



# Series Compatible with Secondary Batteries

Copper (Cu)  
and Zinc (Zn)  
**Free**

Compatible with  
dew points as low as  
**-70°C**

**Longer life**  
due to use of grease  
compatible with  
low dew points

A wide range  
of products!  
Now with a  
greater number  
of models!

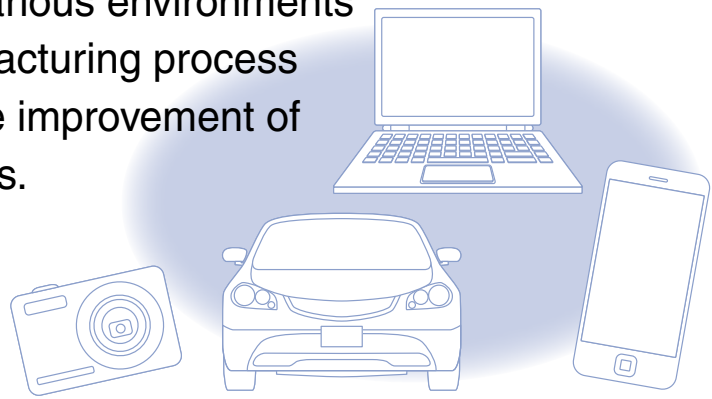
- 4/5-Port Solenoid Valve 25A-SYJA Series
- Air Cylinder: With End Lock  
25A-CBJ2, 25A-CBG1, 25A-CDBQ2 Series
- Mini Free Mount Cylinder 25A-CUJ Series
- Air Slide Table 25A-MXQ□, 25A-MXP Series
- Modular F.R.L. Units 25A-AC□B, C, D Series
- Pressure Switch 25A-ZSE20/ISE20 Series
- Pilot Operated 2-Port Solenoid Valve 25A-VXD Series, etc.,  
have been added.

Compatible with the various environments  
of each manufacturing process

**25A Series**

NC491A

Products compatible with the various environments of the secondary battery manufacturing process are available, contributing to the improvement of productivity and reduced defects.



## Series Compatible with Secondary Batteries 25A- Series

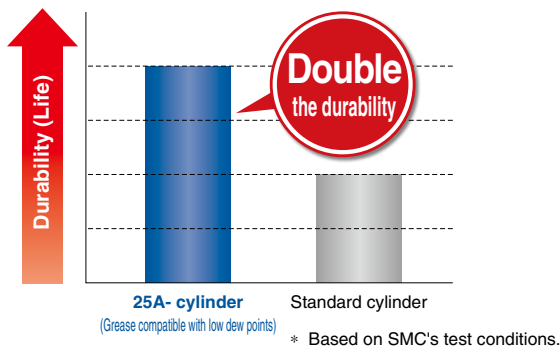


### Improved performance in environments with low dew points

- Uses grease compatible with low dew points

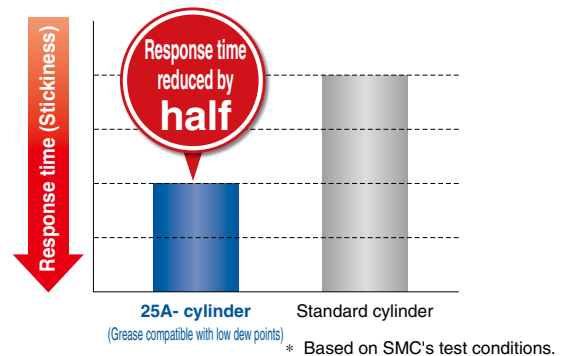
## Double the durability

Durability comparison (Air cylinder)



## Response time reduced by half

Comparison of cylinder response times after being pressurized and stored



## Materials Not Used

The following materials are not used in order to reduce the number of defective products produced during the secondary battery manufacturing process:

- materials containing copper (Cu) or zinc (Zn)
- electrolytic nickel plating with a copper layer or zinc plating

\* Electroless nickel plating is used.

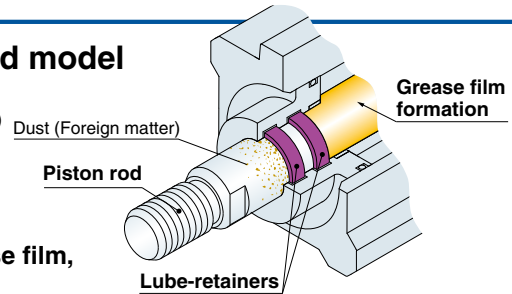
# Dustproof Products

**Durability is 4 times stronger than the standard model in micro-powder (10 to 100 μm) environments.**

(The durability test was conducted in accordance with SMC test conditions.)









**Cylinder with Stable Lubrication Function (Lube-retainer)**

- Double Lube-retainer
- Lube-retainers are mounted at two locations to form a grease film, preventing the entry of dust and foreign matter.



\* Not compatible with the secondary battery specifications

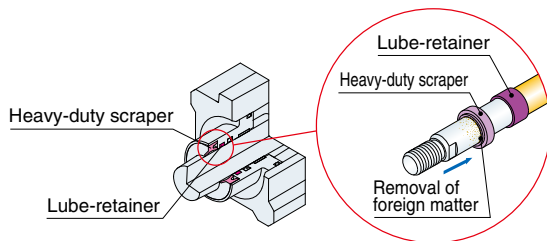
## Applicable Cylinders

<b>Air Cylinder</b> <b>CM2 Series</b> ø20 to ø40 	<b>RoHS</b>	<b>Air Cylinder</b> <b>CG1 Series</b> ø20 to ø100 	<b>RoHS</b>	<b>Air Cylinder</b> <b>CA2 Series</b> ø40 to ø100 	<b>RoHS</b>	<b>Compact Cylinder</b> <b>CQS Series</b> ø20 to ø25 	<b>RoHS</b>
<b>Compact Cylinder</b> <b>CQ2 Series</b> ø32 to ø100 	<b>RoHS</b>	<b>Air Slide Table</b> <b>MXQ□A Series</b> ø6 to ø25 	<b>RoHS</b>	<b>Compact Guide Cylinder</b> <b>MGP Series</b> ø20 to ø100 	<b>RoHS</b>	<b>Dual Rod Cylinder</b> <b>CXS Series</b> ø6 to ø32 	<b>RoHS</b>

## Special Products (Please contact your local sales representative for more details.)

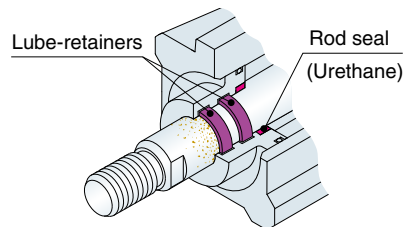
**Lube-retainer + Heavy-duty scraper**

- Improved dust prevention due to the lube-retainer and heavy-duty scraper



**Double Lube-retainer + Urethane seal**

- Material of rod seal has been changed to urethane to improve durability.

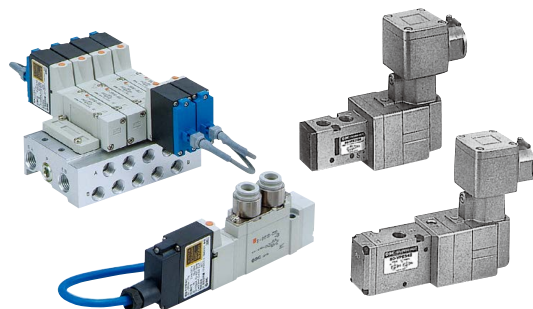


# Explosion-proof Products

**Explosion-proof Solenoid Valves**

- 5-Port Solenoid Valve/51-SY Series  
Intrinsically safe and explosion proof  
(In compliance with IEC Standard 79)
- 3/5-Port Solenoid Valve/50-VFE/VPE Series  
IEC compliant, Waterproof

\* Not compatible with the secondary battery specifications



Not Used	Material	Copper (Cu)	Zinc (Zn)
	Surface treatment	<ul style="list-style-type: none"> <li>Electrolytic nickel plating with a copper layer</li> <li>Zinc plating</li> </ul> <p>(Electroless nickel plating is used.)</p>	

### Solenoid Valve 25A-SY Series

**Mounting bolt**  
Material: Stainless steel

**Cover holding screw**  
Material: Stainless steel

**Fittings**  
Metal parts material: Stainless steel

\* Coils for solenoid valves, connector pins, and lead wires are made of copper.  
\* Manifold terminal block, wiring parts, connector metal parts, and printed circuit board are made of copper.

### Cylinder 25A-CA2 Series

**Bushing**  
Material: Steel bearing alloy

**Cushion valve**  
Material: Stainless steel

**Tie-rod**  
Material: Stainless steel

**Mounting bracket**  
Surface treatment: RAYDENT®

### Compact Cylinder 25A-CQ2 Series

**Bushing (ø50 to ø100)**  
Material: Steel bearing alloy

**Piston rod**  
Surface treatment: Hard chrome plating

**Mounting bracket**  
Surface treatment: RAYDENT®

### Compact Guide Cylinder 25A-MGPM Series

**Bushing (ø50 to ø100)**  
Material: Steel bearing alloy

**Piston rod**  
Surface treatment: Hard chrome plating

**Plate**  
Surface treatment: Electroless nickel plating

### Air Slide Table 25A-MXQ Series

**Piston rod**  
Surface treatment: Hard chrome plating

**Piston**  
Material: Stainless steel  
Aluminum alloy

**Bolts**  
Surface treatment: Electroless nickel plating

### Corrosion-resistant Air Slide Table (Made to Order: 25A-MXQ□-X771, 25A-MXS□-X1949)

The material of the head cap part has been changed to a highly corrosion-resistant material.

	After change	Before change
Head cap	Synthetic resin	Aluminum

### Dual Rod Cylinder/Compact Type 25A-CXSJ Series

**Bolts**

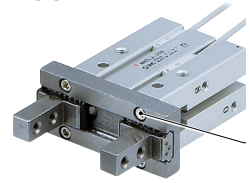
Surface treatment:  
Electroless nickel plating



### Air Gripper 25A-MHZ2 Series

**Bolts**

Surface treatment:  
Electroless nickel plating



### Air Filter 25A-AF Series

**Rod (AF50 to 60-A)**

Material: Stainless steel

**Drain plug (AF30 to 60-A)**

Material: Stainless steel



### Regulator 25A-AR Series

**Valve, Stem**

Material: Stainless steel

**Adjusting spring, Screw**

Surface treatment: Electroless nickel plating



### Precision Regulator 25A-IR□-A Series

**Screw**

Surface treatment: Electroless nickel plating

**Screws**

Material: Stainless steel



### 2-Color Display High-Precision Digital Pressure Switch 25A-ZSE30A/25A-ISE30A Series



**Port thread**

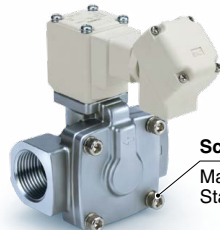
Material: Stainless steel

\* A copper material is used for the lead wires.

### Pilot Operated 2-Port Solenoid Valve 25A-VXD Series

**Screw**

Material:  
Stainless steel



\* A copper material is used for the solenoid coils and lead wires.

### Solid State Auto Switch D-M9□-900 Series

**Mounting screw**

Material: Stainless steel



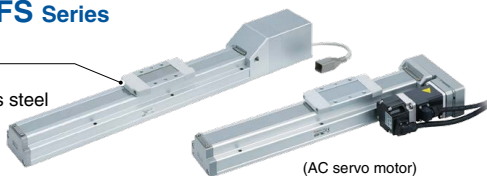
\* A copper material is used for the lead wires.

### Electric Actuator/Slider Type Ball Screw Drive 25A-LEFS Series

**Bolts**

Material:  
Stainless steel

( Step motor )  
( Servo motor )



\* Copper and zinc materials are used for the motors, cables, controllers/drivers.

### Electric Actuator/High Rigidity Slider Type Ball Screw Drive 25A-LEJS Series

**Bolts**

Material: Stainless steel



\* Copper and zinc materials are used for the motors, cables, controllers/drivers.

### Electric Actuator/Rod Type 25A-LEY Series

**Bushing**

Material:  
Steel bearing alloy

**Bolts**

Material: Stainless steel

**Bushing**

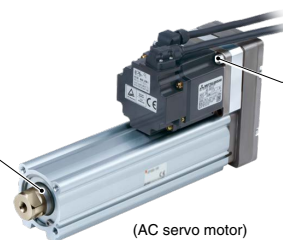
Material: Steel bearing alloy

( Step motor )  
( Servo motor )



**Bolts**

Material: Stainless steel



\* Copper and zinc materials are used for the motors, cables, controllers/drivers.

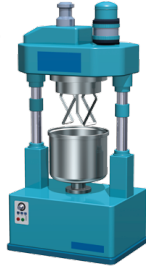
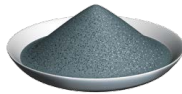
# Secondary Battery Manufacturing Process

## Electrode Production Process

Same for both can types and laminate types

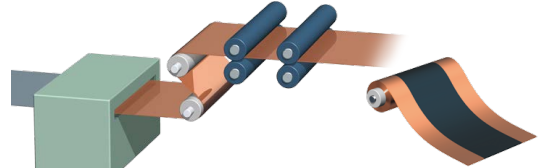
### 1 Mixing and kneading machine

The proper amount of raw materials for positive or negative electrodes are mixed to make electrode slurry.



### 2 Coating and rolling

Positive or negative electrode slurry is coated with a metallic foil made from aluminum, copper, etc. The coated slurry is then compressed with rollers continuously to enhance the density of the electrode sheet.



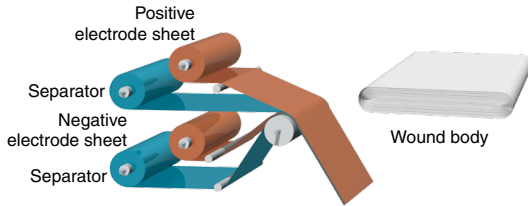
Electrode (Negative)

## Cell Assembly Process

Can type

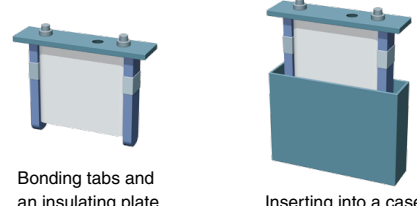
### 4 Winder (Winding)

The positive electrode sheet, negative electrode sheet, and separator sheets are laid on top of each other and wound to form a wound body.



### 5 Attaching tabs and an insulating plate and inserting into a case

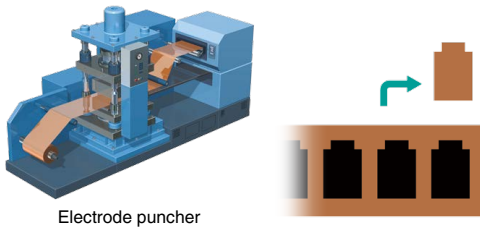
Current collecting tabs and an insulating plate are bonded to the wound body. It is then inserted into a case.



Laminate type

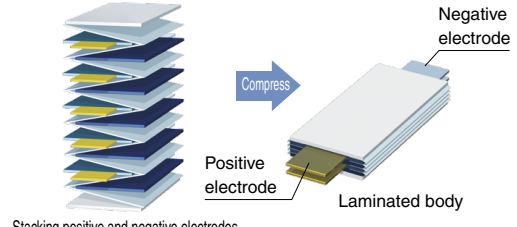
### 4 Punching electrodes

The rolled positive and negative electrodes are punched according to the battery size.



### 5 Stacking (Layering)

Positive and negative electrodes are stacked alternately and accurately at high speed with a separator inserted between them.



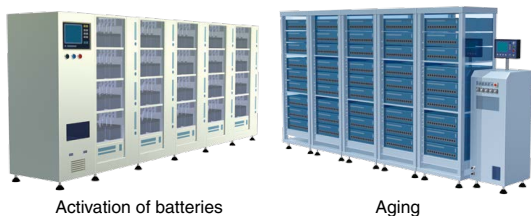
## Inspection/Packaging Process

Same for both can types and laminate types

### 8 Charging/discharging and aging

Standard products are applicable.

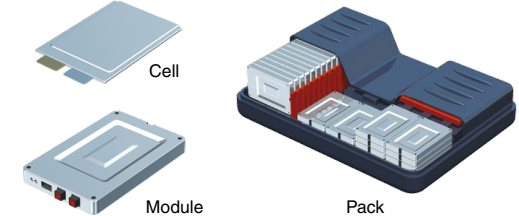
Charging and discharging are repeated to activate batteries. Charged battery cells are then left for a certain period of time, and the initial deterioration of batteries is checked to detect defective products.



### 9 Packaging

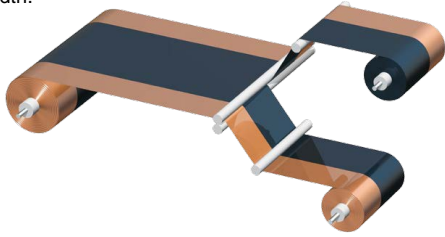
Standard products are applicable.

Connected multiple cells are enclosed in a metallic case, and terminals are attached to form a module. Then, the connected multiple modules with a sensor and a controller are enclosed in a case to form a battery pack.



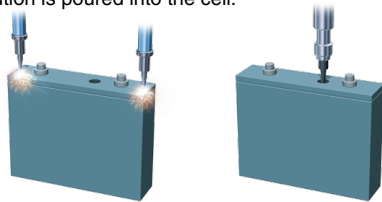
### 3 Slitting

The electrode sheet and separator are cut to the cell width.



### 6 Welding cell lid and pouring electrolytic solution

The electrode and lid are laser-welded, and then the entire periphery of the cell case and lid is welded. Electrolytic solution is poured into the cell.



Welding cell lid

Pouring electrolytic solution

### 7 Pre-charging and welding infusion plug

Pre-charging (formation charging) is performed to remove the gas generated in the initial charging process, and then the infusion plug is welded to seal the cell.

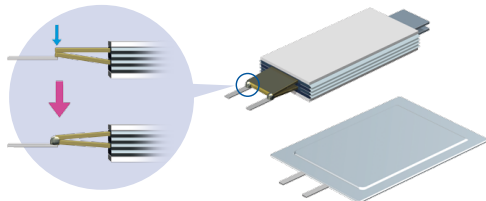


Pre-charging

Welding infusion plug

### 6 Tab welding and lamination

Current collecting tabs are welded to the laminated body. The laminated body is wrapped with armoring material.

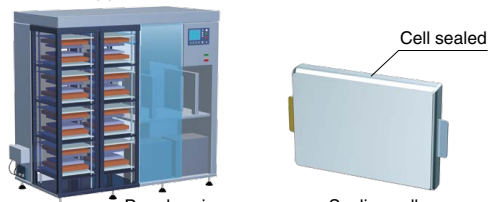


Tab welding

Lamination

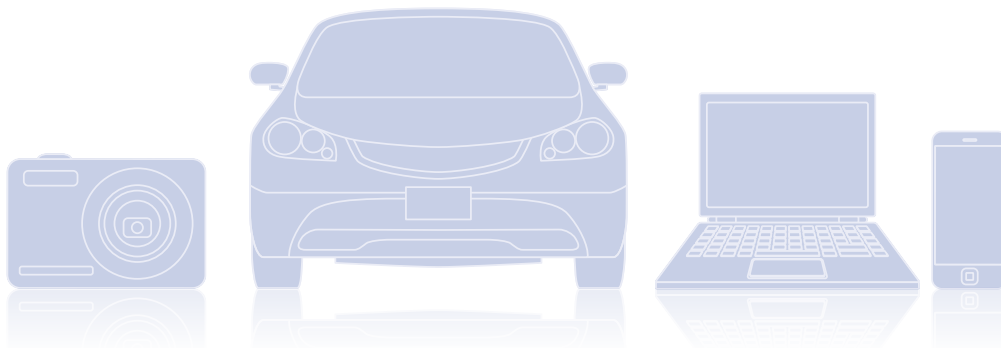
### 7 Pre-charging and sealing cell

Pre-charging (formation charging) is performed to remove the gas generated in the initial charging process, and then heat is applied to seal the cell.


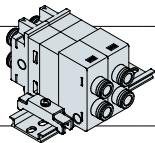





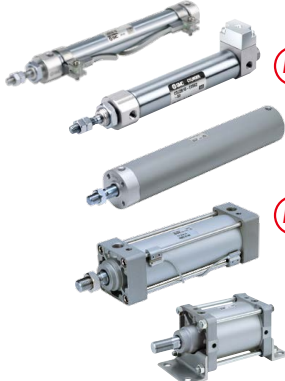




Pre-charging



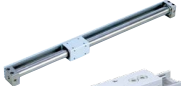




Sealing cell

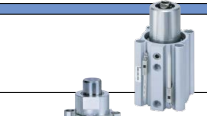









# 25A- Series Applicable Products

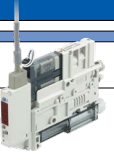









Description		25A- Series	
		Model (Type)	Page
Directional Control Valves	<b>5-Port Solenoid Valve</b> 	25A-SY5000 (Plug-in connector connecting base)	p. 15
		25A-SY5000, 7000	p. 36
		25A-VQ2000, 4000 (W)	p. 43
		25A-SQ2000	p. 56
		25A-VQZ1000	p. 61
	<b>Separate Type Double Check Block</b> 	25A-VQ1000, 2000 (Double check block)	p. 65
	<b>3-Port Solenoid Valve</b> 	25A-VP342, 542, 742 (Body ported)	p. 66
		25A-VP344, 544, 744 (Base mounted)	p. 67
		25A-VP500, 700 (Safety Standard ISO 13849-1)	p. 68
		25A-VT317	p. 69
25A-VG342		p. 70	
<b>5-Port Air Operated Valve</b> 	25A-SYA5000, 7000	p. 71	
<b>3-Port Air Operated Valve</b>  <b>New</b>	25A-SYJA500, 700	p. 72	
<b>Finger Valve</b> 	25A-VHK	p. 74	
<b>Conforming to OSHA Standard Pressure Relief 3-Port Valve with Locking Holes</b>  <b>New</b>	25A-VHS20, 30, 40, 50	p. 75	
	25A-VHS2510, 3510, 4510, 5510	p. 76	
Air Cylinders	<b>Air Cylinder</b>  <b>New</b>	25A-CJ2 (Standard)	p. 77
		25A-CBJ2 (With end lock)	p. 78
		25A-CM2 (Standard) <b>New</b> The air cushion type has been added.	p. 79
		25A-CG1 (Standard)	p. 80
		25A-CBG1 (With end lock) <b>New</b>	p. 81
		25A-MB (Standard)	p. 82
		25A-CA2 (Standard)	p. 83
		25A-CS2 (Standard)	p. 84
	<b>Mini Free Mount Cylinder</b>  <b>New</b>	25A-CUJ (Standard)	p. 85
		<b>Free Mount Cylinder</b> 	25A-CU (Standard)
25A-CUK (Non-rotating rod)	p. 89		



Description		25A- Series		
		Model (Type)	Page	
Compact Air Cylinders	<b>Compact Cylinder</b> 	25A-CQS (Standard)	p. 90	
		25A-CQSW (Standard, Double rod)	p. 91	
		25A-CQS□S (Anti-lateral load)	p. 92	
		25A-CQ2 (Standard)	p. 93	
		25A-CQ2W (Standard, Double rod)	p. 94	
		25A-CQ2 (Large bore size)	p. 95	
		25A-CQ2 (Long stroke)	p. 96	
		25A-CQ2□S (Anti-lateral load)	p. 97	
		25A-CBQ2 (With end lock)	p. 98	
Rodless Cylinders	<b>Mechanically Jointed Rodless Cylinder</b> 	25A-MY1B (Basic)	p. 99	
		25A-MY1C (Cam follower guide)	p. 100	
		25A-MY1H (Linear guide)	p. 101	
		25A-MY2H (Linear guide)	p. 102	
		25A-MY3A (Basic short type, Rubber bumper)	p. 103	
		25A-MY3B (Basic standard type, Air cushion)	p. 103	
		25A-MY3M (Slide bearing guide type)	p. 104	
		<b>Magnetically Coupled Rodless Cylinder</b> 	25A-CY3B (Basic) <b>New</b> Bore sizes $\phi 6$ and $\phi 10$ have been added.	p. 105
25A-CY3R (G) (Direct mount) <b>New</b> Bore sizes $\phi 6$ and $\phi 10$ have been added.	p. 106			
Table Cylinders	<b>Compact Slide</b> 	25A-MXH (Recirculating linear guide)	p. 107	
		<b>Air Slide Table</b> 	25A-MXS (Cross roller guide)	p. 108
			25A-MXQ□A (Recirculating linear guide/Double-ported type)	p. 109
			25A-MXQ□B (Recirculating linear guide/Low thrust with high rigidity type)	p. 110
			25A-MXQ□C (Recirculating linear guide/Single side-ported type)	p. 111
			25A-MXQ□ (Recirculating linear guide/Height interchangeable type)	p. 112
			25A-MXQ (Recirculating linear guide)	p. 113
			25A-MXW (Recirculating linear guide)	p. 114
			25A-MXP (Recirculating linear guide)	p. 115
Guide Cylinders	<b>Compact Guide Cylinder</b> 	25A-MGPM (Slide bearing)	p. 116	
		25A-MGPL (Ball bushing bearing)	p. 116	
		25A-MGPM (Slide bearing, Air cushion type)	p. 117	
		25A-MGPL (Ball bushing bearing, Air cushion type)	p. 117	
	<b>Guide Cylinder</b> 	25A-MGGL (Ball bushing bearing)	p. 121	

Description		25A- Series	
		Model (Type)	Page
Guide Cylinders	Slide Unit	25A-CXWM (Slide bearing)	p. 118
	Dual Rod Cylinder 	25A-CXSJM (Slide bearing) <span style="color:red">New</span>	p. 119
		25A-CXSJL (Ball bushing bearing) <span style="color:red">New</span>	p. 119
		25A-CXSM (Slide bearing)	p. 120
		25A-CXSL (Ball bushing bearing)	p. 120
Clamp/ Stopper Cylinders	Rotary Clamp Cylinder 	25A-MK (Standard)	p. 122
	Stopper Cylinder/ Fixed Mounting Height 	25A-RSQ (Standard)	p. 123
	Heavy Duty Stopper Cylinder <span style="color:red">New</span> 	25A-RSH (Standard)	p. 124
Related Products	Shock Absorber 	25A-RJ (Soft type)	p. 125
		25A-RJ (Short stroke type)	p. 126
		25A-RB (Standard)	p. 127
		25A-RBC (Standard)	p. 127
	Floating Joint 	25A-JA (Standard/80, 100 only)	p. 128
		25A-JB (For compact cylinders)	p. 128
		25A-JS (Stainless steel type)	p. 128
Simple Joint for CQ2 	YA (Type A mounting bracket)	*1	
	YB (Type B mounting bracket)	*1	
	YU (Joint)	*1	
Rotary Actuators	Rotary Table 	25A-MSUB (Vane type)	p. 129
		25A-MSQ (Rack & Pinion type)	p. 130
		25A-MSQ-X251 (Rack & Pinion type, With vacuum port)	p. 130
	3-Position Rotary Table <span style="color:red">New</span> 	25A-MSZA (High precision type) <span style="color:red">New</span>	p. 132
		25A-MSZB (Basic type) <span style="color:red">New</span>	p. 132
Air Grippers	Parallel Type Air Gripper 	25A-MHZ2 (Standard)	p. 133
		25A-MHZL2 (Long stroke)	p. 134
		25A-MHZJ2 (With dust cover)	p. 135
		25A-MHZL2-X5955 (Long stroke, With dust cover)	p. 135
		25A-MHF2 (Low profile type)	p. 136
		25A-MHL2 (Wide type)	p. 137
		25A-MHS□ (3-finger, 4-finger)	p. 138
		25A-MHSJ3 (3-finger, With dust cover)	p. 139
		25A-MHY2 (180° Angular type)	p. 140












\*1 Standard products: Standard products are copper (Cu) and zinc (Zn) free. Refer to the **Web Catalog** for details.

Description	25A- Series		
	Model (Type)	Page	
Vacuum Equipment	Vacuum Ejector 	25A-ZK2 (Vacuum unit) Single unit only	p. 141
	Space Saving Vacuum Ejector 	25A-ZQ (Ejector unit) Single unit/Manifold	p. 145
		25A-ZQ (Vacuum pump unit) Single unit/Manifold	p. 149
		ZH□□DA (Body ported) <span style="color:red">New</span>	*1
	ZH (Body ported)	*2	
	In-line Type Vacuum Ejector <span style="color:red">New</span>	ZU□□A (In-line type)	*1
	In-line Air Filter 	ZFC (With One-touch fittings)	*1
	Air Suction Filter 	ZFC (With One-touch fittings, In-line type)	*1
Vacuum Pad 	ZP (Pad only)	*1	
Adsorption Plate 	SP	*1	
Air Preparation Equipment	Membrane Air Dryer 	25A-IDG (Single unit/Standard dew point -40°C/-60°C specifications)	p. 153
	Air Preparation Filter 	25A-AFF (Main line filter)	p. 155
		25A-AM (Mist separator)	p. 156
		25A-AMD (Micro mist separator)	p. 157
		25A-AMH (Micro mist separator with pre-filter)	p. 158
Clean Air Filters		SFD100	*1
		SFD200	*1
		25A-AMP (Exhaust cleaner for clean room)	p. 159
		SFE (Clean exhaust filter)	*1
Modular F.R.L./ Pressure Control Equipment	Modular F.R.L. Units <span style="color:red">New</span> 	25A-AC□B-A, AC□C-A, AC□D-A	*3
	Air Filter Separator 	25A-AF-A (Air filter)	p. 160
		25A-AFM-A (Mist separator)	p. 161
		25A-AFD-A (Micro mist separator)	p. 161
	Regulator 	25A-AR-B (Regulator)	p. 162
		25A-AR□□K-B (Regulator with backflow function)	p. 162
		25A-AW-B (Filter regulator)	p. 163
		25A-AW□□K-B (Filter regulator with backflow function)	p. 163
		25A-IR□-A (Precision regulator) <span style="color:red">New</span>	p. 164
		25A-ITV1000, 2000, 3000 (Electro-pneumatic regulator)	p. 165
CB-97XH (Residual pressure indicator)		*1	

\*1 Standard products: Standard products are copper (Cu) and zinc (Zn) free. Refer to the **Web Catalog** for details.

\*2 For the ZH (body ported) series, only the screw-in type uses copper. One-touch connection type is copper-free as standard.

\*3 Available as simple specials. Please contact your local sales representative for more details.






Description	25A- Series		
	Model (Type)	Page	
Modular F.R.L./ Pressure Control Equipment	<b>Booster Regulator</b> 	25A-VBA*4	p. 166
		25A-VBAT (Air tank)	p. 167
	<b>Pressure Gauge</b> 	G43-10-01-X300 (Stud, Bourdon tube, Internal parts: Stainless steel)	*2
		G46-SRB (Only external parts and wetted parts are made of stainless steel.)	*3
Flow Control Equipment/Fittings	<b>Stainless Steel Speed Controller</b> 	AS-FG (Elbow/Universal/In-line type)	*1
	<b>Speed Controller with Indicator</b> 	AS-FSG (Elbow type)	*1
		AS-FPG (Elbow type)	*1
	<b>Quick Exhaust Valve</b> 	25A-AQ240F, 340F (Built-in One-touch fittings)	p. 168
	<b>Check Valve</b> 	25A-AKH (With One-touch fittings)	p. 169
	<b>One-touch Fittings</b> 	KQ2 (One-touch fittings) (Only the type without a connection thread)	*1
	<b>Rectangular Multi-connector</b> 	25A-KDM (Rectangular multi-connector)	p. 170
	<b>Stainless Steel Fittings</b> 	KG (One-touch fittings)	*1
		KPG (One-touch fittings)	*1
		KQG2 (One-touch fittings)	*1
		KQ2-G (Stainless steel)	*1
KFG2 (Insert fittings)		*1	
MS (Miniature fittings)		*1	
KKA (S Couplers stainless steel type)		*1	
Tubing	<b>Tubing</b> 	T (Nylon)	*1
		TS (Soft nylon)	*1
		TU (Polyurethane)	*1
		TA□ (Antistatic)	*1
		TL (Fluoropolymer)	*1
		TH (FEP)	*1
		TD (Soft fluoropolymer)	*1
		TPS (Soft polyolefin)	*1
		IDK (Moisture control tube)	*1
Detection Switches	<b>Pressure Switch</b> 	25A-ZSE20(F)/ISE20 (3-screen display high-precision)	p. 171
		25A-ZSE20A(F)/ISE20A (3-screen display high-precision)	p. 172
		25A-ZSE20B(F)/ISE20B (3-screen display high-precision)	p. 173
		25A-ZSE20C(F)/ISE20C(H) (3-screen display high-precision, for general fluids)	p. 174

\*1 Standard products: Standard products are copper (Cu) and zinc (Zn) free. Refer to the **Web Catalog** for details.

\*2 Copper (Cu) and zinc (Zn) free. Please contact your local sales representative for more details.

\*3 Standard products: Copper (Cu) and zinc (Zn) are used for parts other than external parts and wetted parts. Refer to the **Web Catalog** for details.

\*4 Pressure gauge mounting: The G43-10-01-X300/G46-SRB pressure gauge cannot be mounted directly to the booster regulator as it will interfere with the booster regulator (25A-VBA10A) handle or the other pressure gauge (for the 25A-VBA20A/40A). In order to mount the pressure gauge, piping which does not cause any interference must be prepared separately.

Description	25A- Series		
	Model (Type)	Page	
<b>Detection Switches</b> 	<b>Flow Switch</b>	<b>25A-PFMB7</b> (2-color display) p. 175 <b>25A-PFM5</b> (2-color display, Remote sensor unit) p. 177 <b>25A-PFM3</b> (Monitor for air) p. 178 <b>25A-PF3W</b> (3-color display, Monitor for water) p. 179 <b>25A-PFM7</b> (2-color display, Integrated display) p. 180 <b>25A-PF3W</b> (3-color display, for water) p. 181 <b>25A-PF3W</b> (3-color display, for PVC piping) p. 182	
	<b>Fluid Control Equipment</b> 	<b>Direct Operated 2-Port Solenoid Valve</b> <b>25A-VX2</b> (For air) p. 183 <b>25A-VX2</b> (For water/oil/medium vacuum) p. 184	
		<b>Pilot Operated 2-Port Solenoid Valve</b> <b>25A-VXD</b> (For air) p. 185 <b>25A-VXD</b> (For water) p. 186	
		<b>Zero Differential Pressure Type Pilot Operated 2-Port Solenoid Valve</b> <b>25A-VXZ</b> (For air) p. 187 <b>25A-VXZ</b> (For water) p. 188	
		<b>Process Gas Equipment</b> 	<b>Diaphragm Valve for General Applications</b> <b>AK35□, AK45□</b> (Air operated type) *1 <b>AK36□, AK46□</b> (Manually operated type) *1
			<b>Electric Actuator</b> 
		<b>Auto Switches</b> 	<b>Solid State Auto Switch</b> <b>D-M9□□-900</b> <b>D-F8□-900</b> <b>D-Y7□□-900</b> <b>D-G59, G5P, K59-900</b> <b>D-F79, F7P, J79-900</b> <b>D-F7□V-900</b>
<b>Reed Auto Switch</b> <b>D-A90-900</b> <b>D-Z80-900</b> <b>D-E73A, E76A, E80A</b>	From p. 205		

\*1 Standard products: Standard products are copper (Cu) and zinc (Zn) free. Refer to the **Web Catalog** for details.

**25A- series grease pack\*2 applicable models**

\*2 Air cylinders (Except guide unit). For other models, please contact your local sales representative.

Grease pack part no.	Quantity
GR-D-005	5 g
GR-D-010	10 g
GR-D-100	100 g

Contained in a plastic container.

**Special Products** (Please contact your local sales representative for more details.)

Description	Model (Type)
<b>Directional Control Valves</b> <b>3-Port Solenoid Valve/ Residual Pressure Release Valve with Detection of Main Valve Position</b> (Safety Standard ISO 13849-1 Certified) 	<b>VG342-X87</b>
<b>Air Cylinders</b> <b>Air Cylinder With End Lock</b>  <b>Cylinder with Lock</b>  <b>Compact Cylinder with Lock</b>  <b>Stopper Cylinder</b>  <b>Heavy Duty Stopper Cylinder</b> 	<b>CBM2</b>
	<b>MBB</b>
	<b>CNG□N</b>
	<b>CNA2□N</b>
	<b>CLQ</b>
<b>RSQ</b>	
<b>RS2H</b>	
<b>Vacuum Equipment</b> <b>Vacuum Pad</b>  <b>Non-contact Gripper</b>  <b>Vacuum Regulator</b> 	<b>ZP□</b>
	<b>XT661</b>
	<b>IRV (Standard)</b>
<b>High Vacuum Equipment</b> <b>Aluminum High Vacuum Angle Valve</b> 	<b>XLA (Normally closed)</b> <b>XLC (Double acting)</b>

# Related Products

Consult with SMC for "Copper (Cu) and Zinc (Zn) Free" products.

## 1 Antistatic Equipment

Vacuum

Static electricity

Antistatic performance achieved through conductive measures for a reduction in static-related trouble.

**Actuators** · Antistatic Air Cylinder (Made to Order) ..... *CM2-X1051 Series*

**Vacuum Equipment** · Vacuum Pad ..... *ZP Series*

### Fittings and Tubing

- Antistatic One-touch Fittings ..... *KA Series*
- Miniature Fittings/Stainless Steel 316 ..... *MS Series*
- Miniature Fittings ..... *M Series*
- Antistatic Tubing ..... *TA□ Series*

### Flow Control Equipment

- Antistatic Speed Controller (Made to Order) ..... *AS-X260 Series*



## 2 Static Neutralization Equipment

Static electricity

Ions generated by corona discharge neutralize static electricity.

- Ionizer/Bar Type ..... *IZS4□ Series*
- Bar Type Ionizer **Separate Controller** ..... *IZT4□ Series*
- Ionizer ..... *IZS31 Series*
- Nozzle Type Ionizer ..... *IZN10E Series*
- Fan Type Ionizer ..... *IZF□ Series*

**Measurement Equipment** Measures the electrostatic potential.

- Electrostatic Sensor ..... *IZD10/IZE11 Series*
- Handheld Electrostatic Meter ..... *IZH10 Series*



## 3 Temperature Control Equipment

- Thermo-chiller/Standard Type ..... *HRS Series*

## 4 Electric Actuators

- Electric Actuator/Slider Type ..... *LEFB Series*
- Electric Actuator/Low Profile Slider Type ..... *LEM Series*
- Electric Actuator/Guide Rod Slider ..... *LEL Series*
- Electric Slide Table ..... *LES Series*
- Electric Actuator/Miniature Rod Type /Miniature Slide Table Type ..... *LEPY/LEPS Series*
- Electric Rotary Table ..... *LER Series*
- Electric Gripper ..... *LEH□ Series*
- Motorless Type Electric Actuator ..... *LE□ Series*



## 5 High Purity Chemical Liquid Valves

- High Purity Chemical Liquid Valve/Air Operated Type ..... *LVC/LVA/LVH Series*



Type 10  
Side Ported

Type 11  
Bottom Ported

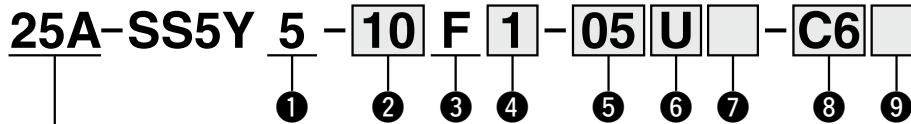
# Plug-in Connector Connecting Base

D-sub Connector

# 25A-SY5000 Series



## How to Order Manifold



Series compatible with secondary batteries

### 1 Series

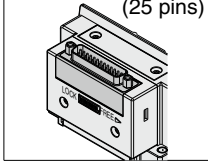
5	SY5000
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### 2 Type

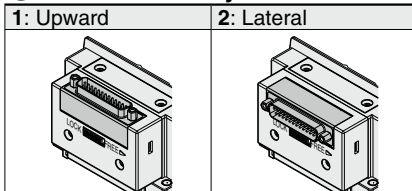
10	Side ported
11	Bottom ported

### 3 Connector type

F: D-sub connector (25 pins)



### 4 Connector entry direction



### 5 Valve stations

F: D-sub connector (25 pins)

Symbol	Stations	Note
02	2 stations	Double wiring*1
:	:	
12	12 stations	Specified layout*2 (Available up to 24 solenoids)
02	2 stations	
:	:	
24	24 stations	

\*1 Double wiring: 2-position single, double, 3-position, and 4-position valves can be used on all manifold stations. Use of a 2-position single solenoid will result in an unused control signal. If

this is not desired, order with a specified layout.

\*2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)

\* This also includes the number of the blanking plate assembly.

### 6 P, E port entry

U	U side (2 to 10 stations)
D	D side (2 to 10 stations)
B	Both sides (2 to 24 stations)

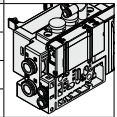
### 7 SUP/EXH block assembly

Nil	Internal pilot
S	Internal pilot, Built-in silencer

\* 3/5(E) port is plugged for the built-in silencer type.

### 8 A, B port size (Metric)

Symbol	A, B port	Type 10/ Side ported	Type 11/ Bottom ported
		SY5000	SY5000
C4	Straight ø4 One-touch fitting	●	●
C6		●	●
C8		●	●
CM*1	Straight port, mixed sizes	●	●
P, E port size (One-touch fittings)		ø10	ø10



\*1 Indicate the sizes on the manifold specification sheet in the case of "CM."

\* The direction of P, E port fittings is the same as for the A, B port.

### 9 Mounting

Symbol	Mounting
Nil	Direct mounting
D□	DIN rail mounting

#### DIN rail option

Nil	Standard length	
0	With DIN bracket (Without DIN rail)	
3	For 3 stations	Specify a longer rail than the total length of specified stations.
:	:	
24	For 24 stations	

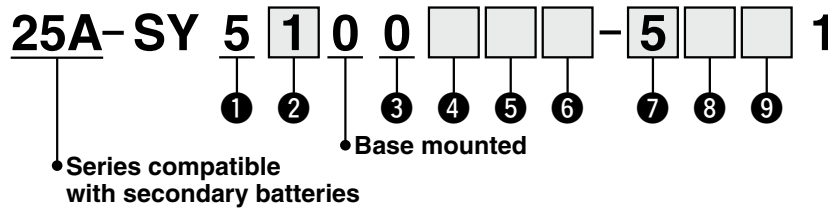
\* Enter the number of stations inside □. (Refer to "DIN Rail Option" above.)

\* Only direct mounting is available for Type 11 (Bottom ported).

\* The 25A-series specifications and dimensions are the same as those of the standard model.



**How to Order Valves (With two mounting screws)**



**1 Series**

5	SY5000
---	--------

**2 Type of actuation**

1	2-position single
2	2-position double
3	3-position closed center
4	3-position exhaust center
5	3-position pressure center
A	4-position dual 3-port valve (N.C./N.C.)
B	4-position dual 3-port valve (N.O./N.O.)
C	4-position dual 3-port valve (N.C./N.O.)

**3 Seal type**

0	Rubber seal
---	-------------

**4 Back pressure check valve (Built-in valve type)**

Nil	None
H	Built-in

\* The built-in valve type back pressure check valve is not available for the 3-position type.

**5 Pilot valve option**

Nil	Standard (0.7 MPa)
B	Quick response type (0.7 MPa)

**6 Coil type**

Nil	Standard
T	With power saving circuit (Continuous duty type)

\* Be sure to select the power saving circuit type when the valve is continuously energized for long periods of time.  
\* Be careful of the energizing time when the power saving circuit is selected. For details, refer to the standard product catalog.

**7 Rated voltage**

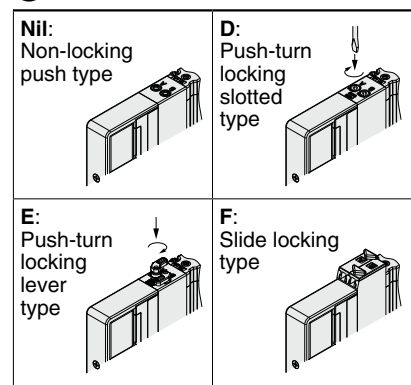
5	24 VDC
6	12 VDC

**8 Light/surge voltage suppressor and common specification**

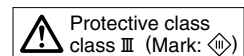
Nil	Without light/surge voltage suppressor (Non-polar)
R	With surge voltage suppressor (Non-polar)
U	With light/surge voltage suppressor (Non-polar)
S	With surge voltage suppressor (Positive common)
Z	With light/surge voltage suppressor (Positive common)
NS	With surge voltage suppressor (Negative common)
NZ	With light/surge voltage suppressor (Negative common)

\* Only "Z" and "NZ" types are available for the product with power saving circuit.

**9 Manual override**



\* The 25A- series specifications and dimensions are the same as those of the standard model.



# Plug-in Connector Connecting Base

D-sub Connector

Type 12  
Top Ported

# 25A-SY5000 Series



## How to Order Manifold

25A-SS5Y 5 -12 F 1 -05 U - -

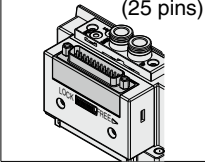
• Series compatible with secondary batteries

### 1 Series

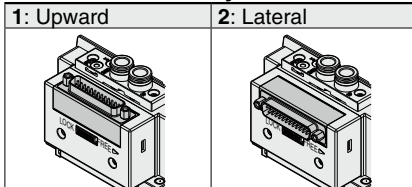
5	SY5000
---	--------

### 2 Connector type

F: D-sub connector (25 pins)



### 3 Connector entry direction



### 4 Valve stations

F: D-sub connector (25 pins)

Symbol	Stations	Note
02	2 stations	Double wiring*1
⋮	⋮	
12	12 stations	Specified layout*2 (Available up to 24 solenoids)
02	2 stations	
⋮	⋮	
24	24 stations	

\*1 Double wiring: 2-position single, double, 3-position, and 4-position valves can be used on all manifold stations. Use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order

with a specified layout.

\*2 Specified layout: Indicate the wiring specifications in the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)

\* This also includes the number of the blanking plate assembly.

### 5 P, E port entry

U*1	U side (2 to 10 stations)
D*1	D side (2 to 10 stations)
B	Both sides (2 to 24 stations)

\*1 For type "S," supply/exhaust block assembly with built-in silencer, choose "U" or "D" for P port entry.

### 6 SUP/EXH block assembly

Nil	Internal pilot
S	Internal pilot, Built-in silencer

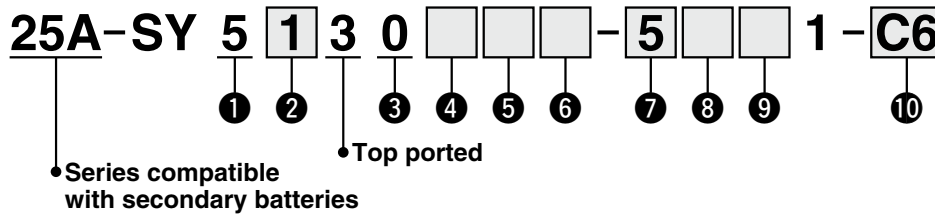
\* For built-in silencer type, P and E ports are available on U and D sides. 3/5(E) port is plugged. The silencer exhaust port is located on the opposite side of P, E port entry. (Example: When the P, E port entry is D side, the silencer exhaust port is U side.)

### 7 Mounting

Nil	Direct mounting	
D	DIN rail mounting (With DIN rail)	
D0	DIN rail mounting (Without DIN rail)	
D3	For 3 stations	Specify a longer rail than the standard length.
⋮	⋮	
D24	For 24 stations	

\* The 25A- series specifications and dimensions are the same as those of the standard model.

**How to Order Valves (With two mounting screws)**



**1 Series**

5	SY5000
---	--------

**2 Type of actuation**

1	2-position single
2	2-position double
3	3-position closed center
4	3-position exhaust center
5	3-position pressure center
A	4-position dual 3-port valve (N.C./N.C.)
B	4-position dual 3-port valve (N.O./N.O.)
C	4-position dual 3-port valve (N.C./N.O.)

**3 Seal type**

0	Rubber seal
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**4 Back pressure check valve (Built-in valve type)**

Nil	None
H	Built-in

\* The built-in valve type back pressure check valve is not available for the 3-position type.

**5 Pilot valve option**

Nil	Standard (0.7 MPa)
B	Quick response type (0.7 MPa)

**6 Coil type**

Nil	Standard
T	With power saving circuit (Continuous duty type)

\* Be sure to select the power saving circuit type when the valve is continuously energized for long periods of time.  
 \* Be careful of the energizing time when the power saving circuit is selected. For details, refer to the standard product catalog.

**7 Rated voltage**

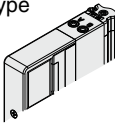
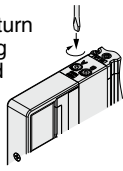
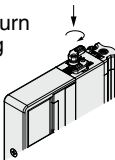
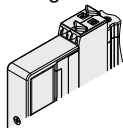
5	24 VDC
6	12 VDC

**8 Light/surge voltage suppressor and common specification**

Nil	Without light/surge voltage suppressor (Non-polar)
R	With surge voltage suppressor (Non-polar)
U	With light/surge voltage suppressor (Non-polar)
S	With surge voltage suppressor (Positive common)
Z	With light/surge voltage suppressor (Positive common)
NS	With surge voltage suppressor (Negative common)
NZ	With light/surge voltage suppressor (Negative common)

\* Only "Z" and "NZ" types are available for the product with power saving circuit.

**9 Manual override**

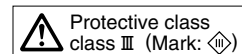
<p><b>Nil:</b> Non-locking push type</p> 	<p><b>D:</b> Push-turn locking slotted type</p> 
<p><b>E:</b> Push-turn locking lever type</p> 	<p><b>F:</b> Slide locking type</p> 

**10 A, B port size**

**One-touch fitting (Metric)**

Symbol	A, B port	SY5000
C4	ø4 One-touch fitting	●
C6	ø6 One-touch fitting	●
C8	ø8 One-touch fitting	●

\* The 25A- series specifications and dimensions are the same as those of the standard model.



Type 10  
Side Ported

Type 11  
Bottom Ported

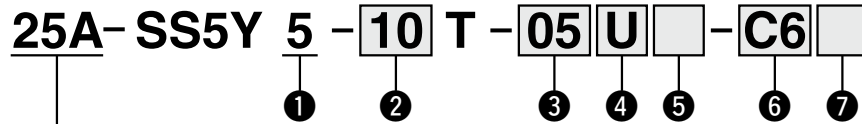
# Plug-in Connector Connecting Base

Terminal Block Box

# 25A-SY5000 Series



## How to Order Manifold



• Series compatible with secondary batteries

### 1 Series

5	SY5000
---	--------

### 2 Type

10	Side ported
11	Bottom ported

### 3 Valve stations

Symbol	Stations	Note
02	2 stations	Double wiring*1
⋮	⋮	
10	10 stations	
02	2 stations	Specified layout*2 (Available up to 20 solenoids)
⋮	⋮	
20	20 stations	

\*1 Double wiring: 2-position single, double, 3-position, and 4-position valves can be used on all manifold stations.

Use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a specified layout.

\*2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)

\* This also includes the number of the blanking plate assembly.

### 4 P, E port entry

U	U side (2 to 10 stations)
D	D side (2 to 10 stations)
B	Both sides (2 to 20 stations)

### 5 SUP/EXH block assembly

Nil	Internal pilot
S	Internal pilot, Built-in silencer

\* 3/5(E) port is plugged for the built-in silencer type.

\* When the built-in silencer type is used, keep the exhaust port from coming in direct contact with water or other liquids.

### 7 Mounting

Symbol	Mounting
Nil	Direct mounting
D□	DIN rail mounting

\* Enter the number of stations inside □. (Refer to "DIN Rail Option" below.)

\* Only direct mounting is available for Type 11 (Bottom ported).

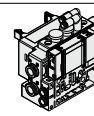
### DIN rail option

Nil	Standard length
0	With DIN bracket (Without DIN rail)
3	For 3 stations
⋮	⋮
24	For 24 stations

Specify a longer rail than the total length of specified stations.

### 6 A, B port size (Metric)

Symbol	A, B port	Type 10/ Side ported	Type 11/ Bottom ported
		SY5000	SY5000
C4	Straight	●	●
C6		●	●
C8		●	●
CM*1	Straight port, mixed sizes	●	●
P, E port size (One-touch fittings)		ø10	ø10

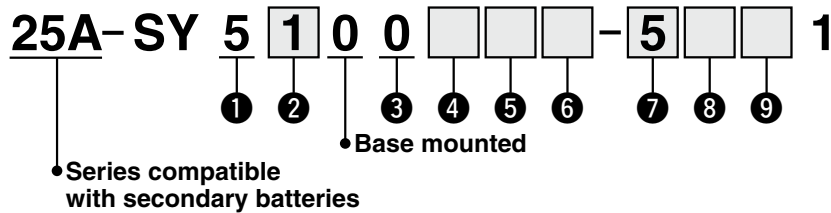


\*1 Indicate the sizes on the manifold specification sheet in the case of "CM."

\* The direction of P, E port fittings is the same as for the A, B port.

\* The 25A-series specifications and dimensions are the same as those of the standard model.

**How to Order Valves (With two mounting screws)**



**① Series**

5	SY5000
---	--------

**② Type of actuation**

1	2-position single
2	2-position double
3	3-position closed center
4	3-position exhaust center
5	3-position pressure center
A	4-position dual 3-port valve (N.C./N.C.)
B	4-position dual 3-port valve (N.O./N.O.)
C	4-position dual 3-port valve (N.C./N.O.)

**③ Seal type**

0	Rubber seal
---	-------------

**④ Back pressure check valve (Built-in valve type)**

Nil	None
H	Built-in

\* The built-in valve type back pressure check valve is not available for the 3-position type.

**⑤ Pilot valve option**

Nil	Standard (0.7 MPa)
B	Quick response type (0.7 MPa)

**⑥ Coil type**

Nil	Standard
T	With power saving circuit (Continuous duty type)

\* Be sure to select the power saving circuit type when the valve is continuously energized for long periods of time.  
\* Be careful of the energizing time when the power saving circuit is selected. For details, refer to the standard product catalog.

**⑦ Rated voltage**

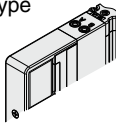
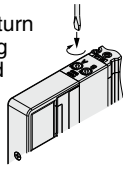
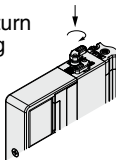
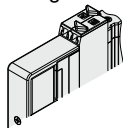
5	24 VDC
6	12 VDC

**⑧ Light/surge voltage suppressor and common specification**

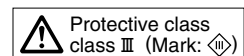
Nil	Without light/surge voltage suppressor (Non-polar)
R	With surge voltage suppressor (Non-polar)
U	With light/surge voltage suppressor (Non-polar)
S	With surge voltage suppressor (Positive common)
Z	With light/surge voltage suppressor (Positive common)
NS	With surge voltage suppressor (Negative common)
NZ	With light/surge voltage suppressor (Negative common)

\* Only "Z" and "NZ" types are available for the product with power saving circuit.

**⑨ Manual override**

<p><b>Nil:</b> Non-locking push type</p> 	<p><b>D:</b> Push-turn locking slotted type</p> 
<p><b>E:</b> Push-turn locking lever type</p> 	<p><b>F:</b> Slide locking type</p> 

\* The 25A- series specifications and dimensions are the same as those of the standard model.



# Plug-in Connector Connecting Base

Terminal Block Box

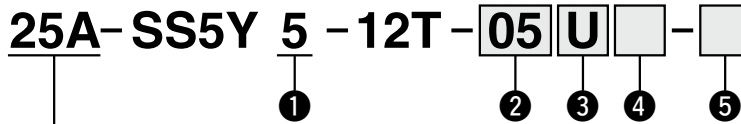
Type 12  
Top Ported

# 25A-SY5000 Series



RoHS

## How to Order Manifold



• Series compatible with secondary batteries

### ① Series

5	SY5000
---	--------

### ③ P, E port entry

U*1	U side (2 to 10 stations)
D*1	D side (2 to 10 stations)
B	Both sides (2 to 20 stations)

\*1 ④ For type "S," supply/exhaust block assembly with built-in silencer, choose "U" or "D" for P port entry.

### ② Valve stations

Symbol	Stations	Note
02	2 stations	Double wiring*1
⋮	⋮	
10	10 stations	
02	2 stations	Specified layout*2 (Available up to 20 solenoids)
⋮	⋮	
20	20 stations	

- \*1 Double wiring: 2-position single, double, 3-position, and 4-position valves can be used on all manifold stations. Use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a specified layout.
- \*2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)
- \* This also includes the number of the blanking plate assembly.

### ④ SUP/EXH block assembly

Nil	Internal pilot
S	Internal pilot, Built-in silencer

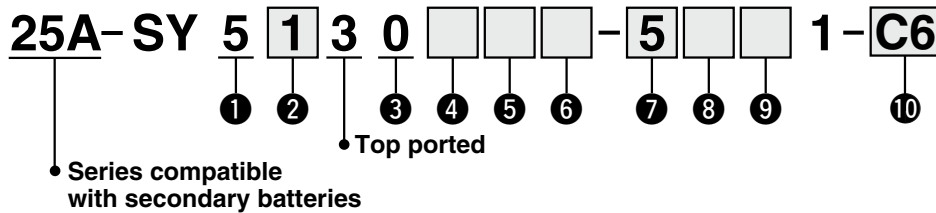
- \* For built-in silencer type, P and E ports are available on U and D sides. 3/5(E) port is plugged. The silencer exhaust port is located on the opposite side of P, E port entry. (Example: When the P, E port entry is D side, the silencer exhaust port is U side.)
- \* When the built-in silencer type is used, keep the exhaust port from coming in direct contact with water or other liquids.

### ⑤ Mounting

Nil	Direct mounting
D	DIN rail mounting (With DIN rail)
D0	DIN rail mounting (Without DIN rail)
D3	For 3 stations Specify a longer rail than the standard length.
⋮	⋮
D20	For 20 stations

\* The 25A- series specifications and dimensions are the same as those of the standard model.

**How to Order Valves (With two mounting screws)**



**1 Series**

5	SY5000
---	--------

**2 Type of actuation**

1	2-position single
2	2-position double
3	3-position closed center
4	3-position exhaust center
5	3-position pressure center
A	4-position dual 3-port valve (N.C./N.C.)
B	4-position dual 3-port valve (N.O./N.O.)
C	4-position dual 3-port valve (N.C./N.O.)

**3 Seal type**

0	Rubber seal
---	-------------

**4 Back pressure check valve (Built-in valve type)**

Nil	None
H	Built-in

\* The built-in valve type back pressure check valve is not available for the 3-position type.

**5 Pilot valve option**

Nil	Standard (0.7 MPa)
B	Quick response type (0.7 MPa)

**6 Coil type**

Nil	Standard
T	With power saving circuit (Continuous duty type)

\* Be sure to select the power saving circuit type when the valve is continuously energized for long periods of time.  
\* Be careful of the energizing time when the power saving circuit is selected. For details, refer to the standard product catalog.

**7 Rated voltage**

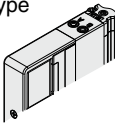
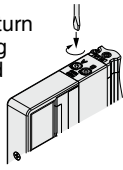
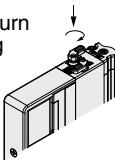
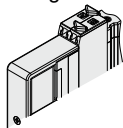
5	24 VDC
6	12 VDC

**8 Light/surge voltage suppressor and common specification**

Nil	Without light/surge voltage suppressor (Non-polar)
R	With surge voltage suppressor (Non-polar)
U	With light/surge voltage suppressor (Non-polar)
S	With surge voltage suppressor (Positive common)
Z	With light/surge voltage suppressor (Positive common)
NS	With surge voltage suppressor (Negative common)
NZ	With light/surge voltage suppressor (Negative common)

\* Only "Z" and "NZ" types are available for the product with power saving circuit.

**9 Manual override**

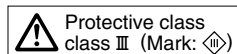
<p><b>Nil:</b> Non-locking push type</p> 	<p><b>D:</b> Push-turn locking slotted type</p> 
<p><b>E:</b> Push-turn locking lever type</p> 	<p><b>F:</b> Slide locking type</p> 

**10 A, B port size**

**One-touch fitting (Metric)**

Symbol	A, B port	SY5000
C4	ø4 One-touch fitting	●
C6	ø6 One-touch fitting	●
C8	ø8 One-touch fitting	●

\* The 25A- series specifications and dimensions are the same as those of the standard model.



Type 10  
Side Ported

Type 11  
Bottom Ported

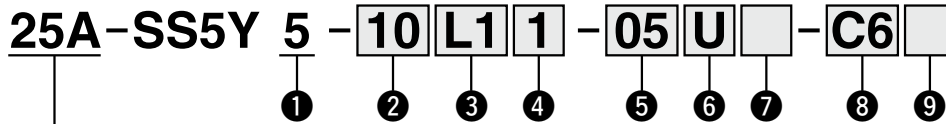
# Plug-in Connector Connecting Base

Lead Wire

# 25A-SY5000 Series



## How to Order Manifold



• Series compatible with secondary batteries

### 1 Series

5	SY5000
---	--------

### 3 Number of cores (Lead wire)

L1	34 cores
L2	17 cores
L3	9 cores

### 6 P, E port entry

U	U side (2 to 10 stations)
D	D side (2 to 10 stations)
B	Both sides (2 to 24 stations)

### 2 Type

10	Side ported
11	Bottom ported

### 4 Lead wire length

1	0.6 m
2	1.5 m
3	3 m

### 7 SUP/EXH block assembly

Nil	Internal pilot
S	Internal pilot, Built-in silencer

- \* 3/5(E) port is plugged for the built-in silencer type.
- \* When the built-in silencer type is used, keep the exhaust port from coming in direct contact with water or other liquids.

### 5 Valve stations

#### (L1□)

Symbol	Stations	Note
02	2 stations	Double wiring*1
⋮	⋮	
16	16 stations	Specified layout*2 (Available up to 32 solenoids)
02	2 stations	
⋮	⋮	
24	24 stations	

#### (L3□)

Symbol	Stations	Note
02	2 stations	Double wiring*1
⋮	⋮	
04	4 stations	Specified layout*2 (Available up to 8 solenoids)
02	2 stations	
⋮	⋮	
08	8 stations	

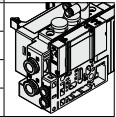
#### (L2□)

Symbol	Stations	Note
02	2 stations	Double wiring*1
⋮	⋮	
08	8 stations	Specified layout*2 (Available up to 16 solenoids)
02	2 stations	
⋮	⋮	
16	16 stations	

- \*1 Double wiring: 2-position single, double, 3-position, and 4-position valves can be used on all manifold stations. Use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a specified layout.
- \*2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)
- \* This also includes the number of the blanking plate assembly.

### 8 A, B port size (Metric)

Symbol	A, B port	Type 10/ Side ported	Type 11/ Bottom ported
		SY5000	SY5000
C4 C6 C8	Straight	ø4 One-touch fitting	●
		ø6 One-touch fitting	●
		ø8 One-touch fitting	●
CM*1	Straight port, mixed sizes	●	●
P, E port size (One-touch fittings)		ø10	ø10



- \*1 Indicate the sizes on the manifold specification sheet in the case of "CM."
- \* The direction of P, E port fittings is the same as for the A, B port.

### 9 Mounting

Symbol	Mounting
Nil	Direct mounting
D□	DIN rail mounting

- \* Enter the number of stations inside □. (Refer to "DIN Rail Option" below.)
- \* Only direct mounting is available for Type 11 (Bottom ported).

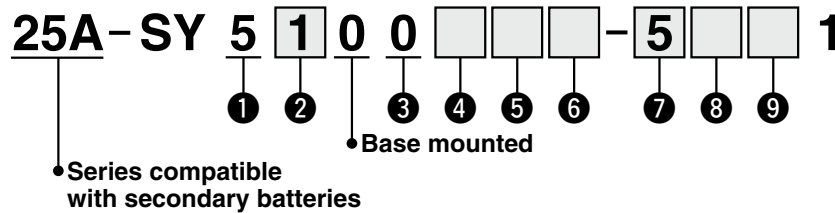
#### DIN rail option

Nil	Standard length	
0	With DIN bracket (Without DIN rail)	
3	For 3 stations	Specify a longer rail than the total length of specified stations.
⋮	⋮	
24	For 24 stations	

- \* The 25A- series specifications and dimensions are the same as those of the standard model.



**How to Order Valves (With two mounting screws)**



**① Series**

5	SY5000
---	--------

**② Type of actuation**

1	2-position single
2	2-position double
3	3-position closed center
4	3-position exhaust center
5	3-position pressure center
A	4-position dual 3-port valve (N.C./N.C.)
B	4-position dual 3-port valve (N.O./N.O.)
C	4-position dual 3-port valve (N.C./N.O.)

**③ Seal type**

0	Rubber seal
---	-------------

**④ Back pressure check valve (Built-in valve type)**

Nil	None
H	Built-in

\* The built-in valve type back pressure check valve is not available for the 3-position type.

**⑤ Pilot valve option**

Nil	Standard (0.7 MPa)
B	Quick response type (0.7 MPa)

**⑥ Coil type**

Nil	Standard
T	With power saving circuit (Continuous duty type)

\* Be sure to select the power saving circuit type when the valve is continuously energized for long periods of time.  
 \* Be careful of the energizing time when the power saving circuit is selected. For details, refer to the standard product catalog.

**⑦ Rated voltage**

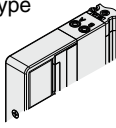
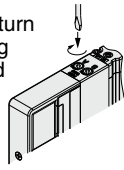
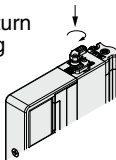
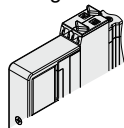
5	24 VDC
6	12 VDC

**⑧ Light/surge voltage suppressor and common specification**

Nil	Without light/surge voltage suppressor (Non-polar)
R	With surge voltage suppressor (Non-polar)
U	With light/surge voltage suppressor (Non-polar)
S	With surge voltage suppressor (Positive common)
Z	With light/surge voltage suppressor (Positive common)
NS	With surge voltage suppressor (Negative common)
NZ	With light/surge voltage suppressor (Negative common)

\* Only "Z" and "NZ" types are available for the product with power saving circuit.

**⑨ Manual override**

<p><b>Nil:</b> Non-locking push type</p> 	<p><b>D:</b> Push-turn locking slotted type</p> 
<p><b>E:</b> Push-turn locking lever type</p> 	<p><b>F:</b> Slide locking type</p> 

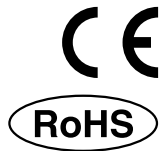
\* The 25A- series specifications and dimensions are the same as those of the standard model.

# Plug-in Connector Connecting Base

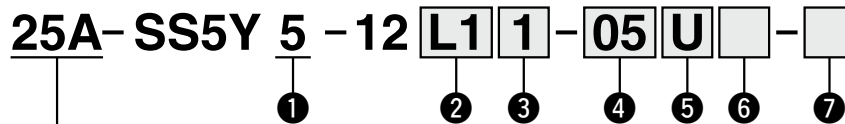
Lead Wire

Type 12  
Top Ported

# 25A-SY5000 Series



## How to Order Manifold



• Series compatible with secondary batteries

### ① Series

5	SY5000
---	--------

### ② Number of cores (Lead wire)

L1	34 cores
L2	17 cores
L3	9 cores

### ③ Lead wire length

1	0.6 m
2	1.5 m
3	3 m

### ⑤ P, E port entry

U*1	U side (2 to 10 stations)
D*1	D side (2 to 10 stations)
B	Both sides (2 to 24 stations)

\*1 ⑥ For type "S," supply/exhaust block assembly with built-in silencer, choose "U" or "D" for P port entry.

### ④ Valve stations

#### (L1□)

Symbol	Stations	Note
02	2 stations	Double wiring*1
⋮	⋮	
16	16 stations	Specified layout*2 (Available up to 32 solenoids)
02	2 stations	
⋮	⋮	
24	24 stations	

#### (L3□)

Symbol	Stations	Note
02	2 stations	Double wiring*1
⋮	⋮	
04	4 stations	Specified layout*2 (Available up to 8 solenoids)
02	2 stations	
⋮	⋮	
08	8 stations	

#### (L2□)

Symbol	Stations	Note
02	2 stations	Double wiring*1
⋮	⋮	
08	8 stations	Specified layout*2 (Available up to 16 solenoids)
02	2 stations	
⋮	⋮	
16	16 stations	

### ⑥ SUP/EXH block assembly

Nil	Internal pilot
S	Internal pilot, Built-in silencer

\* For built-in silencer type, P and E ports are available on U and D sides. 3/5(E) port is plugged. The silencer exhaust port is located on the opposite side of P, E port entry. (Example: When the P, E port entry is D side, the silencer exhaust port is U side.)

\* When the built-in silencer type is used, keep the exhaust port from coming in direct contact with water or other liquids.

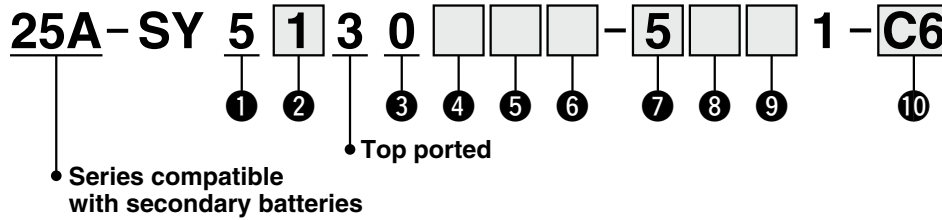
### ⑦ Mounting

Nil	Direct mounting	
D	DIN rail mounting (With DIN rail)	
D0	DIN rail mounting (Without DIN rail)	
D3	For 3 stations	Specify a longer rail than the standard length.
⋮	⋮	
D24	For 24 stations	

- \*1 Double wiring: 2-position single, double, 3-position, and 4-position valves can be used on all manifold stations. Use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a specified layout.
- \*2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)
- \* This also includes the number of the blanking plate assembly.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

**How to Order Valves (With two mounting screws)**



**1 Series**

5	SY5000
---	--------

**2 Type of actuation**

1	2-position single
2	2-position double
3	3-position closed center
4	3-position exhaust center
5	3-position pressure center
A	4-position dual 3-port valve (N.C./N.C.)
B	4-position dual 3-port valve (N.O./N.O.)
C	4-position dual 3-port valve (N.C./N.O.)

**3 Seal type**

0	Rubber seal
---	-------------

**4 Back pressure check valve (Built-in valve type)**

Nil	None
H	Built-in

\* The built-in valve type back pressure check valve is not available for the 3-position type.

**5 Pilot valve option**

Nil	Standard (0.7 MPa)
B	Quick response type (0.7 MPa)

**6 Coil type**

Nil	Standard
T	With power saving circuit (Continuous duty type)

\* Be sure to select the power saving circuit type when the valve is continuously energized for long periods of time.  
\* Be careful of the energizing time when the power saving circuit is selected. For details, refer to the standard product catalog.

**7 Rated voltage**

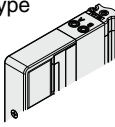
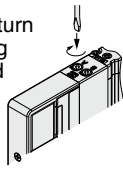
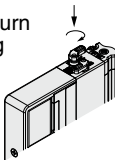
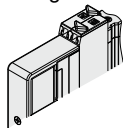
5	24 VDC
6	12 VDC

**8 Light/surge voltage suppressor and common specification**

Nil	Without light/surge voltage suppressor (Non-polar)
R	With surge voltage suppressor (Non-polar)
U	With light/surge voltage suppressor (Non-polar)
S	With surge voltage suppressor (Positive common)
Z	With light/surge voltage suppressor (Positive common)
NS	With surge voltage suppressor (Negative common)
NZ	With light/surge voltage suppressor (Negative common)

\* Only "Z" and "NZ" types are available for the product with power saving circuit.

**9 Manual override**

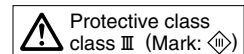
<p><b>Nil:</b> Non-locking push type</p> 	<p><b>D:</b> Push-turn locking slotted type</p> 
<p><b>E:</b> Push-turn locking lever type</p> 	<p><b>F:</b> Slide locking type</p> 

**10 A, B port size**

**One-touch fitting (Metric)**

Symbol	A, B port	SY5000
C4	ø4 One-touch fitting	●
C6	ø6 One-touch fitting	●
C8	ø8 One-touch fitting	●

\* The 25A- series specifications and dimensions are the same as those of the standard model.



Type 10  
Side Ported

Type 11  
Bottom Ported

# Plug-in Connector Connecting Base

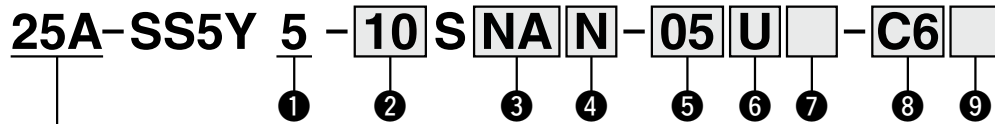
EX260

# 25A-SY5000 Series



RoHS

## How to Order Manifold



Series compatible with secondary batteries

### 1 Series

5	SY5000
---	--------

### 2 Type

10	Side ported
11	Bottom ported

### 3 SI unit specifications

Symbol	Protocol	Number of outputs	Communication connector
0	Without SI unit		
QA	DeviceNet™	32	M12
QB		16	
NA	PROFIBUS	32	
NB		DP	
VA	CC-Link	32	
VB		16	
DA	EtherCAT	32	
DB		16	
FA	PROFINET	32	
FB		16	
EA	EtherNet/IP™	32	
EB		16	

For SI unit part number, refer to page 35. DIN rail cannot be mounted without SI unit.

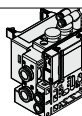
### 4 SI unit output polarity

Nil	Positive common
N	Negative common

- \* Ensure a match with the common specifications of the value to be used.
- \* Without SI unit, the symbol is nil.

### 8 A, B port size (Metric)

Symbol	A, B port	Type 10/ Side ported	Type 11/ Bottom ported
		SY5000	SY5000
Straight	ø4 One-touch fitting	●	●
	ø6 One-touch fitting	●	●
	ø8 One-touch fitting	●	●
	Straight port, mixed sizes	●	●
P, E port size (One-touch fittings)		ø10	ø10



\*1 Indicate the sizes on the manifold specification sheet in the case of "CM."

### 5 Valve stations

In the case of the 32-output SI unit

Symbol	Stations	Note
02	2 stations	Double wiring*1
:	:	
16	16 stations	Specified layout*2 (Available up to 32 solenoids)
02	2 stations	
:	:	
24	24 stations	

In the case of the 16-output SI unit

Symbol	Stations	Note
02	2 stations	Double wiring*1
:	:	
08	8 stations	Specified layout*2 (Available up to 16 solenoids)
02	2 stations	
:	:	
16	16 stations	

- \*1 Double wiring: 2-position single, double, 3-position, and 4-position valves can be used on all manifold stations. Use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a specified layout.
- \*2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)
- \* This also includes the number of the blanking plate assembly.
- \* For the model without the SI unit (S0), note the maximum number of solenoids of the SI unit that will be mounted. If the layout is specified, indicate it on the manifold specification sheet.

### 6 P, E port entry

U	U side (2 to 10 stations)
D	D side (2 to 10 stations)
B	Both sides (2 to 24 stations)

### 7 SUP/EXH block assembly

Nil	Internal pilot
S	Internal pilot, Built-in silencer

- \* 3/5(E) port is plugged for the built-in silencer type.
- \* When the built-in silencer type is used, keep the exhaust port from coming in direct contact with water or other liquids.

### 9 Mounting

Symbol	Mounting
Nil	Direct mounting
D□	DIN rail mounting

- \* Enter the number of stations inside □. (Refer to "DIN Rail Option" below.)
- \* Only direct mounting is available for Type "11" (Bottom ported).

#### DIN rail option

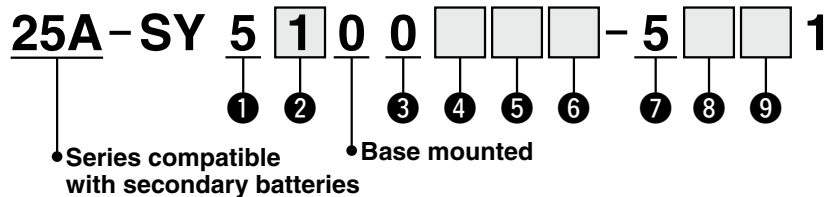
Nil	Direct mounting	
0	With DIN bracket (Without DIN rail)	
3	For 3 stations	Specify a longer rail than the total length of specified stations.
:	:	
24	For 24 stations	

- \* When it is necessary to mount a DIN rail without an SI unit, select "D0" and order DIN rail length separately, referring to L3 in the dimensions.

- \* The 25A- series specifications and dimensions are the same as those of the standard model.

For details about the EX260 Integrated-type (For Output) Serial Transmission System, refer to the Web Catalog and the Operation Manual. For details about part numbers of SI units to be mounted, refer to page 35 in this catalog. Please download the Operation Manual via our website.

**How to Order Valves (With two mounting screws)**



**1 Series**

5	SY5000
---	--------

**2 Type of actuation**

1	2-position single
2	2-position double
3	3-position closed center
4	3-position exhaust center
5	3-position pressure center
A	4-position dual 3-port valve (N.C./N.C.)
B	4-position dual 3-port valve (N.O./N.O.)
C	4-position dual 3-port valve (N.C./N.O.)

**3 Seal type**

0	Rubber seal
---	-------------

**4 Back pressure check valve (Built-in valve type)**

Nil	None
H	Built-in

\* The built-in valve type back pressure check valve is not available for the 3-position type.

**5 Pilot valve option**

Nil	Standard (0.7 MPa)
B	Quick response type (0.7 MPa)

**6 Coil type**

Nil	Standard
T	With power saving circuit (Continuous duty type)

\* Be sure to select the power saving circuit type when the valve is continuously energized for long periods of time.  
 \* Be careful of the energizing time when the power saving circuit is selected. For details, refer to the standard product catalog.

**7 Rated voltage**

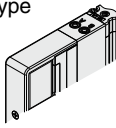
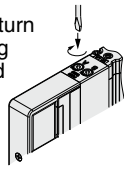
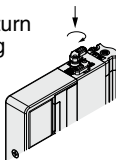
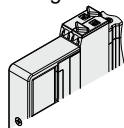
5	24 VDC
---	--------

**8 Light/surge voltage suppressor and common specification**

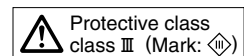
R	With surge voltage suppressor (Non-polar)
U	With light/surge voltage suppressor (Non-polar)
S	With surge voltage suppressor (Positive common)
Z	With light/surge voltage suppressor (Positive common)
NS	With surge voltage suppressor (Negative common)
NZ	With light/surge voltage suppressor (Negative common)

\* Select a valve from "R," "U," "S" or "Z" when the SI unit output polarity is Nil (Positive common). Select a valve from "R," "U," "NS" or "NZ" when the SI unit output polarity is "N" (Negative common).  
 \* Only "Z" and "NZ" types are available for the product with power saving circuit.

**9 Manual override**

<p><b>Nil:</b> Non-locking push type</p> 	<p><b>D:</b> Push-turn locking slotted type</p> 
<p><b>E:</b> Push-turn locking lever type</p> 	<p><b>F:</b> Slide locking type</p> 

\* The 25A- series specifications and dimensions are the same as those of the standard model.



# Plug-in Connector Connecting Base

EX260

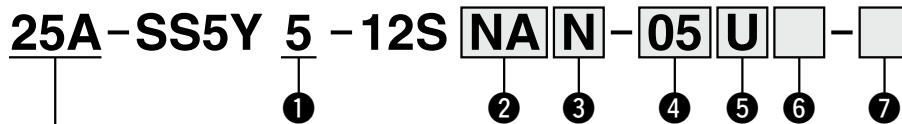
Type 12  
Top Ported

# 25A-SY5000 Series



RoHS

## How to Order Manifold



Series compatible with secondary batteries

### 1 Series

5	SY5000
---	--------

### 2 SI unit specifications

Symbol	Protocol	Number of outputs	Communication connector
0		Without SI unit	
QA	DeviceNet™	32	M12
QB		16	
NA	PROFIBUS	32	
NB		16	
VA	CC-Link	32	
VB		16	
DA	EtherCAT	32	
DB		16	
FA	PROFINET	32	
FB		16	
EA	EtherNet/IP™	32	
EB		16	

For SI unit part number, refer to page 35. DIN rail cannot be mounted without SI unit.

### 3 SI unit output polarity

Nil	Positive common (NPN)
N	Negative common (PNP)

- \* Ensure a match with the common specifications of the value to be used.
- \* Without SI unit, the symbol is nil.

### 4 Valve stations

In the case of the 32-output SI unit

Symbol	Stations	Note
02	2 stations	Double wiring*1
:	:	
16	16 stations	
02	2 stations	Specified layout*2 (Available up to 32 solenoids)
:	:	
24	24 stations	

In the case of the 16-output SI unit

Symbol	Stations	Note
02	2 stations	Double wiring*1
:	:	
08	8 stations	
02	2 stations	Specified layout*2 (Available up to 16 solenoids)
:	:	
16	16 stations	

- \*1 Double wiring: 2-position single, double, 3-position, and 4-position valves can be used on all manifold stations. Use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a specified layout.
- \*2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)
- \* This also includes the number of the blanking plate assembly.
- \* For the model without the SI unit (S0), note the maximum number of solenoids of the SI unit that will be mounted. If the layout is specified, indicate it on the manifold specification sheet.

### 5 P, E port entry

U*1	U side (2 to 10 stations)
D*1	D side (2 to 10 stations)
B	Both sides (2 to 24 stations)

- \*1 For type “S,” supply/exhaust block assembly with built-in silencer, choose “U” or “D” for P port entry.

### 6 SUP/EXH block assembly

Nil	Internal pilot
S	Internal pilot, Built-in silencer

- \* For built-in silencer type, P and E ports are available on U and D sides. 3/5(E) port is plugged. The silencer exhaust port is located on the opposite side of P, E port entry. (Example: When the P, E port entry is D side, the silencer exhaust port is U side.)
- \* When the built-in silencer type is used, keep the exhaust port from coming in direct contact with water or other liquids.

### 7 Mounting

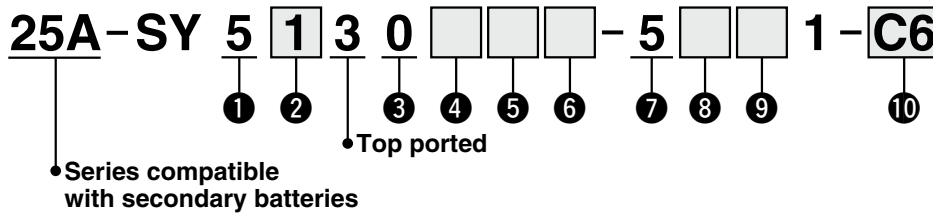
Nil	Direct mounting	
D	DIN rail mounting (With DIN rail)	
D0	DIN rail mounting (Without DIN rail)	
D3	For 3 stations	Specify a longer rail than the standard length.
:	:	
D24	For 24 stations	

- \* When it is necessary to mount a DIN rail without an SI unit, select “D0” and order DIN rail length separately, referring to L3 in the dimensions.

- \* The 25A- series specifications and dimensions are the same as those of the standard model.

For details about the EX260 Integrated-type (For Output) Serial Transmission System, refer to the Web Catalog and the Operation Manual. For details about part numbers of SI units to be mounted, refer to page 35 in this catalog. Please download the Operation Manual via our website.

**How to Order Valves (With two mounting screws)**



**1 Series**

5	SY5000
---	--------

**2 Type of actuation**

1	2-position single
2	2-position double
3	3-position closed center
4	3-position exhaust center
5	3-position pressure center
A	4-position dual 3-port valve (N.C./N.C.)
B	4-position dual 3-port valve (N.O./N.O.)
C	4-position dual 3-port valve (N.C./N.O.)

**3 Seal type**

0	Rubber seal
---	-------------

**4 Back pressure check valve (Built-in valve type)**

Nil	None
H	Built-in

\* The built-in valve type back pressure check valve is not available for the 3-position type.

**5 Pilot valve option**

Nil	Standard (0.7 MPa)
B	Quick response type (0.7 MPa)

**6 Coil type**

Nil	Standard
T	With power saving circuit (Continuous duty type)

\* Be sure to select the power saving circuit type when the valve is continuously energized for long periods of time.  
 \* Be careful of the energizing time when the power saving circuit is selected. For details, refer to the standard product catalog.

**7 Rated voltage**

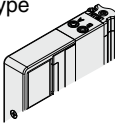
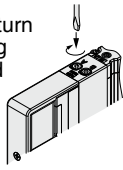
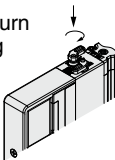
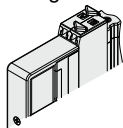
5	24 VDC
---	--------

**8 Light/surge voltage suppressor and common specification**

R	With surge voltage suppressor (Non-polar)
U	With light/surge voltage suppressor (Non-polar)
S	With surge voltage suppressor (Positive common)
Z	With light/surge voltage suppressor (Positive common)
NS	With surge voltage suppressor (Negative common)
NZ	With light/surge voltage suppressor (Negative common)

\* Select a valve from "R," "U," "S" or "Z" when the SI unit output polarity is Nil (Positive common). Select a valve from "R," "U," "NS" or "NZ" when the SI unit output polarity is "N" (Negative common).  
 \* Only "Z" and "NZ" types are available for the product with power saving circuit.

**9 Manual override**

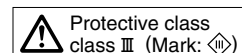
<p><b>Nil:</b> Non-locking push type</p> 	<p><b>D:</b> Push-turn locking slotted type</p> 
<p><b>E:</b> Push-turn locking lever type</p> 	<p><b>F:</b> Slide locking type</p> 

**10 A, B port size**

**One-touch fitting (Metric)**

Symbol	A, B port	SY5000
C4	ø4 One-touch fitting	●
C6	ø6 One-touch fitting	●
C8	ø8 One-touch fitting	●

\* The 25A- series specifications and dimensions are the same as those of the standard model.



Type 10  
Side Ported

Type 11  
Bottom Ported

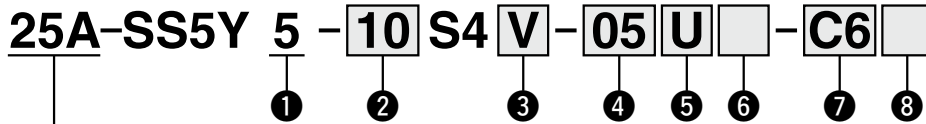
# Plug-in Connector Connecting Base

EX126

# 25A-SY5000 Series



## How to Order Manifold



• Series compatible with secondary batteries

### 1 Series

5	SY5000
---	--------

### 2 Type

10	Side ported
11	Bottom ported

### 3 SI unit

0	Without SI unit
V	CC-Link (Positive common NPN)

\* Only a terminal block plate is mounted for the valve without SI unit.  
For SI unit part number, refer to page 35.

### 4 Valve stations

Symbol	Stations	Note
02	2 stations	Double wiring*1
⋮	⋮	
08	8 stations	
02	2 stations	Specified layout*2 (Available up to 16 solenoids)
⋮	⋮	
16	16 stations	

\*1 Double wiring: 2-position single, double, 3-position, and 4-position valves can be used on all manifold stations.  
Use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a specified layout.

\*2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)

\* This also includes the number of the blanking plate assembly.

### 5 P, E port entry

U	U side (2 to 10 stations)
D	D side (2 to 10 stations)
B	Both sides (2 to 16 stations)

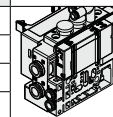
### 6 SUP/EXH block assembly

Nil	Internal pilot
S	Internal pilot, Built-in silencer

\* 3/5(E) port is plugged for the built-in silencer type.  
\* When the built-in silencer type is used, keep the exhaust port from coming in direct contact with water or other liquids.

### 7 A, B port (Metric)

Symbol	A, B port	Type 10/ Side ported	Type 11/ Bottom ported
		SY5000	SY5000
C4	Straight ø4 One-touch fitting	●	●
C6		●	●
C8		●	●
CM*1	Straight port, mixed sizes	●	●
P, E port size (One-touch fittings)		ø10	ø10



\*1 Indicate the size on the manifold specification sheet in the case of "CM."

\* The direction of P, E port fittings is the same as for the A, B port.

### 8 Mounting

Symbol	Mounting
Nil	Direct mounting
D□	DIN rail mounting

\* Enter the number of stations inside □.  
(Refer to "DIN Rail Option" below.)  
\* Only direct mounting is available for Type 11 (Bottom ported).

#### DIN rail option

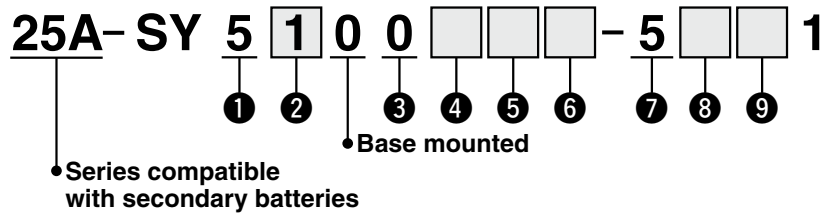
Nil	Standard length	
0	With DIN bracket	(Without DIN rail)
3	For 3 stations	Specify a longer rail than the total length of specified stations.
⋮	⋮	
16	For 16 stations	

\* The 25A- series specifications and dimensions are the same as those of the standard model.

For details about the EX126 Integrated-type (For Output) Serial Transmission System, refer to the Web Catalog and the Operation Manual. For details about part numbers of SI units to be mounted, refer to page 35 in this catalog. Please download the Operation Manual via our website.



**How to Order Valves (With two mounting screws)**



**① Series**

5	SY5000
---	--------

**② Type of actuation**

1	2-position single
2	2-position double
3	3-position closed center
4	3-position exhaust center
5	3-position pressure center
A	4-position dual 3-port valve (N.C./N.C.)
B	4-position dual 3-port valve (N.O./N.O.)
C	4-position dual 3-port valve (N.C./N.O.)

**③ Seal type**

0	Rubber seal
---	-------------

**④ Back pressure check valve (Built-in valve type)**

Nil	None
H	Built-in

\* The built-in valve type back pressure check valve is not available for the 3-position type.

**⑤ Pilot valve option**

Nil	Standard (0.7 MPa)
B	Quick response type (0.7 MPa)

**⑥ Coil type**

Nil	Standard
T	With power saving circuit (Continuous duty type)

\* Be sure to select the power saving circuit type when the valve is continuously energized for long periods of time.  
 \* Be careful of the energizing time when the power saving circuit is selected. For details, refer to the standard product catalog.

**⑦ Rated voltage**

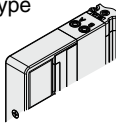
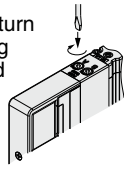
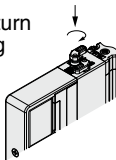
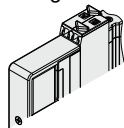
5	24 VDC
---	--------

**⑧ Light/surge voltage suppressor and common specification**

R	With surge voltage suppressor (Non-polar)
U	With light/surge voltage suppressor (Non-polar)
S	With surge voltage suppressor (Positive common)
Z	With light/surge voltage suppressor (Positive common)

\* Only "Z" type is available for the product with power saving circuit.

**⑨ Manual override**

<p><b>Nil:</b> Non-locking push type</p> 	<p><b>D:</b> Push-turn locking slotted type</p> 
<p><b>E:</b> Push-turn locking lever type</p> 	<p><b>F:</b> Slide locking type</p> 

\* The 25A- series specifications and dimensions are the same as those of the standard model.

# Plug-in Connector Connecting Base

EX126

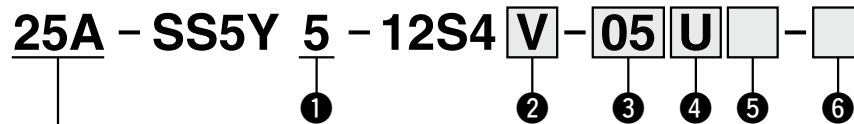
Type 12  
Top Ported

# 25A-SY5000 Series



RoHS

## How to Order Manifold



• Series compatible with secondary batteries

### 1 Series

5	SY5000
---	--------

### 2 SI unit

0	Without SI unit
V	CC-Link (Positive common NPN)

\* Only a terminal block plate is mounted for the valve without SI unit. For SI unit part number, refer to page 35.

### 3 Valve stations

Symbol	Stations	Note
02	2 stations	Double wiring*1
:	:	
08	8 stations	
02	2 stations	Specified layout*2 (Available up to 16 solenoids)
:	:	
16	16 stations	

- \*1 Double wiring: 2-position single, double, 3-position, and 4-position valves can be used on all manifold stations. Use of a 2-position single solenoid will result in an unused control signal. If this is not desired, order with a specified layout.
- \*2 Specified layout: Indicate the wiring specifications on the manifold specification sheet. (Note that 2-position double, 3-position, and 4-position valves cannot be used where single wiring has been specified.)
- \* This also includes the number of the blanking plate assembly.

### 4 P, E port entry

U*1	U side (2 to 10 stations)
D*1	D side (2 to 10 stations)
B	Both sides (2 to 16 stations)

\*1 For type "S," supply/exhaust block assembly with built-in silencer, choose "U" or "D" for P port entry.

### 5 SUP/EXH block assembly

Nil	Internal pilot
S	Internal pilot, Built-in silencer

- \* For built-in silencer type, P and E ports are available on U and D sides. 3/5(E) port is plugged. The silencer exhaust port is located on the opposite side of P, E port entry. (Example: When the P, E port entry is D side, the silencer exhaust port is U side.)
- \* When the built-in silencer type is used, keep the exhaust port from coming in direct contact with water or other liquids.

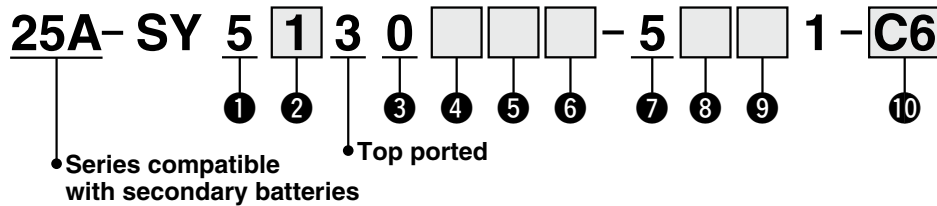
### 6 Mounting

Nil	Direct mounting	
D	DIN rail mounting (With DIN rail)	
D0	DIN rail mounting (Without DIN rail)	
D3	For 3 stations	Specify a longer rail than the standard length.
:	:	
D16	For 16 stations	

\* The 25A-series specifications and dimensions are the same as those of the standard model.

For details about the EX126 Integrated-type (For Output) Serial Transmission System, refer to the Web Catalog and the Operation Manual. For details about part numbers of SI units to be mounted, refer to page 35 in this catalog. Please download the Operation Manual via our website.

**How to Order Valves (With two mounting screws)**



**1 Series**

5	SY5000
---	--------

**2 Type of actuation**

1	2-position single
2	2-position double
3	3-position closed center
4	3-position exhaust center
5	3-position pressure center
A	4-position dual 3-port valve (N.C./N.C.)
B	4-position dual 3-port valve (N.O./N.O.)
C	4-position dual 3-port valve (N.C./N.O.)

**3 Seal type**

0	Rubber seal
---	-------------

**4 Back pressure check valve (Built-in valve type)**

Nil	None
H	Built-in

\* The built-in valve type back pressure check valve is not available for the 3-position type.

**5 Pilot valve option**

Nil	Standard (0.7 MPa)
B	Quick response type (0.7 MPa)

**6 Coil type**

Nil	Standard
T	With power saving circuit (Continuous duty type)

\* Be sure to select the power saving circuit type when the valve is continuously energized for long periods of time.  
 \* Be careful of the energizing time when the power saving circuit is selected. For details, refer to the standard product catalog.

**7 Rated voltage**

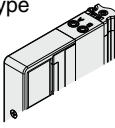
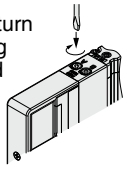
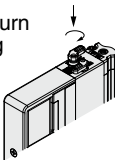
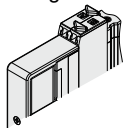
5	24 VDC
---	--------

**8 Light/surge voltage suppressor and common specification**

R	With surge voltage suppressor (Non-polar)
U	With light/surge voltage suppressor (Non-polar)
S	With surge voltage suppressor (Positive common)
Z	With light/surge voltage suppressor (Positive common)

\* Only "Z" type is available for models with a power saving circuit.

**9 Manual override**

<b>Nil:</b> Non-locking push type 	<b>D:</b> Push-turn locking slotted type 
<b>E:</b> Push-turn locking lever type 	<b>F:</b> Slide locking type 

**10 A, B port size**

**One-touch fitting (Metric)**

Symbol	A, B port	SY5000
C4	ø4 One-touch fitting	●
C6	ø6 One-touch fitting	●
C8	ø8 One-touch fitting	●

\* The 25A- series specifications and dimensions are the same as those of the standard model.

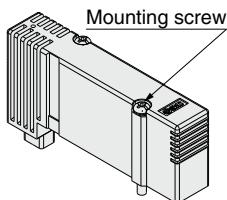
**⚠ Caution**

Tightening torque for mounting screw  
M3: 0.8 N·m

**Manifold Options**

**Blanking plate assembly**

(With two mounting screws)  
 Used when valve additions are expected or for maintenance. A structure is in place on the blanking plate to prevent the mounting screws from sliding.



25A-SY50M-26-1A

**How to Order Blanking Plate Assembly**



Series

5	SY5000
---	--------

• Base type

1	For plug-in connector connecting base
---	---------------------------------------

\* The 25A- series specifications and dimensions are the same as those of the standard model.

# 25A-SY5000 Series

## SI Unit Part Nos.

Description	SI unit part no.	Note
EX260 SI unit	<b>EX260-SPR1-X117</b>	PROFIBUS DP M12 connector, 32 outputs, Negative common (PNP)
	<b>EX260-SPR2-X117</b>	PROFIBUS DP M12 connector, 32 outputs, Positive common (NPN)
	<b>EX260-SPR3-X117</b>	PROFIBUS DP M12 connector, 16 outputs, Negative common (PNP)
	<b>EX260-SPR4-X117</b>	PROFIBUS DP M12 connector, 16 outputs, Positive common (NPN)
	<b>EX260-SDN1-X117</b>	DeviceNet™ M12 connector, 32 outputs, Negative common (PNP)
	<b>EX260-SDN2-X117</b>	DeviceNet™ M12 connector, 32 outputs, Positive common (NPN)
	<b>EX260-SDN3-X117</b>	DeviceNet™ M12 connector, 16 outputs, Negative common (PNP)
	<b>EX260-SDN4-X117</b>	DeviceNet™ M12 connector, 16 outputs, Positive common (NPN)
	<b>EX260-SEC1-X117</b>	EtherCAT M12 connector, 32 outputs, Negative common (PNP)
	<b>EX260-SEC2-X117</b>	EtherCAT M12 connector, 32 outputs, Positive common (NPN)
	<b>EX260-SEC3-X117</b>	EtherCAT M12 connector, 16 outputs, Negative common (PNP)
	<b>EX260-SEC4-X117</b>	EtherCAT M12 connector, 16 outputs, Positive common (NPN)
	<b>EX260-SMJ1-X117</b>	CC-Link M12 connector, 32 outputs, Negative common (PNP)
	<b>EX260-SMJ2-X117</b>	CC-Link M12 connector, 32 outputs, Positive common (NPN)
	<b>EX260-SMJ3-X117</b>	CC-Link M12 connector, 16 outputs, Negative common (PNP)
	<b>EX260-SMJ4-X117</b>	CC-Link M12 connector, 16 outputs, Positive common (NPN)
	<b>EX260-SPN1-X117</b>	PROFINET M12 connector, 32 outputs, Negative common (PNP)
	<b>EX260-SPN2-X117</b>	PROFINET M12 connector, 32 outputs, Positive common (NPN)
	<b>EX260-SPN3-X117</b>	PROFINET M12 connector, 16 outputs, Negative common (PNP)
	<b>EX260-SPN4-X117</b>	PROFINET M12 connector, 16 outputs, Positive common (NPN)
EX126 SI unit	<b>EX260-SEN1-X117</b>	EtherNet/IP™ M12 connector, 32 outputs, Negative common (PNP)
	<b>EX260-SEN2-X117</b>	EtherNet/IP™ M12 connector, 32 outputs, Positive common (NPN)
	<b>EX260-SEN3-X117</b>	EtherNet/IP™ M12 connector, 16 outputs, Negative common (PNP)
	<b>EX260-SEN4-X117</b>	EtherNet/IP™ M12 connector, 16 outputs, Positive common (NPN)
	<b>EX126D-SMJ1-X220</b>	CC-Link (Terminal block, 16 outputs, Positive common (NPN))

## Valve Mounting Screw Part No.

Description	Part no.	Note
	<b>25A-SS5Y5</b>	
Round head combination screw	<b>SY5000-223-1A</b>	Part numbers shown on the left are for 10 valves. (20 pcs.)

## One-touch Fittings Part Nos.

		Port size	25A-SY5000
A, B port	Metric size	ø4 One-touch fitting (Straight type)	<b>90-VVQ1000-51A-C4</b>
		ø6 One-touch fitting (Straight type)	<b>90-VVQ1000-51A-C6</b>
		ø8 One-touch fitting (Straight type)	<b>90-VVQ1000-51A-C8</b>
P, E port	Metric size	ø10 One-touch fitting (Straight type)	<b>90-VVQ2000-51A-C10</b>

## Manifold Options

### How to Order Individual SUP/EXH Spacer Assembly

One-touch fitting Straight type **25A-SY 5 0M-38-1 A-C6**

Series: 5 SY5000

Spacer type: 38 Individual SUP spacer, 39 Individual EXH spacer

Port size (Metric): C4 ø4 One-touch fitting, C6 ø6 One-touch fitting, C8 ø8 One-touch fitting

Part numbers of mounting screw (2 pcs. of each)  
SY5000: SY5000-223-2A

### How to Order Individual SUP/EXH Block Assembly

One-touch fitting Straight type **25A-SY 5 0M-78-1 A-C6**

Series: 5 SY5000

Block type: 78 Individual SUP block, 79 Individual EXH block

Port size (Metric): C4 ø4 One-touch fitting, C6 ø6 One-touch fitting, C8 ø8 One-touch fitting

# 5-Port Solenoid Valve Body Ported/Single Unit **25A-SY5000/7000 Series**

## How to Order

25A - SY 5 1 20 [ ] - 5 L [ ] [ ] - 01 - [ ]

Series compatible with secondary batteries

### Series

5	SY5000
7	SY7000

### Type of actuation

1	2-position single
2	2-position double
3	3-position closed center
4	3-position exhaust center
5	3-position pressure center

### Coil specifications

Nil	Standard
T	With power saving circuit (24, 12 VDC only)

\* Power saving circuit is not available in the case of "D" or "Y" type.

### For DC

5	24 VDC
6	12 VDC
V	6 VDC
S	5 VDC
R	3 VDC

### Rated voltage

### For AC (50/60 Hz)

1	100 VAC
2	200 VAC
3	110 VAC [115 VAC]
4	220 VAC [230 VAC]

\* DC specifications of type "D" and "Y" are only available with 12 and 24 VDC.

### Bracket

Nil	Without bracket
F1	With foot bracket (2-position single only)
F2	With side bracket


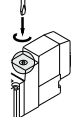
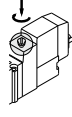
### A, B port size Thread piping

Symbol	Port size	Applicable series
01	Rc 1/8	SY5000
02	Rc 1/4	SY7000





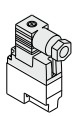




### One-touch fitting (Metric size)

Symbol	Port size	Applicable series
C4	One-touch fitting for ø4	SY5000
C6	One-touch fitting for ø6	
C8	One-touch fitting for ø8	
C8	One-touch fitting for ø8	SY7000
C10	One-touch fitting for ø10	

### Manual override

<b>Nil:</b> Non-locking push type 	<b>D:</b> Push-turn locking slotted type 	<b>E:</b> Push-turn locking lever type 
---	---	---

### Electrical entry

24, 12, 6, 5, 3 VDC/100, 110, 200, 220 VAC				24, 12 VDC/100, 110, 200, 220 VAC
Grommet	L plug connector	M plug connector	DIN terminal	
G: With lead wire (Length 300 mm)	L: With lead wire (Length 300 mm)	M: With lead wire (Length 300 mm)	MN: Without lead wire	D, Y: With connector
				
H: With lead wire (Length 600 mm)	LN: Without lead wire	LO: Without connector	MO: Without connector	
				

- \* "LN," "MN" type: with 2 sockets.
- \* "Y" type is a DIN terminal conforming to EN-175301-803C (former DIN43650C).
- \* Refer to the standard products for the lead wire length of L and M plug connectors and the connector assembly with cover for L and M plug connector.

### Light/surge voltage suppressor

#### Electrical entry for G, H, L, M

Nil	Without light/surge voltage suppressor
S	With surge voltage suppressor
Z	With light/surge voltage suppressor
R	With surge voltage suppressor (Non-polar type)
U	With light/surge voltage suppressor (Non-polar type)

#### Electrical entry for D, Y

Nil	Without light/surge voltage suppressor
S	With surge voltage suppressor
Z	With light/surge voltage suppressor

\* There is no "S" type for AC mode, since a rectifier prevents surge voltage generation.

- \* There is no "S" type for AC mode, since a rectifier prevents surge voltage generation.
- \* For "R" and "U," DC voltage is only available.
- \* Power saving circuit is only available in the "Z" type.

\* When placing an order for body ported solenoid valve as a single unit, mounting screw for manifold and gasket are not attached. Order them separately, if necessary.

\* The 25A-series specifications and dimensions are the same as those of the standard model.

# 5-Port Solenoid Valve Base Mounted/Single Unit 25A-SY5000/7000 Series

## How to Order

**25A - SY 5 2 40 [ ] [ ] - 5 L [ ] [ ] - [ ]**

**Series compatible with secondary batteries**

**Series**

5	SY5000
7	SY7000

**Type of actuation**

1	2-position single
2	2-position double
3	3-position closed center
4	3-position exhaust center
5	3-position pressure center

**Pilot type**

Nil	Internal pilot
R	External pilot

**Coil specifications**

Nil	Standard
T	With power saving circuit (24, 12 VDC only)

\* Power saving circuit is not available in the case of "D" or "Y" type.

**Rated voltage**

**For DC**

5	24 VDC
6	12 VDC
V	6 VDC
S	5 VDC
R	3 VDC

**For AC (50/60Hz)**

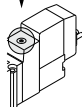
1	100 VAC
2	200 VAC
3	110 VAC [115 VAC]
4	220 VAC [230 VAC]

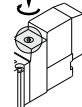
\* DC specifications of type "D" and "Y" are only available with 12 and 24 VDC.

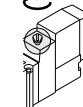
**Port size**

Symbol	Port size	Applicable series
Nil	Without sub-plate	
02	Rc 1/4 With sub-plate	SY5000 SY7000
03	Rc 3/8 With sub-plate	SY7000

**Manual override**

**Nil:** Non-locking push type 

**D:** Push-turn locking slotted type 

**E:** Push-turn locking lever type 

**Light/surge voltage suppressor**

**Electrical entry for G, H, L, M**

Nil	Without light/surge voltage suppressor
S	With surge voltage suppressor
Z	With light/surge voltage suppressor
R	With surge voltage suppressor (Non-polar type)
U	With light/surge voltage suppressor (Non-polar type)

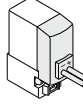
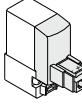
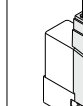
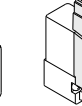
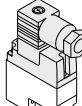
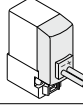
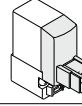
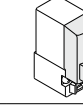
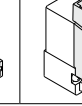
\* There is no "S" type for AC mode, since a rectifier prevents surge voltage generation.  
\* For "R" and "U," DC voltage is only available.  
\* Power saving circuit is only available in the "Z" type.

**Electrical entry for D, Y**

Nil	Without light/surge voltage suppressor
S	With surge voltage suppressor (Non-polar type)
Z	With light/surge voltage suppressor (Non-polar type)

\* There is no "S" type for AC mode, since a rectifier prevents surge voltage generation.

**Electrical entry**

24, 12, 6, 5, 3 VDC / 100, 110, 200, 220 VAC				24, 12 VDC / 100, 110, 200, 220 VAC
Grommet	L plug connector	M plug connector	MN plug connector	DIN terminal
G: With lead wire (Length 300 mm)	L: With lead wire (Length 300 mm)	M: With lead wire (Length 300 mm)	MN: Without lead wire	D, Y: With connector
				
H: With lead wire (Length 600 mm)	LN: Without lead wire	LO: Without connector	MO: Without connector	
				

\* "LN," "MN" type: with 2 sockets.  
\* "Y" type is a DIN terminal conforming to EN-175301-803C (former DIN43650C).  
\* Refer to the standard products for the lead wire length of L and M plug connectors and the connector assembly with cover for L and M plug connector.

\* The 25A-series specifications and dimensions are the same as those of the standard model.

# 5-Port Solenoid Valve Body Ported Manifold Bar Stock Type/Individual Wiring

## 25A-SY5000/7000 Series

Type **20**

### How to Order Manifold

**25A** - **SS5Y** **5** - 20 - **05**

• Series compatible with secondary batteries

Manifold series •

5	SY5000
7	SY7000

• Stations

02	2 stations
⋮	⋮
20	20 stations

\* This also includes the number of the blanking plate assembly.

\* The 25A- series specifications and dimensions are the same as those of the standard model. However, the blanking plate assembly has different dimensions. Refer to page 42.

# 25A-SY5000/7000 Series

## How to Order Valves

**25A – SY 5 1 20 [ ] – 5 L [ ] [ ] – 01**

• Series compatible with secondary batteries

Series •

5	SY5000
7	SY7000

Type of actuation •

1	2-position single
2	2-position double
3	3-position closed center
4	3-position exhaust center
5	3-position pressure center

Coil specifications •

Nil	Standard
T	With power saving circuit (24 VDC, 12 VDC only)

\* Power saving circuit is not available in the case of "D" or "Y" type.

Rated voltage •

For DC		For AC (50/60Hz)	
5	24 VDC	1	100 VAC
6	12 VDC	2	200 VAC
V	6 VDC	3	110 VAC [115 VAC]
S	5 VDC	4	220 VAC [230 VAC]
R	3 VDC		

\* DC specifications of type "D" and "Y" are only available with 12 and 24 VDC.

• A, B port size Thread piping

Symbol	Port size	Applicable series
01	Rc 1/8	SY5000
02	Rc 1/4	SY7000

One-touch fitting (Metric size)

Symbol	Port size	Applicable series
C4	One-touch fitting for ø4	SY5000
C6	One-touch fitting for ø6	
C8	One-touch fitting for ø8	
C8	One-touch fitting for ø8	SY7000
C10	One-touch fitting for ø10	

• Manual override

Nil	Non-locking push type
D	Push-turn locking slotted type
E	Push-turn locking lever type

• Light/surge voltage suppressor

Electrical entry for G, H, L, M

Nil	Without light/surge voltage suppressor
S	With surge voltage suppressor
Z	With light/surge voltage suppressor
R	With surge voltage suppressor (Non-polar type)
U	With light/surge voltage suppressor (Non-polar type)

- \* There is no "S" type for AC mode, since a rectifier prevents surge voltage generation.
- \* For "R" and "U," DC voltage is only available.
- \* Power saving circuit is only available in the "Z" type.

Electrical entry for D, Y

Nil	Without light/surge voltage suppressor
S	With surge voltage suppressor (Non-polar type)
Z	With light/surge voltage suppressor (Non-polar type)

- \* There is no "S" type for AC mode, since a rectifier prevents surge voltage generation.

Electrical entry •

24, 12, 6, 5, 3 VDC/100, 110, 200, 220 VAC			24, 12 VDC/ 100, 110, 200, 220 VAC
Grommet	L plug connector	M plug connector	DIN terminal
G: With lead wire (Length 300 mm) H: With lead wire (Length 600 mm)	L: With lead wire (Length 300 mm) LN: Without lead wire LO: Without connector	M: With lead wire (Length 300 mm) MN: Without lead wire MO: Without connector	D: With connector Y: With connector

- \* "LN," "MN" type: with 2 sockets.
- \* "Y" type is a DIN terminal conforming to EN-175301-803C (former DIN43650C).
- \* Refer to the standard products for the lead wire length of L and M plug connectors and the connector assembly with cover for L and M plug connector.

\* The 25A- series specifications and dimensions are the same as those of the standard model.



Type **41**

Type **42**

# 5-Port Solenoid Valve Base Mounted Manifold Bar Stock Type/Individual Wiring **25A-SY5000/7000 Series**

## How to Order Manifold

### Type 41/Compact type

**25A – SS5Y 5 – 41 – 05 – C8**

• Series compatible with secondary batteries

Manifold series •

5	SY5000
---	--------

Stations •

02	2 stations
⋮	⋮
20	20 stations

\* This also includes the number of the blanking plate assembly.

• A, B port size  
Thread piping

Symbol	Port size	Applicable series
01	Rc 1/8	SY5000

One-touch fitting (Metric size)

Symbol	Port size	Applicable series
C6	One-touch fitting for ø6	SY5000
C8	One-touch fitting for ø8	

One-touch fitting (Inch size)

Symbol	Port size	Applicable series
N7	One-touch fitting for ø1/4"	SY5000
N9	One-touch fitting for ø5/16"	

### Type 42/External pilot capable

**25A – SS5Y 5 – 42 – 05 – C8**

• Series compatible with secondary batteries

Manifold series •

5	SY5000
7	SY7000

Stations •

02	2 stations
⋮	⋮
20	20 stations

\* This also includes the number of the blanking plate assembly.

• A, B port size  
Thread piping

Symbol	Port size	Applicable series
02	Rc 1/4	SY5000
02	Rc 1/4	SY7000

One-touch fitting (Metric size)

Symbol	Port size	Applicable series
C6	One-touch fitting for ø6	SY5000
C8	One-touch fitting for ø8	
C10	One-touch fitting for ø10	SY7000

One-touch fitting (Inch size)

Symbol	Port size	Applicable series
N7	One-touch fitting for ø1/4"	SY5000
N9	One-touch fitting for ø5/16"	
N11	One-touch fitting for ø3/8"	SY7000

\* The 25A- series specifications and dimensions are the same as those of the standard model. However, the blanking plate assembly has different dimensions. Refer to page 42.

# 25A-SY5000/7000 Series

## How to Order Valves

**25A – SY** **5** **2** **40** **–** **5** **L**

• Series compatible with secondary batteries

Series

5	SY5000
7	SY7000

Type of actuation

1	2-position single
2	2-position double
3	3-position closed center
4	3-position exhaust center
5	3-position pressure center

Pilot type

Nil	Internal pilot
R	External pilot

Coil specifications

Nil	Standard
T	With power saving circuit (24 VDC, 12 VDC only)

\* Power saving circuit is not available in the case of "D" or "Y" type.

Rated voltage

For DC

5	24 VDC
6	12 VDC
V	6 VDC
S	5 VDC
R	3 VDC

For AC (50/60Hz)

1	100 VAC
2	200 VAC
3	110 VAC [115 VAC]
4	220 VAC [230 VAC]

\* DC specifications of type "D" and "Y" are only available with 12 and 24 VDC.

• Manual override

Nil	Non-locking push type
D	Push-turn locking slotted type
E	Push-turn locking lever type

• Light/surge voltage suppressor

Electrical entry for G, H, L, M

Nil	Without light/surge voltage suppressor
S	With surge voltage suppressor
Z	With light/surge voltage suppressor
R	With surge voltage suppressor (Non-polar type)
U	With light/surge voltage suppressor (Non-polar type)

\* There is no "S" type for AC mode, since a rectifier prevents surge voltage generation.

\* For "R" and "U," DC voltage is only available.

\* Power saving circuit is only available in the "Z" type.

Electrical entry for D, Y

Nil	Without light/surge voltage suppressor
S	With surge voltage suppressor (Non-polar type)
Z	With light/surge voltage suppressor (Non-polar type)

\* There is no "S" type for AC mode, since a rectifier prevents surge voltage generation.

• Electrical entry

24, 12, 6, 5, 3 VDC/100, 110, 200, 220 VAC			24, 12 VDC/ 100, 110, 200, 220 VAC
Grommet	L plug connector	M plug connector	DIN terminal
G: With lead wire (Length 300 mm) H: With lead wire (Length 600 mm)	L: With lead wire (Length 300 mm) LN: Without lead wire LO: Without connector	M: With lead wire (Length 300 mm) MN: Without lead wire MO: Without connector	D: With connector Y: With connector

\* "LN," "MN" type: with 2 sockets.

\* "Y" type is a DIN terminal conforming to EN-175301-803C (former DIN43650C).

\* Refer to the standard products for the lead wire length of L and M plug connectors and the connector assembly with cover for L and M plug connector.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

# 5-Port Solenoid Valve **25A-SY5000/7000 Series**

## One-touch Fittings Part Nos. for Body Ported

Port size		25A-SY5000	25A-SY7000
Cylinder port	Metric size	ø4 One-touch fitting (Straight type)	90-VVQ1000-51A-C4
		ø6 One-touch fitting (Straight type)	90-VVQ1000-51A-C6
		ø8 One-touch fitting (Straight type)	90-VVQ1000-51A-C8
		ø10 One-touch fitting (Straight type)	90-VVQ2000-51A-C8
			90-VVQ2000-51A-C10

## Gasket Assembly Part Nos.

Valve model	Manifold type	25A-SY5000	25A-SY7000
Body ported	Type 20	SY5000-GS-3	SY7000-GS-3
Base mounted	Type 41/42	SY5000-GS-4	SY7000-GS-4

\* The gasket assembly includes 10 sets of a gasket and mounting screws.

## Bracket Assembly Part Nos.

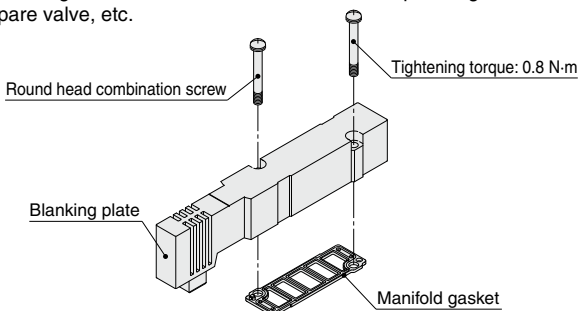
Description	Part no.
Bracket (For F1)	25A-SX <sup>2</sup> 000-16-2A (With mounting screw)
Bracket (For F2)	25A-SX <sup>2</sup> 000-16-1A (With mounting screw)

## Manifold Options

### Blanking plate assembly

(Mounting screw: 2 pcs., with gasket)

It is used by attaching on the manifold block for being prepared for removing a valve for maintenance reasons or planning to mount a spare valve, etc.



### How to Order

25A - SY **5** 000 - 26 - 1A

#### Series

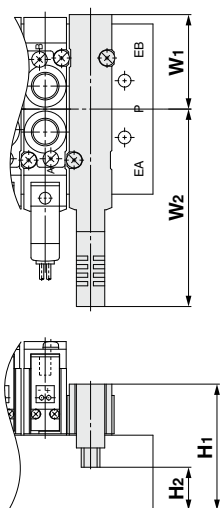
5	25A-SY5000
7	25A-SY7000

### Caution

When mounted on a type 20 manifold, only the P port is plugged.

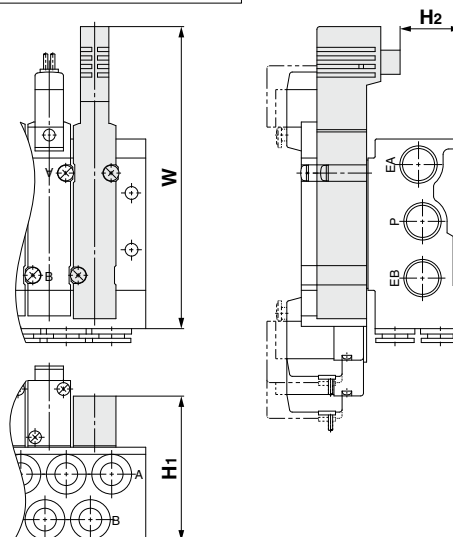
## Dimensions

### Manifold type/For type 20



Dimensions [mm]					
Series	Manifold type	W <sub>1</sub>	W <sub>2</sub>	H <sub>1</sub>	H <sub>2</sub>
25A-SY5000	Type 20	33.3	69.6	44.5	15.2
25A-SY7000	Type 20	39.4	76.4	41.1	18.3


### Manifold type/For type 41/42

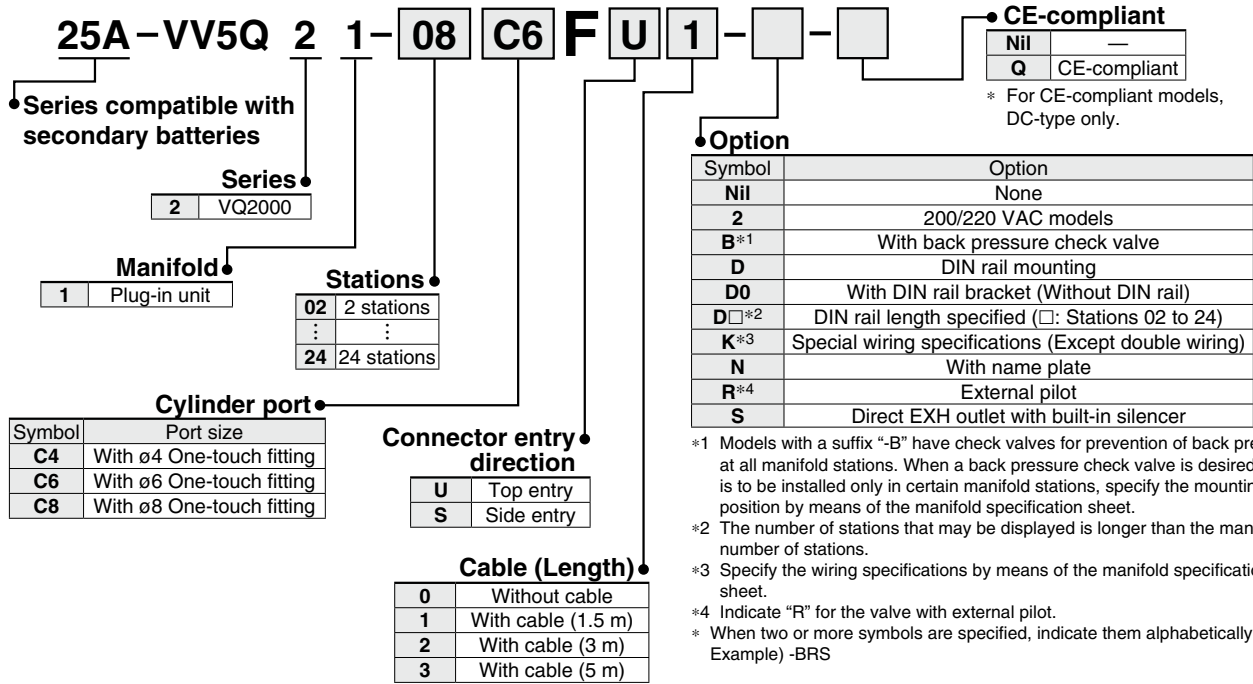


Dimensions [mm]				
Series	Manifold type	W	H <sub>1</sub>	H <sub>2</sub>
25A-SY5000	Type 41	106.4	51	21.7
	Type 42	107.6	56	26.7
25A-SY7000	Type 42	118.1	55.6	32.8


# Plug-in Unit/Base Mounted F Kit (D-sub connector kit) 25A-VQ2000 Series

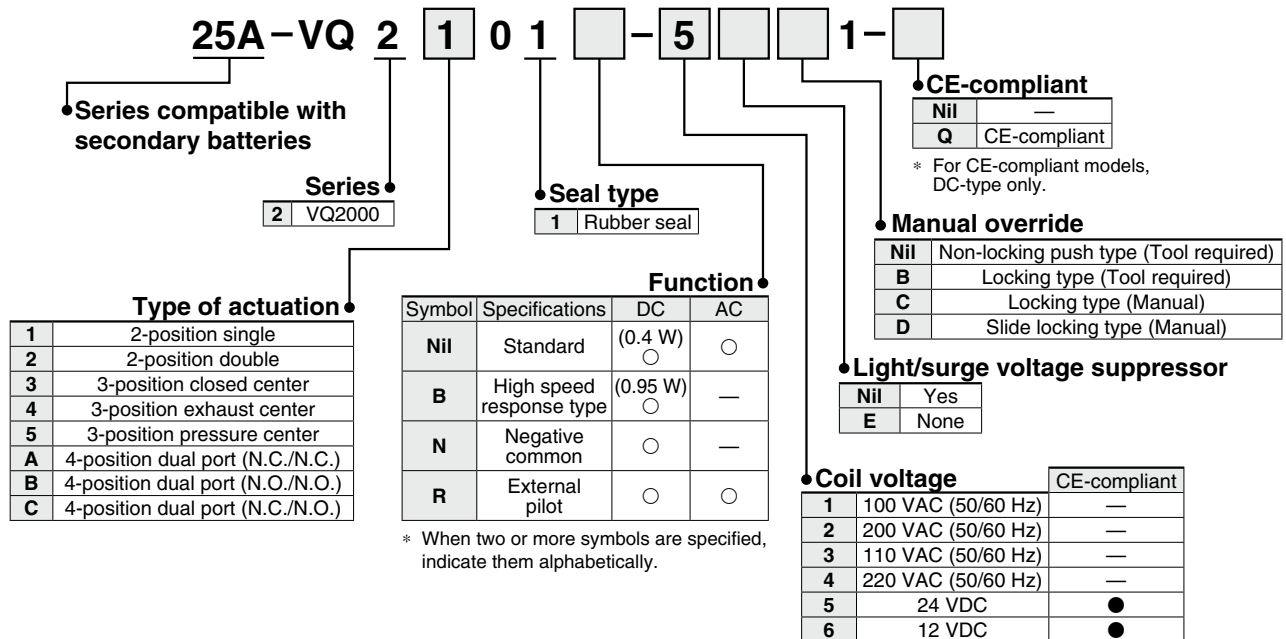
## How to Order Manifold

\* For CE-compliant models, DC-type only.  [Option]



## How to Order Valves

\* For CE-compliant models, DC-type only.  [Option]




### ⚠ Caution

Use the standard (DC) specification when continuously energizing for long periods of time.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

# Plug-in Unit/Base Mounted T Kit (Terminal block box kit) 25A-VQ2000 Series

## How to Order Manifold

\* For CE-compliant models, DC-type only.  [Option]

25A-VV5Q 2 1-08 C6 T 0- -

Series compatible with secondary batteries

Series	2	VQ2000
--------	---	--------

Manifold	1	Plug-in unit
----------	---	--------------

Stations	02	2 stations
⋮	⋮	⋮
20	20 stations	

Symbol	Port size
C4	With ø4 One-touch fitting
C6	With ø6 One-touch fitting
C8	With ø8 One-touch fitting

### Option

Symbol	Option
Nil	None
B*1	With back pressure check valve
D	DIN rail mounting
D0	With DIN rail bracket (Without DIN rail)
D□*2	DIN rail length specified (□: Stations 02 to 20)
K*3	Special wiring spec. (Except double wiring)
N	With name plate
R*4	External pilot
S	Direct EXH outlet with built-in silencer
W	Enclosure: Dust-tight, Water-jet-proof (IP65)


### CE-compliant

Nil	—
Q	CE-compliant

\* For CE-compliant models, DC-type only.

- \*1 Models with a suffix “-B” have check valves for prevention of back pressure at all manifold stations. When a back pressure check valve is desired, and is to be installed only in certain manifold stations, specify the mounting position by means of the manifold specification sheet.
- \*2 The number of stations that may be displayed is longer than the manifold number of stations.
- \*3 Specify the wiring specifications by means of the manifold specification sheet.
- \*4 Indicate “R” for the valve with external pilot.
- \* When two or more symbols are specified, indicate them alphabetically. Example) -BRS
- \* Specify the mounting position by means of the manifold specification sheet.

## How to Order Valves

\* For CE-compliant models, DC-type only.  [Option]

25A-VQ 2 1 0 1 - 5 - - - 1 -

Series compatible with secondary batteries

Series	2	VQ2000
--------	---	--------

### Type of actuation

1	2-position single
2	2-position double
3	3-position closed center
4	3-position exhaust center
5	3-position pressure center
A	4-position dual port (N.C./N.C.)
B	4-position dual port (N.O./N.O.)
C	4-position dual port (N.C./N.O.)

### Seal type

1	Rubber seal
---	-------------

### Function

Symbol	Specifications	DC	AC
Nil	Standard	(0.4 W) ○	○
B	High speed response type	(0.95 W) ○	—
N	Negative common	○	—
R	External pilot	○	○

\* When two or more symbols are specified, indicate them alphabetically. Combination of “B” and “K” is not possible.

### CE-compliant

Nil	—
Q	CE-compliant

\* For CE-compliant models, DC-type only.

### Enclosure

Nil	Dustproof
W	Dust-tight/Water-jet-proof type (IP65)

### Manual override

Nil	Non-locking push type (Tool required)
B	Locking type (Tool required)
C	Locking type (Manual)
D	Slide locking type (Manual)

### Light/surge voltage suppressor

Nil	Yes
E	None

### Coil voltage


	CE-compliant
1	100 VAC (50/60 Hz)
3	110 VAC (50/60 Hz)
5	24 VDC
6	12 VDC

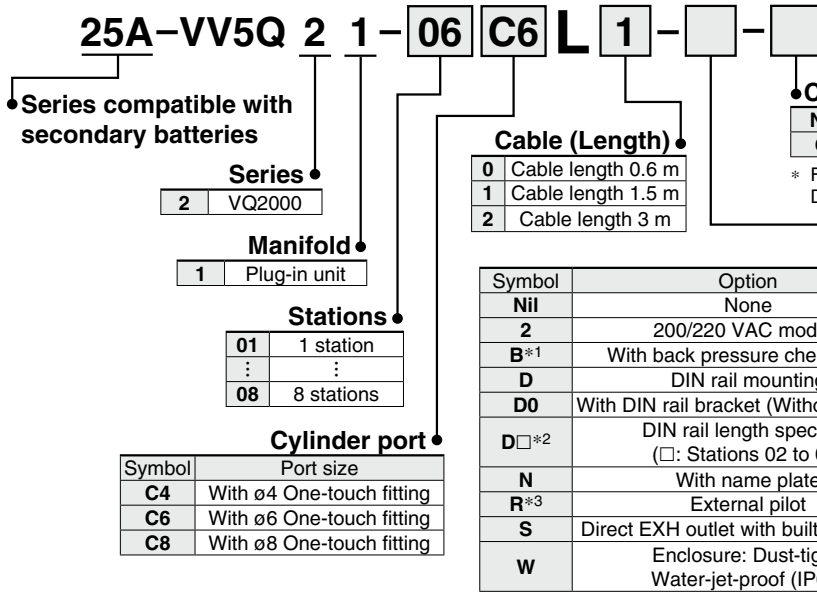
\* The 25A- series specifications and dimensions are the same as those of the standard model.

**Caution**  
Use the standard (DC) specification when continuously energizing for long periods of time.

# Plug-in Unit/Base Mounted L Kit (Lead wire) 25A-VQ2000 Series

## How to Order Manifold

\* For CE-compliant models, DC-type only.  [Option]




\*1 Models with a suffix "-B" have check valves for prevention of back pressure at all manifold stations. When a back pressure check valve is desired, and is to be installed only in certain manifold stations, specify the mounting position by means of the manifold specification sheet.

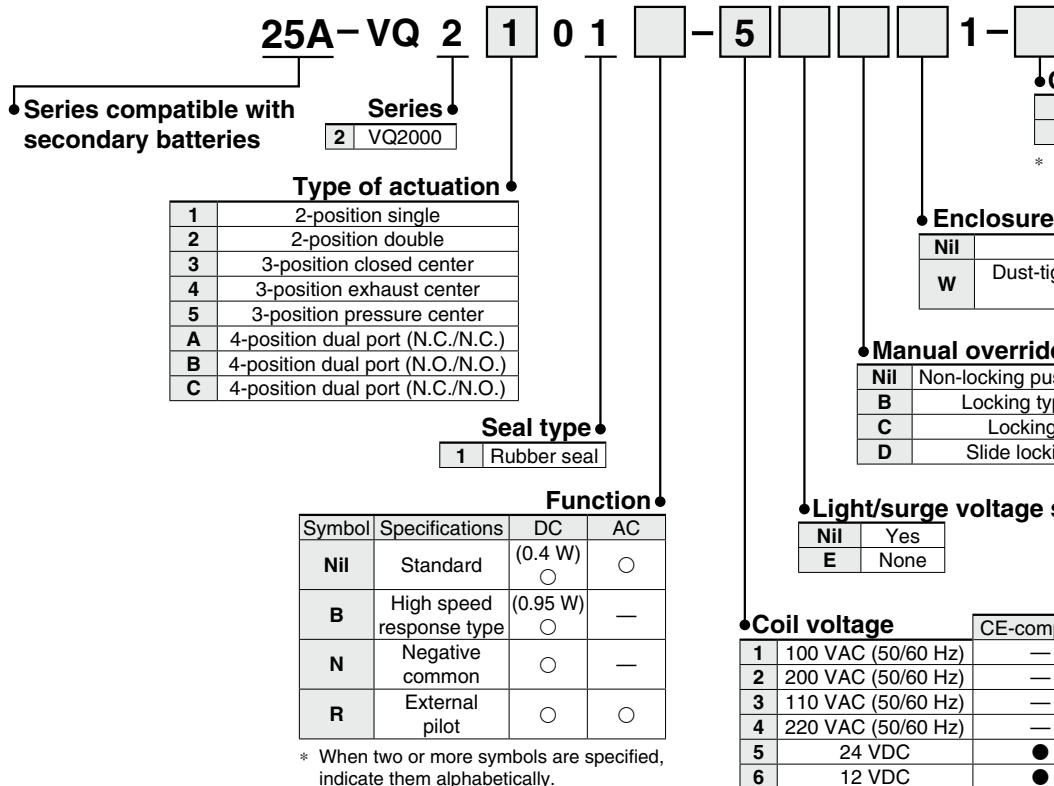
\*2 The number of stations that may be displayed is longer than the manifold a number of stations.

\*3 Indicate "R" for the valve with external pilot.

\* When two or more symbols are specified, indicate them alphabetically. Example) -BRS


## How to Order Valves

\* For CE-compliant models, DC-type only.  [Option]



\* The 25A- series specifications and dimensions are the same as those of the standard model.

# Plug-in Unit/Base Mounted S Kit (Serial transmission) 25A-VQ2000 Series

\* Refer to "SI Unit Part Nos." when ordering the CE-compliant SI unit.  [Option]

## How to Order Manifold

25A-VV5Q 2 1 - 08 C6 S V - [ ] - [ ]

Series compatible with secondary batteries

Series  
2 VQ2000

Manifold  
1 Plug-in unit

Stations	
02	2 stations
⋮	⋮
16*1	16 stations

\*1 Max. 16 stations.  
(Specify a model with 9 to 16 stations by means of the manifold specification sheet.)

### Cylinder port

Symbol	Port size
C4	With ø4 One-touch fitting
C6	With ø6 One-touch fitting
C8	With ø8 One-touch fitting

### SI unit specifications

Symbol	Protocol	Stations
0	Without SI unit	—
Q	DeviceNet™ System	Max.16 stations
V	CC-Link	stations

### CE-compliant

Nil	—
Q	CE-compliant

\* Refer to "SI Unit Part Nos." when ordering the CE-compliant SI unit.

### Option

Symbol	Option
Nil	None
B*1	With back pressure check valve
D	DIN rail mounting
D□*2	DIN rail length specified (□: Stations 02 to 16)
K*3	Special wiring specifications (Except double wiring)
N	With name plate
R*4	With external pilot
S	Direct EXH outlet with built-in silencer
W*5	Enclosure: Dust-tight, Water-jet-proof (IP65)

\*1 Models with a suffix "B" have check valves for prevention of back pressure at all manifold stations. When a back pressure check valve is desired, and is to be installed only in certain manifold stations, specify the mounting position by means of the manifold specification sheet.

\*2 The number of stations that may be displayed is longer than the manifold number of stations.

\*3 Specify the wiring specifications by means of the manifold specification sheet.

\*4 Indicate "R" for the valve with external pilot.

\*5 Refer to "Dimensions" of the standard products for SI unit and valve, in case of "W" (Dust-tight, Water-jet-proof).

\* When two or more symbols are specified, indicate them alphabetically.  
Example) -BRS.

### SI Unit Part Nos.

Symbol	Protocol	SI unit part no.
Q	DeviceNet™	EX120-SDN1-X220
V	CC-Link	EX120-SMJ1-X220

### SI Unit Part Nos. (With option W)

Symbol	Protocol	SI unit part no.
Q	DeviceNet™	EX124D-SDN1-X220
V	CC-Link	EX124D-SMJ1-X220



## How to Order Valves

25A-VQ 2 1 0 1 [ ] - 5 [ ] [ ] 1 - [ ]

Series compatible with secondary batteries

Series  
2 VQ2000

### Type of actuation

1	2-position single
2	2-position double
3	3-position closed center
4	3-position exhaust center
5	3-position pressure center
A	4-position dual port (N.C./N.C.)
B	4-position dual port (N.O./N.O.)
C	4-position dual port (N.C./N.O.)

### Seal type

1 Rubber seal

### CE-compliant

Nil	—
Q	CE-compliant

### Manual override

Nil	Non-locking push type (Tool required)
B	Locking type (Tool required)
C	Locking type (Manual)
D	Slide locking type (Manual)

### Enclosure

Nil	Dustproof
W	Dust-tight/Water-jet-proof type (IP65)

### Function

Symbol	Specifications	DC
Nil	Standard	(0.4 W) ○
B	High speed response type	(0.95 W) ○
N*1	Negative common	○
R*1	External pilot	○

\*1 External pilot and negative common specifications are the same as standard products.

\* When two or more symbols are specified, indicate them alphabetically.

### Coil voltage

5	24 VDC; With indicator light/ surge voltage suppressor
---	--

\* The 25A- series specifications and dimensions are the same as those of the standard model.

# Sub-plate Single Unit 25A-VQ2000 Series



## How to Order

\* For CE-compliant models, DC-type only. [Option]

In the case of **Valve** + **Sub-plate**

25A-VQ2 1 0 1 - 5 W 1 - 02   -  

Series compatible with secondary batteries

Entry is the same as standard products.

Enclosure

Nil	Dustproof
W*1	Dust-tight/Water-jet-proof type (IP65)

\*1 Valves are IP65 specifications.

\* When the valve is a standard (dust-protected) specification, it is not compatible with 200 or 220 VAC.

CE-compliant

Nil	—
Q	CE-compliant

\* For CE-compliant models, DC-type only.

Thread type

Nil	Rc
N	NPT
T	NPTF
F	G

Port size

02	1/4
----	-----

In the case of **Sub-plate** alone

25A-VQ2000-PW-02

\* The 25A-series specifications and dimensions are the same as those of the standard model.

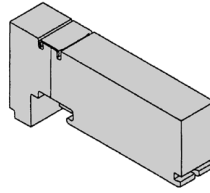


## Manifold Options

### Blanking plate assembly

#### 25A-VVQ2000V-10A-1

It is used by attaching on the manifold block for being prepared for removing a valve for maintenance reasons or planning to mount a spare valve, etc.



\* The 25A- series specifications and dimensions are the same as those of the standard model.

### SI Unit Part Nos.

Description	SI unit part no.	Note
EX124 SI unit	<b>EX124D-SMJ1-X220</b>	CC-Link
	<b>EX124D-SDN1-X220</b>	DeviceNet™
EX120 SI unit	<b>EX120-SMJ1-X220</b>	CC-Link (VQ2000/Without option "W")
	<b>EX120-SDN1-X220</b>	DeviceNet™ (VQ2000/Without option "W")

### One-touch Fittings Part Nos.

Port size		One-touch fitting part no.	
Cylinder port	Metric size	ø4 One-touch fitting (Straight type)	<b>90-VVQ1000-51A-C4</b>
		ø6 One-touch fitting (Straight type)	<b>90-VVQ1000-51A-C6</b>
		ø8 One-touch fitting (Straight type)	<b>90-VVQ1000-51A-C8</b>
1 (P), 3 (R) port	Metric size	ø10 One-touch fitting (Straight type)	<b>90-VVQ2000-51A-C10</b>

# Plug-in/Plug Lead: Single Unit Base Mounted 25A-VQ4000 Series



## How to Order Valves

**Body**

0: Plug-in sub-plate

**Porting specifications**

Nil	Side ported
B	Bottom ported

**Port size**

Nil	Without sub-plate (For manifold)
02	Rc 1/4
03	Rc 3/8

\* Thread standard is the same as standard products.

**Plug-in** 25A-VQ4 1 0 1 [ ] - [ ] [ ] [ ] [ ] 1 - [ ] [ ] - [ ]

**Plug lead** 25A-VQ4 2 5 1 [ ] - [ ] [ ] [ ] [ ] [ ] 1 - [ ] [ ] - [ ]

**Series compatible with secondary batteries**

**Type of actuation**

1	2-position single
2	Rubber/2-position double
3	3-position closed center
4	3-position exhaust center
5	3-position pressure center
6*1	3-position double check

\*1 For double check type, refer to the **Web Catalog**.

**Body**

5: Plug lead sub-plate

**Seal type**

1	Rubber seal
---	-------------

**Function**

Nil*1	Standard type (0.95 W)
Y*2	Low wattage type (0.4 W)
R*3	External pilot

\*1 When the unit is energized continuously, refer to "Specific Product Precautions 1" on page 533 in the **Web Catalog** (VQ4000 series).  
\*2 Only DC is available with Y.  
\*3 External pilot specifications are the same as standard products. Combination of external pilot and perfect interface is not possible.  
\* When two or more symbols are specified, indicate them alphabetically.

**Enclosure**

Nil	Dustproof
W	Dust-tight/Water-jet-proof type (IP65)

**CE-compliant**

Nil	—
Q	CE-compliant

\* CE-compliant: For DC only.

**Manual override**

Nil: Non-locking push type (Tool required)

B: Slotted locking type (Tool required)

C: Locking type (Manual)

**Light/Surge voltage suppressor**

Nil	Yes
E	Without light, with surge voltage suppressor

**Electrical entry**

Grommet	G	Lead wire length 0.6 m
	H	Lead wire length 1.5 m

**Coil voltage**

1	100 VAC (50/60 Hz)
2	200 VAC (50/60 Hz)
3	110 VAC (50/60 Hz)
4	220 VAC (50/60 Hz)
5	24 VDC
6	12 VDC



## How to Order Sub-plates

**25A-VQ4000** - [ ] [ ] - [ ] [ ] - [ ] [ ] - [ ] [ ]

**Series compatible with secondary batteries**

**Electrical entry**

P	Plug-in conduit terminal
S	Plug lead

**Enclosure**

Nil	Dustproof
W*1	Dust-tight/Water-jet-proof type

\*1 It is not necessary for plug lead type.

**CE-compliant**

Nil	—
Q	CE-compliant

**Porting specifications**

Nil	Side ported
B	Bottom ported*1

\*1 For bottom ported port size is Rc 1/4 only.  
\* Thread standard is the same as standard products.

**Port size**

02	Rc1/4
03	Rc3/8

\* The 25A- series specifications and dimensions are the same as those of the standard model.



# Plug-in Unit/Base Mounted F Kit (D-sub connector kit) 25A-VQ4000 Series



## How to Order Manifold

**25A – VV5Q 4 1 – 08 C8 F U 1 –**

• **Series compatible with secondary batteries**

• **Series**

4	VQ4000
---	--------

• **Manifold**

1	Plug-in unit
---	--------------

• **Stations**

01	1 station
⋮	⋮
18	18 stations

• **Cylinder port**

C6	With One-touch fitting for ø6
C8	With One-touch fitting for ø8
C10	With One-touch fitting for ø10
C12	With One-touch fitting for ø12
02	Rc 1/4
03	Rc 3/8
B	Bottom ported Rc 1/4
CM	Mixed

\* As a semi-standard specification, the maximum number of stations can be increased by special wiring specifications.

• **CE-compliant**

Nil	—
Q	CE-compliant

• **Option**

Symbol	Option
Nil	None
K*1	Special wiring specifications (Except double wiring)

\*1 Specify the wiring specifications on the manifold specification sheet.

• **Cable (Length)**

0	Without cable
1	Cable length 1.5 m
2	Cable length 3 m
3	Cable length 5 m

• **Connector entry direction**

D	D side entry
U	U side entry



## How to Order Valves

**25A – VQ 4 1 0 1 – 5 – 1 –**

• **Series compatible with secondary batteries**

• **Series**

4	VQ4000
---	--------

• **Type of actuation**

1	2-position single
2	2-position double
3	3-position closed center
4	3-position exhaust center
5	3-position pressure center
6	3-position double check

• **Seal type**

1	Rubber seal
---	-------------

• **Function**

Nil*1	Standard (0.95 W)
Y*2	Low wattage type (0.4 W)
R*3	External pilot

\*1 When the unit is energized continuously, refer to "Specific Product Precautions 1" on page 533 in the **Web Catalog** (VQ4000 series).  
\*2 Only DC is available with Y.  
\*3 External pilot specifications are the same as standard products. Combination of external pilot and perfect interface is not possible.  
\* When two or more symbols are specified, indicate them alphabetically.

• **CE-compliant**

Nil	—
Q	CE-compliant

\* CE-compliant: For DC only.

• **Manual override**

Nil	Non-locking push type (Tool required)
B	Locking type (Tool required)
C	Locking type (Manual)

• **Light/Surge voltage suppressor**

Nil	Yes
E	Without light, with surge voltage suppressor

• **Coil voltage**

1	100 VAC (50/60 Hz)
2	200 VAC (50/60 Hz)
3	110 VAC (50/60 Hz)
4	220 VAC (50/60 Hz)
5	24 VDC
6	12 VDC

\* The 25A- series specifications and dimensions are the same as those of the standard model.

# Plug-in Unit/Base Mounted T Kit (Terminal block box kit) 25A-VQ4000 Series



## How to Order Manifold

**25A - VV5Q 4 1 - 08 C8 T O - -**

• Series compatible with secondary batteries

**Series**

4	VQ4000
---	--------

**Manifold**

1	Plug-in unit
---	--------------

**Stations**

03	3 stations
⋮	⋮
18	18 stations

\* 2 stations are used for mounting the terminal block box. The number of stations is the number of manifold valves plus 2 stations for the terminal block box. For 13 stations or more, specify the wiring specifications by means of the manifold specification sheet.

**Box mounting position**

O	U side mounting
D	D side mounting

**Cylinder port**

C6	With One-touch fitting for ø6
C8	With One-touch fitting for ø8
C10	With One-touch fitting for ø10
C12	With One-touch fitting for ø12
02	Rc 1/4
03	Rc 3/8
B	Bottom ported Rc 1/4
CM	Mixed

\* As a semi-standard specification, the maximum number of stations can be increased by special wiring specifications.

**CE-compliant**

Nil	—
Q	CE-compliant

**Option**

Symbol	Option
Nil	None
K*1	Special wiring specifications (Except double wiring, for 13 stations or more)
N*2	Name plate
W	IP65 enclosure

\*1 Specify the wiring specifications on the manifold specification sheet.  
\*2 Name plate is inlaid in the terminal block cover.  
\* When two or more symbols are specified, indicate them alphabetically.  
Example) -KM



## How to Order Valves

**25A - VQ 4 1 0 1 - 5 - - - 1 -**

Series compatible with secondary batteries

**Series**

4	VQ4000
---	--------

**Type of actuation**

1	2-position single
2	2-position double
3	3-position closed center
4	3-position exhaust center
5	3-position pressure center
6	3-position double check

**Seal type**

1	Rubber seal
---	-------------

**Function**

Nil*1	Standard (0.95 W)
Y*2	Low wattage type (0.4 W)
R*3	External pilot

\*1 When the unit is energized continuously, refer to "Specific Product Precautions 1" on page 533 in the **Web Catalog** (VQ4000 series).  
\*2 Only DC is available with Y.  
\*3 External pilot specifications are the same as standard products. Combination of external pilot and perfect interface is not possible.  
\* When two or more symbols are specified, indicate them alphabetically.

**CE-compliant**

Nil	—
Q	CE-compliant

\* CE-compliant: For DC only.

**Enclosure**

Nil	Dustproof
W	Dust-tight/Water-jet-proof type (IP65)

**Manual override**

Nil	Non-locking push type (Tool required)
B	Locking type (Tool required)
C	Locking type (Manual)

**Light/Surge voltage suppressor**

Nil	Yes
E	Without light, with surge voltage suppressor

**Coil voltage**

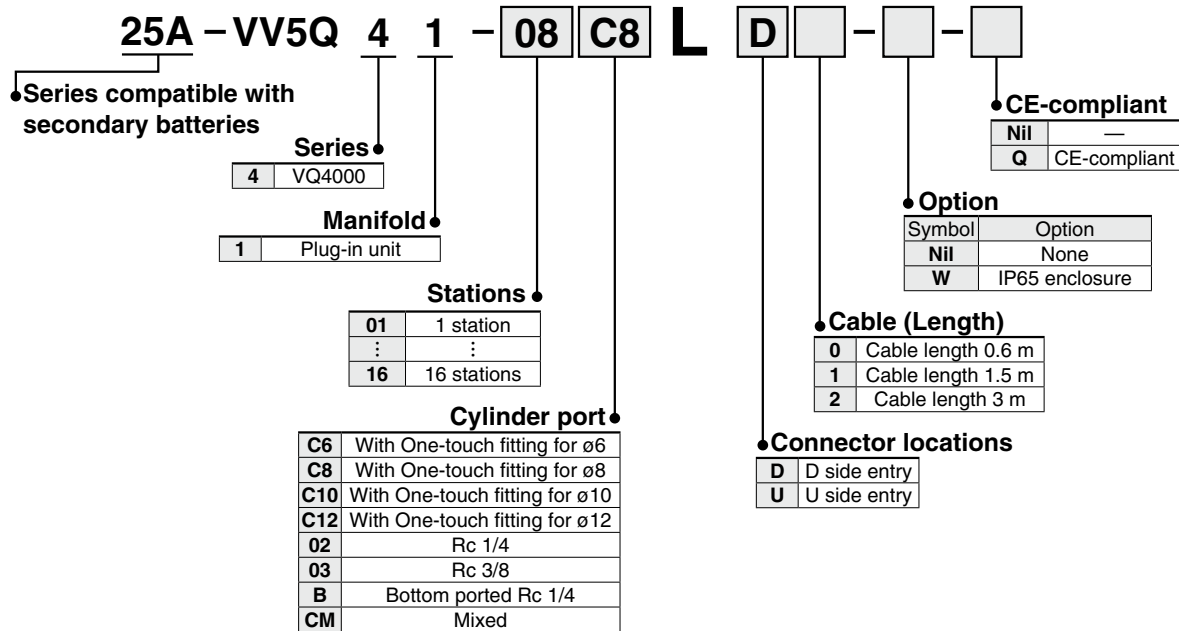
1	100 VAC (50/60 Hz)
2	200 VAC (50/60 Hz)
3	110 VAC (50/60 Hz)
4	220 VAC (50/60 Hz)
5	24 VDC
6	12 VDC

\* The 25A- series specifications and dimensions are the same as those of the standard model.

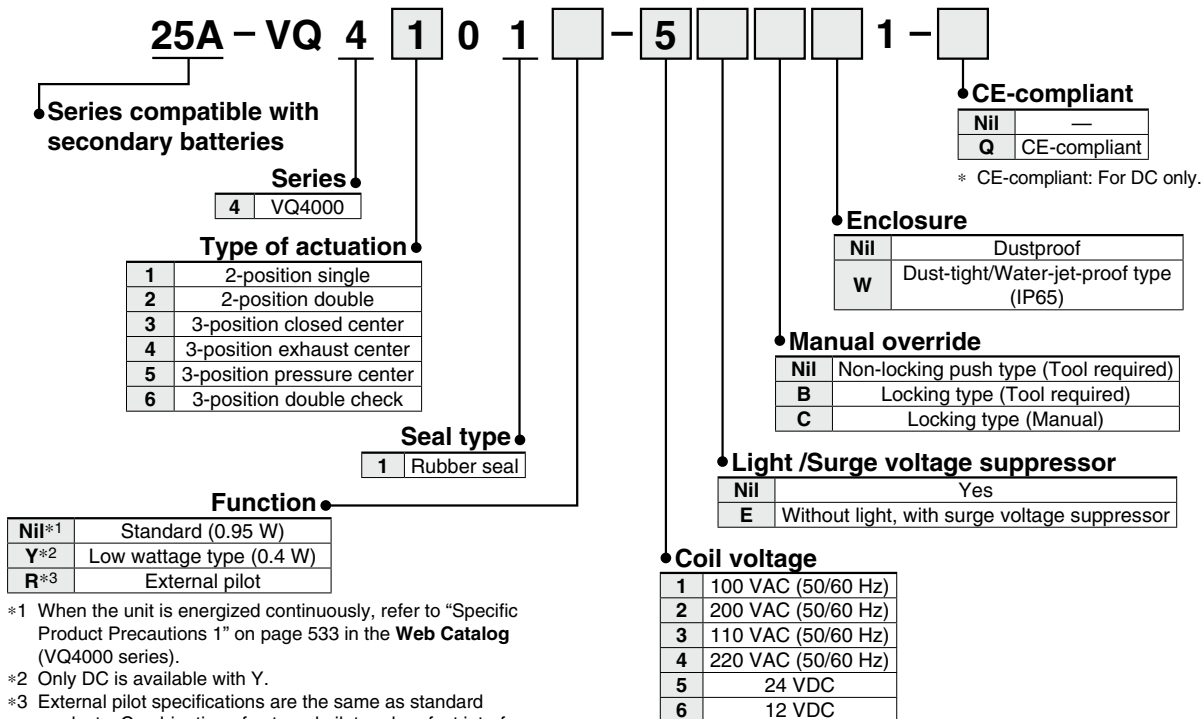
# Plug-in Unit/Base Mounted L Kit (Lead wire cable) 25A-VQ4000 Series



## How to Order Manifold



## How to Order Valves



\*1 When the unit is energized continuously, refer to "Specific Product Precautions 1" on page 533 in the **Web Catalog** (VQ4000 series).  
 \*2 Only DC is available with Y.  
 \*3 External pilot specifications are the same as standard products. Combination of external pilot and perfect interface is not possible.  
 \* When two or more symbols are specified, indicate them alphabetically.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

# Plug-in Unit/Base Mounted S Kit (Serial transmission unit) 25A-VQ4000 Series

\* Refer to "SI Unit Part Nos." when ordering the CE-compliant SI unit. [Option]



## How to Order Manifold

**25A - VV5Q 4 1 - 08 C8 S D V - [ ] - [ ]**

• Series compatible with secondary batteries

• Series

4	VQ4000
---	--------

• Manifold

1	Plug-in unit
---	--------------

• Stations

03	3 stations
⋮	⋮
18	18 stations

\* 2 stations are used for mounting SI unit. The number of stations is the number of manifold valves plus 2 stations for SI unit. For 11 stations or more, specify the wiring specifications by means of the manifold specification sheet.

• Cylinder ports

C6	With One-touch fitting for $\phi 6$
C8	With One-touch fitting for $\phi 8$
C10	With One-touch fitting for $\phi 10$
C12	With One-touch fitting for $\phi 12$
02	Rc 1/4
03	Rc 3/8
B	Bottom ported Rc 1/4
CM	Mixed

• CE-compliant

Nil	—
Q	CE-compliant

• Option

Symbol	Option
Nil	None
K*1	Special wiring specifications (Except double wiring, for 11 stations or more)
W	IP65 enclosure

\*1 Specify the wiring specifications on the manifold specification sheet.  
\* When two or more symbols are specified, indicate them alphabetically. Example) -KW

• SI unit

0	Without SI unit
Q	DeviceNet™
V	CC-Link

• SI unit mounting position

D	D side mounting
U	U side mounting



## How to Order Valves

**25A - VQ 4 1 0 1 [ ] - 5 [ ] [ ] [ ] 1 - [ ]**

• Series compatible with secondary batteries

• Series

4	VQ4000
---	--------

• Type of actuation

1	2-position single
2	2-position double
3	3-position closed center
4	3-position exhaust center
5	3-position pressure center
6	3-position double check

• Seal type

1	Rubber seal
---	-------------

• Function

Nil*1	Standard (0.95 W)
Y*2	Low wattage type (0.4 W)
R*3	External pilot

\*1 When the unit is energized continuously, refer to "Specific Product Precautions 1" on page 533 in the Web Catalog (VQ4000 series).  
\*2 Only DC is available with Y.  
\*3 External pilot specifications are the same as standard products. Combination of external pilot and perfect interface is not possible.  
\* When two or more symbols are specified, indicate them alphabetically.

• CE-compliant

Nil	—
Q	CE-compliant

\* CE-compliant: For DC only.

• Enclosure

Nil	Dustproof
W	Dust-tight/Water-jet-proof type (IP65)

• Manual override

Nil	Non-locking push type (Tool required)
B	Locking type (Tool required)
C	Locking type (Manual)

• Light /Surge voltage suppressor

Nil	Yes
E	Without light, with surge voltage suppressor

• Coil voltage

5	24 VDC
---	--------

\* The 25A- series specifications and dimensions are the same as those of the standard model.

# Plug Lead Unit/Base Mounted C Kit (Connector kit) 25A-VQ4000 Series

## How to Order Manifold

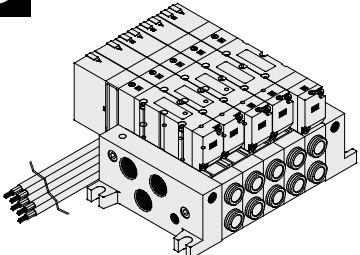
**25A – VV5Q 4 5 – 08 C8 C – W –**

- Series compatible with secondary batteries
- Series: 4 VQ4000
- Manifold: 5 Plug lead unit
- Stations:
 

01	1 station
⋮	⋮
16	16 stations
- Cylinder port:
 

C6	With One-touch fitting for ø6
C8	With One-touch fitting for ø8
C10	With One-touch fitting for ø10
C12	With One-touch fitting for ø12
02	Rc 1/4
03	Rc 3/8
B	Bottom ported Rc 1/4
CM	Mixed
- CE-compliant:
 

Nil	—
Q	CE-compliant
- Option:
 

Symbol	Option
Nil	None
W	IP65 enclosure
- Kit type: **C** kit (Connector)
 

C	Connector kit	Max. 16 stations
---	---------------	------------------

Refer to the **Web Catalog** for wiring specifications.

## How to Order Valves

**25A – VQ 4 1 5 1 – 5 G –**

- Series compatible with secondary batteries
- Series: 4 VQ4000
- Type of actuation:
 

1	2-position single
2	2-position double
3	3-position closed center
4	3-position exhaust center
5	3-position pressure center
6	3-position double check
- Seal type: 1 Rubber seal
- Function:
 

Nil*1	Standard (0.95 W)
Y*2	Low wattage type (0.4 W)
R*3	External pilot
- CE-compliant:
 

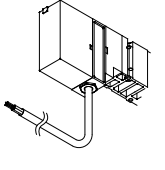
Nil	—
Q	CE-compliant

 \* CE-compliant: For DC only.
- Enclosure:
 

Nil	Dustproof
W	Dust-tight/Water-jet-proof type (IP65)
- Light/Surge voltage suppressor:
 

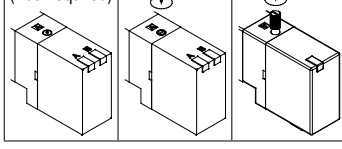
Nil	Yes
E	Without light, with surge voltage suppressor
- Electrical entry:
 

G	Lead wire length 0.6 m
H	Lead wire length 1.5 m


- Coil voltage:
 

1	100 VAC (50/60 Hz)	4	220 VAC (50/60 Hz)
2	200 VAC (50/60 Hz)	5	24 VDC
3	110 VAC (50/60 Hz)	6	12 VDC
- Manual override:
 

Nil:	Non-locking push type (Tool required)
B:	Locking type (Tool required)
C:	Locking type (Manual)



\*1 When the unit is energized continuously, refer to "Specific Product Precautions 1" on page 533 in the **Web Catalog** (VQ4000 series).

\*2 Only DC is available with Y.

\*3 External pilot specifications are the same as standard products. Combination of external pilot and perfect interface is not possible.

\* When two or more symbols are specified, indicate them alphabetically.

\* The 25A-series specifications and dimensions are the same as those of the standard model.

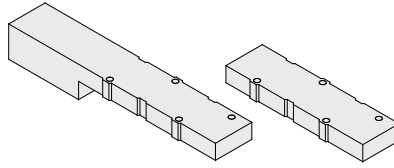
# 25A-VQ4000 Series

## Manifold Options

### Blanking plate assembly

**25A-VVQ4000-10A-1 (Plug-in type)**  
**25A-VVQ4000-10A-5 (Plug lead type)**

It is used by attaching on the manifold block for being prepared for removing a valve for maintenance reasons or planning to mount a spare valve, etc.



\* The 25A- series specifications and dimensions are the same as those of the standard model.

### SI Unit Part Nos.

Description	SI unit part no.	Note
EX124 SI unit	<b>EX124D-SMJ1-X220</b>	CC-Link/D side mounting
	<b>EX124D-SDN1-X220</b>	DeviceNet™/D side mounting
	<b>EX124U-SMJ1-X220</b>	CC-Link/U side mounting
	<b>EX124U-SDN1-X220</b>	DeviceNet™/U side mounting

### One-touch Fittings Part Nos.

Cylinder port	Metric size	Port size	One-touch fittings part no.
		ø6 One-touch fitting (Straight type)	<b>90-VVQ4000-50B-C6</b>
		ø8 One-touch fitting (Straight type)	<b>90-VVQ4000-50B-C8</b>
		ø10 One-touch fitting (Straight type)	<b>90-VVQ4000-50B-C10</b>
		ø12 One-touch fitting (Straight type)	<b>90-VVQ4000-50B-C12</b>



# Plug-in Unit

# 25A-SQ2000 Series



## How to Order Manifold

**25A – SS5Q23 – 08 FD2 – D – [ ] – [ ] – [ ]**

• **Series compatible with secondary batteries**

• **Stations**

01	1 station
⋮	⋮
16*1	16 stations

\*1 The maximum number of stations depends on the type of electrical entries.

• **Manifold mounting**

D	DIN rail mounting
E	Direct mounting

• **Option**

Nil	None
02 to 16*1	DIN rail length specified
B*2	Back pressure check valve
K*3	Special wiring specifications (Except double wiring)
N	With name plate (Side ported only)
R	External pilot specifications
S	Built-in silencer, direct exhaust

\*1 Specify DIN rail length with "D□" at the end. (Enter the number of stations inside □.) The number of stations that may be displayed is longer than the manifold number of stations. Example: -D09

\*2 When "-B" is selected, a back pressure check valve is included in all stations of the manifold. If the back pressure check valve is used only for the station that need it, then specify the station location in the manifold specification. ("-B" is not necessary)

\*3 Specify "-K" for wiring specification for cases below. (Except L kit)

- All single wiring
- Single and double mixed wiring
- When there are stations which do not require wiring (e.g. single SUP spacer)

Specify the wiring specification in the manifold specification so that the number of solenoids is the maximum number of solenoids or less. (Standard wiring specification is double wiring)

\* For specifying two or more options, enter them alphabetically. Example: -BKN

• **CE-compliant**

Nil	—
Q	CE-compliant

• **1(P), 3(R) port size**

Nil	1(P), 3(R) port One-touch fittings for ø10
00T	1(P), 3(R) port One-touch fittings for ø3/8"

• **Electrical entry**

Kit type	Lead wire connector location	Cable specifications	Station	Max. number of stations for special wiring specifications	Max. number of solenoids
<b>F kit</b> The electric parts are made of copper. Mounting screw: Stainless steel D-sub connector kit 	FD0	D-sub connector (25P) kit, without cable	1 to 12 stations	16 stations	24
	FD1	D-sub connector (25P) kit, with 1.5 m cable			
	FD2	D-sub connector (25P) kit, with 3.0 m cable			
	FD3	D-sub connector (25P) kit, with 5.0 m cable			
<b>T kit</b> Terminal block box kit 	TD0	Terminal block box kit	1 to 10 stations	16 stations	16
<b>L kit</b> Mounting screw: Stainless steel Lead wire kit 	LD0	Lead wire kit with 0.6 m cable	1 to 12 stations	—	—
	LU0				
	LD1	Lead wire kit with 1.5 m cable			
	LU1				
	LD2	Lead wire kit with 3.0 m cable			
LU2					
<b>S kit</b> Mounting screw: Stainless steel The electric parts are made of copper. One-touch fitting Body: Stainless steel Serial transmission kit EX140 integrated-type (for output) serial transmission system*2 	SDQ	DeviceNet™	1 to 8 stations	16 stations	16
	SDV	CC-Link	1 to 8 stations	16 stations	16

\*1 The maximum number of stations should not be more than the maximum number of solenoids. (The number of solenoids are counted as: 1 for single solenoids and 2 for type 3P and 4P double solenoids.)

\*2 Refer to the **Web Catalog** for the details of EX140 integrated-type (for output) serial transmission system. Refer to "SI unit part nos." below when ordering the CE-compliant SI unit.

### SI unit part nos.

Symbol	Protocol type	SI unit part no.	Page
SDQ	DeviceNet™	EX140-SDN1-X220	p. 60
SDV	CC-Link	EX140-SMJ1-X220	

### Blanking plate assembly

## 25A-SSQ2000-10A-3

\* The 25A- series specifications and dimensions are the same as those of the standard model.



## How to Order Valves

25A-SQ2 **1** **3** **1**   - **5**   **1** - **C6** -   -   -  

• Series compatible with secondary batteries

### Type of actuation

<b>1</b>	2-position single
<b>2</b>	2-position double (Double solenoid)*1
<b>3</b>	3-position closed center
<b>4</b>	3-position exhaust center
<b>5</b>	3-position pressure center
<b>A</b>	4-position dual 3-port valve (N.C./N.C.)
<b>B</b>	4-position dual 3-port valve (N.O./N.O.)
<b>C</b>	4-position dual 3-port valve (N.C./N.O.)

\*1 For double solenoid specification, the function symbol below is "D."

### Seal type

<b>1</b>	Rubber seal
----------	-------------

### Function

<b>Nil</b>	Standard (0.4 W DC)
<b>B</b>	Quick response type (0.95 W)
<b>D</b> *1	2-position double (Double solenoid specifications)
<b>N</b> *2	Negative common
<b>R</b> *3	External pilot specifications

\*1 "D" is specified for 2-position double.  
 \*2 For L kit, when the manifold specifies negative common, the valve common should also be negative.  
 \*3 Except dual 3-port valves.  
 \* When two or more symbols are specified, indicate them alphabetically.

### CE-compliant

<b>Nil</b>	—
<b>Q</b>	CE-compliant

### With/Without manifold block

<b>Nil</b>	<b>M</b>	<b>MB</b>
Without manifold block	With manifold block	With manifold block, built-in back pressure check valve
	 * Lead wire is not included.	 * Lead wire is not included.
<ul style="list-style-type: none"> <li>When ordering with manifolds</li> <li>When only valves are required.</li> </ul>		For adding stations

### Port plug mounting port

<b>Nil</b>	None
<b>A</b>	Port 4(A)
<b>B</b>	Port 2(B)

### Cylinder port

<b>C4</b>	One-touch fittings for ø4	Side ported	
<b>C6</b>	One-touch fittings for ø6		
<b>C8</b>	One-touch fittings for ø8		
<b>L4</b>	One-touch fittings for ø4	Top ported *1	
<b>L6</b>	One-touch fittings for ø6		
<b>L8</b>	One-touch fittings for ø8		

\*1 Can be changed to side ported configuration.

### Manual override

<b>Nil</b>	<b>B</b>	<b>D</b>
Non-locking push type (Tool required)	Locking type (Tool required)	Slide locking type (Manual type) * Only side ported type applicable

### Coil voltage

<b>5</b>	24 VDC
<b>6</b>	12 VDC

\* Light/Surge voltage suppressor is built-in.  
 \* S kit: 24 VDC only

\* The 25A-series specifications and dimensions are the same as those of the standard model.

# Plug Lead Unit

# 25A-SQ2000 Series



## How to Order Manifold

25A – SS5Q24 – 08 FD2 – D □ – □ – □

Series compatible with secondary batteries

CE-compliant

Nil	—
Q	CE-compliant

1(P), 3(R) port size

Nil	1(P), 3(R) port, One-touch fittings for $\phi 10$
00T	1(P), 3(R) port, One-touch fittings for $\phi 3/8$ "

Stations

01	1 station
⋮	⋮
16*1	16 stations

\*1 The maximum number of stations depends on the type of electrical entries.

Option

Nil	None
02 to 16*1	DIN rail length specified
B*2	Back pressure check valve
K*3	Special wiring specifications (Except double wiring)
N	With name plate (Side ported only)
R	External pilot specifications
S	Built-in silencer, direct exhaust

Manifold mounting

D	DIN rail mounting
E*1	Direct mounting

\*1 Type "E" is only available with a C kit.

\*1 Specify DIN rail length with "D□" at the end. (Enter the number of stations inside □.)

The number of stations that may be displayed is longer than the manifold number of stations. Example: -D09

\*2 When "-B" is selected, a back pressure check valve is included in all stations of the manifold. If the back pressure check valve is used only for the station that need it, then specify the station location in the manifold specification. ("-B" is not necessary)

\*3 Specify "-K" for wiring specification for cases below. (Except C kit)

- All single wiring                      - Single and double mixed wiring  
Specify the wiring specification in the manifold specification so that the number of solenoids is the maximum number of solenoids or less. (Standard wiring specification is double wiring)

\* For specifying two or more options, enter them alphabetically. Example: -BKN

Electrical entry

Kit type	Lead wire connector location	Cable specifications	Stations	Max. number of stations for special wiring specifications	Max. number of solenoids *1	
<b>F kit</b> The electric parts are made of copper. D-sub connector kit 	FD0	D side	1 to 12 stations	16 stations	24	
	FD1					D-sub connector (25P) kit, without cable
	FD2					D-sub connector (25P) kit, with 1.5 m cable
	FD3					D-sub connector (25P) kit, with 3.0 m cable
<b>C kit</b> Connector kit 	C	—	1 to 16 stations	—	—	

\*1 The maximum number of stations should not be more than the maximum number of solenoids. (The number of solenoids are counted as: 1 for single solenoids and 2 for type 3P and 4P double solenoids.)

\* Refer to the **Web Catalog** for manifold spare parts.

## Blanking plate assembly

### 25A-SSQ2000-10A-4

\* The 25A- series specifications and dimensions are the same as those of the standard model.

## How to Order Valves

25A-SQ2 1 4 1 [ ] - 5 L [ ] 1 - C6 - [ ] - [ ] - [ ]

Series compatible with secondary batteries

### Type of actuation

1	2-position single
2	2-position double (Double solenoid)*1
3	3-position closed center
4	3-position exhaust center
5	3-position pressure center
A	4-position dual 3-port valve (N.C./N.C.)
B	4-position dual 3-port valve (N.O./N.O.)
C	4-position dual 3-port valve (N.C./N.O.)

\*1 For double solenoid specification, the function symbol below is "D."

### Seal type

1	Rubber seal
---	-------------

### Function

Nil	Standard (0.4 W DC)
B	Quick response type (0.95 W)
D*1	2-position double (Double solenoid specifications)
N	Negative COM
R*2	External pilot specifications

\*1 "D" is specified for 2-position double.

\*2 Except dual 3-port valves.

\* When two or more symbols are specified, indicate them alphabetically.

### Coil voltage

5	24 VDC
6	12 VDC

\* Light/Surge voltage suppressor is built-in.

### CE-compliant

Nil	—
Q	CE-compliant

### With/Without manifold block

Nil	M	MB
Without manifold block	With manifold block	With manifold block, built-in back pressure check valve
* Lead wire is not included.		* Lead wire is not included.
• When ordering with manifolds • When only valves are required.		For adding stations

### Port plug mounting port

Nil	None
A	Port 4(A)
B	Port 2(B)

### Cylinder port

C4	One-touch fitting for ø4	Side ported	
C6	One-touch fitting for ø6		
C8	One-touch fitting for ø8	Top ported *1	
L4	One-touch fitting for ø4		
L6	One-touch fitting for ø6		
L8	One-touch fitting for ø8		

\*1 Can be changed to side ported configuration.

### Manual override

Nil	B	D
Non-locking push type (Tool required)	Locking type (Tool required)	Slide locking type (Manual type) * Only side ported type applicable

### Electrical entry

L	LO
Plug connector type with 300 mm lead wire	Plug connector type without connector
	For F, P, J kit manifolds*1

\*1 Indicate "LO" when ordering centralized wiring type manifolds, F, P, and J kits, since the lead wire will be attached to the manifold side.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

**SI Unit Part Nos.**

Description	SI unit part no.	Note
EX140 SI unit	<b>EX140-SMJ1-X220</b>	CC-Link
	<b>EX140-SDN1-X220</b>	DeviceNet™

**One-touch Fittings Part Nos.**

Port size		One-touch fittings part no.	
Cylinder port	Metric size	ø4 One-touch fitting (Straight type)	<b>90-VVQ1000-51A-C4</b>
		ø6 One-touch fitting (Straight type)	<b>90-VVQ1000-51A-C6</b>
		ø8 One-touch fitting (Straight type)	<b>90-VVQ1000-51A-C8</b>
1 (P), 3 (R) port	Metric size	ø10 One-touch fitting (Straight type)	<b>90-VVQ2000-51A-C10</b>

Base Mounted  
Plug Lead Unit

# 5-Port Solenoid Valve

## 25A-VQZ1000 Series

### Single Unit



#### How to Order Valves

25A - VQZ 1 1 5 1 [ ] - 5 M [ ] 1 - 01 - [ ]

• Series compatible with secondary batteries

Series •

1	VQZ1000 body width 10 mm
---	--------------------------

Type of actuation •

1	2-position single
2	2-position double
3	3-position closed center
4	3-position exhaust center
5	3-position pressure center
8	3-port for mixture mounting N.C.
9	3-port for mixture mounting N.O.

Body type •

5	Base mounted
---	--------------

Seal type •

1	Rubber seal
---	-------------

Function •

Symbol	Specifications	DC	AC
Nil	Standard	(0.35 W) ○	○
B	High speed response type	(0.9 W) ○	—
R	External pilot type	○	○
BR	High speed response/External pilot type	(0.9 W) ○	—

• CE-compliant

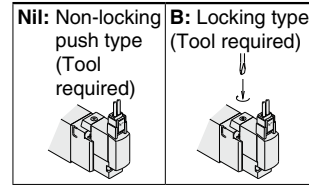
Nil	—
Q	CE-compliant

\* DC-type only.

• Port size

Symbol	Port size
Nil	Without sub-plate
01	Rc1/8

• Manual override



• Electrical entry

G: Grommet (DC specification)	L: L-type plug connector with lead wire	LO: L-type plug connector without connector	M: M-type plug connector with lead wire	MO: M-type plug connector without connector
	With light/surge voltage suppressor	With light/surge voltage suppressor	With light/surge voltage suppressor	With light/surge voltage suppressor

• Coil voltage

1	100 VAC (50/60 Hz)
2	200 VAC (50/60 Hz)
3	110 VAC [115 VAC] (50/60 Hz)
4	220 VAC [230 VAC] (50/60 Hz)
5	24 VDC
6	12 VDC

#### ⚠ Caution

Use standard (DC) specification for continuous duty.

\* The 25A-series specifications and dimensions are the same as those of the standard model.

Base Mounted  
Plug Lead Unit

# 5-Port Solenoid Valve 25A-VQZ1000 Series Manifold Connector Kit



## How to Order Manifold

**25A-VV5QZ 1 5-08 C6 C-R-**

Series compatible with secondary batteries

**Series**  
1 VQZ1000

**Manifold type**  
5 Base mounted

**Stations**

02	2 stations
⋮	⋮
20	20 stations

**Port size [4(A), 2(B) port]**

Symbol	Port size
C4	ø4 One-touch fitting
C6	ø6 One-touch fitting
M5	M5 thread
CM*1	Mixture of port sizes

\*1 Specify port mixture/with port plug by the manifold specification sheet. Port mixture and port plug are available only for One-touch fitting type.

**CE-compliant**

Nil	—
Q	CE-compliant

**Option**

Nil	None
R	External pilot type

**Kit type**  
C Connector

## How to Order Valves

**25A-VQZ 1 1 5 1 -5 M 1-**

Series compatible with secondary batteries

**Series**  
1 VQZ1000 body width 10 mm

**Type of actuation**

1	2-position single
2	2-position double
3	3-position closed center
4	3-position exhaust center
5	3-position pressure center
8	3-port for mixture mounting N.C.
9	3-port for mixture mounting N.O.

**Body type**  
5 Base mounted

**Seal type**  
1 Rubber seal

**Function**

Symbol	Specifications	DC	AC
Nil	Standard	(0.35 W)	○
B	High speed response type	(0.9 W)	—
R	External pilot type	○	○
BR	High speed response/ External pilot type	(0.9 W)	—

**CE-compliant**

Nil	—
Q	CE-compliant

\* DC-type only.

**Manual override**

Nil	Non-locking push type (Tool required)
B	Locking type (Tool required)

**Electrical entry**

Symbol	Electrical entry	Light/surge voltage suppressor
G	Grommet (DC specification)	None
L	L-type plug connector with lead wire	Yes
LO	L-type plug connector without connector	
M	M-type plug connector with lead wire	
MO	M-type plug connector without connector	

**Coil voltage**

1	100 VAC (50/60 Hz)
2	200 VAC (50/60 Hz)
3	110 VAC [115 VAC] (50/60 Hz)
4	220 VAC [230 VAC] (50/60 Hz)
5	24 VDC
6	12 VDC

**Caution**  
Use standard (DC) specification for continuous duty.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

Body Ported

Plug Lead Unit

# 5-Port Solenoid Valve

## 25A-VQZ1000 Series

### Single Unit



#### How to Order Valves

**25A-VQZ** 1 1 2 1 [ ] - 5 M [ ] 1 - C6 - [ ] - [ ]

Series compatible with secondary batteries

Series

1	VQZ1000 body width 10 mm
---	--------------------------

Type of actuation

1	2-position single
2	2-position double
3	3-position closed center
4	3-position exhaust center
5	3-position pressure center
8	3-port for mixture mounting N.C.
9	3-port for mixture mounting N.O.

\* 3-port for mixture mounting is only available for port size C4 or C6.

Body type

2	Body ported
---	-------------

Seal type

1	Rubber seal
---	-------------

Function

Symbol	Specifications	DC (0.35 W)	AC
Nil	Standard	○	○
B	High speed response type	○	—

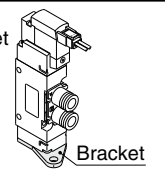
CE-compliant

Nil	—
Q	CE-compliant

\* DC-type only.

Option

Nil: None  
F: With bracket (2-position single type only)



Port size [4(A), 2(B) port]

Symbol	Port size
C4	ø4 One-touch fitting
C6	ø6 One-touch fitting
M5	M5 thread

Manual override

Nil: Non-locking push type (Tool required)  
B: Locking type (Tool required)



Electrical entry

G: Grommet (DC specification)	L: L-type plug connector with lead wire	LO: L-type plug connector without connector	M: M-type plug connector with lead wire	MO: M-type plug connector without connector
	With light/surge voltage suppressor	With light/surge voltage suppressor	With light/surge voltage suppressor	With light/surge voltage suppressor

Coil voltage

1	100 VAC (50/60 Hz)
2	200 VAC (50/60 Hz)
3	110 VAC [115 VAC] (50/60 Hz)
4	220 VAC [230 VAC] (50/60 Hz)
5	24 VDC
6	12 VDC



**Caution**

Use standard (DC) specification for continuous duty.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

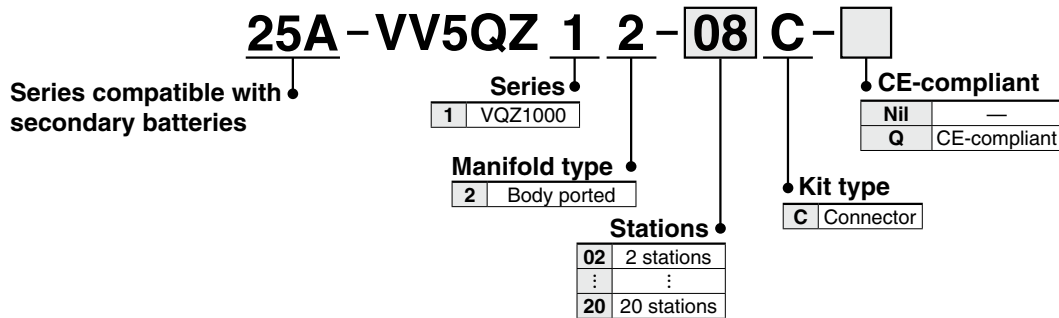


Body Ported  
Plug Lead Unit

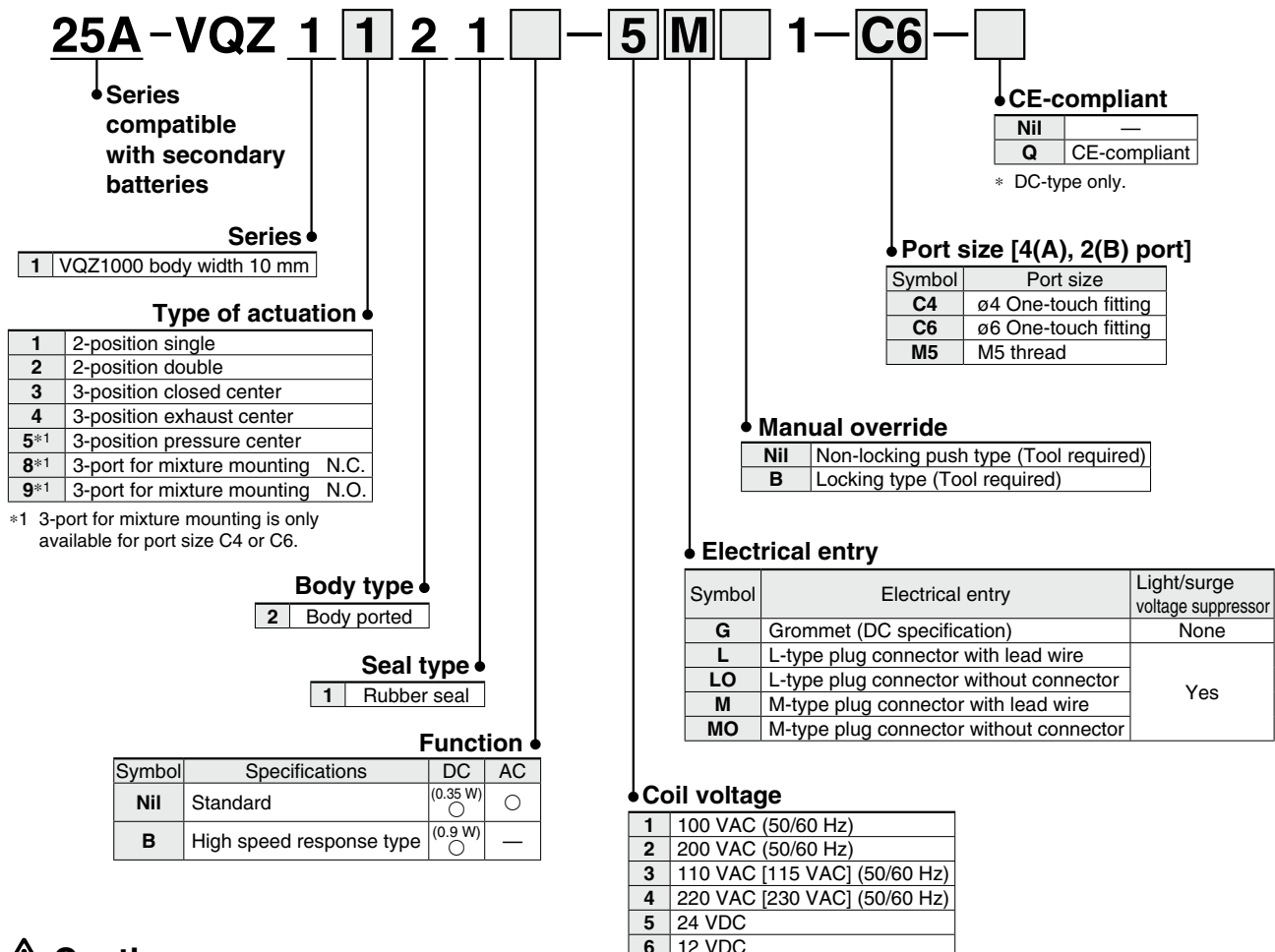
# 5-Port Solenoid Valve 25A-VQZ1000 Series Manifold Connector Kit



## How to Order Manifold



## How to Order Valves



### Caution

Use standard (DC) specification for continuous duty.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

# Plug-in Unit Base Mounted

## 25A-VQ1000/2000 Series

### Double check block (Separated)

#### How to Order

Double check block

**25A-VQ1000-FPG-C4M5-F**

• Series compatible with secondary batteries

• IN side port size

M5	M5 thread
C3	ø3.2 One-touch fitting
C4	ø4 One-touch fitting
C6	ø6 One-touch fitting

• OUT side port size

M5	M5 thread
C3	ø3.2 One-touch fitting
C4	ø4 One-touch fitting
C6	ø6 One-touch fitting

• Option

Nil	None
F	With bracket
D	DIN rail mounting (For manifold)
N	Name plate

\* When two or more symbols are specified, indicate them alphabetically. Example) -DN

Manifold (DIN rail mounting)

**25A-VVQ1000-FPG-06**

• Series compatible with secondary batteries

When ordering a double check block, order the DIN rail mounting [-D].

<Ordering example>

25A-VVQ1000-FPG-06...6-station manifold

\* 25A-VQ1000-FPG-C4M5-D;  
3 sets  
\* 25A-VQ1000-FPG-C6M5-D;  
3 sets

} Double check block

• Stations

01	1 station
⋮	⋮
16	16 stations

Bracket Assembly

Part no.	Tightening torque
25A-VQ1000-FPG-FB	0.22 to 0.25 N·m

Double check block

**25A-VQ2000-FPG-0101-F**

• Series compatible with secondary batteries

• IN side port size

01	Rc 1/8
02	Rc 1/4
C6	ø6 One-touch fitting
C8	ø8 One-touch fitting

• OUT side port size

01	Rc 1/8
02	Rc 1/4
C6	ø6 One-touch fitting
C8	ø8 One-touch fitting

• Option

Nil	None
D	DIN rail mounting (For manifold)
F	With bracket
N	Name plate

\* When two or more symbols are specified, indicate them alphabetically. Example) -DN

Manifold (DIN rail mounting)

**25A-VVQ2000-FPG-06**

• Series compatible with secondary batteries

When ordering a double check block, order the DIN rail mounting [-D].

<Ordering Example>

25A-VVQ2000-FPG-06...6-station manifold

\* 25A-VQ2000-FPG-C6C6-D;  
3 sets  
\* 25A-VQ2000-FPG-C8C8-D;  
3 sets

} Double check block

• Stations

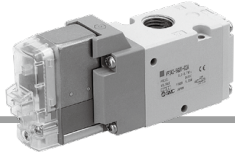
01	1 station
⋮	⋮
16	16 stations

Bracket Assembly

Part no.	Tightening torque
25A-VQ2000-FPG-FB	0.8 to 1.0 N·m

\* The 25A- series specifications and dimensions are the same as those of the standard model.

# Rubber Seal 3-Port/Pilot Poppet Type 25A-VP342/542/742 Series



## How to Order



\* Only DIN and conduit terminal types are available for AC mode. Refer to the electrical entry for details.

Body ported **25A-VP** **3** **4** **2** **5** **D** **1-01** **A**

Series compatible with secondary batteries

### Series

3	VP300
5	VP500
7	VP700

### Pilot type

Nil	Internal pilot
R	External pilot

### Pressure specification

Nil	Standard (0.7 MPa)
K	High pressure type (1.0 MPa)

### Coil specification

Nil	Standard
T	With power saving circuit (DC only)

\* Be sure to select the power saving circuit type when it is continuously energized for a long time.

\* "T" type is only available for DC mode. When "T" is selected, only "Z" type of light/surge voltage suppressor is available.

### Rated voltage

DC	AC (50/60 Hz)
5	1 100 VAC
6	2 200 VAC
	3 110 VAC [115 VAC]
	4 220 VAC [230 VAC]
	7 240 VAC
	B 24 VAC

### Electrical entry

DIN terminal	DIN (EN175301-803) terminal	Conduit terminal
[IP65 compatible]	[IP65 compatible]	[IP65 compatible]
D: With connector	Y: With connector	T: Conduit terminal

CE-compliant	DC	CE	CE	CE
	AC	CE	CE	CE

### Thread type

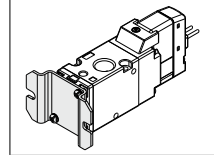
Nil	Rc
F	G
N	NPT
T	NPTF

### Type of actuation

A	N.C. (Normally closed)
B	N.O. (Normally open)

### Bracket

Nil	Without bracket
F	With bracket



### Port size

Symbol	Port size	VP300	VP500	VP700
01	1/8	○	—	—
02	1/4	○	○	—
03	3/8	—	○	○
04	1/2	—	—	○

### Manual override

Nil: Non-locking push type	D: Push-turn locking slotted type	E: Push-turn locking lever type

### Light/surge voltage suppressor

		DC	AC
Nil	Without light/surge voltage suppressor	○	○
S	With surge voltage suppressor	○	—*1
Z	With light/surge voltage suppressor	○	○
R	With surge voltage suppressor (Non-polar)	○	—
U	With light/surge voltage suppressor (Non-polar)	○	—

\*1 There is no "S" type for AC mode, since a rectifier prevents surge voltage generation.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

# Rubber Seal

## 3-Port/Pilot Poppet Type

# 25A-VP344/544/744 Series

### How to Order



\* Only DIN and conduit terminal types are available for AC mode. Refer to the electrical entry for details.

Base mounted **25A-VP** **3** **4** **4** **5** **D** **1** **01** **A**

Series compatible with secondary batteries

Series

3	VP300
5	VP500
7	VP700

Pilot type

Nil	Internal pilot
R	External pilot

Pressure specifications

Nil	Standard (0.7 MPa)
K	High pressure type (1.0 MPa)

Coil specifications

Nil	Standard
T	With power saving circuit (DC only)

\* Be sure to select the power saving circuit type when it is continuously energized for a long time.

\* "T" type is only available for DC mode. When "T" is selected, only "Z" type of light/surge voltage suppressor is available.

Rated voltage

DC	AC (50/60 Hz)
5	1 24 VDC
6	2 12 VDC
	3 100 VAC
	4 200 VAC
	5 110 VAC [115 VAC]
	6 220 VAC [230 VAC]
	7 240 VAC
	B 24 VAC

Thread type

Nil	Rc
F	G
N	NPT
T	NPTF

Type of actuation

A	N.C. (Normally closed)
B	N.O. (Normally open)

Port size (Sub-plate)

Symbol	Port size	VP300	VP500	VP700
Nil	Without sub-plate*1			
01	1/8	○	—	—
02	1/4	○	○	—
03	3/8	—	○	○
04	1/2	—	—	○

\*1 With a gasket and two mounting bolts.

Electrical entry

DIN terminal	DIN (EN175301-803) terminal	Conduit terminal
[IP65 compatible]	[IP65 compatible]	[IP65 compatible]
D: With connector	Y: With connector	T: Conduit terminal
CE-compliant DC	CE	CE
AC	CE	CE

Manual override

Nil: Non-locking push type	D: Push-turn locking slotted type	E: Push-turn locking lever type

Light/surge voltage suppressor

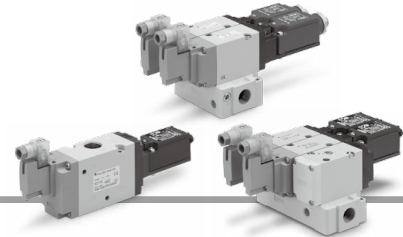
	DC	AC
Nil	Without light/surge voltage suppressor	○ ○
S	With surge voltage suppressor	○ ○*1
Z	With light/surge voltage suppressor	○ ○
R	With surge voltage suppressor (Non-polar)	○ —
U	With light/surge voltage suppressor (Non-polar)	○ —

\*1 There is no "S" type for AC mode, since a rectifier prevents surge voltage generation.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

# 3-Port Solenoid Valve/Residual Pressure Release Valve with Detection of Main Valve Position

## 25A-VP500/700-X536, X538, X555



### How to Order

Residual pressure release valve

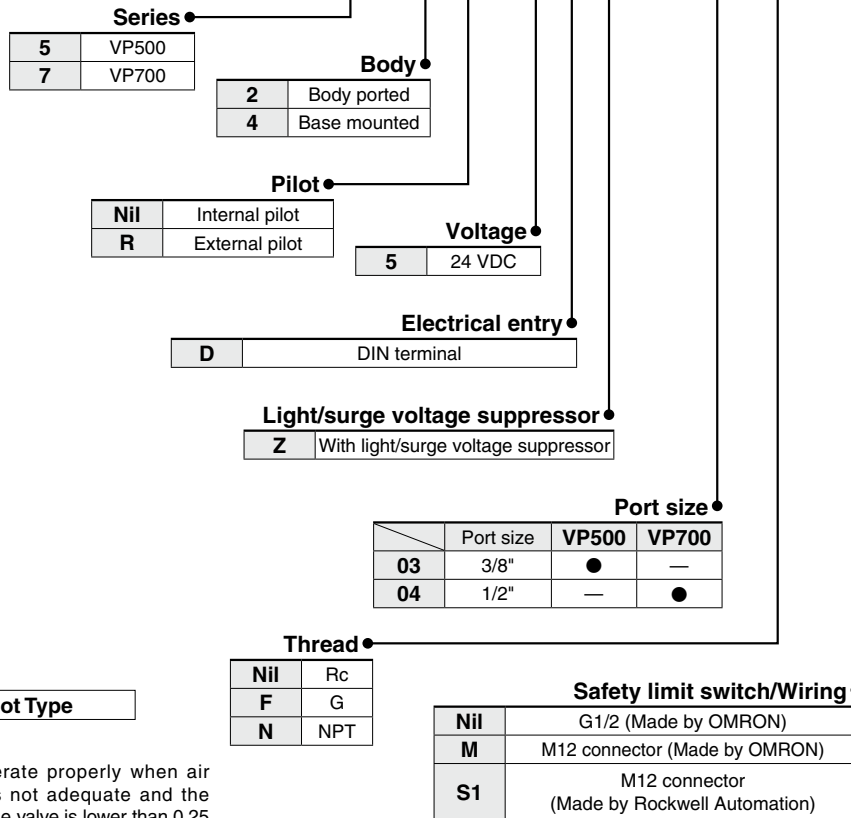
25A-VP 5 4 2 R - 5 D Z 1 - 03 [ ] - M [ ] - X536

Dual residual pressure release valve

25A-VP 5 4 4 R - 5 D Z 1 - 03 [ ] - M A - X538

Dual residual pressure release valve with soft start-up function

25A-VP 5 4 4 [ ] - 5 D Z 1 - 03 [ ] - M [ ] - X555



Internal Pilot Type

**Caution**

Valve may not operate properly when air supply to P port is not adequate and the supply pressure to the valve is lower than 0.25 MPa, the minimum operating pressure. Be careful with insufficient supply pressure.

Piping for External Pilot Type

**Caution**

The product may not operate when the external pilot pressure is insufficient due to simultaneous operation or restricted air piping. In this case, use the check valve (AKH series) with the external pilot port, change the piping size or adjust the set pressure to provide a constant pressure of 0.25 MPa or more.

**With check valve (Only external pilot)**

	Check valve	Applicable tube O.D.	Thread		
			Rc	G	NPT
Nil	None	—	●	●	●
A	Yes	ø6	●	—	—
B		ø1/4"	—	—	●

\* For internal pilot, the symbol is nil.

**Throttle**

Nil	Variable throttle
10	ø1 fixed orifice
15	ø1.5 fixed orifice
20*1	ø2 fixed orifice

\*1 VP700 only

\* The 25A- series specifications and dimensions are the same as those of the standard model.

# 3-Port Solenoid Valve Direct Operated Poppet Type **25A-VT317 Series** Rubber Seal



\* CE-compliant: For DIN terminal type.

## How to Order

**25A-V T 317** [ ] - **1** **G** [ ] - **02** [ ] - [ ]

### Body type

T	Body ported
O	Manifold

Series compatible with secondary batteries

### Valve option

Nil	Standard
E*1	Continuous duty type
V*1	For vacuum

\*1 Semi-standard

### Rated voltage

1	100 VAC (50/60 Hz)
2	200 VAC (50/60 Hz)
3*1	110 VAC (50/60 Hz)
4*1	220 VAC (50/60 Hz)
5	24 VDC
6*1	12 VDC
7*1	240 VAC (50/60 Hz)

\*1 Semi-standard

\* Applicable only for DIN terminal type.

### Thread type

Nil	Rc
F	G
N	NPT
T	NPTF

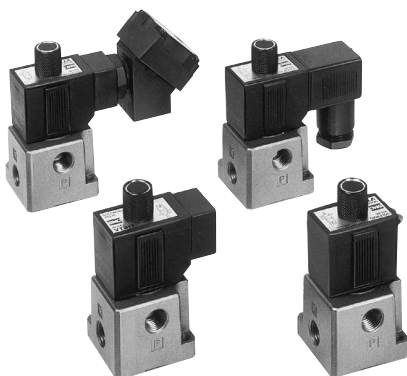
### CE-compliant

Nil	—
Q	CE-compliant*1

\*1 Applicable only for DIN terminal type.

### Port size

Nil	Without port (For manifold)
02	1/4 (8A)



### Electrical entry

		CE-compliant
G	Grommet, 300 mm lead wire	—
H	Grommet, 600 mm lead wire	—
C	Conduit	—
D	DIN terminal	●

### Light/Surge voltage suppressor

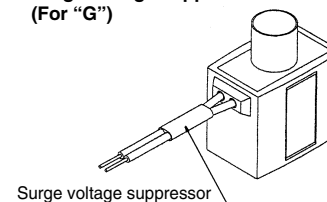
Electrical entry Symbol	CE-compliant				
	G	H	C	D	D Only
Nil	—	—	—	—	●
S	●*1	●*1	●*1	●	●
Z	—	—	—	●	●

S: With surge voltage suppressor

\*1 Refer to the figure below.

Z: With light/surge voltage suppressor

Surge voltage suppressor mounting part (For "G")



## Manifold

Model	Applicable manifold type	Accessory
VO317(-Q)	Common or individual exhaust	O-ring (KA00066, 4 pcs.)*1 Bolts (XT012-25C#1, 2 pcs.)

\*1 It is not applied to "Continuous duty type." Refer to the accessories in the **Web Catalog**.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

# 3-Port Solenoid Valve Direct Operated Poppet Type **25A-VG342 Series** Rubber Seal

## Low power consumption

4.8 W DC (Standard type)  
2 W DC (Energy-saving type)

## No lubrication required

## Possible to use in vacuum or under low pressures

External pilot  
Vacuum: Up to -101.2 kPa  
Low pressure: 0 to 0.2 MPa

## Changeable actuation:

N.C., N.O., or external pilot

Can be used as a selector or divider valve (External pilot)



## How to Order

**25A-VG342** [ ] - **5** **D** [ ] - **04** [ ] **A** - [ ]

• Series compatible with secondary batteries

### Valve option

Nil	Internal pilot
R	External pilot

### Rated voltage

5	24 VDC
6*1	12 VDC

\*1 Semi-standard

### Electrical entry

D	DIN terminal
---	--------------

### Light/Surge voltage suppressor

Nil	None
Z	With light/surge voltage suppressor (Except grommet type)

### Pilot valve option

Nil	Standard type
Y*1	Energy-saving type (DC only)
E*1	Continuous duty type

\*1 Semi-standard

### Passage symbol

Nil	External pilot
A	N.C. (Normally closed)
B	N.O. (Normally open)

### Thread type

Nil	Rc
-----	----

### Port size

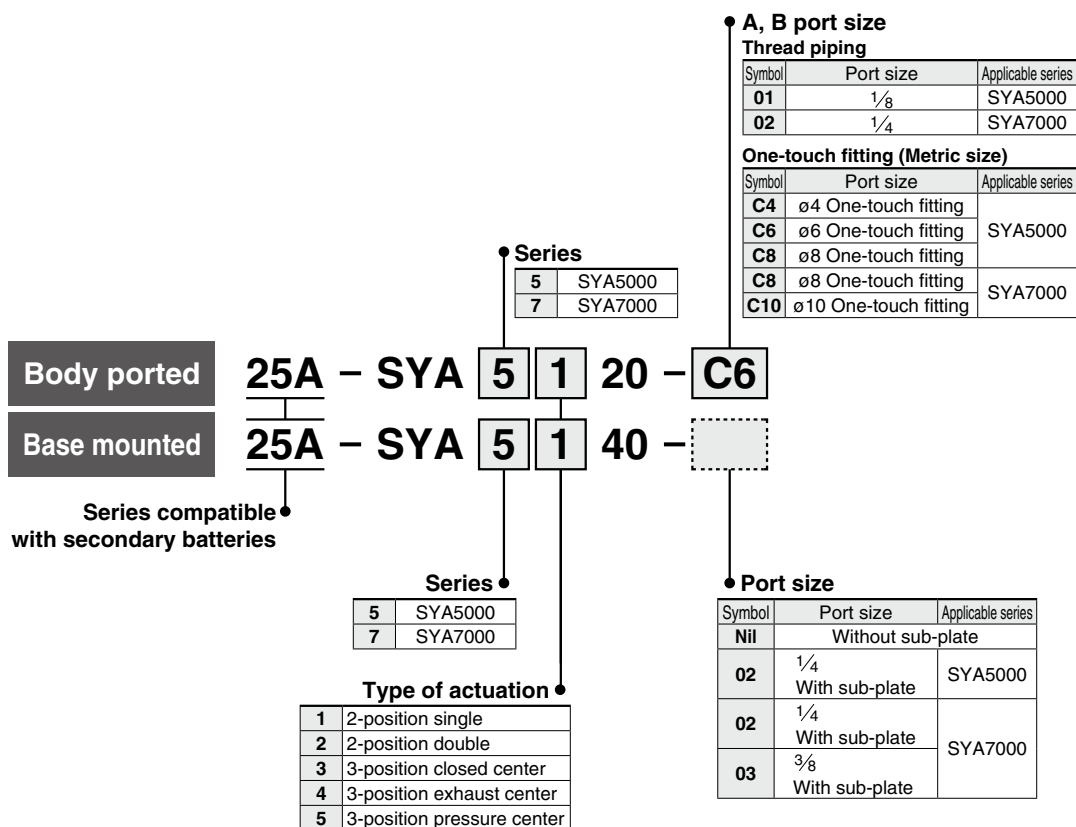
04	1/2
06	3/4
10	1

\* The 25A- series specifications and dimensions are the same as those of the standard model.

# 5-Port Air Operated Valve

## 25A-SYA5000/7000 Series

### How to Order



### How to Order Manifold Base

Same manifolds as the SY series (Non plug-in type) are prepared.  
(For 20, 41 and 42 Types)

25A-SS5YA<sup>5</sup><sub>7</sub>-

Fill the same as 25A-SS5Y<sup>5</sup><sub>7</sub>.

(Refer to page 40.)

\* Specify the part numbers for valves and options together beneath the manifold base part number.

<Example>

25A-SS5YA5-42-03-02.... 1 set (Type 42, 3 station manifold base part no.)

\* 25A-SYA5140 ..... 1 set (Single air operated valve part no.)

\* 25A-SYA5240 ..... 1 set (Double air operated valve part no.)

\* 25A-SY5000-26-1A ..... 1 set (Blanking plate assembly part no.)

↳The asterisk denotes the symbol for assembly.

Prefix it to the part nos. of the solenoid valve, etc.

\* When single body ported air operated valves are ordered, manifold mounting screws and gaskets are not included. Order them separately if necessary.  
(For details, refer to page 42.)

\* The 25A- series specifications and dimensions are the same as those of the standard model.



# 3-Port Air Operated Valve

## 25A-SYJA500/700 Series



### How to Order

**Port size**

Symbol	Port size	Applicable series
M5	M5 x 0.8	SYJA500
01	1/8	SYJA700

**Body ported** 25A-SYJA 5 1 2-M5 - -

**Base mounted** 25A-SYJA 5 1 4- - -

**Series compatible with secondary batteries**

**Series**

5	SYJA500
7	SYJA700

**Type of actuation**

1	Normally closed
2	Normally open

**Bracket**

Nil	Without bracket
F	With bracket

\* The bracket is not mounted.

**Thread type**

Nil	Rc
F	G
N	NPT
T	NPTF

\* Excludes M5

**Port size**

Symbol	Port size	Applicable series
Nil	Without sub-plate	
01	1/8 With sub-plate	SYJA500 SYJA700
02	1/4 With sub-plate	SYJA700

\* The 25A- series specifications and dimensions are the same as those of the standard model.

# 25A-SYJA500/700 Series

## Manifold Type for the SYJA500

### Type 20

How to Order

25A - SS3YJA5 - 20 - 05

Stations

02	2 stations
:	:
20	20 stations

Applicable valve  
25A-SYJA5□2

Applicable blanking  
plate assembly  
25A-SYJ500-10-1A

\* For more than 6 stations, supply air to both sides of P port and exhaust air from both sides of R port.

### Type 40

How to Order

25A - SS3YJA5 - 40 - 05 M5

Stations

02	2 stations
:	:
20	20 stations

A port size

M5	M5 x 0.8
01	1/8

Applicable valve  
25A-SYJA5□4

Applicable blanking  
plate assembly  
25A-SYJ500-10-3A

\* For more than 9 stations, supply air to both sides of P port and exhaust air from both sides of R port.

### Type 41

How to Order

25A - SS3YJA5 - 41 - 05 - C6

Stations

02	2 stations
:	:
20	20 stations

A port size

M5	M5 x 0.8
01	1/8
C4	ø4 One-touch fitting
C6	ø6 One-touch fitting

Applicable valve  
25A-SYJA5□4

Applicable blanking  
plate assembly  
25A-SYJ500-10-3A

\* For more than 9 stations, supply air to both sides of P port and exhaust air from both sides of R port.

## Manifold Type for the SYJA700

### Type 20/21

How to Order

25A - SS3YJA7 - 20 - 05

Manifold type

20	Type 20
21	Type 21

Stations

02	2 stations
:	:
20	20 stations

Applicable valve  
25A-SYJA7□2

Applicable blanking  
plate assembly  
25A-SYJ700-10-1A

\* If there are more than 6 stations for type 20, or more than 9 stations for type 21, supply air to both sides of P port and exhaust air from both sides of R port.

### Type 40/41

How to Order

25A - SS3YJA7 - 40 - 05 - 01

Manifold type

40	Type 40
41	Type 41

A port size

01	1/8
----	-----

Stations

02	2 stations
:	:
20	20 stations

Applicable valve  
25A-SYJA7□4

Applicable blanking  
plate assembly  
25A-SYJ700-10-2A

\* If there are more than 6 stations for type 40, or more than 9 stations for type 41, supply air to both sides of P port and exhaust air from both sides of R port.

### Type 42

How to Order

25A - SS3YJA7 - 42 - 05 - C6

Stations

02	2 stations
:	:
20	20 stations

A port size

01	1/8
C6	ø6 One-touch fitting
C8	ø8 One-touch fitting

Applicable valve  
25A-SYJA7□4

Applicable blanking  
plate assembly  
25A-SYJ700-10-2A

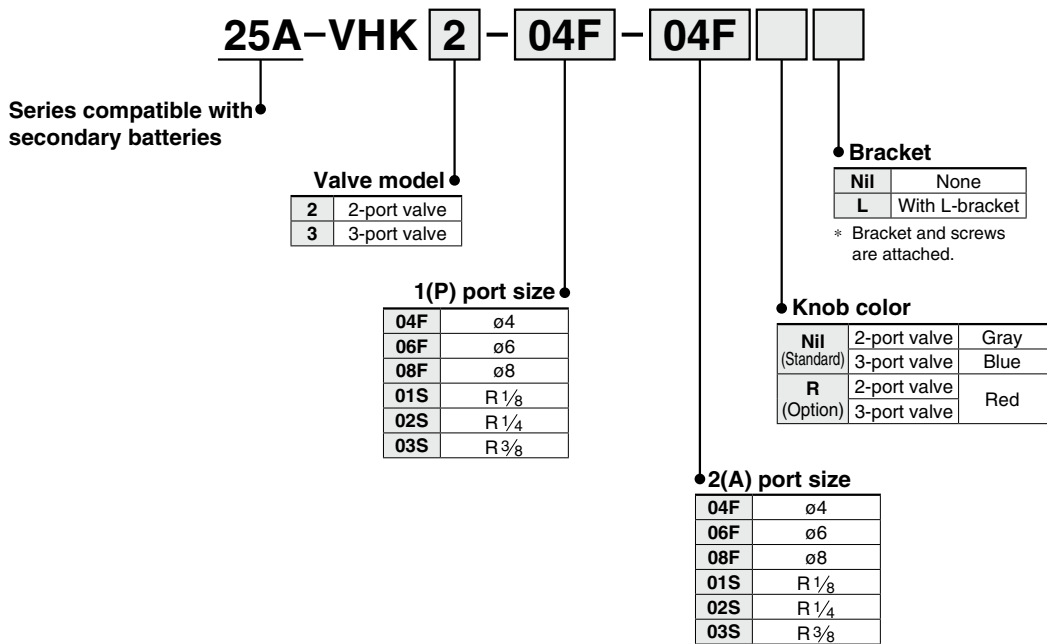
\* For more than 9 stations, supply air to both sides of P port and exhaust air from both sides of R port.

# Finger Valve

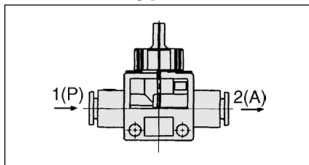
## 25A-VHK Series



### How to Order

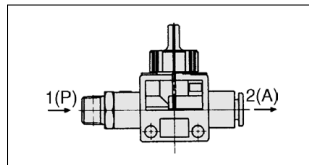


### Standard Type



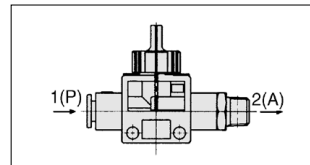
1(P): One-touch fitting  
2(A): One-touch fitting

		2(A)		
		Applicable tubing O.D. [mm]		
Applicable tubing O.D. [mm]	1(P)	ø4	ø6	ø8
	ø4	●		
	ø6	●	●	
ø8		●	●	



1(P): Male thread  
2(A): One-touch fitting

		2(A)		
		Applicable tubing O.D. [mm]		
Port size R	1(P)	ø4	ø6	ø8
	1/8	●	●	●
	1/4		●	●
3/8		●	●	



1(P): One-touch fitting  
2(A): Male thread

		2(A)		
		Port size R		
Applicable tubing O.D. [mm]	1(P)	1/8	1/4	3/8
	ø4	●		
	ø6	●	●	●
ø8	●	●	●	

\* The 25A- series specifications and dimensions are the same as those of the standard model.

# Conforming to OSHA Standard

## Pressure Relief 3-Port Valve with Locking Holes (Single Action)

# 25A-VHS20/30/40/50 Series



### How to Order

**Single action** 25A - VHS 40 - [ ] 04 A - B - [ ] - [ ]

Series compatible with secondary batteries

Pressure relief 3-port valve

Body size

Symbol
20
30
40
50

Thread type

Symbol	Material
Nil	Rc
N	NPT
F	G

Port size

Symbol	Port size	Body size			
		20	30	40	50
01	1/8	●	—	—	—
02	1/4	●	●	●	—
03	3/8	—	●	●	—
04	1/2	—	—	●	—
06	3/4	—	—	●	●
10	1	—	—	—	●

Handle/Bonnet material

Symbol	Material
A	Flame-resistant PBT
B	Aluminum

Made to order

Symbol	Description
X1	Body: Red

Semi-standard specifications

Symbol	Description
Nil	—
K	Handle color: Black
R	Flow direction: Right → Left
Z*1	psi as unit displayed on label

\*1 Only for the NPT thread  
This product is for overseas use only according to the New Measurement Act. (The SI unit type is provided for use in Japan.)

Options

Symbol	Description
Nil	—
B	With bracket

### Option Part Nos.

Model	Bracket assembly part no.*1
25A-VHS20	VHS20PW-180AS-6
25A-VHS30	VHS30PW-180AS-6
25A-VHS40	VHS40PW-180AS-6
25A-VHS40-06	VHS40PW-180-06AS-6
25A-VHS50	VHS50PW-180AS-6

\*1 Bracket/1 pc., Mounting screw/2 pcs.

### OSHA standard (Occupational Safety and Health Administration Department of Labor)

For safety control, OSHA rule requires energy sources for certain equipment be turned off or disconnected and that the device either be locked or labelled with a warning tag.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

# Conforming to OSHA Standard

## Pressure Relief 3-Port Valve with Locking Holes (Double Action)

# 25A-VHS2510/3510/4510/5510 Series



### How to Order

**Double action** 25A - VHS 4 510 - [ ] 04 A - B - [ ] - [ ]

Series compatible with secondary batteries

Pressure relief 3-port valve

Body size

Symbol
2
3
4
5

Double action

Thread type

Symbol	Material
Nil	Rc
N	NPT
F	G

Port size

Symbol	Port size	Body size			
		2	3	4	5
01	1/8	●	—	—	—
02	1/4	●	●	●	—
03	3/8	—	●	●	—
04	1/2	—	—	●	—
06	3/4	—	—	●	●
10	1	—	—	—	●

Handle/Bonnet material

Symbol	Material
A	Flame-resistant PBT
B	Aluminum

Made to order

Symbol	Description
X1	Body: Red

Semi-standard specifications

Symbol	Description
Nil	—
K	Handle color: Black
R	Flow direction: Right → Left
Z*1	psi as unit displayed on label

\*1 Only for the NPT thread  
This product is for overseas use only according to the New Measurement Act. (The SI unit type is provided for use in Japan.)

Options

Symbol	Description
Nil	—
B	With bracket

### Option Part Nos.

Model	Bracket assembly part no.*1
25A-VHS2510	VHS20PW-180AS-6
25A-VHS3510	VHS30PW-180AS-6
25A-VHS4510	VHS40PW-180AS-6
25A-VHS4510-06	VHS40PW-180-06AS-6
25A-VHS5510	VHS50PW-180AS-6

\*1 Bracket/1 pc., Mounting screw/2 pcs.

### OSHA standard (Occupational Safety and Health Administration Department of Labor)

For safety control, OSHA rule requires energy sources for certain equipment be turned off or disconnected and that the device either be locked or labelled with a warning tag.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

# Air Cylinder: Standard Type Double Acting, Single Rod

## 25A-CJ2 Series

ø10, ø16



### How to Order

**25A - C D J2 L 16 - 60 [ ] Z - M9BW [ ] - B**

Series compatible with secondary batteries

#### With auto switch

Nil	Without magnet for switch*1
D	With auto switch (Built-in magnet)

\*1 In the case of without magnet for switch, auto switch cannot be mounted.

#### Mounting

B	Basic
E	Double-side bossed
D	Double clevis
L	Single foot
M	Double foot
F	Rod flange
G	Head flange

\* Mounting bracket is shipped together with the product, but not assembled.

#### Bore size

10	10 mm
16	16 mm

#### Cylinder standard stroke [mm]

10	15, 30, 45, 60, 75, 100, 125, 150
16	15, 30, 45, 60, 75, 100, 125, 150, 175, 200

\* Manufacture of intermediate strokes in 1 mm increments is possible. (Spacers are not used.)

#### Auto switch mounting type

B	Band mounting
---	---------------

\* Refer to page 212 for auto switch mounting brackets.

#### Number of auto switches

Nil	2
S	1
n	n

#### Auto switch

Nil	Without auto switch
-----	---------------------

\* Refer to page 205 for the applicable auto switch model.

#### Head cover port location

Bore size [mm]	ø10, ø16	
Symbol		
Nil	Perpendicular to axis	
R	Axial	

\* Double clevis is only available for being perpendicular to axis.

\* Double-side bossed type is only available for being perpendicular to axis.

#### Built-in Magnet Cylinder Model

Suffix the symbol "B" (Band mounting type) to the end of part number for cylinder with auto switch.

Example	Band mounting type	25A-CDJ2B16-60Z-B
---------	--------------------	-------------------

#### Mounting Bracket Part Nos. for the 25A- Series

Mounting bracket	Bore size [mm]	
	10	16
Foot bracket	90-CJ-L010B	90-CJ-L016B
Flange bracket	90-CJ-F010B	90-CJ-F016B

\* The 25A- series specifications and dimensions are the same as those of the standard model.

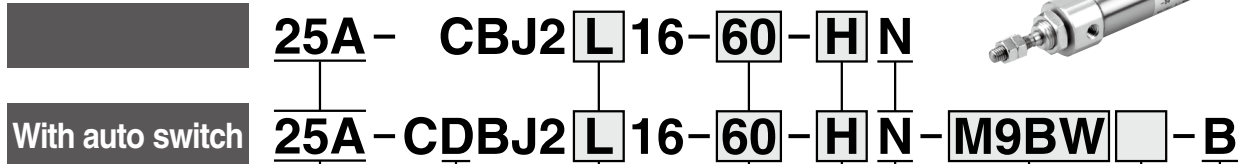
# Air Cylinder: With End Lock

## 25A-CBJ2 Series

∅16



### How to Order



Series compatible with secondary batteries

With auto switch (Built-in magnet)

Mounting

B	Basic
L	Axial foot
F	Rod flange
D	Double clevis*1

- \*1 Rod end lock only
- \* Foot/Flange brackets are shipped together with the product, but not assembled.

Cylinder standard stroke [mm]

Bore size	Standard stroke
16	15, 30, 45, 60, 75, 100, 125, 150, 175, 200

\* Manufacture of intermediate strokes in 1 mm increments is possible. (Spacers are not used.)

Lock position

H	Head end lock
R	Rod end lock

Manual release

N	Non-locking type
---	------------------

Auto switch

Nil	Without auto switch
-----	---------------------

\* For applicable auto switches, refer to page 205.

Number of auto switches

Nil	2
S	1
n	n

Auto switch mounting type

B	Band mounting
---	---------------

\* Refer to page 212 for auto switch mounting brackets.

### Built-in Magnet Cylinder Model

Suffix the symbol "-B" (Band mounting) to the end of part number for cylinder with auto switch.

Example	Band mounting	25A-CDBJ2B16-60-HN-B
---------	---------------	----------------------

### Mounting Bracket Part Nos. for the 25A- Series

Mounting bracket	Bore size [mm]	
	10	16
Foot bracket	90-CJ-L010B	90-CJ-L016B
Flange bracket	90-CJ-F010B	90-CJ-F016B

\* The 25A- series specifications and dimensions are the same as those of the standard model.

# Air Cylinder: Standard Type Double Acting, Single Rod

## 25A-CM2 Series

Ø20, Ø25, Ø32, Ø40



### How to Order

**25A - C D M2 L 40 - 150 A Z - M9BW**

Series compatible with secondary batteries

With auto switch

Nil	Without magnet for switch*1
D	With auto switch (Built-in magnet)

\*1 In the case of without magnet for switch, auto switch cannot be mounted.

Mounting

B	Basic
L	Axial foot
F	Rod flange
G	Head flange
C	Single clevis
D	Double clevis
U	Rod trunnion
T	Head trunnion
E	Integrated clevis
V	Integrated clevis (90°)
BZ	Boss-cut/Basic
FZ	Boss-cut/Rod flange
UZ	Boss-cut/Rod trunnion

### Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.

(Example) 25A-CDM2F32-100AZ

Number of auto switches

Nil	2
S	1
n	n

Auto switch

Nil	Without auto switch
-----	---------------------

\* Refer to page 205 for the applicable auto switch model.

Cushion

Nil	Rubber bumper
A	Air cushion

Cylinder Stroke [mm]

Bore size	Standard stroke*1	Maximum stroke
20		1000
25	25, 50, 75, 100, 125, 150	1500
32	200, 250, 300	2000
40		2000

\*1 Other intermediate strokes can be manufactured upon receipt of order. Manufacture of intermediate strokes in 1 mm increments is possible. (Spacers are not used.)

\* When exceeding 300 strokes, the allowable maximum stroke length is determined by the stroke selection table (**Web Catalog** or **Best Pneumatics**).

Bore size

20	20 mm
25	25 mm
32	32 mm
40	40 mm

\* The 25A- series specifications and dimensions are the same as those of the standard model.

### Mounting Bracket Part Nos. for the 25A- Series

Mounting bracket	Min. order	Bore size [mm]			Description (for min. order)
		20	25	32	
Axial foot*1	2	CM-L020B-XB12	CM-L032B-XB12	CM-L040B-XB12	2 feet, 1 mounting nut
Flange	1	CM-F020BSUS	CM-F032BSUS	CM-F040BSUS	1 flange
Single clevis*2	1	25-CM-C020B	25-CM-C032B	25-CM-C040B	1 single clevis, 3 liners
Double clevis*2*3 (with pin)	1	25-CM-D020B	25-CM-D032B	25-CM-D040B	1 double clevis, 3 liners, 1 clevis pin, 2 retaining rings
Trunnion (with nut)	1	25-CM-T020B	25-CM-T032B	25-CM-T040B	1 trunnion, 1 trunnion nut

\*1 Order 2 foot brackets for each cylinder unit.

\*2 3 liners are attached with a clevis bracket for adjusting the mounting angle.

\*3 A clevis pin and retaining rings (split pins for ø40) are attached.



# Air Cylinder: Standard Type Double Acting, Single Rod

# 25A-CG1 Series

Ø20, Ø25, Ø32, Ø40, Ø50, Ø63, Ø80, Ø100



## How to Order

**25A-C D G1 L N 25-100 Z-M9BW**

Series compatible with secondary batteries

With auto switch

Nil	Without magnet for switch*1
D	With auto switch (Built-in magnet)

\*1 In the case of without magnet for switch, auto switch cannot be mounted.

Mounting

B	Basic
Z*1	Basic (without trunnion mounting female thread)
L	Axial foot
F	Rod flange
G	Head flange
U*1	Rod trunnion
T*1	Head trunnion
D	Clevis

\*1 Not available for Ø80 or Ø100.

\* Mounting bracket is shipped together with the product, but not assembled.

\* The cylinder for F, G, L, D mounting types is Z: Basic (without trunnion mounting female thread).

Type

N	Rubber bumper
A	Air cushion

Bore size

20	20 mm
25	25 mm
32	32 mm
40	40 mm
50	50 mm
63	63 mm
80	80 mm
100	100 mm

### Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.

(Example) 25A-CDG1FN32-100Z

Number of auto switches

Nil	2
S	1
n	n

Auto switch

Nil	Without auto switch
-----	---------------------

\* Refer to page 205 for the applicable auto switch model.

Rod end thread

Nil	Rod end male thread
F	Rod end female thread

Cylinder stroke [mm]

Bore size [mm]	Standard stroke*1 [mm]	Long stroke*2 [mm]
20	25, 50, 75, 100, 125, 150, 200	201 to 1500
25		
32		
40		
50, 63	25, 50, 75, 100, 125, 150, 200, 250, 300	301 to 1500
80		
100		

\*1 Other intermediate strokes can be manufactured upon receipt of order. Manufacture of intermediate strokes in 1 mm increments is possible. (Spacers are not used.)

\*2 The long stroke shows the maximum manufacturable stroke. For details about maximum stroke that can be used for each mounting bracket, refer to the stroke selection table (Web Catalog or Best Pneumatics).

\* The 25A-series specifications and dimensions are the same as those of the standard model.

### Mounting Bracket Part Nos. for the 25A-Series

Mounting bracket	Min. order	Bore size [mm]								Description
		20	25	32	40	50	63	80	100	
Foot	2*1	90-CG-L020	90-CG-L025	90-CG-L032	90-CG-L040	90-CG-L050	25-CG-L063	25-CG-L080	25-CG-L100	Foot x 2, Mounting bolt x 8
Flange	1	90-CG-F020	90-CG-F025	90-CG-F032	90-CG-F040	90-CG-F050	25-CG-F063	25-CG-F080	25-CG-F100	Flange x 1, Mounting bolt x 4
Trunnion pin	1	25-CG-T020	25-CG-T025	25-CG-T032	25-CG-T040	25-CG-T050	25-CG-T063	—	—	Trunnion pin x 2, Trunnion bolt x 2, Flat washer x 2
Clevis	1	25-CG-D020	25-CG-D025	25-CG-D032	25-CG-D040	25-CG-D050	25-CG-D063	25-CG-D080	25-CG-D100	Clevis x 1, Mounting bolt x 4, Clevis pin x 1, Retaining ring x 2
Pivot bracket	1	25-CG-020-24A	25-CG-025-24A	25-CG-032-24A	25-CG-040-24A	25-CG-050-24A	25-CG-063-24A	25-CG-080-24A	25-CG-100-24A	Pivot bracket x 1

\*1 Order two foot brackets per cylinder.

# Air Cylinder: With End Lock

# 25A-CBG1 Series

Ø20, Ø25, Ø32, Ø40, Ø50, Ø63

## How to Order



**25A - CBG1 L N 25 - 100 - H N**

**25A - CDBG1 L N 25 - 100 - H N - M9BW**

Series compatible with secondary batteries

With auto switch (Built-in magnet)

### Mounting

<b>B</b>	Basic
<b>L</b>	Axial foot
<b>F</b>	Rod flange
<b>G</b>	Head flange
<b>U</b>	Rod trunnion
<b>T</b>	Head trunnion
<b>D</b>	Clevis

\* Mounting brackets are shipped together, but not assembled.

### Type

<b>N</b>	Rubber bumper
----------	---------------

### Bore size

<b>20</b>	20 mm
<b>25</b>	25 mm
<b>32</b>	32 mm
<b>40</b>	40 mm
<b>50</b>	50 mm
<b>63</b>	63 mm

### Cylinder stroke [mm]

Bore size	Standard stroke*1	Long stroke*2
<b>20</b>	25, 50, 75, 100, 125, 150, 200	201 to 1500
<b>25</b>	25, 50, 75, 100, 125, 150, 200, 250, 300	301 to 1500
<b>32</b>		
<b>40</b>		
<b>50, 63</b>		

\*1 Other intermediate strokes can be manufactured upon receipt of order. Manufacture of intermediate strokes in 1 mm increments is possible. (Spacers are not used.)

\*2 The long stroke shows the maximum manufacturable stroke. For details about maximum stroke that can be used for each mounting bracket, refer to the stroke selection table ([Web Catalog](#) or [Best Pneumatics](#)).

### Number of auto switches

<b>Nil</b>	2
<b>S</b>	1
<b>n</b>	n

### Auto switch

<b>Nil</b>	Without auto switch
------------	---------------------

\* For applicable auto switches, refer to page 205.

### Manual release

<b>N</b>	Non-locking type
----------	------------------

### Lock position

<b>H</b>	Head end lock
<b>R</b>	Rod end lock
<b>W</b>	Double end lock

## Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.

(Example) 25A-CDBG1FN32-100-RN

## Mounting Bracket Part Nos. for the 25A- Series

Mounting bracket	Min. order	Bore size [mm]						Description
		20	25	32	40	50	63	
Foot	2*1	90-CG-L020	90-CG-L025	90-CG-L032	90-CG-L040	90-CG-L050	25-CG-L063	Foot x 2, Mounting bolt x 8
Flange	1	90-CG-F020	90-CG-F025	90-CG-F032	90-CG-F040	90-CG-F050	25-CG-F063	Flange x 1, Mounting bolt x 4
Trunnion pin	1	25-CG-T020	25-CG-T025	25-CG-T032	25-CG-T040	25-CG-T050	25-CG-T063	Trunnion pin x 2, Trunnion bolt x 2, Flat washer x 2
Clevis	1	25-CG-D020	25-CG-D025	25-CG-D032	25-CG-D040	25-CG-D050	25-CG-D063	Clevis x 1, Mounting bolt x 4, Clevis pin x 1, Retaining ring x 2
Pivot bracket	1	25-CG-020-24A	25-CG-025-24A	25-CG-032-24A	25-CG-040-24A	25-CG-050-24A	25-CG-063-24A	Pivot bracket x 1

\*1 Order two foot brackets per cylinder.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

# Air Cylinder: Single Rod

## 25A-MB Series

Ø32, Ø40, Ø50, Ø63, Ø80, Ø100



### How to Order

25A-M **D** **B** **L** **32** - **50** **Z** - **M9BW**  

Series compatible with secondary batteries

With auto switch

Nil	Without magnet for switch*1
D	With auto switch (Built-in magnet)

\*1 In the case of without magnet for switch, auto switch cannot be mounted.

Mounting

B	Basic
L	Axial foot
F	Rod flange
G	Head flange
C	Single clevis
D	Double clevis
T	Center trunnion

Bore size

32	32 mm
40	40 mm
50	50 mm
63	63 mm
80	80 mm
100	100 mm

Number of auto switches

Nil	2
S	1
3	3
n	n

Auto switch

Nil	Without auto switch
-----	---------------------

\* Refer to page 205 for the applicable auto switch model.

Cylinder stroke [mm]

Bore [mm]	Standard stroke [mm]
32	25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400, 450, 500
40	25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400, 450, 500
50	25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400, 450, 500, 600
63	25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400, 450, 500, 600
80	25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400, 450, 500, 600, 700, 800
100	25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400, 450, 500, 600, 700, 800

\* Intermediate strokes are available. (No spacer is used.)

### Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.  
(Example) 25A-MDBB40-100Z

\* The 25A- series specifications and dimensions are the same as those of the standard model.

### Mounting Bracket Part Nos. for the 25A- Series

Bore size [mm]	32	40	50	63	80	100
Foot*1	25-MB-L03	25-MB-L04	25-MB-L05	25-MB-L06	25-MB-L08	25-MB-L10
Flange	MB-F03-XC7	MB-F04-XC7	MB-F05-XC7	MB-F06-XC7	MB-F08-XC7	MB-F10-XC7
Single clevis	25-MB-C03	25-MB-C04	25-MB-C05	25-MB-C06	25-MB-C08	25-MB-C10
Double clevis	25-MB-D03	25-MB-D04	25-MB-D05	25-MB-D06	25-MB-D08	25-MB-D10

\*1 Two foot brackets required for one cylinder.

\* Accessories for each mounting bracket are as follows: Foot, flange, single clevis/body mounting bolt, double clevis/body mounting bolt, clevis pin, flat washers and split pins.

# Air Cylinder: Standard Type Double Acting, Single Rod

## 25A-CA2 Series

Ø40, Ø50, Ø63, Ø80, Ø100



### How to Order

25A - C D A2 L 50 - 100 Z - M9BW

Series compatible with secondary batteries

With auto switch

Nil	Without magnet for switch*1
D	With auto switch (Built-in magnet)

\*1 In the case of without magnet for switch, auto switch cannot be mounted.

Number of auto switches

Nil	2
S	1
3	3
n	n

Auto switch

Nil	Without auto switch
-----	---------------------

\* Refer to page 205 for the applicable auto switch model.

Mounting

B	Basic
L	Axial foot
F	Rod flange
G	Head flange
C	Single clevis
D	Double clevis
T	Center trunnion

Cylinder stroke [mm]

40	25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400, 450, 500
50, 63	25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400, 500, 600
80, 100	25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400, 450, 500, 600, 700

\* Intermediate strokes not listed above are produced upon receipt of order.

Bore size

40	40 mm
50	50 mm
63	63 mm
80	80 mm
100	100 mm

### Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch  
(Example) 25A-CDA2L40-100Z

\* The 25A- series specifications and dimensions are the same as those of the standard model.

### Mounting Bracket Part Nos. for the 25A- Series

Bore size [mm]	40	50	63	80	100
Axial foot*1	90-CA2-L04	90-CA2-L05	90-CA2-L06	90-CA2-L08	90-CA2-L10
Flange	25A-CA2-F04	25A-CA2-F05	25A-CA2-F06	25A-CA2-F08	25A-CA2-F10
Single clevis	25A-CA2-C04	25A-CA2-C05	25A-CA2-C06	25A-CA2-C08	25A-CA2-C10
Double clevis*2	25A-CA2-D04	25A-CA2-D05	25A-CA2-D06	25A-CA2-D08	25A-CA2-D10

\*1 When axial foot brackets are used, two pieces should be ordered for each cylinder.

\*2 A clevis pin, flat washers and split pins are shipped together with double clevis.

# Air Cylinder: Standard Type Double Acting, Single Rod

## 25A-CS2 Series

∅125, ∅140, ∅160



### How to Order

**25A-C D S2 L 125 - 300 - M9BW**

Series compatible with secondary batteries

With auto switch

Nil	Without magnet for switch*1
D	With auto switch (Built-in magnet)

\*1 In the case of without magnet for switch, auto switch cannot be mounted.

Number of auto switches

Nil	2
3	3
S	1
n	n

Auto switch

Nil	Without auto switch
-----	---------------------

\* Refer to page 205 for the applicable auto switch model.

Mounting

B	Basic
L	Foot
F	Rod flange
G	Head flange
C	Single clevis
D	Double clevis
T	Center trunnion

Cylinder stroke [mm]

Mounting bracket	Maximum stroke	
	Basic, Head flange, Single clevis, Double clevis, Center trunnion	Foot, Rod flange
Bore size		
125	1000 or less	1600 or less
140		
160	1200 or less	

Bore size

125	125 mm
140	140 mm
160	160 mm

Port thread type

Nil	Rc
TN	NPT
TF	G

### Built-in Magnet Cylinder Model

If a built-in magnet cylinder without auto switch is required, there is no need to enter the symbol for auto switch.

(Example) 25A-CS2B125-100

\* The 25A- series specifications and dimensions are the same as those of the standard model.

### Mounting Bracket Part Nos. for the 25A- Series

Bore size [mm]	125	140	160
Axial foot*1	CS2-L12	CS2-L14	CS2-L16
Flange	CS2-F12	CS2-F14	CS2-F16
Single clevis	CS2-C12	CS2-C14	CS2-C16
Double clevis*2	25A-CS2-D12	25A-CS2-D14	25A-CS2-D16

\*1 Order two foot brackets per cylinder.

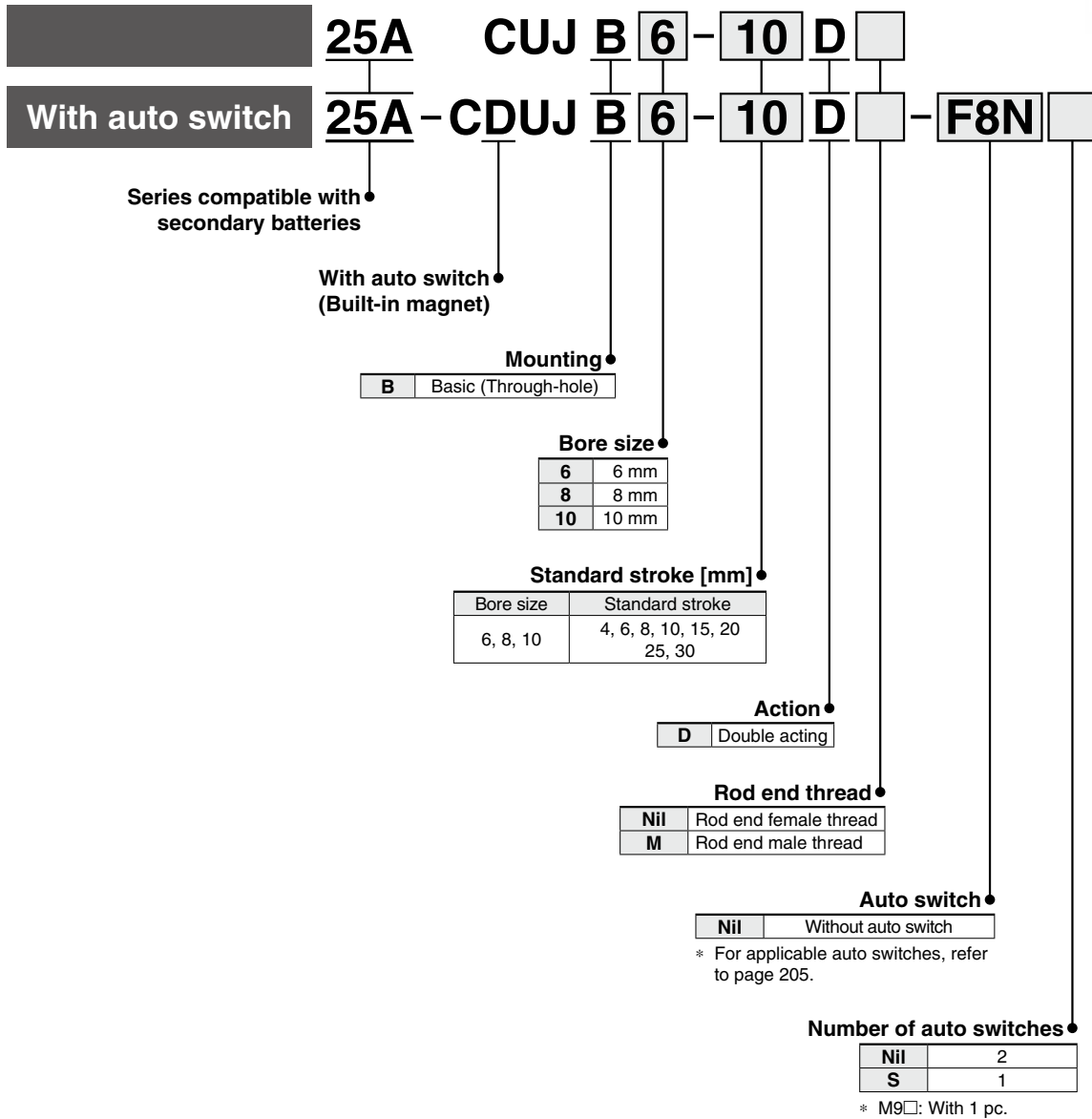
\*2 A clevis pin and split pins are shipped together with double clevis.

# Mini Free Mount Cylinder

## 25A-CUJ Series

ø6, ø8, ø10

### How to Order



#### Built-in Magnet Cylinder Model

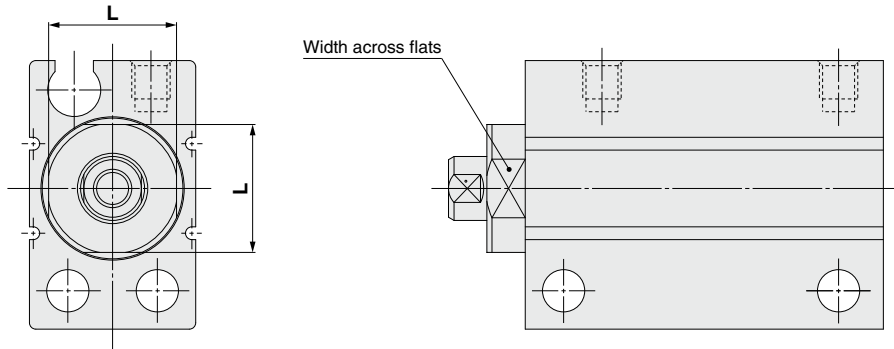
If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.  
(Example) 25A-CDUJB8-15DM

\* The 25A- series specifications are the same as those of the standard model.

# Mini Free Mount Cylinder **25A-CUJ Series**

**Dimensions** (Dimensions other than those shown below are the same as the standard product.)

25A-C□UJB <sup>6</sup>/<sub>8</sub>/<sub>10</sub>



[mm]

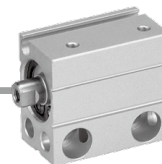
Bore size	L dimension
6	8
8	10
10	11

# Mini Free Mount Cylinder

## 25A-CUJ Series

Ø12, Ø16, Ø20

### How to Order



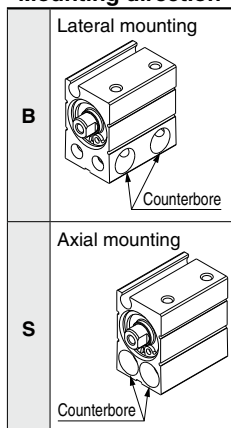
**25A - CUJ B 12 - 30 D**

**With auto switch 25A - CDUJ B 12 - 30 D - F8N**

Series compatible with secondary batteries

With auto switch (Built-in magnet)

Mounting direction



Bore size

12	12 mm
16	16 mm
20	20 mm

Standard stroke [mm]

Bore size	Standard stroke
12, 16, 20	5, 10, 15, 20, 25 30, 35, 40, 45, 50

Action

D	Double acting
---	---------------

Rod end thread

Nil	Rod end female thread
M	Rod end male thread

Auto switch

Nil	Without auto switch
-----	---------------------

\* For applicable auto switches, refer to page 205.

Number of auto switches

Nil	2
S	1

\* M9□: With 1 pc.

### Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.

(Example) 25A-CDUJB12-15DM

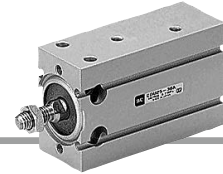
\* The 25A- series specifications and dimensions are the same as those of the standard model.



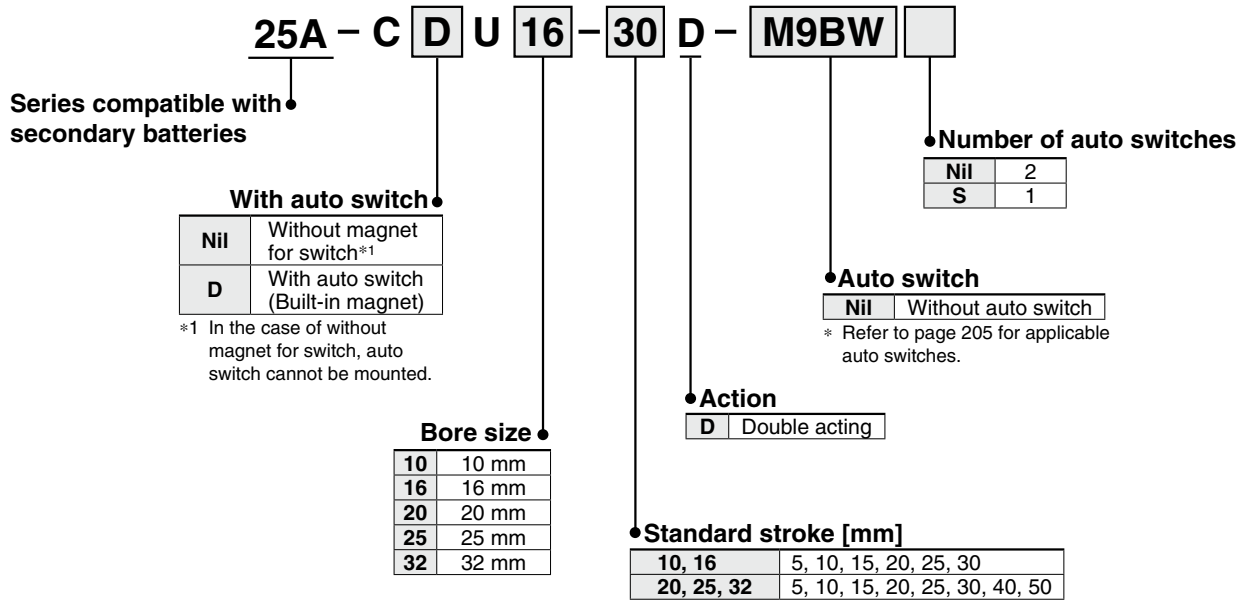
# Free Mount Cylinder Double Acting, Single Rod

## 25A-CU Series

Ø10, Ø16, Ø20, Ø25, Ø32



### How to Order



#### Built-in Magnet Cylinder Model

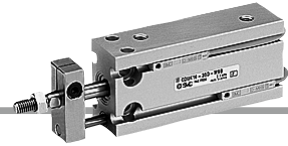
If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.  
(Example) 25A-CDU20-25D

\* The 25A- series specifications and dimensions are the same as those of the standard model.

# Free Mount Cylinder: Non-rotating Rod Type Double Acting, Single Rod

## 25A-*CUK* Series

Ø10, Ø16, Ø20, Ø25, Ø32



### How to Order

25A - C D UK 16 - 30 D - M9BW [ ]

Series compatible with secondary batteries

With auto switch

Nil	Without magnet for switch*1
D	With auto switch (Built-in magnet)

\*1 In the case of without magnet for switch, auto switch cannot be mounted.

Non-rotating rod type

Bore size

10	10 mm
16	16 mm
20	20 mm
25	25 mm
32	32 mm

Number of auto switches

Nil	2
S	1

Auto switch

Nil	Without auto switch
-----	---------------------

\* Refer to page 205 for applicable auto switches.

Action

D	Double acting
---	---------------

Standard stroke [mm]

10, 16	5, 10, 15, 20, 25, 30
20, 25, 32	5, 10, 15, 20, 25, 30, 40, 50

### Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.

(Example) 25A-CDUK20-25D

\* The 25A- series specifications and dimensions are the same as those of the standard model.

# Compact Cylinder: Standard Type Double Acting, Single Rod

## 25A-CQS Series

Ø12, Ø16, Ø20, Ø25



### How to Order

25A - C D QS B 20 - 30 D - M9BW

Series compatible  
with secondary  
batteries

With auto switch

Nil	Without magnet for switch*1
D	With auto switch (Built-in magnet)

\*1 In the case of without magnet for switch, auto switch cannot be mounted.

Mounting

B	Through-hole/Both ends tapped common (Standard)
L	Foot
F	Rod flange
G	Head flange
D	Double clevis

- \* In the case of long strokes, use either ends tapped mounting or bracket mounting.
- \* Mounting brackets are shipped together, but not assembled.
- \* Cylinder mounting bolts are not included.

Bore size

12	12 mm
16	16 mm
20	20 mm
25	25 mm

Number of auto switches

Nil	2
S	1
n	n

Auto switch

Nil	Without auto switch
-----	---------------------

\* Refer to page 205 for the applicable auto switch model.

Body option

<Standard stroke>

Nil	Standard
C	With rubber bumper
M	Rod end male thread

\* Combination of body options is available.

<Long stroke>

C	With rubber bumper Rod end female thread (Standard)
CM	With rubber bumper Rod end male thread

\* Rubber bumper is standard equipment for long stroke type.

Action

D	Double acting
---	---------------

Cylinder stroke [mm]

Bore size	Standard stroke	Long stroke
12, 16	5, 10, 15, 20, 25, 30	35, 40, 45, 50, 75, 100, 125, 150, 175, 200
20	5, 10, 15, 20, 25, 30, 35, 40, 45, 50	75, 100, 125, 150, 175, 200
25		75, 100, 125, 150, 175, 200, 250, 300

### Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.

(Example) 25A-CDQSL25-30D

\* The 25A- series specifications and dimensions are the same as those of the standard model.

### Mounting Bracket Part Nos. for the 25A- Series

Bore size [mm]	Foot*1	Flange	Double clevis
12	25-CQS-L012	25-CQS-F012	25-CQS-D012
16	25-CQS-L016	25-CQS-F016	25-CQS-D016
20	25-CQS-L020	25-CQS-F020	25-CQS-D020
25	25-CQS-L025	25-CQS-F025	25-CQS-D025

\*1 When ordering foot bracket, order 2 pieces per cylinder.

\* Parts belonging to each bracket are as follows.

Foot or Flange type: Body mounting bolt

Double clevis type: Clevis pin, Type C retaining ring for axis, Body mounting bolt.

# Compact Cylinder: Standard Type

## Double Acting, Double Rod

# 25A-CQSW Series

∅12, ∅16, ∅20, ∅25



### How to Order

**25A - C D QSW B 20 - 30 D - M9BWL**

**Series compatible with secondary batteries**

**With auto switch**

Nil	Without magnet for switch*1
D	With auto switch (Built-in magnet)

\*1 In the case of without magnet for switch, auto switch cannot be mounted.

**Mounting**

B	Through-hole/Both ends tapped common (Standard)
L	Foot
F	Flange

\* Mounting brackets are shipped together, but not assembled.  
\* Cylinder mounting bolts are not included.

**Bore size**

12	12 mm
16	16 mm
20	20 mm
25	25 mm

**Number of auto switches**

Nil	2
S	1
n	n

**Auto switch**

Nil	Without auto switch
-----	---------------------

\* For applicable auto switches, refer to page 205.

**Cushion/Rod end thread**

Nil	Standard
C	With rubber bumper
M	Rod end male thread

\* Combination of body options is available.

**Action**

D	Double acting
---	---------------

**Cylinder stroke [mm]**

Bore size	Standard stroke
12, 16	5, 10, 15, 20, 25, 30
20	5, 10, 15, 20, 25, 30, 35, 40, 45, 50
25	30, 35, 40, 45, 50

### Mounting Bracket Part Nos. for the 25A- Series

Bore size [mm]	Foot*1	Flange
12	25-CQS-L012	25-CQS-F012
16	25-CQS-L016	25-CQS-F016
20	25-CQS-L020	25-CQS-F020
25	25-CQS-L025	25-CQS-F025

- \*1 When ordering foot brackets, order 2 pieces per cylinder.  
\* Body mounting bolts are included for each bracket.

### Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.  
(Example) 25A-CDQSWL25-30D

- \* The 25A- series specifications and dimensions are the same as those of the standard model.

# Compact Cylinder: Anti-lateral Load Type

# 25A-CQS□S Series

∅12, ∅16, ∅20, ∅25



## How to Order

25A-C □ D Q S B S 20 - 30 D C - M9BW □

Series compatible with secondary batteries

With auto switch

Nil	Without magnet for switch*1
D	With auto switch (Built-in magnet)

\*1 In the case of without magnet for switch, auto switch cannot be mounted.

Mounting

B	Through-hole/Both ends tapped common (Standard)
L	Foot
F	Rod flange
G	Head flange
D	Double clevis

\* Mounting brackets are shipped together, but not assembled.  
\* Cylinder mounting bolts are not included.

Cushion

S	Anti-lateral load type
---	------------------------

Bore size

12	12 mm
16	16 mm
20	20 mm
25	25 mm

Cylinder stroke [mm]

Bore size	Standard stroke
12, 16	5, 10, 15, 20, 25, 30
20, 25	5, 10, 15, 20, 25, 30, 35, 40, 45, 50

Number of auto switches

Nil	2
S	1
n	n

Auto switch

Nil	Without auto switch
-----	---------------------

\* Refer to page 205 for the applicable auto switch model.

Body option

C	With rubber bumper Rod end female thread (Standard)
CM	With rubber bumper Rod end male thread

Action

D	Double acting
---	---------------

### Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.

(Example) 25A-CDQSLS12-25DC

\* With cushion only.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

### Mounting Bracket Part Nos. for the 25A- Series

Bore size [mm]	Foot*1	Flange	Double clevis
12	25-CQS-L012	25-CQS-F012	25-CQS-D012
16	25-CQS-L016	25-CQS-F016	25-CQS-D016
20	25-CQS-L020	25-CQS-F020	25-CQS-D020
25	25-CQS-L025	25-CQS-F025	25-CQS-D025

\*1 When ordering foot bracket, order 2 pieces per cylinder.

\* Parts belonging to each bracket are as follows.

Foot or Flange type: Body mounting bolt

Double clevis type: Clevis pin, Type C retaining ring for axis, Body mounting bolt

# Compact Cylinder: Standard Double Acting, Single Rod

## 25A-CQ2 Series

ø12, ø16, ø20, ø25, ø32, ø40, ø50, ø63, ø80, ø100



### How to Order

**25A - C D Q2 B 20 - 30 D Z - M9BW**

Series compatible with secondary batteries

With auto switch

Nil	Without magnet for switch*1
D	With auto switch (Built-in magnet)

\*1 In the case of without magnet for switch, auto switch cannot be mounted.

Mounting

B	Through-hole (Standard)
A	Both ends tapped
L	Foot
F	Rod flange
G	Head flange
D	Double clevis

\* Mounting brackets are shipped together, but not assembled.  
\* Cylinder mounting bolts are not included.

Bore size

12	12 mm	40	40 mm
16	16 mm	50	50 mm
20	20 mm	63	63 mm
25	25 mm	80	80 mm
32	32 mm	100	100 mm

Port thread type

Nil	M thread	ø12 to ø25
	Rc	
TN	NPT	ø32 to ø100
TF	G	

Auto switch

Nil	Without auto switch
-----	---------------------

\* Refer to page 205 for the applicable auto switch model.

Number of auto switches

Nil	2
S	1
n	n

Auto switch mounting groove

Z	ø12 to ø25	2 surfaces
	ø32 to ø100	4 surfaces

\* "Z" is not available for ø12 to ø25 without auto switches.

Body option

Nil	Standard (Rod end female thread)
C	With rubber bumper
M	Rod end male thread

\* Combination of body options is available.

Action

D	Double acting
---	---------------

Cylinder stroke [mm]

12, 16	5, 10, 15, 20, 25, 30
20, 25	5, 10, 15, 20, 25, 30, 35, 40, 45, 50
32, 40	5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 75, 100
50 to 100	10, 15, 20, 25, 30, 35, 40, 45, 50, 75, 100

### Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.  
(Example) 25A-CDQ2L32-25DZ

\* The 25A-series specifications and dimensions are the same as those of the standard model.

### Mounting Bracket Part Nos. for the 25A-Series (Without auto switch)

Bore size [mm]	Foot*1	Flange	Double clevis
12	25-CQ-L012	25-CQ-F012	25-CQ-D012
16	25-CQ-L016	25-CQ-F016	25-CQ-D016
20	25-CQ-L020	25-CQ-F020	25-CQ-D020
25	25-CQ-L025	25-CQ-F025	25-CQ-D025
32	25-CQ-L032	25-CQ-F032	25-CQ-D032
40	25-CQ-L040	25-CQ-F040	25-CQ-D040
50	25-CQ-L050	25-CQ-F050	25-CQ-D050
63	25-CQ-L063	25-CQ-F063	25-CQ-D063
80	25-CQ-L080	25-CQ-F080	25-CQ-D080
100	25-CQ-L100	25-CQ-F100	25-CQ-D100

### Mounting Bracket Part Nos. for the 25A-Series (With auto switch)

Bore size [mm]	Foot*1	Flange	Double clevis
12	25-CQ-LZ12	25-CQ-F012	25-CQ-D012
16	25-CQ-LZ16	25-CQ-F016	25-CQ-D016
20	25-CQ-LZ20	25-CQ-F020	25-CQ-D020
25	25-CQ-LZ25	25-CQ-F025	25-CQ-D025
32	25-CQ-L032	25-CQ-F032	25-CQ-D032
40	25-CQ-L040	25-CQ-F040	25-CQ-D040
50	25-CQ-L050	25-CQ-F050	25-CQ-D050
63	25-CQ-L063	25-CQ-F063	25-CQ-D063
80	25-CQ-L080	25-CQ-F080	25-CQ-D080
100	25-CQ-L100	25-CQ-F100	25-CQ-D100

\*1 When ordering a foot bracket, the required quantity will be different depending on the bore size.

- ø12 to ø25:
  - Without switch: Order 2 pieces per cylinder.
  - With switch: Order 1 piece per cylinder. (Part number for a set of 2 foot brackets)
- ø32 to ø100:
  - Order 2 pieces per cylinder.

\* Parts belonging to each bracket are as follows.

Foot or Flange: Body mounting bolts, Double clevis: Clevis pin, Type C retaining rings for axis, Body mounting bolts

### Simple Joint (Standard)/ Part Nos.

Bore size [mm]	Joint	Type A mounting bracket	Type B mounting bracket
32, 40	YU-03	YA-03	YB-03
50, 63	YU-05	YA-05	YB-05
80	YU-08	YA-08	YB-08
100	YU-10	YA-10	YB-10

<Ordering>

- Joints are not included with type A or B mounting brackets. Order them separately.

(Example)

Bore size ø40 Part no.

- Type A mounting bracket .....YA-03

- Joint.....YU-03

# Compact Cylinder: Standard Double Acting, Double Rod

## 25A-CQ2W Series

ø12, ø16, ø20, ø25, ø32, ø40, ø50, ø63, ø80, ø100



### How to Order

**25A - C D Q2W B 20 - 30 D Z - M9BW**

**Series compatible with secondary batteries**

**With auto switch**

Nil	Without magnet for switch*1
D	With auto switch (Built-in magnet)

\*1 In the case of without magnet for switch, auto switch cannot be mounted.

**Mounting**

B	Through-hole (Standard)
A	Both ends tapped
L	Foot
F	Flange

\* Mounting brackets are shipped together, but not assembled.  
\* Cylinder mounting bolts are not included.

**Bore size**

12	12 mm	40	40 mm
16	16 mm	50	50 mm
20	20 mm	63	63 mm
25	25 mm	80	80 mm
32	32 mm	100	100 mm

**Number of auto switches**

Nil	2
S	1
n	n

**Auto switch**

Nil	Without auto switch
-----	---------------------

\* For applicable auto switches, refer to page 205.

**Auto switch mounting groove**

Z	ø12 to ø25	2 surfaces
	ø32 to ø100	4 surfaces

\* "Z" is not available for ø12 to ø25 without auto switches.

**Body option**

Nil	Standard (Rod end female thread)
C	With rubber bumper
M	Rod end male thread

\* Combination of body options is available.

**Action**

D	Double acting
---	---------------

#### Mounting Bracket Part Nos. for the 25A- Series (Without auto switch)

Bore size [mm]	Foot*1	Flange
12	25-CQ-L012	25-CQ-F012
16	25-CQ-L016	25-CQ-F016
20	25-CQ-L020	25-CQ-F020
25	25-CQ-L025	25-CQ-F025
32	25-CQ-L032	25-CQ-F032
40	25-CQ-L040	25-CQ-F040
50	25-CQ-L050	25-CQ-F050
63	25-CQ-L063	25-CQ-F063
80	25-CQ-L080	25-CQ-F080
100	25-CQ-L100	25-CQ-F100

#### Mounting Bracket Part Nos. for the 25A- Series (With auto switch)

Bore size [mm]	Foot*1	Flange
12	25-CQ-LZ12	25-CQ-F012
16	25-CQ-LZ16	25-CQ-F016
20	25-CQ-LZ20	25-CQ-F020
25	25-CQ-LZ25	25-CQ-F025
32	25-CQ-L032	25-CQ-F032
40	25-CQ-L040	25-CQ-F040
50	25-CQ-L050	25-CQ-F050
63	25-CQ-L063	25-CQ-F063
80	25-CQ-L080	25-CQ-F080
100	25-CQ-L100	25-CQ-F100

\*1 When ordering a foot bracket, the required quantity will be different depending on the bore size.  
ø12 to ø25:  
- Without switch: Order 2 pieces per cylinder.  
- With switch: Order 1 piece per cylinder. (Part number for a set of 2 foot brackets)  
ø32 to ø100:  
- Order 2 pieces per cylinder.  
\* Body mounting bolts are included for each bracket.

#### Cylinder stroke [mm]

12, 16	5, 10, 15, 20, 25, 30
20, 25	5, 10, 15, 20, 25, 30, 35, 40, 45, 50
32, 40	5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 75, 100
50 to 100	10, 15, 20, 25, 30, 35, 40, 45, 50, 75, 100

#### Port thread type

Nil	M thread	ø12 to ø25
	Rc	
TN	NPT	ø32 to ø100
TF	G	

#### Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.

(Example) 25A-CDQ2WL32-25DZ

\* The 25A- series specifications and dimensions are the same as those of the standard model.

#### Simple Joint (Standard)/Part Nos.

Bore size [mm]	Joint	Type A mounting bracket	Type B mounting bracket
32, 40	YU-03	YA-03	YB-03
50, 63	YU-05	YA-05	YB-05
80	YU-08	YA-08	YB-08
100	YU-10	YA-10	YB-10

<Ordering>  
Joints are not included with type A or B mounting brackets. Order them separately.  
(Example)  
Bore size ø40 Part no.  
Type A mounting bracket ..... YA-03  
Joint ..... YU-03

# Compact Cylinder: Large Bore Size Double Acting, Single Rod

## 25A-CQ2 Series

∅125, ∅140, ∅160, ∅180, ∅200



### How to Order

**25A-C D Q2B 125 - 30 DC Z - M9BW**

- Series compatible with secondary batteries**
  - With auto switch**

Nil	Without magnet for switch*1
D	With auto switch (Built-in magnet)

\*1 In the case of without magnet for switch, auto switch cannot be mounted.
  - Mounting**

B	Through-hole/ Both ends tapped common (Standard)
---	---

\* Cylinder mounting bolts are not included.
- Bore size**

125	125 mm
140	140 mm
160	160 mm
180	180 mm
200	200 mm
- Port thread type**

Nil	Rc
TN	NPT
TF	G
- Cylinder stroke [mm]**

Bore size	Standard stroke
125, 140, 160	10, 20, 30, 40, 50, 75, 100, 125,
180, 200	150, 175, 200, 250, 300
- Action**

D	Double acting
---	---------------
- Cushion**

C	Rubber bumper
---	---------------
- Body option**

Nil	Standard (Rod end female thread)
M	Rod end male thread
- Auto switch mounting groove**

Z	∅125 to ∅200	4 surfaces
---	--------------	------------
- Auto switch**

Nil	Without auto switch
-----	---------------------

\* Refer to page 205 for the applicable auto switch model.
- Number of auto switches**

Nil	2
S	1
n	n

### Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.

(Example) 25A-CDQ2B140-30DCZ

\* The 25A-series specifications and dimensions are the same as those of the standard model.



# Compact Cylinder: Long Stroke Double Acting, Single Rod

## 25A-CQ2 Series

∅32, ∅40, ∅50, ∅63, ∅80, ∅100



### How to Order

**25A-C D Q2 A 32 - 200 DC Z - M9BW**

- Series compatible with secondary batteries**
- With auto switch**

Nil	Without magnet for switch*1
D	With auto switch (Built-in magnet)

\*1 In the case of without magnet for switch, auto switch cannot be mounted.
- Mounting**

A	Both ends tapped
L	Foot
F	Rod flange
G	Head flange
D	Double clevis

\* Mounting brackets are shipped together, but not assembled.
- Bore size**

32	32 mm
40	40 mm
50	50 mm
63	63 mm
80	80 mm
100	100 mm
- Port thread type**

Nil	Rc
TN	NPT
TF	G
- Number of auto switches**

Nil	2
S	1
n	n
- Auto switch**

Nil	Without auto switch
-----	---------------------

\* Refer to page 205 for the applicable auto switch model.
- Auto switch mounting groove**

Z	4 surfaces
---	------------
- Body option**

Nil	Standard (Rod end female thread)
M	Rod end male thread
- Cushion**

C	Rubber bumper
---	---------------
- Action**

D	Double acting
---	---------------
- Cylinder stroke [mm]**

Bore size	Standard stroke
32, 40, 50 63, 80, 100	125, 150, 175, 200, 250, 300

### Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.  
(Example) 25A-CDQ2L40-200DCZ

### Simple Joint (Standard)/Part Nos.

Bore size [mm]	Joint	Type A mounting bracket	Type B mounting bracket
32, 40	YU-03	YA-03	YB-03
50, 63	YU-05	YA-05	YB-05
80	YU-08	YA-08	YB-08
100	YU-10	YA-10	YB-10

<Ordering>

• Joints are not included with type A or B mounting brackets. Order them separately.

(Example)

Bore size ∅40

Part no.

• Type A mounting bracket.....YA-03

• Joint.....YU-03

### Mounting Bracket Part Nos. for the 25A- Series (Without auto switch)

Bore size [mm]	Foot*1	Flange	Double clevis
32	25-CQ-L032	25-CQ-F032	25-CQ-D032
40	25-CQ-L040	25-CQ-F040	25-CQ-D040
50	25-CQ-L050	25-CQ-F050	25-CQ-D050
63	25-CQ-L063	25-CQ-F063	25-CQ-D063
80	25-CQ-L080	25-CQ-F080	25-CQ-D080
100	25-CQ-L100	25-CQ-F100	25-CQ-D100

\*1 Order 2 pieces per cylinder.

\* Parts belonging to each bracket are as follows.

Foot or Flange: Body mounting bolts, Double clevis: Clevis pin, Type C retaining rings for axis, Body mounting bolts

### Mounting Bracket Part Nos. for the 25A- Series (With auto switch)

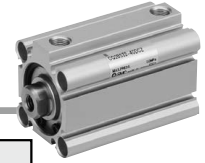
Bore size [mm]	Foot*1	Flange	Double clevis
32	25-CQ-L032	25-CQ-F032	25-CQ-D032
40	25-CQ-L040	25-CQ-F040	25-CQ-D040
50	25-CQ-L050	25-CQ-F050	25-CQ-D050
63	25-CQ-L063	25-CQ-F063	25-CQ-D063
80	25-CQ-L080	25-CQ-F080	25-CQ-D080
100	25-CQ-L100	25-CQ-F100	25-CQ-D100

\* The 25A- series specifications and dimensions are the same as those of the standard model.

# Compact Cylinder: Anti-lateral Load

# 25A-CQ2□S Series

∅32, ∅40, ∅50, ∅63, ∅80, ∅100



## How to Order

25A-C □ D Q2 B S 32 □ - 30 D C □ Z - M9BW □

Series compatible with secondary batteries

With auto switch

Nil	Without magnet for switch*1
D	With auto switch (Built-in magnet)

\*1 In the case of without magnet for switch, auto switch cannot be mounted.

Mounting

B	Through-hole (Standard)
A	Both ends tapped
L	Foot
F	Rod flange
G	Head flange
D	Double clevis

\* Mounting brackets are shipped together, but not assembled.  
\* Cylinder mounting bolts are not included.

Type

S	Anti-lateral load
---	-------------------

Bore size

32	32 mm
40	40 mm
50	50 mm
63	63 mm
80	80 mm
100	100 mm

Port thread type

Nil	Rc
TN	NPT
TF	G

Number of auto switches

Nil	2
S	1
n	n

Auto switch

Nil	Without auto switch
-----	---------------------

\* Refer to page 205 for the applicable auto switch model.

Auto switch mounting groove

Z	4 surfaces
---	------------

Body option

Nil	Standard (Rod end female thread)
M	Rod end male thread

Cushion

C	Rubber bumper
---	---------------

Action

D	Double acting
---	---------------

Cylinder stroke [mm]

Bore size	Standard stroke
32, 40	5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 75, 100
50, 63, 80, 100	10, 15, 20, 25, 30, 35, 40, 45, 50, 75, 100

### Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.

(Example) 25A-CDQ2LS40-30DCZ

\* The 25A-series specifications and dimensions are the same as those of the standard model.

### Mounting Bracket Part Nos. for the 25A-Series (Without auto switch)

Bore size [mm]	Foot*1	Flange	Double clevis
32	25-CQ-L032	25-CQ-F032	25-CQ-D032
40	25-CQ-L040	25-CQ-F040	25-CQ-D040
50	25-CQ-L050	25-CQ-F050	25-CQ-D050
63	25-CQ-L063	25-CQ-F063	25-CQ-D063
80	25-CQ-L080	25-CQ-F080	25-CQ-D080
100	25-CQ-L100	25-CQ-F100	25-CQ-D100

### Mounting Bracket Part Nos. for the 25A-Series (With auto switch)

Bore size [mm]	Foot*1	Flange	Double clevis
32	25-CQ-L032	25-CQ-F032	25-CQ-D032
40	25-CQ-L040	25-CQ-F040	25-CQ-D040
50	25-CQ-L050	25-CQ-F050	25-CQ-D050
63	25-CQ-L063	25-CQ-F063	25-CQ-D063
80	25-CQ-L080	25-CQ-F080	25-CQ-D080
100	25-CQ-L100	25-CQ-F100	25-CQ-D100

\*1 Order 2 pieces per cylinder.

\* Parts belonging to each bracket are as follows.

Foot or Flange: Body mounting bolts, Double clevis: Clevis pin, Type C retaining rings for axis, Body mounting bolts

# Compact Cylinder: With End Lock

# 25A-CBQ2 Series

∅20, ∅25, ∅32, ∅40, ∅50, ∅63, ∅80, ∅100

## How to Order



Without auto switch

**25A - CBQ2 B 40 [ ] - 30 DC [ ] - H N**

With auto switch

**25A - CDBQ2 B 40 [ ] - 30 DC [ ] - H N - M9BW [ ]**

Series compatible with secondary batteries

With auto switch (Built-in magnet)

**Mounting**

∅20, ∅25		∅32 to ∅100	
<b>B</b>	Through-hole/Both ends tapped common (Standard)	<b>B</b>	Through-hole (Standard)*1
<b>L</b>	Foot	<b>A</b>	Both ends tapped
<b>F</b>	Rod flange	<b>L</b>	Foot
<b>G</b>	Head flange	<b>F</b>	Rod flange
<b>D</b>	Double clevis	<b>G</b>	Head flange
		<b>D</b>	Double clevis

\*1 At the 75 and 100 mm strokes with ∅80, ∅100, both ends tapped (A) is the standard. Through-hole (B) is not available.  
\* Mounting brackets are shipped together, but not assembled.

**Bore size**

<b>20</b>	20 mm	<b>50</b>	50 mm
<b>25</b>	25 mm	<b>63</b>	63 mm
<b>32</b>	32 mm	<b>80</b>	80 mm
<b>40</b>	40 mm	<b>100</b>	100 mm

**Port thread type**

<b>Nil</b>	M thread	∅20, ∅25
	Rc	
<b>TN</b>	NPT	∅32 to ∅100
<b>TF</b>	G	

**Cylinder stroke [mm]**

Bore size	Standard stroke
<b>20, 25, 32, 40, 50, 63</b>	10, 15, 20, 25, 50, 75, 100
<b>80, 100</b>	25, 50, 75, 100

Manual release type

**N** Non-lock type

Lock position

**H** Head end lock  
**R** Rod end lock

Body option

**Nil** Rod end female thread  
**M** Rod end male thread

Cushion

**C** Rubber bumper

Action

**D** Double acting

Auto switch

**Nil** Without auto switch

\* For applicable auto switches, refer to page 205.

Number of auto switches

<b>Nil</b>	2
<b>S</b>	1
<b>n</b>	n

## Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.  
(Example) 25A-CDBQ2L32-30DC-RN

\* The 25A- series specifications and dimensions are the same as those of the standard model.

## Mounting Bracket Part Nos. for the 25A- Series (Without auto switch)

Bore size [mm]	Foot*1	Flange	Double clevis
<b>20</b>	25-CQS-L020	25-CQS-F020	25-CQS-D020
<b>25</b>	25-CQS-L025	25-CQS-F025	25-CQS-D025
<b>32</b>	25-CQ-L032	25-CQ-F032	25-CQ-D032
<b>40</b>	25-CQ-L040	25-CQ-F040	25-CQ-D040
<b>50</b>	25-CQ-L050	25-CQ-F050	25-CQ-D050
<b>63</b>	25-CQ-L063	25-CQ-F063	25-CQ-D063
<b>80</b>	25-CQ-L080	25-CQ-F080	25-CQ-D080
<b>100</b>	25-CQ-L100	25-CQ-F100	25-CQ-D100

\*1 Order 2 pieces per cylinder.

\* Parts belonging to each bracket are as follows: Foot or Flange: Body mounting bolts, Double clevis: Clevis pin, Type C retaining rings for axis, Body mounting bolts

## Mounting Bracket Part Nos. for the 25A- Series (With auto switch)

Bore size [mm]	Foot*1	Flange	Double clevis
<b>20</b>	25-CQS-L020	25-CQS-F020	25-CQS-D020
<b>25</b>	25-CQS-L025	25-CQS-F025	25-CQS-D025
<b>32</b>	25-CQ-L032	25-CQ-F032	25-CQ-D032
<b>40</b>	25-CQ-L040	25-CQ-F040	25-CQ-D040
<b>50</b>	25-CQ-L050	25-CQ-F050	25-CQ-D050
<b>63</b>	25-CQ-L063	25-CQ-F063	25-CQ-D063
<b>80</b>	25-CQ-L080	25-CQ-F080	25-CQ-D080
<b>100</b>	25-CQ-L100	25-CQ-F100	25-CQ-D100

# Mechanically Jointed Rodless Cylinder Basic Type

## 25A-MY1B Series

∅16, ∅20, ∅25, ∅32, ∅40, ∅50, ∅63



### How to Order

**∅16, ∅20, ∅50, ∅63** 25A-MY1B20 [ ] - 300 [ ] - M9BW [ ] - [ ]  
**∅25, ∅32, ∅40** 25A-MY1B25 [ ] - 300 [ ] Z-M9BW [ ] - [ ]

Series compatible with secondary batteries • Basic type • Bore size • Piping • Cylinder stroke [mm] • Number of auto switches • Auto switch • Made to order •

16	16 mm
20	20 mm
25	25 mm
32	32 mm
40	40 mm
50	50 mm
63	63 mm

Nil	Standard type
G	Centralized piping type

16, 20, 25, 32, 40, 50, 63	100, 200, 300, 400, 500, 600, 700, 800, 900, 1000, 1200, 1400, 1600, 1800, 2000
----------------------------	---

Nil	2
S	1
n	n

Nil	Without auto switch (Built-in magnet)
-----	---------------------------------------

\* Applicable auto switches vary depending on the bore size. Select an applicable one referring to page 205.

Symbol	Specifications
-XB11	Long stroke type

\* Strokes are manufacturable in 1 mm increments, up to the maximum stroke. When exceeding a 2000 mm stroke, specify "-XB11" at the end of the part number.

For ∅16

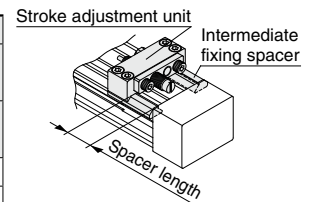
#### Stroke adjustment unit symbol

		Right side stroke adjustment unit			
		Without unit	A: With adjustment bolt		
Left side stroke adjustment unit	Without unit	Nil	SA	SA6	SA7
	A: With adjustment bolt	AS	A	AA6	AA7
	With short spacer	A6S	A6A	A6	A6A7
	With long spacer	A7S	A7A	A7A6	A7

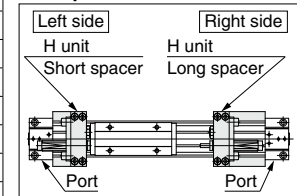
For ∅20 to ∅40

		Right side stroke adjustment unit									
		Without unit	A: With adjustment bolt				L: With low load shock absorber + Adjustment bolt			H: With high load shock absorber + Adjustment bolt	
Left side stroke adjustment unit	Without unit	Nil	SA	SA6	SA7	SL	SL6	SL7	SH	SH6	SH7
	A: With adjustment bolt	AS	A	AA6	AA7	AL	AL6	AL7	AH	AH6	AH7
	With short spacer	A6S	A6A	A6	A6A7	A6L	A6L6	A6L7	A6H	A6H6	A6H7
	With long spacer	A7S	A7A	A7A6	A7	A7L	A7L6	A7L7	A7H	A7H6	A7H7
	L: With low load shock absorber + Adjustment bolt	LS	LA	LA6	LA7	L	LL6	LL7	LH	LH6	LH7
	With short spacer	L6S	L6A	L6A6	L6A7	L6L	L6	L6L7	L6H	L6H6	L6H7
	With long spacer	L7S	L7A	L7A6	L7A7	L7L	L7L6	L7	L7H	L7H6	L7H7
	H: With high load shock absorber + Adjustment bolt	HS	HA	HA6	HA7	HL	HL6	HL7	H	HH6	HH7
With short spacer	H6S	H6A	H6A6	H6A7	H6L	H6L6	H6L7	H6H	H6	H6H7	
With long spacer	H7S	H7A	H7A6	H7A7	H7L	H7L6	H7L7	H7H	H7H6	H7	

#### Stroke adjustment unit mounting diagram



#### Example of H6H7 attachment



\* Spacers are used to fix the stroke adjustment unit at an intermediate stroke position.  
\* The 25A-MY1B50 and 63 are not available with the stroke adjustment unit.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

# Mechanically Jointed Rodless Cylinder Cam Follower Guide Type

## 25A-MY1C Series

∅16, ∅20, ∅25, ∅32, ∅40, ∅50, ∅63



### How to Order

**25A - MY1C 25**   - **300**  - **M9BW**  -

Series compatible with secondary batteries

Cam follower guide type

**Bore size**

16	16 mm
20	20 mm
25	25 mm
32	32 mm
40	40 mm
50	50 mm
63	63 mm

**Port thread type**

Symbol	Type	Bore size
Nil	M thread	∅16, ∅20
	Rc	∅25, ∅32, ∅40, ∅50, ∅63
TN	NPT	
TF	G	

**Piping**

Nil	Standard type
G	Centralized piping type

**Cylinder stroke [mm]**

Bore size [mm]	Standard stroke [mm]*1
16, 20, 25, 32, 40, 50, 63	100, 200, 300, 400, 500, 600, 700, 800, 900, 1000, 1200, 1400, 1600, 1800, 2000

**Made to order**

Symbol	Specifications
-XB11	Long stroke type
-XC56	With knock pin hole

**Number of auto switches**

Nil	2
S	1
n	n

**Auto switch**

Nil	Without auto switch (Built-in magnet)
-----	---------------------------------------

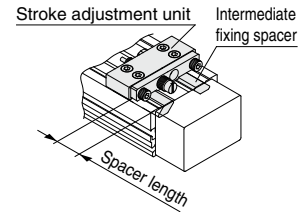
\* Refer to page 205 for the applicable auto switch model.

\*1 Strokes are manufacturable in 1 mm increments, up to the maximum stroke. When exceeding a 2000 mm stroke, specify "-XB11" at the end of the part number.

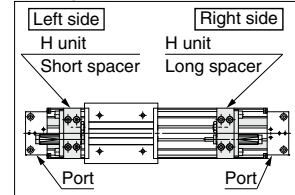
### Stroke adjustment unit symbol

	Right side stroke adjustment unit											
	Without unit	A: With adjustment bolt				L: With low load shock absorber + Adjustment bolt				H: With high load shock absorber + Adjustment bolt		
		With short spacer	With long spacer	With short spacer	With long spacer	With short spacer	With long spacer	With short spacer	With long spacer			
<b>Without unit</b>	Nil	SA	SA6	SA7	SL	SL6	SL7	SH	SH6	SH7		
<b>A: With adjustment bolt</b>	AS	A	AA6	AA7	AL	AL6	AL7	AH	AH6	AH7		
With short spacer	A6S	A6A	A6	A6A7	A6L	A6L6	A6L7	A6H	A6H6	A6H7		
With long spacer	A7S	A7A	A7A6	A7	A7L	A7L6	A7L7	A7H	A7H6	A7H7		
<b>L: With low load shock absorber + Adjustment bolt</b>	LS	LA	LA6	LA7	L	LL6	LL7	LH	LH6	LH7		
With short spacer	L6S	L6A	L6A6	L6A7	L6L	L6	L6L7	L6H	L6H6	L6H7		
With long spacer	L7S	L7A	L7A6	L7A7	L7L	L7L6	L7	L7H	L7H6	L7H7		
<b>H: With high load shock absorber + Adjustment bolt</b>	HS	HA	HA6	HA7	HL	HL6	HL7	H	HH6	HH7		
With short spacer	H6S	H6A	H6A6	H6A7	H6L	H6L6	H6L7	H6H	H6	H6H7		
With long spacer	H7S	H7A	H7A6	H7A7	H7L	H7L6	H7L7	H7H	H7H6	H7		

### Stroke adjustment unit mounting diagram



### Example of H6H7 attachment



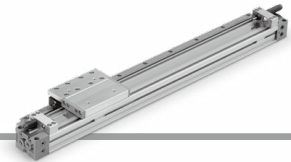
\* Spacers are used to fix the stroke adjustment unit at an intermediate stroke position.  
\* Stroke adjustment unit H is not available for 25A-MY1C16.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

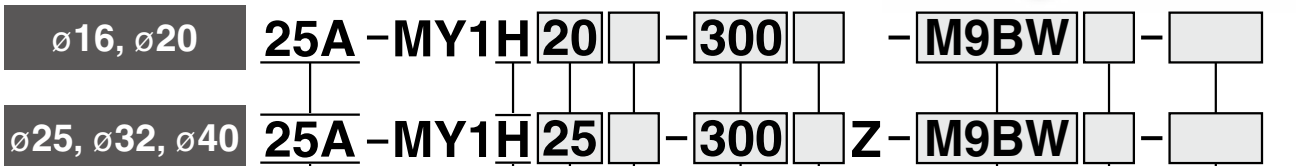
# Mechanically Jointed Rodless Cylinder Linear Guide Type

## 25A-MY1H Series

∅16, ∅20, ∅25, ∅32, ∅40



### How to Order



Series compatible with secondary batteries

Linear guide type

Bore size

16	16 mm
20	20 mm
25	25 mm
32	32 mm
40	40 mm

Piping

Nil	Standard type
G	Centralized piping type

Cylinder stroke [mm]

Bore size [mm]	Standard stroke [mm]*1	Max. manufacturable stroke [mm]
16, 20	50, 100, 150, 200, 250, 300, 350	1000
25, 32, 40	400, 450, 500, 550, 600	1500

\*1 Strokes are manufacturable in 1 mm increments, up to the maximum stroke. However, add "-XB10" to the end of the part number for non-standard strokes from 51 to 599. Also when exceeding a 600 mm stroke, specify "-XB11" at the end of the part number.

Number of auto switches

Nil	2
S	1
n	n

Auto switch

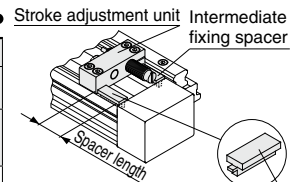
Nil	Without auto switch (Built-in magnet)
-----	---------------------------------------

\* Refer to page 205 for the applicable auto switch model.

Made to order

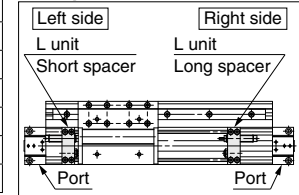
Symbol	Specifications
-XB10	Intermediate stroke (Using exclusive body)
-XB11	Long stroke type

### Stroke adjustment unit mounting diagram



Place the protruding section on the stroke adjusting unit side.

### Example of L6L7 attachment



### Stroke adjustment unit symbol

	Right side stroke adjustment unit										
	Without unit	A: With adjustment bolt			L: With low load shock absorber + Adjustment bolt			H: With high load shock absorber + Adjustment bolt			
		With short spacer	With long spacer		With short spacer	With long spacer		With short spacer	With long spacer		
Left side stroke adjustment unit	Without unit	Nil	SA	SA6	SA7	SL	SL6	SL7	SH	SH6	SH7
	A: With adjustment bolt	AS	A	AA6	AA7	AL	AL6	AL7	AH	AH6	AH7
	With short spacer	A6S	A6A	A6	A6A7	A6L	A6L6	A6L7	A6H	A6H6	A6H7
	With long spacer	A7S	A7A	A7A6	A7	A7L	A7L6	A7L7	A7H	A7H6	A7H7
L: With low load shock absorber + Adjustment bolt	With short spacer	L6S	L6A	L6A6	L6A7	L6L	L6	L6L7	L6H	L6H6	L6H7
	With long spacer	L7S	L7A	L7A6	L7A7	L7L	L7L6	L7	L7H	L7H6	L7H7
	H: With high load shock absorber + Adjustment bolt	HS	HA	HA6	HA7	HL	HL6	HL7	H	HH6	HH7
H: With high load shock absorber + Adjustment bolt	With short spacer	H6S	H6A	H6A6	H6A7	H6L	H6L6	H6L7	H6H	H6	H6H7
	With long spacer	H7S	H7A	H7A6	H7A7	H7L	H7L6	H7L7	H7H	H7H6	H7

\* Spacers are used to fix the stroke adjustment unit at an intermediate stroke position.  
\* H: With high load shock absorber + Adjustment bolt is not available for 25A-MY1H16.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

# Mechanically Jointed Rodless Cylinder Linear Guide Type

## 25A-MY2H Series

∅16, ∅25



### How to Order

**25A - MY2 H 16 G - 300 - M9BW**

Series compatible with secondary batteries

Linear guide type

Bore size

16	16 mm
25	25 mm

Piping

G	Centralized piping type (Standard)
---	------------------------------------

Cylinder stroke [mm]

Bore size [mm]	Standard stroke [mm]*1	Max. manufacturable stroke [mm]
16	50, 100, 150, 200, 250, 300,	1000
25	350, 400, 450, 500, 550, 600	1500

\*1 Strokes are manufacturable in 1 mm increments, up to the maximum stroke. However, add "-XB10" to the end of the part number for non-standard strokes from 51 to 599. Also when exceeding a 600 mm stroke, specify "-XB11" at the end of the part number.

Made to order

Symbol	Specifications
-XB10	Intermediate stroke (Using exclusive body)
-XB11	Long stroke type

Number of auto switches

Nil	2
S	1
n	n

Auto switch

Nil	Without auto switch (Built-in magnet)
-----	---------------------------------------

\* Refer to page 205 for the applicable auto switch model.

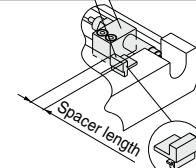
Stroke adjustment unit symbol

		Right side stroke adjustment unit						
		Without unit	L: With low load shock absorber			H: With high load shock absorber		
Left side stroke adjustment unit	Without unit	Nil	SL	SL6	SL7	SH	SH6	SH7
	L: With low load shock absorber	LS	L	LL6	LL7	LH	LH6	LH7
		With short spacer	L6S	L6L	L6	L6L7	L6H	L6H6
	With long spacer	L7S	L7L	L7L6	L7	L7H	L7H6	L7H7
	H: With high load shock absorber	HS	HL	HL6	HL7	H	HH6	HH7
		With short spacer	H6S	H6L	H6L6	H6L7	H6H	H6
With long spacer	H7S	H7L	H7L6	H7L7	H7H	H7H6	H7	

\* Spacers are used to fix the stroke adjustment unit at an intermediate stroke position.

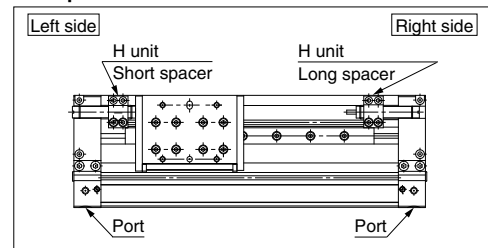
Stroke adjustment unit mounting diagram

Intermediate fixing spacer Stroke adjustment unit



Place the protruding section on the stroke adjusting unit side.

Example of H6H7 attachment



\* The 25A- series specifications and dimensions are the same as those of the standard model.

# Mechanically Jointed Rodless Cylinder/Basic Type

# 25A-MY3A/3B Series

∅16, ∅20, ∅25, ∅32, ∅40, ∅50, ∅63

## How to Order



**25A - MY3 B 16 - 300 - M9BW -**

• Series compatible with secondary batteries

### Type

<b>A</b>	Short type (Rubber bumper)
<b>B</b>	Standard type (Air cushion)

### Cylinder bore size

<b>16</b>	16 mm
<b>20</b>	20 mm
<b>25</b>	25 mm
<b>32</b>	32 mm
<b>40</b>	40 mm
<b>50</b>	50 mm
<b>63</b>	63 mm

### Port thread type

Symbol	Type	Bore size
<b>Nil</b>	M5	∅16, ∅20
	Rc	
<b>TN</b>	NPT	∅25, ∅32, ∅40
<b>TF</b>	G	∅50, ∅63

### Cylinder stroke [mm]

Bore size	Standard stroke*1	Max. manufacturable stroke
<b>16, 20, 25</b>	100, 200, 300, 400, 500, 600	3000
<b>32, 40, 50</b>	700, 800, 900, 1000, 1200	
<b>63</b>	1400, 1600, 1800, 2000	

\*1 Strokes are manufacturable in 1 mm increments, up to the maximum stroke. However, when the stroke is 49 mm or less, the air cushion capability lowers and multiple auto switches cannot be mounted. Pay special attention to this point.  
Also when exceeding a 2000 mm stroke, specify "-XB11" at the end of the model number.

• Made to order  
(See below.)

### Number of auto switches

<b>Nil</b>	2
<b>S</b>	1
<b>n</b>	n

### Auto switch

**Nil** Without auto switch (Built-in magnet)

\* Refer to page 205 for auto switch model numbers.



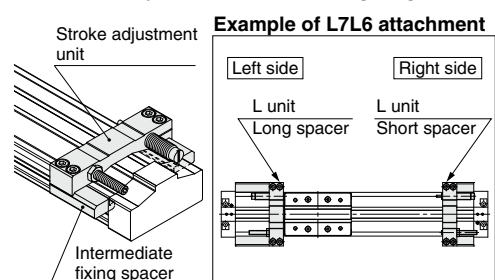
### Made to Order

Symbol	Specifications
<b>-XB11</b>	Long stroke type

### Stroke adjustment unit symbol

		Right side stroke adjustment unit							
		Without unit	L: With low load shock absorber + Adjustment bolt			H: With high load shock absorber + Adjustment bolt			
Left side stroke adjustment unit	Without unit	Nil	SL	SL6	SL7	SH	SH6	SH7	
	L: With low load shock absorber + Adjustment bolt	Without unit	LS	L	LL6	LL7	LH	LH6	LH7
		With short spacer	L6S	L6L	L6	L6L7	L6H	L6H6	L6H7
	With long spacer	L7S	L7L	L7L6	L7	L7H	L7H6	L7H7	
	H: With high load shock absorber + Adjustment bolt	Without unit	HS	HL	HL6	HL7	H	HH6	HH7
		With short spacer	H6S	H6L	H6L6	H6L7	H6H	H6	H6H7
With long spacer	H7S	H7L	H7L6	H7L7	H7H	H7H6	H7		

### Stroke adjustment unit mounting diagram



\* Spacers are used to fix the stroke adjustment unit at an intermediate stroke position.

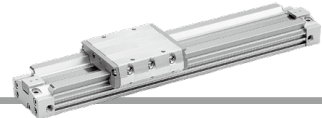
\* The 25A- series specifications and dimensions are the same as those of the standard model.



# Mechanically Jointed Rodless Cylinder Slide Bearing Guide Type

# 25A-MY3M Series

∅16, ∅25, ∅40, ∅63



## How to Order

**25A - MY3 M 16** - **300** - **M9BW** -

Series compatible with secondary batteries

Slide bearing guide type

Cylinder bore size

16	16 mm
25	25 mm
40	40 mm
63	63 mm

Port thread type

Symbol	Type	Bore size
Nil	M5	∅16
	Rc	
TN	NPT	∅25, ∅40, ∅63
TF	G	

Cylinder stroke [mm]

Bore size	Standard stroke*1	Max. manufacturable stroke
16, 25 40, 63	100, 200, 300, 400, 500, 600 700, 800, 900, 1000, 1200 1400, 1600, 1800, 2000	3000

\*1 Strokes are manufacturable in 1 mm increments, up to the maximum stroke. However, when the stroke is 49 mm or less, the air cushion capability lowers and multiple auto switches cannot be mounted. Pay special attention to this point. Also when exceeding a 2000 mm stroke, specify "-XB11" at the end of the model number.

Stroke adjustment unit symbol

		Right side stroke adjustment unit							
		Without unit	L: With low load shock absorber + Adjustment bolt			H: With high load shock absorber + Adjustment bolt			
			With short spacer	With long spacer	With short spacer	With long spacer			
Left side stroke adjustment unit	Without unit	Nil	SL	SL6	SL7	SH	SH6	SH7	
	L: With low load shock absorber + Adjustment bolt	Without unit	LS	L	LL6	LL7	LH	LH6	LH7
		With short spacer	L6S	L6L	L6	L6L7	L6H	L6H6	L6H7
	With long spacer	L7S	L7L	L7L6	L7	L7H	L7H6	L7H7	
	H: With high load shock absorber + Adjustment bolt	Without unit	HS	HL	HL6	HL7	H	HH6	HH7
		With short spacer	H6S	H6L	H6L6	H6L7	H6H	H6	H6H7
		With long spacer	H7S	H7L	H7L6	H7L7	H7H	H7H6	H7

\* Spacers are used to fix the stroke adjustment unit at an intermediate stroke position.

Made to order (See below.)

Number of auto switches

Nil	2
S	1
n	n

Auto switch

Nil	Without auto switch (Built-in magnet)
-----	---------------------------------------

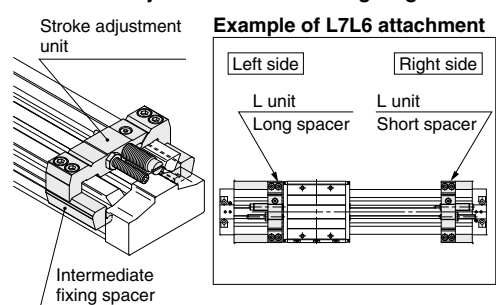
\* Refer to page 205 for auto switch model numbers.



Made to Order

Symbol	Specifications
-XB11	Long stroke type

Stroke adjustment unit mounting diagram



\* The 25A- series specifications and dimensions are the same as those of the standard model.

# Magnetically Coupled Rodless Cylinder/Basic Type

# 25A-CY3B Series

∅6, ∅10, ∅15, ∅20, ∅25, ∅32, ∅40

## How to Order



**25A - CY3 B 25 - 300**

Series compatible with secondary batteries

Basic type

Bore size

6	6 mm
10	10 mm
15	15 mm
20	20 mm
25	25 mm
32	32 mm
40	40 mm

Standard stroke [mm]

Bore size	Standard stroke	Max. manufacturable stroke
6	50, 100, 150, 200	300
10	50, 100, 150, 200, 250, 300	500
15	50, 100, 150, 200, 250, 300, 350 400, 450, 500	1000
20	100, 150, 200, 250, 300, 350 400, 450, 500, 600, 700, 800	1500
25		2000
32		
40	100, 150, 200, 250, 300, 350, 400 450, 500, 600, 700, 800, 900, 1000	

- \* Please contact SMC if the maximum stroke is exceeded.
- \* The longer the stroke, the larger the amount of deflection in a cylinder tube. Pay attention to the mounting bracket and clearance value.
- \* Intermediate stroke is available in 1 mm increments.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

# Magnetically Coupled Rodless Cylinder/Direct Mount Type

## 25A-CY3R Series

ø6, ø10, ø15, ø20, ø25, ø32, ø40

### How to Order



**25A - CY3R**  **25** - **300**  - **M9BWL**

Series compatible with secondary batteries

Direct mount type

Piping type

Nil	Standard type
G	Centralized piping type

\* Type G (centralized piping) is not available for ø6.

Bore size

6	6 mm
10	10 mm
15	15 mm
20	20 mm
25	25 mm
32	32 mm
40	40 mm

Number of auto switches

Nil	2
S	1
n	n

Auto switch

Nil	Without auto switch (Built-in magnet)
-----	---------------------------------------

\* Refer to page 205 for the applicable auto switch model.

\* In case of ø20 with switch rail but without auto switch, the cylinder construction is for reed auto switch. Mounting a solid state auto switch causes malfunctions. Please contact SMC when the solid state auto switch is retrofitted.

Switch rail

Nil	With switch rail
N	Without switch rail

\* A type with switch rail has built-in auto switch magnets.

\* ø15 has built-in auto switch magnets even without switch rail.

\* Centralized piping type (G) is not available without switch rail (N).

Cylinder stroke [mm]

Bore size	Standard stroke	Max. stroke without switch	Max. stroke with switch
6	50, 100, 150, 200	300	300
10	50, 100, 150, 200, 250, 300	500	500
15	50, 100, 150, 200, 250, 300, 350, 400, 450, 500	1000	750
20	100, 150, 200, 250, 300, 350, 400, 450, 500, 600, 700, 800	1500	1000
25			1200
32			
40	100, 150, 200, 250, 300, 350, 400, 450, 500, 600, 700, 800, 900, 1000	2000	1500

\* The longer the stroke, the larger the amount of deflection in a cylinder tube. Pay attention to the mounting bracket and clearance value.

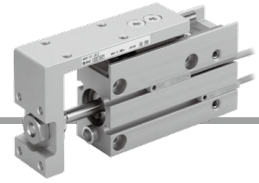
\* Intermediate stroke is available in 1 mm increments.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

# Compact Slide

# 25A-MXH Series

ø6, ø10, ø16, ø20



## How to Order

**25A - MXH 10 - 60 Z - M9BW**  

Series compatible with secondary batteries

Compact slide

Bore size

6	6 mm
10	10 mm
16	16 mm
20	20 mm

Cylinder stroke [mm]

6, 10, 16, 20	5, 10, 15, 20, 25, 30, 40 50, 60
---------------	-------------------------------------

Number of auto switches

Nil	2
S	1

Auto switch

Nil	Without auto switch (Built-in magnet)
-----	---------------------------------------

\* For applicable auto switch model, refer to page 207.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

# Air Slide Table

# 25A-MXS Series

ø6, ø8, ø12, ø16, ø20, ø25



## How to Order

**Air slide table** **25A - MXS** **16** **50** **AS** **M9BW**

Series compatible with secondary batteries

Port thread type

Nil	M thread	ø6 to ø16
	Rc	
TN	NPT	ø20, ø25
TF	G	

Symmetric type

Nil	Standard type
L	Symmetric type

Number of auto switches

Nil	2
S	1
n	n

Auto switch

Nil	Without auto switch (Built-in magnet)
-----	---------------------------------------

Refer to page 207 for auto switch model numbers.

Adjuster option

Nil	Without adjuster
AS	Adjuster on extension end
AT	Adjuster on retraction end
A	Adjuster on both ends
BS	Absorber on extension end
BT	Absorber on retraction end
B	Absorber on both ends
ASBT	Adjuster on extension end + Absorber on retraction end
BSAT	Absorber on extension end + Adjuster on retraction end

Bore size (Standard stroke [mm])

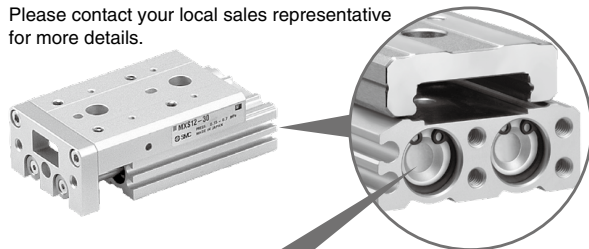
6	10, 20, 30, 40, 50
8	10, 20, 30, 40, 50, 75
12	10, 20, 30, 40, 50, 75, 100
16	10, 20, 30, 40, 50, 75, 100, 125
20	10, 20, 30, 40, 50, 75, 100, 125, 150
25	10, 20, 30, 40, 50, 75, 100, 125, 150

### Corrosion Resistant Air Slide Table

(Made to order: 25A-MXS□-X1949)

The material of the head cap part has been changed to a highly corrosion-resistant material.

Please contact your local sales representative for more details.



	After change	Before change
Head cap	Aluminum	Synthetic resin

\* The 25A- series specifications and dimensions are the same as those of the standard model.

# Air Slide Table Double-ported Type



# 25A-MXQ□A Series

∅6, ∅8, ∅12, ∅16, ∅20, ∅25

## How to Order



25A - MXQ 12 A - 30 ZA □ - M9BW □

Series compatible with secondary batteries

① ② ③ ④ ⑤ ⑥ ⑦

① Bore size	② Body option: Double-ported type	③ Standard stroke [mm]
	A	
6		10, 20, 30, 40, 50
8		10, 20, 30, 40, 50, 75
12		10, 20, 30, 40, 50, 75, 100
16		10, 20, 30, 40, 50, 75, 100, 125
20		10, 20, 30, 40, 50, 75, 100, 125, 150
25		10, 20, 30, 40, 50, 75, 100, 125, 150*

\* The operating speed range of the stroke marked with an asterisk (\*) is 50 to 300 mm/s. (Without stroke adjuster)

⑤ Functional options	
Symbol	Functional option
Nil	Without functional option
1	With buffer
2	With end lock
3	Axial piping
4	With buffer, end lock
5	With buffer, axial piping

⑦ Number of auto switches	
Symbol	Number
Nil	2
S	1
n	n

⑥ Auto switch	
Symbol	Option
Nil	Without auto switch (Built-in magnet)

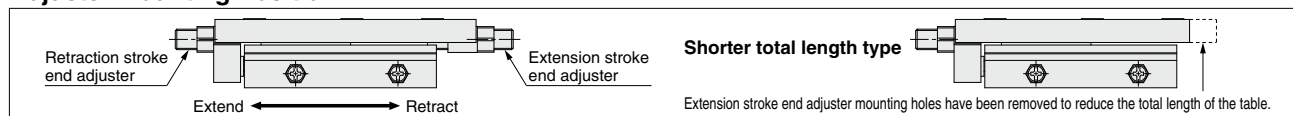
\* For applicable auto switches, refer to page 207.

## ④ Adjuster options/Functional option combinations

Symbol	Adjuster type*6		Adjuster mounting position*1		Functional option combination				
					Without functional option	1	2	3	4
			Extension stroke end	Retraction stroke end	Without functional option	With buffer*2	With end lock	Axial piping*5	With buffer, end lock*2
Z	Without adjuster				○	○	○	○	○
ZA	Metal stopper with bumper		●	●	○	×	×	○	×
ZB	Metal stopper with bumper		●	●	○	×	○	○	×
ZC	Metal stopper with bumper		●	●	○	×	×	○	×
ZD	Metal stopper with bumper		●	●	○	×	×	○	×
ZE	Rubber stopper		●	●	○	○	○	○	○
ZF	Rubber stopper		●	●	○	×	×	○	×
ZG	Shock absorber/RJ		●	●	○	×	×	○	×
ZH	Shock absorber/RJ		●	●	○	×	○	○	×
ZJ	Shock absorber/RJ		●	●	○	×	×	○	×
ZK	Metal stopper		●	●	○	×	×	○	×
ZL	Metal stopper		●	●	○	○	○	○	○
ZM	Metal stopper		●	●	○	×	×	○	×
ZN	Metal stopper		●	●	○	○*4	×	○	×
ZP	Shorter total length type*3	Without adjuster			○	○*4	×	○	×
ZQ		Rubber stopper	●	●	○	×	×	○	×
ZR		Shock absorber/RJ	●	●	○	×	×	○	×
ZS		Metal stopper with bumper	●	●	○	×	×	○	×
ZT		Metal stopper	●	●	○	×	×	○	×
ZBF	Metal stopper with bumper	Rubber stopper	●	●	○	×	×	○	×
ZBJ		Shock absorber/RJ	●	●	○	×	×	○	×
ZBM	Metal stopper with bumper	Metal stopper	●	●	○	×	×	○	×
ZEC		Metal stopper with bumper	●	●	○	×	×	○	×
ZEJ	Rubber stopper	Shock absorber/RJ	●	●	○	×	×	○	×
ZEM		Metal stopper	●	●	○	×	×	○	×
ZHC	Shock absorber/RJ	Metal stopper with bumper	●	●	○	×	×	○	×
ZHF		Rubber stopper	●	●	○	×	×	○	×
ZHM		Metal stopper	●	●	○	×	×	○	×
ZLC	Metal stopper	Metal stopper with bumper	●	●	○	×	×	○	×
ZLF		Rubber stopper	●	●	○	×	×	○	×
ZLJ		Shock absorber/RJ	●	●	○	×	×	○	×

- \*1 ●: Shipped together with the product, but not assembled. Without any symbol for the adjuster mounting position: The adjuster can be mounted afterward.
- \*2 For the buffer mechanism, the buffer stroke will be shorter for the stroke that is adjusted by the extension stroke end adjuster.
- \*3 Extension stroke end adjuster mounting holes have been removed to reduce the total length of the table.
- \*4 The shorter total length type can be used, but a retraction stroke end adjuster cannot be mounted afterward.
- \*5 There is no piping port on the side surface of the product.
- \*6 The metal stopper with bumper option is not available for ∅6.

## Adjuster Mounting Position



- \* When the shock absorber, metal stopper with bumper, or adjuster option with metal stopper is used, metal-to-metal collisions occur, and may generate dust particles.
- \* When the buffer mechanism or the end lock mechanism functional options are used, dust particles may be generated by the buffer part as well as the end lock part.

\* The 25A-series specifications and dimensions are the same as those of the standard model.

# Air Slide Table

## Low Thrust with High Rigidity Type

# 25A-MXQ□B Series

∅6, ∅8, ∅12, ∅16, ∅20



### How to Order



25A - MXQ **12** **B** - **30** **ZA** - **M9BW** □

- 1 Series compatible with secondary batteries
- 2 Body option
- 3 Standard stroke [mm]
- 4 Adjuster options
- 5 Auto switch
- 6 Number of auto switches

1 Bore size	2 Body option		3 Standard stroke [mm]
	Standard type B	Symmetric type BL	
6	Port Switch mounting groove	Switch mounting groove Port	10, 20, 30, 40, 50*, 75*
8			10, 20, 30, 40, 50, 75*, 100*
12			10, 20, 30, 40, 50, 75, 100, 125
16	Port Switch mounting groove Switch mounting groove Port	—*1	10, 20, 30, 40, 50, 75, 100*, 125*, 150*
20			10, 20, 30, 40, 50, 75, 100, 125*, 150*

\*1 Not available, as the standard model has piping ports and auto switch mounting grooves on both sides. Please use the standard type.  
 \* The operating speed range of the strokes marked with an asterisk (\*) is 50 to 300 mm/s. (Without stroke adjuster)

#### 4 Adjuster options

Symbol	Adjuster type*3		Adjuster mounting position*1	
			Extension stroke end	Retraction stroke end
Z	Without adjuster			
ZA	Metal stopper with bumper		●	●
ZB	Metal stopper with bumper		●	
ZC	Rubber stopper			●
ZD	Rubber stopper		●	●
ZE	Rubber stopper		●	
ZF	Rubber stopper			●
ZG	Shock absorber/RJ		●	●
ZH	Shock absorber/RJ		●	
ZJ	Shock absorber/RJ			●
ZK	Shock absorber/RJ		●	●
ZL	Metal stopper		●	
ZM	Metal stopper			●
ZN	Shorter total length type*2	Without adjuster	/	
ZP		Rubber stopper		●
ZQ		Shock absorber/RJ		●
ZS		Metal stopper with bumper		●
ZT		Metal stopper		●
ZBF	Extension stroke end adjuster	Rubber stopper	●	●
ZBJ		Shock absorber/RJ	●	●
ZBM		Metal stopper	●	●
ZEC	Retraction stroke end adjuster	Metal stopper with bumper	●	●
ZEJ		Shock absorber/RJ	●	●
ZEM	Shock absorber/RJ	Metal stopper	●	●
ZHC		Metal stopper with bumper	●	●
ZHF		Rubber stopper	●	●
ZHM	Metal stopper	Metal stopper	●	●
ZLC		Metal stopper with bumper	●	●
ZLF		Rubber stopper	●	●
ZLJ		Shock absorber/RJ	●	●

#### 5 Auto switch

Nil Without auto switch (Built-in magnet)

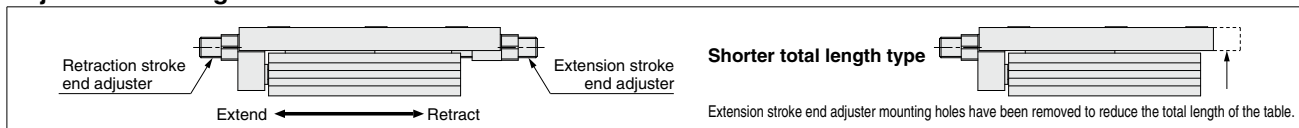
\* For applicable auto switches, refer to page 207.

#### 6 Number of auto switches

Nil	2
S	1
n	n

- \*1 ●: Shipped together with the product, but not assembled  
Without any symbol for the adjuster mounting position: The adjuster can be mounted afterward.
- \*2 Extension stroke end adjuster mounting holes have been removed to reduce the total length of the table.
- \*3 The metal stopper with bumper option is not available for ∅6.

#### Adjuster Mounting Position



\* When the buffer mechanism or the end lock mechanism functional options are used, dust particles may be generated by the buffer part as well as the end lock part.

\* The 25A-series specifications and dimensions are the same as those of the standard model.



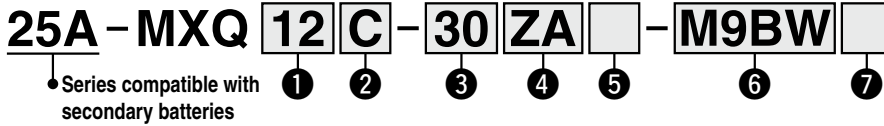
# Air Slide Table Single Side-ported Type



# 25A-MXQ□C Series

∅8, ∅12

## How to Order



1 Bore size	2 Body option		3 Standard stroke [mm]
	Standard type C	Symmetric type CL	
8	Port Switch mounting groove	Switch mounting groove Port	10, 20, 30, 40, 50, 75
12	Port Switch mounting groove	Switch mounting groove Port	10, 20, 30, 40, 50, 75, 100

5 Functional options	
Symbol	Functional option
Nil	Without functional option
1	With buffer
2	With end lock
3	Axial piping
4	With buffer, end lock
5	With buffer, axial piping

6 Auto switch	
Symbol	Functional option
Nil	Without auto switch (Built-in magnet)

\* For applicable auto switches, refer to page 207.

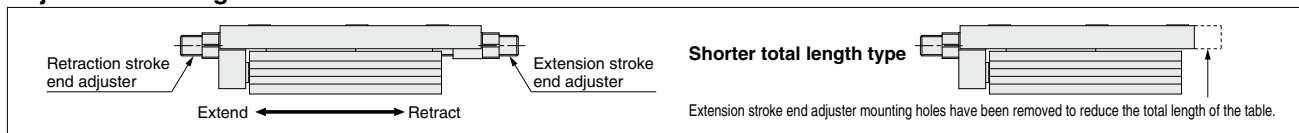
7 Number of auto switches	
Symbol	Number
Nil	2
S	1
n	n

## 4 Adjuster options/Functional option combinations

Symbol	Adjuster type	Adjuster mounting position*1		Functional option combination					
		Extension stroke end	Retraction stroke end	Nil Without functional option	1 With buffer	2 With end lock	3 Axial piping	4 With buffer, end lock	5 With buffer, axial piping
Z	Without adjuster			○	○	○	○	○	○
ZA		●	●	○	×	×	○	×	×
ZB	Metal stopper with bumper	●	●	○	×	○	○	×	×
ZC			●	○	×	×	○	×	×
ZD		●	●	○	×	×	○	×	×
ZE	Rubber stopper	●	●	○	○	○	○	○	○
ZF			●	○	×	×	○	×	×
ZG		●	●	○	×	×	○	×	×
ZH	Shock absorber/RJ	●	●	○	×	○	○	×	×
ZJ			●	○	×	×	○	×	×
ZK		●	●	○	×	×	○	×	×
ZL	Metal stopper	●	●	○	○	○	○	○	○
ZM			●	○	×	×	○	×	×
ZN				○	○*4	×	○	×	○*4
ZP	Shorter overall length type*3	Without adjuster		○	×	×	○	×	×
ZQ		Rubber stopper		●	○	×	○	×	×
ZR		Shock absorber/RJ		●	○	×	×	×	×
ZS		Metal stopper with bumper		●	○	×	×	×	×
ZT		Metal stopper		●	○	×	×	×	×
ZBF	Extension stroke end adjuster	Metal stopper with bumper		●	●	○	×	×	×
ZBJ			Shock absorber/RJ		●	●	○	×	×
ZBM		Metal stopper		●	●	○	×	×	
ZEC	Retraction stroke end adjuster	Metal stopper with bumper		●	●	○	×	×	
ZEJ			Shock absorber/RJ		●	●	○	×	×
ZEM		Metal stopper		●	●	○	×	×	
ZHC	Shock absorber/RJ	Metal stopper with bumper		●	●	○	×	×	
ZHF			Rubber stopper		●	●	○	×	×
ZHM		Metal stopper		●	●	○	×	×	
ZLC	Metal stopper	Metal stopper with bumper		●	●	○	×	×	
ZLF			Rubber stopper		●	●	○	×	×
ZLJ			Shock absorber/RJ		●	●	○	×	×

- \*1 ●: Shipped together with the product, but not assembled Without any symbol for the adjuster mounting position: The adjuster can be mounted afterward.
- \*2 For the buffer mechanism, the buffer stroke will be shorter for the stroke that is adjusted by the extension stroke end adjuster.
- \*3 Extension stroke end adjuster mounting holes have been removed to reduce the total length of the table.
- \*4 The shorter total length type can be used, but a retraction stroke end adjuster cannot be mounted afterward.
- \*5 There is no piping port on the side surface of the product.

## Adjuster Mounting Position



- \* When the shock absorber, metal stopper with bumper, or adjuster option with metal stopper is used, metal-to-metal collisions occur, and may generate dust particles.
- \* When the buffer mechanism or the end lock mechanism functional options are used, dust particles may be generated by the buffer part as well as the end lock part.

\* The 25A- series specifications and dimensions are the same as those of the standard model.



# Air Slide Table

## Height Interchangeable Type

# 25A-MXQ Series

∅6, ∅8, ∅12, ∅16, ∅20, ∅25



### How to Order



25A - MXQ 12   - 30 ZA   - M9BW  

Series compatible with secondary batteries

① ② ③ ④ ⑤ ⑥ ⑦

① Bore size	② Body option		③ Standard stroke [mm]
	Standard type Nil	Symmetric type L	
6	Port Switch mounting groove	Switch mounting groove Port	10, 20, 30, 40, 50
8			10, 20, 30, 40, 50, 75
12			10, 20, 30, 40, 50, 75, 100
16	Switch mounting groove Switch mounting groove		10, 20, 30, 40, 50, 75, 100, 125
20		—*1	10, 20, 30, 40, 50, 75, 100, 125, 150
25	Port Port		10, 20, 30, 40, 50, 75, 100, 125, 150*

⑤ Functional options

Symbol	Functional option
Nil	Without functional option
1	With buffer
2	With end lock
3	Axial piping
4	With buffer, end lock
5	With buffer, axial piping

⑦ Number of auto switches

Symbol	Number
Nil	2
S	1
n	n

\*1 Not available, as the standard model has piping ports and auto switch mounting grooves on both sides. Please use the standard type.  
\* The operating speed range of the stroke marked with an asterisk (\*) is 50 to 300 mm/s. (Without stroke adjuster)

⑥ Auto switch

Nil	Without auto switch (Built-in magnet)
-----	---------------------------------------

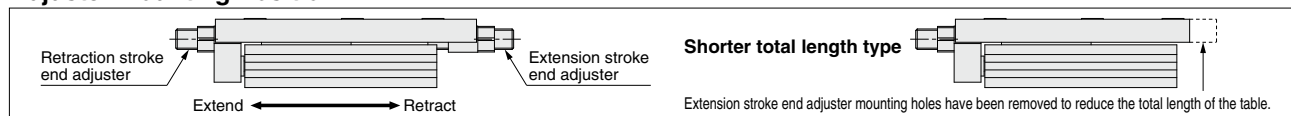
\* For applicable auto switches, refer to page 207.

### ④ Adjuster options/Functional option combinations

Symbol	Adjuster type*6		Adjuster mounting position*1		Functional option combination					
			Extension stroke end	Retraction stroke end	Nil Without functional option	1 With buffer*2	2 With end lock	3 Axial piping*5	4 With buffer, end lock*2	5 With buffer, axial piping*2*5
Z	Without adjuster				○	○	○	○	○	○
ZA	Metal stopper with bumper		●	●	○	×	×	○	×	×
ZB	Metal stopper with bumper		●	●	○	×	×	○	×	×
ZC	Metal stopper with bumper		●	●	○	×	×	○	×	×
ZD	Rubber stopper		●	●	○	×	×	○	×	×
ZE	Rubber stopper		●	●	○	○	○	○	○	○
ZF	Rubber stopper		●	●	○	×	×	○	×	×
ZG	Shock absorber/RJ		●	●	○	×	×	○	×	×
ZH	Shock absorber/RJ		●	●	○	×	○	○	×	×
ZJ	Shock absorber/RJ		●	●	○	×	×	○	×	×
ZK	Shock absorber/RJ		●	●	○	×	×	○	×	×
ZL	Metal stopper		●	●	○	○	○	○	○	○
ZM	Metal stopper		●	●	○	×	×	○	×	×
ZN	Metal stopper		●	●	○	×	×	○	×	×
ZP	Shorter total length type*3	Without adjuster			○	○*4	×	○	×	○*4
ZQ		Rubber stopper	●	●	○	×	×	○	×	×
ZR		Shock absorber/RJ	●	●	○	×	×	○	×	×
ZS		Metal stopper with bumper	●	●	○	×	×	○	×	×
ZT		Metal stopper	●	●	○	×	×	○	×	×
ZBF	Extension stroke end adjuster	Rubber stopper	●	●	○	×	×	○	×	×
ZBJ		Metal stopper with bumper	●	●	○	×	×	○	×	×
ZBM	Extension stroke end adjuster	Metal stopper	●	●	○	×	×	○	×	×
ZEC		Metal stopper with bumper	●	●	○	×	×	○	×	×
ZEJ	Rubber stopper	Shock absorber/RJ	●	●	○	×	×	○	×	×
ZEM		Metal stopper	●	●	○	×	×	○	×	×
ZHC	Shock absorber/RJ	Metal stopper with bumper	●	●	○	×	×	○	×	×
ZHF		Rubber stopper	●	●	○	×	×	○	×	×
ZHM		Metal stopper	●	●	○	×	×	○	×	×
ZLC	Extension stroke end adjuster	Metal stopper with bumper	●	●	○	×	×	○	×	×
ZLF		Rubber stopper	●	●	○	×	×	○	×	×
ZLJ		Shock absorber/RJ	●	●	○	×	×	○	×	×

\*1 ●: Shipped together with the product, but not assembled. Without any symbol for the adjuster mounting position: The adjuster can be mounted afterward.  
\*2 For the buffer mechanism, the buffer stroke will be shorter for the stroke that is adjusted by the extension stroke end adjuster.  
\*3 Extension stroke end adjuster mounting holes have been removed to reduce the total length of the table.  
\*4 The shorter total length type can be used, but a retraction stroke end adjuster cannot be mounted afterward.  
\*5 There is no piping port on the side surface of the product.  
\*6 The metal stopper with bumper option is not available for ∅6.

### Adjuster Mounting Position



\* When the shock absorber, metal stopper with bumper, or adjuster option with metal stopper is used, metal-to-metal collisions occur, and may generate dust particles.  
\* When the buffer mechanism or the end lock mechanism functional options are used, dust particles may be generated by the buffer part as well as the end lock part.

\* The 25A-series specifications and dimensions are the same as those of the standard model.

# Air Slide Table

# 25A-MXQ Series

ø6, ø8, ø12, ø16, ø20, ø25

## How to Order



**25A-MXQ** **16** **50** **AS** **M9BW**

• Series compatible with secondary batteries

Port thread type

Nil	M thread	ø6 to ø16
	Rc	
TN	NPT	ø20, ø25
TF	G	

• Symmetric type

Nil	Standard type
L	Symmetric type

• Bore size (Standard stroke [mm])

<b>6</b>	10, 20, 30, 40, 50
<b>8</b>	10, 20, 30, 40, 50, 75
<b>12</b>	10, 20, 30, 40, 50, 75, 100
<b>16</b>	10, 20, 30, 40, 50, 75, 100, 125
<b>20</b>	10, 20, 30, 40, 50, 75, 100, 125, 150
<b>25</b>	10, 20, 30, 40, 50, 75, 100, 125, 150

• Number of auto switches

Nil	2
S	1
n	n

• Auto switch

Nil	Without auto switch (Built-in magnet)
-----	---------------------------------------

\* Refer to page 207 for auto switch model numbers.

• Adjuster option

Nil	Without adjuster
AS	Extension end adjuster
AT	Retraction end adjuster
A	Double end adjuster
BS	Extension end absorber
BT	Retraction end absorber
B	Double absorber
CS	Extension end metal stopper
CT	Retraction end metal stopper
C	Double metal stopper
ASBT	Extension end adjuster + Retraction end absorber
ASCT	Extension end adjuster + Retraction end metal stopper
BSAT	Extension end absorber + Retraction end adjuster
BSCT	Extension end absorber + Retraction end metal stopper
CSAT	Extension end metal stopper + Retraction end adjuster
CSBT	Extension end metal stopper + Retraction end absorber

\* With shock absorber is not available in the 25A-MXQ6 series.

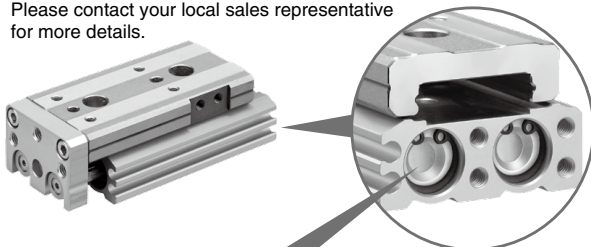
\* When the adjuster option with shock absorber or metal stopper is used, metal-to-metal collisions occur, and may generate dust particles.

### Corrosion Resistant Air Slide Table

(Made to order: 25A-MXQ□-X771)

The material of the head cap part has been changed to a highly corrosion-resistant material.

Please contact your local sales representative for more details.



	After change	Before change
Head cap	Aluminum	Synthetic resin

\* The 25A- series specifications and dimensions are the same as those of the standard model.

# Air Slide Table

# 25A-MXW Series

ø8, ø12, ø16, ø20, ø25



## How to Order

25A – MXW 16 [ ] – 100 B – M9BW [ ]

Series compatible with secondary batteries

**Port thread type**

Nil	M thread	ø8 to ø16
	Rc	
TN	NPT	ø20, ø25
TF	G	

Number of auto switches

Nil	2
S	1
n	n

Auto switch

Nil	Without auto switch (Built-in magnet)
-----	---------------------------------------

\* Refer to page 207 for applicable auto switches.

Bore size (Standard stroke [mm])

8	25, 50, 75, 100, 125, 150
12	50, 75, 100, 125, 150
16	75, 100, 125, 150, 175, 200
20	100, 125, 150, 175, 200, 225, 250
25	100, 125, 150, 175, 200, 225, 250, 275, 300

Option

Nil	Standard (With urethane bumper)
B	With shock absorbers 2 pcs.

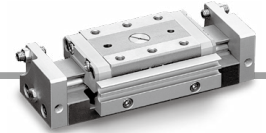
\* When the adjuster option with shock absorber is used, metal-to-metal collisions occur, and may generate dust particles.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

# Air Slide Table

## 25A-MXP Series

ø6, ø8, ø10, ø12, ø16



### How to Order

**25A - MXP** 12 - 15     - **M9BW**  

Series compatible with secondary batteries

Bore size (Standard stroke [mm])

<b>6</b>	5, 10
<b>8</b>	10, 20
<b>10</b>	10, 20
<b>12</b>	15, 25
<b>16</b>	20, 30

Adjuster option

Symbol	Adjuster option
<b>Nil</b>	Rubber stopper
<b>B</b>	Shock absorber
<b>C</b>	Metal stopper

Number of auto switches

<b>Nil</b>	2
<b>S</b>	1
<b>n</b>	n

\* In the case of 25A-MXP6-5, with 2 auto switches are available for D-M9□ type and D-M9□V type only. For other switches, no other choice is affordable but with 1 piece attached (symbol: S).

Auto switch

<b>Nil</b>	Without auto switch (Built-in magnet)
------------	---------------------------------------

\* Refer to page 207 for auto switch model numbers.

Magnet/Switch rail

<b>Nil</b>	With magnet and rail
<b>N</b>	Without magnet and rail

\* Auto switch cannot be mounted on type N (without magnet and rail).

- \* Adjuster for 25A-MXP6 series is available for one side only.
- \* Shock absorber is not available in 25A-MXP6 and 25A-MXP8 series.
- \* When the adjuster option with shock absorber or metal stopper is used, metal-to-metal collisions occur, and may generate dust particles.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

# Compact Guide Cylinder

## 25A-MGP Series

Ø12, Ø16, Ø20, Ø25, Ø32, Ø40, Ø50, Ø63, Ø80, Ø100



### How to Order

**25A - MGP M 25**    **- 30 Z - M9BW**   

Series compatible with secondary batteries

Compact guide cylinder

Bearing type

<b>M</b>	Slide bearing
<b>L</b>	Ball bushing

Bore size

<b>12</b>	12 mm
<b>16</b>	16 mm
<b>20</b>	20 mm
<b>25</b>	25 mm
<b>32</b>	32 mm
<b>40</b>	40 mm
<b>50</b>	50 mm
<b>63</b>	63 mm
<b>80</b>	80 mm
<b>100</b>	100 mm

Cylinder stroke [mm]

<b>12, 16</b>	10, 20, 30, 40, 50, 75, 100, 125, 150, 175, 200, 250
<b>20, 25</b>	20, 30, 40, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400
<b>32 to 100</b>	25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400

Port thread type

<b>Nil</b>	M5 x 0.8
	Rc
<b>TN</b>	NPT
<b>TF</b>	G

\* For bore sizes Ø12 and Ø16, only M5 x 0.8 is available.

Number of auto switches

<b>Nil</b>	2
<b>S</b>	1
<b>n</b>	n

Auto switch

**Nil** Without auto switch (Built-in magnet)

\* For applicable auto switches, refer to page 207.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

# Compact Guide Cylinder/With Air Cushion

## 25A-MGP Series

Ø16, Ø20, Ø25, Ø32, Ø40, Ø50, Ø63, Ø80, Ø100



### How to Order

**25A - MGP M 32 - 50 AZ - M9BW**

Series compatible with secondary batteries

Compact guide cylinder

Bearing type

M	Slide bearing
L	Ball bushing

Bore size

16	16 mm
20	20 mm
25	25 mm
32	32 mm
40	40 mm
50	50 mm
63	63 mm
80	80 mm
100	100 mm

With air cushion

Cylinder stroke [mm]

Bore size	Standard stroke
16	25, 50, 75, 100, 125, 150, 175, 200, 250
20 to 63	25, 50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400
80, 100	50, 75, 100, 125, 150, 175, 200, 250, 300, 350, 400

Auto switch

Nil	Without auto switch (Built-in magnet)
-----	---------------------------------------

\* For applicable auto switches, refer to page 207.

Number of auto switches

Nil	2
S	1
n	n

Port thread type

Nil	M5 x 0.8
	Rc
TN	NPT
TF	G

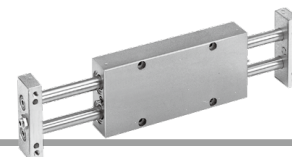
\* For bore size 16, only M5 x 0.8 is available.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

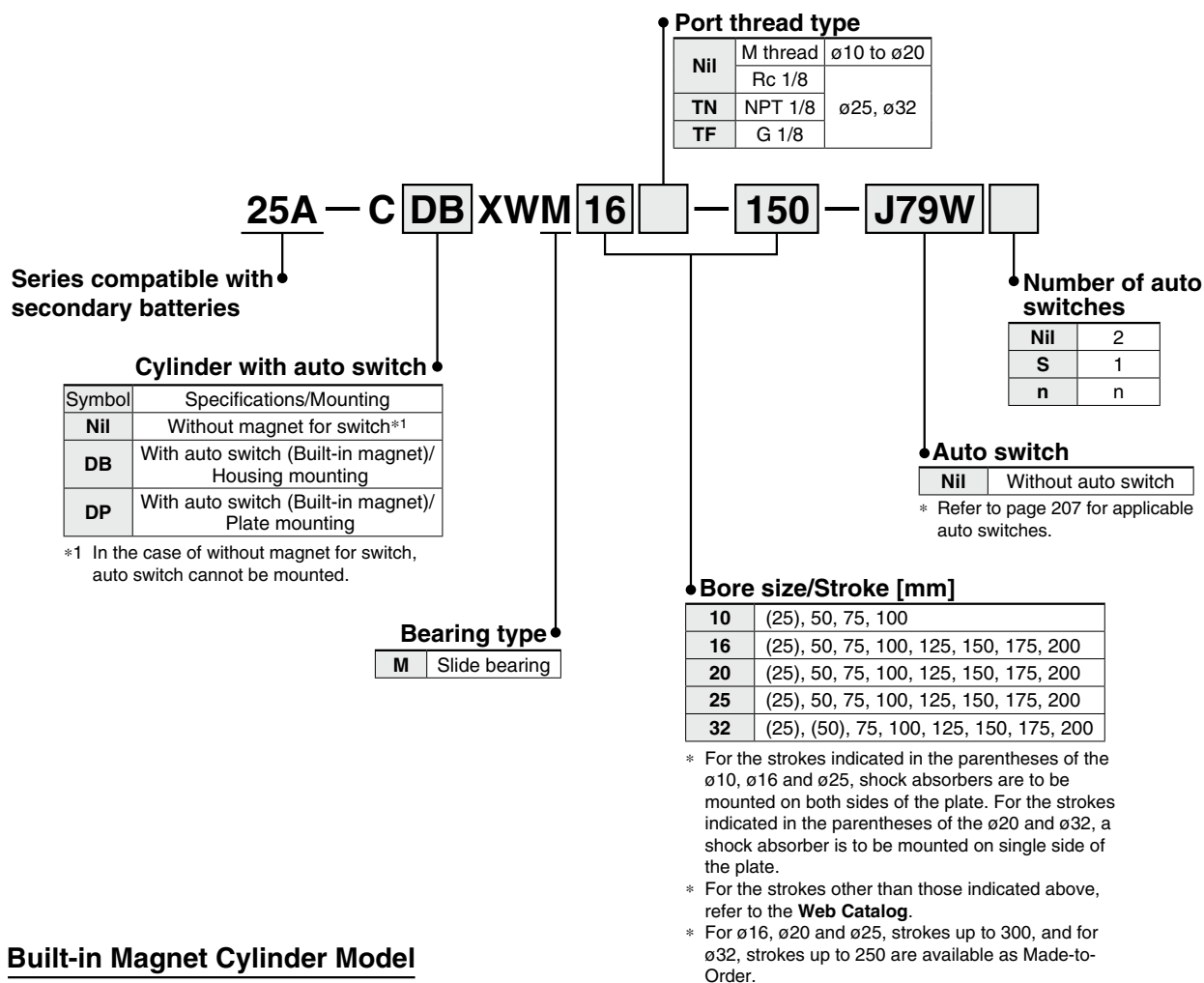
# Slide Unit: Built-in Shock Absorber Slide Bearing Type

## 25A-CXWM Series

ø10, ø16, ø20, ø25, ø32



### How to Order



### Built-in Magnet Cylinder Model

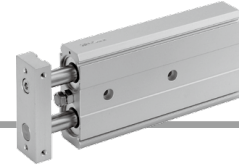
If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch. (Example) 25A-CDPXWM20-100

\* The 25A- series specifications and dimensions are the same as those of the standard model.

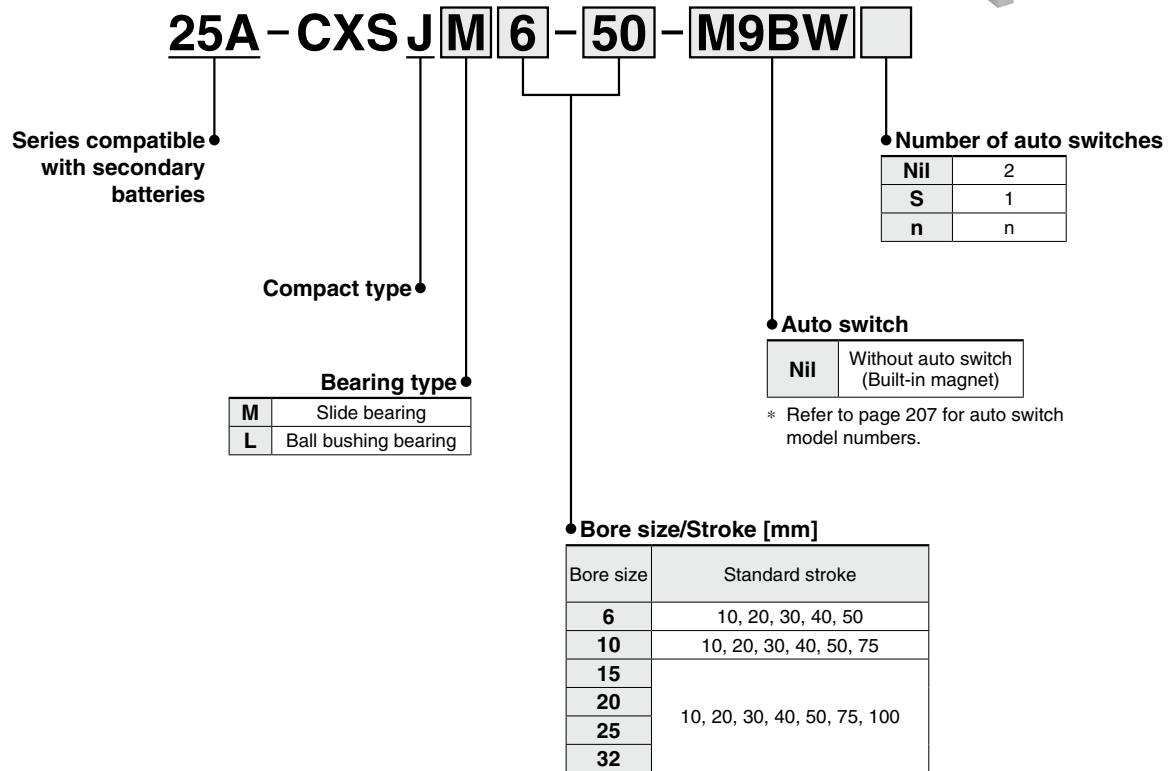
# Dual Rod Cylinder/Compact Type

# 25A-CXSJ Series

ø6, ø10, ø15, ø20, ø25, ø32



## How to Order



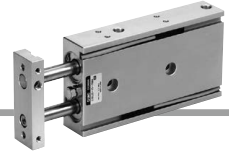
\* The 25A- series specifications and dimensions are the same as those of the standard model.



# Dual Rod Cylinder Basic Type

## 25A-CXS Series

∅6, ∅10, ∅15, ∅20, ∅25, ∅32



### How to Order

#### Slide bearing type

**25A-CXSM** **25** - **100** - **Y7BW**

Series compatible with secondary batteries

Bearing type

M	Slide bearing
---	---------------

Bore size/Stroke [mm]

Bore size	Standard stroke [mm]
6	10, 20, 30, 40, 50
10	10, 15, 20, 25, 30, 35, 40, 45, 50, 60, 70, 75
15, 20, 25, 32	10, 15, 20, 25, 30, 35, 40, 45, 50, 60, 70, 75, 80, 90, 100

Number of auto switches

Nil	2
S	1
n	n

Auto switch

Nil Without auto switch (Built-in magnet)

\* Refer to page 207 for applicable auto switches.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

#### Ball bushing bearing type

**25A-CXSL** **20** - **100** - **Y7BW**

Series compatible with secondary batteries

Bearing type

L	Ball bushing bearing
---	----------------------

Bore size/Stroke [mm]

Bore size	Standard stroke [mm]
6	10, 20, 30, 40, 50
10	10, 15, 20, 25, 30, 35, 40, 45, 50, 60, 70, 75
15, 20, 25, 32	10, 15, 20, 25, 30, 35, 40, 45, 50, 60, 70, 75, 80, 90, 100

Number of auto switches

Nil	2
S	1
n	n

Auto switch

Nil Without auto switch (Built-in magnet)

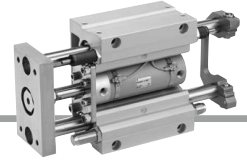
\* Refer to page 207 for applicable auto switches.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

# Guide Cylinder

# 25A-MGG Series

Ø20, Ø25, Ø32, Ø40, Ø50



## How to Order

**25A - MGG L B 32 - 100 - M9BW**

Series compatible with secondary batteries

Guide cylinder

Bearing type

L	Ball bushing
---	--------------

Mounting

B	Basic
F	Front mounting flange

Bore size

20	20 mm
25	25 mm
32	32 mm
40	40 mm
50	50 mm

Port thread type

Nil	Rc
TN	NPT
TF	G

Number of auto switches

Nil	2
S	1
n	n

Auto switch

Nil	Without auto switch (Built-in magnet)
-----	---------------------------------------

\* Refer to page 207 for applicable auto switches.

Cylinder stroke [mm]

Bore size [mm]	Standard stroke [mm]	Long stroke [mm]
20	75, 100, 125, 150, 200	250, 300, 350, 400
25	75, 100, 125, 150, 200, 250, 300	350, 400, 450, 500
32		350, 400, 450, 500, 600
40		350, 400, 450, 500, 600, 700, 800
50		350, 400, 450, 500, 600, 700, 800, 900, 1000

\* Intermediate strokes and short strokes other than those listed above are produced upon receipt of order.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

# Rotary Clamp Cylinder: Standard

# 25A-MK Series

∅12, ∅16, ∅20, ∅25, ∅32, ∅40, ∅50, ∅63



## How to Order

**25A - MKB 20**    - **10 R Z - M9BW**   

Series compatible with secondary batteries

### Bore size

12	12 mm
16	16 mm
20	20 mm
25	25 mm
32	32 mm
40	40 mm
50	50 mm
63	63 mm

### Number of auto switches

Nil	2
S	1

### Auto switch type

Nil	Without auto switch (Built-in magnet)
-----	---------------------------------------

\* For applicable auto switch models, refer to page 207.  
\* Auto switches are shipped together, but not assembled.

### Port thread type

Nil	M thread	∅12 to ∅25
	Rc	
TN	NPT	∅32 to ∅63
TF	G	

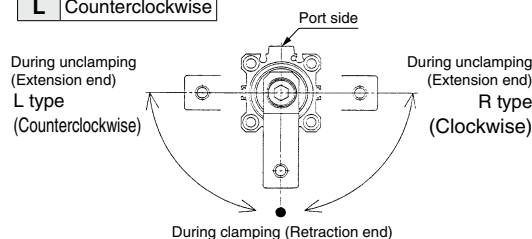
### Auto switch multiple side mounting

### Rotary direction (Unclamp → Clamp)

R	Clockwise
L	Counterclockwise

### Clamp stroke

Symbol	Clamp stroke	Applicable bore size
10	10 mm	∅12 to ∅63
20	20 mm	
30	30 mm	
50	50 mm	∅32 to ∅63



\* The 25A- series specifications and dimensions are the same as those of the standard model.

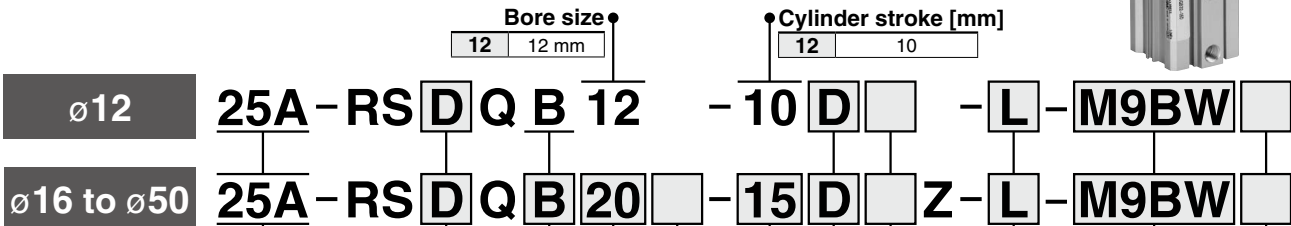
# Stopper Cylinder/Fixed Mounting Height

# 25A-RSQ Series

ø12, ø16, ø20, ø25, ø32, ø40, ø50



## How to Order



Series compatible with secondary batteries

With auto switch

Nil	Without magnet for switch*1
D	With auto switch (Built-in magnet)

\*1 In the case of without magnet for switch, auto switch cannot be mounted.

Mounting bracket

B	Through-hole
A	Both ends tapped type

\* Since ø12 uses a common tube for both A and B, only B is used for part no. denotation.

Bore size

16	16 mm
20	20 mm
32	32 mm
40	40 mm
50	50 mm

Port thread type

Nil	M thread	ø16
	Rc	
TN	NPT	ø20 to ø50
TF*1	G	

\*1 TF for ø20 indicates M5.

Cylinder stroke [mm]

16	10, 15
20	10, 15, 20
32	10, 15, 20
40	20, 25, 30
50	20, 25, 30

Action

D	Double acting
B	Double acting with spring loaded
T	Single acting (Spring extend)

Rod end configuration

Nil	Round bar
F*1	Round bar with female rod end
K	Chamfered
G*1	Chamfered with female rod end
R	Roller
L*2	Lever (Fixed absorber type)

\*1 F and G are not available for bore size ø12.

\*2 L is applicable only to bore sizes ø32, ø40, and ø50.

Mounting bolt

Nil	None
L	Shipped together

\* Mounting bolt is shipped together only when the "Mounting" symbol is B.

Auto switch type

Nil	Without auto switch
-----	---------------------

\* For applicable auto switch models, refer to page 207.

Number of auto switches

Nil	2
S	1

\* The 25A- series specifications and dimensions are the same as those of the standard model.

# Heavy Duty Stopper Cylinder

## 25A-RSH Series

Ø20, Ø32



### How to Order

**25A-RSH** **32** **□** - **20** **D** **L** - **M9BW** **□**

Series compatible with secondary batteries

**Bore size**

<b>20</b>	20 mm
<b>32</b>	32 mm

**Port thread type**

<b>Nil</b>	M*1
	Rc
<b>TN</b>	NPT
<b>TF</b>	G

\*1 The tube I.D. of 20 is only available to port size M screws.

**Cylinder stroke**

<b>15</b>	15 mm (RSH20)
<b>20</b>	20 mm (RSH32)

**Number of auto switches**

<b>Nil</b>	2
<b>S</b>	1

**Auto switch**

<b>Nil</b>	Without auto switch (Built-in magnet)
------------	---------------------------------------

\* For applicable auto switches, refer to page 207.

**Roller material**

<b>L</b>	Resin
<b>M</b>	Carbon steel

**Action**

<b>D</b>	Double acting type
<b>B</b>	Double acting spring type
<b>T</b>	Single acting/Spring extended

\* The 25A- series specifications and dimensions are the same as those of the standard model.

# Shock Absorber Soft Type **25A-RJ Series**



## How to Order

**25A - RJ 0604**

**25A - RJ 0806 H U**

Series compatible with secondary batteries

Shock absorber/Soft type

O.D. thread size/Stroke

Symbol	O.D. thread	Stroke
0604	6 mm	4 mm
0806	8 mm	6 mm
1007	10 mm	7 mm
1412	14 mm	12 mm
2015	20 mm	15 mm
2725	27 mm	25 mm

Collision speed range

H	0.05 to 2 m/s
L	0.05 to 1 m/s

\* RJ0604: 0.05 to 1.0 m/s

\* RJ2725H: 0.05 to 1.5 m/s

Option

Symbol	Hexagon nut	Stopper nut
Nil	2 pcs.	—
J	3 pcs.	—
N	—	—
S	2 pcs.	1 pc.
SJ	3 pcs.	1 pc.
SN	—	1 pc.

With cap

Nil	Basic type
U	With urethane cap

## Hexagon Nut, Stopper Nut (Option) Part Nos. for the 25A- Series

		Thread size				
		M8	M10	M14	M20	M27
Hexagon nut		25-RB08J	25-RB10J	25-RB14J	25-RB20J	25-RB27J
Stopper nut	Basic type	25-RB08S	25-RB10S	25-RB14S	25-RB20S	25-RB27S
	With cap	25-RBC08S	25-RBC10S	25-RBC14S	25-RBC20S	25-RBC27S

Material: Special steel

Treatment: Electroless nickel plating

\* The 25A- series specifications and dimensions are the same as those of the standard model.

# Shock Absorber Short Stroke Type **25A-RJ Series**

## How to Order

Short stroke type

**25A - RJ**

**0805**

**U**

□

Series compatible with secondary batteries

Shock absorber/Soft type

O.D. thread size/Stroke

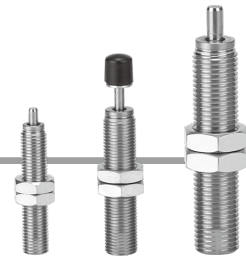
Symbol	O.D. thread	Stroke
<b>0805</b>	8 mm	5 mm
<b>1006</b>	10 mm	6 mm
<b>1410</b>	14 mm	10 mm

Option

Symbol	Hexagon nut	Stopper nut
<b>Nil</b>	2 pcs.	—
<b>J</b>	3 pcs.	—
<b>N</b>	—	—
<b>S</b>	2 pcs.	1 pc.
<b>SJ</b>	3 pcs.	1 pc.
<b>SN</b>	—	1 pc.

With cap

<b>Nil</b>	Basic type
<b>U</b>	With urethane cap



### Hexagon Nut, Stopper Nut (Option) Part Nos. for the 25A- Series

		Thread size		
		<b>M8</b>	<b>M10</b>	<b>M14</b>
Hexagon nut		25-RB08J	25-RB10J	25-RB14J
Stopper nut	Basic type	25-RB08S	25-RB10S	25-RB14S
	With cap	25-RBC08S	25-RBC10S	25-RBC14S

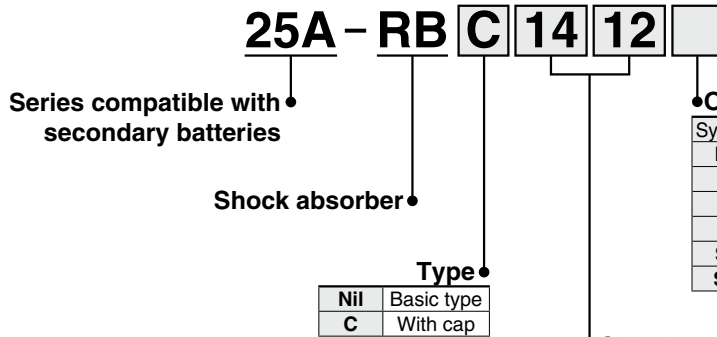
Material: Special steel  
Treatment: Electroless nickel plating

\* The 25A- series specifications and dimensions are the same as those of the standard model.

# Shock Absorber

## 25A-RB/RBC Series

### How to Order



#### Option

Symbol	Hexagon nut	Stopper nut
Nil	2 pcs.	—
J	3 pcs.	—
N	—	—
S	2 pcs.	1 pc.
SJ	3 pcs.	1 pc.
SN	—	1 pc.

#### O.D. thread size/Stroke

Symbol	O.D. thread size	Stroke	Symbol	O.D. thread size	Stroke
0805	8 mm	5 mm	1411	14 mm	11 mm
0806	8 mm	6 mm	1412	14 mm	12 mm
1006	10 mm	6 mm	2015	20 mm	15 mm
1007	10 mm	7 mm	2725	27 mm	25 mm

### Hexagon Nut, Stopper Nut (Option) Part Nos. for the 25A- Series

		Thread size				
		M8	M10	M14	M20	M27
Hexagon nut		25-RB08J	25-RB10J	25-RB14J	25-RB20J	25-RB27J
Stopper nut	Basic type	25-RB08S	25-RB10S	25-RB14S	25-RB20S	25-RB27S
	With cap	25-RBC08S	25-RBC10S	25-RBC14S	25-RBC20S	25-RBC27S

Material: Special steel  
Treatment: Electroless nickel plating

\* The 25A- series specifications and dimensions are the same as those of the standard model.



# Floating Joint

## 25A-J□ Series

RoHS

### How to Order

#### Standard type

25A - JA 80 - 22-150

Series compatible with secondary batteries

Applicable bore size [mm]

Model	Symbol	Applicable bore size [mm]
Standard	80	80
	100	100

\* For ø63 or less, please consider using the stainless steel type 25A-JS series.

Thread nominal size (Standard)

Nominal thread size	Applicable cylinder nominal thread size
22-150	M22 x 1.5
26-150	M26 x 1.5

\* The 25A- series specifications and dimensions are the same as those of the standard model.



### How to Order

#### For compact cylinders

25A - J B 40 - 8-125

Series compatible with secondary batteries

For compact cylinders/Female thread

Applicable bore size [mm]

Symbol	Applicable bore size [mm]
12	12
16	16
20	20
25	25
40	32, 40
63	50, 63
80	80
100	100

Thread nominal size

Nominal thread size	Applicable cylinder nominal thread size
3-050	M3 x 0.5
4-070	M4 x 0.7
5-080	M5 x 0.8
6-100	M6 x 1
8-125	M8 x 1.25
10-150	M10 x 1.5
16-200	M16 x 2
20-250	M20 x 2.5

\* The 25A- series specifications and dimensions are the same as those of the standard model.



### How to Order

#### Stainless steel type

25A - J S 32 - 10-125

Series compatible with secondary batteries

Stainless steel type

Applicable bore size [mm]

Symbol	Applicable bore size [mm]
10	10
16	10, 16
20	20
32	25, 32
40	40
63	50, 63

Thread nominal size

Nominal thread size	Applicable cylinder nominal thread size
4-070	M4 x 0.7
5-080	M5 x 0.8
8-125	M8 x 1.25
10-125	M10 x 1.25
14-150	M14 x 1.5
18-150	M18 x 1.5

\* The 25A- series specifications and dimensions are the same as those of the standard model.

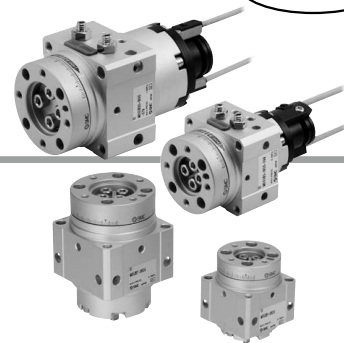


# Rotary Table: Vane Type

## 25A-MSUB Series

Size: 1, 3, 7, 20

RoHS



### How to Order

**Without auto switch** 25A-M SUB 20-90 S

**With auto switch** 25A-M D SUB 20-90 S-T79 L 1

**Series compatible with secondary batteries**

**With auto switch (Built-in magnet)**

**Nominal size (Torque)**

1	MSUB 1
3	MSUB 3
7	MSUB 7
20	MSUB20

**Rotating angle**

Application	Symbol	Rotating angle
Single vane	90	90°
	180	180°
Double vane	90	90°

Rotation adjustment range  
Single vane: Both ends ±5° each  
Double vane: Both ends ±2.5° each

**Connection port location**

Nil	Side ported
E	Axial ported

Available with side ported only, when equipped with auto switch unit.

**Vane type**

S	Single vane
D	Double vane

**Number of auto switches**

S	1*1
Nil	2*2

\*1 S (1 auto switch) is shipped with a right-hand auto switch.  
\*2 Nil (2 auto switches) is shipped with a right-hand and a left-hand switch.

**Electrical entry/Lead wire length**

Nil	Grommet/Lead wire: 0.5 m
L	Grommet/Lead wire: 3 m

**Auto switch**

Nil	Without auto switch (Built-in magnet)
-----	---------------------------------------

\* Refer to page 209 for applicable auto switches.

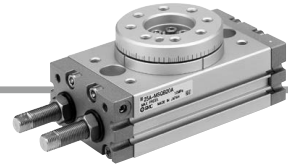
\* The 25A- series specifications and dimensions are the same as those of the standard model.

\* Zinc is used in part of deep groove ball bearing.

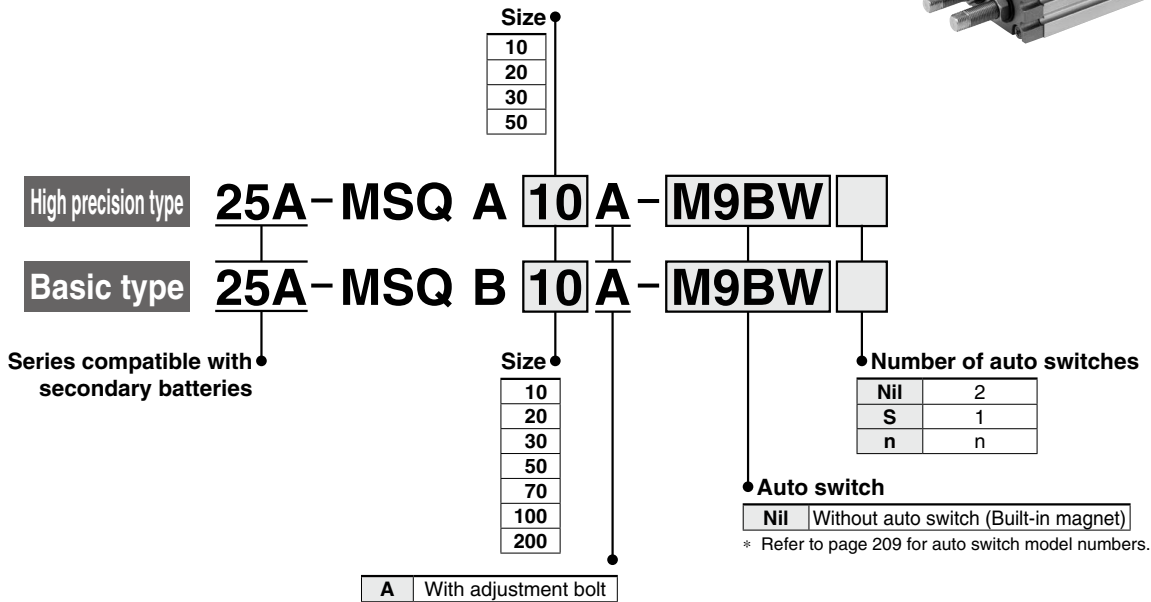
# Rotary Table/Rack & Pinion Type

# 25A-MSQ Series

Size: 10, 20, 30, 50, 70, 100, 200



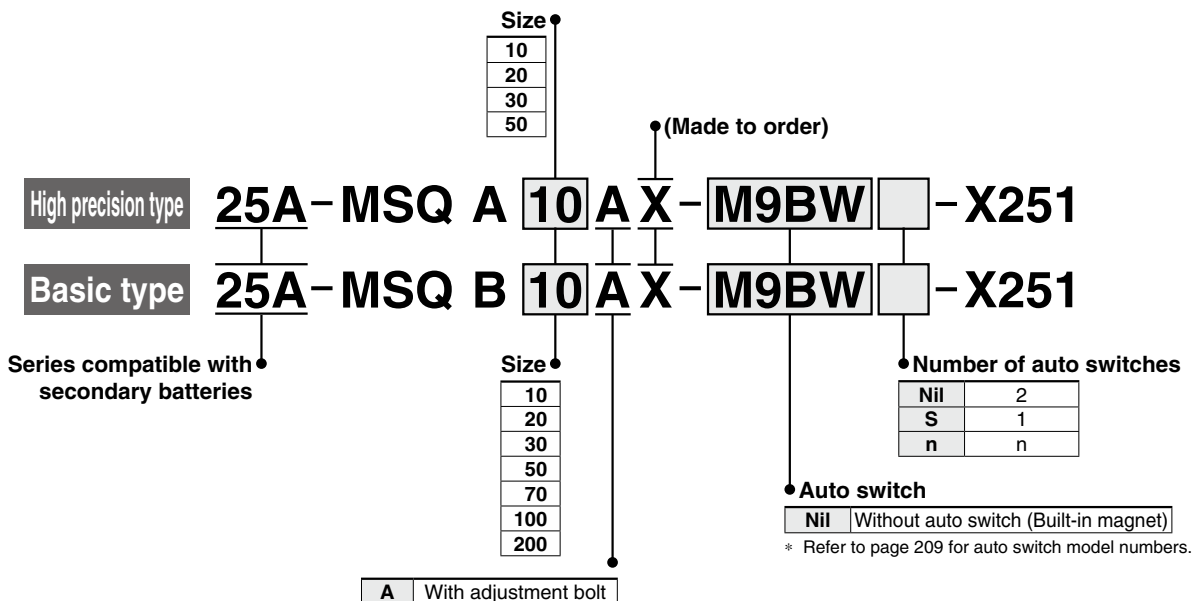
## How to Order



- \* Zinc is used in part of deep groove ball bearing and seal washer.
- \* Side port cannot be used.

\* Some parts have sizes and shapes that are different from the standard products.

## With Vacuum Port



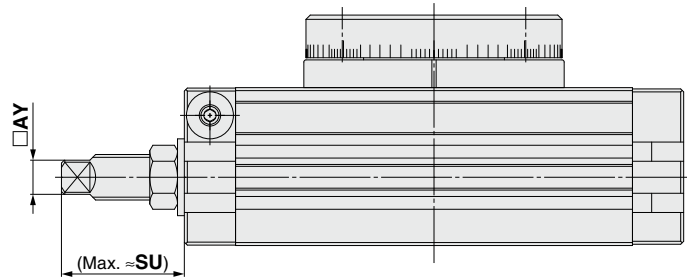
- \* Zinc is used in part of deep groove ball bearing and seal washer.
- \* Side port cannot be used.

\* Some parts have sizes and shapes that are different from the standard products.

# 25A-MSQ Series

## Dimensions

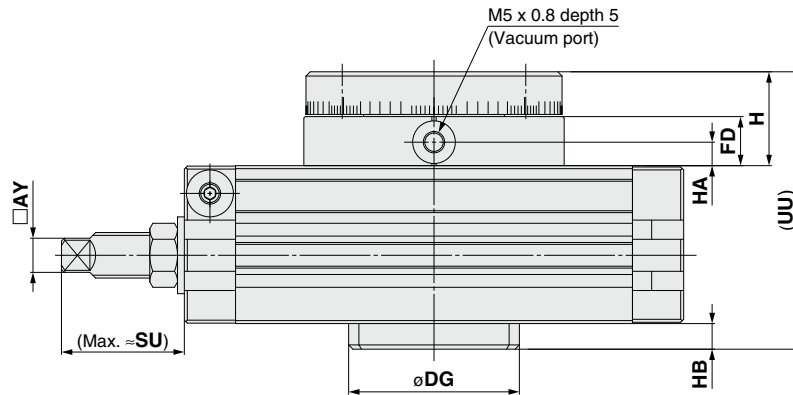
### 25A-MSQB□A



[mm]		
Size	AY	SU
10	6	23.7
20	8	33
30	8	33
50	10	42.9
70	16	44.2
100	16	44.3
200	21	52.2

\* Dimensions other than those shown above are identical to the standard products.

### 25A-MSQB□AX-X251



[mm]								
Size	AY	DG	FD	H	HA	HB	SU	UU
10	6	35h9	11.5	20	5.5	5	23.7	59
20	8	40h9	11.5	22	5.5	6	33	65
30	8	48h9	11.5	22	5.5	6	33	68
50	10	54h9	11.5	24	5.5	7	42.9	77
70	16	50h9	12	25	6	7	44.2	85
100	16	52h9	12	27	6	7	44.3	93
200	21	64h9	15	32	7.5	8	52.2	114

\* The product with the vacuum port has no hollow shaft at its rotation center.  
 \* Dimensions other than those shown above are identical to the standard products.

# 3-Position Rotary Table

# 25A-MSZ Series

Size: 10, 20, 30, 50



## How to Order



High precision type **25A-MSZA** **10** **A** - **M9BW**

Basic type **25A-MSZB** **10** **A** - **M9BW**

Series compatible with secondary batteries

Size

10
20
30
50

Number of auto switches

Nil	2
n	n

Auto switch

Nil	Without auto switch (Built-in magnet)
-----	---------------------------------------

With adjustment bolt

\* For applicable auto switches, refer to page 209.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

# Parallel Type Air Gripper Standard Type

## 25A-MHZ2 Series

ø10, ø16, ø20, ø25, ø32, ø40



### How to Order

#### Bore size

**ø16 to ø25** 25A-MHZ2-16 D [ ] - M9BW [ ]

Series compatible with secondary batteries

Number of fingers  
2 2 fingers

Bore size

10	10 mm
16	16 mm
20	20 mm
25	25 mm

Action  
D Double acting

Number of auto switches

Nil	2
S	1
n	n

Auto switch  
Nil Without auto switch (Built-in magnet)  
\* Refer to page 210 for the applicable auto switch model.

#### Finger position/option

**Standard**  
(MHQG2 compatible type)

Nil: Basic type

1: Side tapped mounting

2: Through-holes in opening/closing direction

3: Flat type fingers  
The flat type fingers do not have standard and narrow options.

**Narrow type**  
(MHQ2 compatible type)

N: Basic type

N1: Side tapped mounting

N2: Through-holes in opening/closing direction



#### Bore size

**ø32, ø40** 25A-MHZ2-32 D [ ] - M9BW [ ]

Series compatible with secondary batteries

Number of fingers  
2 2 fingers

Bore size

32	32 mm
40	40 mm

Action  
D Double acting

Number of auto switches

Nil	2
S	1
n	n

Auto switch  
Nil Without auto switch (Built-in magnet)  
\* Refer to page 210 for the applicable auto switch model.

#### Finger option

[Standard]

Nil: Basic type

1: Side tapped mounting

2: Through-holes in opening/closing direction

3: Flat type fingers



\* The 25A-series specifications and dimensions are the same as those of the standard model.

# Parallel Type Air Gripper Long Stroke Type **25A-MHZL2 Series**



## How to Order

**25A - MHZL2 - 16 D**    - **M9BW**   

Series compatible with secondary batteries

Number of fingers  
2 2 fingers

Bore size

Symbol	Bore size [mm]
<b>10</b>	10 mm
<b>16</b>	16 mm
<b>20</b>	20 mm
<b>25</b>	25 mm

Action  
D Double acting

Number of auto switches

Nil	2
S	1
n	n

Auto switch

Nil Without auto switch (Built-in magnet)

\* Refer to page 210 for the applicable auto switch model.

Finger option

Nil: Basic type



1: Side tapped mounting



2: Through-holes in opening/closing direction



3: Flat type fingers



\* The 25A- series specifications and dimensions are the same as those of the standard model.

# 25A-MHZJ2 Series

Parallel Type Air Gripper with Dust Cover: Long Stroke Type

# 25A-MHZL2 Series (Made to Order)

## How to Order



**25A - MHZJ2 - 16 D**  - **M9BW**

Series compatible with secondary batteries

Number of fingers

2	2 fingers
---	-----------

Bore size

10	10 mm
16	16 mm
20	20 mm
25	25 mm

Action

D	Double acting
---	---------------

Number of auto switches

Nil	2
S	1
n	n

Auto switch

Nil	Without auto switch (Built-in magnet)
-----	---------------------------------------

\* Refer to page 210 for the applicable auto switch model.

Dust cover type

Nil	Chloroprene rubber (CR)
F	Fluororubber (FKM)
S	Silicone rubber (Si)

\* The 25A- series specifications and dimensions are the same as those of the standard model.

## Long Stroke Type/ With Dust Cover (Made to Order)

**25A - MHZL2 - 16 D**  - **M9BW**  - **X5955**

Series compatible with secondary batteries

Number of fingers

2	2 fingers
---	-----------

Bore size/Stroke

Symbol	Bore size [mm]
10	10 mm
16	16 mm
20	20 mm

Action

D	Double acting
---	---------------

Number of auto switches

Nil	2
S	1
n	n

Auto switch

Nil	Without auto switch (Built-in magnet)
-----	---------------------------------------

\* Refer to page 210 for the applicable auto switch model.

Dust cover type

Nil	Chloroprene rubber (CR)
F	Fluororubber (FKM)
S	Silicone rubber (Si)

\* The 25A- series specifications are the same as those of the standard model.



# Low Profile Air Gripper 25A-MHF2 Series



## How to Order



**25A-MHF 2 - 12 D**     **- M9BW**  

- Number of fingers
 

2	2 fingers
---	-----------
- Series compatible with secondary batteries

**Bore size [mm]**

8	8
12	12
16	16
20	20

**Action**

D	Double acting
---	---------------

**Stroke**

Nil	Short stroke
1	Medium stroke
2	Long stroke

- Number of auto switches

Nil	2
S	1
n	n

- Auto switch

Nil	Without auto switch (Built-in magnet)
-----	---------------------------------------

\* Refer to page 210 for the applicable auto switch model.

- Body option

<p><b>Nil:</b> Axial piping type</p> <p style="text-align: center;">Port</p>	<p><b>R:</b> Side piping type</p> <p style="text-align: center;">Port</p>
--	---

\* The 25A- series specifications and dimensions are the same as those of the standard model.

# Parallel Type Air Gripper: Wide Type

# 25A-MHL2 Series

ø10, ø16, ø20, ø25, ø32



## How to Order

**25A-MHL2-20D**  **-M9BW**

**Series compatible with secondary batteries**

**Wide opening**

**Number of fingers**  
 2 2 fingers

**Bore size**

10	10 mm
16	16 mm
20	20 mm
25	25 mm
32	32 mm
40	40 mm

**Action**  
 D Double acting

**Number of auto switches**

Nil	2
S	1
n	n

**Auto switch**  
 Nil Without auto switch (Built-in magnet)  
 \* Refer to page 210 for the applicable auto switch model.

**Opening/Closing stroke** [mm]

Symbol	ø10	ø16	ø20	ø25	ø32	ø40
Nil	20	30	40	50	70	100
1	40	60	80	100	120	160
2	60	80	100	120	160	200

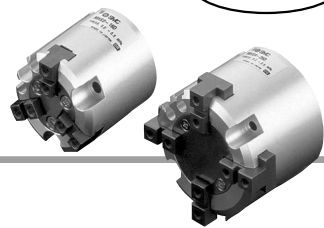
\* The 25A- series specifications and dimensions are the same as those of the standard model. (Weight is not the same.)

# Parallel Type Air Gripper

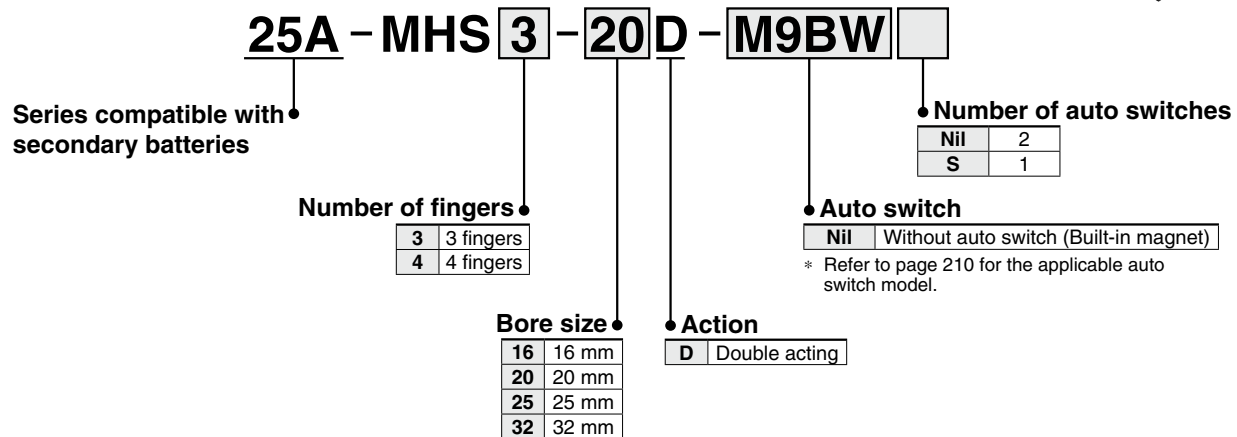
## 25A-MHS□ Series

ø16, ø20, ø25

RoHS



### How to Order



\* The 25A- series specifications and dimensions are the same as those of the standard model.

# Parallel Type Air Gripper 3-Finger Type with Dust Cover

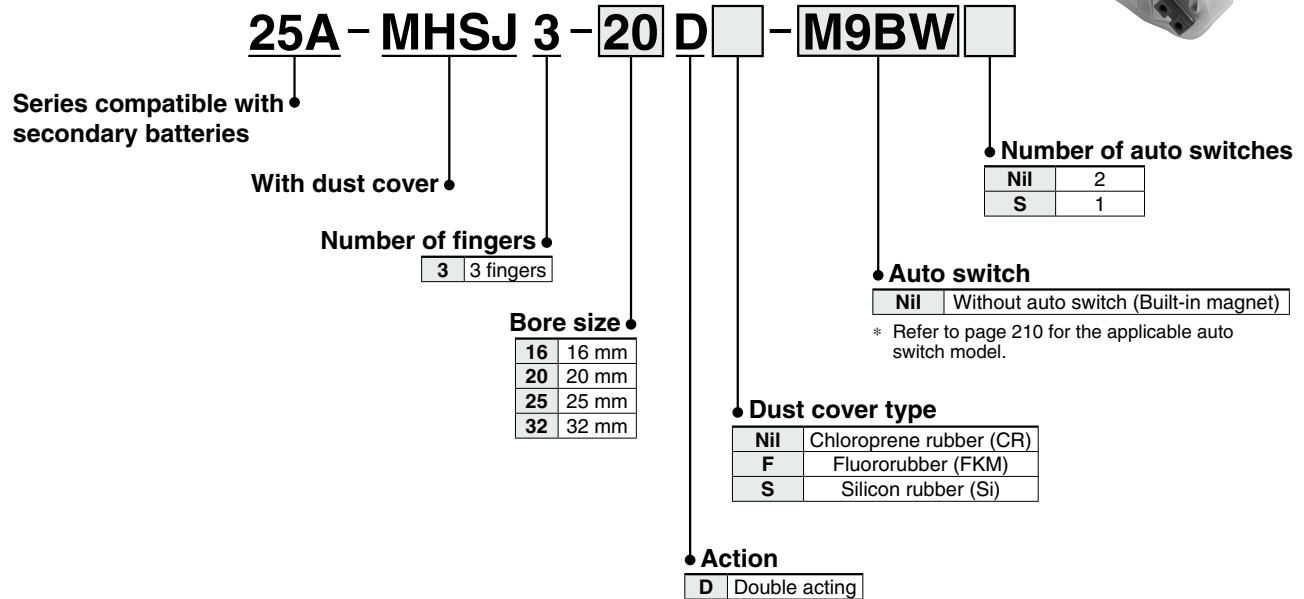
## 25A-MHSJ3 Series

∅16, ∅20, ∅25

RoHS



### How to Order



\* The 25A- series specifications and dimensions are the same as those of the standard model.

# 180° Angular Type Air Gripper Cam Type

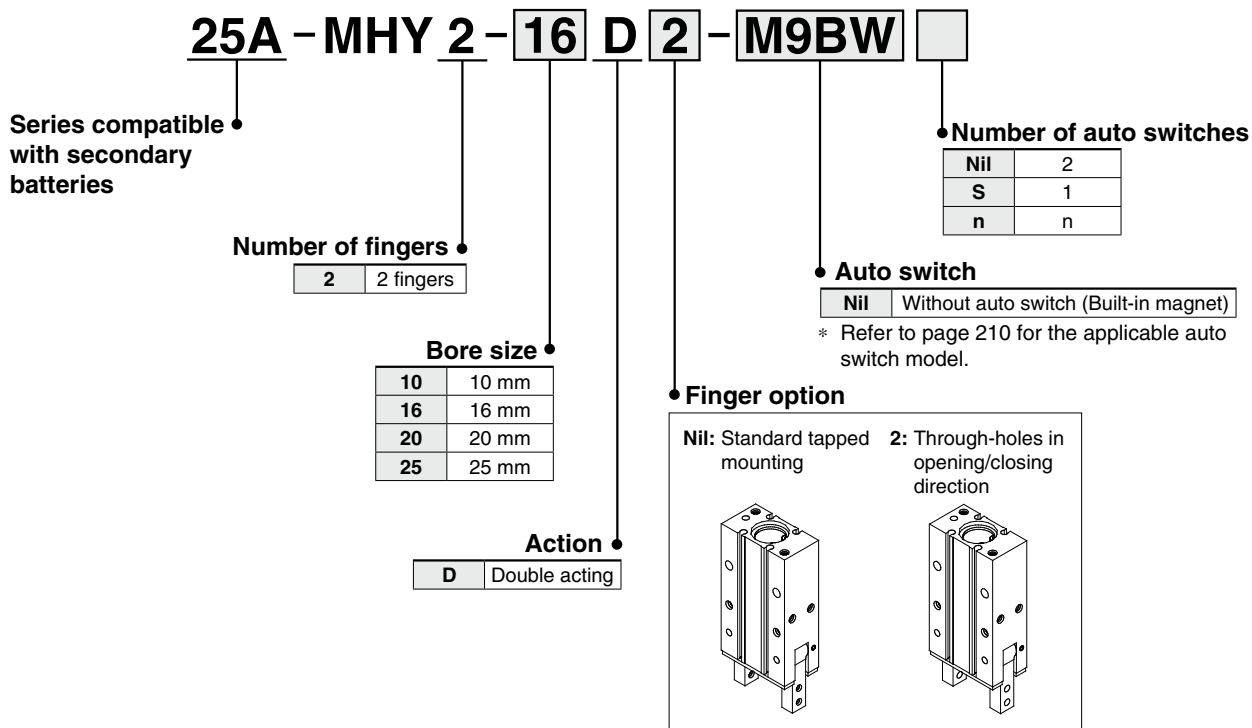
# 25A-MHY2 Series

ø10, ø16, ø20, ø25

RoHS



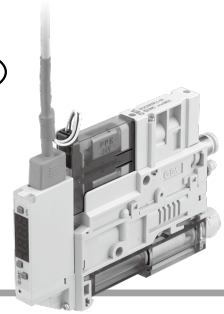
## How to Order



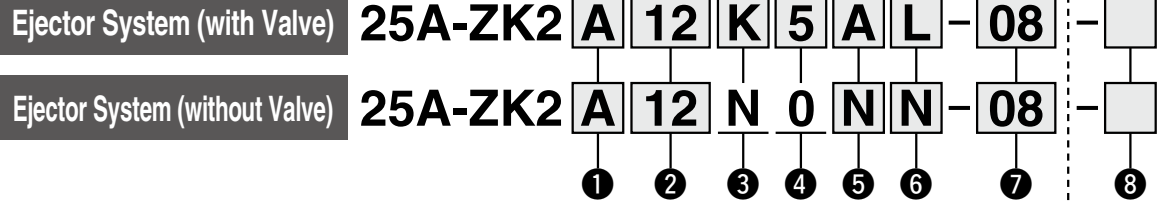
\* The 25A- series specifications and dimensions are the same as those of the standard model.

# Vacuum Unit

# 25A-ZK2 Series



## How to Order Single Unit



Remains blank when no option is selected.

### ① System/Body type

Symbol	System	Body type	Exhaust type
A	Ejector system	Single unit	Silencer exhaust
B			Port exhaust*1
G			High-noise reduction silencer exhaust

\*1 Port size of exhaust port: ø8 (Metric)

### ③ Combination of supply valve and release valve\*3

Symbol	Supply valve	Release valve
*5 K	N.C.	N.C.
J	N.C.	None
R	Self-holding release valve linked*4	N.C.
N	None	None

- \*3 Only non-locking type is available for the manual override for "K," "J," and "R."
- \*4 Self-holding type maintains vacuum by instantaneous energization (20 ms or more). Stopping the vacuum turns on the release valve. (signal to stop vacuum not needed)
- \*5 When the digital pressure switch for vacuum with energy saving function is selected for ⑤, select "K" for ③ Combination of supply valve and release valve.

### ② Nominal nozzle size

Symbol	System	Nominal size
07	Ejector system*2	ø0.7
10		ø1.0
12		ø1.2
15		ø1.5

- \*2 Standard supply pressure for nozzle size  
07 to 12: 0.35 MPa  
15: 0.4 MPa

### ④ Rated voltage\*6

Symbol	Voltage
5	24 VDC
6	12 VDC
0	When ⑤ is "N"

- \*6 Rated voltage for the supply and release valve

### ⑤ Pressure sensor/Digital pressure switch for vacuum specifications

Symbol	Type	Pressure range [kPa]	Specifications
P	Pressure sensor	0 to -101	Analog output 1 to 5 V
T		-100 to 100	Analog output 1 to 5 V
A	Digital pressure switch for vacuum	0 to -101	NPN 2 outputs Unit selection function*7 SI unit only*8
B			PNP 2 outputs Unit selection function*7 SI unit only*8
C			NPN 2 outputs Unit selection function*7 SI unit only*8
D			PNP 2 outputs Unit selection function*7 SI unit only*8
E		-100 to 100	NPN 2 outputs Unit selection function*7 SI unit only*8
F			PNP 2 outputs Unit selection function*7 SI unit only*8
H			NPN 2 outputs Unit selection function*7 SI unit only*8
J			PNP 2 outputs Unit selection function*7 SI unit only*8
K	Digital pressure switch for vacuum with energy saving function*9	-100 to 100	NPN 1 output Unit selection function*7 SI unit only*8
Q			PNP 1 output Unit selection function*7 SI unit only*8
R			PNP 1 output Unit selection function*7 SI unit only*8
S			SI unit only*8
N	Without pressure sensor/ Digital pressure switch for vacuum		

- \*7 The Unit selection function is not available in Japan due to the New Measurement Law.
- \*8 Fixed unit: kPa
- \*9 When "K," "Q," "R," or "S" is selected, select "K" for ③ Combination of supply valve and release valve. Select "W" or "L3" for ⑥.

Manifold type is not available.

- PV: Air pressure supply port/Port for vacuum source (Vacuum pump)
- PS: Pilot pressure supply port • PD: Individual release pressure supply port
- V: Vacuum port • EXH: Exhaust port • PE: Pilot pressure exhaust port

## 6 Supply valve/Release valve/Digital pressure switch for vacuum connector specifications

Symbol	3 For supply valve/release valve*10		5 Lead wire with connector for pressure switch/ sensor*13	Image
	Connector type	Lead wire with connector		
L	L-type plug connector	○*11	○*14	
L1		×*12	○*14	
L2		○*11	×*15	
L3		×*12	×*15	
W		With lead wire for switch with energy saving function		
Y	Non-valve (without supply/release valve)		○*14	
Y1	When "N" is selected for 3		×	
N	When "N" is selected for both 3 and 5 (without supply/release valve, without switch, pressure sensor)			

- \*10 Solenoid valve with light/surge voltage suppressor
- \*11 The standard lead wire length for the solenoid valve is 300 mm.
- \*12 For lead wire lengths other than the standard, select "L1 or L3," and order a connector assembly with the desired length. (Refer to page 143.)
- \*13 The standard lead wire length for the pressure sensor is 3 m. The standard length for the lead wire with connector for the vacuum pressure switch and the lead wire length for the switch with energy saving function is 2 m.
- \*14 Select "L," "L1," or "Y" when the pressure sensor (P, T) is selected for 5 Pressure sensor/Digital pressure switch for vacuum specifications. Since only the grommet type is available for the pressure sensor, the sensor without a lead wire cannot be selected.
- \*15 Select when no vacuum pressure switch, pressure sensor, or vacuum pressure switch with connector without a lead wire is used.

## 7 Vacuum (V) port\*16

Symbol	Type	Port size	
06	Metric size	ø6 One-touch fitting	
08		ø8 One-touch fitting	

\*16 Supply (PV) port size of single unit: ø6

## 8 Optional Specifications\*17

Symbol	Type
Nil	Without option
B	With one bracket for mounting a single unit (A mounting screw is attached.)
D	With individual release pressure supply (PD) port*18
J	Vacuum break flow adjusting needle Round lock nut type
K	Vacuum break flow adjusting needle Screwdriver operation type
W	With exhaust interference prevention valve*19, *20, *21

- \*17 When more than one option is selected, list the option symbols in an alphabetical order. Example) -BJ
- \*18 Only M3 is available for PD port size. Use One-touch fittings or barb fittings with O.D. ø6.2 or less for piping. (Recommended fitting: M-3AU-4)
- \*19 To prevent backflow of the exhaust air, not for holding vacuum. This option does not completely stop the backflow of the exhaust air. Select the port exhaust type according to the application.
- \*20 When "J" is selected for 3 Combination of supply valve and release valve and "W" (exhaust interference prevention valve type) is selected for 8 Optional specifications/ Functions/Applications, install a release valve or vacuum breaker.
- \*21 When "K," "Q," "R," or "S" is selected for 5 Pressure sensor/Digital pressure switch for vacuum specifications, a model with an exhaust interference prevention valve is provided. So, it is not necessary to select "W."

## Single Unit and Options\*22

1 System/ Body type	2 Nominal nozzle size	3 Combination of supply valve and release valve	4 Rated voltage	5 Pressure sensor/digital pressure switch for vacuum specifications	6 Supply valve/release valve/digital pressure switch for vacuum connector specifications	7 Vacuum (V) port	8 Optional specifications
A/B/G	07 10 12 15	K	5 6	P/T	L/L1	06 08	B/D/J/K/W
				A/B/C/D/E/F/H/J	L/L1/L2/L3		
				N	L2/L3		
				K/Q/R/S	L3/W		
				P/T	L/L1		
				A/B/C/D/E/F/H/J	L/L1/L2/L3		
		R	5 6	P/T	L/L1		
				A/B/C/D/E/F/H/J	L/L1/L2/L3		
				N	L2/L3		
				P/T	L/L1		
				A/B/C/D/E/F/H/J	L/L1/L2/L3		
				N	L2/L3		
J	5 6	P/T	L/L1				
		A/B/C/D/E/F/H/J	L/L1/L2/L3				
		N	L2/L3				
N	0	P/T	Y				
		A/B/C/D/E/F/H/J	Y/Y1				
		N	N				

\*22 When "J" or "N" is selected for 3 Combination of Supply Valve and Release Valve, "D," "J," and "K" cannot be selected for 8 Optional Specifications/Functions/Applications.

For options not listed in the table above, please contact SMC.

\* Refer to the **Web Catalog** when mounting single unit to DIN rail.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

# 25A-ZK2 Series

## Replacement Parts/How to Order

### Valve assembly

25A - ZK2 - VA **A** **K** **5** **L** - A

① ② ③ ④

#### ① Applicable system

<b>A</b>	For ejector system
----------	--------------------

#### ② Valve type

<b>K</b>	Supply valve N.C., Release valve N.C.
<b>R</b>	Supply valve, self-holding type (Linked to release valve)
<b>J</b>	Supply valve only (Single)

#### ③ Rated voltage

<b>5</b>	24 VDC
<b>6</b>	12 VDC

#### ④ Lead wire entry direction

<b>L</b>	L-type plug connector with lead wire (Individual wiring)
<b>LO</b>	L-type plug connector, without connector

Select the ZK2-VAAK□LO-A for a switch with energy saving function. This assembly does not include special cable assembly for a switch with energy saving function.

### Vacuum pressure switch assembly

25A - ZK2 - ZS **E** **A** **M** **G** - A

① ② ③ ④

#### ① Rated pressure range and function

<b>E</b>	0 to -101 kPa	Vacuum pressure switch	Open collector 2 outputs
<b>F</b>	-100 to 100 kPa		
<b>V</b>	-100 to 100 kPa	Pressure switch with energy saving function	Open collector 1 output

#### ② Output specifications

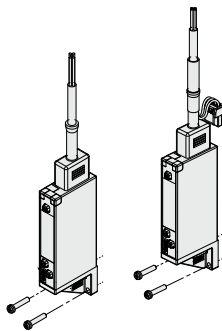
<b>A</b>	NPN
<b>B</b>	PNP

#### ③ Unit specifications

<b>Nil</b>	Unit selection function*1
<b>M</b>	SI unit only*2

\*1 The unit selection function is not available in Japan due to the Measurement Law.

\*2 Fixed unit: kPa



#### ④ Lead wire with connector

<b>Nil</b>	None	
<b>G</b>	With lead wire	When ① is E or F...For vacuum pressure switch, Lead wire with connector (Length 2 m)
		When ① is V...For switch with energy saving function, Lead wire with connector (Length 2 m)

### Connector assembly

ZK2 - LV **W** □ - A

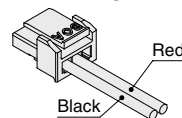
#### Applicable valve type

<b>W</b>	Valve type K/R (With supply valve and release valve)
<b>S</b>	Valve type J (Supply valve only)

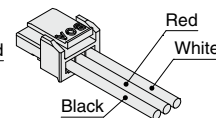
#### Lead wire length

<b>Nil</b>	300 mm
<b>6</b>	600 mm
<b>10</b>	1000 mm
<b>20</b>	2000 mm
<b>30</b>	3000 mm

#### For single



#### For double



### Lead wire with connector for vacuum pressure switch

(When individual lead wire is necessary, order with the part number below.)

#### Lead wire with connector for vacuum pressure switch

ZS - 39 - 5G

#### Lead wire with connector for switch with energy saving function

ZK2 - LW **A** 20 - A

#### Output specifications

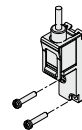
<b>A</b>	NPN open collector
<b>B</b>	PNP open collector

### Pressure sensor assembly

25A - ZK2 - PS **1** - A

#### Rated pressure range and specifications

<b>1</b>	0 to -101 kPa, Output: 1 to 5 V, Accuracy: ±2% F.S. or less
<b>3</b>	-100 to 100 kPa, Output: 1 to 5 V, Accuracy: ±2% F.S. or less



### High-noise reduction silencer case assembly

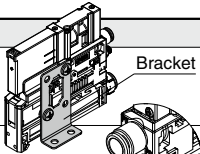
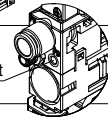
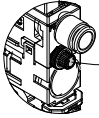
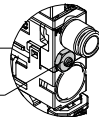

ZK2 - SC3 - **4** - A

#### Exhaust port size

<b>4</b>	ø4	For nozzle size 07, 10
<b>6</b>	ø6	For nozzle size 12, 15



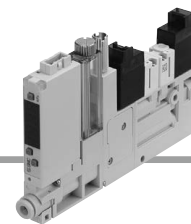
**Optional Specifications/Functions/Applications**

Symbol	Type	Function/Application
<b>B</b>	With one bracket for mounting a single unit (Mounting screw is attached.)  Bracket	<ul style="list-style-type: none"> <li>Use when a single unit is mounted to the floor in an upright position is requested. (The part number for ordering only a bracket is 25A-ZK2-BK1-A. Bolt nuts are included.)</li> </ul>
<b>D</b>	With individual release pressure supply (PD) port  PD port	<ul style="list-style-type: none"> <li>Use when supply pressure for vacuum release which pressure is different from the ejector supply pressure is requested.</li> </ul>
<b>J</b>	Vacuum break flow adjusting needle Round lock nut type  Vacuum break flow adjusting needle	<ul style="list-style-type: none"> <li>Thicker than standard hexagon type. More suitable for hand tightening.</li> <li>Round lock nut improves operability when the exhaust port type is used.</li> </ul>
<b>K</b>	Vacuum break flow adjusting needle Screwdriver operation type  Vacuum break flow adjusting needle	<ul style="list-style-type: none"> <li>Slotted type improves fine adjustment performance when the exhaust port type is used.</li> </ul>
<b>W</b>	With exhaust interference prevention valve  Exhaust interference prevention valve	<ul style="list-style-type: none"> <li>When ejectors are operated individually, exhausted air may flow backward from the V port of ejectors that are turned off. Exhaust interference prevention valve prevents backflow.</li> </ul>



[Option]  
\* CE-compliant:  
For DC only.

# Space Saving Vacuum Ejector 25A-ZQ Series



## How to Order

### Ejector Unit

25A-ZQ1 05 1U - K1 □ 5 L □ - EA □ G □ - □ □ - □

① Series compatible with secondary batteries

#### ① Nozzle nominal size      ② Exhaust type

05	ø0.5
07	ø0.7
10	ø1.0

1U	With silencer for single unit
3M	With silencer for manifold

#### ③ Solenoid valve combination (Refer to Table (1).)

Symbol	Supply valve	Vacuum release valve
K1	Normally closed	Normally closed
K2*1	Normally open	Normally closed
J1	Normally closed	None
J2*1	Normally open	None
Q1	Latching positive common	Normally closed
Q2	Latching positive common	None
N1	Latching negative common	Normally closed
N2	Latching negative common	None

\*1 In cases when "K2" or "J2" (supply valve normally open) is selected for the solenoid valve combination, when vacuum is stopped for long periods of time (10 minutes or more), do not continue to energize the supply valve, and shut off the air supply.

#### ④ Pilot valve (Refer to Table (1).)

Nil	Standard (DC: 1 W)*2
Y	DC low wattage type (0.5 W)*2

\*2 Avoid energizing the solenoid valve for long periods of time. (Refer to Design and Selection on Specific Product Precautions.)

#### ⑤ Solenoid valve rated voltage (Refer to Table (1).)

		CE-compliant
1*3	100 VAC (50/60 Hz)	—
2*3	200 VAC (50/60 Hz)	—
3*3	110 VAC (50/60 Hz)	—
4*3	220 VAC (50/60 Hz)	—
5	24 VDC	●
6	12 VDC	●

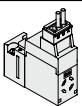


\*3 CE-compliant products are not available for "1," "2," "3" and "4."

**Table (1) Combination of Solenoid Valve, Pilot Valve and Power Supply Voltage**

Combination no.	Solenoid valve combination symbol	Pilot valve symbol	Applicable power supply voltage [V]					
			100 AC	200 AC	110 AC	220 AC	24 DC	12 DC
①	K1	Nil	—	—	—	—	●	●
②	K1	Y	—	—	—	—	●	●
③	K2	Nil	—	—	—	—	●	●
④	J1	Nil	●	●	●	●	●	●
⑤	J1	Y	—	—	—	—	●	●
⑥	J2	Nil	—	—	—	—	●	●
⑦	Q1	Nil	—	—	—	—	●	●
⑧	Q2	Nil	●	●	●	●	●	●
⑨	N1	Nil	—	—	—	—	●	●
⑩	N2	Nil	—	—	—	—	●	●

\* Combinations ① to ⑩ in the above table are the only possible options.

## ⑥ Electrical entry

<b>L</b>	L-type plug connector, with 0.3 m lead wire, with light/surge voltage suppressor	
<b>LO</b>	L-type plug connector, without connector, with light/surge voltage suppressor	
<b>G</b>	Grommet, with 0.3 m lead wire (Latching/AC type: Not applicable)	

## ⑦ Manual override\*4

<b>Nil</b>	Non-locking push type Latching type: Push-locking type
<b>B</b>	Locking type (Q1/Q2/N1/N2: Not applicable)

\*4 Latching type supply valve: Available in "Nil" only. In this case, the supply valve and release valve come with a push-locking type.

## ⑧ Vacuum pressure switch suction filter\*5

<b>EA</b>	0 to -101 kPa/NPN open collector 2 outputs, with suction filter
<b>EB</b>	0 to -101 kPa/PNP open collector 2 outputs, with suction filter
<b>EC</b>	0 to -101 kPa/NPN open collector 1 output + analog voltage, with suction filter
<b>EE</b>	0 to -101 kPa/PNP open collector 1 output + analog voltage, with suction filter
<b>FA</b>	100 to -100 kPa/NPN open collector 2 outputs, with suction filter
<b>FB</b>	100 to -100 kPa/PNP open collector 2 outputs, with suction filter
<b>FC</b>	100 to -100 kPa/NPN open collector 1 output + analog voltage, with suction filter
<b>FE</b>	100 to -100 kPa/PNP open collector 1 output + analog voltage, with suction filter
<b>F</b>	Suction filter only

\*5 The filter included in this product is of an simple type, and will become clogged quickly in environments with high quantities of dust or particulates. Please make additional use of an air suction filter of the ZFA, ZFB or ZFC series.

### **⚠ Warning**

The filter case of this suction filter is made of nylon. Contact with alcohol or similar chemicals may cause it to be damaged. Also, do not use the filter when these chemicals are present in the atmosphere.

## ⑪ Check valve\*8

<b>Nil</b>	None
<b>K</b>	With check valve

\*8 The check valve has a function to prevent the exhaust air from the silencer overflowing to the vacuum port side when a manifold is used. However, depending on usage conditions, it does not always suppress air overflow to the desired extent. During usage, please inspect thoroughly with actual machine. Also, in order to completely prevent the overflow of exhaust air, leave plenty of space between the check valve unit and adjacent ejector to avoid interference from the ejector's exhaust unit.

## ⑫ Fitting (V port)

Symbol	Applicable tubing O.D.
<b>0</b>	Without fitting (M5 x 0.8)

## ⑬ Fitting (P port)

Symbol	Applicable tubing O.D.	Object spec.
<b>Nil</b>	Without port	Manifold
<b>0</b>	Without fitting (M5 x 0.8)	Single unit

## ⑭ CE-compliant

<b>Nil</b>	—
<b>Q</b>	CE-compliant

\* CE-compliant: For DC only.

## ⑨ Vacuum pressure switch unit specifications

<b>Nil</b>	With unit switching function*6
<b>M</b>	Fixed SI unit*7
<b>P</b>	With unit switching function*6 (Initial value psi)

\*6 Under the New Measurement Law, sales of switches with the unit switching function are not allowed for use in Japan.

\*7 Fixed unit: kPa

## ⑩ Vacuum pressure switch lead wire specifications

<b>Nil</b>	Without connector
<b>G</b>	Lead wire with connector (Lead wire length 2 m) With connector cover

### **⚠ Warning**

- ① Cannot be used for vacuum retention.
- ② Use a release valve. (Without a release valve, a workpiece may not be released.)

\* The 25A- series specifications and dimensions are the same as those of the standard model.

## How to Order

**Manifold**

**25A – ZZQ1 07 – B S C**

**Number of stations\*1**

<b>01</b>	1 station
<b>02</b>	2 stations
⋮	⋮
<b>08</b>	8 stations

\*1 Number of stations varies according to nozzle nominal size during simultaneous operation.

**Maximum Number of Stations in Simultaneous Operation**

Nozzle nominal size	Maximum number of stations in simultaneous operation
ø0.5	8 stations
ø0.7	6 stations
ø1.0	4 stations

**Air pressure supply (P) port position**

**B** Both sides

**Exhaust**

**S** With silencers (Both sides)

**Vacuum release pressure supply port (PD port)**

<b>B</b>	None (Release pressure is supplied from the P port.)
<b>C</b>	Provided (Air can be alternatively supplied from the P port.)

\* The 25A- series specifications and dimensions are the same as those of the standard model.

**How to Order**

**Solenoid valve**

**Actuation**

1	Normally closed
---	-----------------

**25A-ZQ1-VQ1 1 0** [ ] - **5** **L** [ ]

**25A-ZQ1-VQ1 2 0** [ ] - **5** **L** [ ]

**Actuation**

2	Normally open
---	---------------

**Pilot valve**

Nil	Standard (1 W)
-----	----------------

**Solenoid valve rated voltage**

5	24 VDC
6	12 VDC

**Pilot valve**

Nil	Standard (DC: 1 W)
Y	DC low wattage type (0.5 W) * AC type: Not applicable
L	Latching positive common
N	Latching negative common

**Solenoid valve rated voltage**

1	100 VAC (50/60 Hz)
2	200 VAC (50/60 Hz)
3	110 VAC (50/60 Hz)
4	220 VAC (50/60 Hz)
5	24 VDC
6	12 VDC

**Manual override\*1**

Nil	Non-locking push type Latching type: Push-locking type
B	Locking type

\*1 Latching type: Available in "Nil" only

**Electrical entry\*2**

L	L-type plug connector, with 0.3 m lead wire	
LO	L-type plug connector, without connector	
G	Grommet, with 0.3 m lead wire (Latching/AC type: Not applicable)	

\*2 Mounting screws are attached.

**Vacuum pressure switch**

**25A-ZQ1-ZS** [ ] [ ] [ ] [ ] - [ ] - **A**

**Vacuum pressure switch specifications**

EA	0 to -101 kPa/NPN open collector 2 outputs, with suction filter
EB	0 to -101 kPa/PNP open collector 2 outputs, with suction filter
EC	0 to -101 kPa/NPN open collector 1 output + analog voltage, with suction filter
EE	0 to -101 kPa/PNP open collector 1 output + analog voltage, with suction filter
FA	100 to -100 kPa/NPN open collector 2 outputs, with suction filter
FB	100 to -100 kPa/PNP open collector 2 outputs, with suction filter
FC	100 to -100 kPa/NPN open collector 1 output + analog voltage, with suction filter
FE	100 to -100 kPa/PNP open collector 1 output + analog voltage, with suction filter

**Vacuum pressure switch unit specifications**

Nil	With unit switching function*1
M	Fixed SI unit*2
P	With unit switching function*1 (Initial value psi)

\*1 Under the New Measurement Law, sales of switches with the unit switching function are not allowed for use in Japan.  
\*2 Fixed unit: kPa

**Vacuum pressure switch lead wire specifications**

Nil	Without connector
G	Lead wire with connector (lead wire length 2 m) With connector cover

**Fitting (V port)**

Symbol	Applicable tubing O.D.
0	Without fitting (M5 x 0.8)

**Check valve\*3**

Nil	None
K	With check valve

\*3 The check valve has a function to prevent the exhaust air from the silencer overflowing to the vacuum port side when a manifold is used, but it is incapable of completely preventing overflow. During usage, please inspect thoroughly with actual machine.  
Also, in order to completely prevent the overflow of exhaust air, leave plenty of space between the check valve unit and adjacent ejector to avoid interference from the ejector's exhaust unit.

**Warning**

- Cannot be used for vacuum retention.
- Use a vacuum release valve. (Without a vacuum release valve, the workpiece may not be released.)

Lead wire with connector part no.	Note
ZS-39-5G	Lead wire length 2 m (With connector cover)

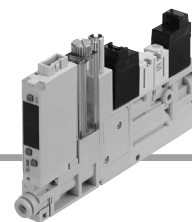
\* The 25A- series specifications and dimensions are the same as those of the standard model.



[Option]  
\* CE-compliant:  
For DC only.

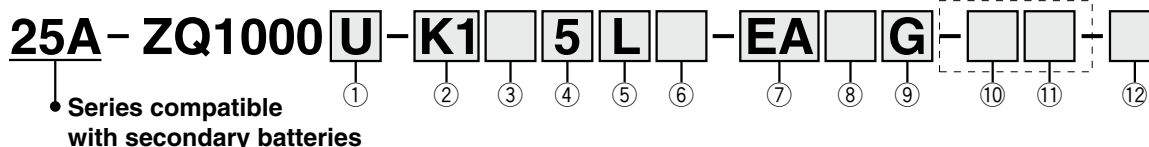
# Space Saving Vacuum Pump System

## 25A-ZQ Series



### How to Order

#### Vacuum pump unit



#### ① Body type

<b>U</b>	For single unit
<b>M</b>	For manifold

#### ② Solenoid valve combination (Refer to Table (1).)

Symbol	Supply valve	Vacuum release valve
<b>K1</b>	Normally closed	Normally closed
<b>K2</b> *1	Normally open	Normally closed
<b>J1</b>	Normally closed	None
<b>J2</b> *1	Normally open	None
<b>Q1</b>	Latching positive common	Normally closed
<b>Q2</b>	Latching positive common	None
<b>N1</b>	Latching negative common	Normally closed
<b>N2</b>	Latching negative common	None

⚠ The air in the adsorption section of this product is not released to the atmosphere at the vacuum suspension state.

As for "K1," "K2," "Q1" and "N1," use the vacuum release valve when a workpiece is detached.

Concerning "J1," "J2," "Q2" and "N2," devise the circuit for the vacuum release additionally when a workpiece is detached.

\*1 In cases when "K2" or "J2" (supply valve normally open) is selected for the solenoid valve combination, when vacuum is stopped for long periods of time (10 minutes or more), do not continue to energize the supply valve, and shut off the air supply.

#### ③ Pilot valve (Refer to Table (1).)

<b>Nil</b>	Standard (DC: 1 W)*2
<b>Y</b>	DC low wattage type (0.5 W)*2

\*2 Avoid energizing the solenoid valve for long periods of time. (Refer to Specific Product Precautions; Caution on Design and Selection.)

#### ④ Solenoid valve rated voltage (Refer to Table (1).)

		CE-compliant
<b>1</b> *3	100 VAC (50/60 Hz)	—
<b>2</b> *3	200 VAC (50/60 Hz)	—
<b>3</b> *3	110 VAC (50/60 Hz)	—
<b>4</b> *3	220 VAC (50/60 Hz)	—
<b>5</b>	24 VDC	●
<b>6</b>	12 VDC	●




\*3 CE-compliant products are not available for "1," "2," "3" and "4."

**Table (1) Combination of Solenoid Valve, Pilot Valve and Rated Voltage**

Combination no.	Solenoid valve combination symbol	Pilot valve symbol	Applicable power supply voltage [V]					
			100 AC	200 AC	110 AC	220 AC	24 DC	12 DC
①	<b>K1</b>	<b>Nil</b>	—	—	—	—	●	●
②	<b>K1</b>	<b>Y</b>	—	—	—	—	●	●
③	<b>K2</b>	<b>Nil</b>	—	—	—	—	●	●
④	<b>J1</b>	<b>Nil</b>	●	●	●	●	●	●
⑤	<b>J1</b>	<b>Y</b>	—	—	—	—	●	●
⑥	<b>J2</b>	<b>Nil</b>	—	—	—	—	●	●
⑦	<b>Q1</b>	<b>Nil</b>	—	—	—	—	●	●
⑧	<b>Q2</b>	<b>Nil</b>	●	●	●	●	●	●
⑨	<b>N1</b>	<b>Nil</b>	—	—	—	—	●	●
⑩	<b>N2</b>	<b>Nil</b>	—	—	—	—	●	●

\* Combinations ① to ⑩ in the above table are the only possible options.

## ⑤ Electrical entry

<b>L</b>	L-type plug connector, with 0.3 m lead wire, with light/surge voltage suppressor	
<b>LO</b>	L-type plug connector, without connector, with light/surge voltage suppressor	
<b>G</b>	Grommet, with 0.3 m lead wire (Latching/AC type: Not applicable)	

## ⑥ Manual override\*4

<b>Nil</b>	Non-locking push type Latching type: Push-locking type
<b>B</b>	Locking type (Q1/Q2/N1/N2: Not applicable)

\*4 Latching type supply valve: Available in "Nil" only. In this case, the supply valve and release valve come with a push-locking type.

## ⑦ Vacuum pressure switch suction filter\*5

<b>EA</b>	0 to -101 kPa/NPN open collector 2 outputs, with suction filter
<b>EB</b>	0 to -101 kPa/PNP open collector 2 outputs, with suction filter
<b>EC</b>	0 to -101 kPa/NPN open collector 1 output + analog voltage, with suction filter
<b>EE</b>	0 to -101 kPa/PNP open collector 1 output + analog voltage, with suction filter
<b>FA</b>	100 to -100 kPa/NPN open collector 2 outputs, with suction filter
<b>FB</b>	100 to -100 kPa/PNP open collector 2 outputs, with suction filter
<b>FC</b>	100 to -100 kPa/NPN open collector 1 output + analog voltage, with suction filter
<b>FE</b>	100 to -100 kPa/PNP open collector 1 output + analog voltage, with suction filter
<b>F</b>	Suction filter only

\*5 The filter included in this product is of a simple type, and will become clogged quickly in environments with high quantities of dust or particulates. Please make additional use of an air suction filter of the ZFA, ZFB or ZFC series.

### ⚠ Warning

The filter case of this suction filter is made of nylon. Contact with alcohol or similar chemicals may cause it to be damaged. Also, do not use the filter when these chemicals are present in the atmosphere.

## ⑧ Vacuum pressure switch unit specifications

<b>Nil</b>	With unit switching function*6
<b>M</b>	Fixed SI unit*7
<b>P</b>	With unit switching function*6 (Initial value psi)

\*6 Under the New Measurement Law, sales of switches with the unit switching function are not allowed for use in Japan.

\*7 Fixed unit: kPa

## ⑨ Vacuum pressure switch lead wire specifications

<b>Nil</b>	Without connector
<b>G</b>	Lead wire with connector (Lead wire length 2 m) With connector cover

## ⑩ Fitting (V port)\*8

Symbol	Applicable tubing O.D.
<b>0</b>	Without fitting (M5 x 0.8)

## ⑪ Fitting (PS / PV port)\*8

Symbol	Applicable tubing O.D.	Part no.	Object spec.
<b>Nil</b>	Without port	—	Manifold
<b>0</b>	Without fitting (M5 x 0.8)	—	Single unit

## ⑫ CE-compliant

<b>Nil</b>	—
<b>Q</b>	CE-compliant

\* CE-compliant: For DC only.

\*8 For filter only (Without vacuum pressure switch)

When neither V port fitting nor PS/PV port fitting are needed, enter nothing or -00 in the dotted line "How to Order".

\* The 25A-series specifications and dimensions are the same as those of the standard model.

## How to Order

**Manifold** 25A-ZZQ1 **08** - **□** **O** **□**

Number of stations ●

01	1 station
02	2 stations
⋮	⋮
08	8 stations

Vacuum pressure supply port (PV port)  
Port location  
(Refer to Table (1).)

L	Left side
R	Right side

**Table (1) Air Pressure Supply Port Location on the Manifold**

PD port	Manifold Port location	Left			Right		
		PS	PV	PD	PS	PV	PD
B	L (Left side)	—	●	—	●*1	—	—
	R (Right side)	●*1	—	—	—	●	—
C	L (Left side)	—	●	●	●	—	●
	R (Right side)	●	—	●	—	●	●

\*1 The position of each port is shown as right and left sides viewed from the front side of the vacuum port.

Release pressure is commonly supplied from the PS port.  
\* PS: Pilot pressure supply port, PV: Vacuum pressure supply port, PD: Release pressure supply port

Release pressure supply port (PD port) ●

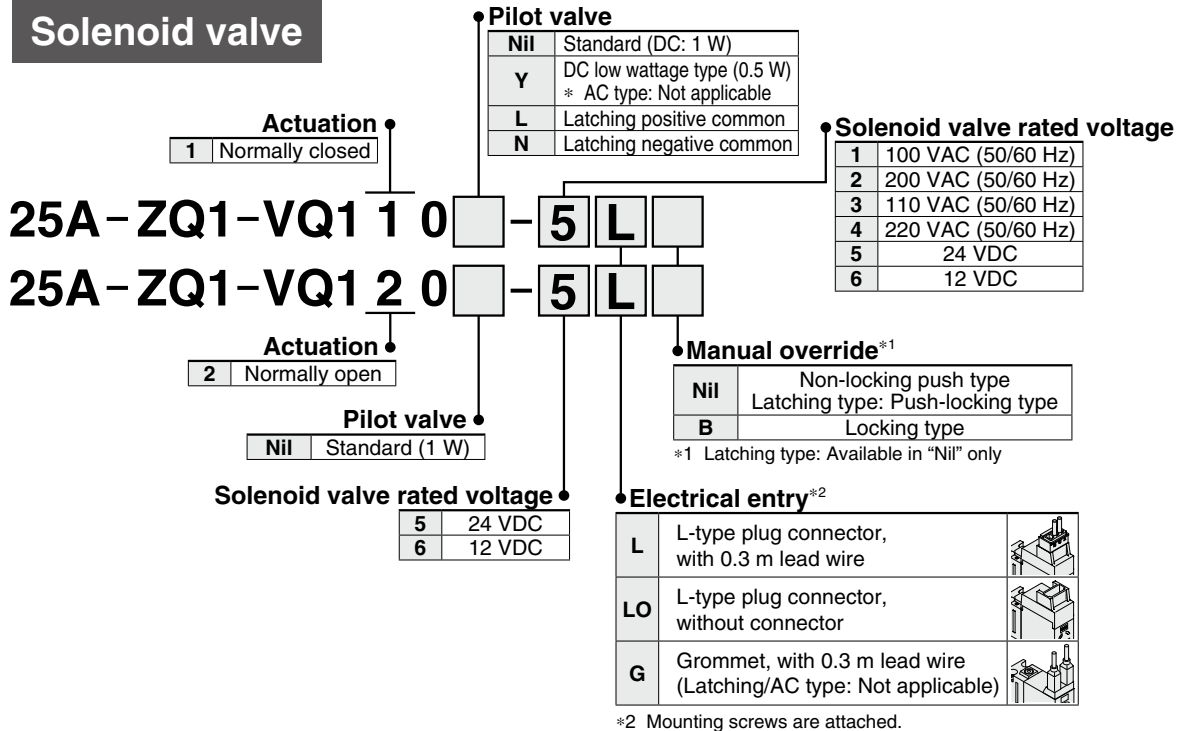
B	None (Release pressure is supplied from the PS port.)
C	Provided (Air can be alternatively supplied from the PS port.)

\* The 25A- series specifications and dimensions are the same as those of the standard model.

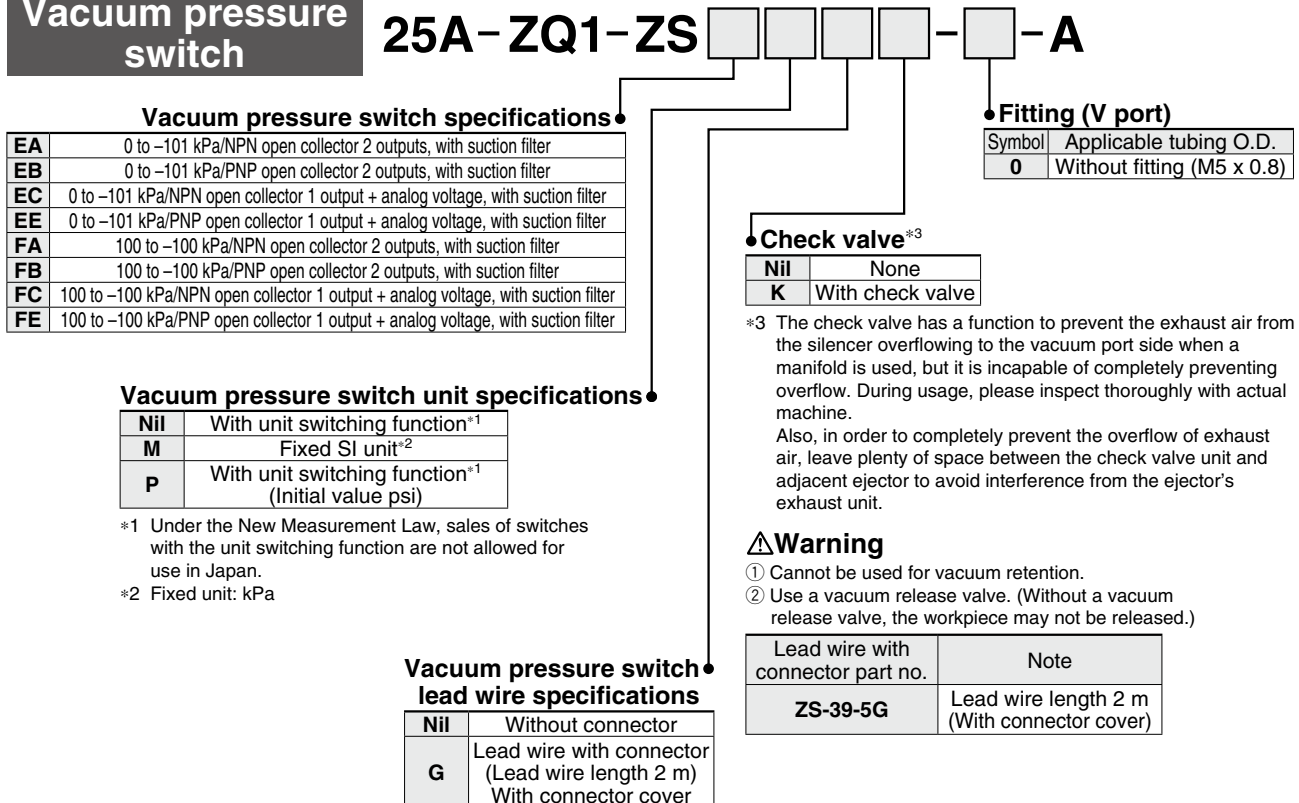


## How to Order

### Solenoid valve



### Vacuum pressure switch



\* The 25A- series specifications and dimensions are the same as those of the standard model.

# Membrane Air Dryer

## 25A-IDG Series

### Single Unit/Standard Dew Point -40°C/-60°C Specifications



#### How to Order

**25A - IDG** **50** **L** **A -** **03** **- P**

Series compatible with secondary batteries

Size

30
50
60
75
100

Standard dew point temperature

Symbol	Standard dew point [°C]
L	-40
S	-60

Symbol	30	50	60	75	100
L	●	●	●	●	●
S	—	—	●	●	●

Semi-standard

Symbol	Contents
Nil	None
R	Flow direction (Right → Left)

Fitting for purge air discharge

Symbol	Contents
P	With fitting for purge air discharge

Accessory

Symbol	Description
Nil	None
B	With bracket

\* When symbol B is indicated, a bracket assembly with a part number shown in the table left below is shipped together as an accessory, (but not assembled).

#### Piping materials

Piping to the outlet side with piping made of water-absorbent or hydrophilic material (nylon, etc.) may result in a rising dew point on the outlet side. Therefore, be sure to use either stainless steel or fluoropolymer piping and fittings.

Port size

Symbol	Bore	Size				
		30	50	60	75	100
02	Rc1/4	●	●	—	—	—
03	Rc3/8	●	●	●	●	●
04	Rc1/2	—	—	●	●	●

#### Bracket Assembly (Accessory) Part Nos.

Part no.	Applicable model
25A-BM64	25A-IDG30LA, 50LA
25A-BM65	25A-IDG60LA, 75LA, 100LA

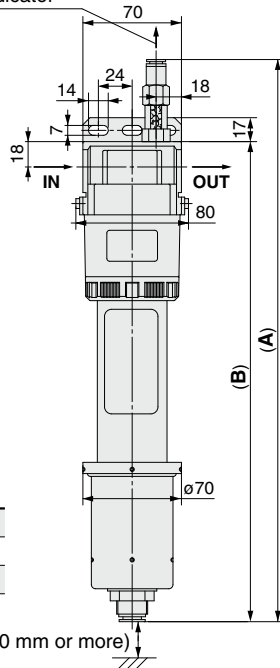
\* Assembly of a bracket and 2 mounting screws

\* The 25A- series specifications are the same as those of the standard model.

## Dimensions

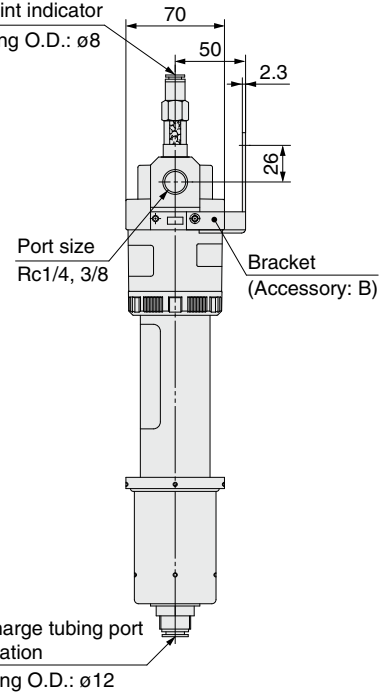
### 25A-IDG30LA 25A-IDG50LA

Purge air for dew point indicator



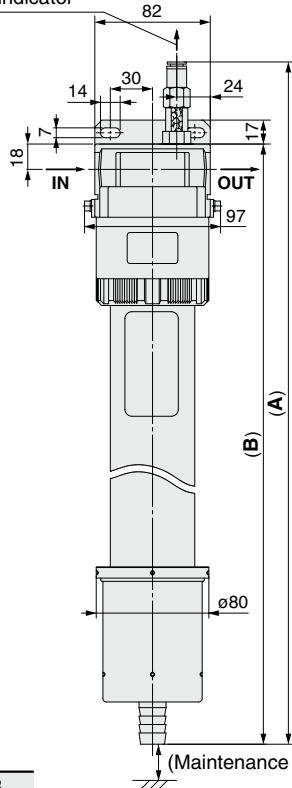
Model	A	B
25A-IDG30LA	361	302
25A-IDG50LA	400	341

Purge air discharge tubing port for dew point indicator  
Applicable tubing O.D.:  $\phi 8$



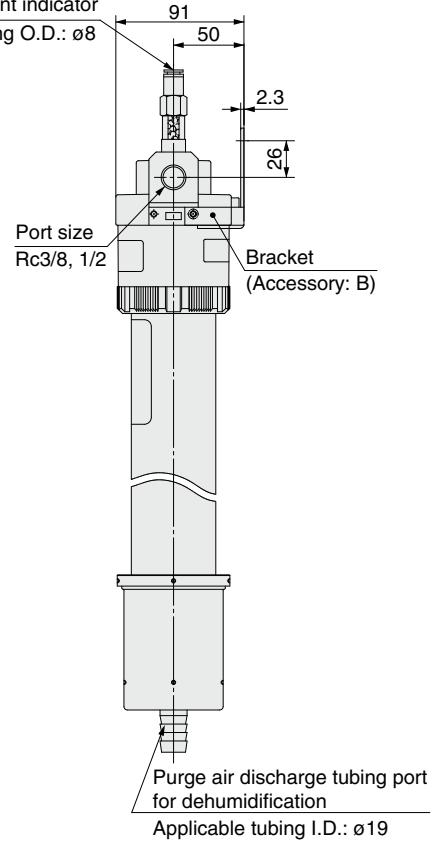
### 25A-IDG60LA 25A-IDG75LA 25A-IDG100LA

Purge air for dew point indicator



Model	A	B
25A-IDG60LA	426	367
25A-IDG75LA	495	436
25A-IDG100LA	560	501

Purge air discharge tubing port for dew point indicator  
Applicable tubing O.D.:  $\phi 8$



# Main Line Filter

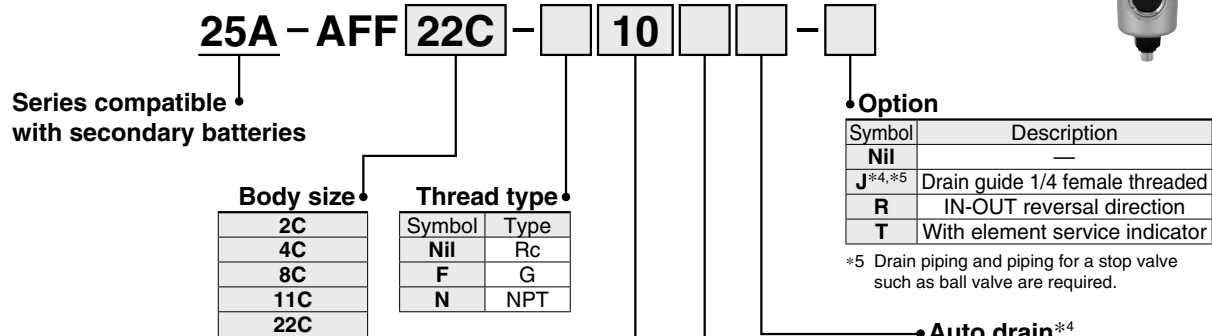
## 25A-AFF Series

RoHS



### How to Order

#### 25A-AFF2C to 25A-AFF22C



#### Bracket Assembly Part Nos.\*3

Applicable model	Part no.
25A-AFF2C	25A-AM-BM101
25A-AFF4C	25A-AM-BM102
25A-AFF8C	25A-AM-BM103
25A-AFF11C	25A-AM-BM104
25A-AFF22C	25A-AM-BM105

\*3 Assembly of a bracket and 2 mounting screws

#### Port size

Symbol	Size	Applicable body size				
		2C	4C	8C	11C	22C
01	1/8	●	—	—	—	—
02	1/4	●	●	—	—	—
03	3/8	—	●	●	—	—
04	1/2	—	—	●	●	—
06	3/4	—	—	—	●	●
10	1	—	—	—	—	●

#### Auto drain\*4

Symbol	Description
Nil	Drain cock (Without auto drain)
C	N.C. auto drain
D	N.O. auto drain

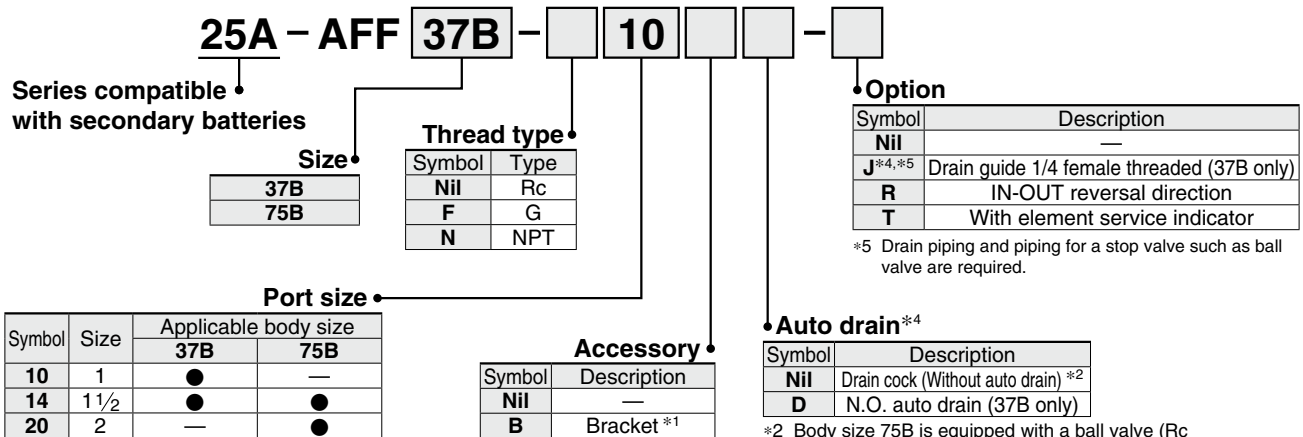
\*4 Only one drain exhaust method can be selected. The drain cock, N.C. auto drain, N.O. auto drain and drain guide cannot be selected together.

#### Accessory

Symbol	Description
Nil	—
B	Bracket *2

\*2 When symbol "B" is indicated, a bracket assembly with a part number shown in the left table is shipped together as an accessory, (but not assembled).

#### 25A-AFF37B/75B



#### Bracket Assembly Part Nos.\*3

Applicable model	Part no.
25A-AFF37B	25A-BM56
25A-AFF75B	25A-BM57

\*3 Assembly of a bracket and 2 mounting screws

\* The 25A- series specifications and dimensions are the same as those of the standard model.

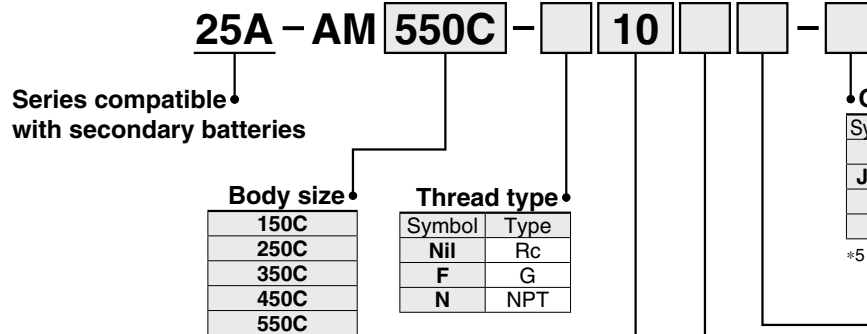
# Mist Separator

## 25A-AM Series



### How to Order

#### 25A-AM150C to 25A-AM550C



#### Bracket Assembly Part Nos.\*3

Applicable model	Part no.
25A-AM150C	25A-AM-BM101
25A-AM250C	25A-AM-BM102
25A-AM350C	25A-AM-BM103
25A-AM450C	25A-AM-BM104
25A-AM550C	25A-AM-BM105

\*3 Assembly of a bracket and 2 mounting screws

#### Port size

Symbol	Size	Applicable body size				
		150C	250C	350C	450C	550C
01	1/8	●	—	—	—	—
02	1/4	●	●	—	—	—
03	3/8	—	●	●	—	—
04	1/2	—	—	●	●	—
06	3/4	—	—	—	●	●
10	1	—	—	—	—	●

#### Auto drain\*4

Symbol	Description
Nil	Drain cock (Without auto drain)
C	N.C. auto drain
D	N.O. auto drain

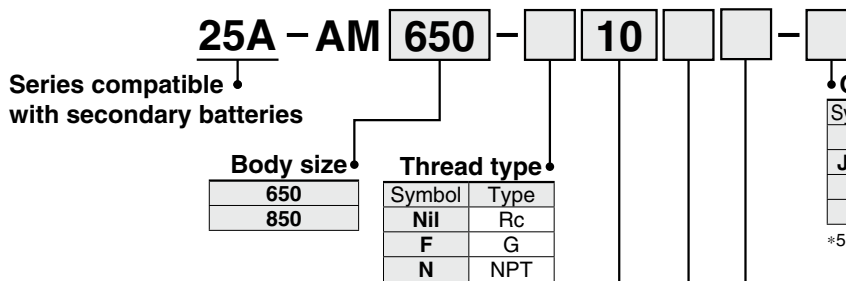
\*4 Only one drain exhaust method can be selected. The drain cock, N.C. auto drain, N.O. auto drain and drain guide cannot be selected together.

#### Accessory

Symbol	Description
Nil	—
B	Bracket*2

\*2 When symbol "B" is indicated, a bracket assembly with a part number shown in the left table is shipped together as an accessory, (but not assembled).

#### 25A-AM650/850



Symbol	Size	Applicable body size	
		650	850
10	1	●	—
14	1 1/2	●	●
20	2	—	●

#### Accessory

Symbol	Description
Nil	—
B	Bracket*1

\*1 When symbol "B" is indicated, a bracket assembly with a part number shown in the left table is shipped together as an accessory, (but not assembled).

#### Bracket Assembly Part Nos.\*3

Applicable model	Part no.
25A-AM650	25A-BM56
25A-AM850	25A-BM57

\*3 Assembly of a bracket and 2 mounting screws

#### Auto drain\*4

Symbol	Description
Nil	Drain cock (Without auto drain)*2
D	N.O. auto drain (650 only)

\*2 Body size 850 is equipped with a ball valve (Rc 3/8 female threaded).

\*4 Body size 650: Only one drain exhaust method can be selected. The drain cock, N.O. auto drain and drain guide cannot be selected together.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

# Micro Mist Separator

## 25A-AMD Series



### How to Order

#### 25A-AMD150C to 25A-AMD550C

25A - AMD 550C - [ ] 10 [ ] [ ] - [ ]

Series compatible with secondary batteries

Body size

150C
250C
350C
450C
550C

Thread type

Symbol	Type
Nil	Rc
F	G
N	NPT

Option

Symbol	Description
Nil	—
J*4,*5	Drain guide 1/4 female threaded
R	IN-OUT reversal direction
T	With element service indicator

\*5 Drain piping and piping for a stop valve such as ball valve are required.

Auto drain\*4

Symbol	Description
Nil	Drain cock (Without auto drain)
C	N.C. auto drain
D	N.O. auto drain

\*4 Only one drain exhaust method can be selected. The drain cock, N.C. auto drain, N.O. auto drain and drain guide cannot be selected together.

Port size

Symbol	Size	Applicable body size				
		150C	250C	350C	450C	550C
01	1/8	●	—	—	—	—
02	1/4	●	●	—	—	—
03	3/8	—	●	●	—	—
04	1/2	—	—	●	●	—
06	3/4	—	—	—	●	●
10	1	—	—	—	—	●

#### Bracket Assembly Part Nos.\*3

Applicable model	Part no.
25A-AMD150C	25A-AM-BM101
25A-AMD250C	25A-AM-BM102
25A-AMD350C	25A-AM-BM103
25A-AMD450C	25A-AM-BM104
25A-AMD550C	25A-AM-BM105

\*3 Assembly of a bracket and 2 mounting screws

Accessory

Symbol	Description
Nil	—
B	Bracket *2

\*2 When symbol "B" is indicated, a bracket assembly with a part number shown in the left table is shipped together as an accessory, (but not assembled).

#### 25A-AMD650/850

25A - AMD 650 - [ ] 10 [ ] [ ] - [ ]

Series compatible with secondary batteries

Body size

650
850

Thread type

Symbol	Type
Nil	Rc
F	G
N	NPT

Option

Symbol	Description
Nil	—
J*4,*5	Drain guide 1/4 female threaded (650 only)
R	IN-OUT reversal direction
T	With element service indicator

\*5 Drain piping and piping for a stop valve such as ball valve are required.

Port size

Symbol	Size	Applicable body size	
		650	850
10	1	●	—
14	1 1/2	●	●
20	2	—	●

Accessory

Symbol	Description
Nil	—
B	Bracket *1

\*1 When symbol "B" is indicated, a bracket assembly with a part number shown in the left table is shipped together as an accessory, (but not assembled).

Auto drain\*4

Symbol	Description
Nil	Drain cock (Without auto drain) *2
D	N.O. auto drain (650 only)

\*2 Body size 850 is equipped with a ball valve (Rc 3/8 female threaded).

\*4 Body size 650: Only one drain exhaust method can be selected. The drain cock, N.O. auto drain and drain guide cannot be selected together.

#### Bracket Assembly Part Nos.\*3

Applicable model	Part no.
25A-AMD650	25A-BM56
25A-AMD850	25A-BM57

\*3 Assembly of a bracket and 2 mounting screws

\* The 25A- series specifications and dimensions are the same as those of the standard model.

# Micro Mist Separator with Pre-filter

## 25A-AMH Series

RoHS



### How to Order

#### 25A-AMH150C to 25A-AMH550C

25A - AMH 550C - [ ] 10 [ ] [ ] - [ ]

Series compatible with secondary batteries

Body size

150C
250C
350C
450C
550C

Thread type

Symbol	Type
Nil	Rc
F	G
N	NPT

Option

Symbol	Description
Nil	—
J <sup>*4,*5</sup>	Drain guide 1/4 female threaded
R	IN-OUT reversal direction
T	With element service indicator

<sup>\*5</sup> Drain piping and piping for a stop valve such as ball valve are required.

Auto drain<sup>\*4</sup>

Symbol	Description
Nil	Drain cock (Without auto drain)
C	N.C. auto drain
D	N.O. auto drain

<sup>\*4</sup> Only one drain exhaust method can be selected. The drain cock, N.C. auto drain, N.O. auto drain and drain guide cannot be selected together.

Port size

Symbol	Size	Applicable body size				
		150C	250C	350C	450C	550C
01	1/8	●	—	—	—	—
02	1/4	●	●	—	—	—
03	3/8	—	●	●	—	—
04	1/2	—	—	●	●	—
06	3/4	—	—	—	●	●
10	1	—	—	—	—	●

Accessory

Symbol	Description
Nil	—
B	Bracket <sup>*2</sup>

<sup>\*2</sup> When symbol "B" is indicated, a bracket assembly with a part number shown in the left table is shipped together as an accessory, (but not assembled).

Bracket Assembly Part Nos. <sup>\*3</sup>

Applicable model	Part no.
25A-AMH150C	25A-AMBM101
25A-AMH250C	25A-AMBM102
25A-AMH350C	25A-AMBM103
25A-AMH450C	25A-AMBM104
25A-AMH550C	25A-AMBM105

<sup>\*3</sup> Assembly of a bracket and 2 mounting screws

#### 25A-AMH650/850

25A - AMH 650 - [ ] 10 [ ] [ ] - [ ]

Series compatible with secondary batteries

Body size

650
850

Thread type

Symbol	Type
Nil	Rc
F	G
N	NPT

Option

Symbol	Description
Nil	—
J <sup>*4,*5</sup>	Drain guide 1/4 female threaded (650 only)
R	IN-OUT reversal direction
T	With element service indicator

<sup>\*5</sup> Drain piping and piping for a stop valve such as ball valve are required.

Port size

Symbol	Size	Applicable body size	
		650	850
10	1	●	—
14	1 1/2	●	—
20	2	—	●

Accessory

Symbol	Description
Nil	—
B	Bracket <sup>*1</sup>

<sup>\*1</sup> When symbol "B" is indicated, a bracket assembly with a part number shown in the left table is shipped together as an accessory, (but not assembled).

Auto drain<sup>\*4</sup>

Symbol	Description
Nil	Drain cock (Without auto drain) <sup>*2</sup>
D	N.O. auto drain (650 only)

<sup>\*2</sup> Body size 850 is equipped with a ball valve (Rc 3/8 female threaded).

<sup>\*4</sup> Body size 650: Only one drain exhaust method can be selected. The drain cock, N.O. auto drain and drain guide cannot be selected together.

Bracket Assembly Part Nos. <sup>\*3</sup>

Applicable model	Part no.
25A-AMH650	25A-BM56
25A-AMH850	25A-BM57

<sup>\*3</sup> Assembly of a bracket and 2 mounting screws

\* The 25A- series specifications and dimensions are the same as those of the standard model.

# Exhaust Cleaner for Clean Room

## 25A-AMP Series

RoHS



### How to Order

25A - AMP 2 0 - 03 [ ] - [ ]

Series compatible with secondary batteries

Size

2
3
4

Port size

Symbol	Port size	Size		
		2	3	4
02	Rc1/4	●	—	—
03	Rc3/8	●	●	—
04	Rc1/2	—	●	●
06	Rc3/4	—	—	●

Semi-standard specifications

Symbol	Description
Nil	None
R	Flow direction Right→Down*3
T	With element service indicator

\*3 Flow direction when the nameplate is viewed from the front. Indicate RT when combining.

Accessories

Symbol	Name
Nil	None
B	With bracket*1

\*1 When symbol "B" is indicated, a bracket assembly with a part number shown in the left table is shipped together as an accessory, (but not assembled).

#### Bracket Assembly Part Nos.\*2

Applicable model	Part no.
25A-AMP220	25A-BM66
25A-AMP320	25A-BM67
25A-AMP420	25A-BM68

\*2 Assembly of a bracket and 2 mounting screws

\* The 25A- series specifications and dimensions are the same as those of the standard model.



# Air Filter

# 25A-AF20-A to 25A-AF60-A



## How to Order

25A - AF 30 -   03 B -   - A

1  
 2  
 3  
 4  
 5

• Series compatible with secondary batteries

- Option/Semi-standard: Select one each for a to c.
- Option/Semi-standard symbol: When more than one specification is required, indicate in alphanumeric order.  
Example) 25A-AF30-N03B-RZ-A

		Symbol	Description	①							
				Body size							
				20	30	40	50	60			
②	Pipe thread type	Nil	Rc	●	●	●	●	●			
		N	NPT	●	●	●	●	●			
		F	G	●	●	●	●	●			
		+									
③	Port size	01	1/8	●	—	—	—	—			
		02	1/4	●	●	●	—	—			
		03	3/8	—	●	●	—	—			
		04	1/2	—	—	●	—	—			
		06	3/4	—	—	●	●	—			
		10	1	—	—	—	●	●			
		+									
④	Option	a	Mounting	Nil	Without mounting option		●	●	●	●	●
				B*1	With bracket		●	●	●	●	●
		+									
⑤	Semi-standard	b	Flow direction	Nil	Flow direction: Left to right		●	●	●	●	●
				R	Flow direction: Right to left		●	●	●	●	●
		+									
		c	Pressure unit	Nil	Name plate and caution plate for bowl in SI units: MPa		●	●	●	●	●
				Z*2	Name plate and caution plate for bowl in imperial units: psi, °F		○*2	○*2	○*2	○*2	○*2

\*1 A bracket is not assembled and supplied loose at the time of shipment. Including 2 mounting screws.

\*2 ○ : For pipe thread type: NPT. This product is for overseas use only according to the New Measurement Law.  
(The SI unit type is provided for use in Japan.)

\* The 25A- series specifications and dimensions are the same as those of the standard model.

### Bracket, Bowl Assembly Part Nos. for the 25A- Series

Option	Model	25A-AF20-A	25A-AF30-A	25A-AF40-A	25A-AF40-06-A	25A-AF50-A 25A-AF60-A
<b>Bracket assembly</b> *1		25A-AF22P-050AS	25A-AF32P-050AS	25A-AF42P-050AS	25A-AF42P-070AS	25A-AF52P-050AS
<b>Bowl assembly</b>		25A-C2SF-A	25A-C3SF-A	25A-C4SF-A		

\*1 Assembly of a bracket and 2 mounting screws.

# Mist Separator

# 25A-AFM20-A to 25A-AFM40-A

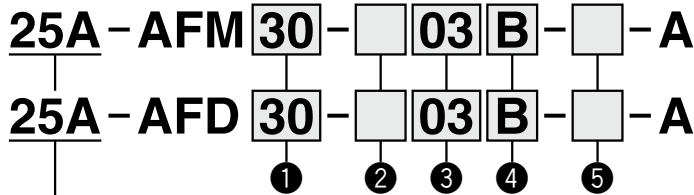
## Micro Mist Separator

# 25A-AFD20-A to 25A-AFD40-A



- 25A-AFM Series Nominal filtration rating: 0.3 μm
- 25A-AFD Series Nominal filtration rating: 0.01 μm

### How to Order



• Series compatible with secondary batteries

- Option/Semi-standard: Select one each for **a** to **c**.
- Option/Semi-standard symbol: When more than one specification is required, indicate in alphanumeric order. Example) 25A-AFM30-N03B-RZ-A

		Symbol	Description	①			
				Body size			
				20	30	40	
②	Pipe thread type	Nil	Rc	●	●	●	
		N	NPT	●	●	●	
		F	G	●	●	●	
		+					
③	Port size	01	1/8	●	—	—	
		02	1/4	●	●	●	
		03	3/8	—	●	●	
		04	1/2	—	—	●	
		06	3/4	—	—	●	
		+					
④	Option a	Mounting	Nil	Without mounting option	●	●	●
			B*1	With bracket	●	●	●
		+					
⑤	Semi-standard b	Flow direction	Nil	Flow direction: Left to right	●	●	●
			R	Flow direction: Right to left	●	●	●
		+					
	c	Pressure unit	Nil	Name plate and caution plate for bowl in SI units: MPa	●	●	●
			Z*2	Name plate and caution plate for bowl in imperial units: psi, °F	○*2	○*2	○*2

\*1 A bracket is not assembled and supplied loose at the time of shipment. Including 2 mounting screws.

\*2 ○ : For pipe thread type: NPT. This product is for overseas use only according to the New Measurement Law. (The SI unit type is provided for use in Japan.)

\* The 25A- series specifications and dimensions are the same as those of the standard model.

### Bracket, Bowl Assembly Part Nos. for the 25A- Series

Option	Model	25A-AFM20-A 25A-AFD20-A	25A-AFM30-A 25A-AFD30-A	25A-AFM40-A 25A-AFD40-A	25A-AFM40-06-A 25A-AFD40-06-A
<b>Bracket assembly</b> *1		25A-AF22P-050AS	25A-AF32P-050AS	25A-AF42P-050AS	25A-AF42P-070AS
<b>Bowl assembly</b>		25A-C2SF-A	25A-C3SF-A	25A-C4SF-A	

\*1 Assembly of a bracket and 2 mounting screws.

# Regulator

# 25A-AR20-B to 25A-AR60-B

## Regulator with Backflow Function

# 25A-AR20K-B to 25A-AR60K-B



### How to Order

**25A - AR** 30 K -   03 B -   - **B**

1  
 2  
 3  
 4  
 5  
 6

• Series compatible with secondary batteries

- Option/Semi-standard: Select one each for a to f.
- Option/Semi-standard symbol: When more than one specification is required, indicate in alphanumeric order. Example) 25A-AR30K-03B-1NR-B

	Symbol	Description	①								
			Body size								
			20	25	30	40	50	60			
②	With backflow function	Nil	Without backflow function	●	●	●	●	●	●		
		K	With backflow function	●	●	●	●	●	●		
+											
③	Pipe thread type	Nil	Rc	●	●	●	●	●	●		
		N	NPT	●	●	●	●	●	●		
		F	G	●	●	●	●	●	●		
+											
④	Port size	01	1/8	●	—	—	—	—	—		
		02	1/4	●	●	●	●	—	—		
		03	3/8	—	●	●	●	—	—		
		04	1/2	—	—	—	●	—	—		
		06	3/4	—	—	—	●	●	—		
		10	1	—	—	—	—	●	●		
+											
⑤	*1 Option a	Mounting	Nil	Without mounting option	●	●	●	●	●	●	
			B*2	With bracket	●	●	●	●	●	●	
			H	With set nut (For panel fitting)	●	●	●	●	—	—	
+											
⑥	Semi-standard	b	Set pressure	Nil	0.05 to 0.85 MPa setting	●	●	●	●	●	●
				1*3	0.02 to 0.2 MPa setting	●	●	●	●	●	●
		+									
		c	Exhaust mechanism	Nil	Relieving type	●	●	●	●	●	●
				N	Non-relieving type	●	●	●	●	●	●
		+									
		d	Flow direction	Nil	Flow direction: Left to right	●	●	●	●	●	●
				R	Flow direction: Right to left	●	●	●	●	●	●
		+									
		e	Knob	Nil	Downward	●	●	●	●	●	●
				Y	Upward	●	●	●	●	●	●
		+									
f	Pressure unit	Nil	Name plate in SI units: MPa	●	●	●	●	●	●		
		Z*4	Name plate in imperial units: psi	○*4	○*4	○*4	○*4	○*4	○*4		

- \*1 Option "B", "H" are not assembled and supplied loose at the time of shipment.
- \*2 Assembly of a bracket and set nuts (25A-AR20(K) to 25A-AR40(K)). Including 2 mounting screws for the 25A-AR50(K) and 25A-AR60(K).
- \*3 Pressure can be set at the upper limit of the specification or more, however, be sure to set the pressure within specification.
- \*4 ○: For pipe thread type: NPT. This product is for overseas use only according to the New Measurement Law. (The SI unit type is provided for use in Japan.)

\* The 25A- series specifications and dimensions are the same as those of the standard model.

### Bracket, Set Nut Part Nos. for the 25A- Series

Option	Model	25A-AR20(K)-B	25A-AR25(K)-B	25A-AR30(K)-B	25A-AR40(K)-B	25A-AR50(K)-B 25A-AR60(K)-B
<b>Bracket assembly</b> *1		25A-AR23P-270AS	25A-AR28P-270AS	25A-AR33P-270AS	25A-AR43P-270AS	25A-AR52P-270AS*2
<b>Set nut</b>		AR23P-260S	AR28P-260S	AR33P-260S	AR43P-260S	—*3

- \*1 Assembly of a bracket and set nuts.
- \*2 Assembly of a bracket and 2 mounting screws.
- \*3 Please consult with SMC regarding the set nuts for the 25A-AR50(K) and 25A-AR60(K).

# Filter Regulator

# 25A-AW20-B to 25A-AW60-B

## Filter Regulator with Backflow Function

# 25A-AW20K-B to 25A-AW60K-B



### How to Order

**25A - AW** 30 K -   03 B -   - **B**

1
2
3
4
5
6

• Series compatible with secondary batteries

- Option/Semi-standard: Select one each for a to e.
- Option/Semi-standard symbol: When more than one specification is required, indicate in alphanumeric order.  
Example) 25A-AW30K-03B-1N-B

		Symbol	Description	① Body size			
				20	30	40	60
②	With backflow function	Nil	Without backflow function	●	●	●	●
		K	With backflow function	●	●	●	●
③	Pipe thread type	Nil	Rc	●	●	●	●
		N	NPT	●	●	●	●
		F	G	●	●	●	●
④	Port size	01	1/8	●	—	—	—
		02	1/4	●	●	●	—
		03	3/8	—	●	●	—
		04	1/2	—	—	●	—
		06	3/4	—	—	●	●
		10	1	—	—	—	●
⑤	*1 Option a Mounting	Nil	Without mounting option	●	●	●	●
		B*2	With bracket	●	●	●	●
		H	With set nut (For panel fitting)	●	●	●	—
⑥	b Set pressure	Nil	0.05 to 0.85 MPa setting	●	●	●	●
		1*3	0.02 to 0.2 MPa setting	●	●	●	●
	c Exhaust mechanism	Nil	Relieving type	●	●	●	●
		N	Non-relieving type	●	●	●	●
	d Flow direction	Nil	Flow direction: Left to right	●	●	●	●
		R	Flow direction: Right to left	●	●	●	●
	e Pressure unit	Nil	Name plate and caution plate for bowl in SI units: MPa	●	●	●	●
		Z*4	Name plate and caution plate for bowl in imperial units: psi, °F	○*4	○*4	○*4	○*4

\*1 Option "B", "H" are not assembled and supplied loose at the time of shipment.

\*2 Assembly of a bracket and set nuts (25A-AW20(K) to 25A-AW40(K)). Including 2 mounting screws for the 25A-AW60(K).

\*3 Pressure can be set at the upper limit of the specification or more, however, be sure to set the pressure within specification.

\*4 ○ : For pipe thread type: NPT. This product is for overseas use only according to the New Measurement Law.

(The SI unit type is provided for use in Japan.)

\* The 25A- series specifications and dimensions are the same as those of the standard model.

### Bracket, Set Nut, Bowl Assembly Part Nos. for the 25A- Series

Option	Model	25A-AW20(K)-B	25A-AW30(K)-B	25A-AW40(K)-B	25A-AW60(K)-B
<b>Bracket assembly</b> *1		25A-AW23P-270AS	25A-AR33P-270AS	25A-AR43P-270AS	25A-AW62P-270AS*2
<b>Set nut</b>		AR23P-260S	AR33P-260S	AR43P-260S	—*3
<b>Bowl assembly</b>		25A-C2SF-A	25A-C3SF-A	25A-C4SF-A	

\*1 Assembly of a bracket and set nuts.

\*2 Assembly of a bracket and 2 mounting screws.

\*3 Please consult with SMC regarding the set nuts for the 25A-AW60(K).

# Precision Regulator



# 25A-IR1000/2000/3000-A Series



## How to Order

25A-IR 1 0 0 0 -   01 B -   - A

1  
 2  
 3  
 4  
 5  
 6  
 7

- Option/Semi-standard: Select one each for a, b, and c.
- Option/Semi-standard symbol: When more than one specification is required, indicate in alphanumeric order.

		Symbol	Description	①			
				Body size			
				1	2	3	
②	Set pressure range	0	0.005 to 0.2 MPa	●	●	—	
		1	0.01 to 0.2 MPa	—	—	●	
		2	0.01 to 0.4 MPa	●	●	●	
			0.01 to 0.8 MPa	●	●	●	
		+					
③	Exhaust direction	0	Bottom exhaust	●	●	●	
		1	Front exhaust	—	—	●	
		2	Rear exhaust	—	—	●	
		+					
④	Pipe thread type	Nil	Rc	●	●	●	
		N	NPT	●	●	●	
		F	G	●	●	●	
		+					
⑤	Port size	01	1/8	●	—	—	
		02	1/4	—	●	●	
		03	3/8	—	—	●	
		04	1/2	—	—	●	
		+					
⑥	*1 a	Mounting	Nil	Without mounting option	●	●	●
			B*2	With bracket	●	●	●
			H	With hexagon panel nut (for panel mount)	●	●	●
		+					
⑦	b	Flow direction	Nil	Flow direction: Left to right	●	●	●
			R	Flow direction: Right to left	●	●	●
			+				
c	Knob	Nil	Upward	●	●	●	
		V	Downward	●	●	●	

\*1 Options are shipped together with the product, but not assembled. B and H cannot be selected at the same time. The current bracket cannot be used for this product.

\*2 Assembly of a bracket and set nuts

# Electro-Pneumatic Regulator

## 25A-ITV1000/2000/3000 Series

### How to Order



25A - ITV 2 0 1 0 - 0 1 [ ] 2 [ ] S [ ]

Series compatible with secondary batteries

**Model**

1	1000 type
2	2000 type
3	3000 type

**Pressure range**

1	0.1 MPa
3	0.5 MPa
5	0.9 MPa

**Power supply voltage**

0	24 VDC
1	12 to 15 VDC

**Input signal**

0	Current type 4 to 20 mA DC (Sink type)
1	Current type 0 to 20 mA DC (Sink type)
2	Voltage type 0 to 5 VDC
3	Voltage type 0 to 10 VDC
40	4 points preset input

**Monitor output**

1	Analog output 1 to 5 VDC
2	Switch output/NPN output
3	Switch output/PNP output
4	Analog output 4 to 20 mA DC (Sink type)
Nil	None (For 4 points preset input)

**Pressure display unit**

Nil	MPa
2*1	kgf/cm <sup>2</sup>
3	bar
4*1	psi
5	kPa

\*1 This product is for overseas use only according to the New Measurement Law. (The SI unit type is provided for use in Japan.)

**Cable connector type**

S	Straight type 3 m
N	Without cable connector

\* A dedicated cable connector whose material was changed is used.

**Bracket**

Nil	Without bracket
B	Flat bracket
C	L-bracket

\* The bracket is made with a special black chromium treatment. The bracket is shipped with the product.

**Port size**

1	1/8 (1000 type)
2	1/4 (1000, 2000, 3000 type)
3	3/8 (2000, 3000 type)
4	1/2 (3000 type)

**Thread type**

Nil	Rc
N	NPT
T	NPTF
F	G

\* Since the lead wires and electrical circuits are used, this product is not completely copper-free. Only the wetted parts are copper-free.

\* Copper and zinc materials are used for solenoid valve coils, connector pins, and lead wire substrate.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

# Booster Regulator 25A-VBA Series

RoHS

## How to Order



25A - VBA 40A - 04

Series compatible with secondary batteries

Body size

10A	1/4", Handle-operated type	Pressure increase ratio: Twice
20A	3/8", Handle-operated type	
40A	1/2", Handle-operated type	

Thread type\*1

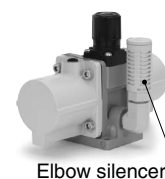
Symbol	Thread type
Nil	Rc
F	G
N	NPT
T	NPTF

\*1 Thread types apply to the IN, OUT, and EXH ports of the VBA10A and to the IN, OUT, EXH, and gauge ports of the VBA20A and VBA40A. The gauge ports of the VBA10A are Rc thread type regardless of the thread type indication.

Option

Symbol	Option
Nil	None
N	Silencer
S	High-noise reduction silencer*1
LN	Elbow silencer*1
LS	Elbow high-noise reduction silencer*1

\*1 Refer to "Combination of Thread Type and Options."  
\* Pressure gauge is not available as an option.



Port size

Symbol	Port size	Applicable series
02	1/4	VBA10A
03	3/8	VBA20A
04	1/2	VBA40A

## Combination of Thread Type and Options

Body size	Thread type	Option					Semi-standard
		Nil	N	S	LN	LS	
10A	Nil	●	●	●	●	●	●
	F	●	●	●	●	●	●
	N	●	●	—	●	—	●
	T	●	●	—	●	—	●
20A	Nil	●	●	●	/	/	●
	F	●	●	●			●
	N	●	●	●			●
	T	●	●	●			●
40A	Nil	●	●	●	/	/	●
	F	●	●	●			●
	N	●	●	●			●
	T	●	●	●			●

## Caution

- Not compatible with a low dew point
- VBA10A: Due to the close proximity of the IN and OUT sides of the gauge port and the handle of the booster regulator, a G43-10-01-X300/G46-SRB pressure gauge cannot be mounted as it will interfere with the handle.  
VBA20A/40A: The G43-10-01-X300/G46-SRB pressure gauge cannot be mounted as the mounting pitch of the IN and OUT sides of the gauge port of the booster regulator is smaller than the diameter of the pressure gauge. In order to mount the pressure gauge, piping which does not cause any interference must be prepared separately.

## Air Tank Compatibility Chart

Air tank	Booster regulator		
	25A-VBA10A	25A-VBA20A	25A-VBA40A
25A-VBAT05A1	●	—	—
25A-VBAT05S1	●	—	—
25A-VBAT10A1	●	●	—
25A-VBAT10S1	●	●	—
25A-VBAT20A1	—	●	●
25A-VBAT20S1	—	●	●
25A-VBAT38A1	—	●	●
25A-VBAT38S1	—	●	●

\* Refer to page 167 for details on air tanks.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

# Air Tank

# 25A-VBAT Series

RoHS

## How to Order



- For the booster regulator, use the 25A-VBA.
- It can be used alone as a tank.

**Standard product**  
(For Japanese market)

\* The thread type for each port is Rc.

**25A - VBAT 10 A 1**

• **Tank internal capacity**

Symbol	Internal capacity
05	5 L
10	10 L
20	20 L
38	38 L

• **Material**

Symbol	Material
A	Carbon steel (SS400)
S	Stainless steel

- \* Order drain valve (VBAT-V2) separately.
- \* Safety valve is not available as an option.

- Series compatible with secondary batteries

### ⚠ Caution

- When used as a single unit (not connected with a booster regulator) and pressurized at over 1 MPa at normal temperatures, the air tank falls under the scope of the "High Pressure Gas Safety Act" in Japan.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

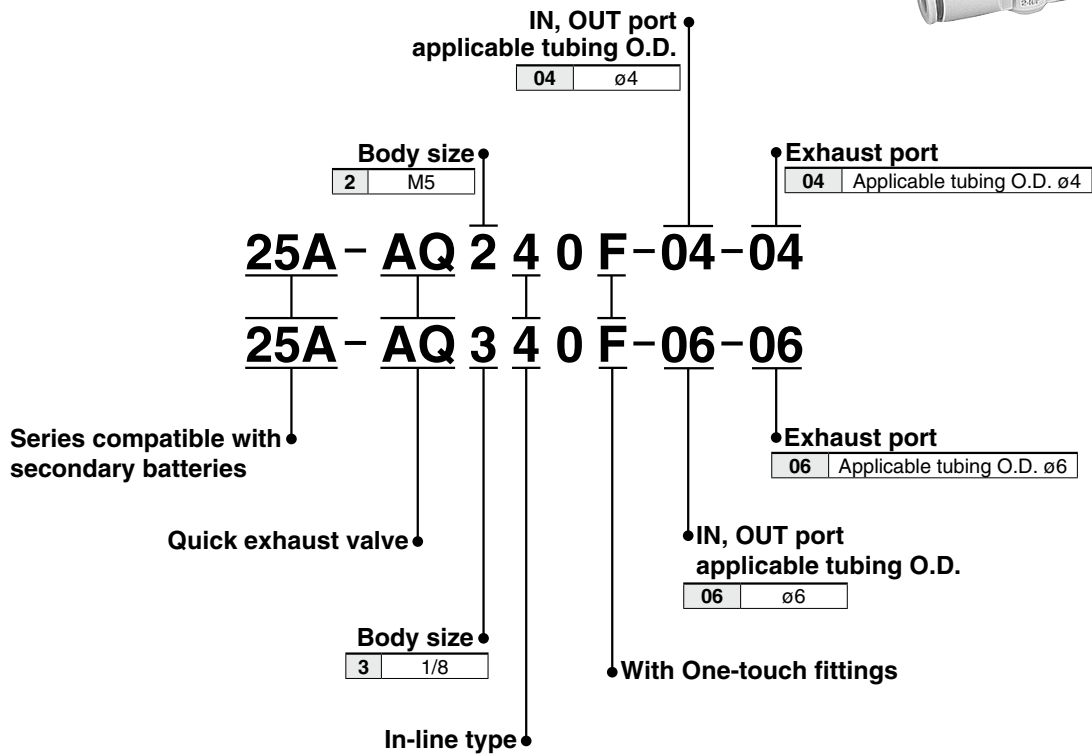


# Quick Exhaust Valve with One-touch Fittings **25A-AQ240F/340F Series**

RoHS



## How to Order



\* The 25A- series specifications and dimensions are the same as those of the standard model.

# Check Valve with One-touch Fittings **25A-AKH Series**

RoHS

## How to Order

**Straight type**

**25A - AKH 04 - 00**

Series compatible with  
secondary batteries

Applicable tubing O.D.

Metric size

04	ø4
06	ø6
08	ø8
10	ø10
12	ø12



\* The 25A- series specifications and dimensions are the same as those of the standard model.

# Rectangular Multi-connector **25A-KDM Series**

No. of Connecting Tubes: 20

RoHS

## How to Order

**25A - KDM 20 - 06**

Series compatible with secondary batteries

No. of connecting tubes

Tubing O.D.

Metric size

Symbol	Size	Color of release button
<b>23</b>	ø3.2	Blue
<b>04</b>	ø4	
<b>06</b>	ø6	

Inch size

Symbol	Size	Color of release button
<b>01</b>	ø1/8"	Red
<b>03</b>	ø5/32"	
<b>07</b>	ø1/4"	

### Applicable Tubing

Tubing material	FEP, PFA, Nylon, Soft nylon, Polyurethane
-----------------	---

\* The 25A- series specifications and dimensions are the same as those of the standard model.

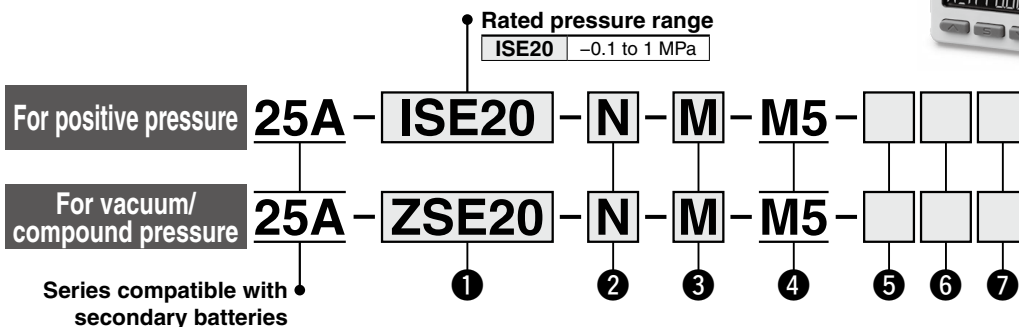
1 Output

# 3-Screen Display High-Precision Digital Pressure Switch

# 25A-ZSE20(F)/ISE20 Series



## How to Order



### ① Rated pressure range

Symbol	Description
ZSE20	0 to -101 kPa
ZSE20F	-100 to 100 kPa

### ② Output specification

Symbol	Description
N	NPN open collector 1 output
P	PNP open collector 1 output

### ③ Unit specification

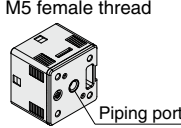
Symbol	Description
Nil	Units selection function*1
M	SI unit only*2
P	Units selection function (Initial value psi)*1

\*1 Under the New Measurement Act, switches with the units selection function are not permitted for use in Japan.

\*2 Fixed unit: kPa, MPa

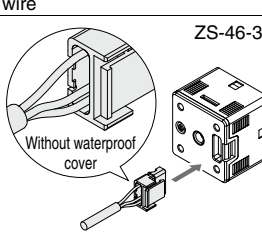
### ④ Piping specification

Symbol	Description
M5	M5 female thread



### ⑤ Option 1

Symbol	Description
Nil	Without lead wire
L	Lead wire with connector (3-core, 2 m lead wire)



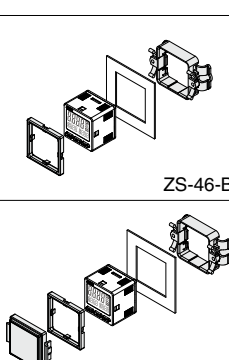
### ⑦ Option 3

Symbol	Operation manual*1	Calibration certificate*1
Nil	○	—
Y	—	—
K	○	○
T	—	○

\*1 All texts are in both English and Japanese.

### ⑥ Option 2

Symbol	Description
Nil	None
B	Panel mount adapter
D	Panel mount adapter + Front protection cover



## Options/Part Nos.

When only optional parts are required, order with the part numbers listed below.

Description	Part no.	Note
Panel mount adapter	ZS-46-B	—
Panel mount adapter + Front protection cover	ZS-46-D	—
Lead wire with connector	ZS-46-3L	3-core, 2 m, Non-waterproof (Without waterproof cover)
Front protection cover	ZS-27-01	—

\* The 25A-series specifications and dimensions are the same as those of the standard model.

2 Outputs + Analog Output (Voltage/Current)

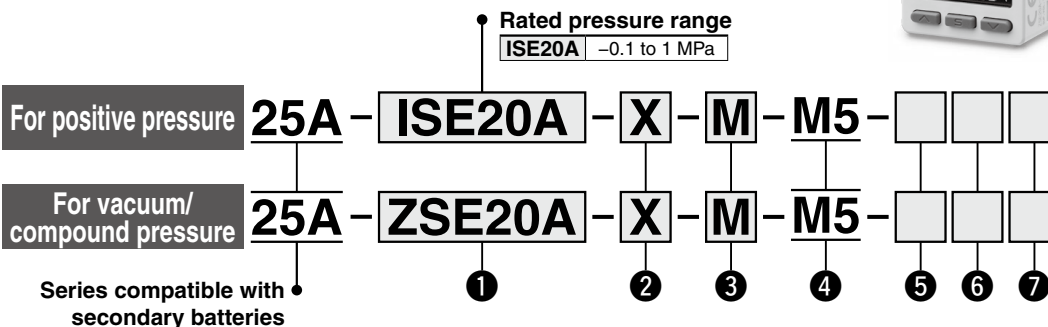


# 3-Screen Display High-Precision Digital Pressure Switch

# 25A-ZSE20A(F)/ISE20A Series



## How to Order



### ① Rated pressure range

ZSE20A	0 to -101 kPa
ZSE20AF	-100 to 100 kPa

### ② Output specification

Symbol	Description
R	NPN open collector 2 outputs + Analog voltage output *1
S	NPN open collector 2 outputs + Analog current output *1
T	PNP open collector 2 outputs + Analog voltage output *1
V	PNP open collector 2 outputs + Analog current output *1
X	NPN open collector 2 outputs + Copy function
Y	PNP open collector 2 outputs + Copy function

\*1 Can be switched to auto-shift or copy function

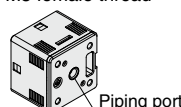
### ③ Unit specification

Symbol	Description
Nil	Units selection function *1
M	SI unit only *2
P	Units selection function (Initial value psi) *1

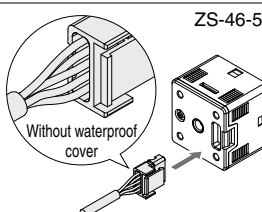
\*1 Under the New Measurement Act, switches with the units selection function are not permitted for use in Japan.

\*2 Fixed unit: kPa, MPa

### ④ Piping specification

Symbol	Description
M5	M5 female thread 

### ⑤ Option 1

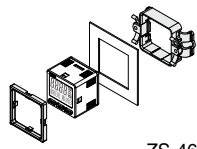
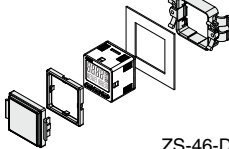
Symbol	Description
Nil	Without lead wire
J	Lead wire with connector (5-core, 2 m lead wire) 

### ⑦ Option 3

Symbol	Operation manual *1	Calibration certificate *1
Nil	○	—
Y	—	—
K	○	○
T	—	○

\*1 All texts are in both English and Japanese.

### ⑥ Option 2

Symbol	Description
Nil	None
B	Panel mount adapter 
D	Panel mount adapter + Front protection cover 

## Options/Part Nos.

When only optional parts are required, order with the part numbers listed below.

Description	Part no.	Note
Panel mount adapter	ZS-46-B	—
Panel mount adapter + Front protection cover	ZS-46-D	—
Lead wire with connector	ZS-46-5L	5-core, 2 m, Non-waterproof (Without waterproof cover)
Front protection cover	ZS-27-01	—

2 Outputs + Analog Output (Voltage/Current)



RoHS

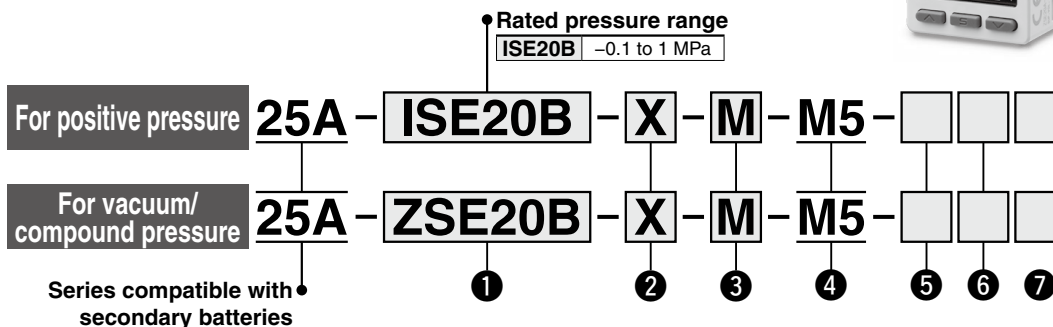
IP65

# 3-Screen Display High-Precision Digital Pressure Switch

# 25A-ZSE20B(F)/ISE20B Series



## How to Order



### ① Rated pressure range

ZSE20B	0 to -101 kPa
ZSE20BF	-100 to 100 kPa

### ② Output specification

Symbol	Description
R	NPN open collector 2 outputs + Analog voltage output *1
S	NPN open collector 2 outputs + Analog current output *1
T	PNP open collector 2 outputs + Analog voltage output *1
V	PNP open collector 2 outputs + Analog current output *1
X	NPN open collector 2 outputs + Copy function
Y	PNP open collector 2 outputs + Copy function

\*1 Can be switched to auto-shift or copy function

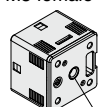
### ③ Unit specification

Symbol	Description
Nil	Units selection function *1
M	SI unit only *2
P	Units selection function (Initial value psi) *1

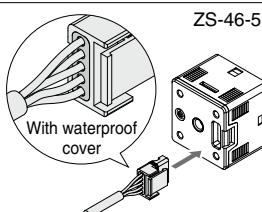
\*1 Under the New Measurement Act, switches with the units selection function are not permitted for use in Japan.

\*2 Fixed unit: kPa, MPa

### ④ Piping specification

Symbol	Description
M5	M5 female thread 

### ⑤ Option 1

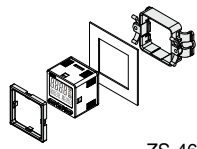
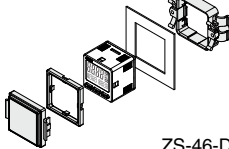
Symbol	Description
Nil	Without lead wire
W	Lead wire with connector (5-core, 2 m lead wire, With waterproof cover) 

### ⑦ Option 3

Symbol	Operation manual *1	Calibration certificate *1
Nil	○	—
Y	—	—
K	○	○
T	—	○

\*1 All texts are in both English and Japanese.

### ⑥ Option 2

Symbol	Description
Nil	None
B	Panel mount adapter 
D	Panel mount adapter + Front protection cover 

## Options/Part Nos.

When only optional parts are required, order with the part numbers listed below.

Description	Part no.	Note
Panel mount adapter	ZS-46-B	—
Panel mount adapter + Front protection cover	ZS-46-D	—
Lead wire with connector	ZS-46-5F	5-core, 2 m, Waterproof (With waterproof cover)
Front protection cover	ZS-27-01	—

2 Outputs + Analog Output (Voltage/Current)



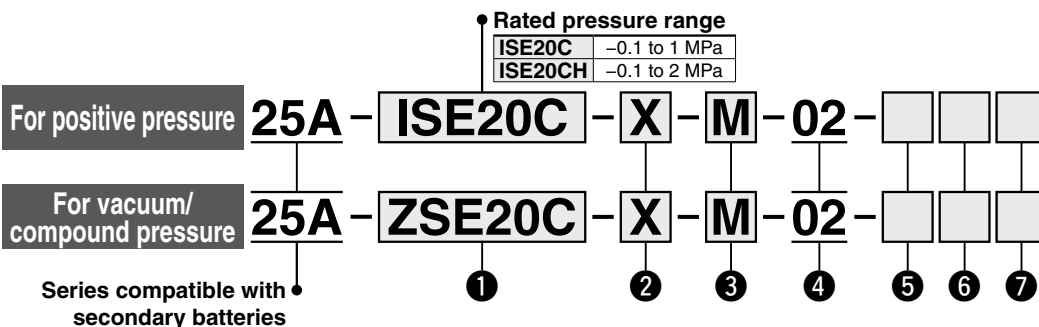
# 3-Screen Display High-Precision Digital Pressure Switch for General Fluids

## 25A-ZSE20C(F)/ISE20C(H) Series

IP65



### How to Order



#### ① Rated pressure range

ZSE20C	0 to -101 kPa
ZSE20CF	-100 to 100 kPa

#### ② Output specification

Symbol	Description
R	NPN open collector 2 outputs + Analog voltage output*1
S	NPN open collector 2 outputs + Analog current output*1
T	PNP open collector 2 outputs + Analog voltage output*1
V	PNP open collector 2 outputs + Analog current output*1
X	NPN open collector 2 outputs + Copy function
Y	PNP open collector 2 outputs + Copy function

\*1 Can be switched to auto-shift or copy function

#### ③ Unit specification

Symbol	Description
Nil	Units selection function*1
M	SI unit only*2
P	Units selection function (Initial value psi)*1

\*1 Under the New Measurement Act, switches with the units selection function are not permitted for use in Japan.

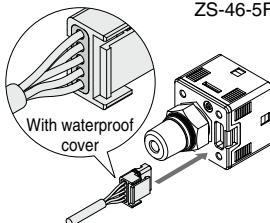
\*2 Fixed unit: kPa, MPa

#### ④ Piping specification

Symbol	Description
02	R1/4 (M5 female threaded)

#### ⑤ Option 1

Symbol	Description
Nil	Without lead wire
W	Lead wire with connector, 5-core (2 m lead wire, With waterproof cover)



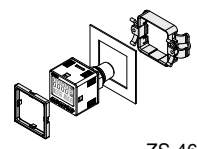
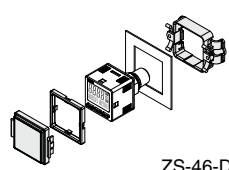
#### ⑦ Option 3

Symbol	Operation manual*1	Calibration certificate*1
Nil	○	—
Y	—	—
K	○	○
T	—	○

\*1 All texts are in both English and Japanese.

#### ⑥ Option 2

Symbol	Description
Nil	None
B	Panel mount adapter
D	Panel mount adapter + Front protection cover

### Options/Part Nos.

When only optional parts are required, order with the part numbers listed below.

Description	Part no.	Note
Panel mount adapter	ZS-46-B	Rear ported
Panel mount adapter + Front protection cover	ZS-46-D	Rear ported
Lead wire with connector	ZS-46-5F	5-core, 2 m, Waterproof (With waterproof cover)
Front protection cover	ZS-27-01	Rear ported

# 2-Color Display

## Digital Flow Switch

# 25A-PFMB7 Series



RoHS



### How to Order

**25A - PFMB 7 201 - C8 - A W - M**

Series compatible with secondary batteries

Rated flow range (Flow rate range)

201	2 to 200 L/min
-----	----------------

Port size

C8	ø8 (5/16") One-touch fitting
O2*1	Rc1/4
N02*1	NPT1/4
F02*1	G1/4 *2

\*1 Made to order

\*2 ISO1179-1 compliant

Piping entry direction

Nil	L*1
Straight	Bottom

\*1 Made to order

Output specification

	OUT1	OUT2	Applicable monitor unit model
A	NPN	NPN	—
B	PNP	PNP	—
C	NPN	Analog 1 to 5 V	PFG300 series
D	NPN	Analog 4 to 20 mA	PFG310 series
E*1	PNP	Analog 1 to 5 V	PFG300 series
F*1	PNP	Analog 4 to 20 mA	PFG310 series
G*1	NPN	External input *2	—
H*1	PNP	External input *2	—

\*1 Made to order

\*2 Accumulated flow value, peak/bottom flow value can be reset by external signal input.

Option 1

W
Lead wire with connector (2 m) + Rubber cover for connector (Silicone rubber)
ZS-33-F
ZS-33-D

\* When only optional parts are required, refer to Option 1/Part Nos. on page 176.

Calibration certificate \*1

Nil	None
A*2	With calibration certificate

\*1 Certificate in both English and Japanese

\*2 Made to order

Option 2

Nil	R
No bracket	Bracket (For without flow adjustment valve) <b>25A-ZS-33-M</b> 
	T Panel mount adapter (For without flow adjustment valve) <b>ZS-33-J</b> 

\* Options are shipped together with the product, but not assembled.

When only optional parts are required, refer to Option 2/Part Nos. on page 176.

Unit specification

M	SI unit only *1
Nil	Units selection function *2

\*1 Fixed unit: Instantaneous flow: L/min  
Accumulated flow: L

\*2 This product is for overseas use only according to the New Measurement Act. (The SI unit type is provided for use in Japan.)

Unit can be changed. Instantaneous flow: L/min ↔ cfm  
Accumulated flow: L ↔ ft<sup>3</sup>

\* The 25A- series specifications and dimensions are the same as those of the standard model.





### How to Order

**25A - PFMB 7 501 - 04 - A W - M**

• Series compatible with secondary batteries

Rated flow range (Flow rate range)•

<b>501</b>	5 to 500 L/min
<b>102</b>	10 to 1000 L/min
<b>202</b>	20 to 2000 L/min

Thread type •

<b>Nil</b>	Rc
<b>N</b>	NPT
<b>F</b>	G*1

\*1 ISO228 compliant

Port size •

Port size	Rated flow range	Port size		
		501	102	202
<b>04</b>	1/2	●	●	—
<b>06</b>	3/4	—	—	●

Output specification •

	OUT1	OUT2	Applicable monitor unit model
<b>A</b>	NPN	NPN	—
<b>B</b>	PNP	PNP	—
<b>C</b>	NPN	Analog 1 to 5 V	PFG300 series
<b>D</b>	NPN	Analog 4 to 20 mA	PFG310 series
<b>E</b> *1	PNP	Analog 1 to 5 V	PFG300 series
<b>F</b> *1	PNP	Analog 4 to 20 mA	PFG310 series
<b>G</b> *1	NPN	External input*2	—
<b>H</b> *1	PNP	External input*2	—

\*1 Made to order

\*2 Accumulated flow value, peak/bottom flow value can be reset by external signal input.

Option 1 •

**W**

Lead wire with connector (2 m)  
+  
Rubber cover for connector (Silicone rubber)

**ZS-33-F**

**ZS-33-D**

\* When only optional parts are required, refer to Option 1/Part Nos. below.

• Calibration certificate\*1

<b>Nil</b>	None
<b>A</b> *2	With calibration certificate

\*1 Certificate in both English and Japanese

\*2 Made to order

• Option 2

Nil	R
No bracket	With bracket With 4 tapping screws

\* Options are shipped together with the product, but not assembled. When only optional parts are required, refer to Option 2/Part Nos. below.

• Unit specification

<b>M</b>	SI unit only*1
<b>Nil</b>	Units selection function*2

\*1 Fixed unit: Instantaneous flow: L/min  
Accumulated flow: L

\*2 This product is for overseas use only according to the New Measurement Act. (The SI unit type is provided for use in Japan.)

Unit can be changed. Instantaneous flow: L/min ⇔ cfm  
Accumulated flow: L ⇔ ft<sup>3</sup>

#### Option 1/Part Nos.

Option	Part no.	Qty.	Note
Lead wire with connector	<b>ZS-33-D</b>	1	Lead wire: 2 m
Rubber cover (Silicone rubber)	<b>ZS-33-F</b>	1	For connector

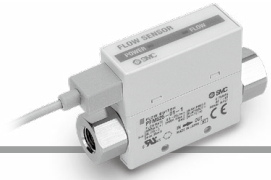
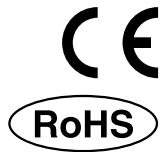
#### Option 2/Part Nos.

Option	Part no.	Qty.	Note
Bracket (for PFMB7201)	<b>25A-ZS-33-M</b>	1	With 2 tapping screws (3 x 6)
Panel mount adapter (for PFMB7201)	<b>ZS-33-J</b>	1	
Bracket (for PFMB7501/7102)	<b>25A-ZS-42-C</b>	1	With 4 tapping screws (3 x 6)
Bracket (for PFMB7202)	<b>25A-ZS-42-D</b>	1	With 4 tapping screws (3 x 6)

\* The 25A- series specifications and dimensions are the same as those of the standard model.

# 2-Color Display Digital Flow Switch Remote sensor unit

## 25A-PFM5 Series



### How to Order

Remote sensor unit **25A-PFM5** **10** - **C6** **1** - **W**

Series compatible with secondary batteries

Type

5	Remote sensor unit
---	--------------------

Rated flow range (Flow rate range)

10	0.2 to 10 (5) L/min
25	0.5 to 25 (12.5) L/min
50	1 to 50 (25) L/min
11	2 to 100 (50) L/min

\* ( ): Fluid: CO<sub>2</sub>

Piping entry direction

Nil	Straight
L	Bottom

Output specification

No.	Description	Applicable display unit
1	Analog output (1 to 5 V)	25A-PFM30□
2	Analog output (4 to 20 mA)	25A-PFM31□

Port size

Symbol	Description	Flow rate range			
		10	25	50	11
01	Rc1/8	●	●	●	
02	Rc1/4				●
N01	NPT1/8	●	●	●	
N02	NPT1/4				●
F01	G1/8*1	●	●	●	
F02	G1/4*1				●
C6	ø6 One-touch fitting	●	●	●	●
C8	ø8 (5/16") One-touch fitting	●	●	●	●

\*1 ISO228-1 compliant

Calibration certificate

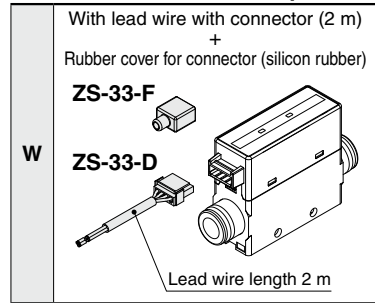
Nil	None
A	With calibration certificate

\* The certificate is written in English and Japanese. Other languages are available as specials.

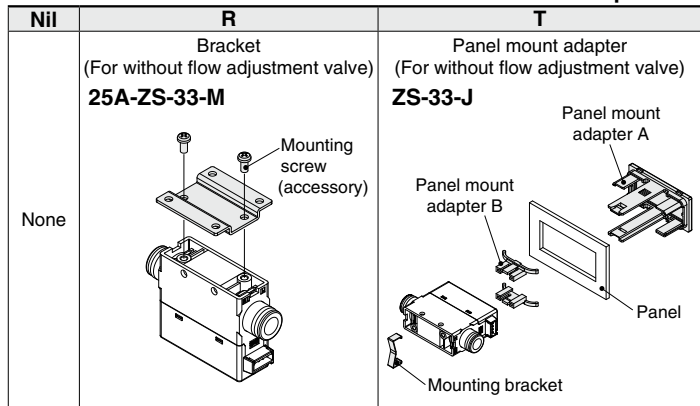
Operation manual

Nil	With operation manual (Japanese and English)
N	None

Option 1



Option 2



Options are shipped together with the product, but not assembled.

### Piping Variations

	With One-touch fittings (C6, C8)		Female thread (01, 02, N01, N02, F01, F02)	
	Straight (Nil)	Bottom (L)	Straight (Nil)	Bottom (L)
Without flow adjustment valve (Nil)				

\* The 25A-series specifications and dimensions are the same as those of the standard model.

# Flow Sensor Monitor

## 25A-PFM3 Series



### How to Order

#### Output specification

0	2 NPN outputs + 1 to 5 V output
1	2 NPN outputs + 4 to 20 mA output
2	2 NPN outputs + External input*1
3	2 PNP outputs + 1 to 5 V output
4	2 PNP outputs + 4 to 20 mA output
5	2 PNP outputs + External input*1

\*1 User can select from accumulated value external reset, auto-shift and auto-shift zero.

#### Operation manual

Nil	With operation manual (Japanese and English)
N	None

#### Calibration certificate

Nil	None
A	With calibration certificate

\* The certificate is written in English and Japanese. Other languages are available as specials.

**25A-PFM3 00-ML**

Series compatible with secondary batteries

#### Type

3	Remote display unit
---	---------------------

#### Input specification

Symbol	Content	Applicable remote type sensor unit
0	Voltage input	25A-PFM5□□-□-1-□
1	Current input	25A-PFM5□□-□-2-□

#### Unit specification

Nil	With unit switching function*1
M	Fixed SI unit*2

\*1 Under the New Measurement Act, flow sensor monitors with the unit switching function are not permitted for use in Japan.

\*2 Fixed unit: Instantaneous flow: L/min  
Accumulated flow: L

#### Option 1

Nil	None
L	Power supply/Output connector

\* The cable does not come connected, but it is shipped together with the product.

#### Option 3

Nil	None
F	With sensor connector

\* The connector does not come connected, but it is shipped together with the product.

#### Option 2

Nil	None
B	Panel mount adapter
D	Panel mount adapter + Front protective cover

\* Options are shipped together with the product, but not assembled.

### Options/Part Nos.

Description	Part no.	Note
Power supply/Output connector (2 m)	ZS-28-A	
Sensor connector	ZS-28-C-1	1 pc.
Panel mount adapter	ZS-46-B	
Panel mount adapter + Front protective cover	ZS-46-D	

\* The 25A-series specifications and dimensions are the same as those of the standard model.

# 3-Color Display

# Digital Flow Monitor for Water

# 25A-PF3W Series



RoHS



## How to Order

**25A-PF3W 30 A - M V C**

Series compatible with secondary batteries

Type

**3** Remote monitor unit

For remote sensor units, select the analog output 1 to 5 V type.  
Applicable sensors: PF3W5□□-□□-1(T)

### Output specification

Symbol	OUT1	OUT2
<b>A</b>	NPN	NPN
<b>B</b>	PNP	PNP
<b>C</b>	NPN	Analog 1 to 5 V
<b>D</b>	NPN	Analog 4 to 20 mA
<b>E</b>	PNP	Analog 1 to 5 V
<b>F</b>	PNP	Analog 4 to 20 mA
<b>G</b>	NPN	External input
<b>H</b>	PNP	External input
<b>J</b>	Analog 1 to 5 V	Analog 1 to 5 V
<b>K</b>	Analog 4 to 20 mA	Analog 4 to 20 mA

In combination with remote sensor unit with temperature sensor, only OUT2 can be set for temperature sensor output.

### Lead wire

<b>Nil</b>	With power supply/output connection lead wire (2 m)	
<b>N</b>	Without power supply/output connection lead wire	

The lead wire does not come connected, but it is shipped together with the product.

### Remote monitor unit/Unit specification

Symbol	Instantaneous flow	Accumulated flow	Temperature
<b>M</b>	L/min	L	°C
<b>G</b>	gal/min	gal	°C
<b>F</b>	gal/min	gal	°F
<b>J</b>	L/min	L	°F

\* Under the New Measurement Act, units other than SI (symbol "M") cannot be used in Japan.

\* G, F, J: Made to order

Reference: 1 [L/min] ↔ 0.2642 [gal/min]

1 [gal/min] ↔ 3.785 [L/min]

°F = 9/5°C + 32

### Calibration certificate (Only flow monitor)

<b>Nil</b>	None
<b>A</b>	With calibration certificate

\* The certificate is written in both Japanese and English.

### Option 2

<b>Nil</b>	None
<b>C</b>	Sensor connector (1 pc.) 

The connector does not come connected, but it is shipped together with the product.

### Option 1

<b>Nil</b>	None
<b>T</b>	Panel mount adapter 
<b>V</b>	Front protective cover + Panel mount adapter 

## Options/Part Nos.

When only optional parts are required, order with the part numbers listed below.

Description	Part no.	Note
Panel mount adapter	<b>25A-ZS-26-B</b>	With waterproof seal and screws
Front protective cover + Panel mount adapter	<b>25A-ZS-26-C</b>	With waterproof seal and screws
Front protective cover only	<b>ZS-26-01</b>	Separately order panel mount adapter, etc.
Power supply/output connection lead wire	<b>ZS-40-W</b>	Lead wire length: 2 m
Sensor connector (e-con)	<b>ZS-28-CA-4</b>	1 pc.
Lead wire with connector for copying	<b>ZS-40-Y</b>	Connect up to 10 slave units

\* The 25A- series specifications and dimensions are the same as those of the standard model.

# 2-Color Display Digital Flow Switch

## 25A-PFM7 Series

Integrated display



### How to Order

Integrated display

25A - PFM7 10 - C6 - A - M - W

Series compatible with secondary batteries

Type

7 Integrated display

Rated flow range (Flow rate range)

10	0.2 to 10 (5) L/min
25	0.5 to 25 (12.5) L/min
50	1 to 50 (25) L/min
11	2 to 100 (50) L/min

\* ( ): Fluid: CO<sub>2</sub>

Port size

Symbol	Description	Flow rate range			
		10	25	50	11
01	Rc1/8	●	●	●	—
02	Rc1/4	—	—	—	●
N01	NPT1/8	●	●	●	—
N02	NPT1/4	—	—	—	●
F01	G1/8	●	●	●	—
F02	G1/4	—	—	—	●
C6	ø6 One-touch fitting	●	●	●	●
C8	ø8 (5/16") One-touch fitting	—	●	●	●

Piping entry direction

Nil	Straight
L	Bottom

Output specifications

A	2 NPN outputs
B	2 PNP outputs
C	1 NPN output + Analog output (1 to 5 V)
D	1 NPN output + Analog output (4 to 20 mA)
E	1 PNP output + Analog output (1 to 5 V)
F	1 PNP output + Analog output (4 to 20 mA)
G	1 NPN output + External input* <sup>3</sup>
H	1 PNP output + External input* <sup>3</sup>

\*<sup>3</sup> User can select from accumulated value external reset, auto-shift and auto-shift zero.

Unit specifications

Nil	With unit switching function* <sup>2</sup>
M	Fixed SI unit* <sup>1</sup>

\*<sup>1</sup> Fixed unit: Instantaneous flow: L/min  
Accumulated flow: L

\*<sup>2</sup> Under Japan's New Measurement Act, this is only for overseas sales.  
(SI units are to be used inside Japan.)

Option 1

W	Lead wire with connector (2 m) + Rubber cover for connector (Silicon rubber)
---	--

Calibration certificate

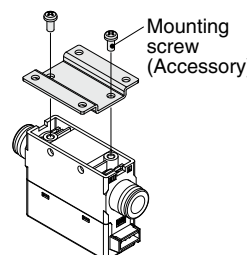
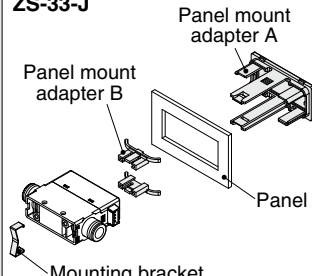
Nil	None
A	With calibration certificate

\* The certificate is written in English and Japanese.  
Other languages are available as specials.

Operation manual

Nil	With operation manual (Japanese and English)
N	None

Option 2

Nil	None
R	Bracket (For without flow adjustment valve) <b>25A-ZS-33-M</b> 
T	Panel mount adapter (For without flow adjustment valve) <b>ZS-33-J</b>  Panel mount adapter A Panel mount adapter B Panel Mounting bracket

\* The 25A-series specifications and dimensions are the same as those of the standard model.

\* Digital flow switch with flow adjustment valve is not standard product. It can be supplied as Made-to-Order separately.

# 3-color display

## Digital Flow Switch for Water

# 25A-PF3W Series



### How to Order

#### Remote sensor unit

#### Output specification/ Temperature sensor

Symbol	OUT1	OUT2	Temperature sensor
	Flow rate	Temperature	
1	Analog 1 to 5 V	—	None
2	Analog 4 to 20 mA	—	
1T	Analog 1 to 5 V	Analog 1 to 5 V	

\* To use in combination with remote monitor (PF3W3 series), select analog output of 1 to 5 V of flow rate (output symbol "1" or "1T").

#### Remote sensor unit/Unit printed on label

Symbol	Instantaneous flow rate	Temperature
Nil	L/min	°C
G*1	L/min (gal/min)	°C/°F

\*1 Under the New Measurement Law, units other than SI (symbol: "Nil") cannot be used in Japan.

\* G: Made to Order

Reference: 1 [L/min] ↔ 0.2642 [gal/min]  
1 [gal/min] ↔ 3.785 [L/min]  
°F = 9/5°C + 32



#### Remote sensor unit

**25A-PF3W 5 04** [ ] - [ ] **03** - **1T** [ ] - [ ] [ ] [ ]

#### Integrated display

**25A-PF3W 7 04** [ ] - [ ] **03** - **AT** [ ] - **M** [ ] [ ]

Series compatible with secondary batteries

#### Type

5	Remote sensor unit
7	Integrated display

#### Rated flow range (Flow range)

Symbol	Rated flow range
04	0.5 to 4 L/min
20	2 to 16 L/min
40	5 to 40 L/min
11	10 to 100 L/min

#### Thread type

Nil	Rc
N	NPT
F	G

#### Port size

Symbol	Port size	Rated flow range			
		04	20	40	11
03	3/8	●	●	—	—
04	1/2	—	●	●	—
06	3/4	—	—	●	●
10	1/1	—	—	—	●

#### Flow adjustment valve

Symbol	With/without flow adjustment valve	Rated flow rate			
		04	20	40	11
Nil	None	●	●	●	●
S	Yes	●	●	●	—

100 L/min type is not available with flow adjustment valve.

#### Integrated display

#### Output specification/ Temperature sensor

Symbol	OUT1	OUT2		Temperature sensor
	Flow rate	Flow rate	Temperature	
A	NPN	NPN	—	None
B	PNP	PNP	—	
C	NPN	Analog 1 to 5 V	—	
D	NPN	Analog 4 to 20 mA	—	
E	PNP	Analog 1 to 5 V	—	
F	PNP	Analog 4 to 20 mA	—	
G	NPN	External input*1	—	
H	PNP	External input*1	—	
AT	NPN	(NPN)	↔*2 NPN	With temperature sensor
BT	PNP	(PNP)	↔*2 PNP	
CT	NPN	(Analog 1 to 5 V)	↔*2 Analog 1 to 5 V	
DT	NPN	(Analog 4 to 20 mA)	↔*2 Analog 4 to 20 mA	
ET	PNP	(Analog 1 to 5 V)	↔*2 Analog 1 to 5 V	
FT	PNP	(Analog 4 to 20 mA)	↔*2 Analog 4 to 20 mA	

\* The 25A-series specifications and dimensions are the same as those of the standard model.

\*1 External input: The accumulated value, peak value, and bottom value can be reset.

\*2 For units with temperature sensor, OUT2 can be set as either temperature output or flow rate output. Setting when shipped is for temperature output.

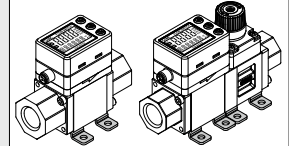
#### Calibration certificate (Only flow sensor)

Nil	None
A	With calibration certificate

\* The certificate is written in both English and Japanese. Integrated display type with temperature sensor can only display flow rate.

#### Bracket (Option)

Nil	None
R	Bracket



#### Integrated display/Unit specification

Symbol	Instantaneous flow rate	Accumulated flow	Temperature
M	L/min	L	°C
G	gal/min	gal	°C
F	gal/min	gal	°F
J	L/min	L	°F

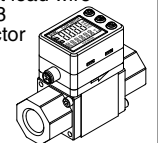
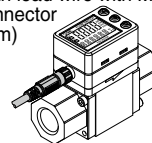
\* Under the New Measurement Law, units other than SI (symbol: "M") cannot be used in Japan.

\* G, F, J: Made to Order

Reference: 1 [L/min] ↔ 0.2642 [gal/min]  
1 [gal/min] ↔ 3.785 [L/min]  
°F = 9/5°C + 32

#### Lead wire (Option)

Nil	N
With lead wire with M8 connector (3 m)	Without lead wire with M8 connector



\* The 25A-series specifications and dimensions are the same as those of the standard model.

### Options/Part Nos.

When optional parts are required separately, use the following part numbers to place an order.

Description	Part no.	Qty.	Note	
Bracket*1	25A-ZS-40-K	1	For PF3W704/720/504/520	With 4 tapping screws (3 x 8)
	25A-ZS-40-L	1	For PF3W740/540	With 4 tapping screws (3 x 8)
	25A-ZS-40-M	1	For PF3W711/511	With 4 tapping screws (4 x 10)
Lead wire with M8 connector	25A-ZS-40-A	1	Lead wire length (3 m)	

\*1 For units with flow adjustment valve, 2 brackets are required.

# 3-color display

## Digital Flow Switch for PVC Piping

# 25A-PF3W Series



RoHS

### How to Order

#### Remote sensor unit Output specification

Symbol	OUT1
1	Analog 1 to 5 V
2	Analog 4 to 20 mA

\* To use in combination with remote monitor (PF3W3 series), select analog output of 1 to 5 V of flow rate (output symbol "1").



#### Remote sensor unit/Unit printed on label

Symbol	Instantaneous flow rate
Nil	L/min
G*1	L/min (gal/min)

\*1 Under the New Measurement Law, units other than SI (symbol: "Nil") cannot be used in Japan.

\* G: Made to Order  
Reference: 1 [L/min] ↔ 0.2642 [gal/min]  
1 [gal/min] ↔ 3.785 [L/min]

#### Calibration certificate (Only flow sensor)

Nil	None
A	With calibration certificate

\* The certificate is written in both English and Japanese.

Remote sensor unit

25A - PF3W 5 11 - U 25 - 1

Integrated display

25A - PF3W 7 11 - U 25 - A M

Series compatible with secondary batteries



#### Type

5	Remote sensor unit
7	Integrated display

#### Rated flow range (Flow range)

Symbol	Rated flow range
11	10 to 100 L/min

#### Connection type

U	PVC pipe
---	----------

#### PVC pipe O.D.

Symbol	Port size	Pipe O.D.*1
25	25A	32 mm

\*1 JIS K6742 equivalent

#### Integrated display Output specification

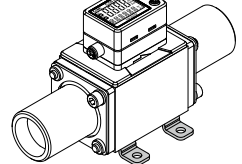
Symbol	OUT1	OUT2
A	NPN	NPN
B	PNP	PNP
C	NPN	Analog 1 to 5 V
D	NPN	Analog 4 to 20 mA
E	PNP	Analog 1 to 5 V
F	PNP	Analog 4 to 20 mA
G	NPN	External input*1
H	PNP	External input*1

\* The 25A-series specifications and dimensions are the same as those of the standard model.

\*1 External input: The accumulated value, peak value, and bottom value can be reset.

#### Bracket (Option)

Nil	None
R	Bracket



#### Integrated display/Unit specification

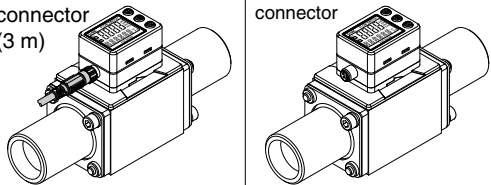
Symbol	Instantaneous flow rate	Accumulated flow
M	L/min	L
G	gal/min	gal

\* Under the New Measurement Law, units other than SI (symbol: "M") cannot be used in Japan.

\* G: Made to Order  
Reference: 1 [L/min] ↔ 0.2642 [gal/min]  
1 [gal/min] ↔ 3.785 [L/min]

#### Lead wire

Nil	N
With lead wire with M8 connector (3 m)	Without lead wire with M8 connector



### Options/Part Nos.

When optional parts are required separately, use the following part numbers to place an order.

Description	Part no.	Qty.	Note
Bracket	25A-ZS-40-M	1	For PF3W711/511 With 4 tapping screws (4 x 10)
Lead wire with M8 connector	25A-ZS-40-A	1	Lead wire length (3 m)

\* The 25A-series specifications and dimensions are the same as those of the standard model.

# Direct Operated 2-Port Solenoid Valve

## 25A-VX21/22/23 Series

 For Air Single Unit



### Common Specifications

Valve type	N.C.
Seal material	NBR
Coil insulation type	Class B
Thread type	Rc

### How to Order (Single Unit)

25A - VX2 1 0 A A

Series compatible with secondary batteries

Fluid

0 For air

### Size/Valve type

Symbol	Size	Valve type	Symbol	Body material	Port size	Orifice diameter	
1	Size 1	Single unit N.C.	A	Aluminum	1/8	2	
			B			3	
			C			5	
			D			1/4	2
			E				3
			F				5
			H	Resin	2		
			J		ø6 One-touch fitting	3	
			K			5	
			L		ø8 One-touch fitting	2	
			M			3	
			N			5	

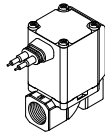
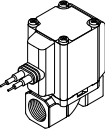
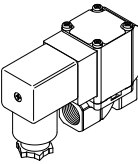
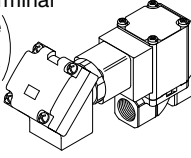
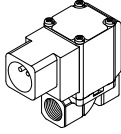
Symbol	Size	Valve type	Symbol	Body material	Port size	Orifice diameter
2	Size 2	Single unit N.C.	A	Aluminum	1/4	4
			B			7
			D		3/8	4
			E			7
			H	Resin	ø8 One-touch fitting	4
			J			7
			L		ø10 One-touch fitting	4
			M			7

Symbol	Size	Valve type	Symbol	Body material	Port size	Orifice diameter
3	Size 3	Single unit N.C.	A	Aluminum	1/4	5
			B			8
			C			10
			D			3/8
			E		8	
			F		10	
			G		1/2	
			H			Resin
			J	ø10 One-touch fitting	8	
			K		10	
			L	ø12 One-touch fitting	5	
			M		8	
			N		10	

For other special options, refer to the standard products.

Special voltage	48 VAC
	220 VAC
	240 VAC
	12 VDC
DIN terminal with light	
Conduit terminal with light	
Low concentration ozone resistant (Seal material: FKM)	
Oil-free	
G thread	
NPT thread	

### Voltage/Electrical entry

Symbol	Voltage	Electrical entry
A	24 VDC	Grommet 
B	100 VAC	Grommet (With surge voltage suppressor) 
C	110 VAC	
D	200 VAC	
E	230 VAC	DIN terminal (With surge voltage suppressor) 
F	24 VDC	
G	24 VDC	
H	100 VAC	
J	110 VAC	
K	200 VAC	
L	230 VAC	Conduit terminal (With surge voltage suppressor) 
M	24 VDC	
N	100 VAC	
P	110 VAC	
Q	200 VAC	
R	230 VAC	Conduit (With surge voltage suppressor) 
S	24 VDC	
T	100 VAC	
U	110 VAC	
V	200 VAC	
W	230 VAC	
Y	24 VDC	
Z	Other voltages and electrical options	

\* The 25A- series specifications and dimensions are the same as those of the standard model.

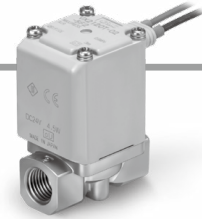


# Direct Operated 2-Port Solenoid Valve 25A-VX21/22/23 Series

 For Water Single Unit

 For Oil Single Unit

 For Medium Vacuum Single Unit



## How to Order (Single Unit)

25A - VX2 1 4 A A

Series compatible with secondary batteries

Fluid

2	For water
3	For oil
4	For medium vacuum

### Size/Valve type

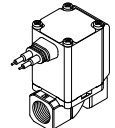
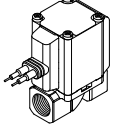
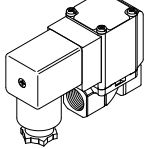
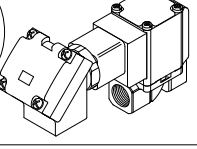
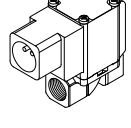
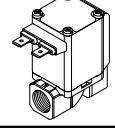
### Body material/Port size/Orifice diameter

Symbol	Size	Valve type	Symbol	Body material	Port size	Orifice diameter
1	Size 1	Single unit N.C.	H	Stainless steel	1/8	2
			J			3
			K			5
			L		1/4	2
			M			3
			N			5
2	Size 2	Single unit N.C.	H	Stainless steel	1/4	4
			J			7
			L		3/8	4
			M			7
3	Size 3	Single unit N.C.	H	Stainless steel	1/4	5
			J			8
			K			10
			L		3/8	5
			M			8
			N			10
			P	1/2	10	

### Common Specifications

Valve type	N.C.
Seal material	FKM
Coil insulation type	Class B
Thread type	Rc

### Voltage/Electrical entry

Symbol	Voltage	Electrical entry		
A	24 VDC	Grommet 		
		Grommet (With surge voltage suppressor) 		
B	100 VAC			
C	110 VAC			
D	200 VAC			
E	230 VAC			
F	24 VDC			
G	24 VDC	DIN terminal (With surge voltage suppressor) 		
			H	100 VAC
			J	110 VAC
			K	200 VAC
			L	230 VAC
			M	24 VDC
N	100 VAC	Conduit terminal (With surge voltage suppressor) 		
			P	110 VAC
			Q	200 VAC
			R	230 VAC
S	24 VDC	Conduit (With surge voltage suppressor) 		
			T	100 VAC
			U	110 VAC
			V	200 VAC
			W	230 VAC
Y	24 VDC	Flat terminal 		
			Z	Other voltages and electrical options

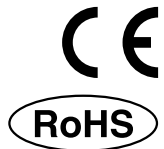
For other special options, refer to the standard products.

Special voltage	48 VAC
	220 VAC
	240 VAC
	12 VDC
DIN terminal with light	
Conduit terminal with light	
G thread	
NPT thread	

\* The 25A- series specifications and dimensions are the same as those of the standard model.

# Pilot Operated 2-Port Solenoid Valve For Air

## 25A-VXD Series



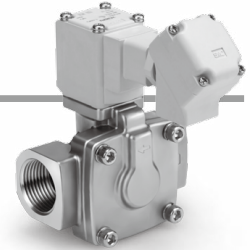
### How to Order

25A - VXD2 3 0 A A

Series compatible with secondary batteries

Fluid

0 For Air



#### Common Specifications

Seal material	NBR
Coil insulation type	Class B
Thread type	Rc

#### Size—Valve type

Symbol	Size	Valve type
3	8A	N.C.
	10A	N.O.
	15A	
4	10A	N.C.
	15A	N.O.
5	20A	N.C.
		N.O.
6	25A	N.C.
		N.O.

#### Body material/Port size/Orifice diameter

Symbol	Body material	Port size	Orifice diameter
A	Aluminum	1/4	10
		3/8	
		1/2	
J	Stainless steel	3/8	15
		1/2	
M	Stainless steel	3/4	20
		1	
P	Stainless steel	1	25

#### Voltage/Electrical entry

Symbol	Voltage	Electrical entry	
A	24 VDC	Grommet	
	B		100 VAC
	C		110 VAC
	D		200 VAC
	E		230 VAC
	F		24 VDC
G	24 VDC	DIN terminal (With surge voltage suppressor)	
	H		100 VAC
	J		110 VAC
	K		200 VAC
	L		230 VAC
	M		24 VDC
N	100 VAC	Conduit terminal (With surge voltage suppressor)	
	P		110 VAC
	Q		200 VAC
	R		230 VAC
	S		24 VDC
	T		100 VAC
U	110 VAC	Conduit (With surge voltage suppressor)	
	V		200 VAC
	W		230 VAC
	Y		24 VDC
Z		Flat terminal	
Z		Other special options	

All other special options are the same as those of the standard model.

Special voltage	24 VAC
	48 VAC
	220 VAC
	240 VAC
	12 VDC
DIN terminal with light	
Conduit terminal with light	
Without DIN connector	
Low concentration ozone resistant (Seal material: FKM)	
Seal material: EPDM	
Oil-free	
G thread	
NPT thread	
With bracket	
Special electrical entry direction	

\* The 25A- series specifications and dimensions are the same as those of the standard model.

# Pilot Operated 2-Port Solenoid Valve For Water

## 25A-VXD Series



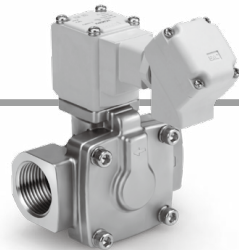
### How to Order

25A - VXD2 3 2 D A

Series compatible with secondary batteries

Fluid

2 For Water



#### Common Specifications

Seal material	NBR
Coil insulation type	Class B
Thread type	Rc

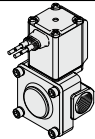
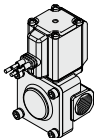
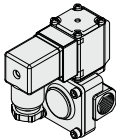
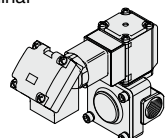
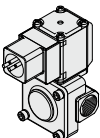
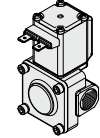
#### Size—Valve type

Symbol	Size	Valve type
3	8A	N.C.
	10A	N.O.
	15A	
4	10A	N.C.
	15A	N.O.
5	20A	N.C.
		N.O.
6	25A	N.C.
		N.O.

#### Body material/Port size/Orifice diameter

Symbol	Body material	Port size	Orifice diameter
D	Stainless steel	1/4	10
		3/8	
		1/2	
J	Stainless steel	3/8	15
		1/2	
M	Stainless steel	3/4	20
		1	
P	Stainless steel	1	25

#### Voltage/Electrical entry

Symbol	Voltage	Electrical entry
A	24 VDC	Grommet 
	100 VAC	
	110 VAC	
	200 VAC	
	230 VAC	
	24 VDC	
B	100 VAC	Grommet (With surge voltage suppressor) 
	110 VAC	
	200 VAC	
	230 VAC	
	24 VDC	
	230 VAC	
C	24 VDC	DIN terminal (With surge voltage suppressor) 
	100 VAC	
	110 VAC	
	200 VAC	
	230 VAC	
	230 VAC	
D	24 VDC	Conduit terminal (With surge voltage suppressor) 
	100 VAC	
	110 VAC	
	200 VAC	
	230 VAC	
	230 VAC	
E	24 VDC	Conduit (With surge voltage suppressor) 
	100 VAC	
	110 VAC	
	200 VAC	
	230 VAC	
	230 VAC	
Y	24 VDC	Flat terminal 
Z	Other voltages and electrical option	

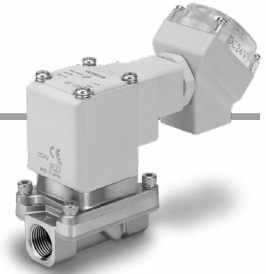
All other special options are the same as those of the standard model.

Special voltage	24 VAC
	48 VAC
	220 VAC
	240 VAC
	12 VDC
DIN terminal with light	
Conduit terminal with light	
Without DIN connector	
Applicable to deionized water (Seal material: FKM)	
Seal material: EPDM	
Oil-free	
G thread	
NPT thread	
With bracket	
Special electrical entry direction	

\* The 25A- series specifications and dimensions are the same as those of the standard model.

# Zero Differential Pressure Type Pilot Operated 2-Port Solenoid Valve/For Air

## 25A-VXZ Series



### How to Order (Single Unit)

**25A - VXZ2 3 0 A A**

Series compatible with secondary batteries

Fluid

0 For Air

#### Common Specifications

Seal material	NBR
Coil insulation type	Class B
Thread type	Rc

#### Size/Valve type

Symbol	Body size	Valve type	Symbol	Body material	Port size	Orifice diameter
3 A	10A	N.C.	A B	Aluminum	1/4	10
		N.O.			3/8	
4 B	15A	N.C.	G	Stainless steel	1/2	15
		N.O.				
5 C	20A	N.C.	J	Stainless steel	3/4	20
		N.O.				
6 D	25A	N.C.	L	Stainless steel	1	25
		N.O.				

#### Body material/Port size/Orifice diameter

#### Voltage/Electrical entry

Symbol	Voltage	Electrical entry
A B C D E F	24 VDC	Grommet 
	100 VAC	
	110 VAC	
	200 VAC	
	230 VAC	
	24 VDC	
G H J K L	24 VDC	DIN terminal (With surge voltage suppressor) 
	100 VAC	
	110 VAC	
	200 VAC	
	230 VAC	
	24 VDC	
M N P Q R	24 VDC	Conduit terminal (With surge voltage suppressor) 
	100 VAC	
	110 VAC	
	200 VAC	
	230 VAC	
	24 VDC	
S T U V W	24 VDC	Conduit (With surge voltage suppressor) 
	100 VAC	
	110 VAC	
	200 VAC	
	230 VAC	
	24 VDC	
Y Z	24 VDC	Flat terminal 
	Other voltages	

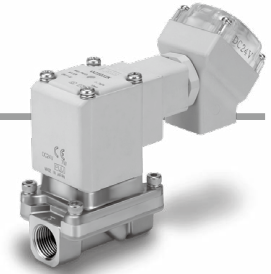
All other special options are the same as those of the standard model.

Special voltage	24 VAC
	48 VAC
	220 VAC
	240 VAC
	12 VDC
DIN terminal with light	
Conduit terminal with light	
Without DIN connector	
Low concentration ozone resistant (Seal material: FKM)	
Seal material: EPDM	
Oil-free	
G thread	
NPT thread	
With bracket (Standard for resin body)	
Special electrical entry direction	

\* The 25A- series specifications and dimensions are the same as those of the standard model.

# Zero Differential Pressure Type Pilot Operated 2-Port Solenoid Valve/For Water

## 25A-VXZ Series



### How to Order (Single Unit)

**25A - VXZ2 3 2 C A**

Series compatible with secondary batteries

Fluid

2 For Water

#### Common Specifications

Seal material	NBR
Coil insulation type	Class B
Thread type	Rc

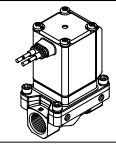
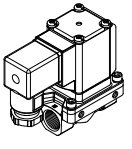
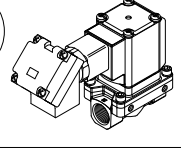
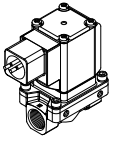
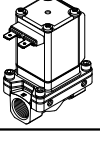
#### Size/Valve type

Symbol	Body size	Valve type
3 A	10A	N.C.
		N.O.
4 B	15A	N.C.
		N.O.
5 C	20A	N.C.
		N.O.
6 D	25A	N.C.
		N.O.

#### Body material/Port size/Orifice diameter

Symbol	Body material	Port size	Orifice diameter
C D	Stainless steel	1/4	10
		3/8	
G	Stainless steel	1/2	15
		3/4	
J L	Stainless steel	1	25
		3/4	

#### Voltage/Electrical entry

Symbol	Voltage	Electrical entry
A B C D E F	24 VDC	Grommet 
	100 VAC	
	110 VAC	
	200 VAC	
	230 VAC	
	24 VDC	
G H J K L	24 VDC	DIN terminal (With surge voltage suppressor) 
	100 VAC	
	110 VAC	
	200 VAC	
	230 VAC	
	24 VDC	
M N P Q R	24 VDC	Conduit terminal (With surge voltage suppressor) 
	100 VAC	
	110 VAC	
	200 VAC	
	230 VAC	
	24 VDC	
S T U V W	24 VDC	Conduit (With surge voltage suppressor) 
	100 VAC	
	110 VAC	
	200 VAC	
	230 VAC	
	24 VDC	
Y Z	24 VDC	Flat terminal 
	Other voltages	

All other special options are the same as those of the standard model.

Special voltage	24 VAC
	48 VAC
	220 VAC
	240 VAC
	12 VDC
DIN terminal with light	
Conduit terminal with light	
Without DIN connector	
Applicable to deionized water (Seal material: FKM)	
Seal material: EPDM	
Oil-free	
G thread	
NPT thread	
With bracket	
Special electrical entry direction	

\* The 25A- series specifications and dimensions are the same as those of the standard model.

# Electric Actuator/Slider Type Ball Screw Drive

Secondary Battery Compatible

Applicable to the  
LEC□ series



## 25A-LEFS Series LEFS16, 25, 32, 40

RoHS

Refer to the Web Catalog for model selection.

Refer to page 191 for the communication protocols  
EtherCAT®, EtherNet/IP™, PROFINET, and DeviceNet™.

### How to Order

**25A-LEFS** **H** **25** **R** **□** **B** - **200** **□** **K** - **S** **1** **6N** **1** **□**

1 2 3 4 5 6 7 8 9 10 11 12 13

Series compatible with secondary batteries

#### 1 Accuracy

Nil	Basic type
H	High-precision type

#### 2 Size

16
25
32
40

#### 3 Motor mounting position

Nil	In-line
R	Right side parallel
L	Left side parallel

#### 4 Motor type

Symbol	Type	Applicable size				Compatible controller/driver
		LEFS16	LEFS25	LEFS32	LEFS40	
Nil	Step motor (Servo/24 VDC)	●	●	●	●	LECP6 LECP1 LECPA LECPMJ
A	Servo motor (24 VDC)	●	●	—	—	LECA6

#### 5 Lead [mm]

Symbol	LEFS16	LEFS25	LEFS32	LEFS40
A	10	12	16	20
B	5	6	8	10

#### 6 Stroke [mm]

50	50
to	
1000	1000

\* Refer to the applicable stroke table.

#### 7 Motor option

Nil	Without option
B	With lock

### ⚠ Caution

#### [CE-compliant products]

① EMC compliance was tested by combining the electric actuator LEF series and the controller LEC series.

The EMC depends on the configuration of the customer's control panel and the relationship with other electrical equipment and wiring. Therefore, conformity to the EMC directive cannot be certified for SMC components incorporated into the customer's equipment under actual operating conditions. As a result, it is necessary for the customer to verify conformity to the EMC directive for the machinery and equipment as a whole.

② For the servo motor (24 VDC) specification, EMC compliance was tested by installing a noise filter set (LEC-NFA).

Refer to the **Web Catalog** for the noise filter set. Refer to the LECA Operation Manual for installation.

③ CC-Link direct input type (LECPMJ) is not CE-compliant.

#### [UL-compliant products]

When conformity to UL is required, the electric actuator and controller/driver should be used with a UL1310 Class 2 power supply.

### Applicable Stroke Table

●: Standard

Model	Stroke [mm]	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	Manufacturable stroke range [mm]	
LEFS16		●	●	●	●	●	●	●	●	●	●	—	—	—	—	—	—	—	—	—	—	—	50 to 500
LEFS25		●	●	●	●	●	●	●	●	●	●	●	●	—	—	—	—	—	—	—	—	—	50 to 600
LEFS32		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	—	—	—	—	—	50 to 800
LEFS40		—	—	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	150 to 1000

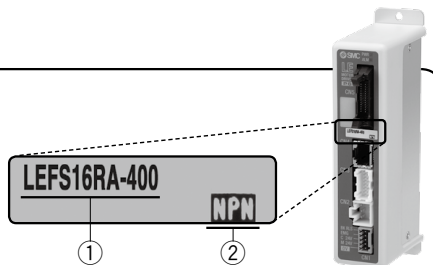
\* Please consult with SMC for non-standard strokes as they are produced as special orders.

### The actuator and controller/driver are sold as a package.

Confirm that the combination of the controller/driver and the actuator is correct.

<Check the following before use.>

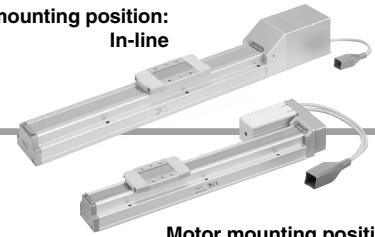
- Check the actuator label for model number (after "25A-"). This matches the controller/driver.
- Check Parallel I/O configuration matches (NPN or PNP).



# Electric Actuator/Slider Type Ball Screw Drive **25A-LEFS Series**

Step Motor (Servo/24 VDC) Servo Motor (24 VDC) Secondary Battery Compatible

Motor mounting position:  
In-line



Motor mounting position:  
Right side parallel

## 8 Positioning pin hole

Nil	Housing B bottom*1	
K	Body bottom 2 locations	

\*1 Refer to the body mounting example in the **Web Catalog** for the mounting method.

## 11 Controller/Driver type\*1

Nil	Without controller/driver	
6N	LECP6/LECA6 (Step data input type)	NPN
6P		PNP
1N	LECP1*2 (Programless type)	NPN
1P		PNP
MJ	LECPMJ*2 *3 (CC-Link direct input type)	—
AN	LECPA*2 *4 (Pulse input type)	NPN
AP		PNP

\*1 For details on controllers/drivers and compatible motors, refer to the compatible controller/driver below.

\*2 Only available for the motor type "Step motor".

\*3 Not applicable to CE.

\*4 When pulse signals are open collector, order the current limiting resistor (LEC-PA-R-□) separately.

## 9 Actuator cable type\*1

Nil	Without cable
S	Standard cable*2
R	Robotic cable (Flexible cable)*3

\*1 The standard cable should be used on fixed parts. For using on moving parts, select the robotic cable.

\*2 Only available for the motor type "Step motor".

\*3 Fix the motor cable protruding from the actuator to keep it unmovable. For details about fixing method, refer to Wiring/Cables in the Electric Actuators Precautions.

## 12 I/O cable length [m]\*1, Communication plug

Nil	Without cable (Without communication plug connector)*3	
1	1.5	
3	3*2	
5	5*2	
S	Straight type communication plug connector*3	
T	T-branch type communication plug connector*3	

\*1 When "Without controller/driver" is selected for controller/driver types, I/O cable cannot be selected. Refer to the **Web Catalog** if I/O cable is required.

\*2 When "Pulse input type" is selected for controller/driver types, pulse input usable only with differential. Only 1.5 m cables usable with open collector.

\*3 When "CC-Link direct input type" is selected for controller/driver types, I/O cable is not included. Only "Nil", "S" or "T" can be selected.

## 10 Actuator cable length [m]

Nil	Without cable
1	1.5
3	3
5	5
8	8*1
A	10*1
B	15*1
C	20*1

\*1 Produced upon receipt of order (Robotic cable only)

## 13 Controller/Driver mounting

Nil	Screw mounting
D	DIN rail mounting*1

\*1 DIN rail is not included. Order it separately.

\* The 25A-series specifications and dimensions are the same as those of the standard model.

## Compatible Controller/Driver

Type					
Series	LECP6	LECA6	LECPMJ	LECP1	LECPA
Features	Value (Step data) input Standard controller		CC-Link direct input	Capable of setting up operation (step data) without using a PC or teaching box	Operation by pulse signals
Compatible motor	Step motor (Servo/24 VDC)	Servo motor (24 VDC)	Step motor (Servo/24 VDC)		
Maximum number of step data	64 points		14 points		—
Power supply voltage	24 VDC				

\* Copper and zinc materials are used for the motors, cables, controllers/drivers.

# Electric Actuator/Slider Type Ball Screw Drive

Secondary Battery Compatible

Applicable to the  
JXC□ series



## 25A-LEFS Series LEFS16, 25, 32, 40

RoHS

Refer to the Web Catalog for model selection.

### How to Order

Refer to page 189 for the communication protocol CC-Link.

**25A-LEFS H 25 R □ B - 200 □ K - R1 CD17T**

Series compatible with secondary batteries

- ①
- ②
- ③
- ④
- ⑤
- ⑥
- ⑦
- ⑧
- ⑨
- ⑩

#### ① Accuracy

Nil	Basic type
H	High-precision type

#### ② Size

16
25
32
40

#### ④ Motor type

Symbol	Type	Applicable size				Compatible controller
		LEFS16	LEFS25	LEFS32	LEFS40	
Nil	Step motor (Servo/24 VDC)	●	●	●	●	JXCE1 JXC91 JXCP1 JXCD1

#### ③ Motor mounting position

Nil	In-line
R	Right side parallel
L	Left side parallel

#### ⑤ Lead [mm]

Symbol	LEFS16	LEFS25	LEFS32	LEFS40
A	10	12	16	20
B	5	6	8	10

#### ⑥ Stroke [mm]

50	50
to	to
1000	1000

\* Refer to the applicable stroke table.

#### ⚠ Caution

##### [CE-compliant products]

EMC compliance was tested by combining the electric actuator LE series and the JXCE1/91/P1/D1 series.

The EMC depends on the configuration of the customer's control panel and the relationship with other electrical equipment and wiring. Therefore, conformity to the EMC directive cannot be certified for SMC components incorporated into the customer's equipment under actual operating conditions. As a result, it is necessary for the customer to verify conformity to the EMC directive for the machinery and equipment as a whole.

#### ⑦ Motor option

Nil	Without option
B	With lock

#### ⑧ Positioning pin hole

Nil	Housing B bottom*	
K	Body bottom 2 locations	

\* Refer to the body mounting example in the Web Catalog for the mounting method.

#### Applicable Stroke Table

●: Standard

Model	Stroke [mm]																			Manufacturable stroke range [mm]	
	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950		1000
LEFS16	●	●	●	●	●	●	●	●	●	●	—	—	—	—	—	—	—	—	—	—	50 to 500
LEFS25	●	●	●	●	●	●	●	●	●	●	●	●	—	—	—	—	—	—	—	—	50 to 600
LEFS32	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	—	—	—	—	50 to 800
LEFS40	—	—	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	150 to 1000

\* Please consult with SMC for non-standard strokes as they are produced as special orders.

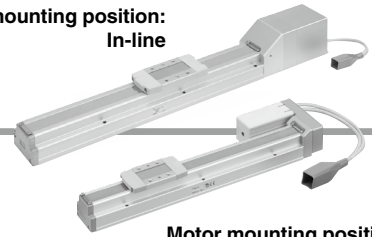


# Electric Actuator/Slider Type Ball Screw Drive **25A-LEFS Series**

Step Motor (Servo/24 VDC)

Secondary Battery Compatible

Motor mounting position:  
In-line



Motor mounting position:  
Right side parallel

## 9 Actuator cable type/length

Nil	Without cable
S1	Standard cable 1.5 m
S3	Standard cable 3 m
S5	Standard cable 5 m
R1	Robotic cable 1.5 m
R3	Robotic cable 3 m
R5	Robotic cable 5 m
R8	Robotic cable 8 m*1
RA	Robotic cable 10 m*1
RB	Robotic cable 15 m*1
RC	Robotic cable 20 m*1

\*1 Produced upon receipt of order (Robotic cable only)

\* The standard cable should only be used on fixed parts. For use on moving parts, select the robotic cable.

## 10 Controller

Nil	Without controller
C□1□□	With controller

**C D 1 7 T**

Communication protocol

E	EtherCAT®
9	EtherNet/IP™
P	PROFINET
D	DeviceNet™

For single axis

Communication plug connector for DeviceNet™

Nil	Without plug connector
S	Straight type
T	T-branch type

\* Select "Nil" for anything other than DeviceNet™.

Mounting

7	Screw mounting
8*1	DIN rail

\*1 DIN rail is not included. It must be ordered separately.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

## Compatible Controller

Type	EtherCAT® direct input type	EtherNet/IP™ direct input type	PROFINET direct input type	DeviceNet™ direct input type
Series	JXCE1	JXC91	JXCP1	JXCD1
Features	EtherCAT® direct input	EtherNet/IP™ direct input	PROFINET direct input	DeviceNet™ direct input
Compatible motor	Step motor (Servo/24 VDC)			
Maximum number of step data	64 points			
Power supply voltage	24 VDC			

\* Copper and zinc materials are used for the motors, cables, controllers/drivers.

# Electric Actuator/Slider Type Ball Screw Drive

Secondary Battery Compatible



## 25A-LEFS Series LEFS25, 32, 40

Refer to the Web Catalog for model selection.



LECY Series Page 194

### How to Order

**25A-LEFS H 32 R S3 B - 200 K - S 2 A2**

Series compatible with secondary batteries

<b>1 Accuracy</b>	<b>2 Size</b>	<b>3 Motor mounting position</b>	<b>5 Lead [mm]</b>	<b>6 Stroke [mm]</b>	<b>7 Motor option</b>																															
<table border="1"> <tr><td>Nil</td><td>Basic type</td></tr> <tr><td>H</td><td>High-precision type</td></tr> </table>	Nil	Basic type	H	High-precision type	<table border="1"> <tr><td>25</td></tr> <tr><td>32</td></tr> <tr><td>40</td></tr> </table>	25	32	40	<table border="1"> <tr><td>Nil</td><td>In-line</td></tr> <tr><td>R</td><td>Right side parallel</td></tr> <tr><td>L</td><td>Left side parallel</td></tr> </table>	Nil	In-line	R	Right side parallel	L	Left side parallel	<table border="1"> <tr><th>Symbol</th><th>25A-LEFS25</th><th>25A-LEFS32</th><th>25A-LEFS40</th></tr> <tr><td>A</td><td>12</td><td>16</td><td>20</td></tr> <tr><td>B</td><td>6</td><td>8</td><td>10</td></tr> </table>	Symbol	25A-LEFS25	25A-LEFS32	25A-LEFS40	A	12	16	20	B	6	8	10	<table border="1"> <tr><td>50 to 1000</td><td>50 to 1000</td></tr> </table>	50 to 1000	50 to 1000	<table border="1"> <tr><td>Nil</td><td>Without option</td></tr> <tr><td>B</td><td>With lock</td></tr> </table>	Nil	Without option	B	With lock
Nil	Basic type																																			
H	High-precision type																																			
25																																				
32																																				
40																																				
Nil	In-line																																			
R	Right side parallel																																			
L	Left side parallel																																			
Symbol	25A-LEFS25	25A-LEFS32	25A-LEFS40																																	
A	12	16	20																																	
B	6	8	10																																	
50 to 1000	50 to 1000																																			
Nil	Without option																																			
B	With lock																																			

4 Motor type					
Symbol	Type	Output [W]	Actuator size	Compatible driver	UL-compliant
S2*1	AC servo motor	100	25	LECSA□-S1	—
S3	(Incremental encoder)	200	32	LECSA□-S3	—
S4	(Absolute encoder)	400	40	LECSA2-S4	—
S6*1	AC servo motor (Absolute encoder)	100	25	LECSB□-S5	—
S7				LECSB□-S7	—
S8				LECSB2-S8	—
T6*2				LECS2-T5	●
T7	AC servo motor (Absolute encoder)	200	32	LECS2-T7	—
T8		400	40	LECS2-T8	—

\*1 For motor type S2 and S6, the compatible driver part number suffixes are S1 and S5 respectively.  
\*2 For motor type T6, the compatible driver part number suffix is T5.

12 I/O cable length [m]*3	
Nil	Without cable
H	Without cable (Connector only)
1	1.5

\*3 When "Without driver" is selected for driver type, only "Nil: Without cable" can be selected. Refer to the Web Catalog if I/O cable is required.

8 Positioning pin hole		
Nil	Housing B bottom*1	
K	Body bottom 2 locations	

\*1 Refer to the body mounting example in the Web Catalog for the mounting method.

10 Cable length* [m]	
Nil	Without cable
2	2
5	5
A	10

\* The length of the encoder, motor and lock cables are the same.

9 Cable type*1, *2	
Nil	Without cable
S	Standard cable
R	Robotic cable (Flexible cable)

\*1 The motor and encoder cables are included. (The lock cable is also included when the motor with lock option is selected.)  
\*2 Standard cable entry direction is  
· Parallel: (A) Axis side  
· In-line: (B) Counter axis side

11 Driver type					
Compatible driver	Power supply voltage [V]	Size			UL-compliant
		25	32	40	
Nil	Without driver	—	●	●	—
A1	LECSA1-S□	100 to 120	●	●	—
A2	LECSA2-S□	200 to 230	●	●	—
B1	LECSB1-S□	100 to 120	●	●	—
B2	LECSB2-S□	200 to 230	●	●	—
C1	LECS2-S□	100 to 120	●	●	—
C2	LECS2-S□	200 to 230	●	●	—
S1	LECS1-S□	100 to 120	●	●	—
S2	LECS2-S□	200 to 230	●	●	—
S2	LECS2-T□	200 to 240	●	●	●

\* When a driver type is selected, a cable is included. Select the cable type and cable length.  
Example) S2S2: Standard cable (2 m) + Driver (LECS2)  
S2 : Standard cable (2 m)  
Nil : Without cable and driver

### Applicable Stroke Table

Model	Stroke [mm]																Manufacturable stroke range [mm]				
	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800		850	900	950	1000
25A-LEFS25	●	●	●	●	●	●	●	●	●	●	●	●	●	—	—	—	—	—	—	—	50 to 600
25A-LEFS32	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	—	—	—	50 to 800
25A-LEFS40	—	—	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	150 to 1000

\* Please consult with SMC for non-standard strokes as they are produced as special orders.

### Compatible Driver

\* The 25A-series specifications and dimensions are the same as those of the standard model.

Driver type	Pulse input type/ Positioning type	Pulse input type	CC-Link direct input type	SSCNET III type	SSCNET III/H type
Series	LECSA	LECSB	LECS2	LECS1	LECS2-T
Number of point tables	Up to 7	—	Up to 255 (2 stations occupied)	—	—
Pulse input	○	○	—	—	—
Applicable network	—	—	CC-Link	SSCNET III	SSCNET III/H
Control encoder	Incremental 17-bit encoder	Absolute 18-bit encoder	Absolute 18-bit encoder	Absolute 18-bit encoder	Absolute 22-bit encoder
Communication function	USB communication	USB communication, RS422 communication	USB communication, RS422 communication	USB communication	
Power supply voltage [V]	100 to 120 VAC (50/60 Hz), 200 to 230 VAC (50/60 Hz)			200 to 240 VAC (50/60 Hz)	

\* Copper and zinc materials are used for the motors, cables, controllers/drivers.

# Electric Actuator/Slider Type Ball Screw Drive

Secondary Battery Compatible



## 25A-LEFS Series LEFS25, 32, 40

Refer to the Web Catalog for model selection.



LECY □ Series ▶ Page 193

### How to Order

**25A-LEFS H 32 R V7 B - 200 □ K - S 2 M2 □**

Series compatible with secondary batteries

<b>1 Accuracy</b>	<b>2 Size</b>	<b>3 Motor mounting position</b>	<b>5 Lead [mm]</b>	<b>6 Stroke [mm]</b>	<b>7 Motor option</b>																																			
<table border="1"> <tr><td>Nil</td><td>Basic type</td></tr> <tr><td>H</td><td>High-precision type</td></tr> </table>	Nil	Basic type	H	High-precision type	<table border="1"> <tr><td>25</td></tr> <tr><td>32</td></tr> <tr><td>40</td></tr> </table>	25	32	40	<table border="1"> <tr><td>Nil</td><td>In-line</td></tr> <tr><td>R</td><td>Right side parallel</td></tr> <tr><td>L</td><td>Left side parallel</td></tr> </table>	Nil	In-line	R	Right side parallel	L	Left side parallel	<table border="1"> <tr><th>Symbol</th><th>LEFS25</th><th>LEFS32</th><th>LEFS40</th></tr> <tr><td>A</td><td>12</td><td>16</td><td>20</td></tr> <tr><td>B</td><td>6</td><td>8</td><td>10</td></tr> </table>	Symbol	LEFS25	LEFS32	LEFS40	A	12	16	20	B	6	8	10	<table border="1"> <tr><td>50</td><td>50</td></tr> <tr><td>to</td><td>to</td></tr> <tr><td>1000</td><td>1000</td></tr> </table>	50	50	to	to	1000	1000	<table border="1"> <tr><td>Nil</td><td>Without option</td></tr> <tr><td>B</td><td>With lock</td></tr> </table>	Nil	Without option	B	With lock
Nil	Basic type																																							
H	High-precision type																																							
25																																								
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Symbol	LEFS25	LEFS32	LEFS40																																					
A	12	16	20																																					
B	6	8	10																																					
50	50																																							
to	to																																							
1000	1000																																							
Nil	Without option																																							
B	With lock																																							

\* Refer to the applicable stroke table.

**4 Motor type**

Symbol	Type	Output [W]	Size	Compatible driver
V6*1	AC servo motor (Absolute encoder)	100	25	LECYM2-V5/LECYU2-V5
V7		200	32	LECYM2-V7/LECYU2-V7
V8		400	40	LECYM2-V8/LECYU2-V8

\*1 For motor type V6, the compatible driver part number suffix is V5.

**12 I/O cable length [m]\*3**

Nil	Without cable
H	Without cable (Connector only)
1	1.5

\*3 When "Without driver" is selected for driver type, only "Nil: Without cable" can be selected. Refer to the Web Catalog if I/O cable is required.

**8 Positioning pin hole**

Nil	Housing B bottom*1	
K	Body bottom 2 locations	

\*1 Refer to the body mounting example in the Web Catalog for the mounting method.

**10 Cable length\*1 [m]**

Nil	Without cable
3	3
5	5
A	10
C	20

\*1 The length of the encoder, motor and lock cables are the same.

**9 Cable type\*1, \*2**

Nil	Without cable
S	Standard cable
R	Robotic cable (Flexible cable)

\*1 The motor and encoder cables are included. (The lock cable is also included when the motor with lock option is selected.)

\*2 Standard cable entry direction is  
· Parallel: (A) Axis side  
· In-line: (B) Counter axis side

**11 Driver type**

	Compatible driver	Power supply voltage [V]
Nil	Without driver	—
M2	LECYM2-V□	200 to 230
U2	LECYU2-V□	200 to 230

### Applicable Stroke Table

Model	Stroke [mm]																	Manufacturable stroke range [mm]			
	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850		900	950	1000
25A-LEFS25	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	50 to 600
25A-LEFS32	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	50 to 800
25A-LEFS40	—	—	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	150 to 1000

●: Standard

\* Please consult with SMC for non-standard strokes as they are produced as special orders.

\* The 25A-series specifications and dimensions are the same as those of the standard model.

### Compatible Driver

Driver type	MECHATROLINK-II type	MECHATROLINK-III type
Series	LECYM	LECYU
Applicable network	MECHATROLINK-II	MECHATROLINK-III
Control encoder	Absolute 20-bit encoder	
Communication device	USB communication, RS-422 communication	
Power supply voltage [V]	200 to 230 VAC (50/60 Hz)	

\* Copper and zinc materials are used for the motors, cables, controllers/drivers.

# Electric Actuator/High Rigidity Slider Type Ball Screw Drive Secondary Battery Compatible

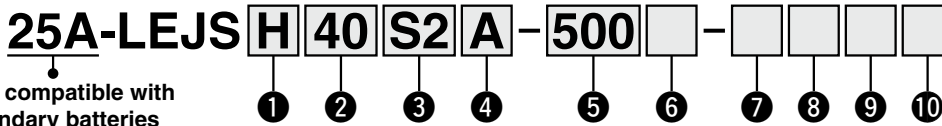


## 25A-LEJS Series LEJS40, 63

Refer to the Web Catalog for model selection.

LECY□ Series ▶ Page 196

### How to Order



Series compatible with secondary batteries

#### ① Accuracy

Nil	Basic type
H	High-precision type

#### ② Size

40
63

#### ⑤ Stroke [mm]\*3

200
to
1500

\*3 Refer to the applicable stroke table for details.

#### ⑥ Motor option

Nil	Without option
B	With lock

#### ⑦ Cable type\*5, \*6, \*7

Nil	Without cable
S	Standard cable
R	Robotic cable (Flexible cable)

\*6 The motor and encoder cables are included. (The lock cable is included when the motor with lock option is selected.)

\*7 Standard cable entry is "(A) Axis side".

#### ③ Motor type

Symbol	Type	Output [W]	Actuator size	Compatible driver	UL-compliant
S2*1	AC servo motor (Incremental encoder)	100	40	LECSA□-S1	—
S3		200	63	LECSA□-S3	—
S6*1	AC servo motor (Absolute encoder)	100	40	LECSB□-S5 LECS□-S5 LECSS□-S5	—
S7		200	63	LECSB□-S7 LECS□-S7 LECSS□-S7	—
T6*2	AC servo motor (Absolute encoder)	100	40	LECSS2-T5	●
T7		200	63	LECSS2-T7	—

\*1 For motor type S2 and S6, the compatible driver part number suffixes are S1 and S5 respectively.

\*2 For motor type T6, the compatible driver part number suffix is T5.

#### ④ Lead [mm]

Symbol	25A-LEJS40	25A-LEJS63
H	24	30
A	16	20
B	8	10

#### ⑨ Driver type\*5

	Compatible driver	Power supply voltage [V]	UL-compliant
Nil	Without driver	—	—
A1	LECSA1-S□	100 to 120	—
A2	LECSA2-S□	200 to 230	—
B1	LECSB1-S□	100 to 120	—
B2	LECSB2-S□	200 to 230	—
C1	LECS□1-S□	100 to 120	—
C2	LECS□2-S□	200 to 230	—
S1	LECSS1-S□	100 to 120	—
S2	LECSS2-S□	200 to 230	—
	LECSS2-T□	200 to 240	●

\*5 When a driver type is selected, a cable is included. Select the cable type and cable length.

Example)

S2S2: Standard cable (2 m) + Driver (LECSS2)

S2 : Standard cable (2 m)

Nil : Without cable and driver

#### ⑩ I/O cable length [m]\*9

Nil	Without cable
H	Without cable (Connector only)
1	1.5

\*9 When "Without driver" is selected for driver type, only "Nil: Without cable" can be selected. Refer to the Web Catalog if I/O cable is required.

#### Applicable Stroke Table\*4

Model	Stroke [mm]	●: Standard										
		200	300	400	500	600	700	800	900	1000	1200	1500
25A-LEJS40		●	●	●	●	●	●	●	●	●	●	—
25A-LEJS63		—	●	●	●	●	●	●	●	●	●	●

\*4 Please consult with SMC for non-standard strokes as they are produced as special orders.

For auto switches, refer to page 211.

#### Compatible Driver

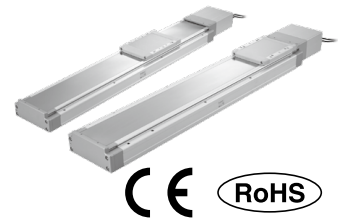
\* The 25A- series specifications and dimensions are the same as those of the standard model.

Driver type	Pulse input type/ Positioning type	Pulse input type	CC-Link direct input type	SSCNET III type	SSCNET III/H type
Series	LECSA	LECSB	LECS□	LECSS	LECSS-T
Number of point tables	Up to 7	—	Up to 255	—	—
Pulse input	○	○	—	—	—
Applicable network	—	—	CC-Link	SSCNET III	SSCNET III/H
Control encoder	Incremental 17-bit encoder	Absolute 18-bit encoder	Absolute 18-bit encoder	Absolute 18-bit encoder	Absolute 22-bit encoder
Communication function	USB communication	USB communication, RS422 communication	USB communication, RS422 communication	USB communication	
Power supply voltage [V]	100 to 120 VAC (50/60 Hz), 200 to 230 VAC (50/60 Hz)				200 to 240 VAC (50/60 Hz)

\* Copper and zinc materials are used for the motors, cables, controllers/drivers.

# Electric Actuator/High Rigidity Slider Type Ball Screw Drive Secondary Battery Compatible

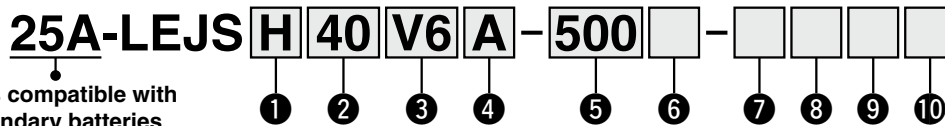
## 25A-LEJS Series LEJS40, 63



Refer to the Web Catalog for model selection.

**LECS** □ Series ▶ Page 195

### How to Order



Series compatible with secondary batteries

#### ① Accuracy

<b>Nil</b>	Basic type
<b>H</b>	High-precision type

#### ② Size

<b>40</b>
<b>63</b>

#### ③ Motor type \*1

Symbol	Type	Output [W]	Actuator size	Compatible driver
<b>V6</b>	AC servo motor (Absolute encoder)	100	40	LECYM2-V5 LECYU2-V5
<b>V7</b>	AC servo motor (Absolute encoder)	200	63	LECYM2-V7 LECYU2-V7

\*1 For motor type V6, the compatible driver part number suffix is V5.

#### ④ Lead [mm]

Symbol	25A-LEJS40	25A-LEJS63
<b>H</b>	24	30
<b>A</b>	16	20
<b>B</b>	8	10

#### ⑤ Stroke [mm]\*3

<b>200</b>	*3 Refer to the applicable stroke table for details.
<b>to</b>	
<b>1500</b>	

#### ⑥ Motor option

<b>Nil</b>	Without option
<b>B</b>	With lock

#### ⑦ Cable type\*5, \*6, \*7

<b>Nil</b>	Without cable
<b>S</b>	Standard cable
<b>R</b>	Robotic cable (Flexible cable)

\*6 The motor and encoder cables are included. (The lock cable is included when the motor with lock option is selected.)

\*7 Standard cable entry is "(A) Axis side".

#### ⑧ Cable length [m] \*5, \*6

<b>Nil</b>	Without cable
<b>3</b>	3
<b>5</b>	5
<b>A</b>	10
<b>C</b>	20

\*6 The length of the motor, encoder and lock cables are the same.

#### ⑨ Driver type \*5

	Compatible driver	Power supply voltage [V]
<b>Nil</b>	Without driver	—
<b>M2</b>	LECYM2-V□	200 to 230
<b>U2</b>	LECYU2-V□	200 to 230

\*5 When a driver type is selected, a cable is included. Select the cable type and cable length.

Example)

S2S2: Standard cable (2 m) + Driver (LECSS2)

S2 : Standard cable (2 m)

Nil : Without cable and driver

#### ⑩ I/O cable length [m]\*9

<b>Nil</b>	Without cable
<b>H</b>	Without cable (Connector only)
<b>1</b>	1.5

\*9 When "Without driver" is selected for driver type, only "Nil: Without cable" can be selected. Refer to the **Web Catalog** if I/O cable is required.

#### Applicable Stroke Table\*4

Model	Stroke [mm]	●: Standard											
		200	300	400	500	600	700	800	900	1000	1200	1500	
25A-LEJS40		●	●	●	●	●	●	●	●	●	●	●	—
25A-LEJS63		—	●	●	●	●	●	●	●	●	●	●	●

\*4 Please consult with SMC for non-standard strokes as they are produced as special orders.


**Solid state auto switches should be ordered separately. For details about auto switches, refer to page 211.**

#### Applicable auto switches

D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900  
D-M9NW(V)-900, D-M9PW(V)-900, D-M9B(V)-900

#### Compatible Driver

\* The 25A- series specifications and dimensions are the same as those of the standard model.

Driver type	MECHATROLINK-II type	MECHATROLINK-III type
		
Series	<b>LECYM</b>	
Applicable network	MECHATROLINK-II	MECHATROLINK-III
Control encoder	Absolute 20-bit encoder	
Communication device	USB communication, RS-422 communication	
Power supply voltage [V]	200 to 230 VAC (50/60 Hz)	

\* Copper and zinc materials are used for the motors, cables, controllers/drivers.

# Electric Actuator/ Rod Type

Secondary Battery Compatible

Applicable to the  
LEC□ series



## 25A-LEY Series LEY16, 25, 32, 40

Refer to the Web Catalog for model selection.

Refer to page 199 for the communication protocols  
EtherCAT®, EtherNet/IP™, PROFINET, and DeviceNet™.

### How to Order

**25A-LEY** **16** **B** - **100** **C** - **S1** **6N** **1**

Series compatible with  
secondary batteries

1 2 3 4 5 6 7 8 9 10 11 12

#### 1 Size

16
25
32
40

#### 2 Motor mounting position

Nil	Top mounting
R	Right side parallel
L	Left side parallel
D	In-line

#### 3 Motor type

Symbol	Type	Size			Compatible controller/driver
		LEY16	LEY25	LEY32/40	
Nil	Step motor (Servo/24 VDC)	●	●	●	LECP6 LECP1 LECPA LECPMJ
A	Servo motor (24 VDC)	●	●	—	LECA6

#### ⚠ Caution

##### [CE-compliant products]

① EMC compliance was tested by combining the electric actuator LEY series and the controller LEC series.

The EMC depends on the configuration of the customer's control panel and the relationship with other electrical equipment and wiring. Therefore, conformity to the EMC directive cannot be certified for SMC components incorporated into the customer's equipment under actual operating conditions. As a result, it is necessary for the customer to verify conformity to the EMC directive for the machinery and equipment as a whole.

② For the servo motor (24 VDC) specification, EMC compliance was tested by installing a noise filter set (LEC-NFA). Refer to the **Web Catalog** for the noise filter set. Refer to the LECA Operation Manual for installation.

③ CC-Link direct input type (LECPMJ) is not CE-compliant.

##### [UL-compliant products]

When conformity to UL is required, the electric actuator and controller/driver should be used with a UL1310 Class 2 power supply.

#### 4 Lead [mm]

Symbol	LEY16	LEY25	LEY32/40
A	10	12	16
B	5	6	8
C	2.5	3	4

#### 5 Stroke [mm]

30	30
to	to
500	500

\* Refer to the applicable stroke table.

#### 6 Motor option

C	With motor cover
W	With lock/motor cover

\* When "With lock/motor cover" is selected for the top mounting and right/left side parallel types, the motor body will stick out of the end of the body for size 16/40 with strokes 30 mm or less. Check for interference with workpieces before selecting a model.

#### 7 Rod end thread

Nil	Rod end female thread
M	Rod end male thread (1 rod end nut is included.)

#### Mounting Bracket Part Nos. for the 25A- Series

Applicable size	Foot *1	Flange	Double clevis
16	25-LEY-L016	25-LEY-F016	25-LEY-D016
25	25-LEY-L025	25-LEY-F025	25-LEY-D025
32, 40	25-LEY-L032	25-LEY-F032	25-LEY-D032
Surface treatment	RAYDENT®	RAYDENT®	Coating (Size 16: Electroless nickel plating)

\*1 When ordering foot brackets, order 2 pieces per actuator.

\* Parts belonging to each bracket are as follows.

Foot, Flange: Body mounting bolt, Double clevis: Clevis pin, Type C retaining ring for axis, Body mounting bolt

\* Applicable stroke table

●: Standard

Model	Stroke [mm]											Manufacturable stroke range [mm]
	30	50	100	150	200	250	300	350	400	450	500	
LEY16	●	●	●	●	●	●	●	—	—	—	—	10 to 300
LEY25	●	●	●	●	●	●	●	●	●	—	—	15 to 400
LEY32/40	●	●	●	●	●	●	●	●	●	●	●	20 to 500

\* Please consult with SMC for non-standard strokes as they are produced as special orders.

Solid state auto switches should be ordered separately.  
For details about auto switches, refer to page 211.

#### Applicable auto switches

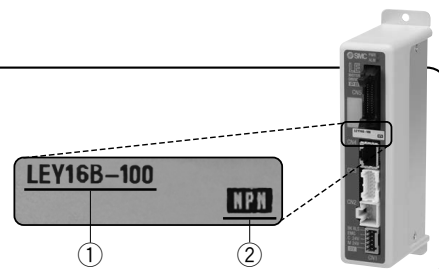
D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900  
D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900

#### The actuator and controller/driver are sold as a package.

Confirm that the combination of the controller/driver and the actuator is correct.

<Check the following before use.>

- Check the actuator label for model number (after "25A-"). This matches the controller/driver.
- Check Parallel I/O configuration matches (NPN or PNP)

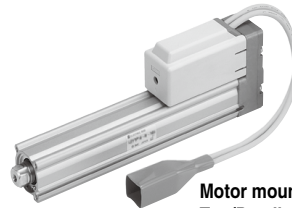


# Electric Actuator/Rod Type **25A-LEY Series**

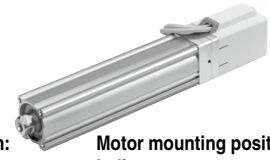
Step Motor (Servo/24 VDC)

Servo Motor (24 VDC)

Secondary Battery Compatible



Motor mounting position:  
Top/Parallel



Motor mounting position:  
In-line

## 8 Mounting\*1

Symbol	Type	Motor mounting position	
		Top/Parallel	In-line
Nil	Ends tapped/ Body bottom tapped*2	●	●
L	Foot	●	—
F	Rod flange*2	●	●
G	Head flange*2	●*4	—
D	Double clevis*3	●	—

\*1 Mounting bracket is shipped together, (but not assembled).

\*2 For horizontal cantilever mounting with the rod flange, head flange and ends tapped, use the actuator within the following stroke range.

- LEY25: 200 mm or less
- LEY32/40: 100 mm or less

\*3 For mounting with the double clevis, use the actuator within the following stroke range.

- LEY16: 100 mm or less
- LEY25: 200 mm or less
- LEY32/40: 200 mm or less

\*4 Head flange is not available for the LEY32/40.

## 12 Controller/Driver mounting

Nil	Screw mounting
D	DIN rail mounting*1

\*1 DIN rail is not included. Order it separately.

## 9 Actuator cable type/length\*2

Nil	Without cable
S1	Standard cable 1.5 m*3
S3	Standard cable 3 m*3
S5	Standard cable 5 m*3
R1	Robotic cable 1.5 m
R3	Robotic cable 3 m
R5	Robotic cable 5 m
R8	Robotic cable 8 m*1
RA	Robotic cable 10 m*1
RB	Robotic cable 15 m*1
RC	Robotic cable 20 m*1

\*1 Produced upon receipt of order (Robotic cable only)

\*2 The standard cable should only be used on fixed parts. For use on moving parts, select the robotic cable.

\*3 Only available for the motor type "Step motor."

## 11 I/O cable length [m]\*1, Communication plug

Nil	Without cable (Without communication plug connector)*3
1	1.5
3	3*2
5	5*2
S	Straight type communication plug connector*3
T	T-branch type communication plug connector*3

\*1 When "Without controller/driver" is selected for controller/driver types, I/O cable cannot be selected. Refer to the **Web Catalog** if I/O cable is required.

\*2 When "Pulse input type" is selected for controller/driver types, pulse input usable only with differential. Only 1.5 m cables usable with open collector.

\*3 When "CC-Link direct input type" is selected for controller/driver types, I/O cable is not included. Only "Nil", "S" or "T" can be selected.

## 10 Controller/Driver type\*1

Nil	Without controller/driver	
6N	LECP6/LECA6 (Step data input type)	NPN
6P		PNP
1N	LECP1*2 (Programless type)	NPN
1P		PNP
MJ	LECPMJ*2 *3 (CC-Link direct input type)	—
AN	LECPA*2 *4 (Pulse input type)	NPN
AP		PNP

\*1 For details on controllers/drivers and compatible motors, refer to the compatible controller/driver below.

\*2 Only available for the motor type "Step motor".

\*3 Not applicable to CE.

\*4 When pulse signals are open collector, order the current limiting resistor (LEC-PA-R-□) separately.

\* The 25A-series specifications and dimensions are the same as those of the standard model.

## Compatible Controller/Driver

Type	Step data input type	Step data input type	CC-Link direct input type	Programless type	Pulse input type
Series	LECP6	LECA6	LECPMJ	LECP1	LECPA
Features	Value (Step data) input Standard controller		CC-Link direct input	Capable of setting up operation (step data) without using a PC or teaching box	Operation by pulse signals
Compatible motor	Step motor (Servo/24 VDC)	Servo motor (24 VDC)		Step motor (Servo/24 VDC)	
Maximum number of step data	64 points			14 points	—
Power supply voltage	24 VDC				

\* Copper and zinc materials are used for the motors, cables, controllers/drivers.

# Electric Actuator/ Rod Type

Secondary Battery Compatible

Applicable to the  
JXC□ series

## 25A-LEY Series LEY16, 25, 32, 40

Refer to the Web Catalog for model selection.

### How to Order

Refer to page 197 for the communication protocol CC-Link.

**25A-LEY** **16** **B** - **100** **C** - **R1** **CD17T**

Series compatible with  
secondary batteries

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩

## ① Size

16
25
32
40

## ② Motor mounting position

Nil	Top mounting
R	Right side parallel
L	Left side parallel
D	In-line

## ③ Motor type

Symbol	Type	Size			Compatible controller
		LEY16	LEY25	LEY32/40	
Nil	Step motor (Servo/24 VDC)	●	●	●	JXCE1 JXC91 JXCP1 JXCD1

## ④ Lead [mm]

Symbol	LEY16	LEY25	LEY32/40
A	10	12	16
B	5	6	8
C	2.5	3	4

## ⑤ Stroke [mm]

30	30
to	to
500	500

\* Refer to the applicable stroke table.

### Caution

## [CE-compliant products]

EMC compliance was tested by combining the electric actuator LE series and the JXCE1/91/P1/D1 series.

The EMC depends on the configuration of the customer's control panel and the relationship with other electrical equipment and wiring. Therefore, conformity to the EMC directive cannot be certified for SMC components incorporated into the customer's equipment under actual operating conditions. As a result, it is necessary for the customer to verify conformity to the EMC directive for the machinery and equipment as a whole.

## ⑥ Motor option

C	With motor cover
W	With lock/motor cover

\* When "With lock/motor cover" is selected for the top mounting and right/left side parallel types, the motor body will stick out of the end of the body for size 16/40 with strokes 30 mm or less. Check for interference with workpieces before selecting a model.

## ⑦ Rod end thread

Nil	Rod end female thread
M	Rod end male thread (1 rod end nut is included.)

### Mounting Bracket Part Nos. for the 25A- Series

Applicable size	Foot*1	Flange	Double clevis
16	25-LEY-L016	25-LEY-F016	25-LEY-D016
25	25-LEY-L025	25-LEY-F025	25-LEY-D025
32, 40	25-LEY-L032	25-LEY-F032	25-LEY-D032
Surface treatment	RAYDENT®	RAYDENT®	Coating (Size 16: Electroless nickel plating)

\*1 When ordering foot brackets, order 2 pieces per actuator.

\* Parts belonging to each bracket are as follows.

Foot, Flange: Body mounting bolt, Double clevis: Clevis pin, Type C retaining ring for axis, Body mounting bolt

\* Applicable Stroke Table

●: Standard

Model	Stroke [mm]											Manufacturable stroke range [mm]
	30	50	100	150	200	250	300	350	400	450	500	
LEY16	●	●	●	●	●	●	●	—	—	—	—	10 to 300
LEY25	●	●	●	●	●	●	●	●	●	—	—	15 to 400
LEY32/40	●	●	●	●	●	●	●	●	●	●	●	20 to 500

\* Please consult with SMC for non-standard strokes as they are produced as special orders.

Solid state auto switches should be ordered separately.  
For details about auto switches, refer to page 211.

## Applicable auto switches

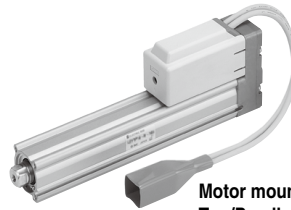
D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900  
D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900



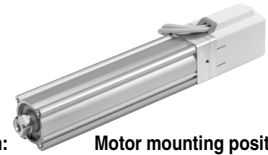
# Electric Actuator/Rod Type **25A-LEY Series**

Step Motor (Servo/24 VDC)

Secondary Battery Compatible



Motor mounting position:  
Top/Parallel



Motor mounting position:  
In-line

## 8 Mounting\*1

Symbol	Type	Motor mounting position	
		Top/Parallel	In-line
Nil	Ends tapped/ Body bottom tapped*2	●	●
L	Foot	●	—
F	Rod flange*2	●	●
G	Head flange*2	●*4	—
D	Double clevis*3	●	—

\*1 Mounting bracket is shipped together, (but not assembled).

\*2 For horizontal cantilever mounting with the rod flange, head flange and ends tapped, use the actuator within the following stroke range.

- LEY25: 200 mm or less
- LEY32/40: 100 mm or less

\*3 For mounting with the double clevis, use the actuator within the following stroke range.

- LEY16: 100 mm or less
- LEY25: 200 mm or less
- LEY32/40: 200 mm or less

\*4 Head flange is not available for the LEY32/40.

## 9 Actuator cable type/length

Nil	Without cable
S1	Standard cable 1.5 m
S3	Standard cable 3 m
S5	Standard cable 5 m
R1	Robotic cable 1.5 m
R3	Robotic cable 3 m
R5	Robotic cable 5 m
R8	Robotic cable 8 m*1
RA	Robotic cable 10 m*1
RB	Robotic cable 15 m*1
RC	Robotic cable 20 m*1

\*1 Produced upon receipt of order (Robotic cable only)  
\* The standard cable should only be used on fixed parts. For use on moving parts, select the robotic cable.

## 10 Controller

Nil	Without controller
C□1□□	With controller



Communication protocol	
E	EtherCAT®
9	EtherNet/IP™
P	PROFINET
D	DeviceNet™

For single axis

Mounting

7	Screw mounting
8*1	DIN rail

\*1 DIN rail is not included. It must be ordered separately.

Communication plug connector for DeviceNet™

Nil	Without plug connector
S	Straight type
T	T-branch type

\* Select "Nil" for anything other than DeviceNet™.

\* The 25A-series specifications and dimensions are the same as those of the standard model.

## Compatible Controller

Type	EtherCAT® direct input type	EtherNet/IP™ direct input type	PROFINET direct input type	DeviceNet™ direct input type
Series	JXCE1	JXC91	JXCP1	JXCD1
Features	EtherCAT® direct input	EtherNet/IP™ direct input	PROFINET direct input	DeviceNet™ direct input
Compatible motor	Step motor (Servo/24 VDC)			
Maximum number of step data	64 points			
Power supply voltage	24 VDC			

\* Copper and zinc materials are used for the motors, cables, controllers/drivers.

# Electric Actuator/ Rod Type Secondary Battery Compatible

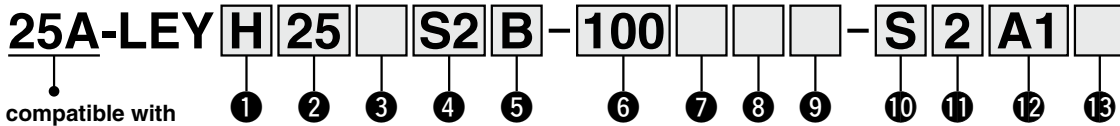


## 25A-LEY Series LEY25, 32 Size 25, 32

LECY Series Page 203

Refer to the Web Catalog for model selection.

### How to Order



Series compatible with secondary batteries

#### 1 Accuracy

Nil	Basic type
H	High-precision type

#### 2 Size

25
32

#### 3 Motor mounting position

Nil	Top mounting
R	Right side parallel
L	Left side parallel
D	In-line

#### 5 Lead [mm]

Symbol	LEY25	LEY32*1
A	12	16 (20)
B	6	8 (10)
C	3	4 (5)

\*1 The values shown in ( ) are the lead for size 32 top mounting, right/left side parallel types. (Equivalent lead which includes the pulley ratio [1.25:1])

#### 4 Motor type\*1

Symbol	Type	Output [W]	Actuator size	Compatible drivers*3	UL-compliant
S2*1	AC servo motor (Incremental encoder)	100	25	LECSA□-S1	—
S3		200	32	LECSA□-S3	—
S6*1	AC servo motor (Absolute encoder)	100	25	LECSB□-S5 LECSC□-S5 LECSS□-S5	—
S7		200	32	LECSB□-S7 LECSC□-S7 LECSS□-S7	—
T6*2		100	25	LECSS2-T5	—
T7	AC servo motor (Absolute encoder)	200	32	LECSS2-T7	●

\*1 For motor type S2 and S6, the compatible driver part number suffixes are S1 and S5 respectively.

\*2 For motor type T6, the compatible driver part number suffix is T5.

\*3 For details about the driver, refer to the Web Catalog.

#### 6 Stroke [mm]

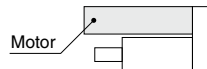
30	30
to	to
500	500

\* Refer to the applicable stroke table for details.

#### 7 Motor option

Nil	Without option
B	With lock*1

\*1 When "With lock" is selected for the top mounting and right/left side parallel types, the motor body will stick out of the end of the body for size 25 with strokes 30 mm or less. Check for interference with workpieces before selecting a model.



#### 9 Mounting\*1

Symbol	Type	Motor mounting position	
		Top/Parallel	In-line
Nil	Ends tapped/ Body bottom tapped *2	●	●
L	Foot	●	—
F	Rod flange*2	●*4	●
G	Head flange*2	●*5	—
D	Double clevis*3	●	—

\*1 Mounting bracket is shipped together, (but not assembled).

\*2 For horizontal cantilever mounting with the rod flange, head flange and ends tapped, use the actuator within the following stroke range.

- 25A-LEY25: 200 mm or less
- 25A-LEY32: 100 mm or less

\*3 For mounting with the double clevis, use the actuator within the following stroke range.

- 25A-LEY25: 200 mm or less
- 25A-LEY32: 200 mm or less

\*4 Rod flange is not available for the LEY25 with stroke 30 mm and motor option "With lock".

\*5 Head flange is not available for the 25A-LEY32.

#### 8 Rod end thread

Nil	Rod end female thread
M	Rod end male thread (1 rod end nut is included.)

#### Mounting Bracket Part Nos. for the 25A- Series

Applicable size	Foot*1	Flange	Double clevis
25	25-LEY-L025	25-LEY-F025	25-LEY-D025
32	25-LEY-L032	25-LEY-F032	25-LEY-D032
Surface treatment	RAYDENT®	RAYDENT®	Coating (Size 16: Electroless nickel plating)

\*1 When ordering foot brackets, order 2 pieces per actuator.

\* Parts belonging to each bracket are as follows.

Foot, Flange: Body mounting bolt, Double clevis: Clevis pin, Type C retaining ring for axis, Body mounting bolt

\* Applicable stroke table

Model	Stroke [mm]	Applicable stroke table										Manufacturable stroke range [mm]
		30	50	100	150	200	250	300	350	400	450	
25A-LEY25	●	●	●	●	●	●	●	●	●	—	—	15 to 400
25A-LEY32	●	●	●	●	●	●	●	●	●	●	●	20 to 500

\* Please consult with SMC for non-standard strokes as they are produced as special orders.

Solid state auto switches should be ordered separately. For details about auto switches, refer to page 211.

#### Applicable auto switches

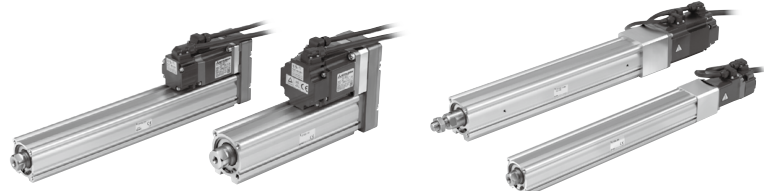
D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900  
D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900

# Electric Actuator/Rod Type **25A-LEY Series**

AC Servo Motor

Size **25, 32**

Secondary Battery Compatible



Motor mounting position:  
Top/Parallel

Motor mounting position:  
In-line

## 10 Cable type\*1

<b>Nil</b>	Without cable
<b>S</b>	Standard cable
<b>R</b>	Robotic cable (Flexible cable)

\*1 The motor and encoder cables are included.  
(The lock cable is also included when the motor with lock option is selected.)

\*1 Standard cable entry direction is  
· Top/Parallel: (A) Axis side  
· In-line: (B) Counter axis side

## 11 Cable length\*1 [m]

<b>Nil</b>	Without cable
<b>2</b>	2
<b>5</b>	5
<b>A</b>	10

\*1 The length of the encoder, motor and lock cables are the same.

## 12 Driver type\*1

	Compatible driver	Power supply voltage [V]	UL-compliant
<b>Nil</b>	Without driver	—	—
<b>A1</b>	LECSA1-S□	100 to 120	—
<b>A2</b>	LECSA2-S□	200 to 230	—
<b>B1</b>	LECSB1-S□	100 to 120	—
<b>B2</b>	LECSB2-S□	200 to 230	—
<b>C1</b>	LECSA1-S□	100 to 120	—
<b>C2</b>	LECSA2-S□	200 to 230	—
<b>S1</b>	LECSS1-S□	100 to 120	—
<b>S2</b>	LECSS2-S□	200 to 230	—
	LECSS2-T□	200 to 240	●

\*1 When a driver type is selected, a cable is included.  
Select the cable type and cable length.

Example)

S2S2: Standard cable (2 m) + Driver (LECSS2)

S2 : Standard cable (2 m)

Nil : Without cable and driver






## 13 I/O cable length [m]\*1

<b>Nil</b>	Without cable
<b>H</b>	Without cable (Connector only)
<b>1</b>	1.5

\*1 When "Without driver" is selected for driver type,  
only "Nil: Without cable" can be selected.  
Refer to the **Web Catalog** if I/O cable is required.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

## Compatible Driver

Driver type	Pulse input type/ Positioning type	Pulse input type	CC-Link direct input type	SSCNET III type	SSCNET III/H type
					
<b>Series</b>	<b>LECSA</b>	<b>LECSB</b>	<b>LECSA</b>	<b>LECSS</b>	<b>LECSS-T</b>
<b>Number of point tables</b>	Up to 7	—	Up to 255 (2 stations occupied)	—	—
<b>Pulse input</b>	○	○	—	—	—
<b>Applicable network</b>	—	—	CC-Link	SSCNET III	SSCNET III/H
<b>Control encoder</b>	Incremental 17-bit encoder	Absolute 18-bit encoder	Absolute 18-bit encoder	Absolute 18-bit encoder	Absolute 22-bit encoder
<b>Communication function</b>	USB communication	USB communication, RS422 communication	USB communication, RS422 communication	USB communication	
<b>Power supply voltage [V]</b>	100 to 120 VAC (50/60 Hz), 200 to 230 VAC (50/60 Hz)				200 to 240 VAC (50/60 Hz)

\* Copper and zinc materials are used for the motors, cables, controllers/drivers.

# Electric Actuator/ Rod Type Secondary Battery Compatible

## 25A-LEY Series LEY25, 32 Size 25, 32

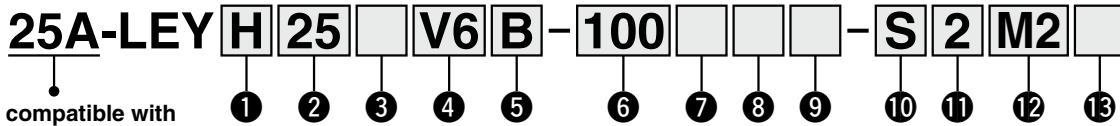


RoHS

LECY Series Page 201

Refer to the Web Catalog for model selection.

### How to Order



Series compatible with secondary batteries

**1 Accuracy**

Nil	Basic type
H	High-precision type

**2 Size**

25
32

**3 Motor mounting position**

Nil	Top mounting
R	Right side parallel
L	Left side parallel
D	In-line

**4 Motor type**

Symbol	Type	Output [W]	Size	Compatible driver
V6*1	AC servo motor (Absolute encoder)	100	25	LECYM2-V5 LECYU2-V5
V7		200	32	LECYM2-V7 LECYU2-V7

\*1 For motor type V6, the compatible driver part number suffix is V5.

**5 Lead [mm]**

Symbol	25A-LEY25	25A-LEY32*1
A	12	16 (20)
B	6	8 (10)
C	3	4 (5)

\*1 The values shown in ( ) are the lead for size 32 top mounting, right/left side parallel types. (Equivalent lead which includes the pulley ratio [1.25:1])

**6 Stroke [mm]**

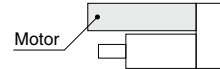
30	30
to	to
500	500

\* Refer to the applicable stroke table for details.

**7 Motor option**

Nil	Without option
B	With lock*1

\*1 When "With lock" is selected for the top mounting and right/left side parallel types, the motor body will stick out of the end of the body for size 25 with strokes 30 mm or less. Check for interference with workpieces before selecting a model.



**8 Rod end thread**

Nil	Rod end female thread
M	Rod end male thread (1 rod end nut is included.)

**9 Mounting\*1**

Symbol	Type	Motor mounting position	
		Top/Parallel	In-line
Nil	Ends tapped/ Body bottom tapped*2	●	●
L	Foot	●	—
F	Rod flange*2	●*4	●
G	Head flange*2	●*5	—
D	Double clevis*3	●	—

\*1 Mounting bracket is shipped together, (but not assembled).

\*2 For horizontal cantilever mounting with the rod flange, head flange and ends tapped, use the actuator within the following stroke range.  
· LEY25: 200 mm or less · LEY32: 100 mm or less

\*3 For mounting with the double clevis, use the actuator within the following stroke range.  
· LEY25: 200 mm or less · LEY32: 200 mm or less

\*4 Rod flange is not available for the LEY25 with stroke 30 mm and motor option "With lock".

\*5 Head flange is not available for the LEY32.

**Mounting Bracket Part Nos. for the 25A- Series**

Applicable size	Foot*1	Flange	Double clevis
25	25-LEY-L025	25-LEY-F025	25-LEY-D025
32	25-LEY-L032	25-LEY-F032	25-LEY-D032
Surface treatment	RAYDENT®	RAYDENT®	Coating (Size 16: Electroless nickel plating)

\*1 When ordering foot brackets, order 2 pieces per actuator.

\* Parts belonging to each bracket are as follows.

Foot, Flange: Body mounting bolt, Double clevis: Clevis pin, Type C retaining ring for axis, Body mounting bolt

\* Applicable stroke table

Model	Stroke [mm]	30	50	100	150	200	250	300	350	400	450	500	Manufacturable stroke range [mm]
		●	●	●	●	●	●	●	●	●	●	●	
25A-LEY25		●	●	●	●	●	●	●	●	●	—	—	15 to 400
25A-LEY32		●	●	●	●	●	●	●	●	●	●	●	20 to 500

\* Please consult with SMC for non-standard strokes as they are produced as special orders.

**Solid state auto switches should be ordered separately. For details about auto switches, refer to page 211.**

**Applicable auto switches**

D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900  
D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900

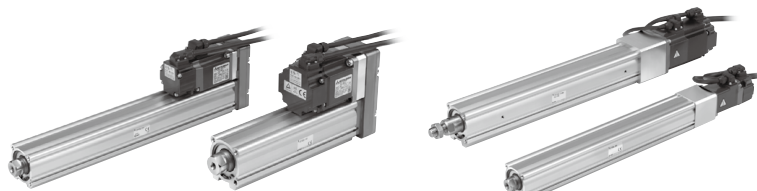
●: Standard

# Electric Actuator/Rod Type **25A-LEY Series**

AC Servo Motor

Size **25, 32**

Secondary Battery Compatible



Motor mounting position:  
Top/Parallel

Motor mounting position:  
In-line

## ⑩ Cable type\*1

<b>Nil</b>	Without cable
<b>S</b>	Standard cable
<b>R</b>	Robotic cable (Flexible cable)

\*1 The motor and encoder cables are included.  
(The lock cable is also included when the motor with lock option is selected.)

\*1 Standard cable entry direction is  
· Top/Parallel: (A) Axis side  
· In-line: (B) Counter axis side

## ⑪ Cable length [m]\*1

<b>Nil</b>	Without cable
<b>3</b>	3
<b>5</b>	5
<b>A</b>	10
<b>C</b>	20

\*1 The length of the motor and encoder cables are the same. (For with lock)

## ⑫ Driver type

	Compatible driver	Power supply voltage [V]
<b>Nil</b>	Without driver	—
<b>M2</b>	LECYM2-V□	200 to 230
<b>U2</b>	LECYU2-V□	200 to 230

\* When a driver type is selected, a cable is included. Select the cable type and cable length.



## ⑬ I/O cable length [m]\*1

<b>Nil</b>	Without cable
<b>H</b>	Without cable (Connector only)
<b>1</b>	1.5

\*1 When "Without driver" is selected for driver type, only "Nil: Without cable" can be selected. Refer to the **Web Catalog** if I/O cable is required.

\* The 25A- series specifications and dimensions are the same as those of the standard model.

## Compatible Driver

Driver type	 MECHATROLINK-II type	 MECHATROLINK-III type
	Series	<b>LECYM</b>
Applicable network	MECHATROLINK-II	MECHATROLINK-III
Control encoder	Absolute 20-bit encoder	
Communication device	USB communication, RS-422 communication	
Power supply voltage [V]	200 to 230 VAC (50/60 Hz)	

\* Copper and zinc materials are used for the motors, cables, controllers/drivers.

# 25A- Series

## Applicable Auto Switches

### Applicable Cylinder Series

Type	Special function	Electrical entry	Indicator light	Auto switches						Air cylinders								
				Wiring (Output)	Electrical entry direction	Auto switch model	Lead wire length [m]				Pre-wired connector	CD(B)J2	CDM2	CD(B)G1	MDB	CDA2		
							0.5	1	3	5							SDPC	ø10, ø16
Solid state auto switch	—	Grommet	Yes	3-wire (NPN)	In-line	D-M9N-900	●	●	●	○	—	●	●	●	—	●	●	
						3-wire (PNP)	●	●	●	○	—	●	●	●	—	●	●	
						2-wire	●	●	●	○	—	●	●	●	—	●	●	
				3-wire (NPN)	Perpendicular	D-M9NV-900	●	●	●	○	—	—	—	—	—	●	●	
						3-wire (PNP)	●	●	●	○	—	—	—	—	—	●	●	
						2-wire	●	●	●	○	—	—	—	—	—	●	●	
				3-wire (NPN)	In-line	D-M9NW-900	●	●	●	○	—	●	●	●	—	●	●	
						3-wire (PNP)	●	●	●	○	—	●	●	●	—	●	●	
						2-wire	●	●	●	○	○	●	●	●	—	●	●	
				3-wire (NPN)	Perpendicular	D-M9NWV-900	●	●	●	○	—	—	—	—	—	●	●	
						3-wire (PNP)	●	●	●	○	—	—	—	—	—	●	●	
						2-wire	●	●	●	○	○	—	—	—	—	●	●	
	3-wire (NPN)	In-line	D-Y59A-900	●	●	●	○	—	—	—	—	—	—	—				
			3-wire (PNP)	●	●	●	○	—	—	—	—	—	—	—				
			2-wire	●	●	●	○	—	—	—	—	—	—	—				
	3-wire (NPN)	Perpendicular	D-Y69A-900	●	●	●	○	—	—	—	—	—	—	—				
			3-wire (PNP)	●	●	●	○	—	—	—	—	—	—	—				
			2-wire	●	●	●	○	—	—	—	—	—	—	—				
	3-wire (NPN)	In-line	D-Y79A-900	●	●	●	○	—	—	—	—	—	—	—				
			3-wire (PNP)	●	●	●	○	—	—	—	—	—	—	—				
			2-wire	●	●	●	○	—	—	—	—	—	—	—				
	3-wire (NPN)	Perpendicular	D-Y79V-900	●	●	●	○	—	—	—	—	—	—	—				
			3-wire (PNP)	●	●	●	○	—	—	—	—	—	—	—				
			2-wire	●	●	●	○	—	—	—	—	—	—	—				
	3-wire (NPN)	In-line	D-Y79W-900	●	●	●	○	—	—	—	—	—	—	—				
			3-wire (PNP)	●	●	●	○	—	—	—	—	—	—	—				
			2-wire	●	●	●	○	—	—	—	—	—	—	—				
	3-wire (NPN)	Perpendicular	D-Y79WV-900	●	●	●	○	—	—	—	—	—	—	—				
			3-wire (PNP)	●	●	●	○	—	—	—	—	—	—	—				
			2-wire	●	●	●	○	—	—	—	—	—	—	—				
	3-wire (NPN)	In-line	D-G59-900	●	—	●	○	—	—	—	—	—	●	—	●			
			3-wire (PNP)	●	—	●	○	—	—	—	—	—	●	—	●			
			2-wire	●	—	●	○	—	—	—	—	—	●	—	●			
	3-wire (NPN)	In-line	D-G59W-900	●	—	●	○	—	—	—	—	—	●	—	●			
			3-wire (PNP)	●	—	●	○	—	—	—	—	—	●	—	●			
			2-wire	●	—	●	○	○	—	—	—	—	●	—	●			
	3-wire (NPN)	In-line	D-F79-900	●	—	●	○	—	—	—	—	—	—	—				
			3-wire (PNP)	●	—	●	○	—	—	—	—	—	—	—				
			2-wire	●	—	●	○	—	—	—	—	—	—	—				
	3-wire (NPN)	Perpendicular	D-F79V-900	●	—	●	○	—	—	—	—	—	—	—				
			3-wire (PNP)	●	—	●	○	—	—	—	—	—	—	—				
			2-wire	●	—	●	○	—	—	—	—	—	—	—				
	3-wire (NPN)	In-line	D-F79W-900	●	—	●	○	—	—	—	—	—	—	—				
			3-wire (PNP)	●	—	●	○	—	—	—	—	—	—	—				
			2-wire	●	—	●	○	—	—	—	—	—	—	—				
	3-wire (NPN)	Perpendicular	D-F79WV-900	●	—	●	○	—	—	—	—	—	—	—				
			3-wire (PNP)	●	—	●	○	—	—	—	—	—	—	—				
			2-wire	●	—	●	○	—	—	—	—	—	—	—				
3-wire (NPN)	Perpendicular	D-F8N-900	●	—	●	○	—	—	—	—	—	—	—					
		3-wire (PNP)	●	—	●	○	—	—	—	—	—	—	—					
		2-wire	●	—	●	○	—	—	—	—	—	—	—					
3-wire (NPN)	In-line	D-A90-900	—	—	●	—	—	—	—	●	●	●	—	—	●			
		3-wire (PNP)	—	—	●	—	—	—	—	—	—	—	—	—	—			
		2-wire	—	—	●	—	—	—	—	—	—	—	—	—	—			
Reed auto switch	—	Grommet	No	2-wire	In-line	D-E76A	●	—	●	—	—	—	—	—	—	—	—	
						D-E73A	●	—	●	—	—	—	—	—	—	—	—	—
						D-E80A	●	—	●	—	—	—	—	—	—	—	—	—

\* Solid state auto switches marked with "○" are produced upon receipt of order.

### Ordering the Auto Switches

Please be aware that the order part numbers for the cylinder mounted and individual auto switches are different.

(Example) Part number for ordering D-M9BWL-900:

- Cylinder mounted type: 25A-CDJ2L16-60-M9BWL  
(Omit the first "D-" and the last "-900" or "-901".)

- Individual auto switch: D-M9BWL-900

(Place the order with the part number for auto switch shown in the table above.)

- \* Lead wire length symbols: 0.5 m..... Nil (Example) M9NW
- 1 m..... M (Example) M9NWM
- 3 m..... L (Example) M9NWL
- 5 m..... Z (Example) M9NWX



# 25A- Series

## Applicable Cylinder Series

Auto switches																	
Type	Special function	Electrical entry	Indicator light	Wiring (Output)	Electrical entry direction	Auto switch model	Lead wire length [m]				Pre-wired connector						
							0.5 Nil	1 M	3 L	5 Z		SDPC					
Solid state auto switch	—	Grommet	Yes	3-wire (NPN)	In-line	D-M9N-900	●	●	●	○	—						
				3-wire (PNP)		D-M9P-900	●	●	●	○	—						
				2-wire		D-M9B-900	●	●	●	○	—						
				3-wire (NPN)	Perpendicular	D-M9NV-900	●	●	●	○	—						
				3-wire (PNP)		D-M9PV-900	●	●	●	○	—						
				2-wire		D-M9BV-900	●	●	●	○	—						
	Diagnostic indication (2-color indicator)			Grommet	Yes	3-wire (NPN)	In-line	D-M9NW-900	●	●	●	○	—				
						3-wire (PNP)		D-M9PW-900	●	●	●	○	—				
						2-wire		D-M9BW-900	●	●	●	○	○				
						3-wire (NPN)	Perpendicular	D-M9NWV-900	●	●	●	○	—				
						3-wire (PNP)		D-M9PWV-900	●	●	●	○	—				
						2-wire		D-M9BWBV-900	●	●	●	○	○				
	—	Grommet	Yes			3-wire (NPN)	In-line	D-Y59A-900	●	●	●	○	—				
						3-wire (PNP)		D-Y7P-900	●	●	●	○	—				
						2-wire		D-Y59B-900	●	●	●	○	—				
						3-wire (NPN)	Perpendicular	D-Y69A-900	●	●	●	○	—				
						3-wire (PNP)		D-Y7PV-900	●	●	●	○	—				
						2-wire		D-Y69B-900	●	●	●	○	—				
	Diagnostic indication (2-color indicator)			Grommet	Yes	3-wire (NPN)	In-line	D-Y7NW-900	●	●	●	○	—				
						3-wire (PNP)		D-Y7PW-900	●	●	●	○	—				
						2-wire		D-Y7BW-900	●	●	●	○	—				
						3-wire (NPN)	Perpendicular	D-Y7NWV-900	●	●	●	○	—				
						3-wire (PNP)		D-Y7PWV-900	●	●	●	○	—				
						2-wire		D-Y7BWBV-900	●	●	●	○	—				
	—	Grommet	Yes			3-wire (NPN)	In-line	D-G59-900	●	—	●	○	—				
						3-wire (PNP)		D-G5P-900	●	—	●	○	—				
						2-wire		D-K59-900	●	—	●	○	—				
						3-wire (NPN)	In-line	D-G59W-900	●	—	●	○	—				
						3-wire (PNP)		D-G5PW-900	●	—	●	○	—				
						2-wire		D-K59W-900	●	—	●	○	○				
	—			Grommet	Yes	3-wire (NPN)	In-line	D-F79-900	●	—	●	○	—				
						3-wire (PNP)		D-F7P-900	●	—	●	○	—				
						2-wire		D-J79-900	●	—	●	○	—				
						3-wire (NPN)	Perpendicular	D-F7NV-900	●	—	●	○	—				
						3-wire (PNP)		D-F7PV-900	●	—	●	○	—				
						2-wire		D-F7BV-900	●	—	●	○	—				
	Diagnostic indication (2-color indicator)	Grommet	Yes			3-wire (NPN)	In-line	D-F79W-900	●	—	●	○	—				
						3-wire (PNP)		D-F7PW-900	●	—	●	○	—				
						2-wire		D-J79W-900	●	—	●	○	—				
						3-wire (NPN)	Perpendicular	D-F7NWV-900	●	—	●	○	—				
						2-wire		D-F7BWBV-900	●	—	●	○	—				
						3-wire (PNP)		D-F79W-900	●	—	●	○	—				
	—			Grommet	Yes	3-wire (NPN)	Perpendicular	D-F8N-900	●	—	●	○	—				
						3-wire (PNP)		D-F8P-900	●	—	●	○	—				
						2-wire		D-F8B-900	●	—	●	○	—				
						Reed auto switch	—	Grommet	No	2-wire	In-line	D-A90-900	—	—	●	—	—
									—	3-wire (NPN equiv.)	In-line	D-Z80-900	—	—	●	—	—
							—		Grommet	Yes	2-wire	In-line	D-E76A	●	—	●	—
D-E73A	●	—	●							—			—				
No	2-wire	In-line	D-E80A							●	—	●	—	—			





# 25A- Series

## Applicable Rotary Actuator Series

Type	Special function	Electrical entry	Indicator light	Auto switches					Rotary actuators												
				Wiring (Output)	Electrical entry direction	Auto switch model	Lead wire length [m]				Pre-wired connector	MSQ 10 to 200	MSZ 10 to 50	MDSUB							
							0.5 Nil	1 M	3 L	5 Z				SDPC	1, 3	7, 20					
Solid state auto switch	—	—	—	3-wire (NPN)	In-line	D-M9N-900	●	●	●	○	—	●	●	—	—						
				3-wire (PNP)		D-M9P-900	●	●	●	○	—	●	●	—	—						
				2-wire		D-M9B-900	●	●	●	○	—	●	●	—	—						
				3-wire (NPN)	Perpendicular	D-M9NV-900	●	●	●	○	—	●	●	—	—						
				3-wire (PNP)		D-M9PV-900	●	●	●	○	—	●	●	—	—						
				2-wire		D-M9BV-900	●	●	●	○	—	●	●	—	—						
				Diagnostic indication (2-color indicator)	—	Grommet	Yes	3-wire (NPN)	In-line	D-M9NW-900	●	●	●	○	—	●	●	—	—		
								3-wire (PNP)		D-M9PW-900	●	●	●	○	—	●	●	—	—		
								2-wire		D-M9BW-900	●	●	●	○	○	●	●	—	—		
								3-wire (NPN)	Perpendicular	D-M9NWV-900	●	●	●	○	—	●	●	—	—		
								3-wire (PNP)		D-M9P WV-900	●	●	●	○	—	●	●	—	—		
								2-wire		D-M9B WV-900	●	●	●	○	○	●	●	—	—		
	—	—	Grommet	Yes	3-wire (NPN)	In-line	D-Y59A-900	●	●	●	○	—	—	—	—	—					
					3-wire (PNP)		D-Y7P-900	●	●	●	○	—	—	—	—	—					
					2-wire		D-Y59B-900	●	●	●	○	—	—	—	—	—					
					3-wire (NPN)	Perpendicular	D-Y69A-900	●	●	●	○	—	—	—	—	—					
					3-wire (PNP)		D-Y7PV-900	●	●	●	○	—	—	—	—	—					
					2-wire		D-Y69B-900	●	●	●	○	—	—	—	—	—					
	Diagnostic indication (2-color indicator)	—	Grommet	Yes	3-wire (NPN)	In-line	D-Y7NW-900	●	●	●	○	—	—	—	—	—					
					3-wire (PNP)		D-Y7PW-900	●	●	●	○	—	—	—	—	—					
					2-wire		D-Y7BW-900	●	●	●	○	—	—	—	—	—					
					3-wire (NPN)	Perpendicular	D-Y7NWV-900	●	●	●	○	—	—	—	—	—					
					3-wire (PNP)		D-Y7P WV-900	●	●	●	○	—	—	—	—	—					
					2-wire		D-Y7B WV-900	●	●	●	○	—	—	—	—	—					
					—	—	Grommet	Yes	3-wire (NPN)	In-line	D-S991-901*1	●	—	●	○	—	—	—	●	—	
									3-wire (PNP)		D-S992-901*1	●	—	●	○	—	—	—	—	●	—
									2-wire		D-S9P1-901*1	●	—	●	○	—	—	—	—	●	—
									3-wire (NPN)	Perpendicular	D-S9P2-901*1	●	—	●	○	—	—	—	—	●	—
									3-wire (PNP)		D-T991-901*1	●	—	●	○	—	—	—	—	●	—
									2-wire		D-T992-901*1	●	—	●	○	—	—	—	—	●	—
	3-wire (NPN)	Perpendicular	D-S99V1-901*1	●					—	●	○	—	—	—	—	●	—				
	3-wire (PNP)		D-999V2-901*1	●					—	●	○	—	—	—	—	●	—				
	2-wire		D-S9PV1-901*1	●					—	●	○	—	—	—	—	●	—				
	3-wire (NPN)	In-line	D-S9PV2-901*1	●					—	●	○	—	—	—	—	●	—				
	3-wire (PNP)		D-T99V1-901*1	●					—	●	○	—	—	—	—	●	—				
	2-wire		D-T99V2-901*1	●					—	●	○	—	—	—	—	●	—				
	3-wire (NPN)	In-line	D-S791-901*1	●	—	●	○	—	—	—	—	—	●								
	3-wire (PNP)		D-S792-901*1	●	—	●	○	—	—	—	—	—	●								
	2-wire		D-S7P1-901*1	●	—	●	○	—	—	—	—	—	●								
	3-wire (NPN)	In-line	D-S7P2-901*1	●	—	●	○	—	—	—	—	—	●								
3-wire (PNP)	D-T791-901*1		●	—	●	○	—	—	—	—	—	●									
2-wire	D-T792-901*1		●	—	●	○	—	—	—	—	—	●									
Reed auto switch	—	Grommet	No	2-wire	In-line	D-A90-900	—	—	●	—	—	●	●	—	—						

\* Solid state auto switches marked with "○" are produced upon receipt of order.

\* Note that the individual auto switch with part number of "S□□" and "T□□" have the right-hand-type (□□□1) and the left-hand-type (□□□2).

When you order the actuator with two auto switches at the part number of the actuator, one each of the right-hand-type and the left-hand-type are shipped together with the actuator.

\* When the MHZ2-10, MHZL2-10, MHL2-10 to 40, or MHS3-32 air gripper is ordered with auto switch, mounting brackets are supplied with the air gripper.

When the auto switch is used at the square groove on the side with other cylinder bore sizes, or ordering only auto switches separately, mounting brackets (90-BMG2-012) are required. Order them separately. For details, refer to page 214.

### Ordering the Auto Switches

Please be aware that the order part numbers for the rotary actuator mounted and individual auto switches are different.

(Example) Part number for ordering D-M9BWL-900:

- Rotary actuator mounted type: 25A-MSQB-10A-M9BWL  
(Omit the first "D-" and the last "-900" or "-901".)

- Individual auto switch: D-M9BWL-900

(Place the order with the part number for auto switch shown in the table above.)

- \* Lead wire length symbols: 0.5 m..... Nil (Example) M9NW
- 1 m..... M (Example) M9NWM
- 3 m..... L (Example) M9NWL
- 5 m..... Z (Example) M9NWX

\*1 Lead wire for a solid state auto switch with "-901" at the end of part number has been changed to a cable for a robot use.

**Applicable Air Gripper Series**

Auto switches										Air grippers											
Type	Special function	Electrical entry	Indicator light	Wiring (Output)	Electrical entry direction	Auto switch model	Lead wire length [m]				Pre-wired connector	MHZ2	MHZL2	MHZJ2	MHZL2-X5955	MHL2	MHF2	MHS3 MHS4	MHSJ3	MHY2	
							0.5	1	3	5		10 to 40	10 to 25	10 to 25	10 to 20	10 to 40	8 to 20	16 to 32	16 to 32	16 to 25	
							Nil	M	L	Z		SDPC									
Solid state auto switch	—	Grommet	Yes	3-wire (NPN)	In-line	D-M9N-900	●	●	●	○	—	●	●	●	●	●	●	●	●	●	
				3-wire (PNP)		D-M9P-900	●	●	●	○	—	●	●	●	●	●	●	●	●	●	
				2-wire		D-M9B-900	●	●	●	○	—	●	●	●	●	●	●	●	●	●	
				3-wire (NPN)		Perpendicular	D-M9NV-900	●	●	●	○	—	●	●	●	●	●	●	●	●	●
				3-wire (PNP)			D-M9PV-900	●	●	●	○	—	●	●	●	●	●	●	●	●	●
				2-wire		D-M9BV-900	●	●	●	○	—	●	●	●	●	●	●	●	●	●	
				3-wire (NPN)		In-line	D-M9NW-900	●	●	●	○	—	●	●	●	●	●	●	—	●	●
				3-wire (PNP)			D-M9PW-900	●	●	●	○	—	●	●	●	●	●	●	—	●	●
				2-wire		D-M9BW-900	●	●	●	○	○	●	●	●	●	●	●	—	●	●	
				3-wire (NPN)		Perpendicular	D-M9NWV-900	●	●	●	○	—	●	●	●	●	●	●	—	●	●
	3-wire (PNP)	D-M9PVV-900	●	●	●		○	—	●	●	●	●	●	●	—	●	●				
	2-wire	D-M9BWW-900	●	●	●	○	○	●	●	●	●	●	●	—	●	●					
	3-wire (NPN)	In-line	Grommet	Yes	3-wire (NPN)	D-Y59A-900	●	●	●	○	—	●	●	—	—	●	—	—	—		
	3-wire (PNP)				D-Y7P-900	●	●	●	○	—	●	●	—	—	●	—	—	—			
	2-wire	D-Y59B-900	●	●	●	○	—	●	●	—	—	●	—	—	—						
	3-wire (NPN)	Perpendicular	Grommet	Yes	3-wire (NPN)	D-Y69A-900	●	●	●	○	—	●	●	—	—	●	—	—	—		
	3-wire (PNP)				D-Y7PV-900	●	●	●	○	—	●	●	—	—	●	—	—	—			
	2-wire	D-Y69B-900	●	●	●	○	—	●	●	—	—	●	—	—	—						
	3-wire (NPN)	In-line	Grommet	Yes	3-wire (NPN)	D-Y7NW-900	●	●	●	○	—	●	●	—	—	●	—	—	—		
	3-wire (PNP)				D-Y7PW-900	●	●	●	○	—	●	●	—	—	●	—	—	—			
	2-wire	D-Y7BW-900	●	●	●	○	—	●	●	—	—	●	—	—	—						
	3-wire (NPN)	Perpendicular	Grommet	Yes	3-wire (NPN)	D-Y7NVV-900	●	●	●	○	—	●	●	—	—	●	—	—	—		
	3-wire (PNP)				D-Y7PVV-900	●	●	●	○	—	●	●	—	—	●	—	—	—			
	2-wire	D-Y7BWW-900	●	●	●	○	—	●	●	—	—	●	—	—	—						
	3-wire (NPN)	In-line	Grommet	Yes	3-wire (NPN)	D-S991-901*1	●	—	●	○	—	—	—	—	—	—	—	—			
	3-wire (PNP)				D-S992-901*1	●	—	●	○	—	—	—	—	—	—	—	—				
	2-wire	D-S9P1-901*1	●	—	●	○	—	—	—	—	—	—	—	—							
		D-S9P2-901*1	●	—	●	○	—	—	—	—	—	—	—	—							
		D-T991-901*1	●	—	●	○	—	—	—	—	—	—	—	—							
		D-T992-901*1	●	—	●	○	—	—	—	—	—	—	—	—							
	3-wire (NPN)	Perpendicular	Grommet	Yes	3-wire (NPN)	D-S99V1-901*1	●	—	●	○	—	—	—	—	—	—	—	—			
	3-wire (PNP)				D-S99V2-901*1	●	—	●	○	—	—	—	—	—	—	—	—				
		D-S9PV1-901*1	●	—	●	○	—	—	—	—	—	—	—	—							
		D-S9PV2-901*1	●	—	●	○	—	—	—	—	—	—	—	—							
	2-wire	D-T99V1-901*1	●	—	●	○	—	—	—	—	—	—	—	—							
		D-T99V2-901*1	●	—	●	○	—	—	—	—	—	—	—	—							
	3-wire (NPN)	In-line	Grommet	Yes	3-wire (NPN)	D-S791-901*1	●	—	●	○	—	—	—	—	—	—	—	—			
	3-wire (PNP)				D-S792-901*1	●	—	●	○	—	—	—	—	—	—	—	—				
		D-S7P1-901*1	●	—	●	○	—	—	—	—	—	—	—	—							
		D-S7P2-901*1	●	—	●	○	—	—	—	—	—	—	—	—							
2-wire	D-T791-901*1	●	—	●	○	—	—	—	—	—	—	—	—								
	D-T792-901*1	●	—	●	○	—	—	—	—	—	—	—	—								
Reed auto switch	—	Grommet	No	2-wire	In-line	D-A90-900	—	—	●	—	—	—	—	—	—	—	—	—			

- \* Solid state auto switches marked with "○" are produced upon receipt of order.
- \* Note that the individual auto switch with part number of "S□□" and "T□□" have the right-hand-type (□□□1) and the left-hand-type (□□□2). When you order the actuator with two auto switches at the part number of the actuator, one each of the right-hand-type and the left-hand-type are shipped together with the actuator.
- \* When the MHZ2-10, MHZL2-10, MHL2-10 to 40, or MHS3-32 air gripper is ordered with auto switch, mounting brackets are supplied with the air gripper. When the auto switch is used at the square groove on the side with other cylinder bore sizes, or ordering only auto switches separately, mounting brackets (90-BMG2-012) are required. Order them separately. For details, refer to page 214.

**Ordering the Auto Switches**

Please be aware that the order part numbers for the air gripper mounted and individual auto switches are different.  
 (Example) Part number for ordering D-M9BWL-900:

• Air gripper mounted type: 25A-MHZ2-16D-M9BWL (Omit the first "D-" and the last "-900" or "-901".)	* Lead wire length symbols: 0.5 m..... Nil (Example) M9NW
• Individual auto switch: D-M9BWL-900 (Place the order with the part number for auto switch shown in the table above.)	1 m..... M (Example) M9NWM
	3 m..... L (Example) M9NWL
	5 m..... Z (Example) M9NWZ

\*1 Lead wire for a solid state auto switch with "-901" at the end of part number has been changed to a cable for a robot use.

# 25A- Series

## Applicable Electric Actuator Series

Auto switches											Electric actuators			
Type	Special function	Electrical entry	Indicator light	Wiring (Output)	Electrical entry direction	Auto switch model	Lead wire length [m]				Pre-wired connector SDPC	LEJS	LEY	
							0.5 Nil	1 M	3 L	5 Z		40 to 63	16 to 40	
Solid state auto switch	—	Grommet	No	2-wire	In-line	D-A90-900	—	—	●	—	—	—	—	
				3-wire (NPN)		In-line	D-M9N-900	●	●	●	○	—	●	●
				3-wire (PNP)			D-M9P-900	●	●	●	○	—	●	●
				2-wire		Perpendicular	D-M9B-900	●	●	●	○	—	●	●
				3-wire (NPN)			D-M9NV-900	●	●	●	○	—	●	●
				3-wire (PNP)			D-M9PV-900	●	●	●	○	—	●	●
				2-wire			D-M9BV-900	●	●	●	○	—	●	●
				3-wire (NPN)		In-line	D-M9NW-900	●	●	●	○	—	●	●
				3-wire (PNP)			D-M9PW-900	●	●	●	○	—	●	●
				2-wire		Perpendicular	D-M9BW-900	●	●	●	○	○	●	●
	3-wire (NPN)	D-M9NWV-900	●	●	●		○	—	●	●				
	3-wire (PNP)	D-M9PWV-900	●	●	●		○	—	●	●				
	2-wire	D-M9BWV-900	●	●	●		○	○	●	●				

\* Solid state auto switches marked with "○" are produced upon receipt of order.

\* Auto switches cannot be ordered with the actuator part number. They should be ordered separately. Please refer below for ordering.  
One each of the right-hand-type and the left-hand-type are shipped together with the actuator.

### Ordering the Auto Switches

- Individual auto switch: D-M9BWL-900  
(Place the order with the part number for auto switch shown in the table above.)

\* Lead wire length symbols: 0.5 m..... Nil (Example) M9NW  
1 m..... M (Example) M9NWM  
3 m..... L (Example) M9NWL  
5 m..... Z (Example) M9NWZ

# 25A- Series

## Auto Switch Mounting

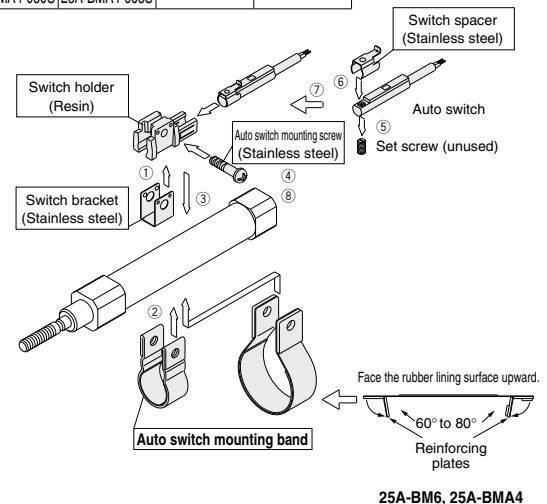
### Band Mounting Type

Applicable cylinder series: 25A-CDJ2, 25A-CDBJ2, 25A-CDM2, 25A-CDG1, 25A-CDBG1, 25A-MGG  
 Applicable auto switches : D-M9□-900, D-M9□W-900, D-M9BWSRPC-900, D-M9BWVSDPC-900, D-A90-900

#### Auto Switch Mounting Bracket Part Nos.

Cylinder series	Applicable bore size [mm]									
	10	16	20	25	32	40	50	63	80	100
25A-CDJ2	*1	*1	—	—	—	—	—	—	—	—
25A-CDBJ2	25A-BJ7-010S	25A-BJ7-016S	—	—	—	—	—	—	—	—
25A-CDM2	—	—	*2 25A-BM6-020S	*2 25A-BM6-025S	*2 25A-BM6-032S	*2 25A-BM6-040S	—	—	—	—
25A-CDG1	—	—	*3 25A-BMA4-020S	*3 25A-BMA4-025S	*3 25A-BMA4-032S	*3 25A-BMA4-040S	*3 25A-BMA4-050S	*3 25A-BMA4-063S	—	—
25A-MGG	—	—	*3 25A-BMA4-020S	*3 25A-BMA4-025S	*3 25A-BMA4-032S	*3 25A-BMA4-040S	*3 25A-BMA4-050S	*3 25A-BMA4-063S	—	—

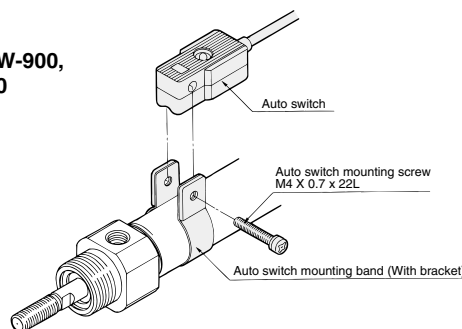
- \*1 The combination of the auto switch mounting band (BJ2-□□□S/with a stainless steel screw) and the holder set (BJ3-1).
- \*2 The combination of the auto switch mounting band (for BM2-□□□) and stainless steel screw (BBA4), and the holder set (BJ3-1).
- \*3 The combination of the auto switch mounting band (for BMA2-□□□) and stainless steel screw (BBA4), and the holder set (BJ3-1).



Applicable cylinder series: 25A-CDG1, 25A-CDBG1  
 Applicable auto switches : D-G5□-900, D-K59-900, D-G5□W-900, D-K59W-900, D-K59WSDPC-900

#### Auto Switch Mounting Bracket Part Nos.

Cylinder series	Applicable bore size [mm]	
	80	100
25A-CDG1	BA-08S	BA-10S
25A-CDBG1	—	—

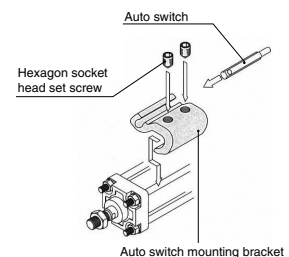


### Tie-rod Mounting Type

Applicable cylinder series: 25A-MDB, 25A-CDA2, 25A-CDS2  
 Applicable auto switches : D-M9□-900, D-M9□V-900, D-M9□W-900, D-M9□WV-900, D-M9BWSRPC-900, D-M9BWVSDPC-900  
 : D-A90-900

#### Auto Switch Mounting Bracket Part Nos.

Cylinder series	Applicable bore size [mm]								
	32	40	50	63	80	100	125	140	160
25A-MDB	90- BMB5-032	90- BMB5-032	90- BA7-040	90- BA7-040	90- BA7-063	90- BA7-063	—	—	—
25A-CDA2	—	90- BA7-040	90- BA7-040	90- BA7-063	90- BA7-080	90- BA7-080	—	—	—
25A-CDS2	—	—	—	—	—	—	25A- BS6-125	25A- BS6-125	25A- BS6-160



# 25A- Series

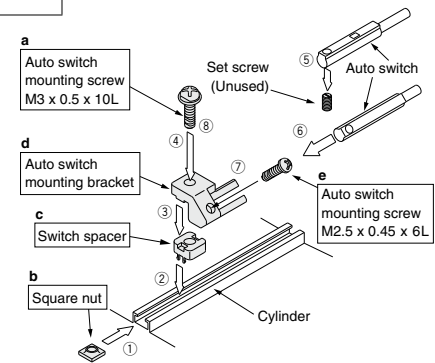
## Rail Mounting Type

Applicable cylinder series: 25A-CDBQ2

Applicable auto switches : D-M9N(V)-900, D-M9P(V)-900, D-M9B(V)-900, D-M9NW(V)-900, D-M9PW(V)-900, D-M9BW(V)-900, D-M9NA(V)-900, D-M9PA(V)-900, D-M9BA(V)-900, D-A90-900

### Auto Switch Mounting Bracket Part No.

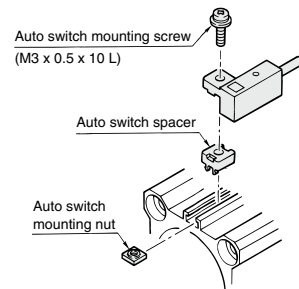
Cylinder series	Applicable bore size [mm]							
	20	25	32	40	50	63	80	100
25A-CDBQ2	—	—	25A-BQ2-032			—	—	—



Applicable auto switches: D-F79-900, D-F7P-900, D-J79-900, D-F7NV-900, D-F7PV-900, D-F7BV-900, D-F79W-900, D-F7PW-900, D-J79W-900, D-F7NWV-900, D-F7BWV-900

### Auto Switch Mounting Bracket Part No.

Cylinder series	Applicable bore size [mm]								
	20	25	32	40	50	63	80	100	
25A-CDBQ2	—	—	25A-BQ-2						

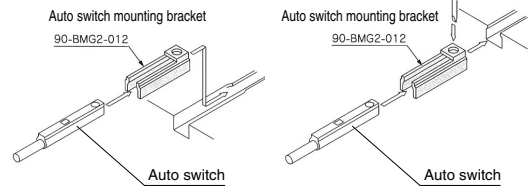


## Direct Mounting Type

Applicable cylinder series : 25A-MY1B, 25A-MY1H, 25A-MY3□,  
25A-CY3R, 25A-MGP-Z, 25A-MGP-AZ,  
25A-MGP-H/R, 25A-RSH

Applicable air gripper series: 25A-MHZ(L) 2, 25A-MHL2, 25A-MHS3, MHS4

Applicable auto switches : D-M9□-900, D-M9□V-900, D-M9□W-900,  
D-M9□WV-900, D-M9BWSDPC-900,  
D-M9BWVSDPC-900  
: D-A90L-900



### Auto Switch Mounting Bracket Part Nos.

Cylinder series Air gripper series	Applicable bore size [mm]											
	10	12	15	16	20	25	32	40	50	63	80	100
25A-MY1B-Z	—	—	—	—	—	BMY3-016	BMY3-016	BMY3-016	—	—	—	—
25A-MY1H-Z	—	—	—	—	—	BMY3-016	BMY3-016	BMY3-016	—	—	—	—
25A-MY1B	—	—	—	Not required	Not required	—	—	—	—	90-BMG2-012	—	—
25A-MY1C	—	—	—	Not required	Not required	90-BMG2-012	90-BMG2-012	90-BMG2-012	90-BMG2-012	90-BMG2-012	—	—
25A-MY1H	—	—	—	Not required	Not required	—	—	—	—	—	—	—
25A-MY3□	—	—	—	BMY3-016	BMY3-016	BMY3-016	BMY3-016	BMY3-016	BMY3-016	BMY3-016	—	—
25A-CY3R	—	—	Not required	—	Not required	90-BMG2-012	90-BMG2-012	90-BMG2-012	—	—	—	—
25A-MGP-Z 25A-MGP-AZ	—	Not required	—	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
25A-MGP-H/R	—	—	—	—	90-BMG2-012	90-BMG2-012	90-BMG2-012	90-BMG2-012	90-BMG2-012	90-BMG2-012	90-BMG2-012	90-BMG2-012
25A-RSH	—	—	—	—	90-BMG2-012	—	90-BMG2-012	—	—	—	—	—
25A-MHZ2	90-BMG2-012	—	—	*1	*1	*1	*1	*1	—	—	—	—
25A-MHZL2	90-BMG2-012	—	—	*1	*1	*1	—	—	—	—	—	—
25A-MHL2	90-BMG2-012	—	—	90-BMG2-012	90-BMG2-012	90-BMG2-012	90-BMG2-012	90-BMG2-012	—	—	—	—
25A-MHS3 25A-MHS4	—	—	—	Not required	Not required	Not required	90-BMG2-012	—	—	—	—	—

\*1 When mounting D-M9 type of auto switch onto the square groove of the side of the air gripper, the auto switch mounting bracket (90-BMG2-012) is required.



# 25A- Series Precautions

Be sure to read this before handling products.

## Precautions

### Caution

#### ■ Change of material

The 25A- series are copper- and zinc-free products and restrict the use of materials including copper and zinc as main components. However, some parts including solenoid valves, motors, cables, drivers for electric actuators, and coils, connector pins, lead wires for auto switches whose materials are difficult to be changed to alternative ones use copper materials.

#### ■ Particle generation (metallic contaminants)

Usage of metal stoppers and/or shock absorbers on an air slide table produces metal-to-metal collision and contact, and may generate wear particles. Do not use metal stoppers and/or shock absorbers in an environment where wear particles are problem.

When the buffer mechanism or the end lock mechanism functional options are used, dust particles may be generated by the buffer part as well as the end lock part.

The following models of air gripper may generate dust particles, as metal-to-metal collisions occur when fingers are fully closed.

- MHZ2
- MHZL2 (Except -X5955)
- MHF2
- MHY2

#### ■ Static electricity

Refrain from using the electrical equipments including detection switches (e.g., pressure switches and flow switches) in electrostatically-charged environments. Otherwise, they may cause the system to fail or to malfunction.

#### ■ Piping

Usage of nylon tubing and polyurethane tubing in environments with a low dew point may affect dew points of ambient air and inside of piping. Use fluoropolymer tubing (TL series) or stainless steel tubing (Supply it on your own) in environments with a low dew point.

#### ■ Chemical environment

Refrain from using the products in such environments as exposed to chemicals. Otherwise, resin parts may deteriorate.

If you want SMC to test the products for the effects of chemicals attached to them, send the products back to SMC after thoroughly cleaning them.

Consult your SMC sales representative for further details.

#### ■ Trademark

DeviceNet™ is a trademark of ODVA.

EtherNet/IP™ is a trademark of ODVA.

EtherCAT® is registered trademark and patented technology, licensed by Beckhoff Automation GmbH, Germany.

Be sure to read the "Handling Precautions for SMC Products" (M-E03-3) and the "Operation Manual" before use.







### UNIT CONVERSIONS

	unit	conversion	result
length	m	x 3.28	ft
	mm	x 0.04	in
mass	g	x 0.04	oz
volume	cm <sup>3</sup>	÷ 16.387	in <sup>3</sup>
	L	x 61.024	in <sup>3</sup>
speed	mm/s	÷ 25.4	in/s
pressure	MPa	x 145	psi
	kPa	÷ 6.895	psi
temperature	°C	x1.8 then add 32	°F
torque	N·m	x 0.738	ft·lb
force	N	÷ 4.448	lbf
flow	L/min	÷ 28.317	cfm

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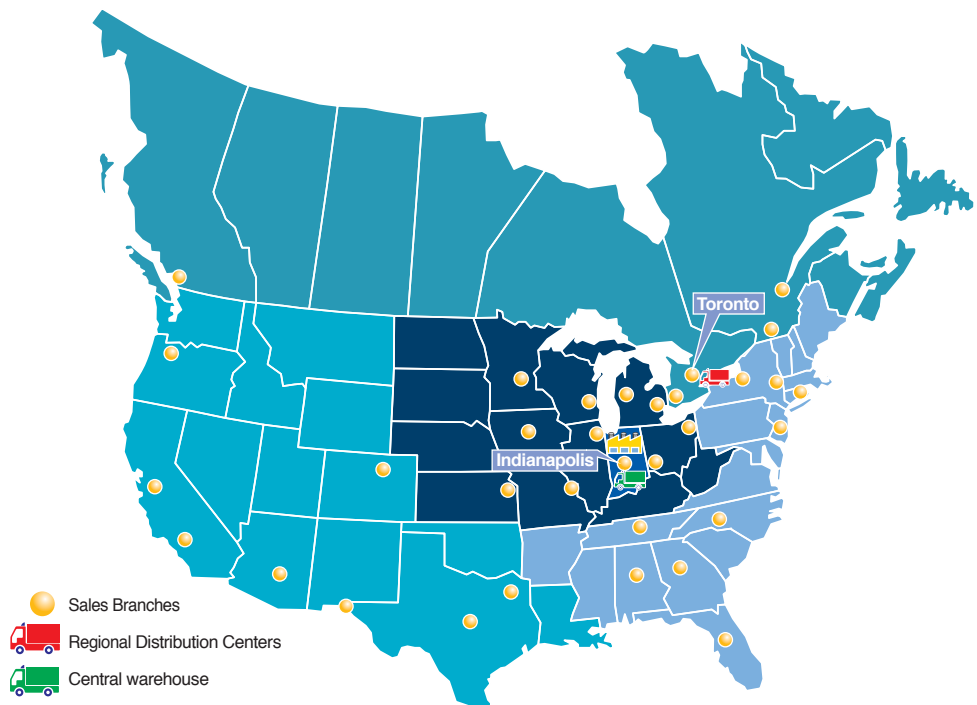
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