

Series 10-/11-21-/22-CG1

Air cylinder ø20, ø25, ø32, ø40, ø50, ø63, ø80, ø100

How to Order

Clean series

10	Relief type
11	Vacuum suction type

Built-in magnet

Nil	No
D	With auto switch (Built-in magnet)

Lubrication

N	Rubber bumper/ø20 to ø100
A	Air cushion/ø40 to ø63

Bore size (mm)

Port thread type

Nil	Rc
TN	NPT
TF	G

Cylinder stroke (mm)

Mounting style

B	Basic style
L	Axial foot style
F	Rod side flange style
G	Head side flange style

Type of auto switch

Reed switch	C73, B54
Solid state switch	H7B, H7A1, K59, G59

Number of auto switches

Nil	2 pcs.
S	1 pc.
n	"n" pcs.

Copper, fluorine and silicon-free + Low particle generation

21	Relief type
22	Vacuum suction type



Model

Model		Bore size (mm)	Port size	Lubrication	Action	Standard stroke (mm)	Auto switch mounting	Cushion	
								Rubber	Air
Relief type	10-/21-CG1□20	20	1/8	Non-lube	Double acting, single rod	25, 50, 75, 100, 125, 150, 200	Available	Available	Available (ø40 to ø63)
	10-/21-CG1□25	25				25, 50, 75, 100, 125, 150, 200, 250, 300			
	10-/21-CG1□32	32							
	10-/21-CG1□40	40							
	10-/21-CG1□50	50							
	10-/21-CG1□63	63							
	10-/21-CG1□80	80							
	10-/21-CG1□100	100				3/8			
		1/2							
Vacuum suction type	11-/22-CG1□20	20	1/8			25, 50, 75, 100, 125, 150, 200			
	11-/22-CG1□25	25				25, 50, 75, 100, 125, 150, 200, 250, 300			
	11-/22-CG1□32	32							
	11-/22-CG1□40	40							
	11-/22-CG1□50	50							
	11-/22-CG1□63	63							
	11-/22-CG1□80	80							
	11-/22-CG1□100	100							
		3/8							
		1/2							

Note) Consult SMC for long stroke.

Specifications

Item	Bore size (mm)
	20/25/32/40/50/63/80/100
Proof pressure	1.5MPa
Maximum operating pressure	1.0MPa
Minimum operating pressure	0.05MPa
Ambient and fluid temperature	Without auto switch: -10°C to 70°C With auto switch: -10°C to 60°C (No freezing)
Piston speed	10-/11-: 30 to 400 mm/s, 21-/22-: 50 to 400 mm/s
Stroke length tolerance	Up to 300st ⁺¹⁴ mm
Mounting style	Basic style / Axial foot style / Rod side flange style / Head side flange style
Grease	10-/11-: Fluorine grease 21-/22-: Lithium soap based grease
Particle generation grade	10-: Grade 2, 21-: Grade 3
(Refer to front matter pages 13 to 22 for details.)	11-/22-: Grade 1

Suction flow rate of vacuum suction type (Reference values)

Bore size	Suction flow rate ℓ /min (ANR)
20/25/32/40	10
50/63/80/100	20

Auto switch specifications (Refer to Best Pneumatics catalog for detailed specifications and auto switches not in the following table.)

Type	Auto switch part no.	Applicable bore size	Load voltage	Load current range	Indicator light	Application
Reed switch	D-C73	ø20 to ø63	24 VDC, 100 VAC	5 to 40 mA, 5 to 20 mA	○	Relay, PLC
	D-B54	ø20 to ø100	24 VDC, 100 VAC, 200 VAC	5 to 50 mA, 5 to 25 mA, 5 to 12.5 mA	○	Relay, PLC
Solid state switch	2-wire	D-H7B	ø20 to ø63	24 VDC (10 to 28 VDC)	○	24 VDC relay, PLC
		D-K59	ø20 to ø100	24 VDC (10 to 28 VDC)	○	24 VDC relay, PLC
	3-wire	D-H7A1	ø20 to ø63	28 VDC or less	○	IC circuit, Relay, PLC
		D-G59	ø20 to ø100	28 VDC or less	○	IC circuit, Relay, PLC

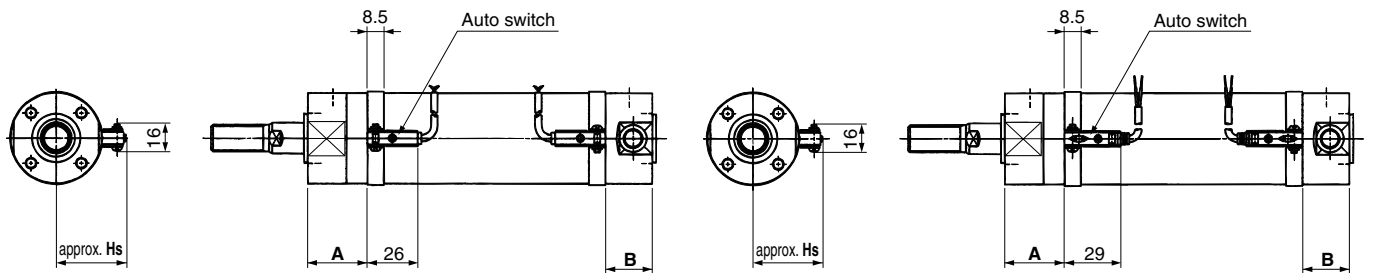
Refer to page 182 for a list of applicable auto switches.

PLC: Programmable Logic Controller

Proper auto switch mounting position (Detection at stroke end)

D-C73

D-H7B / H7A1



D-B54

D-K59 / G59

(mm)

Bore size	D-C73			D-H7B/H7A1		
	A	B	Hs	A	B	Hs
20	37.5	20.5[36.5]	24.5	36.5	19.5[35.5]	24.5
25	37.5	20.5[36.5]	27	36.5	19.5[35.5]	27
32	38.5	21.5[37.5]	30.5	37.5	20.5[36.5]	30.5
40	35.5 (44.5)	23.5[32.5]<41.5>	35	34.5 (43.5)	22.5[31.5]<40.5>	35
50	42.5 (54.5)	28.5[40.5]<52.5>	40.5	41.5 (53.5)	27.5[39.5]<51.5>	40.5
63	42.5 (54.5)	28.5[40.5]<52.5>	47.5	41.5 (53.5)	27.5[39.5]<51.5>	47.5
80	—	—	—	—	—	—
100	—	—	—	—	—	—

(mm)

Bore size	D-B54			D-K59 / G59		
	A	B	Hs	A	B	Hs
20	31.5	14.5[30.5]	27.5	33	16[32]	27.5
25	31.5	14.5[30.5]	30	33	16[32]	30
32	32.5	15.5[31.5]	33.5	34	17[33]	33.5
40	29.5(38.5)	17.5[26.5]<35.5>	38	31(40)	19[28]<37>	38
50	36.5(48.5)	22.5[34.5]<46.5>	43.5	38(50)	24[36]<48>	43.5
63	36.5(48.5)	22.5[34.5]<46.5>	50.5	38(50)	24[36]<48>	50.5
80	46.5	30.5[44.5]	59	48	32[46]	59
100	46.5	30.5[44.5]	69.5	48	32[46]	69.5

Note 1) Values in "()" are for types with air cushion, those in "[]" are for double rod types, and those in "< >" are for double rod types with air cushion.

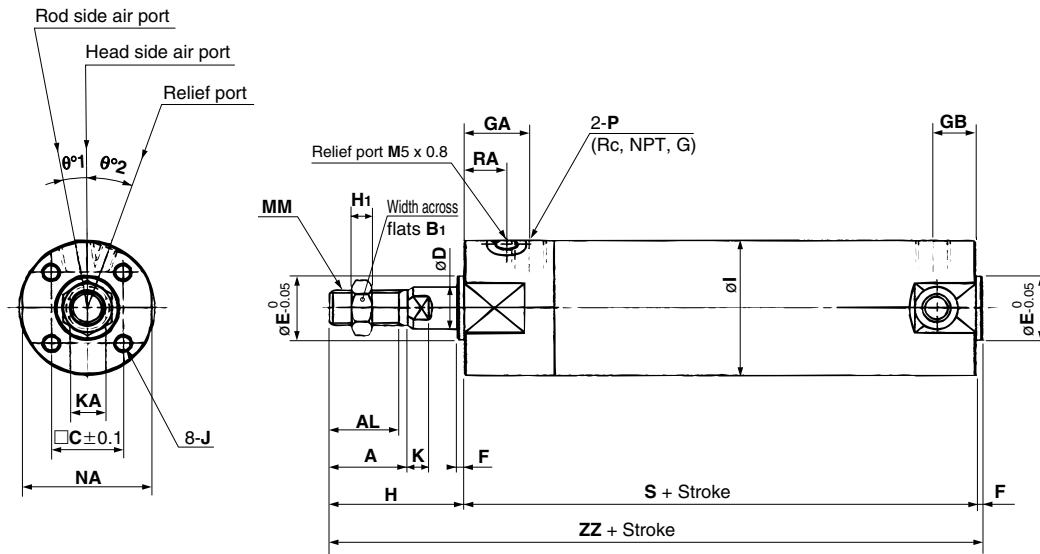
Note 2) The above values should be used as a guide for detection at stroke end. When actually mounting the auto switch, adjust the position after confirming the operating conditions of the auto switch.

SMC

35

Basic style (B) / ¹⁰⁻**CG1B**, ²¹⁻**CG1B**

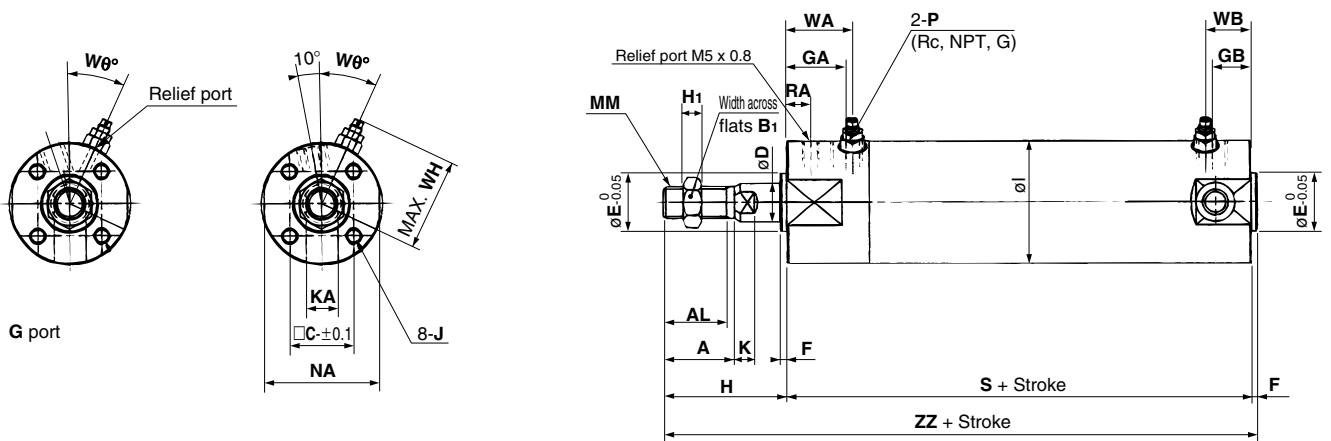
With rubber bumper



Bore size	Standard stroke range	A	AL	B ₁	C	D	E	F	GA	GB	H	H ₁	I	J	K	KA	MM	NA	P	RA	S	θ°1	θ°2	ZZ
20	Up to 200	18	15.5	13	14	8	12	2	20	10	35	5	26	M4 x 0.7 depth 7	5	6	M8 x 1.25	24	1/8<M5 x 0.8>	7	77	0	0	114
25	Up to 300	22	19.5	17	16.5	10	14	2	20	10	40	6	31	M5 x 0.8 depth 7.5	5.5	8	M10 x 1.25	29	1/8<M5 x 0.8>	7	77	0	0	119
32	Up to 300	22	19.5	17	20	12	18	2	20<18>	10	40	6	38	M5 x 0.8 depth 8	5.5	10	M10 x 1.25	35.5	1/8	7	79	0	0<23>	121
40	Up to 300	30	27	19	26	16	25	2	13<10>	10	50	8	47	M6 x 1 depth 12	6	14	M14 x 1.5	44	1/8	9	78	10	23	130
50	Up to 300	35	32	27	32	20	30	2	14<12>	12	58	11	58	M8 x 1.25 depth 16	7	18	M18 x 1.5	55	1/4	10	90	10	23	150
63	Up to 300	35	32	27	38	20	32	2	14<12>	12	58	11	72	M10 x 1.5 depth 16	7	18	M18 x 1.5	69	1/4	10	90	10	20	150
80	Up to 300	40	37	32	50	25	40	3	20<17>	16	71	13	89	M10 x 1.5 depth 22	10	22	M22 x 1.5	80	3/8	10	108	10	20	182
100	Up to 300	40	37	41	60	30	50	3	20<17>	16	71	16	110	M12 x 1.75 depth 22	10	26	M26 x 1.5	100	1/2	10	108	10	20	182

Note) < >: Denotes the dimensions for G port.

With air cushion

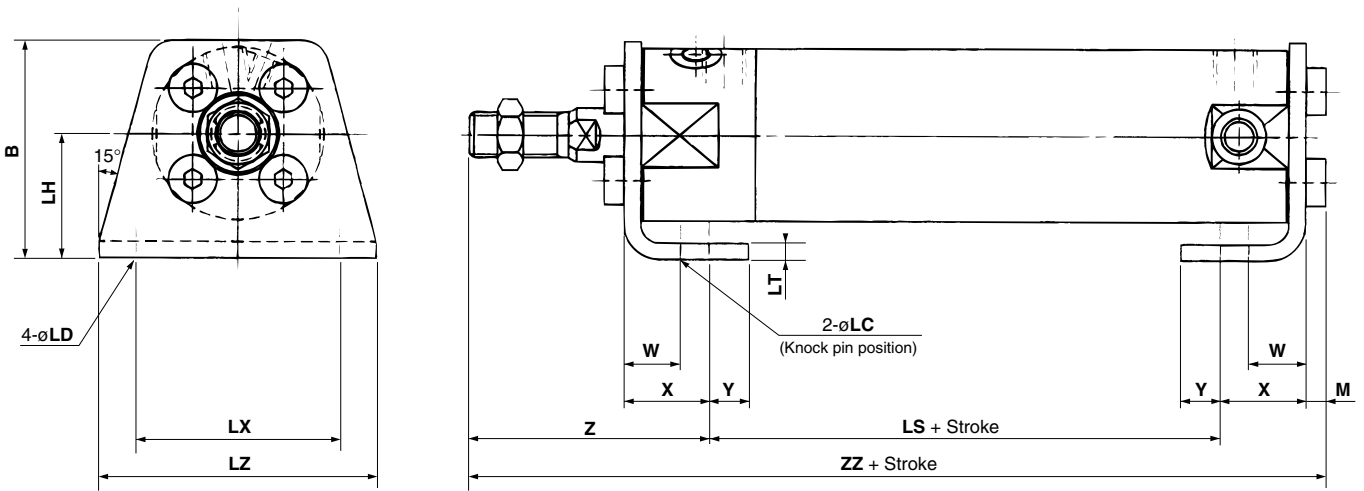


Bore size	Standard stroke range	A	AL	B ₁	C	D	E	F	GA	GB	H	H ₁	I	J	K	KA	MM	NA	P	RA	S	WA	WB	WH	Wθ	ZZ
40	Up to 300	30	27	19	26	16	25	2	22<19>	10	50	8	47	M6 x 1 depth 12	6	14	M14 x 1.5	44	1/8	8	87	25	15	33	20°	139
50	Up to 300	35	32	27	32	20	30	2	26<24>	12	58	11	58	M8 x 1.25 depth 16	7	18	M18 x 1.5	55	1/4	9	102	30	17	40.5	20°	162
63	Up to 300	35	32	27	38	20	32	2	26<24>	12	58	11	72	M10 x 1.5 depth 16	7	18	M18 x 1.5	69	1/4	9	102	30	17	47.5	20°	162

Note) < >: Denotes the dimensions for G port.

Axial foot style (L) / ¹⁰⁻~~11-~~CG1L, ²¹⁻~~22-~~CG1L

With rubber bumper

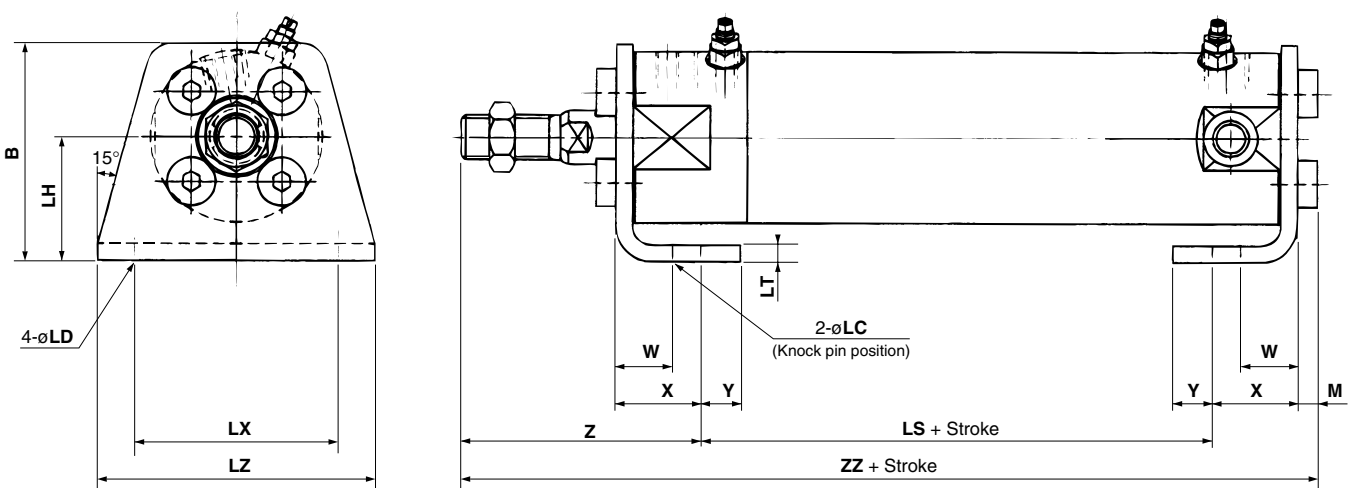


(mm)

Bore size	B	L	CLD	LH	LS	LT	LX	LZ	M	W	X	Y	Z	ZZ
20	34	4	6	20	53	3	32	44	3	10	15	7	47	118
25	38.5	4	6	22	53	3	36	49	3.5	10	15	7	52	123.5
32	45	4	7	25	53	3	44	58	3.5	10	16	8	53	125.5
40	54.5	4	7	30	51	3	54	71	4	10	16.5	8.5	63.5	135
50	70.5	5	10	40	55	4.5	66	86	5	17.5	22	11	75.5	157.5
63	82.5	5	12	45	55	4.5	82	106	5	17.5	22	13	75.5	157.5
80	101	6	11	55	60	4.5	100	125	5	20	28.5	14	95	188.5
100	121	6	14	65	60	6	120	150	7	20	30	16	95	192

* Other dimensions are the same as basic style.

With air cushion



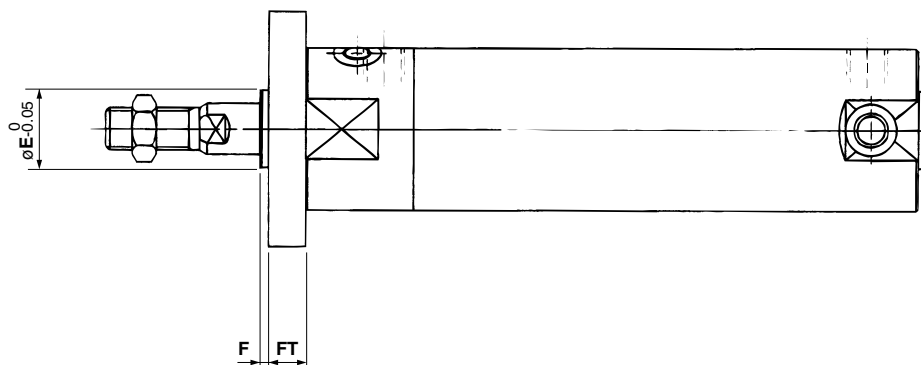
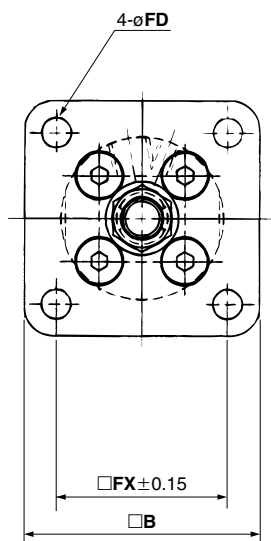
(mm)

Bore size	B	L	CLD	LH	LS	LT	LX	LZ	M	W	X	Y	Z	ZZ
40	54.5	4	7	30	60	3	54	71	4	10	16.5	8.5	63.5	144
50	70.5	5	10	40	67	4.5	66	86	5	17.5	22	11	75.5	169.5
63	82.5	5	12	45	67	4.5	82	106	5	17.5	22	13	75.5	169.5

* Other dimensions are the same as basic style.

Rod side flange style (F) / ¹⁰⁻₁₁₋**CG1F**, ²¹⁻₂₂₋**CG1F**

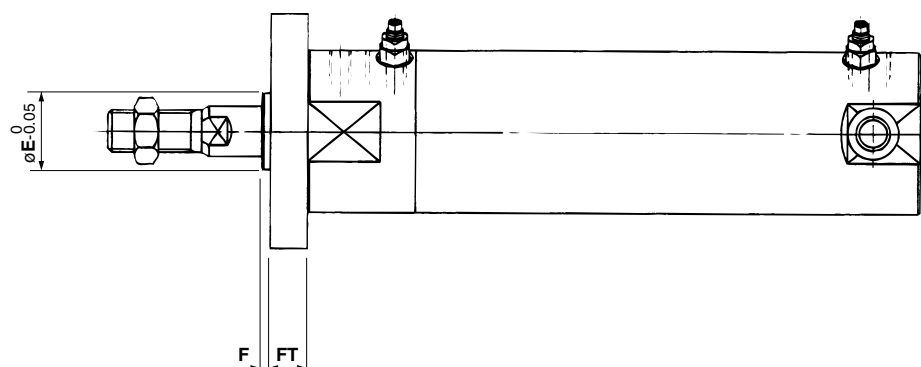
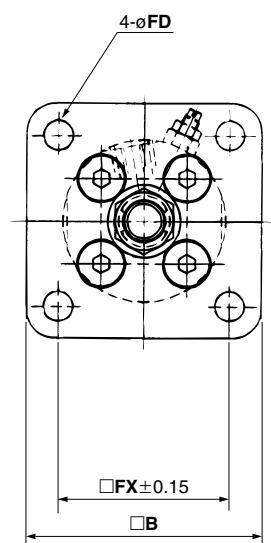
With rubber bumper



Bore size	B	E	F	FX	FD	FT
20	40	12	2	28	5.5	6
25	44	14	2	32	5.5	7
32	53	18	2	38	6.6	7
40	61	25	2	46	6.6	8
50	76	30	2	58	9	9
63	92	32	2	70	11	9
80	104	40	3	82	11	11
100	128	50	3	100	14	14

Note) End boss is machined on the flange for øE.
* Other dimensions are the same as basic style.

With air cushion

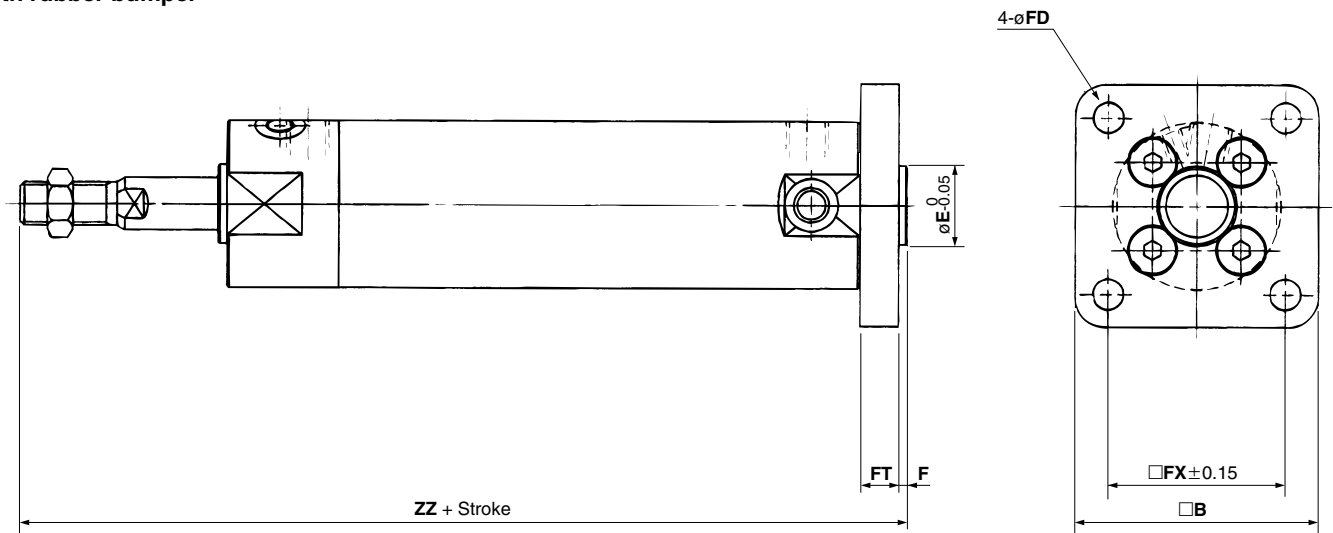


Bore size	B	E	F	FX	FD	FT
40	61	25	2	46	6.6	8
50	76	30	2	58	9	9
63	92	32	2	70	11	9

Note) End boss is machined on the flange for øE.
* Other dimensions are the same as basic style.

Head side flange style (G) / 10-11-**CG1G**, 21-22-**CG1G**

With rubber bumper

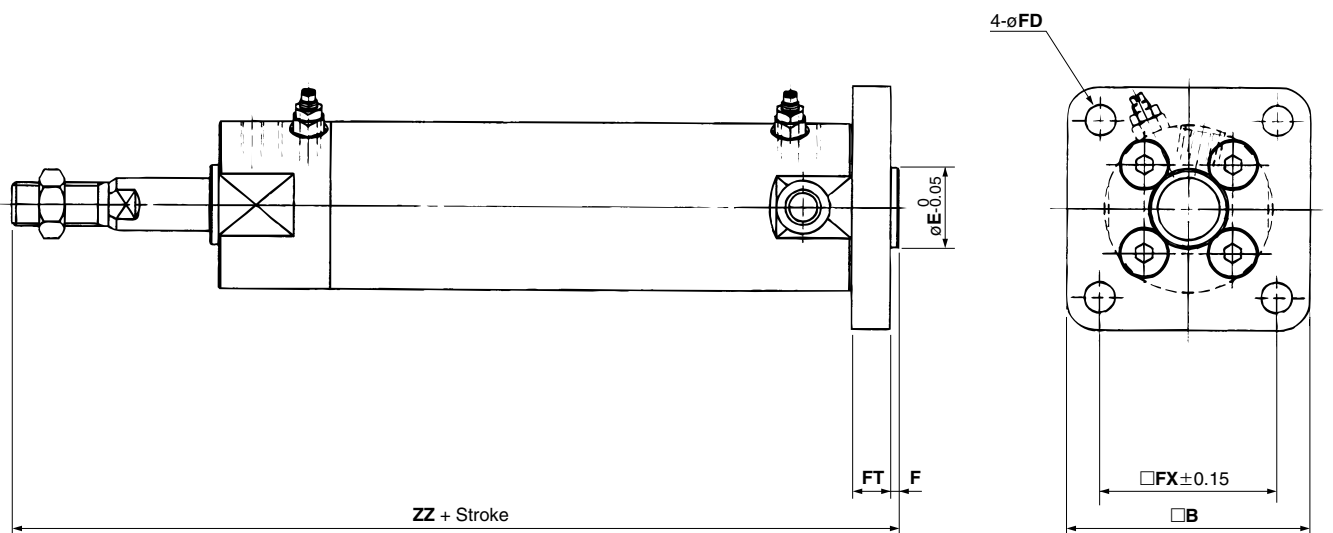


(mm)

Bore size	B	E	F	FX	FD	FT	ZZ
20	40	12	2	28	5.5	6	120
25	44	14	2	32	5.5	7	126
32	53	18	2	38	6.6	7	128
40	61	25	2	46	6.6	8	138
50	76	30	2	58	9	9	159
63	92	32	2	70	11	9	159
80	104	40	3	82	11	11	193
100	128	50	3	100	14	14	196

Note) End boss is machined on the flange for øE.
* Other dimensions are the same as basic style.

With air cushion



(mm)

Bore size	B	E	F	FX	FD	FT	ZZ
40	61	25	2	46	6.6	8	147
50	76	30	2	58	9	9	171
63	92	32	2	70	11	9	171

Note) End boss is machined on the flange for øE.
* Other dimensions are the same as basic style.

Series 10-/11-21-/22-**CG1W**

Double acting, double rod cylinder
 ø20, ø25, ø32, ø40, ø50, ø63, ø80, ø100

How to Order

Clean series	Built-in magnet	Type	Bore size (mm)	Port thread type	Number of auto switches
10 Relief type 11 Vacuum suction type	Nil D With auto switch (Built-in magnet)	N Rubber bumper/ø20 to ø100 A Air cushion/ø40 to ø63		Nil Rc TN NPT TF G	Nil 2 pcs. S 1 pc. n "n" pcs.

Copper, fluorine and silicon-free + Low particle generation	Mounting style	Type of auto switch
21 Relief type 22 Vacuum suction type	B Basic style L Axial foot style F Rod side flange style	Reed switch C73, B54 Solid state switch H7B, H7A1, K59, G59

Modeling Example:

10 - C D G 1 W L N 25 - 100 - H7B

21 - C D G 1 W L N 25 - 100 - H7B

Labels: Clean series, Built-in magnet, Type, Bore size (mm), Port thread type, Number of auto switches, Copper, fluorine and silicon-free + Low particle generation, Mounting style, Type of auto switch, Cylinder stroke (mm).

Model

Model		Bore size (mm)	Port size	Lubrication	Action	Standard stroke (mm)	Auto switch mounting	Cushion	
								Rubber	Air
Relief type	10-/21-CG1W□20	20	1/8	Non-lube	Double acting, double rod	25, 50, 75, 100, 125, 150, 200	Available	Available	Available (ø40 to ø63)
	10-/21-CG1W□25	25				25, 50, 75, 100, 125, 150, 200, 250, 300			
	10-/21-CG1W□32	32							
	10-/21-CG1W□40	40							
	10-/21-CG1W□50	50							
	10-/21-CG1W□63	63	1/4						
	10-/21-CG1W□80	80	3/8						
10-/21-CG1W□100	100	1/2							
Vacuum suction type	11-/22-CG1W□20	20	1/8	Non-lube	Double acting, double rod	25, 50, 75, 100, 125, 150, 200	Available	Available	Available (ø40 to ø63)
	11-/22-CG1W□25	25				25, 50, 75, 100, 125, 150, 200, 250, 300			
	11-/22-CG1W□32	32							
	11-/22-CG1W□40	40							
	11-/22-CG1W□50	50							
	11-/22-CG1W□63	63	1/4						
	11-/22-CG1W□80	80	3/8						
	11-/22-CG1W□100	100	1/2						

Specifications

Bore size (mm)	
Item	20/25/32/40/50/63/80/100
Proof pressure	1.5MPa
Maximum operating pressure	1.0MPa
Minimum operating pressure	0.05MPa
Ambient and fluid temperature	Without auto switch: -10°C to 70°C With auto switch: -10°C to 60°C (No freezing)
Piston speed	10-/11-: 30 to 400 mm/s, 21-/22-: 50 to 400 mm/s
Stroke length tolerance	Up to 300 ^{+1.4} ₀ st mm
Mounting style	Basic style / Axial foot style / Rod side flange style
Grease	10-/11-: Fluorine grease 21-/22-: Lithium soap based grease
Particle generation grade (Refer to front matter pages 13 to 22 for details.)	10-: Grade 2, 21-: Grade 3 11-/22-: Grade 1

Suction flow rate of vacuum suction type (Reference values)

Bore size	Suction flow rate l/min (ANR)
20/25/32/40	10
50/63/80/100	20

Auto Switch Specifications (Refer to Best Pneumatics catalog for detailed specifications and auto switches not in the following table.)

Type	Auto switch model	Applicable bore size	Load voltage	Load current range	Indicator light	Application
Reed switch	D-C73	ø20 to ø63	24 VDC, 100 VAC	5 to 40 mA, 5 to 20 mA	Yes	Relay, PLC
	D-B54	ø20 to ø100	24 VDC, 100 VAC, 200 VAC	5 to 50 mA, 5 to 25 mA, 5 to 12.5 mA	Yes	Relay, PLC
Solid state switch	2-wire D-H7B	ø20 to ø63	24 VDC (10 to 28 VDC)	5 to 40 mA	Yes	24 VDC relay, PLC
	D-K59	ø20 to ø100	24 VDC (10 to 28 VDC)	5 to 40 mA	Yes	24 VDC relay, PLC
	3-wire D-H7A1	ø20 to ø63	28 VDC or less	40 mA or less	Yes	IC circuit, Relay, PLC
	D-G59	ø20 to ø100	28 VDC or less	40 mA or less	Yes	IC circuit, Relay, PLC

Refer to page 182 for a list of applicable auto switches.

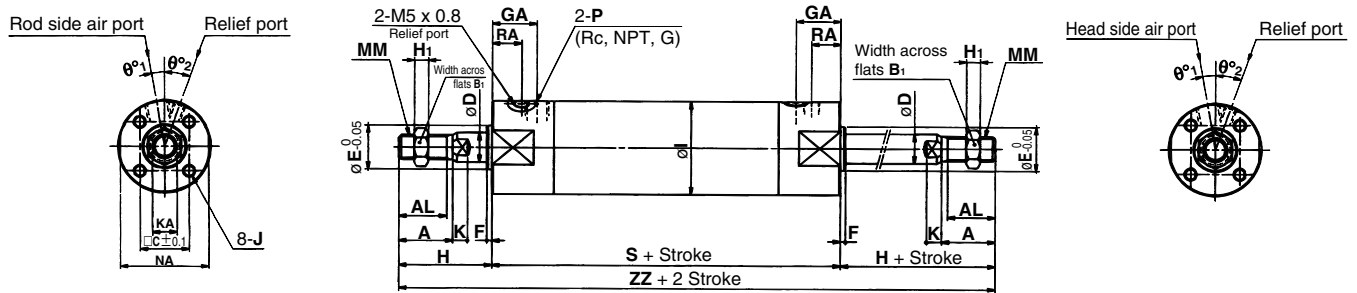
PLC: Programmable Logic Controller

Proper Auto Switch Mounting Position (Detection at stroke end)

Refer to page 35, Double acting, Single rod types.

Basic style (B) / 10-**CG1WB** 21-**CG1WB**

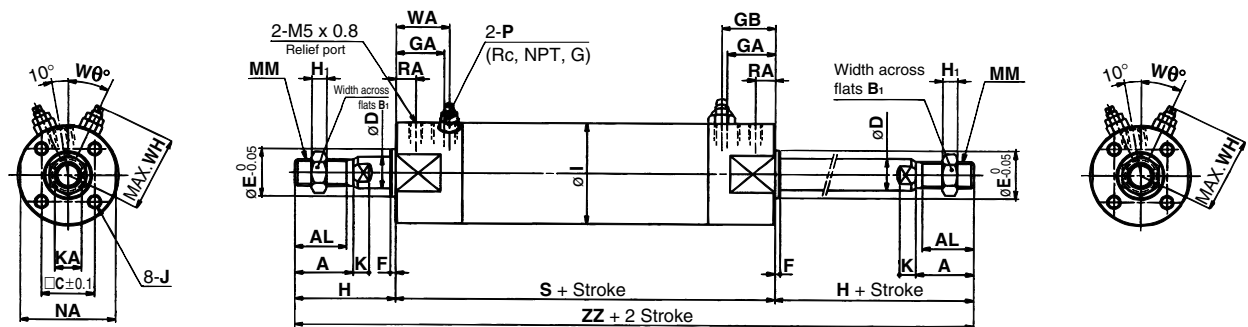
With rubber bumper



Bore size	A	AL	B ₁	C	D	E	F	GA	H	H ₁	I	J	K	KA	MM	NA	P	RA	S	θ ₁	θ ₂	ZZ
20	18	15.5	13	14	8	12	2	20	35	5	26	M4 x 0.7 depth 7	5	6	M8 x 1.25	24	1/8<M5 x 0.8>	7	93	0	0	163
25	22	19.5	17	16.5	10	14	2	20	40	6	31	M5 x 0.8 depth 7.5	5.5	8	M10 x 1.25	29	1/8<M5 x 0.8>	7	93	0	0	173
32	22	19.5	17	20	12	18	2	20<18>	40	6	38	M5 x 0.8 depth 8	5.5	10	M10 x 1.25	35.5	1/8	7	95	0	0<23>	175
40	30	27	19	26	16	25	2	13<10>	50	8	47	M6 x 1 depth 12	6	14	M14 x 1.5	44	1/8	9	87	10	23	187
50	35	32	27	32	20	30	2	14<12>	58	11	58	M8 x 1.25 depth 16	7	18	M18 x 1.5	55	1/4	10	102	10	23	218
63	35	32	27	38	20	32	2	14<12>	58	11	72	M10 x 1.5 depth 16	7	18	M18 x 1.5	69	1/4	10	102	10	20	218
80	40	37	32	50	25	40	3	20<17>	71	13	89	M10 x 1.5 depth 22	10	22	M22 x 1.5	80	3/8	10	122	10	20	264
100	40	37	41	60	30	50	3	20<17>	71	16	110	M12 x 1.75 depth 22	10	26	M26 x 1.5	100	1/2	10	122	10	20	264

Note) < >: Denotes the dimensions for G port.

With air cushion

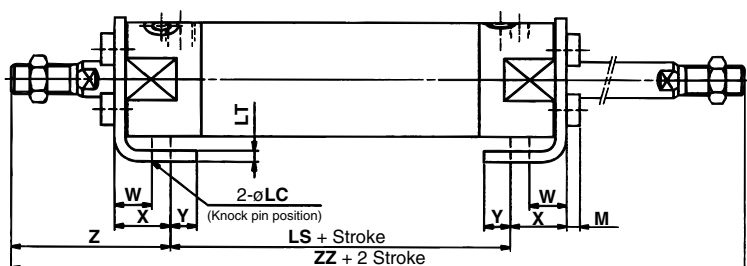
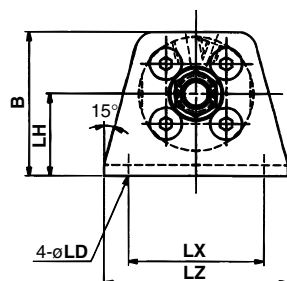


Bore size	A	AL	B ₁	C	D	E	F	GA	H	H ₁	I	J	K	KA	MM	NA	P	RA	S	WA	WH	Wθ	ZZ
40	30	27	19	26	16	25	2	22<19>	50	8	47	M6 x 1 depth 12	6	14	M14 x 1.5	44	1/8	8	105	25	33	20°	205
50	35	32	27	32	20	30	2	26<24>	58	11	58	M8 x 1.25 depth 16	7	18	M18 x 1.5	55	1/4	9	126	30	40.5	20°	242
63	35	32	27	38	20	32	2	26<24>	58	11	72	M10 x 1.5 depth 16	7	18	M18 x 1.5	69	1/4	9	126	30	47.5	20°	242

Note) < >: Denotes the dimensions for G port.

Axial foot style (L) / 10-**CG1WL** 21-**CG1WL**

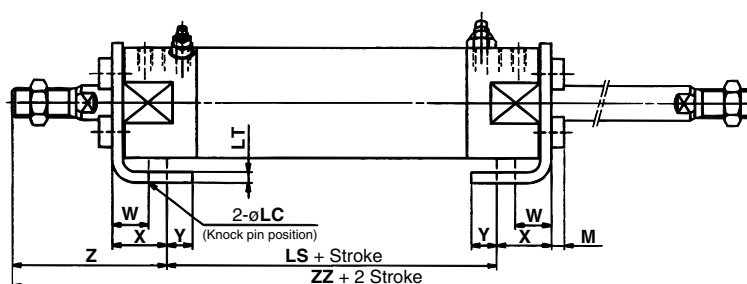
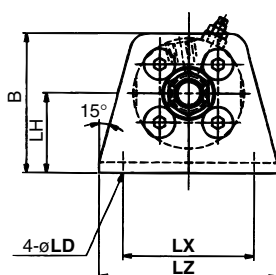
With rubber bumper



	(mm)													
Bore size	B	LC	LD	LH	LS	LT	LX	LZ	M	W	X	Y	Z	ZZ
20	34	4	6	20	69	3	32	44	3	10	15	7	47	163
25	38.5	4	6	22	69	3	36	49	3.5	10	15	7	52	173
32	45	4	7	25	69	3	44	58	3.5	10	16	8	53	175
40	54.5	4	7	30	60	3	54	71	4	10	16.5	8.5	63.5	187
50	70.5	5	10	40	67	4.5	66	86	5	17.5	22	11	75.5	218
63	82.5	5	12	45	67	4.5	82	106	5	17.5	22	13	75.5	218
80	101	6	11	55	74	4.5	100	125	5	20	28.5	14	95	264
100	121	6	14	65	74	6	120	150	7	20	30	16	95	264

* Other dimensions are the same as basic style.

With air cushion

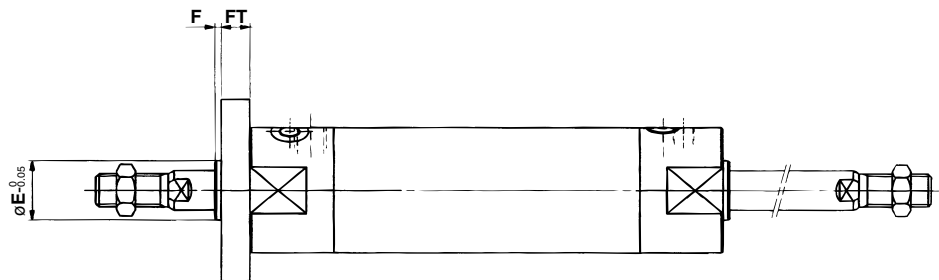
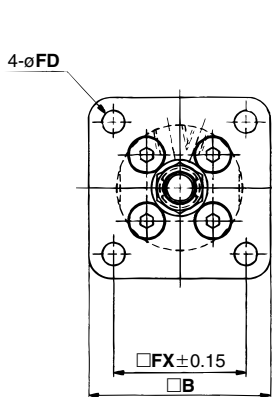


	(mm)													
Bore size	B	LC	LD	LH	LS	LT	LX	LZ	M	W	X	Y	Z	ZZ
40	54.5	4	7	30	78	3	54	71	4	10	16.5	8.5	63.5	205
50	70.5	5	10	40	91	4.5	66	86	5	17.5	22	11	75.5	242
63	82.5	5	12	45	91	4.5	82	106	5	17.5	22	13	75.5	242

* Other dimensions are the same as basic style.

Rod side flange style (F) / ¹⁰⁻~~11-~~**CG1WF**, ²¹⁻~~22-~~**CG1WF**

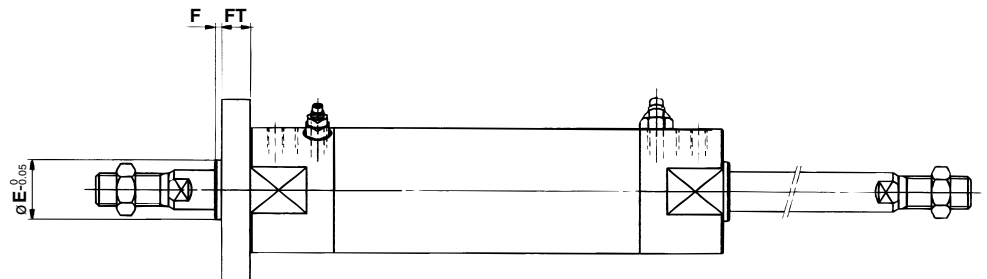
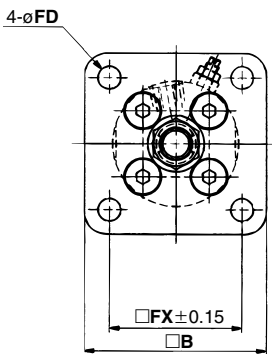
With rubber bumper



Bore size	B	E	F	FX	FD	FT
20	40	12	2	28	5.5	6
25	44	14	2	32	5.5	7
32	53	18	2	38	6.6	7
40	61	25	2	46	6.6	8
50	76	30	2	58	9	9
63	92	32	2	70	11	9
80	104	40	3	82	11	11
100	128	50	3	100	14	14

Note) End boss is machined on the flange for øE.
* Other dimensions are the same as basic style.

With air cushion



Bore size	B	E	F	FX	FD	FT
40	61	25	2	46	6.6	8
50	76	30	2	58	9	9
63	92	32	2	70	11	9

Note) End boss is machined on the flange for øE.
* Other dimensions are the same as basic style.

Series 10-/11-21-/22-**CG1R** Direct mount type cylinder ø20, ø25, ø32, ø40, ø50, ø63

How to Order

Clean series

10	Relief type
11	Vacuum suction type

Built-in magnet

Nil	No
D	With auto switch (Built-in magnet)

Cushion

N	Rubber bumper
---	---------------

Bore size (mm)

Cylinder stroke (mm)

Number of auto switches

Nil	2 pcs.
S	1 pc.
n	"n" pcs.

Copper, fluorine and silicon-free + Low particle generation

21	Relief type
22	Vacuum suction type

Port thread type

Nil	Rc
TN	NPT
TF	G

Type of auto switch

Reed switch	C73, B54
Solid state switch	H7B, H7A1, K59, G59

Modeling Example 1: 10 - C D G 1 R N 25 - 100 - H7B

Modeling Example 2: 21 - C D G 1 R N 25 - 100 - H7B

Model

Model		Bore size (mm)	Port size	Lubrication	Action	Standard stroke (mm)	Auto switch mounting	Cushion						
								Rubber	Air					
Relief type	10-/21-CG1RN20	20	1/8	Non-lube	Double acting Single rod	25, 50, 75, 100,125,150,	○	○	Not available					
	10-/21-CG1RN25	25				25, 50, 75, 100, 125,150,200								
	10-/21-CG1RN32	32				25, 50, 75, 100, 125,150,200 250,300								
	10-/21-CG1RN40	40				25, 50, 75, 100, 125,150,200 250,300								
	10-/21-CG1RN50	50				25, 50, 75, 100, 125,150,200 250,300								
10-/21-CG1RN63	63	1/4												
Vacuum suction type	11-/22-CG1RN20	20	1/8								25, 50, 75, 100,125,150,			
	11-/22-CG1RN25	25				25, 50, 75, 100, 125,150,200								
	11-/22-CG1RN32	32				25, 50, 75, 100, 125,150,200 250,300								
	11-/22-CG1RN40	40				25, 50, 75, 100, 125,150,200 250,300								
	11-/22-CG1RN50	50		25, 50, 75, 100, 125,150,200 250,300										
	11-/22-CG1RN63	63		1/4										

Specifications

Item	Bore size (mm)
	20/25/32/40/50/63
Proof pressure	1.5MPa
Maximum operating pressure	1.0MPa
Minimum operating pressure	0.05MPa
Ambient and fluid temperature	Without auto switch: -10°C to 70°C With auto switch: -10°C to 60°C (No freezing)
Piston speed	10-/11-: 30 to 400 mm/s, 21-/22-: 50 to 400 mm/s
Stroke length tolerance	Up to 300 ^{+1.4} ₀ mm
Grease	10-/11-: Fluorine grease 21-/22-: Lithium soap based grease
Particle generation grade (Refer to front matter pages 13 to 22 for details.)	10-: Grade 2, 21-: Grade 3 11-/22-: Grade 1

Suction flow rate of vacuum suction type (Reference values)

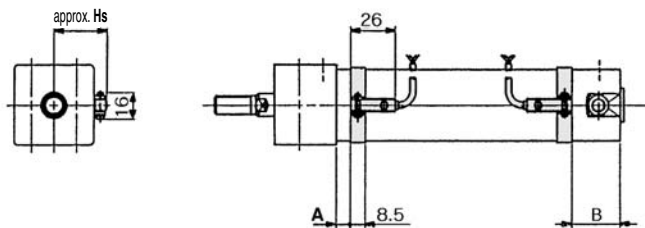
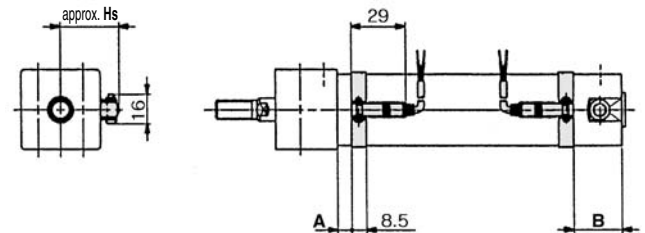
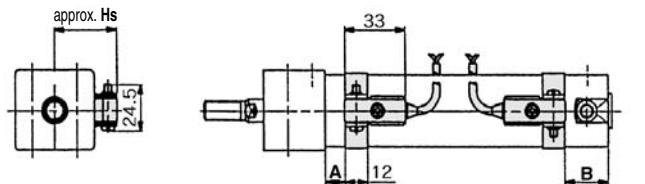
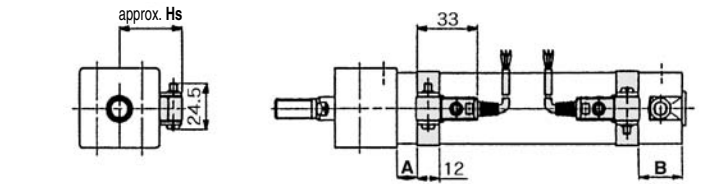
Bore size	Suction flow rate l/min (ANR)
20/25/32/40	10
50/63	20

Auto switch specifications (Refer to Best Pneumatics catalog for detailed specifications and auto switches not in the following table.)

Type	Auto switch model	Load voltage	Load current range	Indicator light	Application
Reed switch	D-C73	24 VDC, 100 VAC	5 to 40 mA, 5 to 20 mA	○	Relay, PLC
	D-B54	24 VDC, 100 VAC, 200 VAC	5 to 50 mA, 5 to 25 mA, 5 to 12.5 mA	○	Relay, PLC
Solid state switch	2-wire	D-H7B	24 VDC (10 to 28 VDC)	○	24 VDC relay, PLC
		D-K59	24 VDC (10 to 28 VDC)	○	24 VDC relay, PLC
	3-wire	D-H7A1	28 VDC or less	○	IC circuit, Relay, PLC
		D-G59	28 VDC or less	○	IC circuit, Relay, PLC

Refer to page 182 for a list of applicable auto switches.

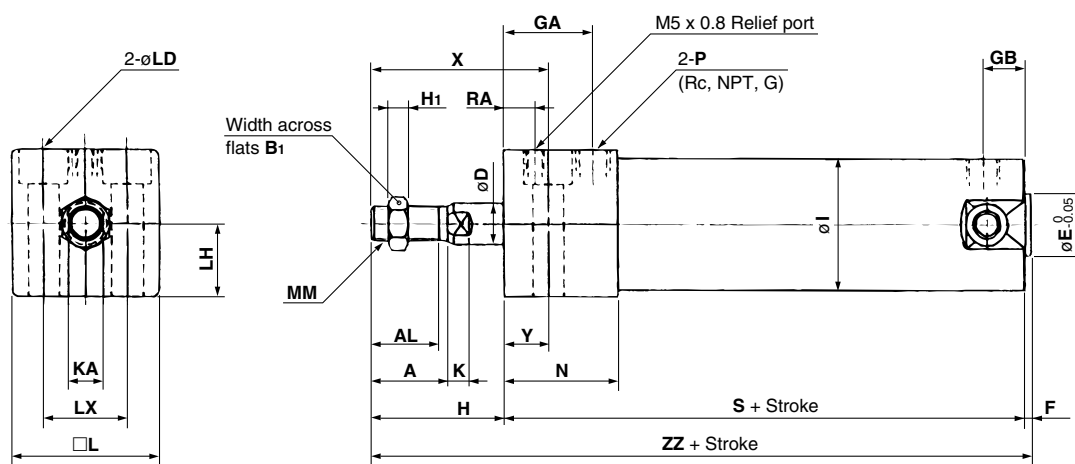
PLC: Programmable Logic Controller

Proper auto switch mounting position (Detection at stroke end)**D-C73****D-H7B/H7A1****D-B54****D-K59/G59**

(mm)

Bore size	D-C73			D-H7B/H7A1			D-B54			D-K59/G59		
	A	B	Hs	A	B	Hs	A	B	Hs	A	B	Hs
20	8.5	20.5	24.5	7.5	19.5	24.5	2.5	14.5	27.5	4	16	27.5
25	8.5	20.5	27	7.5	19.5	27	2.5	14.5	30	4	16	30
32	9.5	21.5	30.5	8.5	20.5	30.5	3.5	15.5	33.5	5	17	33.5
40	14.5	23.5	35	13.5	22.5	35	8.5	17.5	38	10	19	38
50	16.5	28.5	40.5	15.5	27.5	40.5	10.5	22.5	43.5	12	24	43.5
63	16.5	28.5	47.5	15.5	27.5	47.5	10.5	22.5	50.5	12	24	50.5

Note) The above values should be used as a guide for detection at stroke end. When actually mounting the auto switch, adjust the position after confirming the operating conditions of the auto switch.

Basic style / 10-CG1RN**, 21-**CG1RN****

																											(mm)
Bore size	Stroke range	A	AL	B ₁	D	E	F	G	AG	B _H	H ₁	I	K	KA	L	LD	LH	LX	MM	N	P	RA	S	X	Y	ZZ	
20	Up to 150	18	15.5	13	8	12	2	20	10	27	5	26	5	6	30.4	ø5.5, ø9.5 counterbore depth 6	15	18	M8 x 1.25	27	1/8<M5 x 0.8>	7	75	38	11	104	
25	Up to 200	22	19.5	17	10	14	2	22	10	32	6	31	5.5	8	36.4	ø6.6, ø11 counterbore depth 7	18	22	M10 x 1.25	29	1/8<M5 x 0.8>	9	77	44	12	111	
32	Up to 200	22	19.5	17	12	18	2	26	10	32	6	38	5.5	10	42.4	ø9, ø14 counterbore depth 9	21	24	M10 x 1.25	33	1/8	9	83	45	13	117	
40	Up to 300	30	27	19	16	25	2	30	10	39	8	47	6	14	52.4	ø11, ø17.5 counterbore depth 12	26	32	M14 x 1.5	37	1/8	11	94	55	16	135	
50	Up to 300	35	32	27	20	30	2	33	12	45	11	58	7	18	64.5	ø14, ø20 counterbore depth 14	32	41	M18 x 1.5	44	1/4	12	108	62	17	155	
63	Up to 300	35	32	27	20	32	2	39	12	45	11	72	7	18	76.6	ø18, ø26 counterbore depth 18	38	46	M18 x 1.5	50	1/4	12	114	64	19	161	

Note) < >: Denotes the dimensions for G port.