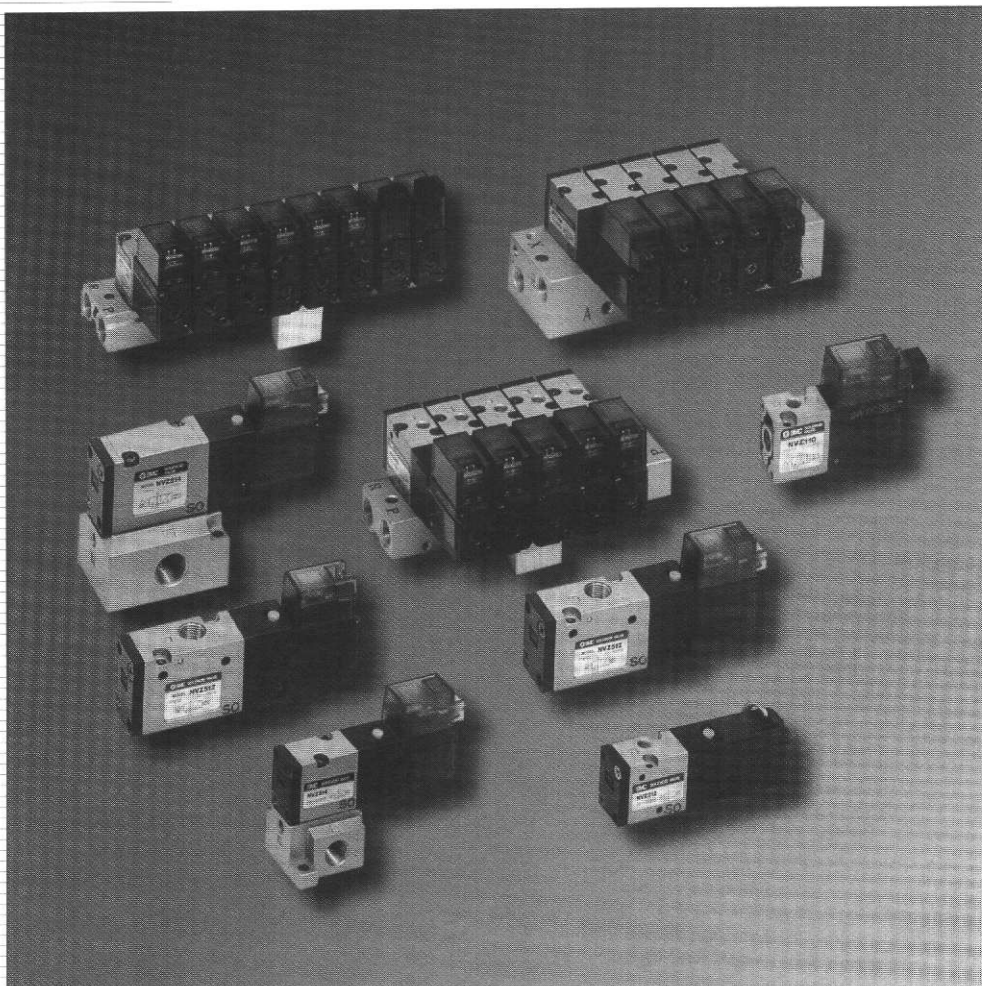




3 Way • 3 Port Solenoid Valve

NVZ Series

Rubber Seal Model 100/300/500



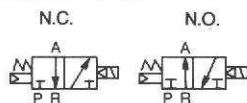
Low Power Consumption 1.8 WDC
Compact Size, Large Flow Capacity Cv 0.05 ~ 0.5
High Speed Response Time -15 mSec (NVZ 100)
Built-in One-Touch Fitting Manifolds Available
Individual or Manifold Mounting

Variations of Series NVZ

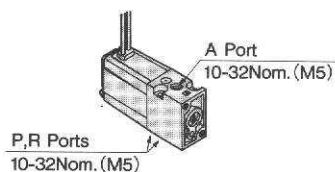
3-port direct operated solenoid valve

NVZ100

PAGE 3 ~ 8



Body ported type

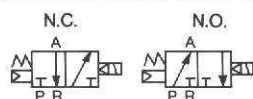


3-port pilot operated solenoid valve

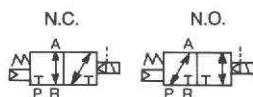
NVZ300

PAGE 9 ~ 21

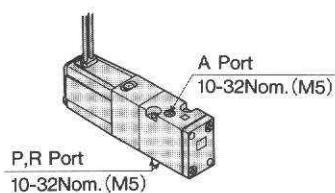
Internal pilot type



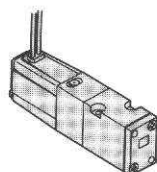
External pilot type



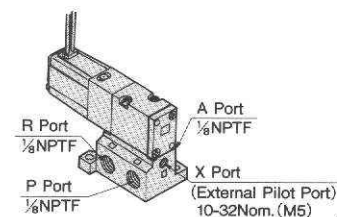
Body ported type



Base mounted type



With subplate

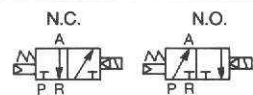


3-port pilot operated solenoid valve

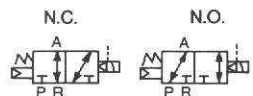
NVZ500

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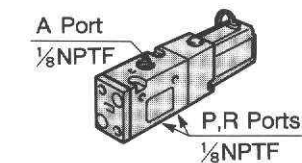
Internal pilot type



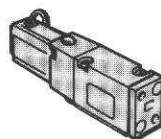
External pilot type



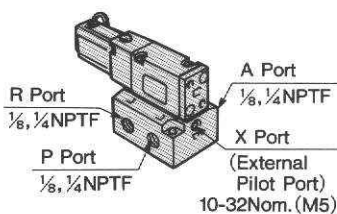
Body ported type



Base mounted type



With subplate



3 Port Solenoid Valve Series NVZ100/300/500

NVZ100

Cv0.05

width 0.6in



NVZ300

Cv0.25

width 0.6in



NVZ500

Cv0.5

width 0.71in



■ **Power Consumption 1.8WDC**
(2.1 WDC w/LED)

■ **Response Time**

NVZ100: 15 mSec or less

NVZ300/500: 20 mSec or less

INDEX

Notes for series NVZ P 1 2

Series NVZ100

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Series NVZ300

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Construction/Parts List P 10
How to Order P 11
Manifold Specifications P 12
Dimensions
(Body Ported type) P 14
Dimensions
(Base Mounted type) P 15
Manifold Dimensions P 16 - 21

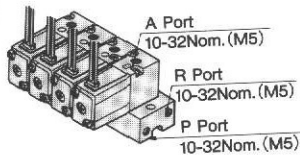
Series NVZ500

Specifications P 22
Construction/Parts List P 23
How to Order P 24
Manifold Specifications P 25
Dimensions
(Body Ported type) P 27
Dimensions
(Base Mounted type) P 28
Manifold Dimensions P 29 - 34

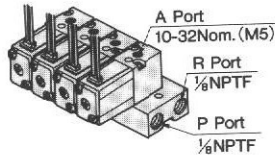
Manifold

Optional Accessory/Bracket

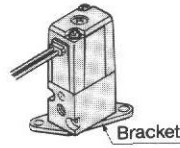
Top ported/NVV3Z1-01-01



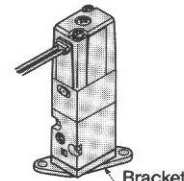
Top ported/NVV4Z1-20-01



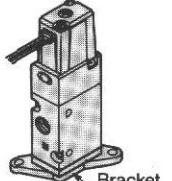
NVZ10 0-000
-M5-F



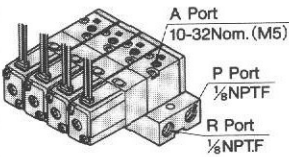
NVZ3020-000
-M5-F



NVZ5020-000
-01T-F

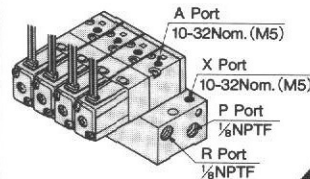


Top ported/NVV3Z3-20-01

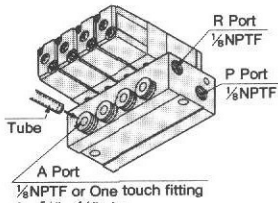


For external pilot valve

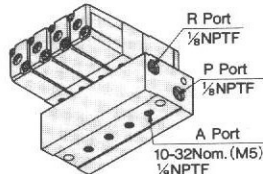
Top ported/NVV3Z3-21R-01



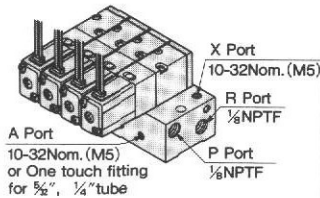
Side ported/NVV3Z3-40-01



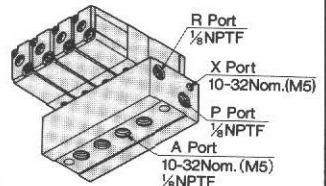
Bottom ported/
NVV3Z3-40-02



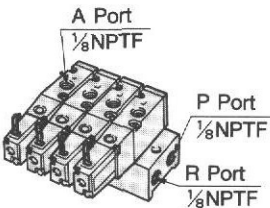
Side ported/NVV3Z3-40R-01



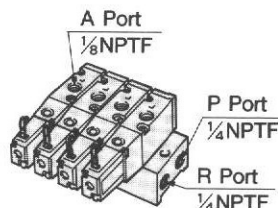
Bottom ported/
NVV3Z3-40R-02



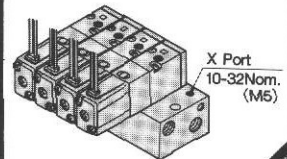
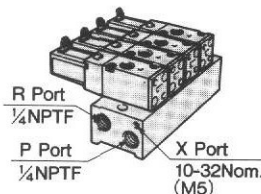
Top ported/NVV3Z5-20-01



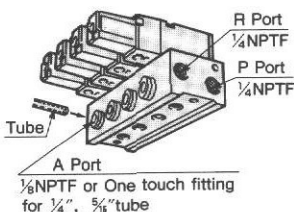
Top ported/NVV3Z5-21-01



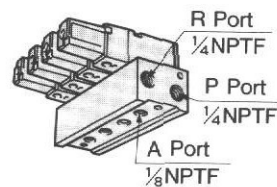
Top ported/NVV3Z5-21R-01



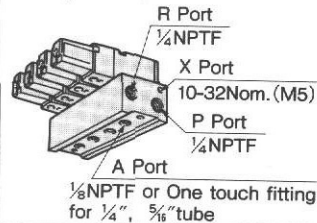
Side ported/NVV3Z5-41-01



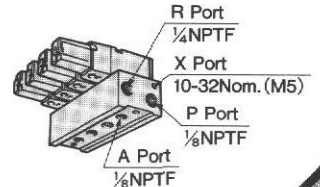
Bottom ported/
NVV3Z5-4102



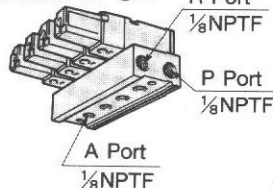
Side ported/NVV3Z5-41R-01



Bottom ported/
NVV3Z5-41R-02

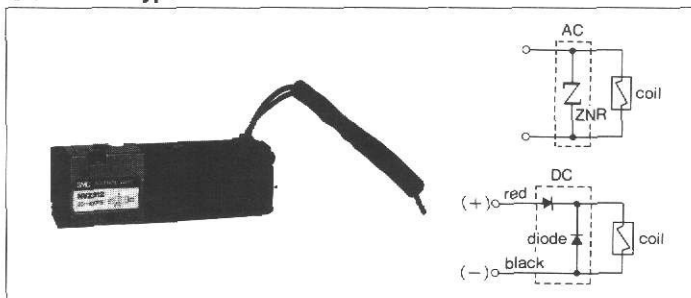


Bottom ported/
NVV3Z5-40-02

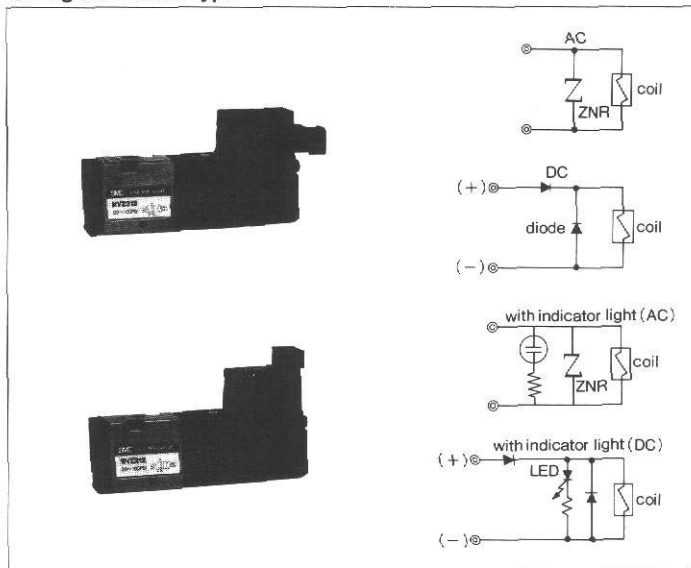


Surge Voltage Protection Circuit

① Grommet type



② Plug connector type



In applications where the supply voltage is DC, correctly connect the lead wires to ⊕ (plus) and ⊖ (minus) indicated on the connector or to the markings + — — — — —

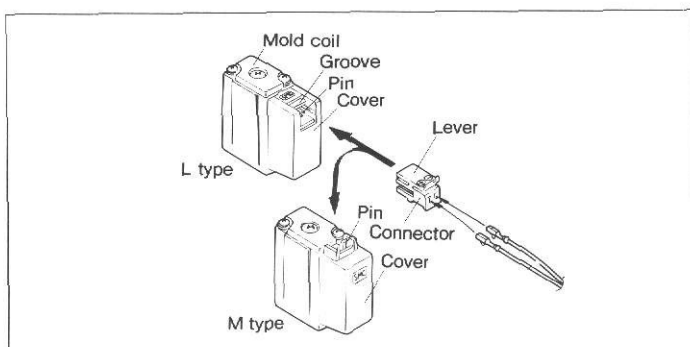
For those on which the lead wires have been pre-wired, the plus side is red and minus side is black.

Cover of indicator light is made of polycarbonate, therefore avoid contact with any substance that may attack polycarbonate, such as organic solvents.

Connection/ Disconnection of Plug

① Connection — Push the connector straight on to the pins of the solenoid, making sure the lip of the lever is securely positioned in the groove of the solenoid cover.

② Disconnection — Pinch the lever against the connector and pull connector away from the solenoid.



Common Exhaust for Main Valve & Pilot Valve

(NVZ300M and NVZ500M valves are available with a common exhaust for the pilot exhaust and the main exhaust.

Exhaust air from the pilot valve will flow to the main valve exhaust port. Exhaust air from the main valve will not enter the pilot valve side due to a check valve.

Applications

- Elimination of air contamination which pilot exhaust would create.
- Elimination of pilot exhaust noise.
- Prevention of dust entry into valve when used in extremely dusty environments.

Common exhaust type valves to be used with the common type manifolds. Please install exhaust cleaner (Series NAMC) when used in this manner. Take precautions for piping so that common exhaust air does not become restricted.

External Pilot Type

The NVZ300R, NVZ500R type valves are external pilot operated. The external pilot pressure is separate from the main supply pressure.

Applications

- Vacuum or low pressure (less than 10 PSI). However, this valve will not retain vacuum indefinitely.
- In case of A port used in an open position. For example, air blowing.
- In case of P port extremely restricted.

Constantly regulate external pilot pressure.

Piping

- 1 Make sure that chips, cutting oil, dust, etc. are cleaned up before piping.
- 2 If required to pipe on the pilot exhaust (PE) port, remove the mesh filter.
- 3 Fastening torque

Thread	Proper fastening torque in-lb
10-32Nom. (M5)	13~17.3
1/8NPTF	60.6~78.0
1/4NPTF	104~121.3

Quality of Operating Fluid

- 1 A filter of about 5 microns is preferred.
- 2 Remove drain from the system periodically. A large quantity of drainage can lead to product malfunction as well as environmental contamination. For added convenience, the use of an auto drain is recommended.
- 3 When there is a large amount of carbon powder from the compressor, it causes valve malfunction. Please change the compressor oil or install a mist separator. Please change compressor oil or install a mist separator for this case.

Lubrication

- 1 The valve has been lubricated for life at manufacture, and does not require further lubrication in service.
 - 2 If a lubricant is used in the system, use turbine oil type #1 (ISO VG32). If lubricant has been used in the system, do not cease to lubricate, as the original lubricant applied during manufacturing will have been washed away.
- See table of suggested lubricants.

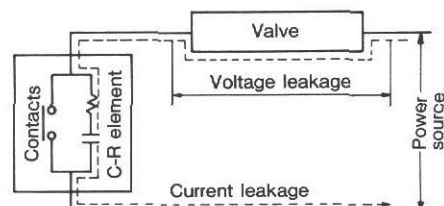
Recommended Lubricants for Valves

Lubricant Table

Manufacturer	Lubricant
BP	THB 32
Castrol	Perfecto T32
ESSO/Exxon	TERESS0 32
Mobil	DTE Light
Shell	Turbo T32

Voltage Leakage

- 1 Ensure that the voltage remaining across the ends of the coil due to current leakage when the power is switched OFF is as follows: (at magnetically sealed position)
AC coil: No more than 15% of the rated voltage
DC coil: No more than 2% of the rated voltage
- 2 Note that when using a C-R element for contact protection, the voltage leakage may increase due to the current leakage flowing through the C-R element.



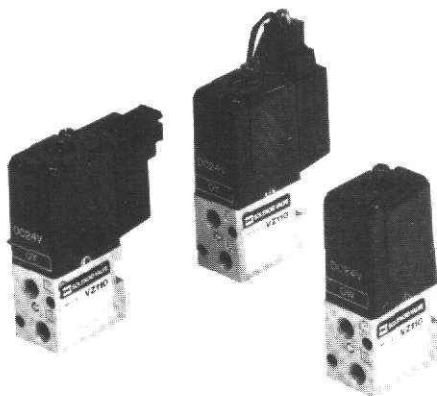
※Note that a contact-less relay is provided with a protection circuit that will allow some current leakage.

Operating Conditions

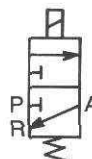
- 1 Avoid applications where exposed to corrosive gas, chemical solution or vapor, seawater, etc.
- 2 When installing the valve in a place which is temporarily exposed to water droplets or oil, use a protective barrier or cover.
- 3 When the unit is used in a dusty location, provision should be made to prevent dust from entering the unit by installing a silencer to the EXH port.
- 4 The valve may be used in low temperature applications down to 26°F if the air is sufficiently free of moisture. Please use an appropriate dryer to ensure dry air and prevent the valve from freezing.
- 5 The double solenoid valve must be energized for at least 0.1 second or more to ensure proper operation.

Cv 0.034

3 Port Solenoid Valve Series NVZ100

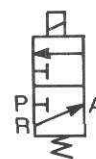


Symbol
N.C.



NVZ110

N.O.



NVZ120

Model

Body type	Model	Type of actuation	Operating pressure range	Vacuum application		Cv factor		Port size	Weight lbs (gf)
				P Port	R Port				
Body ported type	NVZ110--M5	N.C.	0~100PSI (0~7kgf/cm ²)	22in-Hg ~85PSI (560Torr~6kgf/cm ²)	VAC ~0PSI (10Torr~0kgf/cm ²)	P→A	0.034	10-32Nom. (M5)	0.15 (70)
	NVZ120--M5	N.O.	0~70PSI (0~5kgf/cm ²)	22in-Hg ~85PSI (560Torr~6kgf/cm ²)	VAC ~55PSI	A→R	0.05		
						R→A	0.034		
						A→P	0.034		

Note: In case of NVZ120, supply air to "R" port.
"P" port will be the exhaust port.

Specifications

Fluid	Air, Inert gases
Ambient and fluid temprature	Max. 120°F (50°C)
Response time	15ms or less (at 70PSI)
Max. operating frequency	900 cpm
Manual override	Non-locking type
Lubrication	Not required (Use turbine oil #1 (ISO VG32), if lubrication is provided.)
Mounting position	Free
Impact/vibration resistance	15G/5G (45~1000Hz)
Enclosure	Dust proof

Solenoid Specifications

Electrical entry		Grommet (G) (H) Plug connector (L) (M)
Voltage	AC	110V ^{5%} Hz, 220V ^{5%} Hz
	DC	24V ^{5%} Hz
Allowable voltage		-15~+10% of rated voltage
Coil insulation		Class E or equivalent (250°F)
Temperature rise		81°F or less
Power consumption	DC	1.8W/2.1W (W/LED)
Apparent power	AC	Inrush 4.2VA/60Hz, 4.5VA/50Hz
		Holding 3VA/60Hz, 3.5VA/50Hz
Surge voltage suppressor		DC : Diode, AC : ZNR
Indicator light		DC : LED (Red), AC : Neon Lamp

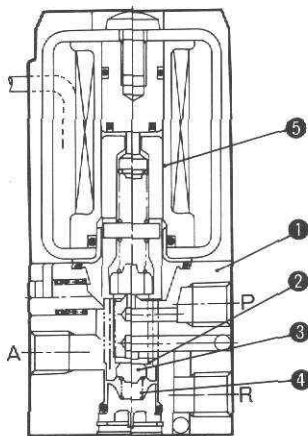
*Consult factory for others.

Options

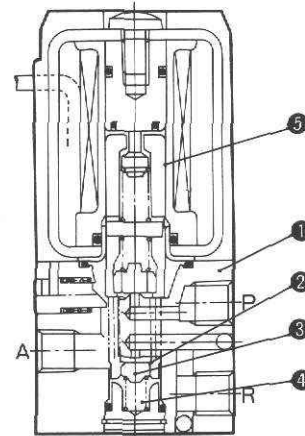
Description	Part number	Notes
Foot Bracket with screws	DXT170-34-1B	See "How to Order", pg. 5
Silencer	10-32NOM	AN120-M5 Noise reduction: 18dB or more Cv factor: 0.28
	1/8NPTF	NAN110-N01 For R port of manifold (NVV4Z1) Noise reduction: 21 dB or more, Cv factor: 1.94

Construction/Parts List

NVZ110/N.C. Type



NVZ120/N.O. Type



Main Parts

Description	Material	Notes
Body	Zinc die cast	Metallic paint
Push rod	Polyacetal	
EXH poppet	NBR	
Poppet spring	Stainless steel	

Spare Parts

No.	Description	Material	Part No.
⑤	Solenoid ass'y*	—	DXT170-A-○○○

*Including armature ass'y

How To Order Solenoid Assembly

Solenoid ass'y **DXT170-A-3 G**

Voltages•

*1	100VAC $\frac{5}{-10}$ Hz
*2	200VAC $\frac{5}{-10}$ Hz
3	115VAC60Hz (110VAC $\frac{5}{-10}$ Hz)
4	230VAC60Hz (220VAC $\frac{5}{-10}$ Hz)
5	24VDC
6	12VDC
*9	Others

*Consult factory for availability.

Electrical entry•

G	Grommet	Lead wire length 12" (300mm)
*H	Grommet	Lead wire length 24" (600mm)
L	L type plug connector	With lead wire
LO		Without connector
M	M type plug connector	With lead wire
MO		Without connector

*Special Order Only.

Indicator light and surge voltage suppressor

	Without indicator light and surge voltage suppressor
Z*	With indicator light and surge voltage suppressor
S†	With surge voltage suppressor

* Plug connector type only.

† Grommet type only.

Series NVZ100

How To Order: Series NVZ100

Voltage •

* 1	100V AC 50/60Hz
* 2	200V AC 50/60Hz
3	115VAC60Hz (110VAC%Hz)
4	230VAC60Hz (220VAC%Hz)
5	24V DC
6	12V DC
* 9	Others

*Consult factory for availability.

Indicator light and surge voltage suppressor

	Without indicator light and surge voltage suppressor
Z†	With indicator light and surge voltage suppressor
S*	With surge voltage suppressor

Z option not available for grommet type.

*Grommet type only.

Surge voltage suppressor of grommet type.



Body Ported

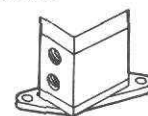
NVZ1 1 0-5 L Z-M5-

Type of actuation •

1	Normally closed
2	Normally open

Optional accessory

F:Foot bracket
DXT170-34-1A



(factory assembled)

Port Size

M5 10-32Nom.(M5 × 0.8)

Electrical entry

G:Grommet



Lead wire length
:12inch
(300mm)

*H:Grommet

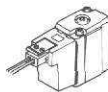


Lead wire length
:24inch
(600mm)

MO:M type plug connector without connector



L:L type plug connector with lead wire



Lead wire length
:12inch
(300mm)

M:M type plug connector with lead wire



Lead wire length
:12inch
(300mm)

LO:L type plug connector without connector



*Special Order Only.

How To Order/ Connector Ass'y

DXT170-80-A-

Lead wire color •

* 1	Blue/Blue
* 2	Red/Red
3	Gray/Gray
4	Red/Black(DC)

*Special Order Only.

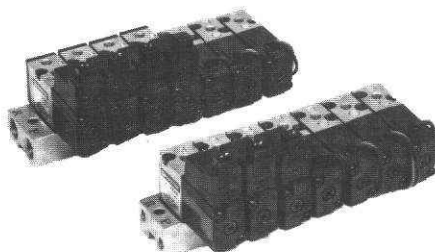
Lead wire length

	12 inch (300mm) Std.
6	24inch (600mm)
10	40inch (1000mm)
15	60inch (1500mm)
20	80inch (2000mm)
25	100inch (2500mm)
30	120inch (3000mm)

When ordering the valve and long connector ass'y include both the valve and connector ass'y product numbers.

Example: In case of 80 inch lead wire length
NVZ110-5LO-M5
DXT170-80-4A-20

Manifold



Specifications

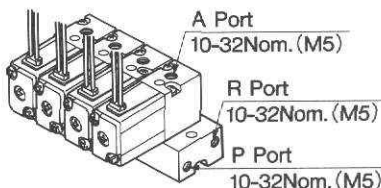
P(SUP)·R(EXH) type	Common SUP and EXH type
Valve station	2 to 20 stations
Optional accessory	Blank plate ass'y: DXT170-25-1A Supply Relocation spacer: DXT170-44-1A Exhaust Relocation spacer: DXT170-48-1A

Note: If there are more than 10 stations, exhaust from both sides of manifold.
Please order the appropriate valves and/or blanking plate ass'y with manifold base.

Type and How To Order

p ported
NVV3Z1-01-01
Special Order only)

NVV3Z1-01-05 1-

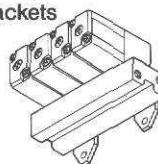


Station	
02	2 stations
...	...
20	20 stations

If there are more than 10 stations, exhaust from both sides of manifold.

Optional accessory

F: With mounting brackets



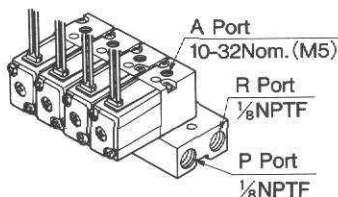
Applicable valves
NVZ110-0000-M5
NVZ120-0000-M5 (Pressure to R)

Notes
● It is impossible to use NVZ110 and NVZ120 together on the standard manifold base.

● In case of NVZ120 manifold type, Supply air to "R" port of manifold base. "P" port of manifold base will be the exhaust port.

p ported
NVV4Z1-20-01

NVV4Z1-20-05 1-

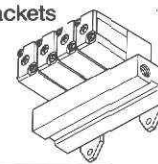


Station	
02	2 stations
...	...
20	20 stations

If there are more than 10 stations, exhaust from both sides of manifold.

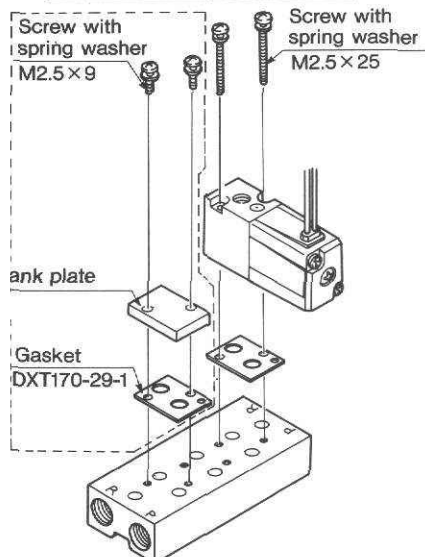
Optional accessory

F: With mounting brackets

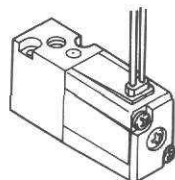


Proper Combinations of Solenoid Valve, Blank Plate Ass'y, Manifold Base

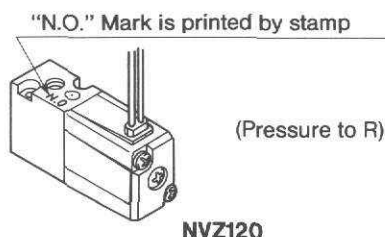
Blank Plate Ass'y DXT170-25-1A



Difference Between NVZ110 and NVZ120



NVZ110

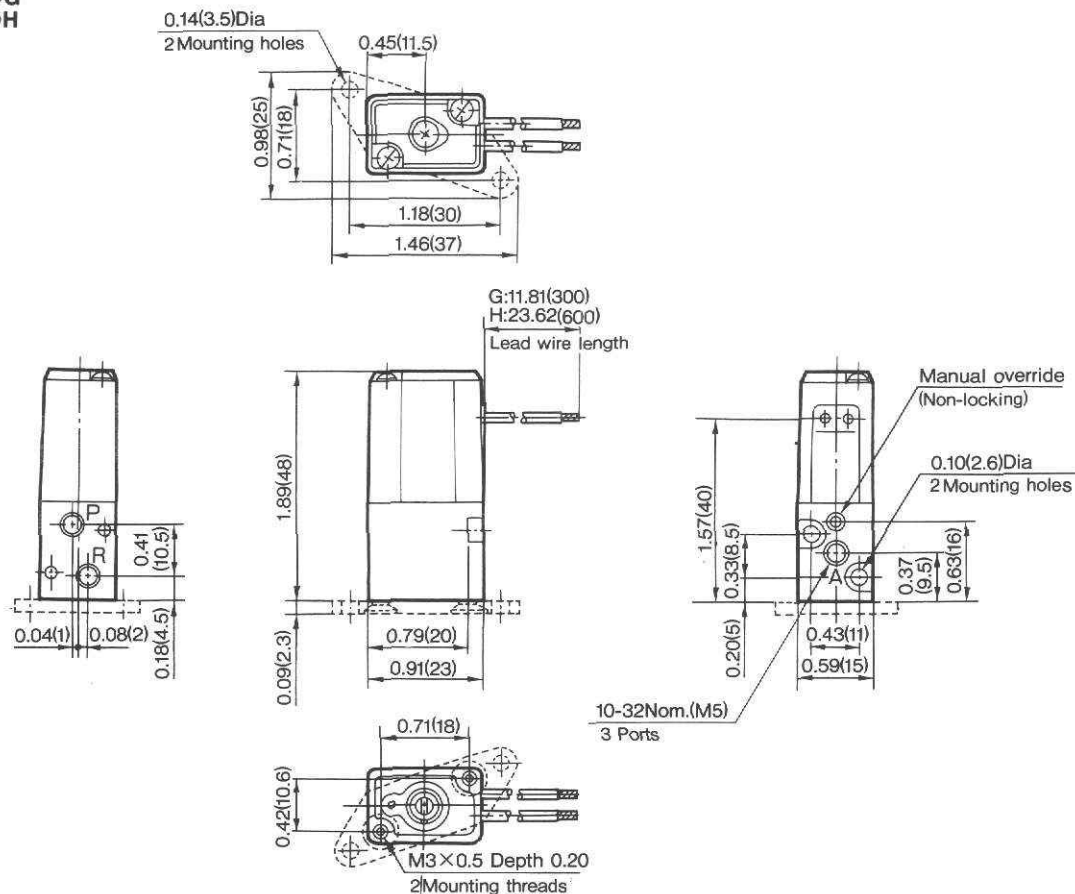


NVZ120

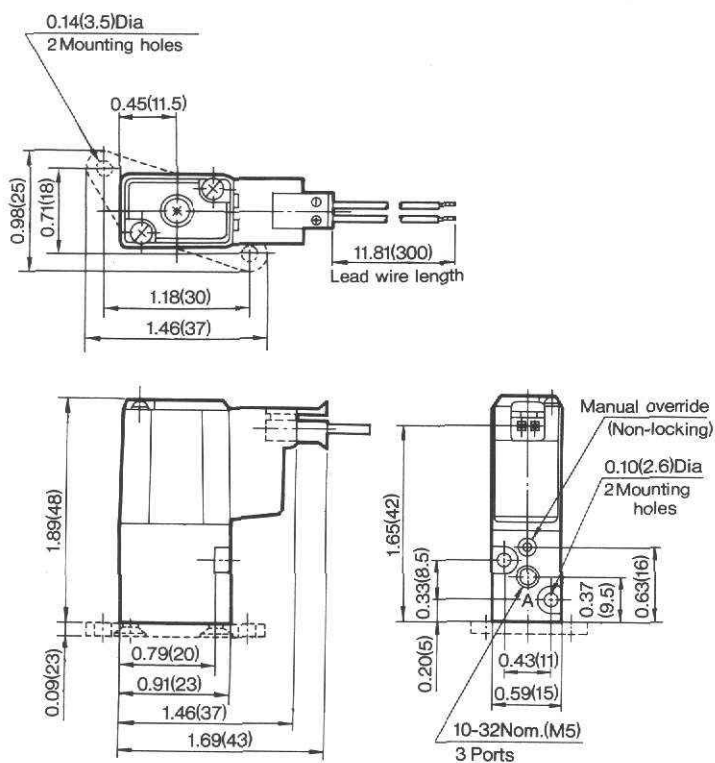
Body Ported Type

inch (mm)

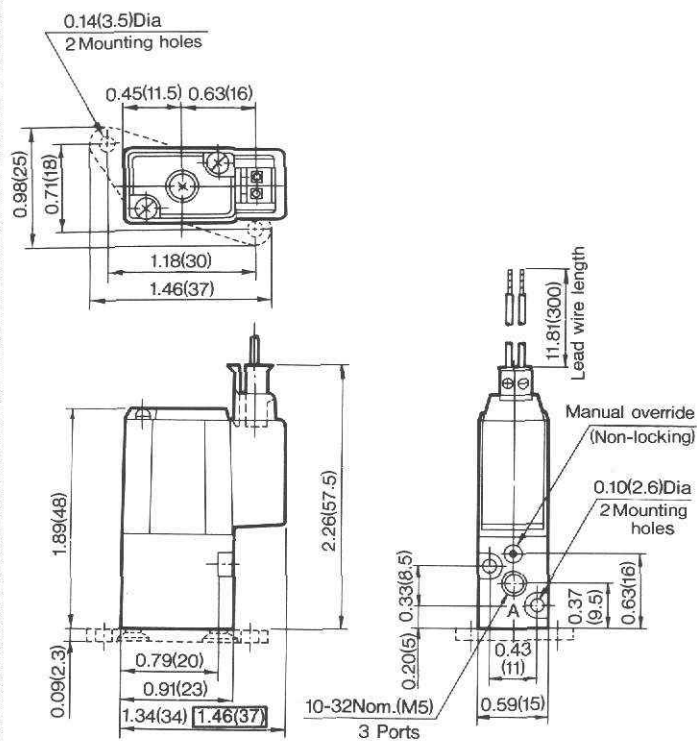
Grommet / NVZ100-OG
NVZ100-OH



L type plug connector / NVZ100-OL



M type plug connector / NVZ100-OM

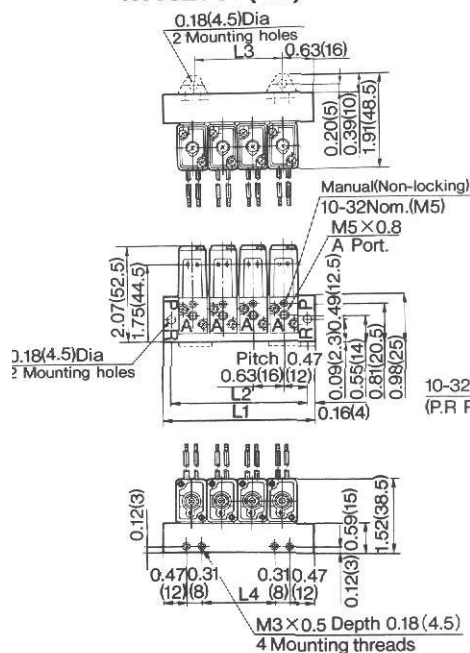


□ : With indicator light and surge voltage suppressor

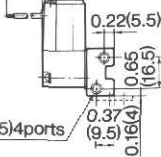
Type 01•20 Manifold/ Top Ported

inch (mm)

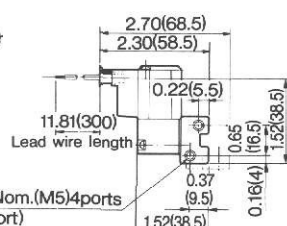
Grommet/NVV3Z1-01-(OG) NVV3Z1-01-(OH)



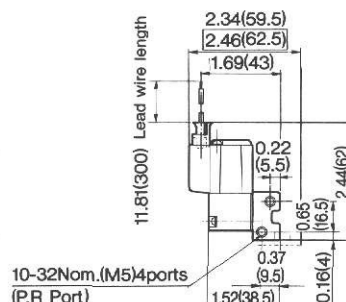
G:11.81(300)
H:23.62(600) Lead wire length



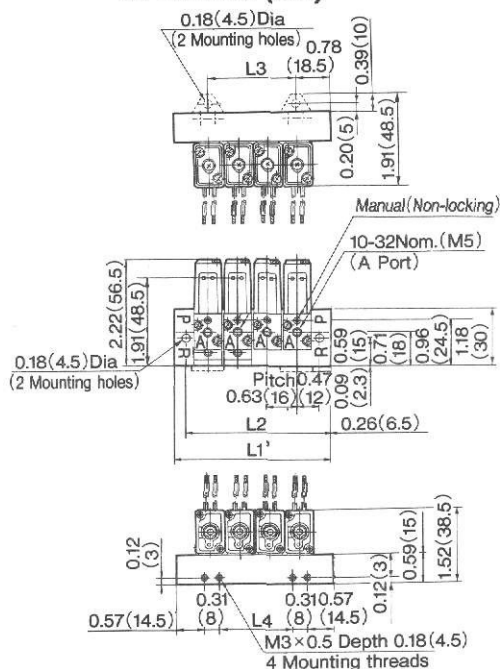
L type plug connector /NVV3Z1-01-(OL)



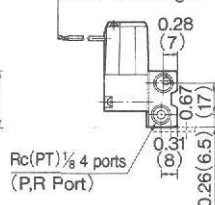
M type plug connector /NVV3Z1-01-(OM)



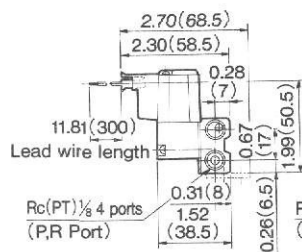
Grommet/NVV4Z1-20-(OG) NVV4Z1-20-(OH)



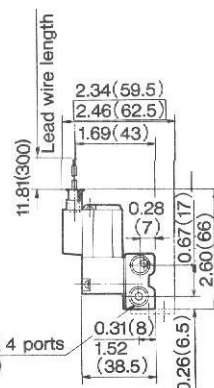
G:11.81(300)
H:23.62(600) Lead wire length



L type plug connector /NVV4Z1-20-(OL)



M type plug connector /NVV4Z1-20-(OM)

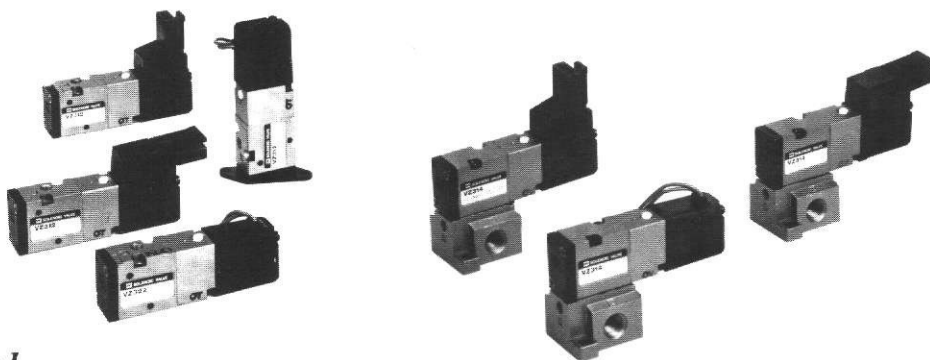


□ : With indicator light and surge voltage suppressor

Stations	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L ₁	1.89 (48)	2.52 (64)	3.15 (80)	3.78 (96)	4.41 (112)	5.04 (128)	5.67 (144)	6.30 (160)	6.93 (176)	7.56 (192)	8.19 (208)	8.82 (224)	9.49 (241)	10.08 (256)	10.71 (272)	11.34 (288)	11.97 (304)	12.60 (320)	13.23 (336)
L ₁	2.09 (53)	2.72 (69)	3.35 (85)	3.98 (101)	4.61 (117)	5.24 (133)	5.87 (149)	6.50 (165)	7.13 (181)	7.76 (197)	8.39 (213)	9.02 (229)	9.65 (245)	10.28 (261)	10.91 (277)	11.54 (293)	12.17 (309)	12.80 (325)	13.43 (341)
L ₂	1.57 (40)	2.20 (56)	2.83 (72)	3.46 (88)	4.09 (104)	4.72 (120)	5.35 (136)	5.98 (152)	6.61 (168)	7.24 (184)	7.87 (200)	8.50 (216)	9.13 (232)	9.76 (248)	10.39 (264)	11.02 (280)	11.65 (296)	12.28 (312)	12.91 (328)
L ₃	1.63 (16)	1.26 (32)	1.89 (48)	2.52 (64)	3.15 (80)	3.78 (96)	4.41 (112)	5.04 (128)	5.67 (144)	6.30 (160)	6.93 (176)	7.56 (192)	8.19 (208)	8.82 (224)	9.45 (240)	10.08 (256)	10.71 (272)	11.34 (288)	11.97 (304)
L ₄	0.31 (8)	0.94 (24)	1.57 (40)	2.20 (56)	2.83 (72)	3.46 (88)	4.09 (104)	4.72 (120)	5.35 (136)	5.98 (152)	6.61 (168)	7.24 (184)	7.87 (200)	8.50 (216)	9.13 (232)	9.76 (248)	10.39 (264)	11.02 (280)	11.65 (296)

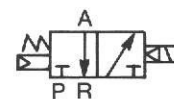
Cv0.25

3 Port Solenoid Valve Series NVZ300

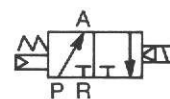


Symbol

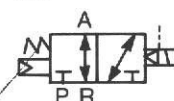
(internal pilot type)
N.C.



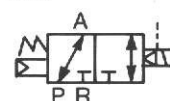
N.O.



(external pilot type)
N.C.



N.O.



Model

Model	Type of actuation	Cv factor	Port size	Weight lbs. (gf)
Body ported type	NVZ312, NVZ312M, NVZ312R	0.20	10-32Nom. (M5)	0.2 (90)
	NVZ322, NVZ322M, NVZ322R			
Base mounted type (with subplate)	NVZ314, NVZ314M, NVZ314R	0.25	1/8NPTF	0.26 (120) without subplate 0.2 (90)
	NVZ324, NVZ324M, NVZ324R			

Specifications

Fluid	Air and inert gases		
Operating pressure range	Internal pilot type	20~100 PSI (1.5~7kgf/cm ²)	
	External pilot type	Main supply pressure	VAC ~ 100PSI (10Torr ~ 7kgf/cm ²)
		External pilot pressure	20~100PSI (15~7kgf/cm ²)
Ambient and fluid temperature	Max. 120°F (50°C)		
Response time	20 ms or less (70PSI)		
Max. operating frequency	600 cpm		
Manual override	Non-locking push type (std.), Slotted locking type, Knob locking type		
Pilot exhaust	Individual, Common		
Lubrication	Not required (Use turbine oil # 1 (ISO VG32) if lubrication is provided.)		
Mounting position	Free		
Impact/vibration resistance	30G/5G (8.3~2000Hz)		
Enclosure	Dust proof		

Solenoid Specifications

Electrical entry			Grommet (G)(H) Plug connector (L)(M) DIN connector (D)
Voltage *	AC	110V ^{±5%} 60Hz, 220V ^{±5%} 50Hz	
	DC	24V ^{±5%} 50Hz	
Allowable voltage			−15 ~ +10% of rated voltage
Coil insulation			Class E or equivalent (250°F)
Temperature rise			81°F or less
Power consumption	DC	1.8W/2.1W (W/LED)	
Apparent power	AC	Inrush	4.2VA/60Hz, 4.5VA/50Hz
		Holding	3VA/60Hz, 3.5VA/50Hz
Surge voltage suppressor			DC : Diode, AC : ZNR
Indicator light			DC : LED (Red), AC : Neon Lamp

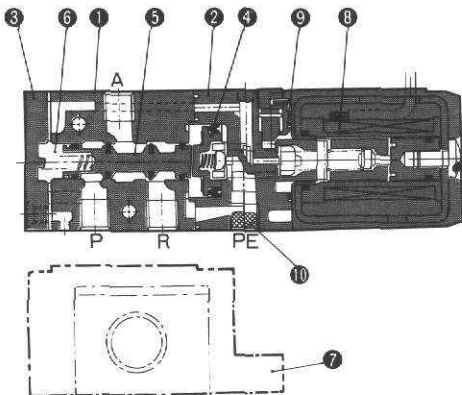
*Consult factory for others.

Option

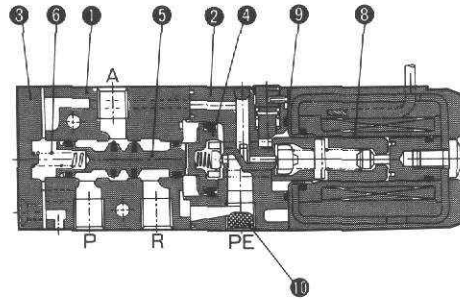
Description	Part number	Applicable valve
Foot Bracket (with screws)	DXT170-34-1B	NVZ302 NVZ302M

Instruction/Parts List

NVZ31○/N.C.



NVZ32○/N.O.



Part

Description	Material	Notes
Body	Aluminum die cast	Metallic paint
Piston plate	Polyacetal	
End cover	Zinc die cast	
Piston	Polyacetal	
Spool ass'y	Aluminum·NBR	
Spool spring	Stainless steel	
Subplate	Aluminum die cast	Metallic paint

Spare Parts

No.	Description	Material	Part number
⑧	Solenoid ass'y*	—	DXT170-C-○○○
⑨	O ring	NBR	13 × 11 × 1
⑩	Filter	Stainless steel	

*Including armature ass'y

How To Order

Solenoid ass'y **DXT170-C-3 G**

Voltages•

* 1	100VAC $\frac{50}{60}$ Hz
* 2	200VAC $\frac{50}{60}$ Hz
* 3	115VAC60Hz (110VAC $\frac{50}{60}$ Hz)
* 4	230VAC60Hz (220VAC $\frac{50}{60}$ Hz)
* 5	24VDC
* 6	12VDC
* 9	Others

*Consult factory for availability.

Electrical entry•

G	Grommet	Lead wire length 12" (300mm)
*H	Grommet	Lead wire length 24" (600mm)
L	L type plug connector	With lead wire
LO		Without connector
M	M type plug connector	With lead wire
MO		Without connector
D	DIN	With DIN top
DO†	connector	Without DIN top

* Special Order Only.

† DOZ is not available.

Indicator light and surge voltage suppressor•

	Without Indicator light and surge voltage suppressor
Z*	With Indicator light and surge voltage suppressor
S†	With surge voltage suppressor

* Plug connector type only.

† Grommet type only.

Connector ass'y **DXT170-80-3 A**

Lead wire color•

* 1	Blue/Blue
* 2	Red/Red
* 3	Gray/Gray
* 4	Red/Black (DC)

*Special Order Only.

Lead wire length•

	12inch (300mm) Std.
6	24inch (600mm)
10	40inch (1000mm)
15	60inch (1500mm)
20	80inch (2000mm)
25	100inch (2500mm)
30	120inch (3000mm)

When ordering the valve and long connector ass'y include both the valve and connector ass'y product numbers.

Example: In case of 80 inch lead wire length

NVZ312-5MOZ-M5

DXT170-80-4A-20

How To Order: Series NVZ300

For 20,21R type manifold



Voltage

* 1	100V AC 50/60Hz
* 2	200V AC 50/60Hz
3	115V AC 60Hz (110V AC 50/60Hz)
4	230V AC 60Hz (220V AC 50/60Hz)
5	24V DC
6	12V DC
* 9	Others

*Consult factory for availability.

Indicator light and surge voltage suppressor

	Without indicator light and surge voltage suppressor
Z	With indicator light and surge voltage suppressor
S*	With surge voltage suppressor

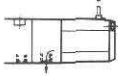
Z option not available with grommet type.
*Grommet type only.

For 40,40R type manifold

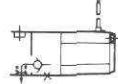


Body Option

—: Individual pilot exhaust (Std.)



M: Common exhaust for main and pilot valve



The pilot exhaust is connected to the main exhaust port via a check valve

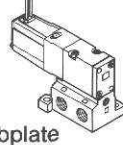
R: External pilot type*



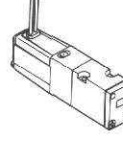
NVZ302R is available only for manifold.
*Special order.

Port Size

01T: With 1/8" NPTF subplate



—: Without subplate



Electrical entry

G: Grommet



Lead wire length
: 12 inch (300mm)

***H: Grommet**



Lead wire length
: 24 inch (600mm)

L: L type plug connector
With lead wire



Lead wire length
: 12 inch (300mm)

LO: L type plug connector
Without connector



M: M type plug connector
With lead wire

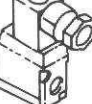


Lead wire length
: 12 inch (300mm)

MO: M type plug connector
Without connector

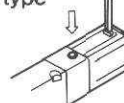


D: DIN connector

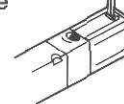


Manual override

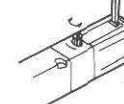
—: Non-locking push type manual override (standard)



B: Slotted locking type manual override



*C: Knob locking type manual override



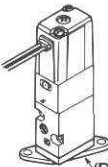
*Special Order Only.

Body Ported NVZ3 1 2 5 L Z M5

Base Mounted NVZ3 1 4 5 L Z

Optional accessory

F: Foot bracket



Bracket (DXT170-34-1B)

Surge voltage suppressor of grommet type.

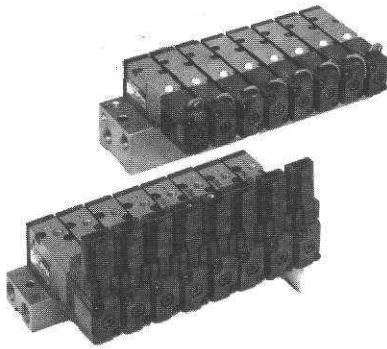


Manifold

Specifications

Type P (SUP), R (EXH)	Common SUP, EXH type
Valve stations	2 ~ 20 stations
Options	Blank plate ass'y

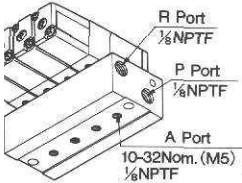
Notes: Please order the appropriate valves and/or blank plate ass'y with manifold base.



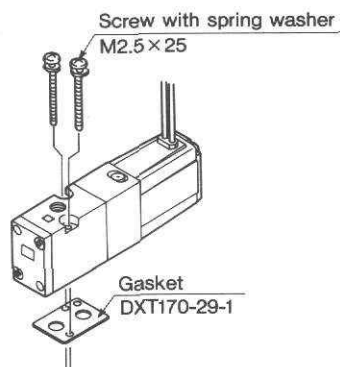
Type and How to Order

2 ported NVV3Z3-20-01	NVV3Z3-20-05 1-00T	Applicable valves NVZ3½-2-0000-M5 NVZ3½-2M-0000-M5
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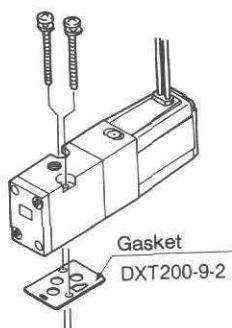
V3Z3-21R-01		NVV3Z3-21R-05 1-00T	Stations <table><tr><td>02</td><td>2 stations</td></tr><tr><td>:</td><td>:</td></tr><tr><td>20</td><td>20 stations</td></tr></table>	02	2 stations	:	:	20	20 stations	If there are more than 9 stations, supply air and exhaust from both sides of manifold.	Applicable valves NVZ3½2R-0000-M5 Blank plate ass'y: DXT200-8-1A
02	2 stations										
:	:										
20	20 stations										

6 ported NVV3Z3-40-02-0 	NVV3Z3-40-05 2-M5 For internal pilot valve For external pilot valve *Special order. Stations <table> <tr> <td>02</td> <td>2 stations</td> </tr> <tr> <td>⋮</td> <td>⋮</td> </tr> <tr> <td>20</td> <td>20 stations</td> </tr> </table> If there are more than 9 stations, supply air and exhaust from both sides of manifold.	02	2 stations	⋮	⋮	20	20 stations	Applicable valves • NVV3Z3-40-02-0 - NVZ3$\frac{1}{2}$-4-0000 - NVZ3$\frac{1}{2}$-4M-0000 • NVV3Z3-40R-02-0 - NVZ3$\frac{1}{2}$-4R-0000 Blank plate ass'y: DXT200-8-1A
02	2 stations							
⋮	⋮							
20	20 stations							

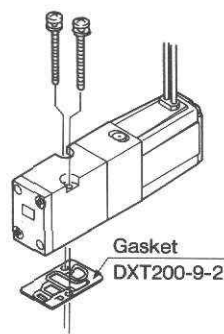
Proper Combinations of Solenoid Valve, Gasket, Manifold/Subplate Base



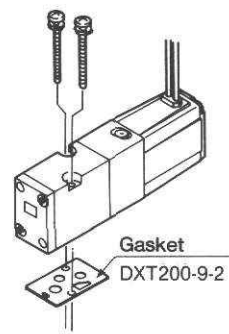
Applicable base
● NVV3Z3-20-○1



Applicable base
● NVV3Z3-21R-○1



Applicable base
● Subplate DXT200-13-1TP

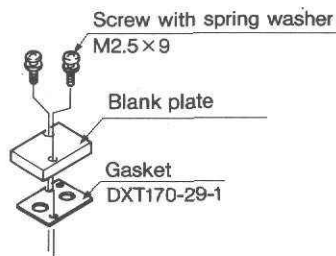


Applicable base
● NVV3Z3-40-○1
● NVV3Z3-40-○2
● NVV3Z3-40R-○1
● NVV3Z3-40R-○2

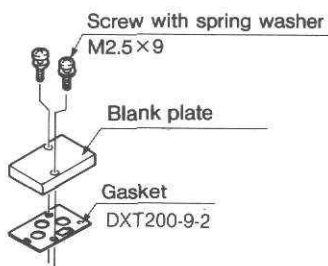
Blank Plate Ass'y

DXT170-25-1A

DXT200-8-1A



Applicable base
● NVV3Z3-20-○1

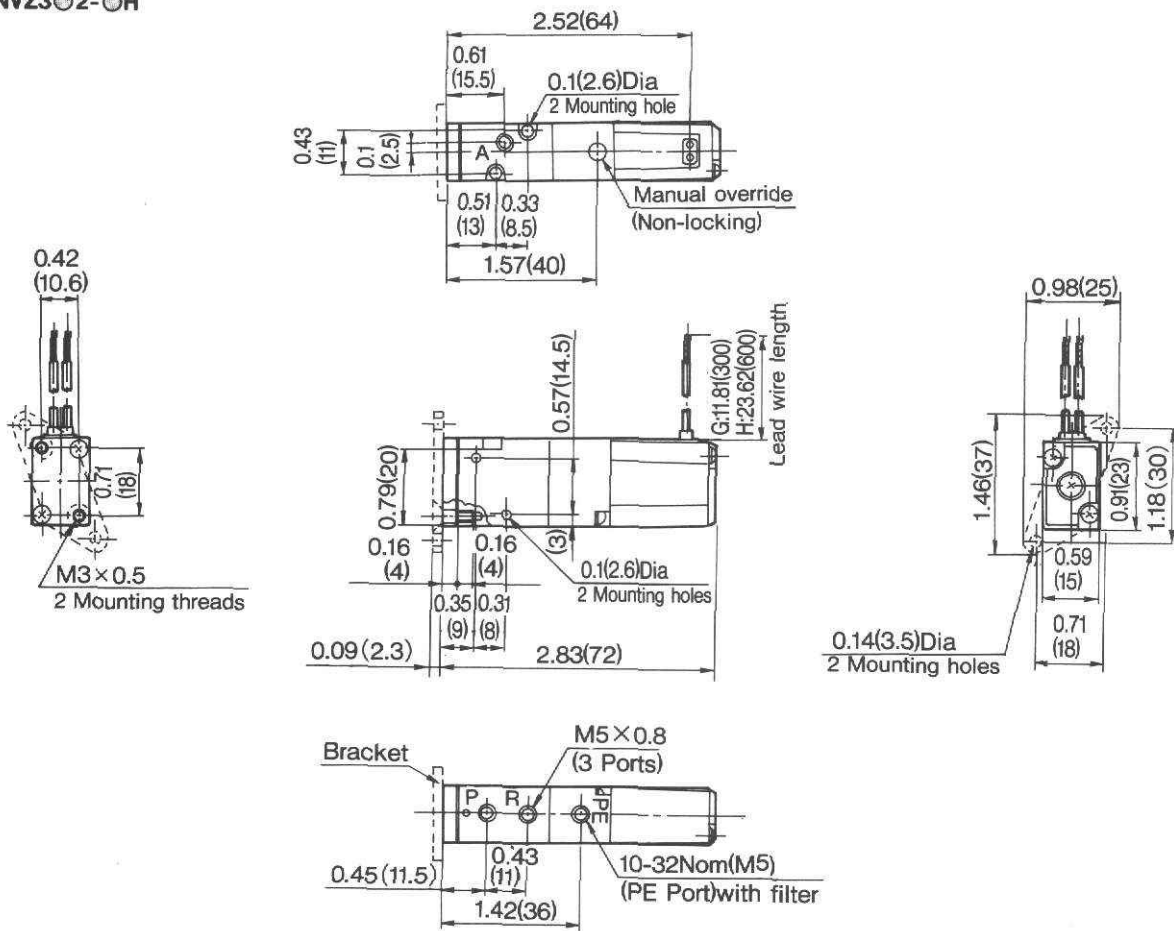


Applicable base
● Subplate DXT200-13-1TP
● NVV3Z3-21R-○1
● NVV3Z3-40-○1
● NVV3Z3-40-○2
● NVV3Z3-40R-○1
● NVV3Z3-40R-○2

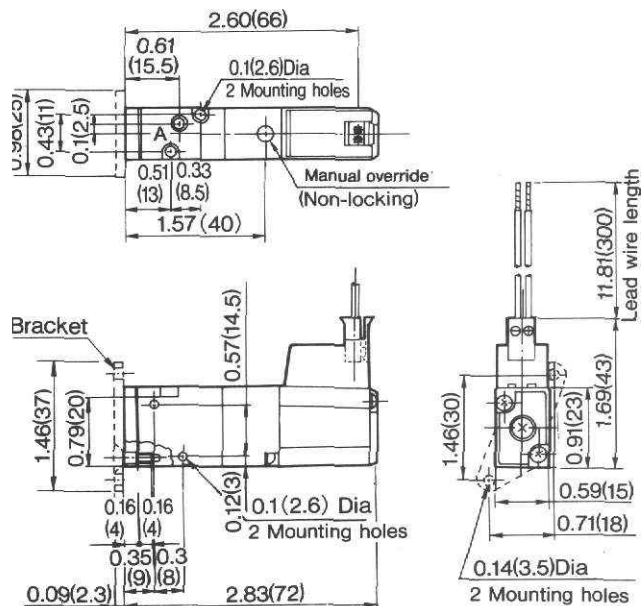
Body Ported Type

inch (mm)

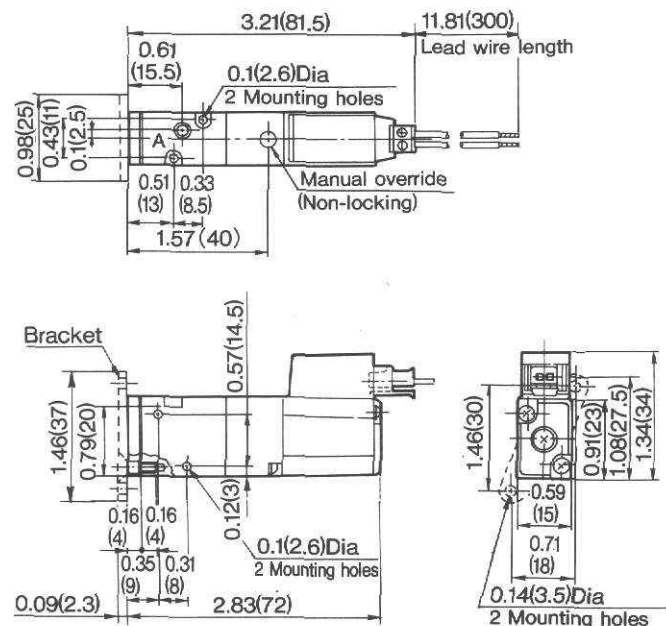
mmet / NVZ302-0G
NVZ302-0H



pe plug connector / NVZ302-0L



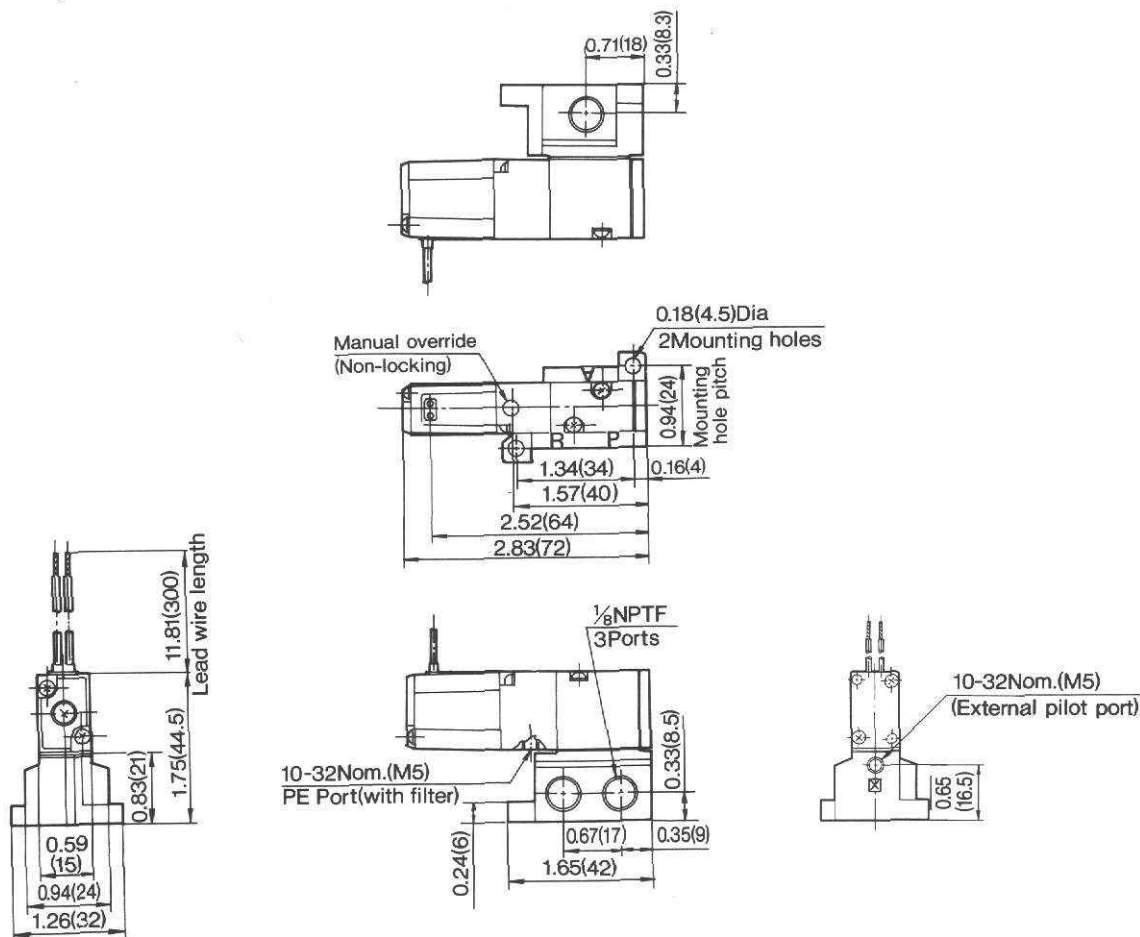
M type plug connector / NVZ302-0M



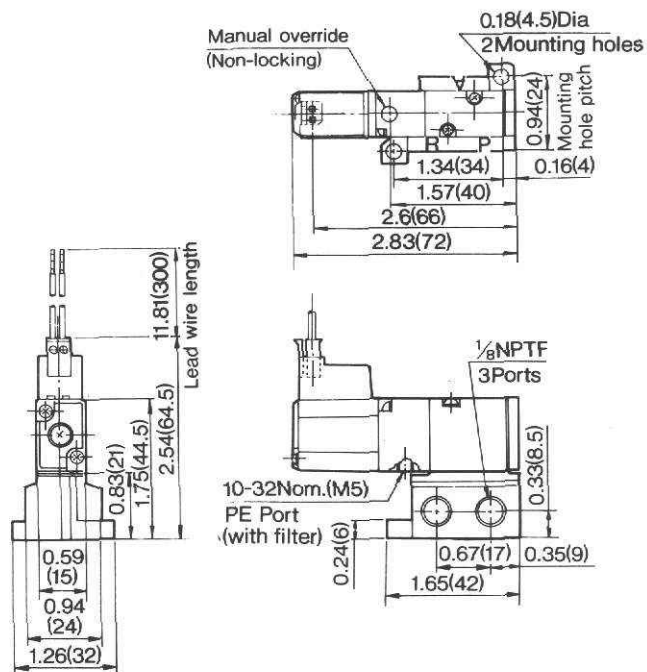
Base Mounted Type with Subplate

inch (mm)

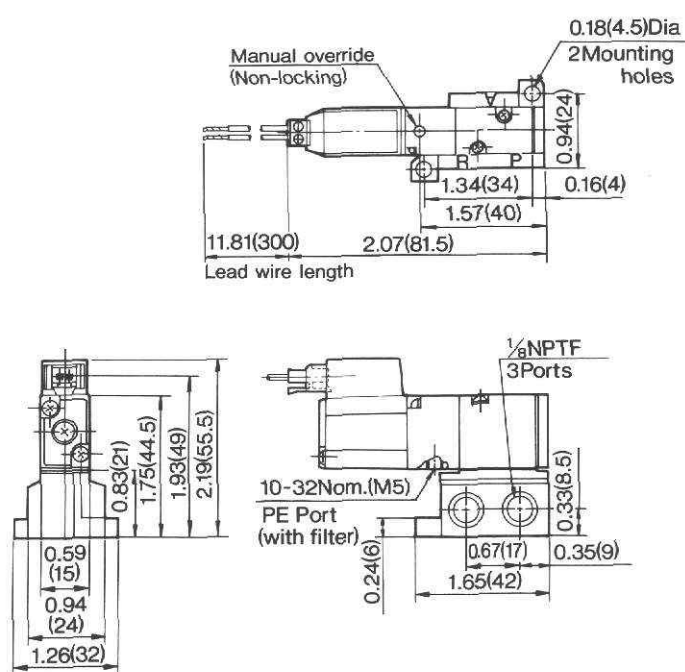
Grommet/NVZ304-0G, NVZ304R-0G
NVZ304-0H, NVZ304R-0H



L type plug connector / NVZ304-0L, NVZ304R-0L



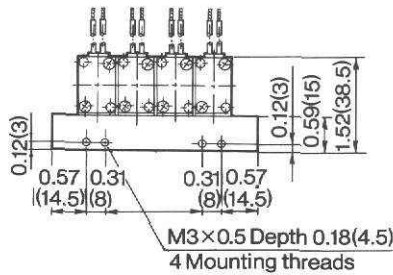
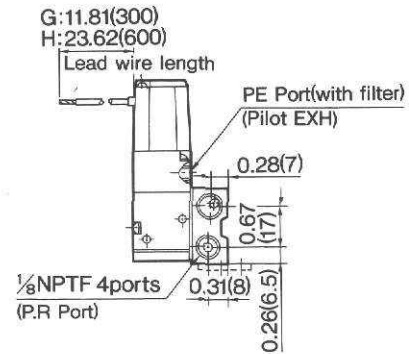
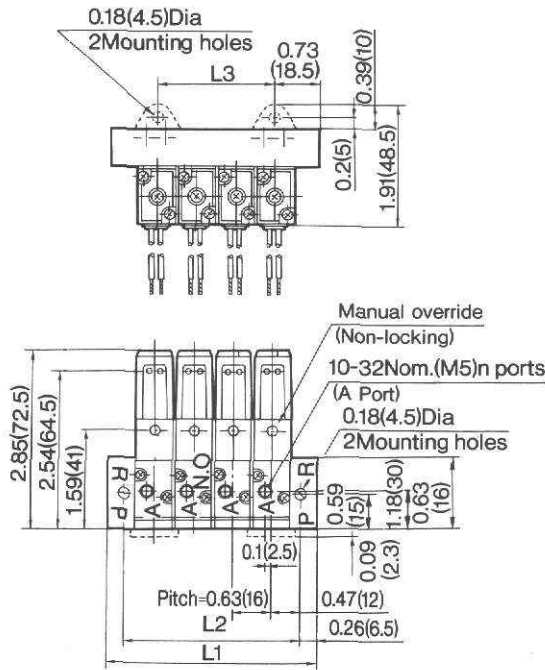
M type plug connector / NVZ304-0M, NVZ304R-0M



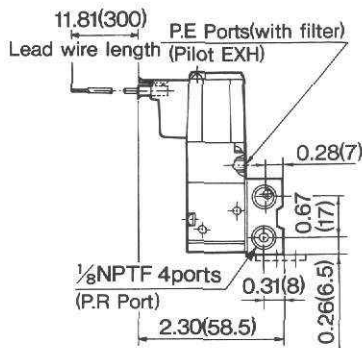
Type 20 Manifold/ Top Ported

inch (mm)

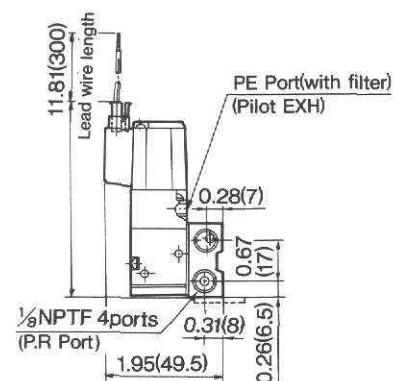
Symbol (G), (H)



pe plug connector (L)



M type plug connector (M)

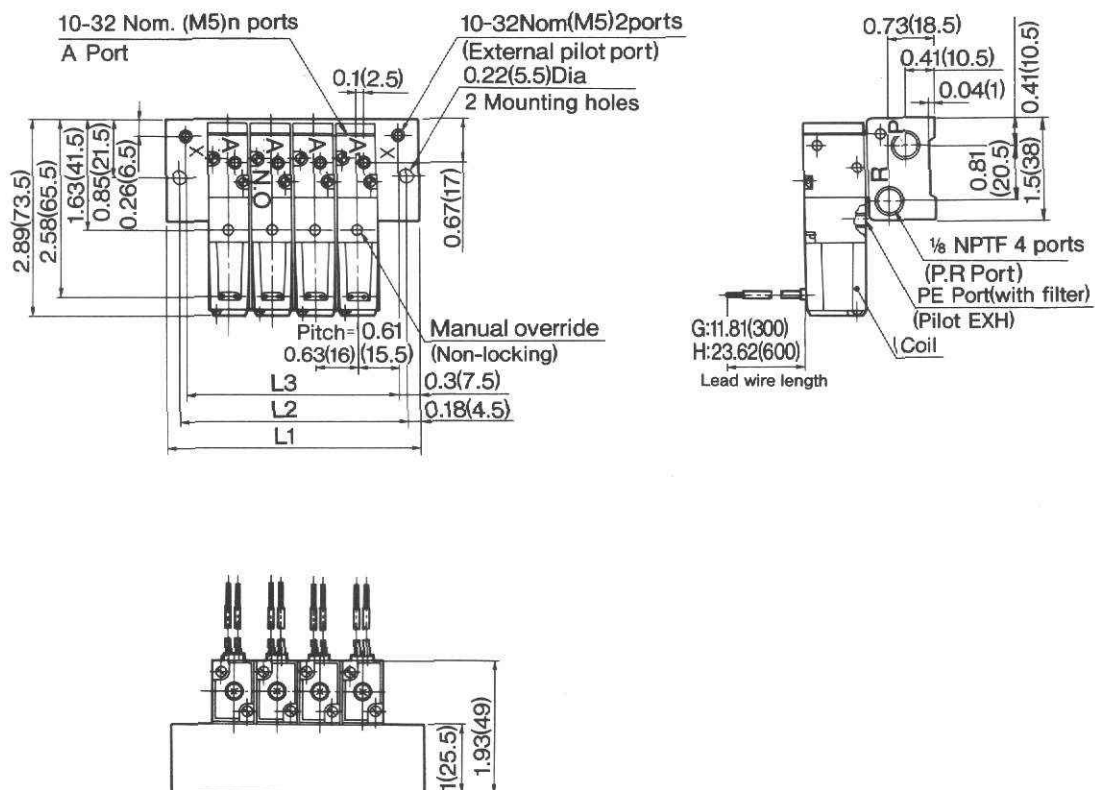


Stations	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L1	2.09 (53)	2.72 (101)	3.35 (85)	3.98 (85)	4.61 (117)	5.24 (133)	5.87 (149)	6.50 (165)	7.13 (181)	7.76 (197)	8.39 (213)	9.02 (229)	9.65 (245)	10.28 (261)	10.91 (277)	11.54 (293)	12.17 (309)	12.80 (325)	13.43 (341)
L2	1.57 (40)	2.20 (56)	2.83 (72)	3.46 (88)	4.09 (104)	4.72 (120)	5.35 (136)	5.98 (152)	6.61 (168)	7.24 (184)	7.87 (200)	8.50 (216)	9.13 (232)	9.76 (248)	10.39 (264)	11.02 (280)	11.65 (296)	12.28 (312)	12.91 (328)
L3	0.63 (16)	1.26 (32)	1.89 (48)	2.52 (64)	3.15 (80)	3.78 (96)	4.41 (112)	5.04 (128)	5.67 (144)	6.30 (160)	6.93 (176)	7.56 (192)	8.19 (208)	8.82 (224)	9.45 (240)	10.08 (256)	10.71 (272)	11.34 (288)	11.97 (304)
L4	0.31 (8)	0.94 (24)	1.57 (40)	2.20 (56)	2.83 (72)	3.46 (88)	4.09 (104)	4.72 (120)	5.35 (136)	5.98 (152)	6.61 (168)	7.24 (184)	7.87 (200)	8.50 (216)	9.13 (232)	9.76 (248)	10.39 (264)	11.02 (280)	11.65 (296)

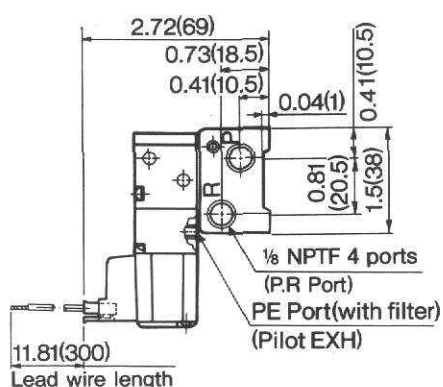
Type 21R Manifold/ Top Ported(External Pilot)

inch (mm)

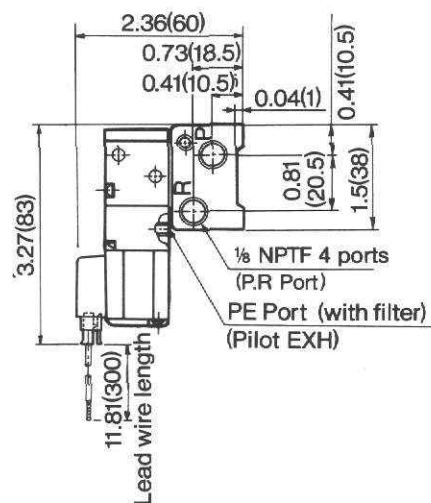
Grommet (G), (H)



L type plug connector (L)



M type plug connector (M)

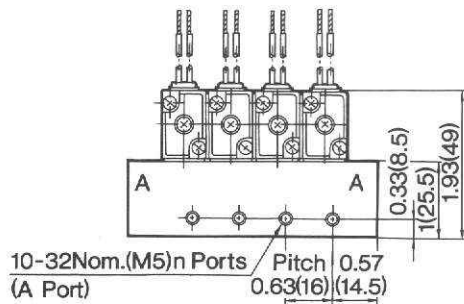
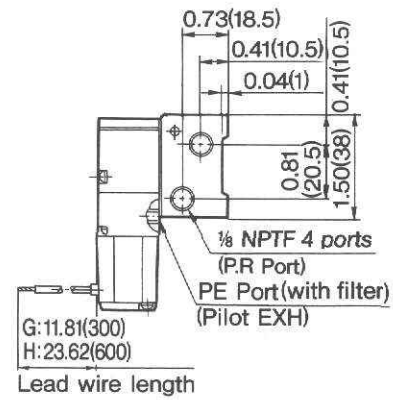
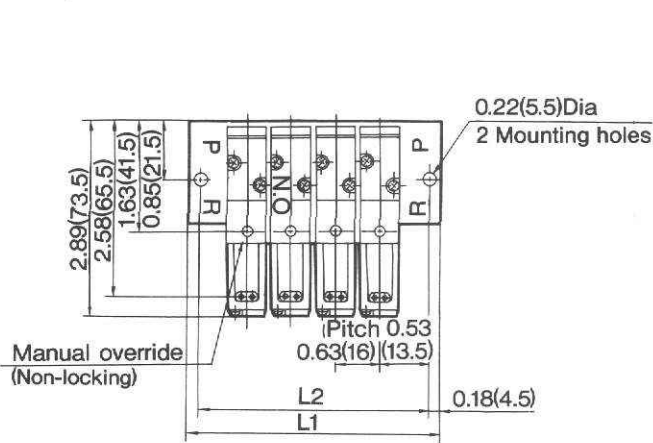


Stations	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L1	2.44 (62)	3.07 (78)	3.70 (94)	4.33 (110)	4.96 (126)	5.59 (142)	6.22 (158)	6.85 (174)	7.48 (190)	8.11 (206)	8.74 (222)	9.37 (238)	10.00 (254)	10.63 (270)	11.26 (286)	11.89 (302)	12.52 (318)	13.15 (334)	13.78 (350)
L2	2.09 (53)	2.72 (69)	3.35 (85)	3.98 (101)	4.61 (117)	5.24 (133)	5.87 (149)	6.50 (165)	7.13 (181)	7.76 (197)	8.39 (213)	9.02 (229)	9.65 (245)	10.28 (261)	10.91 (277)	11.54 (293)	12.17 (309)	12.80 (325)	13.43 (341)
L3	1.85 (47)	2.48 (63)	3.11 (79)	3.74 (95)	4.37 (111)	5.00 (127)	5.63 (143)	6.26 (159)	6.89 (175)	7.52 (191)	8.15 (207)	8.78 (223)	9.41 (239)	10.04 (255)	10.67 (271)	11.30 (287)	11.93 (303)	12.56 (319)	13.19 (335)

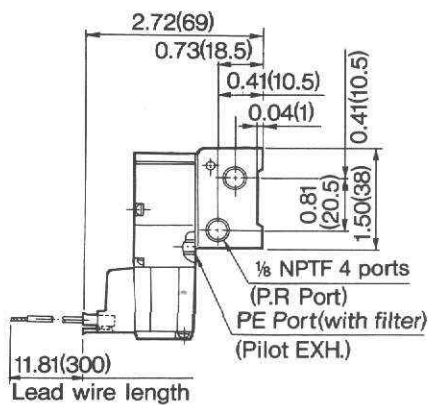
type 40 Manifold/ Side Ported

inch (mm)

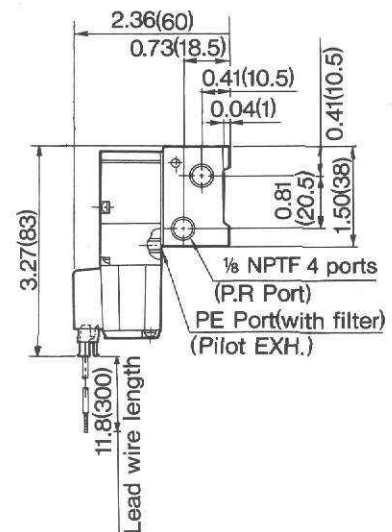
rommet (G), (H)



type plug connector (L)



M type plug connector (M)

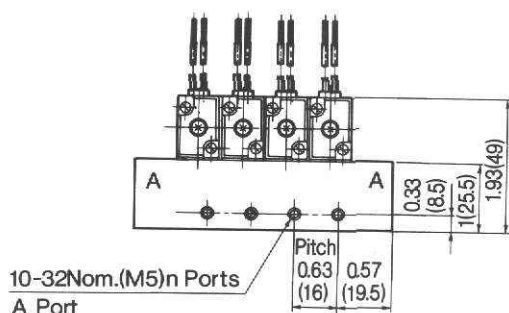
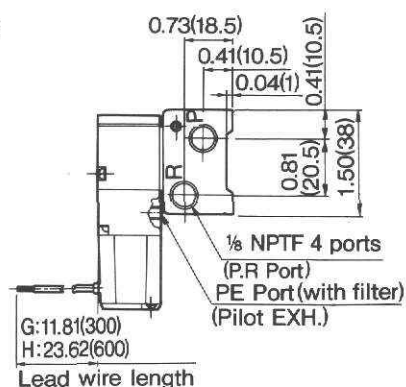
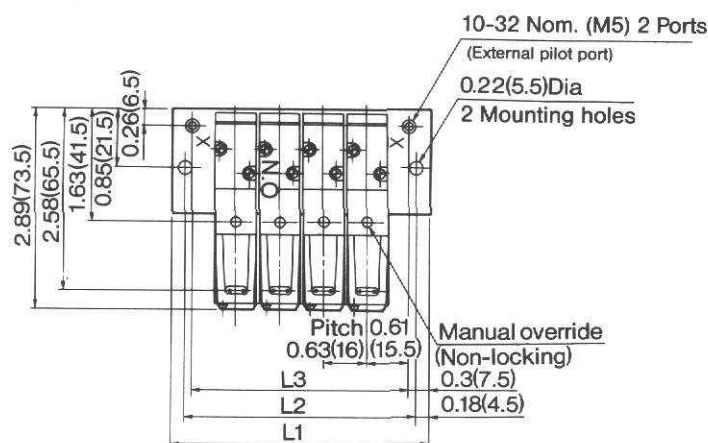


Stations	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L1	2.05 (52)	2.68 (68)	3.31 (84)	3.94 (100)	4.57 (116)	5.20 (132)	5.83 (148)	6.46 (164)	7.09 (180)	7.72 (196)	8.35 (212)	8.98 (228)	9.61 (244)	10.24 (260)	10.87 (276)	11.50 (292)	12.13 (308)	12.76 (324)	13.39 (340)
L2	1.69 (43)	2.32 (59)	2.95 (75)	3.58 (91)	4.21 (107)	4.84 (123)	5.47 (139)	6.10 (155)	6.73 (171)	7.36 (187)	7.99 (203)	8.62 (219)	9.25 (235)	9.88 (251)	10.51 (267)	11.14 (283)	11.77 (299)	12.40 (315)	13.03 (331)

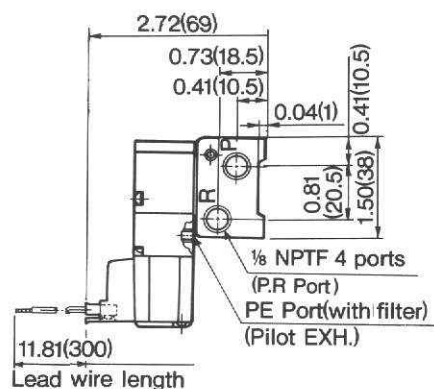
Type 40R Manifold / Side Ported (External Pilot)

inch (mm)

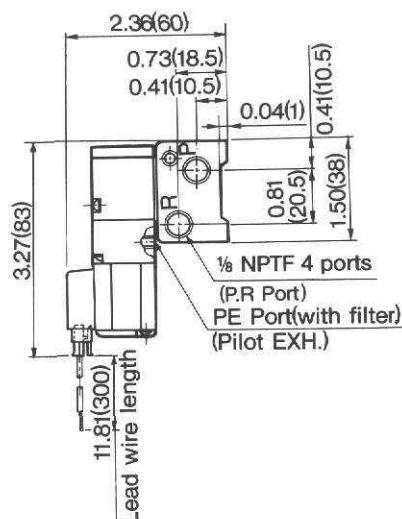
Grommet (G), (H)



L type plug connector (L)



M type plug connector (M)

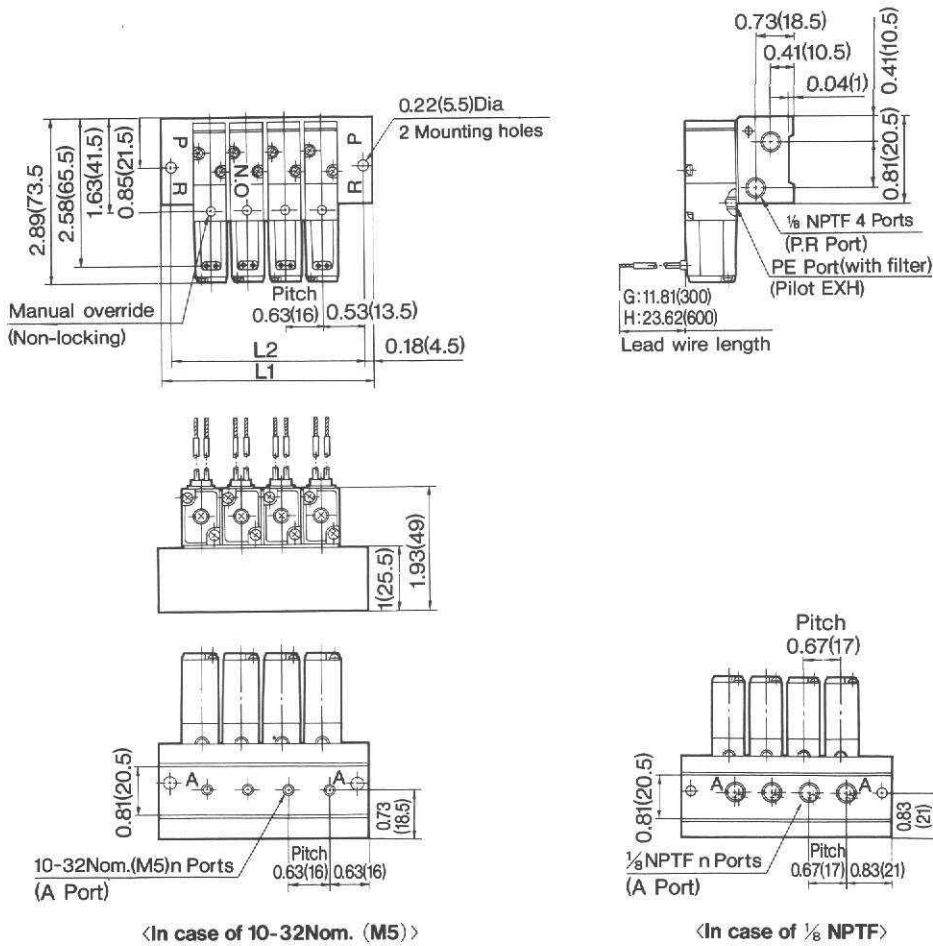


Stations	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L1	2.44 (62)	3.07 (78)	3.07 (94)	4.33 (110)	4.96 (126)	5.59 (142)	6.22 (158)	6.85 (174)	7.48 (190)	8.11 (206)	8.74 (222)	9.37 (238)	10.00 (254)	10.63 (270)	11.26 (286)	11.89 (302)	12.52 (318)	13.15 (334)	13.78 (350)
L2	2.09 (53)	2.72 (69)	3.35 (85)	3.98 (101)	4.61 (117)	5.24 (133)	5.87 (149)	6.50 (165)	7.13 (181)	7.76 (197)	8.39 (213)	9.02 (229)	9.65 (245)	10.28 (261)	10.91 (277)	11.54 (293)	12.17 (309)	12.80 (325)	13.43 (341)
L3	1.85 (47)	2.48 (63)	3.11 (79)	3.74 (95)	4.37 (111)	5.00 (127)	5.63 (143)	6.26 (159)	6.89 (175)	7.52 (191)	8.15 (207)	8.78 (223)	9.41 (239)	10.04 (255)	10.67 (271)	11.30 (287)	11.93 (303)	12.56 (319)	13.19 (335)

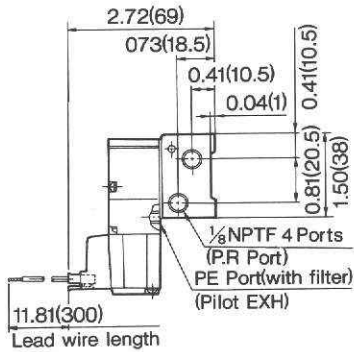
type 40 Manifold/Bottom Ported

inch (mm)

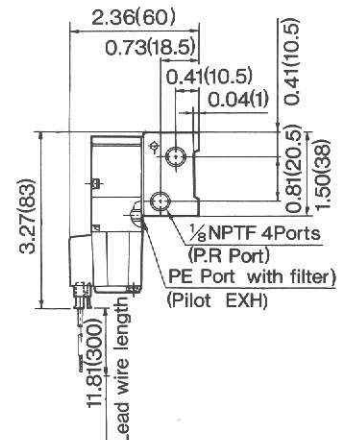
rommet (G), (H)



type plug connector (L)



M type plug connector (M)

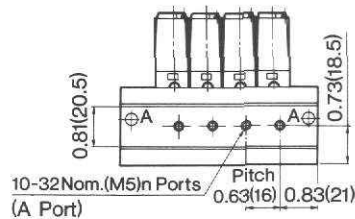
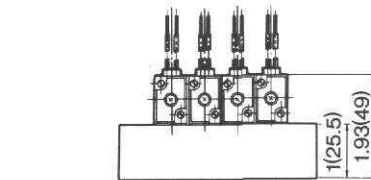
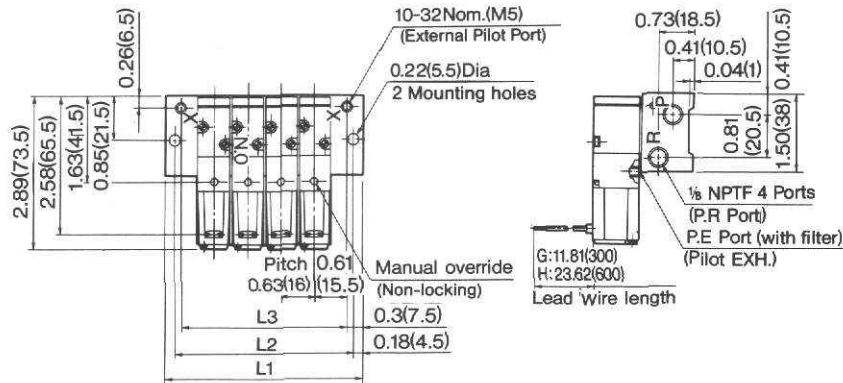


Stations		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
10-32Nom. (M5)	L1	2.05 (52)	2.68 (68)	3.31 (84)	3.94 (100)	4.57 (116)	5.20 (132)	5.83 (148)	6.46 (164)	7.09 (180)	7.72 (196)	8.35 (212)	8.98 (228)	9.61 (244)	10.24 (260)	10.87 (276)	11.50 (292)	12.13 (308)	12.76 (324)	13.39 (340)
	L2	1.69 (43)	2.32 (59)	2.95 (75)	3.58 (91)	4.21 (107)	4.84 (123)	5.47 (139)	6.10 (155)	6.73 (171)	7.36 (187)	7.99 (203)	8.62 (219)	9.25 (235)	9.88 (251)	10.51 (267)	11.14 (283)	11.77 (299)	12.40 (315)	13.03 (331)
1/8 NPTF	L1	2.48 (63)	3.15 (80)	3.82 (97)	4.49 (114)	5.16 (131)	5.83 (148)	6.50 (165)	7.17 (182)	7.83 (199)	8.50 (216)	9.17 (233)	9.84 (250)	10.51 (267)	11.18 (284)	11.85 (301)	12.52 (318)	13.19 (335)	13.86 (352)	14.53 (369)
	L2	2.13 (54)	2.80 (71)	3.46 (88)	4.13 (105)	4.80 (122)	5.47 (139)	6.14 (156)	6.81 (173)	7.48 (190)	8.15 (207)	8.82 (224)	9.49 (241)	10.16 (258)	10.83 (275)	11.50 (292)	12.17 (309)	12.83 (326)	13.50 (343)	14.17 (360)

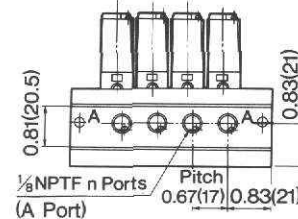
Type 40 Manifold/ Bottom Ported(External Pilot)

inch (mm)

Grommet (G), (H)

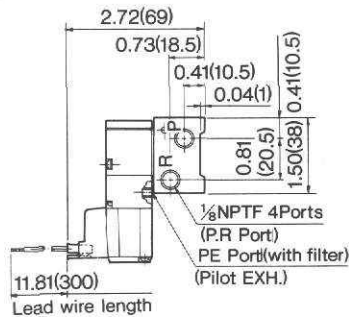


<In case of 10-32Nom. (M5)>

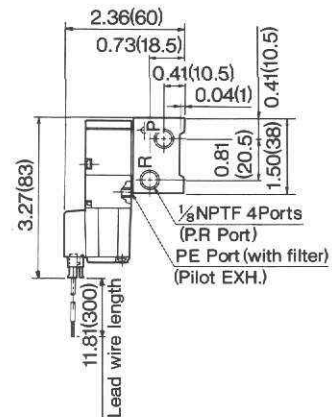


<In case of 1/8 NPTF>

L type plug connector (L)



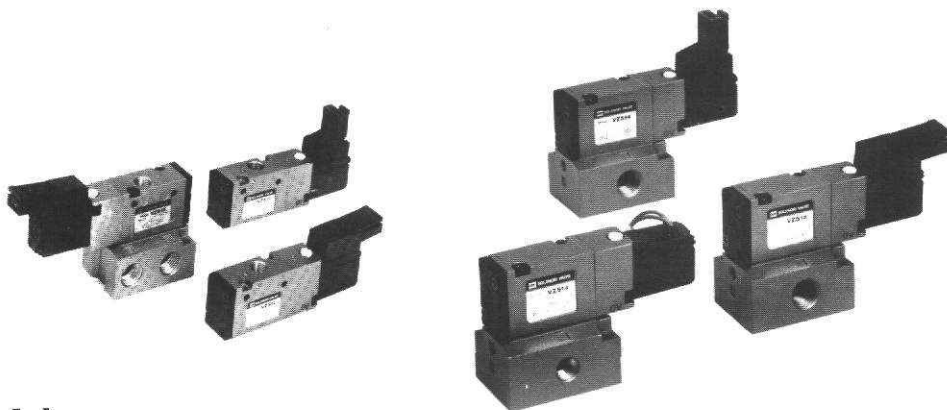
M type plug connector (M)



Stations		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
10-32Nom. (M5)	L1	2.44 (62)	3.07 (78)	3.70 (94)	4.33 (110)	4.96 (126)	5.59 (142)	6.22 (158)	6.85 (174)	7.48 (190)	8.11 (206)	8.74 (222)	9.37 (238)	10.00 (254)	10.63 (270)	11.26 (286)	11.89 (302)	12.52 (318)	13.15 (334)	13.78 (350)
	L2	2.09 (53)	2.72 (69)	3.35 (85)	3.98 (101)	4.61 (117)	5.24 (133)	5.87 (149)	6.50 (165)	7.13 (181)	7.76 (197)	8.39 (213)	9.02 (229)	9.65 (245)	10.28 (261)	10.91 (277)	11.54 (293)	12.17 (309)	12.80 (325)	13.43 (341)
	L3	1.85 (47)	2.48 (63)	3.11 (79)	3.74 (95)	4.37 (111)	5.00 (127)	5.63 (143)	6.26 (159)	6.89 (175)	7.52 (191)	8.15 (207)	8.78 (223)	9.41 (239)	10.04 (255)	10.67 (271)	11.30 (287)	11.93 (303)	12.56 (319)	13.19 (335)
1/8 NPTF	L1	2.48 (63)	3.15 (80)	3.82 (97)	4.49 (114)	5.16 (131)	5.83 (148)	6.50 (165)	7.17 (182)	7.83 (199)	8.50 (216)	9.17 (233)	9.84 (250)	10.51 (267)	11.18 (284)	11.85 (301)	12.52 (318)	13.19 (335)	13.86 (352)	14.53 (369)
	L2	2.13 (54)	2.80 (71)	3.46 (88)	4.13 (105)	4.80 (122)	5.47 (139)	6.14 (156)	6.81 (173)	7.48 (190)	8.15 (207)	8.82 (224)	9.49 (241)	10.16 (258)	10.83 (275)	11.50 (292)	12.17 (309)	12.83 (326)	13.50 (343)	14.17 (360)
	L3	1.89 (48)	2.56 (65)	3.23 (82)	3.90 (99)	4.57 (116)	5.24 (133)	5.91 (150)	6.57 (167)	7.24 (184)	7.91 (201)	8.58 (218)	9.25 (235)	9.92 (252)	10.59 (269)	11.26 (286)	11.93 (303)	12.60 (320)	13.27 (337)	13.94 (354)

Cv0.5

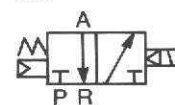
3 Port Solenoid Valve Series NVZ500



Symbol

(internal pilot type)

N.C.

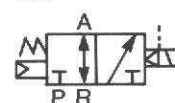


N.O.



(external pilot type)

N.C.



N.O.



Model

Model	Type of actuation	Cv factor	Port size	Weight lbs (gf)
Body ported type	NVZ512, NVZ512M, NVZ512R	N.C.	1/8 NPTF	0.26 (130)
	NVZ522, NVZ522M, NVZ522R	N.O.		
Base mounted type (With subplate)	NVZ514, NVZ514M, NVZ514R	N.C.	1/8, 1/4 NPTF	0.48 (220) with subplate 0.26 (130)
	NVZ524, NVZ524M, NVZ524R	N.O.		

Specifications

Fluid	Air and inert gases		
Operating pressure range	Internal pilot type	20~100 PSI (15~7kgf/cm ²)	
	External pilot type	Main supply pressure	VAC ~ 100PSI(10Torr~7kgf/cm ²)
		External pilot pressure	20~100PSI(15~7kgf/cm ²)
Ambient and fluid temperature	Max. 120°F (50°C)		
Response time	20ms or less (70PSI)		
Max. operating frequency	600 cpm		
Manual override	Non-locking push type, (std.) Slotted locking type, Knob locking type (opt.)		
Pilot exhaust	Individual, Common		
Lubrication	Not required (Use turbine oil #1(ISO VG32) if lubrication is provided.)		
Mounting position	Free		
Impact/vibration resistance	30G/5G (8.5~2000Hz)		
Enclosure	Dust proof		

Solenoid Specifications

Electrical entry	Grommet (G) (H), Plug connector (L) (M), DIN connector (D)		
Voltage*	AC		110V ^{50/60} Hz, 220V ^{50/60} Hz
			24V ^{50/60} Hz
	DC		12V, 24V
Allowable voltage	-15~+10% of rated voltage		
Coil insulation	Class E or equivalent (250°F)		
Temperature rise	81°F or less		
Power consumption	DC	1.8W/2.1W(W/LED)	
Apparent power	AC	Inrush	4.2VA/60Hz 4.5VA/50Hz
		Holding	3VA/60Hz 3.5VA/50Hz
Surge voltage suppressor	DC : Diode, AC : ZNR		
Indicator light	DC : LED (Red), AC : Neon Lamp		

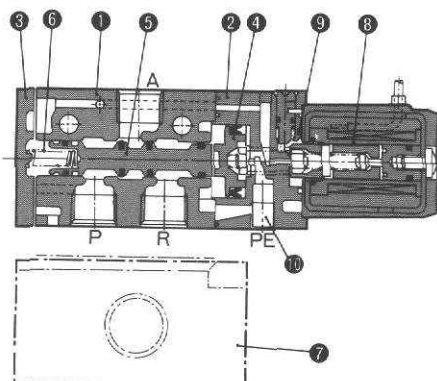
Consult factory for others.

Option

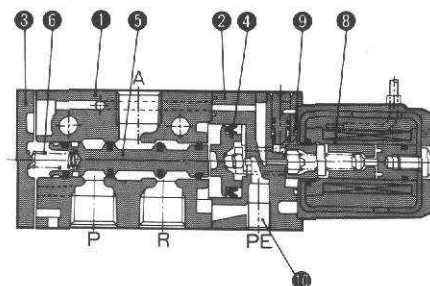
Description	Part number	Applicable valve
Foot Bracket with screws	DXT201-19-1A	NVZ502 NVZ502M

Construction/Parts List

NVZ51○/N.C.



NVZ52●/N.O.



Main Parts

No.	Description	Material	Note
①	Body	Aluminum die cast	Metallic paint
②	Piston plate	Polyacetal	
③	End cover	Zinc die cast	
④	Piston	Polyacetal	
⑤	Spool ass'y	Aluminum•NBR	
⑥	Spool spring	Stainless steel	
⑦	Subplate	Aluminum die cast	Metallic paint

Spare Parts

No.	Description	Material	Part No.
⑧	Solenoid ass'y*	—	DXT170-C-○○○
⑨	O ring	NBR	13 × 11 × 1
⑩	Filter	Stainless steel	

※Including armature ass'y

How To Order

Solenoid ass'y **DXT170-C-3 M**

Voltage●

* 1	100VAC $\frac{50}{60}$ Hz
* 2	200VAC $\frac{50}{60}$ Hz
3	115VAC60Hz (110VAC $\frac{50}{60}$ Hz)
4	230VAC60Hz (220VAC $\frac{50}{60}$ Hz)
5	24VDC
6	12VDC
* 9	Others

*Consult factory for availability.

Electrical entry●

G	Grommet	Lead wire length 12" (300mm)
*H	Grommet	Lead wire length 24" (600mm)
L	L type plug connector	With lead wire
LO		Without connector
M	M type plug connector	With lead wire
MO		Without connector
D	DIN connector	With DIN top
DO†		Without DIN top

* Special Order Only.

† DOZ is not available.

Indicator light and surge voltage suppressor●

	Without indicator light and surge voltage suppressor
Z*	With indicator light and surge voltage suppressor
S†	With surge voltage suppressor

※ Plug connector type only

† Grommet type only.

Connector ass'y **DXT170-80-A**

Lead wire color●

* 1	Blue/Blue
* 2	Red/Red
3	Gray/Gray
4	Red/Black (DC)

*Special Order Only.

Lead wire length●

	12 inch (300mm) Std.
6	24 inch (600mm)
10	40 inch (1000mm)
15	60 inch (1500mm)
20	80 inch (2000mm)
25	100 inch (2500mm)
30	120 inch (3000mm)

When ordering the valve and long connector ass'y include both the valve and connector ass'y product numbers.

Example: In case of 80 inch lead wire length
NVZ512-3LOZ-M5
DXT170-80-3A-20

How To Order: Series NVZ500

For type 20,21,21R manifold



Type of actuation

1	Normally closed
2	Normally open

Voltage

*1	100V AC 50/60Hz
*2	200V AC 50/60Hz
3	115V AC 60Hz (110V AC 50/60Hz)
4	230V AC 60Hz (220V AC 50/60Hz)
5	24V DC
6	12V DC
*9	Others

*Consult factory for availability.

Indicator light and surge voltage suppressor

	Without indicator light and surge voltage suppressor
Z	With indicator light and surge voltage suppressor
S*	With surge voltage suppressor

Z option not available with grommet type.

*Grommet type only.

Port size

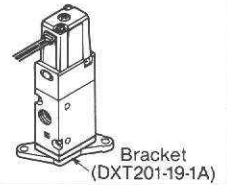
01T	1/8" NPTF
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Surge voltage suppressor of grommet type.



Optional accessory

F: Foot bracket



Body Ported

NVZ5 1 2 5 L Z 01T

Base mounted

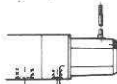
NVZ5 1 4 5 L Z

For type 40,41,41R manifold

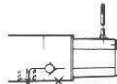


*Body Option

—: Individual pilot exhaust (Std.)



M: Common exhaust for main and pilot valve



The pilot exhaust is connected to the main exhaust port via a check valve

R: External pilot type

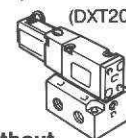


NVZ502R is available only for manifold.

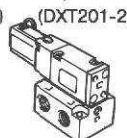
*Consult factory for availability.

*Port Size

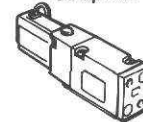
01T: With 1/8" NPTF subplate



02T: With 1/4" NPTF subplate



—: Without subplate



Electrical entry

G: Grommet



Lead wire length
: 12 inch (300mm)

*H: Grommet



Lead wire length
: 24 inch (600mm)

L: L type plug connector

With lead wire



Lead wire length
: 12 inch (300mm)

LO: L type plug connector

Without connector



D: DIN connector



M: M type plug connector

With lead wire



Lead wire length
: 12 inch (300mm)

MO: M type plug connector

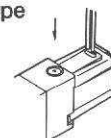
Without connector



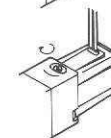
*Special Order Only.

*Manual override

—: Non-locking push type manual override (standard)

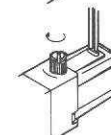


B: Slotted locking type manual override



*C: Knob locking type manual override

*Special Order Only.

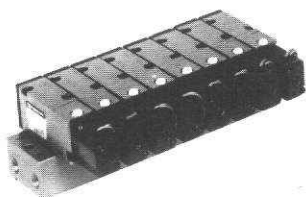


Manifold

Specifications

Type P (SUP), R (EXH)	Common SUP, EXH type
Valve stations	2~20 stations
Options	Blank plate ass'y

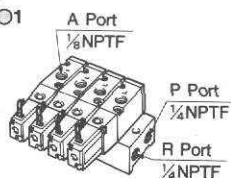
Notes: Please order the appropriate valves and or blank plate ass'y with manifold base.



Type And How To Order

Top ported

NVV3Z5-20-○1



NVV3Z5-20-05 1-00T

Stations

02	2 stations
20	20 stations

If there are more than 6 stations, supply air and exhaust from both sides of manifold.

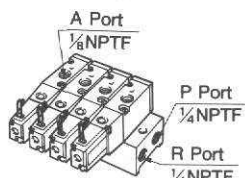
Applicable valves

NVZ5¹/₂-○○○-01T
NVZ5¹/₂M-○○○-01T

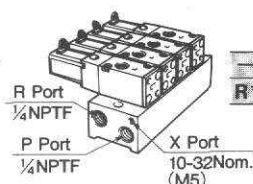
Blank plate ass'y

DXT201-15-1A

NVV3Z5-21-○1



NVV3Z5-21R-○1



NVV3Z5-21-05 1-00T

— For internal pilot valve
R* For external pilot valve
* Special order

Stations

02	2 stations
20	20 stations

If there are more than 9 stations, supply air and exhaust from both sides of manifold.

Applicable valves

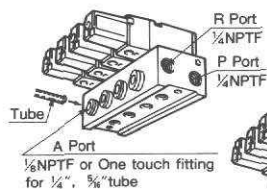
● NVV3Z5-21-○1-00T
NVZ5¹/₂-○○○-01T
NVZ5¹/₂M-○○○-01T
● NVV3Z5-21R-○1-00T
NVZ5¹/₂R-○○○-01T

Blank plate ass'y

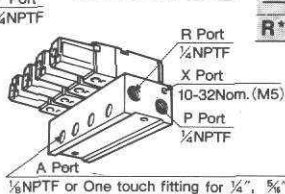
DXT201-15-1A

Side ported

NVV3Z5-41-○○



NVV3Z5-41R-○1-○



NVV3Z5-41-05 1-B7T

— For internal pilot valve
R* For external pilot valve
* Special order

Stations

02	2 stations
20	20 stations

If there are more than 9 stations, supply air and exhaust from both sides of manifold.

Size of A, B port

01T	1/8 NPTF
B7T	One touch fitting for 1/4" tube
B9T	One touch fitting for 5/8" tube

Applicable valves

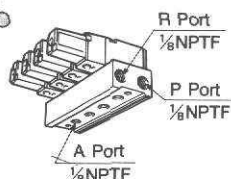
● NVV3Z5-41-○1-○
NVZ5¹/₄-○○○
NVZ5¹/₄M-○○○
● NVV3Z5-41R-○1-○
NVZ5¹/₄R-○○○

Blank plate ass'y

DXT201-15-1A

Bottom ported

NVV3Z5-40-○2-○



NVV3Z5-40-05 2-01T

Stations

02	2 stations
20	20 stations

If there are more than 6 stations, supply air and exhaust from both sides of manifold.

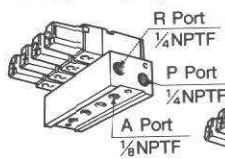
Applicable valves

NVZ5¹/₄-○○○
NVZ5¹/₄M-○○○

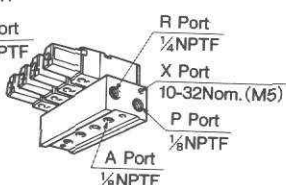
Blank plate ass'y

DXT201-15-1A

NVV3Z5-41-○2-○



NVV3Z5-41R-○2-○



NVV3Z5-41-05 2-01T

— For internal pilot valve
R* For external pilot valve
* Special order

Stations

02	2 stations
20	20 stations

If there are more than 9 stations, supply air and exhaust from both sides of manifold.

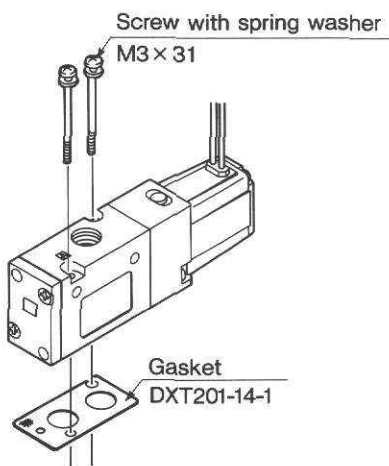
Applicable valves

● NVV3Z5-41-○2-○
NVZ5¹/₄-○○○
NVZ5¹/₄M-○○○
● NVV3Z5-41R-○2-○
NVZ5¹/₄R-○○○

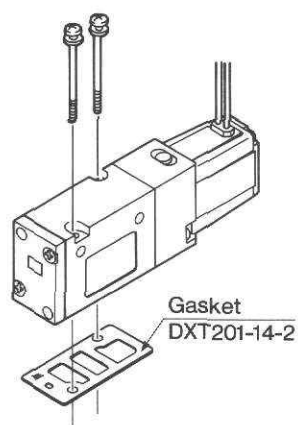
Blank plate ass'y

DXT201-15-1A

**Proper Combinations of Solenoid Valve,
Gasket, Manifold/Subplate**

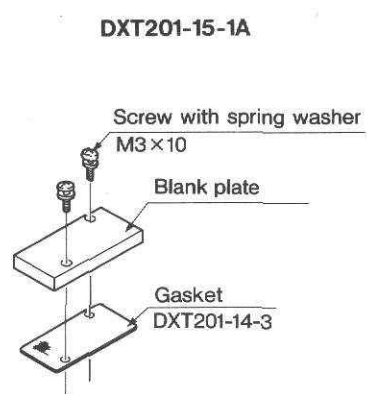


- Applicable base**
- NVV3Z5-20-○1
 - NVV3Z5-21-○1
 - NVV3Z5-21R-○1



- Applicable base**
- Subplate (1/8 NPTF): DXT201-2-1TP
 - Subplate (1/8 NPTF): DXT201-2-2TP
 - NVV3Z5-40-○2
 - NVV3Z5-41-○1
 - NVV3Z5-41-○2
 - NVV3Z5-41R-○1
 - NVV3Z5-41R-○2

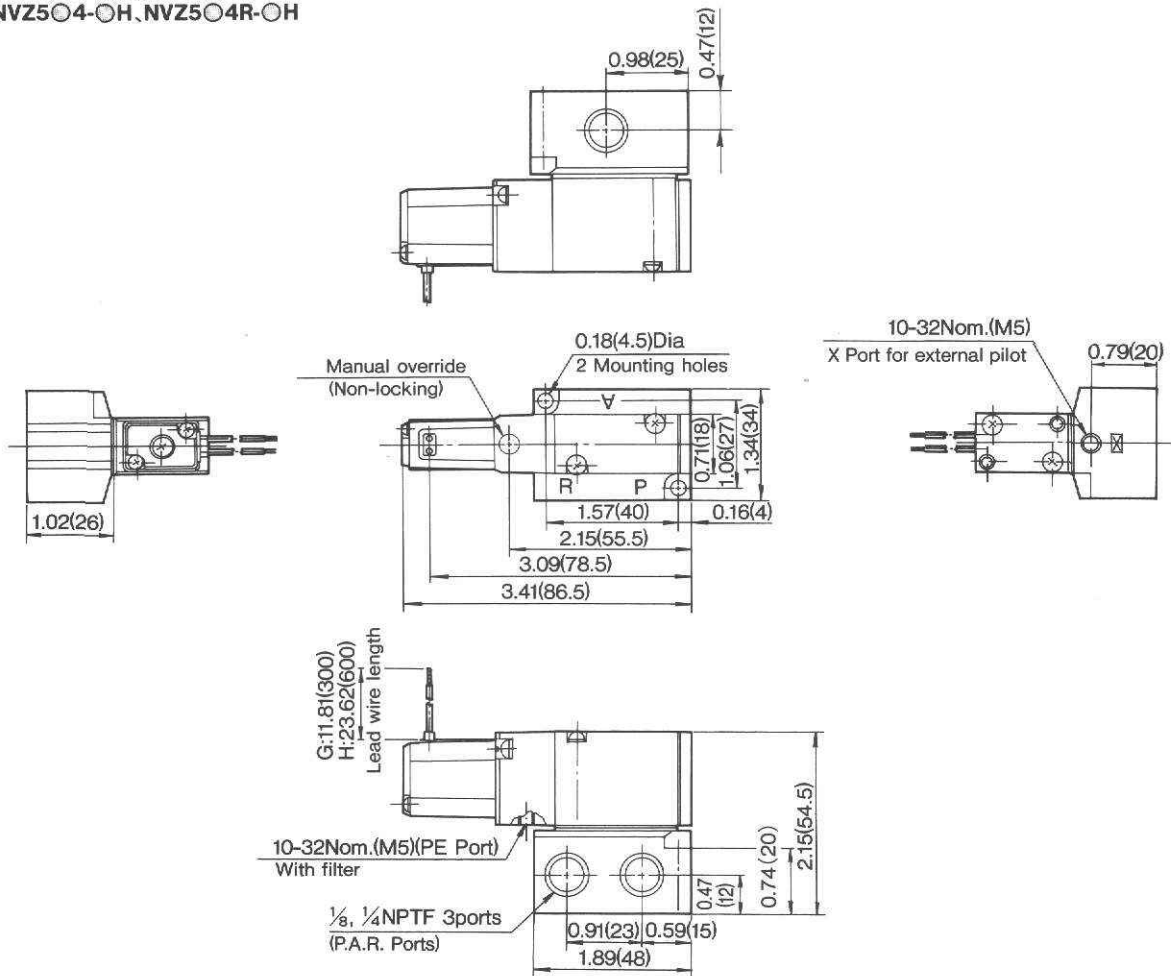
Blank Plate Ass'y



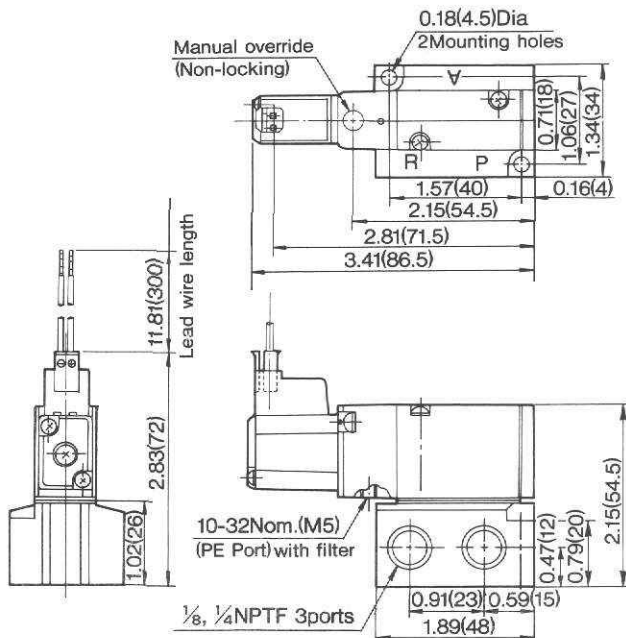
Base Mounted Type with Subplate

inch (mm)

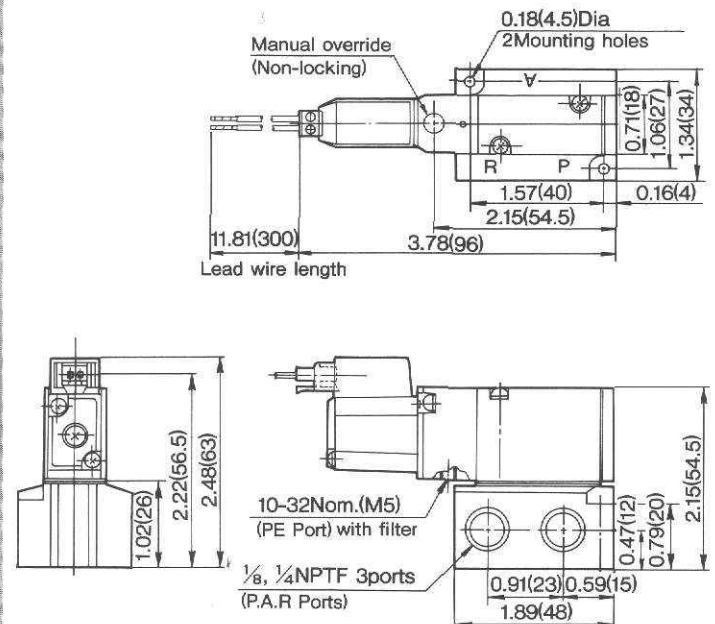
ommet / NVZ504-0G, NVZ504R-0G
NVZ504-0H, NVZ504R-0H



type plug connector / NVZ504-0L, NVZ504R-0L



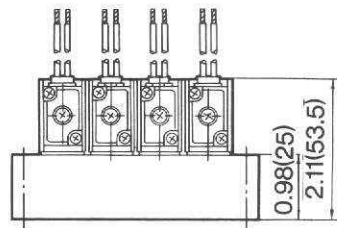
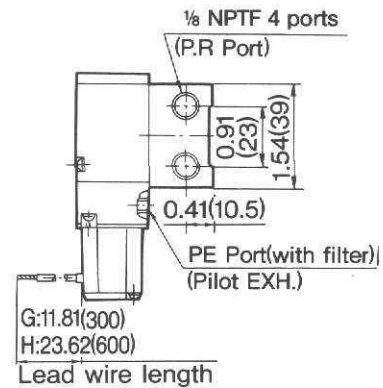
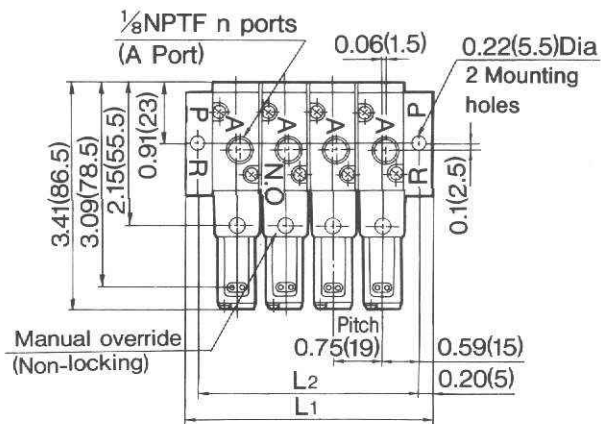
M type plug connector / NVZ504-0M, NVZ504R-0M



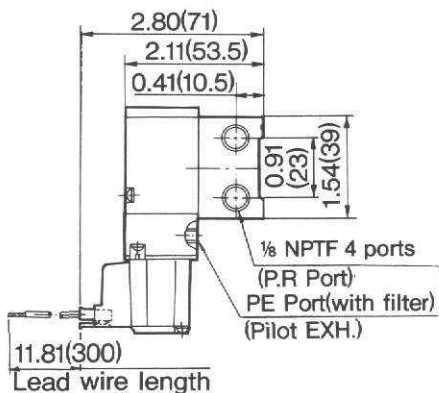
Type 20 Manifold/ Top Ported

inch (mm)

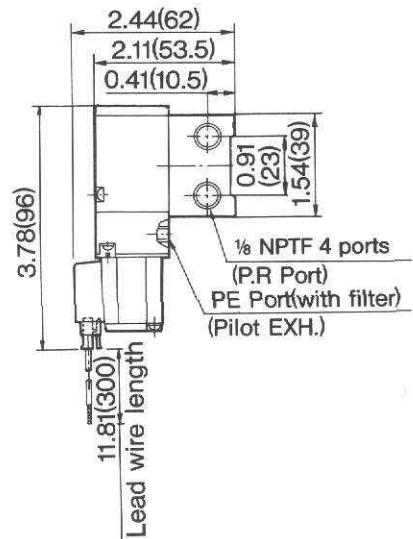
Grommet (G), (H)



L type plug connector (L)



M type plug connector (M)

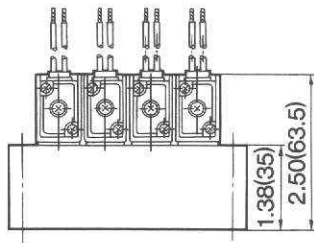
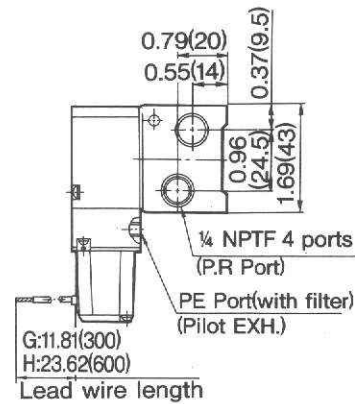
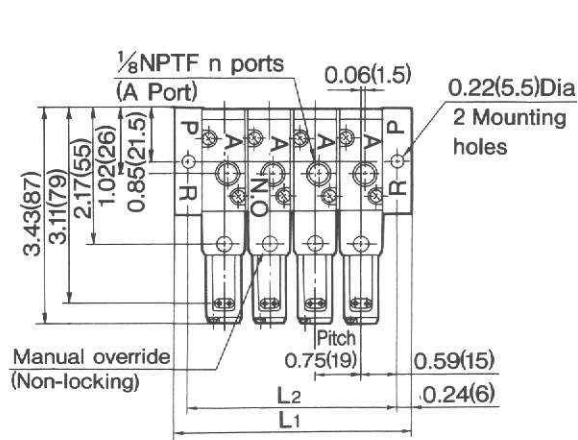


Stations	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L ₁	2.32 (59)	3.07 (78)	3.82 (97)	4.57 (116)	5.31 (135)	6.06 (154)	6.81 (173)	7.56 (192)	8.31 (211)	9.06 (230)	9.80 (249)	10.55 (268)	11.30 (287)	12.05 (306)	12.80 (325)	13.54 (344)	14.29 (363)	15.04 (382)	15.79 (401)
L ₂	1.93 (49)	2.68 (68)	3.43 (87)	4.17 (106)	4.92 (125)	5.67 (144)	6.42 (163)	7.17 (182)	7.91 (201)	8.66 (220)	9.41 (239)	10.16 (258)	10.91 (277)	11.65 (296)	12.40 (315)	13.15 (334)	13.90 (353)	14.65 (372)	15.39 (391)

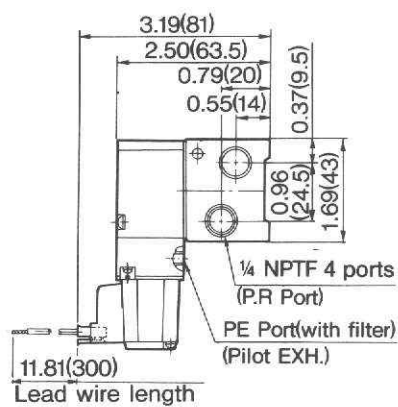
Type 21 Manifold/ Top Ported

inch (mm)

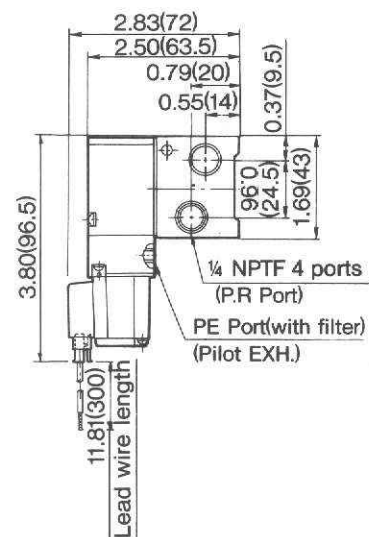
mmet (G), (H)



Type plug connector (L)



M type plug connector (M)

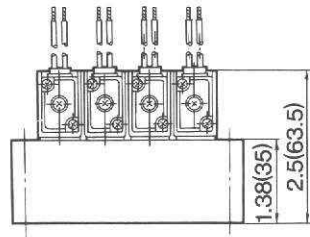
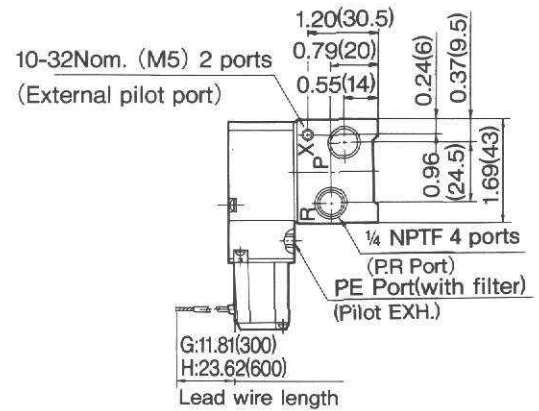
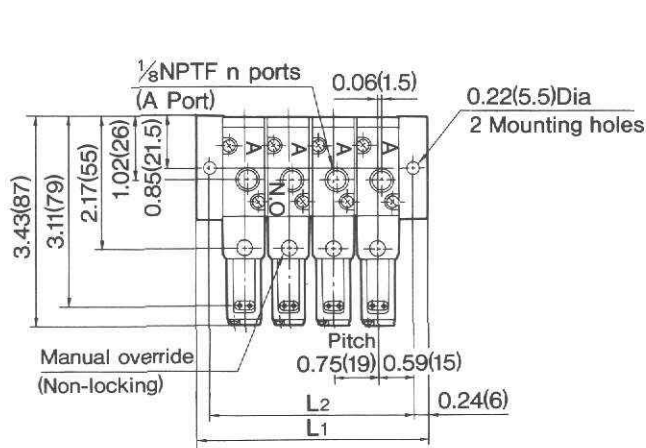


Stations	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	30
L1	2.40 (61)	3.15 (80)	3.90 (99)	4.65 (118)	5.39 (137)	6.14 (156)	6.89 (175)	7.64 (194)	8.39 (213)	9.13 (232)	9.88 (251)	10.63 (270)	11.38 (289)	12.13 (308)	12.87 (327)	13.62 (346)	14.37 (365)	15.12 (384)	15.87 (403)
L2	1.93 (49)	2.68 (68)	3.43 (87)	4.17 (106)	4.92 (125)	5.67 (144)	6.42 (163)	7.17 (182)	7.91 (201)	8.66 (220)	9.41 (239)	10.16 (258)	10.91 (277)	11.65 (296)	12.40 (315)	13.15 (334)	13.90 (353)	14.65 (372)	15.39 (391)

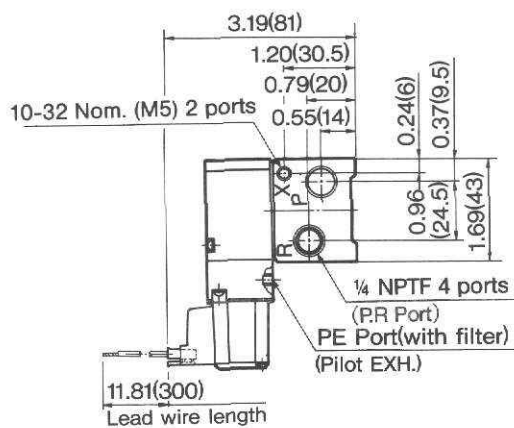
Type 21R Manifold/ Top Ported

inch (mm)

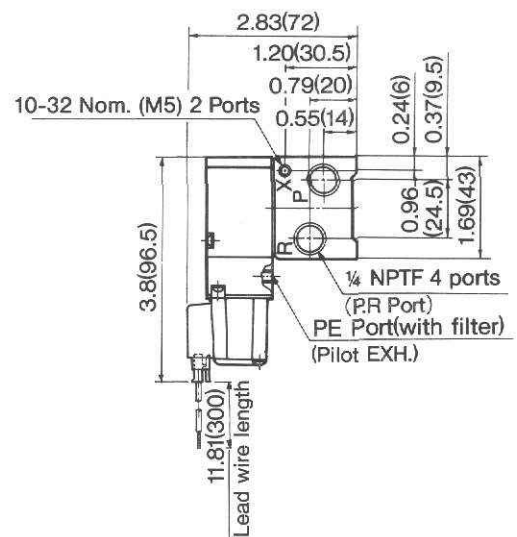
Grommet (G), (H)



L type plug connector (L)



M type plug connector (M)

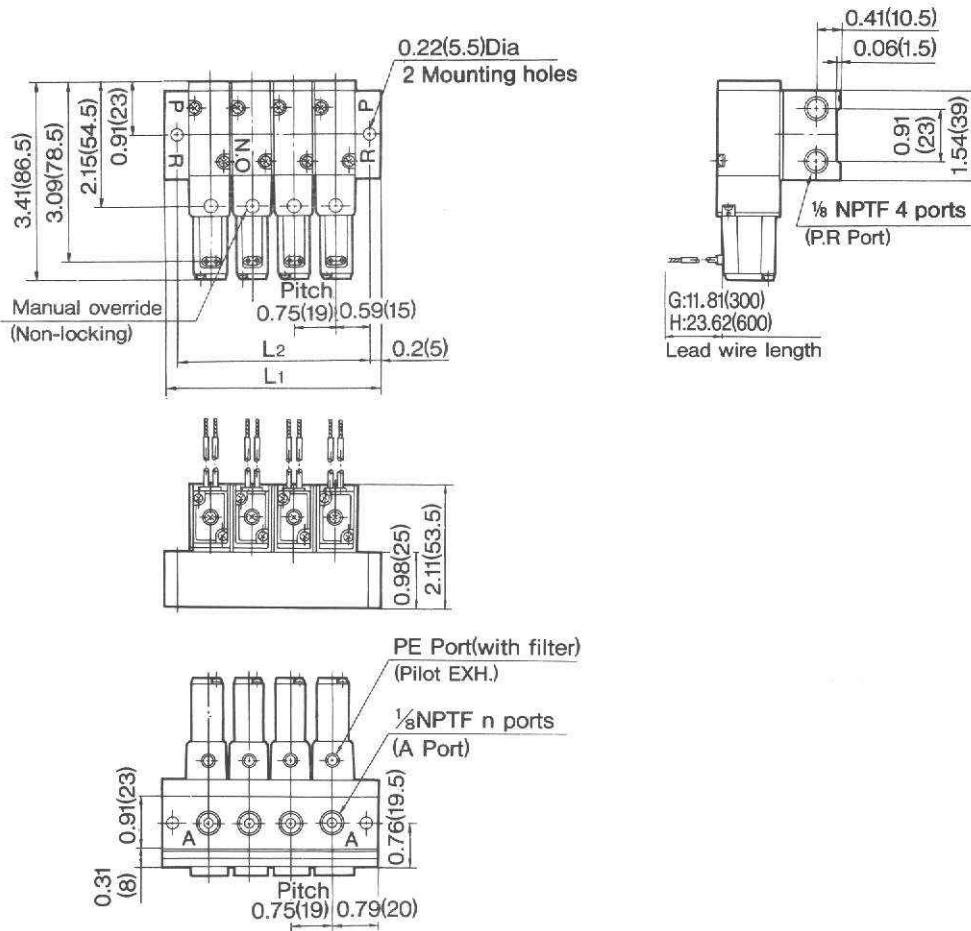


Stations	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L1	2.40 (61)	3.15 (80)	3.90 (99)	4.65 (118)	5.39 (137)	6.14 (156)	6.89 (175)	7.64 (194)	8.39 (213)	9.13 (232)	9.88 (251)	10.63 (270)	11.38 (289)	12.13 (308)	12.87 (327)	13.62 (346)	14.37 (365)	15.12 (384)	15.87 (403)
L2	1.93 (49)	2.68 (68)	3.43 (87)	4.17 (106)	4.92 (125)	5.67 (144)	6.42 (163)	7.17 (182)	7.91 (201)	8.66 (220)	9.41 (239)	10.16 (258)	10.91 (277)	11.65 (296)	12.40 (315)	13.15 (334)	13.90 (353)	14.65 (372)	15.39 (391)

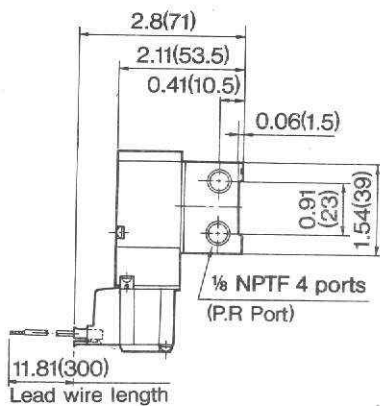
type 40 Manifold/ Bottom Ported

inch (mm)

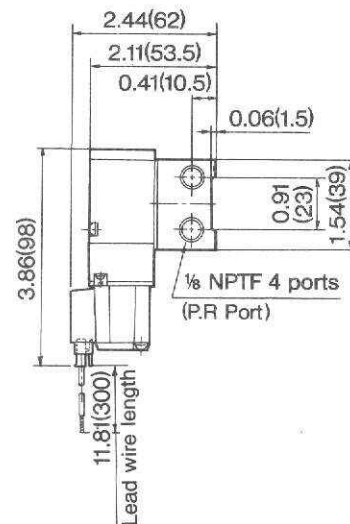
ommet (G), (H)



L type plug connector (L)



M type plug connector (M)



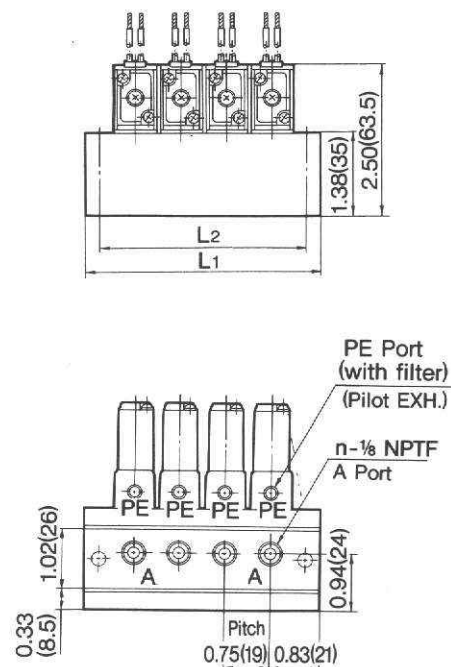
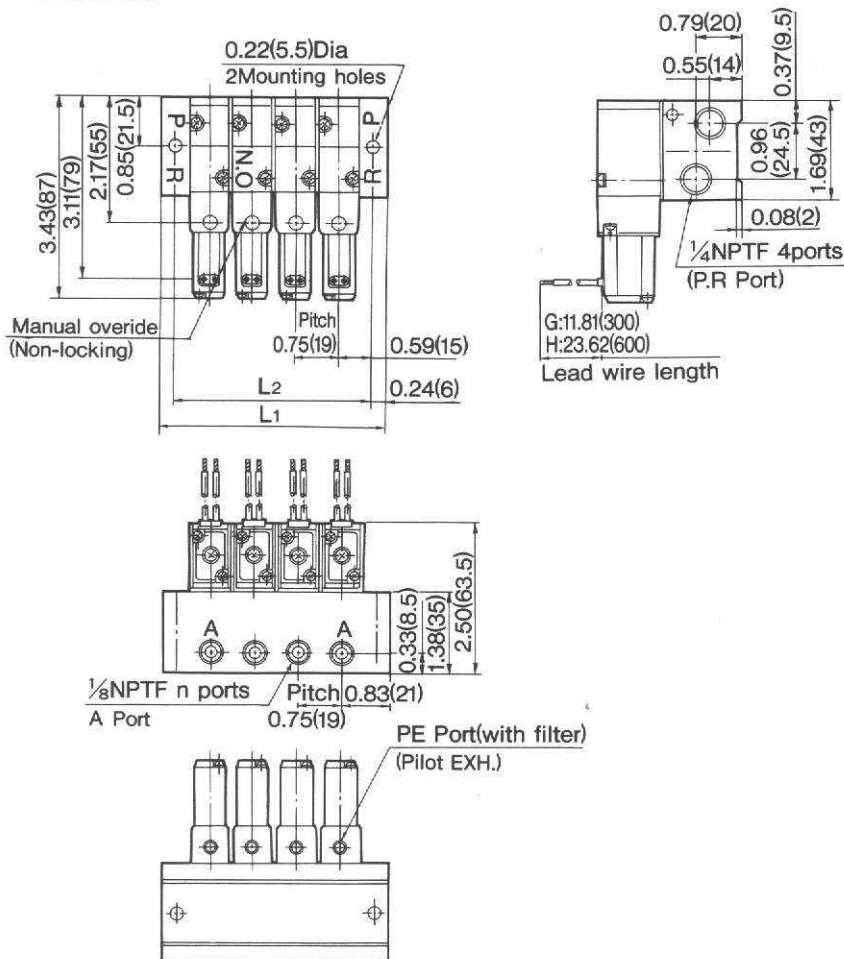
Stations	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L1	2.32 (59)	3.07 (78)	3.82 (97)	4.57 (116)	5.31 (135)	6.06 (154)	6.81 (173)	7.56 (192)	8.31 (211)	9.06 (230)	9.80 (249)	10.55 (268)	11.30 (287)	12.05 (306)	12.80 (325)	13.54 (344)	14.29 (363)	15.04 (382)	15.79 (401)
L2	1.93 (49)	2.68 (68)	3.43 (87)	4.17 (106)	4.92 (125)	5.67 (144)	6.42 (163)	7.17 (182)	7.91 (201)	8.66 (220)	9.41 (239)	10.16 (258)	10.91 (277)	11.65 (295)	12.40 (315)	13.15 (334)	13.90 (353)	14.65 (372)	15.39 (391)

Type 41 Manifold/ Side Ported

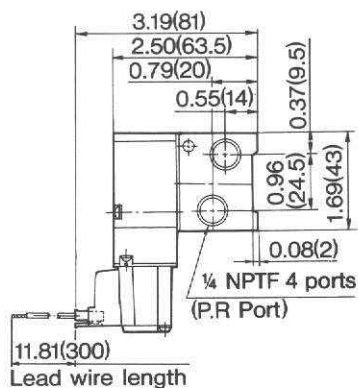
Grommet (G), (H)

Bottom Ported

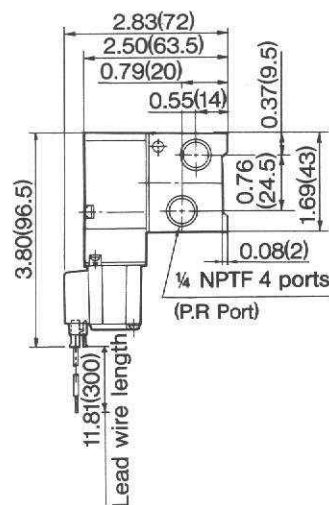
inch (mm)



L type plug connector (L)



M type plug connector (M)



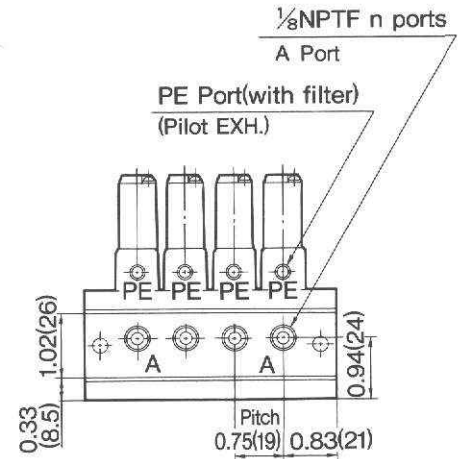
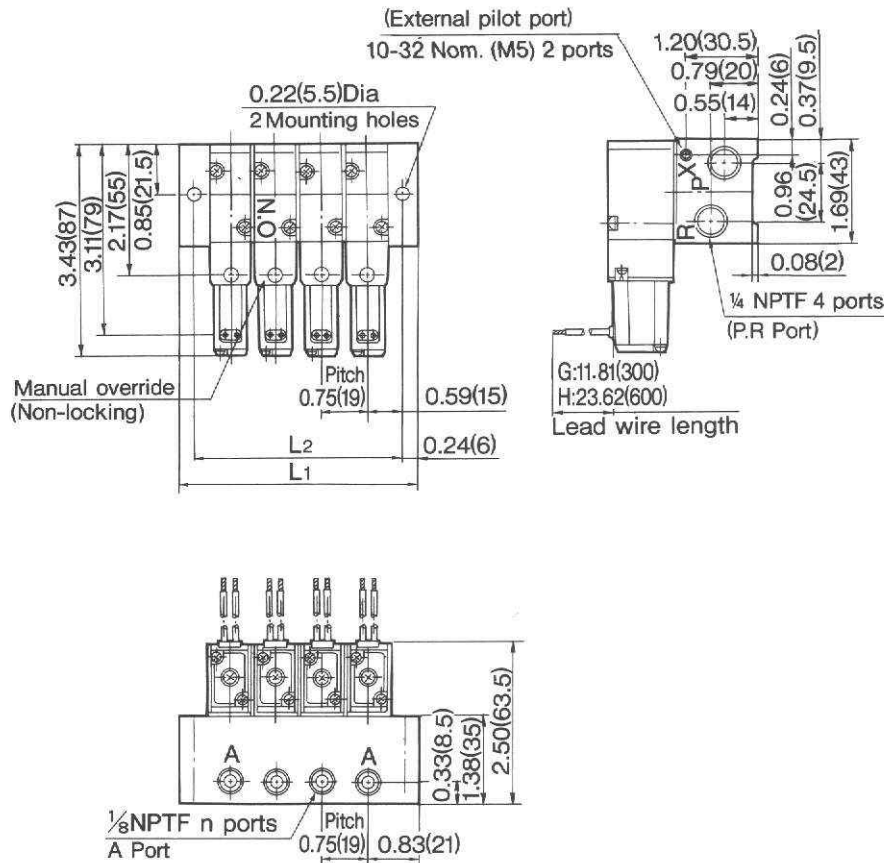
Stations	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L1	2.40 (61)	3.15 (80)	3.90 (99)	4.65 (118)	5.39 (137)	6.14 (156)	6.89 (175)	7.64 (194)	8.39 (213)	9.13 (232)	9.88 (251)	10.63 (270)	11.38 (289)	12.13 (308)	12.87 (327)	13.62 (346)	14.37 (365)	15.12 (384)	15.87 (403)
L2	1.93 (49)	2.68 (68)	3.43 (87)	4.17 (106)	4.92 (125)	5.67 (144)	6.42 (163)	7.17 (182)	7.91 (201)	8.66 (220)	9.41 (239)	10.16 (258)	10.91 (277)	11.65 (296)	12.40 (315)	13.15 (334)	13.90 (353)	14.65 (372)	15.39 (391)

type 41R Manifold/ Side Ported(External Pilot)

Bottom Ported

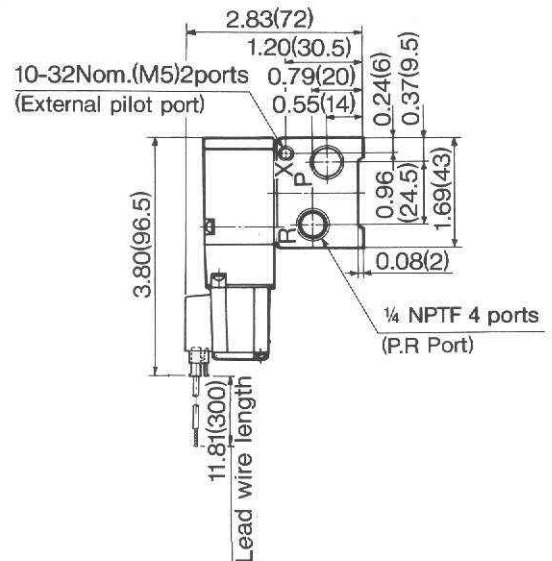
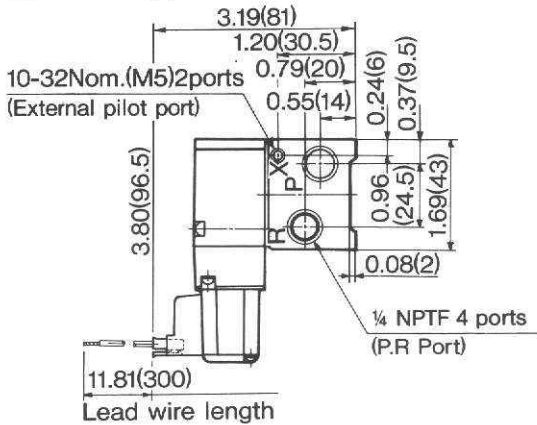
inch(mm)

nommet (G), (H)



type plug connector (L)

M type plug connector (M)



Stations	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L ₁	1.65 (42)	2.40 (61)	3.15 (80)	3.90 (99)	4.65 (118)	5.39 (137)	6.14 (156)	6.89 (175)	7.64 (194)	8.39 (213)	9.13 (232)	9.88 (251)	10.63 (270)	11.38 (289)	12.13 (308)	12.87 (327)	13.62 (346)	14.37 (365)	15.12 (384)	15.87 (403)
L ₂	1.18 (30)	1.93 (49)	2.68 (68)	3.43 (87)	4.17 (106)	4.92 (125)	5.67 (144)	6.42 (163)	7.17 (182)	7.91 (201)	8.66 (220)	9.41 (239)	10.16 (258)	10.91 (277)	11.65 (296)	12.40 (315)	13.15 (334)	13.90 (353)	14.65 (372)	15.39 (391)

World Wide SMC Support...

North American Branch Offices For a branch office near you call: 1-800-SMC-SMC1 (762-7621)

SMC Pneumatics Inc. (Atlanta)
1440 Lakes Parkway, Suite 600
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Tel: (770) 624-1940
FAX: (770) 624-1943

SMC Pneumatics Inc. (Cleveland)
2305 East Aurora Rd., Unit A-3
Twinsburg, OH 44087
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