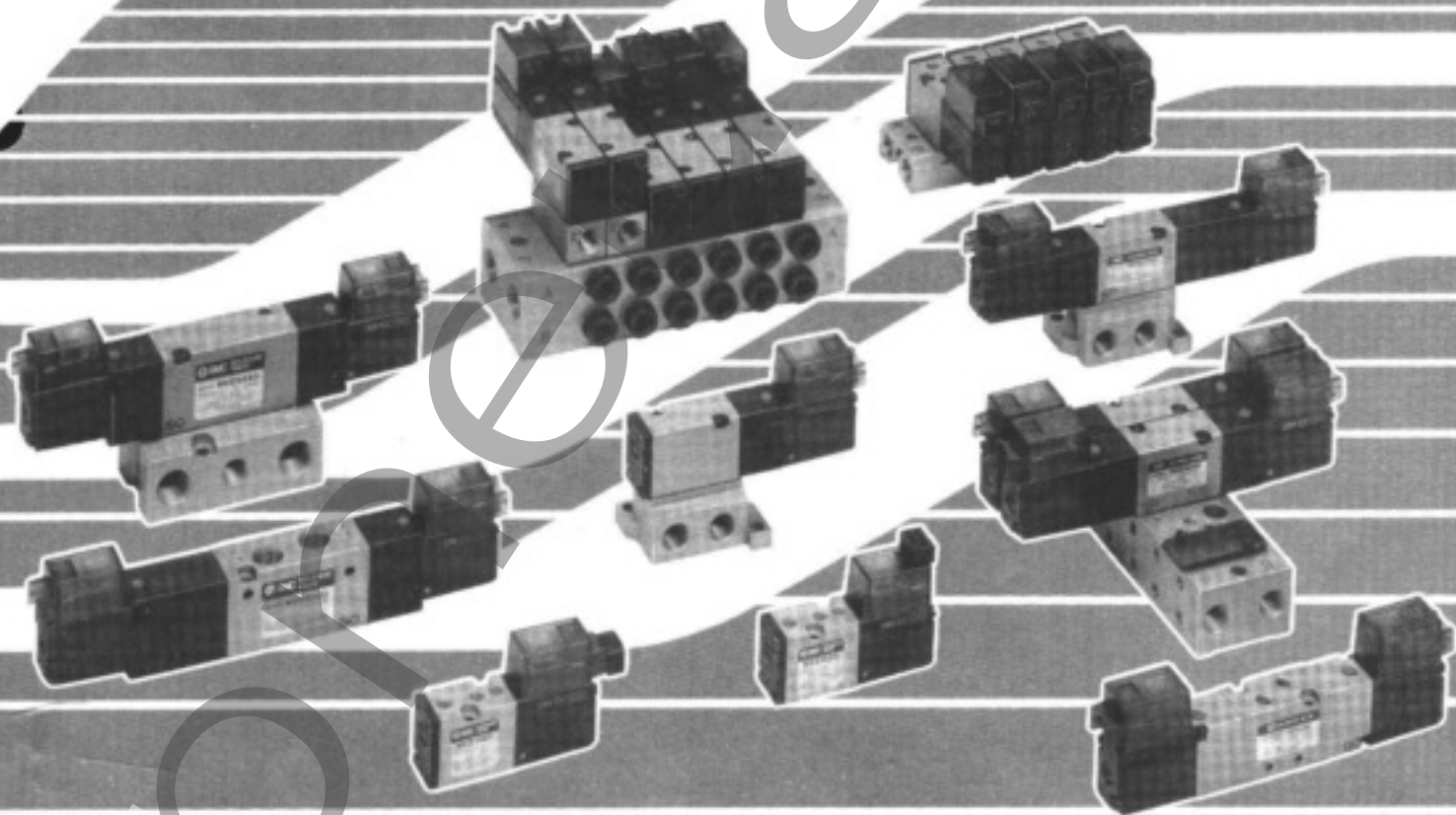


# NVZ1000/3000/5000

4 • 5 Port Solenoid Valve / Rubber Seal Type



# 4·5 Ports Solenoid Valve NVZ1000/3000/5000

## NVZ1000

**Cv0.05**

**width 0.6" (15mm)**



## NVZ3000

**Cv0.25**

**width 0.6" (15mm)**

(Body ported type Cv0.2)



## NVZ5000

**Cv0.7**

**width 0.71" (18mm)**

(Body ported type Cv0.6)



## INDEX

Notes for series NVZ P 1 - 2

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How to Order P 12  
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Manifold Specifications /  
How to Order P 22  
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Manifold Dimensions P 27 - 28

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

■ **Response Time**

(2 position) 20ms or less

(3 position) 35ms or less : NVZ3000

50ms or less : NVZ5000

# Variations of Series NVZ

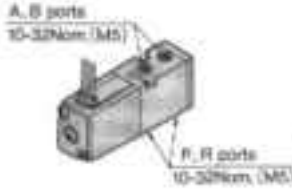
## NVZ1000

Symbol

NVZ100



Body ported type



Cv0.05

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## NVZ3000

Symbol

Body ported type    Base mounted type with subplate

NVZ3120

NVZ3140



NVZ3220

NVZ3240



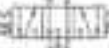
NVZ3320

NVZ3340



NVZ3420

NVZ3440

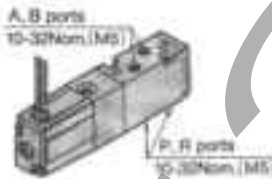


NVZ3520

NVZ3540



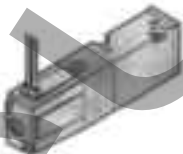
Body ported type



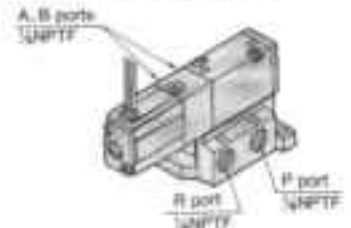
Cv0.25

PAGE ⑦ - ⑧

Base mounted type



With Subplate



## NVZ5000

Symbol

Body ported type    Base mounted type with subplate

NVZ5100

NVZ5140



NVZ5200

NVZ5240



NVZ5300

NVZ5340

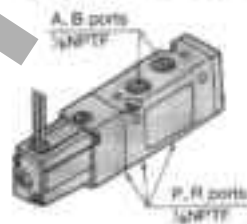


NVZ5400

NVZ5440



Body ported type



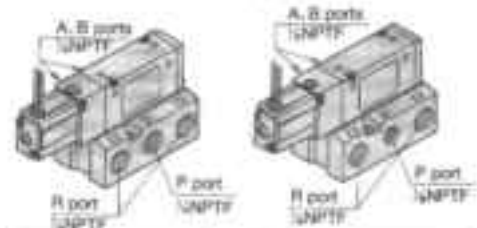
Cv0.7

PAGE ⑨ - ⑩

Base mounted type



With Subplate

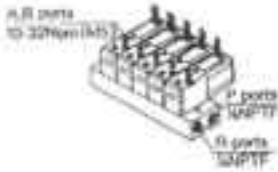




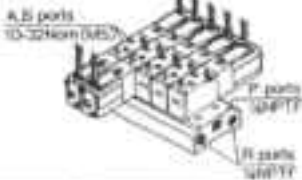
# Manifold

Built-in One Touch fitting manifolds available for NVZ3000 and NVZ5000

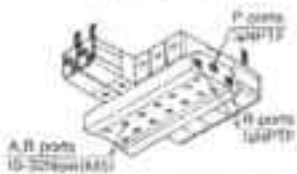
**Top ported  
Type 20**



**Top ported  
Type 20**



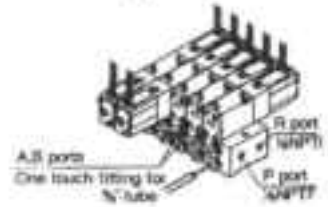
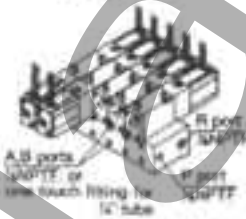
**Bottom ported  
Type 40**



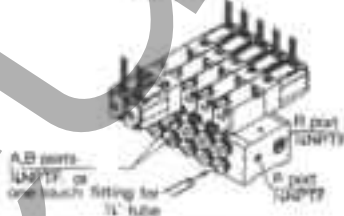
**Type 41**

**Side ported**

**Type 43**



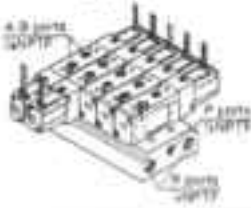
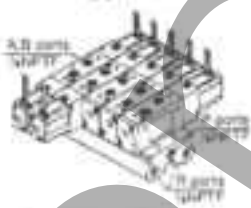
**Type 42**



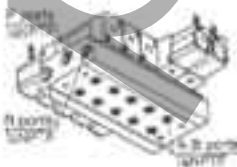
**Type 20**

**Top ported**

**Type 21**



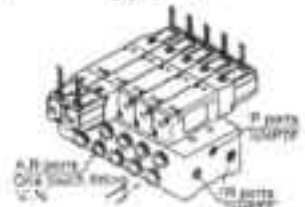
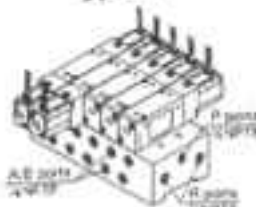
**Bottom ported  
Type 40**



**Type 41**

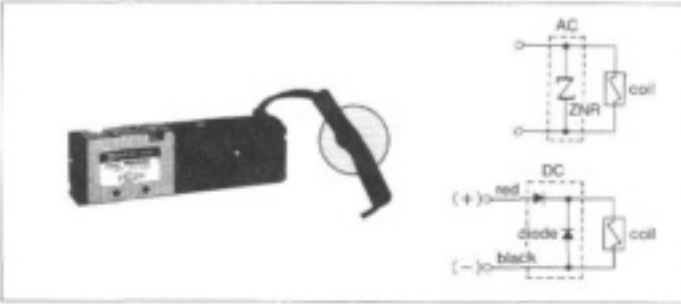
**Side ported**

**Type 42**

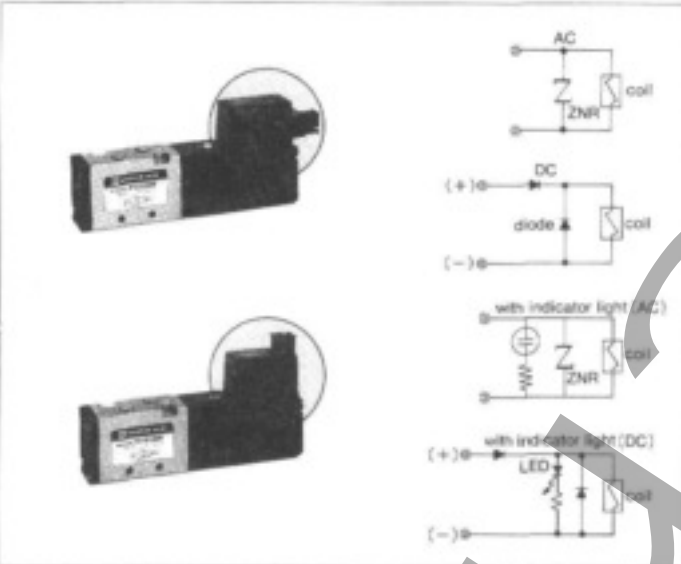


## Surge Voltage Protection Circuit

### ① Grommet type



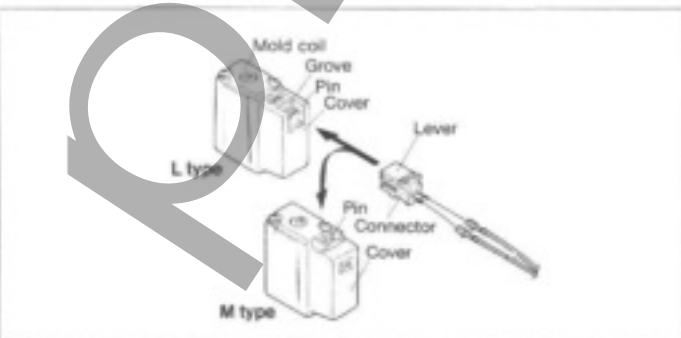
### ② Plug connector type



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

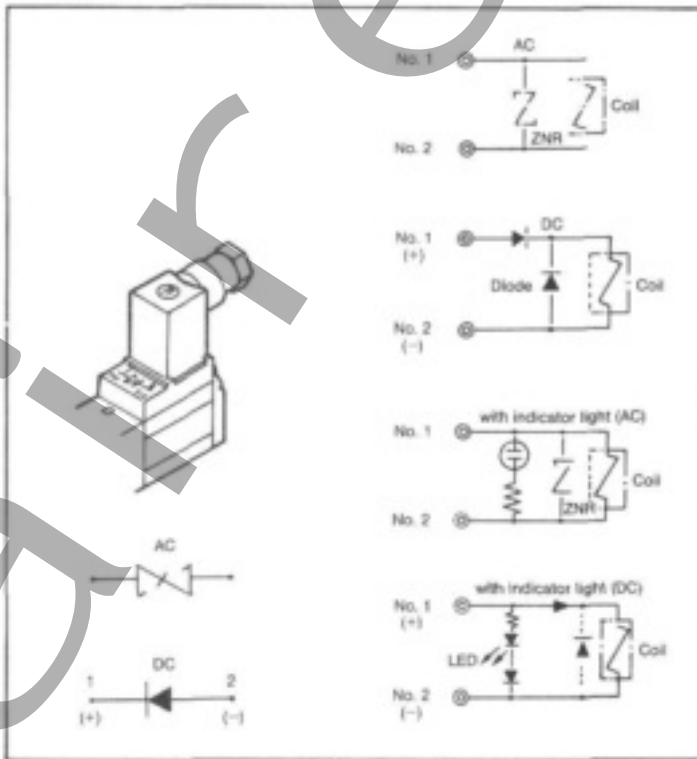
- ① Connection — Push the connector straight on to the pins of the solenoid, making sure the lip of the lever is securely positioned in the groove on the solenoid cover.
- ② Disconnection — Pinch the lever against the connector and pull connector away from the solenoid.



## DIN Connector

Based on international standard, IP65 (DIN 40050).

### ① DIN connector type



## Common Exhaust For Main Valve & Pilot Valve

NVZ3003 and NVZ5003 valves are available with a common exhaust for the pilot valve exhaust and the main valve 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 are 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.

## Flow Control (NVZ1120)

Be sure not to install a flow control valve on NVZ1120 type. If flow control is required, install a speed controller on the cylinder.

## Piping

- 1 Make sure that chips, cutting oil, dust, etc. are cleaned up before piping.
- 2 When using a NVZ3300 or NVZ5307 closed center type, make sure of non-leakage between the fittings and piping.
- 3 If required to pipe on the pilot exhaust (PE) port, remove the mesh filter.
- 4 Fastening torque

Thread	Proper fastening torque in-lbs
10-32Nom. (M5)	13-17.3
1/4NPTF	60.8-78.0
1/2NPTF	104-121.3

## Quality Of Operating Fluid

- 1 A filter of about 5 microns is preferred.
- 2 Remove drainage from the system since large quantity of drainage can lead to product malfunction as well as environmental contamination.
- 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.

## 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.

## Recommended Lubricants for SMC Pneumatics' Valves

Lubricant Table

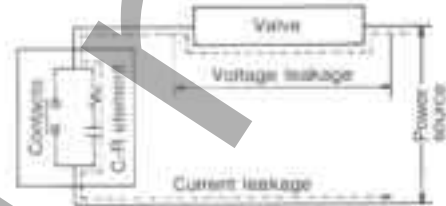
Manufacturer	Lubricant
BP	THB 32
Castrol	Perfecto T32
ESSO/Exxon	TERESSO 32
Mobil	DTE Light
Shell	Turbo T32

## 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 magnetic seal position)

AC coil: No more than 15% of the rated voltage  
 DC coil: No more than 2% of than 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.

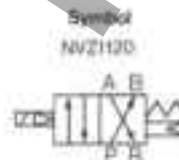
## Operating Conditions

- 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 silencers to the EXH ports.
- 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 0.1 seconds or more to ensure proper operation.



Cv0.05

# 4 Port Solenoid Valve NVZ1000



## Model

Body	Type of actuation	Model	Cv factor	Port size	Weight (g)		
Body Ported type	2 Position	Single	NVZ1120-OG-M5	P→A	0.034	10-32Nom. (M5)	0.2 (90)
				B→R	0.083		
				P→B	0.056		
				A→R	0.05		

## Specifications

Fluid	Air, Inert gases
Operating Pressure range	20 - 100PSI (1.5 - 7kgf/cm <sup>2</sup> )
Ambient and fluid temperature	Max. 120°F (50°C)
Response time	15 ms or less (at 70PSI)
Max operating frequency	900 cpm
Manual override	Non-locking type
Lubrication	Not required (Use turbine oil ISO VG32 if lubrication is required.)
Mounting position	Free
Impact/vibration resistance	15G/50 (45 - 1000Hz)
Enclosure	Dust proof

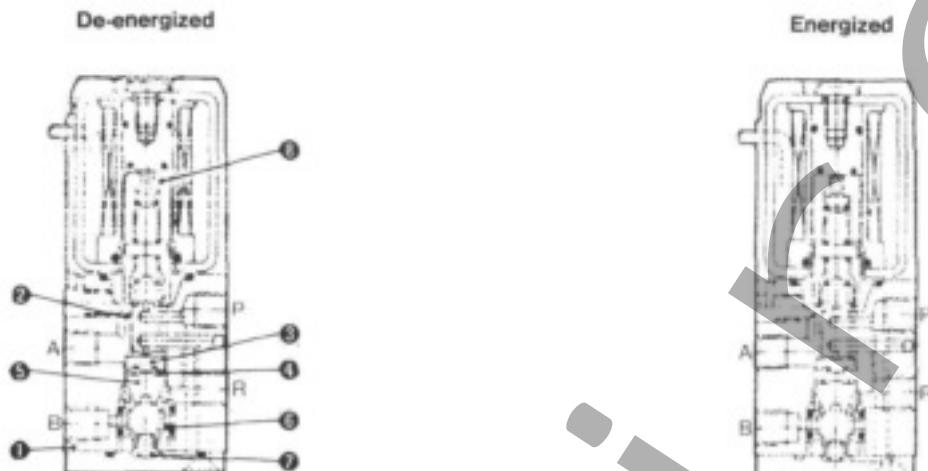
## Solenoid Specifications

Electrical entry	Grommet (G) (H) Plug connector (L) (M)	
Voltage	AC	110V 50 Hz, 220V 50 Hz 100V 50Hz, 200V 50Hz 24V 50Hz, 48V 50Hz
	DC	6V, 12V, 24V, 48V
Allowable voltage	-15 - +10% of rated voltage	
Coil insulation	Class E or equivalent (250°F)	
Temperature rise	81°F or less	
Power consumption DC	1.6W/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	

## Options

Description	Part number	Notes
Foot Bracket w/screws	OXT170-34-1E	NVZ1120 4 port
Silencer	10-32 (NOM)	For R port of valve body Noise reduction: 18 dB or more, Cv factor Cv 0.28
	1/4NPTF	For R port of manifold base Noise reduction: 21 dB or more, Cv factor 1.94

Construction/Parts List



Main Parts

No.	Description	Material	Notes
1	Body	Zinc diecast	Metallic paint
2	Push rod	Polyacetal	
3	EXH. poppet	NBR	
4	Back up spring	Stainless Steel	
5	V packing	NBR	
6	Retainer ass'y	Brass, NBR	
7	Poppet spring	Stainless Steel	

Spare Parts

No.	Description	Parts number	Notes
8	Solenoid ass'y *	—	DXT170-A-000

\*Including armature ass'y.

How To Order Solenoid Ass'y

Solenoid ass'y	DXT170-A-3	G	0
----------------	------------	---	---

Voltage\*

1*	100VAC 50/60Hz
2*	200VAC 50/60Hz
3	110VAC 50/60Hz
4	220VAC 50/60Hz
5	24VDC
6	12VDC
9*	Others

\* Special Order.

Indicator light and surge voltage suppressor

—	None
Z*	With indicator light and surge voltage suppressor
S†	With surge voltage suppressor

\* Except grommet type.

† Special order

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.



How To Order : NVZ1000

Voltage	
1*	100VAC $\frac{50}{60}$ Hz
2*	200VAC $\frac{50}{60}$ Hz
3	110VAC $\frac{50}{60}$ Hz
4	220VAC $\frac{50}{60}$ Hz
5	24V DC
6	12V DC
9*	Others

\* Special order.

Indicator light and surge voltage suppressor	
-	None
2*	With indicator light and surge voltage suppressor
5 †	With surge voltage suppressor

\* Grommet type not avail. with 2.  
† Special order.

Surge voltage suppressor of grommet type



Body Ported **NVZ1120-5 L - M5-**

Electrical entry\*

<p><b>G:</b> Grommet (std.)</p> <p>Lead wire length : 12 inch (300mm)</p>	<p><b>H:</b> Grommet*</p> <p>Lead wire length : 24 inch (600mm)</p>
<p><b>L:</b> L type plug connector with lead wire</p> <p>Lead wire length : 12 inch (300mm)</p>	<p><b>M:</b> M type plug connector with lead wire</p> <p>Lead wire length : 12 inch (300mm)</p>
<p><b>LO:</b> L type plug connector without connector</p>	<p><b>MO:</b> M type plug connector without connector</p>

\* Special order

Optional accessory

**F:** Foot bracket

Port Size

M5 10-32Nom. (M5 x 0.8)

How To Order / Connector Ass'y

**DXT170-80-A-**

Lead wire color\*

1*	Blue/Blue
2*	Red/Red
3	Gray/Gray
4	Red/Black

\* Special order.

Type 3 - Std. AC use.  
Type 4 - Std. DC use.

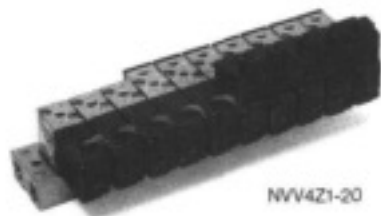
Lead wire length

-	12 inch (300mm)
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 order the valve and non-standard connector ass'y, include both the valve and connector ass'y product numbers.  
(Example) In case of 80 inch lead wire length:

**NVZ1120-5MO-M5  
DXT170-80-4A-20**

# Manifold



NVV4Z1-20

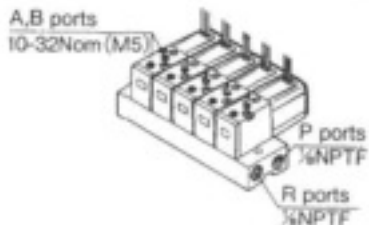
## Specifications

P(SUP) · R(EXH) type	Common SUP and EXH type
Valve stations	2 ~ 20 stations
Optional accessory	Blanking plate ass'y : DXT170-25-1A SUP relocation ass'y : DXT170-44-1A EXH relocation ass'y : DXT170-48-1A

Note: If there are more than 10 stations, supply air to both sides of manifold and exhaust from both sides of manifold.

## How To Order / NVV4Z1 Manifold

NVV4Z1-20-03 1



### Stations

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

### Optional accessory

- None
- F : Mounting brackets



## Manifold Mounting Of NVZ100 And NVZ1000

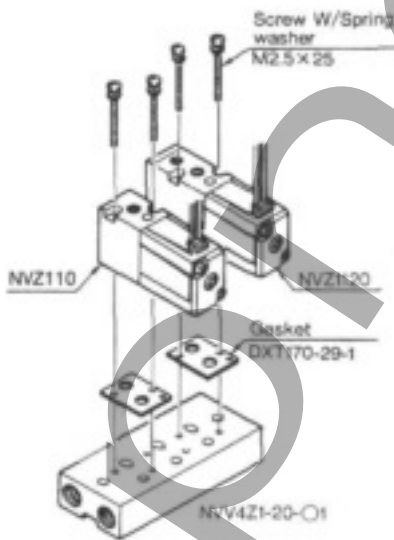
## Relocation Spacer Ass'y For Exhaust/Supply

## Blank Station Plate Ass'y

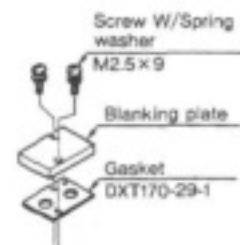
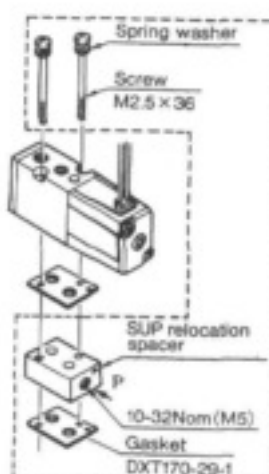
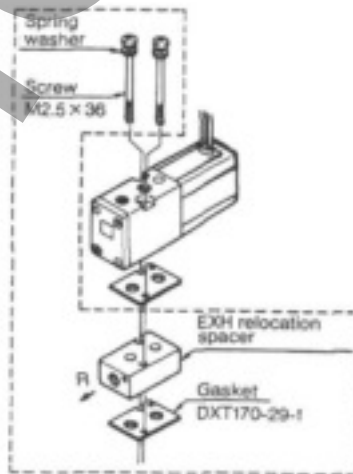
Spacer ass'y for individual exhaust  
DXT170-48-1A

Spacer ass'y for individual supply  
DXT170-44-1A

DXT170-25-1A



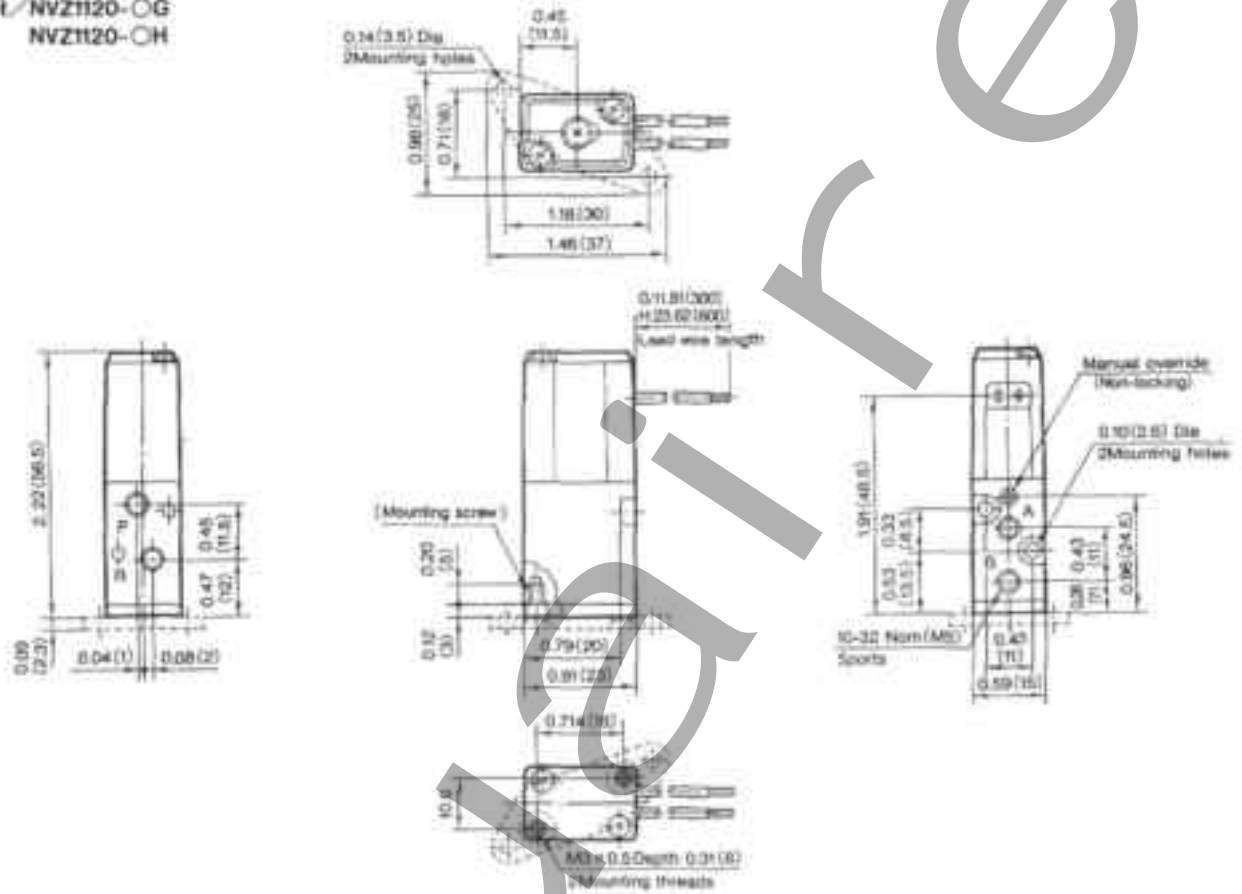
NVZ120 cannot be used on the NVV4Z1-20-01 with NVZ1120.



Body Ported Type

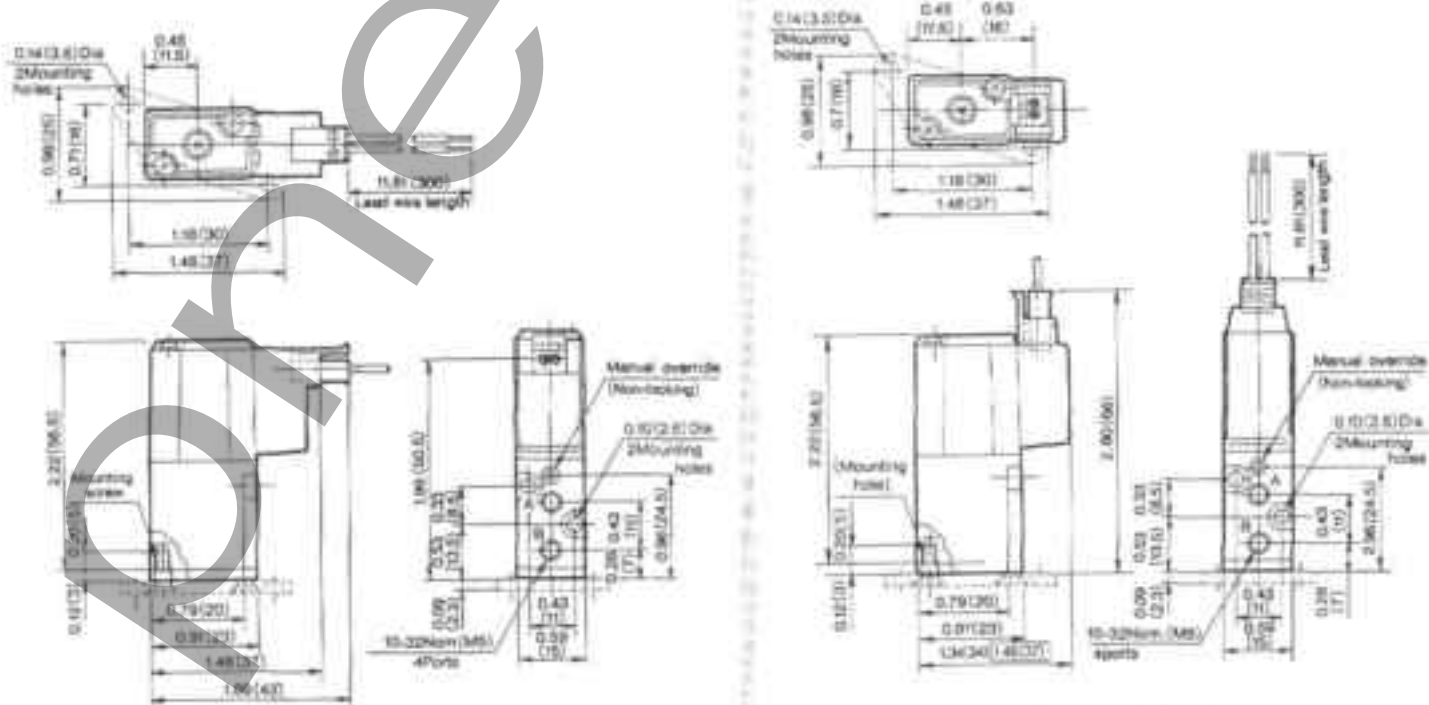
inch (mm)

Grommet / NVZ1120-OG  
NVZ1120-OH



L type plug connector / NVZ1120-OL

M type plug connector / NVZ1120-OM



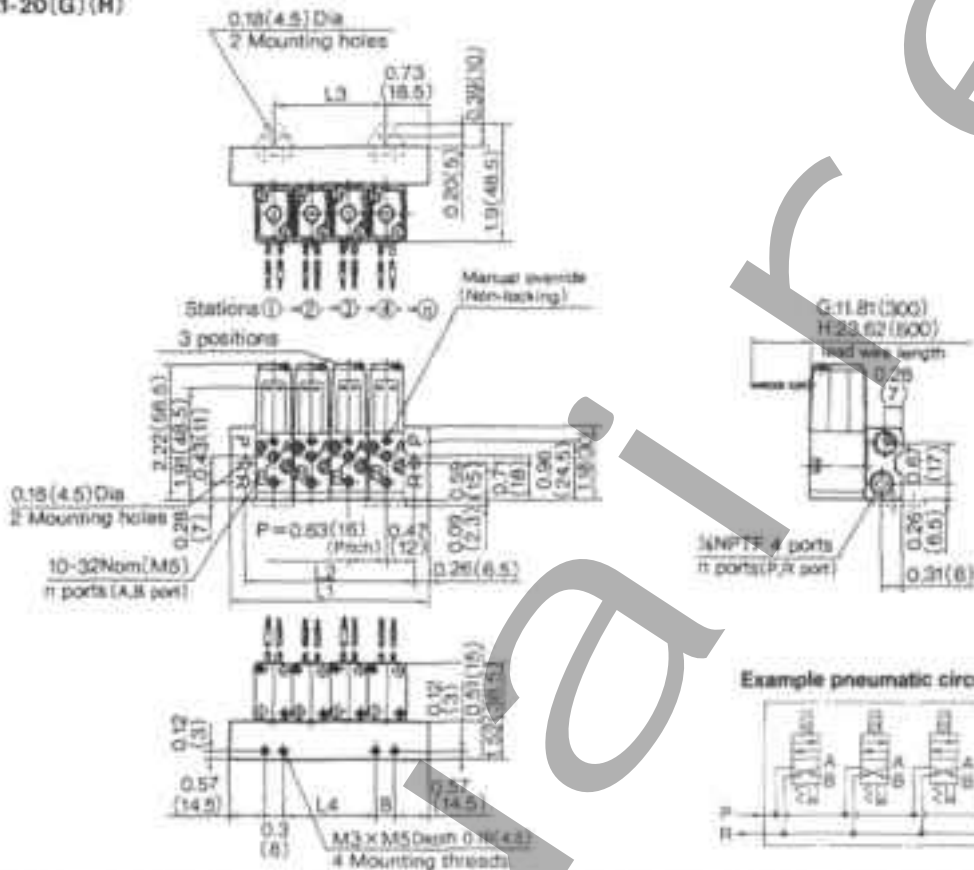
□ With indicator light and surge voltage suppressor.



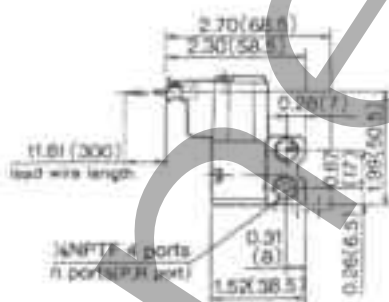
Type 20 Manifold/ Top Ported

inch(mm)

Grommet./NVV4Z1-20(G)(H)



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



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



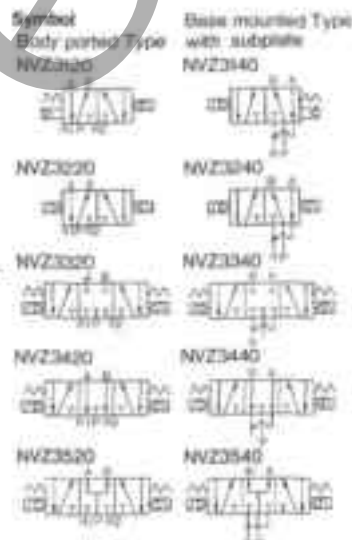
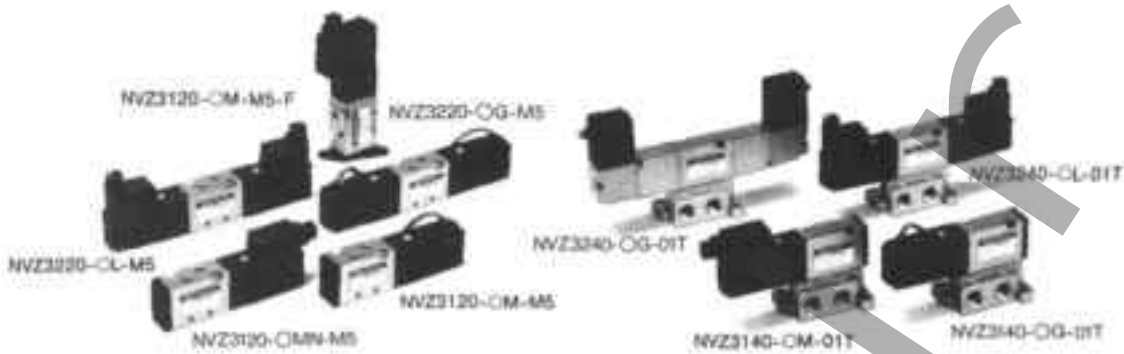
□ : With indicator light and surge voltage suppressor

Stations (n)	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L <sub>1</sub>	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 <sub>2</sub>	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 <sub>3</sub>	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)
L <sub>4</sub>	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

# 5 Port Solenoid Valve NVZ3000

ORDER  
ONLINE



### Model

Body type	Type of actuation	Model	Cv factor	Port size	Weight lbs (gf)	
Body Ported type	2 position	Single	NVZ3120-00-M5	0.2	10-32 Nom. (M5)	0.17 (75)
		Double	NVZ3220-00-M5	0.2		0.26 (120)
	3 position	Closed center	NVZ3320-00-M5	0.18		0.43 (195)
		Exhaust center	NVZ3420-00-M5	0.15		0.43 (195)
		Pressure center	NVZ3520-00-M5	0.22		0.43 (195)
Base mounted type with subplate	2 position	Single	NVZ3140-00-01T	0.25	1/8NPTF	0.28 (125)
		Double	NVZ3240-00-01T	0.25		0.37 (170)
	3 position	Closed center	NVZ3340-00-01T	0.19		0.54 (245)
		Exhaust center	NVZ3440-00-01T	0.15		0.54 (245)
		Pressure center	NVZ3540-00-01T	0.22		0.54 (245)

### Specifications

Fluid	Air, inert gases
Operating pressure range	2 position single, 3 position: 20-100 PSI (1.5-7kgf/cm <sup>2</sup> ) 2 position double: 15-100 PSI (1.0-7kgf/cm <sup>2</sup> )
Ambient and fluid temperature	Max. 120°F (50°C)
Response time	2 position: 20ms or less, 3 position: 35ms or less (70PSI)
Max. operating frequency	2 position: 10c/s 3 position: 3c/s
Manual override	Non-locking push type, Slotted locking type, Knob locking type
Pilot exhaust	Individual, Common
Lubrication	Not required (Use turbine oil ISO VG32 if lubrication is required.)
Mounting position	Free
Impact/vibration resistance	30G/5G (8.3-2000Hz)
Enclosure	Dust proof

### Options

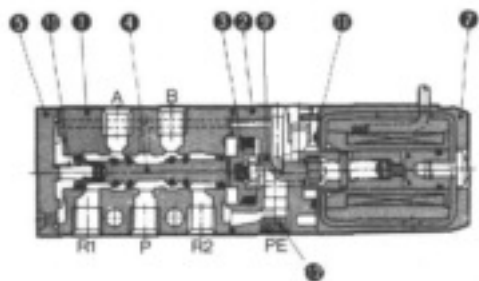
Description	Parts number	Notes
Foot bracket with screws	DXT170-34-1B	NVZ3120
Silencer	10-32UNF	18dB or more
	1/8NPTF	21dB or more

### Solenoid Specifications

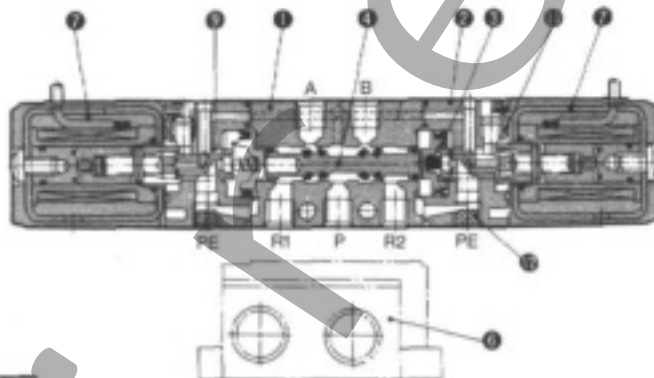
Electrical entry	Grommet (I) (R); Plug connector (L) (M) DIN connector (D)		
Voltage	AC	110V <sup>1</sup> /50Hz, 220V <sup>1</sup> /50Hz 24V <sup>1</sup> /50Hz	
	DC	12V, 24V	
Allowable voltage	-15-10% of rated voltage		
Coil insulation	Class E or equivalent (250°F)		
Temperature rise	81°F or less		
Power consumption	DC	1.8W/2.1W (W/LED)	
Apparent power	AC	Inrush	4.2VA/50Hz, 4.5VA/50Hz
		Holding	3VA/50Hz, 3.5VA/50Hz
Surge voltage suppressor	DC: Diode, AC: ZNR		
Indicator light	DC: LED (Red), AC: Neon Lamp		

Construction/Parts List

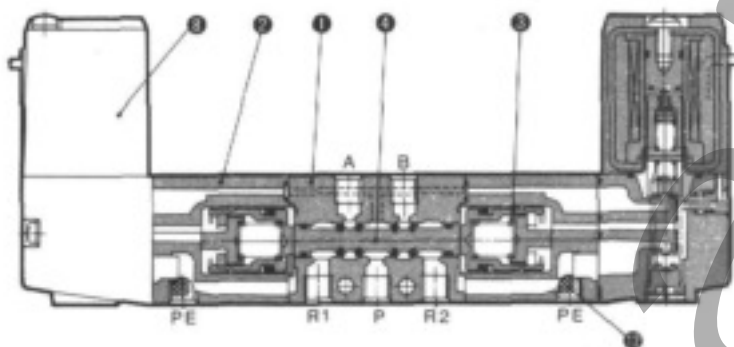
Single Solenoid



Double Solenoid



3 Position Closed Center



Main Parts

No.	Description	Material	Notes
1	Body	Aluminum die cast	Metallic paint
2	Piston plate	Polyacetal *	
3	Piston	Polyacetal **	
4	Spool Ass'y	Aluminum+NBR	
5	End cover	PBT	
6	Sub plate	Aluminum die cast	Metallic paint

\* Zinc die cast is used on 3position  
\*\* Aluminum is used on 3position

Spare Parts

No.	Description	Material	Parts number
7	Solenoid ass'y*	—	DXT170-C-○○○
8	Pilot valve ass'y	—	VZ111-○○○
9	Push rod	Polyacetal	DXT192-32-1
10	Spool spring	Stainless steel	DXT192-7-1
11	O ring	NBR	13×11×1
12	Filter	Stainless	AXT500-17

\* Including armature ass'y

How To Order

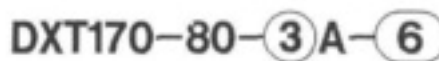
For 2 position valve



For 3 position valve



How To Order/Connector Ass'y



Lead wire color *	Lead wire length *
1* Blue/Blue	— 12 inch (300mm)
2* Red/Red	6 24 inch (600mm)
3 Gray/Gray	10 40 inch (1000mm)
4 Red/Black	15 60 inch (1500mm)
	20 80 inch (2000mm)
	25 100 inch (2500mm)
	30 120 inch (3000mm)

\* Special Order.  
std. AC : '3'  
std. DC : '4'

When ordering valve without standard connector ass'y, include both the valve and connector ass'y product numbers. (Example) in case of 80 inch lead wire length,

**NVZ3120-4L0-M5  
DXT170-80-3A-20**

Voltage *	Electrical entry	Lead wire length
1* 100VAC 50/60 Hz	G Grommet	12" (300mm)
2* 200VAC 50/60 Hz	H* Grommet	24" (600mm)
3 110VAC 50/60 Hz	L L type plug connector	With lead wire
4 220VZC 50/60 Hz	LO connector	Without connector
5 24V DC	M M type plug connector	With lead wire
6 12V DC	MO connector	Without connector
9* Others	D DIN	With DIN top
	DO† connector	Without DIN top

\* Special Order Only. † DOZ is not available.

Indicator light and surge voltage suppressor

—	None
* Z	With Indicator light and surge voltage suppressor
S	With surge voltage suppressor

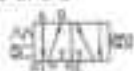
\* Plug connector type only



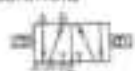
## How To Order : NVZ3000

### Position

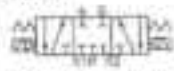
1: 2 position single solenoid



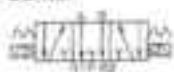
2: 2 position double solenoid



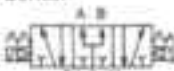
3: 3 position closed center



4: 3 position exhaust center



5: 3 position pressure center



For type 20 manifold



Voltage	
1*	100VAC 50/60 Hz
2*	200VAC 50/60 Hz
3	110VAC 50/60 Hz
4	220VAC 50/60 Hz
5	24V DC
6	12V DC
9*	Others

\* Special Order.

### Indicator light and surge voltage suppressor

-	None
Z*	With indicator light and surge voltage suppressor
5†	With surge voltage suppressor

\* Not avail. for grommet type  
† Special order.

### Port size

M5	1/8-3/8Nom. (M5×0.8)
----	-------------------------

### Optional accessory

F: Foot bracket



Surge voltage suppressor of grommet type



Body Ported

NVZ3 1 2 0 5 L M5

Base mounted

NVZ3 1 4 0 5 L

### Body option\*

For type 40, 41, 42, 43 manifold



0: Individual pilot exhaust



3: Common exhaust for main and pilot valve



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

### \* Port size

01T: With 1/8NPTF subplate



- Without subplate



### Electrical entry\*

G: Grommet (std.)



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



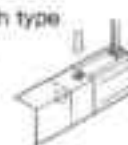
Lead wire length  
: 12 inch (300mm)

MO: M type plug connector  
Without connector



### \* Manual override

- Non-locking push type manual override



B: Slotted locking type manual override



C\*: Knob locking type manual override



\* Special Order

\* Special order

# Manifold

## Specifications

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

Note: If there are more than 8 stations, supply air and exhaust from both sides of manifold.

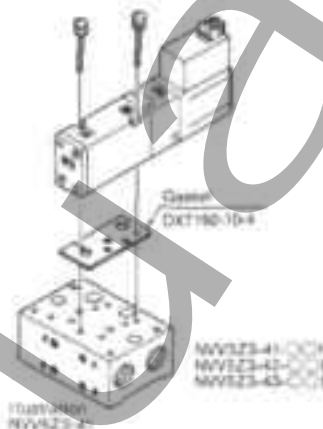
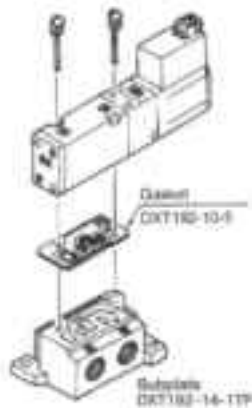
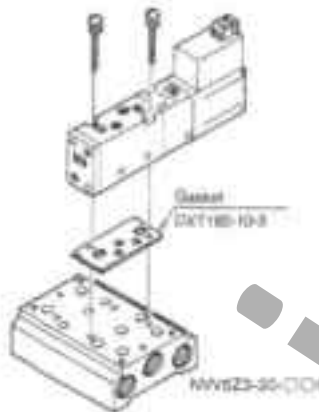
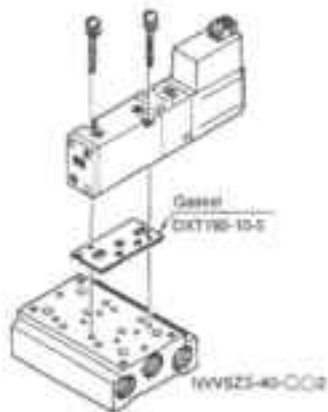
When using a NVZ3000 with a manifold, use EXH relocation spacer ass'y because the exhaust of other solenoid valves may cause actuator malfunction.  
Please order the appropriate valves and/or blanking plate ass'y with manifold base.



## Type And How To Order

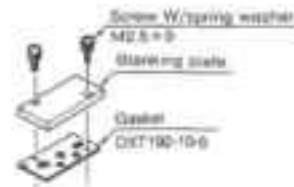
<p><b>Type 20</b></p> 	<p><b>NVV5Z3-20-05 1-00T</b></p> <table border="1"> <tr> <th>Stations</th> <th></th> </tr> <tr> <td>02</td> <td>2 stations</td> </tr> <tr> <td>20</td> <td>20 stations</td> </tr> </table>	Stations		02	2 stations	20	20 stations	<p>Applicable valves  <b>NVZ312</b> ○-○○○-M5  <b>NVZ322</b> ○-○○○-M5  <b>NVZ332</b> ○-○○○-M5  <b>NVZ342</b> ○-○○○-M5  <b>NVZ352</b> ○-○○○-M5</p> <p>Options —  Blank plate ass'y: DXT192-13-1A  EXH Relocation Spacer ass'y: DXT192-21-1A</p>			
Stations											
02	2 stations										
20	20 stations										
<p><b>Type 40</b></p> 	<p><b>NVV5Z3-40-05 2-M5</b></p> <table border="1"> <tr> <th>Stations</th> <th></th> <th>Size of A, B port</th> </tr> <tr> <td>02</td> <td>2 stations</td> <td>M5 10-32 Nom. (M5)</td> </tr> <tr> <td>20</td> <td>20 stations</td> <td></td> </tr> </table>	Stations		Size of A, B port	02	2 stations	M5 10-32 Nom. (M5)	20	20 stations		<p>Applicable valves  <b>NVZ314</b> ○-○○○  <b>NVZ324</b> ○-○○○  <b>NVZ334</b> ○-○○○  <b>NVZ344</b> ○-○○○  <b>NVZ354</b> ○-○○○</p> <p>Options —  Blank plate ass'y: DXT192-13-1A  EXH Relocation Spacer ass'y: DXT192-21-1A  SUP Relocation Spacer ass'y: (only for type 41, 42, 43): DXT192-40-1TA  Interface regulator (only for type 41, 42, 43): NARBZ3000-00-P</p>
Stations		Size of A, B port									
02	2 stations	M5 10-32 Nom. (M5)									
20	20 stations										
<p><b>Type 41</b></p> 	<p><b>NVV5Z3-41-05 1-M5</b></p> <table border="1"> <tr> <th>Stations</th> <th></th> <th>Size of A, B port</th> </tr> <tr> <td>02</td> <td>2 stations</td> <td>M5 10-32 Nom. (M5)</td> </tr> <tr> <td>20</td> <td>20 stations</td> <td></td> </tr> </table>	Stations		Size of A, B port	02	2 stations	M5 10-32 Nom. (M5)	20	20 stations		<p>Options —  Blank plate ass'y: DXT192-13-1A  EXH Relocation Spacer ass'y: DXT192-21-1A  SUP Relocation Spacer ass'y: (only for type 41, 42, 43): DXT192-40-1TA  Interface regulator (only for type 41, 42, 43): NARBZ3000-00-P</p>
Stations		Size of A, B port									
02	2 stations	M5 10-32 Nom. (M5)									
20	20 stations										
<p><b>Type 42</b></p> 	<p><b>NVV5Z3-42-05 1-01T</b></p> <table border="1"> <tr> <th>Stations</th> <th></th> <th>Size of A, B port</th> </tr> <tr> <td>02</td> <td>2 stations</td> <td>01T 1/4 NPTF</td> </tr> <tr> <td>20</td> <td>20 stations</td> <td>B7T One touch fitting for 1/2" tube</td> </tr> </table>	Stations		Size of A, B port	02	2 stations	01T 1/4 NPTF	20	20 stations	B7T One touch fitting for 1/2" tube	<p>Options —  Blank plate ass'y: DXT192-13-1A  EXH Relocation Spacer ass'y: DXT192-21-1A  SUP Relocation Spacer ass'y: (only for type 41, 42, 43): DXT192-40-1TA  Interface regulator (only for type 41, 42, 43): NARBZ3000-00-P</p>
Stations		Size of A, B port									
02	2 stations	01T 1/4 NPTF									
20	20 stations	B7T One touch fitting for 1/2" tube									
<p><b>Type 43</b></p> 	<p><b>NVV5Z3-43-03 1-B3T</b></p> <table border="1"> <tr> <th>Stations</th> <th></th> <th>Size of A, B port</th> </tr> <tr> <td>02</td> <td>2 stations</td> <td>B3T One touch fitting for 1/2" tube</td> </tr> <tr> <td>20</td> <td>20 stations</td> <td></td> </tr> </table>	Stations		Size of A, B port	02	2 stations	B3T One touch fitting for 1/2" tube	20	20 stations		<p>Options —  Blank plate ass'y: DXT192-13-1A  EXH Relocation Spacer ass'y: DXT192-21-1A  SUP Relocation Spacer ass'y: (only for type 41, 42, 43): DXT192-40-1TA  Interface regulator (only for type 41, 42, 43): NARBZ3000-00-P</p>
Stations		Size of A, B port									
02	2 stations	B3T One touch fitting for 1/2" tube									
20	20 stations										

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



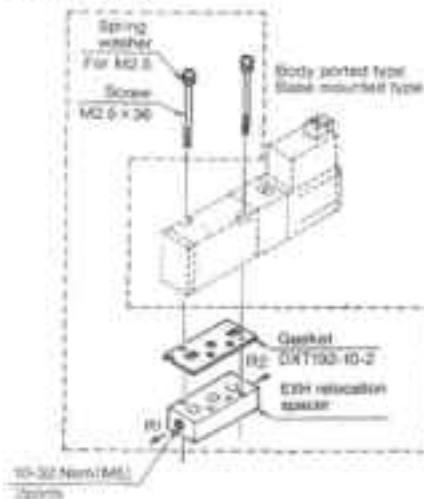
**Blank Plate Ass'y**

DXT192-13-1A



**EXII Relocation Spacer Ass'y**

DXT192-21-1A

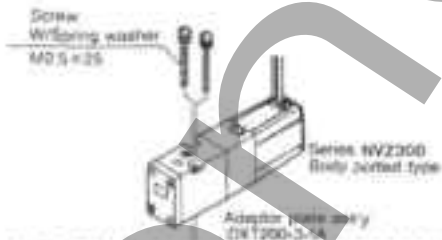


**Manifold Mounting of Series NVZ300 And NVZ3000**

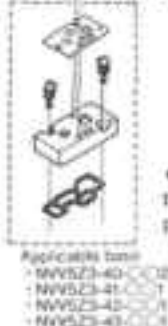
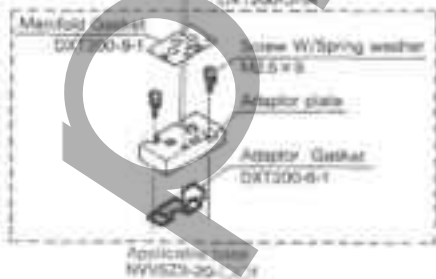
Adaptor plate ass'y / DXT200-3-1A

● Assemble according to the illustration.

Mount such that the series NVZ300 valve solenoid is on the same side as a single solenoid series NVZ3000 valves.

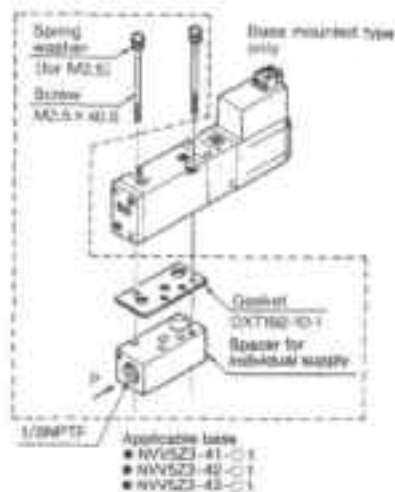


● In case of the base mounted type, the outlet of the 3 port valve is the B part of the manifold base.



**SUP Relocation Spacer Ass'y**

DXT192-40-1TA



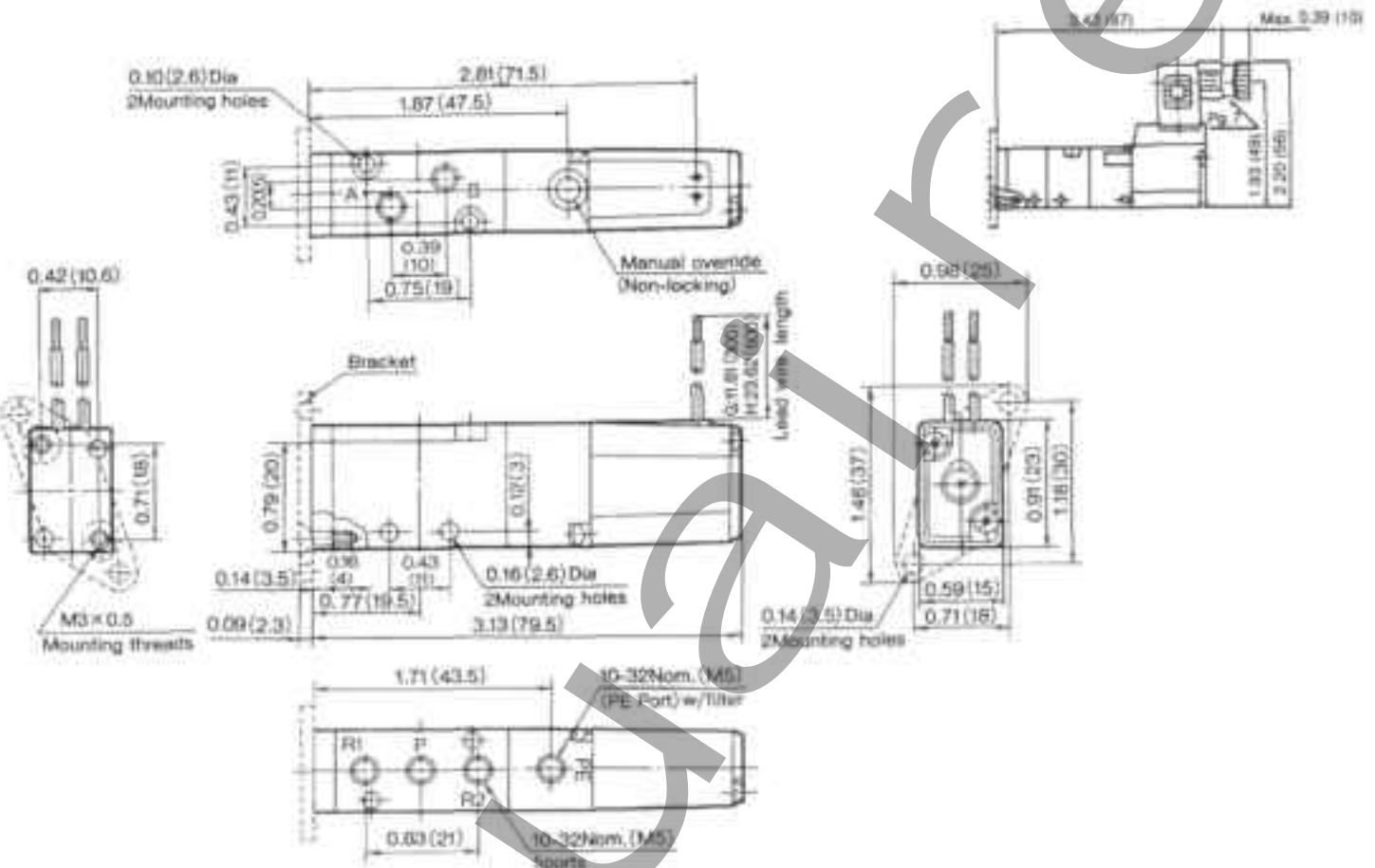


Body Ported Type / 2 Position Single Solenoid

inch (mm)

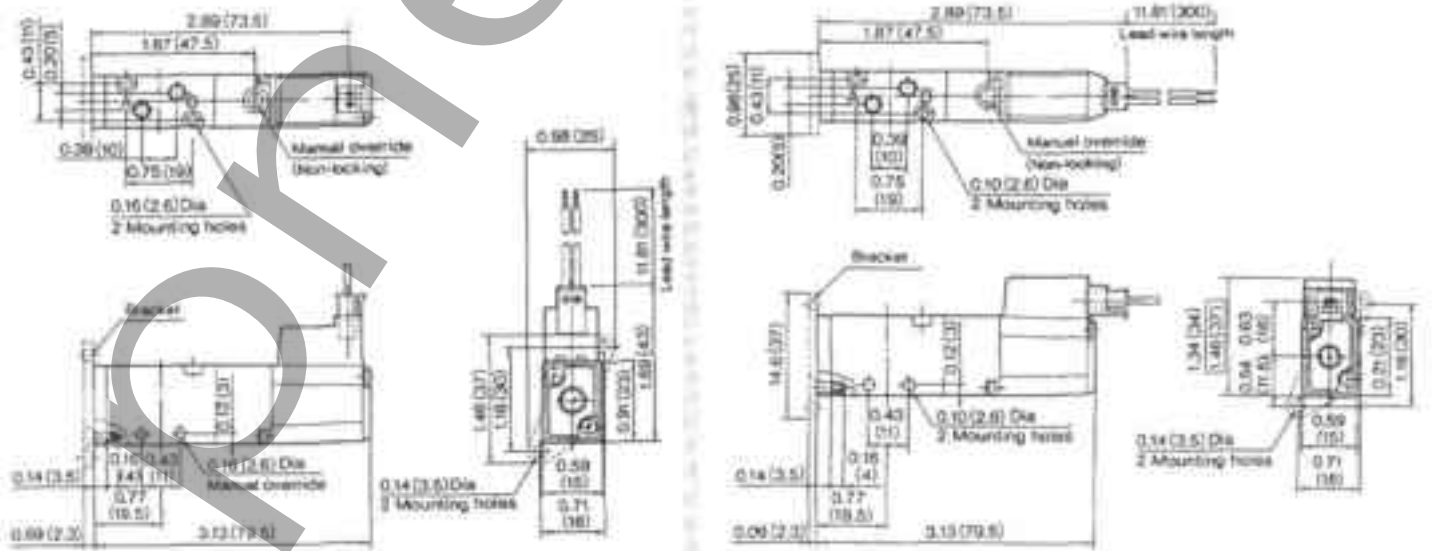
Grommet/NVZ3120-OG-M5  
NVZ3120-CH-M5

DIN connector (D)/  
NVZ3120-OD-M5



L type plug connector/NVZ3120-OL-M5

M type plug connector/NVZ3120-OM-M5



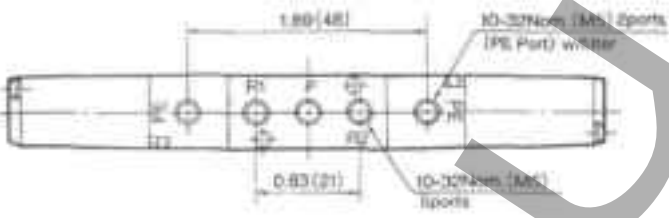
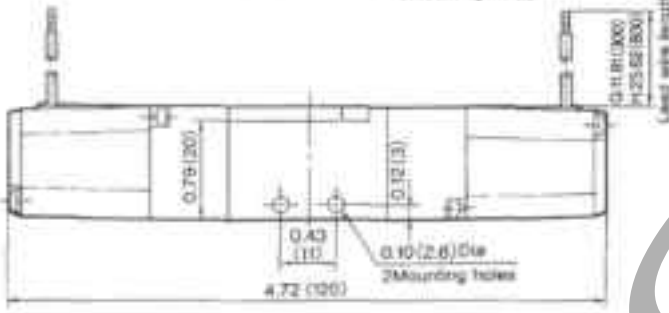
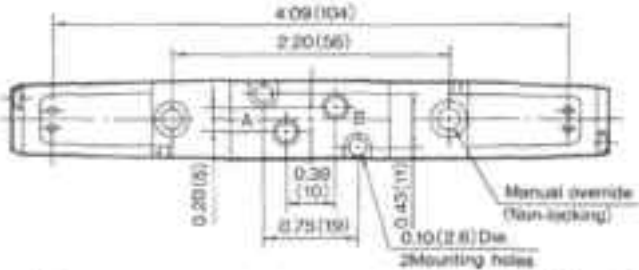
□ : With indicator light and surge voltage suppressor

Body Ported Type / 2 Position Double Solenoid

inch(mm)

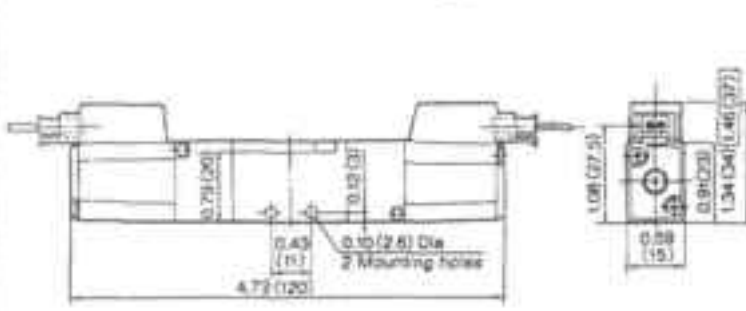
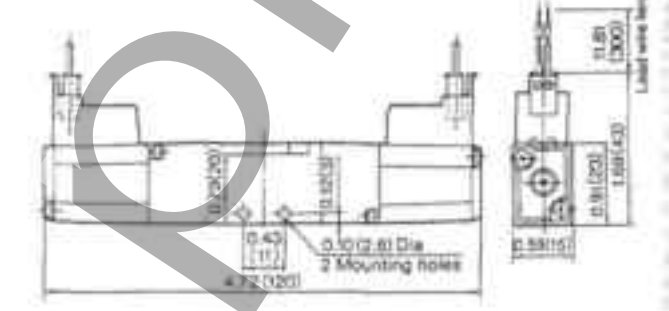
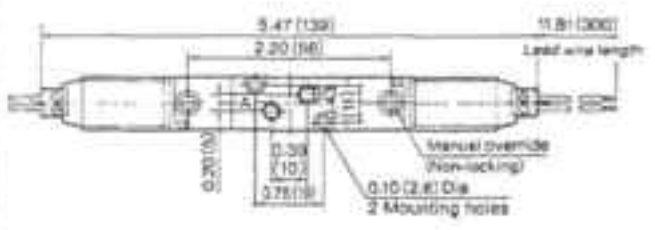
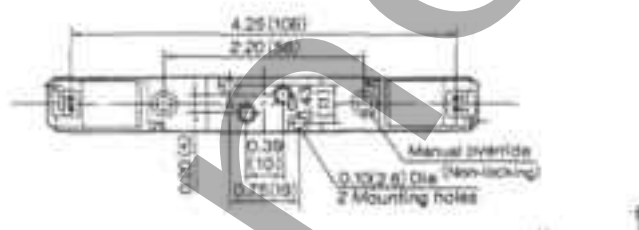
Grommet / NVZ3220-OG00-M5  
NVZ3220-OH00-M5

DIN connector (D) / NVZ3220-OD00-M5



L type plug connector / NVZ3220-OL00-M5

M type plug connector / NVZ3220-OM00-M5



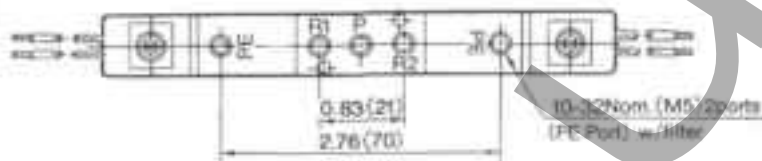
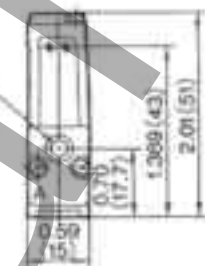
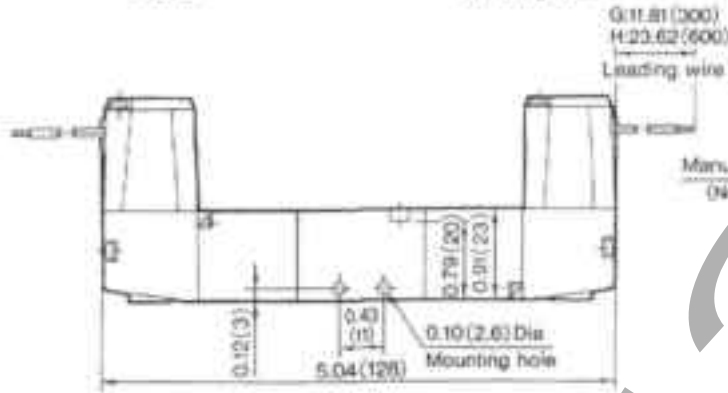
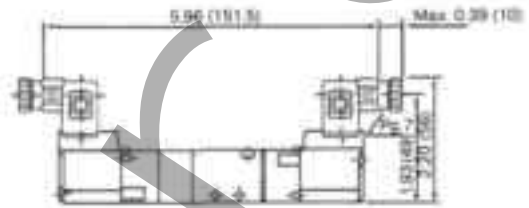
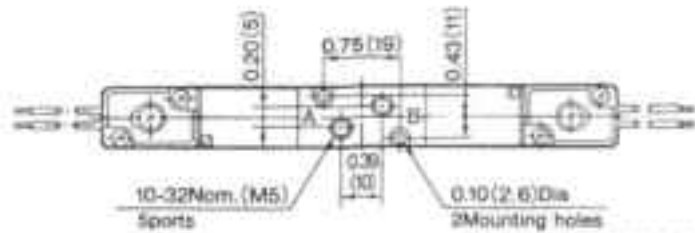
□ : With indicator light and surge voltage suppressor

inch (mm)

**Body Ported Type / 3 Position**

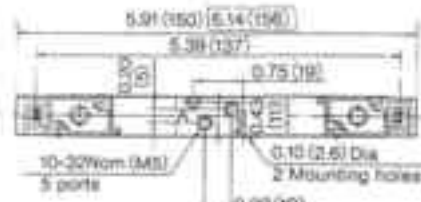
Grommet/NVZ3320-○G, NVZ3320-○H/Closed Center  
 NVZ3420-○G, NVZ3420-○H/Exhaust Center  
 NVZ3520-○G, NVZ3520-○H/Pressure Center

DIN connector (D)/  
 3  
 NVZ3420-○D○○-M5  
 5



**L type plug connector/NVZ3320-○L/Closed Center  
 NVZ3420-○L/Exhaust Center  
 NVZ3520-○L/Pressure Center**

**M type plug connector/NVZ3320-○M/Closed Center  
 NVZ3420-○M/Exhaust Center  
 NVZ3520-○M/Pressure Center**



□ With indicator light and surge voltage suppressor

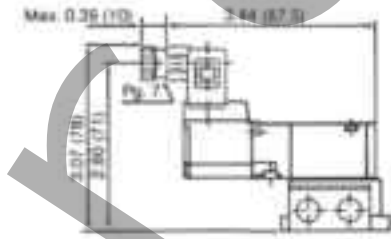
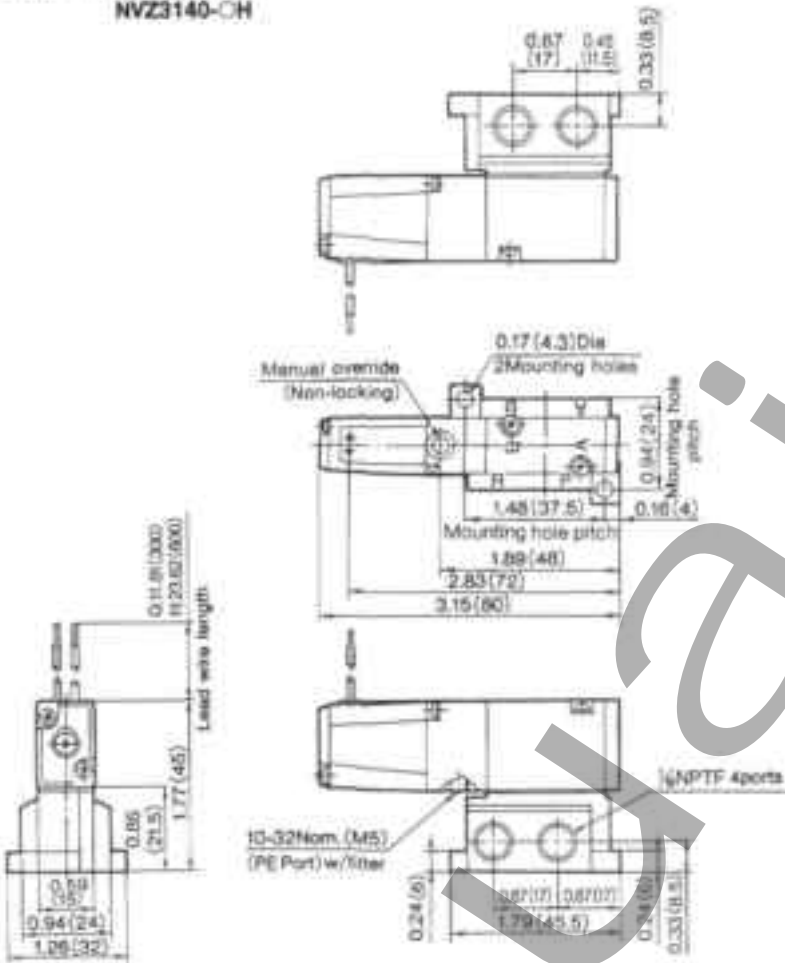


Base Mounted Type with Subplate / 2 Position Single Solenoid

inch (mm)

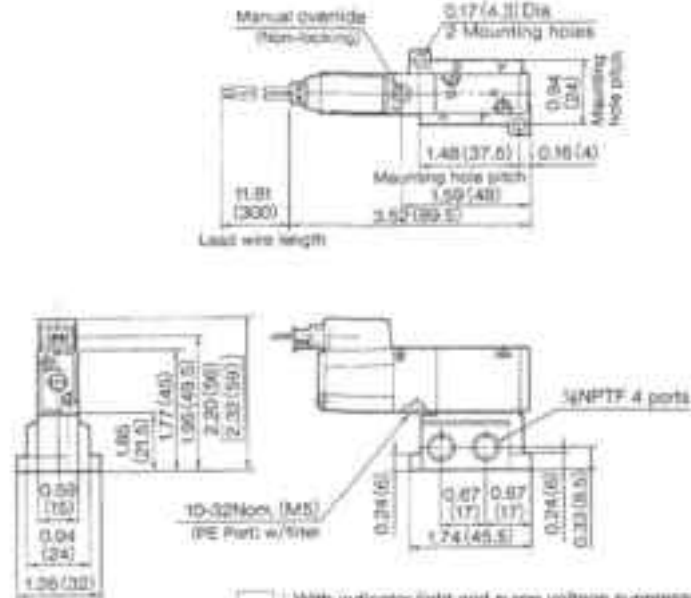
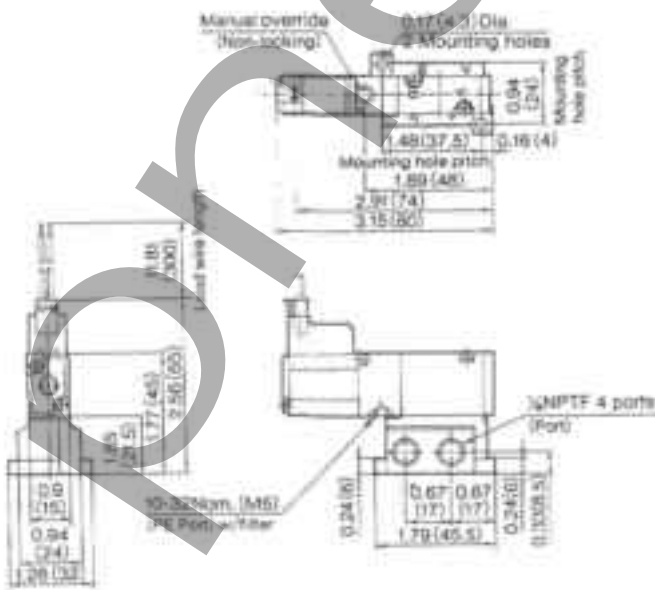
Grammet/NVZ3140-OG  
NVZ3140-OH

DIN connector (D)  
NVZ3140-OD/O-D1T



L type plug connector / NVZ3140-OL

M type plug connector / NVZ3140-OM



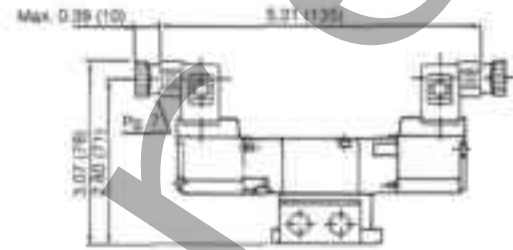
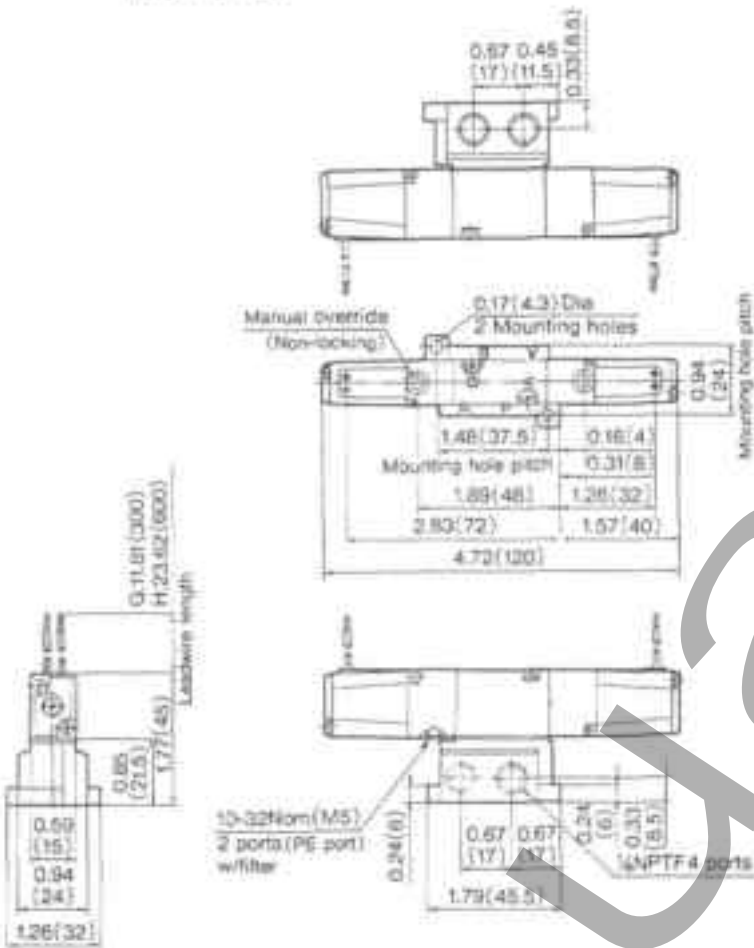
□ With indicator light and surge voltage suppressor

Base Mounted Type with Subplate / 2 Position Double Solenoid

inch (mm)

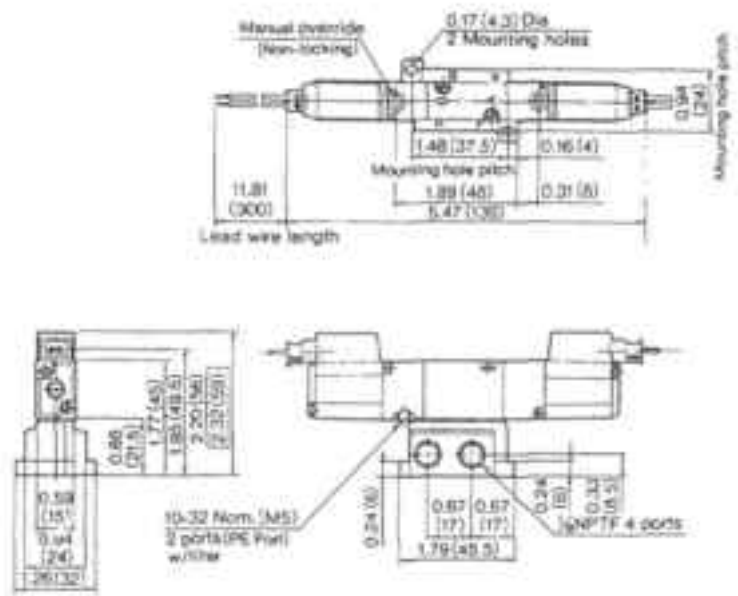
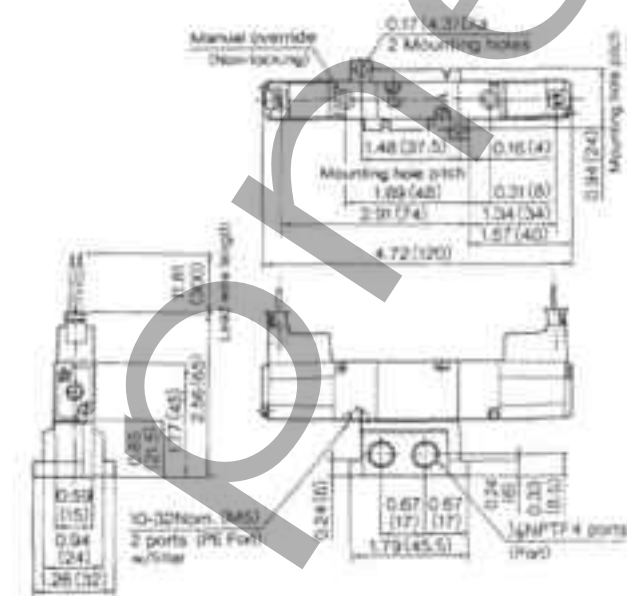
Grommet / NVZ3240-OG  
NVZ3240-OH

DIN connector (D) /  
NVZ3240-OD○○-01T



L type plug connector / NVZ3240-OL

M type plug connector / NVZ3240-OM



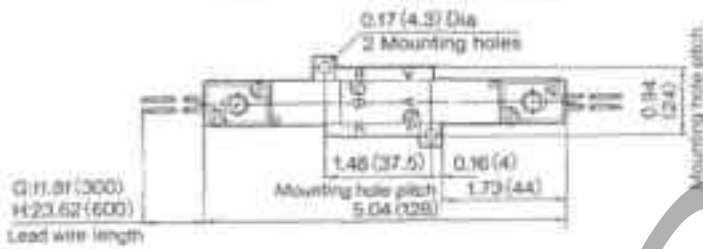
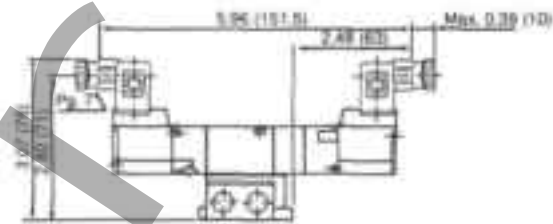
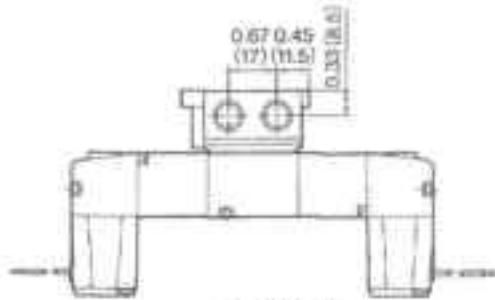
□ : With indicator light and surge voltage suppressor

Base Mounted Type with Subplate / 3 Position

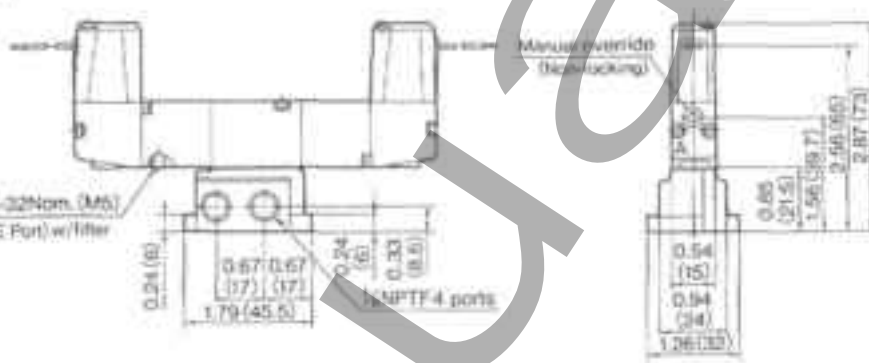
inch (mm)

Grommet/NVZ3340-○G, NVZ3340-○H/Closed Center  
 NVZ3440-○G, NVZ3440-○H/Exhaust Center  
 NVZ3540-○G, NVZ3540-○H/Pressure Center

DIN connector (D) /  
 3  
 NVZ3440-○D-○01T  
 5

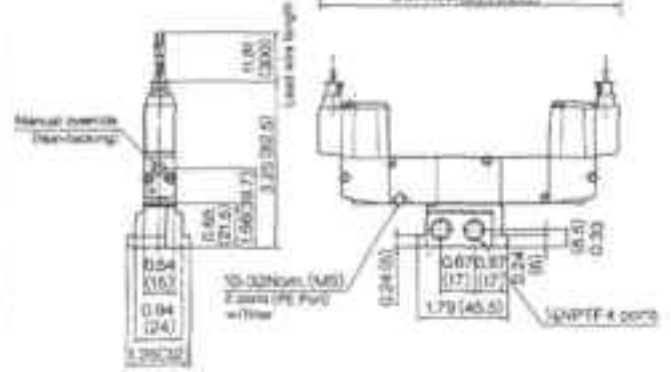
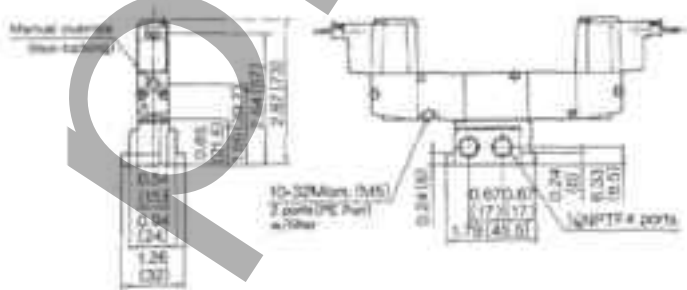
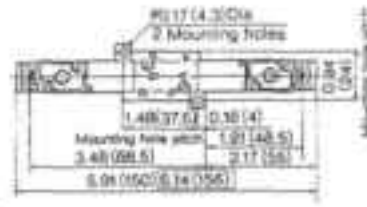
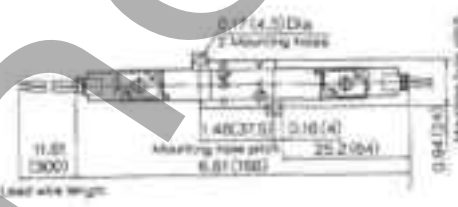


Lead wire length  
 G: 11.91 (300)  
 H: 23.62 (600)



L type plug connector/NVZ3340-○L/Closed Center  
 NVZ3440-○L/Exhaust Center  
 NVZ3540-○L/Pressure Center

M type plug connector/NVZ3340-○M/Closed Center  
 NVZ3440-○M/Exhaust Center  
 NVZ3540-○M/Pressure Center

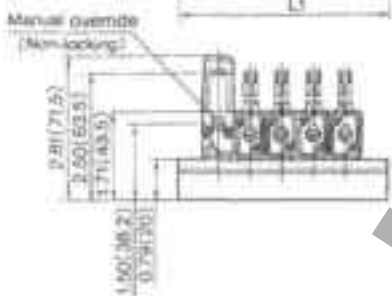
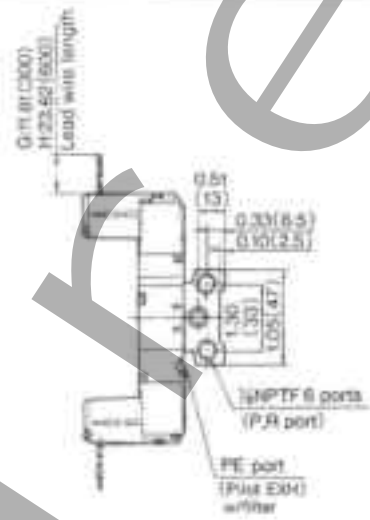
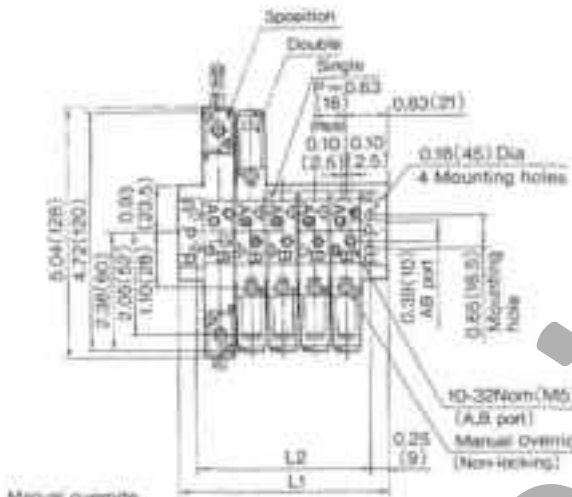


□ : With indicator light and surge voltage suppressor

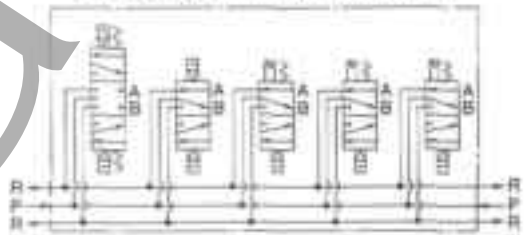


Type 20 Manifold/ Top Ported

Grommet (G) (H)

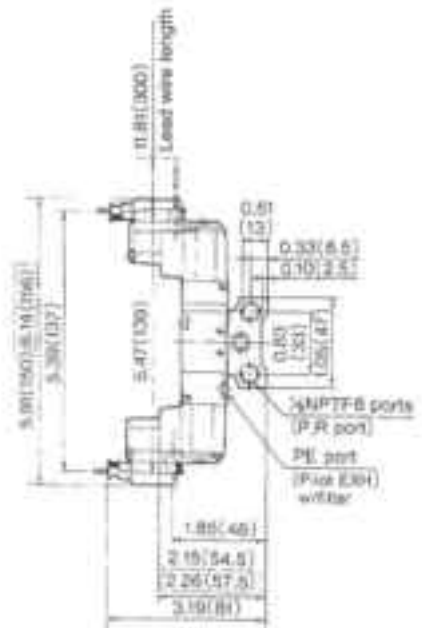
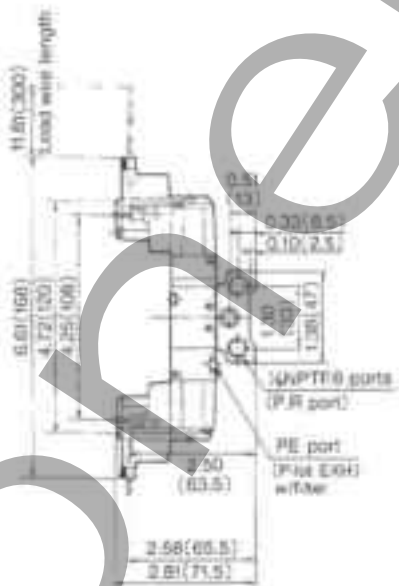


Example pneumatic circuit diagram



L type plug connector (L)

M type plug connector (M)



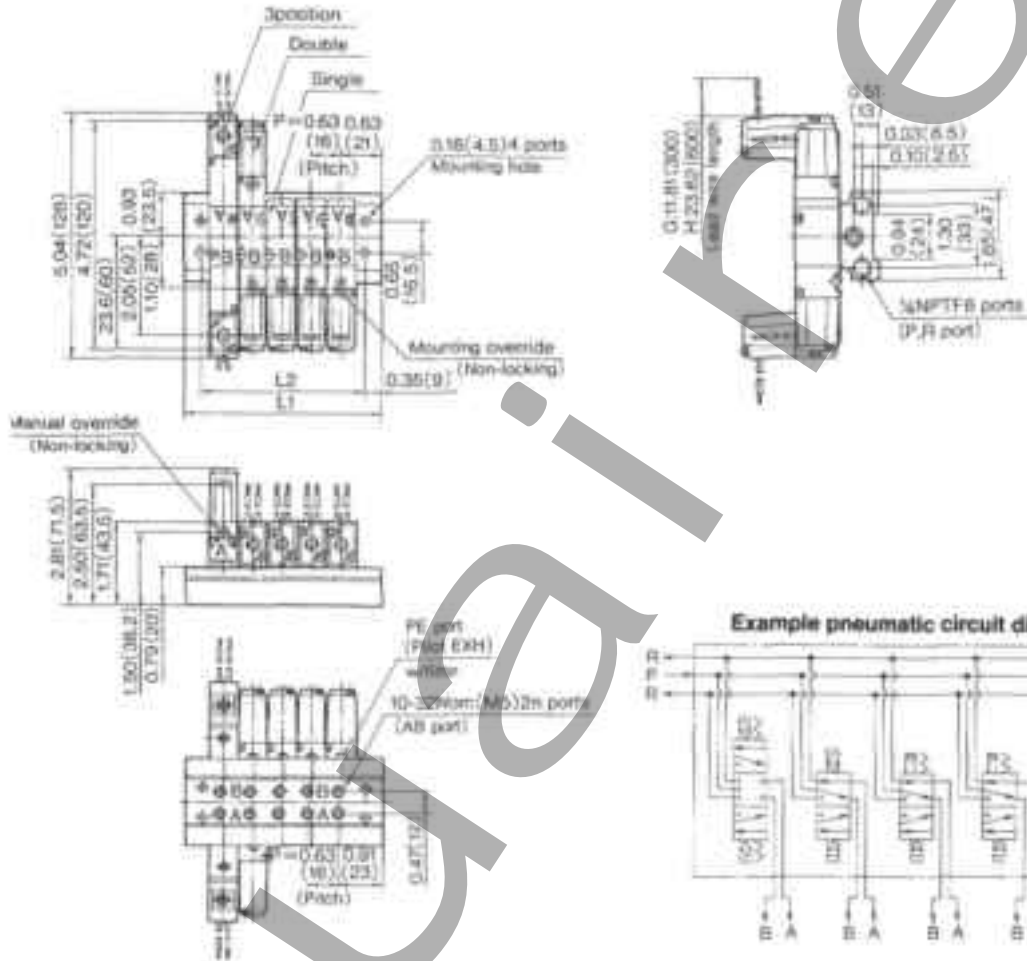
□ With indicator light and surge voltage suppressor

Station (n)	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L <sub>1</sub>	2.28 (58)	2.91 (74)	3.54 (90)	4.17 (106)	4.80 (122)	5.43 (138)	6.06 (154)	6.69 (170)	7.32 (186)	7.95 (202)	8.58 (218)	9.21 (234)	9.84 (250)	10.47 (266)	11.10 (282)	11.73 (298)	12.36 (314)	12.99 (330)	13.62 (346)
L <sub>2</sub>	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)

Type 40 Manifold/ Bottom Ported

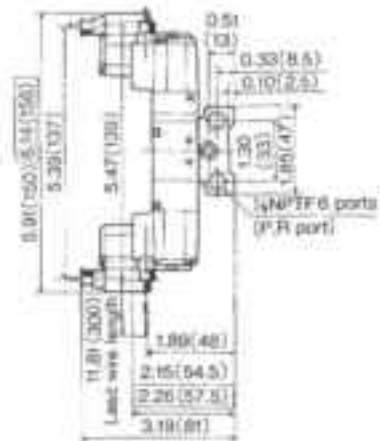
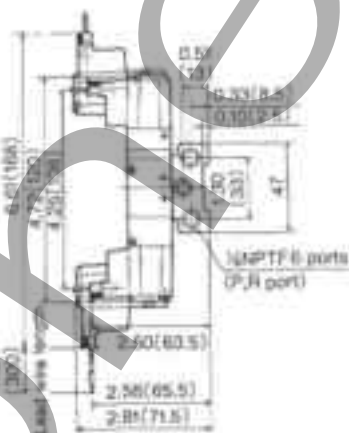
inch (mm)

Grommet (G) (H)



L type plug connector (L)

M type plug connector (M)



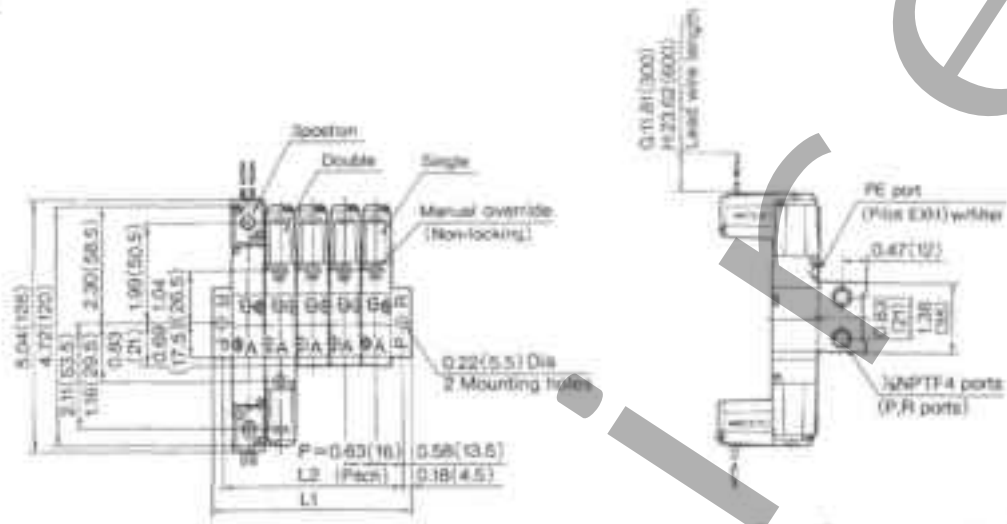
□ : With indicator light and surge voltage suppressor

Stations (n)	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	2.26 (58)	2.91 (74)	3.54 (90)	4.17 (106)	4.80 (122)	5.43 (138)	6.06 (154)	6.69 (170)	7.32 (186)	7.95 (202)	8.58 (218)	9.21 (234)	9.84 (250)	10.47 (266)	11.10 (282)	11.73 (298)	12.36 (314)	12.99 (330)	13.62 (346)
L <sub>s</sub>	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)

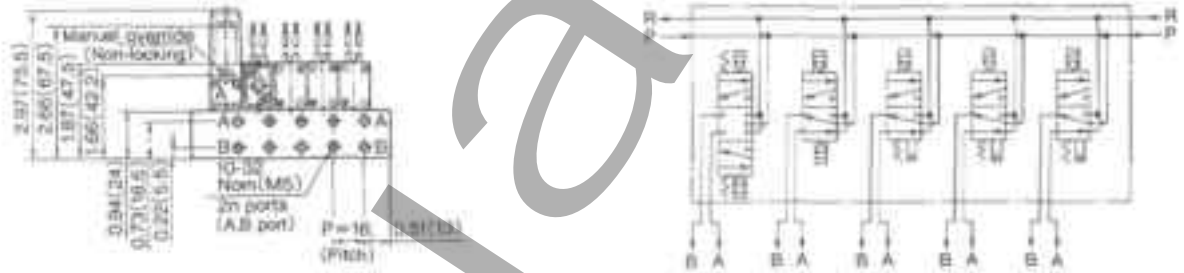
Type 41 Manifold/Side Ported

inch(mm)

Grommet (G)(H)

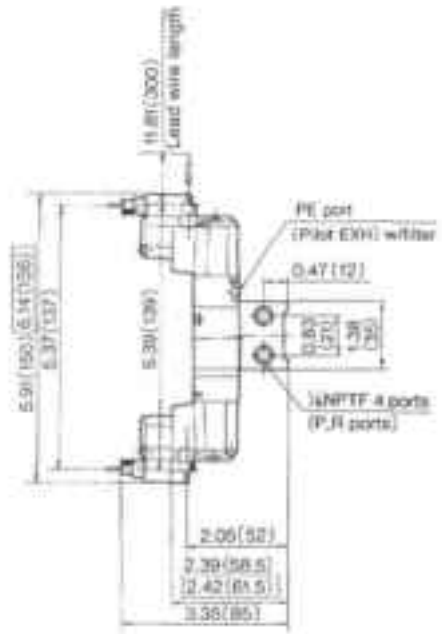
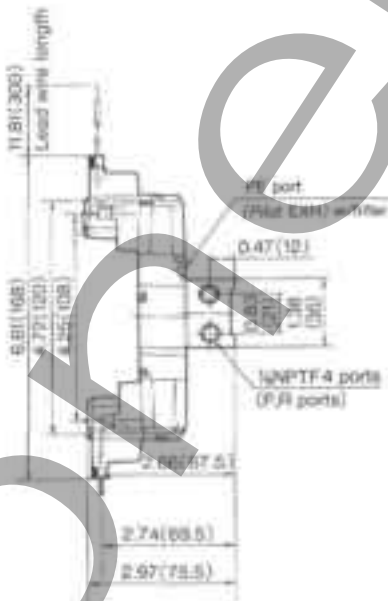


Example pneumatic circuit diagram



L type plug connector (L)

M type plug connector (M)



□: With indicator light and surge voltage suppressor

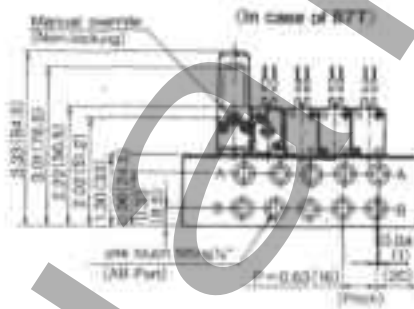
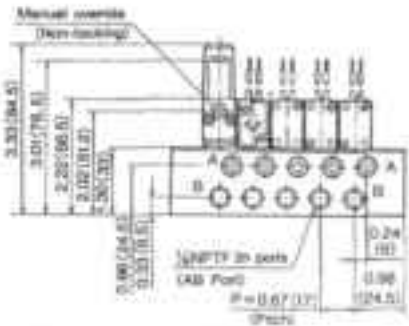
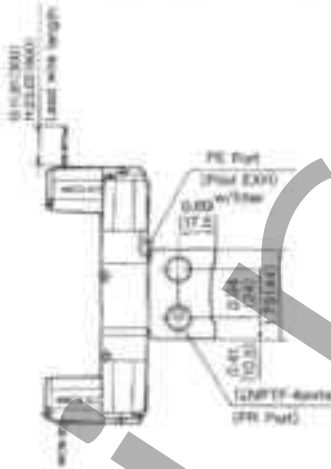
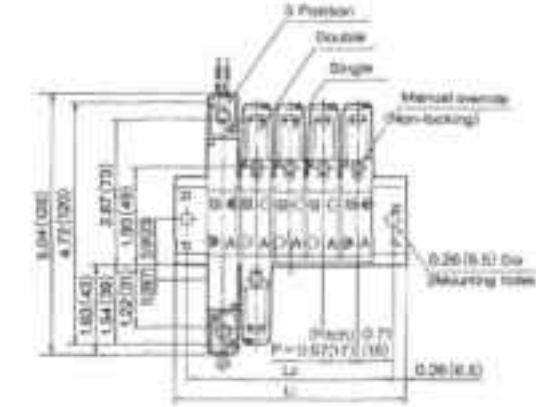
Stations (n)	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	2.05 (52)	2.68 (68)	3.31 (84)	3.94 (100)	4.57 (116)	5.20 (132)	5.83 (148)	6.46 (164)	7.09 (180)	7.72 (196)	8.35 (212)	8.98 (228)	9.61 (244)	10.24 (260)	10.87 (276)	11.50 (292)	12.13 (308)	12.76 (324)	13.39 (340)
L	1.69 (43)	2.32 (59)	2.95 (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)



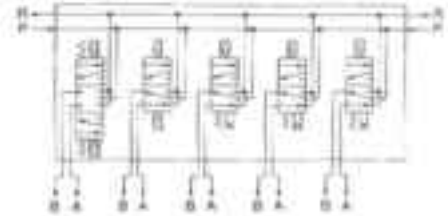
Type 42 Manifold/ Side Ported

Inch (mm)

Grommet (G) (H)

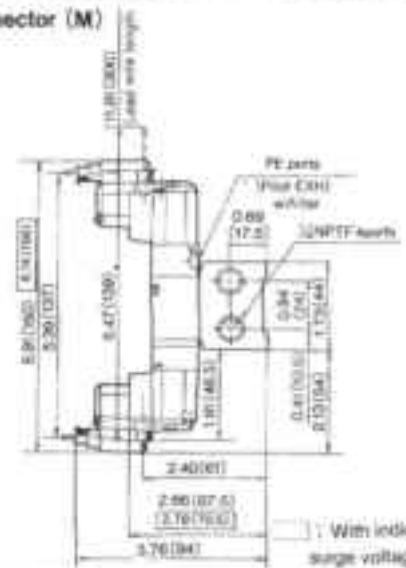
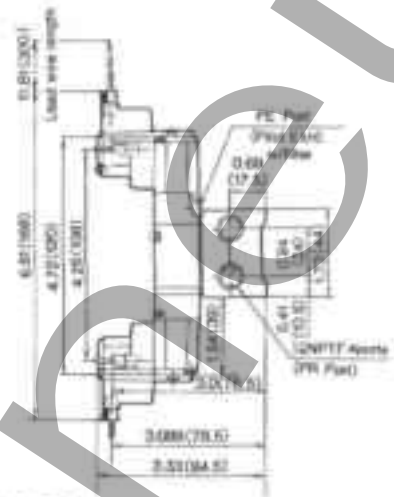


Example pneumatic circuit diagram



L type plug connector (L)

M type plug connector (M)



NV523-42-001-87T

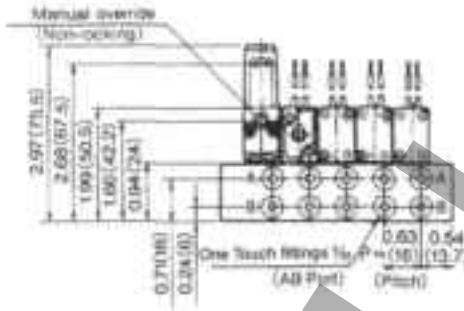
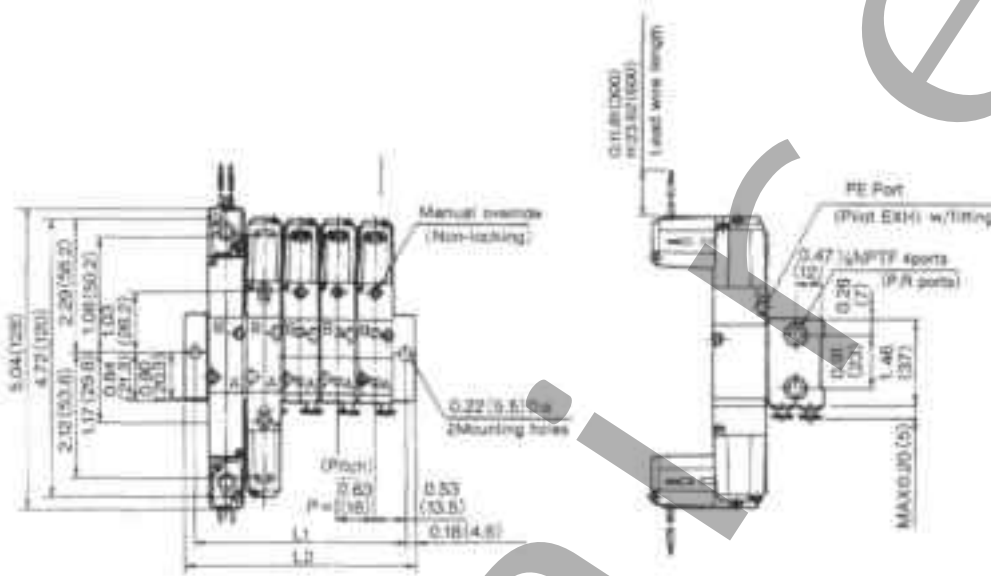
Stations (n)	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L <sub>i</sub>	2.56 (65)	3.19 (81)	3.82 (97)	4.45 (113)	5.08 (129)	5.71 (146)	6.34 (161)	6.97 (177)	7.60 (193)	8.23 (209)	8.86 (225)	9.49 (241)	10.12 (257)	10.75 (273)	11.38 (289)	12.01 (305)	12.64 (321)	13.27 (337)	13.90 (353)
L <sub>e</sub>	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)

NV523-42-001-01T

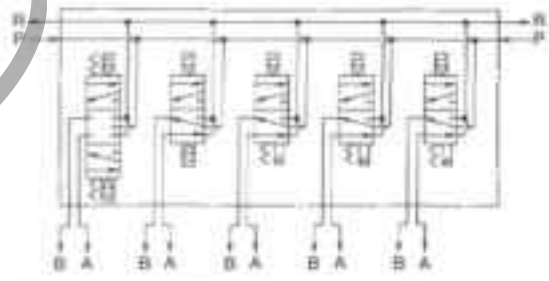
Stations (n)	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L <sub>i</sub>	2.60 (66)	3.27 (83)	3.94 (100)	4.61 (117)	5.28 (134)	5.94 (151)	6.61 (168)	7.28 (185)	7.95 (202)	8.62 (219)	9.29 (236)	9.96 (253)	10.63 (270)	11.30 (287)	11.97 (304)	12.64 (321)	13.31 (338)	13.98 (355)	14.65 (372)
L <sub>e</sub>	2.09 (53)	2.76 (70)	3.43 (87)	4.09 (104)	4.76 (121)	5.43 (138)	6.10 (155)	6.77 (172)	7.44 (189)	8.11 (206)	8.78 (223)	9.45 (240)	10.12 (257)	10.79 (274)	11.46 (291)	12.13 (308)	12.80 (325)	13.46 (342)	14.13 (359)

Type 43 Manifold / Side Ported

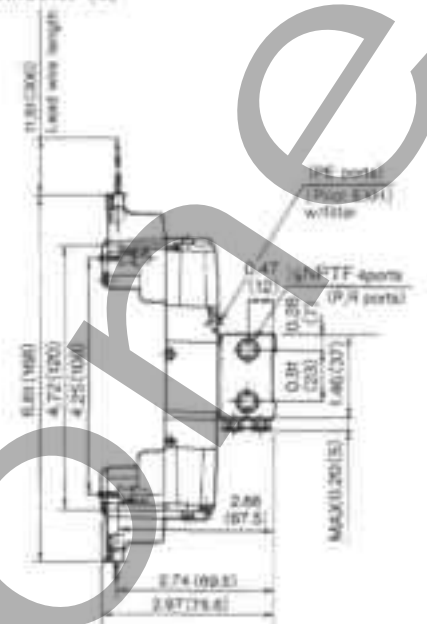
Grommet (G)



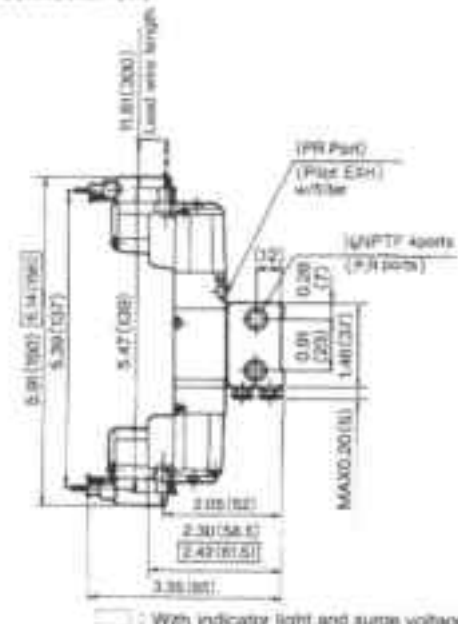
Example pneumatic circuit diagram



L type plug connector (L)



M type plug connector (M)



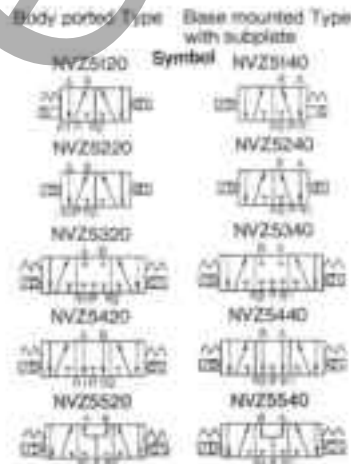
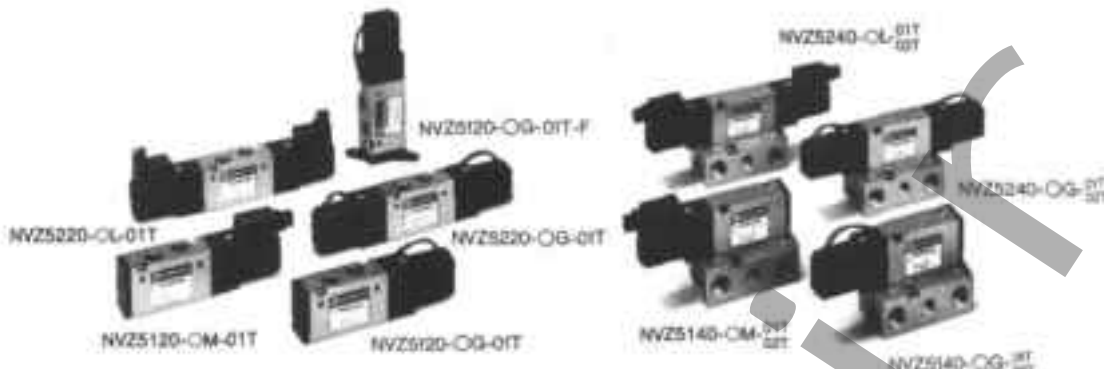
□ : With indicator light and surge voltage suppressor

Stations (n)	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L <sub>1</sub>	2.05 (52)	2.66 (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)
L <sub>2</sub>	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)

Cv0.7

# 5 Port Solenoid Valve NVZ5000

ORDER ONLINE



## Model

Body type	Type of actuation	Model	Cv factor	Port size	Weight lbs (gf)		
Body Ported type	2	Single	NVZ5120-00-01T	0.6	1/4 NPTF	0.26 (120)	
		Double	NVZ5220-00-01T			0.35 (160)	
	3	Closed center	NVZ5320-00-01T			0.3	0.70 (320)
		Exhaust center	NVZ5420-00-01T			0.2	0.70 (320)
		Pressure center	NVZ5520-00-01T			0.4	0.70 (320)
Base mounted type with subplate	2	Single	NVZ5140-00-01T	0.7	P, A, B : 1/4, 1/2 NPTF R1, R2 : 1/4 NPTF	0.44 (200)	
		Double	NVZ5240-00-01T			0.53 (240)	
	3	Closed center	NVZ5340-00-01T			0.3	0.88 (400)
		Exhaust center	NVZ5440-00-01T			0.2	0.88 (400)
		Pressure center	NVZ5540-00-01T			0.4	0.88 (400)

## Specifications

Fluid	Air, Inert gases
Operating pressure range	2position Single, 3position : 20~100PSI (1.5~7kgf/cm <sup>2</sup> ) 2position double : 15~100PSI (1.0~7kgf/cm <sup>2</sup> )
Ambient and fluid temperature	Max. 120°F(50°C)
Response time	2position : 20 ms or less 3position : 50 ms or less (70 PSI)
Max. Operating frequency	2position : 10 c/s 3position : 3c/s
Manual override	Non-locking push type, Slotted locking type, Knob locking type
Pilot exhaust	Individual, Common
Lubrication	Not required (Use turbine oil 1 ISO VG32 if lubrication is required.)
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 50Hz, 220V 50Hz, 24V 50Hz, 48V 50Hz
	DC	6V, 12V, 24V, 48V
Allowable voltage range	-15 ~ +10%	
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/80Hz 4.5VA/50Hz Holding : 3VA/80Hz 3.5VA/50Hz
Surge voltage suppressor	DC : Diode AC : ZNR	
Indicator light	DC : LED AC : Neon Lamp	

## With Foot Bracket

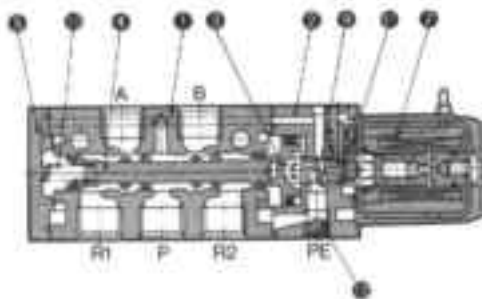
Valve model number	NVZ5120-00-01T-F NVZ5123-00-01T-F
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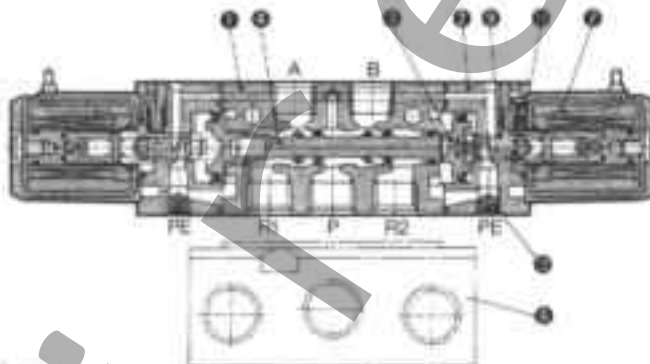


Construction/Parts List

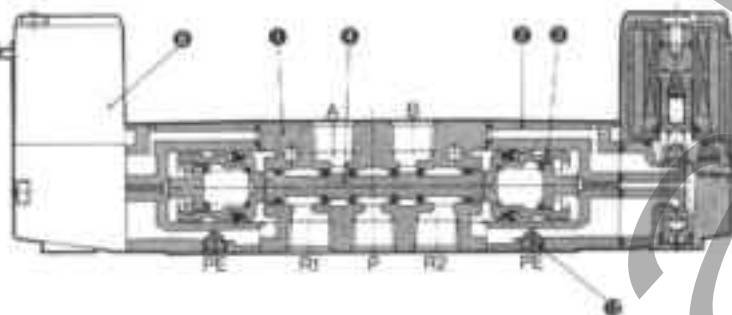
Single Solenoid



Double Solenoid



3 position Closed Center



Main Parts

No.	Description	Material	Notes
1	Body	Aluminum die cast	Metallic paint
2	Piston plate	Polycetal*	
3	Piston	Polycetal**	
4	Spool Ass'y	Aluminum and NBR	
5	End cover	Zinc die cast	
6	Sub plate	Aluminum die cast	Metallic paint

\* Zinc die cast is used on 3 position  
 \*\* Aluminum is used on 3 position

Spare Parts

No.	Description	Material	Parts number
7	Solenoid ass'y*	Stainless steel NBR	DXT170-C-00
8	Pilot valve ass'y	—	VZ111-000
9	Push rod	Polycetal	DXT192-32-1
10	Spool spring	Stainless steel	DXT199-16-1
11	O ring	NBR	13 X 11 X 1
12	Filter	Stainless	AXT500-17

\* Including armature ass'y

How To Order

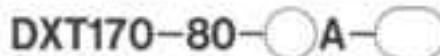
For 2 position valve



For 3 position valve



How To Order/Connector Ass'y



Lead wire color*	Lead wire length*
1* Blue/Blue	— 12 inch (300mm)
2* Red/Red	6 24 inch (600mm)
3 Gray/Gray	10 40 inch (1000mm)
4 Red/Black	15 60 inch (1500mm)
* Special Order:	20 80 inch (2000mm)
std. AC: '3'	25 100 inch (2500mm)
std. DC: '4'	30 120 inch (3000mm)

When ordering the valve with non-standard connector ass'y include both the valve and connector ass'y product numbers. (Example) in case of 80 inch lead wire

**NVZ5140-5MO-02T**  
**DXT170-80-4A-20**

Voltage*	Electrical entry	Lead wire length
1* 100VAC 50/60 Hz	G Grommet	12" (300mm)
2* 200VAC 50/60 Hz	H* Grommet	24" (600mm)
3 110VAC 50/60 Hz	L L type plug connector	With lead wire
4 220VZC 50/60 Hz	LO	Without connector
5 24V DC	M M type plug connector	With lead wire
6 12V DC	MO	Without connector
9* Others	D DIN connector	With DIN top
	DO†	Without DIN top

\* Special Order      † DOZ is not available.

Indicator light and surge	voltage suppressor
—	None
*Z	With indicator light and surge voltage suppressor
S	With surge voltage suppressor

\* Plug connector type only

How To Order : NVZ5000

Position

1: 2 position single solenoid



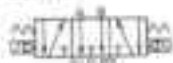
2: 2 position double solenoid



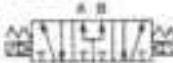
3: 3 position closed center



4: 3 position exhaust center



5: 3 position pressure center



For type 20, 21 manifold



Voltage

1*	100VAC 50/60 Hz
2*	200VAC 50/60 Hz
3	110VAC 50/60 Hz
4	220VAC 50/60 Hz
5	24V DC
6	12V DC
9*	Others

\* Special Order

Indicator light and surge voltage suppressor

-	None
Z*	With indicator light and surge voltage suppressor
S†	With surge voltage suppressor

\* Not avail. for grommet type.  
† Special order.

Optional accessory

F: If use of a foot bracket is expected, indicate that option when placing the initial order. Standard body cannot be retrofitted with a foot bracket.



(Special order only)

Surge voltage suppressor of grommet type.



Body ported

NVZ5 1 2 0 - 5 L - - - 01T - -

Base mounted

NVZ5 1 4 0 - 5 L - - - 01T

Body option \*

0: Individual pilot exhaust



3: Common exhaust for main and pilot valve



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

For type 40, 41, 42 manifold



Port size

01T: With 1/4" NPTF subplate (R1, R2 Ports) : 1/4" NPTF



- : 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.

Manual

- : Non-locking push type manual override



B: Slotted locking type manual override



C\*: Knob locking type manual override



\* Special order

# Manifold

## Specifications

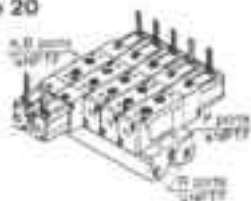
Type P (SUP), R (EXH)	Common SUP, EXH type
Valve stations	2~20 stations (Type 20 : 2~15 stations)
Options	Blank plate ass'y EXH/SUP Relocation Spacer Ass'y

Note: When using a NVZ5400 with a manifold, use a spacer ass'y because the exhaust of other solenoid valves may cause actuator malfunction.  
Please order the appropriate valves and/or blank plate ass'y with manifold base.



## Type And How To Order

### Type 20



**NVV5Z5-20-05 1-00T**

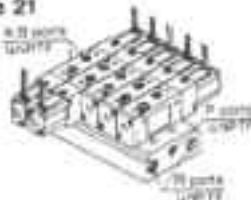
Stations*	
02	2 stations
15	15 stations

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

Applicable valves  
NVZ5120-000-01T  
NVZ5220-000-01T  
NVZ5320-000-01T  
NVZ5420-000-01T  
NVZ5520-000-01T

Optional accessory  
Blank plate ass'y: DXT199-22-1A  
EXH Relocation Spacer ass'y:  
DXT199-29-2TA

### Type 21

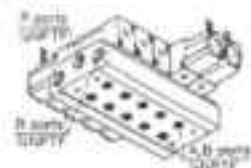


**NVV5Z5-21-05 1-00T**

Stations*	
02	2 stations
20	20 stations

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

### Type 40



**NVV5Z5-40-05 2-01T**

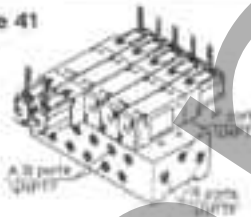
Stations*	
02	2 stations
20	20 stations

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

Applicable valves  
NVZ5140-000  
NVZ5240-000  
NVZ5340-000  
NVZ5440-000  
NVZ5540-000

Optional accessory  
Blank plate ass'y: DXT199-22-1A  
EXH Relocation Spacer:  
DXT199-29-2TA  
SUP Relocation Spacer:  
(only for type 41, 42, 43):  
DXT199-35-1TA

### Type 41

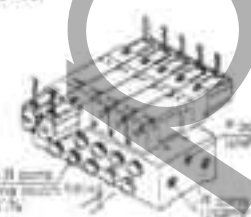


**NVV5Z5-41-05 1-01T**

Stations*	
02	2 stations
20	20 stations

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

### Type 42



**NVV5Z5-42-05 1-B7T**

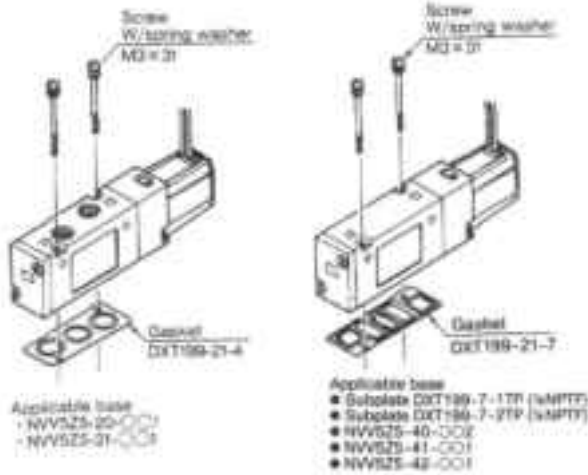
Stations*	
02	2 stations
20	20 stations

\* Size of A, B port  
**B7T** One touch fitting for 1/4" tube  
**B9T** One touch fitting for 3/8" tube

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

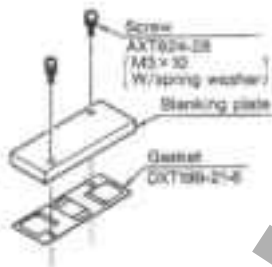


**Proper Combinations of Solenoid Valve, Gasket, Manifold / Subplate**



**Blank Plate Ass'y**

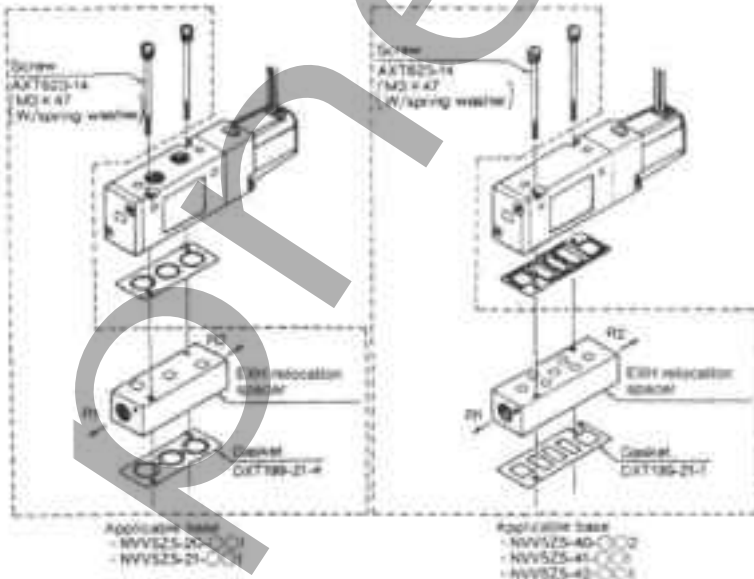
DXT199-22-1A



**EXH Relocation Spacer Ass'y**

DXT199-29-1TA

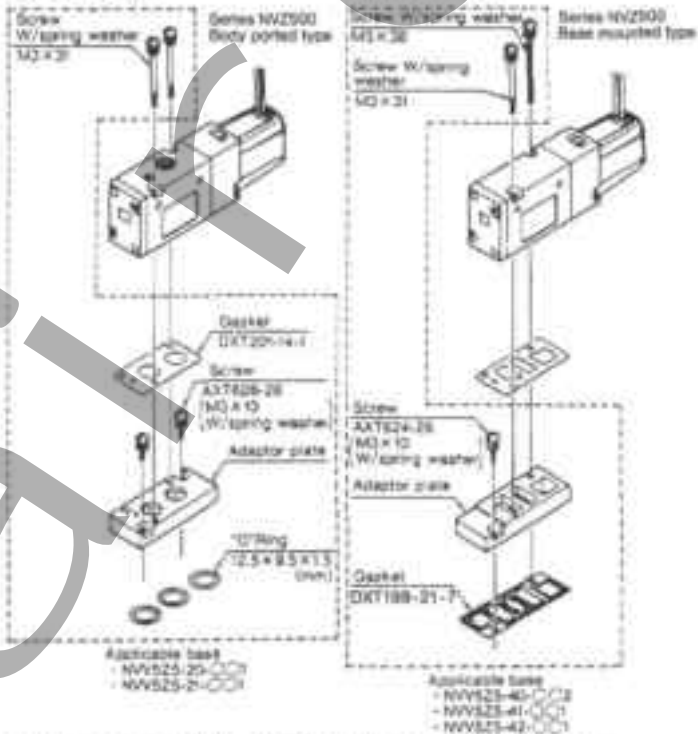
DXT199-29-2TA



**Manifold Mounting of NVZ500 And NVZ5000**

Adaptor plate ass'y DXT201-3-1A

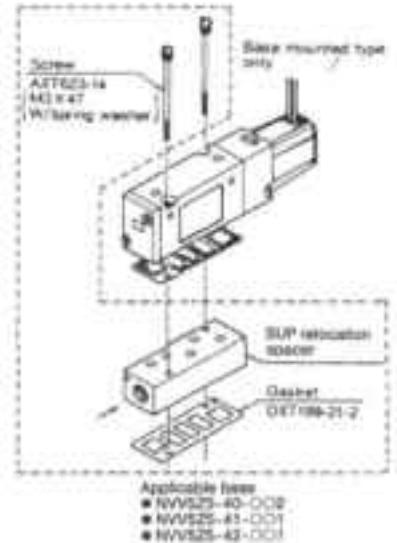
Adaptor plate ass'y DXT201-3-2A



• If the base mounted type NVZ500 valve is mounted such that the solenoid is on the same side as a single solenoid series NVZ5000 valve, the outlet of the 3 port valve is the B port of the manifold base.

**SUP Relocation Spacer Ass'y**

DXT199-35-1TA

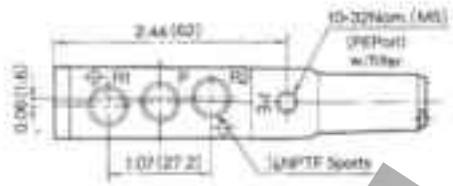
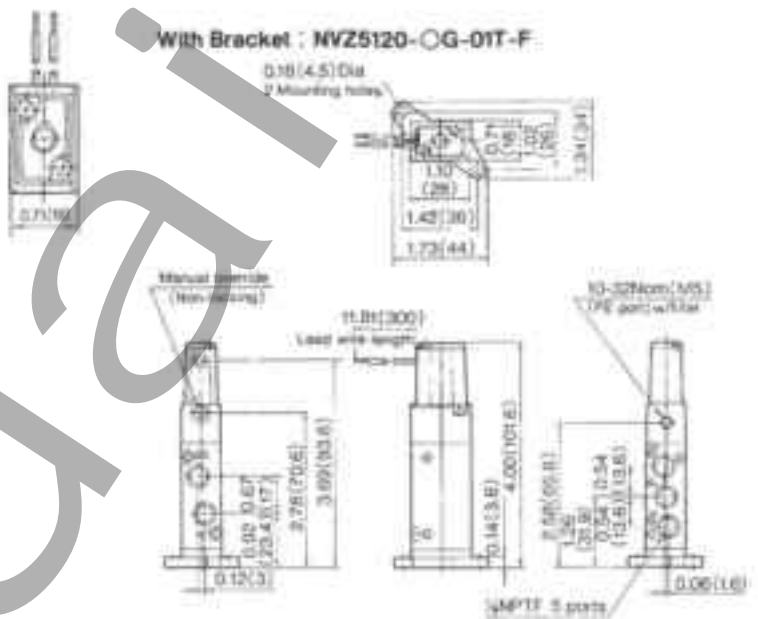
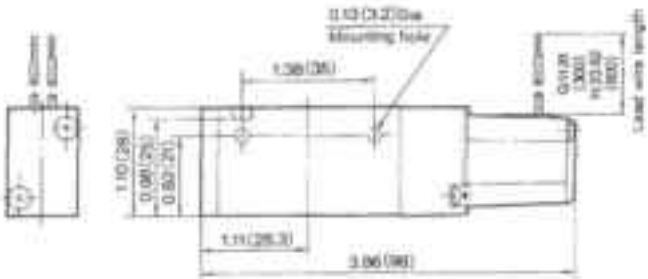
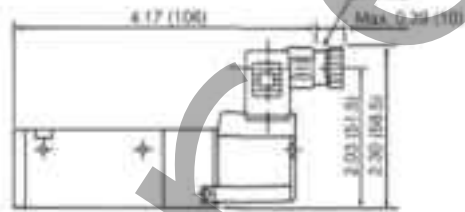
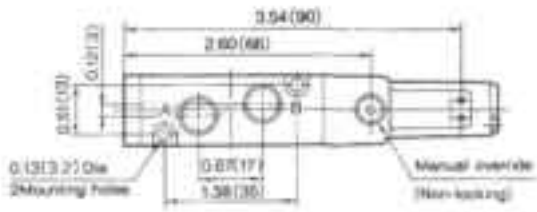


Body Ported Type / 2 Position Single Solenoid

inch (mm)

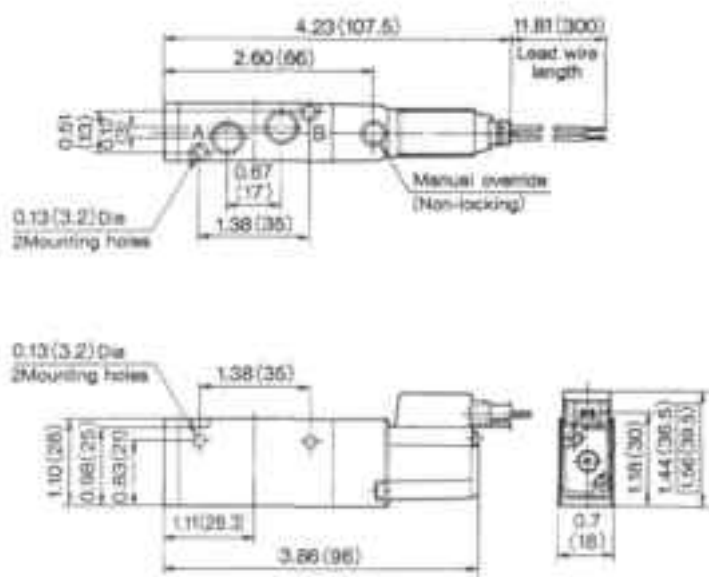
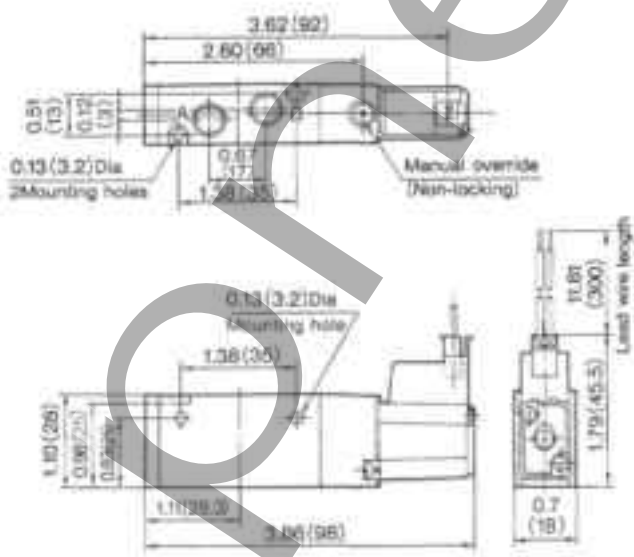
Grommet/NVZ5120-OG00-01T  
NVZ5120-OH00-01T

DIN connector (D)/  
NVZ5120-CD00-01T



L type plug connector/NVZ5120-OL00-01T

M type plug connector/NVZ5120-OM00-01T



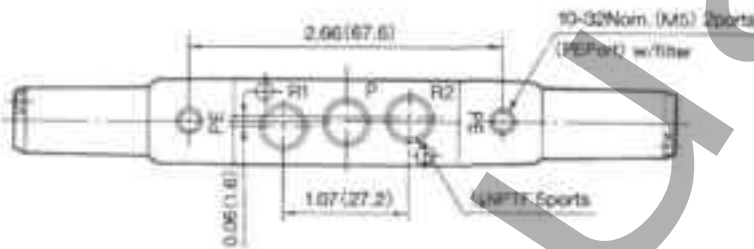
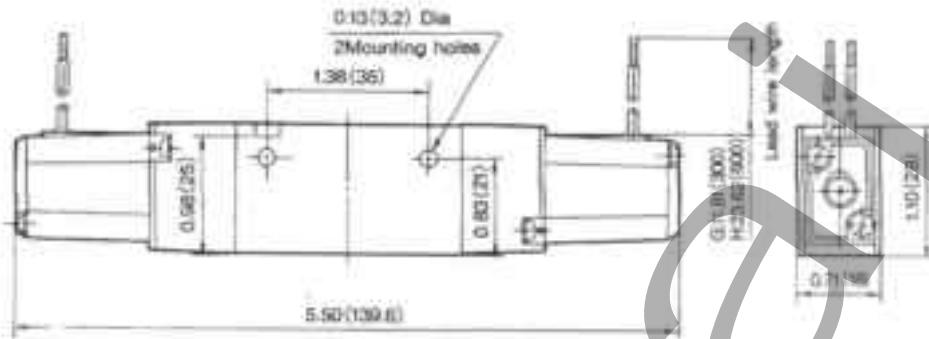
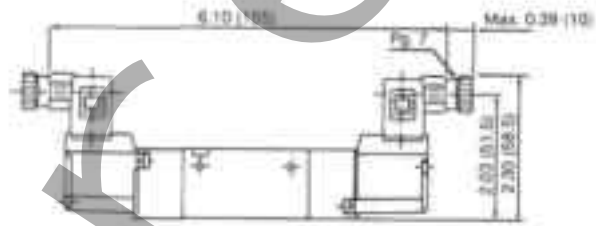
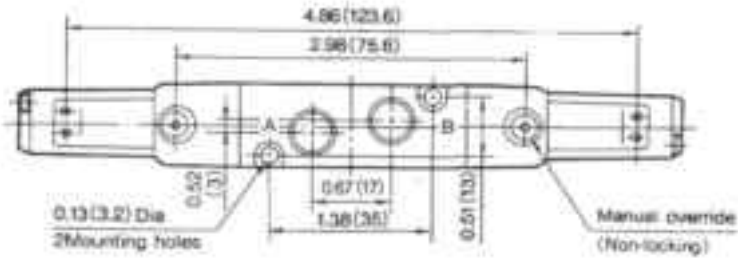
□ : With indicator light and surge voltage suppressor

Body Ported Type / 2 Position Single Solenoid

inch (mm)

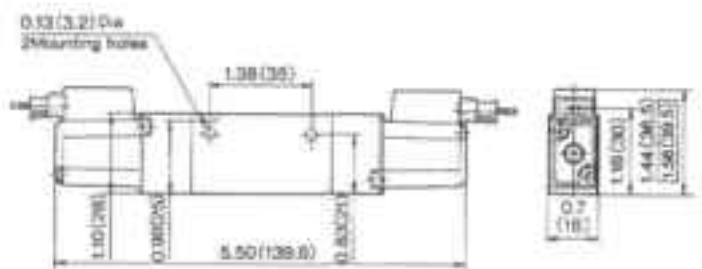
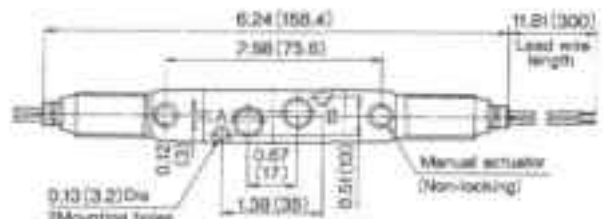
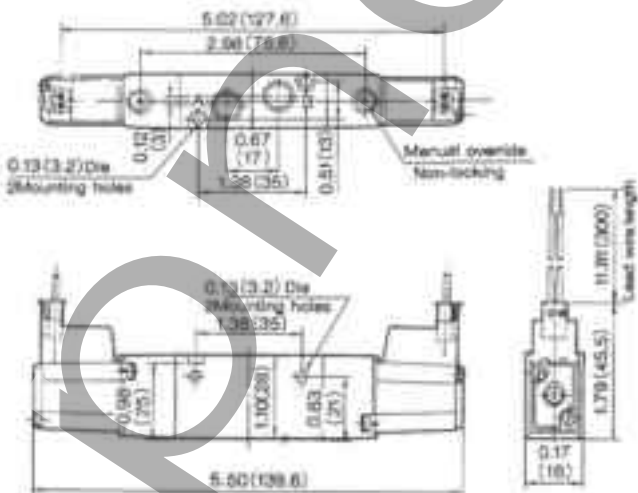
Grommet/NVZ5220-OG00-01T  
NVZ5220-CH00-01T

DIN connector (D)/  
NVZ5220-OD00-01T



L type plug connector/NVZ5220-OL00-01T

M type plug connector/NVZ5220-OM00-01T



□ : With indicator light and surge voltage suppressor

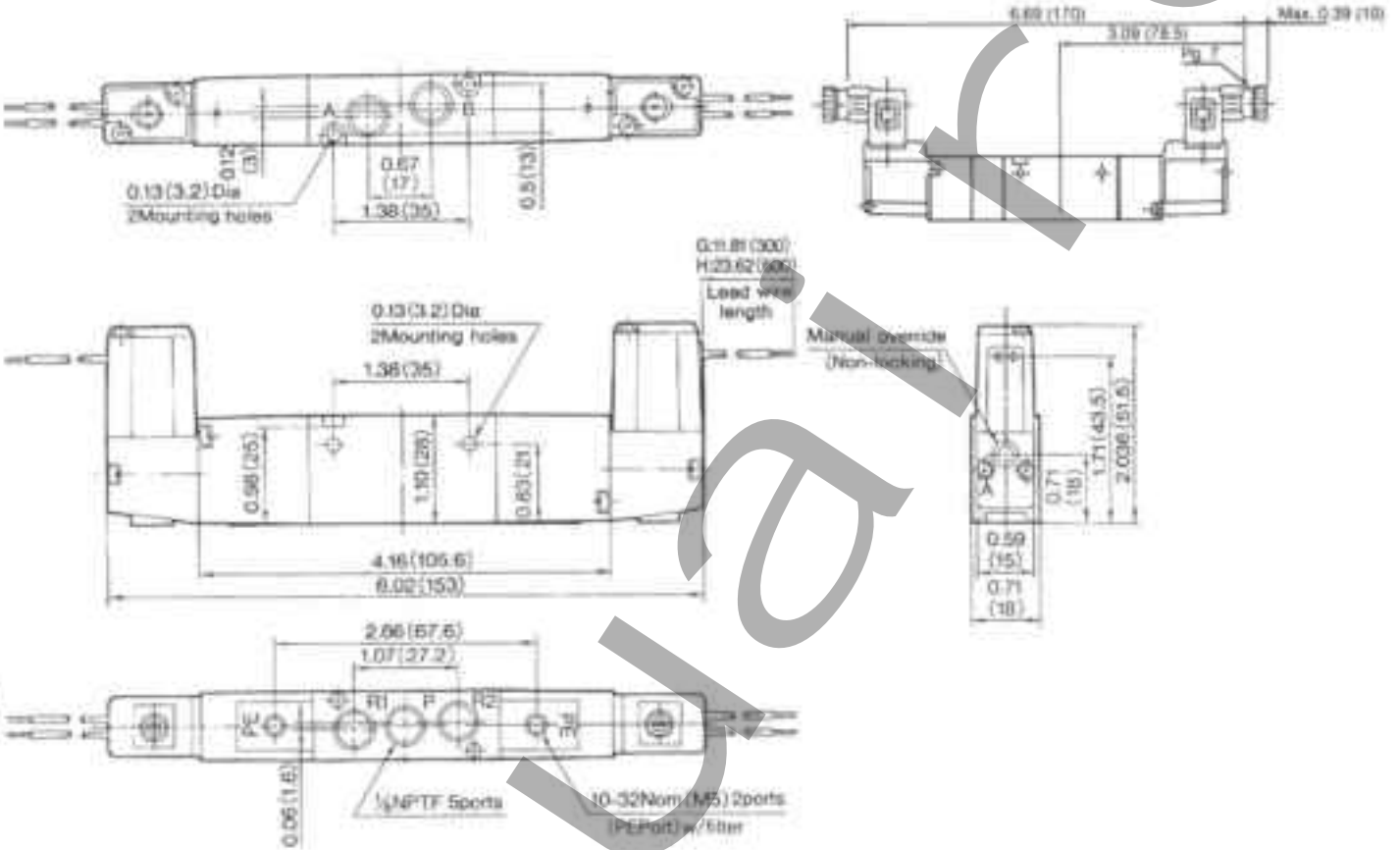


inch (mm)

**Body Ported Type / 3 Position**

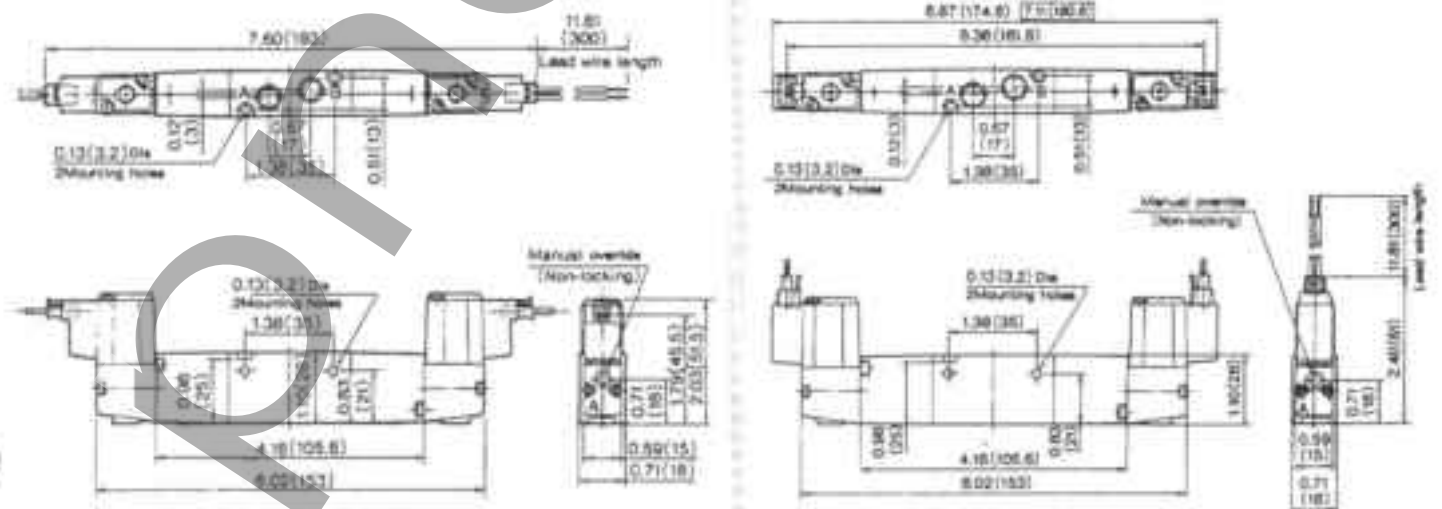
Grommet/NVZ5320-○G. NVZ5320-○H/Closed center  
 NVZ5420-○G. NVZ5420-○H/Exhaust center  
 NVZ5520-○G. NVZ5520-○H/Pressure center

DIN connector (D)/  
 3  
 NVZ5420-○D○-01T  
 5



**L type plug connector/NVZ5320-○L/Closed center  
 NVZ5420-○L/Exhaust center  
 NVZ5520-○L/Pressure center**

**M type plug connector/NVZ5320-○M/Closed center  
 NVZ5420-○M/Exhaust center  
 NVZ5520-○M/Pressure center**



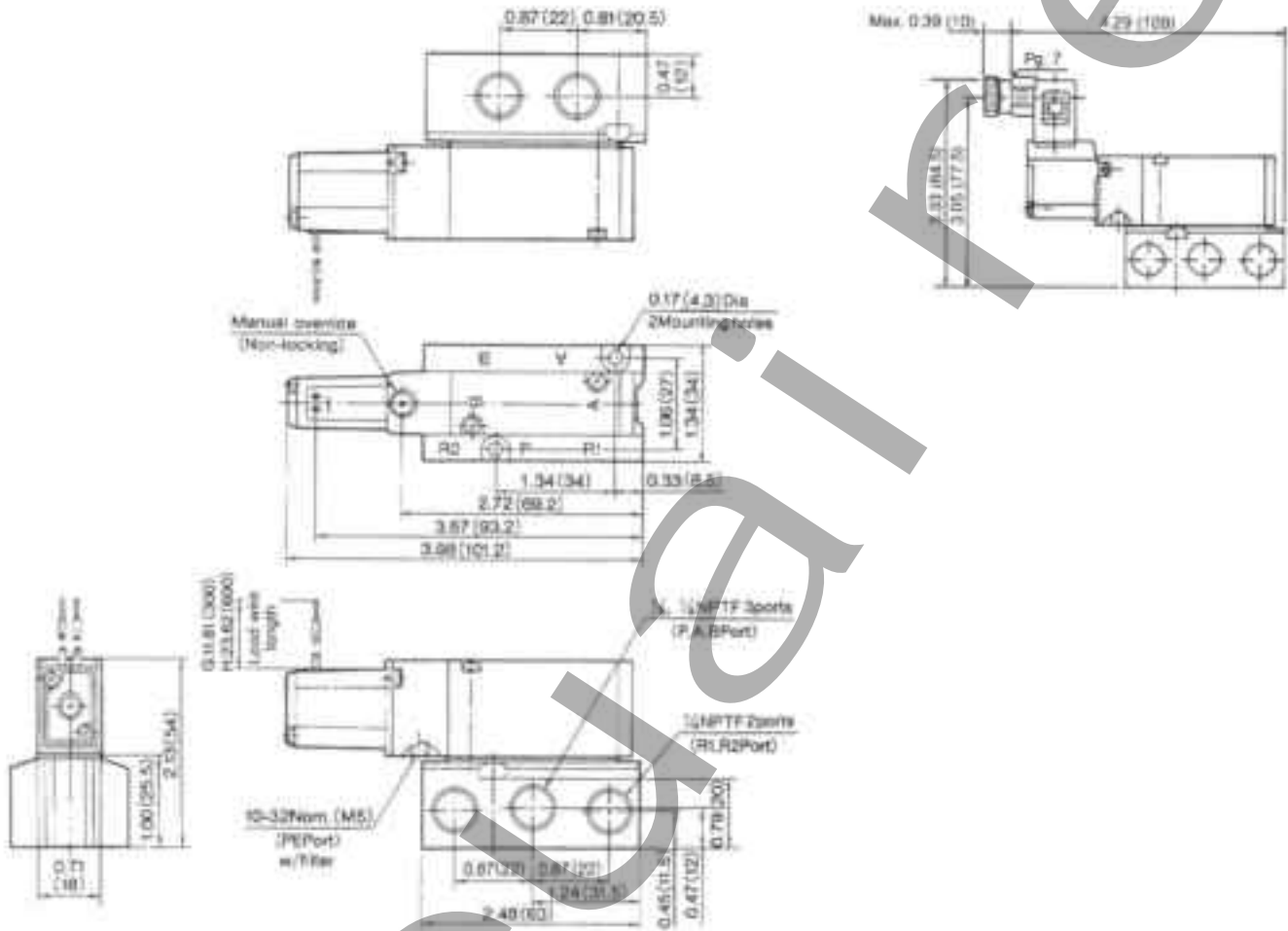
□ : With indicator light and surge voltage suppressor

Base Mounted Type with Subplate / 2 Position Single Solenoid

inch (mm)

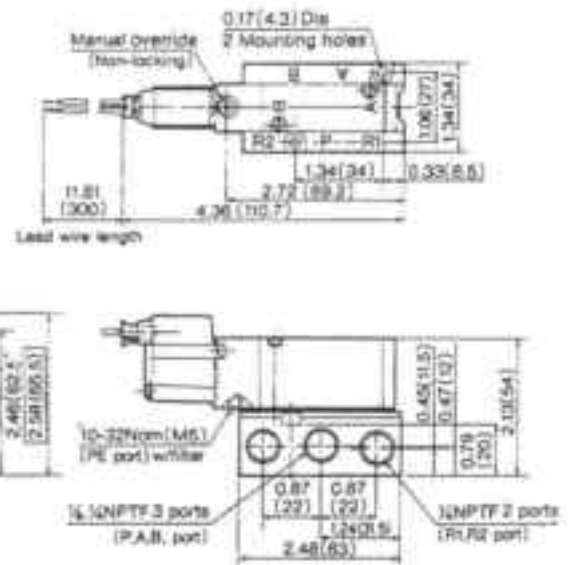
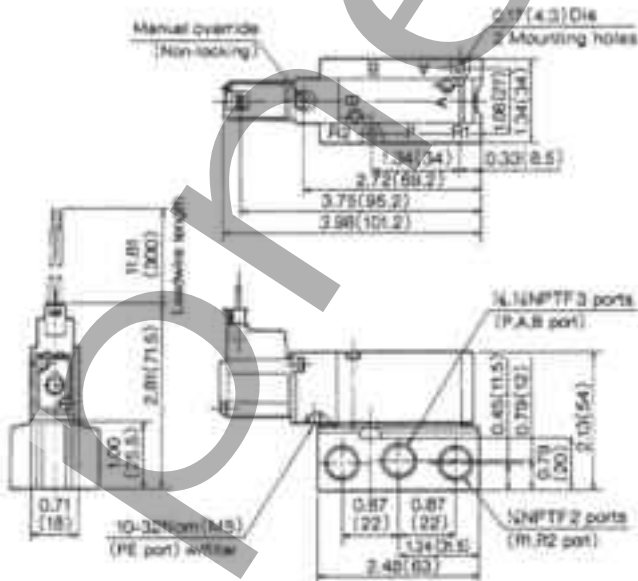
Grommet / NVZ5140-OG  
NVZ5140-OH

DIN connector (D) /  
NVZ5140-OD ○○-01T  
02T



L type plug connector / NVZ5140-OL

M type plug connector / NVZ5140-OM



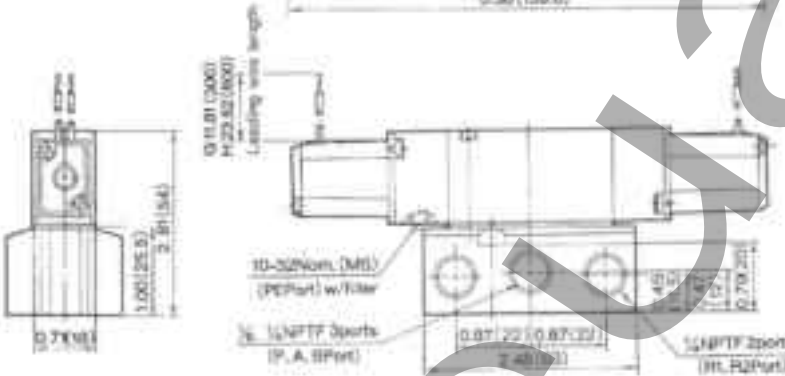
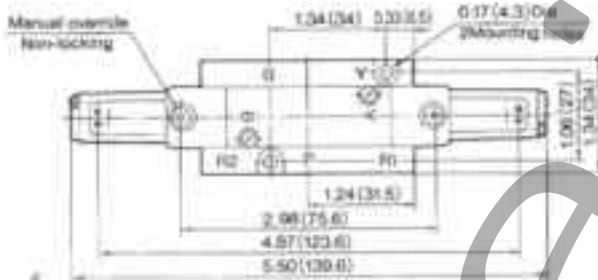
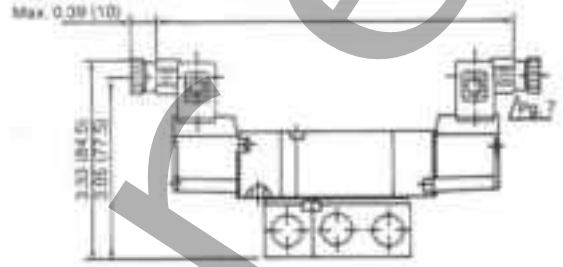
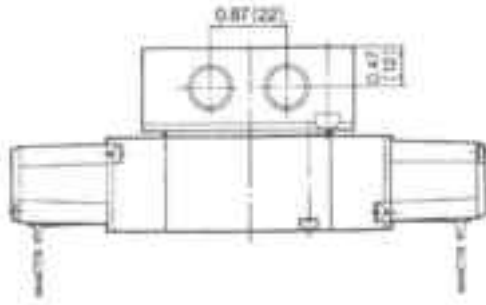
□ : With indicator light and surge voltage suppressor

Base Mounted Type with Subplate / 2 Position Double Solenoid

inch (mm)

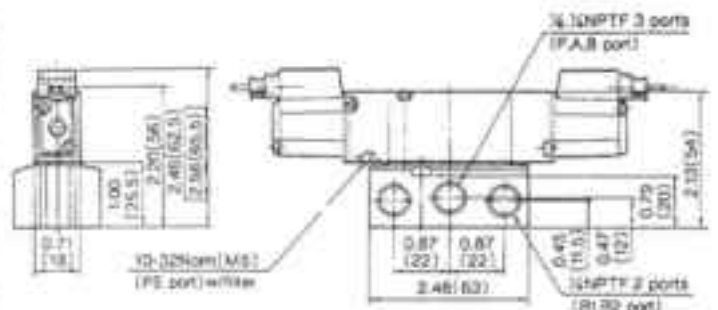
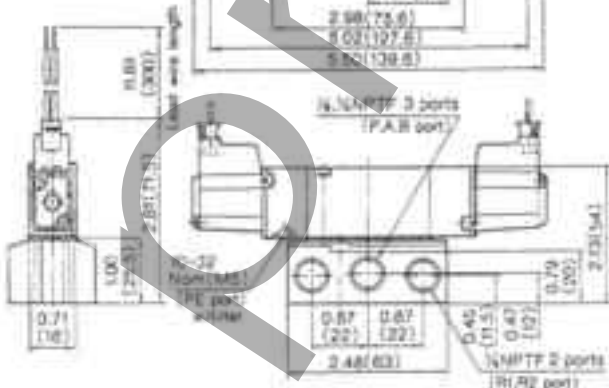
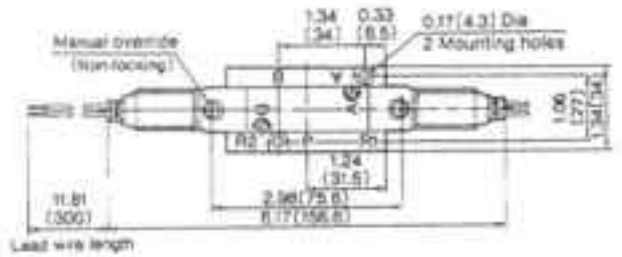
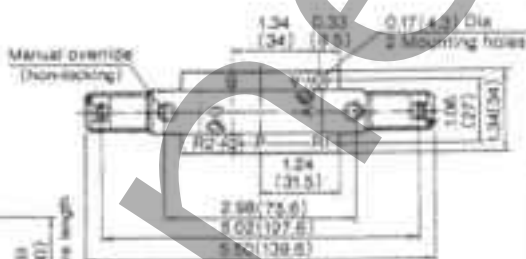
Grommet / NVZ5240-OG  
NVZ5240-OH

DIN connector (D) /  
NVZ5240-OD○○-01T  
02T



L type plug connector / NVZ5240-OL

M type plug connector / NVZ5240-OM



□ With indicator light and surge voltage suppressor

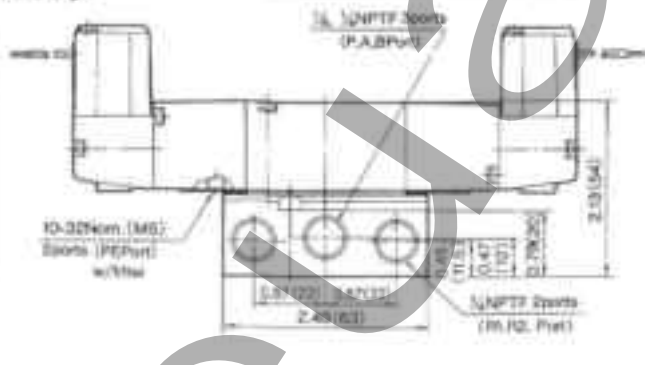
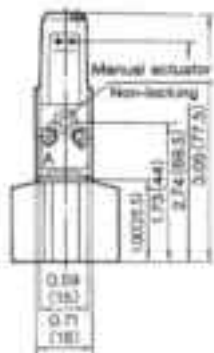
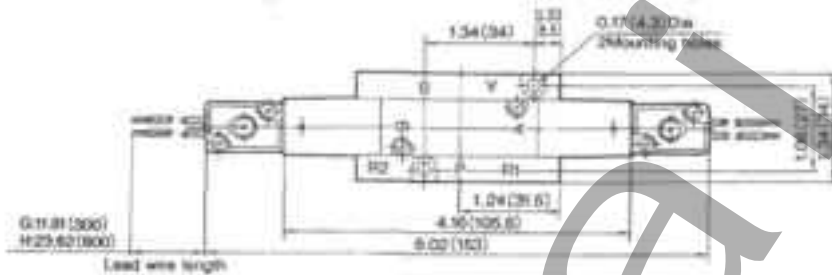
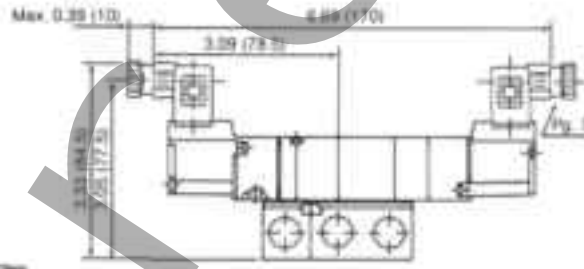
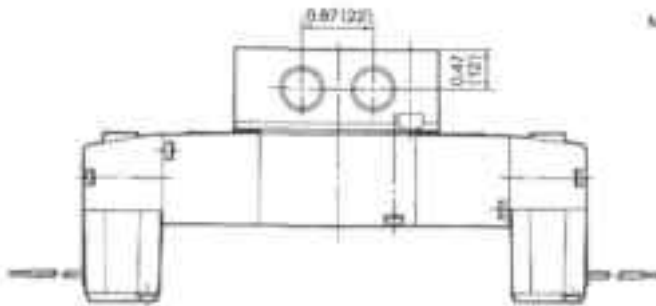


Base Manifold Type with Subplate / 3 Position

inch (mm)

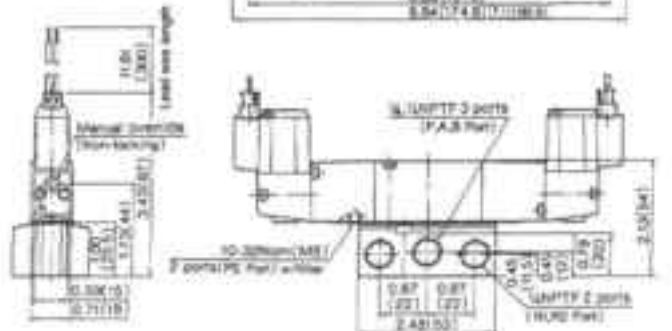
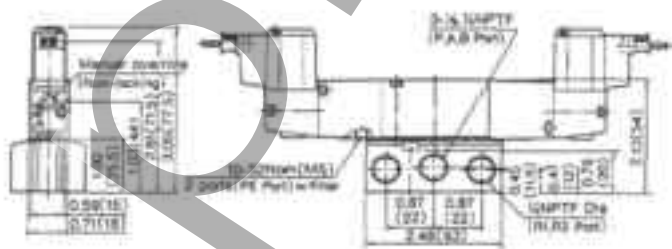
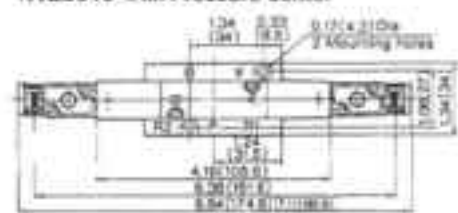
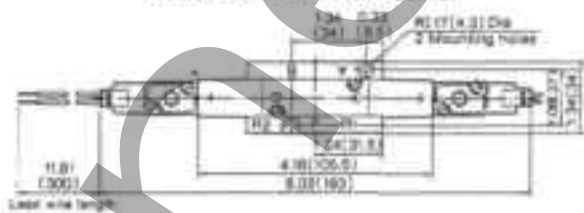
Grammet/NVZ5340-○G. NVZ5340-○H/Closed center  
 NVZ5440-○G. NVZ5440-○H/Exhaust center  
 NVZ5540-○G. NVZ5540-○H/Pressure center

DIN connector (D)/  
 3  
 NVZ5440-○D○○-01T  
 5



L type plug connector/NVZ5340-○L/Closed center  
 NVZ5440-○L/Exhaust center  
 NVZ5540-○L/Pressure center

M type plug connector/NVZ5340-○M/Closed center  
 NVZ5440-○M/Exhaust center  
 NVZ5540-○M/Pressure center

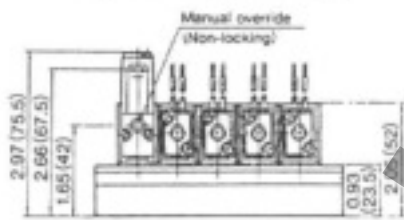
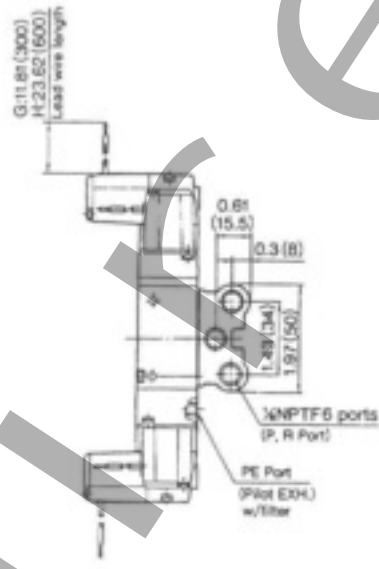
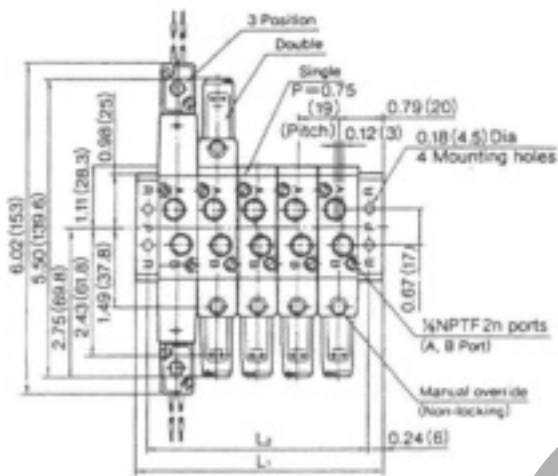


□ : With indicator light and surge voltage suppressor

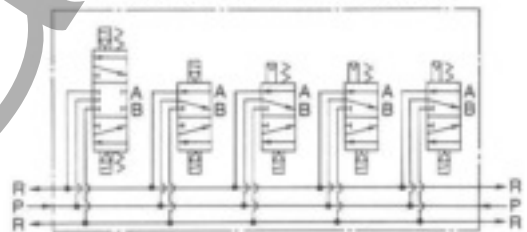
Type 20 Manifold/ Top Ported

inch (mm)

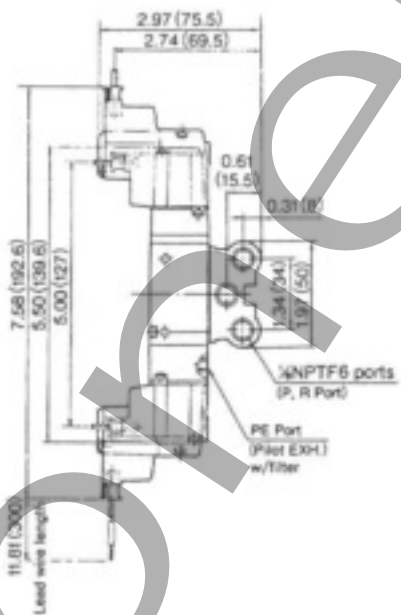
Grommet (G) (H)



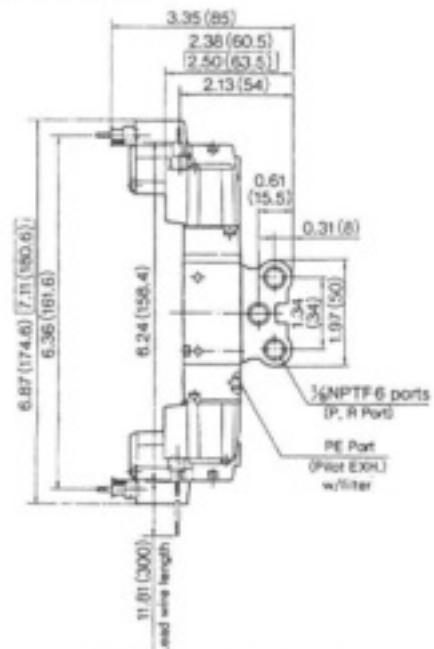
Example pneumatic circuit diagram



L type plug connector (L)



M type plug connector (M)



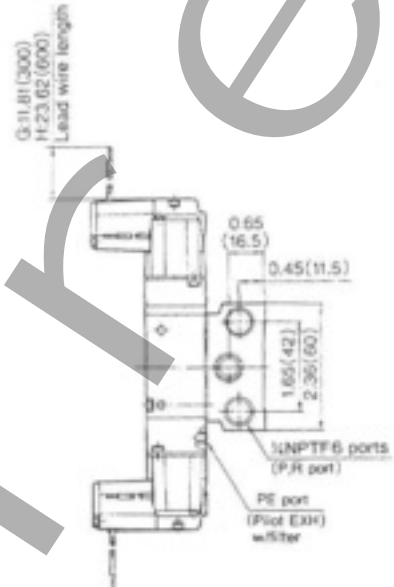
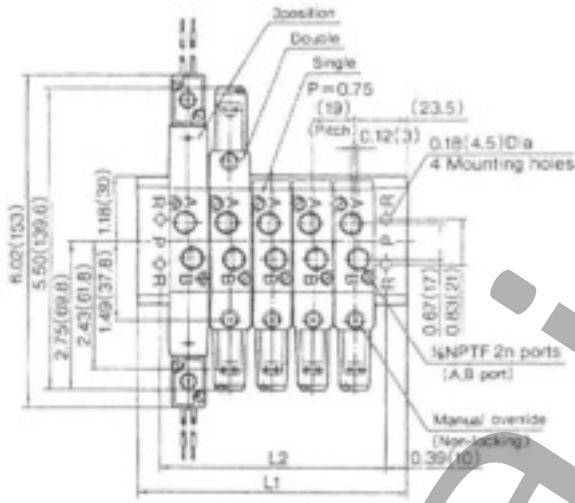
□ : With indicator light and surge voltage suppressor

Station (n)	2	3	4	5	6	7	8	9	10	11	12	13	14	15
L <sub>1</sub>	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)
L <sub>2</sub>	1.85 (47)	2.60 (66)	3.35 (85)	4.09 (104)	4.84 (123)	5.59 (142)	6.34 (161)	7.09 (180)	7.83 (199)	8.58 (218)	9.33 (237)	10.08 (256)	10.83 (275)	11.57 (294)

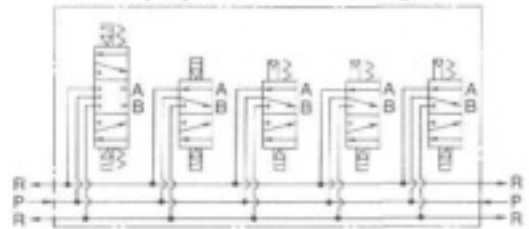
Type 21 Manifold/ Top Ported

inch (mm)

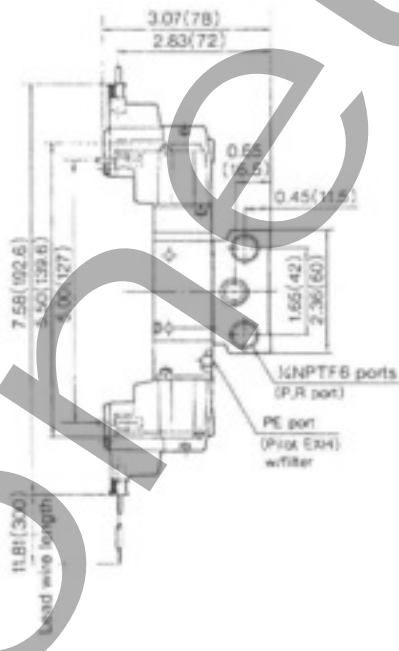
Grommet (G)(H)



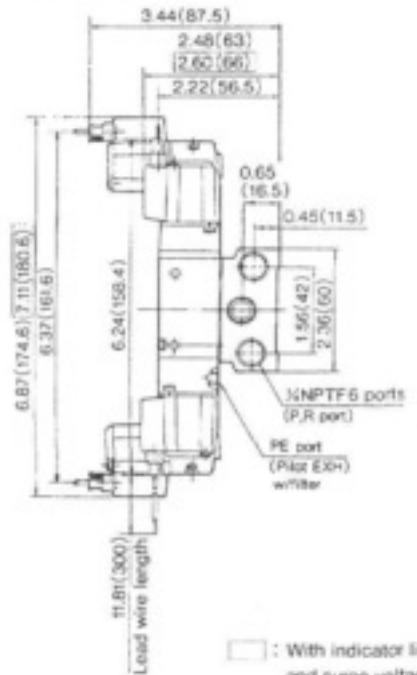
Example pneumatic circuit diagram



L type plug connector (L)



M type plug connector (M)



□ : With indicator light and surge voltage suppressor

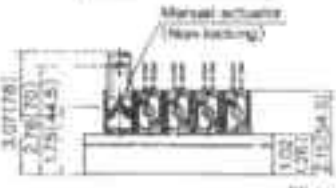
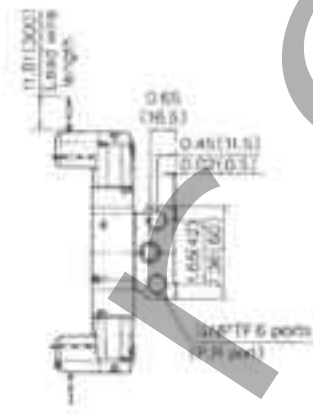
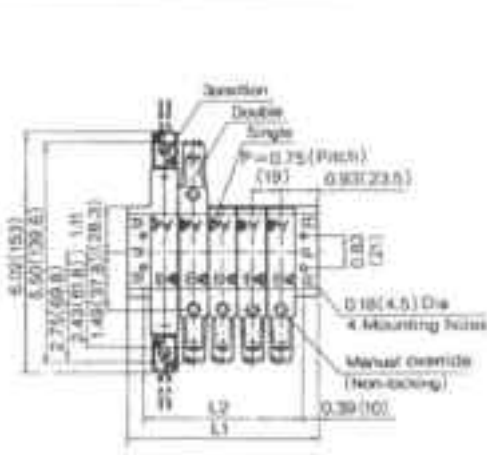
Station (n)	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L <sub>1</sub>	2.60 (66)	3.35 (85)	4.09 (104)	4.84 (123)	5.59 (142)	6.34 (161)	7.09 (180)	7.83 (199)	8.58 (218)	9.33 (237)	10.08 (256)	10.83 (275)	11.57 (294)	12.32 (313)	13.07 (332)	13.82 (351)	14.57 (370)	15.31 (389)	16.06 (408)
L <sub>2</sub>	1.81 (46)	2.56 (65)	3.31 (84)	4.06 (103)	4.80 (122)	5.55 (141)	6.30 (160)	7.05 (179)	7.80 (198)	8.54 (217)	9.29 (236)	10.04 (255)	10.79 (274)	11.54 (293)	12.28 (312)	13.03 (331)	13.78 (350)	14.53 (369)	15.28 (388)



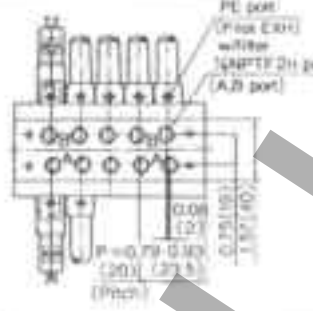
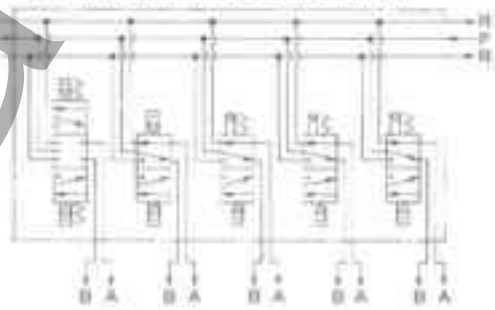
Type 40 Manifold/ Bottom Ported

inch (mm)

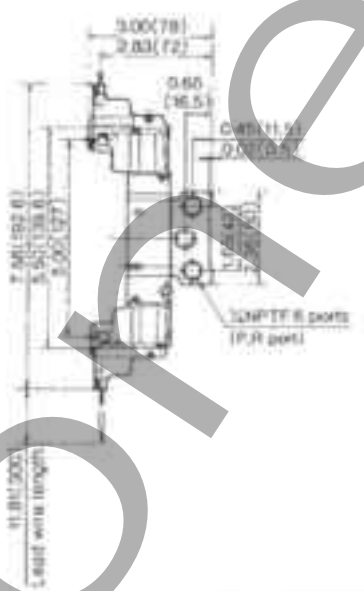
Grommet (G) (H)



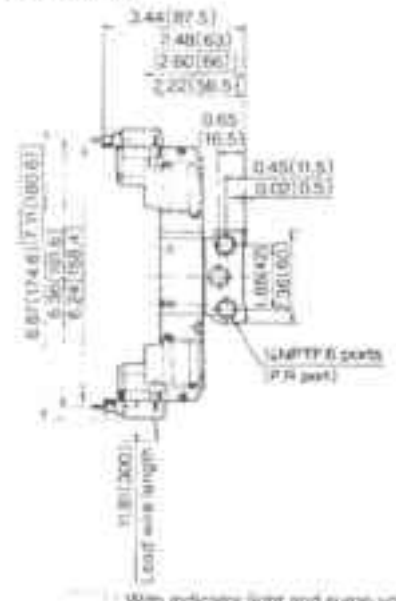
Example pneumatic circuit diagram



L type plug connector (L)



M type plug connector (M)



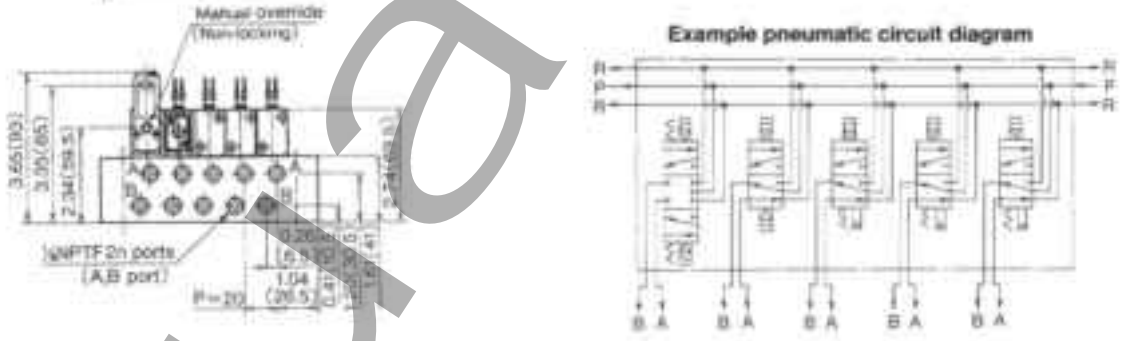
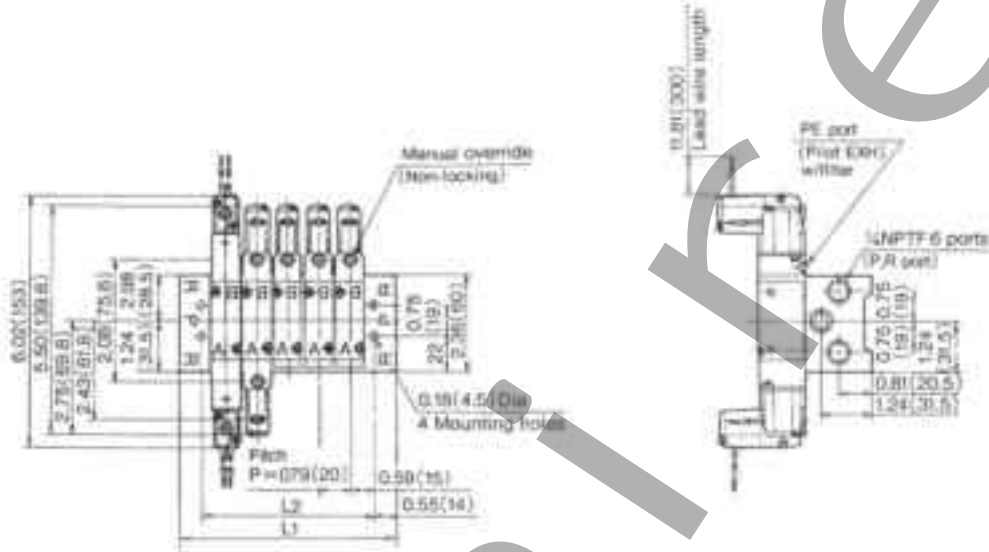
With indicator light and surge voltage suppressor

Station (n)	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L <sub>1</sub>	2.60 (66)	3.35 (85)	4.63 (104)	4.84 (123)	5.59 (142)	6.34 (161)	7.09 (180)	7.83 (199)	8.58 (218)	9.33 (237)	10.08 (256)	10.83 (275)	11.57 (294)	12.32 (313)	13.07 (332)	13.82 (351)	14.57 (370)	15.31 (389)	16.06 (408)
L <sub>2</sub>	1.81 (46)	2.56 (65)	3.31 (84)	4.06 (103)	4.80 (122)	5.55 (141)	6.30 (160)	7.05 (179)	7.80 (198)	8.54 (217)	9.29 (236)	10.04 (255)	10.79 (274)	11.54 (293)	12.28 (312)	13.03 (331)	13.78 (350)	14.53 (369)	15.28 (388)

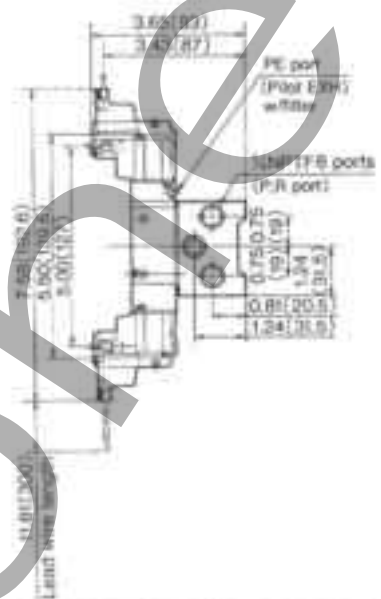
Type 41 Manifold/ Side Ported

inch (mm)

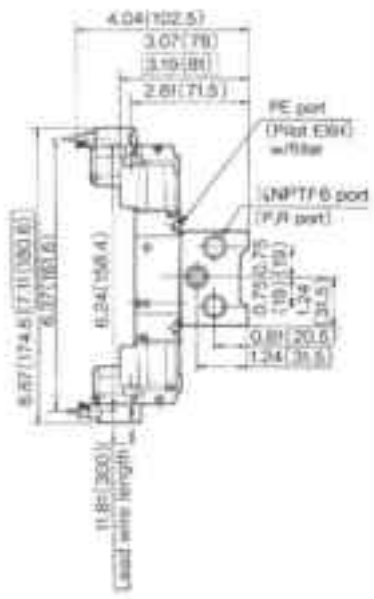
Grommet (G)(H)



L type plug connector (L)



M type plug connector (M)



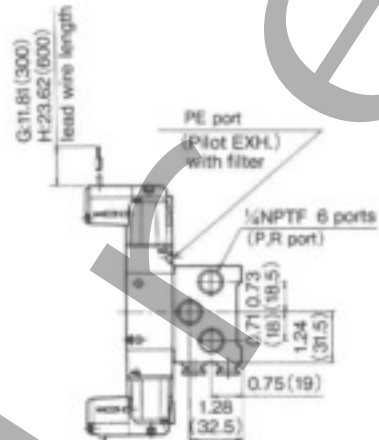
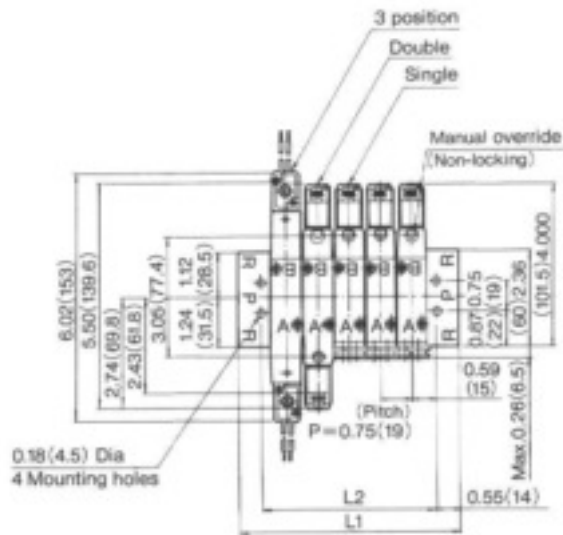
□ With indicator light and surge voltage suppressor

Station (n)	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L <sub>1</sub>	3.07 (78)	3.66 (93)	4.65 (118)	5.43 (138)	6.22 (158)	7.01 (178)	7.80 (198)	8.58 (218)	9.37 (238)	10.16 (258)	10.94 (278)	11.73 (298)	12.52 (318)	13.31 (338)	14.09 (358)	14.88 (378)	15.67 (398)	16.46 (418)	17.24 (438)
L <sub>2</sub>	1.97 (50)	2.76 (70)	3.54 (90)	4.33 (110)	5.12 (130)	5.91 (150)	6.69 (170)	7.48 (190)	8.27 (210)	9.06 (230)	9.84 (250)	10.63 (270)	11.42 (290)	12.20 (310)	12.99 (330)	13.78 (350)	14.57 (370)	15.35 (390)	16.14 (410)

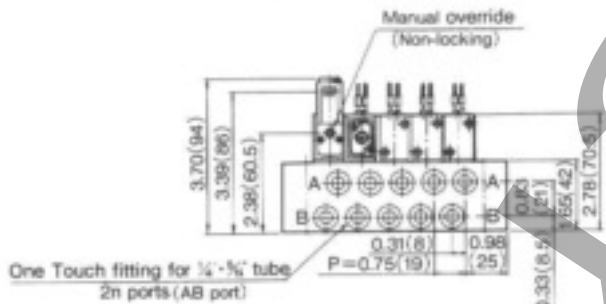
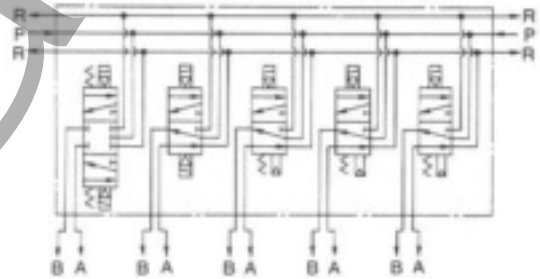
Type 42 Manifold/ Side Ported

inch (mm)

Grommet (G)(H)

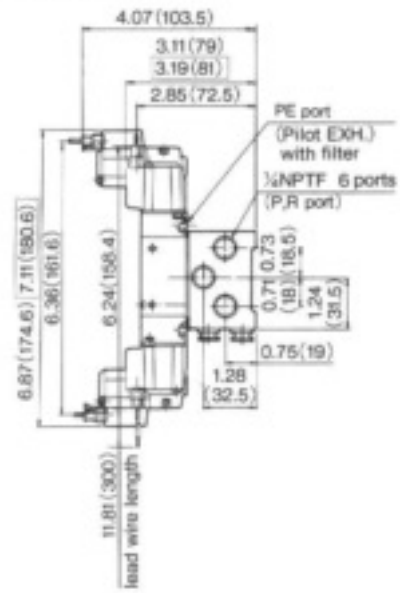
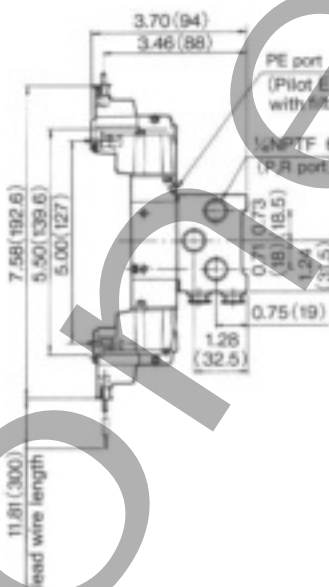


Example pneumatic circuit diagram



L type plug connector (L)

M type plug connector (M)



□ : With indicator light and surge voltage suppressor

Station (n)	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L1	3.03 (77)	3.78 (96)	4.53 (115)	5.28 (134)	6.02 (153)	6.77 (172)	7.52 (191)	8.27 (210)	9.02 (229)	9.76 (248)	10.51 (267)	11.26 (286)	12.01 (305)	12.76 (324)	13.50 (343)	14.25 (362)	15.00 (381)	15.75 (400)	16.50 (419)
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)