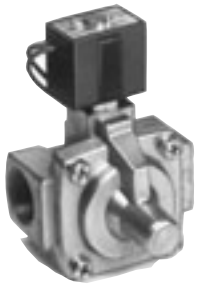
Pilot Operated 2 Port Solenoid Valve

Series VXP21/22/23

For Air, Gas, Steam, Water and Oil



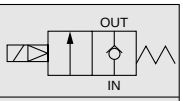
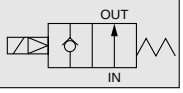
N.C.

N.O.

- **Wide variations of combination. Able to control a wide variety of fluids.**
  Valve can be matched to particular application through selection of body materials (Brass (C37)/BC6 or Stainless steel), seal material (NBR, PTFE, EPDM or FKM) and solenoid coil (Class B or H).
- **Easy to disassemble and reassemble in a short time.**
- **Flange for threaded ports available.**
  (32A to 50A)

Variations

Valve

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

Solenoid coil

Coil: Class B, Class H

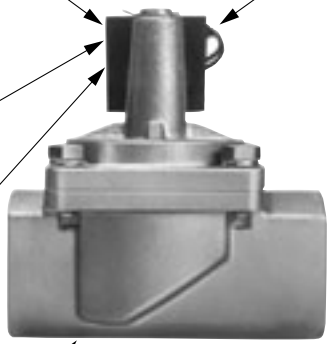
Rated voltage

□AC
Standard — 100 V, 200 V
Option — 48 V, 110 V, 220 V, 240 V

□DC
Standard — 24 V
Option — 12 V

Material

Body — Brass (C37)/BC6, Stainless steel
Seal — NBR, FKM, EPDM, PTFE



Electrical entry

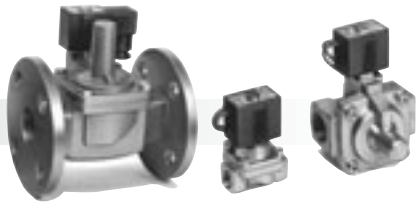
- Grommet
- Conduit
- DIN terminal
- Conduit terminal

Model

Model	Port size	Orifice dia. (mmø)
Threaded type		
VXP2130	Rc 1/4, 3/8, 1/2	10
VXP214□	Rc 3/8, 1/2	15
VXP215□	Rc 3/4	20
VXP226□	Rc 1	25
VXP227□	Rc 1 1/4	35
VXP238□	Rc 1 1/2	40
VXP239□	Rc 2	50
Flange type		
VXP227□	32A	35
VXP238□	40A	40
VXP239□	50A	50

Applicable Fluids Check List

Pilot Operated 2 Port Solenoid Valve Series VXP21/22/23



Normally Closed (N.C.)

Refer to page 147 for specifications and models.

Option Symbol and Composition

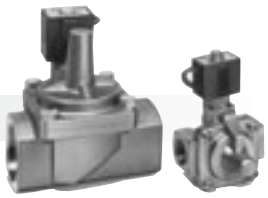
Option symbol	Seal material	Coil insulation type	Body, Shading coil material
Standard	NBR	B	Brass (C37) or BC6, Copper
A	FKM		
B	EPDM		
C Note 2)	PTFE		
D	FKM	H	
E	EPDM		
F Note 1)	FKM	B	Stainless steel, Silver (10 to 25 A) Not available for 32 A to 50 A
G	NBR		
H	FKM		
J	EPDM		
K Note 2)	PTFE		
L Note 1)	FKM		
N	FKM	H	
P	EPDM		
Q Note 2)	PTFE(FKM)		
S Note 2)	PTFE(FKM)		Brass (C37) or BC6, Copper
T Note 1)	NBR	B	

Note 1) Non-lube type. For other options, "-X21" at the end of product number represents the non-lube option.
Note 2) Available option for VXP2130.

Fluid Name and Option

Fluid (Application)	Option symbol and body material	
	Brass (C37) or BC6	Stainless steel
Applicable valve	10A to 50A Note 1)	10A to 25A
Ethyl alcohol	F, B	L, J
Ethylene glycol	B	J
Caustic soda (25% ≥)	—	J
Gas oil	A	H
Silicon oil	A	H
Fuel oil (up to 60°C)	A	H
Fuel oil (up to 100°C)	D	N
Steam system (Steam)	S	Q
Steam system (Boiler water)	—	G, J
Steam system (Condensate)	E	P
Insulation oil	A	H
Naphtha	A	H
Parachloroethylene	A	H
Brake oil	B	J
Water (up to 99°C)	D, E	N, P

∗ If using for other fluids, please contact SMC.
Note 1) 10A to 25A are Brass (C37) and 32A to 50A are BC6.



Normally Open (N.O.)

Refer to page 149 for specifications and models.

Option Symbol and Composition

Option symbol	Seal material	Coil insulation type	Body, Shading coil material	Holder material (in core assembly)
Standard Note 2)	NBR	B	Brass (C37) or BC6, Copper	Polyacetal
A	FKM			
B	EPDM			
C	PTFE			Stainless steel
D Note 2)	FKM	H		
E	EPDM			
F Note 1)	FKM	B	Stainless steel, Silver (15 to 25 A) Not available for 32 A to 50 A	Polyacetal
G	NBR			
H	FKM			
J	EPDM			
K	PTFE			
L Note 1)	FKM			
N	FKM	H		Stainless steel
P	EPDM			
Q	PTFE(FKM)			
S	PTFE(FKM)			
T Note 1)	NBR	B	Brass (C37) or BC6, Copper	Polyacetal
X Note 1)	FKM	H		Stainless steel

Note 1) Non-lube type. For other options, "-X21" at the end of product number represents the non-lube option.
Note 2) Grease has been applied to the core part.

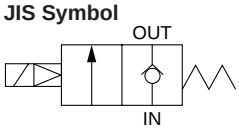
Fluid Name and Option

Fluid (Application)	Option symbol and body material	
	Brass (C37) or BC6	Stainless steel
Applicable valve	15A to 50A Note 1)	15A to 25A
Caustic soda (25% ≥)	—	J
Gas oil	A	H
Silicon oil	A	H
Fuel oil (up to 60°C)	A	H
Fuel oil (up to 100°C)	D	N
Steam system (Steam)	S	Q
Steam system (Boiler water)	—	G, J
Steam system (Condensate)	E	P
Insulation oil	A	H
Parachloroethylene	A	H
Brake oil	B	J
Water (up to 99°C)	E	N, P

∗ If using for other fluids, please contact SMC.
Note 1) 15A to 25A are Brass (C37) and 32A to 50A are BC6.

Normally Closed (N.C.)

JIS Symbol



Fluid

Standard specifications	Option Note 1)	Made to Order Note 2)
Water (Standard) Turbine oil	Steam ····· (S) High temperature water ····· (D, E) High temperature oil ····· (D)	Air ····· X44

Note 1) Refer to page 146 "Applicable Fluids Check List" for details of special fluids outside of the standard options and specifications.
Note 2) Please contact SMC for details.

Model/Valve Specifications <Normally Closed>

Connection Thread	Orifice dia. (mmø)	Model	Min. operating pressure differential (MPa)	Maximum operating pressure differential (MPa) Water AC	Water DC	Air AC	Air DC	Oil AC	Oil DC	Steam AC	Flow characteristics Water, Oil, Steam Av x $10^{-6}m^2$	Water, Oil, Steam Cv converted	Air C [$dm^3/(s \cdot bar)$]	Air b	Air Cv	Max. system pressure (MPa)	Note) Mass (g)
1/4	10	**VXP2130-02**	0.04	0.7	0.5	0.9	0.7	0.5	0.4	0.9	46	1.9	8.5	0.35	2.0	Water, Air, Oil 1.5 Steam 1.0	420
3/8	10	**VXP2130-03**	0.04	0.7	0.5	0.9	0.7	0.5	0.4	0.9	58	2.4	9.2	0.35	2.4		420
	15	**VXP2140-03**	0.04	1.0	1.0	1.0	1.0	0.7	0.7	1.0	100	4.2	18	0.35	5.0		740
1/2	10	**VXP2130-04**	0.04	0.7	0.5	0.9	0.7	0.5	0.4	0.9	58	2.4	9.2	0.35	2.4		500
	15	**VXP2140-04**	0.04	1.0	1.0	1.0	1.0	0.7	0.7	1.0	130	5.3	20	0.35	5.5		740
3/4	20	**VXP2150-06**	0.04	1.0	1.0	1.0	1.0	0.7	0.7	1.0	220	9.2	38	0.30	9.2		1300

Connection Thread	Connection Flange	Orifice diameter (mmø)	Model	Min. operating pressure differential (MPa)	Maximum operating pressure differential (MPa) Water AC	Water DC	Air AC	Air DC	Oil AC	Oil DC	Steam AC	Flow characteristics Water, Oil, Steam Av x $10^{-6}m^2$	Water, Oil, Steam Cv converted	Air Effective area (mm^2)	Max. system pressure (MPa)	Note) Mass (g)
1	—	25	**VXP2260-10**	0.04	1.0	1.0	1.0	1.0	0.7	0.7	1.0	290	12	215	Water Air Oil 1.5 Steam 1.0	1810
1 1/4	—	35	**VXP2270-12**	0.03	1.0	1.0	1.0	1.0	0.7	0.7	1.0	550	23	415		3300
1 1/2	—	40	**VXP2380-14**	0.03	1.0	1.0	1.0	1.0	0.7	0.7	1.0	740	31	560		4200
2	—	50	**VXP2390-20**	0.03	1.0	1.0	1.0	1.0	0.7	0.7	1.0	1200	49	880		5400
—	32A	35	**VXP2270-32**	0.03	1.0	1.0	1.0	1.0	0.7	0.7	1.0	550	23	415		5900
—	40A	40	**VXP2380-40**	0.03	1.0	1.0	1.0	1.0	0.7	0.7	1.0	740	31	560		7300
—	50A	50	**VXP2390-50**	0.03	1.0	1.0	1.0	1.0	0.7	0.7	1.0	1200	49	880		9200

Note) Mass of grommet type. Add 10 g for conduit type, 30 g for DIN terminal type, 60 g for conduit terminal type respectively.
- Refer to "Glossary of Terms" on page 26 for detail of max. operating pressure differential and max. system pressure.
- VXP2130: Option "C", "K", "Q", "S" only.

Solenoid Specifications

Model	Power source	Frequency (Hz)	Apparent power (VA) Inrush	Apparent power (VA) Holding	Power consumption (W) (Holding)	Temperature rise (°C) (Rated voltage)
VXP21	AC	50	20 (32)	11	4.5	45
		60	17 (28)	7	3.2	35
	DC	—	—	—	6	55
VXP22	AC	50	40	18	7.5	60
		60	35	12	6	50
	DC	—	—	—	8	60
VXP23	AC	50	50	21	11	65
		60	45	17	9.5	60
	DC	—	—	—	11.5	65

Note)
- The return voltage is 20% or more of the rated voltage for AC and 2% or more for DC.
- The allowable voltage fluctuation rate is ±10% of the rated voltage value for both AC and DC.
- When the ambient temperature is 20°C ± 5°C and rated voltage is applied.
- For VXP2130, changing coils from AC to DC and vice versa is impossible, because of different core shapes. VXP21$^{5}_{0}$, 22$^{7}_{6}$0, 23$^{9}_{8}$0 are possible to exchange coil from AC to DC, but impossible from DC to AC.
  (Hum sound may generate because of no shading coil for DC.)
- ( ): VXP2130

Operating Fluid and Ambient Temperature

Temperature conditions	Power source	Operating fluid temperature (°C) Water (Standard)	Air (Standard)	Oil (Standard)	High temperature water Note 3) (D, E)	High temperature oil Note 3) (D)	Steam Note 3) (S)	Ambient temperature (°C)
Maximum	AC	60	80	60	99	100	183	60
	DC	40	60	40	—	—	—	40
Minimum	AC DC	1	–10 Note 1)	–5 Note 2)	—	—	—	–10

Note 1) Dew point: –10°C or less Note 2) 50 mm^2/s or less
Note 3) "D", "E" etc. in parentheses are option symbols.
Note 4) VXP2130: Option "C", "K", "Q", "S" only.

How to Order (Normally Closed)

VXP21 / VXP22 / VXP23 □ **0** □ – □□ – □□ □ – □

Model

Body size

3	10A
4	15A
5	20A
6	25A
7	32A
8	40A
9	50A

Valve/Body

0	Normally closed/Single unit

Solenoid valve option

Nil	Standard Specifications

Select an option mark in page 146 by "Applicable Fluids Check List" for special fluids outside of the standard.

VXP2130: Option “C”, “K”, “Q”, “S” only.

Connection

Thread	**02**	1/4
	03	3/8
	04	1/2
	06	3/4
	10	1
	12	1 1/4
	14	1 1/2
	20	2
Flange	**32**	For 32A
	40	For 40A
	50	For 50A

∗ Refer to the table (1) given below for availability.

Thread type

Nil	Rc
T	NPTF
F	G
N	NPT

Rated voltage

1	100 VAC 50/60 Hz
2	200 VAC 50/60 Hz
3	110 VAC 50/60 Hz
4	220 VAC 50/60 Hz
5	24 VDC
6	12 VDC
7	240 VAC 50/60 Hz
8	48 VAC 50/60 Hz
9	Other (Please contact SMC separately.)

∗ Refer to the table (2) given below for availability.

Refer to page 156 for ordering coil only.

Electrical entry

G	Grommet
C	Conduit
D	DIN terminal
T	Conduit terminal

∗ Refer to the table (2) given below for availability.

Electrical option

Nil	None
S	With surge voltage suppressor
L	With indicator light
Z	With light/surge voltage suppressor

∗ Refer to the table (2) given below for availability.

Bracket

Nil	None
B	With bracket

Thread connection sizes are available from 02 to 10.

Table(1)
Connection Size and Applicable Model

Connection	Size	Applicable model
Thread	1/4	VXP2130-02
	3/8	VXP2130-03, VXP2140-03
	1/2	VXP2130-04, VXP2140-04
	3/4	VXP2150-06
	1	VXP2260-10
	1 1/4	VXP2270-12
	1 1/2	VXP2380-14
	2	VXP2390-20
Flange	32A	VXP2270-32
	40A	VXP2380-40
	50A	VXP2390-50

Table(2)
Rated Voltage-Electrical Entry-Electrical Option

Insulation type		Class B				Class H		
Electrical entry		G	C	D, T		G, C	T	
Electrical option		S Note)	—	S	L, Z	—	S	L, Z
AC	**1** (100 V)	●	●	●	●	●	●	●
	2 (200 V)	●	●	●	●	●	●	●
	3 (110 V)	●	●	●	●	●	●	●
	4 (220 V)	●	●	●	●	●	●	●
	7 (240 V)	●	●	●	–	●	●	–
	8 (48 V)	●	●	●	–	–	●	–
DC	**5** (24 V)	●	●	●	●	–	–	–
	6 (12 V)	●	●	●	–	–	–	–

Note) Surge voltage suppressor is attached in the middle of lead wire.

Ordering example

(Example) Series VXP22, Rc 1 1/4, 100 VAC
Grommet
(Part no.) **VXP2270-12-1G**

Made to Order Specifications

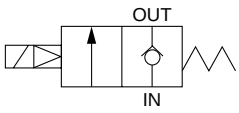
Splashproof Specifications (Based on JIS C 0920 Based on IEC529IP-X4)

VXP Model — Port size — Electrical entry - X36

DIN terminal or class H coil not available.

Normally Open (N.O.)

JIS Symbol



Fluid

Standard specifications	Option [Note 1)]	Made to Order [Note 2)]
Water (Standard) Turbine oil	Steam ····· (S) High temperature water ····· (D, E) High temperature oil ····· (D)	Air ····· X44

Note 1) Refer to page 146 “Applicable Fluids Check List” for details of special fluids outside of the standard options and specifications.
Note 2) Please contact SMC for details.

Model/Valve Specifications <Normally Open>

Connection		Orifice dia. (mmø)	Model	Min. operating pressure differential (MPa)	Max. operating pressure differential (MPa)			Flow characteristics					Max. system pressure (MPa)	Mass (g) [Note]
					Water, Air	Oil	Steam	Water, Oil, Steam		Air				
Thread	Flange				AC/DC	AC/DC	AC	Av x $10^{-6}m^2$	Cv converted	C [$dm^3/(s \cdot bar)$]	b	Cv		
3/8	—	15	**VXP2142-03**	0.04	0.7	0.6	0.7	100	4.2	18	0.35	5.0	Water, Air, Oil 1.5 Steam 1.0	760
1/2	—	15	**VXP2142-04**	0.04	0.7	0.6	0.7	130	5.3	20	0.35	5.5		760
3/4	—	20	**VXP2152-06**	0.04	0.7	0.6	0.7	220	9.2	38	0.30	9.2		1320

Connection		Orifice dia. (mmø)	Model	Min. operating pressure differential (MPa)	Max. operating pressure differential (MPa)			Flow characteristics			Max. system pressure (MPa)	Mass (g) [Note]
					Water, Air	Oil	Steam	Water, Oil, Steam		Air		
Thread	Flange				AC/DC	AC/DC	AC	Av x $10^{-6}m^2$	Cv converted	Effective area (mm^2)		
1	—	25	**VXP2262-10**	0.04	0.7	0.6	0.7	290	12	215	Water, Air, Oil 1.5 Steam 1.0	1850
1 1/4	—	35	**VXP2272-12**	0.03	0.7	0.6	0.7	550	23	415		3300
1 1/2	—	40	**VXP2382-14**	0.03	0.7	0.6	0.7	740	31	560		4200
2	—	50	**VXP2392-20**	0.03	0.7	0.6	0.7	1200	49	880		5400
—	32A	35	**VXP2272-32**	0.03	0.7	0.6	0.7	550	23	415		5900
—	40A	40	**VXP2382-40**	0.03	0.7	0.6	0.7	740	31	560		7300
—	50A	50	**VXP2392-50**	0.03	0.7	0.6	0.7	1200	49	880		9200

Note) Mass of grommet type. Add 10 g for conduit type, 30 g for DIN terminal type, 60 g for conduit terminal type respectively.
• Refer to “Glossary of Terms” on page 26 for details of max. operating pressure differential and max. system pressure.

Solenoid Specifications

Model	Power source	Frequency (Hz)	Apparent power (VA)		Power consumption (W) (Holding)	Temperature rise (°C) (Rated voltage)
			Inrush	Holding		
VXP21	AC	50	25	12	5	50
		60	20	8	3.5	35
	DC	—	—	—	6	50
VXP22	AC	50	45	20	8	55
		60	40	15	6.5	45
	DC	—	—	—	8	50
VXP23	AC	50	60	25	10.5	60
		60	50	20	9.5	50
	DC	—	—	—	11.5	55

Note) • They are values in an ambient temperature of 20°C ±5°C and application of rated voltage.
• Changing coils from AC to DC and vice versa is impossible, because of different core shapes.
• Return voltage is 20% or more of the rated value at AC power and 5% or more at the DC power.
• The allowable voltage fluctuation rate is ±10% of the rated voltage value for both AC and DC.

Fluid and Ambient Temperature

Temperature conditions	Power source	Fluid temperature (°C)						Ambient temperature (°C)
		Water (Standard)	Air (Standard)	Oil (Standard)	High temperature water [Note 3)] (X, E)	High temperature oil [Note 3)] (D)	Steam [Note 3)] (S)	
Maximum	AC	60	80	60	99	100	183	60
	DC	40	60	40	—	—	—	40
Minimum	AC DC	1	–10 [Note 1)]	–5 [Note 2)]	—	—	—	–10

Note 1) Dew point: –10°C or less Note 2) 50 mm^2/s or less
Note 3) “D”, “E” etc. in parentheses are option symbols.

How to Order (Normally Open)

VXP21 / VXP22 / VXP23 □ **2** □ – □ □ – □ □ □ – □

Model

Body size

4	15A
5	20A
6	25A
7	32A
8	40A
9	50A

Valve/Body

2	Normally open/Single unit

Solenoid valve option

Nil	Standard Specifications

Select an option mark in page 146 by "Applicable Fluids Check List" for special fluids outside of the standard.

Connection

Thread	**03**	3/8
	04	1/2
	06	3/4
	10	1
	12	1 1/4
	14	1 1/2
	20	2
Flange	**32**	For 32A
	40	For 40A
	50	For 50A

∗ Refer to the table (1) given below for availability.

Thread type

Nil	Rc
T	NPTF
F	G
N	NPT

Rated voltage

1	100 VAC 50/60 Hz
2	200 VAC 50/60 Hz
3	110 VAC 50/60 Hz
4	220 VAC 50/60 Hz
5	24 VDC
6	12 VDC
7	240 VAC 50/60 Hz
8	48 VAC 50/60 Hz
9	Other (Please contact SMC separately.)

∗ Refer to the table (2) given below for availability.

Refer to page 156 for ordering coil only.

Electrical entry

G	Grommet
C	Conduit
D	DIN terminal
T	Conduit terminal

∗ Refer to the table (2) given below for availability.

Electrical option

Nil	None
S	With surge voltage suppressor
L	With indicator light
Z	With light/surge voltage suppressor

∗ Refer to the table (2) given below for availability.

Bracket

Nil	None
B	With bracket

Thread connection sizes are available from 03 to 10.

Table (1)
Connection Size and Applicable Model

Connection	Size	Applicable model
Thread	3/8	VXP2142-03
	1/2	VXP2142-04
	3/4	VXP2152-06
	1	VXP2262-10
	1 1/4	VXP2272-12
	1 1/2	VXP2382-14
	2	VXP2392-20
Flange	32A	VXP2272-32
	40A	VXP2382-40
	50A	VXP2392-50

Table (2)
Rated Voltage-Electrical Entry-Electrical Option

Insulation type		Class B				Class H		
Electrical entry		G	C	D, T		G, C	T	
Electrical option		S Note)	—	S	L, Z	—	S	L, Z
AC	**1** (100 V)	●	●	●	●	●	●	●
	2 (200 V)	●	●	●	●	●	●	●
	3 (110 V)	●	●	●	●	●	●	●
	4 (220 V)	●	●	●	●	●	●	●
	7 (240 V)	●	●	●	–	●	●	–
	8 (48 V)	●	●	●	–	–	●	–
DC	**5** (24 V)	●	●	●	●	–	–	–
	6 (12 V)	●	●	●	–	–	–	–

Note) Surge voltage suppressor is attached in the middle of lead wire.

Ordering example

(Example) Series VXP22, 32A Flange, 200 VAC, DIN terminal

(Part no.) **VXP2272-32-2D**

Made to Order Specifications

Splashproof Specifications (Based on JIS C 0920 Based on IEC529IP-X4)

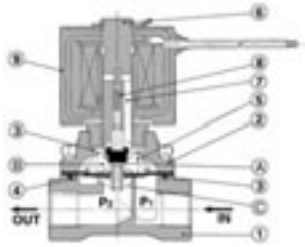
VXP Model — Port size — Electrical entry - X36

DIN terminal or class H coil not available.

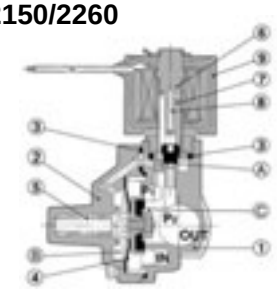
Construction/Principle Parts Material

Normally Closed (N.C.)

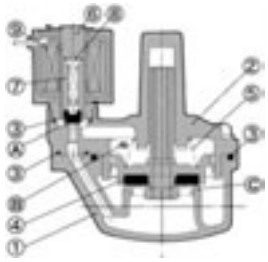
VXP2130



VXP2140/2150/2260



VXP2270/2380/2390



Operation

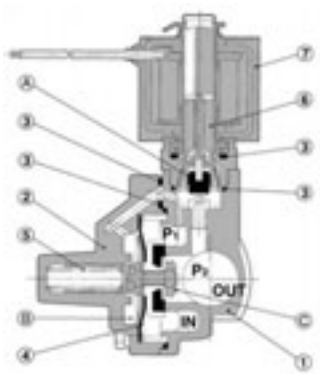
<Valve opened> When the coil ⑨ is energized, the armature assembly ⑦ is attracted into the core of the core assembly ⑥ and the pilot valve Ⓐ opens. Then the pressure in the pressure action chamber Ⓑ falls to open the main valve Ⓒ.

<Valve closed> When the coil ⑨ is not energized, the pilot valve Ⓐ is closed and the pressure in the pressure action chamber Ⓑ rises and the main valve Ⓒ closes.

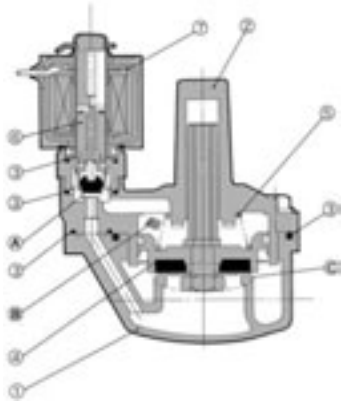
No.	Description	Size	Material	
			Standard	Option
1	**Body**	10A to 25A	Brass (C37)	Stainless steel
		32A to 50A	BC6	—
2	**Bonnet**	10A to 25A	Brass (C37)	Stainless steel
		32A to 50A	BC6	—
3	**O-ring**	—	NBR	FKM/EPDM
4	**Disk assembly**	10A to 25A	Stainless steel, Brass (C37), NBR	Stainless steel, FKM Stainless steel, EPDM
		32A to 50A		Stainless steel, Brass (C37) FKM/EPDM
5	**Valve spring**	—	Stainless steel	—
6	**Core assembly**	10A to 25A	Stainless steel, Copper	Stainless steel, Silver
		32A to 50A		—
7	**Armature assembly**	—	Stainless steel, NBR	Stainless steel, FKM Stainless steel, EPDM
8	**Return spring**	—	Stainless steel	—
9	**Coil assembly**	—	Class B molded	Class H molded

Normally Open (N.O.)

VXP2142/2152/2262



VXP2272/2382/2392



Operation

<Valve closed> When the coil ⑦ is energized, the opened pilot Ⓐ closes, the pressure in pressure action chamber Ⓑ rises and the main valve Ⓒ closes.

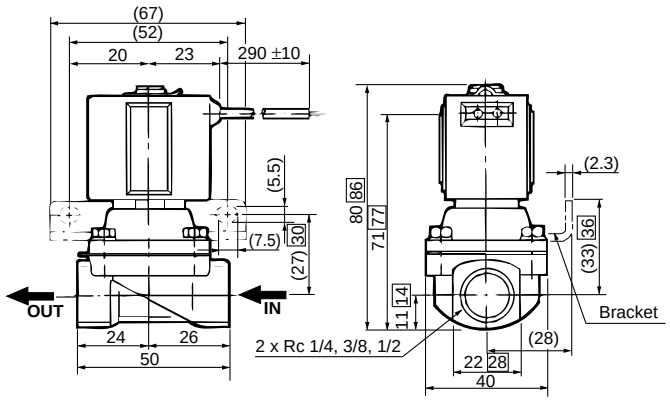
<Valve opened> When coil ⑦ is not energized, the closed pilot valve Ⓐ opens, the pressure in pressure action chamber Ⓑ drops and the main valve Ⓒ opens.

No.	Description	Size	Material	
			Standard	Option
1	**Body**	15A to 25A	Brass (C37)	Stainless steel
		32A to 50A	BC6	—
2	**Bonnet**	15A to 25A	Brass (C37)	Stainless steel
		32A to 50A	BC6	—
3	**O-ring**	—	NBR	FKM/EPDM
4	**Disk assembly**	15A to 25A	Stainless steel, Brass (C37), NBR	Stainless steel, FKM Stainless steel, EPDM
		32A to 50A		Stainless steel, Brass (C37) FKM/EPDM
5	**Valve spring**	—	Stainless steel	—
6	**Core assembly**	15A to 25A	Stainless steel, Copper, NBR Polyacetal PTFE	Stainless steel, Silver FKM/EPDM, PTFE
		32A to 50A		Stainless steel, Copper, FKM/EPDM, PTFE
7	**Coil assembly**	—	Class B molded	Class H molded

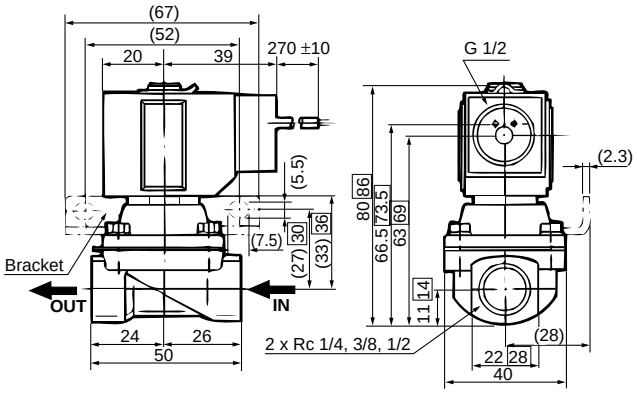
Dimensions (Orifice Diameter: 10 mmø)

Normally Closed: VXP2130

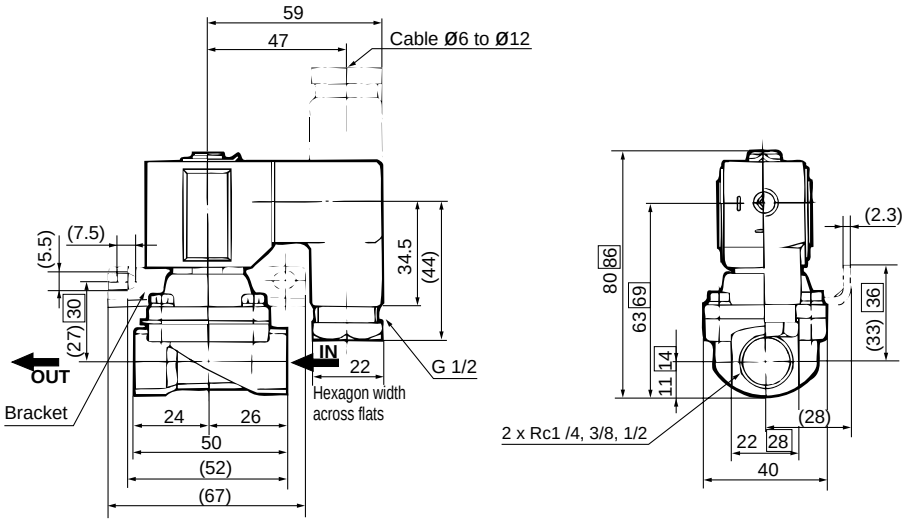
Grommet: G



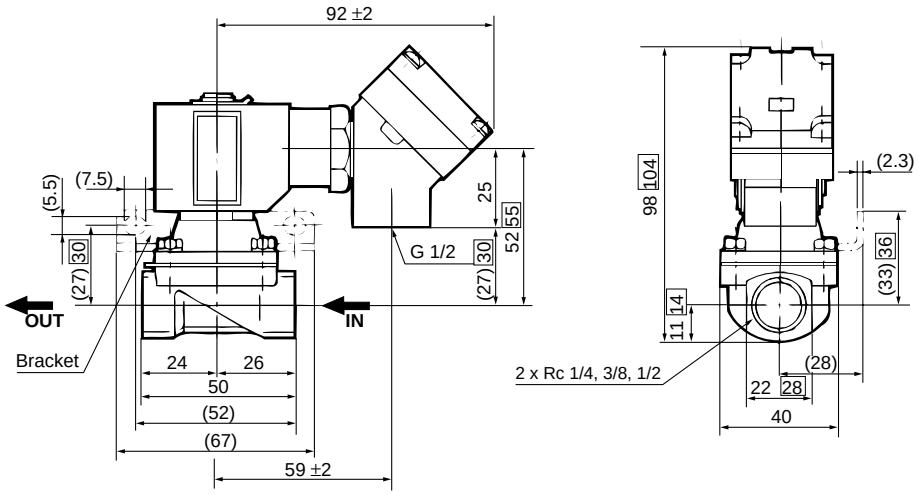
Conduit: C



DIN terminal: D



Conduit terminal: T

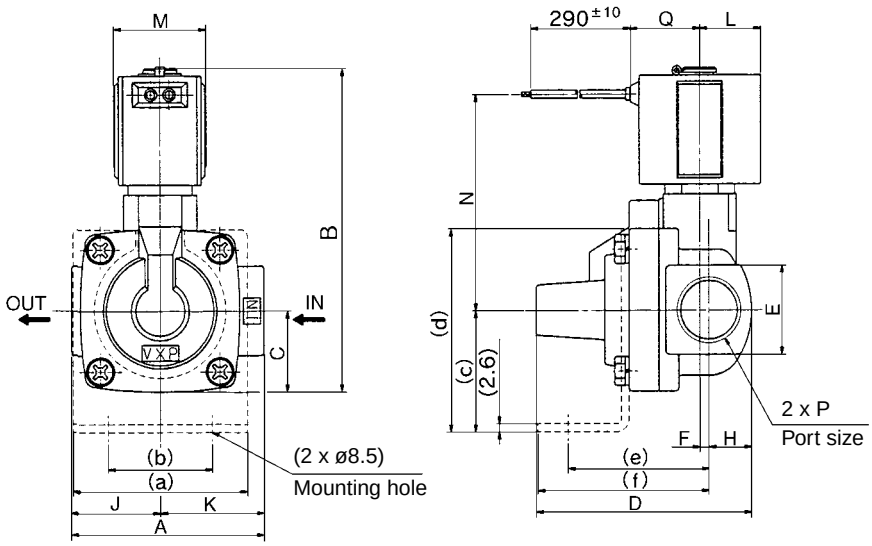


□: Port size Rc 1/2

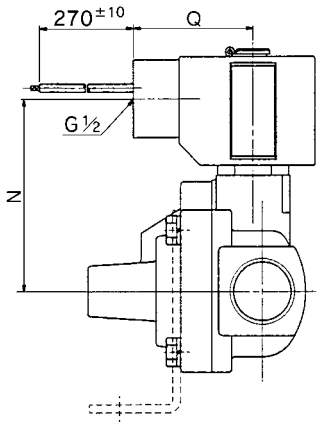
Dimensions (Orifice Diameter: 15 mmø, 20 mmø, 25 mmø)

Normally closed: VXP2140/2150/2260 Normally open: VXP2142/2152/2262

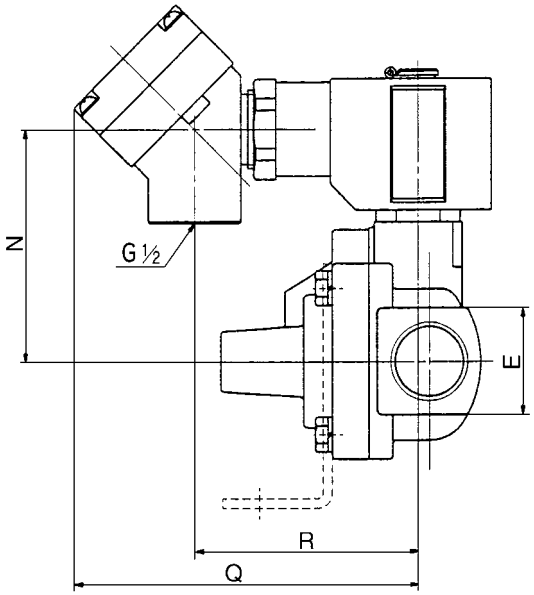
Grommet: G



Conduit: C



Conduit terminal: T



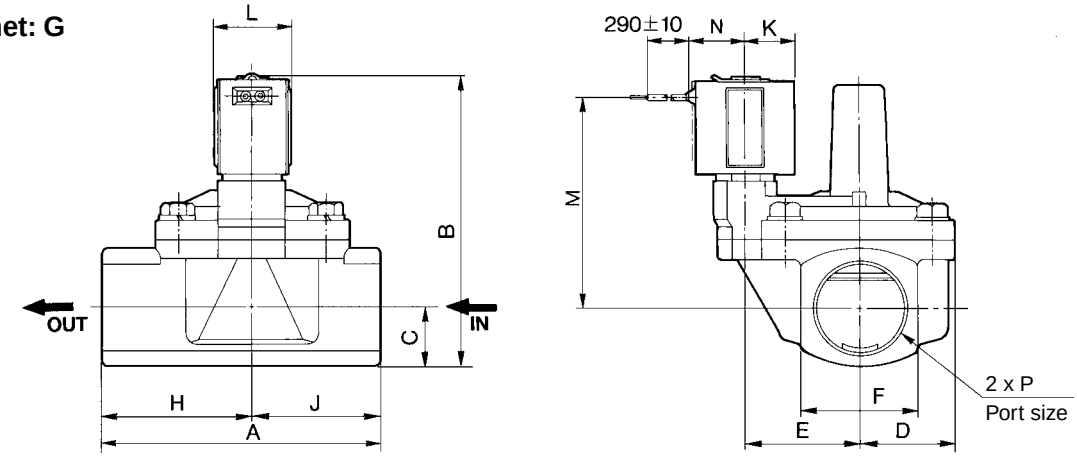
Model		P Port size Rc	A	B	C	D	E	F	H	J	K	L	M	Electrical entry							Bracket					
														Grommet		Conduit		Conduit terminal								
Normally closed	Normally open													N	Q	N	Q	N	Q	R	a	b	c	d	e	f
VXP2140	**VXP2142**	3/8, 1/2	63	104 (116)	26	71	28	3	14	29	34	20	30	69 (76)	23	61	39	61 (68)	92	59	57	34	39	65	47	57
VXP2150	**VXP2152**	3/4	80	118 (136)	32.5	87	35	8	17.5	37	43	20	30	77 (84)	23	69	39	69 (76)	92	59	74	51	45.5	78	52	62
VXP2260	**VXP2262**	1	90	133 (150)	36.5	97	40	8	20	43	47	23	35	87 (97)	25.5	79	41.5	79 (89)	95	62	81	58	49.5	86	57	67

( ): N.O.

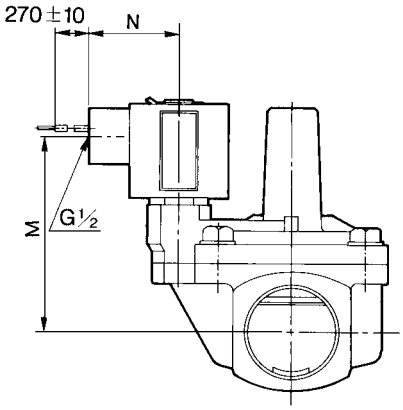
Dimensions

Normally closed: VXP2270/2380/2390 Normally open: VXP2272/2382/2392

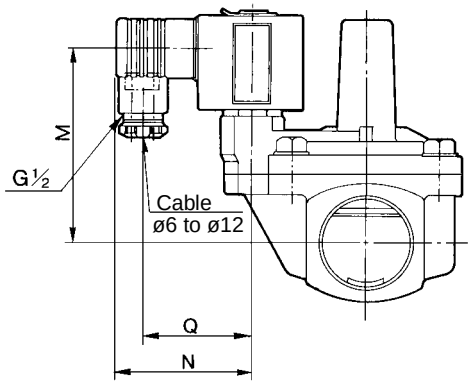
Grommet: G



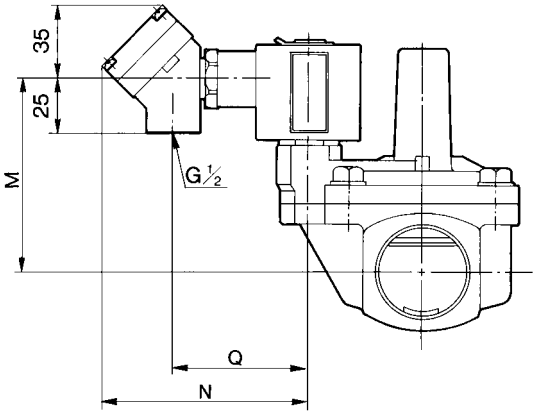
Conduit: C



DIN terminal: D



Conduit terminal: T



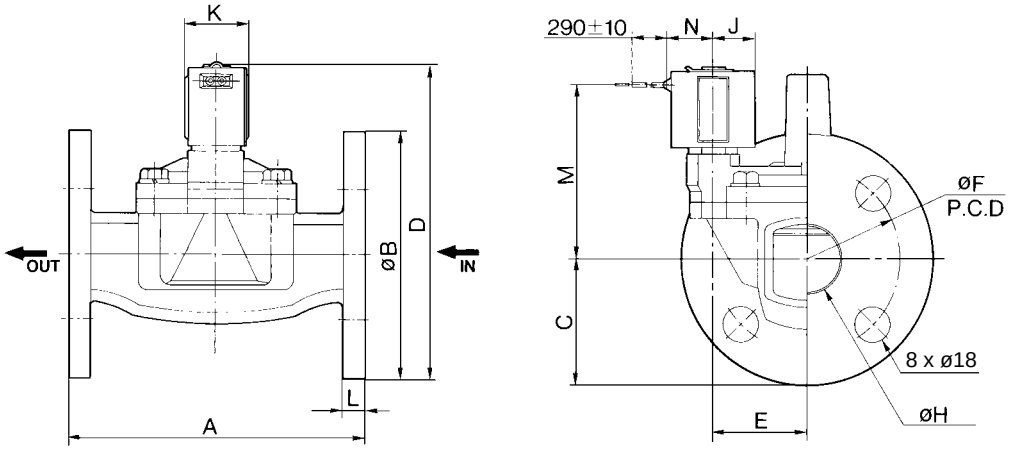
Model		P Applicable thread Pc	A	B	C	D	E	F	H	J	K	L	Electrical entry									
													Grommet		Conduit		DIN terminal			Conduit terminal		
Normally closed	Normally open												M	N	M	N	M	N	Q	M	N	Q
VXP2270	**VXP2272**	1 ¼	125	128 (145)	26.5	43.5	51.5	53	67.5	57.5	23	35	92 (102)	25.5	84 (94)	41.5	84 (94)	60	48	84 (94)	95	62
VXP2380	**VXP2382**	1 ½	132	144 (159)	30	46.5	54.5	60	72	60	25.5	40	103 (113)	28	95 (105)	44.5	95(105)	62	50	95(105)	97	64
VXP2390	**VXP2392**	2	150	160 (175)	35.5	52	59	71	81	69	25.5	40	114 (124)	28	106 (117)	44.5	106(117)	62	50	106(117)	97	64

( ): N.O.

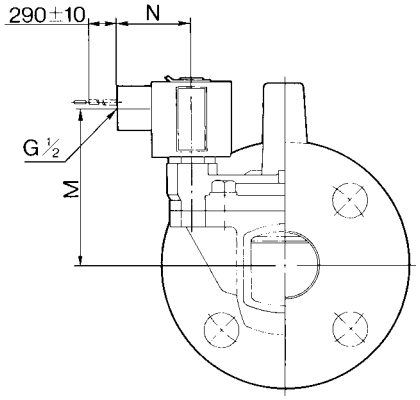
Dimensions

Normally closed: VXP2270/2380/2390 Normally open: VXP2272/2382/2392

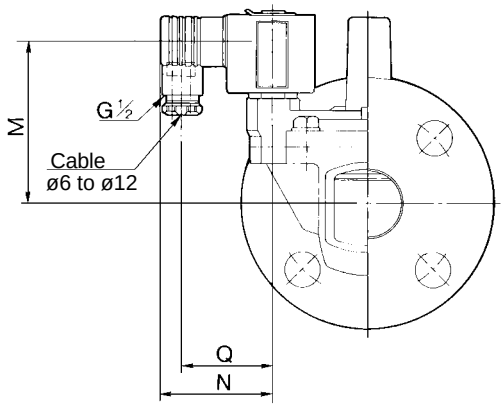
Grommet: G



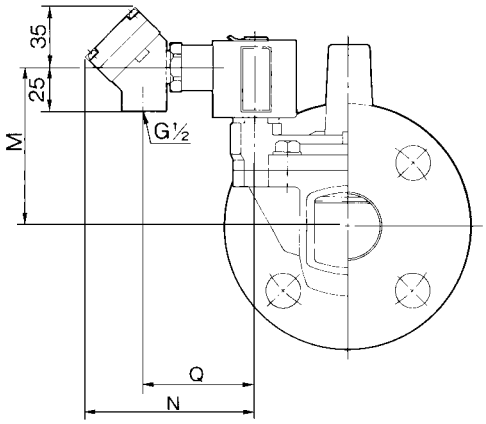
Conduit: C



DIN terminal: D



Conduit terminal: T



Model		Applicable flange	A	B	C	D	E	F	H	J	K	L	Electrical entry									
													Grommet		Conduit		DIN terminal			Conduit terminal		
Normally closed	Normally open												M	N	M	N	M	N	Q	M	N	Q
VXP2270	**VXP2272**	32A	160	135	67.5	169 (186.5)	51.5	100	36	23	35	12	92 (102)	25.5	84 (94)	41.5	84 (94)	60	48	84 (94)	95	62
VXP2380	**VXP2382**	40A	170	140	70	184 (199)	54.5	105	42	25.5	40	14	103 (113)	28	95(105)	44.5	95(105)	62	50	95(105)	97	64
VXP2390	**VXP2392**	50A	180	155	77.5	202.5(217.5)	59	120	52	25.5	40	14	114 (124)	28	106(117)	44.5	106(117)	62	50	106(117)	97	64

( ): N.O.

Solenoid Coil Assembly

How to Order Solenoid Coil Assemblies

VX021 – 001 C B □ □ – 01

VX solenoid coil assembly

Application

Size part number		Applicable series
001	No.1 solenoid	Series VXP21
002	No.2 solenoid	Series VXP22
003	No.3 solenoid	Series VXP23

Electrical entry

G	Grommet
C	Conduit
D	DIN terminal

Coil insulation type

B	Class B insulation
H	Class H insulation

∗ DIN terminal or DC not available

Terminal box

Nil	None
T	With terminal box

Electrical option

Nil	None
S	With surge voltage suppressor
L	With indicator light
Z	With light/surge voltage suppressor

Rated voltage Note)

01	100 VAC 50/60 Hz
02	200 VAC 50/60 Hz
03	110 VAC 50/60 Hz
04	220 VAC 50/60 Hz
05	24 VDC
06	12 VDC
07	240 VAC 50/60 Hz
08	48 VAC 50/60 Hz
13	24 VAC 50/60 Hz
23	440 VAC 50/60 Hz
51	6 VDC
53	48 VDC
55	100 VDC
56	110 VDC

Note) Voltage symbols 01 to 08 are the same as the solenoid valve model identification symbols if the leading zero is removed.

Ordering example

(Example) Series VXP21, 100 VAC, class B insulation, grommet
(Part no.) **VX021-001GB-01**

(Example) Series VXP22, 220 VAC, class B insulation, DIN terminal (with terminal box)
(Part no.) **VX021-002DBT-04**

(Example) Series VXP23, 24 VDC, conduit terminal, with light/surge voltage suppressor
(Part no.) **VX021-003CBTZ-05**

Coil Combination Table

(Electrical entry - Coil insulation type - Electrical option)

Electrical entry	Without electrical option	With electrical option		
		With surge voltage suppressor	With indicator light	With light/surge voltage suppressor
Grommet	GB	GBS	—	—
	GH	—	—	—
Conduit	CB	—	—	—
	CH	—	—	—
	CBT	CBTS	CBTL	CBTZ
	CHT	CHTS	CHTL	CHTZ
DIN terminal	DB	—	—	—
	DBT	DBTS	DBTL	DBTZ

∗ Applicable voltages for with indicator light or with light/surge voltage suppressor are 100 VAC, 200 VAC, 110 VAC, 220 VAC and 24 VDC.
∗ Applicable voltages for CHTL or CHTZ are 100 VAC, 200 VAC, 110 VAC and 220 VAC.