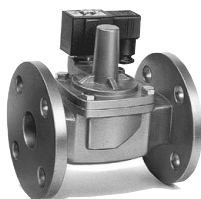


Pilot Operated 2 Port Solenoid Valve

VXP21/22/23 Series

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 (C37/CAC408 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.)

Electrical entry

- Grommet
- Conduit
- DIN terminal
- Conduit terminal

Solenoid coil

Coil: Class B, Class H

Rated voltage

☐ AC

Standard — 100 V, 200 V

Semi-standard — 48 V, 110 V, 220 V, 240 V

☐ DC

Standard — 24 V

Semi-standard — 12 V

Material

Body — C37/CAC408, Stainless steel

Seal — NBR, FKM, EPDM, PTFE

Model

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

When the valve is closed, flow is blocked from port 1 to port 2. However, if the pressure in port 2 is higher than port 1, the valve will not be able to block the fluid and it will flow from port 2 to port 1.

VX2
VXK
VXD
VXZ
VXS
VXB
VXE
VXP
VXR
VXH
VXF
VX3
VXA

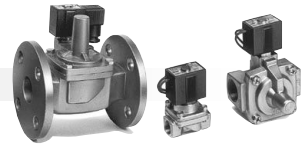
Pilot Operated 2 Port Solenoid Valve

VXP21/22/23 Series

Applicable Fluids Check List

Normally Closed (N.C.)

Refer to page 313 for specifications and models.



Option Symbol and Composition

Option symbol	Seal material	Coil insulation type	Body, Shading coil material
Standard	NBR	B	C37 or CAC408, Copper
A	FKM		
B	EPDM		
C ^{Note 2)}	PTFE		
D	FKM	H	C37 or CAC408, Copper
E	EPDM		
F ^{Note 1)}	FKM		
G	NBR		
H	FKM	B	Stainless steel, Silver (Not available for VXP2270/2380/2390)
J	EPDM		
K ^{Note 2)}	PTFE		
L ^{Note 1)}	FKM		
N	FKM	H	C37 or CAC408, Copper
P	EPDM		
Q ^{Note 2)}	PTFE(FKM)		
S ^{Note 2)}	PTFE(FKM)		
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

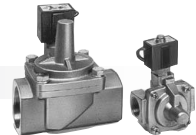
Fluid (Application)	Option symbol and body material	
	C37 or CAC408	Stainless steel
Applicable valve	10A to 50A ^{Note 1)}	10A to 25A
Ethyl alcohol	F, B	L, J
Ethylene glycol	B	J
Caustic soda (25% ≥)	—	J
Gas oil	A	H
Silicone oil	A	H
Fuel oil (up to 60°C)	A	H
Fuel oil (up to 100°C)	D	N
Steam system (Steam)	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 C37 and 32A to 50A are CAC408.

Normally Open (N.O.)

Refer to page 315 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	C37 or CAC408, Copper	POM
A	FKM			Stainless steel
B	EPDM			
C	PTFE			
D ^{Note 2)}	FKM	H	C37 or CAC408, Copper	POM
E	EPDM			Stainless steel
F ^{Note 1)}	FKM			
G	NBR			
H	FKM	B	Stainless steel, Silver (Not available for VXP2272/2382/2392)	POM
J	EPDM			Stainless steel
K	PTFE			
L ^{Note 1)}	FKM			
N	FKM	H	C37 or CAC408, Copper	POM
P	EPDM			Stainless steel
Q ^{Note 2)}	PTFE(FKM)			
S ^{Note 2)}	PTFE(FKM)			
T ^{Note 1)}	NBR	B		POM
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

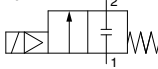
Fluid (Application)	Option symbol and body material	
	C37 or CAC408	Stainless steel
Applicable valve	15A to 50A ^{Note 1)}	15A to 25A
Caustic soda (25% ≥)	—	J
Gas oil	A	H
Silicone oil	A	H
Fuel oil (up to 60°C)	A	H
Fuel oil (up to 100°C)	D	N
Steam system (Steam)	S	Q
Steam system (Boiler water)	—	G, J
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 C37 and 32A to 50A are CAC408.

Normally Closed (N.C.)

Symbol



When the valve is closed, flow is blocked from port 1 to port 2. However, if the pressure in port 2 is higher than port 1, the valve will not be able to block the fluid and it will flow from port 2 to port 1.

Fluid

Standard specifications	Option ^{Note 1)}
Water (Standard)	Steam (S)
Air	High temperature water (D, E)
Turbine oil	High temperature oil (D)

Note 1) Refer to page 312 "Applicable Fluids Check List" for details of special fluids outside of the standard options and specifications.

Model/Valve Specifications <Normally Closed>

Connection Thread	Orifice dia. (mm)	Model	Max. operating pressure differential (MPa)	Maximum operating pressure differential (MPa) ^{Note 2)}								Flow rate characteristics					Note 2) Max. system pressure (MPa)	Note 1) Weight (g)
				Water		Air		Oil		Steam		Water, Oil, Steam		Air				
				AC	DC	AC	DC	AC	DC	AC	DC	Kv	Cv converted	C [dm ³ /(s·bar)]	b	Cv		
1/4	10	VXP2130-02	0.04	0.7	0.5	0.9	0.7	0.5	0.4	0.9	1.6	1.9	8.5	0.35	2.0	Water, Air, Oil 1.5 Steam 1.0	420	
	10	VXP2130-03	0.04	0.7	0.5	0.9	0.7	0.5	0.4	0.9	2.1	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	3.6	4.2	18	0.35	5.0		740	
3/8	10	VXP2130-04	0.04	0.7	0.5	0.9	0.7	0.5	0.4	0.9	2.1	2.4	9.2	0.35	2.4	1.5 Steam 1.0	500	
	15	VXP2140-04	0.04	1.0	1.0	1.0	1.0	0.7	0.7	1.0	4.6	5.3	20	0.35	5.5		740	
	20	VXP2150-06	0.04	1.0	1.0	1.0	1.0	0.7	0.7	1.0	7.9	9.2	38	0.30	9.2		1300	

Connection		Orifice diameter (mm)	Model	Min. operating pressure differential (MPa)	Maximum operating pressure differential ^{Note 2)} (MPa)								Flow rate characteristics				^{Note 2)} Max. system pressure (MPa)	^{Note 1)} Weight (g)
Thread	Flange				Water		Air		Oil		Steam		Water, Oil, Steam		Air			
					AC	DC	AC	DC	AC	DC	AC	DC	Kv	Cv converted	Effective area (mm²)			
1	—	25	VXP2260-10	0.04	1.0	1.0	1.0	1.0	0.7	0.7	1.0	10	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	20	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	26	31	560		4200		
2	—	50	VXP2390-20	0.03	1.0	1.0	1.0	1.0	0.7	0.7	1.0	43	49	880		5400		
—	32A	35	VXP2270-32	0.03	1.0	1.0	1.0	1.0	0.7	0.7	1.0	20	23	415		5900		
—	40A	40	VXP2380-40	0.03	1.0	1.0	1.0	1.0	0.7	0.7	1.0	26	31	560		7300		
—	50A	50	VXP2390-50	0.03	1.0	1.0	1.0	1.0	0.7	0.7	1.0	43	49	880		9200		

Note 1) Weight of grommet type. Add 10 g for conduit type, 30 g for DIN terminal type, 60 g for conduit terminal type respectively.

Note 2) Refer to "Glossary of Terms" on page 309 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)		Power consumption (W) (Holding)	Temperature rise (°C) (Rated voltage)
			Inrush	Holding		
VXP21	AC	50	20 (32)	11	4.5	45
		60	17 (28)	7	3.2	35
VXP22	AC	50	40	18	7.5	60
		60	35	12	6	50
VXP23	AC	50	50	21	11	65
		60	45	17	9.5	60
		—	—	—	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 $\pm 10\%$ of the rated voltage value for both AC and DC.

• When the ambient temperature is $20^{\circ}\text{C} \pm 5^{\circ}\text{C}$ and rated voltage is applied.

• For VXP2130, changing coils from AC to DC and vice versa is impossible, because of different core shapes. VXP2130, 2230, 2330 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)						Ambient temperature (°C)
		Water (Standard)	Air (Standard)	Oil (Standard)	High temperature water (D, E)	High temperature oil (D) ^{Note 3)}	Steam (S) ^{Note 3)}	
Maximum	AC	60	80	60	99	100	183	60
	DC	40	60	40	—	—	—	40
Minimum	AC	1	—10 ^{Note 1)}	—5 ^{Note 2)}	—	—	—	—10
	DC	—	—	—	—	—	—	—

Note 1) Dew point: -10°C or less

Note 2) 50 mm²/s or less

Note 3) "D", "E" etc. in parentheses are option symbols.

Note 4) VXP2130: Option "C", "K", "Q", "S" only.

VXP21/22/23 Series

How to Order (Normally Closed)

VXP21
VXP22
VXP23

Model

0

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

NII Standard Specifications

Select an option mark in page 312 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

Thread type

NII	Rc
T	NPTF
F	G
N	NPT

Bracket

NII	None
B	With bracket

Thread connection sizes are available from 02 to 10.

Electrical option

NII	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.

Electrical entry

G	Grommet
C	Conduit
D	DIN terminal
T	Conduit terminal

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

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 322 for ordering coil only.

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

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

Ordering example

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

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

Insulation type		Class B				Class H		
Electrical entry		G	C	D, T		G, C	S	T
Electrical option		S ^{Note)}	—	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.



Made to Order Specifications

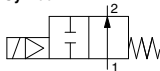
Splashproof Specifications (Based on JIS C 0920 Based on IEC529IP-X4)

VXP Model — **Port size** — **Electrical entry** - X36

DIN terminal or class H coil not available.

Normally Open (N.O.)

Symbol



When the valve is closed, flow is blocked from port 1 to port 2. However, if the pressure in port 2 is higher than port 1, the valve will not be able to block the fluid and it will flow from port 2 to port 1.

Fluid

Standard specifications	Option ^{Note 1)}
Water (Standard)	Steam (S)
Air	High temperature water (D, E)
Turbine oil	High temperature oil (D)

Note 1) Refer to page 312 "Applicable Fluids Check List" for details of special fluids outside of the standard options and specifications.

Model/Valve Specifications <Normally Open>

Connection		Orifice dia. (mm)	Model	Min. operating pressure differential (MPa)	Max. operating pressure differential ^{Note 2)} (MPa)			Flow rate characteristics					Max. sys- tem pressure (MPa)	Weight (g)
Thread	Flange				Water, Air	Oil	Steam	Water, Oil, Steam		Air				
					AC/DC	AC/DC	AC	Kv	Cv converted	C [dm ³ /[s·bar]]	b	Cv		
3/8	—	15	VXP2142-03	0.04	0.7	0.6	0.7	3.6	4.2	18	0.35	5.0	Water, Air, Oil	760
1/2	—	15	VXP2142-04	0.04	0.7	0.6	0.7	4.6	5.3	20	0.35	5.5	1.5 Steam	760
3/4	—	20	VXP2152-06	0.04	0.7	0.6	0.7	7.9	9.2	38	0.30	9.2		1320

Connection		Orifice dia. (mm)	Model	Min. operating pressure differential (MPa)	Max. operating pressure differential ^{Note 2)} (MPa)			Flow rate characteristics				Max. system pressure (MPa)	Weight (g)
Thread	Flange				Water, Air	Oil	Steam	Water, Oil, Steam		Air			
					AC/DC	AC/DC	AC	Kv	Cv converted	Effective area (mm ²)			
1	—	25	VXP2262-10	0.04	0.7	0.6	0.7	10	12	215	Water, Air, Oil 1.5 Steam 1.0	1850	
1¼	—	35	VXP2272-12	0.03	0.7	0.6	0.7	20	23	415		3300	
1½	—	40	VXP2382-14	0.03	0.7	0.6	0.7	26	31	560		4200	
2	—	50	VXP2392-20	0.03	0.7	0.6	0.7	43	49	880		5400	
—	32A	35	VXP2272-32	0.03	0.7	0.6	0.7	20	23	415		5900	
—	40A	40	VXP2382-40	0.03	0.7	0.6	0.7	26	31	560		7300	
—	50A	50	VXP2392-50	0.03	0.7	0.6	0.7	43	49	880		9200	

Note 1) Weight of grommet type. Add 10 g for conduit type, 30 g for DIN terminal type, 60 g for conduit terminal type respectively.

Note 2) Refer to "Glossary of Terms" on page 309 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	1	—10 ^{Note 1)}	—5 ^{Note 2)}	—	—	—	—10
	DC	—	—	—	—	—	—	—

Note 1) Dew point: -10°C or less

Note 2) 50 mm²/s or less

Note 3) "D", "E" etc. in parentheses are option symbols.

VXP21/22/23 Series

How to Order (Normally Open)

VXP21

VXP22

VXP23

Model

2

Body size

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

Valve/Body

2	Normally open/Single unit
---	---------------------------

Solenoid valve option

NII	Standard Specifications
-----	-------------------------

Select an option mark in page 312 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.

Bracket

NII	None
B	With bracket

Thread connection sizes are available from 03 to 10.

Electrical option

NII	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.

Electrical entry

G	Grommet
C	Conduit
D	DIN terminal
T	Conduit terminal

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

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 322 for ordering coil only.

Thread type

NII	Rc
T	NPTF
F	G
N	NPT

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
Flange	2	VXP2392-20
	32A	VXP2272-32
	40A	VXP2382-40
	50A	VXP2392-50

Ordering example

(Example) VXP22 series, 32A Flange, 200 VAC,
DIN terminal
(Part no.) **VXP2272-32-2D**

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

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

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



Made to Order Specifications

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

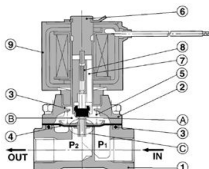
VXP [Model] — [Port size] — [Electrical entry] - X36

DIN terminal or class H coil not available.

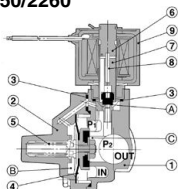
Construction/Principle Parts Material

Normally Closed (N.C.)

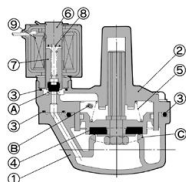
VXP2130



VXP2140/2150/2260



VXP2270/2380/2390



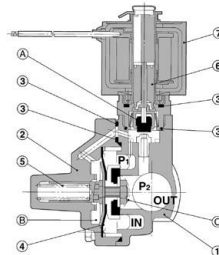
Operation

<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 (A) opens. Then the pressure in the pressure action chamber (B) falls to open the main valve (C).
<Valve closed> When the coil (9) is not energized, the pilot valve (A) is closed and the pressure in the pressure action chamber (B) rises and the main valve (C) closes.

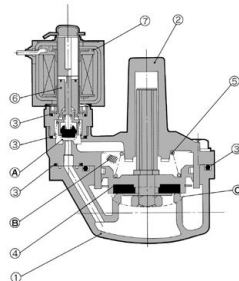
No.	Description	Size	Material	
			Standard	Option
1	Body	10A to 25A	C37	Stainless steel
		32A to 50A	CAC408	—
2	Bonnet	10A to 25A	C37	Stainless steel
		32A to 50A	CAC408	—
3	O-ring	—	NBR	FKM/EPDM
4	Disk assembly	10A to 25A	Stainless steel, C37, NBR	Stainless steel, FKM/EPDM
		32A to 50A	Stainless steel, C37	Stainless steel, FKM/EPDM
5	Valve spring	—	Stainless steel	—
6	Core assembly	10A to 25A	Stainless steel, Silver	Stainless steel, Silver
		32A to 50A	Copper	—
7	Armature assembly	—	Stainless steel, NBR	Stainless steel, FKM/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 (A) closes, the pressure in pressure action chamber (B) rises and the main valve (C) closes.
<Valve opened> When coil (7) is not energized, the closed pilot valve (A) opens, the pressure in pressure action chamber (B) drops and the main valve (C) opens.

No.	Description	Size	Material	
			Standard	Option
1	Body	15A to 25A	C37	Stainless steel
		32A to 50A	CAC408	—
2	Bonnet	15A to 25A	C37	Stainless steel
		32A to 50A	CAC408	—
3	O-ring	—	NBR	FKM/EPDM
4	Disk assembly	15A to 25A	Stainless steel, C37, NBR	Stainless steel, FKM/EPDM
		32A to 50A	Stainless steel, C37	Stainless steel, FKM/EPDM
5	Valve spring	—	Stainless steel	—
6	Core assembly	15A to 25A	Stainless steel, Silver	Stainless steel, Silver
		32A to 50A	Copper, NBR	FKM/EPDM, PTFE
7	Coil assembly	—	POM	Stainless steel, Copper
		—	PTFE	FKM/EPDM, PTFE

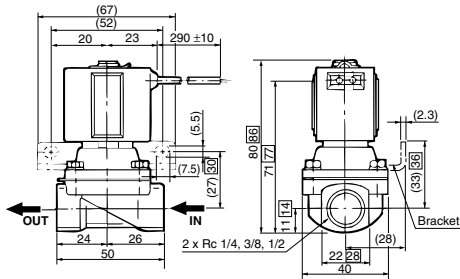
VX2
VXK
VXD
VXZ
VXS
VXB
VXE
VXP
VXR
VXH
VXF
VX3
VXA

VXP21/22/23 Series

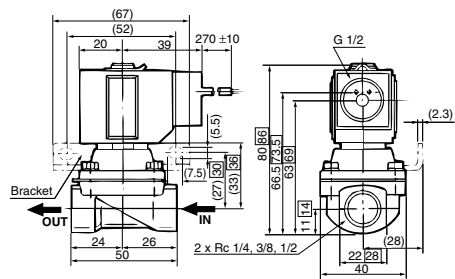
Dimensions (Orifice Diameter: 10 mmø)

Normally Closed: VXP2130

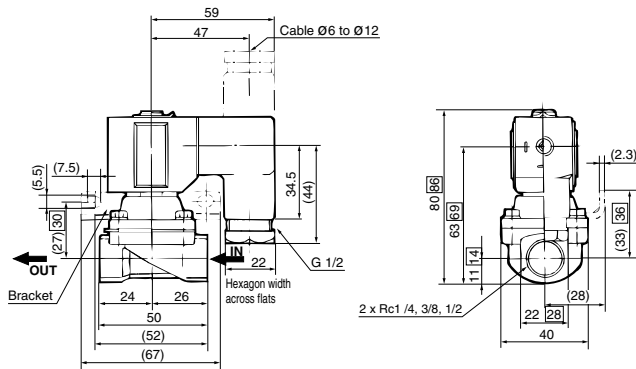
Grommet: G



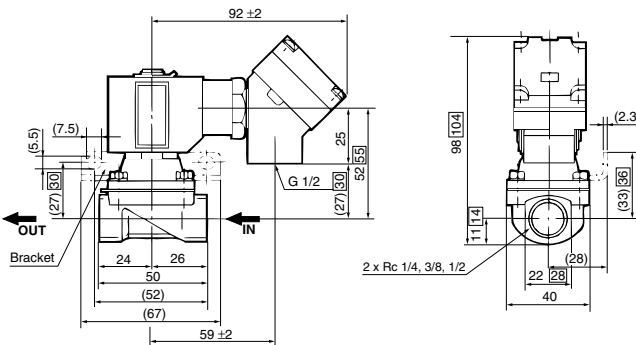
Conduit: C



DIN terminal: D



Conduit terminal: T

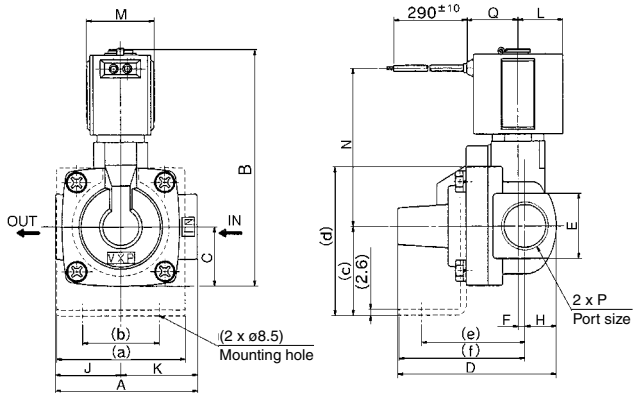


□: Port size Rc 1/2

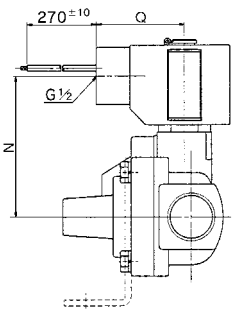
Dimensions (Orifice Diameter: 15 mmØ, 20 mmØ, 25 mmØ)

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

Grommet: G

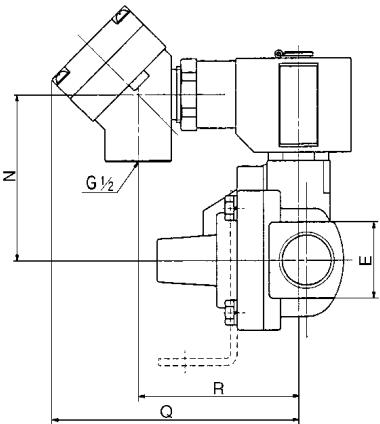


Conduit: C



- VX2
- VXK
- VXD
- VXZ
- VXS
- VXB
- VXE
- VXP
- VXR
- VXH
- VXF
- VX3
- VXA

Conduit terminal: T



Model		P Port size														Electrical entry						Bracket					
			A	B	C	D	E	F	G	H	J	K	L	M	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	

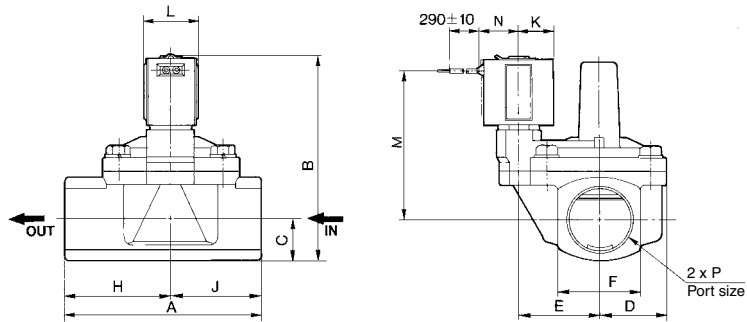
(): N.O.

VXP21/22/23 Series

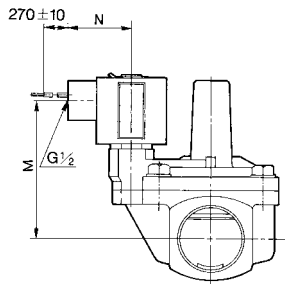
Dimensions

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

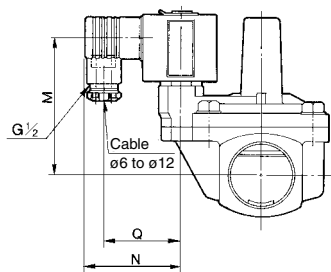
Grommet: G



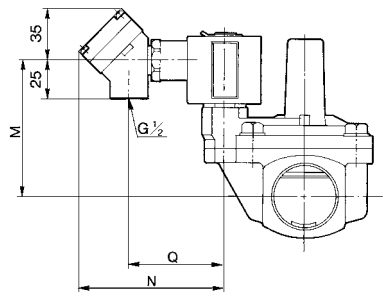
Conduit: C



DIN terminal: D



Conduit terminal: T



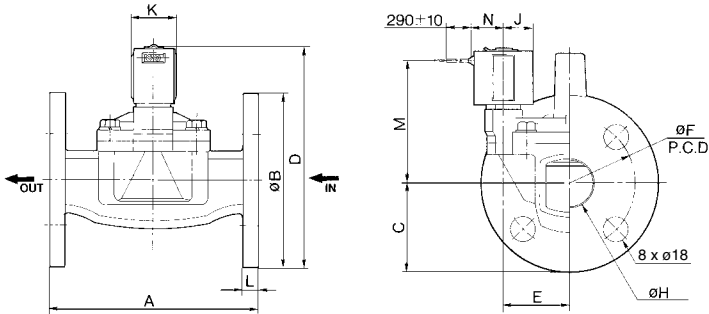
Model		P Applicable thread	A	B	C	D	E	F	H	J	K	L	Electrical entry											
													Grommet		Conduit		DIN terminal		Conduit terminal					
Normally closed	Normally open												M	N	M	N	M	N	M	N	Q			
VXP2270	VXP2272	1 ¼	125	128 (145)	26.5	43.5	51.5	53	67.5	57.5	23	35	92 (102)	25.5	84 (94)	41.5	84 (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

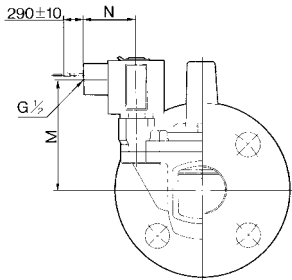
Normally closed: VXP2270/2380/2390 Normally open: VXP2272/2382/2392

Grommet: G

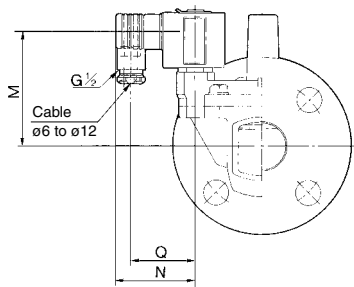


- VX2
- VXK
- VXD
- VXZ
- VXS
- VXB
- VXE
- VXP
- VXR
- VXH
- VXF
- VX3
- VXA

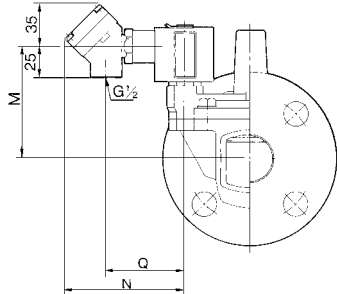
Conduit: C



DIN terminal: D



Conduit terminal: T



Model		Applicable flange	A	B	C	D	E	F	H	J	K	L	Electrical entry											
Normally closed	Normally open												Grommet			Conduit			DIN terminal			Conduit terminal		
													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

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

Application

Electrical entry	
G	Grommet
C	Conduit
D	DIN terminal

Electrical entry

Electrical option

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

Terminal box

Nil	None
T	With terminal box

Coil insulation type

B	Class B insulation
H	Class H insulation

⋆ DIN terminal or DC not available

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) VXP21 series, 100 VAC, class B insulation, grommet
(Part no.) **VX021-001GB-01**
- (Example) VXP22 series, 220 VAC, class B insulation, DIN terminal (with terminal box)
(Part no.) **VX021-002DBT-04**
- (Example) VXP23 series, 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	—	—	—
	CB	—	—	—
Conduit	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.