

Aluminum High Vacuum Angle Valve Normally Closed/O-ring Seal

The production of flange sizes 16, 25, 40, 50, 63, and 80 for the XLF(V) series has been discontinued. Please select the new XLF(V)-2 type. See [here](#) for details.



XLF/XLFV Series

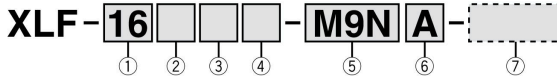


XLF

How to Order



Made to Order specifications
(For details, refer to pages 430 to 435)



① Flange size

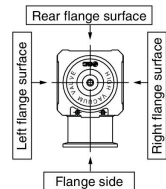
Size
16
25
40
50
63
80
100
160

② Flange type

Symbol	Type	Applicable flange
Nil	KF (NW)	16, 25, 40, 50, 63 80, 100, 160
D	K (DN)	63, 80, 100, 160

③ Indicator/Pilot port direction

Symbol	Indicator	Pilot port direction
Nil	Without indicator	Flange side
A	With indicator	Flange side
F		Left flange surface
G		Rear flange surface
J		Right flange surface
K	Without indicator	Left flange surface
L		Rear flange surface
M		Right flange surface



④ Temperature specifications/Heater

Symbol	Temperature	Heater
Nil	5 to 60°C	—
High temperature type	H0	—
	H4	5 to 150°C
	H5	With 100°C heater With 120°C heater

Note) Size 16 is not applicable for H4, H5, Size 25 not for H4.

⑥ Number of auto switches/Mounting position

Symbol	Quantity	Mounting position
Nil	Without auto switch	—
A	2 pcs.	Valve open/closed
B	1 pc.	Valve open
C	1 pc.	Valve closed

⑤ Auto switch type

Symbol	Auto switch model	Remarks
Nil	—	Without auto switch (without built-in magnet)
M9N(M)(L)(Z)	D-M9N(M)(L)(Z)	Solid state auto switch
M9P(M)(L)(Z)	D-M9P(M)(L)(Z)	
M9B(M)(L)(Z)	D-M9B(M)(L)(Z)	
A90(L)	D-A90(L)	Reed auto switch (Not applicable to flange size 16)
A93(M)(L)(Z)	D-A93(M)(L)(Z)	
M9//	—	Without auto switch (with built-in magnet)

Note 1) Auto switches shown above cannot be mounted on the high temperature type. For the high temperature type, a semi-standard product that uses the heat resistant auto switch D-F7NJ* is available. For details, please contact SMC.

Note 2) Standard lead wire length is 0.5 m. Add "L" to the end of the part number when 3 m is desired, "M" when 1 m, and "Z" when 5 m.

Example) -M9NL

⑦ Body surface treatment/Seal material and its changed part

• Body surface treatment

Symbol	Surface treatment
Nil	External: Hard anodized Internal: Raw material
A	External: Hard anodized Internal: Oxalic acid anodized

• Seal material

Symbol	Seal material	Compound No.
Nil	FKM	1349-80*
N1	EPDM	2101-80*
P1	Barrel	70W
	Perfluoro®	
Q1	Kalrez®	4079
R1	Chemraz®	SS592
R2		SS630
R3		SSE38
S1	VMQ	1232-70*
T1	FKM for Plasma	3310-75*
U1	ULTIC	UA4640
	ARMOR®	

* Produced by Mitsubishi Cable Industries, Ltd.

• Seal material changed part and leakage

Symbol	Changed part ^{Note 2)}	Leakage (Pa·m³/s or less) ^{Note 1)}	
		Internal	External
Nil	None	1.3 x 10 ⁻¹⁰ (FKM)	1.3 x 10 ⁻¹⁰ (FKM)
A	②, ③	1.3 x 10 ⁻⁸	1.3 x 10 ⁻⁸
B	②	1.3 x 10 ⁻⁸	1.3 x 10 ⁻¹⁰ (FKM)
C	③	1.3 x 10 ⁻¹⁰ (FKM)	1.3 x 10 ⁻⁸

Note 1) Values at normal temperature, excluding gas permeation.

Note 2) Refer to parts number of "Construction" on page 428 for changed part. Number indicates parts number of "Construction" accordingly.

Note 3) Part ③ (exterior seal) is not changeable for sizes 16 and 25.

To order something other than "Nil" (standard), list the symbols starting with "X," followed by each symbol for "body surface treatment," "seal material" and then "changed part".

Example) XLF-40-M9NA-XAN1A

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