

Solenoid Valve

Model: PF-22, PF-22C (for Steam, Liquids or Air)

The PF-22 Type series flanged solenoid valves (Momotaro II) inherit features of the conventional PF-12 Type series products.

To make replacement easy, the face-to-face dimensions of the new series are exactly the same as those of the previous series. There are some changes though, for improving durability, energy saving performance, and compliance with RoHS directives (products with nominal diameter less than 50mm) and other environmental standards.



Features

- Three times more durable than conventional VENN products. (Size 50mm and lower products)
- Wide range of applicable pressure: 0-1.0 MPa.
- Install in horizontal or vertical pipe. (size 50mm or smaller).
- The coil is coated with heat-resistant thermosetting resin (size 25mm and lower products).

Specifications

Operation	Energized open	Energized close
Model name	PF-22*1	PF-22C*1
Code name	PF22-W*1	PF22C-W*1
Applicable fluid	Steam, water, air & oils (Kerosene, diesel oil level)*3	
Fluid temperature	5 - 180°C (For hot water : Max. 100°C)	
Fluid viscosity	20cST or less	
Applicable pressure	0 – 1.0MPa (0.05-1.0MPa for size 80mm.)	
Min.pressure differential across the disc	0MPa (0.03MPa for coil installed horizontally. 0.05MPa for size 80mm.)	
Leakage allowance	Steam, water & oils:Nil (Confirm at pressure gauge) Air:50mL/min(standard state) or less (when 0.05 – 1.0MPa)	
Rated voltage	Common use:AC100/200V 50/60Hz or AC110/220V 60Hz*6	
Insulation	Class H	
Ambient temperature	5-60°C	
Protection	Dustproof, splash proof, for indoor use*7 (When used outdoors, also use TB-03 Type terminal box, as rain proof type*8)	
End connection	Flanged JIS 10KFF	
Materials	Body (Cast bronze, Size 80mm:Cast iron), Disc (Size 10-50mm: Brass with Teflon tip, Size 65-80mm: Stainless steel with Teflon tip)	
Installation	Size 50mm or smaller: Can be installed on both horizontal and vertical piping at any angle Between the vertical (when the coil part is placed above) and horizontal. Size 65-80mm: Install the valve vertically in horizontal piping placing coil part above.	
Valve body pressure	Hydraulic 2.0 MPa	

*1. Size 65-80mm products are PF-12, 12C Types, whose code names are PF12-W,PF12C-W(65A),PF12-S, PF12C-S(80A) respectively (with different shape and specifications of coil)

*2. Refer to Page 244 for method of wiring.

*3. If there is any regulation for fuel gas or diesel oil, confirm the body material according to the regulation.

*4. Size 32mm or larger product and those suitable for special voltage have different shape and dimensions of the coil.

*5. Please select WF Type series if you need air lightness or use the product will well or river water.

*6. For products suitable for special voltage, please contact us (Products for such purpose have coils with different shape and dimensions)

*7. Size 32mm and larger products are dustproof and drip-proof type.

*8. Products with TB-03 Type terminal box are rain-proof type Products with TB-03C Type terminal box are splash-proof type (size 25 mm or smaller) or rain-proof type (size 32mm or larger)

*9. In environment with humidity higher than 85%, please use PF-22Y,22CY Types if the required size is 32-50 mm or PF-12Y,12CY Types if the required size is 65-80 mm (Please contact our agent in your area for products with size smaller than 25mm)

*10. In case of high viscosity (100cSt or larger), Please contact our agent in your area.

*11. Products with manual operating device are also available (Size 50mm or smaller).

Dimensions and Current values

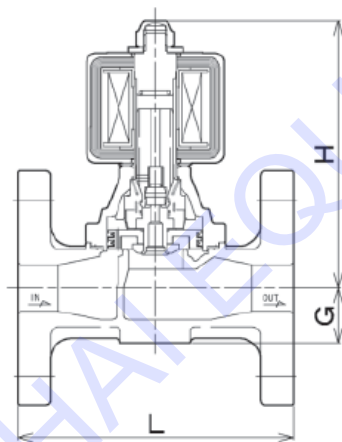
(mm)

Size		15(1/2")	20(3/4")	25(1")	32(1 1/4")	40(1 1/2")	50(2")	65(2 1/2")*	80(3")*
L		112	118	140	150	160	190	212	290
G		21	24	27	32	35	41	50	50
H		102(174)	115(178)	120(183)	150(199)	153(202)	165(214)	200(252)	220(272)
Port size		18	23	28	32	40	48	60	73
Cv value		4.5	7.5	12	18	23	35	50	70
Mass(kg)		2.6(3)	3.4(3.8)	5.2(5.6)	7(7.5)	8.3(8.8)	10.6(11.1)	15.1(15.5)	26.5(27)
Current (A)	AC100V	Rated	0.21(0.30)	0.30(0.30)		0.42(0.43)		0.60(0.60)	
		Starting	0.70(1.35)	1.25(1.35)		1.62(1.71)		2.50(2.50)	
	AC200V	Rated	0.10(0.15)	0.15(0.15)		0.18(0.22)		0.30(0.30)	
		Starting	0.35(0.70)	0.63(0.70)		0.80(0.85)		1.25(1.25)	

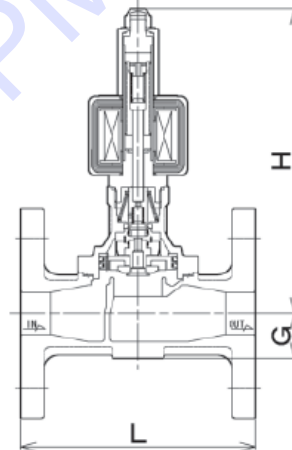
- *Size 65-80mm products are PF-12, 12C Types, whose code names are PF12-W,PF12C-W(65A),PF12-S, PF12C-S (80A)
- respectively.(The shape and specifications of coils in these products are different from other products.)
- Figures in () are for energized close type Flange code JIS 10KFF

■ CONSTRUCTION

PF-22 Type



PF-22C Type



- Depending on size, the structure may vary (Size 32mm and larger products have different coil structure)
- The face-to-face dimensions are the same as those of old models PF-12 and PF-12C Types.