

Model 4010

4"
DN100



Three-Way Thermostatic Valves

Compact and Reliable Temperature Control

Fluid Power Energy (FPE) thermostatic valves utilize the principle of expanding wax, which in the semi-liquid state undergoes large expansion rates within a relatively narrow temperature range. The self-contained element activates a stainless steel sleeve, which directs flow. All FPE thermostatic valves are factory set at predetermined temperatures: no further adjustments are necessary.

When used in a diverting application, on start-up the total fluid flow is routed back to the main system. As fluid temperature rises to the control range, some fluid is diverted to the cooling system. As fluid temperature continues to increase, more flow is diverted. When the thermostat is in a fully stroked condition, all fluid flow is directed to the cooling system.

FPE thermostatic valves may also be used in a mixing application. Hot fluid enters the "B" port and colder fluid enters the "C" port. The flows mix and the thermostat adjusts flow through ports "B" and "C" to reach the desired temperature, exiting the "A" port.

Standard FPE thermostatic valve housings are made from aluminum and grey iron castings, however, ductile iron, bronze, steel and stainless steel housings are available.



Including:

4010	4" Flange ANSI 125
4010M	4" Flange, lever manual override
4010 MZ	4" Flange, nut manual override
4010U	4" Flange DN/PN
4010UM	4" Flange DN/PN, lever manual override
4010UMZ	4" Flange DN/PN, nut manual override
4010XM	4" Flange ANSI 300, lever manual override
4010XMZ	4" Flange ANSI 300, nut manual override

Features and Benefits

- Wide range of temperatures
- Heavy duty
- Self-contained
- Replaceable element
- Non-adjustable
- Rugged construction
- Tamper-proof
- Operate in any orientation
- Compact

www.FPEvalves.com

EUROPE, MIDDLE EAST,
AFRICA, ASIA + PACIFIC
+44 1733 206 678
emeaap@FPEvalves.com

AMERICAS
+1 262 548 6220
americas@FPEvalves.com

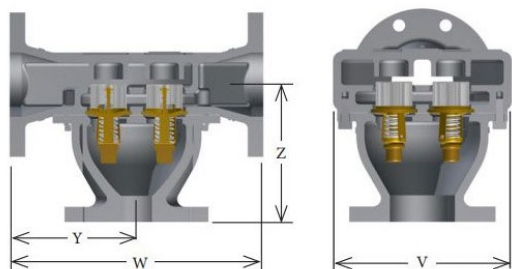
CHINA
+86 0519 8158 0102
china@FPEvalves.com

Model 4010 Three-Way Thermostatic Valve Specifications

All units in inches (mm) or lbs (Kg); English (metric)

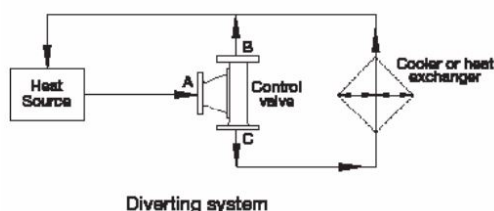
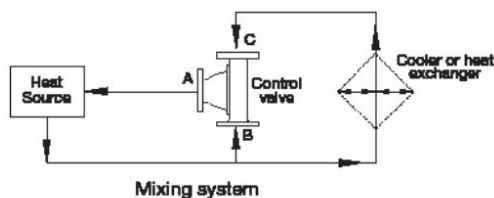
Model Number	Body Material*	Connection Size	Principal Dimensions Units				Flange Drilling			No. of elements
			Y	W	Z	V	No. of holes	Dia. of holes	Bolt circle	
*4010 *4010M *4010MZ	A	4" 125lbs FF FLANGE	7 29/32 (208)	15 13/16 (401)	8 9/16 (217)	11 (279)	8	3/4 (19)	7 1/2 (190)	4
	B	4" 150lbs FF FLANGE	7 21/32 (195)	15 5/16 (388)	8 5/16 (211)	11 (279)	8	3/4 (19)	7 1/2 (190)	4
	D	4" 150lbs FF FLANGE	7 29/32 (200)	15 13/16 (401)	8 9/16 (217)	11 (279)	8	3/4 (19)	7 1/2 (190)	4
	S, SS	4" 150lbs RF FLANGE	7 15/16 (201)	15 7/8 (403)	8 5/8 (218)	11 (279)	8	3/4 (19)	7 1/2 (190)	4
*4010U *4010UM *4010UMZ	A	100DN PN10/16 RF FLANGE	7 15/16 (201)	15 7/8 (403)	8 5/8 (218)	11 (279)	8	11/16 (18)	7 1/8 (180)	4
	B	100DN PN10/16 RF FLANGE	7 3/4 (197)	15 1/2 (394)	8 3/8 (213)	11 (279)	8	11/16 (18)	7 1/8 (180)	4
	D	100DN PN10/16 RF FLANGE	7 11/16 (196)	15 7/16 (392)	8 9/16 (217)	11 (279)	8	11/16 (18)	7 1/8 (180)	4
	S, SS	100DN PN10/16 RF FLANGE	7 13/16 (197)	15 9/16 (395)	8 7/16 (213)	11 (279)	8	11/16 (18)	7 1/8 (180)	4
*4010X *4010XM *4010XMZ	S, SS	4" 300lbs RF FLANGE	7 15/16 (201)	15 7/8 (403)	8 19/32 (218)	11 (279)	8	7/8 (22)	7 7/8 (200)	4
*4010-X15 *4010-X15M *4010-X15MZ	S, SS	4" 600lbs RF FLANGE	8 1/2 (215)	17 (431)	9 3/32 (230)	11 (279)	8	1 (25)	8 1/2 (215)	4

Replace * with body material type: A = Cast iron, B = Bronze, D = Ductile iron, S = Steel, SS = Stainless Steel.



Pressure ratings @ 250°F						Weights			
Material	A	B	D	S	SS	A	B	D	S & SS
psi	175	195	225	245	225	115 (52)	116 (52)	94 (43)	120 (54)
Bar	12.0	13.4	15.5	16.9	15.5				

Kits (xxx represents temperature °F)				
Model	O-Ring	Gasket	LipSeal	Thermostat
4000-xxx	4 of Buna-N	1	4	4
4000V-xxx	4 of Viton	1	4	4
4000E-xxx	4 of Neoprene	1	4	4



Lip Seal Insertion Tools		Lip Seal Extraction Tools	
Part Number	Component	Part Number	Component
2071-IT	Lip Seal Insertion Plug	2071-RT	Lip Seal Extraction Plug

NOTE: Service Kits are supplied with Housing O-Rings & Housing Gaskets. Make sure to replace your original housing seal using the same style seal, and discard the extra component. If your valve was originally supplied with a gasket, DO NOT attempt to use an O-Ring, as the seal will leak without a groove to accept the O-Ring

Note: FPE reserves the right to substitute ordered material for better quality.

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EUROPE, MIDDLE EAST,
AFRICA, ASIA + PACIFIC
+44 1733 206 678
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AMERICAS
+1 262 548 6220
americas@FPEvalves.com

CHINA
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