

Model 1010

3/4" to 1"

DN20 to DN32



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.

Additional BSP, SAE and JIS threads available.



Including:

1010	1" NPT
1110	3/4" NPT
1210	1/2" NPT
1010J8	1" SAE O-Ring
1010J12	3/4" SAE O-Ring
1010J16	1/2" SAE O-Ring

Flange options available

Features and Benefits

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

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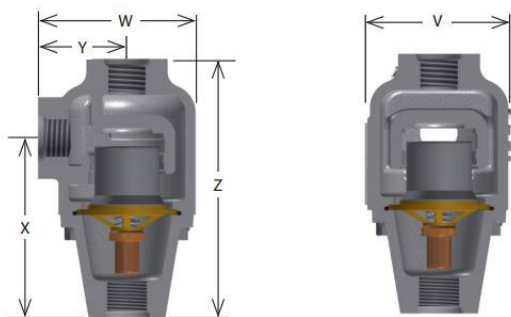
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Model 1010 Three-Way Thermostatic Valve Specifications

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

Model Number	Body Material*	Connection Size	Principal Dimensions Units					Flange	No. of elements
			X	Y	W	Z	V		
*1010 *1010B	A, AL, B, D, S, SS	1" NPT 1" BSPT	4 1/4 (108)	2 (50)	3 7/8 (98)	6 (152)	3 3/8 (85)	Socket Weld & Flange - Consult Factory	1
*1110 *1110B	A, AL, B, D, S, SS	3/4" NPT 3/4" BSPT	4 1/4 (108)	2 (50)	3 7/8 (98)	6 (152)	3 3/8 (85)		1
*1210 *1210B	A, AL, B, D, S, SS	1/2" NPT 1/2" BSPT	4 1/4 (108)	2 (50)	3 7/8 (98)	6 (152)	3 3/8 (85)		1
*1010J8	A, AL, B, D, S, SS	SAE 8 1/2"	4 13/32 (112)	2 3/16 (55)	3 7/8 (98)	6 11/32 (161)	3 3/8 (85)		1
*1010J12	A, AL, B, D, S, SS	SAE 12 3/4"	4 13/32 (112)	2 3/16 (55)	3 7/8 (98)	6 11/32 (161)	3 3/8 (85)		1
*1010J16	A, AL, B, D, S, SS	SAE 16 1"	4 13/32 (112)	2 3/16 (55)	3 7/8 (98)	6 11/32 (161)	3 3/8 (85)		1
*1010A	A, AL, B, D, S, SS	1" BSPP/ JIS Rp	4 13/32 (112)	2 3/16 (55)	3 7/8 (98)	6 11/32 (161)	3 3/8 (85)		1
*1110A	A, AL, B, D, S, SS	3/4" BSPP/ JIS Rp	4 13/32 (112)	2 3/16 (55)	3 7/8 (98)	6 11/32 (161)	3 3/8 (85)		1
*1210A	A, AL, B, D, S, SS	1/2" BSPP/ JIS Rp	4 13/32 (112)	2 3/16 (55)	3 7/8 (98)	6 11/32 (161)	3 3/8 (85)		1
*1410A	A, AL, B, D, S, SS	1 1/4" BSPP/ JIS Rp	4 13/32 (112)	2 3/16 (55)	3 7/8 (98)	6 11/32 (161)	3 3/8 (85)		1

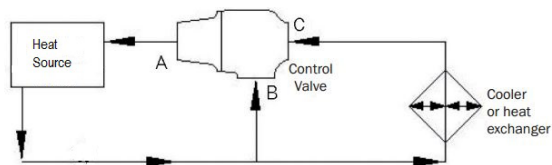
Replace * with body material type: A = Cast iron, AL = Aluminum B = Bronze, D = Ductile iron, S = Steel, SS = Stainless Steel.



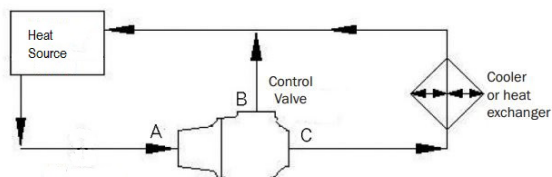
Pressure ratings @ 250°F					
Material	A, AL	B	D	S	SS
psi	150	180	250	670	590
Bar	10.3	12.4	17.2	46.2	40.7

Weights				
A	AL	B	D	S & SS
7 (3)	3 (1)	8 (4)	7 (3)	9 (4)

Service Kits (xxx represents temperature °F)				
Model	O-Ring	Gasket	Lip Seal	Thermostat
1000-xxx	1 of Buna-N	1	1	1
1000V-xxx	1 of Viton	1	1	1
1000E-xxx	1 of Neoprene	1	1	1



Mixing System



Diverting System

Lip Seal Insertion Tools	
Part Number	Component
1071-IT	Lip Seal Insertion Plug

Lip Seal Extraction Tools	
Part Number	Component
1071-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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