

# Model 2010

1½" to 2"

DN40 to DN50



## 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:

2010	2" NPT
2010-1	1½" NPT
2010J24	1½" SAE O-ring
A2010J32	2" SAE O-ring
F2010	2" 125lbs FF flange
SF2010	2" 150lbs RF flange
SF2010X	2" 300lbs RF flange

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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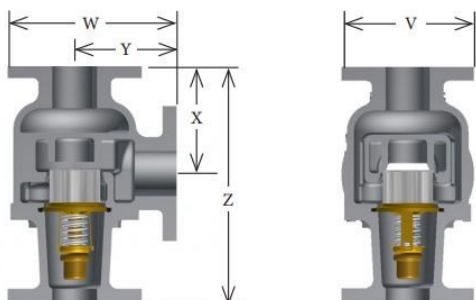
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# Model 2010 Three-Way Thermostatic Valve Specifications

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

Model Number	Body Material*	Connection Size	Principal Dimensions Units					Flange Drilling			No. of elements
			X	Y	W	Z	V	No. of holes	Dia. of holes	Bolt circle	
*2010-1	A, AL, B, D, S, SS	1½" NPT	3 13/16 (96)	3 9/16 (90)	6 7/16 (163)	9 11/16 (246)	5½ (139)	N/A	N/A	N/A	1
*2010	A, AL, B, D, S, SS	2" NPT	3 13/16 (96)	3 9/16 (90)	6 7/16 (163)	9 11/16 (246)	5½ (139)	N/A	N/A	N/A	1
*2010-1B	A, AL, B, D, S, SS	1½" BSPT	3 13/16 (96)	3 9/16 (90)	6 7/16 (163)	9 11/16 (246)	5½ (139)	N/A	N/A	N/A	1
*2010B	A, AL, B, D, S, SS	2" BSPT	3 13/16 (96)	3 9/16 (90)	6 7/16 (163)	9 11/16 (246)	5½ (139)	N/A	N/A	N/A	1
*2010-1A	A, AL, B, D, S, SS	1½" BSPP	3 13/16 (96)	3 9/16 (90)	6 7/16 (163)	9 11/16 (246)	5½ (139)	N/A	N/A	N/A	1
*2010A	A, AL, B, D, S, SS	2" BSPP	3 13/16 (96)	3 9/16 (90)	6 7/16 (163)	9 11/16 (246)	5½ (139)	N/A	N/A	N/A	1
*2010J24	A, AL, B, D, S, SS	SAE 24 1 7/8"-12	3 13/16 (96)	3 9/16 (90)	6 7/16 (163)	9 11/16 (246)	5½ (139)	N/A	N/A	N/A	1
*2010J32	A, AL, B, D, S, SS	SAE 32 2½"-12	3 13/16 (96)	3 9/16 (90)	6 7/16 (163)	9 11/16 (246)	5½ (139)	N/A	N/A	N/A	1
*F2010	A	2" 125lbs FF FLANGE	4 7/8 (123)	4 9/16 (115)	7 9/16 (192)	10 5/8 (269)	6 (152)	4	¾ (19)	4¾ (120)	1
	B	2" 150lbs RF FLANGE	4¾ (120)	4 7/16 (112)	7 7/16 (188)	10 3/8 (263)	6 (152)	4	¾ (19)	4¾ (120)	1
	D	2" 150lbs RF FLANGE	4¾ (120)	4 11/16 (119)	7 11/16 (195)	10 7/8 (276)	6 (152)	4	¾ (19)	4¾ (120)	1
	S, SS	2" 150lbs RF FLANGE	4 7/8 (123)	4 9/16 (115)	7 9/16 (192)	10 11/16 (271)	6 (152)	4	¾ (19)	4¾ (120)	1
*F2010X	S, SS	2" 300lbs RF FLANGE	5 (127)	4 11/16 (119)	7 15/16 (201)	10 11/16 (271)	6½ (165)	8	¾ (19)	5 (127)	1

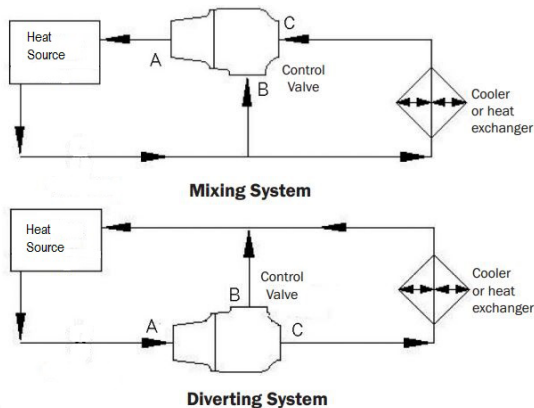
Replace \* with body material type: A = Cast iron, AL = Aluminum B = Bronze, D = Ductile iron, S = Steel, SS = Stainless Steel.



Pressure ratings @ 250°F						Weights				
Material	A, AL	B	D	S	SS	A	AL	B	D	S & SS
psi	150	180	225	670	590	21 (10)	10 (5)	25 (11)	21 (10)	23 (10)
Bar	10.3	12.4	15.5	46.1	40.6					

Service Kits (xxx represents temperature °F)				
Model	O-Ring	Gasket	LipSeal	Thermostat
2000-xxx	1 of Buna-N	1	1	1
2000V-xxx	1 of Viton	1	1	1
2000E-xxx	1 of Neoprene	1	1	1

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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