

Model 1010

Three-Way Thermostatic Valve

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

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. A wide range of temperatures are available for water and oil temperature control applications.

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.

In a mixing application, hot fluid enters the "B" port and colder fluid enters the "C" port. The flows mix and the thermostat adjusts 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.

Optional 1010 features: High over temperature element, plated element. Other options available upon request.



Features

Wide Range of Temperatures

Heavy Duty

Self-Contained

Replaceable Element

Non-Adjustable

Rugged Construction

Tamper-Proof

Operate in Any Position

Available for Refrigeration Service



FLUID POWER ENERGY, INC.

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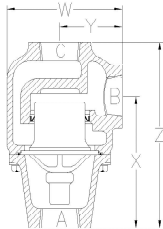
www.fpevalves.com



Model 1010

MODEL NUMBER	BODY MATERIAL (*)	NOMINAL PIPE SIZE	PRINCIPAL DIMENSIONS (UNITS in. & (mm))				MAX WIDTH IN THE OTHER PLANE	FLANGE DRILLING			NO. OF ELEMENTS	APPROX. SHIPPING WEIGHT	NOTES OR NUMBERED ENDNOTES
			"X"	"Y"	"W"	"Z"		NO. OF HOLES	DIA. OF HOLES	BOLT CIRCLE			
*1010	A, AL, B, D, S, SS	1" NPT	4 1/4 (107.95)	2 (50.80)	3 5/8 (92.08)	6 (152.40)	3 3/8 (85.73)	N/A	N/A	N/A	1	A=6.5#, AL=3# B=8.5#, D=6.5# S & SS=7#	
*1110	A, AL, B, D, S, SS	3/4" NPT	4 1/4 (107.95)	2 (50.80)	3 5/8 (92.08)	6 (152.40)	3 3/8 (85.73)	N/A	N/A	N/A	1	A=6.5#, AL=3# B=8.5#, D=6.5# S & SS=7#	
*1210	A, AL, B, D, S, SS	1/2" NPT	4 1/4 (107.95)	2 (50.80)	3 5/8 (92.08)	6 (152.40)	3 3/8 (85.73)	N/A	N/A	N/A	1	A=6.5#, AL=3# B=8.5#, D=6.5# S & SS=7#	
*1010J8	A, AL, B, D, S, SS	SAE 8 1/2"	4 13/32 (111.92)	2 3/16 (55.56)	3 7/8 (98.43)	6 11/32 (161.13)	3 3/8 (85.73)	N/A	N/A	N/A	1	A=6.5#, AL=3# B=8.5#, D=6.5# S & SS=7#	
*1010J12	A, AL, B, D, S, SS	SAE 12 3/4"	4 13/32 (111.92)	2 3/16 (55.56)	3 7/8 (98.43)	6 11/32 (161.13)	3 3/8 (85.73)	N/A	N/A	N/A	1	A=6.5#, AL=3# B=8.5#, D=6.5# S & SS=7#	
*1010J16	A, AL, B, D, S, SS	SAE 16 1"	4 13/32 (111.92)	2 3/16 (55.56)	3 7/8 (98.43)	6 11/32 (161.13)	3 3/8 (85.73)	N/A	N/A	N/A	1	A=6.5#, AL=3# B=8.5#, D=6.5# S & SS=7#	

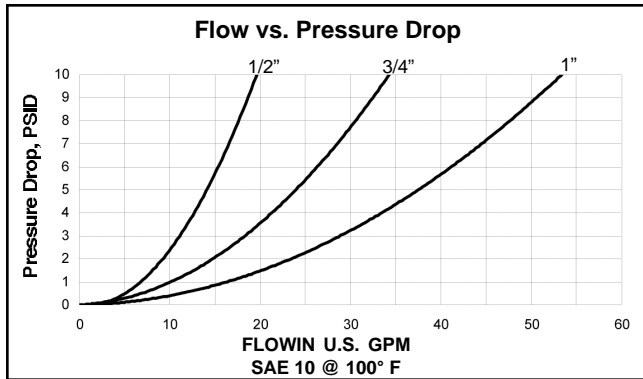
* (Replace * with body material type; A=Cast Iron, AL=Aluminum, B=Bronze, D=Ductile Iron, S=Steel, SS=Stainless Steel)



All models

PRESSURE RATINGS	
MATERIAL	PSI
A, AL, B	150
D	250
S, SS	500

For port sizes not shown consult factory



Recommended Pressure Drop is 2 to 7 PSI

PART #	DESCRIPTION
*1010	VALVE BODY (*See table for material)
*1020	VALVE COVER (*See table for material)
1080	GASKET (Older than 1979)
1572**	O-RING (Standard material is Buna-N)
1071	LIP SEAL
1060-Temp	THERMOSTAT (Temp to follow dash)
1600	HEX BOLT
1601	LOCK WASHER
1590	NAMEPLATE

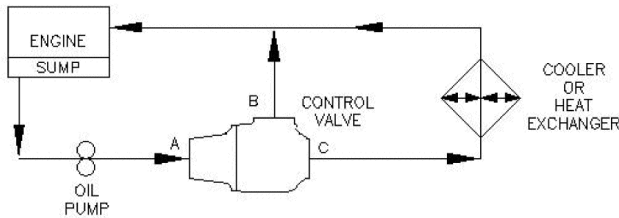
FPE Model 1000* Replacement Kit (Includes the following:)

1572**	O-RING (Standard material is Buna-N)
1071	LIP SEAL
1060-Temp	THERMOSTAT (Temp to follow dash)

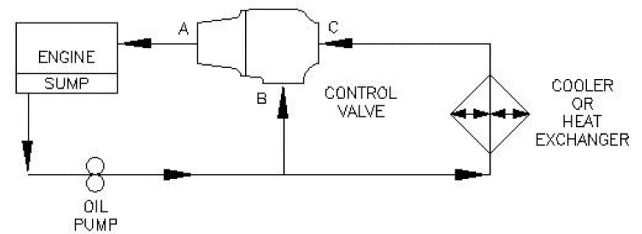
(For Viton® (V) or Neoprene (E) O-Ring material, replace ** with V or E)

Viton® is a registered trademark of Dupont Dow Elastomers

APPLICATION CHARTS



DIVERTING SYSTEM



MIXING SYSTEM

To Order

Specify Model Number, nominal temperature desired, and housing material. For Model coding information, visit our website or consult your factory representative.



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