

# Thermostatic Valves

## Model 1010

### Including:

#### Three-Way

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

### Features and Benefits

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



Manufactured by:



Fluid Power Energy Inc

## Compact, reliable temperature control

Fluid Power Energy (FPE) thermostatic valves use 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.

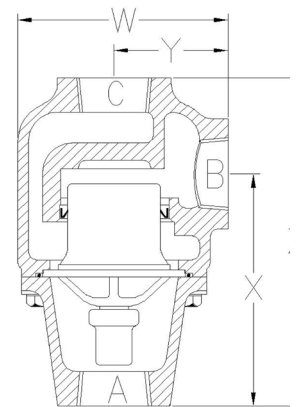
Optional 1010 features: High over temperature element, plated element. Other options available upon request.

## Specification

Model Number	Body Material (*)	Nominal Pipe Size	Principal Dimensions Units - inches (mm)				Max. width in other plane	Flange Drilling			No. of elements	Approx. shipping weight
			"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#
*1010B	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#

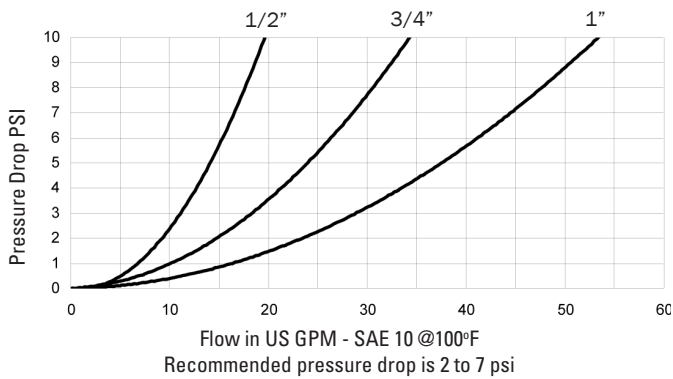
\* Replace \* with body material type: A= Cast Iron, AL= Aluminium, B = Bronze, D= Ductile Iron, S=Steel, SS= Stainless Steel. For port sizes not shown consult factory.

Pressure Ratings	
Material	PSI
A, AL, B	150
D	250
S, SS	500



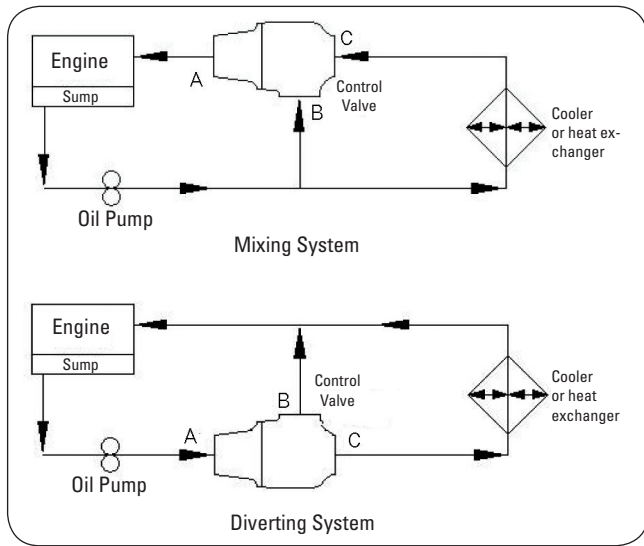
All Models

### Flow vs. Pressure Drop



# Thermostatic Valves

Model 1010



## Spare Parts

Part Number	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
<b>FPE Model 1000*</b>	<b>Replacement kit (includes the following:)</b>
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	

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