



# Three-Way Thermostatic Valves Model 2010 Datasheet

## Including:

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

## Features and Benefits

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



## 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.

Available connections: NPT, SAE O-ring, 125# FF flange, 150# and 300# RF flange.

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

Represented by:



**HUEGLI TECH AG (LTD)**  
The Engine & Genset Control Company

Huegli Tech AG (LTD)  
Langenthal, Switzerland  
+41 (0)629165030 ■ sales@huegli-tech.com ■ www.huegli-tech.com

[www.fpevalves.com](http://www.fpevalves.com)

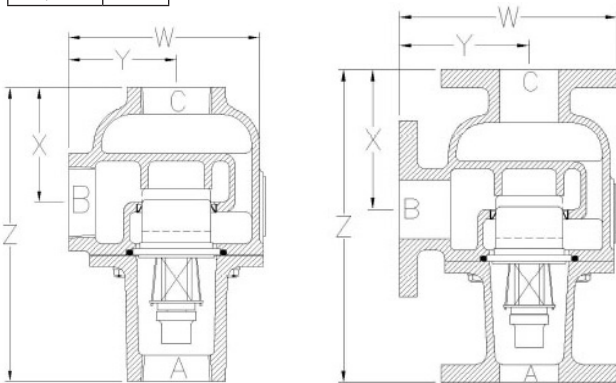
# Model 2010 Three-Way Thermostatic Valve

## 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		
*2010-1	A, B, D, S, SS	1 1/2" NPT	3 13/16 (96.84)	3 9/16 (90.49)	6 5/16 (160.34)	9 3/4 (247.65)	5 1/2 (139.70)	N/A	N/A	N/A	1	A & D=21#, B=24#, S & SS=23#
*2010	A, B, D, S, SS	2" NPT	3 13/16 (96.84)	3 9/16 (90.49)	6 5/16 (160.34)	9 3/4 (247.65)	5 1/2 (139.70)	N/A	N/A	N/A	1	A & D=21#, B=24#, S & SS=23#
*2010J24	A, B, D, S, SS	SAE 24 1 1/2"	3 13/16 (96.84)	3 9/16 (90.49)	6 5/16 (160.34)	9 3/4 (247.54)	5 1/2 (139.70)	N/A	N/A	N/A	1	A & D=21#, B=24#, S & SS=23#
*2010J32	A, B, D, S, SS	SAE 32 2"	3 13/16 (96.84)	3 9/16 (90.49)	6 5/16 (160.34)	9 3/4 (247.65)	5 1/2 (139.70)	N/A	N/A	N/A	1	A & D=21#, B=24#, S & SS=23#
*F2010	A, B, D	2" 125# FF flange	4 3/4 (120.65)	4 9/16 (115.89)	7 9/16 (192.09)	10 5/8 (269.88)	6 (152.40)	4	3/4 (19.05)	4 3/4 (120.65)	1	A=32#, B=40#, D=32#
	S, SS	2" 150# FF flange	4 7/8 (123.83)	4 9/16 (115.89)	7 9/16 (192.09)	10 7/8 (276.23)	6 (152.40)	4	3/4 (19.05)	4 3/4 (120.65)	1	S & SS=34#
*F2010X	S, SS	2" 300# RF flange	5 (127.00)	4 11/16 (119.06)	7 15/16 (201.61)	11 1/8 (282.58)	6 1/2 (165.10)	8	3/4 (19.05)	5 (127.00)	1	S & SS=36#

\* Replace \* with body material type: A= Cast iron, B = Bronze, D = Ductile iron, S = Steel, SS = stainless steel

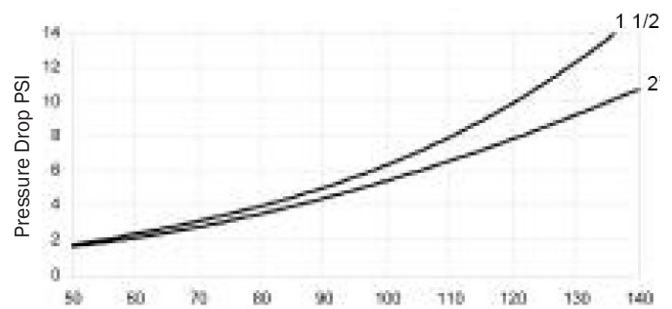
Pressure Ratings	
Material	PSI
A, B	150
D	250
S, SS	500
SF, SSF	275
SFX, SSFX	720



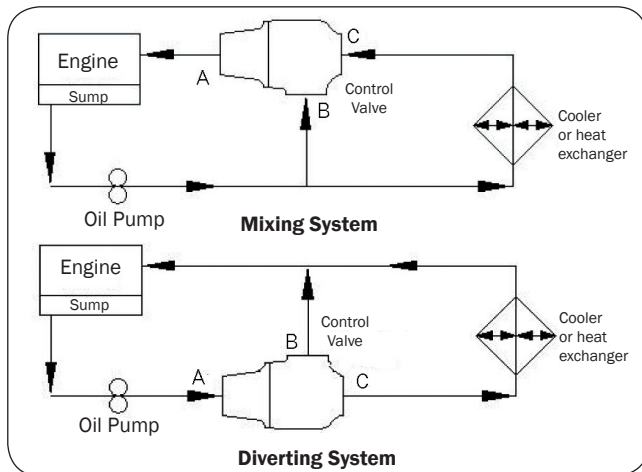
\*2010-1, \*2010, \*2010J

\*F2010, \*F2010X

### Flow vs. Pressure Drop



Flow in US GPM - SAE 10 @100°F  
Recommended pressure drop is 2 to 7 psi



### Spare Parts

Part Number	Description
*2010	Valve Body (*See table for material)
*2020	Valve cover (*See table for material)
1570**	O-ring (Standard material is Buna-N)
2071	Lip seal
2050-Temp	Thermostat (Temp to follow dash)
1600	Hex bolt
1601	Lock washer
<b>FPE Model 2000**</b>	<b>Replacement kit (includes the following:)</b>
1570**	Buna O-ring (Standard material is Buna-N)
2071	Lip seal
2050-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

### Americas

Global Headquarters  
Fluid Power Energy Inc  
W229 N591 Foster Court  
Waukesha, WI 53186  
USA

Tel: +1 262-548-6220  
Fax: +1 262-548-6239  
Email: fpeinfo@fpevalves.com

### Europe, Middle East, Africa, India, Russia & Asia Pacific

Fluid Power Energy Inc  
Steinackerstraße 20  
D-79576 Weil am Rhein  
Germany

Tel: +49 (0)7621 940 9990  
Fax: +49 (0)7621 940 99940  
Email: info@fpevalves.de



www.fpevalves.com