

500 BPHP SERIES

BYPASS HIGH PRESSURE ADJUSTABLE FLOW MONITOR

Monitor Flows of Corrosive and Non-Corrosive Liquids and Gases

KEY FEATURES

Higher Working Pressure.

FEATURES

- Broad Range of Adjustability
- Close On-Off Differential
- Ease of Adjustment
- In Line 180 Degree Porting
- High Resolution
- Materials: 316ss
- Confirms: Normal Flow Conditions
- Senses: High Flow, Low Flow conditions
- Water and Explosion Proof Covers
- Output: Switch Contact
- Best for Ratio (normal flow/set point) of 10:1 or less

APPLICATIONS

- High Pressure Systems
- Hydraulic Fluid
- Coolants
- Process Chemicals
- Gas & Liquid Sampling



OPERATION

When no flow is present the free magnetic piston rests on the bottom of the bypass bore. When flow is established the piston is forced upward and actuates the reed switch. The bypass flow is controlled by manual adjustment of the flow control vane. When flow decreases the piston moves downward and the reed switch deactuates. The adjustment assembly is then locked down to prevent any inadvertent readjustment.

- Actuation Points for air at 68° F and 14.7 PSIA with increasing flow
- Deactuation (decreasing flow) averages 10% less than actuation (increasing flow)
- Repeatability $\pm 2\%$
- Unit will pass greater flows

Corrections must be made for other gases, line pressure and temperatures. Please consult your representative or the factory.

TEMPERATURE OPERATING RANGE

- 0° to 220° F (-17° to 104° C)

For other temperature ranges consult factory.

CALIBRATION POINTS

MODEL	AIR SLPM (SCFM)	WATER LPM (GPM)	PORTS FNPT
500-BPHP Minimum	6 (0.21)	0.11 (0.03)	1/2"
Maximum	993 (35)	15.14 (4)	

PRESSURE LOSS TABLE

AIR FLOW RATE SLPM (SCFM)	WATER FLOW RATE LPM (GPM)	ΔP TO ATMOSPHERE MBARS (PSID)
84.9 (3)	3.8 (1)	17.2 (0.25)
566.3 (20)	15.1 (4)	51.7 (0.75)
1557.4 (55)	31.3 (8)	233.0 (3.38)
1925.5 (68)	37.8 (10)	362.0 (5.25)

SPECIFICATIONS

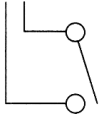
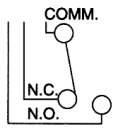
BODY MATERIAL	WEIGHT Lbs. (Kg.)	MAX WORKING PRESSURE PSIG (BARG)	WETTED PARTS	SEAL
316ss	5 (2.27)	6000 (413.4)	316ss, Epoxy	Viton®

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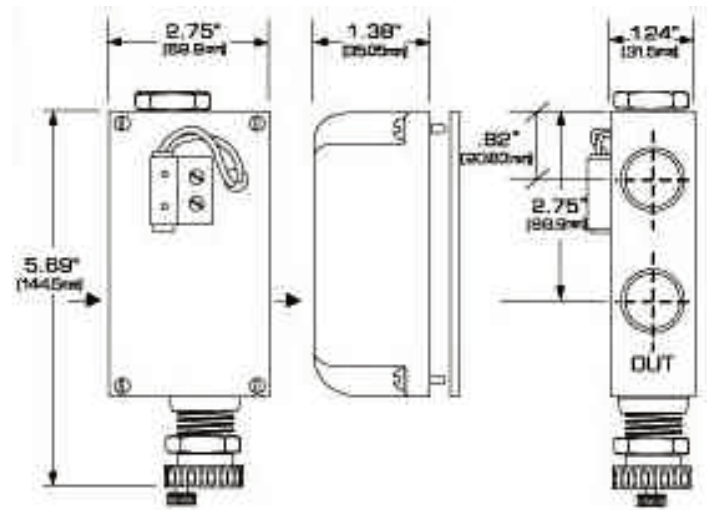
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SWITCH DATA	SPST	SPDT
Maximum Switching Voltage		
DC (V)	200	175
AC (V)	150	120
Contact Rating		
DC (W)	50	5
AC (VA)	70	5
Maximum Switching Current (A)		
DC (A)	1.0	.25
AC (A)	0.7	.25

LEADS	SPST	SPDT(Optional)
	leads 18 in. min. from body 22 AWG, TFE insulation	
		leads 18 in. min. from body 24 AWG, TFE insulation • green - N.C. • blue - N.O. • white - Common

Above values for resistive loads only. For inductive loads, surge current and rush current - contact protection is required, consult your local representative. SPDT UL Recognized (E47258).



INSTALLATION

Mount vertically (leads on the side) with horizontal piping. A 100 micron filter is recommended.

HOW TO ORDER *(Please see Custom Page for Special Options.)*

Model	Materials	Bypass High Pressure Design	Cover Type	Switch Options	Options
500	316 316ss	BPHP	W NEMA IV Water Proof X NEMA VII Explosion Proof	N.O. Single Pole Single Throw Normally Open STD. SPDT Single Pole Double Throw	TFE Teflon® Encapsulated Piston* O2 Oxygen Cleaned HT High Temperature Option 340° F (171° C) KZ Kalrez® Seals EPR EPR Seals BN Buna N Seals

*Consult Factory

*Viton - E.I. Dupont & Co

*Teflon - E.I. Dupont & Co

*Kalrez - E.I. Dupont & Co

Note: All dimensions and specifications are subject to change for quality improvement. Not responsible for printing errors.

CTE
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1057 CTE 500 BPHP Series

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