WEBTEC

WEBSTER INSTRUMENTS

Flow Meters to suit various applications

MP Series

Manufacturers of hydraulic components and test equipment for the Mobile, Industrial and Agricultural industries

BFPA The British Fluid Power Association

nqa. ISO 9001 Registered

UKAS QUALITY MANAGEMENT 015

Certificate No.8242

A versatile flow meter with improved design. . .

Webtec's WP Series of Flow meters for pipe sizes 1/4" to 1 1/2"

Benefits

- WP Series improved sharp-edged orifice design provides a more reliable and accurate reading in applications where fluid viscosity varies.
- The high-strength magnetic coupling between internal and external components eliminates mechanical seals and linkages that can fail and also allows installation in any piping orientation.
- With over 20 different port options and three materials of construction, WP Series flow meters offer an economical solution for your system requirements.
- Each monitor carries our standard parts and labour warranty against defects in materials and workmanship.

The economical WP Series Flow Meters are based on an improved variable-area, sharp-edged orifice design, providing accurate and repeatable flow rate measurements in both liquid and gas applications.

. . .because every Webtec flow meter has been designed and built to withstand today's rigorous working environment using advanced technology.

Maximum operating pressure and temperature of 3500 psi and 240°F are standard

We offer a complete line of products to fit all your monitoring needs

Basic In-Line Flow Meter

These economical, direct reading flow meters are available ex-stock with aluminum bodies in a variety of port sizes and flow ranges at working pressures to 3500 psi and system temperatures to 240 °F. For working pressures to 6000 psi see our rugged and durable FI series flow meters.

Phosphate Ester Flow Meter

This product line can be modified for compatibility with phosphate ester. The FI series flow meters can also be supplied for phosphate ester service.

Options

Flow switches are available to signal both High Flow and Low Flow conditions. An analog output module is available for remote indication. Versions are available for higher temperature, water, air or gas service. For working pressures to 6000 psi see the durable and rugged FI series flow meters.

Test Analizers

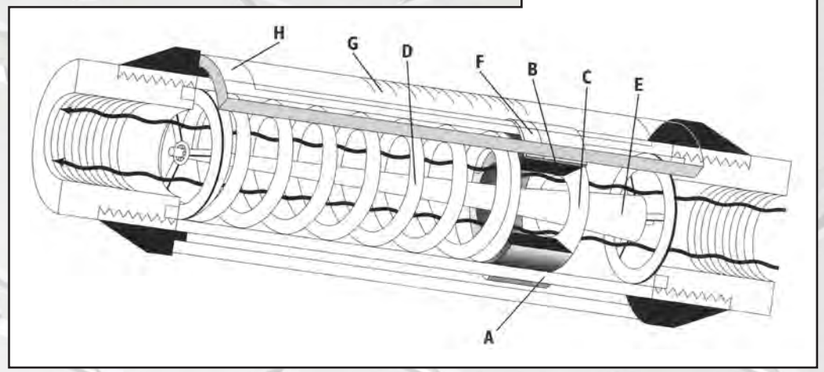
In addition to our rugged FIK series hydraulic test kit, the WP series is available as a system analyzer. Each delivers continuous fluid flow rate, pressure and temperature readings allowing quick in-line component checks.

Special Designs

Webtec manufactures one of the broadest lines of hydraulic flow meters and test equipment on the market. Feel free to call our experienced technical sales staff to discuss your unique application or modifications to our standard products.

Operating theory

Enclosed within a high pressure casing (A), a high strength magnet (B) is in tandem with the sharp-edged annular orifice disk (C) and is pressed towards the zero flow rate position by a linear rate compression spring (D). A tapered metering pin (E) is positioned concentrically within the annular orifice disk and provides a variable-area opening that increases by the square of linear displacement of the orifice disk. Fluid flow creates a pressure differential across the orifice disk, pressing the orifice disk and magnet against the compression spring. Flow rate is read by aligning the magnetically coupled follower (F) with the graduated scale (G) located within the environmentally sealed window (H). The variable-area orifice design provides pressure differentials and orifice displacements that are proportional to fluid flow rate.



. . .for mobile, industrial and agricultural applications

Product Selector

Standard Flow Meter Part Number
(For custom units, consult the Sales Office)

Series # WP □ □ □ – □ □ □ – □ □ Webtec Part Number

Style:

BASIC in-line for liquid	= B*
PNEUMATIC for air and gas	= G
HI-TEMP 400°F in-line	= H
HI-TEMP 600°F in-line	= J
Flow alarm, 1 switch	= M
Flow alarm, 2 switches	= N
Phosphate Ester in-line	= P
Flow Transmitter	= R
Hydraulic system analyser (See also FIK Series)	= T

Size Code:

1/4" to 1/2" inch	= 3*
3/4" to 1" inch	= 4*
1 1/4" to 2" inch	= 5*

Material:

Aluminium	= A*
Brass (See also FI Series)	= B
Stainless Steel	= S

Pressure Rating:

600 PSIG Max. (Air & Gas/Aluminium and Brass)	= 4
1000 PSIG Max. (Air & Gas/Stainless Steel)	= 5
3500 PSIG Max. (Liquids/Aluminium and Brass)	= 6*
6000 PSIG Max. (Liquids/Stainless Steel)	= See FI Series

Porting: (All Female)

Code		Size
S	= 1/4" NPTF, dry seal	3 only
A	= 3/8" NPTF, dry seal	3 only
B	= 1/2" NPTF, dry seal	3 only
C	= 3/4" NPTF, dry seal	4 only
D	= 1" NPTF, dry seal	4 only
E	= #6 SAE, O-ring seal	3 only
F	= #8 SAE, O-ring seal	3 only
* G	= #10 SAE, O-ring seal	3 only
* H	= #12 SAE, O-ring seal	4 only
* J	= #16 SAE, O-ring seal	4 only
K	= 1 1/4" NPTF, dry seal	5 only
L	= 1 1/2" NPTF, dry seal	5 only
M	= 2" NPTF, dry seal	5 only
N	= #20 SAE, O-ring seal	5 only
* P	= #24 SAE, O-ring seal	5 only
* Q	= #32 SAE, O-ring seal	5 only
R	= 3/8" BSP (British Std. Pipe)	3 only
T	= 1/2" BSP (British Std. Pipe)	3 only
U	= 3/4" BSP (British Std. Pipe)	4 only
V	= 1" BSP (British Std. Pipe)	4 only
W	= 1 1/4" BSP (British Std. Pipe)	5 only
Y	= 1 1/2" BSP (British Std. Pipe)	5 only
X	= 2" BSP (British Std. Pipe)	5 only
Z	= Cartridge	

SAE porting not available for brass monitors

Fluid Media:[1]

A =	Air at Gas
* H =	Oil at 0.873 specific gravity
W =	Water and 1.0 specific gravity (See also FI series)

Flow Ranges:

	Liquid (Oil and Water)	Air (@100 PSIG)	Size Code
0 1 =	0.05-1 GPM	1.5-12 SCFM	3 only
	0.1-1 GPM water		3 only
0 2 =	0.2-2 GPM	4-23 SCFM	3 only
	0.2-2.6 GPM	2-30 SCFM	4 only
* 0 5 =	0.5-5 GPM	5-50 SCFM	3 only
	0.5-5 GPM	6-60 SCFM	4 only
* 1 0 =	1-10 GPM	10-100 SCFM	3 & 4
* 1 5 =	1-15 GPM	15-150 SCFM	3 & 4
* 2 0 =	2-20 GPM	20-215 SCFM	4 only
2 5 =	2-25 GPM	20-250 SCFM	4 & 5
3 0 =	3-30 GPM	30-330 SCFM	4 only
* 4 0 =	4-40 GPM	30-400 SCFM	4 only
* 5 0 =	5-50 GPM	40-500 SCFM	4 only
	5-50 GPM	30-470 SCFM	5 only
7 5 =	8-75 GPM	30-750 SCFM	5 only
8 8 =	10-100 GPM	150-900 SCFM	5 only
	15-90 GPM water		5 only
* 9 9 =	20-150 GPM	150-1300 SCFM	5 only

Key

*** Stock Models**

[1] Consult Sales Office for special calibration or scale modifications.

Your Webtec Products representative:

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