

# WPG Series Pneumatic Flow Monitor

- Flow rates from  
1.5 to 1300 SCFM

The WPG series in-line flow monitors are designed for continuous monitoring or intermittent use and ideal for checking air compressor output or testing pneumatic machinery and tools for correct air consumption. All monitors are calibrated at 21°C and 6.9 bar (100 psi) as standard, so eliminating the need for look-up tables for most applications. The tubular scale is easily read through the clear polycarbonate window and ensures checks can be made to determine compressor performance and setting of flow control valves.

The unit is fully sealed for weather tight or wash down applications. An optional pyrex safety glass window is available. Wetted seals are available in Buna (standard), Viton®, EPR or Kalrez®, so compatibility with all pneumatic systems in mobile, industrial or other applications is not a problem.

The WPG series flow monitors do not require straight inlet or outlet plumbing and can be fitted in any orientation. The advanced design of the sharp edged orifice ensures good reliability over a wide viscosity range and minimises the effect of contamination. Accuracy is 2.5% over the centre third of the scale and 4% over the entire flow range.



Nuffield Road,  
St. Ives, Cambs.,  
PE27 3LZ, UK

Tel: +44(0)1480 397400

Fax: +44(0)1480 466555

www.webtec.co.uk

E-mail: sales@webtec.co.uk

## Features

- Low cost solution
- Ideal for measuring compressor output
- Wide variety of flow ranges, 1.5 - 1300 SCFM
- Pressure rating up to 70 bar (1000 psi)
- Port sizes from 3/8" to 2"
- Direct reading
- Calibrated in SCFM at 21°C and 6.9 bar (100 psi)
- Accurate within 2.5% over mid-scale, 4% FSD
- Advanced stainless steel sharp edge orifice
- Unrestricted mounting in any orientation



Certificate No.8242

WPG-BU-ENG-1938.pdf 09/11  
(Issue 3)

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

## Specifications

### Measuring accuracy

± 2.5% of full-scale in the centre third of the measuring range  
± 4% of full-scale over the entire scale range

### Repeatability

± 1% of full scale

### Flow measuring range

1.5 - 1300 SCFM (Standard cubic feet per minute)

### Maximum operating pressure

Aluminium & brass monitors 40 bar (580 psi),  
stainless steel 70 bar (1,000 psi)

### Maximum operating temperature

115° C (240° F)

### Pressure differential

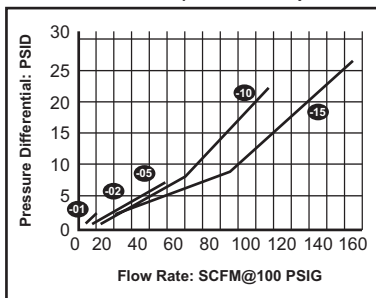
See graphs below

### Standard calibration fluids

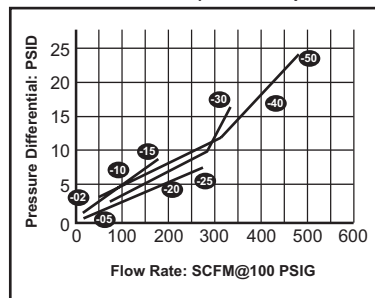
Air @ 21°C, 1.0 sg and 6.9 bar (100 psi)

## Pressure differential graphs categorised by size code

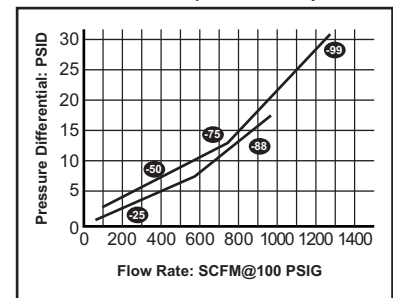
Series 3 (3/8" - 1/2")



Series 4 (3/4" - 1")



Series 5 (1 1/4" - 2")



415 = Model number (see Sales Brochure)

## Construction

### Wetted components:

High-pressure casing, end ports and tapered shafts: *Aluminium, Brass & Stainless Steel*

Seals: *Buna-N (STD), EPR, Viton® or Kalrez®*

Transfer magnet: *Teflon® coated Alnico*

Floating Orifice disc: *Stainless Steel*

All other internal parts: *Stainless Steel*

### Non-wetted components:

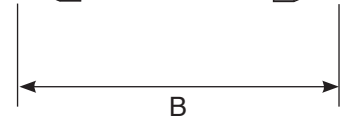
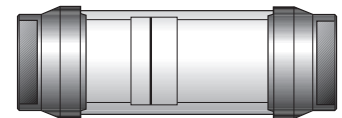
Window tube: *Polycarbonate (STD), Pyrex*

Window seals: *Buna-N (STD), Teflon®*

*(Teflon® is a registered trademark of DuPont)  
(Viton® & Kalrez® are registered trademarks of Dow DuPont Elastomers)*

## Dimensions

Size code	3	4	5	5 (2" ports)
Dim. A mm (inches)	48 (1.9)	60 (2.4)	90 (3.5)	90 (3.50)
Dim. B mm (inches)	167 (6.6)	182 (7.2)	258 (10.2)	322 (12.7)



# Product Selector

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

Series # WP  -  -  Webtec Part Number

## Step 1 - Style

BASIC in line for liquid	= B
Pneumatic for air and gas	= G
High Temp 200 °C (400 °F)	= H
Flow alarm, 1 switch	= M
Flow alarm, 2 switches	= N
Flow transmitter	= R
Phosphate esters	= P

## Step 2 - Port / Line Size

1/4" - 1/2"	= 3
3/4" - 1"	= 4
1 1/4" - 2"	= 5

## Step 3 - Material

Aluminium	= A
Brass	= B
Stainless Steel	= S

## Step 4 - Pressure rating maximum

42 bar (600 psi)	= 4
(Air and gas / Aluminium and brass)	
69 bar (1000 psi)	= 5
(Air and gas / Stainless steel)	
240 bar (3500 psi)	= 6
(Liquids / Aluminium and brass)	
420 bar (6000 psi)	= 7
(Liquids / Stainless steel)	

## Step 5 - Fluid:

Air and Gases	= A
Oil and 0.873 specific gravity	= H
Water and 1.0 specific gravity	= W

## Step 6 - Thread porting

<b>Size 3 available threads</b>	
1/4" NPTF	= S
1/8" NPTF	= A
1/2" NPTF	= B
9/16" -18UN #6 SAE ORB	= E
3/4" -16UN #8 SAE ORB	= F
7/8" -14UN #10 SAE ORB	= G
3/8" BSPP	= R
1/2" BSPP	= T

<b>Size 4 available threads</b>	
3/4" NPTF	= C
1" NPTF	= D
1-1/16" -12UN #12 SAE ORB	= H
1-5/16" -12UN #16 SAE ORB	= J
3/4" BSPP	= U
1" BSPP	= V

<b>Size 5 available threads</b>	
1-1/4" NPTF	= K
1-1/2" NPTF	= L
2" NPTF	= M
1-5/8" -12UN #20 SAE ORB	= N
1-7/8" -12UN #24 SAE ORB	= P
2" -12UN #32 SAE ORB	= Q
1-1/4" BSPP	= W
1-1/2" BSPP	= Y
2" BSPP	= X

Please note - SAE porting not available in brass

## Step 7 - Flow ranges

Oil and Water LPM (USgpm)	@100 PSIG SCFM	Size
0.5-4 (0.05 - 1)	1.5 -12	= 01 3 only
0.5-4 (0.1 - 1) water		
1-8 (0.2-2)	4-23	= 02 3 & 4
2-19 (0.5-5)	5-50	= 05 3 & 4
4-38 (1-10)	10-100	= 10 3 & 4
4-56 (1-15)	25-150	= 15 3 & 4
10-75 (2-20)	20-215	= 20 4 only
10-100 (2-25)	20-250	= 25 4 & 5
10-115 (3-30)	30-330	= 30 4 only
15-150 (4-40)	30-400	= 40 4 only
15-190 (5-50)	40-500	= 50 4 only
15-190 (5-50)	30-470	= 50 5 only
30-280 (8-75)	30-750	= 75 5 only
40-375 (10-100)	150-900	= 88 5 only
75-550 (20-150)	150-1300	= 99 5 only

## Step 8 - Optional flow directions

Uni-directional	=
Bi directional	= BI
Reverse flow	= RF

Not all flow ranges are available with Bi and reverse directional options, please consult the sales office.

## Case Drain Monitor

Series # WPC  -  -  Webtec Part Number

## Port / Line Size

1/2"	= 3
3/4" - 1"	= 4

## Material

Aluminium	= A
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## Pressure Rating Max.

70 bar (1000 psi)	= 5
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## Fluid Media

Oil and 0.873 specific gravity	= H
Water and 1.0 specific gravity	= W

## Flow ranges (oil and water)

LPM (USgpm)	Size
0.5-4 (0.05 - 1)	= 01 3 only
0.5-4 (0.1 - 1) water	
1-8 (0.2-2)	= 02 3 & 4
2-19 (0.5-5)	= 05 3 & 4
4-38 (1-10)	= 10 3 & 4
4-56 (1-15)	= 15 3 & 4
10-75 (2-20)	= 20 4 only
10-100 (2-25)	= 25 4 & 5
10-115 (3-30)	= 30 4 only

## Thread Type

Porting (All Female)	Size
1/2" BSPP	= T 3 only
3/4" BSPP	= U 4 only
1" BSPP	= V 4 only
1/2" NPTF, dry seal	= B 3 only
3/4" NPTF, dry seal	= C 4 only
1" NPTF, dry seal	= D 4 only