

# FI750/1500 Series

## Brass In-Line Flow Indicator

Flow Indicators are designed for continuous monitoring or intermittent use commissioning and servicing hydraulic systems up to 420 bar, 6000 psi.

These brass body units contain no carbon steel parts and can be used with water, water-oil emulsions systems and hydraulic oil.

The large clear 63mm (2 1/2") diameter dial ensures that quick checks can be made to determine pump performance and setting of flow control valves.

These direct acting flow indicators can be installed in hazardous areas or on applications where no power is available. The flow indicator design ensures good reliability and minimises the effects of contamination.

### Specifications

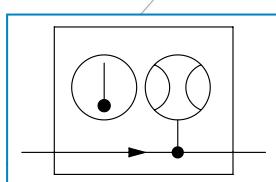
<b>Maximum Rated Pressure:</b>	Up to 420 bar, 6000 psi
<b>Maximum Rated Flow:</b>	Up to 400 L/min, 100 US gpm
<b>Ambient Temperature:</b>	-10 to 50°C, 14 to 122°F
<b>Porting:</b>	BSPP, SAE, NPSF
<b>Material:</b>	<b>Body Materials:</b> Brass CW614N
	<b>Internal Materials:</b> Mainly Brass
	<b>Seals:</b> FKM
<b>Weight:</b>	<b>FI750:</b> 3.8 kg, 8.4 lb <b>FI1500:</b> 9.2 kg, 20.2 lb

Make it **BLUE**®

### Features

- Suitable for use with water and water based systems
- Accuracy within 4% FSD
- Built-in thermometer available
- Dual scale water and oil in L/min or US gpm
- Large clear dials
- Horizontal or vertical mounting
- Rugged design
- Pressure gauge port
- Wide operating range

### Symbol:



## Sales Order Code

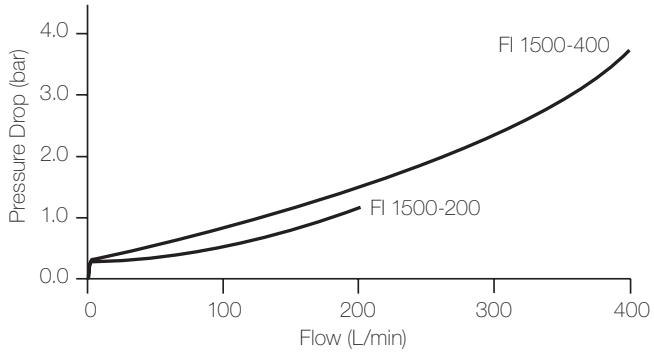
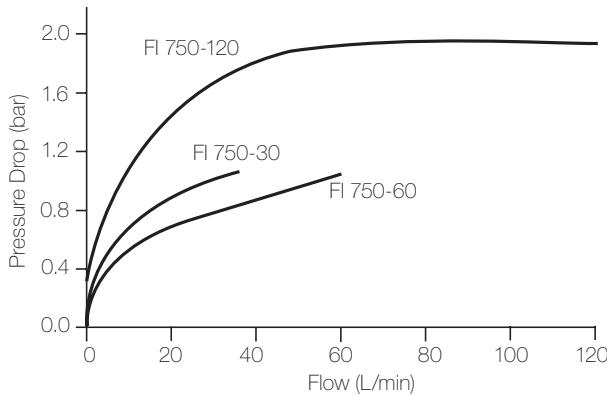
Please contact our technical sales to team to discuss any special order requirements.

MODEL NUMBER		CALIBRATED FLOW RANGE		MAIN PORTS	TOP PORTS	MAX RATED PRESSURE
WITH TEMPERATURE	WITHOUT TEMPERATURE	WATER	OIL			
FI750-30BBWT	FI750-30BBW	2-30 L/min	2-30 L/min	3/4" BSPP	1/4" BSPP	420 bar
FI750-30BNWT	FI750-30BNW	0.5-8 US gpm	0.5-8 US gpm	3/4" NPSF	1/4" NPTF	6000 psi
FI750-60BBWT	FI750-60BBW	3-70 L/min	2-60 L/min	3/4" BSPP	1/4" BSPP	420 bar
FI750-60BNWT	FI750-60BNW	0.8-8 US gpm	0.5-16 US gpm	3/4" NPSF	1/4" NPTF	6000 psi
FI750-120BBWT	FI750-120BBW	4-140 L/min	4-120 L/min	3/4" BSPP	1/4" BSPP	420 bar
FI750-120BNWT	FI750-120BNW	1-37 US gpm	1-32 US gpm	3/4" NPSF	1/4" NPTF	6000 psi
FI1500-200BBWT	FI1500-200BBW	10-200 L/min	10-200 L/min	1-1/2" BSPP	1/4" BSPP	350 bar
FI1500-200BSWT	FI1500-200BSW	2.5-50 US gpm	2.5-50 US gpm	1-7/8" -12UN #24 SAE ORB	1/4" NPTF	5000 psi
FI1500-400BBWT	FI1500-400BBW	20-400 L/min	20-400 L/min	1-1/2" BSPP	1/4" BSPP	350 bar
FI1500-400BSWT	FI1500-400BSW	5-100 US gpm	5-100 US gpm	1-7/8" -12UN #24 SAE ORB	1/4" NPTF	5000 psi

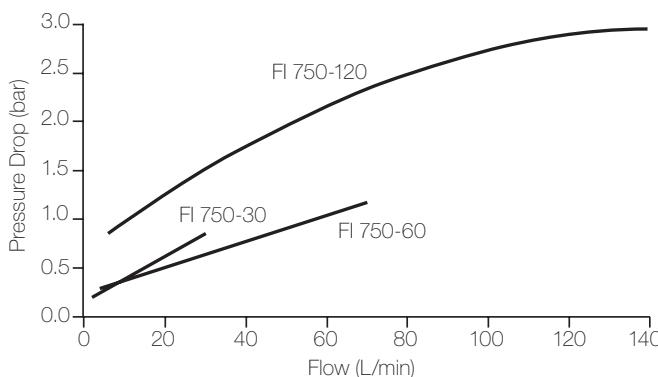
Note - All NPTF threads are to ANSI B1.20.3 -1976 Class 1. As stated in the standard it is recommended that "sealing is accomplished by the means of a sealant applied to the thread". NPT fittings may also be used to connect to NPTF ports (also with a sealant applied to the thread)

### Typical Pressure Drop Curves

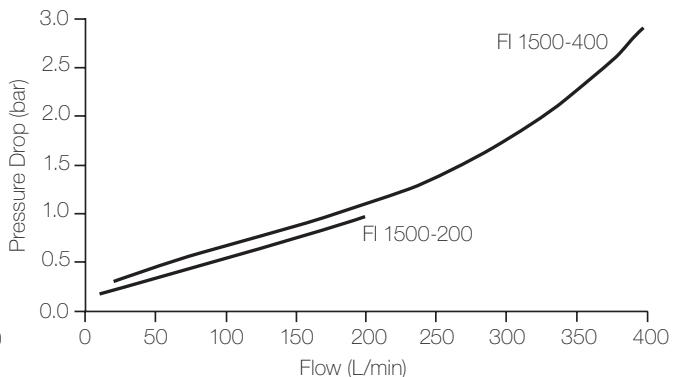
All tests completed using ISO32 Mineral oil at 25 cSt



Water Pressure Drop Curve for FI750

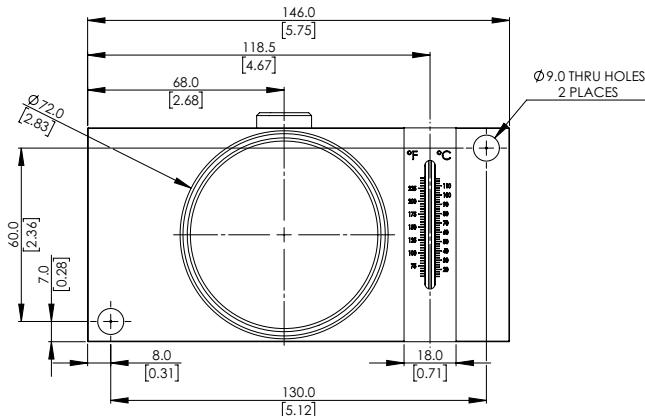
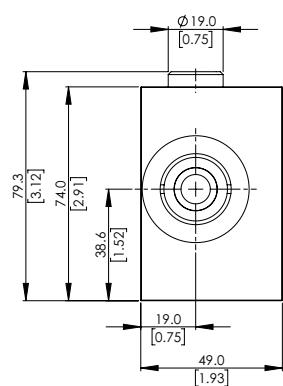
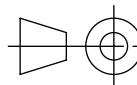


Water Pressure Drop Curve for FI1500

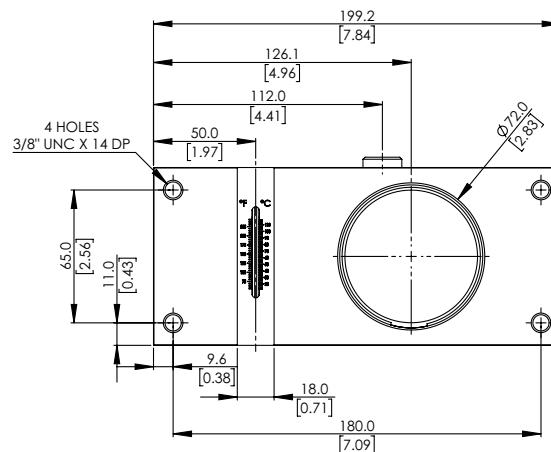
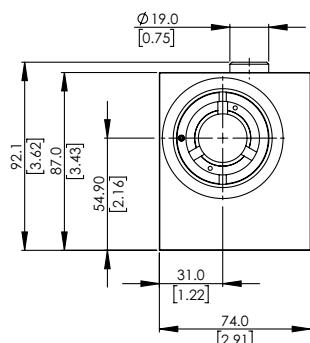


## Installation Details Dimensions in mm [Inches]

FI750



FI1500



## Functional Specification

Ambient Temperature range: -10 to 50°C, 14 to 122°F

Water, water based fluids and mineral oils to ISO 11158. Other fluids consult sales office.

#### Fluid Temperature Range:

Accuracy:

Flow:  $\pm 4\%$  of full scale  
Temperature:  $\pm 2.5^\circ\text{C}$  ( $\pm 5^\circ\text{F}$ )

## Operation

The flow indicator consists of a sharp edged orifice and tapered metering piston. The piston movement is directly proportional to the flow rate and the sharp edge orifice minimises the effects of viscosity. The piston is magnetically coupled to the rotary pointer assembly which registers on a clear 63 mm (2 1/2") scale displayed in L/min and US gpm. The FI750/1500 series flow indicators should not be installed in circuits where the flow is reversed.

## Calibration

All flow indicators are calibrated at a mean viscosity of 28cSt using ISO32 hydraulic mineral oil to ISO11158 category HM. Calibration certificates are available on request - this is a chargeable option. Other calibration on request - please consult sales office.

## Installation

The unit can be installed in any position, horizontal, vertical or anywhere in between. The unit is designed to panel mount or pipe mount. When panel mounting ensure that rear and bottom faces of the unit are at least 12 mm (1/2") from any ferrous material such as an iron panel or base. The piston contains a magnet that can be affected by close proximity of ferrous material. The front face can be mounted directly to ferrous panels.

The indicator can be connected into pressure or return lines, however, do not reverse flow; the flow indicator may be damaged and will act as a non return valve.

All hydraulic connections should be made by suitably trained personnel.

## Accessories

Pressure gauge fitted directly into block or remotely connected by micro bore hose, see pressure gauge bulletin.

**Webtec** reserve the right to make improvements and changes to the specification without notice