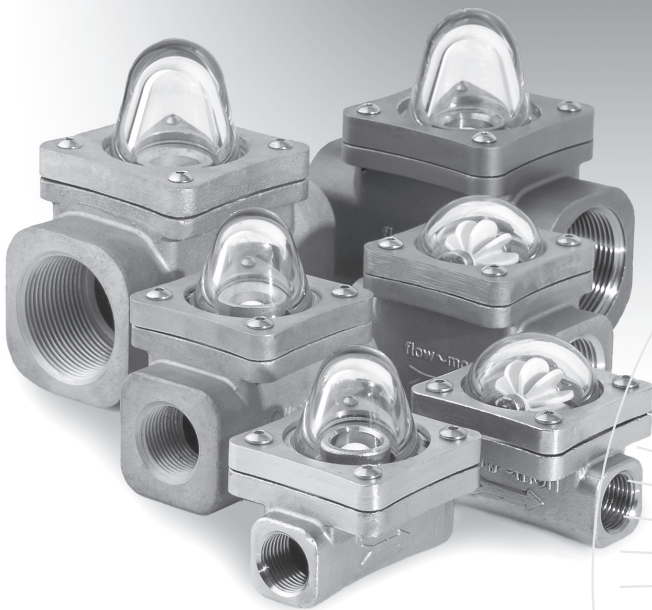




*Manufacturer of Specialist Flow Instruments*



- Flow Meters
- Flow Switches
- Sight Indicators
- Sight Glasses
- Sales, Service and Repair
- Accredited to ISO 9001
- Certified PED and ATEX

**SOLUTIONS FOR  
FLOW MANAGEMENT AND  
PLANT PROTECTION**



# Specialist UK manufacturer providing quality flow solutions and customer support

## About Flow-Mon

Flow-Mon is a specialist manufacturer of flow indicators, switches and sight glasses producing cost effective and robust flow solutions to industry for over 50 years. Our factory in North Yorkshire is equipped with the latest CNC technology, traceable calibration equipment, welding and fabrication facilities.

Our team of skilled and experienced engineers manufactures a broad range of products from simple low cost sight indicators to large capacity flanged units for heavy industrial use. Flow-Mon can offer a solution to suit most applications within the process control industry and wider market.

Flow-Mon manufactures liquid and gas flow units for up to 12 inch process connections which are chemical resistant, accurate and can be fitted with several switch options, transmitters and totalisers for use in hazardous areas. Bespoke products are frequently manufactured to meet customers' specifications.

## Why choose Flow-Mon?

- Cost effective solutions
- Reliability
- Short lead times
- Quality assured products
- CE marked and fully PED compliant
- ATEX certified units available
- Specialist for bespoke items
- Exceptional customer service

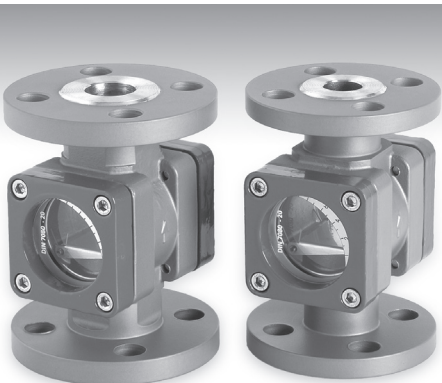
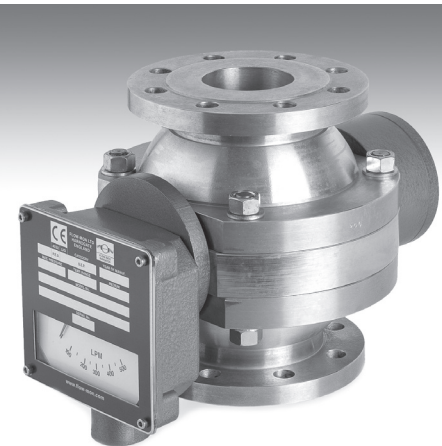
## Quality Assurance

ISO 9001:2015 is the internationally recognised standard for quality management. This standard is based on a number of quality management principles including a strong customer focus, the motivation and implication of top management, the process approach and continual improvement. This guarantees we continuously monitor our processes and quality management system to ensure our standards meet customers' requirements with consistent, high quality products and services.

## Ask our sales team

Call us on **0044 (0)1423 561972** to find out how our dedicated team can help.

- Full range of flow indicators
- Bespoke solutions
- Sales and supply
- Repair or refurbishment
- Advice and quotation



# Plastic Sight Flow Indicator

The Plastic Sight Flow Indicator is a robust, low-cost, industrial class flow indicator that is simple to install. It can be mounted in any position from vertical to horizontal without any special connectors or plumbing.

Constructed of high impact polycarbonate plastic, this product offers excellent structural integrity and compatibility with a wide range of industrial chemicals. The transparent polycarbonate plastic body allows visual inspection of the fluid condition as well as viewing the centrifugal movement of the internal impeller.



## Features & Benefits

- 1/4 inch to 1 inch BSP/NPT connection
- Easy to install in any position
- No special piping or connections required
- Robust with good shock and vibration resistance
- Resistant to a wide range of chemicals
- Temperature - **80°C (maximum working temperature)**
- Pressure - **10 bar (maximum working pressure)**

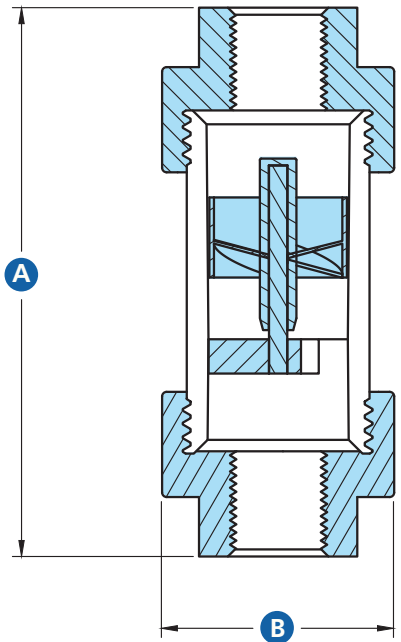
## Applications

- Water
- Oils
- Coolants
- Chemicals
- Corrosives
- Air and gases

## Materials

- Body** - Polycarbonate
- Impeller** - PPS
- Spindle** - Stainless steel 316
- Seals** - Viton
- End caps** - SS 316, Bronze, Aluminium, PVC.

## Dimensions

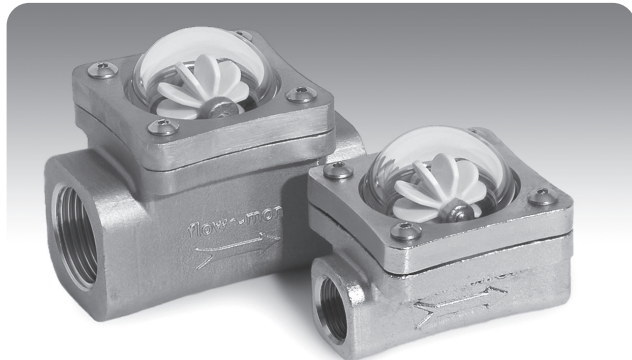


SPP	SS	15	BSP
<b>STYLE</b>	<b>MATERIAL</b>	<b>SIZE</b>	<b>THREAD</b>
SPP	B = Bronze SS = Stainless Steel AL = Aluminium P = PVC	8 = 1/4" 10 = 3/8" 15 = 1/2" 20 = 3/4" 25 = 1"	NPT BSP

SIZE		Dim A Length	Dim B Width	Weight Kg	Max Flow LPM
mm	inch				
8	1/4"	120mm	50.8mm	0.60	20
10	3/8"	120mm	50.8mm	0.60	20
15	1/2"	127mm	50.8mm	0.60	20
20	3/4"	127mm	50.8mm	0.60	40
25	1"	127mm	50.8mm	0.60	40



# Spinner Visual Sight Flow Indicator



The Flow-Mon Spinner is a low-cost, robust flow indicator that is simple to install and will outperform other spinner instruments by a considerable margin. This spinner design can be mounted both horizontally and vertically, offering bi-directional flow indication with low pressure losses. With a tough construction, this product offers excellent structural integrity and compatibility with a wide range of applications.

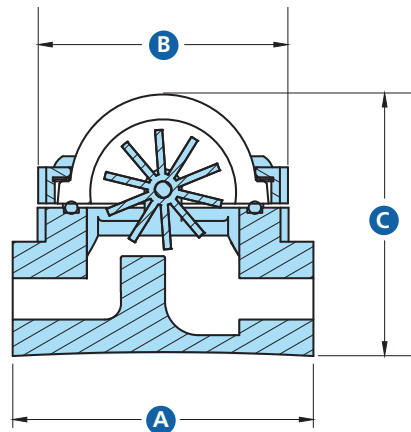
When calibrated flow indicators are not needed, this simple indicator will satisfy most requirements within pipe sizes 8mm to 50mm. If operators require a visual confirmation in their pipe work for lubrication and coolant flow, this simple spinner can provide a cost effective solution for plant protection.

## Technical Data

<b>Body</b>	- Stainless steel 316 - Bronze BS EN1982
<b>Spinner</b>	- PPS
<b>Spindle</b>	- Stainless steel 316
<b>Glass Dome</b>	- Annealed borosilicate
<b>'O' Ring</b>	- Viton
<b>Gasket</b>	- Klingsil (C-4400)
<b>Fasteners</b>	- Stainless steel
<b>Pressure</b>	- 16 Bar (maximum working pressure)
<b>Temperature</b>	- 200°C (maximum working temperature)
<b>Connections</b>	- BSP(F) parallel and NPT(F) taper - Other connection types available on request

## Product Application

- Plant protection
- Early warning of overheating, bearing or seal failure
- Pump and compressor protection
- Provide assurance that flow of cooling water is maintained to specialised welding equipment
- Indication of air entrainment



## Dimensions & Weight

Bore mm	Size inch	Weight kg	A' mm	B' mm	C' mm
8	1/4	0.68	76	63	65
10	3/8	0.65	76	63	65
15	1/2	0.62	76	63	65
20	3/4	1.25	89	63	83
25	1	1.20	89	63	83
32	1 1/4	2.4	115	75	100
40	1 1/2	2.4	115	75	100

## Flow Requirements

Size mm	Min Flow l/min	Max Flow l/min	Pressure Drop - 2m/sec bar
8	0.7	30	0.14
10	0.8	40	0.16
15	1.0	55	0.22
20	1.2	90	0.19
25	1.5	140	0.50
32	4	180	0.80
40	4	200	0.90

## Feature & Benefits

- 1/4 inch to 1 1/2 inch connection available
- Easy to install in any orientation
- No routine maintenance required
- Unrivalled flow and pressure drop performance
- Bi-directional flow
- Operates over a wide flow range
- Robust with good shock and vibration resistance

# Rising Ball Visual Sight Flow Indicator



The Flow-Mon Rising Ball was developed to provide industry with a high standard in-line flow indicator to meet the requirements for a broad range of chemical, water, oil and gas applications. When calibrated flow indicators are not needed, the Rising Ball will satisfy most requirements within pipe sizes 8mm to 50mm.

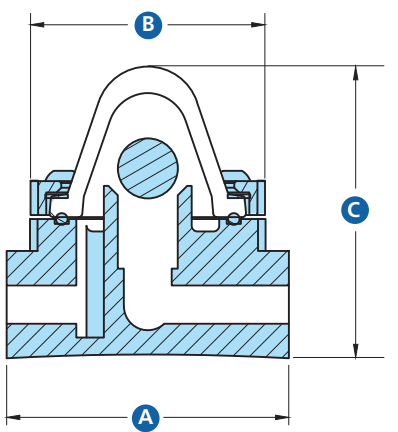
With no flow in the pipe, the white PTFE Ball remains seated in the body socket. As the flow rises, the ball will lift out of the socket, becoming clearly visible. The ball will continue to rise and move freely in the dome as the flow rate increases.

## Technical Data

<b>Body</b>	- Stainless steel 316 - Bronze BS EN1982
<b>Glass Dome</b>	- Annealed borosilicate
<b>Ball</b>	- PTFE
<b>'O' Ring</b>	- Viton
<b>Gasket</b>	- Klingsil (C-4400)
<b>Fasteners</b>	- Stainless steel
<b>Pressure</b>	- 16 Bar (maximum working pressure)
<b>Temperature</b>	- 200°C (maximum working temperature)
<b>Connections</b>	- BSP(F) parallel and NPT(F) taper - Other connection types available on request

## Product Application

- Plant protection to show lubrication or coolant flow to pumps, compressors or engines.
- Detecting changes in the colour and condition of liquids during processing.
- Pump and compressor protection.
- Ensuring that flow of cooling water is maintained to specialised welding equipment.
- Indication of air entrainment.
- Showing the presence of condensate in steam return lines.
- Maintaining demineralised water rinsing, essential to electronic components' manufacture.



## Dimensions & Weight

Bore mm	Size inch	Weight kg	A' mm	B' mm	C' mm
8	1/4	0.72	76	63	79
10	3/8	0.69	76	63	79
15	1/2	0.65	76	63	79
20	3/4	1.30	89	63	95
25	1	1.25	89	63	95
32	1 1/4	2.50	115	75	125
40	1 1/2	2.35	115	75	125

## Flow Requirements

Size mm	Min Flow l/min	Out of Socket l/min	Max Flow l/min	Pressure Drop - 2m/sec bar
8	0.1	1.0	60	0.13
10	0.1	1.0	60	0.16
15	0.1	1.0	65	0.19
20	2.4	5.2	150	0.16
25	2.7	5.5	165	0.40
32	11.0	16.0	400	0.20
40	16.0	21.0	450	0.23

## Feature & Benefits

- 1/4 inch to 1 1/2 inch connection available
- Easy to install (horizontal plane only)
- No routine maintenance required
- Unrivalled flow and pressure drop performance
- Robust with good shock and vibration resistance
- Resistant to a wide range of chemicals
- Can be used for condensate

# Double Window – Spout, Flap & Spinner Visual Sight Flow Indicator

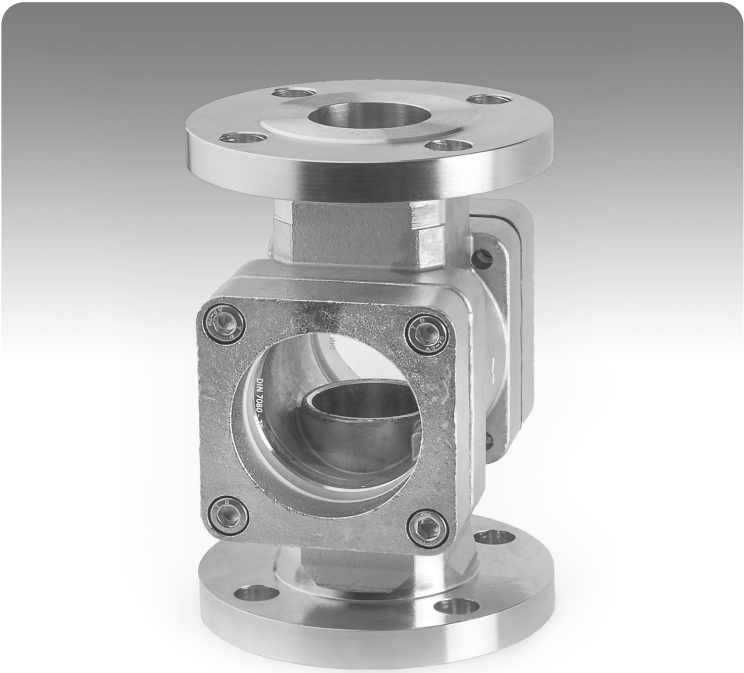
### Product Description

The Flow-Mon Double Window Sight Flow Indicators are designed to provide the means of visual inspection for process operations and plant protection. The straight through windows allow the operator to view immediate flow and to monitor the colour and condition of pipeline applications.

The plain spout enables visual inspection only while the flap variant with its graduated scale provides an indication of flow rate and repeatability of valve positioning. This variant is also available with a sprung flap to manage approximate flow that can be increased up to three times. It is an ideal solution for use in vertical lines where gravity prevents the use of an untensioned flap.

A spinner variant, equipped with an 8 blade PTFE spinner and stainless steel internals, is ideally suited for chemical applications providing excellent corrosion resistance. All designs can be mounted in any pipeline orientation capable of managing a wide flow range.

These high quality, robust units are designed for a broad range of industrial applications with working temperatures up to 250°C and working pressures up to 16 bar for the standard range and 40 bar for the high pressure range.



### Technical Data

<b>Body</b>	- Stainless steel 316
	- Carbon Steel
<b>Spindle</b>	- Stainless steel 316
<b>Glass</b>	- Toughened Borosilicate (DIN7080) (16 bar) or,
	- Toughened Soda Lime (BIS 3463) (40 bar)
<b>Gasket</b>	- PTFE
<b>Flap</b>	- Stainless steel 316
<b>Spinner</b>	- PTFE, PVC
<b>Scale</b>	- Polycarbonate
<b>Fasteners</b>	- Stainless steel A2

<b>Pressure</b>	- 40 Bar (maximum working pressure)
<b>Temperature</b>	- 250°C (maximum working temperature)
<b>Connections</b>	- Threaded up to 2 inch BSP/NPT
	- Flanged up to 10 inch; PN, ANSI, JIS
	- Other connection types and larger sizes available on request

### Connections

- Available for any threaded, socket weld or flanged connection type.

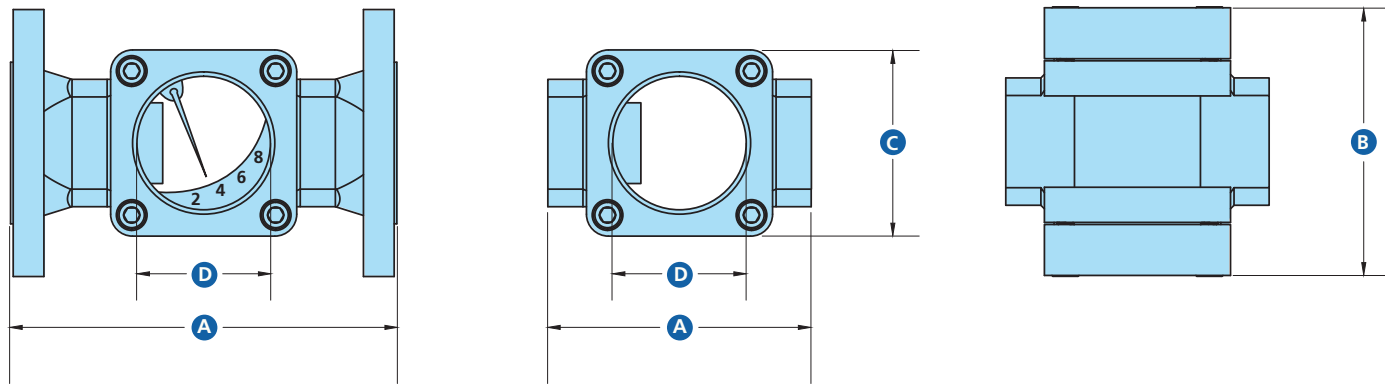
### Features & Benefits

- High quality robust design
- Body cast in stainless steel or carbon steel (other materials available)
- Threaded or flanged connections
- Pressures up to 40 Bar
- Temperatures up to 250 degrees
- Can be mounted in any orientation (flap design horizontal and up only)
- CE marked and fully compliant with the Pressure Equipment Directive

### Flow Requirements

Size	Weight (kg) (mm)		A (mm)		B (mm)	C (mm)	D (mm)	Flow Values (LPM)				Top	Max Flow
	T	F	T	F				2	4	6	8		
8	2	4	95	140	89	66	48	2.5	3.5	4.5	7	22	100
10	2	4	95	140	89	66	48	2.5	4	4.5	7	24	150
15	2	4	95	140	89	66	48	3	4.5	6	8.5	20	250
20	2	4	95	140	89	66	48	3	5	6	9	20	250
25	2	4	95	140	89	66	48	3.5	6	8	10	25	250
32	4	7	120	180	120	89	62	7	11	14	24	40	550
40	4	7	120	180	120	89	62	8	12	15	25	50	600
50	4.5	15	150	220	170	110	77	9	15	28	50	75	1000
65	-	17	-	220	170	110	77	9	15	28	50	75	1000
80	-	25	-	258	160	165	100	24	32	52	128	220	
100	-	27	-	258	160	165	100	46	70	100	150	220	
150	-	67	-	360	333	279							
200	-	79	-	360	333	279							

\* Larger sizes available on request

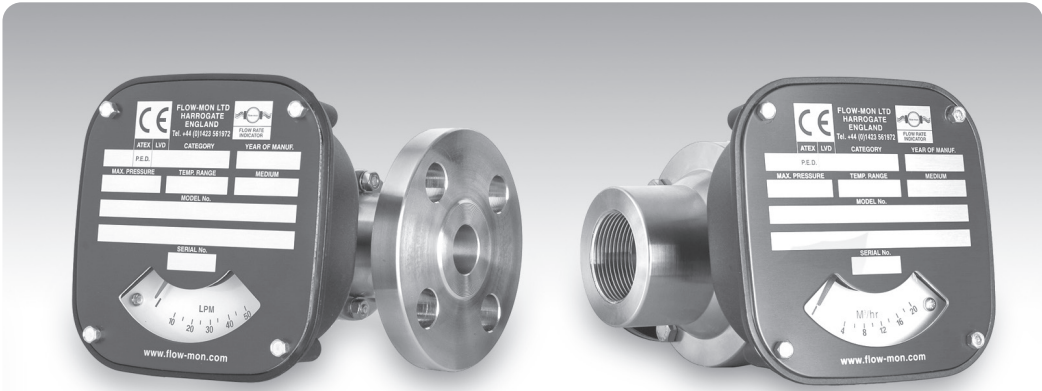


### Example Parts List

FMF	SS	B	50	F16
<b>STYLE</b> FMF = Flap FMP = Spout FMS = Spinner FMFS = Sprung Flap	<b>MATERIAL</b> B = Bronze SS = Stainless Steel CS = Carbon Steel	<b>GLASS</b> B = Borosilicate S = Sodalime Q = Quartz  Specials please contact Flow-Mon	<b>SIZE</b> 8 = 1/4" 10 = 3/8" 15 = 1/2" 20 = 3/4" 25 = 1" 32 = 1 1/4" 40 = 1 1/2" 50 = 2" 80 = 3" 100 = 4" 150 = 6" 200 = 8"  Standard thread BSP. For NPT add N. For socket weld add SW. Larger sizes available on request.	<b>FLANGE</b> For ANSI or DIN flanges add one of the following: F10 F16 F25 F40 F150 F300 F600

Contact us: [sales@flow-mon.com](mailto:sales@flow-mon.com) or call 0044 (0)1423 561972

# Flow Rate Indicator



Our Flow Rate Indicators are manufactured in a wide range of sizes and specifications providing flow solutions for a broad range of applications. They are designed to be robust, highly versatile and extremely reliable in the harshest of environments. They continuously monitor flow with a local indication, through a mechanical pointer, switch, transmitter or digital rate totaliser and, can be manufactured in a variety of materials to suit each application.

### Design

This unique modular design allows for easy field installation and service. No straight run of pipe is required before or after the monitor minimizing pressure drop and the installation footprint. Vane-style flow meters have a spring-opposed vane that moves in relation to the flow rate. The fluid forces the vane to move through a contoured opening creating a variable orifice; the greater the flow the larger the orifice becomes for flow to pass. The vane style monitor is spring loaded and allows the vane to return on decreasing flows

### Features & Benefits

- Calibrated in any unit of measure
- Single or Dual scale options
- Individually calibrated
- Simple modular design
- Low pressure drop
- Viscosities up to 650cSt
- +/- 3% accuracy
- 1% rate of repeatability switch set point – accurate and reliable
- Size range from 8mm (1/4") to 200mm (8")
- Installed in any position
- Weatherproof enclosure box
- Capable of twice the maximum indicated flow
- Available in a wide range of materials

### Switches

Vane style flow meters can be connected to a field adjustable indicator or transmitter suitable for batching, trending, totalising or recording.

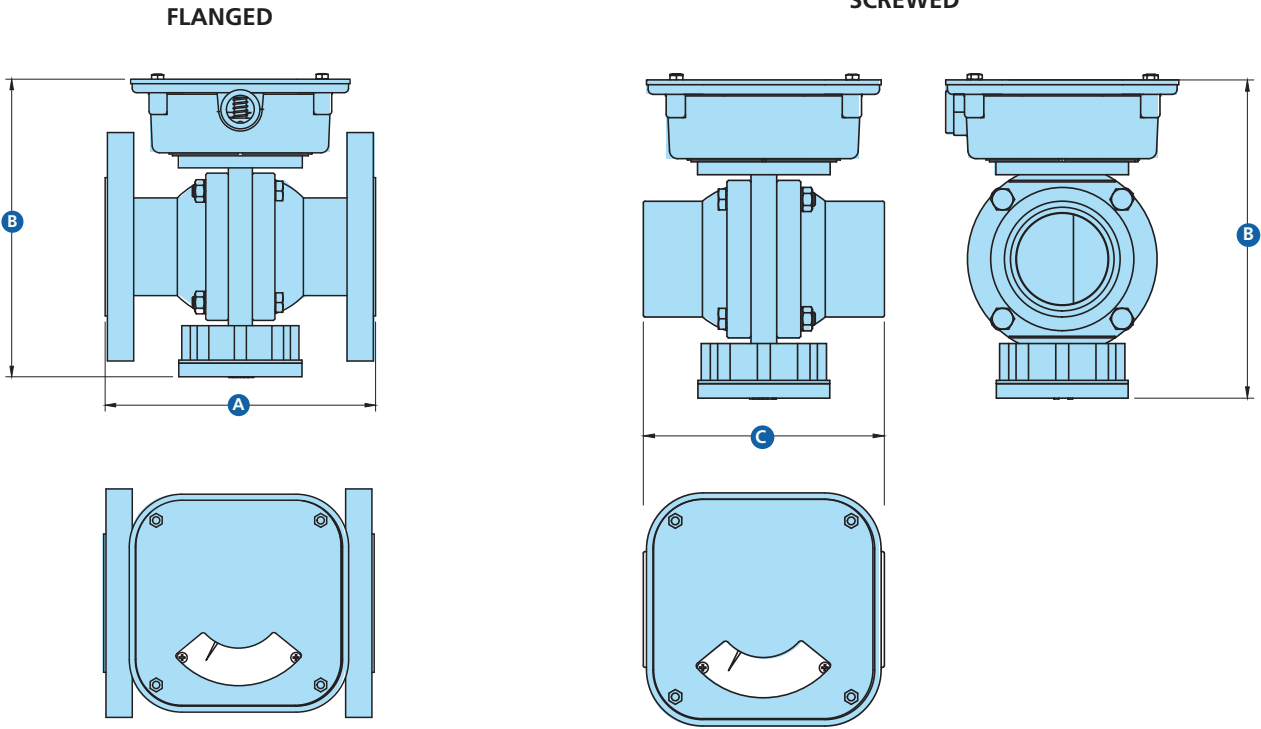
- SPDT 3 & 4 wire mechanical switch (gold contacts available)
- DPDT 6 wire mechanical switch
- 4-20mA Output
- 0-10V Potentiometer
- Digital Rate Totaliser
- ATEX variants available

### Applications

- Water
- Soluble Oils (Glycols)
- Synthetic Based Fluids
- Corrosive Fluids
- Solvents
- De-Ionised Water
- Petroleum Based Fluids
- Coolants
- Paints
- Air & Gases



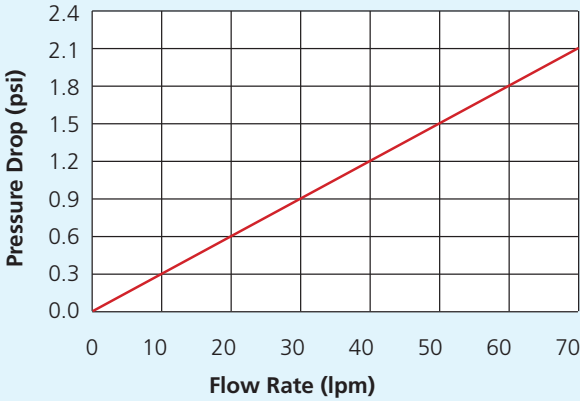
### Dimensions



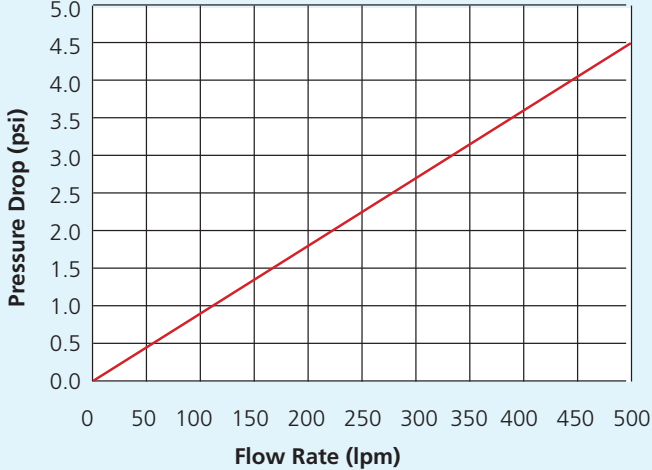
Pipe Size	Min Full Scale	Max Full Scale	Dimensions			Weight (kg)				
	LPM	LPM	a	b	c	AL	B	CI	S/SS	PVC
¼ – 1"	4	70	160	150	130	1	2	2	2	1
¾ – 2"	40	500	180	200	150	3	7	7	7	3
2 ½"	50	800	180	200	230	5	10	10	10	4
3"	250	1500	255	358	-	20	54	50	54	15
4"	300	2000	255	358	-	23	60	56	60	17
6"	800	3500	460	500	-	60	200	175	200	-
8"	1000	5000	485	500	-	68	225	200	225	-

### Pressure Drop Charts

#### Small Series



#### Medium Series





# Low Flow Indicator

The Flow-Mon low flow unit is a robust flow indicator specifically designed to manage low flow rates of liquids and gases.

The basic design provides a simple and robust accurate measurement well suited to harsh industrial process applications. It is easy to install and can be mounted in any orientation offering threaded or flanged connections with very low pressure loss.

## Design

A fixed tapered needle passes through an orifice in the face of a piston, so the device completely seals the port to port connection when the piston is seated. As flow commences, the piston is displaced against a differential spring and moves over the tapered section of the needle to permit flow through the orifice. Accuracy is not affected by position, so the unit can be mounted in any plane.

### Maximum Pressure

- Low Pressure up to 300psi (20 Bar)
- Medium Pressure up to 725psi (50 Bar)
- High Pressure up to 300psi (200 Bar)\*
- \* Cast iron, steel and stainless steel only

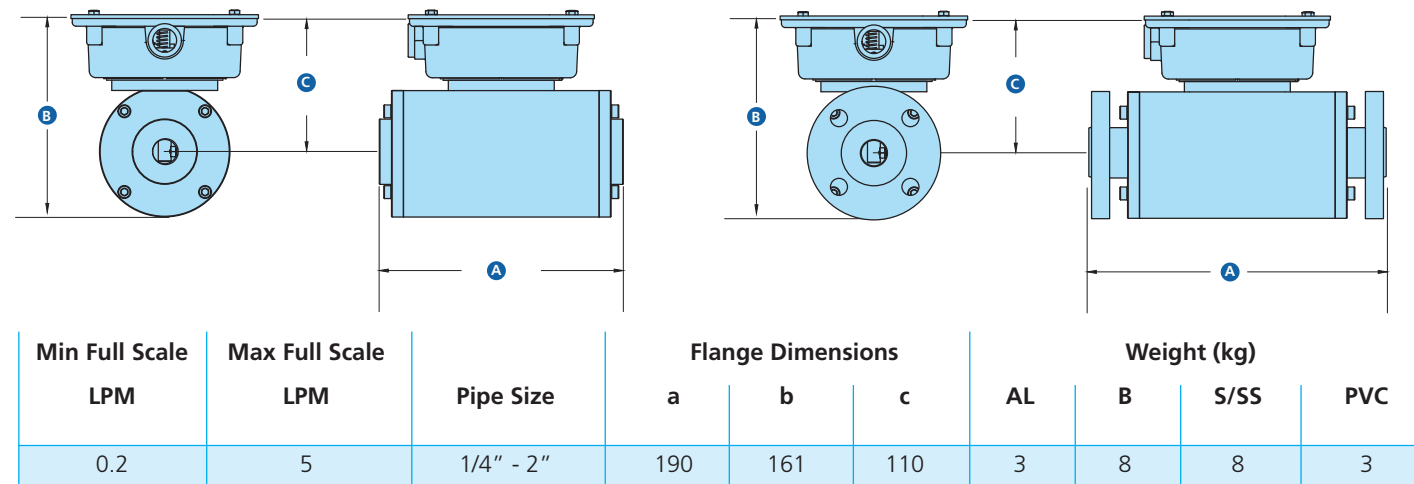
## Applications

- Water
- Soluble Oils (Glycols)
- Synthetic Based Fluids
- Corrosive Fluids
- Solvents
- De-Ionised Water
- Petroleum Based Fluids
- Coolants
- Paints
- Air and Gases

## Switches

The low flow meter can be connected to a field adjustable indicator or transmitter suitable for batching, trending, totalising or recording. All Flow-Mon units can be supplied with a 0-10v or 4-20mA output.

## Dimensions



## Features & Benefits

- +/- 3% accuracy across the full range
- Calibrated in any unit of measure
- Measures down to 50cc / minute
- Maximum capacity 5 litres / minute
- Installed in any position
- Low pressure drop
- Weatherproof enclosure box
- Available in a wide range of materials
- High pressure variant available
- Size range from 8mm (1/4") to 50mm (2")

# Wafer

The Flow-Mon Wafer is designed to mount between two flanges, which reduces the weight, size and cost. It is robust, highly versatile and extremely reliable in the harshest of environments.

The wafer continuously monitors flow with a local indication through a mechanical pointer, switch, transmitter or digital rate totaliser and can be manufactured in a variety of materials to suit each application.

## Design

This unique modular design allows for easy field installation and service. No straight run of pipe is required before or after the monitor, therefore minimizing pressure drop and the installation footprint. Vane-style flow meters have a spring-opposed vane that moves in relation to the flow rate. The fluid forces the vane to move through a contoured opening, creating a variable orifice; the greater the flow the larger the orifice becomes for flow to pass. The vane style monitor is spring loaded and allows the vane to return on decreasing flows.

### Maximum Flow Rates

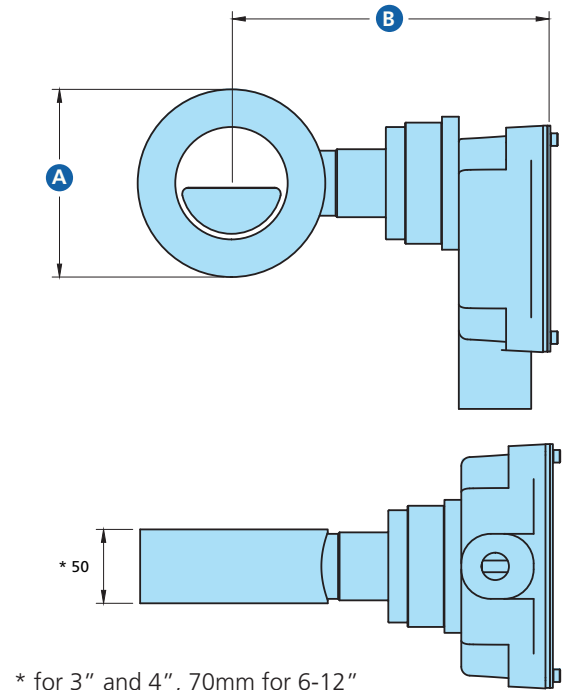
- 3" 1500 l/min
- 4" 2000 l/min
- 6" 3500 l/min

### Maximum Pressure

- Low pressure up to 300psi (20 Bar)
- Medium pressure up to 725psi (50 Bar)
- High pressure up to 300psi (200 Bar)\*
- \* Cast iron, steel & stainless steel only

## Applications

- De-Ionised Water
- Petroleum Based Fluids
- Synthetic Based Fluids
- Air & Gases
- Soluble Oils (Glycols)
- Coolants
- Corrosive Fluids
- Water
- Solvents
- Paints



## Features & Benefits

- +/- 3% accuracy across the full range
- Direct reading flow rate Indication
- Optional (field adjustable) switch(es)
- Optional non-contact 4-20mA output
- High pressure available
- Mounts easily between ANSI, JIS or DIN flanges
- Mounts in any orientation
- No straight pipe run required
- Connection sizes from 3" to 12"
- Minimum scale 0-40 LPM
- Maximum scale on request

## Dimensions

DN	A	B	ANSI	A	B
80	138	216	3	127	210
100	158	226	4	157	217
150	218	264	6	216	263
200	278	291	8	270	287
250	335	318	10	324	313
300	395	348	12	381	338

## Switches

Are field adjustable, suitable for batching, trending, totalising or recording where required. All switch units can be supplied with a 0-10v or 4-20mA output.

# PART CODE BUILDER

### SERIES AND FLOW RATE

FMC*	=	Low Flow
FML*	=	Litres/Min
FMB*	=	Imp. Gallons/Min
FMG*	=	U.S. Gallons/Min
FMM*	=	m³/Hour

\* Add Full Flow Rate in Units

### MATERIAL OF MANUFACTURE

AL	=	Aluminium	* Only available up to 4" port connections and 100 psi / 7 bar maximum pressure. Note: For materials and pressures not specified, please consult sales
B	=	Bronze	
CI	=	Cast Iron	
CIK	=	Cast Iron Nickel Plated	
S	=	Carbon Steel	
SS	=	Stainless Steel	
PTFE*	=	PTFE	
PVC*	=	PVC	

### PRESSURE RATING

LP	=	300psi / 20 bar maximum
MP	=	750 psi / 50 bar maximum
HP	=	3000 psi / 200 bar maximum*

\* CI, CIK, S & SS only

### FLOW DIRECTIONS

D1	=	→	D2	=	←
D3	=	↑	D4	=	↓

### 'O' RING SEAL MATERIAL

S1	=	Buna	(-40°C	+110°C)
S2	=	EPDM	(-40°C	+150°C)
S3	=	Viton	(-20°C	+200°C)
S4	=	PTFE	(-100°C	+250°C)
S5	=	Perlast	(-15°C	+330°C)

FML200 SS LP 3EE 1cS 12F150 S3 D1

Example Part Code

### INDICATOR READ OUT

ME	=	Mechanical Pointer only
3EE	=	SPDT 3 Wire Switch
3EEG	=	SPDT 3 Wire Switch with Gold Contacts
4EE	=	single-pole, double throw, double-break
6EE	=	DPDT 6 Wire Switch
3EE(ATEX2)	=	SPDT Explosion Proof Micro Switch to ATEX zone 2
3EE(ATEX1)	=	SPDT Explosion Proof Switch to ATEX zone 1
6EE(ATEX1)	=	DPDT Explosion Proof Switch to ATEX zone 1
AIR	=	Pneumatic Switch
POT	=	Potentiometer (specify rating)
OUT	=	4-20 mAmp Output
OUTX	=	4-20 mAmp (ATEX)
TOT	=	Digital Rate Totaliser
TOTX	=	Digital Rate Totaliser (ATEX)

Note 1: All electrical boxes (apart from TOT & TOTX) also carry a mechanical pointer  
Note 2: For 4 & 6 wire switches replace 3EE by 4EE or 6EE  
Note 3: Manufactured to IP65 (NEMA 4) as standard (up to 2 1/2")

### Electrical Options

**Code: 3EE**  
Basic single pole, double throw, double-break.  
10 Amp - 125, 250 or 480V.AC  
0.5 Amp - 125V.DC / 0.25 Amp - 250V.DC

**Code: 4EE**  
Contact arrangements are single-pole, double throw and double-break  
10 Amp - 125 or 250V.AC  
0.3 Amp - 125V.DC / 0.15 Amp - 250V.DC

**Code: AIR**  
This system offers an alternative safety arrangement for operation in explosive atmospheres. Compressed air can be used to transmit an on / off signal from the danger area, or to operate a klaxon inside the danger area.

**Code: POT**  
Remote read-out option (0-10V). Rating to customer's specification, e.g. 1K, 2K etc.

**Code: OUT**  
A non-contact position encoder gives a continuous 4-20 mAmp readout. Data loggers or recorders can be added to the system. The 3 and 6 wire switches described above are available in ATEX approved explosion proof versions, with the appropriate enclosure box. When two or more switches are assembled in one unit, they remain independently adjustable. Re-adjustments may be carried out in the field.

### PORT CONNECTIONS

2	=	1/4"
3	=	3/8"
4	=	1/2"
6	=	3/4"
8	=	1"
Sizes 1/4" - 2" are screwed or flanged. For flanged bodies, add relevant code letters (shown below)		
10	=	1 1/4"
12	=	1 1/2"
16	=	2"
20	=	2 1/2"
24	=	3"
32	=	4"
48	=	6"
64	=	8"
Sizes 2 1/2" - 8". Standard units have flanged bodies - add relevant code letters (shown below) cast iron and steel mating flanges are available: For screwed add - S For socket weld, add - SW		

Standard threads are BSP. For NPT add N.  
For wafer connections add W then flange type (e.g. WF10). For flanged connections add one of the following codes:

F10	Alternative pressure ratings in BSEN1092 / DIN2632-5
F16	
F25	
F40	Alternative pressure ratings in BS1560/ANSI B16.5.
F150	
F300	
F600	Alternative pressure ratings in BS10
FAD	
FE	
FF	

For special flange connections, please contact the sales team: sales@flow-mon.com

### VISCOSITY AT OPERATING TEMPERATURE

State units and scale eg. water is 1 centistoke (cS). Maximum rating should not exceed 600cS

### AIR & GAS APPLICATIONS

Flow-Mon flow switches can be used to measure gas flows in exactly the same way as liquid flows. When enquiring for such an application the following information will be required:

- Specify gravity of the gas
- Maximum flow volume
- Operating temperature
- Operating pressure

# Turbine Flow Meter

The FM range of Turbine Flowmeters meets the demand of most liquid measurement applications.

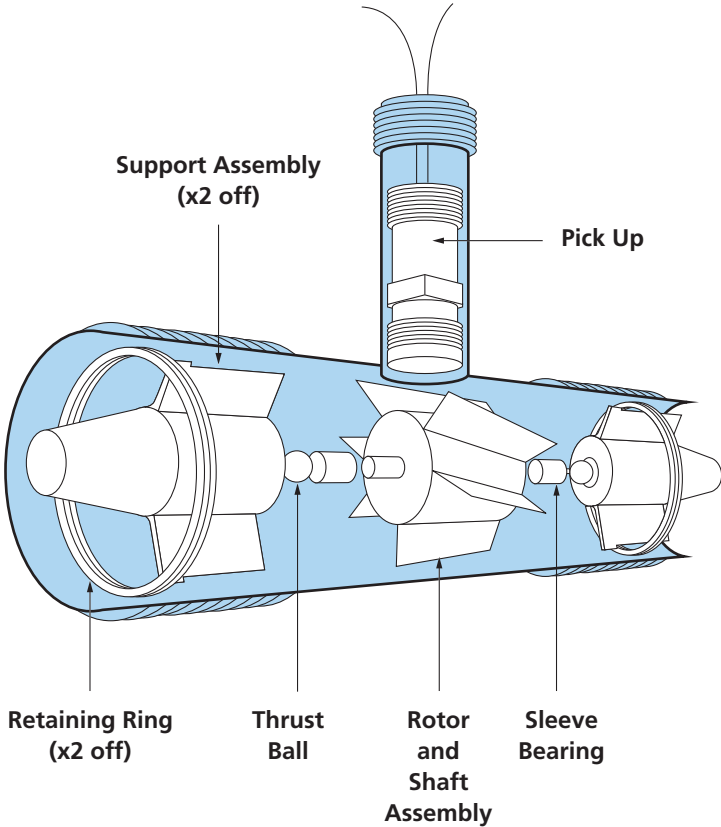
The turbine flowmeter consists of three component assemblies, fitted inside a stainless steel body and locked with retaining rings. Fitted with a variable reluctance sensor (pick up), it comes in a range of threaded, flanged and tri-clamp styles.

The rotor and shaft assembly which is mounted in sleeve bearings and fitted inside support assemblies is turned by the kinetic energy of the flowing fluid at an angular velocity, which in the linear range of the flowmeter is proportional to the mean axial velocity of the fluid.

The rotor blades sweep out the full bore of the flowmeter, except for a small tip clearance space. As the blade tips pass the magnetic pick up (through the housing wall) they initiate pulse. Flow rate is determined by the frequency of the pulses and totalised flow is obtained by summation of the pulsing electrical signal.

<b>Working Temperature</b>	- 50°C to + 282°C
<b>Accuracy</b>	+ / - 0.5% of reading over flow range
<b>Repeatability</b>	+ / - 0.15% of reading
<b>Pressure Drop</b>	Less than 0.5 bar at maximum flow
<b>Materials</b>	All 316 stainless steel with ANC1A rotor
<b>Bearings</b>	Wear resistant tungsten carbide sleeve
<b>Pick Up</b>	The variable reluctance sensor is hermetically sealed for resistance to moisture and can withstand repeated thermocycling.

The magnet is resistant to demagnetisation.  
Output is a low level signal that ranges from 10 mV to 1 V peak to peak.  
A screened twin core signal cable should be used for connection to the Pick Up.



Contact us: sales@flow-mon.com or call 0044 (0)1423 561972

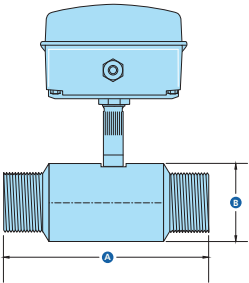


Specification

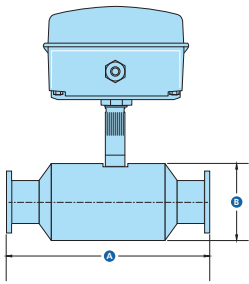
Model	FM13	FM16	FM19	FM25	FM40	FM50	FM80	FM100
Flow Range	2 - 20	5 - 50	14 - 140	27 - 270	55 - 550	114 - 1140	227 - 2270	454 - 4540

Connections

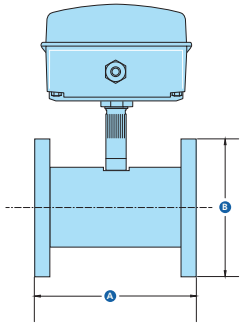
Threaded								
T1	BSPP Male	1/2"	3/4"	3/4"	1"	1 1/2"	2"	
T2	NPT Male	1/2"	3/4"	3/4"	1"	1 1/2"	2"	
A	Length (mm)	70	76	76	76	114	133	
B	Height (mm)	160	160	160	160	170	180	
	Max Pressure (bar)	250	250	250	250	250		



Hygienic								
H1	TRI Clamp		3/4"	1"	1 1/2"	2"		
A	Length (mm)		64	64m	88	100		
B	Height (mm)		160	160	170	180		
	Max Pressure (bar)		50	50	50	50		



Flanged								
F1	ANSI 150	3/4"	3/4"	3/4"	1"	1 1/2"	2"	3"
F2	ANSI 300	3/4"	3/4"	3/4"	1"	1 1/2"	2"	3"
F3	DIN PN 16 (mm)	20	20	20	25	40	50	80
F4	DIN PN 40 (mm)	20	20	20	25	40	50	80
A	Length (mm)	140	140	140	152	165	165	210
B	Height (mm)	160	160	160	160	170	180	190



Pick Up

S	Standard Variable Reluctance Coil
I	Intrinsically Safe Variable Reluctance Coil ATEX Ex ia IIC T6 to T3

Electronics

101a	Totaliser / Flowrate Indicator with pulse output and 4 20 mA output
101ai	Intrinsically safe version ATEX Ex ia IIC T4
101b	Batch Controller
101 bi	Intrinsically safe version ATEX Ex ia IIC T4
101c	Totaliser / Flowrate Indicator with high and low Alarms
101ci	Intrinsically safe version ATEX Ex ia IIC T4
101d	Bi Directional Flow Indication ( Fmb Model only)
101di	Intrinsically safe version ATEX Ex ia IIC T4
AMP	Amplifier Board
SCALER	Scaler Board
4 - 20 mA	4 - 20 mA Board

Ordering Code

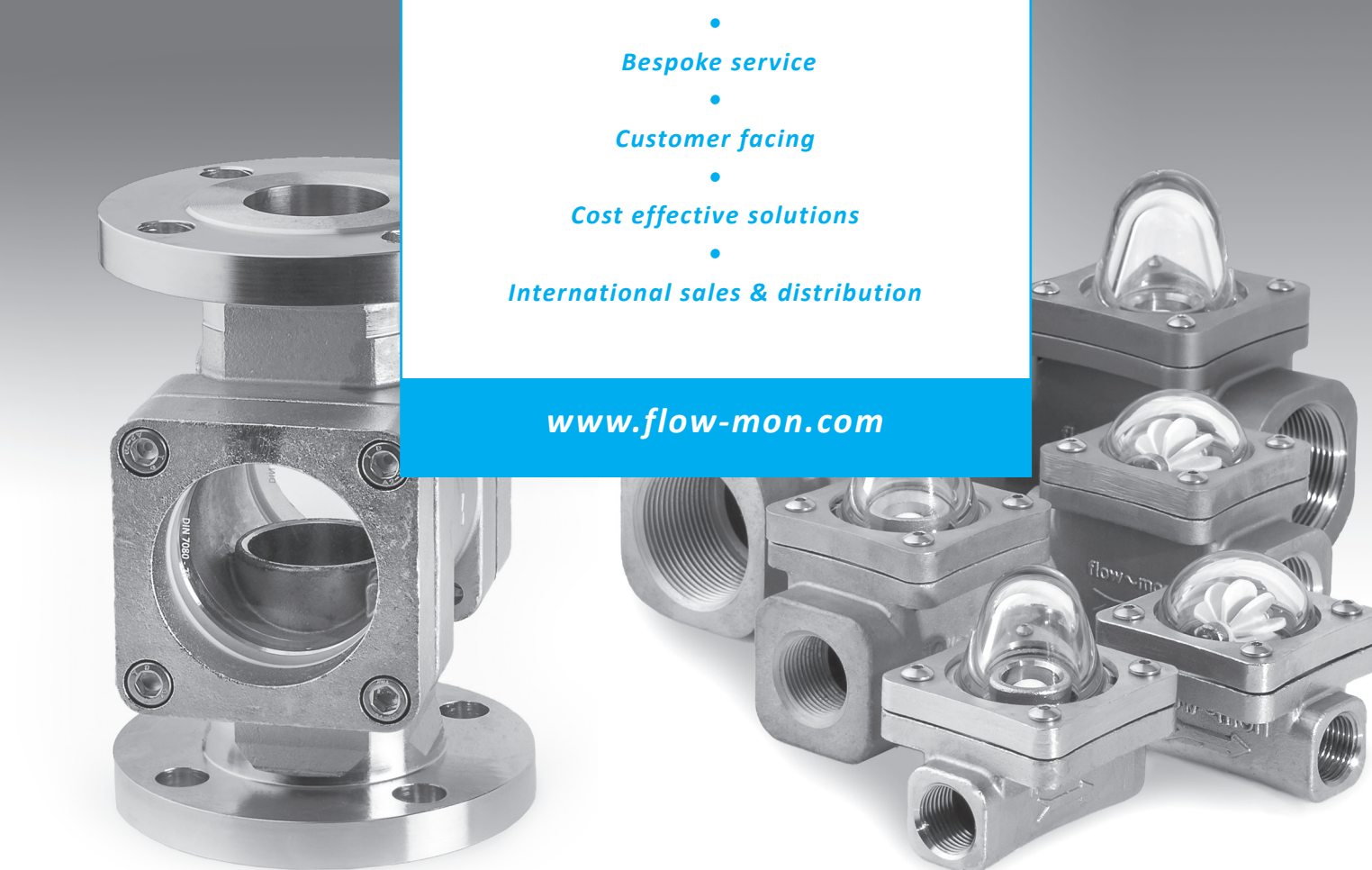
Model	Connections	Pick Up	or	Electronics
		Pick Up		Electronics
e.g. FM25	T1	S		101a



MANUFACTURER OF SPECIALIST  
FLOW INSTRUMENTS

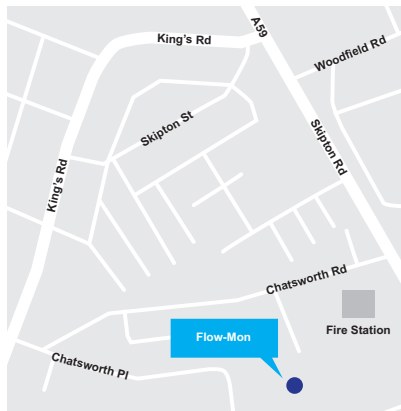
- Reliable
- Short lead times
- Quality assured
- Bespoke service
- Customer facing
- Cost effective solutions
- International sales & distribution

www.flow-mon.com





## Location - Harrogate



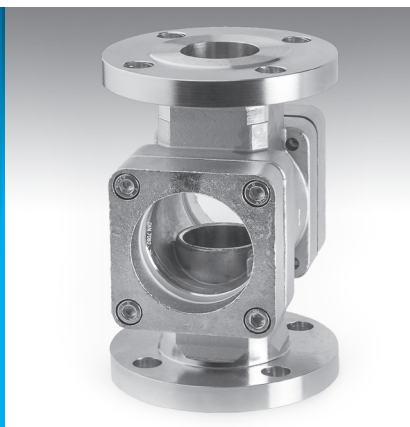
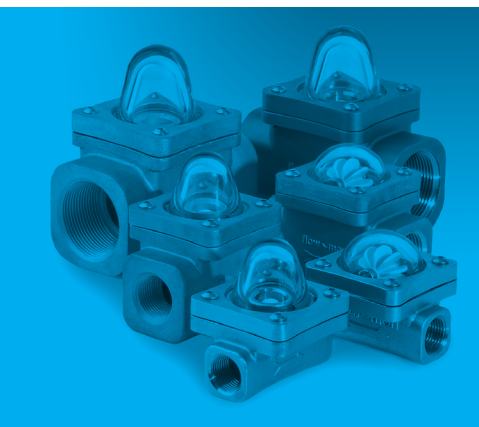
Distributor

## How to Contact Us

Flow-Mon is dedicated to delivering the best service to your industry.

Contact us on email at **[sales@flow-mon.com](mailto:sales@flow-mon.com)** or call **0044 (0)1423 561972** to see how our experienced team can help.

Visit our website for more information **[www.flow-mon.com](http://www.flow-mon.com)**



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