

A photograph showing a series of Influx flowmeters mounted vertically on a metal panel. Each flowmeter consists of a clear tube with a scale, a brass-colored top cap with the Influx logo, and a white plastic base with a red adjustment knob. The flowmeters are connected to clear plastic tubing. The panel is mounted on a wooden surface.

INFLUX

FLOWMETER CATALOGUE

www.influxmeasurements.com

INFLUX INTRODUCTION

Influx Measurements Ltd

Influx specialise in the design and manufacture of flowmeters, fluid instruments and accessories to suit processes requiring the measurement and control of liquids and gases.



Design

The standard products included in this guide will fit a wide range of applications . We are also able to design and manufacture solutions to fit more specific application needs. In this instance please contact us.

Service

ISO 9001:2008 accredited, we are committed to providing customers with the highest levels of service and meeting delivery expectations at all times.



Innovation

Influx engage in continuous research and development to ensure that new and innovative products are available to meet changing customer needs.



Flowmeter Selection Guide

The standard product index below shows the flow measurement ranges in litres/min for air and water at standard operating conditions (1 atm 20°C), standard connection sizes and options available.

If using fluids at other operating conditions or for fluids other than air or water, the sizing data and unit conversion factors on pages 20 to 21 provide calculations for determining the equivalent air or water flows.

Product Index

Flowmeter type	Conne- ction type	Suitable pipe sizes (mm)	Flow Ranges (L/min)						Direct reading	4-20 mA	Alarm Setpoint	Page
			Water		Air		min	max				
			min	max	min	max						
Uniflux	1/4" BSP	3-10	0.005	4.4	0.01	100	Y	0	0	4		
Reflux	3/8"-1/2" BSP	5-12	0.1	12	0.5	220	Y	Y	0	6		
Fluxline	1/2"-1" BSP	8-25	0.005	40	0.01	600	Y	N	0	8		
LPL	3/8"-1" BSP	5-25	0.005	100	0.01	2000	Y	0	0	10		
Flow Tubes	1/4"-1/2" BSP	3-10	0.005	4.4	0.01	100	Y	N	0	12		
FloTrak	3/4"-2"	10-50	0.1	415	2	11670	Y	0	0	14		
Deltaflux	1"-10"	25-250	50	16500	350	115000	Y	0	0	16		

Accessories and Technical Data

		Y=Yes	N=No	O=Optional
Flowsense	Infra-red flow alarm system			18
Finetrim	Fine and ultra fine needle valves			19
Gas Flowmeter sizing information				20
Liquid Flowmeter sizing information				21
Unit conversion charts				21
Calibration and Testing				22
Flowmeters for automatic sprinkler systems				23



Standard, Compact and Long Series are available in a range of materials with optional fine or ultrafine needle control valves.

The **BENCH STAND** used with angled connections is ideal for use in laboratories and other testing applications where panel mounting is not practical.

FLOWSENSE infra-red flow alarms can be factory mounted or retro-fitted. Details on page 18.

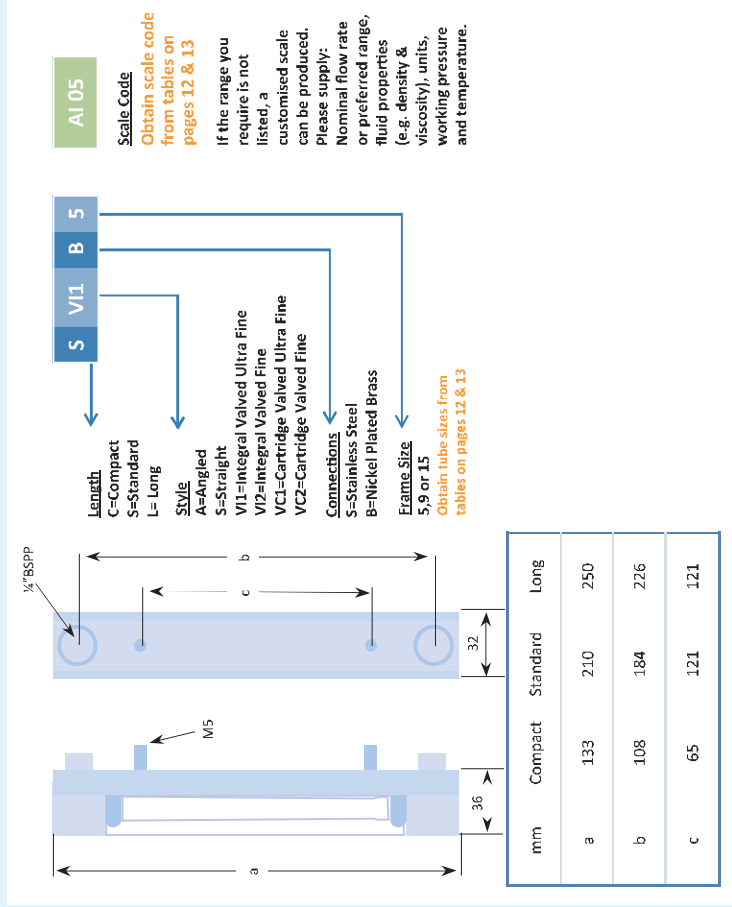
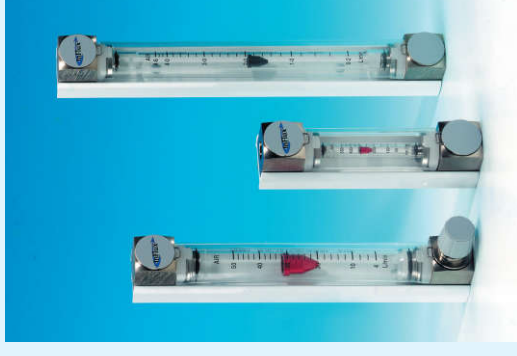
Flow tubes are available in a wide range of standard scales to suit many common fluids and operating conditions.

CUSTOMISED SCALES are also provided on request, to meet specific fluid requirements or varied conditions of use.

Flow tubes for use in **ANAESTHETIC** equipment are available for medical gases.

UNIFLUX FLOWMETERS

- Low flows
- Direct reading
- Alarm options
- Customised scales
- High repeatability
- Angled or straight connections
- Low pressure drop
- Suitable for panel mounting

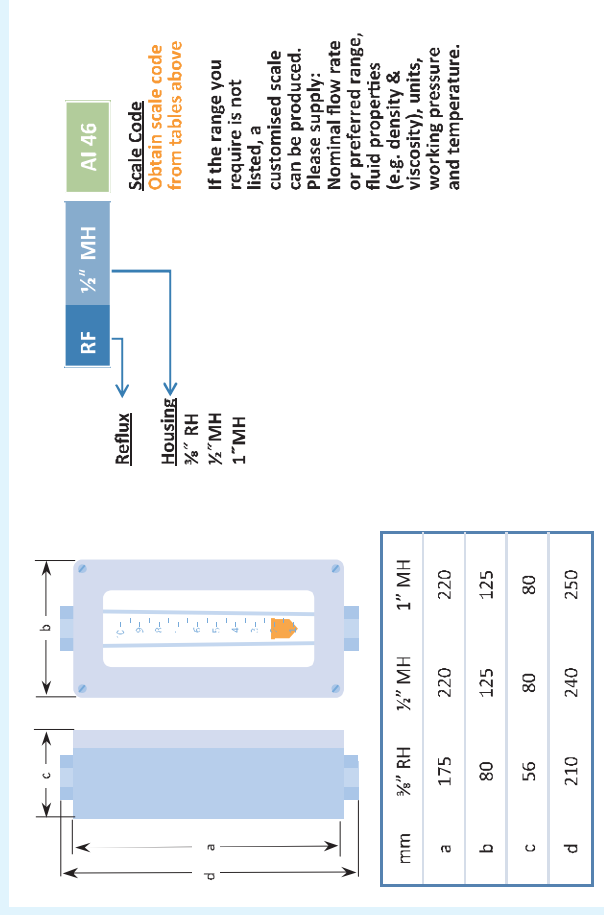


Specification	
Gas Range	5 cm ³ /min – 120 L/min (air equiv.)
Liquid Range	2 cm ³ /min – 4.4 L/min (water equiv.)
Scale Length	30/100/140 mm
Accuracy Class	4 / 2.5 / 2.5 VDI / VDE
Repeatability	Better than 0.5%
Temperature	-15°C to 120°C
Connections	1/4" BSP female, stainless steel or nickel plated brass
Seals	Viton (PTFE valve seals)
Flow Tube	Borosilicate glass
Float	Stainless steel, anodised aluminium or PEEK

Housing Type	Air (20°C, 1013mbar)	Float Material	Scale Code	Housing Type	Water (20°C)	Float Material	Scale Code
3/8" RH	0.6 to 5 L/min	Dural	AI 48	3/8" RH	6 to 70 cm³/min	PTFE	WA 48
3/8" RH	2 to 10 L/min	Dural	AI 40	3/8" RH	30 to 250 cm³/min	PEEK	WA 50
3/8" RH	2.5 to 13 L/min	St. Steel	AI 41	3/8" RH	40 to 500 cm³/min	St. Steel	WA 41
3/8" RH	3 to 22 L/min	Dural	AI 42	3/8" RH	100 to 800 cm³/min	St. Steel	WA 42
3/8" RH	5 to 33 L/min	St. Steel	AI 43	3/8" RH	0.4 to 3 L/min	St. Steel	WA 43
3/8" RH	12 to 80 L/min	Dural	AI 44	3/8" RH	0.5 to 3 L/min	St. Steel	WA 44
1/2" MH	20 to 150 L/min	Dural	AI 46	1/2" MH	1 to 8 L/min	St. Steel	WA 46
1/2" MH	30 to 220 L/min	St. Steel	AI 47	1/2" MH	1.5 to 12 L/min	St. Steel	WA 47
1" MH	60 to 400 L/min	Dural	AI 81	1" MH	3 to 24 L/min	St. Steel	WA 81
1" MH	80 to 600 L/min	St. Steel	AI 82	1" MH	4 to 40 L/min	St. Steel	WA 82

Reflux flow transmitters can be ranged to suit higher flowrates than those shown. Please supply details of your application.

Alarms may also be fitted to these meters, please enquire.
For indication only, please refer to the LPL Series on pages 10–11.



REFLUX FLOW TRANSMITTERS

Low to medium flows
4-20 mA transmission
Local indication
Gases and liquids
Approved for explosive atmospheres
Fast response
High repeatability
Customised calibration
Low pressure drop
Suitable for panel mounting



Specification	
Gas Range	0.6 - 600 L/min (air equiv.)
Liquid Range	6 cm³/min - 40 L/min (water equiv.)
Output	2-wire, 4 to 20mA loop powered
Supply	8 - 30 VDC
Approvals	EEx ia IIC T6 ATEX II 2GD T70°C IP65
Accuracy	±2% FSD
Repeatability	±0.5% of Flow
Temperature	-15°C to 60°C
Pressure	20 bar max. (non shock)
Pressure Drop	Gases: 6 mbar max. Liquids: 25 mbar max.
Connections	3/8" 1/2" or 1" BSP female, Stainless steel
Seals	Viton or nitrile on sizes 23 and 30
Flow Tube	Borosilicate glass
Float	Stainless steel, anodised aluminium or PEEK

INFLUX FLUXLINE FLOWMETERS



The Fluxline series of flowmeters are suitable for both our glass and acrylic flow tubes

The **SAFETY HOUSED (SH)** frame, shown here, is used for glass tubes. A polycarbonate cover completely surrounds the glass, protecting it from accidental damage and also shielding the user should breakage occur.

CUSTOMISED SCALES are also provided on request, to meet specific fluid requirements or varied conditions of use.

Air	Scale Code	Tube Size	Float Material	Water		Scale Code	Tube Size	Float Material
				0.6-5	1-10			
L/min	10-20 30-200 40-360 60-600	23	Dural St. Steel Dural St. Steel	L/min		WA 28 WA 29 WA 30 WA 31	23 30	St. Steel St. Steel St. Steel St. Steel

mm

1"	253	55	52
1/2"	220	45	44

Housing
SH=Safety Housed
OF=Open Frame

Scale Code
Obtain scale code from tables on pages 12 & 13 and above.

Size
SH 1/2" = 5, 9, 15 Glass
OF 1/2" = 23 Plastic
OF 1" = 30 Plastic

Connections
S=Stainless Steel
B=Nickel Plated Brass (1/2" only)

If the range you require is not listed, a customised scale can be produced. Please supply:
Nominal flow rate or preferred range, fluid properties (e.g. density & viscosity), units, working pressure and temperature.

For sizes 5,9 and 15 obtain tube sizes from the tables on pages 12 & 13. For sizes 23 and 30 see tables above.

FLUXLINE FLOWMETERS

Low to medium flows

Direct reading

Alarm options

Plastic or glass tubes

Customised scales

Safety housing for glass flow tubes

Low pressure drop

Suitable for panel mounting



Specification	
Gas Range	5 cm ³ /min - 600 L/min (air equiv.)
Liquid Range	2 cm ³ /min - 40 L/min (water equiv.)
Scale Length	100 mm or 140 mm
Accuracy	Glass: 2.5 VDI / VDE Acrylic: 5% FSD
Temperature	Glass: -15°C to 120°C Acrylic: 60°C max.
Pressure (non shock)	Glass: 10 bar max. Acrylic: 8 bar max. at 20°C 3 bar max. at 60°C
Connections	1/2" or 1" BSPF 316 Stainless Steel 1/2" BSPF Brass
Seals	Sizes 5, 9, 15 : Viton Sizes 23, 30 : Nitrile
Flow Tube	Borosilicate glass or acrylic
Float	Stainless steel, anodised aluminium or PEEK

INFLUX LPL SERIES HOUSED FLOWMETER



LPL Series flowmeters can be used with our glass or acrylic flow tubes. These include Size 40, which combine higher flowrates with a very low pressure drop.

REFLUX 4 to 20 mA OUTPUT versions of LPL Series flowmeters are available in many standard ranges, many of which are shown on page 6. If the range you require is not shown, please enquire.

Glass Tubes for LPL (MH) Flowmeters

Air	Water (H ₂ O)	Scale Code	Tube Size
10-120	0.5-7	55LPL	23
30-230	1.5-12	56LPL	23
40-360	2-20	98LPL	30
60-600	4-40	99LPL	30
AI		WA	

Acrylic Tubes for LPL (LH) Flowmeters

Air	Water (H ₂ O)	Scale Code	Tube Size
100-1000	5-60	57LPL	40
300-2000	10-100	58LPL	40
AI		WA	

mm	3/8" RH	1/2" MH	1" MH	1" LH
a	175	220	220	355
b	80	125	125	125
c	56	80	80	80
d	210	240	250	410

Scale Code
Obtain scale codes for sizes 5, 9 and 15 from the tables on pages 12 & 13. For sizes 23, 30 and 40 see tables above.

Housing

Size	5, 9, 15	23	30	40
3/8" RH	=	=	=	=
1/2" MH	=	=	=	=
1" MH	=	=	=	=
1" LH	=	=	=	=

Please enquire for details of alarm options.
For 4 to 20mA output versions go to page 6.

LPL SERIES HOUSED FLOWMETER

- Medium flows
- Direct reading
- Gases and liquids
- Low pressure drop
- High repeatability
- Customised calibration
- Rugged enclosure
- Suitable for panel mounting



Specification	
Gas Range	5 cm ³ /min - 2000 L/min (air equiv.)
Liquid Range	2 cm ³ /min - 100 L/min (water equiv.)
Scale Length	100 mm, 140 mm, 200 mm
Accuracy	2.5 VDI/VDE
Temperature	Glass: 120°C max. Acrylic: 60°C max.
Pressure (non shock)	Glass: 20 bar max. Acrylic: 8 bar max. at 20°C 3 bar max. at 60°C
Pressure Drop	Gas: 6 mbar max. Liquid: 25 mbar max.
Connections	3/8", 1/2" or 1" BSPF 316 Stainless Steel
Seals	Sizes 5, 9, 15 : Viton Sizes 23, 30, 40 : Nitrile
Flow Tube	Borosilicate glass or acrylic
Float	Stainless steel, anodised aluminium or PEEK
Other Materials	PVC adaptors on 1" LH units

Standard Glass Tubes: for Uniflux (1/4"),
LPL (RH) or Fluxline (1/2") Flowmeters

Air		Argon (Ar)	Butane (C ₄ H ₁₀)	Carbon Dioxide (CO ₂)	Carbon Monoxide (CO)	Cracked Ammonia (N ₂ H ₄)	Helium (He)	Hydrogen (H ₂)	Methane (CH ₄)	Nitrogen (N ₂)	Oxygen (O ₂)	Propane (C ₃ H ₈)	Scale Code	Float Material	Tube Size	Floats are St. Steel	Water (H ₂ O)	Scale Code
cm ³ /min	5-100	5-80	20-130	10-100	10-100	10-120	5-100	20-250	10-150	5-100	5-90	10-140	02	Dural	5		-	-
	20-250	20-200	50-290	20-250	20-270	30-360	20-280	40-600	40-360	20-250	20-220	40-300	03	Dural			1-10	08
	60-600	60-560	100-700	60-600	50-700	-	50-800	-	0.05-0.9	60-600	40-600	100-700	38	Dural			2-25	49
	50-750	40-660	100-800	50-750	50-800	-	0.05-1.1	0.1-2	0.1-1.1	50-800	50-700	100-850	04	Dural			4-60	01
													05	St. Steel			-	-
L/min	0.1-1.2	0.1-1	0.1-1.1	0.1-1.1	0.1-1.2	0.1-1.8	0.1-1.8	0.2-3.4	0.1-1.7	0.1-1.2	0.1-1.1	0.1-1.2			9	cm ³ /min	-	-
	0.2-2	0.2-1.7	0.4-2	0.2-1.8	0.2-2	0.3-3	0.2-3	0.4-5.6	0.4-2.8	0.2-2	0.2-1.8	0.3-2.2	36	Dural			30-280	02
	0.3-3.4	0.2-2.9	0.5-3	0.3-3	0.3-3.5	0.4-5.8	0.3-5.8	0.5-10	0.4-4.8	0.3-3.5	0.3-3.2	0.3-3.4	06	PEEK			40-480	03
	0.6-5	0.4-4	0.8-4	0.6-4.4	0.6-5	1-8	0.5-9	1-15	1-7	0.6-5	0.4-4.4	0.8-4.8	07	Dural			50-750	04
	1-10	1-8	1.5-8	1-8.5	1-10	2-18	2-20	3-34	2-14	1-10	1-9.5	1.5-9	45	St. Steel			-	-
	1-13	1-11	1-10	1-11	1-12	2-22	1-28	2-46	1-18	1-13	1-12	1-11	08	Dural			-	-
	2-26	2-22	2-19	2-20	2-26	4-48	2-60	5-95	3-36	2-27	2-25	2-22	09	St. Steel			0.1-1.2	05
	4-50	4-44	4-36	4-40	6-54	10-90	5-120	10-180	5-70	4-50	4-50	4-40	10	Dural	15	L/min	0.3-3	06
	10-100	10-90	10-70	10-80	10-100	20-180	20-270	40-400	15-140	10-100	10-100	10-85	11	St. Steel			0.4-4.4	07
	AI	AR	BU	CD	CM	CA	HE	HY	ME	NI	OX	PR					WA	

Compact Glass Tubes: For Uniflux (1/4") Flowmeters

Air		Scale Code	Float Material	Tube Size	Floats are St. Steel	Water (H ₂ O)	Scale Code
cm ³ /min	20-200	13	Dural	5	cm ³ /min	-	-
	50-500	51	Dural			15-80	12
	0.2-1	15	Dural			-	-
L/min	0.5-2.5	52	Dural	9	L/min	25-250	13
	0.5-5	53	Dural			100-700	14
	2-12	18	Dural			0.2-1	15
	5-25	54	St. Steel			-	-
AI						WA	

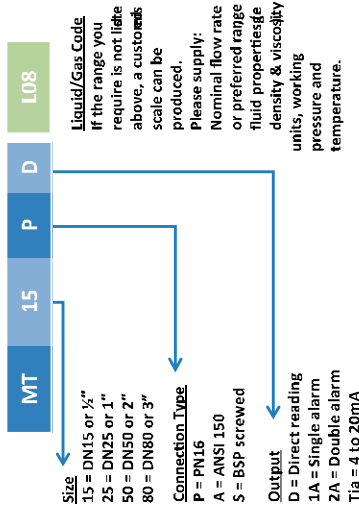
Long Glass Tubes: For Uniflux (1/4") Flowmeters

Air		Scale Code	Float Material	Tube Size	Floats are St. Steel	Water (H ₂ O)	Scale Code
cm ³ /min	0.05-1.6	24	St. Steel	5	5	2-80	20
	0.3-4.6	25	PEEK	9	cm ³ /min	30-380	22
	0.5-16	33	Dural				
	1-33	39	St. Steel	15	L/min	0.05-1.5	24
L/min	5-115	27	St. Steel			0.1-3.4	34
	-	-	-			0.1-4.8	25
						WA	

Size (MM)	Full Scale Flow Rates (at 20°C & 1013 mbar)				Max Pressure Drop (kPa)
	Water	Liquid Range Code	Air (with gas damping)	Gas Range Code	
DN 15 Flange or BSP	50 L/h	L08	1.5 m³/h	G08	1.5
	70 L/h	L11	2 m³/h	G11	1.5
	100 L/h	L14	3 m³/h	G14	1.5
	160 L/h	L16	4.8 m³/h	G16	1.5
	250 L/h	L19	7.5 m³/h	G19	3.0
	400 L/h	L23	12 m³/h	G23	3.0
	600 L/h	L26	18 m³/h	G26	3.5
	1 m³/h	L00	30 m³/h	G00	1.5
DN 25 Flange or BSP	1.6 m³	L02	48 m³/h	G02	3.0
	2.5 m³/h	L04	75 m³/h	G04	3.5
	4 m³/h	L07	120 m³/h	G07	8.0
	6 m³/h	L11	180 m³/h	G11	16.0
DN 50 Flange or BSP	6 m³/h	L00	180 m³/h	G00	3.0
	10 m³/h	L02	300 m³/h	G02	4.0
	16 m³/h	L05	480 m³/h	G05	8.0
	25 m³/h	L08	750 m³/h	G08	16.0
DN 80 Flange only	25 m³/h	L00	750 m³/h	G01	14.0
	50 m³/h	L04	1500 m³/h	G05	22.0



MT meters are installed in vertical lines with flow upwards and are normally supported by the pipework.



Medium to high flows
High pressures
Direct reading
Alarm option
4 - 20 mA option
Gases and liquids
Flanged connections

Specification	
Gas Range	0.1 - 700 m³/h (air equiv)
Liquid Range	5 L/h – 25 m³/h (water equiv)
Scale Length	100 mm
Alarms*	Single or Dual NAMUR Type (ATEX II 2G)
Transmitter*	2-wire 4 to 20 mA (EEx ia IIC T6) (ATEX II 2GD T70°C)
Protection	IP65
Accuracy	±2% FSD
Repeatability	0.5% of Flow
Temperature	-30°C to 65°C Ambient -40°C to 200°C Fluid
Pressure**	100 bar max, (or flange rating)
Flanged	DIN PN16 or ANSI 150
Screwed	BSP female
Sizes	DN15-DN50 (3/4" to 2")
Materials	316 SS standard

*Alarms and transmitters are optional

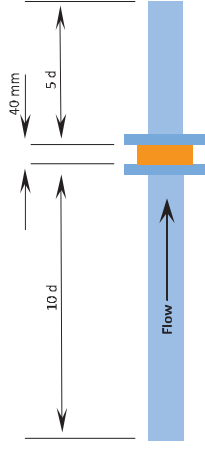
**In accordance with the European Pressure Equipment Directive 97/23/EC, stated pressure rating is for Group 2 fluids (non dangerous).

Flow Ranges (@ 20°C, 1013 mbar)

Pipe Size (mm)	Water m³/h	Scale Code	Water m³/h	Scale Code	Air m³/h	Scale Code
DN 38	2 to 20	WA 85	2 to 10	WA 91	20 to 150	AI 85
DN 50	5 to 40	WA 86	4 to 20	WA 92	40 to 300	AI 86
DN 80	10 to 100	WA 87	10 to 50	WA 93	100 to 700	AI 87
DN 100	20 to 200	WA 88	20 to 100	WA 94	200 to 1500	AI 88
DN 150	50 to 400	WA 89	40 to 200	WA 95	500 to 3500	AI 89
DN 200	100 to 1000	WA 90	80 to 400	WA 96	1000 to 7000	AI 90
		400 mbar	100 mbar		40 mbar	

Unrecovered pressure loss at maximum flow

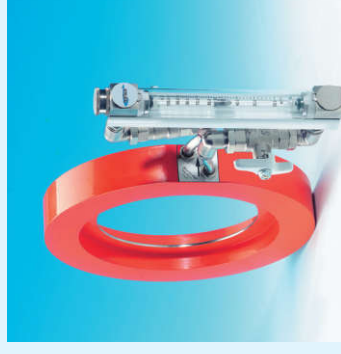
FLOWSENSE infra-red flow alarms can be factory mounted or retro-fitted. Details on page 18
Other materials of construction are available, please enquire for details.



The achievable accuracy of the Deltaflux flowmeter is a function of installation. For best results, minimum straight lengths of pipe 10 diameter upstream and 5 diameter downstream are recommended.

DELTAFLUX ORIFICE FLOWMETER

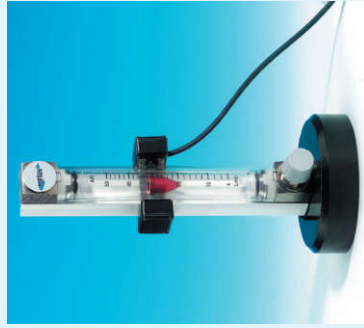
- High flows
- Direct reading
- Gases and liquids
- Between flange connection
- Compact construction
- Vertical or horizontal mounting
- By-pass isolation valves
- Optional alarm



Specification	
Gas Range	20 - 7000 m³/h (air equiv)
Liquid Range	2 - 1000 m³/h (water equiv)
Scale Length	100 mm
Accuracy	±2% FSD
Temperature	-15 to 90°C
Pressure*	20 bar max. (non shock)
Connections	Flange wafer, bolted between flanges (DIN or BS10 Table E or D)
Seals	Viton and polyurethane
Flow Tube	Borosilicate glass
Float	Liquids: Stainless steel Gases: Anodised aluminium (Dural)
Orifice Carrier	316 St. steel flow orifice mounted in a polyester coated carbon steel carrier
Other Materials	Copper and brass

*Pressure rating for water application. In accordance with the European Pressure Equipment Directive 97/23/EC, actual pressure rating is dependent upon fluid type and nominal pipe size.

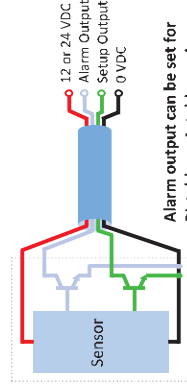
INFLUX FLOWSENSE ALARM



- Fits most frame types
- Adjusts to any point on scale
- Simple interfacing
- Selectable output modes
- Power failure detection
- Can be retro-fitted
- Optional power supply/relay module

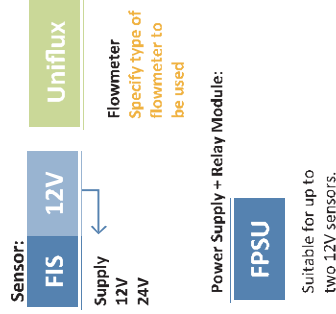
Sensor	
Supply	12 VDC, 30mA (24 VDC optional)
Output	2 x npn open collector* 150mA, 24VDC max.
Cable	3m, screened 4 core
Temperature	-5 to 60°C

* Alarm output conducts in non-alarm state. Setup output non conducting after power failure, until initialised.



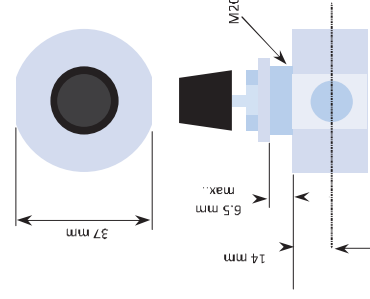
Depending upon flowmeter type and range required, for Hazardous Area applications, NAMUR type inductive sensors may be available. Enquire for suitability.

Power Supply + Relay Module	
Supply	115 /230 VAC, 50-60Hz
PSU Output	12 VDC, 200 mA max.
Relays	2 x SPNO 10A @ 30 VDC/250 VAC 125 VDC/380 VAC max. 10mA @ 5 VDC min.
Indicators	Power on, Output and Setup LEDs
Temperature	-5 to 50°C
Protection	IP65

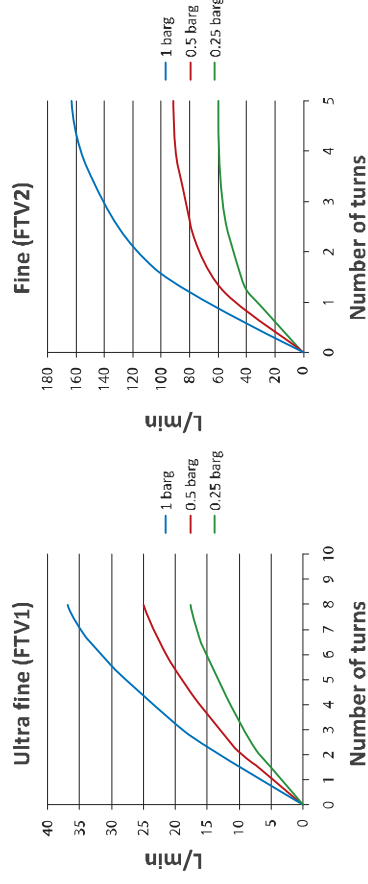


INFLUX FINETRIM VALVES

- Gas or liquid control
- Multi-turn operation
- Choice of valve characteristics
- Stainless steel construction
- Interchangeable valve cartridge



Specification	
Temperature	120°C max.
Pressure	30 bar max.
Adjustment	10 operating turns max.
Connections	1/4" BSPP Female
Seals	Viton and PTFE
Valve Body	316 stainless steel
Valve Needle	316 stainless steel



Gas Sizing

For non-standard gases or conditions, use the tables below to find the flowrate of Air @20°C and 1013 mbar and match to the equivalent flowmeter type and size.
To convert from Air at other temperatures or pressures, use table 1.
To convert from other gases to Air, use table 2.

Table 1: Multiplier to give equivalent flow @ 20°C and 1013 mbar

Fluid Conditions	0 bar g	1 bar g	2 bar g	3 bar g	4 bar g	5 bar g	6 bar g	7 bar g
0°C	0.965	0.685	0.560	0.485	0.434	0.396	0.367	0.343
10°C	0.983	0.697	0.570	0.494	0.442	0.403	0.374	0.349
20°C	1.000	0.709	0.580	0.502	0.450	0.410	0.380	0.355
30°C	1.017	0.721	0.590	0.511	0.457	0.417	0.387	0.362
40°C	1.034	0.733	0.599	0.519	0.465	0.424	0.393	0.368
50°C	1.050	0.745	0.609	0.528	0.472	0.431	0.399	0.373
60°C	1.066	0.756	0.618	0.536	0.479	0.438	0.405	0.379
70°C	1.082	0.768	0.627	0.544	0.486	0.444	0.411	0.385
80°C	1.098	0.779	0.636	0.552	0.493	0.451	0.417	0.390
90°C	1.113	0.790	0.645	0.559	0.500	0.457	0.423	0.396
100°C	1.128	0.800	0.654	0.567	0.507	0.463	0.429	0.401

Table 2: Multiplier to give equivalent flow of Air

Fluid	Symbol	Multiplier
Acetylene	C ₂ H ₂	0.948
Ammonia	NH ₃	0.767
Argon	Ar	1.175
Butane	C ₄ H ₁₀	1.417
Carbon Dioxide	CO ₂	1.233
Carbon Monoxide	CO	0.983
Chlorine	Cl ₂	1.565
Ethane	C ₂ H ₆	1.019
Ethylene	C ₂ H ₄	0.984
Hydrogen	H ₂	0.264
Hydrogen Chloride	HCl	1.122
Methane	CH ₄	0.744
Nitrogen	N ₂	0.984
Nitrous Oxide	N ₂ O	1.233
Oxygen	O ₂	1.051
Propane	C ₃ H ₈	1.234

Example 1
50 L/min of Air @ 2 barg & 40°C
Using table 1:
Equivalent flow of Air at 1013 mbar and 20°C
= 50 L/min x 0.599
= 30 L/min

Example 2
50 L/min of Hydrogen @ 1013 mbar & 20°C
Using table 2:
Equivalent flow of Air @ 1013 mbar and 20°C
= 50 L/min x 0.264
= 13.2 L/min

Example 3
50 L/min of Hydrogen @ 2 barg & 40°C
Using tables 1 & 2:
Equivalent flow of Air @ 1013 mbar and 20°C
= 50 L/min x 0.599 x 0.264
= 7.9 L/min

Liquid Sizing

For liquids other than water, use the Specific Gravity (SG) of the liquid and table 3 below to find the water flowrate and match to the equivalent flowmeter type and size.

Table 3: Multiplier to give equivalent water flow

Liquid SG (g/cm ³)	Multiplier
0.7	0.819
0.8	0.882
0.9	0.942
1.0	1.000
1.1	1.056
1.2	1.111
1.3	1.166
1.4	1.218
1.5	1.271
1.6	1.323

Example
25 L/min of Liquid with a Specific Gravity of 1.2
Using table 3:
Equivalent flow of Water
= 25 L/min x 1.111
= 27.8L/min

Unit Conversion

Flowrate		To	
Multiply to convert	From	cm ³ /min	L/min
cm ³ /sec	60	1	0.06
cm ³ /min	1	1000	0.001
L/min	16.67	16670	1
L/h	16670	28320	0.0166
m ³ /h	28320	471.9	16.67
CFM	471.9	454.6	28.32
CFH	454.6	75.77	0.4719
Imp GPM	75.77	3785	4.546
Imp GPH	3785	63.08	0.07577
US GPM	63.08		3.785
US GPH			0.06308

Pressure		To	
Multiply to convert	From	mbar	bar
psi	atms.	68.947	0.069
inch H ₂ O	kg/cm ²	1013	1.013
mm H ₂ O	mm Hg	2.486	0.0025
mm Hg	kPa	980.662	0.981
10		0.0977	0.000098
		1.329	0.001329
			0.01

Temperature		To
Convert	From	°C
°F		(°F-32) / 1.8
K		K-273.15



Each flowmeter scale is produced using our bespoke air or water calibration facilities where all reference equipment used is traceable to national standards and controlled within our approved ISO9001:2008 management system, assuring accuracy within the required limits.

To meet the exacting needs of modern industry we can offer higher levels of accuracy and certification traceable to national standards or third party UKAS certification.



Investment in flow calibration facilities and automation of build and test routines enables Influx to deliver consistent product quality in support of both small batch and high volume manufacturing requirements.



Flowmeters for sprinkler systems



LPS 1045: Issue 1
Cert No. 464a



Flange and groove style connection
Simple and quick to install
Horizontal or vertical pipelines
Direct or remote indicator
Certificated to LPS 1045

Size & connection	Firesure close coupled		Firesure X remote coupled.	
	dm3/min	LPCB ref.	dm3/min	LPCB ref.
50 Flange	150 to 700	464a/01	200 to 850	464a/11
80 Flange	300 to 1600	464a/02	200 to 1800	464a/12
100 Flange	500 to 3500	464a/03	400 to 4000	464a/13
150 Flange	900 to 7900	464a/04	1100 to 9500	464a/14
200 Flange	2000 to 15000	464a/05	2500 to 17000	464a/15
50 Groove	150 to 700	464a/06	200 to 850	464a/16
80 Groove	300 to 1600	464a/07	200 to 1800	464a/17
100 Groove	500 to 3500	464a/08	400 to 4000	464a/18
150 Groove	900 to 7900	464a/09	1100 to 9500	464a/19
200 Groove	2000 to 15000	464a/10	2500 to 17000	464a/20



A wide range of low flowrate meters for monitoring, controlling and visualisation in sampling, blending, dosing, aeration, cooling and laboratory use.

Flowmeters suitable for high flowrate measurement and control in process flows, water treatment and gas furnace applications.



The Firesure range of meters approved for the testing of automatic sprinkler installations in buildings.

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