

MT Series VA Flowmeter

110mm Linear Scale ● Easy to Read

Repeatable & Stable • Optimum Control

Rugged Design • Harsh Environments

Output Options • Switching & 4-20mA

Liquid & Gas ● Many Plant Applications



How It Works

Flow through an orifice within the metal tube, causes a profiled float to assume an equilibrium position where the upward forces created by flow are balanced by the weight of the float. A magnet in the float is sensed by the pointer, providing a direct flow rate reading. Options include alarms and 4 to 20mA transmitter.

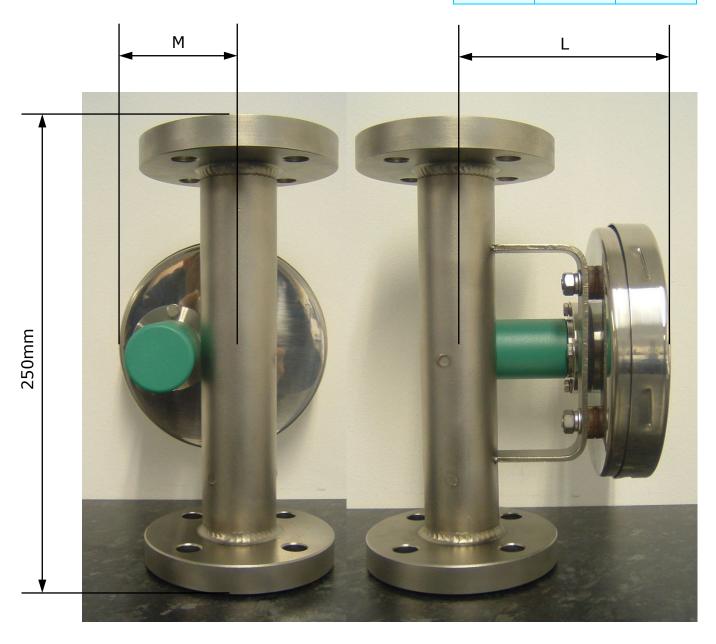
Alternative materials and connections may be available to suit application.

Please enquire for specifications or features not quoted in this standard leaflet.

Installation

The meter is installed in a vertical line with flow upwards and is normally supported by the surrounding pipework.

Dimensions (mm)					
Size	`M ′	`L′			
DN15	78	56			
DN25	87	65			
DN50	101	80			
DN80	115	95			



Instrument Specification & Options

General Specification			
Accuracy	:	±2% of Full Scale	
Repeatability	:	±0.5% of Flow	
Nominal Sizes	:	DN15 to DN80 (½" to 3")	
Flow Ranges	:	$1.5 - 1500 \text{m}^3/\text{h}$ Air $50 \text{l/h} - 50 \text{m}^3/\text{h}$ H ₂ O	
Wetted Material	:	316 Stainless Steel	
Process Connections	:	DIN PN16 or ANSI 150	
Pressure Rating	:	100bar (or flange rating)*	
Installation Length	:	250mm	

D - Direct Reading Specification				
Scale Length	:	110mm		
Housing Diame- ter	:	150mm		
Turn Down Ratio	:	10:1		
Ambient Temp.	:	-40°C to +120°C		
Fluid Temp.	:	-80°C to +300°C		
Housing	:	IP65 Stainless Steel		

Tia - Transmitter Specification			
Output	:	4 to 20mA (2 wire)	
Loop Powered	:	8 to 30 V DC 800Ω max. @ $24V$	
Explosion Protection (Gas and Dust)	:	Ex ia IIC T6 II 2G Ex tD A21 T 70°C II 2D	
Ambient Temp.	:	-30°C to +65°C	
Fluid Temp.	:	-40°C to +120°C	
Housing	:	IP65 Polycarbonate (additional to indicator)	
Connection	:	M20 Cable Gland	

Instrument Options:

Direct Reading Indicator

Clear and stable indication over a 110mm long scale. Can be scaled to suit exact process conditions.

Flow Alarm Unit

A direct reading indicator with one or two fully adjustable set-point trips. Giving output signals for connection to NAMUR compatible interfaces.

Transmitter

Independent of the mechanical indicator, this solid-state device senses the float position directly. Providing a 4 to 20mA, 2-wire loop output proportional to flow reading. Supplied with the Direct Reading Indicator.

1A/2A - Alarm Specification			
Output	:	NAMUR (2 wire)	
Adjustment	:	0 to 100% of Scale	
Explosion Protection (Gas and Dust)	:	Ex ia IIC T6 (x) II 1G Ex iaD 20 T 108°C (x) II 1D	
Ambient Temp.	:	-25°C to +100°C	
Fluid Temp.	:	-40°C to +150°C	
Housing	:	IP65 Coated Aluminium (replaces standard indicator)	
Connection	:	M20x1.5	

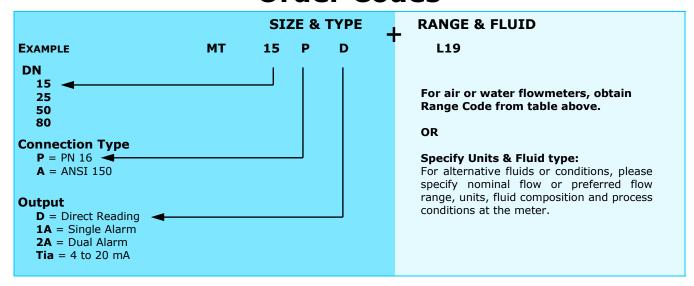
^{*} In accordance with the European Pressure Equipment Directive 97/23/EC, stated pressure rating is for Group 2 fluids (non dangerous).

Standard Flow Ranges

Nominal	i all ocale i lott itates (at 20 c a 2025 liibai)			Maximum	
Size (mm)	Liquid Range Code	WATER	Gas Range Code	AIR (with gas damping)	Pressure Drop (kPa)
DN 15	L08 L11 L14 L16 L19 L23 L26	50 L/h 70 L/h 100 L/h 160 L/h 250 L/h 400 L/h 600 L/h	G08 G11 G14 G16 G19 G23 G26	1.5 m ³ /h 2 m ³ /h 3 m ³ /h 4.8 m ³ /h 7.5 m ³ /h 12 m ³ /h	1.5 1.5 1.5 1.5 3.0 3.0 3.5
DN 25	L00	1 m ³ /h	G00	30 m ³ /h	1.5
	L02	1.6 m ³ /h	G02	48 m ³ /h	3.0
	L04	2.5 m ³ /h	G04	75 m ³ /h	3.5
	L07	4 m ³ /h	G07	120 m ³ /h	8.0
	L11	6 m ³ /h	G11	180 m3/h	16.0
DN 50	L00	6 m ³ /h	G00	180 m³/h	3.0
	L02	10 m ³ /h	G02	300 m³/h	4.0
	L05	16 m ³ /h	G05	480 m³/h	8.0
	L08	25 m ³ /h	G08	750 m³/h	16.0
DN 80	L01	25 m³/h	G01	750 m³/h	14.0
	L05	50 m³/h	G05	1500 m³/h	22.0

Customised scales are produced to suit other fluids and/or operating conditions, please enquire.

Order Codes



For further applications or technical advice please contact:



