positive displacement flow meters

M1 – 1/4" pulse meters

The M1 is a small capacity meter in the M-SERIES[™] range and is differentiated by its flow rate capabilities. It has the ability to handle a wide range of fluid viscosities with exceptional levels of repeatability and durability.

Features

- · Very compact size.
- · Low flow capability with high resolution output.
- Meter accuracy is verified by a factory calibration check after which an individual metrology report is issued.
- Solid state Hall Effect Sensor/Reed Combination.
- Low pressure drop allows for economical pump selection or gravity flow applications.
- Meter design minimises the number of wearable and replaceable parts and extends
- product life.Has IP54/NEMA13 protection.
- MISSPH-XY IP65-NEMA 9
- Flexibility of installation options (e.g. can be mounted horizontally or vertically; no flow conditioning required).





M1RSP-X

MR100



Specification:

MODEL	M1RSP-X	M1SSP-X	M1SSPH-X	M1ASP-X
Meter Type	Pulse	Pulse	Pulse	Pulse
Meter Body Material	PPS	316 Stainless Steel	316 Stainless Steel	Aluminium / PPS
Wetted Components:				
Rotor Material	316 Stainless Steel / Ceramic	316 Stainless Steel / Ceramic	316 Stainless Steel / Ceramic	316 Stainless Steel / Bronze
Shafts	316 Stainless Steel	316 Stainless Steel	316 Stainless Steel	316 Stainless Steel
O'ring	FKM	FKM	FKM	FKM
Flow Rate Ranges (Litres Per Hour	/US Gallons Per Hour)			
Above 5 cPs	2 To 100 / 0.53 To 26.4	2 To 100 / 0.53 To 26.4	2 To 100 / 0.53 To 26.4	2 To 100 / 0.53 To 26.4
Below 5 cPs (Excluding Water)	5 To 100 / 1.32 To 26.4	5 To 100 / 1.32 To 26.4	5 To 100 / 1.32 To 26.4	5 To 100 / 1.32 To 26.4
Accuracy- Within	+/- 1%	+/- 1%	+/- 1%	+/- 1%
(Of Reading)				
Repeatability	0.03%	0.03%	0.03%	0.03%
Maximum Viscosity	1000 Centipoise	1000 Centipoise	1000 Centipoise	1000 Centipoise
Maximum Operating Pressure	500kpa/ 75 Psi/ 5 Bar	1000kpa/ 150psi/ 10bar	55160kpa/ 8000psi/ 551bar	500kpa/ 75psi/ 5bar
Pulser Type	Dual Hall Effect Sensor/	Dual Hall Effect Sensor/	Hall Effect Sensor	Dual Hall Effect Sensor/
	Reed Switch	Reed Switch	or Reed Switch	Reed Switch
Pulses Per Litre/US Gallon	1000 / 3785.4	1000 / 3785.4	1000 / 3785.4	1000 / 3785.4
Model Dimensions				
Meter Body	50x50mm / 1.97"X1.97"	50x50mm / 1.97"X1.97"	86mm Dia X 110mm H/3.4" Dia X 4.33" H	50mm X 50mm/1.97" X 1.97"
Port Face To Face	67mm / 2.64"	67mm / 2.64"	83mm / 3.26"	60mm / 2.36"
Weight	240g / 8.5oz	600g / 21.2oz	3.3kg / 116.5oz	310g / 11oz
Max. Operating Temperature	80°C / 176°F	120°C / 248°F	120°C / 248°F	80°C / 176°F
Recommended Mesh	200 Mesh	200 Mesh	200 Mesh	200 Mesh
Strainer				

X = Port Size To order flowmeter you must replace 'X' with the relevant number.

Meter mounted options = MR100 LCD and or MR150LA (4-20mA - module) or combination of both.

Port Size:

Port Size:	Calibrated In:	Electrical Connections
1 = 1/4" BSP (F) ports	litres	1m/39" pulser fly lead (5 core cable)
2 = 1/4" NPT (F) ports	US gallons	1m/39" pulser fly lead (5 core cable)
1 = 1/4" BSP (F) ports 1 HP only	vith litres	20mm (F) Conduit Thread
2 = 1/4" NPT (F) ports pulser ca	o US gallons	1/2" NPT (F)

 $\mathsf{PPS} = \mathsf{Polyphenylene} \ \mathsf{Sulfide} \ \mathsf{Resins}$

Note: Water usage is limited due to poor lubricating quality of the fluid limiting accuracy and bottom end stable operation.

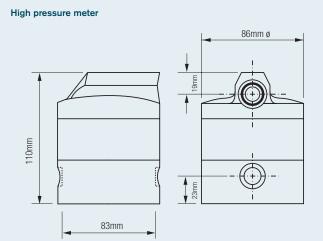
M1 – 1/4" pulse meters

Options and accessories

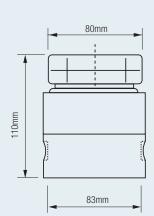
M1 - 1/4" Pulse Meters	M1RSP-X	M1SSP-X	M1SSPH-X	M1ASP-X	
FKM O-Ring	•	•	•	•	
FFPM Elastomer	0	0	0	0	
EPDM O-Ring	0	0	0	0	
High Temp Rotors	-	-	_	-	
High Viscosity Rotors	_	_	-	_	
Hall Effect Sensor	•	•	•	•	
Reed Switch	•	•	•	•	
Solvent Kit	_	_	_	_	
PPS Rotors With Hastalloy C Shafts	0	_	_	_	
Remote Mounted LC Display	+	+	+	+	
4-20ma Module (Remote)	+	+	+	+	
Meter Mounted LC Display	+	+	+	+	
Meter Mounted 4-20mA Module	+	+	+	+	

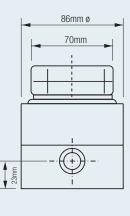
• Standard O Optional - Not Available + Accessory

Dimensions



High pressure meter with MR100



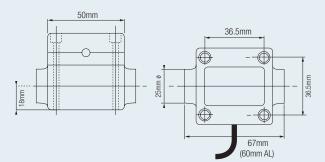


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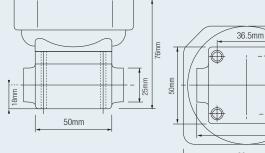
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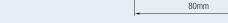
36.5mm 70mm

Standard meter



Standard meter with MR100





Generic Diagram for M05/M1/M2 (fitted with MR100 Register)

Note: When MR150 is fitted the O/A height increases by 22mm for each model. (sizes are common,) as shown in plan view.

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