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.



MR100

M1RSP-X

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).





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 with | litres | 20mm (F) Conduit Thread |
| 2 = 1/4" NPT (F) ports | US gallons | 1/2" NPT (F) |

PPS = Polyphenylene Sulfide Resins

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

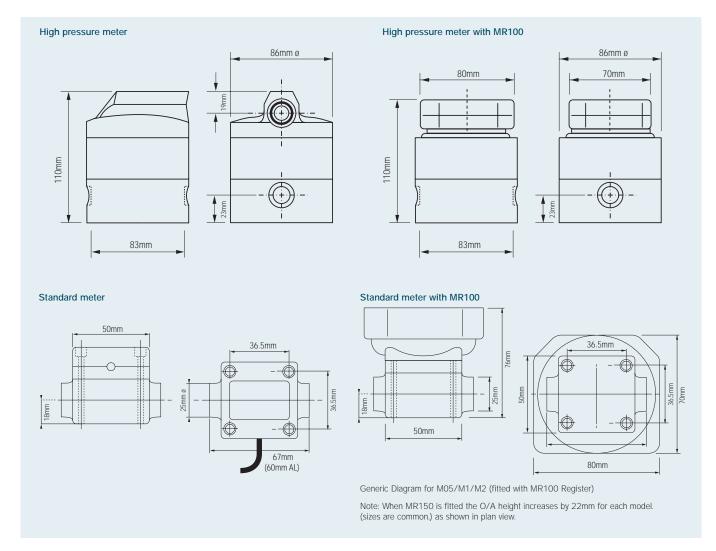
M1 – 1/4" pulse meters

Options and accessories

| M1RSP-X | M1SSP-X | M1SSPH-X | M1ASP-X |
|---------|---------|---------------------------------------|---------|
| • | • | • | • |
| 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 |
| - | - | _ | - |
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| • | • | • | • |
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| | 0 | • • • • • • • • • • • • • • • • • • • | |

[●] Standard ○ Optional - Not Available + Accessory

Dimensions



Macnaught Pty Ltd reserves the right to modify or alter product materials, dimensions, design and construction, when necessary, to improve the performance of our products. Please check with your local distributor or Macnaught to confirm current specifications of our products.