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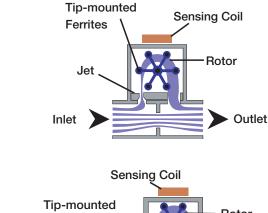
Pelton Wheel Flowmeters

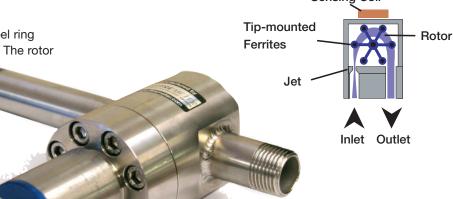
Precision measurement and total control of fluid flow

The Litre Meter Pelton Wheel flowmeters employ a single size straight bladed rotor manufactured in chemically resistant PFA with bearings of sapphire. The rotor runs in hemispherical sapphire bearing cups forming two 'floating' low friction precision bearings. Ferrites sealed in the PFA rotor are sensed by a pick-up coil in the Litre Meter sensor. The flow path for the LM series meters is shown where all of the flow travels with the Pelton Wheel and exits from the flowmeter. The meter provides a square wave pulse output. LM Series meters are specifically designed for low flows and have a wide turndown ratio of up to 280:1.

For the MM Series an identical Pelton Wheel ring assembly is located in a by-pass chamber. The rotor

movement is directly proportional to total flow through the flowmeter. This gives a wide rangeability, typically 50:1 for the MM orifice/by-pass meter.





Consult the specialists

Display and output options

- Display of rate and total
- Analogue and scaled pulse outputs
- RS232, RS485, Hart, Foundation Fieldbus, Modbus communication
- Flow alarms
- Batching control
- Temperature and Pressure compensation for fluids and gases
- Enclosures rated up to IP68 and others suitable for sub-sea applications
- Hazardous area approved for either Exi or Exd
- AC, DC or battery power supply options
- Linearisation
- Printers and printer outputs
- Ratio control
- Pipe, wall, head and panel mounting options



Litre Meter LM and MM Pelton Wheel Flowmeters

| | Description | Flow range & Accuracy | Fluids | Features |
|-------------|--|---|---|--|
| LMGN | Glass filled nylon bodied meter with 7 flow rate ranges all supplied with 8mm or 11mm push on hose connections, 316 stainless steel and sapphire internals suitable for pressures up to 2 bar and temperature from -20 to +70°C. IP68 protection. | LM01 0.01 - 0.25 l/min, LM05 0.02 - 1.3 l/min, LM24 0.03 - 4.3 l/min, LM45 0.04 - 6.3 l/ min, LM90 0.08 - 15 l/min, LM220 0.1 - 28 l/min, LM005 0.006-0.100 l/min | Any non abrasive, chemical compatible low viscosity liquid. ±2% reading - linearity. ±0.25% repeatability. 005 requires linearisation. | Low cost glass nylon meter ideal for general applications with low pressure and temperatures. |
| SPFA | 316 stainless steel bodied meter with 15 meter sizes from 1/4" to 2" with PFA and sapphire internals suitable for pressures to 40 bar and temperature ranges from -20 to +70°C. IP68 protection. Or 120 bar. | LM003 0.004 - 0.060 V/min, LM005 0.006 - 0.100 V/min, LM01 0.01 - 0.25 V/min, LM05 0.02 - 1.3 I/min, LM24 0.03 - 4.3 I/min, LM45 0.04 - 6.3 V/min, LM49 0.08 - 15 I/min, LM90 0.08 - 15 I/min, LM220 0.1 - 28 I/min, MM12.5 1 - 65 I/min, MM20 2 - 130 I/min, MM25 3 - 160 I/min, MM37 7 - 350 I/min, MM50 10 - 500 I/min, | Any non abrasive, chemical compatible low viscosity liquid. ±2% reading - linearity. ±0.25% repeatability. 003 and 005 require linearisation. | Designed for use with medium pressure and temperature applications. LM meters all provided with male BSP threaded connections, MM meter sizes up to MM30 provided with female BSP threaded connections and MM37 to 50 designed for wafer fitting between flanges as standard. Alternative end connections also offered. Hazardous area approved units available on request. |
| LMX | 316 stainless steel bodied meter with 10 meter sizes all 1/2" with PFA and sapphire internals suitable for pressures up to 100 bar and temperature ranges from -20 to +100°C. IP68 protection. | LM003 0.004 - 0.06 l/min, LM005 0.006 - 0.1 l/min, LM01 0.01 - 0.25 l/min, LM05 0.02 - 1.3 l/min, LM24 0.03 - 4.3 l/min, LM45 0.04 - 6.3 l/min, LM48 0.06 - 8 l/min, LM90 0.08 - 15 l/min, LM220 0.1 - 28 l/min, MM12.5 1 - 65 l/min, | Any non abrasive, chemical compatible low viscosity liquid. ±2% reading - linearity. ±0.25% repeatability. 003 and 005 require linearisation. | Designed for use with medium pressure and temperature applications. Meters all provided with 1/2" BSP or NPT male threaded connections. LM 003 and 005 have 8mm OD tube option. |
| SS or Ti | 316 stainless steel or titanium bodied meter with 15 meter sizes from 1/4" to 2" with PFA and sapphire internals suitable for pressures from 30 to 345 bar and higher, and temperature ranges from -50 to +135°C. IP68 protection. | LM003 0.004 - 0.06 l/min, LM005 0.006 - 0.1 l/min, LM01 0.01 - 0.25 l/min, LM05 0.02 - 1.3 l/min, LM24 0.03 - 4.3 l/min, LM45 0.04 - 6.3 l/min, LM220 0.1 - 28 l/min, MM12.5 1 - 65 l/min, MM20 2 - 130 l/min, MM25 3 - 160 l/min, MM30 5 - 220 l/min, MM37 7 - 350 l/min, MM50 10 - 500 l/min, LM48 0.06 - 8 l/min, LM90 0.08 - 15 l/min, | Any non abrasive, chemical compatible low viscosity liquid. ±2% reading - linearity. ±0.25% repeatability. 003 and 005 require linearisation. | Designed for use with medium pressure and temperature applications. LM meters all provided with male BSP threaded connections, MM meter sizes up to MM30 provided with female BSP threaded connections and MM37 to 50 designed for wafer fitting between flanges as standard. Alternative end connections also offered. Hazardous area approved units available on request. |
| PVC or PVC3 | PVC: PVC bodied meter with 6 larger meter sizes from 1/2" to 2" with 316SS, PFA and sapphire internals suitable for pressures up to 5 bar and temperature ranges from -10 to +50°C. IP68 protection. PVC3: as PVC but no metal wetted parts and available in smaller flow sizes. | LM01 0.01 - 0.25 l/min, LM05 0.02 - 1.3 l/min, LM24 0.03 - 4.3 l/min, LM45 0.04 - 6.3 l/ min, LM220 0.1 - 28 l/min, MM12.5 1 - 65 l/min, MM20 2 - 130 l/min, MM25 3 - 160 l/min, MM30 5 - 220 l/min, MM37 7 - 350 l/min, MM50 10 - 500 l/min, | Any non abrasive, chemical compatible low viscosity liquid. ±2% reading - linearity. ±0.25% repeatability. | Designed for low pressure and temperature with the PVC3 ideal for use with high corrosion and purity applications. LM meters all provided with 3/4" PVC connections, MM meter sizes up to MM30 provided with solvent weld connections and MM37 to 50 designed for wafer fitting between flanges as standard; alternative end connections also offered. Also in PVDF and PFA. |



