

## EExd VFF Chemical Injection Flow meter

<b>Model:</b>	<b>Flow meter module LF15 to V270, for flow ranges see individual meter data sheet.</b>
<b>Body:</b>	Body provided in 316L stainless steel either wafer body for flange mounting between applicable ANSI flanges or threaded NPT.
<b>Rotor:</b>	The rotor is provided in either anti galling stainless steel (AG, Nitronic 60) or brass, with a 316SS encapsulated magnet. For some lower flow rate low viscosity applications a carbon graphite rotor is used
<b>Seal:</b>	There are FPM O-ring seals between the top cap, module and body. Other elastomers are available e.g. Kalrez®, FEP covered silicon and in higher pressure versions PTFE and Inconel.
<b>Pick-up/Transmitter:</b>	There is one reed switch installed in a SS housing which is O-sealed to the meter body providing a rating of IP68. The Ex d display is normally mounted on the housing but is optionally remote. Typical reed switch life is 30 years at continuous maximum operating flow rate. An Ex ia instrument is also available.
<b>Pressure rating:</b>	110, 207, 414 & 690bar (Higher pressure rating also available) (1500, 3000, 6000 and 10000 psi)
<b>Temperature rating:</b>	-40°C to +150°C (subject to chemical compatibility, pressure rating and location of the display), higher temperature sensor available.
<b>Viscosity range:</b>	0.8 to 2000 cSt or greater. The normal meter maximum flow rate applies for viscosities from 1.2 to 30 cSt. For higher viscosities up to 2000 cSt a reduced maximum flow rate may apply.
<b>Flow rate range:</b>	- Normal flow rate range 0.01-16,200l/hr (0.16-270,000 ml/min, 0.0025 -4275 USG/hr, 0.06-102,500 USGPD). Actual minimums depending on viscosity and rotor material. - 50% over-range capability available for some applications – Please consult Litre Meter.
<b>Filtration:</b>	A 100 micron filter is advisable for 100% long life serviceability. If filtration is not possible, consult Litre Meter.
<b>Accuracy:</b>	A calibration certificate is provided based on a representative viscosity fluid for the application. The calibration certificate confirms the flowmeter accuracy. System accuracy is typically to ±1% of actual reading where the linearisation signal processing facility of the display instrument is employed.
<b>Instrument:</b>	The head mounted F-POD instrument provides indication of flow rate and total with a scaled 4-20mA output with HART, Modbus or Foundation Fieldbus protocol on a three/four wire 24VDC powered system. In addition there are two settable flow alarm transistor relays.
<b>Enclosure:</b>	The instrument has a top or remote mounted IPW66 Exd enclosure. The system is certified by ATEX, INMETRO Brazil or UL.
<b>Painting:</b>	The flow meter body and enclosure can be painted in accordance with customer specification.
<b>Petrobras Specifics:</b>	These products can conform to Petrobras specifications: -I-ET-3000.00-1200-800-PCI-001 Instruments spec & -I-ET-3010.64-1300-140-PPC-001 Painting procedure. To date this product has been supplied to P47, P50, P51, P52, P53, P54 and P55.

