

M18x1 High pressure sensor with 316 stainless steel body – suitable for Hazardous Area

Common Features:

Pick-up transmitter	The intrinsically safe pick-up system is in 316 stainless steel with a top mounted IP65 aluminium die cast enclosure containing an intrinsically safe encapsulated electronics.
Pressure Rating	420 bar [optional 1035 bar; max design 2068 bar]
Temperature Rating	Maximum +70°C. Minimum operating/storage temperature -40°C.
Wetted parts of sensor	316SS
External materials of sensing electronics	316SS
Dimensions	The sensor has an M18x1 thread. Standard length, including 39mm of thread, is 56mm.
Weight	Less than 0.2kg
Cabling	A 5m 4-core screened cable is normally provided blue tagged to identify it as intrinsically safe service.
Frequency Range	0.3 to 500 Hz depending on application.
Standard Operating Gap	0.1 to 0.25mm, greater if required
CE Marking	The equipment is provided CE marked for electromagnetic compatibility, the machinery directive 89/392/EEC and the low voltage directive 73/23/EEC. The product is EMC compliant with the lowest emissions and highest immunity requirements as defined in EN50081-1 and EN50082-2 harmonised European standards.
Apparatus certified service rating	Maximum electrical parameters, 28V dc, 110mA and 1 Watt. To ensure that these values are not exceeded, a suitable barrier device must be installed in cabling to any safe area electrical equipment. The intrinsically safe coding for connection system, cabling parameters, barrier device (and an Exd enclosure in the hazardous area containing a barrier device, if applicable) may affect installation coding.
Barrier device	The product is permitted to be installed in a Group II Category 1G with its power supply and electrical connections protected by a barrier device with maximum electrical parameters 28V dc 110mA or 1 Watt to the apparatus. We specify MTL 722+ & MTL 764+
KEMA apparatus certification for flowmeter	Certificate No KEMA 03ATEX1422 X for OM meters with plastic or aluminium enclosures. KEMA 03ATEX1421 X for OM series flowmeters with stainless steel or brass enclosures (see below).
ATEX certified galvanic isolator devices	In all cases refer to the manufacturer's data sheet for cable parameters, power supply requirements and mounting. For example, use either (a) Measurement Technology Ltd MTL4032 pulse isolator or (b) MTL 5032 pulse isolator.
Electrical parameters	13V dc minimum to 28V dc maximum power supply. Maximum current 20mA.
Conformity	Hazardous Area approved as standard.
Power supply	Provided by some instrumentation, otherwise 15V dc and 9V dc for Zener barriers and 24V dc for galvanic isolator.
NPN Output Signal	5V dc minimum to 28V dc maximum applied by the user to the output. Quiescent dc high with a negative going pulse using a pull-up resistor. Nominal 3mA (peak). Settable pulse width referenced to earth for Zener barriers. May be earthed or left isolated for galvanic isolator systems.
Compatible:	With all OMG series, OMH series, OMK series and versions for OMX series helical screw positive displacement flowmeters.

Options:

Enclosure	Aluminium die cast enclosure may be replaced with brass or 316SS IP68 enclosure. This also provides two extra pulse outputs which allow a pulse output in the hazardous area.
Complementary Instrumentation	Exd or Exi, hazardous area instrument with variety of displays including rate and total.
Cabling/connector	Longer cable lengths are obtainable. Flying leads of various lengths can be provided.
Sensor body	Longer lengths available on request.

Documentation:

Operating and Maintenance Manual	LM0512 et al
Maintenance	See Litre Meter drawings IS5506 and IS5506A

Sensor Specification Sheet:

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