

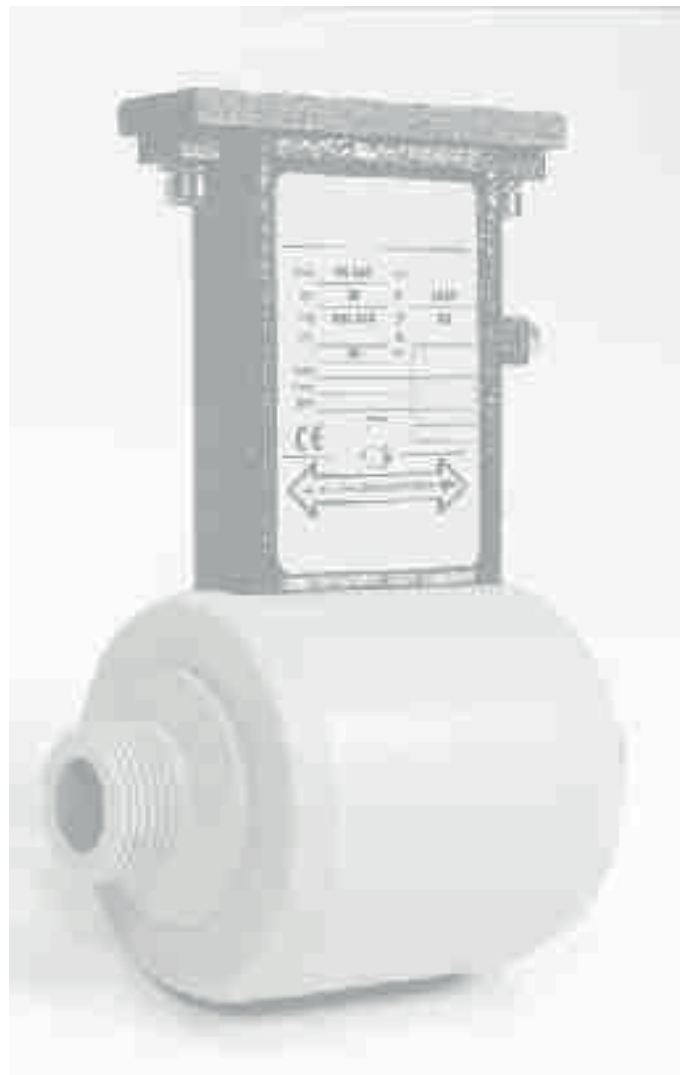


ISOMAG

The friendly magmeter

DATA SHEET

MS600



CE

ISOIL 
I N D U S T R I A

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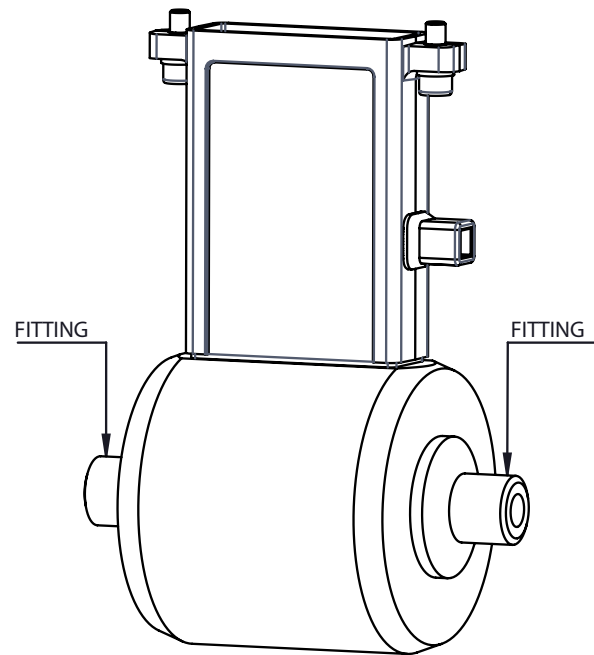
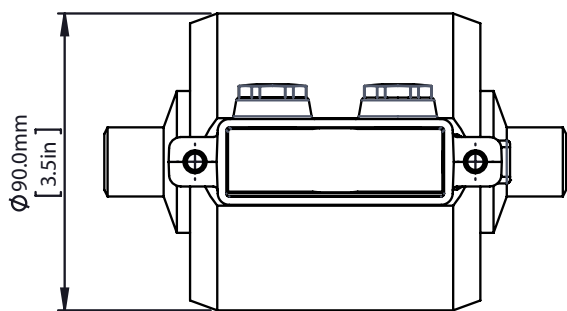
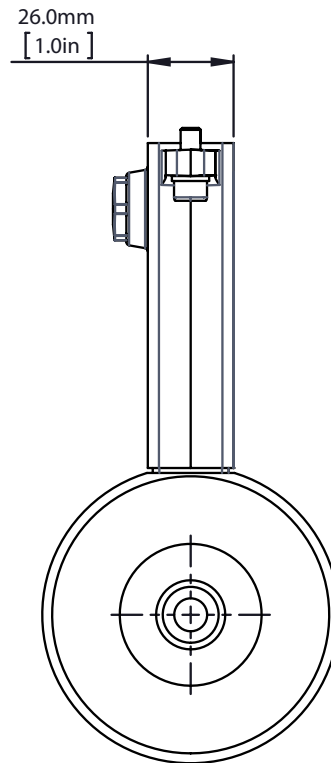
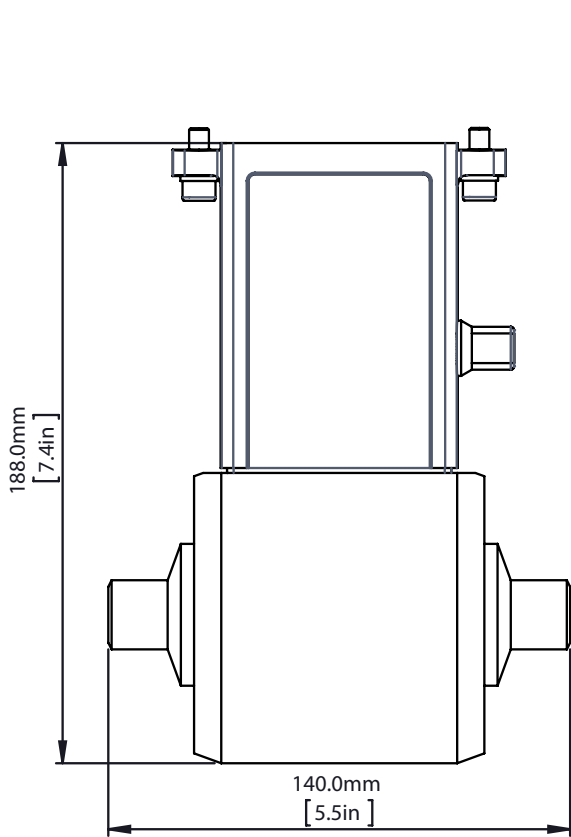
TECHNICAL DATA

| OVERALL FEATURES | |
|-----------------------------|---|
| Nominal diameter | <input type="checkbox"/> DN 3 ÷ 20 |
| Minimum conductivity | <input type="checkbox"/> 5 µS/cm |
| Humidity Range | <input type="checkbox"/> 0÷100% (IP 67) |
| Accuracy | <input type="checkbox"/> See relevant converter datasheet |
| CE Certification | <input type="checkbox"/> Yes |

| STANDARD FEATURES | |
|------------------------------------|---|
| Body material | <input type="checkbox"/> Polypropylene |
| Nominal pressure | <input type="checkbox"/> 1600 kPa |
| Process connection | <input type="checkbox"/> Threaded UNI 338 <input type="checkbox"/> Threaded NTP |
| Version - Protection Rating | <input type="checkbox"/> Compact IP67 |
| Connection material | <input type="checkbox"/> Polypropylene |
| Lining material | <input type="checkbox"/> Polypropylene |
| Gasket material | <input type="checkbox"/> FPM |
| Liquid temperature | <input type="checkbox"/> 0 °C ÷ 60 °C |
| Vacuum resistance | <input type="checkbox"/> 10 Kpa absolute at 60 °C |
| Electrodes material | <input type="checkbox"/> Stainless steel AISI 316 <input type="checkbox"/> Hastelloy C276 <input type="checkbox"/> Platinum-rhodium <input type="checkbox"/> Titanium <input type="checkbox"/> Tantalum |

| OPTIONAL FEATURES (CHECK FOR MORE DETAILS 'HOW TO ORDER' ON LAST PAGE) | |
|--|--|
| Gasket material | <input type="checkbox"/> EPDM |
| Process connection | <input type="checkbox"/> Other on request |
| Electrodes material | <input type="checkbox"/> On request |
| Version - protection rate | <input type="checkbox"/> Separate (max 20m) - IP68 <input type="checkbox"/> Separate (max 500m) with pre-amp IP67 (IP68 optional) |

OVERALL DIMENSIONS



FITTINGS GAS/NPT


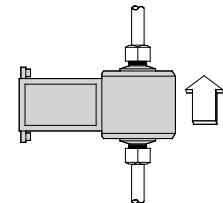
| DIMENSIONS mm (inches) | DN | | | | |
|---------------------------|------|----------|---------|----------|-----------|
| | | 3 (1/8") | 6 (1/4) | 10 (3/8) | 15 (1/2") |
| FITTINGS | 1/4" | 3/8" | 1/2" | 3/4" | 1" |


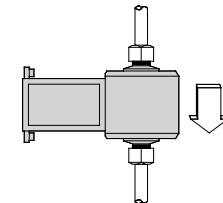
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INSTALLATION RECOMMENDATIONS


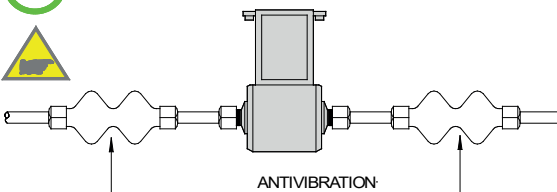
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**In vertical installation an ascending flow is preferable.
For vertical installations with descending flow direction contact the manufacturer**


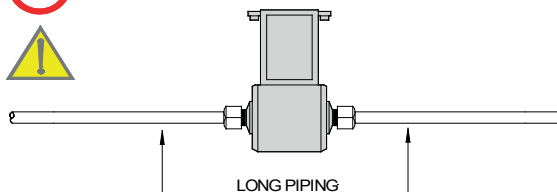



For installations in long pipe lines, please use anti vibration joints


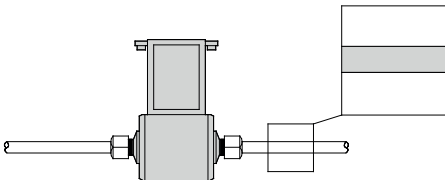




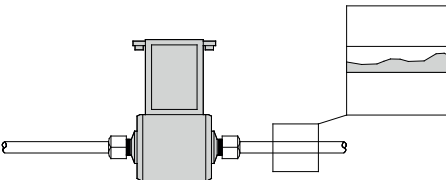
ANTIVIBRATION


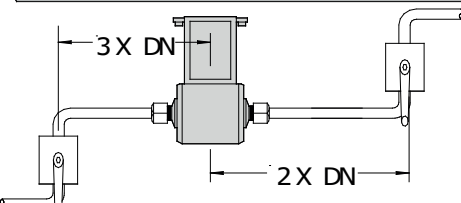
LONG PIPING

Avoid a partially empty pipe, during operation the pipe must be either completely full of liquid or completely empty


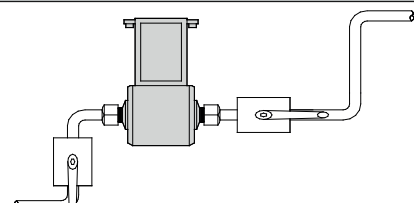



Install the sensor away from bends and hydraulic accessories and hydraulic accessories


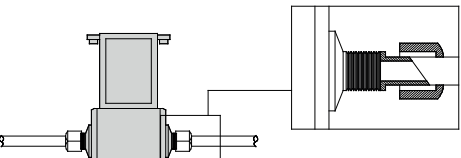




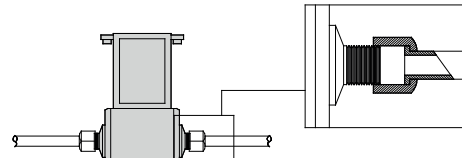
3 X DN

2 X DN

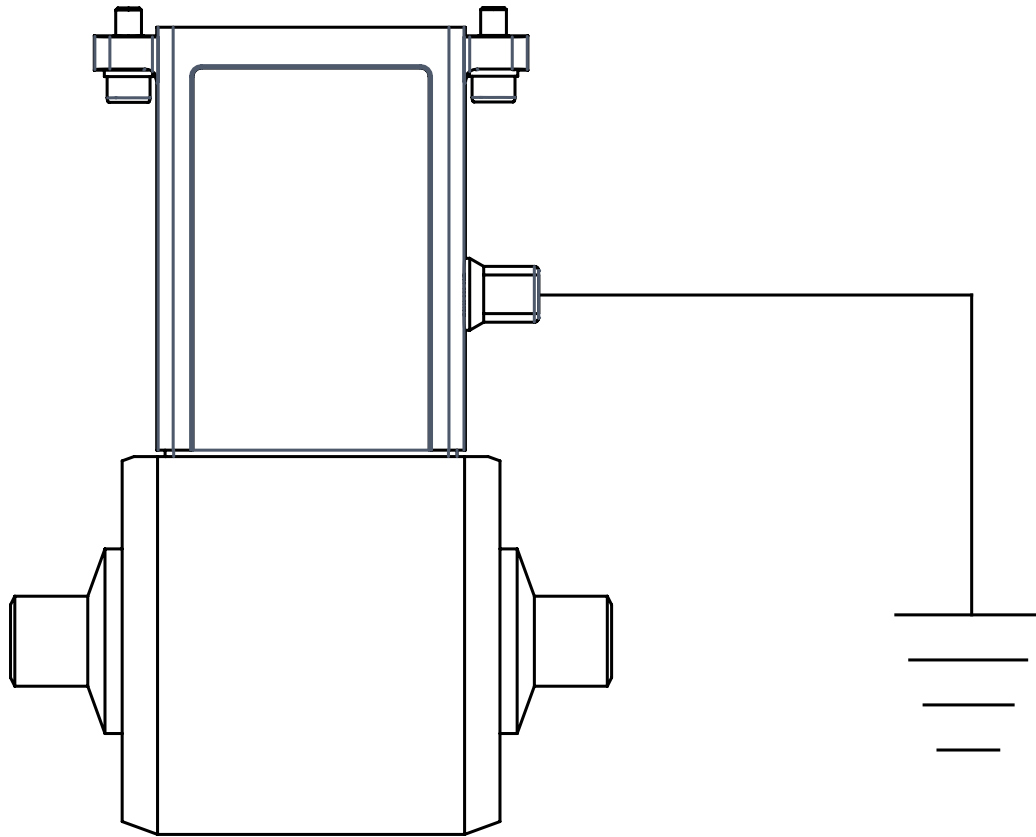



Avoid positioning flange and counter flanges by tightening the nuts.

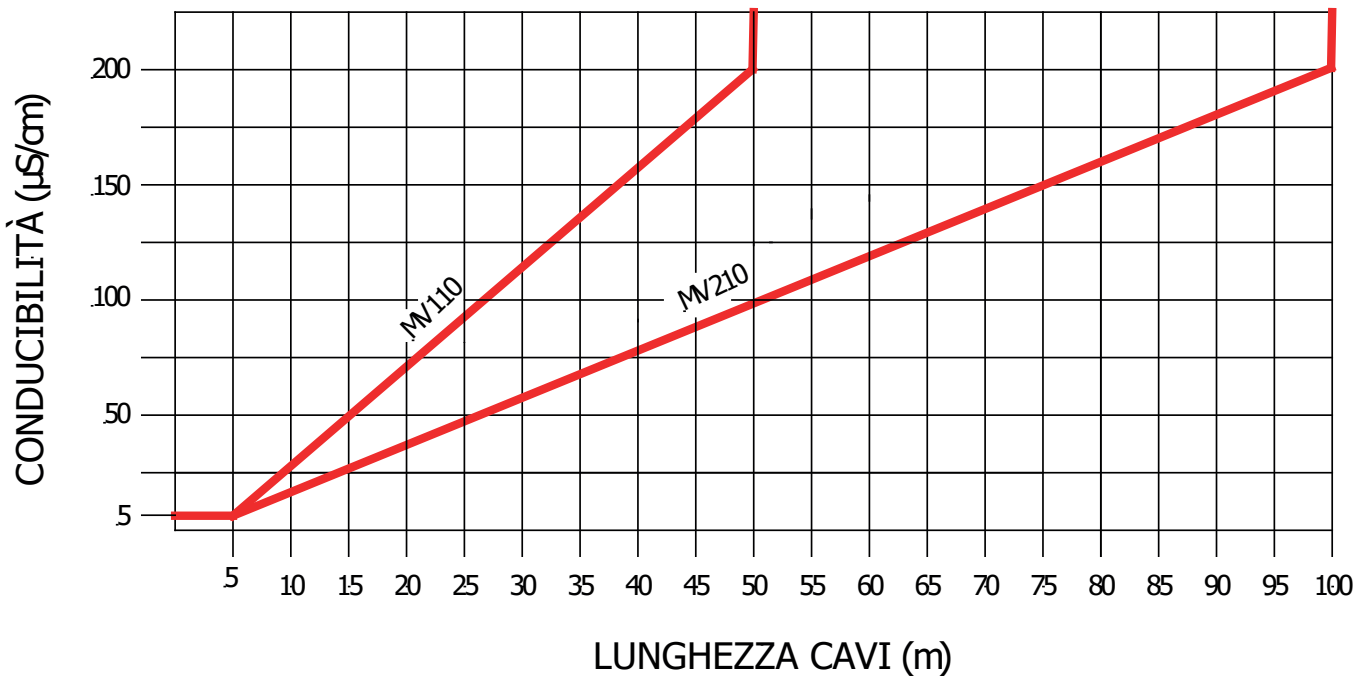
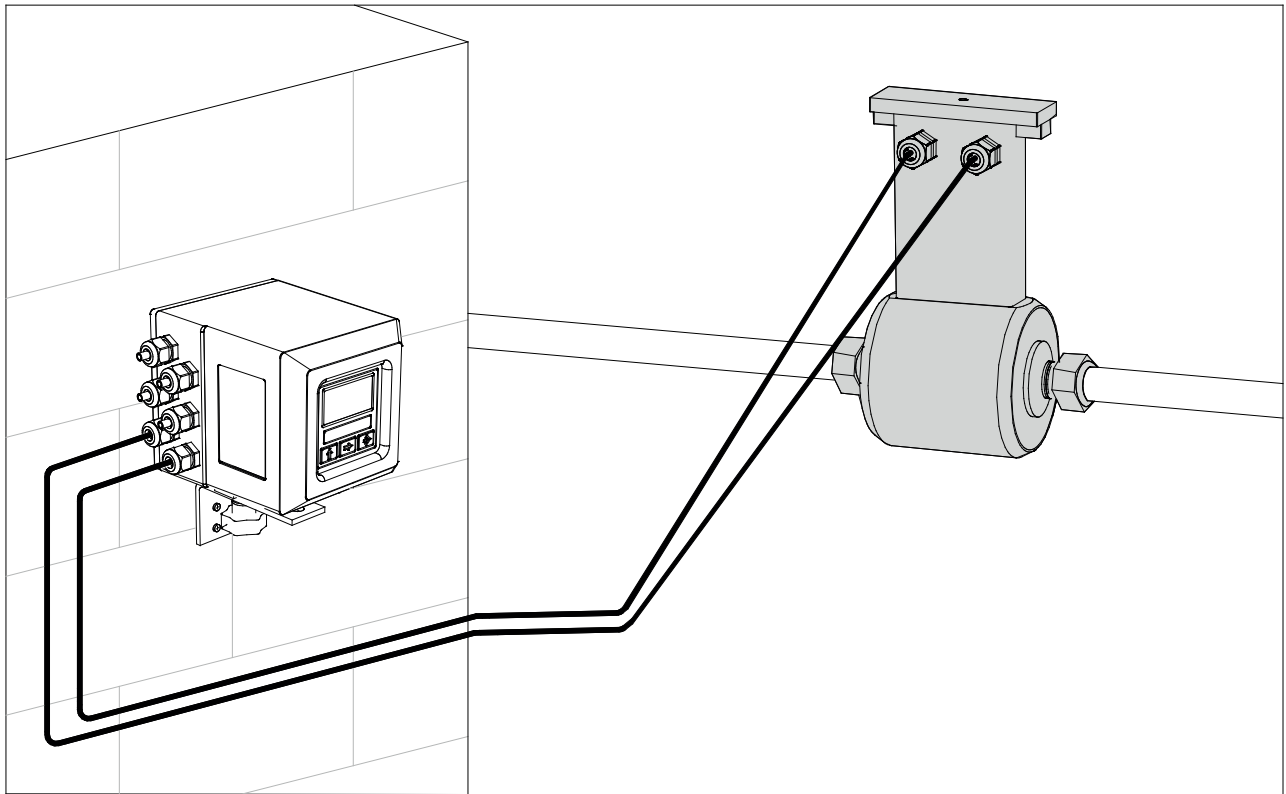



SENSOR GROUNDING



For the correct operation of the meter the sensor and liquid must be equipotential. ALWAYS connect sensor and converter to the ground.

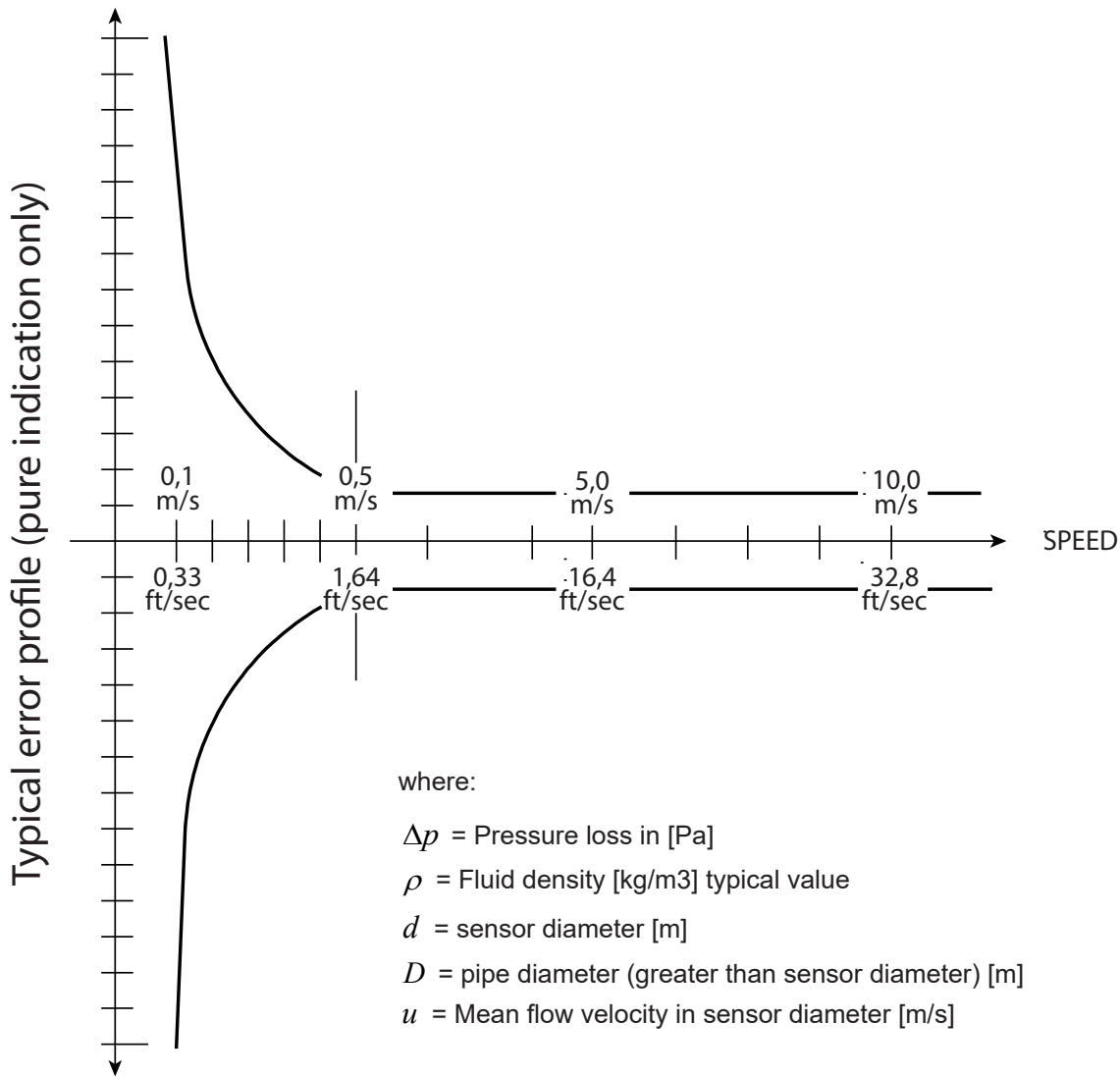
SEPARATE VERSION



Notes:

- It is recommended to install the connection cables away from, or protect against sources of electromagnetic noise.
- The minimum conductivity of the liquid medium to ensure correct functionality of the empty pipe detection is 20 µS/cm

ACCURACY TABLE



| Calculation examples Δp [mbar] | | | | | | | | | |
|--|---------|---------|---------|---------|---------|---------|---------|---------|--|
| d/D \ u | 1 [m/s] | 2 [m/s] | 3 [m/s] | 4 [m/s] | 5 [m/s] | 6 [m/s] | 7 [m/s] | 8 [m/s] | |
| 0.5 | 1.1 | 4.3 | 9.6 | 17.0 | 26.6 | 38.3 | 52.1 | 68.0 | |
| 0.6 | 0.9 | 3.6 | 8.2 | 14.6 | 22.7 | 32.7 | 44.6 | 58.2 | |
| 0.7 | 0.8 | 3.0 | 6.8 | 12.2 | 19.0 | 27.4 | 37.2 | 48.6 | |
| 0.8 | 0.6 | 2.5 | 5.7 | 10.1 | 15.7 | 22.7 | 30.9 | 40.3 | |
| 0.9 | 0.5 | 2.1 | 4.8 | 8.6 | 13.4 | 19.3 | 26.3 | 34.3 | |

Notes:

- $\rho = 1000 [kg / m^3]$ as goodness approximation of water density in common use.
- Inner diameter of sensor is used for d , express in meters.
- Indeed pressure loss equation is dimensionally correct in [Pa]. The equation results in table are show in [mbar].

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HOW TO ORDER

| EXAMPLE CODE | CODE / DESCRIPTION | |
|--|--------------------|---|
| Nominal Diameter / Lining / Maximum temperature / Measuring range | | |
| P03 | P03 | DN3 (1/8 "), PP lining, measuring range 0.. 10,3 / 0...259 l/h |
| | P06 | DN6 (1/4 "), PP lining, measuring range 0...41,4/0...1036 l/h |
| | P10 | DN10 (3/8 "), PP lining, measuring range 0..115,2/0...2880 l/h |
| | P15 | DN15 (1/2 "), PP lining, measuring range 0.. 259,2/0...6480 l/h |
| | P20 | DN20 (3/4 "), PP lining, measuring range 0.. 460,8/0...11520 l/h |
| Gasket material (internal tightness) | | |
| 1 | 1 | O-Ring : FKM |
| | 2 | O-Ring : Epdm |
| | 4 | O-Ring : FFKM |
| | 9 | O-Ring : to be specified |
| Process connection type | | |
| A | A | Male threaded UNI338 (FOR THE DIMENSIONS CONSULT THE OVERALL DIMENSIONS DRAWING) |
| | B | Male threaded NPT(FOR THE DIMENSIONS CONSULT THE OVERALL DIMENSION DRAWING) |
| | Z | Gasket material: to be specified |
| Number and electrodes material | | |
| 2 | 2 | n. 4 (2 measure + 2 for ground) electrodes in AISI 316 |
| | 4 | n. 4 (2 measure + 2 for ground) electrodes in Hastelloy C |
| | 5 | n. 4 (2 measure + 2 for ground) electrodes in Titanium |
| | 6 | n. 4 (2 measure + 2 for ground) electrodes in Tantalum |
| | 7 | n. 4 (2 measure +21 for ground) electrodes in Platinum |
| | 0 | Electrode material: to be specified |
| Execution / Protection rate | | |
| A | A | Compact execution, IP67 protection rate |
| | B | Separate execution , maximum length 20m, remember to added the cables cost , protection rate IP68 (standing immersion with 1,5 m of head |
| | F | Execution separate with N° 2 connectors IP 68 suitable for C015/16 for fast cable connections (max 20 m-ADD THE COST) |
| | G | Execution separate with N° 1 connectors IP 68 suitable for C018 for fast cable connections (max 20 m-ADD THE COST) |
| | M | Compact execution, IP67 protection rate, with the possibility to turn the converter of 90° |

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Complete code
example for
order



MS600-P03-1A2A

ISOIL INDUSTRIA S.p.A.

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If you want to find the complete list of our distributors access at the following link:

<http://www.isoil.it>



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