

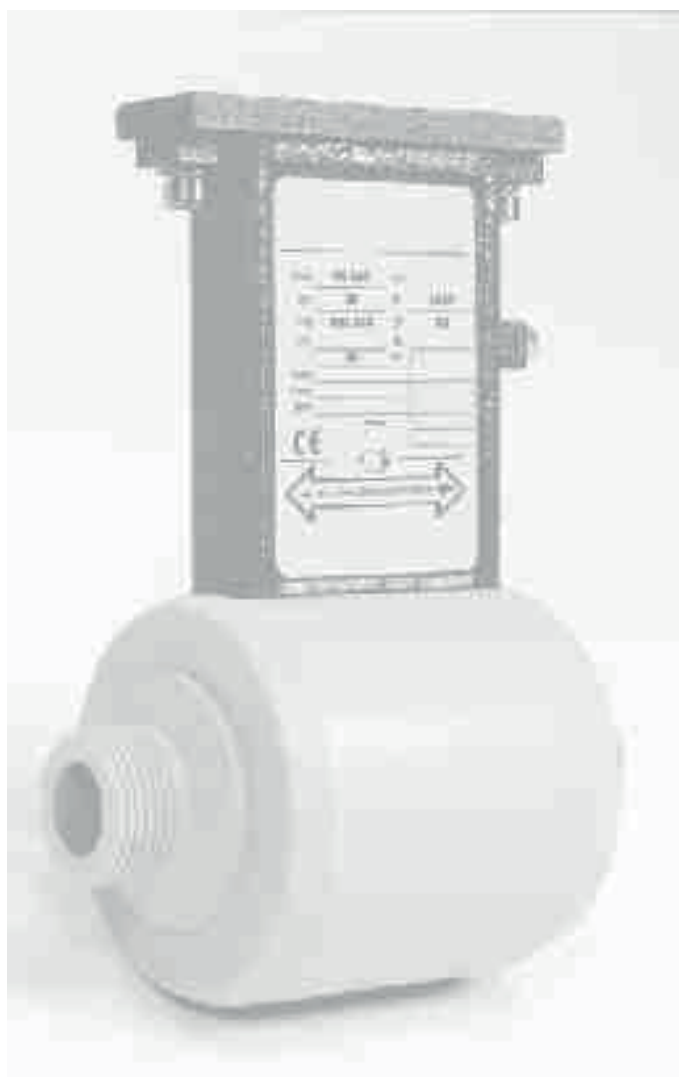


ISOMAG[®]

The friendly magmeter

DATA SHEET

MS600



CE

ISOIL[®]
I N D U S T R I A

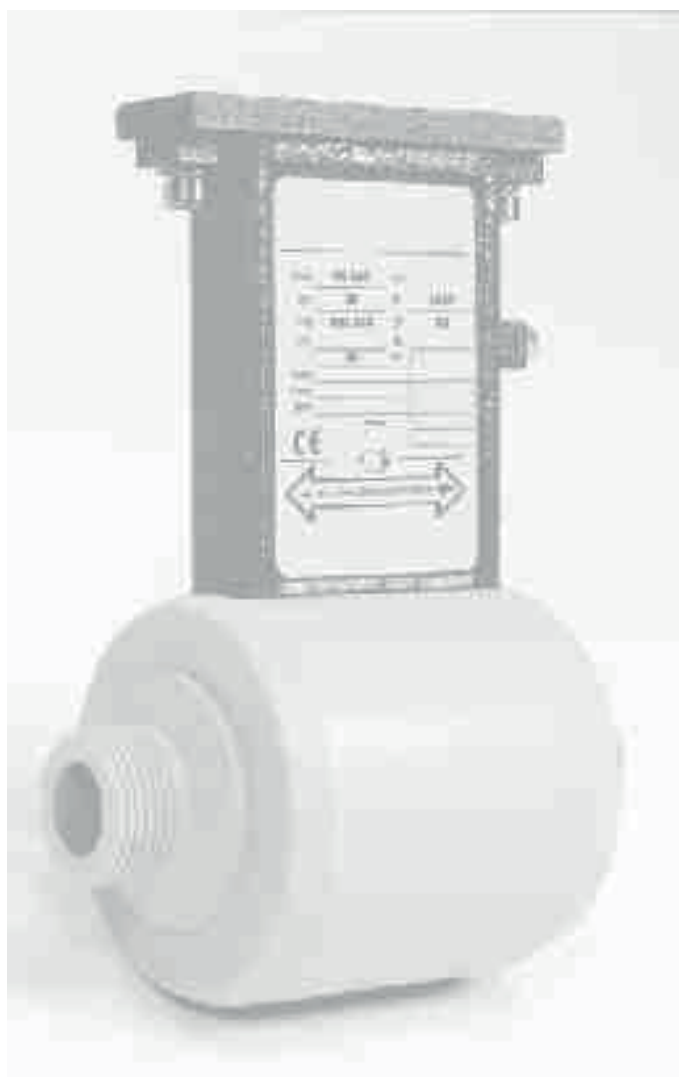


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INDEX

TECHNICAL DATA	2
OVERALL DIMENSIONS	3
INSTALLATION RECOMMENDATIONS	4
SENSOR GROUNDING	5
SEPARATE VERSION	6
ACCURACY TABLE	7
HOW TO ORDER	8

TECHNICAL DATA

OVERALL FEATURES

Nominal diameter	☐ DN 3 ÷ 20
Minimum conductivity	☐ 5 µS/cm
Humidity Range	☐ 0÷100% (IP 67)
Accuracy	☐ See relevant converter datasheet
CE Certification	☐ Yes

STANDARD FEATURES

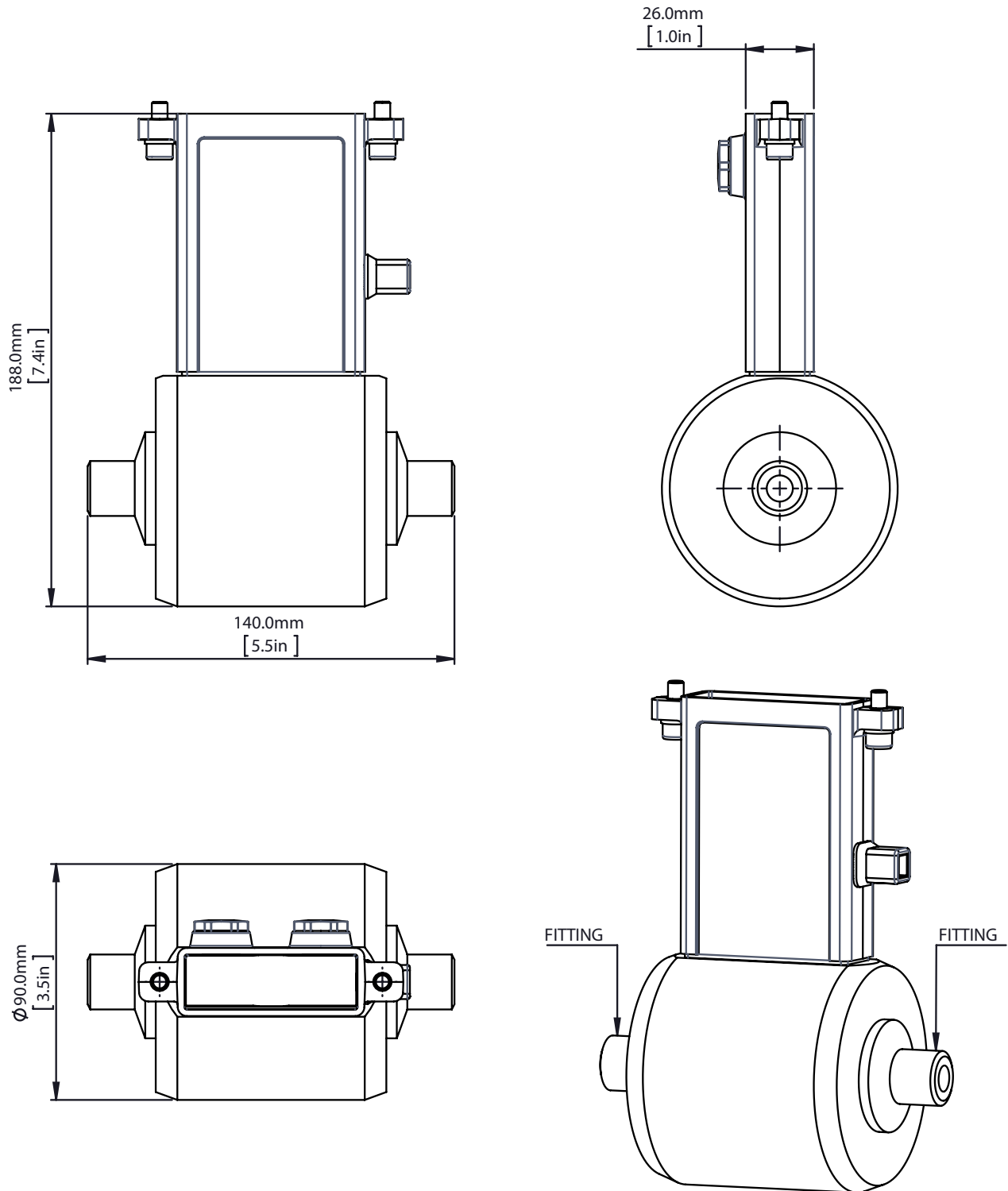
Body material	☐ Polypropylene
Nominal pressure	☐ 1600 kPa
Process connection	☐ Threaded UNI 338 ☐ Threaded NTP
Version - Protection Rating	☐ Compact IP67
Connection material	☐ Polypropylene
Lining material	☐ Polypropylene
Gasket material	☐ FPM
Liquid temperature	☐ 0 °C ÷ 60 °C
Vacuum resistance	☐ 10 Kpa absolute at 60 °C
Electrodes material	☐ Stainless steel AISI 316 ☐ Hastelloy C276 ☐ Platinum-rhodium ☐ Titanium ☐ Tantalum

OPTIONAL FEATURES

(CHECK FOR MORE DETAILS 'HOW TO ORDER' ON LAST PAGE)

Gasket material	☐ EPDM
Process connection	☐ Other on request
Electrodes material	☐ On request
Version - protection rate	☐ Separate (max 20m) - IP68 ☐ Separate (max 500m) with pre-amp IP67 (IP68 optional)

OVERALL DIMENSIONS

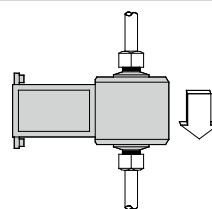
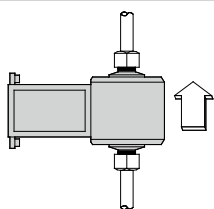


FITTINGS GAS/NPT

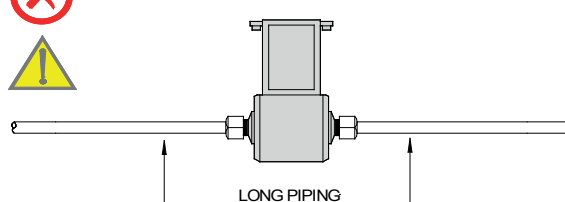
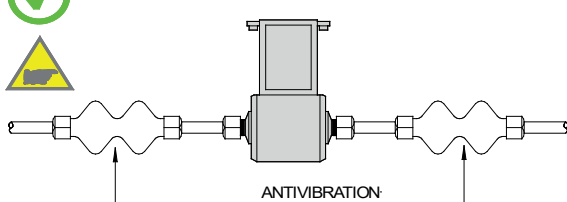
DIMENSIONS mm (inches)	DN				
	3 (1/8")	6 (1/4)	10 (3/8)	15 (1/2")	20 (3/4")
FITTINGS	1/4"	3/8"	1/2"	3/4"	1"

INSTALLATION RECOMMENDATIONS

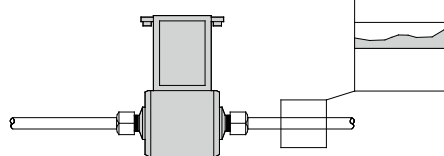
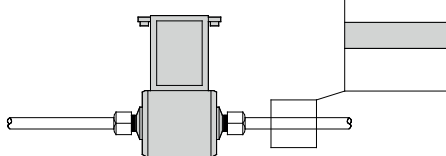
In vertical installation an ascending flow is preferable.
For vertical installations with descending flow direction contact the manufacturer



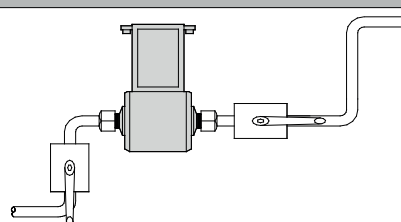
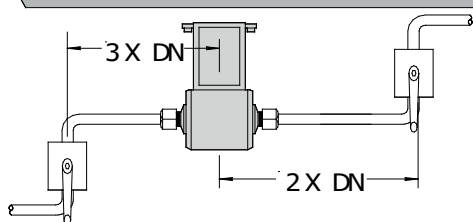
For installations in long pipe lines, please use anti vibration joints



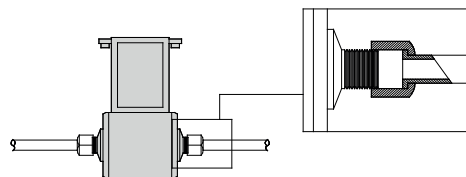
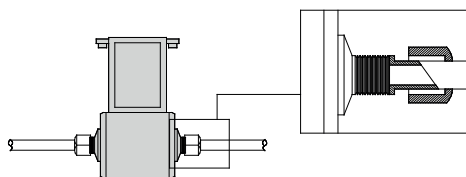
Avoid a partially empty pipe, during operation the pipe must be either completely full of liquid or completely empty



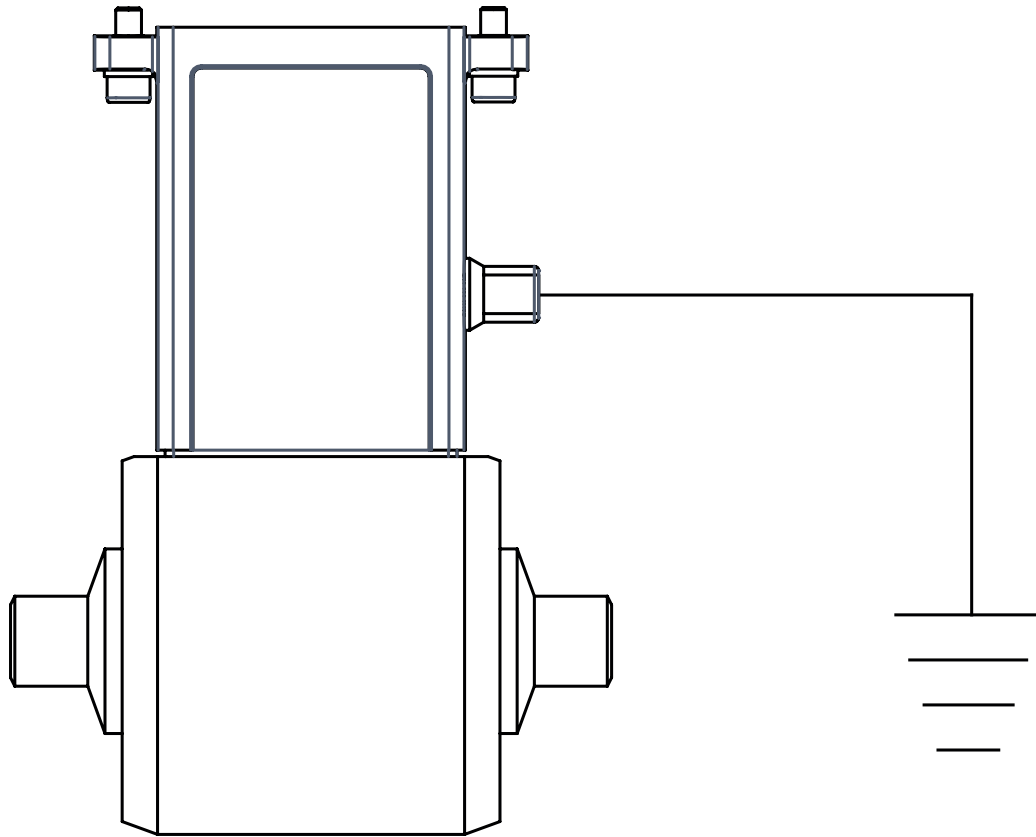
Install the sensor away from bends and hydraulic accessories



Avoid positioning flange and counter flanges by tightening the nuts.

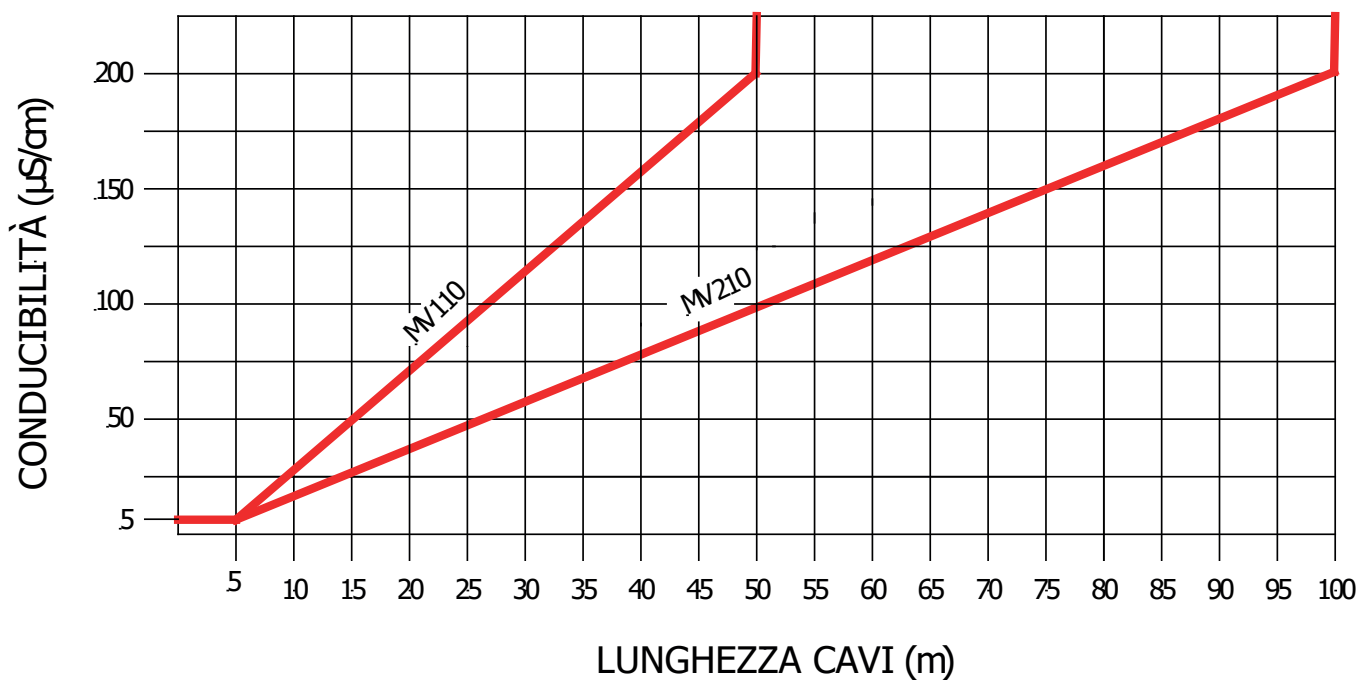
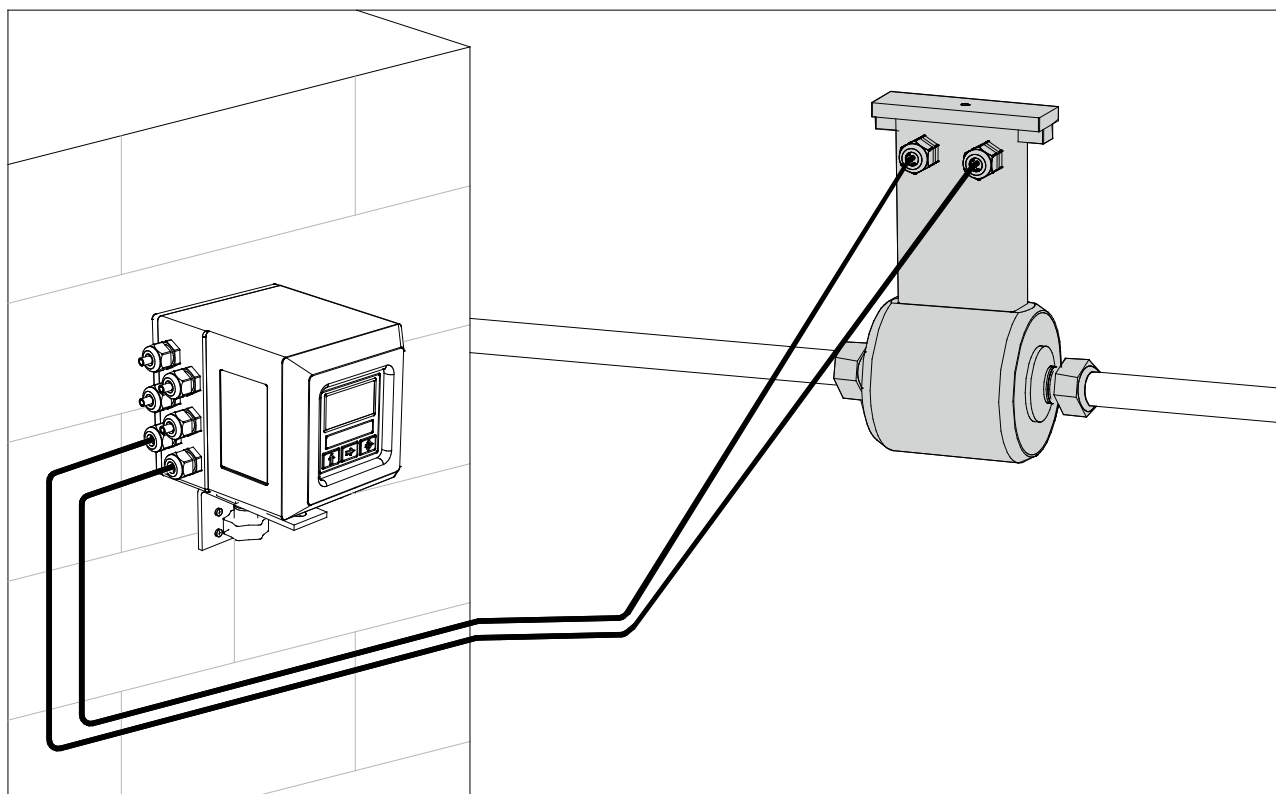


SENSOR GROUNDING



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

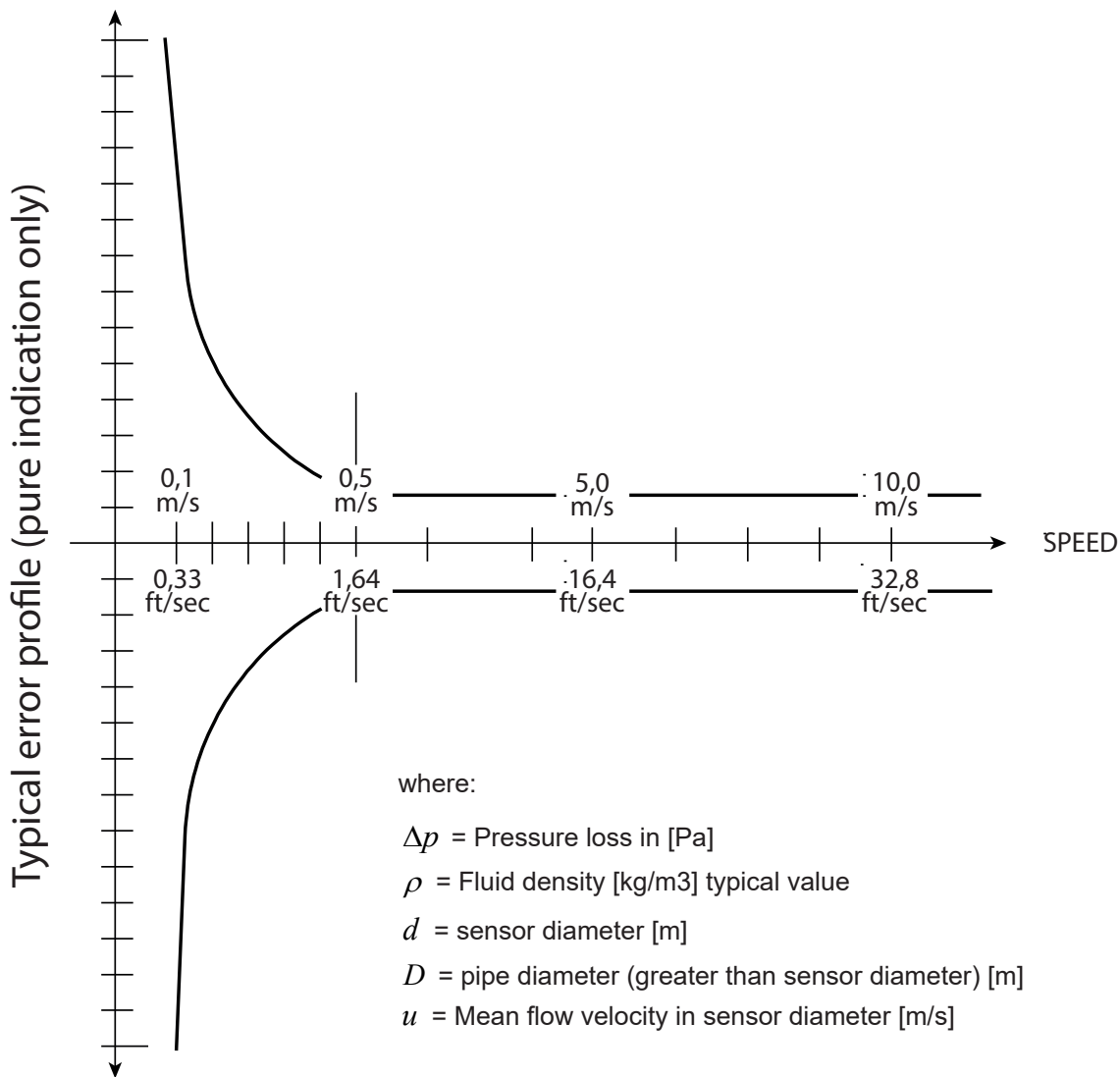
SEPARATE VERSION



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 $\mu\text{S}/\text{cm}$

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:

- ☐ $\rho = 1000 [\text{kg} / \text{m}^3]$ 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].

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 version - Material JB: Alluminium - IP68 - for Cable C014 + C015/16
	F	Separate version - Material JB: Alluminium - IP68 - n.2 MIL connectors for Cable C015/016-CC/CS + CB

Complete code
example for
order

MS600-P03-1A2A

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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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