

SENSOR
CH1222
Electromagnetic flowmeter



The electromagnetic insertion flow meter

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A COST EFFECTIVE ALTERNATIVE TO FULL-BORE METERS

Chemtec presents the new CH1222 electromagnetic insertion flowmeter in three different sizes (small, medium and large) suitable to use in pipe size from DN 50 to DN2600. Delivering highly accurate bi-directional measurement for water distribution and raw water pipelines, it is robust and has no moving parts, this allows to be reliable and suitable to measure a wide range of flows.

The CH1222 can be used as a portable or dedicated/permanent instrument; with its "hot tapping" application it is very easy and quick to install with no need to stop the flow under full working pressure conditions. It is an alternative solution to full bore metering and with its compact size allows installation on small pipes, providing water monitoring in applications considered impossible.

Applications:

- Water network management
- Leakage control
- District metering
- Flow surveys
- Flow profiling
- Checking on-site flowmeters
- Data capture reporting analysis

Installation:

- Compact with converter CH608A/B/R
- Compact vertical with CH406
- Separate(remote) with CH608A/B/R and CH406 with cables supply from factory (up to 30 m for battery powered, 100 m for mains powered version).



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Equipment:

- 1" ball valve zinc plated brass
- "Hot tap" installation
- Head of the unit in POM 22mm
- Valve connection (female-female)
- Probe 12mm
- Pressure up to 20 bar
- Input connection for pressure gauge
- Handle grips with flow directions
- Body in AISI304
- 2 Electrodes in AISI316L
- ATEX on request (only separate version)

Reference standards

The Chemitec magnetic meters are marked CE and are manufactured according to the following standards:

- 2014/35/EU - EN 61010-1:2013 (LVD)
- 2014/30/EU - EN 61326-1:2013 (EMC)
- 2014/34/UE - IEC 60079 - 0, IEC 60079 - 18 (ATEX - IECEx) Separate version

Temperature of liquid:

- 80° compact and separate version

Technical features:



Size range	Size Small (S)	Size Medium (M)	Size Large (L)
	50...600	200...1500	450...2600
Available electrodes [*]	AISI 316L		
Body material	AISI 304 Stainless Steel		
Head of sensor	POM		
Standard operating pressure	20 bar		
Temperature of liquid	-40 °C , +80 °C		
Protection Degree	IP68 for immersion at 1,5m (IEC 529)		
Converter compatibility	CH608, CH406		
Parts in contact with liquid	Head of sensor	Electrodes	Pipe end
	POM	AISI 316L	AISI 304
Electric connections	Cable gland M20 x 1.5 + Terminal block + sealing resin		

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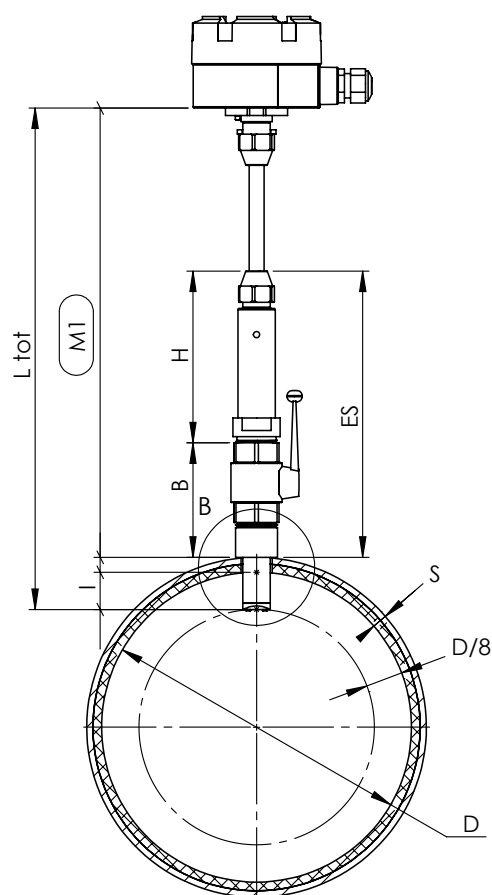
Advantages:

- No moving parts
- No pressure loss
- Long lasting stability and precision
- No filter needed, zero maintenance
- Extremely sturdy structure
- Internal parts protected by a bi-component resin in order to increase protection from external agents
- Bi-directional measure



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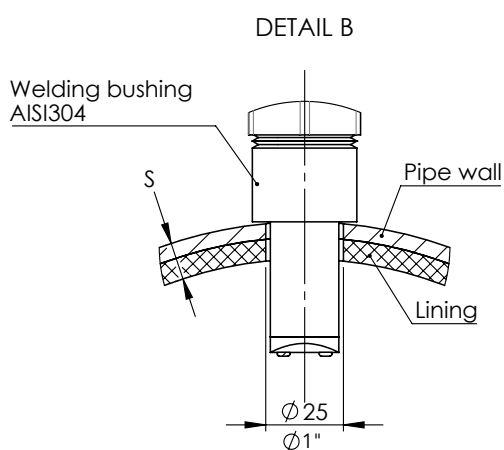
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D: Internal diameter
S: Pipe wall thickness (lining included)
B: Dead length
H: Housing dimension
Ltot: Instrument length
ES: Standard dimension (Euromag original parts)
I: Insertion depth = $D/8$
M1: Insertion control dimension

$$\mathbf{M1} = \mathbf{Ltot} - \mathbf{S} - (\mathbf{D}/8)$$

- **Size S:**
 $\mathbf{M1} = 403 - \mathbf{S} - (\mathbf{D}/8)$
- **Size M:**
 $\mathbf{M1} = 674 - \mathbf{S} - (\mathbf{D}/8)$
- **Size L:**
 $\mathbf{M1} = 916 - \mathbf{S} - (\mathbf{D}/8)$



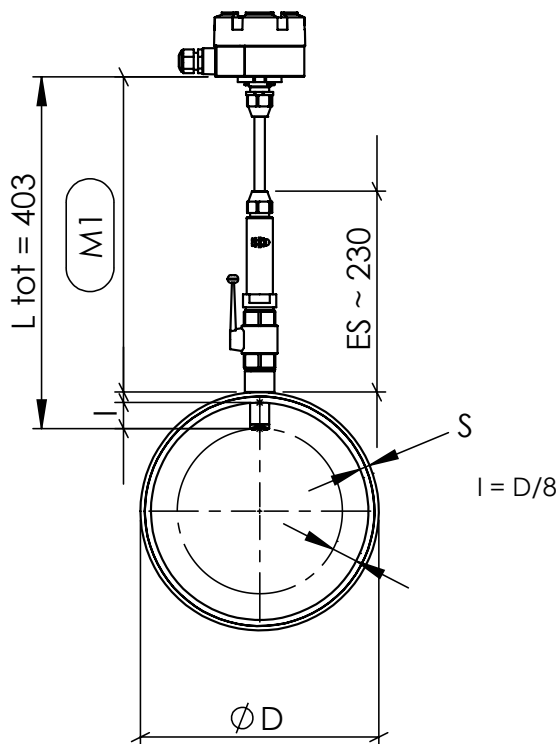
Size	Min Pipe Diameter		Max Pipe Diameter	
	DN	Inches	DN	Inches
S	50	2"	600	24"
M	200	8"	1600	64"
L	450	18"	2600	104"

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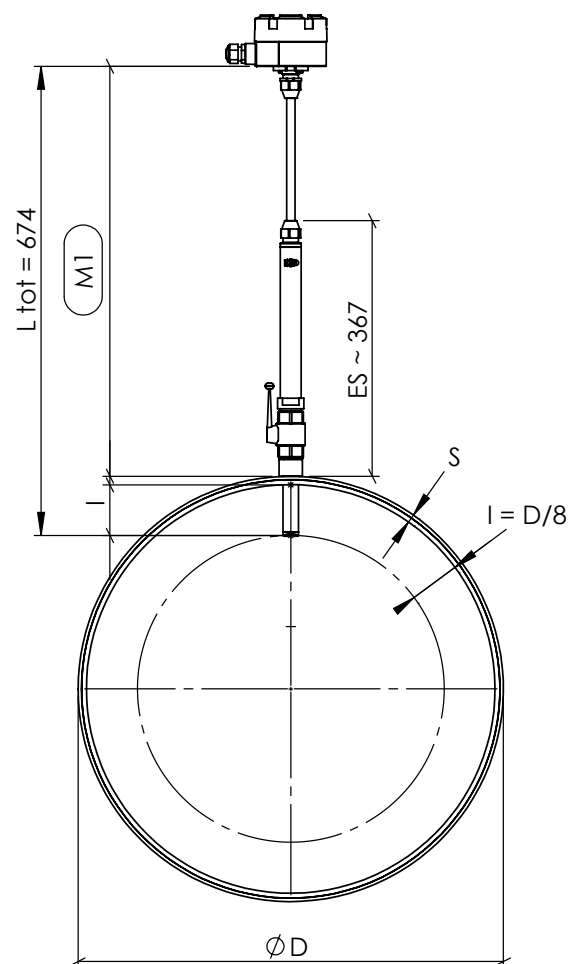
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Size S:
M1 = 403 - S - (D/8)



Size M:
M1 = 674 - S - (D/8)



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Size L:
 $M1 = 916 - S - (D/8)$

