

Flow meter

Insertion version

Model FLC-1222

WIKA data sheet FL 20.07

Applications

- Water network management
- Leakage detection systems
- Data acquisition and analysis

Special features

- Can be used as a mobile or permanent measuring instrument, thanks to “hot tapping” (drilling of pipelines under pressure)
- Pressure gauge connection available
- Testing of flow meters on-site
- No moving parts and no pressure loss



Flow meter, model FLC-1222

Description

The model FLC-1222 flow meter is a cost-saving solution for flow monitoring. The possibility of a “hot tapping” installation, without having to empty the flow tube, enables the compact measuring instrument to be installed quickly and easily. The instrument can be used as a mobile or as a permanent solution.

The flow meter is available in three sizes and is suitable for use in pipe sizes of DN 50 to DN 2600. Thus, a wide range of flow volumes and velocities can be measured, even in demanding applications.

The robust design, which requires no maintenance, enables a high-precision bi-directional measurement. Internal components are lined to protect them against external influences.

A WIKA signal converter, either attached directly to the instrument or separated from it (e.g. model FLC-608), detects the potential difference between the electrodes, processes the signal to calculate the flow and manages communication with the external control systems.

Specifications

Available pipe diameters

Version	Min. diameter of the flow tube	Max. diameter of the flow tube
	DN [in]	DN [in]
S	50 [2"]	600 [24"]
M	200 [8"]	1,600 [64"]
L	450 [18"]	2,600 [104"]

Specifications	
Versions	<ul style="list-style-type: none">■ S (DN 50 ... 600)■ M (DN 200 ... 1500)■ L (DN 450 ... 2600)
Materials	
Case material	Stainless steel 304
Sensor head	POM
Electrodes	Stainless steel 316L
Valve	<ul style="list-style-type: none">■ Nickel-plated steel (standard)■ Stainless steel 316L
Stopcock	<ul style="list-style-type: none">■ 1" GAS■ 1" NPT
Operating pressure	≤ 20 bar [290 psi]
Medium temperature	-40 °C ... +80 °C [-40 ...+176 °F]
Ingress protection per EN 60529	IP68 (continuous immersion to 1.5 m)
Compatible signal converters	<ul style="list-style-type: none">■ Model FLC-608A/B/R■ Model FLC-406
Electrical connection	Cable gland M20 x 1.5, terminal block and sealing resin

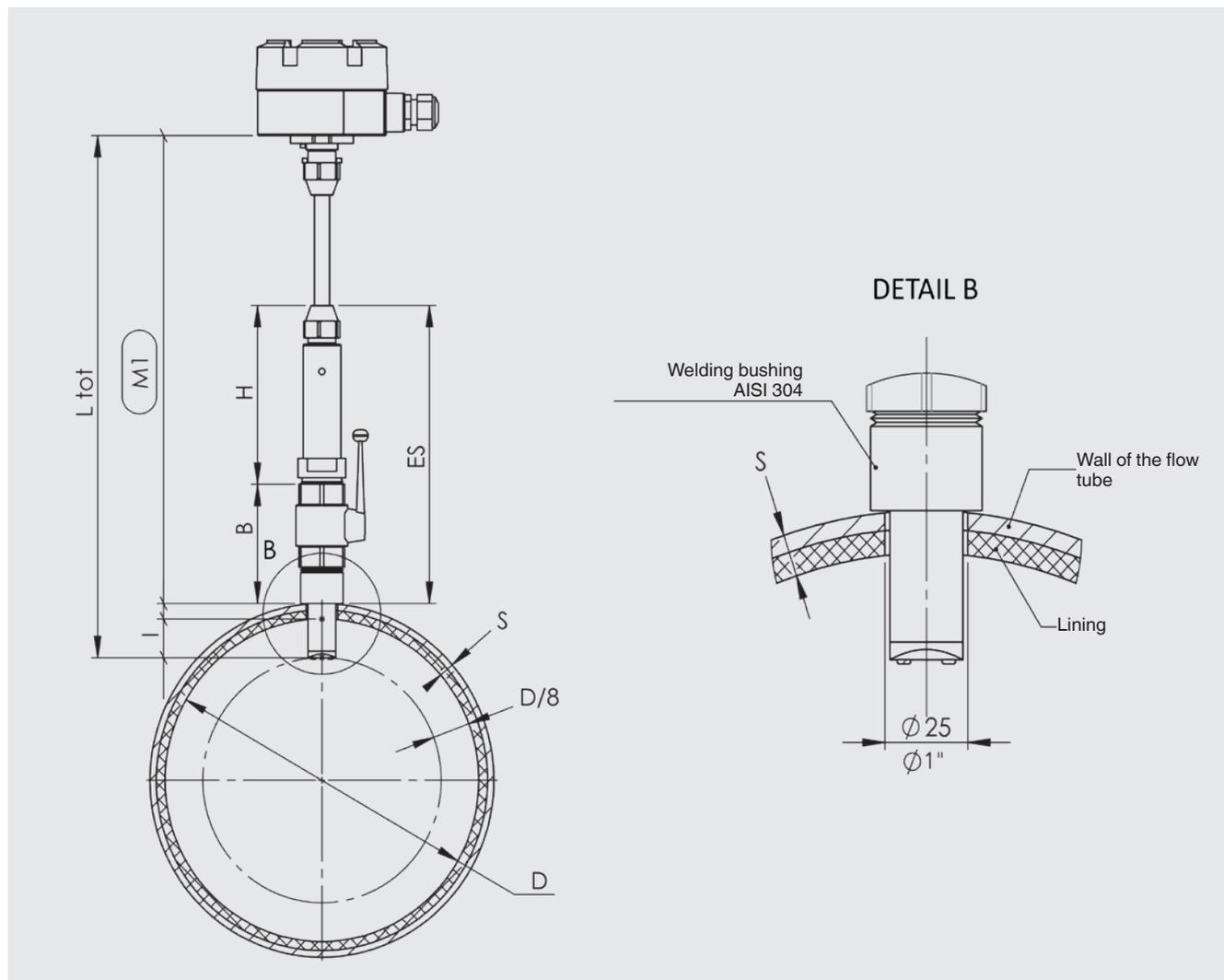
Integration of the flow meter

The model FLC-1222 sensors are compatible with the model FLC-608A/B/R signal converter, in the compact version, and with the model FLC-406 signal converter, for the back mount version.

In the separated version, they can be combined with the model FLC-406 and model FLC-608A/B/R signal converters. For this, the sensor is connected with the signal converter via a cable, whose length depends on the electric conductivity of the liquid. The maximum length of the cable is 100 m [328ft] (30 m [98 ft] in combination with battery-powered electronics).

Dimensions in mm [in]

Model FLC-1222

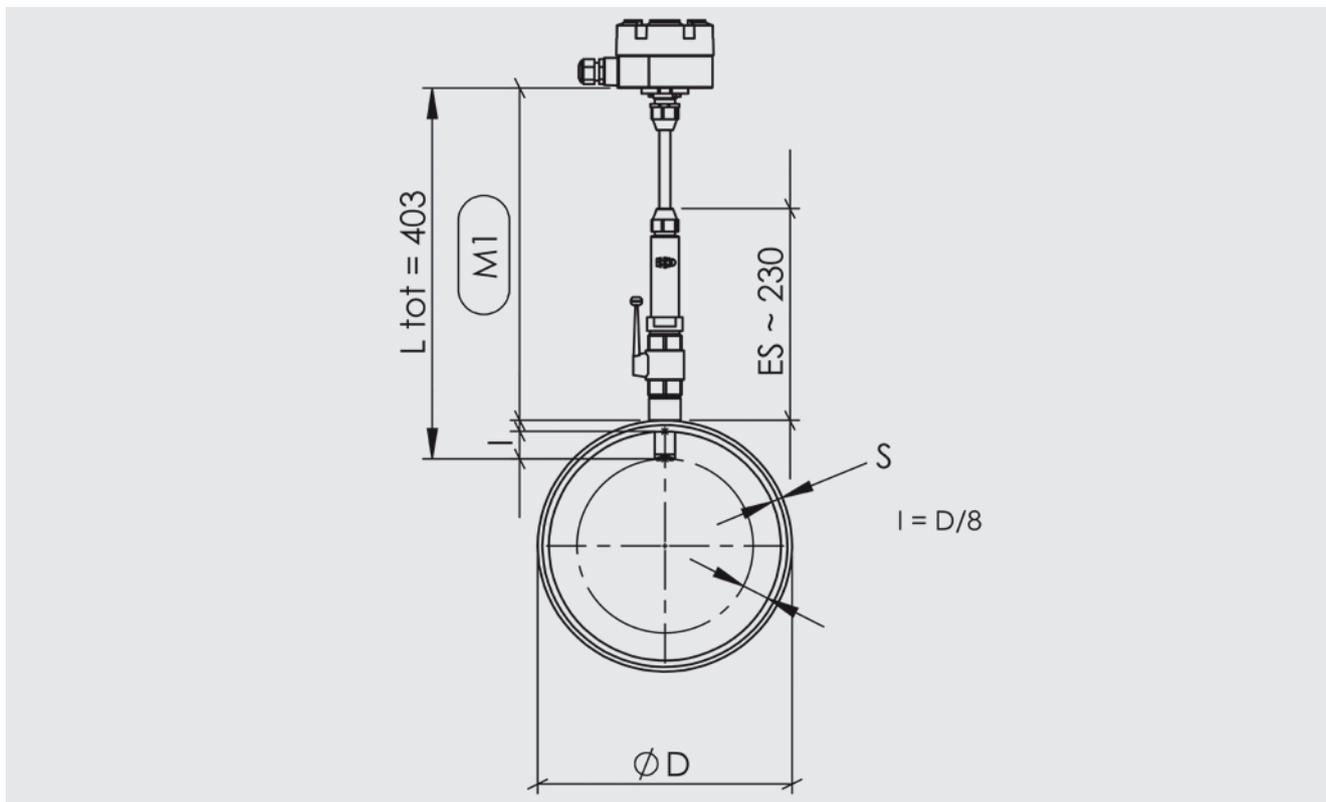


Legend:

- D Inner diameter
- S Wall thickness of the flow tube (incl. lining)
- B Height of the stopcock
- H Height of the case
- L_{tot} Overall length (without signal converter)
- ES Standard dimension
- I Insertion depth = $D/8$
- M1 Insertion control dimension

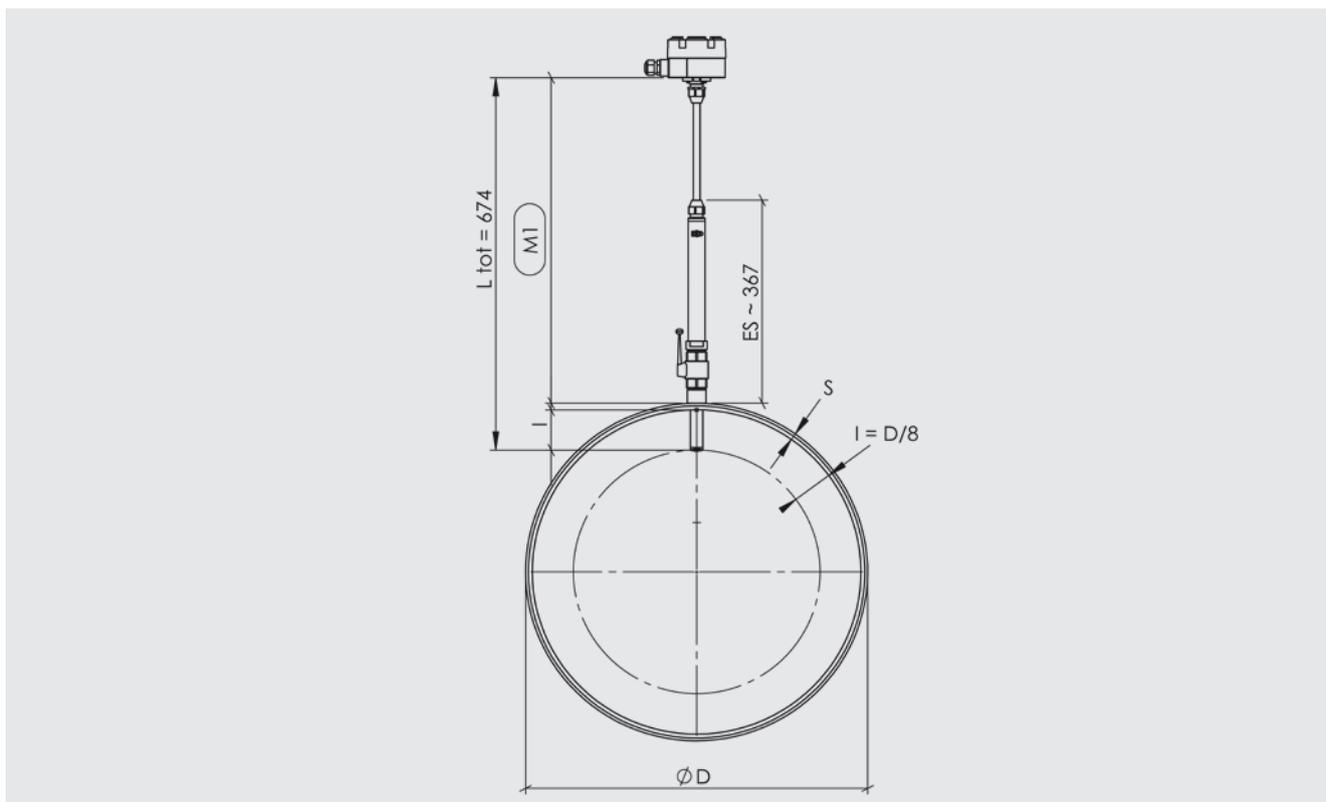
Version S

M1 = 403 mm [15,87 in] - S - (D/8)



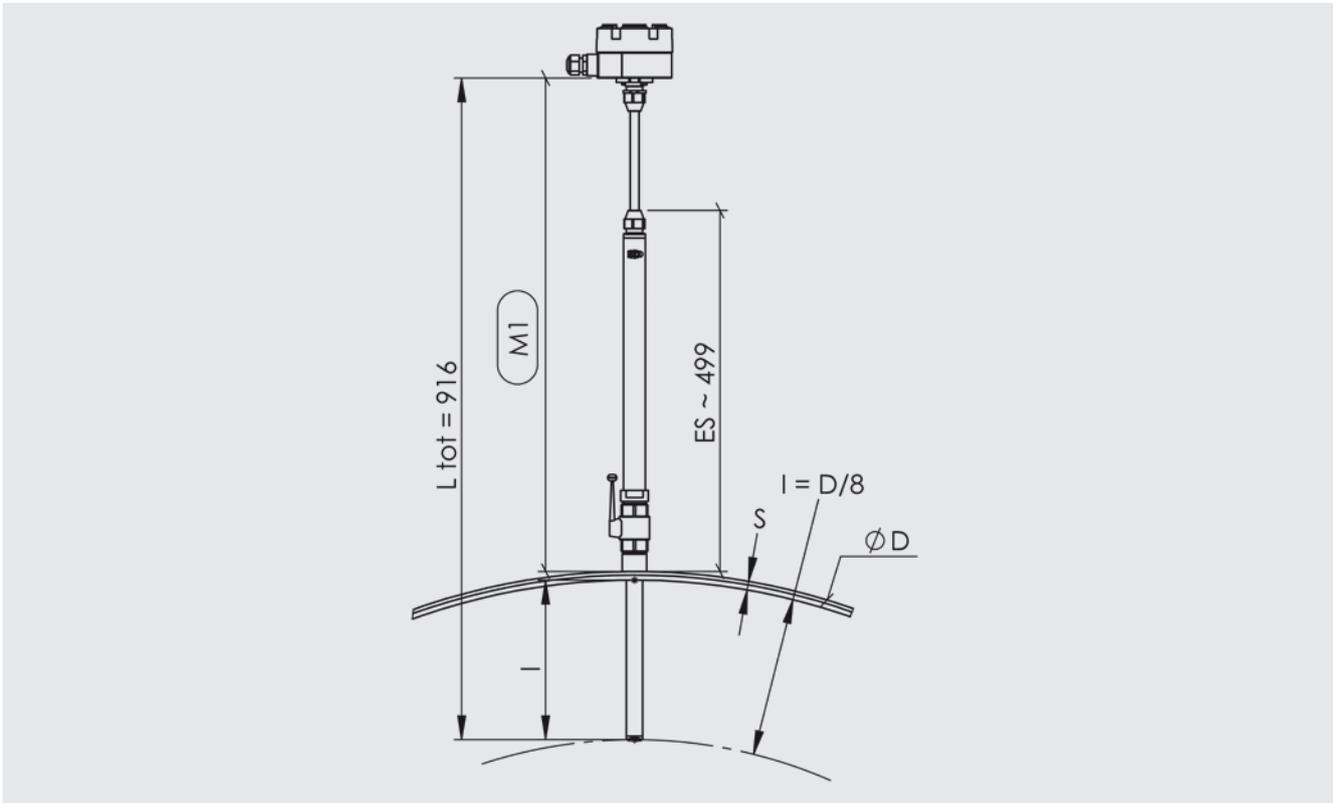
Version M

M1 = 674 mm [26,54 in] - S - (D/8)



Version L

M1 = 916 mm [36,06] - S - (D/8)



Approvals

Logo	Description	Country
CE	EU declaration of conformity	European Union
	EMC directive EN 61326 emission (group 1, class B) and immunity (industrial application)	
	Low voltage directive	
Ex	ATEX directive (option for separated version)	International
IEC IECEx	IECEx (option for separated version)	

Approvals and certificates, see website

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