



## Inline flow-captor Type 4411.30

### Flow and Temperature Transmitter

The inline flow-captor model 4411.30 is a unique dual transmitter that provides two separate 4-20 MA outputs, one for flow rate and one for temperature. The stainless steel pipe that runs through the unit is completely hollow, thus no obstruction of flow and no mechanical moving parts to stick or wear out.

The 4411.30 is ideal for monitoring low flow rates and is used for chemical dosing, oil lubrication monitoring, food and beverage processing, and a variety of other industrial applications. Pipe sizes from 28mm down to 6mm are available allowing a wide choice of flow rates. Each unit is also field adjustable via a zero and span pot so that the user can adapt the transmitter to their specific flow rate.

This flow-captor, as are all weber flow-captors, is resin epoxy encapsulated for high resistance to shock and vibration. It also comes with a gasketed cover plate which provides protection to IP65 standards.

Self-contained flow and temperature meter for measurement and control applications, non-intrusive sensing, ideal for small diameters, suitable for liquids, semi-solids and a wide range of corrosive media.

#### Sensing Data Flow

Medium	liquids, pastes (corrosive media which are compatible with pipe material)
Measuring range	continuously adjustable from 0 - 20 cm/s to 0 - 100 cm/s (related to water; extended range for other media)
Measuring time	2 - 10 s, according to measuring conditions
Linearity deviation	< 5 % (best fitting slope)
Repeatability tolerance	< 2%
Temperature drift	< 0.3 % / K

All data related to water

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Compact Inline flow meter



## Typical Application Examples:

With the inline flow-captor, type 4411.30 the pipe wall itself is part of the sensor element, a technique which permits non intrusive sensing, thus no interference in flow profile. The small sensor pipe diameters correspond to existant small-bore systems and are consequently ideally suited to low flow rates.

Applications where these features are especially important are in process control of food as well as chemical industries.

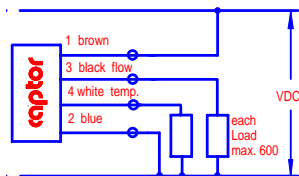
## Electrical Data

Voltage supply	24 V DC $\pm$ 10%
Current consumption	max. 100 mA
Output current	4 - 20 mA
Resistive load	0 - 600 Ohm
Measurement range adjustment: The two potentiometers can be adjusted to set the measuring range and zero point. Operation within the measuring range is indicated by a green LED (within the range: ON; beyond the range: OFF)	
Temp. output	-10°C to 80°C $\hat{=}$ 4 - 20 mA

## Mechanical Data

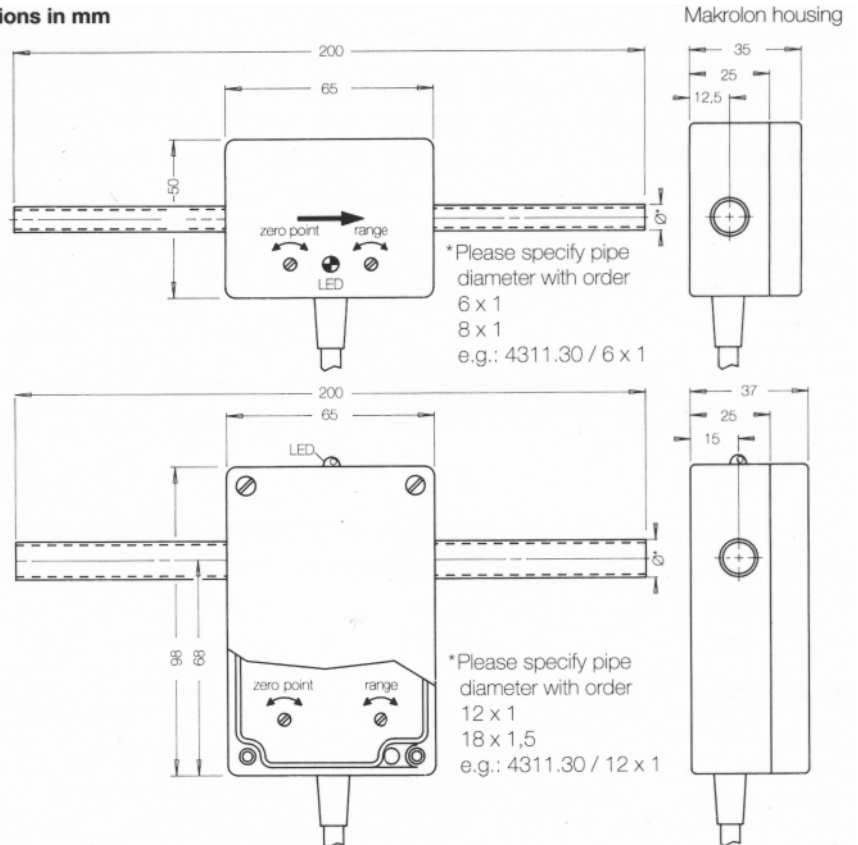
Material	Inline sensor pipe	Housing
	stainless steel WN 1.4571 (V4A, 316 Ti), other qualities and metals (Titan, Hastelloy) on request	Makrolon
Dimensions in mm	6 x 1; 8 x 1 diameter x wall thickness 12x1; 18x1.5 diameter x wall thickness	65 x 50 x 35 (L x W x H) 65x98x37 (L x W x H)
Operating pressure	max. 30 bar	
Medium temperature range	-10 °C to + 80 °C (14 °F to 176 °F) (higher temperatures on request)	
Ambient temperature	-10 °C to + 60 °C (14 °F to 140 °F)	
Electrical connection	2 m moulded oilflex cable, 3 x 0.5 mm <sup>2</sup>	
Protection standard	IP 65	
Torsion: pipe to housing	max. 5 Nm at medium and ambient temperature < 40 °C. At higher temperatures no torsion allowed	

## Connection diagram



4 - 20 mA current output

## Dimensions in mm



# weber

Sensors GmbH · Strohdreich 32 · D-25377 Kollmar · Tel.: +49 4128-591 · Fax: -593

Sensors Ltd · 4 Union Street · Southport · Merseyside PR9 0QE · UK · Tel.: +44 1704-548706 · Fax: -533956

Sensors Inc · 2230 Towne Lake Pkwy., Bldg. 900, Suite 200 · Woodstock, GA 30189 · Tel.: +1 (770) 592-6630 · Fax: -6640