



- * flow switch/transmitter of low flow rates
- * flow indicator without moving parts
- * medium in contact with only one material
- * analogue output, switching outputs
- * clear, easily readable, backlit LCD display
- * changeable units in the display
- * low pressure loss
- * different nominal diameter
- * very fast reaction times for a calorimetric system
- * linearized and temperature-compensated

PRINCIPLE

The calorimetric sensor measures the flow velocity in liquids (see also the general description for calorimetric sensors 10.1.EF.)

The measurement is supported in temperature compensation and in signal processing (linearisation, filtering) by the use of a microcontroller.

Please take into account though that a probe measurement system does not always give very high accuracy! Here, a point measurement is taken as representing the complete flow cross-section in a pipe!

Please take all additional data from the omni-sensor-family 51.1.omni and data sheet 51.1.omni2. Sensor Range for all the other characteristics.

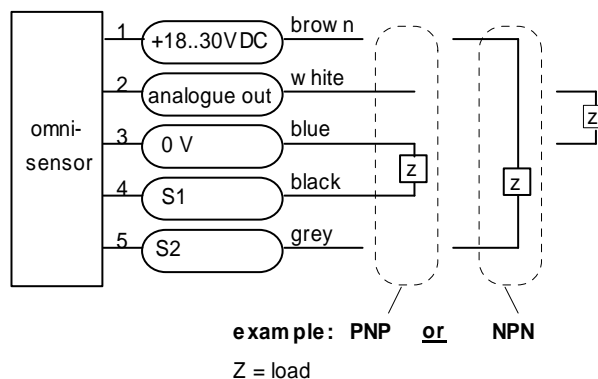
TECHNICAL DATA

range (water)	6 mm-pipe	(0.001) 0.01..2 l/min
	8 mm-pipe	0.025..5 l/min
	10 mm-pipe	0.05..10 l/min
		() = special range on request
temperature gradient		4°C/s
measurement range temperature		0..70°C
storage temperature		(-20..100°C on request)
pressure		-20..80°C
pressure loss		max. 10 bar (other on request)
connection		max. 0.3 bar at max. flow
		at locking plug M 12x1, 5-pole

protection class	IP67
weight	appr. 200 g
supply voltage	24 VDC ±10%
power consumption	max. 100 mA
limit values	2 as minimum or maximum alarm adjustable limit values
switching output S1 and S2	2 push-pull-output (short circuit proof/ reverse polarity protected) $I_{out} = 100mA$ max.
hysteresis	adjustable
display	graphical LCD display (32x16 Pixel) backlit
analogue output	4..20 mA, max. load 500 Ohm or 0..10V. min load 1 kOhm
materials	media contact stainless steel 1.4305 other: PPS, PA66, brass nickel plated

TERMINAL ASSIGNMENT

Before the electrical installation, make sure that the supply voltage corresponds to the data provided!



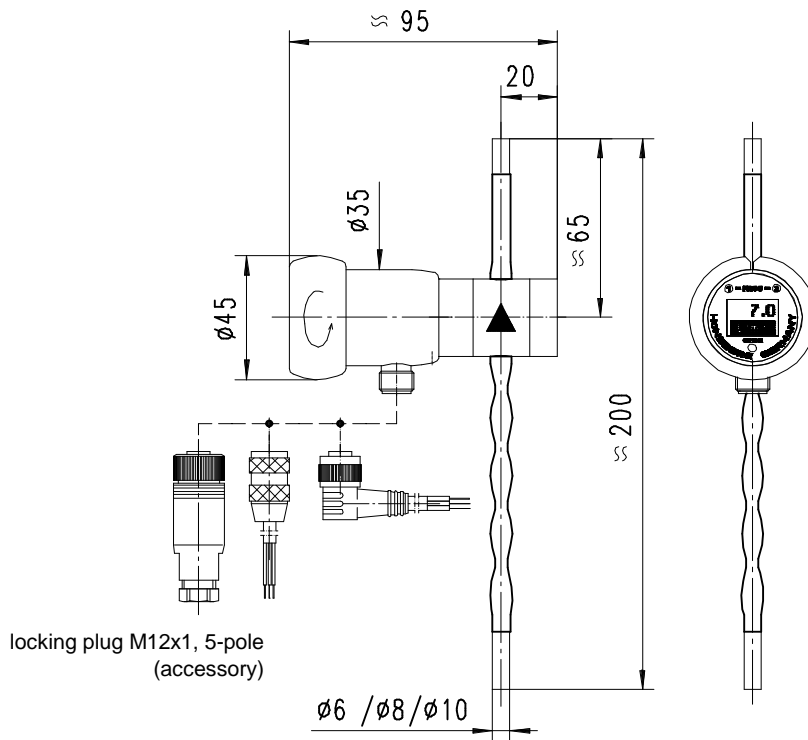
The switchpoints are changing to PNP or NPN depending to your interface automatically (push-pull).

Please you use shielded cable, signal lines < 30m and power supply lines < 10m.

MOUNTING

To maintain the greatest possible interference insensitivity of the sensor, the flow should be from the bottom to the top (best ventilation even in case of the lowest flow velocity). For the connection, conventional crimp connectors, hoses with crimp fasteners, or Honsberg's own crimp connectors can be used. For the best possible insulation from the outside environment, insulating hoses that may not be removed can be used.

DIMENSIONS



NOMENCLATURE

omni-FIN	006	R	K	U	S	basic type specification
	006					● pipe Ø 6 mm / 0.5 mm wall thickness
	008					● pipe Ø 8 mm / 0.5 mm wall thickness
	010					● pipe Ø 10 mm / 0.5 mm wall thickness
		R				● pipe
			K			● stainless steel 1.4571
				U		● voltage output 0..10V
				I		● current output 4..20mA
					S	● connection for locking plug M12x1 , 5-pole

INFORMATION

flow sensor without display please see product information 10.2.EFIN.

ACCESSORY

Locking plug M12x1

K5	PU-	02	S	G	S	basic type specification
K5						● ready-made cable 5-pole
KB05						● self makable cable 5-pole
	PU-					● material PUR
		02				● length 2 m
		05				● length 5 m
		10				● length 10 m
			S			● moulded-on plug
				G		● straight plug
				W		● angled plug 90°
					S	● shielded



All technical changes reserved

●BASIC Standard ○BASIC Programme option □VARIO Special option ⊕ PLUS Accessories ✗ not recommendable