



- \* universal flowmeter with rotor principle
- \* analogue output, switching outputs
- \* clear, easily readable, backlit LCD display
- \* changeable units in the display
- \* designed for industrial applications
- \* small and compact
- \* most simple installation

**PRINCIPLE**

The circuitry of the omni is able to detect, display and convert the measuring values of the flow meter. Depending on the housing material inductive (4.2.RRI), optical (4.2.RRO) or hall sensors (4.2.RRH) are used for detection.

Please take all additional data from the omni-sensor-family 51.1.omni and data sheet 51.1.omni2.

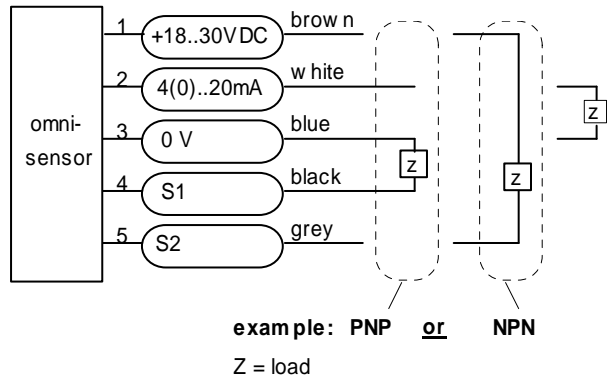
**TECHNICAL DATA**

<b>measurement range</b>	in different types 0.5...100 l/min (please see data sheet 4.2.RRI, 4.2.RRH and 4.2.RRO)
<b>accuracy</b>	see product information
<b>operating pressure</b>	4.2.RRI, 4.2.RRH and 4.2.RRO
<b>operating temperature</b>	0..60°C
<b>storage temperature</b>	-20..80°C
<b>supply voltage</b>	18..30 VDC
<b>power consumption</b>	<1 W
<b>output</b>	4(0)..20mA, 2(0)..10V across 500 Ohm resistor to 0V.
<b>switching values S1 and S2</b>	PNP or NPN selectable, 300mA load in sum max., programmable as min. or max. value, short-circuit proof, reverse-polarity proof
<b>hysteresis</b>	adjustable, position of hysteresis depends on min or max.

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<b>display</b>	graphical LCD display extended temperature range -20..70°C, 32x16 pixels, back-lit, shows value and units, LED signalling lamp with simultaneous message in display.	
<b>connection</b>	at locking plug M 12x1, 5-pole	
<b>protection class</b>	IP67	
<b>materials</b>	housing	stainless steel 1.4305
<b>electronic housing</b>	glass	tempered mineral glass
	magnet	cobalt samarium
	ring	POM

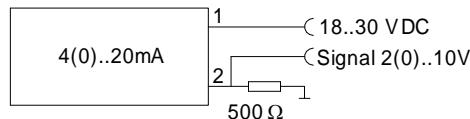
Please take all additional data from 4.2.RRI, 4.2.RRH and 4.2.RRO

**TERMINAL ASSIGNMENT**



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

Signal output with 2(0)..10V  
Sample:

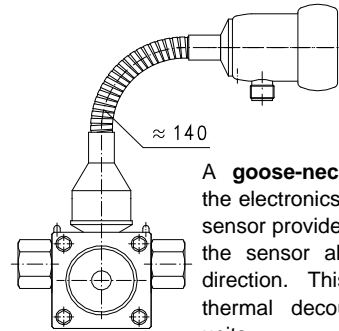
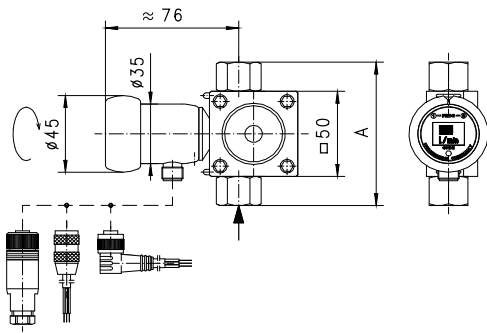


**MOUNTING**

The converters are connected by plugs to the flowmeter. There is no electrical connection between the local electronics and the flowmeter. Please note that the flowmeter and the smart electronics are paired to one another (same production number) and please follow the mounting instructions for the relevant primary sensor or Flowmeter.

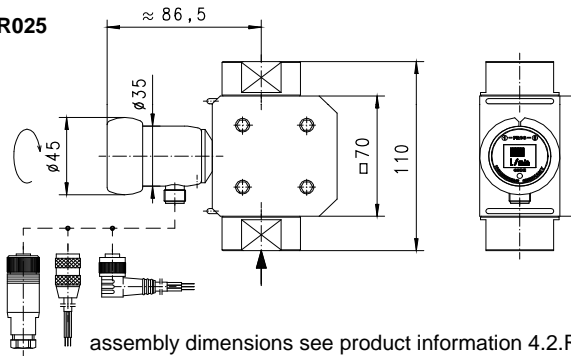
**DIMENSIONS**

omni-RR010



A **goose-neck** (optional) between the electronics head and the primary sensor provides complete freedom in the sensor alignment and reading direction. This option also gives thermal decoupling between both units.

omni-RR025



assembly dimensions see product information 4.2.RRI, 4.2.RRH and 4.2.RRO , locking plug M12x1 , 5-pole (accessory)

**NOMENCLATURE**

omni-RR	010	S		basic type specification
omni-RR				● omni at flowmeter RR....
	010			● DN 010
	025			● DN 025
		S		● connection for locking plug M12x1 , 5-pole
			H	○ goose-neck

**IMPORTANT ORDER DETAILS**

- the primary sensor is ordered as follows, e.g. RR-010... with omni-RR010S...

**ACCESSORY**

**Locking plug M12x1**

K5	PU-	02	S	G	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°



All technical changes reserved

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