

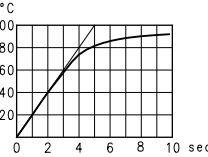


- * universal temperature sensor
- * analogue output, switching outputs
- * clear, easily readable, backlit LCD display
- * changeable units in the display
- * designed for industrial applications
- * small and compact
- * most simple installation

PRINCIPLE

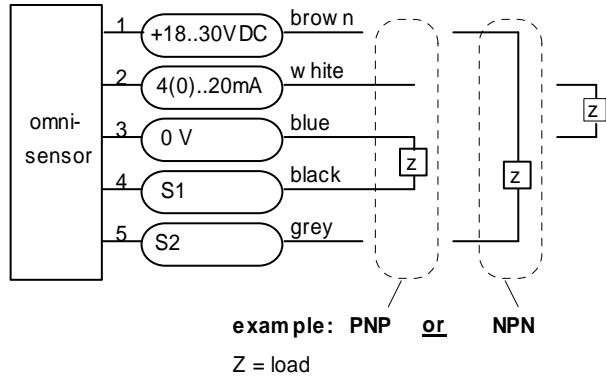
The primary sensor consists of a platinum resistance probe in thin-film technology which due to the 4mm lance thickness offers a very good reaction time. Please refer to the general description 51.1.omni. Sensor Range for all the other characteristics.

TECHNICAL DATA

measurement range	0..100°C (with "goose-neck" 0..250°C)
accuracy	±1% FS
reproducibility	±0.1% FS
dynamic response	measurement cycle 32ms, display cycle 0.5 s
dynamic (τ)	5 sec. 
operating pressure	max. 25 bar
operating temperature	-20..70°C (with "goose-neck" max. 250°C)
storage temperature	-20..80°C
supply voltage	18..30 VDC
power consumption	< 1 W
signal output	4(0)..20mA, 2(0)..10V across 500 Ohm resistor to 0V.
switching values S1 and S2	PNP or NPN selectable, 300mA load in sum max., programmable as min. or max. value, short-circuit proof, reverse-polarity proof
hysteresis	adjustable, position of hysteresis depends on min or max.
display	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.

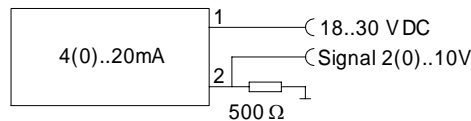
connection	at locking plug M 12x1, 5-pole	
protection class	IP67	
materials	stainless steel 1.4571	
medium contact		
materials	housing	stainless steel 1.4305
electronic housing	glass	tempered mineral glass
	magnet	cobalt samarium
	ring	POM

TERMINAL ASSIGNMENT



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

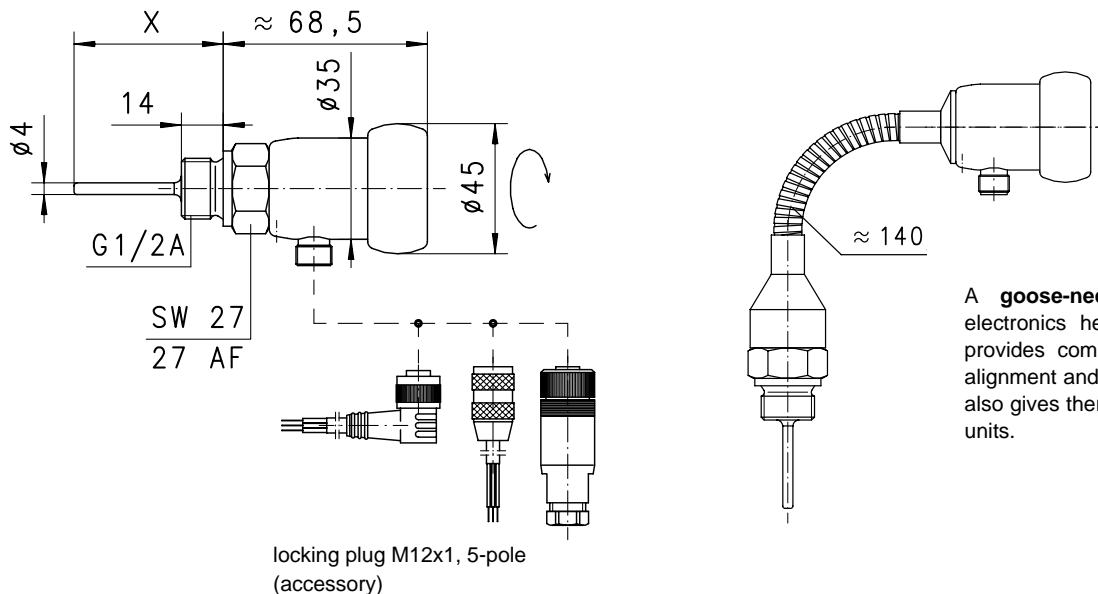
Signal output with 2(0)..10V
Sample:



MOUNTING

Seal the sensor with Teflon tape such that the stamped cross is on the upstream side. This is the setting used for the measurement at the works and which ensures the best results. Only turn the sensor using the hexagon. Once sealed, you have the opportunity to align the sensor head to the best reading position by turning it.

DIMENSIONS



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.

NOMENCLATURE

omni-T	100	K	015	K	050		basic type specification
	100						● range 0 ... 100 °C
	250						● range 0 ... 250 °C (only with goose-neck)
		K					● material Parts in contact with the medium 1.4571
			015				● connection G1/2A
				S			● connection for locking plug M12x1, 5-pole
					050		● for probe length 50 mm
					100		● for probe length 100 mm
					150		● for probe length 150 mm
					200		● for probe length 200 mm
						H	○ goose-neck

INFORMATION

temperature sensor without display , only with 4-20mA output in 2 wire technic please see product information 31.1.ETS.

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