

design	50 x 78 x 91mm 50 x 78 x 108mm
temperature	operating range -40 up to +120°C



- ✓ sensor material stainless steel 1.4571
- ✓ programmable via membrane keyboard
- ✓ hysteresis and window function
- ✓ turn-on and turn-off delay
- ✓ 330° rotatable display
- ✓ connection with M12-connector

**analog output 4 to 20mA
membrane keyboard**



description

This compact device has an adjustable switch-point plus a scalable 4...20mA analog output. The measuring range is between -40°C and +120°C in liquid and paste-like media. As an alternative to the conventional limit value monitoring, the temperature sensor offers the option to select a window function. Furthermore the normally closed or normally open function can be set for the switching output. Momentary temperature variations can be overcome by the turn-on delay respectively the turn-off delay. The device has also been equipped with a volatile resettable MIN/MAX memory. The membrane keyboard on the front of the device is used for the programming. The set switching point and the programmed parameters may be called up and displayed during the measuring operation by pressing the key. Sensors of the design 45 are used to monitor temperatu-

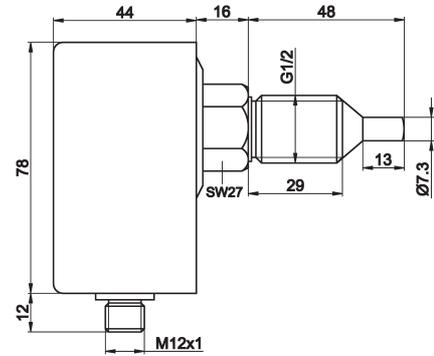
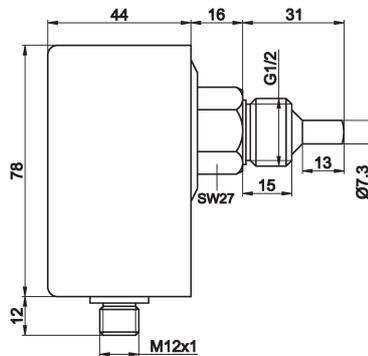
res of fluids inside conduits.

The temperature sensor can be mounted in any commercially available T-piece or welding socket. The sealing can be done with the enclosed flat gasket or other suitable sealing material. Attention should be paid to the pressure resistance of the seal at higher temperatures. After the installation the display electronics can be rotated by about 330°. This provides for a good readability independent of the sensor's position. In applications where the temperatures exceed 80°C the device should be mounted laterally inside the conduit.

application examples

- ▶ temperature monitoring inside conduits for liquid and paste-like media

article-no.	YT450024	YT450020
temperature range (medium)	-40 ... +120°C	-40 ... +120°C
screw-in depth	31mm	48mm
design	50x78x91mm	50x78x108mm

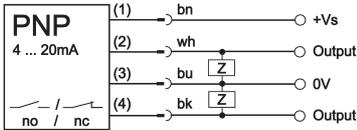


TECHNICAL DATA

temperature range (medium)	-40 ... +120°C
temperature detection	touching the medium
output	4 ... 20mA scalable / pnp, no/nc programmable
operating voltage	24V DC ±10%
output current (max. load)	200mA
current consumption (w/o load)	< 200mA
voltage drop (max. load)	< 2.5V DC
turn-on / turn-off delay	0 ... 50sec
time-setting	typical 10sec
adjustment range	
limit values	-39 ... +120°C
hysteresis	0.5 ... 99°C
window	0.5 ... 99°C
pressure resistance	100bar
display	LED
display (resolution)	0.1°C
display (function)	yellow LED
short-circuit protection	+
reverse polarity protection	+
housing material	PBT
sensor head material	stainless steel 1.4571
design	see above
operating temperature	-20 ... +60°C
system of protection (EN 60529)	IP65
connection	M12-connector, 4-pin
connection accessories	e.g. VK200325, 2m, straight, 4-wire, PUR
connection (process)	G1/2"

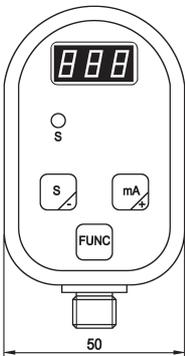
connection

connector device



wire colors: bn = brown (1), wh = white (2), bu = blue (3), bk = black (4)

frontal view



This data sheet contains the standard versions only. Kindly request the availability of other output- and connection functions.

We will be pleased to supply the matching cable socket for your devices with connector. Please refer to the list in catalog chapter “accessories” under “cable sockets **ipf-SENSORFLEX**®” or search our website for “VK”.

Warning: Never use these devices in applications where the safety of a person depends on their functionality.

notes

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