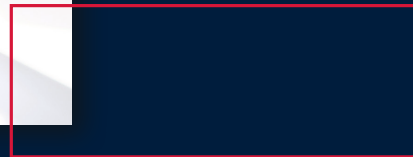




**AVS  
RÖMER**

# AVS Römer combi-sensor temperature & level: XTL set



## AVS Römer combi-sensor temperature & level: XTL set consisting of sensor & adapter

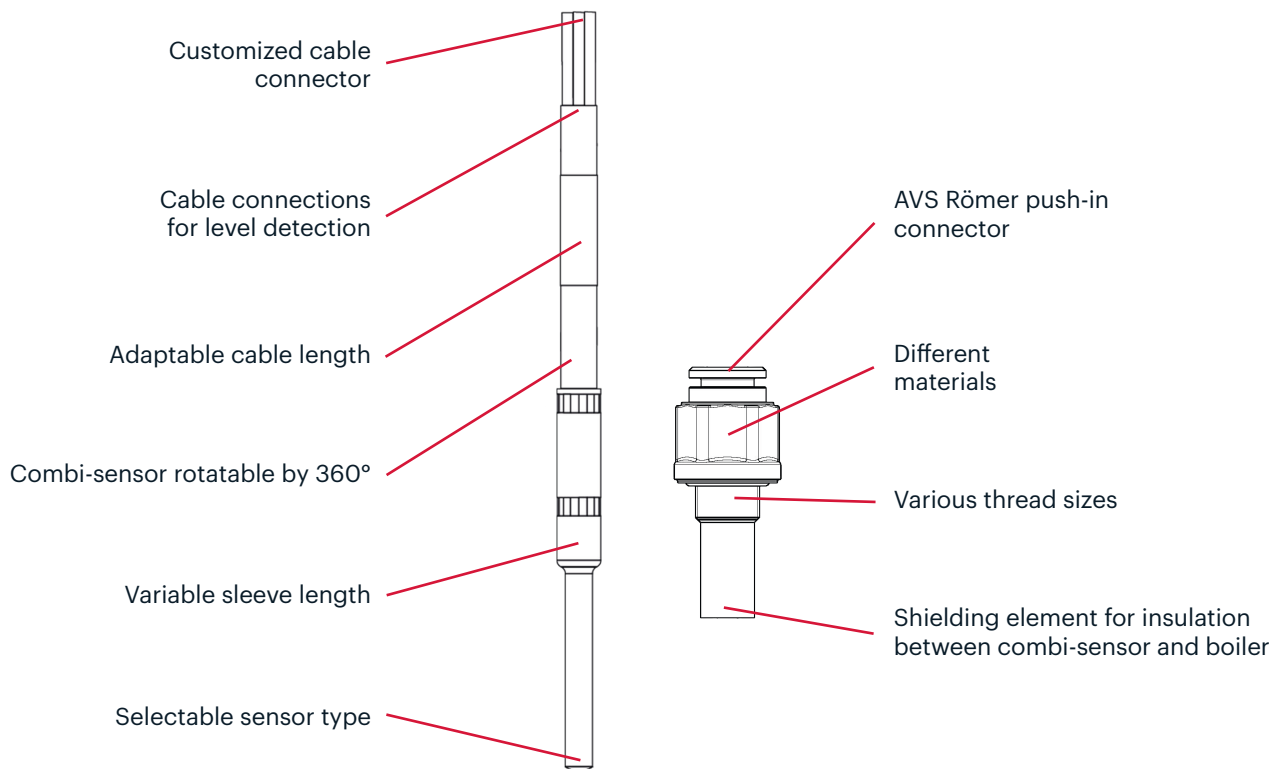
The XTL set with temperature sensor and level detection is perfect for all applications where temperatures and limit levels need to be detected exactly. The combination sensor reduces the number of sensors required to a minimum and therefore saves costs and space.



Measuring temperatures precisely and detecting the filling level at the same time.

### product features

- Always accurate temperature and level detection, independent of moisture influences and capillary effects.
- 2 in 1: the reduction to one sensor simplifies installation and assembly.
- Cost and space savings by combining the two functions in one sensor.
- Flexible and individual due to different variants and configurations.
- Precise measurement results in high process reliability.



## Functional principle

The combination sensor detect, based on a signal between the sensor sleeve and the tank or container housing, whether a defined fill level (based on the sleeve length) has been reached. When the sensor comes into contact with water, the circuit is closed through the grounding on the tank. Simultaneously, the sensor measures the temperature by capturing the resistance change of the sensor element as a function of temperature.

There are two states to distinguish, which provide conclusions about the temperature and fill level:

### Condition 1

No contact between the medium and the sensor tip: The circuit is not closed, indicating the fill level is below the defined immersion depth. In this case, the steam or air temperature is measured.

### Condition 2

The medium reaches the sensor tip: The defined immersion depth is reached. The circuit is closed, and the sensor outputs a corresponding fill level signal while also measuring the medium temperature.





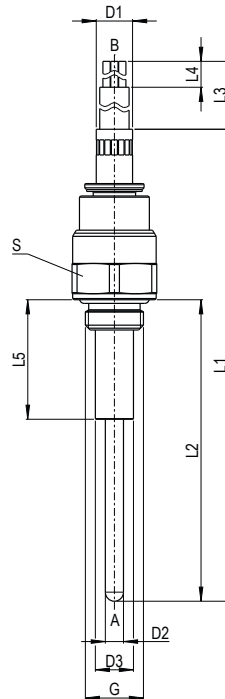
## Parameters

<b>Constructional design</b>	Stainless steel combination sensor + adaptor
<b>Connection sizes thread</b>	G 1/8
<b>Materials</b>	<p><b>PPSU/Stainless steel:</b> Body: PPSU natural   Sealing material: FPM   Release ring: PPSU natural            Sensor housing: Stainless steel 1.4404   Grip ring: Stainless steel 1.4310            Retaining ring: Brass, galvanically nickel plated   Nipple: Stainless steel 1.4404</p> <p><b>PEEK:</b> Body: PEEK natural   Sealing material: FPM   Release ring: PPSU natural   Sensor housing: Stainless steel 1.4404   Grip ring: Stainless steel 1.4310   Retaining ring: Brass, galvanically nickel plated</p>
<b>Alternative materials</b>	Sealing: EPDM
<b>Medium</b>	Gases or liquids which do not corrode the materials specified.
<b>Medium temperature</b>	NTC: 0 °C – 125 °C PT: 0 °C – 140 °C
<b>Ambient temperature</b>	0 °C – 60 °C
<b>Pressure range</b>	-0,95 bar – 20 bar
<b>Cable</b>	Silicone cable, Ø4.85 ±0.15 mm, black, 3x AWG24/7, FEP, white/red/black
<b>Electrical connection</b>	Free strand ends stripped, pre-tinned
<b>Protection class according to EN 60529</b>	IP 67
<b>Price group</b>	722
<b>Special versions</b>	Further variants on request



## AVS Römer combi-sensor temperature & level: XTL set

PPSU/Stainless steel



### Metrics

A	G 1/8
D1 mm	6.0
D2 mm	3.0
D3 mm	8.0
D4 mm	15.8
L1 mm	78.0
L2 mm	52.0
L3 mm	750.0
L4 mm	50.0
L5 mm	20.0
S mm	14.0

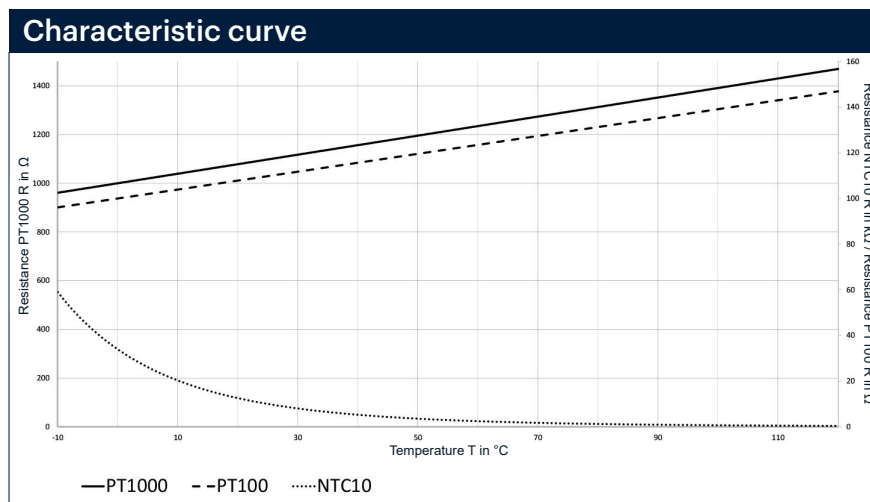
### Sensor type PT

A	PN	OP* at 20 °C	OP* at 100 °C	OP* at 140 °C	Sensor type	Nominal resistance R at 0 °C	R tolerance	Type	Order No.
G 1/8	20	20 bar	12 bar	12 bar	PT100	100 Ohm	Class B	XTL-951P3-6FF-1/8X4-X4-PT100-78-750	392004
G 1/8	20	20 bar	12 bar	12 bar	PT1000	1,000 Ohm	Class B	XTL-951P3-6FF-1/8X4-X4-PT1000-78-750	392005

### Sensor type NTC

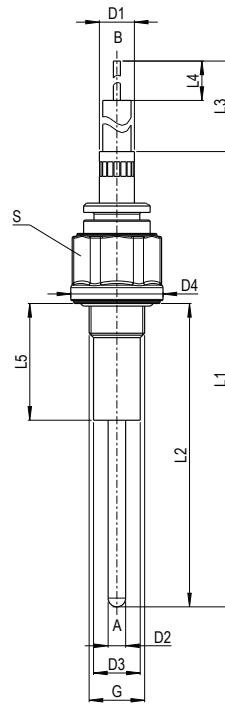
A	PN	OP* at 20 °C	OP* at 100 °C	OP* at 125 °C	Sensor type	Nominal resistance R at 25 °C	R tolerance	B value R25/85	B tolerance	Type	Order No.
G 1/8	20	20 bar	12 bar	12 bar	NTC10	10,000 Ohm	± 1%	3,977 K	± 1%	XTL-951P3-6FF-1/8X4-X4-NTC10-78-750	392003

\*OP = Maximum operating pressure at the specified medium temperature



## AVS Römer combi-sensor temperature & level: XTL set

PEEK



### Metrics

A	G 1/8
D1 mm	6.0
D2 mm	3.0
D3 mm	8.0
D4 mm	15.8
L1 mm	78.0
L2 mm	52.0
L3 mm	750.0
L4 mm	50.0
L5 mm	20.0
S mm	14.0

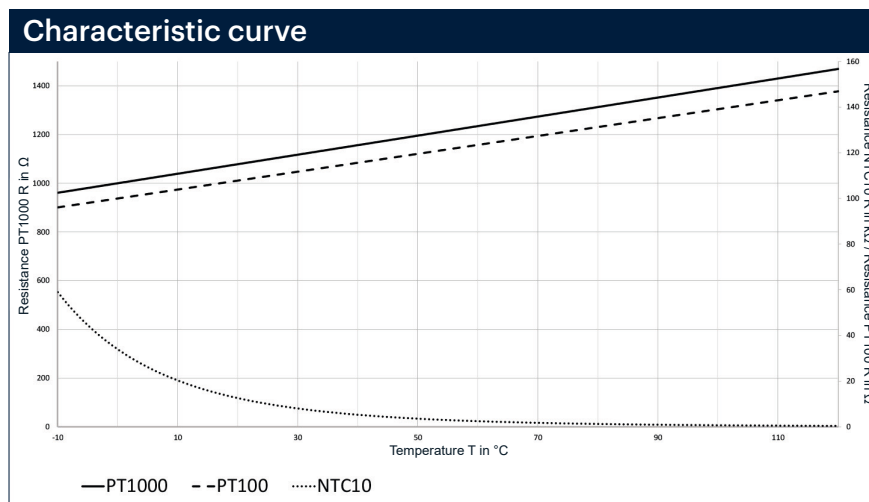
### Sensor type PT

A	PN	OP* at 20 °C	OP* at 100 °C	OP* at 140 °C	Sensor type	Nominal resistance R at 0 °C	R tolerance	Type	Order No.
G 1/8	20	20 bar	12 bar	12 bar	PT100	100 Ohm	Class B	XTL-951P5-6FF-1/8-X4-PT100-78-750	392001
G 1/8	20	20 bar	12 bar	12 bar	PT1000	1,000 Ohm	Class B	XTL-951P5-6FF-1/8-X4-PT1000-78-750	392002

### Sensor type NTC

A	PN	OP* at 20 °C	OP* at 100 °C	OP* at 125 °C	Sensor type	Nominal resistance R at 25 °C	R tolerance	B value R25/85	B tolerance	Type	Order No.
G 1/8	20	20 bar	12 bar	12 bar	NTC10	10,000 Ohm	± 1%	3,977 K	± 1%	XTL-951P5-6FF-1/8-X4-NTC10-78-750	392000

\*OP = Maximum operating pressure at the specified medium temperature



## Approvals



### RoHS

All listed products comply with RoHS Directive 2011/65/EU and (EU) 2015/863 on the restriction of the use of certain hazardous substances in electrical and electronic equipment.



### REACH

All listed products meet the requirements of the REACH Regulation (EC) No 1907/2006.



### EU 1935/2004

All listed products comply with Regulations (EC) No 1935/2004, (EC) No 10/2011 and (EC) No 2023/2006.



### NSF 169

All listed products are NSF 169 certified.

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