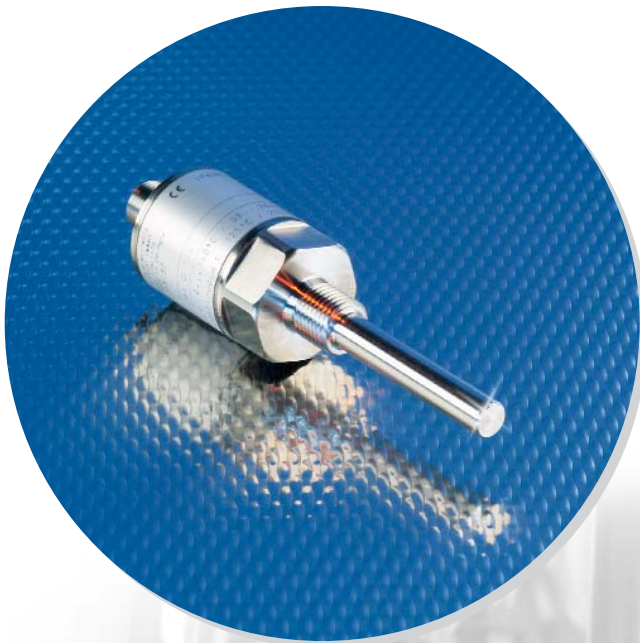


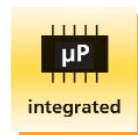
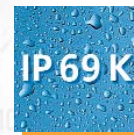


Compact temperature sensor with excellent response times.



4...20 mA output or AS-interface profile S-7.3!

- Temperature evaluation range
-50...150 °C, 0...140 °C or -10...150 °C.
- Excellent response times
T05 = 1 s; T09 = 3 s.
- High mechanical stability.
- Integrated G 1/4 process connection.
- Protection rating IP 69 K.



Universal temperature sensor

The temperature sensors of type TA are universal transmitters with integrated AS-i slaves (TAA131) or 4...20 mA outputs (TA3130 / TA3131). For the AS-i transmitter the data is transmitted according to the analogue protocol 7.3 which is implemented in all masters to AS-i specification 2.1 as standard. When the temperature sensor has been connected to the AS-i interface, the AS-i master detects the sensor automatically and starts data transfer.

The analogue units (TA3130 / TA3131) provide a temperature-proportional 4...20 mA signal.

A high level of accuracy is achieved using Pt sensor elements of accuracy class A. In addition, ifm's tried and tested film technology ensures excellent dynamic response times.



TA integrated in a hydraulic application

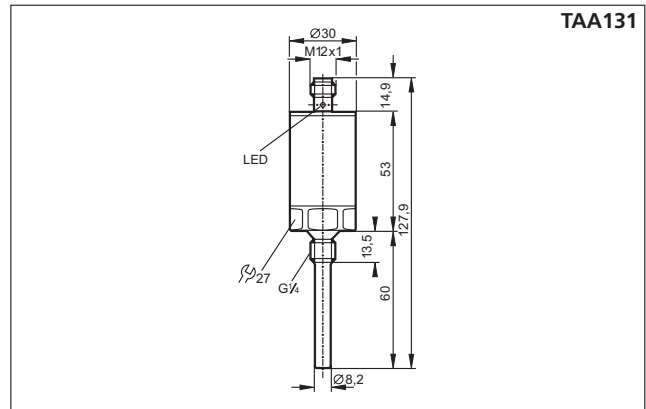
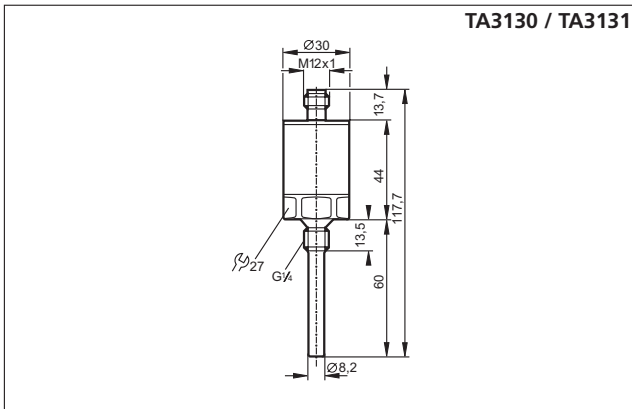
fluid sensors
and diagnostic
systems

position
sensors
and object
recognition

bus,
identification
and control systems

Temperature range [°C]	Resolution [°C]	Dynamic response time T05 /T09 [s]	Ub [V]	Analogue value	Measuring element	Order no.
M12 connector / output function 4...20 mA / AS-i						
-50...150	< 0.02	1 / 3	10...30	4...20 mA	Pt1000 / class A	TA3131
0...140	< 0.02	1 / 3	10...30	4...20 mA	Pt1000 / class A	TA3130
-10...150	< 0.05	1 / 3	26.5...31.6 DC (AS-i)	16 bits incl. sign	Pt1000 / class A	TAA131

Dimensions



Advantages and customer benefits

• No software required

With masters to specification 2.1 the TAA131 temperature transmitter using the profile (S-7.3.C) is recognised as a one-channel analogue input slave and data transfer is started automatically. The measured values of the temperature sensor are directly transferred in the physical unit °C and so they are available without further conversion.

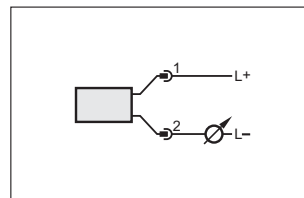
• Mounting

The integrated G 1/4 thread enables simple mounting without further adapters.

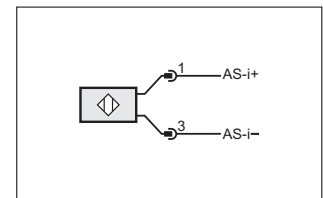
• High protection rating and mechanical stability

The completely sealed and welded housing ensures not only protection rating IP 69 K but also high mechanical stability.

Wiring diagrams of the units







TA3130, TA3131



TAA131

Connectors and splitter boxes (selection)

Type	Description	Order no.
	M12 socket, 2 m black, PUR cable	EVC001
	M12 socket, 5 m black, PUR cable	EVC002
	M12 socket, 2 m black, PUR cable	EVC004
	M12 socket, 5 m black, PUR cable	EVC005