



Self-monitoring temperature measurement.



Temperature transmitter with 4...20 mA or Profibus PA profile 3.01 and ATEX.

- Integrated drift monitoring, diagnostic and backup function.
- Including free 5-point calibration certificate.
- Precision of 0.2 K at -10...100 °C and 0.3 K at -25...-10 / 100...150 °C.
- Increased process safety due to self-monitoring.
- Cost savings possible through reduced calibration intervals.



Increased confidence in process quality.

The use of two different sensor elements which monitor each other in the process ensures that a developing sensor drift is immediately detected and reliably diagnosed. Furthermore, if one element fails, the process continues with the second measuring element (backup function).

Profibus PA or 4...20 mA output

The TAP series complements the tried-and-tested self-monitoring TAD temperature sensors (4...20 mA). TAP transmitters communicate via the established bus system Profibus PA. The unit supports the Profibus PA profile 3.01 "Temperature Transmitter" including the extension for "Installation and Maintenance" with optimised diagnostic capabilities

ATEX for the highest demands

The Profibus PA sensors TAP18A and TAP98A are certified to ATEX II 1 G, 1/2 D.



TAD temperature transmitter in hygienic applications for CIP and SIP

fluid sensors
and diagnostic
systems

position
sensors
and object
recognition

bus,
identification
and control systems

Electrical design	Process connection	Rod length [mm]	Response time T05 / T09 [s]	Operating voltage [V DC]	ATEX category	Order no.
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TAP, Profibus PA profile 3.01, electrically separated, GSD file on supplied CD

Profibus PA	Aseptoflex Vario	33	3 / 6	9...32	II 1 G, 1/2 D	TAP98A
Profibus PA	Aseptoflex Vario	87,5	3 / 6	9...32	II 1 G, 1/2 D	TAP18A

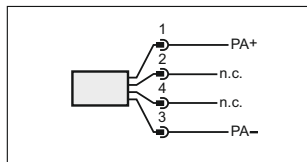
Programming options: Parameter setting to Profibus PA profile temperature transmitter, version 3.01; I&M parameter, drift and diagnostic functions

TAD transmitter 4...20 mA · 2-wire or 3-wire operating

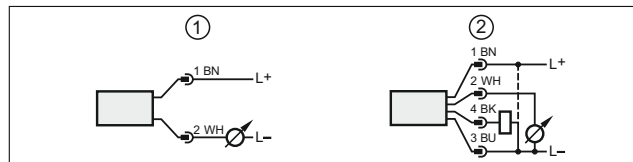
4...20 mA (scalable)	Aseptoflex Vario	33	3 / 6	15...32	–	TAD981
4...20 mA (scalable)	Aseptoflex Vario	87,5	3 / 6	15...32	–	TAD181
4...20 mA (scalable)	G 1/2 male	33	3 / 6	15...32	–	TAD991
4...20 mA (scalable)	G 1/2 male	87,5	3 / 6	15...32	–	TAD191

Programming options: Threshold for drift warning / alarm; fail-safe; display unit; scaling of the analogue output; redundancy switching; performance diagnostic output; output logic; normally open / normally closed

Wiring



TAP



TAD: 1) 2-wire operation, 2) 3-wire operation

Accessories





Type	Description	Order no.
	Aseptoflex Vario welding adapter* Ø 50 mm Sealing by O-ring	E30122
	Aseptoflex Vario adapter* Clamp 2", ISO 2852 Metal-to-metal seal	E33702
	Aseptoflex Vario adapter* Varivent type N, DN40 (1.5"), Ø 68 mm Metal-to-metal seal	E33722
	Aseptoflex Vario adapter* pipe fitting, DN40 (1.5"), DIN 11851 Metal-to-metal seal	E33712
	Adapter G 1/2 female – clamp 1"–1.5"	E33401
	Adapter G 1/2 female – clamp 2"	E33402
	Welding adapter ball, G 1/2	E30055
	Welding adapter collar, G 1/2	E30056

* other Aseptoflex Vario adapters available

Other technical data

Self-monitoring temperature sensor for liquids and gases		
Measuring range	[°C]	-25...150
Perm. overload pressure	[bar]	50
Accuracy Process value, drift monitoring		
(-10...100 °C)	[°C]	± 0.2
(-25...-10 / 100...150 °C)	[°C]	± 0.3
Resolution	[°C]	< 0.05
Protection		IP 68 / IP 69K
Measuring element		Pt1000 / NTC, thermally coupled
Materials (wetted parts)		high-grade stainless steel (316S12)
Surface characteristics		Ra: < 0.6
Connection		M12 connector, Gold-plated contacts

Connectors and splitter boxes

Type	Description	Order no.
	M12 socket, 5 m orange, PVC cable	EVT001
	M12 socket, 10 m orange, PVC cable	EVT002
	M12 socket, 5 m orange, PVC cable	EVT004
	M12 socket, 10 m orange, PVC cable	EVT005