TEMPERATURE - RESISTANT IAS

For increased requirements for the permitted ambient temperature range of our inductive proximity sensors, we offer the *series* up to +100°C with integrated electronic as a 3-Wire DC version. The sensors are available with housings made of PTFE, PTFE/V2A or PTFE/brass and have a silicone connection cable. For extreme ambient or product-temperature conditions, our *high temperature sensors* up to +250°C with external electronics are available. The sensors are integrated in PTFE or PTFE/V2A housings. The FEP-coated sensor cable, in the lengths 2, 5 or 10 m, is the connection to the evaluation unit and may also be used under high-temperature conditions. The evaluation unit is connected to the sensor by means of a plug-in connector. On the sensor side the cable is permanently cast in or equipped with a temperature-resistant plug-in connector (...Y-version). The sensing distance for high temperature sensors can be adjusted on the evaluation unit and the switching state is displayed by an LED. The sensing distance adjustment should be made at operating temperature. Here the maximum specified sensing distance and the temperature drive must be taken into consideration.

Technical data **IAS temperature resistant**		**+100°C**	**+250°C**		
Housing / active area	∅	**8...30 mm**	**IS-250-M32-...**	**ISA-250**	**ISA-...-BB**
Operating voltage	U_B	10…35 V DC	-	200...240 V AC	10...35 V DC
Rated voltage	Un	24 V DC	-	230 V AC	24 V DC
Residual ripple max.		5 %	-	-	10 %
No-load current	Io	typ. 15 mA	-	typ. 16 mA	typ. 10 mA
Contacts output relay		-	-	1 change-over	-
Contact rating max.		-	-	250V/6A/500VA	-
Output current max.	Ie	250 mA	-	-	250 mA
Voltage drop max.	Ud	≤ 2.5V	-	-	≤ 2.5 V
Frequency of operating cycles max.		typ. 1 kHz	-	-	80 Hz
Switching hysteresis		typ. 10 %	-	typ. 10 %	typ. 10 %
Repeat accuracy		< 0.1 %	-	< 0.1 %	< 0.1 %
Drift		typ. 10 %	-	typ.10 %	typ.10 %
Permitted ambient temperature		-25…+100°C	-200...+250°C	-20...+60°C	-25...+70°C
LED display	yellow	built-in	-	built-in	built-in
Overload protection		built-in	-	-	built-in
Electr. short circuit protection		built-in	-	-	built-in
Reverse polarity protection		built-in	-	-	built-in
Enclosure rating IEC 529		IP 67	IP 67	IP 40 / IP 20	IP 67
Connection cable	Type M8	2m 3x0.14 mm²	2m, 5m or 10m Triax cable	terminals	2m 3 x 0.14mm²
	Type M12/M18	2m 3x0,34 mm.			
	Type M30	2m 3x0.75 mm²			

Data at +24°C, U_B = 24 V DC or 230 V AC

TYPES - IAS up to +250°C

High-temperature sensors for connection to amplifiers ISA... **Series 250**

Art. No.	Type	Sensing dist. Sn [mm]	Flush mounting	Thread ∅ [mm]	Material	Dim.
		Cylindrical housing with thread, high temperature version for use at -200...+250°C, 2 m sensor cable FEP, amplifier/evaluation unit separate from the sensor, pluggable.				
552100	IS-250-M32	2...15 mm	no	M 32 x 1.5	PTFE/V2A	12
552140	IS-250-M32-PTFE	2...15 mm	no	M 32 x 1.5	PTFE	12
		... with plug-in connector (IP67 temperature resistant) at sensor.				
552101	IS-250-M32-Y	2...15 mm	no	M 32 x 1.5	PTFE/V2A	12

Amplifiers for inductive high-temperature sensors IS...

Art. No.	Type	Operating voltage	Output relay	Output function	Dim.
550100	ISA-250	240 V AC	1 change-over	-	14
550101	ISA-250	120 V AC	1 change-over	-	14
550500	ISA-10-250-S-BB	10...35 V DC	-	PNP/ NO	13
550700	ISA-10-250-Ö-BB	10...35 V DC	-	PNP / NC	13
550900	ISA-20-250-S-BB	10...35 V DC	-	NPN / NO	13
551100	ISA-20-250-Ö-BB	10...35 V DC	-	NPN / NC	13