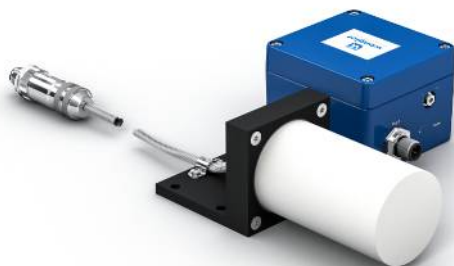


Inductive Sensor for Extreme Temperature Ranges

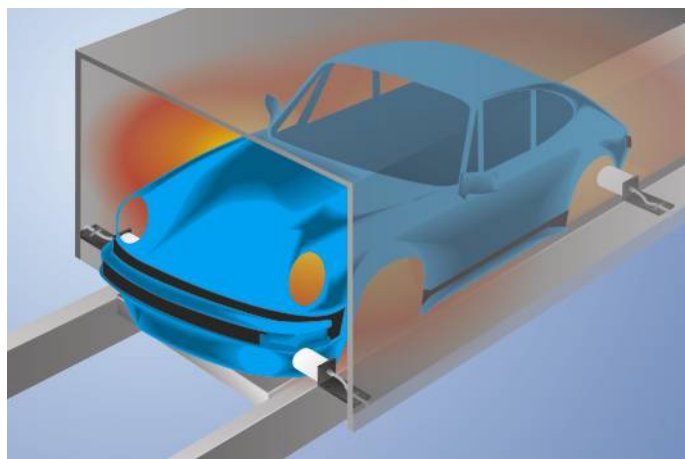
INRT007

Part Number



- Large temperature range from -60 to 450° C
- Long service life of up to 100 000 hours
- Quickly interchangeable sensor head

The sensors consist of a sensor head and an analysis module, and are laid out for use in very hot work environments. Together with unparalleled service life in hot surroundings, large switching distances assure maximum system availability. Easily interchangeable sensor heads with numerous standard cable lengths are additionally available as separate replacement parts. Switching distance can be quickly adjusted via a potentiometer within a temperature range of -60 to 450° C.



Technical Data

Inductive Data

Switching Distance	25 mm
Correction Factors Stainless Steel V2A/CuZn/Al	1,27/1,29/1,33
Mounting	non-flush
Mounting A/B/C/D in mm	95/200/40/85
Switching Hysteresis	< 10 %

Electrical Data

Supply Voltage	18...30 V DC
Current Consumption (U _b = 24 V)	< 70 mA
Switching Frequency	200 Hz
Sensor head temperature range	-60...450 °C
Analysis module temperature range	0...50 °C
Number of Switching Outputs	2
Switching Output Voltage Drop	< 3,5 V
Switching Output/Switching Current	50 mA
Residual Current Switching Output	< 10 mA
Short Circuit Protection	yes
Reverse Polarity and Overload Protection	yes
Protection Class	III
Service Life	100000 h

Mechanical Data

Sensor head material	Ceramic
Analysis module material	Aluminum
Degree of protection, sensor head	IP60
Degree of protection, analysis module	IP67
Connection	M12 × 1; 4-pin
Cable Length (L)	10 m
Outer diameter cable	6,6 mm
PWIS-free	yes

PNP NC, PNP NO

Connection Diagram No.

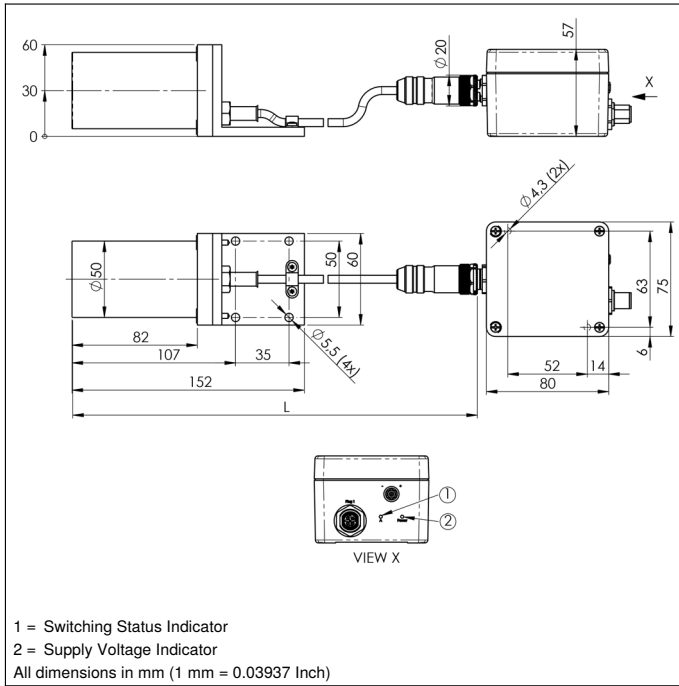
101

Control Panel No.

A19

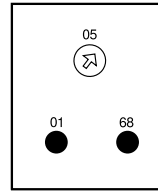
Suitable Connection Equipment No.

2

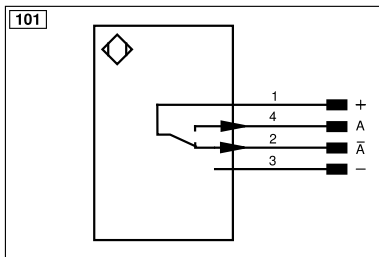


Ctrl. Panel

A19

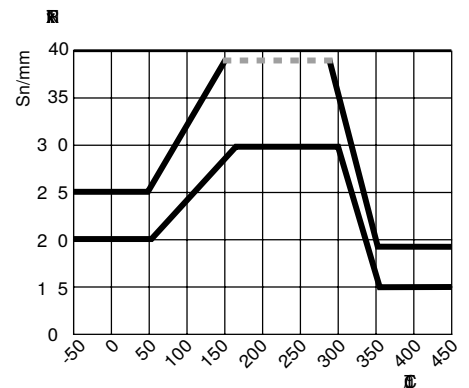


01 = Switching Status Indicator
 05 = Switching Distance Adjuster
 68 = supply voltage indicator



Legend			
+	Supply Voltage +	nc	Not connected
-	Supply Voltage 0 V	U	Test Input
~	Supply Voltage (AC Voltage)	Ü	Test Input inverted
A	Switching Output (NO)	W	Trigger Input
Ā	Switching Output (NC)	W-	Ground for the Trigger Input
V	Contamination/Error Output (NO)	O	Analog Output
ȳ	Contamination/Error Output (NC)	O-	Ground for the Analog Output
E	Input (analog or digital)	BZ	Block Discharge
T	Teach Input	Amv	Valve Output
Z	Time Delay (activation)	a	Valve Control Output +
S	Shielding	b	Valve Control Output 0 V
RxD	Interface Receive Path	SY	Synchronization
TxD	Interface Send Path	SY-	Ground for the Synchronization
RDY	Ready	E+	Receiver-Line
GND	Ground	S+	Emitter-Line
CL	Clock	±	Grounding
E/A	Output/Input programmable	SnR	Switching Distance Reduction
IO-Link	IO-Link	Rx+/-	Ethernet Receive Path
PoE	Power over Ethernet	Tx+/-	Ethernet Send Path
IN	Safety Input	Bus	Interfaces-Bus A(+)/B(-)
OSSD	Safety Output	La	Emitted Light disengageable
Signal	Signal Output	Mag	Magnet activation
BI_D+/-	Ethernet Gigabit bidirect. data line (A-D)	RES	Input confirmation
ENo RS422	Encoder 0-pulse 0/0 (TTL)	EDM	Contact Monitoring
PT	Platinum measuring resistor	ENARs422	Encoder A/Ā (TTL)
			Wire Colors according to DIN IEC 60757
			BK Black
			BN Brown
			RD Red
			OG Orange
			YE Yellow
			GN Green
			BU Blue
			VT Violet
			GY Grey
			WH White
			PK Pink
			GNYE Green/Yellow

Switching Distance Deviation



Tu = Ambient temperature
 Sn = Nominal Switching Distance

— Switching Point
 ■ Switching output on

