

Inductive Sensor
for Extreme Temperature Ranges

INRT009

Part Number

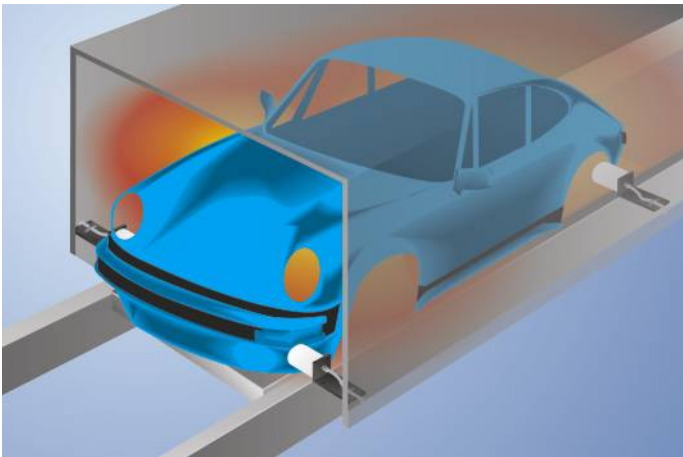


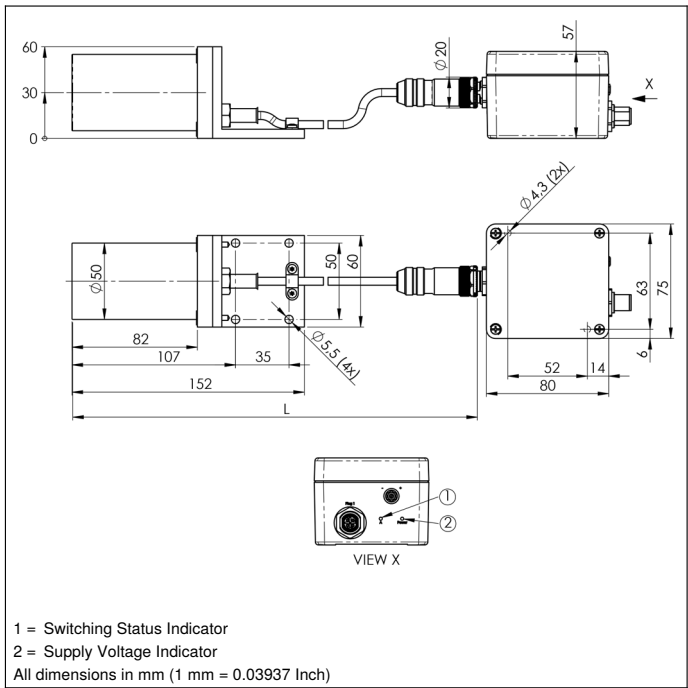
- Large temperature range from -60 to 450° C
- Long service life of up to 100 000 hours
- Quickly interchangeable sensor head

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 (Ub = 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)	15 m
Outer diameter cable	6,6 mm
PWIS-free	yes
PNP NO/NC antivalent	
Connection Diagram No.	101
Control Panel No.	A19
Suitable Connection Equipment No.	2

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.

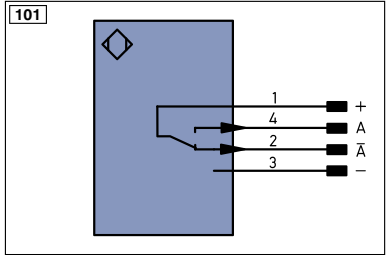




Ctrl. Panel



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



Legend

+	Supply Voltage +
-	Supply Voltage 0 V
~	Supply Voltage (AC Voltage)
A	Switching Output (NO)
\bar{A}	Switching Output (NC)
V	Contamination/Error Output (NO)
\bar{V}	Contamination/Error Output (NC)
E	Input (analog or digital)
T	Teach Input
Z	Time Delay (activation)
S	Shielding
RxD	Interface Receive Path
TxD	Interface Send Path
RDY	Ready
GND	Ground
CL	Clock
E/A	Output/Input programmable
	IO-Link
PoE	Power over Ethernet
IN	Safety Input
OSSD	Safety Output
Signal	Signal Output
BL-D +/-	Ethernet Gigabit bidirect. data line (A-D)
EN0	Encoder 0-pulse 0-0 (TTL)

PT	Platinum measuring resistor
nc	not connected
U	Test Input
\bar{U}	Test Input inverted
W	Trigger Input
W-	Ground for the Trigger Input
O	Analog Output
O-	Ground for the Analog Output
BZ	Block Discharge
AWV	Valve Output
a	Valve Control Output +
b	Valve Control Output 0 V
SY	Synchronization
SY-	Ground for the Synchronization
E+	Receiver-Line
S+	Emitter-Line
\pm	Grounding
SnR	Switching Distance Reduction
Rx+/-	Ethernet Receive Path
Tx+/-	Ethernet Send Path
Bus	Interfaces-Bus A(+)/B(-)
La	Emitted Light disengageable
Mag	Magnet activation
RES	Input confirmation
EDM	Contactur Monitoring

EN0	Encoder A/ \bar{A} (TTL)
ENB	Encoder B/ \bar{B} (TTL)
ENA	Encoder A
ENB	Encoder B
A-MIN	Digital output MIN
A-MAX	Digital output MAX
A-OK	Digital output OK
SY-IN	Synchronization In
SY-OUT	Synchronization OUT
OLT	Brightness output
M	Maintenance
RSV	reserved
Wire Colors according to 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

