

Inductive Sensor with Full-Metal Housing

IB040DE65UD3

Part Number



InoxSens

Technical Data

Inductive Data

Switching Distance	4 mm
Correction Factors Stainless Steel V2A/CuZn/Al	0,82/0,35/0,32
Mounting	flush
Mounting A/B/C/D in mm	0/8/12/0
Mounting A/B/C/D (V2A) in mm	0/8/12/0
Switching Hysteresis	< 15 %

Electrical Data

Supply Voltage	10...30 V DC
Current Consumption (U _b = 24 V)	< 15 mA
Switching Frequency	500 Hz
Temperature Drift	< 10 %
Temperature Range	-25...80 °C
Switching Output Voltage Drop	< 2,5 V
Switching Output/Switching Current	400 mA
Residual Current Switching Output	< 100 µA
Short Circuit Protection	yes
Reverse Polarity and Overload Protection	yes
Protection Class	III

Mechanical Data

Housing Material	Stainless Steel 316L
Full Encapsulation	yes
Degree of Protection	IP68/IP69K
Connection	M12 × 1; 4-pin
Pressure Resistance Sensor Area	60 bar
Ex II 3G Ex nA IIC T5 Gc X	yes
Ex II 3D Ex tc IIIC T90°C Dc IP6X X	yes

Safety-relevant Data

MTTFd (EN ISO 13849-1)	2065,66 a
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PNP NC



Connection Diagram No.

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Suitable Connection Equipment No.

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Suitable Mounting Technology No.

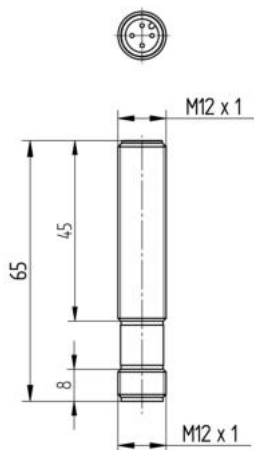
170

Housing: Stainless Steel V4A 1.4404, 316L

Complementary Products

Circlip Z0007

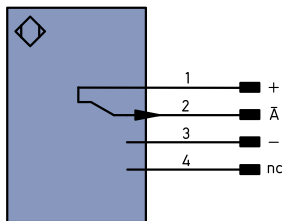
PNP-NPN Converter BG2V1P-N-2M



All dimensions in mm (1 mm = 0.03937 Inch)



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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
BI_D+/-	Ethernet Gigabit bidirect. data line (A-D)
EN0.5S4Z	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	Contacting Monitoring

EN0.5S4Z	Encoder A/ $\bar{A}$ (TTL)
EN0.5S4Z	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
OL _T	Brightness output
M	Maintenance
rsv	reserved
Wire Colors according to DIN IEC 757	
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

Mounting

