

Inductive Sensor

with Standard Switching Distances

IM020BM45VB8

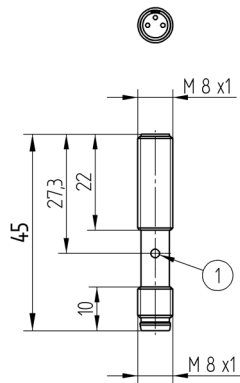
Part Number



Technical Data

Inductive Data	
Switching Distance	2 mm
Correction Factors V2A/CuZn/Al	0,73/0,55/0,45
Mounting	flush
Mounting A/B/C/D in mm	0/16/6/0
Switching Hysteresis	< 15 %
Electrical Data	
Supply Voltage	10...30 V DC
Current Consumption (U _b = 24 V)	< 6 mA
Switching Frequency	1500 Hz
Temperature Drift	< 10 %
Temperature Range	-25...80 °C
Switching Output Voltage Drop	< 2,5 V
Switching Output/Switching Current	200 mA
Residual Current Switching Output	< 100 µA
Short Circuit Protection	yes
Reverse Polarity and Overload Protection	yes
Protection Class	III
Mechanical Data	
Housing Material	CuZn, nickel-plated
Full Encapsulation	yes
Degree of Protection	IP67
Connection	M8 × 1; 3-pin
Stock Type	●
PNP NO	●
Connection Diagram No.	102
Suitable Connection Technology No.	8
Suitable Mounting Technology No.	200

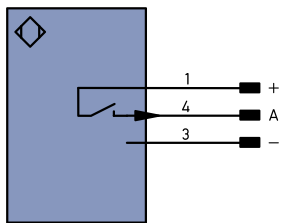




1 = Switching Status Indicator
All dimensions in mm (1 mm = 0.03937 Inch)



102



Legend

+	Supply Voltage +	nc	not connected
-	Supply Voltage 0 V	U	Test Input
~	Supply Voltage (AC Voltage)	Ū	Test Input inverted
A	Switching Output (NO)	W	Trigger Input
Ā	Switching Output (NC)	O	Analog Output
V	Contamination/Error Output (NO)	O-	Ground for the Analog Output
ȳ	Contamination/Error Output (NC)	BZ	Block Discharge
E	Input (analog or digital)	AWV	Valve Output
T	Teach Input	a	Valve Control Output +
Z	Time Delay (activation)	b	Valve Control Output 0 V
S	Shielding	SY	Synchronization
RxD	Interface Receive Path	E+	Receiver-Line
TxD	Interface Send Path	S+	Emitter-Line
RDY	Ready	±	Grounding
GND	Ground	SnR	Switching Distance Reduction
CL	Clock	Rx+/-	Ethernet Receive Path
E/A	Output/Input programmable	Tx+/-	Ethernet Send Path
	IO-Link	Bus	Interfaces-Bus A(+)/B(-)
PoE	Power over Ethernet	La	Emitted Light disengageable
IN	Safety Input	Mag	Magnet activation
OSSD	Safety Output	RES	Input confirmation
Signal	Signal Output	EDM	Contacting Monitoring

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

