Inductive Sensor
with Analog Output

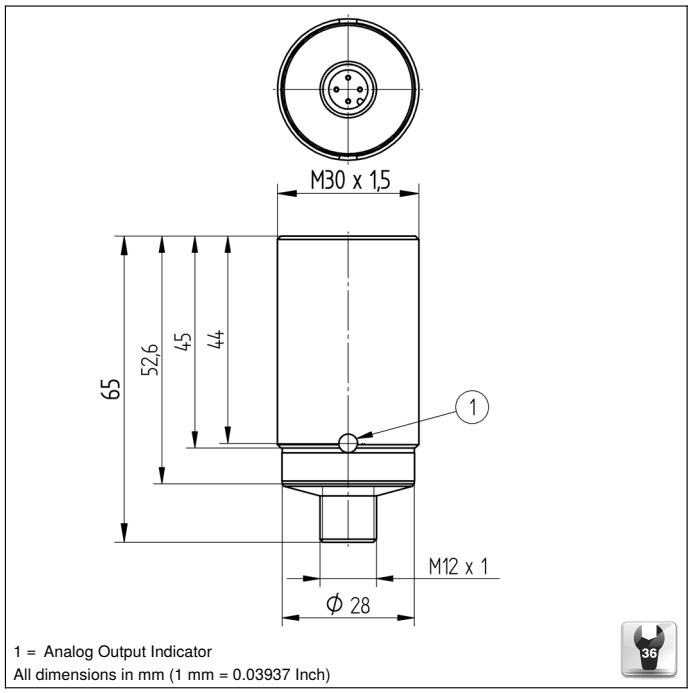
IX080CM65MG3
Part Number

Technical Data

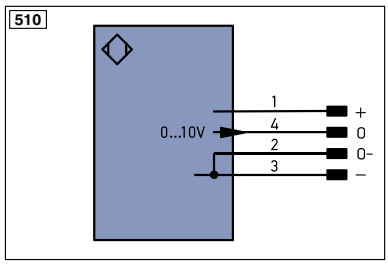
Inductive Data	
Working Range	2...8 mm
Measuring Distance	5 mm
Measuring Range	6 mm
Correction Factors Stainless Steel V2A/CuZn/Al	1,1/1,1/1,1
Mounting	flush
Mounting A/B/C/D in mm	0/30/24/0
Standard Target FE360, thickness 1 mm	30 × 30 mm
Linearity	< 1 %
Resolution	2 µm
Electrical Data	
Supply Voltage	18...30 V DC
Current Consumption (Ub = 24 V)	< 30 mA
Cut-Off Frequency	900 Hz
Temperature Drift	6 µm/K
Temperature Range	-10...70 °C
Analog Output	0...10 V
Load Current Voltage Output	< 1 mA
Resistant to Magnetic Fields	yes
Short Circuit Protection	yes
Reverse Polarity Protection	yes
Protection Class	III
Mechanical Data	
Housing Material	CuZn, nickel-plated
Full Encapsulation	yes
Degree of Protection	IP67
Connection	M12 × 1; 4-pin
Analog Output	●
Connection Diagram No.	510
Suitable Connection Equipment No.	2
Suitable Mounting Technology No.	130

Complementary Products

Analog Evaluation Unit AW02



1 = Analog Output Indicator
All dimensions in mm (1 mm = 0.03937 Inch)



Legend

+	Supply Voltage +	
–	Supply Voltage 0 V	
~	Supply Voltage (AC Voltage)	
A	Switching Output	(NO)
Ā	Switching Output	(NC)
V	Contamination/Error Output	(NO)
V̄	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 RS422	Encoder 0-pulse 0-0̄ (TTL)	
PT	Platinum measuring resistor	
nc	not connected	
U	Test Input	
Ū	Test Input inverted	
W	Trigger Input	
W–	Ground for the Trigger Input	
O	Analog Output	
O–	Ground for the Analog Output	
BZ	Block Discharge	
AW	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	
⏚	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	Contactor Monitoring	
ENA RS422	Encoder A/Ā (TTL)	
ENB RS422	Encoder B/B̄ (TTL)	
ENA	Encoder A	
ENB	Encoder B	
AMIN	Digital output MIN	
AMAX	Digital output MAX	
AOK	Digital output OK	
SY In	Synchronization In	
SY OUT	Synchronization OUT	
OLT	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