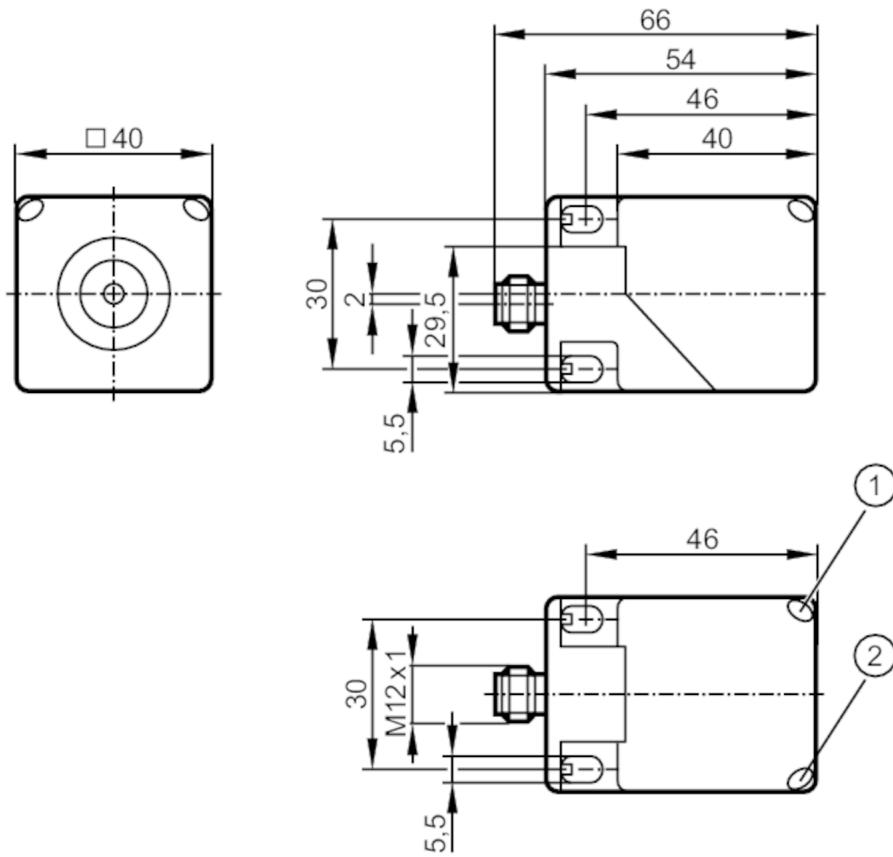


IM5141



Inductive analogue sensor with IO-Link

IMC4026A1PKG/IO/US



- 1 LED yellow
2 LED green



Product characteristics

Electrical design	PNP/NPN; (parameterisable)	
Output function	normally open / normally closed; (parameterisable)	
Communication interface	IO-Link	
Housing	rectangular	
Dimensions [mm]	40 x 40 x 54	

Electrical data

Operating voltage [V]	15...30 DC
Current consumption [mA]	< 33
Protection class	II
Reverse polarity protection	yes

Outputs

Electrical design	PNP/NPN; (parameterisable)	
Output function	normally open / normally closed; (parameterisable)	
Max. voltage drop switching output DC [V]	2.5	
Permanent current rating of switching output DC [mA]	100	
Switching frequency DC [Hz]	100	

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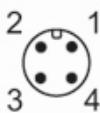
Analogue current output	[mA]	4...20; (linear; gradient: 0,64 mA/mm; for frontal approach and for target made of mild steel: 90 x 90 x 1 mm)
Max. load	[Ω]	500; (Ub <=18 V;; Max. load <=400 Ω)
Short-circuit protection		yes
Overload protection		yes
Detection zone		
Measuring range	[mm]	1...26
Switch point IO-Link	[mm]	3.44...24.2
Accuracy / deviations		
Correction factor		steel: 1 / stainless steel: 0.7 / brass: 0.4 / aluminium: 0.4 / copper: 0.3
Hysteresis	[% of Sr]	3...15
Note on hysteresis		parameterisable
Linearity error of analogue output	[%]	± 2; (of the final value of the measuring range)
Repeatability analogue output	[%]	± 2; (of the final value of the measuring range)
Temperature coefficient	[%/K vom MEW]	±0,15
Temperature drift		± 5 %; (of the final value of the measuring range)
Response times		
Response time	[ms]	< 20
Interfaces		
Communication interface		IO-Link
Transmission type		COM2 (38,4 kBaud)
IO-Link revision		1.1
SDCI standard		IEC 61131-9
Profiles		Smart Sensor: Identification and diagnosis; Multi-channel, two setpoint switching sensor, type 0 Generic Profiled Sensor; Teach Channel
SIO mode		yes
Required master port type		A
Min. process cycle time	[ms]	3.2
IO-Link process data (cyclical)	function	bit length
	process value	16
	device status	4
	binary switching information	2
IO-Link functions (acyclical)	switching cycles counter; switch-on cycle counter; operating hours counter; internal temperature; application specific tag	
Supported DeviceIDs	Type of operation	DeviceID
	default	1205
Note	For further information please see the IODD PDF file under "Downloads"	
Operating conditions		
Ambient temperature	[°C]	-25...80
Protection		IP 67

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Tests / approvals		
EMC	EN 61000-4-2 ESD	4 kV CD / 8 kV AD
	EN 61000-4-3 HF radiated	10 V/m
	EN 61000-4-4 Burst	2 kV
	EN 61000-4-6 HF conducted	10 V
	EN 55011	class B
MTTF [years]		232
Embedded software included		yes
UL approval	Ta	-25...70 °C
	Enclosure type	Type 1
	power supply	Limited Voltage/Current
	UL Approval no.	A025
	File number UL	E174191
Mechanical data		
Weight [g]		157.5
Housing		rectangular
Sensing face		5 positions selectable
Mounting		non-flush mountable
Dimensions [mm]		40 x 40 x 54
Materials		PA; brass white bronze coated
Displays / operating elements		
Display	target in measuring range	1 x LED, yellow lights
	target outside measuring range	1 x LED, yellow flashing
	operation	LED, green
Remarks		
Pack quantity		1 pcs.
Electrical connection - plug		
Connector: 1 x M12; coding: A		
		

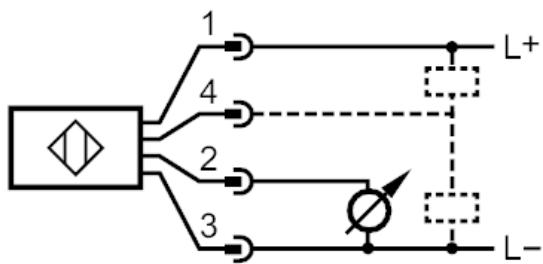
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Connection



1	L +
2	OUT
3	L -
4	OUT / IO-Link