

IM5141



Inductive analog sensor with IO-Link

IMC4026A1PKG/IO/US



- 1 LED yellow
- 2 LED green



Product characteristics	
Electrical design	PNP/NPN; (configurable)
Output function	normally open / closed; (configurable)
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



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Outputs		
Electrical design		PNP/NPN; (configurable)
Output function		normally open / closed; (configurable)
Max. voltage drop switching output DC	[V]	2.5
Permanent current rating of switching output DC	[mA]	100
Switching frequency DC	[Hz]	100
Analog 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; (U _b ≤ 18 V;; Max. load ≤ 400 Ω)
Short-circuit protection		yes
Overload protection		yes
Monitoring range		
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 / aluminum: 0.4 / copper: 0.3
Hysteresis	[% of Sr]	3...15
Note on hysteresis		configurable
Linearity error of analog output	[%]	± 2; (of the final value of the measuring range)
Repeatability analog 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)
Reaction times		
Response time	[ms]	< 20



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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 class	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 at "Downloads"	
Operating conditions		
Ambient temperature [°C]	-25...80	
Protection	IP 67	
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
	voltage supply	Limited Voltage/Current
	UL approval number	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	
Material	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
	Power	LED, green

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Remarks

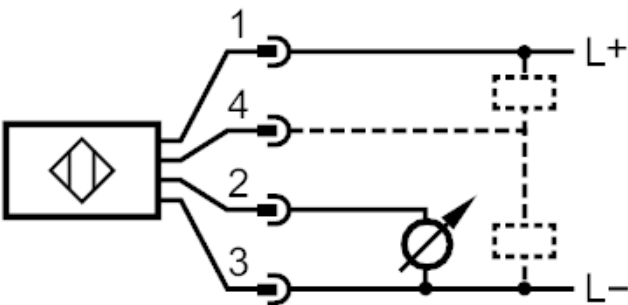
Pack quantity	1 pcs.
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Electrical connection - plug

Connector: 1 x M12; coding: A



Connection



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