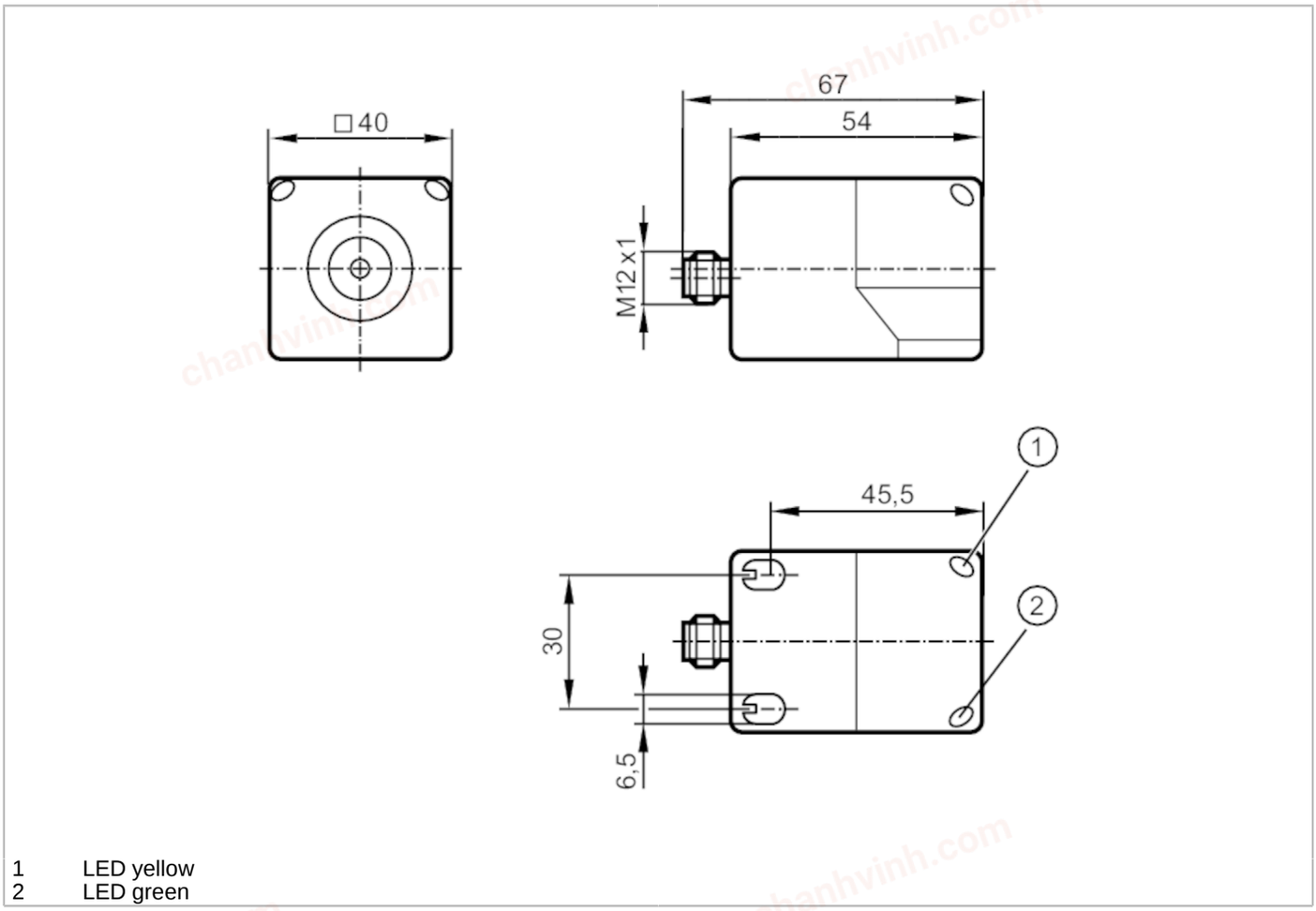
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IM5143

Inductive analogue sensor with IO-Link

IMC4035A2PKG/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 voltage output	[V]	0...10; (linear; gradient: 0,3125 V/mm; for frontal approach and for target made of mild steel: 105 x 105 x 1 mm)
Min. load resistance	[Ω]	2000
Short-circuit protection		yes
Overload protection		yes
Detection zone		
Measuring range	[mm]	3...35
Switch point IO-Link	[mm]	6.13...32.69
Accuracy / deviations		
Correction factor		steel: 1 / stainless steel: 0.8 / brass: 0.5 / aluminium: 0.5 / copper: 0.4
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: 1206
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]	231	
Embedded software included		yes	
UL approval		Ta	-25...70 °C
		Enclosure type	Type 1
		power supply	Limited Voltage/Current
		UL Approval no.	A026
		File number UL	E174191
Mechanical data			
Weight	[g]	157.5	
Housing		rectangular	
Mounting		non-flush mountable	
Dimensions	[mm]	40 x 40 x 54	
Materials		PA; stainless steel (1.4404 / 316L)	
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			
Remarks		Installation only with stainless steel plate 16x40x3 and 2 cylinder screws ISO 4762-12.9	
Pack quantity		1 pcs.	

Electrical connection - plug

Connector: 1 x M12; coding: A



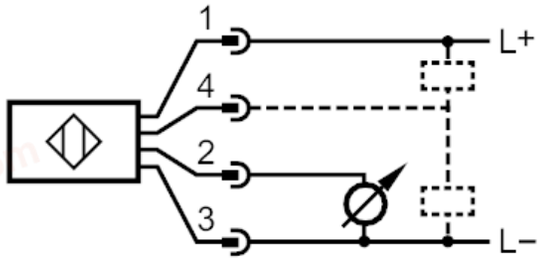
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Connection



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