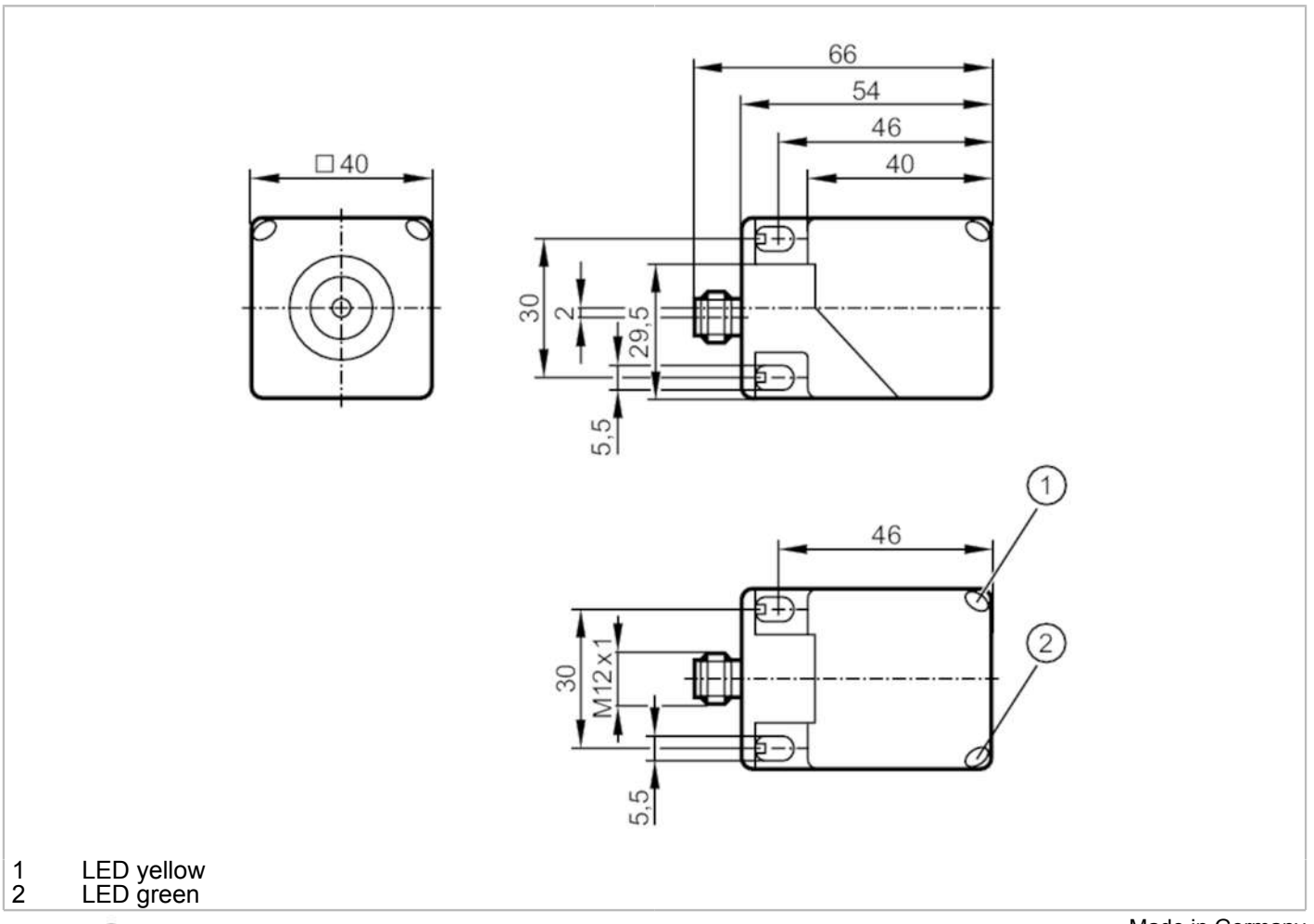
IM5172

Inductive sensor with IO-Link

IMC3020BFRKG/IO/US-100



1 LED yellow
2 LED green

Made in Germany

Electrical data		
Operating voltage	[V]	10...30 DC
Current consumption	[mA]	10
Protection class		III
Reverse polarity protection		yes
Outputs		
Output function		normally open / normally closed; (selectable)
Max. voltage drop switching output DC	[V]	2.5
Permanent current rating of switching output DC	[mA]	100
Switching frequency DC	[Hz]	100
Electrical design		PNP/NPN
Short-circuit protection		yes
Overload protection		yes
Range		
Measuring range	[mm]	2.1...21

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Accuracy / deviations			
Correction factor		steel: 1 / stainless steel: 0.8 / brass: 0.5 / aluminium: 0.5 / copper: 0.4	
Hysteresis	[% of Sr]	3...15	
Linearity error of analogue output	[%]	± 2 %; (of the final value of the measuring range)	
Repeatability analogue output	[%]	± 1 %; (of the final value of the measuring range)	
Temperature coefficient		± 10 %; (of the final value of the measuring range)	
Interfaces			
Communication interface		IO-Link	
Transmission type		COM2 (38,4 kBaud)	
IO-Link revision		1.1	
SDCI standard		IEC 61131-9 CDV	
IO-Link device ID		791d / 000317h	
Profiles		Smart Sensor: Device Identification; Device Diagnosis; Device Teach Channel; Binary Data Channel; Process Data Variable	
SIO mode		yes	
Required master port type		A	
Min. process cycle time	[ms]	3	
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]	632	
UL Approval no.		A009	
Mechanical data			
Weight	[g]	147.2	
Housing		rectangular	
Sensing face		5 positions selectable	
Mounting		flush mountable	
Dimensions	[mm]	40 x 40 x 54	
Materials		PA; connector thread: brass white bronze coated	
Displays / operating elements			
Display		operation	LED, green
		SIO mode	
		output stage supplied with current	LED, yellow lights
		IO-Link mode	
		target in measuring range	LED, yellow lights
		target outside measuring range	LED, yellow flashing
Remarks			
Pack quantity		1 pcs.	

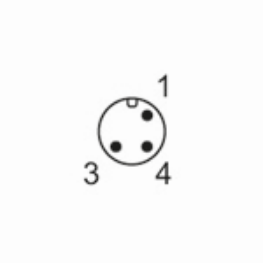
IM5172

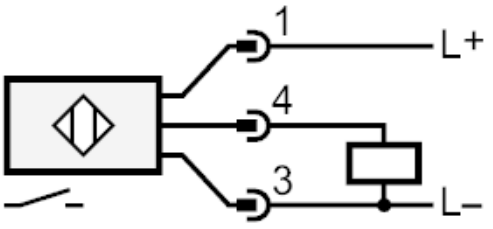
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Electrical connection

Connector: 1 x M12





4: OUT / IO-Link