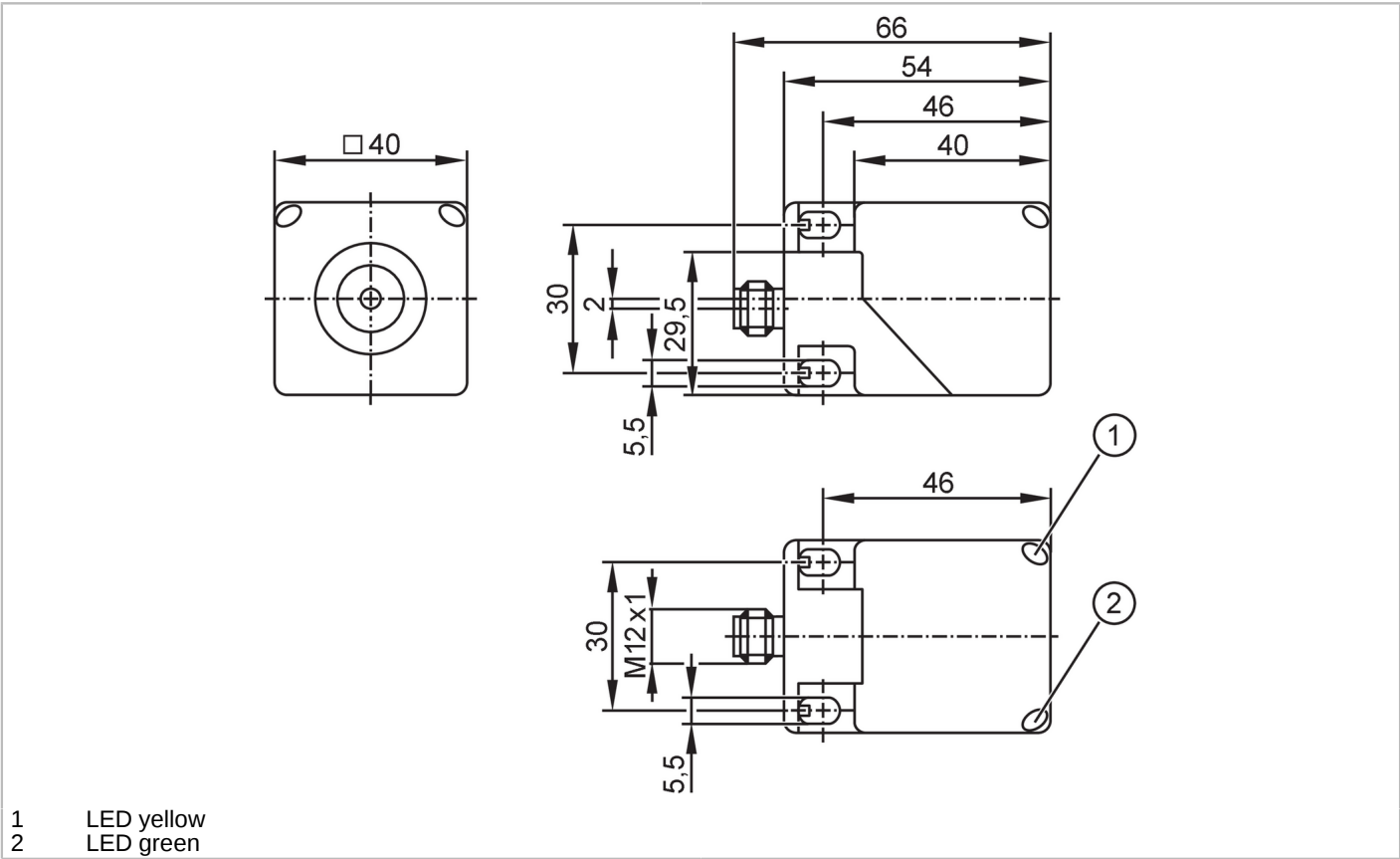


IM5172



Inductive sensor with IO-Link

IMC3020BFRKG/IO/US-100



Product characteristics		
Electrical design		PNP/NPN; (configurable)
Output function		normally open / closed; (selectable)
Communication interface		IO-Link
Housing		rectangular
Dimensions	[mm]	40 x 40 x 54
Electrical data		
Operating voltage	[V]	10...30 DC
Current consumption	[mA]	< 20
Protection class		III
Reverse polarity protection		yes
Outputs		
Electrical design		PNP/NPN; (configurable)
Output function		normally open / 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
Short-circuit protection		yes
Overload protection		yes

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Monitoring range		
Switch point IO-Link	[mm]	3.9...19.6; (configurable)
Measuring range IO-Link	[mm]	2.1...21
Accuracy / deviations		
Correction factor		steel: 1 / stainless steel: 0.8 / brass: 0.4 / aluminum: 0.4 / copper: 0.3
Hysteresis	[% of Sr]	3...15
Linearity error of analog output	[%]	± 2 %; (of the final value of the measuring range)
Repeatability analog output	[%]	± 1 %; (of the final value of the measuring range)
Temperature coefficient		± 0,2 %/K; (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
Profiles	Smart Sensor - SSP 0	Generic Profiled Sensor
	Function	Device identification
	Function	Multiple switching signal
	Function	Process data variable
	Function	Device diagnosis
	Function	Teach channel
SIO mode		yes
Required master port class		A
Min. process cycle time	[ms]	3
Supported DeviceIDs	Type of operation	DeviceID
	default	791
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
Embedded software included		yes
UL approval	Ta	-25...70 °C
	Enclosure type	Type 1
	voltage supply	Limited Voltage/Current
	UL approval number	A009
	File number UL	E174191
Mechanical data		
Weight	[g]	147
Housing		rectangular
Sensing face		5 positions selectable

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Mounting	flush mountable
Dimensions [mm]	40 x 40 x 54
Material	housing: PA

Displays / operating elements

Display	Power	LED, green
	SIO mode	
	output stage supplied with current	LED, yellow lights
	IO-Link mode	
	target in measuring range	LED, yellow lights

Remarks

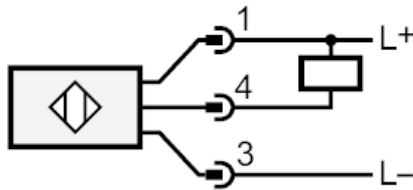
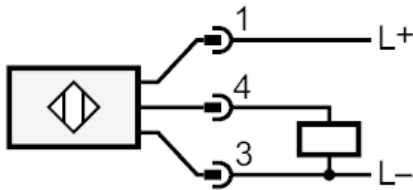
Pack quantity	1 pcs.
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Electrical connection - plug

Connector: 1 x M12; coding: A; Contacts: 3; Moulded body: brass, white bronze coated



Connection



4: OUT / IO-Link
Factory setting : PNP / normally open