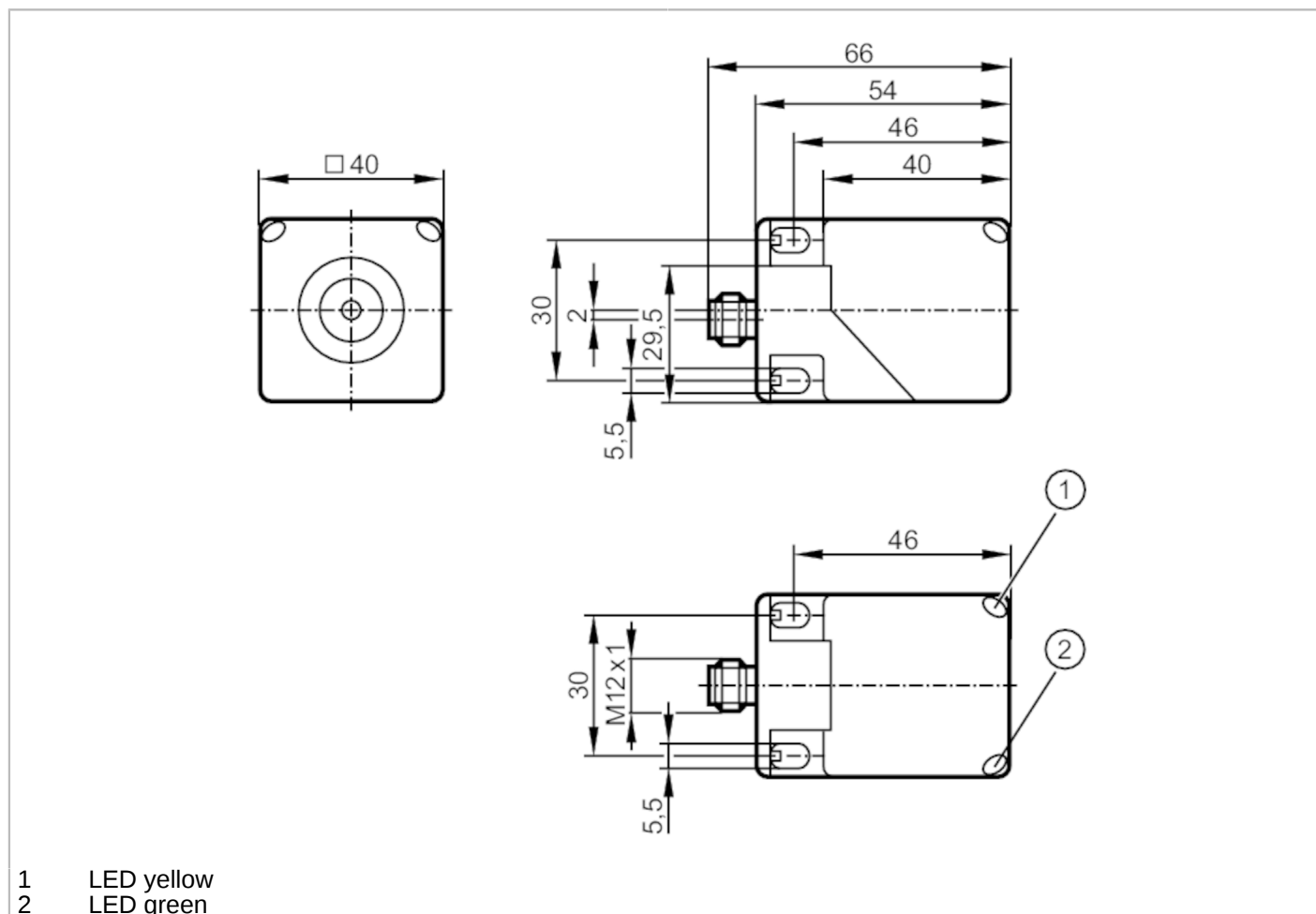


# IM5140



## Inductive analogue sensor with IO-Link

IMC4015A2PKG/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

# IM5140



## Inductive analogue sensor with IO-Link

IMC4015A2PKG/IO/US

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
Analogue voltage output [V]	0...10; (linear; gradient: 0,714 V/mm; for frontal approach and for target made of mild steel: 45 x 45 x 1 mm)
Min. load resistance [ $\Omega$ ]	2000
Short-circuit protection	yes
Overload protection	yes
Detection zone	
Measuring range [mm]	1...15
Switch point IO-Link [mm]	2.37...13.99
Accuracy / deviations	
Correction factor	steel: 1 / stainless steel: 0.9 / brass: 0.4 / aluminium: 0.4 / copper: 0.3
Hysteresis [% of Sr]	3...15
Note on hysteresis	parameterisable
Linearity error of analogue output [%]	$\pm 2$ ; (of the final value of the measuring range)
Repeatability analogue output [%]	$\pm 2$ ; (of the final value of the measuring range)
Temperature coefficient [%/K vom MEW]	$\pm 0,15$
Temperature drift [% vom MEW]	$\pm 5$
Response times	
Response time [ms]	< 20

# IM5140



## Inductive analogue sensor with IO-Link

IMC4015A2PKG/IO/US

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	
	Type of operation	DeviceID
Supported DeviceIDs	Default	1206
	Note	
For further information please see the IODD PDF file under "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]	230	
UL approval	Ta	-25...70 °C
	Enclosure type	Type 1
	voltage supply	Limited Voltage/Current
	UL Approval no.	A026
	File number UL	E174191
Mechanical data		
Weight [g]	152.5	
Housing	rectangular	
Sensing face	5 positions selectable	
Mounting	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

# IM5140



## Inductive analogue sensor with IO-Link

IMC4015A2PKG/IO/US

### Remarks

Pack quantity

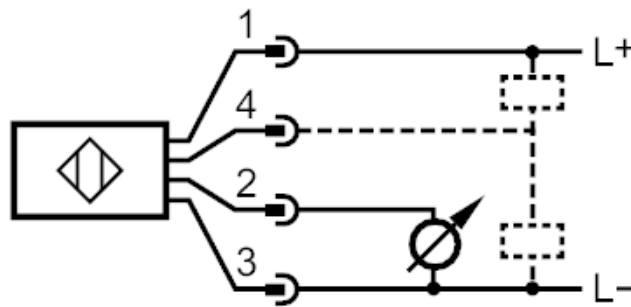
1 pcs.

### Electrical connection - plug

Connector: 1 x M12



### Connection



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