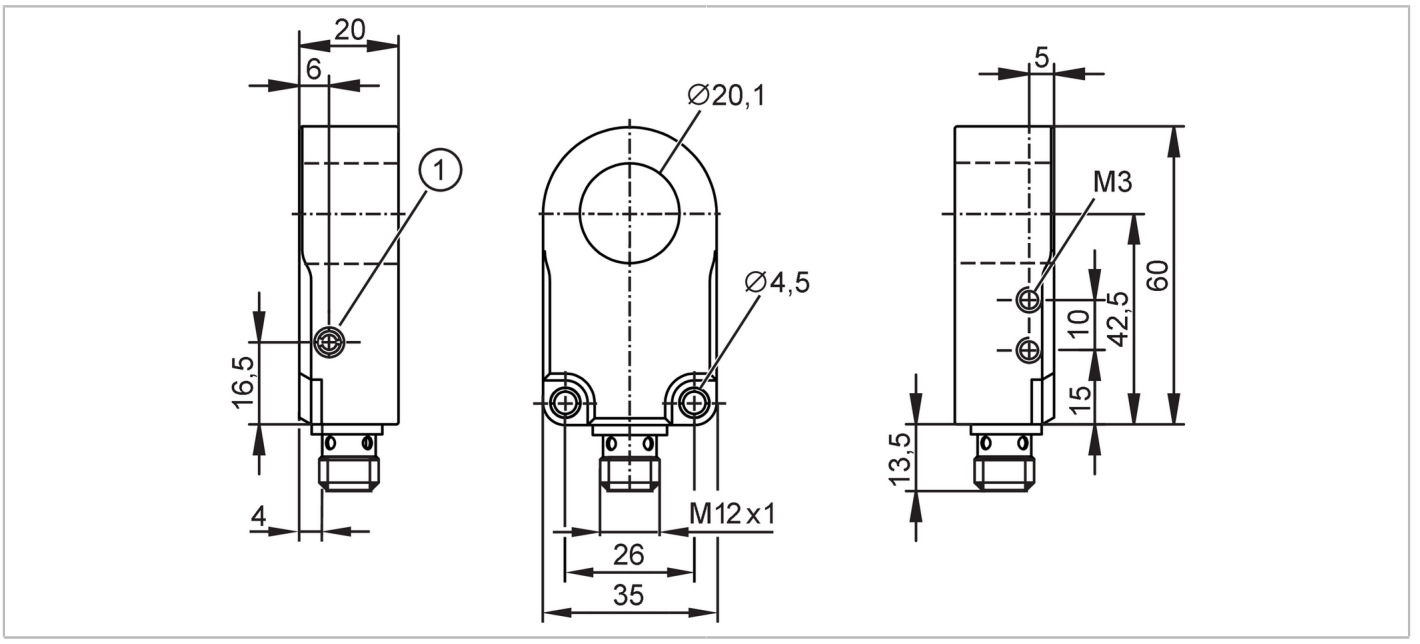
I7R209

Inductive ring sensor

I7R3020-FRKG/IO/US-104



Product characteristics		
Electrical design		PNP/NPN; (selectable)
Output function		normally open / normally closed; (selectable)
Communication interface		IO-Link
Housing		circular
Dimensions	[mm]	60 x 35 x 20
Application		
Operating principle		static; dynamic; (selectable)
Application		Industrial applications / factory automation
Electrical data		
Operating voltage	[V]	10...30 DC
Current consumption	[mA]	< 30
Protection class		III
Reverse polarity protection		yes
Outputs		
Electrical design		PNP/NPN; (selectable)
Output function		normally open / normally closed; (selectable)
Max. voltage drop switching output DC	[V]	2
Permanent current rating of switching output DC	[mA]	100
Factory setting		Electrical design: PNP
		Output function: normally open
		Operating principle: static
Short-circuit protection		yes
Overload protection		yes

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Detection zone			
Max. part speed	[m/s]	35	
Dynamic			
Resolution of steel ball (diameter)	[mm]	1	
Static			
Resolution of steel ball (diameter)	[mm]	2.5	
Response times			
Pulse stretching	[ms]	0...60000	
Pulse stretching adjustable		yes	
Interfaces			
Communication interface		IO-Link	
Transmission type		COM2 (38,4 kBaud)	
IO-Link revision		1.1	
SDCI standard		IEC 61131-9	
Profiles		Smart Sensor - SSP 4.1.1	Measuring and Switching Sensor, 1 channel
		Common - I&D	Identification and Diagnosis
		Extension	Teach dynamic
		Extension	Quantity detection, switches when value exceeds the setpoint
		Function	Locator
		Function	ProductURI
SIO mode		yes	
Required master port type		A	
Min. process cycle time	[ms]	3.2	
Supported DeviceIDs		**Type of operation**	**DeviceID**
		default	1764
Operating conditions			
Ambient temperature	[°C]	-25...70	
Protection		IP 67	
Tests / approvals			
MTTF	[years]	658	
UL approval		Ta	-25...70 °C
		Enclosure type	Type 4X (indoor use only) / 12 and 13
		voltage supply	Class 2
		File number UL	E174191
Mechanical data			
Weight	[g]	58.4	
Housing		circular	
Dimensions	[mm]	60 x 35 x 20	
Inside diameter	[mm]	20.1	
Materials		housing: PA; ring: POM	
Displays / operating elements			
Display		switching status	4 x LED, yellow

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Remarks

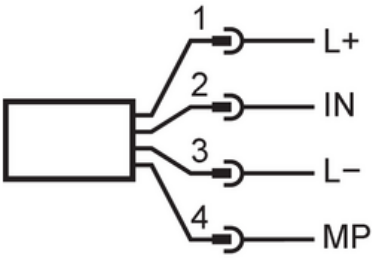
Pack quantity	1 pcs.

Electrical connection - plug

Connector: 1 x M12; coding: A; Contacts: 4



Connection



1	L+	
2	IN	DI (Teach)
3	L-	
4	MP	DO (NO/NC), IO-Link

DI: digital input; DO: digital output; MP: multi-function connection; NC: normally closed; NO: normally open