

1) Sensing surface, 2) Clear zone, 3) Cable length see text, 4) LED function indicator, 5) Tightening torque



### Basic features

Antenna type	round
Approval/Conformity	CE cULus WEEE
EN 55022	Size 1, Cl. A

### Display/Operation

IO-Link active	Green LED, flashing
Power (ON)	Green LED

### Electrical connection

Bending radius min., fixed cable	5 x D
Bending radius min., flexible cable	10 x D
Cable diameter D	5.40 mm
Cable length L	0.5 m
Cable, bending cycles min.	2 million
Connection	M12x1-Male, 4-pin, A-coded
Connection type	Connector, 0.50 m, PU

### Electrical data

Current consumption max. at 24 V DC	150 mA
EN 300330-1	Power Class 5
Operating voltage $U_b$	18...30 VDC Supports only LPS/ Class 2
Residual ripple max.	1.3 Vpp

### Environmental conditions

Ambient temperature	0...70 °C
Cable temperature, drag chain	-25...60 °C
Cable temperature, fixed routing	-50...80 °C
Continuous shock load	yes
EN 60068-2-27, Shock	yes
EN 60068-2-32 Free fall	yes
EN 60068-2-6, Vibration	yes
Protection degree	IP67
Storage temperature	-20...85 °C

## Functional Characteristics

<b>Supported data carrier types</b>	DIN
	ISO
	14443
	DIN ISO 15693

## Material

<b>Housing material</b>	Brass, Interface aluminum, nickel plated
<b>Housing material, surface protection</b>	nickel plated
<b>Material jacket</b>	PU

## Mechanical data

<b>Application weight</b>	220.00 g
<b>Dimension</b>	Ø 18 x 45.5 mm
<b>Installation</b>	metal-free (clear zone)
<b>Size</b>	M18x1

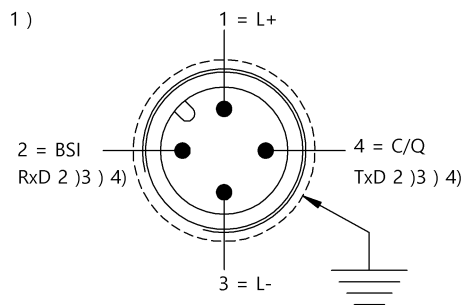
## Output/Interface

<b>IO-Link version</b>	1.1
<b>Interface</b>	IO-Link 1.1
<b>Process data IN</b>	10 bytes

## Remarks

For basic equipment see IO-Link catalog.  
 When installing, the technical standards and regulations of the corresponding countries must be observed.  
 For installation in metal: Observe clear zone.  
 Order accessories separately.  
 Values are under rated conditions unless otherwise specified.  
 Use included nuts and fastening clamps for installation.

## Connector Drawings



- 1 ) View towards connector
- 2 ) BSI service interface
- 3 ) Do not connect power
- 4 ) (Only for Balluff Service)

## Help Views





**BIS M-402-XXX-002-**

passende Datenträger Appropriate data carriers	BIS M-130-03/L	BIS M-130-07/L	BIS M-132-03/L- HT	BIS M-143-02/A- XX	
Abstand Datenträger zu Metall in mm ( a ) Data carrier distance to metal in mm	>25	>25	>25	>0	
Freizone Datenträger in mm ( b ) Data carrier clear zone in mm	>100	>100	>100	>100	
Schreibabstand in mm Write distance in mm	0-9	0-9	0-20	0-9	
Lesebestand in mm Read distance in mm	0-9	0-9	0-20	0-9	
Versatz in mm bei Abstand von	±6	±6	±12	±6	
	5	±6	±12	±6	
	7	±5	±12	±6	
	9	±1	±12	±4	
	10		±12		
	15		±10		
	17		±10		
	20		±4		
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