

1) Sensing surface, 2) Read/write axis, 3) Clear zone, 4) LED (Power), 5) LED (CP), 6) Data carrier, 7) Tightening torque



### Basic features

<b>Antenna type</b>	Rod
<b>Approval/Conformity</b>	CE FCC Part 15 IC RSS-210 WEEE

### Display/Operation

<b>Function indicator</b>	CP (Code tag present), LED yellow Power (ON), LED green Operating, LED green flashing
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### Electrical connection

<b>Connection</b>	M12x1-Male, 4-pin, A-coded
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### Electrical data

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

### Environmental conditions

<b>Ambient temperature</b>	0...70 °C
<b>Continuous shock load</b>	yes
<b>EN 60068-2-27, Shock</b>	yes
<b>EN 60068-2-32 Free fall</b>	yes
<b>EN 60068-2-6, Vibration</b>	yes
<b>Protection degree</b>	IP67
<b>Storage temperature</b>	-20...85 °C

## Functional Characteristics

Supported data carrier types	DIN ISO 14443 DIN ISO 15693
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## Material

Housing material	Zinc, Die casting, nickel plated
Housing material, surface protection	nickel plated

## Mechanical data

Application weight	360.00 g
Dimension	40 x 15 x 105 mm
Installation	metal-free (clear zone)

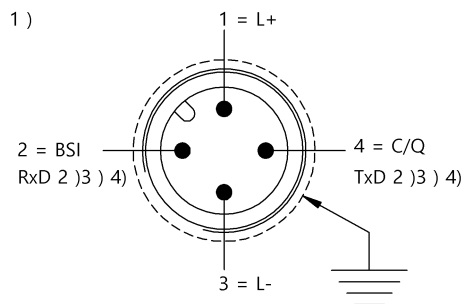
## Output/Interface

IO-Link version	1.1
Interface	IO-Link 1.1
Process data IN	10 bytes

## Remarks

For basic equipment: Accessories see [www.balluff.com](http://www.balluff.com)  
Values are under rated conditions unless otherwise specified.  
For installation in metal: Observe clear zone.

## Connector Drawings



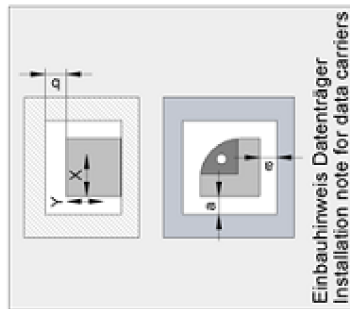
- 1 ) View towards connector
- 2) BSI service interface
- 3) Do not connect power
- 4) (Only for Balluff Service)

## Help Views

**BIS M-458-045-001-**

passende Datenträger Appropriate data carriers	BIS M-191-02/A				
Freizone Datenträger in mm ( a ) Data carrier clear zone in mm	>27	>27			
Freizone Datenträger in mm ( b ) Data carrier clear zone in mm	>27	>27			

Schreibabstand in mm Write distance in mm	0-25	0-25			
Leseabstand in mm Read distance in mm	0-25	0-25			
Versatz in mm bei Abstand von Offset in mm at distance	X	Y			
	0	±30	±20		
	5	±30	±20		
	10	±30	±20		
	15	±25	±15		
	20	±15	±10		
	25	±5	±5		
	27				
	35				
	40				
	42				
	50				
	57				
	60				
	65				
	70				
	75				



**BIS M-458-045-001-**

	BIS M-150-02/A	BIS M-151-02/A	BIS M-150-02/A	BIS M-151-02/A	BIS M-151-02/A
passende Datenträger					
Appropriate data carriers					
Freizone Datenträger in mm ( a )	>200	>200	>200	>200	>200
Data carrier clear zone in mm	>200	>200	>200	>200	>200
Freizone Datenträger in mm ( b )	>200	>200	>200	>200	>200
Data carrier clear zone in mm	>200	>200	>200	>200	>200
Datenträger Metall-Montagefläche 40x22	0-38	0-38	0-38	0-38	0-38
Data carrier metal mounting surface 40x22	0-38	0-38	0-38	0-38	0-38
Datenträger Metall-Montagefläche ≥ 200x200					
Data carrier metal mounting surface ≥ 200x200					
Schreibabstand in mm	0-38	0-38	0-42	0-42	0-34
Write distance in mm	0-38	0-38	0-42	0-42	0-34
Leseabstand in mm	0-38	0-38	0-42	0-42	0-34
Read distance in mm	0-38	0-38	0-42	0-42	0-34
Versatz in mm	X	Y	X	Y	Y
bei Abstand von	0 ±43 ±18	±40 ±20	±45 ±21	±45 ±21	±35 ±17
	5 ±43 ±18	±40 ±20	±45 ±21	±45 ±21	±35 ±17
	10 ±43 ±18	±40 ±20	±45 ±21	±45 ±21	±35 ±17
	15 ±40 ±17	±35 ±18	±43 ±20	±43 ±20	±33 ±15
	20 ±40 ±17	±35 ±18	±43 ±20	±43 ±20	±33 ±15
	30 ±35 ±15	±30 ±15	±40 ±18	±40 ±18	±28 ±13
	34 ±18 ±5	±10 ±5	±24 ±12	±24 ±12	±10 ±5
	38 ±18 ±5	±10 ±5	±24 ±12	±24 ±12	
	40		±15 ±8		
	42				
	50				
	60				
	70				
	80				
	90				
	100				

