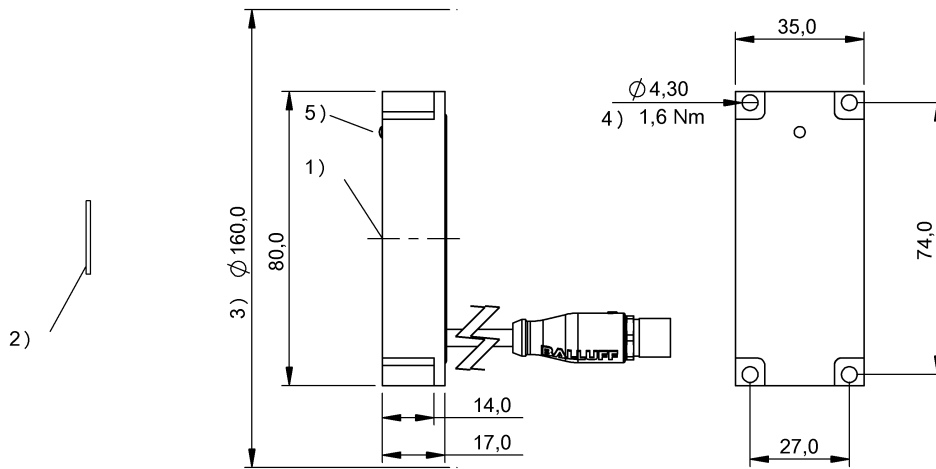


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1) Sensing surface 2) Data carrier 3) Clear zone 4) Tightening torque 5) LED Power



Display/Operation

Function indicator	LED yellow TP (Tag Present) LED green Power (ON)
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Electrical connection

Cable length	0.3 m
Connection	M12x1-Connector, 4-pole, A-coded
Connection type	Connector, 0.30 m

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

Environmental conditions

Ambient temperature	0...70 °C
EN 60068-2-27, Continuous shock load	yes
EN 60068-2-27, Shock	yes
EN 60068-2-6, Vibration	yes
Protection type IEC 60529	IP67
Storage temperature	-20...85 °C

Functional safety

EN 60068-2-32 Free fall	yes
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General data

Antenna type	round
Approval/Conformity	CE UL-FILE E227256, Vol.X1, BIS EN 55022
	Size 1, Cl. A

Material

Housing material	ABS
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Mechanical data

Application weight	73.00 g
Dimension	35 x 17 x 80 mm
Installation	with clear zone (in steel)

Output/Interface

Interface	IO-Link 1.1
IO-Link version	1.1

Range/Distance

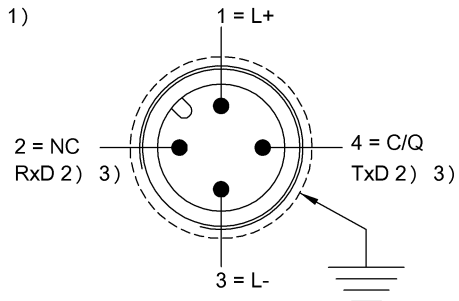
Residual ripple max.	1.3 Vpp
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Remarks

When installing, the technical standards and regulations of the corresponding countries must be observed.
Values are under rated conditions unless otherwise specified.
Order accessories separately.
For installation in metal: Observe clear zone.

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Connector view



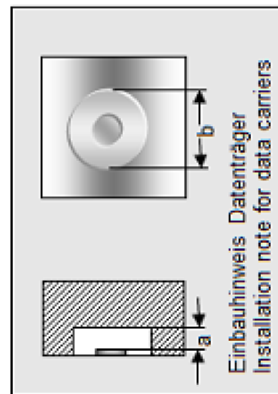
1) View towards connector 2) Service 3) (Only for Balluff Service)

Additional View

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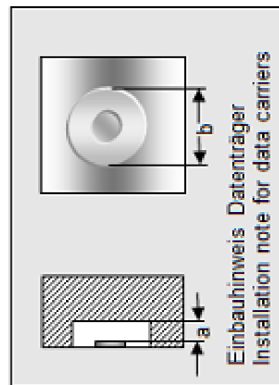
	BIS M-101-01/L	BIS M-102-01/L	BIS M-105-01/A	BIS M-105-02/A	BIS M-108-02/L
passende Datenträger Appropriate data carriers					
Abstand Datenträger zu Metall in mm (a) Data carrier distance to metal in mm	>25 >10 >5	>50 >15 >10	>20 >5	>20 >5	>25 >0
Freizone Datenträger in mm (b) Data carrier clear zone in mm	>100 >60 >50	>150 >90 >70	>100 >100	>100 >100	>100 >0
Schreibabstand in mm Write distance in mm	0-20 0-15 0-12	0-28 0-20 0-12	0-7 0-6	0-11 0-7	0-28 0-16
Leseabstand in mm Read distance in mm	0-20 0-15 0-12	0-28 0-20 0-12	0-7 0-6	0-11 0-7	0-28 0-16
Versatz in mm bei Abstand von	0 ±14 1 ±10 ±6	±20 ±15 ±6	±7 ±6	±9 ±6	±16 ±10
	5 ±14 ±10 ±6	±20 ±15 ±6	±7 ±6	±8 ±6	±16 ±10
	9 ±14 ±8 ±4	±20 ±15 ±3		±5	±14 ±8
	12 ±10 ±4 ±2	±20 ±13 ±2			±14 ±6
	15 ±10 ±2	±20 ±10			±14 ±6
	16 ±8	±18 ±3			±14 ±4
	18 ±6	±16			±14
	20 ±5	±15			±14
	22	±15			±12
	25	±10			±12
	30				
	32				
	35				
	40				
	43				
	45				
	50				
	52				
	60				
	65				
	70				



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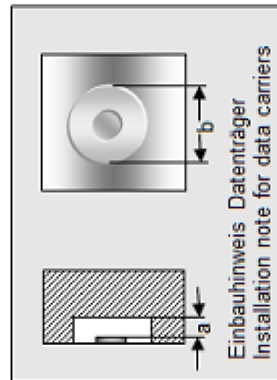
	BIS M-110-02/L	BIS M-111-02/L	BIS M-112-02/L	BIS M-1L4-03/L- D018	
passende Datenträger Appropriate data carriers					
Abstand Datenträger zu Metall in mm (a) Data carrier distance to metal in mm	>25 >10 >5	>25 >10 >5	>50 >15 >10	>25	
Freizone Datenträger in mm (b) Data carrier clear zone in mm	>100 >60 >50	>100 >60 >50	>150 >90 >70	>100	
Schreibabstand in mm Write distance in mm	0-20 0-15 0-8	0-28 0-18 0-10	0-38 0-25 0-15	0-18	
Leseabstand in mm Read distance in mm	0-20 0-15 0-8	0-28 0-18 0-10	0-38 0-25 0-15	0-18	
Versatz in mm bei Abstand von	0 ±12 ±8 ±6 5 ±12 ±8 ±5 9 ±10 ±6	±16 ±10 ±7 ±16 ±10 ±7 ±14 ±8 ±2	±22 ±16 ±13 ±22 ±16 ±13 ±22 ±14 ±10	±11 ±11 ±10	
Offset in mm at distance	12 ±8 ±4 15 ±8 ±2 16 ±5 18 ±5 20 ±5	±14 ±7 ±14 ±6 ±14 ±3 ±14 ±2 ±14	±20 ±13 ±8 ±20 ±12 ±6 ±20 ±10 ±20 ±10 ±20 ±8	±8 ±8 ±2	
	22 25 30 32 35 40 43 45 50 52 60 65 70	±12 ±12 ±12 ±12 ±12 ±12 ±12 ±12 ±12 ±12 ±12 ±12 ±12	±20 ±6 ±20 ±4 ±16 ±10 ±10		



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	BIS M-140-02/A- xx	BIS M-142-02/A- xx	BIS M-143-02/A- xx	BIS M-144-02/A- xx
passende Datenträger Appropriate data carriers				
Abstand Datenträger zu Metall in mm (a) Data carrier distance to metal in mm	>0	>0	>0	>0
Freizone Datenträger in mm (b) Data carrier clear zone in mm	>100	>100	>100	>100
Schreibabstand in mm Write distance in mm	0-22	0-22	0-13	0-22
Leseabstand in mm Read distance in mm	0-22	0-22	0-13	0-22
Versatz in mm bei Abstand von	0 ±13	±13	±10	±13
	5 ±13	±13	±10	±13
	10 ±13	±13	±9	±13
	13 ±11	±11	±5	±11
	15 ±11	±11		±11
	18 ±11	±11		±11
	20 ±7	±7		±7
	22 ±7	±7		±7
	25			
	28			
	30			
	32			
	35			
	40			
	43			
	45			
	50			
	52			
	60			
	65			
	70			



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	BIS M-115-03/A					
passende Datenträger Appropriate data carriers						
Freizone Datenträger in mm (a) Data carrier clear zone in mm	>100					
Freizone Datenträger in mm (b) Data carrier clear zone in mm	>140					
Abstand Datenträger zu Metall in mm (c) Data carrier distance to metal in mm	>25					
Schreibabstand in mm Write distance in mm	0-18	0-18				
Leseabstand in mm Read distance in mm	0-18	0-18				
Versatz in mm bei Abstand von Offset in mm at distance	X Y	X Y				
	0 ±8 ±14	0 ±8 ±14				
	5 ±8 ±14	5 ±8 ±14				
	7 ±8 ±14	7 ±8 ±14				
	10 ±8 ±14	10 ±8 ±14				
	15 ±6 ±14	15 ±6 ±14				
	18 ±6 ±10	18 ±6 ±10				
	20					
	25					
	30					
	35					
	40					
	45					

