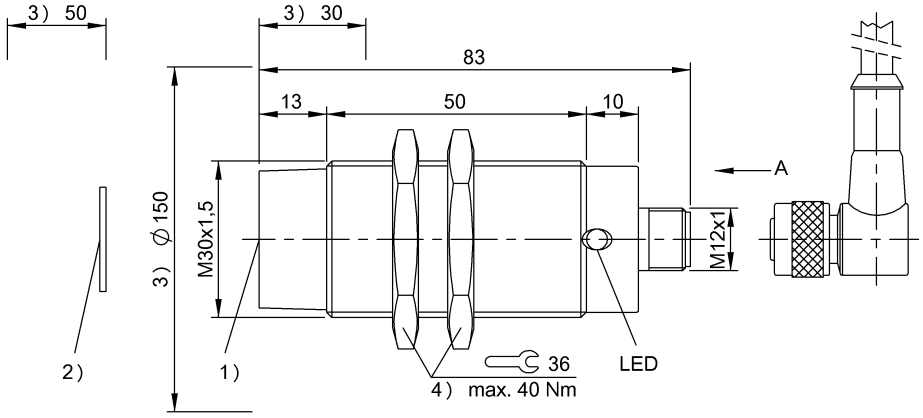
HF (13.56 MHz)

BIS M-400-072-001-07-S4
Order Code: BIS0108



1) Sensing surface, 2) Data carrier, 3) Clear zone, 4) Tightening torque

Basic features

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

Display/Operation

Function indicator	Power (ON) Green LED TP (Tag Present) LED yellow

Electrical connection

Connection	M12x1-Male, 4-pin, A-coded

Electrical data

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

Environmental conditions

Ambient temperature	0...70 °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

Supported data carrier types	DIN ISO 14443 DIN ISO 15693

Material

Housing material	Brass, Nickel-plated brass nuts, nickel plated
Housing material, surface protection	nickel plated

Mechanical data

Application weight	100.00 g
Dimension	Ø 30 x 83 mm
Installation	metal-free (clear zone)
Size	M30x1.5

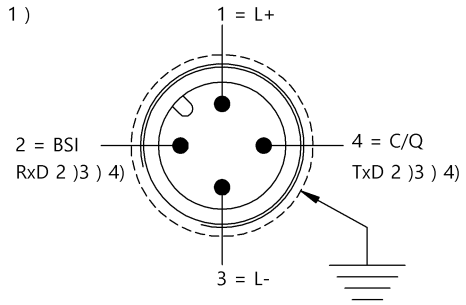
Output/Interface

Interface	IO-Link 1.1
Process data IN	32 bytes

Remarks

When installing, the technical standards and regulations of the corresponding countries must be observed.
Use included nuts for installation.
Values are under rated conditions unless otherwise specified.
For installation in metal: Observe clear zone.
For basic equipment: Accessories see www.balluff.com

Connector Drawings

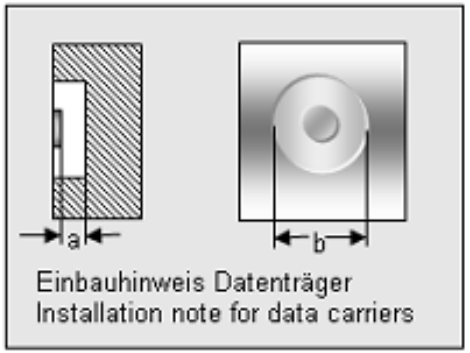


1) View towards connector
2) BSI service interface
3) Do not connect power
4) (Only for Balluff Service)

Help Views

BIS M-400-xxx-001-__

passende Datenträger Appropriate data carriers		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		
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	0	±14	1 ±10	±6	±20	±15	±6	±7	±6		±9	±6		±16	±10	
bei Abstand von	5	±14	±10	±6	±20	±15	±6	±7	±6		±8	±6		±16	±10	
	9	±14	±8	±4	±20	±15	±3				±5			±14	±8	
Offset in mm	12	±10	±4	±2	±20	±13	±2							±14	±6	
at distance	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															



Einbauhinweis Datenträger
Installation note for data carriers

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passende Datenträger Appropriate data carriers	BIS M-110-02/L			BIS M-111-02/L			BIS M-112-02/L			BIS M-132-03/L-HT		BIS M-135-03/L-HT	
Abstand Datenträger zu Metall in mm (**a**)							>50	>15	>10	>25	>0	>50	
Data carrier distance to metal in mm	>25	>10	>5	>25	>10	>5							
Freizone Datenträger in mm (**b**)							>150	>90	>70	>100	>100	>150	
Data carrier clear zone in mm	>100	>60	>50	>100	>60	>50							
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	0-30	0-8	0-42	
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	0-30	0-8	0-42	
Versatz in mm	±12	±8	±6	±16	±10	±7	±22	±16	±13	±18	±8	±30	
bei Abstand von	±12	±8	±5	±16	±10	±7	±22	±16	±13	±18	±8	±30	
Offset in mm at distance	±10	±6	±4	±14	±8	±2	±22	±14	±10	±18	±6	±30	
	±10	±6	±2	±14	±8	±2	±22	±14	±10	±18	±3	±30	
	±10	±6		±14	±8	±2	±22	±14	±10	±18		±30	
	±8	±4		±14	±7	±1	±20	±13	±8	±18		±30	
	±8	±4		±14	±7		±20	±13	±8	±18		±28	
	±8	±2		±14	±6		±20	±12	±6	±18		±28	
	±5			±14	±3		±20	±10		±18		±28	
	±5			±14	±2		±20	±10		±18		±28	
	±5			±14			±20	±8		±18		±28	
				±12			±20	±6		±16		±24	
				±12			±20	±4		±16		±24	
							±16			±5		±24	
							±10					±24	
							±10					±24	
							±5					±5	
												±5	

Einbauhinweis Datenträger
Installation note for data carriers

BALLUFF

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passende Datenträger Appropriate data carriers	BIS M-107-03/L-H200		BIS M-140-02/A-xx		BIS M-142-02/A-xx		BIS M-143-02/A-xx		BIS M-144-02/A-xx	
Abstand Datenträger zu Metall in mm (a) Data carrier distance to metal in mm	>25	>0	>0		>0		>0		>0	
Freizone Datenträger in mm (b) Data carrier clear zone in mm	>100	>100	>100		>100		>100		>100	
Schreibabstand in mm Write distance in mm	0-27	0-13	0-22		0-22		0-13		0-22	
Leseabstand in mm Read distance in mm	0-27	0-13	0-22		0-22		0-13		0-22	
Versatz in mm bei Abstand von	0	±16	±10	±13		±13		±10		±13
	5	±16	±10	±13		±13		±10		±13
	10	±16	±7	±13		±13		±9		±13
Offset in mm at distance	13	±14	±5	±11		±11		±5		±11
	15	±14		±11		±11				±11
	18	±14		±11		±11				±11
	20	±14		±7		±7				±7
	22	±12		±7		±7				±7
	25	±12								
	27	±5								
	30									
	32									
	35									
	40									
	43									
	45									
	50									
	52									
	60									
	65									
	70									

Einbauhinweis Datenträger
Installation note for data carriers