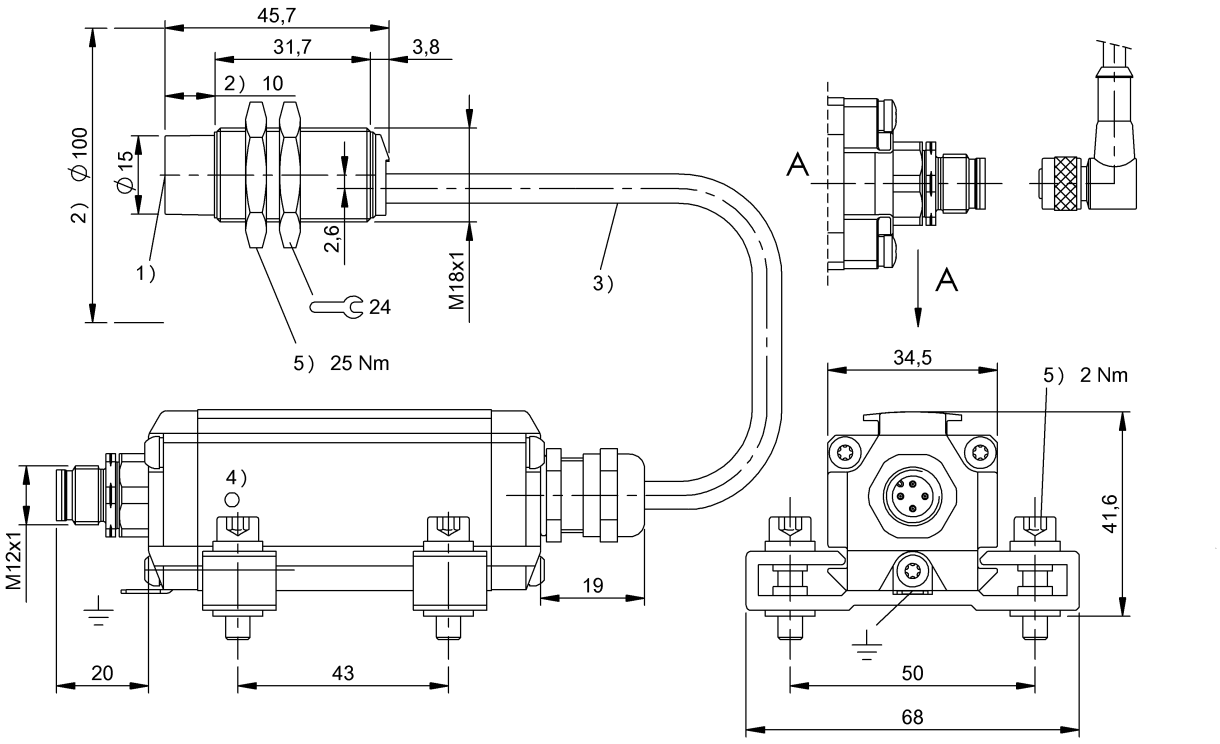
HF (13.56 MHz)

BIS M-402-045-002-07-S4
Order Code: BIS00LW



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 UKCA cULus WEEE MIC FCC IC (Radio) KC NBTC IMDA
EN 55022	Gr. 1, Cl. A
Principle of operation	Read/write device

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 mil.
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
Operating voltage Ub	18...30 VDC Supports only LPS/ Class 2
Residual ripple max.	1.3 Vpp
Transfer rate	COM2 (38.4 kBaud)

BIS M-402-045-002-07-S4
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Environmental conditions

Altitude max.	2000 m
Ambient temperature	0...70 °C
Area of operation	Indoor
Cable temperature, drag chain	-25...60 °C
Cable temperature, fixed routing	-50...80 °C
Contamination scale	2
Continuous shock load	yes
EN 60068-2-27, Shock	yes
EN 60068-2-32 Free fall	yes
EN 60068-2-6, Vibration	yes
IP rating	IP67
Relative humidity	0…90 %, non-condensing
Storage temperature	-20...85 °C

Functional Characteristics

Supported data carrier types	DIN ISO 14443 DIN ISO 15693

IO-Link

IO-Link Profil IDs	N/A

Interface

Interface	IO-Link 1.1
Process data IN	10 bytes

Material

Housing material	Brass, Interface aluminum, nickel-plated
Housing material, surface protection	nickel-plated
Material jacket	PU

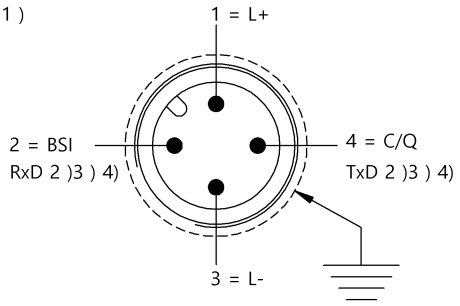
Mechanical data

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

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.
This device is intended to be supplied by a UL-listed or CSA-certified power supply unit with "Class 2" or LPS power source.
The devices must be installed permanently.
1. Determine a suitable mounting position.
2. Fasten the device with suitable mounting material.
The device can be cleaned with a slightly damp cloth.
Regularly check the function of the device and all associated components through visual and functional tests.
- Shut down the device in the event of malfunctions.
- Secure the system against unauthorized use.
- Check fastening and tighten if necessary.
The product is maintenance-free.

Connector Drawings

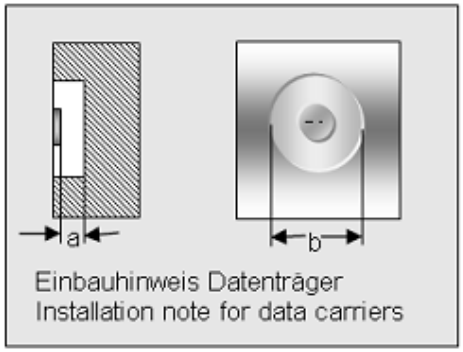


1) View towards connector
2) BSI service interface
3) Do not connect power
4) (Only for Balluff Service)

Help Views

BIS M-402-xxx-002-

passende Datenträger Appropriate data carriers		BIS M-105-01/A			BIS M-105-02/A			BIS M-122-01/A			BIS M-122-02/A			BIS M-110-02/L		
Abstand Datenträger zu Metall in mm (**a**) Data carrier distance to metal in mm		>10	>0		>10	>0		>10	>0		>10	>0		>25		
Freizone Datenträger in mm (**b**) Data carrier clear zone in mm		>60	>0		>60	>0		>60	>0		>60	>0		>80		
Schreibabstand in mm Write distance in mm		0-6	0-4		0-8	0-6		0-5	0-4		0-8	0-5		0-15		
Leseabstand in mm Read distance in mm		0-6	0-4		0-8	0-6		0-5	0-4		0-8	0-5		0-15		
Versatz in mm	0	±3	±3		±4	±3		±3	±2		±4	±3		±7		
bei Abstand von	5	±2			±3	±2		±2			±3	±2		±7		
	9													±5		
Offset in mm	12													±3		
at distance	15													±3		
	16															
	18															
	20															
	22															
	25															
	30															
	32															
	35															
	40															
	43															
	45															
	50															
	52															
	60															
	65															
	70															



Einbauhinweis Datenträger
Installation note for data carriers

BALLUFF

BIS M-402-xxx-002-

passende Datenträger Appropriate data carriers	BIS M-101-01/L	BIS M-111-02/L				
Abstand Datenträger zu Metall in mm (**a**) Data carrier distance to metal in mm	>25	>25				
Freizone Datenträger in mm (**b**) Data carrier clear zone in mm	>100	>100				
Schreibabstand in mm Write distance in mm	0-14	0-18				
Leseabstand in mm Read distance in mm	0-14	0-18				
Versatz in mm bei Abstand von	0 ±10	±12				
	5 ±10	±12				
	10 ±9	±11				
Offset in mm at distance	14 ±5	±10				
	15	±10				
	18	±5				
	20					
	25					
	30					
	35					
	40					
	45					
	50					
	55					
	60					
	65					
	70					
	75					
	80					
	85					
	90					

Einbauhinweis Datenträger
Installation note for data carriers

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	
Leseabstand in mm Read distance in mm	0-9	0-9	0-20	0-9	
Versatz in mm bei Abstand von	0 ±6	±6	±12	±6	
	5 ±6	±6	±12	±6	
	7 ±5	±5	±12	±6	
Offset in mm at distance	9 ±1	±1	±12	±4	
	10		±12		
	15		±10		
	17		±10		
	20		±4		
	22				
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	52				
	60				
	65				
	70				

Einbauhinweis Datenträger
Installation note for data carriers