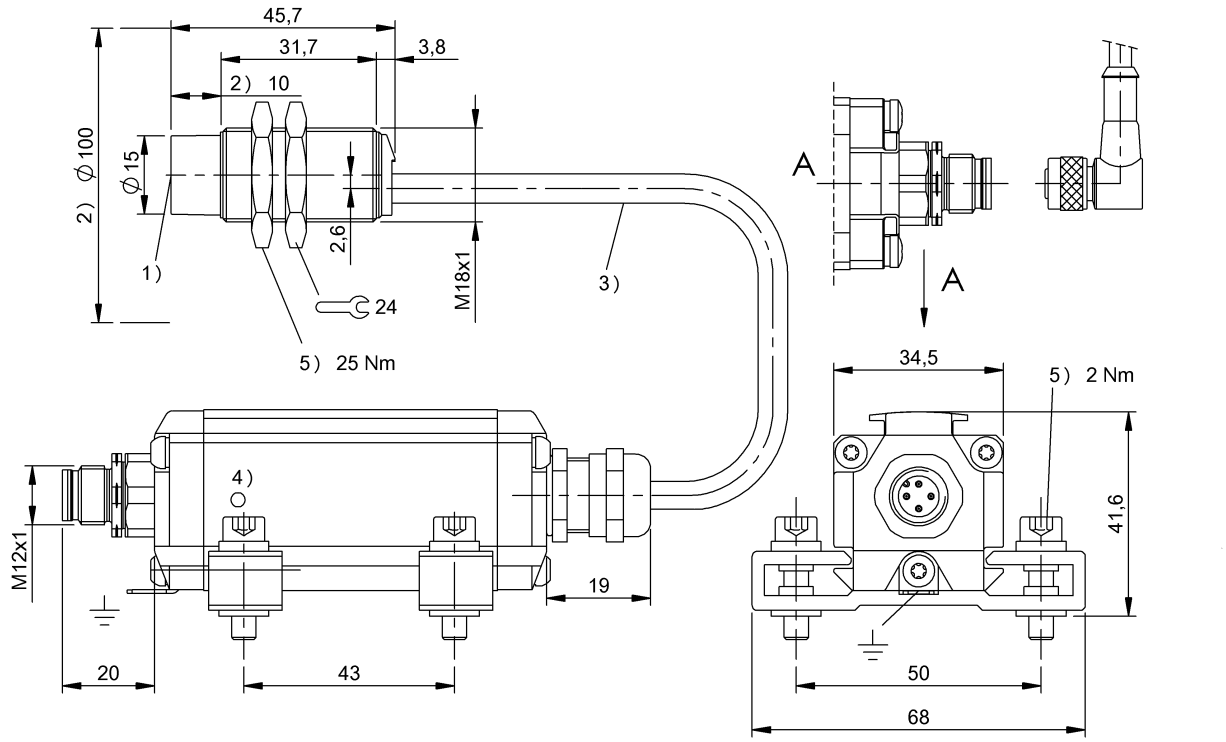
HF (13.56 MHz)

BIS M-402-072-002-07-S4
Order Code: BIS0105



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 EAC WEEE
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
EN 300330-1	Power Class 5
Operating voltage Ub	18...30 VDC Supports only LPS/ Class 2
Residual ripple max.	1.3 Vpp
Transfer rate	COM2 (38.4 kBaud)

HF (13.56 MHz)

BIS M-402-072-002-07-S4
Order Code: BIS0105

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
IP rating	IP67
Storage temperature	-20...85 °C

Functional Characteristics

Supported data carrier types	DIN ISO 14443 DIN ISO 15693

Interface

Interface	IO-Link
Process data IN	32 bytes

Material

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

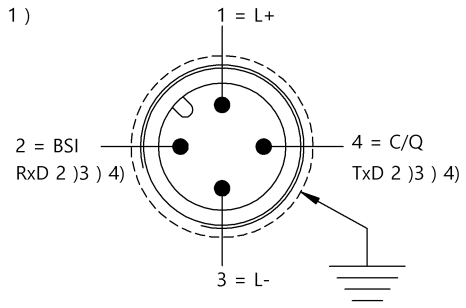
Mechanical data

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

Remarks

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

Connector Drawings

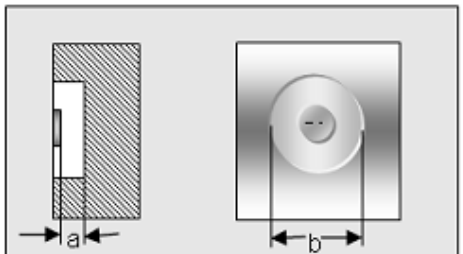


1) View towards connector
2) BSI service interface
3) Do not connect power
4) (Only for Balluff Service)

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															



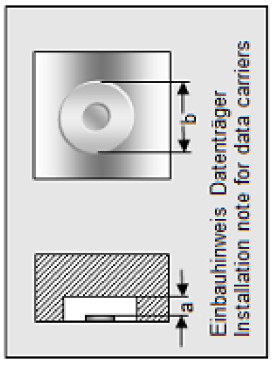
Einbauhinweis Datenträger
Installation note for data carriers

BIS M-402-072-002-07-S4
Order Code: BIS0105

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				
	25				
	30				
	32				
	35				
	40				
	43				
	45				
	50				
	52				
	60				
	65				
	70				

Einbauhinweis Datenträger
Installation note for data carriers