

High transmission speed for large volumes of data

RFID SYSTEM HF (13.56 MHZ) BIS M

The RFID system BIS M supports global ISO standards and scores with a high transmission speed for large volumes of data. Through various combination options of data carriers and read/write heads, the system can be used for a variety of applications. The system is ideal, for example, in close-range parts tracking or for applications in production control such as palletizing or recording data on the workpiece.

Features

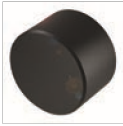
- 4-pin standard wiring and IO-Link components
- In combination with passive data carriers of average ranges up to a max. of 400 mm
- Seamless integration in applications through global RFID standards ISO 15693 and ISO 14443A
- All bus systems commonly used on a global basis available
- Easy, fast commissioning
- Balluff high-speed components (up to eight times faster than ISO 15693)
- Customer-specific developments
- A variety of accessories for an easy integration available at all places of use



	BIS018Y BIS M-113-03/L	
Product Group	HF (13.56 MHz)	
Dimension	Ø 4.35 x 3.6 mm	
Antenna type	round	
UID serial number, read-only	8 Byte	
Memory type	EEPROM	
Supported data carrier types	DIN ISO 15693	
User data, read/write	112 Byte	
Storage temperature	-40...85 °C	
Storage temperature temporary	—	
Ambient temperature	-40...85 °C	
Housing material	Epoxy-resin/fiberglass PVC	
Protection degree	IPx8	
Installation	metal-free (clear zone) on metal flush in metal	
Approval/Conformity	CE	
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Suitable read/write head with max. read/write working distance

Installation	flush in metal*	on metal	metal-free (clear zone)	
BIS M-302				
BIS M-305				
BIS M-402-xxx-002				
BIS M-402-xxx-007				
BIS M-410				
BIS M-411				
BIS M-449		0-5.5	0-6	
BIS M-451				
BIS VM-330				
BIS VM-343-401				
BIS VM-346-401				
BIS VM-348-401				
BIS VM-349-401		0-5.5	0-6	
Dimensions in mm				
* Installation on request				



	BIS00UC BIS M-116-03/A	BIS00UE BIS M-116-08/A	BIS00YL BIS M-130-03/L
	HF (13.56 MHz)	HF (13.56 MHz)	HF (13.56 MHz)
	Ø 6 x 1 mm	Ø 6 x 1 mm	Ø 7.9 x 4.9 mm
	round	round	round
	8 Byte	8 Byte	8 Byte
	EEPROM	EEPROM	EEPROM
	DIN ISO 15693	DIN ISO 14443	DIN ISO 15693
	112 Byte	160 Byte	112 Byte
	-20...90 °C	-20...90 °C	-40...85 °C
	—	—	—
	0...50 °C	0...50 °C	-20...85 °C
	Epoxy-resin/fiberglass	Epoxy-resin/fiberglass	ABS, black
	IP67	IP67	IP68
	metal-free (clear zone) on metal flush in metal	metal-free (clear zone) on metal	metal-free (clear zone) on metal flush in metal
	CE	CE	CE
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	flush in metal	on metal	metal-free (clear zone)	flush in metal	on metal*	metal-free (clear zone)	flush in metal	on metal	metal-free (clear zone)
			0-7			0-7			
		0-4	0-7.5						
			0-3			0-3			0-9
									0-17
									0-20
	0-2	0-3	0-4.5				0-2	0-5.5	0-6
	1.3-2.5	0-4	0-6.5						
	0-2	0-3	0-4.5				0-2	0-5.5	0-6
			0-3.5			0-3.5	0-3	0-6	0-6.5
			0-3.5			0-3.5	0-3	0-6	0-6.5
	0-2	0-3	0-5						
	1.3-2.5	0-4	0-6.5						



	BIS00YJ BIS M-130-10/L	
Product Group	HF (13.56 MHz)	
Dimension	Ø 7.9 x 4.9 mm	
Antenna type	round	
UID serial number, read-only	4 Byte	
Memory type	EEPROM	
Supported data carrier types	DIN ISO 14443	
User data, read/write	736 Byte	
Storage temperature	-40...85 °C	
Storage temperature temporary	—	
Ambient temperature	-20...85 °C	
Housing material	ABS, black	
Protection degree	IP68	
Installation	metal-free (clear zone) on metal flush in metal	
Approval/Conformity	CE	
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Suitable read/write head with max. read/write working distance

Installation	flush in metal	on metal	metal-free (clear zone)	
BIS M-302				
BIS M-304				
BIS M-305				
BIS M-307		0-7	0-5	
BIS M-400-xxx-001				
BIS M-400-xxx-002				
BIS M-400-xxx-401				
BIS M-402-xxx-002			0-4.5	
BIS M-402-xxx-004				
BIS M-404-xxx-401			0-6.5	
BIS M-408-045-001			0-6	
BIS M-410			0-6.5	
BIS M-411			0-2	
BIS M-414	0-1	0-3		
BIS M-449				
BIS VM-305				
BIS VM-306				
BIS VM-307	0-7		0-5	
BIS VM-330	0-1	0-3	0-2	
BIS VM-332				
BIS VM-333				
BIS VM-343-401	0-1.5	0-4	0-2.5	
BIS VM-344-401				
BIS VM-345-401				
BIS VM-346-401	0-1.5	0-4	0-2.5	
BIS VM-348-401				
BIS VM-349-401				
Dimensions in mm				



BIS00YK BIS M-130-07/L	BIS01A0 BIS M-122-21/A	BIS0048 BIS M-122-01/A
HF (13.56 MHz)	HF (13.56 MHz)	HF (13.56 MHz)
Ø 7.9 x 4.9 mm	Ø 10 x 4.5 mm	Ø 10 x 4.5 mm
round	round	round
8 Byte	8 Byte	4 Byte
EEPROM	EEPROM	EEPROM
DIN ISO 15693	—	DIN ISO 14443
992 Byte	32 Byte	752 Byte
-40...85 °C	-25...85 °C	-25...85 °C
—	—	—
-20...85 °C	-25...70 °C	-25...70 °C
ABS, black	PA 12, PU potting	PA 12, PU potting
IP68	IP67	IP67
metal-free (clear zone) on metal flush in metal	metal-free (clear zone) on metal flush in metal	metal-free (clear zone) flush in metal
CE	CE	CE
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flush in metal	on metal	metal-free (clear zone)	flush in metal	on metal	metal-free (clear zone)	flush in metal	on metal	metal-free (clear zone)
			0-5.5		0-7.5	0-5		0-7
			0-3.5		0-5.5	0-4		0-5
			0-3.5		0-5.5	0-4		0-5
	0-8	0-10	0-3.5		0-5.5	0-4		0-5
			0-5.5		0-11.5			0-9.5
			0-3.5		0-4.5	0-4		0-5
					0-7.5			
		0-9	0-3.5		0-6.5	0-4		0-5
			0-3.5		0-6.5	0-4		0-5
			0-2	0-4	0-4.5			
		0-13		0-7.5	0-9.5			
		0-12						
		0-13						
0-2	0-4	0-4.5	0-2	0-3.5	0-4			
			0-4.5	0-6.5	0-6.5			
			0-3.5		0-5.5	0-4		0-5
			0-3.5			0-4		
0-8		0-10	0-3.5		0-5.5	0-4		0-5
0-2	0-4	0-4.5	0-2	0-3.5	0-4			
			0-3	0-5	0-5.5			
					0-8.5			
0-2.5	0-5	0-5	0-2	0-3	0-3.5			
				0-7.5				
0-2.5	0-5	0-5	0-2	0-3	0-3.5			
			0-3.5		0-5.5			
			0-4.5	0-6.5	0-6.5			



	BIS004A BIS M-122-02/A	
Product Group	HF (13.56 MHz)	
Dimension	Ø 10 x 4.5 mm	
Antenna type	round	
UID serial number, read-only	8 Byte	
Memory type	FRAM	
Supported data carrier types	DIN ISO 15693	
User data, read/write	2000 Byte	
Storage temperature	-25...85 °C	
Storage temperature temporary	—	
Ambient temperature	-25...70 °C	
Housing material	PA 12, PU potting	
Protection degree	IP67	
Installation	metal-free (clear zone) on metal flush in metal	
Approval/Conformity	CE	
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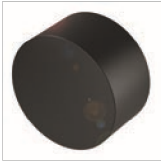
Suitable read/write head with max. read/write working distance

Installation	flush in metal	on metal	metal-free (clear zone)	
BIS M-300				
BIS M-302	0-6		0-9	
BIS M-304	0-5		0-7	
BIS M-305	0-5		0-7	
BIS M-307	0-5		0-7	
BIS M-400-xxx-001	0-7		0-13	
BIS M-400-xxx-002	0-5		0-6	
BIS M-400-xxx-401			0-9	
BIS M-402-xxx-002	0-5		0-8	
BIS M-402-xxx-004	0-5		0-8	
BIS M-404-xxx-401	0-3.5	0-5.5	0-6	
BIS M-405-xxx-001				
BIS M-408-045-001		0-9	0-11	
BIS M-414	0-3.5	0-5	0-5.5	
BIS M-449	0-6	0-8	0-8	
BIS VM-300				
BIS M-302				
BIS M-304				
BIS VM-305	0-5		0-7	
BIS VM-306	0-5			
BIS VM-307	0-5		0-7	
BIS VM-330	0-3.5	0-5	0-5.5	
BIS VM-332	0-4.5	0-6.5	0-7	
BIS VM-333			0-10	
BIS VM-343-401	0-3.5	0-4.5	0-5	
BIS VM-344-401				
BIS VM-345-401		0-9	0-1	
BIS VM-346-401	0-3.5	0-4.5	0-5	
BIS VM-348-401	0-5		0-7	
BIS VM-349-401	0-6	0-8	0-8	
Dimensions in mm				
* Installation on request				



BIS019C BIS M-1R1-02/L	BIS0040 BIS M-105-01/A	BIS0042 BIS M-105-02/A
HF (13.56 MHz)	HF (13.56 MHz)	HF (13.56 MHz)
Ø 10.1 x 4.5 mm	Ø 11.98 x 6 mm	Ø 11.98 x 6 mm
round	round	round
8 Byte	4 Byte	8 Byte
FRAM	EEPROM	FRAM
DIN ISO 15693	DIN ISO 14443	DIN ISO 15693
2000 Byte	752 Byte	2000 Byte
-25...85 °C	-25...85 °C	-25...85 °C
—	—	—
-25...85 °C	-25...70 °C	-25...70 °C
PEEK, GF30	Epoxy resin-glass fiber, GF	Epoxy resin-glass fiber, GF
IP68	IP67	IP67
metal-free (clear zone) on metal flush in metal	metal-free (clear zone) on metal flush in metal	metal-free (clear zone) on metal flush in metal
CE	CE	CE
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flush in metal	on metal	metal-free (clear zone)*	flush in metal	on metal	metal-free (clear zone)	flush in metal	on metal	metal-free (clear zone)
					0-9			0-11
0-7	0-8		0-5		0-7	0-6		0-9
0-6.5	0-7		0-5		0-5	0-6		0-7
			0-4		0-6	0-4		0-8
			0-4		0-6	0-6		0-8
					0-7			0-11
			0-5		0-6	0-5		0-9
								0-13
			0-4		0-6	0-4		0-6
			0-4		0-6	0-6		0-8
						0-6	0-8	0-8.5
					0-7			0-11
							0-11	0-13
						0-5	0-6	0-6.5
						0-7	0-9.5	0-10
					0-9			0-11
0-7	0-8							
0-6.5	0-7							
			0-4		0-6	0-6		0-8
			0-5			0-6		
			0-4		0-6	0-6		0-8
						0-5	0-6	0-6.5
						0-6	0-8	0-8.5
								0-13
						0-4	0-5	0-5.5
								0-11
						0-4	0-5	0-5.5
						0-5		0-7
						0-7	0-9.5	0-10



	BIS00YH BIS M-131-10/L	
Product Group	HF (13.56 MHz)	
Dimension	Ø 12 x 6.4 mm	
Antenna type	round	
UID serial number, read-only	4 Byte	
Memory type	EEPROM	
Supported data carrier types	DIN ISO 14443	
User data, read/write	736 Byte	
Storage temperature	-40...85 °C	
Storage temperature temporary	—	
Ambient temperature	-20...85 °C	
Housing material	ABS	
Protection degree	IP68	
Installation	metal-free (clear zone) on metal flush in metal	
Approval/Conformity	CE	
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Suitable read/write head with max. read/write working distance

Installation	flush in metal	on metal	metal-free (clear zone)	
BIS M-300				
BIS M-301				
BIS M-302				
BIS M-304				
BIS M-305				
BIS M-307		0-8	0-10	
BIS M-340				
BIS M-371-000-A01				
BIS M-372-000-A01				
BIS M-373-000-A01				
BIS M-400-xxx-001				
BIS M-400-xxx-002				
BIS M-400-xxx-401				
BIS M-401				
BIS M-402-xxx-002			0-9	
BIS M-402-xxx-004				
BIS M-404-xxx-401				
BIS M-405-xxx-001				
BIS M-408-045-001			0-13	
BIS M-410			0-12	
BIS M-411			0-13	
BIS M-451	0-2	0-4	0-4.5	
BIS VM-300				
BIS VM-301				
BIS M-302				
BIS M-304				
BIS VM-305				
BIS VM-307				
BIS VM-332				
BIS VM-333				
BIS VM-344-401				
BIS VM-345-401				
BIS VM-348-401				
BIS VM-349-401				
BIS M-371-000-A01				
BIS M-372-000-A01				
BIS M-373-000-A01				
BIS M-410			0-5	
BIS M-411				
Dimensions in mm, * Installation on request				



BIS019E BIS M-1R2-02/L	BIS0044 BIS M-110-02/L	BIS00YF BIS M-132-03/L
HF (13.56 MHz)	HF (13.56 MHz)	HF (13.56 MHz)
Ø 15.3 x 4.5 mm	Ø 20 x 2.8 mm	Ø 24.9 x 4.8 mm
round	round	round
8 Byte	8 Byte	8 Byte
FRAM	FRAM	EEPROM
DIN ISO 15693	DIN ISO 15693	DIN ISO 15693
2000 Byte	2000 Byte	112 Byte
-25...85 °C	-25...85 °C	-40...85 °C
—	—	—
-25...85 °C	-25...85 °C	-20...85 °C
PEEK, GF30	PA 6	ABS, black
IP68	IP68	IP68
metal-free (clear zone) on metal flush in metal	metal-free (clear zone) on metal flush in metal	metal-free (clear zone)
CE	CE	CE
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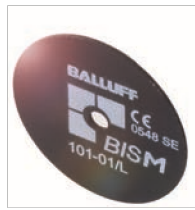
flush in metal	on metal	metal-free (clear zone)*	flush in metal	on metal	metal-free (clear zone)	flush in metal	on metal	metal-free (clear zone)
0-11	0-12				0-22			
0-10	0-10				0-32			
					0-16			
					0-14			
					0-13			
					0-13			
					0-90			
					0-70			0-100
					0-115			0-160
								0-160
					0-20			
					0-15			
					0-18			
					0-30			
					0-15			
					0-15			
					0-10			
					0-20			
					0-23			
								0-48
					0-45			0-80
				0-5	0-12			
				0-22				
				0-32				
0-11	0-12							
0-10	0-10							
				0-13				
				0-13				
				0-10				
				0-18				
				0-22				
			0-5	0-22				
				0-12				
			0-5	0-12				
								0-100
								0-160
								0-160
								0-48
								0-80



	BIS00YC BIS M-132-10/L	
Product Group	HF (13.56 MHz)	
Dimension	Ø 24.9 x 4.8 mm	
Antenna type	round	
UID serial number, read-only	4 Byte	
Memory type	EEPROM	
Supported data carrier types	DIN ISO 14443	
User data, read/write	736 Byte	
Storage temperature	-40...85 °C	
Storage temperature temporary	—	
Ambient temperature	-20...85 °C	
Housing material	ABS, black	
Protection degree	IP68	
Installation	metal-free (clear zone)	
Approval/Conformity	CE	
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Suitable read/write head with max. read/write working distance

Installation	flush in metal	on metal	metal-free (clear zone)	
BIS M-300				
BIS M-301				
BIS M-302				
BIS M-304				
BIS M-340				
BIS M-371-000-A01				
BIS M-372-000-A01				
BIS M-400-xxx-001				
BIS M-400-xxx-002				
BIS M-400-xxx-401				
BIS M-401				
BIS M-402-xxx-002				
BIS M-402-xxx-004				
BIS M-404-xxx-401				
BIS M-405-xxx-001				
BIS M-406-045-001				
BIS M-408-045-001				
BIS M-410			0-15	
BIS M-411			0-26	
BIS M-449				
BIS M-4006-001				
BIS M-4008-001				
BIS VM-300				
BIS VM-301				
BIS VM-332				
BIS VM-333				
BIS VM-344-401				
BIS VM-345-401				
BIS VM-349-401				
BIS M-410			0-15	
BIS M-411			0-26	
Dimensions in mm				
* Installation on request				



BIS0143 BIS M-128-03/L	BIS003Y BIS M-101-01/L	BIS0045 BIS M-111-02/L
HF (13.56 MHz)	HF (13.56 MHz)	HF (13.56 MHz)
Ø 26 x 6 mm	Ø 30 x 1 mm	Ø 30 x 2.8 mm
round	round	round
8 Byte	4 Byte	8 Byte
EEPROM	EEPROM	FRAM
DIN ISO 15693	DIN ISO 14443	DIN ISO 15693
112 Byte	752 Byte	2000 Byte
-25...85 °C	-25...85 °C	-25...85 °C
—	—	—
-25...70 °C	-25...70 °C	-25...85 °C
Epoxy-resin/fiberglass	Epoxy resin-glass fiber, GF	PA 6
IP67	IP67	IP68
metal-free (clear zone)	metal-free (clear zone)	metal-free (clear zone) on metal flush in metal
CE	CE	CE
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flush in metal	on metal	metal-free (clear zone)	flush in metal	on metal	metal-free (clear zone)	flush in metal	on metal	metal-free (clear zone)
					0-22			0-28
					0-34			0-45
					0-16			0-20
					0-14			
								0-140
								0-120
								0-175
		0-27			0-20			0-28
					0-15			0-20
		0-21						0-21
					0-28			0-40
					0-14			0-18
					0-15			
		0-13						
					0-12			0-28
		0-26						0-28
								0-67
								3-13
								0-52
								0-52
					0-15	0-28	0-18	0-10
					0-15	0-45	0-30	
	0-13							
	0-21					0-21		
						0-28	0-18	0-10
						0-28		
						3-13		



	BIS00Y8 BIS M-134-10/L	
Product Group	HF (13.56 MHz)	
Dimension	Ø 49.8 x 5.3 mm	
Antenna type	round	
UID serial number, read-only	4 Byte	
Memory type	EEPROM	
Supported data carrier types	DIN ISO 14443	
User data, read/write	736 Byte	
Storage temperature	-40...85 °C	
Storage temperature temporary	—	
Ambient temperature	-20...85 °C	
Housing material	ABS, black	
Protection degree	IP68	
Installation	metal-free (clear zone)	
Approval/Conformity	CE	
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Suitable read/write head with max. read/write working distance

Installation	flush in metal	on metal	metal-free (clear zone)	
BIS M-300				
BIS M-301				
BIS M-302				
BIS M-304				
BIS M-305				
BIS M-307				
BIS M-340				
BIS M-341				
BIS M-371-000-A01				
BIS M-372-000-A01				
BIS M-373-000-A01				
BIS M-400-xxx-001				
BIS M-400-xxx-002				
BIS M-400-xxx-401				
BIS M-401				
BIS M-402-xxx-002				
BIS M-402-xxx-004				
BIS M-404-xxx-401				
BIS M-405-xxx-001				
BIS M-406-045-001				
BIS M-408-045-001				
BIS M-410			0-32	
BIS M-411			0-56	
BIS M-414				
BIS M-449				
BIS M-4006-001				
BIS M-4008-001				
BIS VM-300				
BIS VM-301				
BIS VM-305				
BIS VM-307				
BIS VM-330				
BIS VM-332				
BIS VM-333				
BIS VM-341-001				
BIS VM-341-401				
BIS VM-343-401				
BIS VM-344-401				
BIS VM-345-401				
BIS VM-346-401				
BIS VM-349-401				
Dimensions in mm				



BIS003Z BIS M-102-01/L	BIS0046 BIS M-112-02/L	BIS00NW BIS M-143-02/A-M8
HF (13.56 MHz)	HF (13.56 MHz)	HF (13.56 MHz)
Ø 50 x 1 mm	Ø 50 x 3.3 mm	Ø 22 x 21 mm
round	round	round
4 Byte	8 Byte	8 Byte
FRAM	FRAM	FRAM
DIN ISO 14443	DIN ISO 15693	DIN ISO 15693
752 Byte	2000 Byte	2000 Byte
-25...85 °C	-25...85 °C	-25...95 °C
—	140 °C 1x100 h, -40 °C...90 °C 1x1000 h	—
-25...70 °C	-25...85 °C	-25...70 °C
Epoxy resin-glass fiber, GF	PA 6	Steel, data carrier: PA 12-GF30
IP67	IP68	IP68, IPx9K
metal-free (clear zone)	metal-free (clear zone)	on metal
CE	CE	CE
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flush in metal	on metal	metal-free (clear zone)	flush in metal	on metal	metal-free (clear zone)	flush in metal	on metal	metal-free (clear zone)
		0-32			0-44		0-13	
		0-45			0-70			
		0-20			0-30		0-13	
		0-18					0-12	
							0-12	
					0-170		0-23	
					35-90			
					0-150			
					0-235			
					0-270			
		0-28			0-38		0-13	
		0-18			0-28		0-12	
					0-30		0-13	
		0-45			0-60		0-16	
							0-9	
							0-9	
							0-9,5	
		0-28			0-38		0-13	
					0-38			
					0-40		0-13	
							0-7	
							0-10	
					0-80		0-18	
					0-80		0-18	
		0-32			0-44		0-13	
		0-45			0-70			
							0-12	
							0-12	
							0-7	
							0-9,5	
					0-30		0-13	
					35-90		0-23	
					0-100			
							0-7,5	
					0-44		0-13	
					0-45		0-16	
							0-7,5	
							0-10	



	BIS0100 BIS M-143-02/A-M8-SA2	
Product Group	HF (13.56 MHz)	
Dimension	Ø 21 x 21 mm	
Antenna type	round	
UID serial number, read-only	8 Byte	
Memory type	FRAM	
Supported data carrier types	DIN ISO 15693	
User data, read/write	2000 Byte	
Storage temperature	-25...95 °C	
Storage temperature temporary	—	
Ambient temperature	-25...70 °C	
Housing material	Steel, data carrier: PA 12-GF30	
Protection degree	IP68, IPx9K	
Installation	on metal	
Approval/Conformity	CE	
Productview	Page 120	

Suitable read/write head with max. read/write working distance

Installation	flush in metal	on metal	metal-free (clear zone)	
BIS M-300		0-13		
BIS M-302		0-13		
BIS M-305		0-12		
BIS M-307		0-12		
BIS M-341		0-23		
BIS M-400-xxx-001		0-13		
BIS M-400-xxx-002		0-12		
BIS M-400-xxx-401		0-13		
BIS M-401		0-16		
BIS M-402-xxx-002		0-9		
BIS M-402-xxx-004		0-9		
BIS M-404-xxx-401		0-9.5		
BIS M-405-xxx-001		0-13		
BIS M-408-045-001		0-13		
BIS M-414		0-7		
BIS M-449		0-10		
BIS M-4006-001		0-18		
BIS M-4008-001		0-18		
BIS VM-300		0-13		
BIS VM-305		0-12		
BIS VM-307		0-12		
BIS VM-330		0-7		
BIS VM-332		0-9.5		
BIS VM-333		0-13		
BIS VM-341-001		0-23		
BIS VM-343-401		0-7.5		
BIS VM-344-401		0-13		
BIS VM-345-401		0-16		
BIS VM-346-401		0-7.5		
BIS VM-349-401		0-10		
Dimensions in mm				



BIS00NU BIS M-143-02/A-M6	BIS00M8 BIS M-140-02/A-M8	BIS00M9 BIS M-140-02/A-M6
HF (13.56 MHz)	HF (13.56 MHz)	HF (13.56 MHz)
Ø 21 x 21 mm	Ø 22 x 31 mm	Ø 22 x 31 mm
round	round	round
8 Byte	8 Byte	8 Byte
FRAM	FRAM	FRAM
DIN ISO 15693	DIN ISO 15693	DIN ISO 15693
2000 Byte	2000 Byte	2000 Byte
-25...95 °C	-25...95 °C	-25...95 °C
—	—	—
-25...70 °C	-25...70 °C	-25...70 °C
Steel, data carrier: PA 12-GF30	Steel, data carrier: PA 12-GF30	Steel, data carrier: PA 12-GF30
IP68, IPx9K	IP68, IPx9K	IP68, IPx9K
on metal	on metal	on metal
CE	CE	CE
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flush in metal	on metal	metal-free (clear zone)	flush in metal	on metal	metal-free (clear zone)	flush in metal	on metal	metal-free (clear zone)
	0-13			0-22			0-22	
	0-13			0-17			0-17	
	0-12			0-17			0-17	
	0-12			0-16			0-16	
	0-23			0-46			0-46	
	0-13			0-22			0-22	
	0-12							
	0-13							
	0-16			0-32			0-32	
	0-9							
	0-9							
	0-9.5							
	0-13			0-22			0-22	
	0-13			0-22			0-22	
	0-7			0-9			0-9	
	0-10			0-13			0-13	
	0-18							
	0-18							
	0-13			0-22			0-22	
	0-12			0-17			0-17	
	0-12			0-16			0-16	
	0-7							
	0-9.5							
	0-13							
	0-23			0-46			0-46	
	0-7.5							
	0-13			0-22			0-22	
	0-16							
	0-7.5							
	0-10							



	BIS0119 BIS M-142-20/A-M8-GY	
Product Group	HF (13.56 MHz)	
Dimension	Ø 22 x 26 mm	
Antenna type	round	
UID serial number, read-only	8 Byte	
Memory type	FRAM	
Supported data carrier types	DIN ISO 15693	
User data, read/write	8192 Byte	
Storage temperature	-25...95 °C	
Storage temperature temporary	—	
Ambient temperature	-25...70 °C	
Housing material	Steel, data carrier: PA 12-GF30 gray	
Protection degree	IP68, IPx9K	
Installation	on metal	
Approval/Conformity	CE	
Productview	Page 120	

Suitable read/write head with max. read/write working distance

Installation	flush in metal	on metal	metal-free (clear zone)	
BIS M-300				
BIS M-301				
BIS M-302				
BIS M-304				
BIS M-305				
BIS M-341				
BIS M-371-000-A01		0-50		
BIS M-372-000-A01		0-65		
BIS M-373-000-A01		0-65		
BIS M-400-xxx-001				
BIS M-400-xxx-002				
BIS M-400-xxx-401				
BIS M-401				
BIS M-404-xxx-401				
BIS M-405-xxx-001				
BIS M-410				
BIS M-449				
BIS M-458-045-001				
BIS M-4006-001		0-38		
BIS M-4006-002				
BIS M-4008-001		0-38		
BIS VM-300				
BIS VM-301				
BIS VM-305				
BIS VM-332				
BIS VM-333				
BIS VM-341-001				
BIS VM-341-401		0-40		
BIS VM-343-401		0-7.5		
BIS VM-344-401				
BIS VM-345-401		0-22		
BIS VM-346-401		0-7.5		
BIS VM-349-401				
Dimensions in mm				
* Installation on request				



BIS004E BIS M-125-01/L	BIS0043 BIS M-108-02/L	BIS011F BIS M-108-11/A
HF (13.56 MHz)	HF (13.56 MHz)	HF (13.56 MHz)
30 x 6 x 30 mm	32 x 11 x 52 mm	32 x 11 x 52 mm
round	round	round
4 Byte	8 Byte	8 Byte
EEPROM	FRAM	FRAM
DIN ISO 14443	DIN ISO 15693	DIN ISO 15693 (High Memory)
752 Byte	2000 Byte	8192 Byte
-25...85 °C	-25...85 °C	-25...85 °C
—	—	—
-25...70 °C	-25...70 °C	-25...70 °C
PBT	PBT, GF	PBT, GF
IP67	IP67	IP67
metal-free (clear zone) on metal	metal-free (clear zone) on metal flush in metal	metal-free (clear zone) on metal
CE	CE	CE
Page 120	Page 121	Page 121

flush in metal	on metal*	metal-free (clear zone)*	flush in metal	on metal	metal-free (clear zone)	flush in metal	on metal	metal-free (clear zone)
			0-16		0-30			
					0-45			
			0-12		0-20			
			0-10		0-18			
			0-11		0-17			
			0-50		20-60			
					0-110			
					0-160			
					0-185			
			0-16		0-28			
			0-12		0-20			
			0-13	0-15	0-21			
					0-40			
			0-6	0-8	0-11	0-5	0-6	0-6.5
			0-16		0-28			
					0-40			
			0-7	0-9.5	0-13			
						11-18	0-28	0-36
			10-19	0-32	0-52	11-18	0-28	0-36
			10-19	0-32	0-52			
			0-16		0-30			
					0-45			
			0-11		0-17			
			0-6	0-8	0-11	0-5	0-6	0-6.5
			0-13	0-15	0-21			
			14-25		20-60			
			14-20	0-36	0-64	11-20	0-30	0-42
			0-16		0-30		0-15	0-18
					0-28			0-18
			0-7	0-9.5	0-13			



	BIS0111 BIS M-108-20/A	
Product Group	HF (13.56 MHz)	
Dimension	32 x 11 x 52 mm	
Antenna type	round	
UID serial number, read-only	8 Byte	
Memory type	FRAM	
Supported data carrier types	DIN ISO 15693	
User data, read/write	8192 Byte	
Storage temperature	-25...85 °C	
Storage temperature temporary	—	
Ambient temperature	-25...70 °C	
Housing material	PBT, GF	
Protection degree	IP67	
Installation	metal-free (clear zone) on metal flush in metal	
Approval/Conformity	CE	
Productview	Page 121	

Suitable read/write head with max. read/write working distance

Installation	flush in metal	on metal	metal-free (clear zone)	
BIS M-301			0-45	
BIS M-371-000-A01			0-100	
BIS M-372-000-A01			0-150	
BIS M-373-000-A01			0-150	
BIS M-400-xxx-401	0-13	0-15	0-21	
BIS M-404-xxx-401				
BIS M-4006-001				
BIS M-4008-001	11-18	0-28	0-36	
BIS VM-301			0-50	
BIS VM-332				
BIS VM-333	0-13	0-15	0-21	
BIS VM-341-401				
BIS VM-344-401	0-16		0-30	
BIS VM-345-401			0-28	
Dimensions in mm				



	BIS011E BIS M-108-13/A	BIS011A BIS M-108-14/A	BIS0139 BIS M-108-15/A
	HF (13.56 MHz)	HF (13.56 MHz)	HF (13.56 MHz)
	32 x 11 x 52 mm	32 x 11 x 52 mm	32 x 11 x 52 mm
	round	round	round
	8 Byte	8 Byte	8 Byte
	FRAM	FRAM	FRAM
	DIN ISO 15693 (High Memory)	DIN ISO 15693 (High Memory)	DIN ISO 15693 (High Memory)
	32768 Byte	65536 Byte	131072 Byte
	-25...85 °C	-25...85 °C	-25...85 °C
	—	—	—
	-25...70 °C	-25...70 °C	-25...70 °C
	PBT, GF	PBT, GF	PBT, GF
	IP67	IP67	IP67
	metal-free (clear zone) on metal flush in metal	metal-free (clear zone) on metal flush in metal	metal-free (clear zone) on metal flush in metal
	CE	CE	CE
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	flush in metal	on metal	metal-free (clear zone)	flush in metal	on metal	metal-free (clear zone)	flush in metal	on metal	metal-free (clear zone)
	0-5	0-6	0-6.5	0-5	0-6	0-6.5	0-5	0-6	0-6.5
	11-18	0-28	0-36	11-18	0-28	0-36	11-18	0-28	0-36
	11-18	0-28	0-36	11-18	0-28	0-36	11-18	0-28	0-36
	0-5	0-6	0-6.5	0-5	0-6	0-6.5	0-5	0-6	0-6.5
	11-20	0-30	0-42	11-20	0-30	0-42	11-20	0-30	0-42
		0-15	0-18		0-15	0-18		0-15	0-18
			0-18			0-18			0-18



	BIS00Y5 BIS M-135-03/L	
Product Group	HF (13.56 MHz)	
Dimension	51.5 x 6.4 x 51.5 mm	
Antenna type	round	
UID serial number, read-only	8 Byte	
Memory type	EEPROM	
Supported data carrier types	DIN ISO 15693	
User data, read/write	112 Byte	
Storage temperature	-40...85 °C	
Storage temperature temporary	—	
Ambient temperature	-20...85 °C	
Housing material	ABS, black	
Protection degree	IP68	
Installation	metal-free (clear zone)	
Approval/Conformity	CE	
Productview	Page 121	

Suitable read/write head with max. read/write working distance

Installation	flush in metal	on metal	metal-free (clear zone)	
BIS M-371-000-A01			10-205	
BIS M-372-000-A01			0-300	
BIS M-373-000-A01			0-340	
BIS M-400-xxx-001			0-50	
BIS M-408-045-001			0-48	
BIS M-410			0-68	
BIS M-411			0-110	
BIS M-371-000-A01			10-205	
BIS M-372-000-A01			0-300	
BIS M-373-000-A01			0-340	
BIS M-400-xxx-001			0-50	
BIS M-408-045-001			0-48	
BIS M-410			0-68	
BIS M-411			0-110	
Dimensions in mm				



	BIS00Y3 BIS M-135-07/L	BIS00Y6 BIS M-135-02/L	BIS00W9 BIS M-136-03/L
	HF (13.56 MHz)	HF (13.56 MHz)	HF (13.56 MHz)
	51.5 x 6.4 x 51.5 mm	51.5 x 6.4 x 51.5 mm	52 x 11.5 x 128 mm
	round	round	round
	8 Byte	8 Byte	8 Byte
	EEPROM	FRAM	EEPROM
	DIN ISO 15693	DIN ISO 15693	DIN ISO 15693
	992 Byte	2000 Byte	112 Byte
	-40...85 °C	-40...85 °C	-40...85 °C
	—	—	—
	-20...85 °C	-20...85 °C	-20...85 °C
	ABS, black	ABS, black	ABS, black
	IP68	IP68	IP68
	metal-free (clear zone)	metal-free (clear zone)	metal-free (clear zone)
	CE	CE	CE
	Page 121	Page 121	Page 121

	flush in metal	on metal	metal-free (clear zone)	flush in metal	on metal	metal-free (clear zone)	flush in metal	on metal	metal-free (clear zone)
						25-140			15-210
						0-230			0-350
						0-230			0-370
			23-46			0-60			
			11-75			0-100			
						25-140			15-210
						0-230			0-350
						0-230			0-370
			23-46			0-60			
			11-75			0-100			



	BIS00Y9 BIS M-133-02/A	
Product Group	HF (13.56 MHz)	
Dimension	Ø 30 x 9.7 mm	
Antenna type	round	
UID serial number, read-only	8 Byte	
Memory type	FRAM	
Supported data carrier types	DIN ISO 15693	
User data, read/write	2000 Byte	
Storage temperature	-40...130 °C	
Storage temperature temporary	—	
Ambient temperature	-40...85 °C	
Housing material	PA, black	
Protection degree	IP67	
Installation	metal-free (clear zone) on metal	
Approval/Conformity	CE	
Productview	Page 121	

Suitable read/write head with max. read/write working distance

Installation	flush in metal	on metal	metal-free (clear zone)	
BIS M-300				
BIS M-340				
BIS M-351				
BIS M-371-000-A01			0-70	
BIS M-372				
BIS M-400-xxx-001				
BIS M-408-045-001				
BIS M-410			0-32	
BIS M-411			38-52	
BIS M-451				
BIS M-458-045-001				
BIS M-4006-001			0-55	
BIS M-4006-002				
BIS M-4008-001		0-45	0-55	
BIS M-4008-002				
BIS VM-300				
BIS VM-343-401				
BIS VM-344-401				
BIS VM-346-401				
BIS VM-351-001				
BIS VM-351-401				
BIS M-410			0-32	
BIS M-411			38-52	
BIS M-4006-001			0-55	
BIS M-4008-001		0-45	0-55	
Dimensions in mm				
** Combined with metal mounting plate BAM012M				



	BIS00LC BIS M-107-03/L-H200	BIS004F BIS M-150-02/A	BIS004H BIS M-151-02/A
	HF (13.56 MHz)	HF (13.56 MHz)	HF (13.56 MHz)
	22 x 6.5 x 40 mm	22 x 6.5 x 40 mm	22 x 6.5 x 40 mm
	round	Rod	Rod
	8 Byte	8 Byte	8 Byte
	EEPROM	FRAM	FRAM
	DIN ISO 15693	DIN ISO 15693	DIN ISO 15693
	112 Byte	2000 Byte	2000 Byte
	-25...85 °C	—	—
	200 °C 1x1000 h	-25...130 °C 1x1000 h	-25...130 °C 1x1000 h
	-25...70 °C	-25...70 °C	-25...70 °C
	PPS, GF40, with EP potting	PPS, GF40, with EP potting	PPS, GF40, with EP potting
	IP67	IP67	IP67
	metal-free (clear zone) on metal	metal-free (clear zone) on metal	metal-free (clear zone) on metal
	CE	CE	CE
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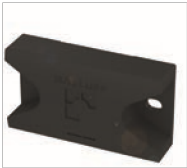
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	BIS011M BIS M-155-11/A	
Product Group	HF (13.56 MHz)	
Dimension	22 x 9.7 x 40 mm	
Antenna type	Rod	
UID serial number, read-only	8 Byte	
Memory type	FRAM	
Supported data carrier types	DIN ISO 15693 (High Memory)	
User data, read/write	8192 Byte	
Storage temperature	—	
Storage temperature temporary	-25...130 °C 1x1000 h	
Ambient temperature	-25...70 °C	
Housing material	PPS, GF40, with EP potting	
Protection degree	—	
Installation	metal-free (clear zone) on metal	
Approval/Conformity	CE	
Productview	Page 121	

Suitable read/write head with max. read/write working distance

Installation	flush in metal	on metal	metal-free (clear zone)**	
BIS M-4006-002		0-42	0-42	
BIS M-4008-002		0-42	0-42	
BIS VM-351-401		0-50	0-50	
BIS VM-355-401		0-34	0-34	
Dimensions in mm				
** Combined with metal mounting plate BAM012M				



	BIS0117 BIS M-155-20/A	BIS012J BIS M-156-11/A	BIS0112 BIS M-156-20/A
	HF (13.56 MHz)	HF (13.56 MHz)	HF (13.56 MHz)
	22 x 9.7 x 40 mm	22 x 9.7 x 40 mm	22 x 9.7 x 40 mm
	Rod	Rod	Rod
	8 Byte	8 Byte	8 Byte
	FRAM	FRAM	FRAM
	DIN ISO 15693	DIN ISO 15693 (High Memory)	DIN ISO 15693
	8192 Byte	8192 Byte	8192 Byte
	—	—	—
	-25...130 °C 1x1000 h	-25...130 °C 1x1000 h	-25...130 °C 1x1000 h
	-25...70 °C	-25...70 °C	-25...70 °C
	PPS, GF40, with EP potting	PPS, GF40, with EP potting	PPS, GF40, with PU potting
	—	—	—
	metal-free (clear zone) on metal	metal-free (clear zone) on metal	metal-free (clear zone) on metal
	CE	CE	CE
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	flush in metal	on metal	metal-free (clear zone)**	flush in metal	on metal	metal-free (clear zone)**	flush in metal	on metal	metal-free (clear zone)**
		0-68	0-68		0-42	0-42		0-68	0-68
		0-68	0-68		0-42	0-42		0-68	0-68
		0-75	0-75		0-42	0-42		0-70	0-70
		0-45	0-45		0-30	0-30		0-45	0-45



	BIS011Z BIS M-155-13/A	
Product Group	HF (13.56 MHz)	
Dimension	22 x 9.7 x 40 mm	
Antenna type	Rod	
UID serial number, read-only	8 Byte	
Memory type	FRAM	
Supported data carrier types	DIN ISO 15693 (High Memory)	
User data, read/write	32768 Byte	
Storage temperature	—	
Storage temperature temporary	-25...130 °C 1x1000 h	
Ambient temperature	-25...70 °C	
Housing material	PPS, GF40, with EP potting	
Protection degree	—	
Installation	metal-free (clear zone) on metal	
Approval/Conformity	CE	
Productview	Page 121	

Suitable read/write head with max. read/write working distance

Installation	flush in metal	on metal	metal-free (clear zone)**	
BIS M-4006-002		0-42	0-42	
BIS M-4008-002		0-42	0-42	
BIS VM-351-401		0-50	0-50	
BIS VM-355-401		0-34	0-34	
Dimensions in mm				
** Combined with metal mounting plate BAM012M				



	BIS012K BIS M-156-13/A	BIS011N BIS M-155-14/A	BIS012L BIS M-156-14/A
	HF (13.56 MHz)	HF (13.56 MHz)	HF (13.56 MHz)
	22 x 9.7 x 40 mm	22 x 9.7 x 40 mm	22 x 9.7 x 40 mm
	Rod	Rod	Rod
	8 Byte	8 Byte	8 Byte
	FRAM	FRAM	FRAM
	DIN ISO 15693 (High Memory)	DIN ISO 15693 (High Memory)	DIN ISO 15693 (High Memory)
	32768 Byte	65536 Byte	65536 Byte
	—	—	—
	-25...130 °C 1x1000 h	-25...130 °C 1x1000 h	-25...130 °C 1x1000 h
	-25...70 °C	-25...70 °C	-25...70 °C
	PPS, GF40, with EP potting	PPS, GF40, with EP potting	PPS, GF40, with EP potting
	—	—	—
	metal-free (clear zone) on metal	metal-free (clear zone) on metal	metal-free (clear zone) on metal
	CE	CE	CE
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	flush in metal	on metal	metal-free (clear zone)**	flush in metal	on metal	metal-free (clear zone)**	flush in metal	on metal	metal-free (clear zone)**
		0-42	0-42		0-42	0-42		0-42	0-42
		0-42	0-42		0-42	0-42		0-42	0-42
		0-42	0-42		0-50	0-50		0-42	0-42
		0-30	0-30		0-34	0-34		0-30	0-30



	BIS013C BIS M-155-15/A	
Product Group	HF (13.56 MHz)	
Dimension	22 x 9.7 x 40 mm	
Antenna type	Rod	
UID serial number, read-only	8 Byte	
Memory type	FRAM	
Supported data carrier types	DIN ISO 15693 (High Memory)	
User data, read/write	131072 Byte	
Storage temperature	—	
Storage temperature temporary	-25...130 °C 1x1000 h	
Ambient temperature	-25...70 °C	
Housing material	PPS, GF40, with EP potting	
Protection degree	—	
Installation	metal-free (clear zone) on metal	
Approval/Conformity	CE	
Productview	Page 121	

Suitable read/write head with max. read/write working distance

Installation	flush in metal	on metal	metal-free (clear zone)**	
BIS M-351				
BIS M-451				
BIS M-458-045-001				
BIS M-4006-002		0-42	0-42	
BIS M-4008-002		0-42	0-42	
BIS VM-351-001				
BIS VM-351-401		0-50	0-50	
BIS VM-355-401		0-34	0-34	
Dimensions in mm				
** Combined with metal mounting plate BAM012M				



	BIS013F BIS M-156-15/A	BIS00P3 BIS M-153-02/A	BIS011W BIS M-153-11/A
	HF (13.56 MHz)	HF (13.56 MHz)	HF (13.56 MHz)
	22 x 9.7 x 40 mm	40 x 22 x 80 mm	40 x 22 x 80 mm
	Rod	Rod	Rod
	8 Byte	8 Byte	8 Byte
	FRAM	FRAM	FRAM
	DIN ISO 15693 (High Memory)	DIN ISO 15693	DIN ISO 15693 (High Memory)
	131072 Byte	2000 Byte	8192 Byte
	—	-25...85 °C	-25...85 °C
	-25...130 °C 1x1000 h	—	—
	-25...70 °C	-25...85 °C	-25...85 °C
	PPS, GF40, with EP potting	POM	POM
	—	—	—
	metal-free (clear zone) on metal	metal-free (clear zone) on metal flush in metal	metal-free (clear zone) on metal
	CE	CE	CE
	Page 122	Page 122	Page 122

	flush in metal	on metal	metal-free (clear zone)**	flush in metal	on metal	metal-free (clear zone)	flush in metal	on metal	metal-free (clear zone)
						0-100			
						0-100			
						0-54			
		0-42	0-42			0-100			0-55
		0-42	0-42			0-100			0-55
				0-100				0-60	
		0-42	0-42	0-100	0-100				
		0-30	0-30	0-60	0-60			0-36	



	BIS011Y BIS M-153-13/A	
Product Group	HF (13.56 MHz)	
Dimension	40 x 22 x 80 mm	
Antenna type	Rod	
UID serial number, read-only	8 Byte	
Memory type	FRAM	
Supported data carrier types	DIN ISO 15693 (High Memory)	
User data, read/write	32768 Byte	
Storage temperature	-25...85 °C	
Storage temperature temporary	—	
Ambient temperature	-25...85 °C	
Housing material	POM	
Protection degree	—	
Installation	metal-free (clear zone) on metal	
Approval/Conformity	CE	
Productview	Page 122	

Suitable read/write head with max. read/write working distance

Installation	flush in metal	on metal	metal-free (clear zone)	
BIS M-300				
BIS M-371-000-A01				
BIS M-372-000-A01				
BIS M-373-000-A01				
BIS M-400-xxx-001				
BIS M-400-xxx-002				
BIS M-401				
BIS M-402-xxx-002				
BIS M-411				
BIS M-4006-001				
BIS M-4006-002			0-55	
BIS M-4008-001				
BIS M-4008-002			0-55	
BIS VM-300				
BIS VM-344-401				
BIS VM-345-401				
BIS VM-351-401		0-60		
BIS VM-355-401		0-36		
Dimensions in mm				
** Combined with metal mounting plate BAM012M				



	BIS011U BIS M-153-14/A	BIS013E BIS M-153-15/A	BIS00YE BIS M-132-03/L-HT
	HF (13.56 MHz)	HF (13.56 MHz)	HF (13.56 MHz)
	40 x 22 x 80 mm	40 x 22 x 80 mm	Ø 24.9 x 4.8 mm
	Rod	Rod	round
	8 Byte	8 Byte	8 Byte
	FRAM	FRAM	EEPROM
	DIN ISO 15693 (High Memory)	DIN ISO 15693 (High Memory)	DIN ISO 15693
	65536 Byte	131072 Byte	112 Byte
	-25...85 °C	-25...85 °C	-40...220 °C
	—	—	—
	-25...85 °C	-25...85 °C	-40...85 °C
	POM	POM	PPS
	—	—	IP68
	metal-free (clear zone) on metal	metal-free (clear zone) on metal	metal-free (clear zone)
	CE	CE	CE, Ecolab
	Page 122	Page 122	Page 119

	flush in metal	on metal	metal-free (clear zone)	flush in metal	on metal	metal-free (clear zone)	flush in metal	on metal	metal-free (clear zone)
									0-30
									0-100
									0-145
									0-155
									0-30
									0-24
									0-50
									0-20
									0-70
									0-60
			0-55			0-55			0-60
			0-55			0-55			0-30
									0-30
									0-34
		0-60			0-60				
		0-36			0-36				



	BIS00YA BIS M-132-10/L-HT	
Product Group	HF (13.56 MHz)	
Dimension	Ø 24.9 x 4.8 mm	
Antenna type	round	
UID serial number, read-only	4 Byte	
Memory type	EEPROM	
Supported data carrier types	DIN ISO 14443	
User data, read/write	736 Byte	
Storage temperature	-40...220 °C	
Storage temperature temporary	—	
Ambient temperature	-40...85 °C	
Housing material	PPS	
Protection degree	IP68	
Installation	metal-free (clear zone)	
Approval/Conformity	CE, Ecolab	
Productview	Page 119	

Suitable read/write head with max. read/write working distance

Installation	flush in metal	on metal	metal-free (clear zone)	
BIS M-300				
BIS M-371-000-A01			0-40	
BIS M-372-000-A01			0-30	
BIS M-373-000-A01				
BIS M-400-xxx-001				
BIS M-401				
BIS M-406-045-001				
BIS M-408-045-001				
BIS M-410			0-15	
BIS M-411			0-22	
BIS M-4006-001				
BIS M-4008-001				
BIS VM-300				
BIS VM-341-401				
BIS VM-344-401				
BIS VM-345-401				
BIS M-371-000-A01			0-40	
BIS M-372-000-A01			0-30	
BIS M-400-xxx-001				
BIS M-406-045-001				
BIS M-410			0-15	
BIS M-411			0-22	
Dimensions in mm				



	BIS00Y7 BIS M-134-10/L-HT	BIS018P BIS M-137-10/L-HT	BIS00Y4 BIS M-135-03/L-HT
	HF (13.56 MHz)	HF (13.56 MHz)	HF (13.56 MHz)
	Ø 49.8 x 5.3 mm	Ø 49.8 x 5.3 mm	51.5 x 6.4 x 51.5 mm
	round	round	round
	4 Byte	4 Byte	8 Byte
	EEPROM	EEPROM	EEPROM
	DIN ISO 14443	DIN ISO 14443	DIN ISO 15693
	736 Byte	736 Byte	112 Byte
	-40...220 °C	-40...220 °C	-40...220 °C
	—	—	—
	-40...85 °C	-40...85 °C	-40...85 °C
	PPS	PPS	PPS
	IP68	IP68	IP68
	metal-free (clear zone)	metal-free (clear zone)	metal-free (clear zone)
	CE, Ecolab	CE	CE, Ecolab
	Page 119	Page 122	Page 121

	flush in metal	on metal	metal-free (clear zone)	flush in metal	on metal	metal-free (clear zone)	flush in metal	on metal	metal-free (clear zone)
									0-42
									10-205
									0-300
									0-340
			0-24			0-24			0-42
									0-75
			0-24			0-24			0-42
									0-48
			0-36			0-36			0-70
			0-60			0-60			0-125
									0-90
									0-90
									0-42
									0-120
									0-42
									0-52
			0-24			0-24			
			0-24			0-24			
			0-36			0-36			
			0-60			0-60			



	BIS018R BIS M-138-03/L-HT	
Product Group	HF (13.56 MHz)	
Dimension	51.5 x 6.4 x 51.5 mm	
Antenna type	round	
UID serial number, read-only	8 Byte	
Memory type	EEPROM	
Supported data carrier types	DIN ISO 15693	
User data, read/write	112 Byte	
Storage temperature	-40...220 °C	
Storage temperature temporary	—	
Ambient temperature	-40...85 °C	
Housing material	PPS	
Protection degree	IP68	
Installation	metal-free (clear zone)	
Approval/Conformity	CE	
Productview	Page 122	

Suitable read/write head with max. read/write working distance

Installation	flush in metal	on metal	metal-free (clear zone)	
BIS M-300			0-42	
BIS M-371-000-A01			10-205	
BIS M-372-000-A01			0-300	
BIS M-373-000-A01			0-340	
BIS M-400-xxx-001			0-42	
BIS M-401			0-75	
BIS M-406-045-001			0-42	
BIS M-408-045-001			0-48	
BIS M-410			0-70	
BIS M-411			0-125	
BIS M-4006-001			0-90	
BIS M-4008-001			0-90	
BIS VM-300			0-42	
BIS VM-341-401			0-120	
BIS VM-344-401			0-42	
BIS VM-345-401			0-52	
Dimensions in mm				



	BIS00Y2 BIS M-135-07/L-HT	BIS018T BIS M-138-07/L-HT	BIS00Y1 BIS M-136-03/L-HT
	HF (13.56 MHz)	HF (13.56 MHz)	HF (13.56 MHz)
	51.5 x 6.4 x 51.5 mm	51.5 x 6.4 x 51.5 mm	52 x 11.5 x 128 mm
	round	round	round
	8 Byte	8 Byte	8 Byte
	EEPROM	EEPROM	EEPROM
	DIN ISO 15693	DIN ISO 15693	DIN ISO 15693
	992 Byte	992 Byte	112 Byte
	-40...220 °C	-40...220 °C	-40...220 °C
	—	—	—
	-40...85 °C	-40...85 °C	-40...85 °C
	PPS	PPS	PPS
	IP68	IP68	IP68
	metal-free (clear zone)	metal-free (clear zone)	metal-free (clear zone)
	CE, Ecolab	CE	CE, Ecolab
	Page 121	Page 122	Page 121

	flush in metal	on metal	metal-free (clear zone)	flush in metal	on metal	metal-free (clear zone)	flush in metal	on metal	metal-free (clear zone)
			10-135			10-135			
			0-190			0-190			
			0-215			0-215			
			23-46			23-46			
			11-75			11-75			
			0-65			0-65			0-95
			0-65			0-65			0-95



	BIS00NZ BIS M-191-02/A	
Product Group	HF (13.56 MHz)	
Dimension	24 x 21 x 24 mm	
Antenna type	Rod	
UID serial number, read-only	8 Byte	
Memory type	FRAM	
Supported data carrier types	DIN ISO 15693	
User data, read/write	2000 Byte	
Storage temperature	-25...85 °C	
Storage temperature temporary	—	
Ambient temperature	-25...70 °C	
Housing material	PBT, PU potted	
Protection degree	IP67	
Installation	metal-free (clear zone)	
Approval/Conformity	CE	
Productview	Page 122	

Suitable read/write head with max. read/write working distance

Installation	flush in metal	on metal	metal-free (clear zone)	
BIS M-300				
BIS M-352			0-22	
BIS M-401				
BIS M-458-045-001			0-25	
BIS M-4006-002			0-55	
BIS M-4008-002			0-55	
BIS VM-301				
BIS VM-351-401			0-25	
BIS VM-352			0-17	
BIS VM-355-401			0-15	
Dimensions in mm				



	BIS0180 BIS M-127-02/A-SA1	BIS0047 BIS M-120-01/L	BIS0176 BIS M-127-02/A
	HF (13.56 MHz)	HF (13.56 MHz)	HF (13.56 MHz)
	40 x 23 x 28 mm	54 x 0.76 x 85.6 mm	93 x 43.3 x 57.2 mm
	round	round	round
	8 Byte	4 Byte	8 Byte
	FRAM	EEPROM	FRAM
	DIN ISO 15693	DIN ISO 14443	DIN ISO 15693
	2000 Byte	752 Byte	2000 Byte
	-25...85 °C	-25...70 °C	-25...85 °C
	—	—	—
	-25...70 °C	-25...70 °C	-25...70 °C
	PA 12 Cast aluminum	PVC	PA 12 Cast aluminum
	IP67	IP67	IP67
	metal-free (clear zone) on metal flush in metal	metal-free (clear zone)	metal-free (clear zone) on metal flush in metal
	CE	CE	CE
	Page 122	Page 122	Page 122

	Combined with BIS018E			flush in metal	on metal	metal-free (clear zone)	Combined with BIS0189		
						0-50			
						0-50			
						0-50			



	BIS017F BIS M-157-17/A	
Product Group	HF (13.56 MHz)	
Dimension	Ø 2.12 x 12 mm	
Antenna type	Rod	
UID serial number, read-only	8 Byte	
Memory type	EEPROM	
Supported data carrier types	DIN ISO 15693	
User data, read/write	208 Byte	
Storage temperature	-25...85 °C	
Storage temperature temporary	120 °C 1x100 h, -40 °C...90 °C 1x1000 h, 140 °C 1x10 h	
Ambient temperature	-25...85 °C	
Housing material	Glass, transparent	
Protection degree	IP68	
Installation	metal-free (clear zone)	
Approval/Conformity	CE	
Productview	Page 123	

Suitable read/write head with max. read/write working distance

Installation	flush in metal	on metal	metal-free (clear zone)	
BIS M-300				
BIS M-301				
BIS M-351				
BIS M-352			0-17	
BIS M-371-000-A01				
BIS M-400-xxx-001				
BIS M-400-xxx-002				
BIS M-401				
BIS M-402-xxx-002				
BIS M-406-045-001				
BIS M-451				
BIS M-458-045-001				
BIS M-4006-002				
BIS M-4008-002				
BIS VM-300				
BIS VM-301				
BIS VM-344-401				
Dimensions in mm				



	BIS00M2 BIS M-152-03/A	BIS00L8 BIS M-106-03/L	BIS00KM BIS M-115-03/A
	HF (13.56 MHz)	HF (13.56 MHz)	HF (13.56 MHz)
	Ø 4 x 22.2 mm	Ø 18 x 15 mm	25 x 3 x 65 mm
	Rod	round	round
	8 Byte	8 Byte	8 Byte
	EEPROM	EEPROM	EEPROM
	DIN ISO 15693	DIN ISO 15693	DIN ISO 15693
	112 Byte	112 Byte	112 Byte
	-25...85 °C	10...126 °C	-30...60 °C
	120 °C 1x100 h, -40 °C...90 °C 1x1000 h	—	—
	-25...85 °C	10...70 °C	-25...50 °C
	Glass, transparent	Glass	Epoxy-resin/fiberglass PVC
	IP68	IP68	IP65
	metal-free (clear zone)	metal-free (clear zone)	metal-free (clear zone)
	CE	CE	CE
	Page 123	Page 123	Page 123

	flush in metal	on metal	metal-free (clear zone)	flush in metal	on metal	metal-free (clear zone)	flush in metal	on metal	metal-free (clear zone)
						0-32			0-18
									0-38
			0-30						
			0-17						
									0-85
									0-24
									0-17
									0-44
									0-14
									0-18
			0-30						
			0-18						
			0-35						
			0-35						
									0-18
						0-32			
									0-18



	BIS00N5 BIS M-115-07/A-SA1	
Product Group	HF (13.56 MHz)	
Dimension	25 x 3 x 65 mm	
Antenna type	round	
UID serial number, read-only	8 Byte	
Memory type	EEPROM	
Supported data carrier types	DIN ISO 15693	
User data, read/write	992 Byte	
Storage temperature	-30...60 °C	
Storage temperature temporary	—	
Ambient temperature	-25...50 °C	
Housing material	Epoxy-resin/fiberglass PVC	
Protection degree	IP65	
Installation	metal-free (clear zone)	
Approval/Conformity	CE	
Productview	Page 123	

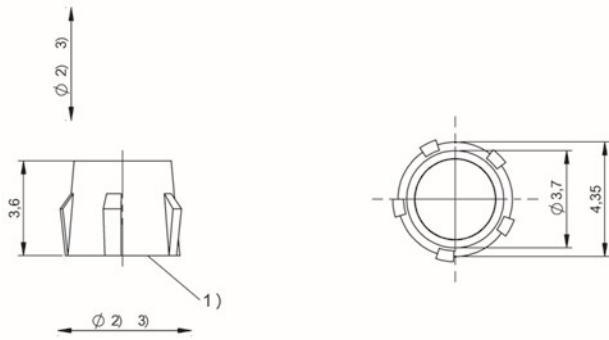
Suitable read/write head with max. read/write working distance

Installation	flush in metal	on metal	metal-free (clear zone)*	
BIS M-405				
Dimensions in mm				
* Installation on request				



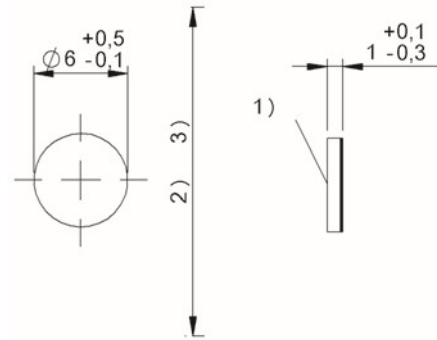
	BIS012H BIS M-1L4-03/L-D018		
	HF (13.56 MHz)		
	1 x 20 x 20 mm		
	round		
	8 Byte		
	EEPROM		
	DIN ISO 15693		
	112 Byte		
	-20...80 °C		
	—		
	0...50 °C		
	PET, transparent		
	IP20		
	metal-free (clear zone) on metal		
	CE		
	Page 123		

	flush in metal	on metal*	metal-free (clear zone)						
			0-18						



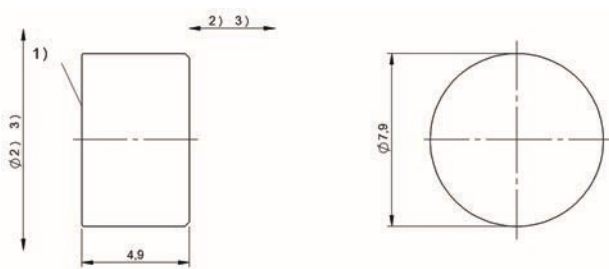
1) Sensing surface, 2) Clear zone, 3) see corresponding R/W head

BISO18Y



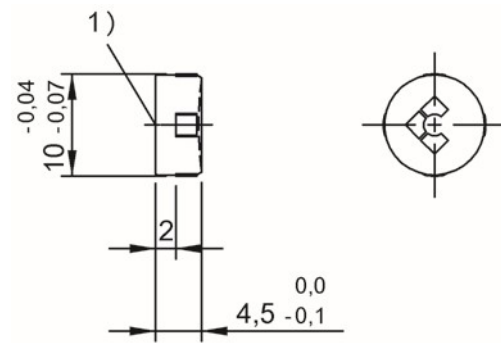
1) Sensing surface, 2) Clear zone, 3) see corresponding R/W head

BISO0UC, BISO0UE



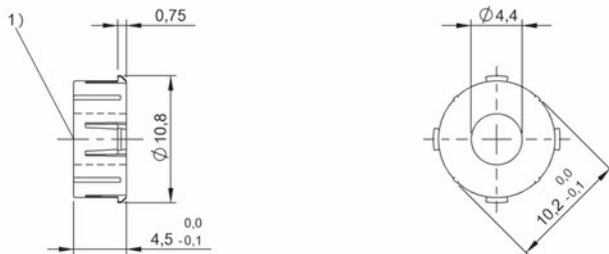
1) Sensing surface, 2) Clear zone, 3) see corresponding R/W head

BISO0YL, BISO0YJ, BISO0YK



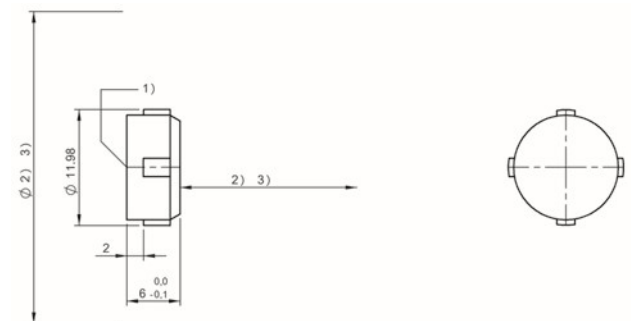
1) Sensing surface

BISO1A0, BISO048, BISO04A



1) Sensing surface

BISO19C



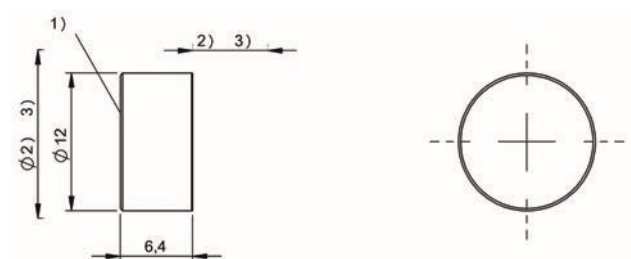
1) Sensing surface, 2) Clear zone, 3) see corresponding R/W head

BISO040



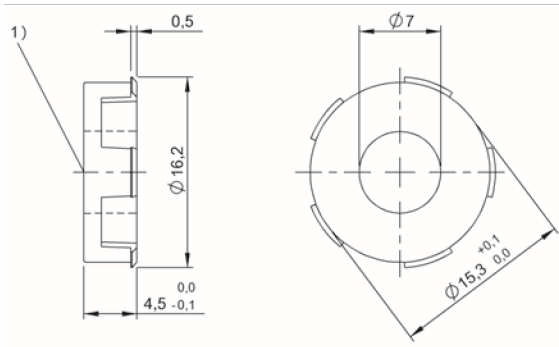
1) Sensing surface

BISO042



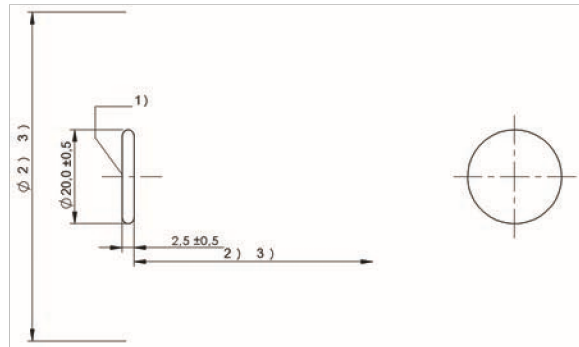
1) Sensing surface, 2) Clear zone, 3) see corresponding R/W head

BISO0YH



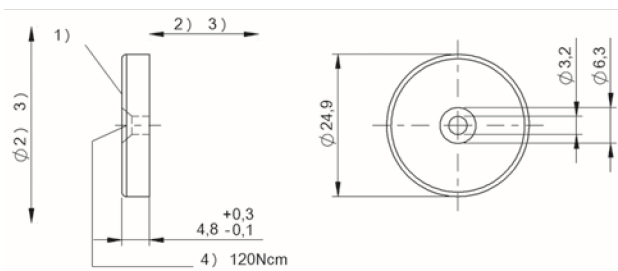
1) Sensing surface

BISO19E



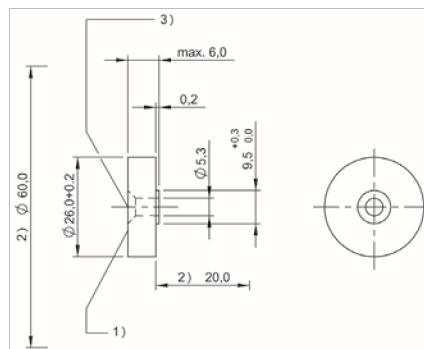
1) Sensing surface, 2) Clear zone, 3) see corresponding R/W head

BIS0044



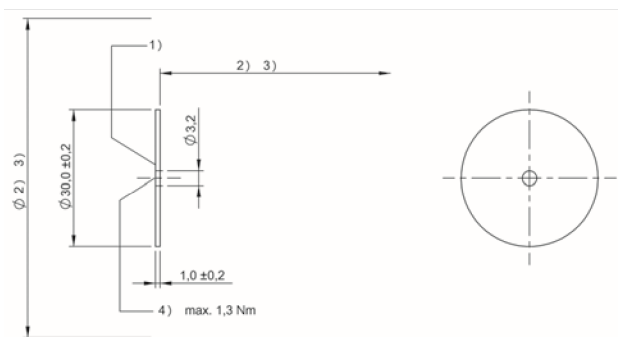
1) Sensing surface, 2) Clear zone, 3) see corresponding R/W head, 4) Tightening torque

BIS00YF, BIS00YC, BIS00YE, BIS00YA



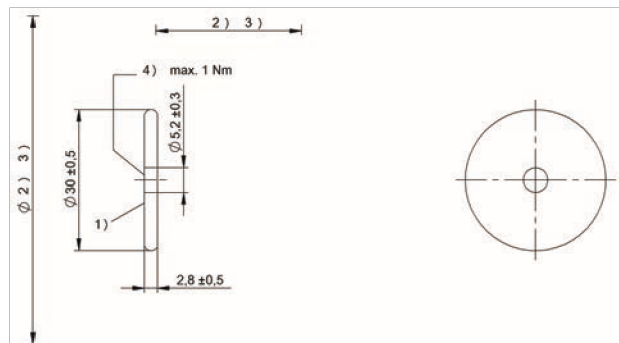
1) Sensing surface, 2) Clear zone, 3) Tightening torque max. 2.5 Nm

BIS0143



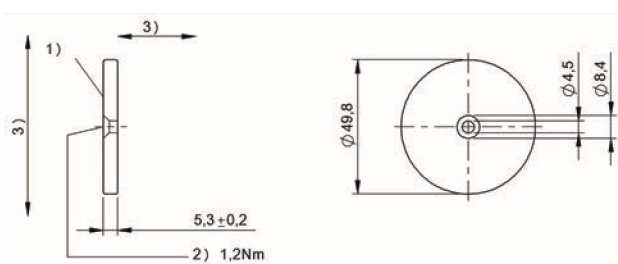
1) Sensing surface, 2) Clear zone, 3) see corresponding R/W head, 4) Tightening torque

BIS003Y



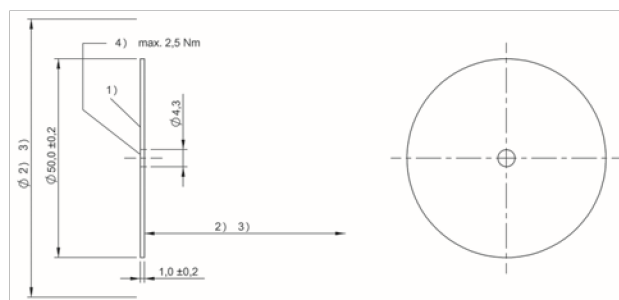
1) Sensing surface, 2) Clear zone, 3) see corresponding R/W head, 4) Tightening torque

BIS0045



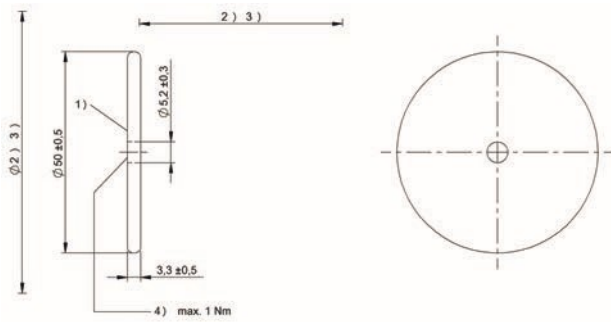
1) Sensing surface, 2) Tightening torque, 3) see R/W head table

BIS00Y8, BIS00Y7



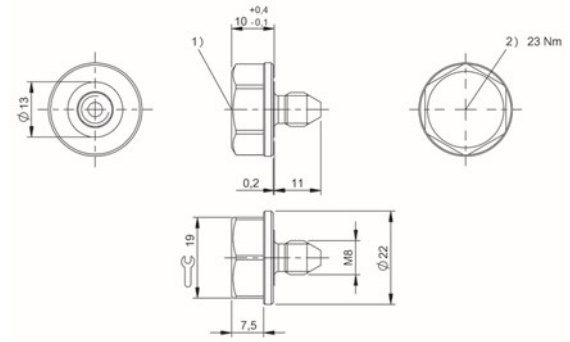
1) Sensing surface, 2) Clear zone, 3) see corresponding R/W head, 4) Tightening torque

BIS003Z



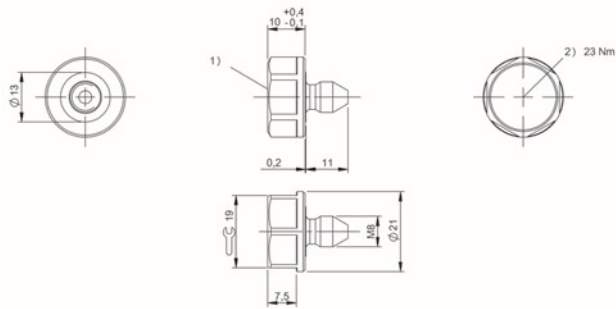
1) Sensing surface, 2) Clear zone, 3) see corresponding R/W head, 4) Tightening torque

BISO046



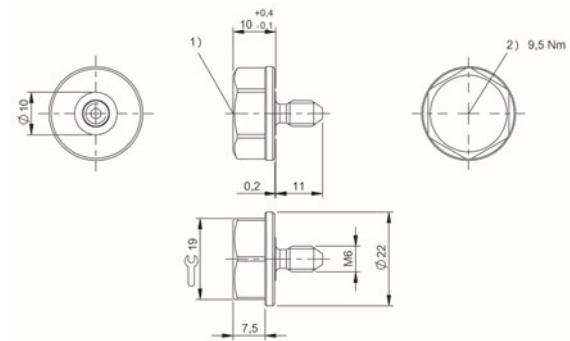
1) Sensing surface, 2) Tightening torque

BISO0NW



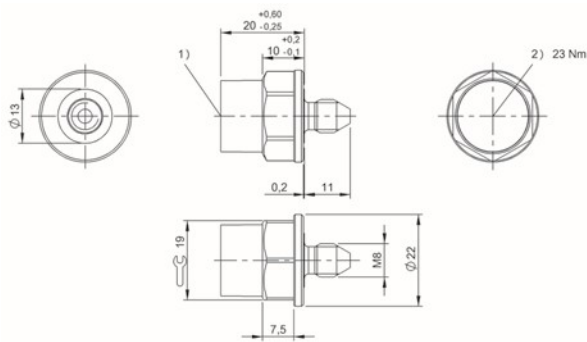
1) Sensing surface, 2) Tightening torque

BISO100



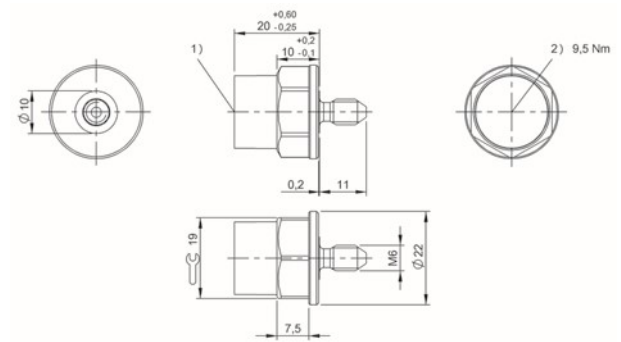
1) Sensing surface, 2) Tightening torque

BISO0NU



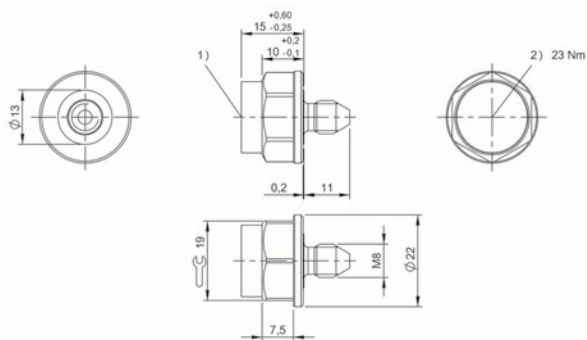
1) Sensing surface, 2) Tightening torque

BISO0M8



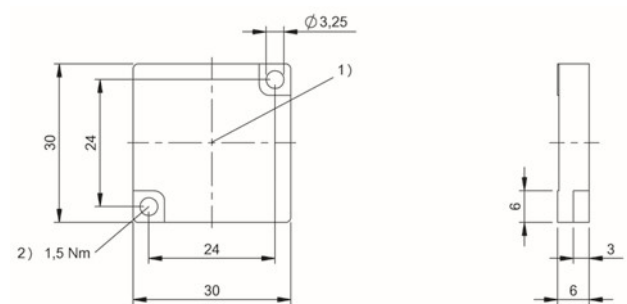
1) Sensing surface, 2) Tightening torque

BISO0M9



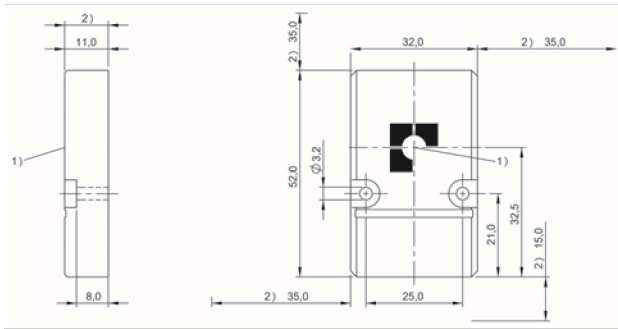
1) Sensing surface, 2) Tightening torque

BISO119



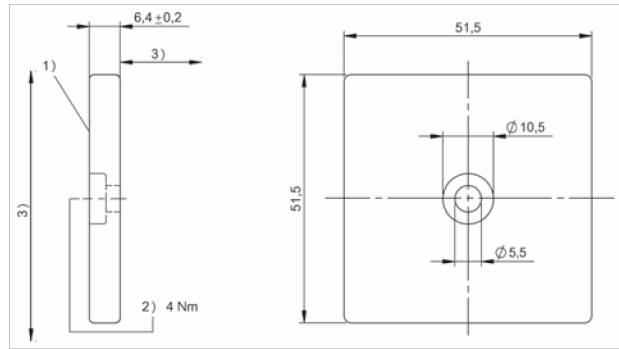
1) Sensing surface, 2) Tightening torque

BISO04E



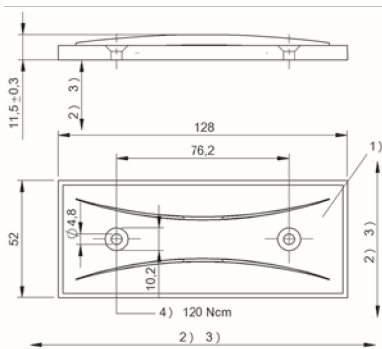
1) Sensing surface, 2) Clear zone

BIS0043, BIS011F, BIS0111, BIS011E, BIS011A, BIS0139



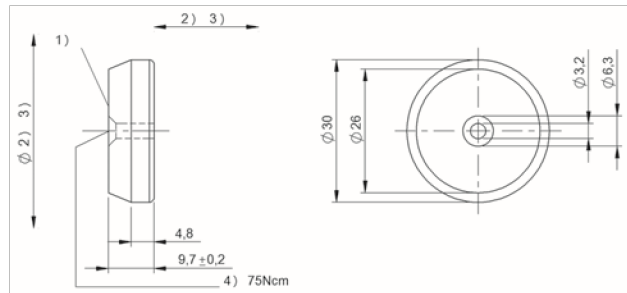
1) Sensing surface, 2) Tightening torque, 3) see R/W head table

BIS00Y5, BIS00Y3, BIS00Y6, BIS00Y4, BIS00Y2



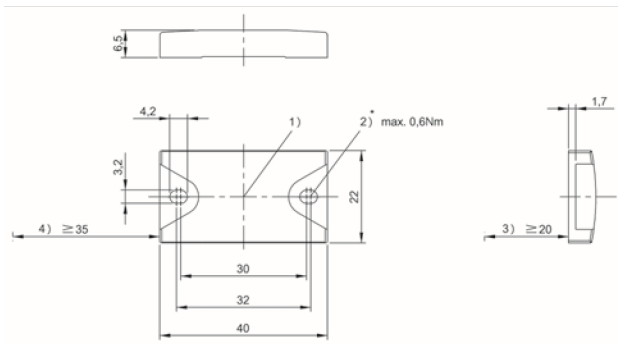
1) Sensing surface, 2) Clear zone, 3) see corresponding RW head, 4) Tightening torque

BIS00W9, BIS00Y1



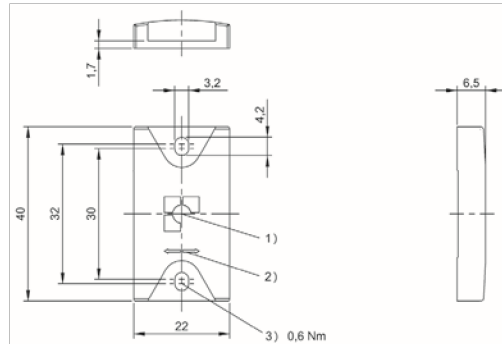
1) Sensing surface, 2) Clear zone, 3) see corresponding R/W head, 4) Tightening torque

BIS00Y9



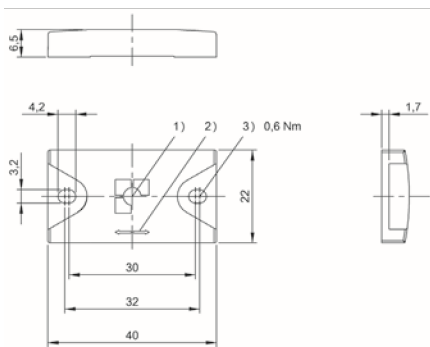
1) Sensing surface, 2) Tightening torque, 3) Clear zone, 4) Clear zone surrounding

BIS00LC



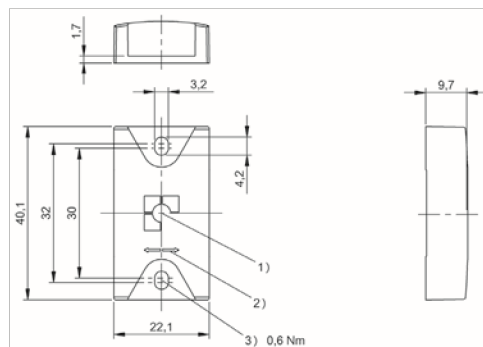
1) Sensing surface, 2) Read/write axis, 3) Tightening torque

BIS004F



1) Sensing surface, 2) Read/write axis, 3) Tightening torque

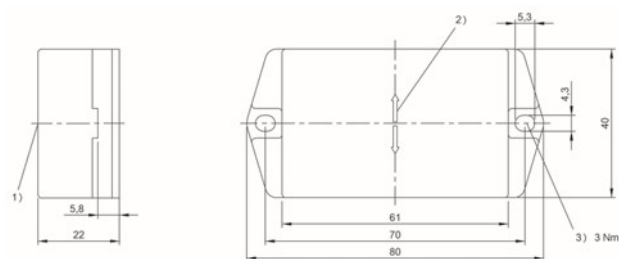
BIS004H



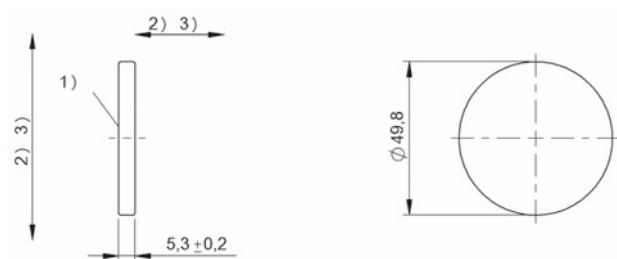
1) Sensing surface, 2) Read/write axis, 3) Tightening torque

BIS011M, BIS0117, BIS011Z, BIS011N, BIS013C

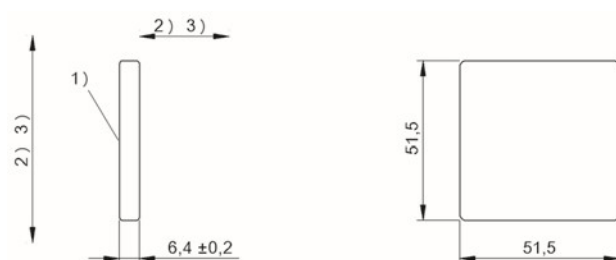
BIS012J, BIS0112, BIS012K, BIS012L, BIS013F



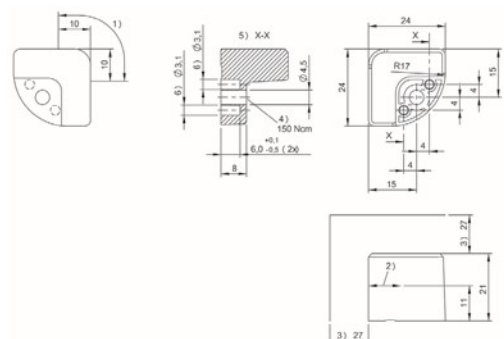
BIS00P3, BIS011W, BIS011Y, BIS011U, BIS013E



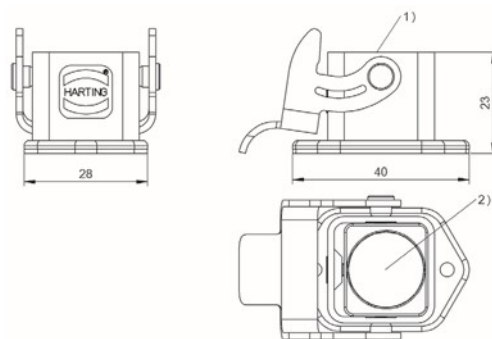
BIS018P



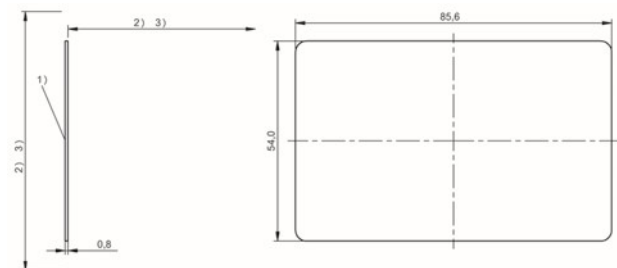
BIS018R, BIS018T



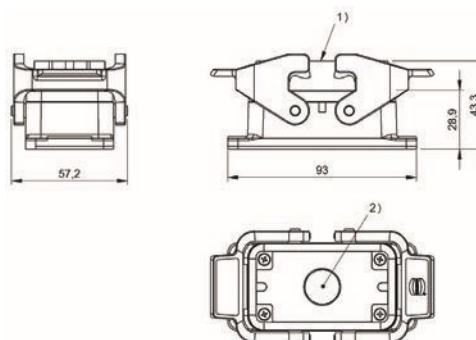
BISOONZ



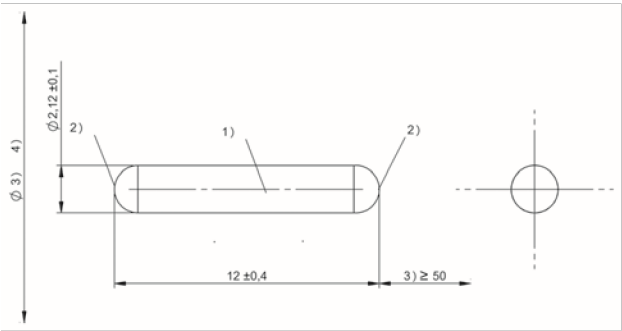
BIS0180



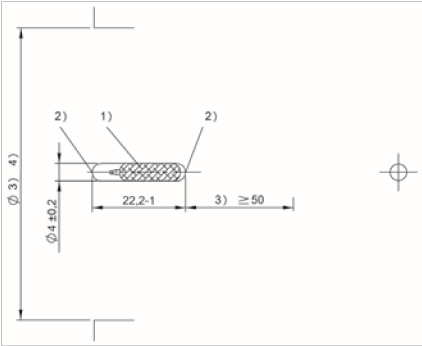
BIS0047



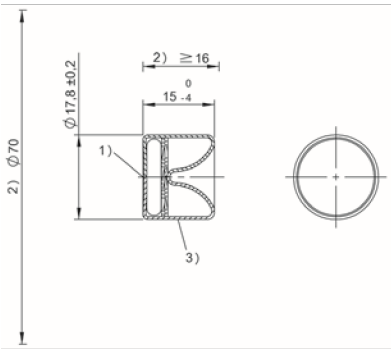
BIS0176



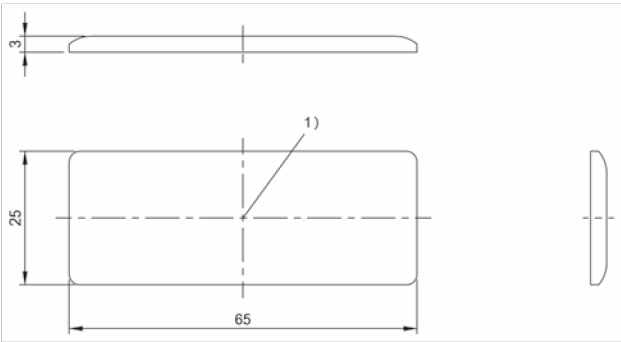
1) Sensing surface parallel, 2) Sensing surface axial, 3) Clear zone, 4) see corresponding R/W head
BIS017F



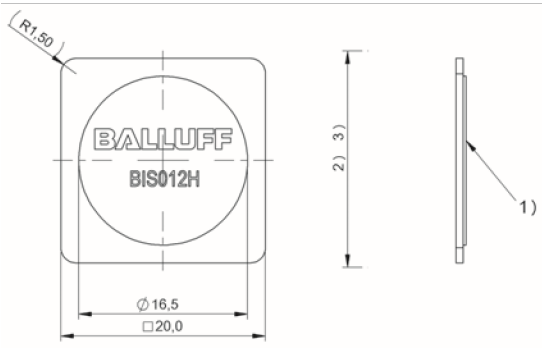
1) Sensing surface parallel, 2) Sensing surface axial, 3) Clear zone, 4) see corresponding R/W head
BIS00M2



1) Sensing surface, 2) Clear zone, 3) Glass
BIS00L8



1) Sensing surface
BIS00KM, BIS00N5



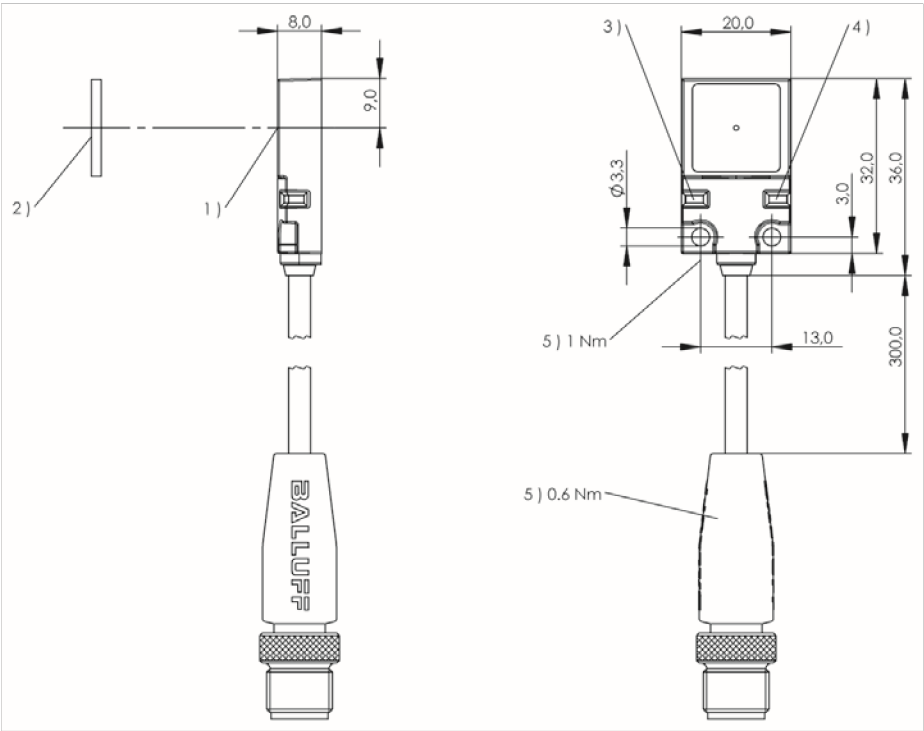
1) Sensing surface, 2) Clear zone, 3) see corresponding R/W head
BIS012H



For processor units BIS V-6...	BIS0197 BIS VM-349-401-S4
Product Group	HF (13.56 MHz)
Dimension	20 x 8 x 32 mm
Installation	metal-free (clear zone) on metal flush in metal
Antenna type	round
Supported data carrier types	DIN ISO 15693, DIN ISO 15693 (High Memory)
Connection	Male, 4-pin
Housing material	Zinc, die-cast
Ambient temperature	0...80 °C
Protection degree	IP67
Approval/Conformity	CE, FCC Part 15, IC RSS-210, UL Listed

Appropriate data carrier

	BIS0042			BIS0043			BIS0044		BIS0045			BIS018Y		
Data carrier distance to metal	>20	>0	>0	>20	>0	>0	>25	>0	>25			>20	>0	
Data carrier clear zone	>100	>100	>0	>100	>100	>0	>100	>100	>100			>100	>100	
Working distance for writing	0-10	0-9.5	0-7	0-13	0-9.5	0-7	0-12	0-5	3-13			0-6	0-5.5	
Working distance for reading	0-10	0-9.5	0-7	0-13	0-9.5	0-7	0-12	0-5	3-13			0-6	0-5.5	
Offset at distance														
	0	±5	±5	±5	±9	±8	±7	±7	±5			0	±5	±4
	2	±5	±5	±5	±9	±8	±7	±7	±5			2	±5	±4
	4	±5	±5	±4.5	±9	±8	±6	±7	±4	±9		2.5	±4	±3.5
	5	±4.5	±4	±4	±9	±7	±5	±7	±2	±9		3	±4	±3.5
	6	±4.5	±4	±4	±8	±7	±5	±6		±8		4	±4	±3.5
	7	±4.5	±4	±2	±8	±7	±1.5	±6		±8		5	±4	±2
	8	±4.5	±4		±8	±7		±6		±8		5.5	±2	±2
	9	±2	±2		±8	±4		±6		±8		6	±2	
	9.5	±2	±2		±8	±4		±6		±8		6.5		
	10	±1			±8			±6		±8		7		
	12				±3			±3		±3		8		
	13				±3					±3		9		
	15											9.5		
	20											10		
Dimensions in mm														



1) Sensing surface, 2) Data carrier, 3) LED (Power), 4) LED (CP), 5) Tightening torque

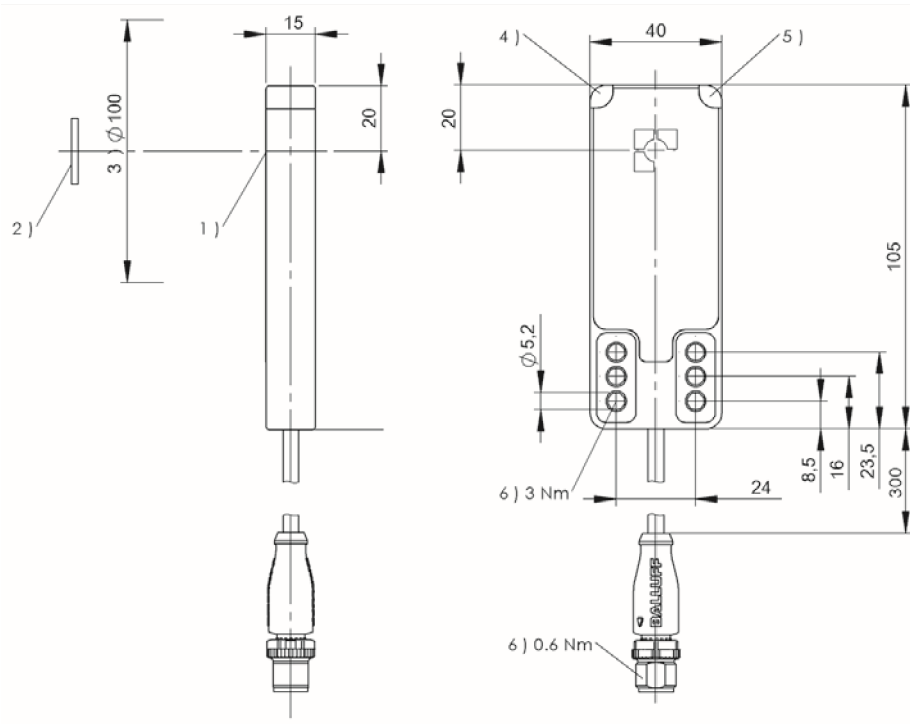
	BIS00UC			BIS004A			BIS00NU BIS00NW BIS0100	
	>20	>0	>0	>20	>0	>0	>0	
	>100	>100	>0	>100	>100	>0	>100	
	0-6.5	0-4	1.3-2.5	0-8	0-8	0-6	0-10	
	0-6.5	0-4	1.3-2.5	0-8	0-8	0-6	0-10	
	±4	±4		±5	±4.5	±4	±6	
	±4	±4	±2	±5	±4.5	±4	±6	
	±3	±3	±0.5	±5	±4.5	±3	±6	
	±3	±3		±5	±4.5	±3	±6	
	±3	±2		±5	±4.5	±3	±6	
	±3			±4	±4	±3	±5	
	±2			±4	±4	±2	±5	
	±2			±4	±4	±2	±5	
	±2			±4	±4		±5	
				±2	±2		±5	
							±3	
							±3	
							±3	



For processor units BIS V-6...	BIS0133 BIS VM-345-401-S4
Product Group	HF (13.56 MHz)
Dimension	40 x 15 x 105 mm
Installation	metal-free (clear zone)
Antenna type	round
Supported data carrier types	DIN ISO 15693, DIN ISO 15693 (High Memory)
Connection	Male, 4-pin
Housing material	Zinc, die-cast
Ambient temperature	0...70 °C
Protection degree	IP67
Approval/Conformity	CE, UL-FILE E227256, Vol.X1, BIS, FCC, IC

Appropriate data carrier

	BIS0043 BIS0111		BIS011F BIS011E BIS011A BIS0139		BIS004A		BIS00YE		BIS00Y4				BIS0044		BIS0045		BIS0046				BIS0119		BIS00NU BIS00NW BIS0100	
Data carrier distance to metal	>50		>50		>10	>0	>25		>50				>50	>0	>50	>50				>0	>0			
Data carrier clear zone	>200		>200		>60	>60	>100		>200				>200	>200	>200	>200				>100	>100			
Working distance for writing	0-28		0-18		0-11	0-9	0-34		0-52				0-22	0-5	0-28	0-45				0-22	0-16			
Working distance for reading	0-28		0-18		0-11	0-9	0-34		0-52				0-22	0-5	0-28	0-45				0-22	0-16			
Offset at distance																								
0	±16		±14		±8	±8	±20		±30		0	±14	±7	±16		±26		0	±13		±10			
4	±16		±14		±8	±8	±20		±30		4	±14	±6	±16		±26		5	±13		±10			
8	±16		±14		±7	±6	±20		±30		5	±14	±3	±16		±26		10	±13		±9			
9	±16		±14		±7	±4	±20		±30		10	±14		±16		±26		13	±10		±8			
10	±16		±14		±7		±20		±30		15	±12		±14		±26		16	±10		±4			
11	±14		±11		±4		±18		±30		18	±10		±14		±26		18	±10					
15	±14		±11				±18		±30		20	±10		±14		±26		20	±10					
18	±14		±5				±18		±30		22	±6		±12		±24		22	±6					
22	±12						±15		±28		24			±12		±24		24						
25	±12						±15		±28		28			±9		±24		28						
28	±9						±15		±28		30					±24		30						
32							±8		±28		31					±24		31						
35									±28		35					±24		35						
40									±28		40					±24		40						
42									±24		43					±15		43						
45									±24		45					±15		45						
48									±24		48							48						
50									±24		52							52						
52									±10		60							60						
Dimensions in mm																								



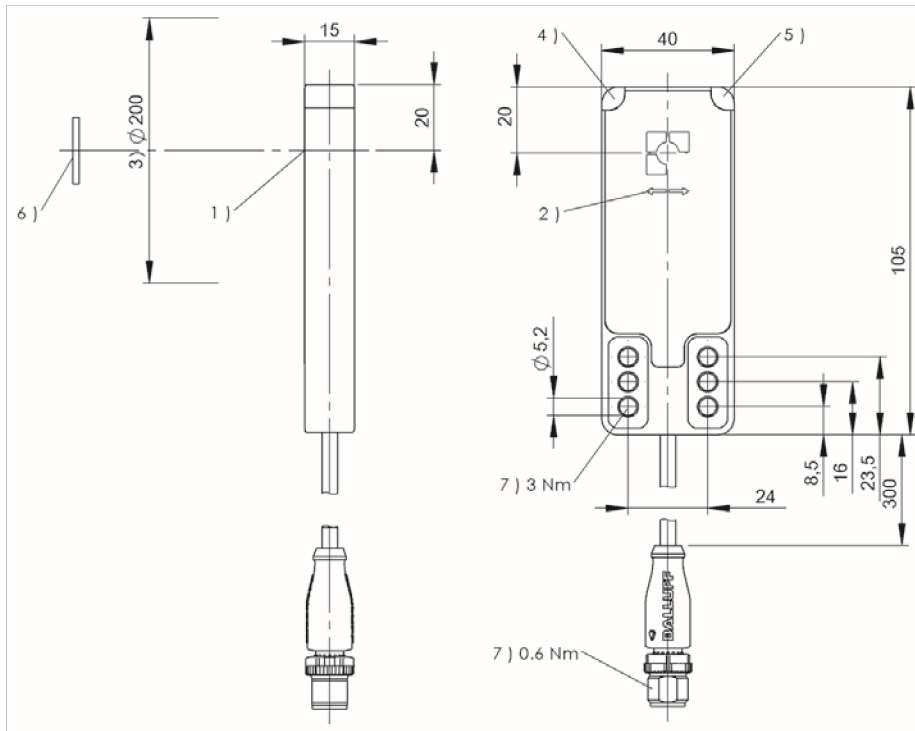
1) Sensing surface, 2) Data carrier, 3) Clear zone, 4) LED (Power), 5) LED (CP), 6) Tightening torque



For processor units BIS V-6...	BIS0131 BIS VM-355-401-S4
Product Group	HF (13.56 MHz)
Dimension	40 x 15 x 105 mm
Installation	metal-free (clear zone)
Antenna type	Rod
Supported data carrier types	DIN ISO 15693, DIN ISO 15693 (High Memory)
Connection	Male, 4-pin
Housing material	Zinc, die-cast
Ambient temperature	0...70 °C
Protection degree	IP67
Approval/Conformity	CE, UL-FILE E227256, Vol.X1, BIS, FCC, IC

Appropriate data carrier

	BIS004F				BIS004H					BIS00M2		BIS00P3				
Data carrier clear zone A	>200	>200	>200	>200	>200	>200	>200	>200		>200	>200	>240	>240	>240	>240	
Data carrier clear zone B	>200	>200	>200	>200	>200	>200	>200	>200		>200	>200	>480	>480	>480	>480	
Data carrier clear zone C										>50	>50	>50	>50	>0	>0	
Metallic mounting surface 40 x 22 mm	0-45	0-45			0-45	0-45										
Metallic mounting surface > 200 x 200 mm			0-45	0-45			0-45	0-45								
Working distance for writing	0-45	0-45	0-45	0-45	0-45	0-45	0-45	0-45		0-25	0-25	0-60	0-60	0-60	0-60	
Working distance for reading	0-45	0-45	0-45	0-45	0-45	0-45	0-45	0-45		0-25	0-25	0-60	0-60	0-60	0-60	
Offset at distance	X	Y	X	Y	X	Y	X	Y		X	Y	X	Y	X	Y	
0	±50	±24	±50	±24	±24	±50	±24	±50	0	±32	±16	±80	±36	±80	±36	
5	±50	±24	±50	±24	±24	±50	±24	±50	5	±32	±16	±80	±36	±80	±36	
12	±50	±24	±50	±24	±24	±50	±24	±50	10	±32	±16	±80	±36	±80	±36	
15	±50	±24	±50	±24	±24	±50	±24	±50	13	±30	±14	±80	±36	±80	±36	
18	±50	±24	±50	±24	±24	±50	±24	±50	15	±30	±14	±80	±36	±80	±36	
20	±50	±24	±50	±24	±24	±50	±24	±50	20	±30	±14	±80	±36	±80	±36	
22	±40	±20	±40	±20	±20	±40	±20	±40	25	±15	±8	±75	±30	±75	±30	
25	±40	±20	±40	±20	±20	±40	±20	±40	30			±75	±30	±75	±30	
30	±40	±20	±40	±20	±20	±40	±20	±40	36			±75	±30	±75	±30	
32	±40	±20	±40	±20	±20	±40	±20	±40	40			±75	±30	±75	±30	
35	±40	±20	±40	±20	±20	±40	±20	±40	42			±75	±30	±75	±30	
40	±38	±18	±38	±18	±18	±38	±18	±38	50			±75	±30	±75	±30	
45	±20	±10	±20	±10	±10	±20	±10	±20	52			±55	±25	±55	±25	
50									60			±20	±10	±20	±10	
52									75							
60									83							
65									100							
Dimensions in mm																



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

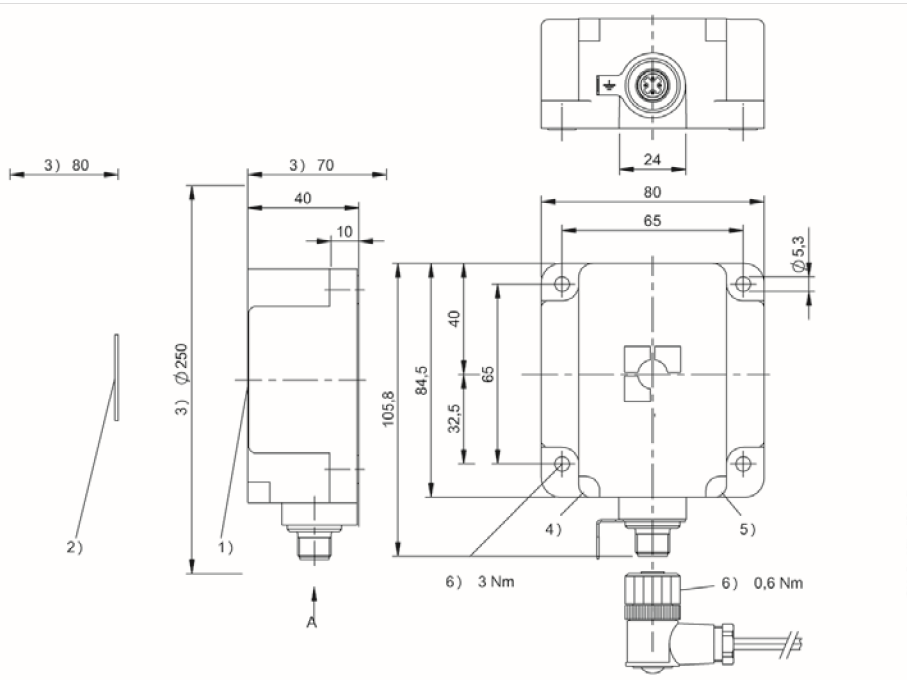
	BIS011W BIS011Y BIS011U BIS013E				BIS017F			BIS011M BIS011Z BIS011N BIS013C				BIS012J BIS012K BIS012L BIS013F					BIS0117				BIS0112					BIS00NZ		
	>240	>240	>200	>200		>200	>200	>200	>200	>200	>200	>200	>200	>200	>200		>200	>200	>200	>200	>200	>200	>200	>200	>200	>200	>27	>27
	>480	>480	>200	>200		>200	>200	>200	>200	>200	>200	>200	>200	>200	>200		>200	>200	>200	>200	>200	>200	>200	>200	>200	>27	>27	
	>50	>50	>50	>50																								
						0-34	0-34			0-30	0-30						0-45	0-45			0-45	0-45						
								0-34	0-34			0-30	0-30						0-45	0-45			0-45	0-45				
	0-36	0-36	0-15	0-15		0-34	0-34	0-34	0-34	0-30	0-30	0-30	0-30				0-45	0-45	0-45	0-45	0-45	0-45	0-45	0-45		0-25	0-25	
	0-36	0-36	0-15	0-15		0-34	0-34	0-34	0-34	0-30	0-30	0-30	0-30				0-45	0-45	0-45	0-45	0-45	0-45	0-45	0-45		0-25	0-25	
	X	Y	X	Y		X	Y	X	Y	X	Y	X	Y				X	Y	X	Y	X	Y	X	Y		X	Y	
	±50	±26	±20	±11	0	±38	±18	±40	±18	±20	±40	±20	±40	0	±58	±24	±58	±24	±24	±55	±20	±48			0	±30	±20	
	±50	±26	±20	±11	5	±38	±18	±40	±18	±20	±40	±20	±40	5	±58	±24	±58	±24	±24	±55	±20	±48			5	±30	±20	
	±50	±26	±17	±9	10	±38	±18	±40	±18	±20	±40	±20	±40	10	±58	±24	±58	±24	±24	±55	±20	±48			10	±30	±20	
	±50	±26	±14	±7	15	±38	±18	±40	±18	±17	±38	±17	±38	15	±58	±24	±58	±24	±24	±55	±20	±48			15	±25	±15	
	±50	±26	±8	±3	18	±35	±15	±40	±18	±17	±38	±17	±38	20	±58	±24	±58	±24	±24	±55	±20	±48			20	±15	±10	
	±50	±26			20	±35	±15	±40	±18	±17	±38	±17	±38	25	±53	±21	±53	±21	±20	±50	±16	±38			25	±5	±5	
	±40	±20			22	±35	±15	±35	±16	±15	±30	±15	±30	30	±53	±21	±53	±21	±20	±50	±16	±38			27			
	±35	±17			25	±35	±15	±35	±16	±7	±16	±7	±16	35	±53	±21	±53	±21	±20	±50	±16	±38			35			
	±20	±10			30	±27	±12	±35	±16	±7	±16	±7	±16	40	±45	±18	±45	±18	±18	±40	±16	±38			40			
					34	±15	±8	±15	±8					45	±25	±12	±25	±12	±10	±20	±10	±20			42			
					36									50											50			
					39									54											57			
					42									56											60			
					50									60											65			
					52									70											70			
					60									75											75			
					65									80														



For processor units BIS V-6...	BIS00T0 BIS VM-301-001-S4
Product Group	HF (13.56 MHz)
Dimension	80 x 40 x 84.5 mm
Installation	metal-free (clear zone)
Antenna type	round
Supported data carrier types	DIN ISO 14443, DIN ISO 15693
Connection	Male, 4-pin
Housing material	PBT
Ambient temperature	0...70 °C
Protection degree	IP67
Approval/Conformity	CE, UL-FILE E227256, Vol.X1, BIS

Appropriate data carrier

	BIS003Y			BIS003Z			BIS0043		BIS0044		BIS0045		BIS0046		BIS0047	BIS00L8		BIS0111	
Data carrier distance to metal	>50	>10	>5	>50	>25	>10	>50	>20	>50	>30	>50	>30	>50	>30	>80	>1	0	>50	
Data carrier clear zone	>200	>60	>50	>200	>150	>150	>200	>60	>200	>100	>200	>100	>200	>100	>250	>70	>70	>200	
Working distance for writing	0-34	0-20	0-15	0-45	0-43	0-35	0-45	8-22	0-32	0-20	0-45	0-30	0-70	0-45	0-50	0-32	0-32	0-50	
Working distance for reading	0-34	0-20	0-15	0-45	0-43	0-35	0-45	8-22	0-32	0-20	0-45	0-30	0-70	0-45	0-50	0-32	0-32	0-50	
Offset at distance																			
0	±22	±18	±14	±30	±24	±18	±32	±20	±28	±20	±32	±22	±40	±25	±30	±30	±25	±30	
5	±22	±18	±14	±30	±24	±18	±32	±20	±28	±20	±32	±22	±40	±25	±30	±30	±25	±30	
9	±22	±18	±14	±30	±24	±18	±32	±20	±28	±18	±32	±22	±40	±25	±30	±30	±25	±30	
12	±22	±18	±10	±30	±24	±18	±32	±18	±24	±18	±32	±22	±40	±25	±30	±25	±25	±30	
15	±22	±18	±10	±30	±24	±18	±32	±18	±24	±15	±32	±20	±40	±25	±30	±25	±25	±30	
16	±22	±16	±8	±30	±24	±18	±32	±18	±24	±15	±32	±20	±40	±25	±30	±25	±25	±30	
18	±22	±16	±6	±30	±24	±18	±32	±16	±24	±12	±32	±18	±40	±25	±30	±25	±22	±30	
20	±22	±16	±4	±30	±24	±18	±32	±16	±24	±8	±32	±16	±40	±25	±30	±25	±22	±30	
22	±20	±10		±30	±24	±15	±25	±14	±20		±25	±14	±40	±22	±30	±25	±22	±25	
25	±15	±10		±30	±24	±15	±25		±20		±25	±12	±40	±22	±30	±25	±22	±25	
30	±15	±4		±30	±20	±12	±25		±12		±25	±10	±40	±22	±28	±20	±17	±25	
32	±8			±30	±18	±8	±20		±12		±20		±40	±22	±24	±20	±17	±25	
35	±4			±30	±16	±4	±20				±20		±40	±20	±22			±25	
40				±24	±10		±20				±20		±40	±20	±18			±25	
43				±20	±4		±12				±12		±35	±15	±14			±25	
45				±16			±12				±12		±35	±12	±12			±25	
50				±4									±35		±4			±5	
52													±35						
60													±30						
65													±30						
70													±20						
Dimensions in mm																			



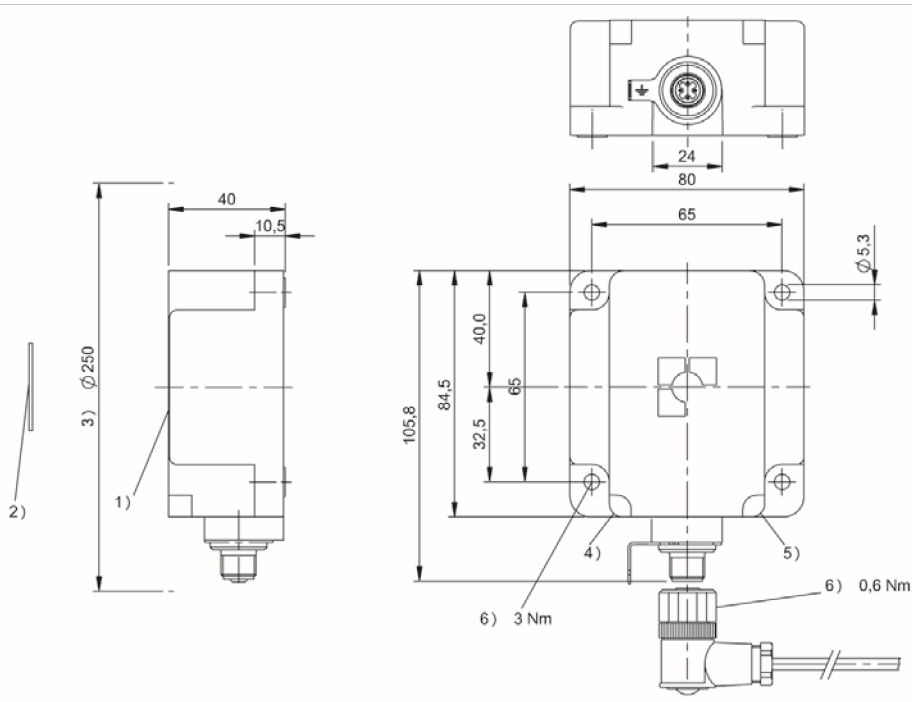
1) Sensing surface, 2) Data carrier, 3) Clear zone, 4) LED (Power), 5) LED (CP), 6) Tightening torque



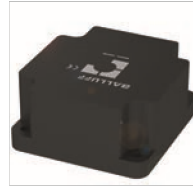
For processor units BIS V-6...	BIS0130 BIS VM-341-401-S4
Product Group	HF (13.56 MHz)
Dimension	80 x 40 x 84.5 mm
Installation	metal-free (clear zone)
Antenna type	round
Supported data carrier types	DIN ISO 15693, DIN ISO 15693 (High Memory)
Connection	Male, 4-pin
Housing material	PBT
Ambient temperature	0...70 °C
Protection degree	IP67
Approval/Conformity	CE, UL-FILE E227256, Vol.X1, BIS

Appropriate data carrier

	BIS0043			BIS011F BIS011E BIS011A BIS0139			BIS0046	BIS00Y4		BIS0119
Data carrier distance to metal	>50	>0	>0	>50	>0	>0	>50	>50		>0
Data carrier clear zone	>200	>200	>0	>200	>200	>0	>200	>200		>100
Working distance for writing	0-64	0-36	14-20	0-42	0-30	11-20	0-100	0-120		0-40
Working distance for reading	0-64	0-36	14-20	0-42	0-30	11-20	0-100	0-120		0-40
Offset at distance										
0	±40	±25		±30	±24		±50	±60		0 ±30
8	±40	±25		±30	±24		±50	±60		5 ±30
11	±40	±25		±30	±24	±25	±50	±60		10 ±30
14	±40	±25	±20	±30	±24	±25	±50	±60		12 ±25
16	±40	±25	±20	±30	±24	±9	±50	±60		15 ±25
18	±40	±25	±10	±30	±24	±9	±50	±60		16 ±25
20	±40	±25	±10	±30	±24	±9	±50	±60		18 ±25
25	±36	±22		±25	±20		±50	±60		20 ±25
30	±36	±22		±25	±10		±50	±60		22 ±25
36	±36	±10		±25			±50	±60		25 ±25
40	±36			±25			±50	±60		30 ±25
42	±30			±5			±50	±60		32 ±20
50	±30						±50	±60		36 ±20
60	±30						±45	±55		40 ±15
64	±15						±45	±55		43
80							±45	±55		45
90							±45	±55		50
100							±20	±55		52
110								±40		60
120								±40		65
Dimensions in mm										



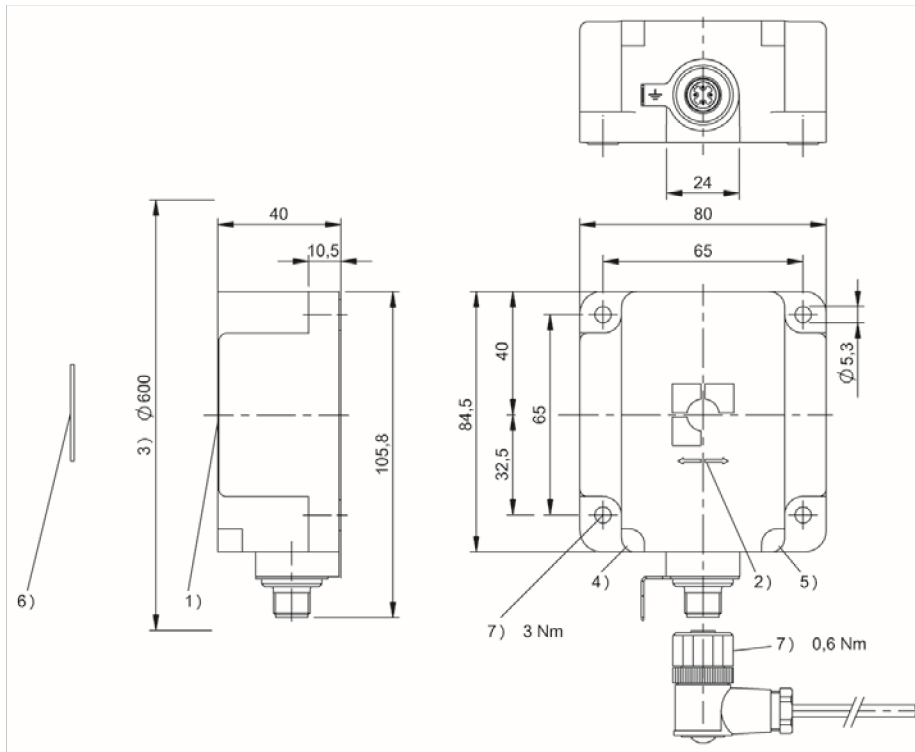
1) Sensing surface, 2) Data carrier, 3) Clear zone, 4) LED (Power), 5) LED (CP), 6) Tightening torque



For processor units BIS V-6...	BIS012Z BIS VM-351-401-S4
Product Group	HF (13.56 MHz)
Dimension	80 x 40 x 84.5 mm
Installation	metal-free (clear zone)
Antenna type	Rod
Supported data carrier types	DIN ISO 15693, DIN ISO 15693 (High Memory)
Connection	Male, 4-pin
Housing material	PBT
Ambient temperature	0...70 °C
Protection degree	IP67
Approval/Conformity	CE, UL-FILE E227256, Vol.X1, BIS

Appropriate data carrier

	BIS004F				BIS004H					BIS00M2		BIS00P3				
Data carrier clear zone A	>200	>200	>200	>200	>200	>200	>200	>200		>200	>200	>240	>240	>240	>240	
Data carrier clear zone B	>200	>200	>200	>200	>200	>200	>200	>200		>200	>200	>480	>480	>480	>480	
Data carrier clear zone C										>50	>50	>50	>50	>0	>0	
Metallic mounting surface 40 x 22 mm	0-52	0-52			0-52	0-52										
Metallic mounting surface > 200 x 200 mm			0-52	0-52			0-52	0-52								
Working distance for writing	0-52	0-52	0-52	0-52	0-52	0-52	0-52	0-52		0-36	0-36	0-100	0-100	0-100	0-100	
Working distance for reading	0-52	0-52	0-52	0-52	0-52	0-52	0-52	0-52		0-36	0-36	0-100	0-100	0-100	0-100	
Offset at distance	X	Y	X	Y	X	Y	X	Y		X	Y	X	Y	X	Y	
	0	±60	±25	±60	±25	±25	±60	±25	±60	0	±45	±23	±110	±50	±120	±50
	5	±60	±25	±60	±25	±25	±60	±25	±60	5	±45	±23	±110	±50	±120	±50
	12	±60	±25	±60	±25	±25	±60	±25	±60	10	±45	±23	±110	±50	±120	±50
	15	±60	±25	±60	±25	±25	±60	±25	±60	15	±45	±23	±110	±50	±120	±50
	18	±60	±25	±60	±25	±25	±60	±25	±60	20	±40	±20	±110	±50	±120	±50
	20	±60	±25	±60	±25	±25	±60	±25	±60	25	±40	±20	±100	±50	±100	±50
	22	±60	±25	±60	±25	±25	±60	±25	±60	30	±36	±18	±100	±50	±100	±50
	25	±60	±25	±60	±25	±25	±60	±25	±60	36	±20	±10	±100	±50	±100	±50
	30	±60	±25	±60	±25	±25	±60	±25	±60	40			±100	±50	±100	±50
	32	±50	±25	±50	±25	±25	±50	±25	±50	45			±100	±50	±100	±50
	35	±50	±25	±50	±25	±25	±50	±25	±50	50			±100	±50	±100	±50
	40	±50	±20	±50	±20	±20	±50	±20	±50	60			±80	±35	±80	±35
	45	±25	±20	±25	±20	±20	±25	±20	±25	70			±80	±35	±80	±35
	50	±25	±20	±25	±20	±20	±25	±20	±25	80			±80	±35	±80	±35
	52	±25	±8	±25	±8	±8	±25	±8	±25	90			±80	±35	±80	±35
	60									100			±35	±15	±80	±35
	65									110				±25	±15	
Dimensions in mm																



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

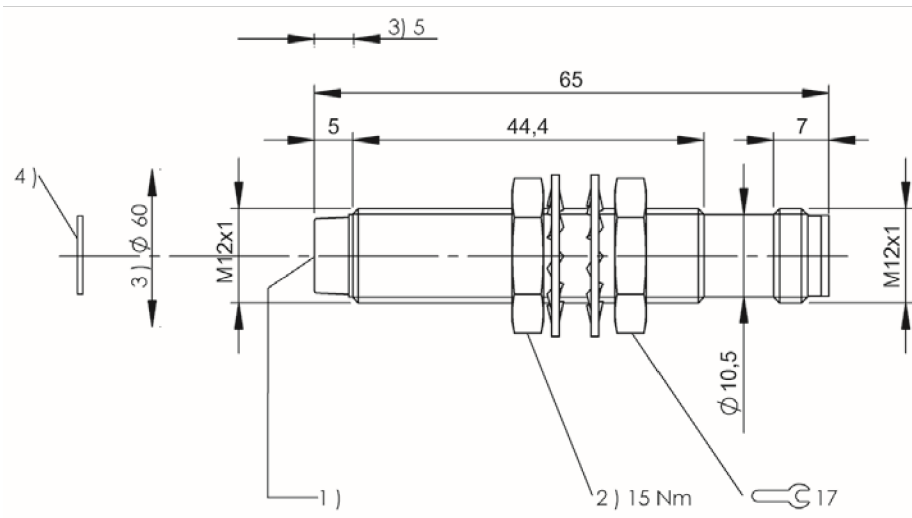
	BIS011W BIS011Y BIS011U BIS013E				BIS017F					BIS011M BIS011Z BIS011N BIS013C				BIS012J BIS012K BIS012L BIS013F					BIS0117				BIS0112					BIS00NZ				
	>240	>240	>200	>200		>200	>200	>200	>200	>200	>200	>200	>200	>200	>200	>200	>200	>200	>200	>200	>200	>200	>200	>200	>200	>200	>200	>200	>27	>27	>27	>27
	>480	>480	>200	>200		>200	>200	>200	>200	>200	>200	>200	>200	>200	>200	>200	>200	>200	>200	>200	>200	>200	>200	>200	>200	>200	>200	>27	>27	>27	>27	
	>50	>50	>50	>50																												
						0-40	0-40				0-42	0-42				0-75	0-75			0-70	0-70											
								0-50	0-50			0-42	0-42					0-70	0-70			0-54	0-54									
	0-60	0-60	0-25	0-25		0-40	0-40	0-50	0-50	0-42	0-42	0-42	0-42			0-75	0-75	0-70	0-70	0-70	0-70	0-54	0-54			0-57	0-57	0-27	0-27			
	0-60	0-60	0-25	0-25		0-40	0-40	0-50	0-50	0-42	0-42	0-42	0-42			0-75	0-75	0-70	0-70	0-70	0-70	0-54	0-54			0-57	0-57	0-27	0-27			
	X	Y	X	Y		X	Y	X	Y	X	Y	X	Y			X	Y	X	Y	X	Y	X	Y			X	Y	X	Y			
	±70	±30	±35	±21		0	±50	±24	±55	±28	±25	±50	±25	±50	0	±85	±35	±80	±34	±34	±80	±30	±60			0	±70	±35	±40	±20		
	±70	±30	±35	±21		5	±50	±24	±55	±28	±25	±50	±25	±50	5	±85	±35	±80	±34	±34	±80	±30	±60			5	±70	±35	±40	±20		
	±70	±30	±35	±21		12	±50	±24	±55	±28	±25	±50	±25	±50	10	±85	±35	±80	±34	±34	±80	±30	±60			10	±70	±35	±40	±20		
	±70	±30	±33	±19		15	±50	±24	±55	±28	±25	±45	±25	±45	15	±85	±35	±80	±34	±34	±80	±30	±60			15	±70	±35	±30	±18		
	±70	±30	±23	±13		18	±50	±24	±55	±28	±22	±45	±22	±45	20	±85	±35	±80	±34	±34	±80	±30	±60			20	±70	±35	±30	±18		
	±60	±30	±7	±5		20	±50	±24	±55	±28	±22	±45	±22	±45	25	±85	±35	±75	±30	±30	±75	±25	±52			25	±60	±30	±25	±15		
	±60	±30				22	±40	±22	±50	±25	±22	±45	±22	±45	30	±85	±35	±75	±30	±30	±75	±25	±52			27	±60	±30		±5		
	±60	±30				25	±40	±22	±50	±25	±22	±45	±22	±45	35	±75	±30	±75	±30	±30	±75	±25	±52			35	±60	±30				
	±60	±30				30	±40	±22	±50	±25	±19	±36	±19	±36	40	±75	±30	±75	±30	±30	±75	±25	±52			40	±60	±30				
	±50	±25				32	±40	±22	±40	±20	±19	±36	±19	±36	45	±75	±30	±65	±27	±27	±65	±20	±45			45	±50	±25				
	±50	±25				35	±40	±22	±40	±20	±19	±36	±19	±36	50	±75	±30	±65	±27	±27	±65	±20	±45			50	±50	±25				
	±15	±10				40	±20	±10	±40	±20	±10	±18	±10	±18	54	±60	±25	±65	±27	±27	±65	±12	±22			57	±30	±15				
						42			±40	±20	±10	±18	±10	±18	60	±60	±25	±65	±27	±27	±65					60						
						50			±20	±10					65	±60	±25	±40	±20	±20	±40					65						
						52									70	±60	±25	±40	±20	±20	±40					70						
						60									75	±40	±15									75						
						65									80																	



For processor units BIS V-6...	BIS013H BIS VM-348-401-S4
Product Group	HF (13.56 MHz)
Dimension	Ø 12 x 65 mm
Installation	metal-free (clear zone)
Antenna type	round
Supported data carrier types	DIN ISO 15693, DIN ISO 15693 (High Memory)
Connection	Male, 4-pin
Housing material	Brass, nuts nickel plated brass
Ambient temperature	0...70 °C
Protection degree	IP67
Approval/Conformity	CE, FCC Part 15, IC RSS-210, UL-FILE E227256, Vol.X1, BIS

Appropriate data carrier

	BIS0042		BIS004A		BIS0044		BIS00UC			
Data carrier distance to metal	>50	>0	>50	>0	>50		>50	>0	>0	
Data carrier clear zone	>200	>0	>200	>0	>200		>200	>200	>0	
Working distance for writing	0-7	0-5	0-7	0-5	0-12		0-5	0-3	0-2	
Working distance for reading	0-7	0-5	0-7	0-5	0-12		0-5	0-3	0-2	
Offset at distance										
	0	±5	±3	±4.5	±3	±7		±4	±2.5	±2
	1	±5	±3	±4.5	±3	±7		±4	±2.5	±1
	2	±5	±3	±4.5	±3	±7		±4	±2	
	3	±4.5	±2.5	±4	±2.5	±7		±3	±1	
	4	±4.5	±2.5	±4	±2.5	±7		±3		
	5	±4.5	±1	±4	±1	±6		±1.5		
	6	±4.5		±4		±6				
	7	±2.5		±2		±6				
	8					±6				
	10					±3				
	12					±3				
	18									
Dimensions in mm										



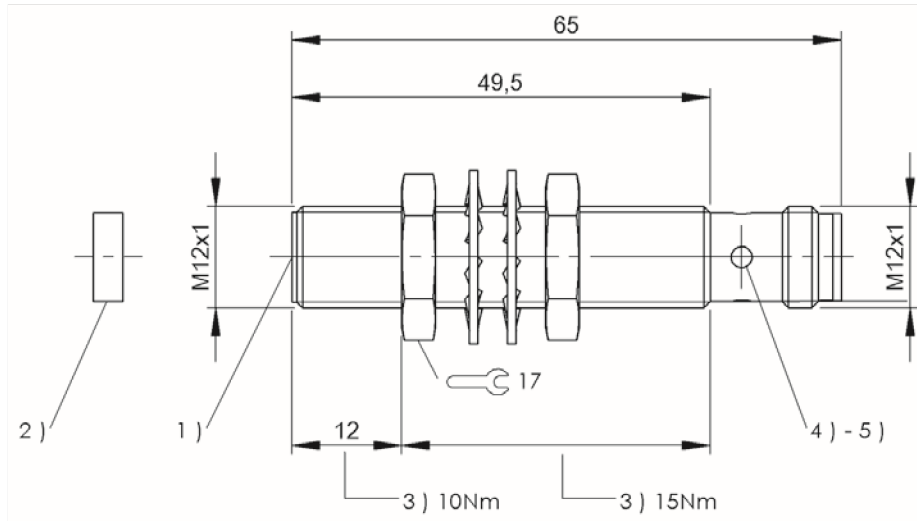
1) Sensing surface, 2) Tightening torque, 3) Clear zone, 4) Data carrier



For processor units BIS V-6...	BIS015M BIS VM-330-401-S4
Product Group	HF (13.56 MHz)
Dimension	Ø 12 x 65 mm
Installation	metal-free (clear zone) on metal flush in metal
Antenna type	round
Supported data carrier types	DIN ISO 15693, DIN ISO 15693 (High Memory)
Connection	Male, 4-pin
Housing material	Brass, nuts brass with white bronze
Ambient temperature	0...70 °C
Protection degree	IP67
Approval/Conformity	CE, FCC Part 15, IC RSS-210, UL-FILE E227256, Vol.X1, BIS

Appropriate data carrier

	BIS0042			BIS00UC			BIS004A			BIS00YL			BIS00YK				BIS00NU BIS00NW BIS0100
Data carrier distance to metal	>20	>0	>0	>20	>0	>0	>20	>0	>0	>20	>0	>0	>20	>0	>0		>0
Data carrier clear zone	>100	>100	>0	>100	>100	>0	>100	>100	>0	>100	>100	>0	>100	>100	>0		>100
Working distance for writing	0-6.5	0-6	0-5	0-4.5	0-3	0-2	0-5.5	0-5	0-3.5	0-6	0-5.5	0-2	0-4.5	0-4	0-2		0-7
Working distance for reading	0-6.5	0-6	0-5	0-4.5	0-3	0-2	0-5.5	0-5	0-3.5	0-6	0-5.5	0-2	0-4.5	0-4	0-2		0-7
Offset at distance																	
0	±4	±3.5	±3.5	±2.5	±2.5	±2	±3	±3	±2.5	±3.5	±3.5	±2	±3.5	±3	±2	0	±4.5
1	±4	±3.5	±3.5	±2.5	±2.5	±2	±3	±3	±2.5	±3.5	±3.5	±2	±3.5	±3	±2	2	±4.5
2	±4	±3.5	±3.5	±2.5	±2	±1	±3	±3	±2.5	±3.5	±3.5	±1	±3.5	±3	±1	3	±4
3	±3	±3	±2.5	±2	±1		±2	±2	±2	±3	±3		±3	±2		4	±4
3.5	±3	±3	±2.5	±2			±2	±2	±1	±3	±3		±2	±1		5	±4
4	±3	±3	±2.5	±2			±2	±2		±3	±3		±2	±1		7	±1.5
4.5	±3	±3	±1.5	±1			±1	±1		±2	±2		±2			9	
5	±3	±3	±1.5				±1	±1		±2	±2					10	
5.5	±2	±2					±1			±2	±2					15	
6	±2	±2								±2						20	
6.5	±2															25	
Dimensions in mm																	



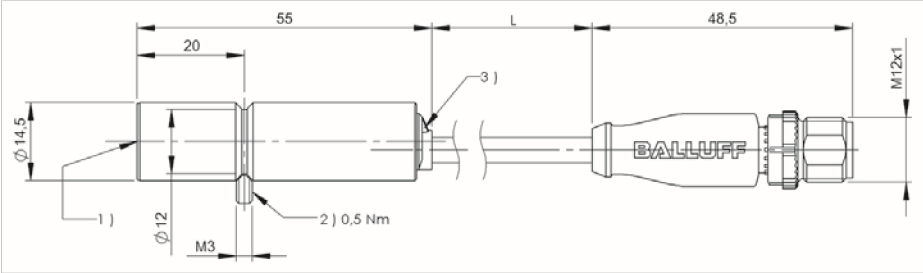
1) Sensing surface, 2) Data carrier, 3) Tightening torque, 4) LED (CP), 5) LED (Power)



For processor units BIS V-6...	BISO13Z BIS VM-343-401-S4
Product Group	HF (13.56 MHz)
Dimension	Ø 14.5 x 55 mm
Installation	metal-free (clear zone) on metal flush in metal
Antenna type	round
Supported data carrier types	DIN ISO 15693, DIN ISO 15693 (High Memory)
Connection	Male, 4-pole, 0.30 m, PU
Housing material	Brass
Ambient temperature	0...70 °C
Protection degree	IP67
Approval/Conformity	CE, UL-FILE E227256, Vol.X1, BIS, FCC, IC

Appropriate data carrier

	BIS0042			BIS00UC BIS00UE		BIS004A			BIS00YL			BIS00YK			
Data carrier distance to metal	>50	>0	>0	>50		>50	>0	>0	>50	>0	>0	>50	>0	>0	
Data carrier clear zone	>200	>200	>0	>200		>200	>200	>0	>200	>200	>0	>200	>200	>0	
Working distance for writing	0-5.5	0-5	0-4	0-3.5		0-5	0-4.5	0-3.5	0-6.5	0-6	0-3	0-5	0-5	0-2.5	
Working distance for reading	0-5.5	0-5	0-4	0-3.5		0-5	0-4.5	0-3.5	0-6.5	0-6	0-3	0-5	0-5	0-2.5	
Offset at distance															
0	±3.5	±3	±2.5	±3		±3.5	±3	±2.5	±4	±3.5	±3	±3	±3	±2.5	
1	±3.5	±3	±2.5	±3		±3.5	±3	±2.5	±4	±3.5	±3	±3	±3	±2.5	
2	±3.5	±3	±2.5	±3		±3.5	±3	±2.5	±4	±3.5	±2	±3	±3	±2	
2.5	±3	±2.5	±2	±2		±3	±2.5	±2	±3	±3	±1	±2.5	±2.5	±1	
3	±3	±2.5	±2	±2		±3	±2.5	±1	±3	±3	±1	±2.5	±2.5		
3.5	±3	±2.5	±1	±1		±3	±2.5	±1	±3	±3		±2.5	±2.5		
4	±3	±2.5	±1			±3	±1.5		±3	±3		±2	±2		
4.5	±2	±1.5				±2	±1.5		±3	±3		±1	±1		
5	±2	±1.5				±2			±3	±3		±1	±1		
5.5	±2								±2	±2					
6									±2	±2					
6.5									±2						
Dimensions in mm															



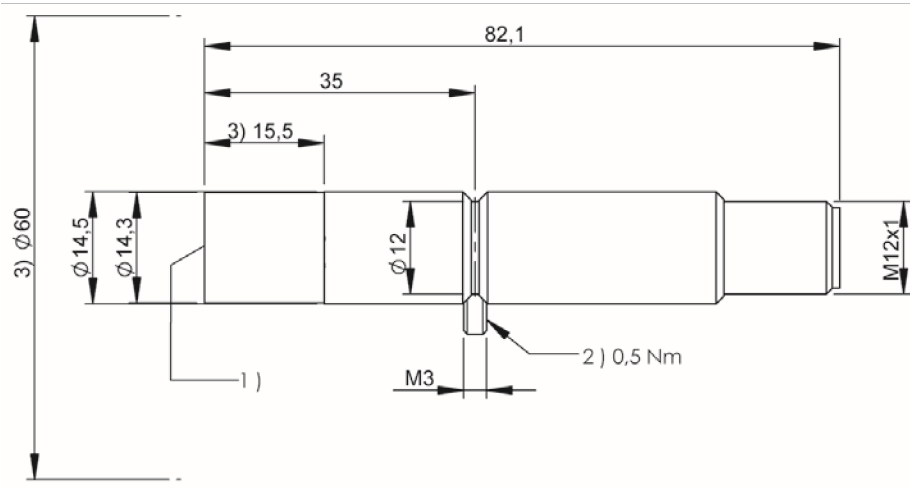
1) Sensing surface, 2) Tightening torque, 3) Function indicator

		BIS00LC	BIS0119	BIS00NU BIS00NW BIS0100	
		>25	>0	>0	
		>100	>100	>100	
		0-7	0-7.5	0-7.5	
		0-7	0-7.5	0-7.5	
	0	±4	±5	±5	
	2	±4	±5	±5	
	4	±3.5	±5	±4.5	
	5	±3.5	±4	±4	
	6	±2	±4	±4	
	7	±2	±2.5	±2	
	7.5		±2.5	±2	
	10				
	14				
	16				
	18				
	20				



For processor units BIS V-6...	BIS019U BIS VM-343-501/05-S115
Product Group	HF (13.56 MHz)
Dimension	Ø 14.5 x 82.1 mm
Installation	metal-free (clear zone)
Antenna type	round
Supported data carrier types	DIN ISO 15693, DIN ISO 15693 (High Memory), LF 70/455 kHz
Connection	Male, 8-pin
Housing material	Brass
Ambient temperature	0...70 °C
Protection degree	IP67
Approval/Conformity	CE, UL-FILE E227256, Vol.X1, BIS

Appropriate data carriers on request

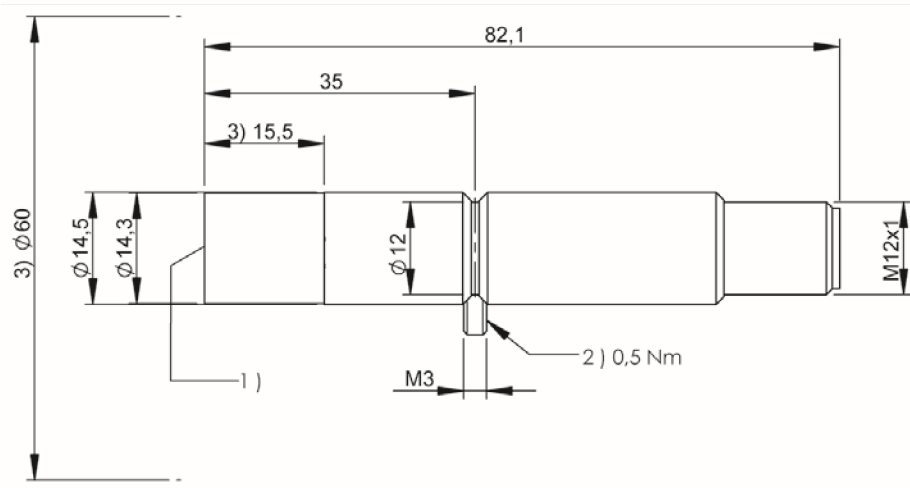


1) Sensing surface, 2) Tightening torque



For processor units BIS V-6...	BIS019W BIS VM-343-501/10-S115
Product Group	HF (13.56 MHz)
Dimension	Ø 14.5 x 82.1 mm
Installation	metal-free (clear zone)
Antenna type	round
Supported data carrier types	DIN ISO 15693, DIN ISO 15693 (High Memory), LF 70/455 kHz
Connection	Male, 8-pin
Housing material	Brass
Ambient temperature	0...70 °C
Protection degree	IP67
Approval/Conformity	CE, UL-FILE E227256, Vol.X1, BIS

Appropriate data carriers on request



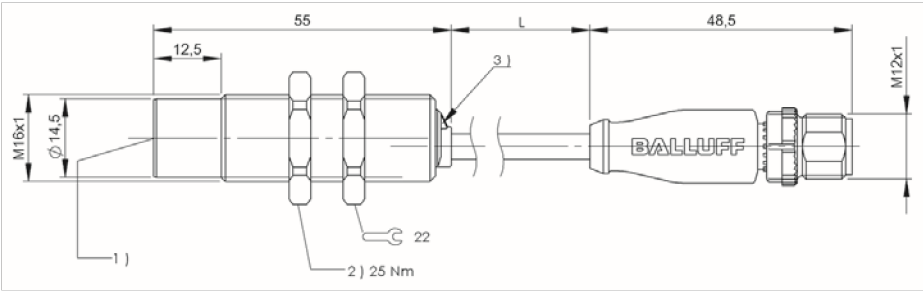
1) Sensing surface, 2) Tightening torque



For processor units BIS V-6...	BISO140 BIS VM-346-401-S4
Product Group	HF (13.56 MHz)
Dimension	Ø 16 x 55 mm
Installation	metal-free (clear zone) on metal flush in metal
Antenna type	round
Supported data carrier types	DIN ISO 15693, DIN ISO 15693 (High Memory)
Connection	0.30 m, PU
Housing material	Brass
Ambient temperature	0...70 °C
Protection degree	IP67
Approval/Conformity	CE, UL-FILE E227256, Vol.X1, BIS, FCC, IC

Appropriate data carrier

	BIS0042			BIS00UC BIS00UE		BIS004A			BIS00YL			BIS00YK			
Data carrier distance to metal	>50	>0	>0	>50		>50	>0	>0	>50	>0	>0	>50	>0	>0	
Data carrier clear zone	>200	>200	>0	>200		>200	>200	>0	>200	>200	>0	>200	>200	>0	
Working distance for writing	0-5.5	0-5	0-4	0-3.5		0-5	0-4.5	0-3.5	0-6.5	0-6	0-3	0-5	0-5	0-2.5	
Working distance for reading	0-5.5	0-5	0-4	0-3.5		0-5	0-4.5	0-3.5	0-6.5	0-6	0-3	0-5	0-5	0-2.5	
Offset at distance															
0	±3.5	±3	±2.5	±3		±3.5	±3	±2.5	±4	±3.5	±3	±3	±3	±2.5	
1	±3.5	±3	±2.5	±3		±3.5	±3	±2.5	±4	±3.5	±3	±3	±3	±2.5	
2	±3.5	±3	±2.5	±3		±3.5	±3	±2.5	±4	±3.5	±2	±3	±3	±2	
2.5	±3	±2.5	±2	±2		±3	±2.5	±2	±3	±3	±1	±2.5	±2.5	±1	
3	±3	±2.5	±2	±2		±3	±2.5	±1	±3	±3	±1	±2.5	±2.5		
3.5	±3	±2.5	±1	±1		±3	±2.5	±1	±3	±3		±2.5	±2.5		
4	±3	±2.5	±1			±3	±1.5		±3	±3		±2	±2		
4.5	±2	±1.5				±2	±1.5		±3	±3		±1	±1		
5	±2	±1.5				±2			±3	±3		±1	±1		
5.5	±2								±2	±2					
6									±2	±2					
6.5									±2						
Dimensions in mm															



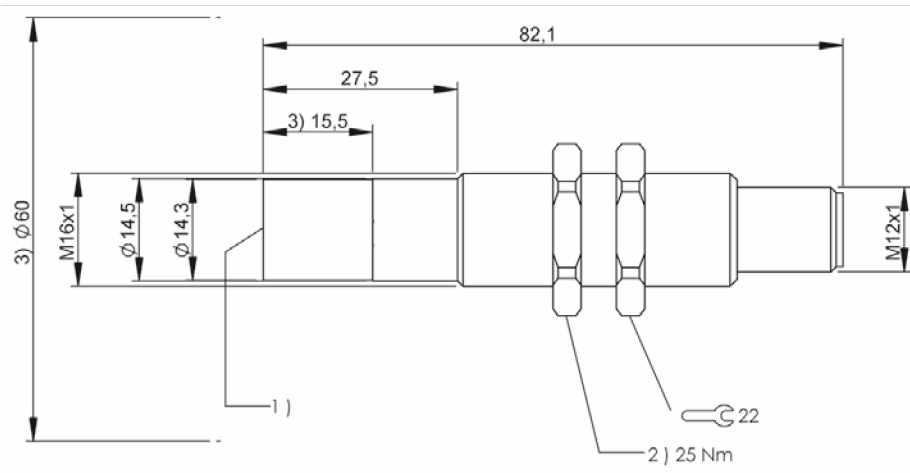
1) Sensing surface, 2) Tightening torque, 3) Function indicator

		BIS00LC	BIS0119	BIS00NU BIS00NW BIS0100	
		>25	>0	>0	
		>100	>100	>100	
		0-7	0-7.5	0-7.5	
		0-7	0-7.5	0-7.5	
	0	±4	±5	±5	
	2	±4	±5	±5	
	4	±3.5	±5	±4.5	
	5	±3.5	±4	±4	
	6	±2	±4	±4	
	7	±2	±2.5	±2	
	7.5		±2.5	±2	
	10				
	14				
	16				
	18				
	20				



For processor units BIS V-6...	BIS019Y BIS VM-346-501/05-S115
Product Group	HF (13.56 MHz)
Dimension	Ø 16 x 82.1 mm
Installation	metal-free (clear zone)
Antenna type	round
Supported data carrier types	DIN ISO 15693, DIN ISO 15693 (High Memory), LF 70/455 kHz
Connection	Male, 8-pin
Housing material	Brass
Ambient temperature	0...70 °C
Protection degree	IP67
Approval/Conformity	CE, UL-FILE E227256, Vol.X1, BIS

Appropriate data carriers on request

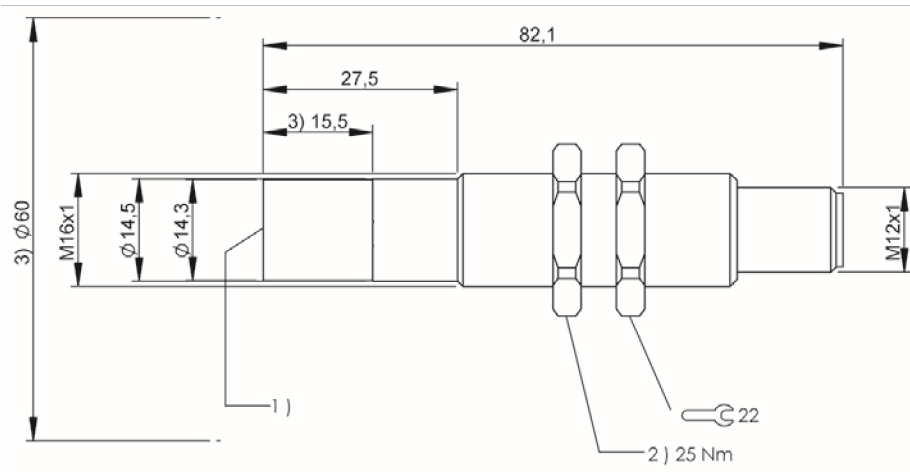


1) Sensing surface, 2) Tightening torque



For processor units BIS V-6...	BIS019Z BIS VM-346-501/10-S115
Product Group	HF (13.56 MHz)
Dimension	Ø 16 x 82.1 mm
Installation	metal-free (clear zone)
Antenna type	round
Supported data carrier types	DIN ISO 15693, DIN ISO 15693 (High Memory), LF 70/455 kHz
Connection	Male, 8-pin
Housing material	Brass
Ambient temperature	0...70 °C
Protection degree	IP67
Approval/Conformity	CE, UL-FILE E227256, Vol.X1, BIS

Appropriate data carriers on request



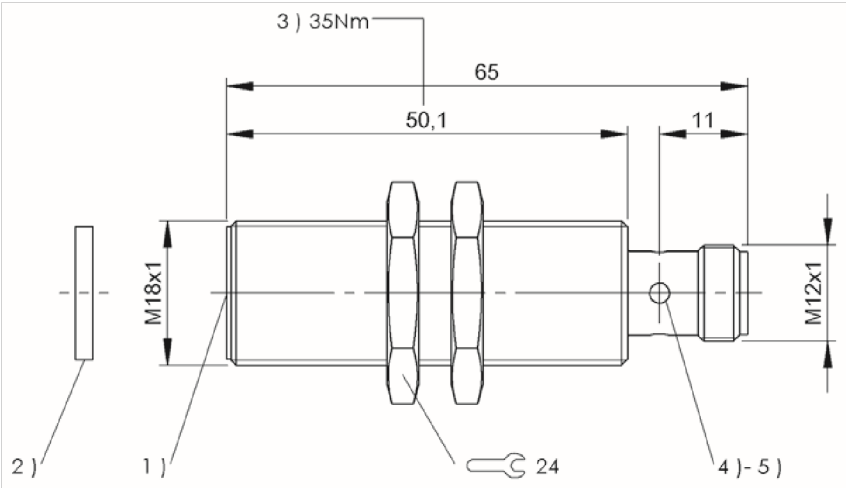
1) Sensing surface, 2) Tightening torque



For processor units BIS V-6...	BISO15P BIS VM-332-401-S4
Product Group	HF (13.56 MHz)
Dimension	Ø 18 x 65 mm
Installation	metal-free (clear zone) on metal flush in metal
Antenna type	round
Supported data carrier types	DIN ISO 15693, DIN ISO 15693 (High Memory)
Connection	Male, 4-pin
Housing material	Brass, nuts brass with white bronze
Ambient temperature	0...70 °C
Protection degree	IP67
Approval/Conformity	CE, FCC Part 15, IC RSS-210, UL-FILE E227256, Vol.X1, BIS

Appropriate data carrier

	BIS0042			BIS0043			BISO11F BISO11E BISO11A BISO139			BIS004A			BISO143		
Data carrier distance to metal	>20	>0	>0	>20	>0	>0	>20	>0	>0	>20	>0	>0	>20		
Data carrier clear zone	>100	>100	>0	>100	>100	>0	>100	>100	>0	>100	>100	>0	>100		
Working distance for writing	0-8.5	0-8	0-6	0-11	0-8	0-6	0-6.5	0-6	0-5	0-7	0-6.5	0-4.5	0-13		
Working distance for reading	0-8.5	0-8	0-6	0-11	0-8	0-6	0-6.5	0-6	0-5	0-7	0-6.5	0-4.5	0-13		
Offset at distance															
0	±5	±5	±4	±8	±8	±7	±8	±8	±7	±4.5	±4	±3.5	±8		
2	±5	±5	±4	±8	±8	±7	±8	±8	±7	±4.5	±4	±3.5	±8		
4	±4.5	±4	±3	±8	±7	±6	±7	±7	±6	±4	±3	±2.5	±8		
4.5	±4.5	±4	±3	±8	±7	±4	±7	±6	±3	±3.5	±3	±1.5	±8		
5	±4.5	±4	±3	±8	±7	±4	±7	±6	±3	±3.5	±3		±8		
6	±4	±3	±2	±7	±5	±1	±4	±3		±3.5	±2		±7		
6.5	±4	±3		±7	±5		±4			±2	±2		±7		
7	±4	±3		±7	±5					±2			±7		
8	±2	±2		±7	±4								±7		
8.5	±2			±7									±7		
10				±7									±7		
11				±4									±4		
13													±4		
Dimensions in mm															



1) Sensing surface, 2) Data carrier, 3) Tightening torque, 4) LED (CP), 5) LED (Power)

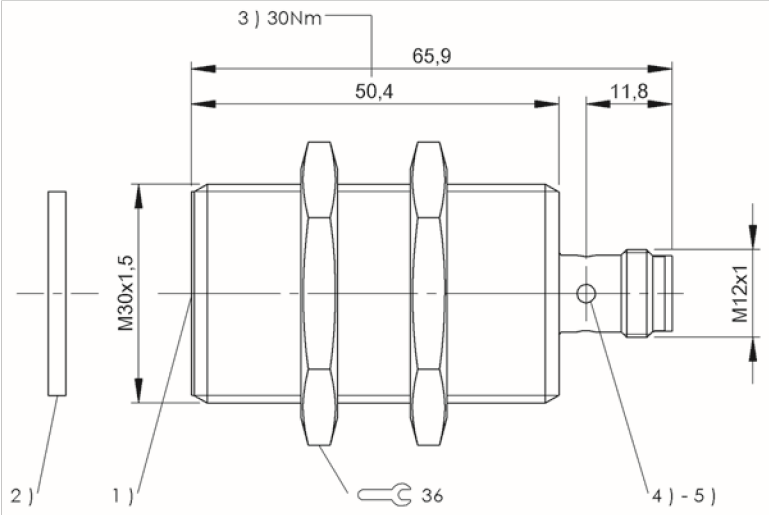
		BIS0044	BIS00NU BIS00NW BIS0100	
		>25	>0	
		>100	>100	
		0-10	0-9.5	
		0-10	0-9.5	
	0	±6	±5	
	2	±6	±5	
	4	±6	±5	
	5	±6	±5	
	6	±5	±4	
	7	±5	±4	
	8	±5	±4	
	9.5	±3	±2	
	10	±3		
	12			
	15			
	20			
	25			



For processor units BIS V-6...	BIS015K BIS VM-333-401-S4
Product Group	HF (13.56 MHz)
Dimension	Ø 30 x 65.9 mm
Installation	metal-free (clear zone) on metal flush in metal
Antenna type	round
Supported data carrier types	DIN ISO 15693, DIN ISO 15693 (High Memory)
Connection	Male, 4-pin
Housing material	Brass, nuts brass with white bronze
Ambient temperature	0...70 °C
Protection degree	IP67
Approval/Conformity	CE, FCC Part 15, IC RSS-210, UL-FILE E227256, Vol.X1, BIS

Appropriate data carrier

	BIS0042		BIS0043 BIS0111				BIS004A		BIS0143			BIS0044		BIS0045		
Data carrier distance to metal	>20		>25	>0	>0		>20		>20			>25		>25		
Data carrier clear zone	>100		>100	>100	>0		>100		>100			>100		>100		
Working distance for writing	0-13		0-21	0-15	0-13		0-10		0-21			0-18		0-21		
Working distance for reading	0-13		0-21	0-15	0-13		0-10		0-21			0-18		0-21		
Offset at distance																
	0	±8	±13	±10	±10		±7		±12			0	±9	±13		
	5	±8	±13	±10	±10		±7		±12			5	±9	±13		
	8	±8	±13	±10	±9		±6		±12			10	±9	±13		
	10	±7	±13	±8	±8		±4		±12			13	±8	±12		
	13	±4	±12	±8	±3				±11			15	±8	±12		
	15		±12	±3					±11			16	±4	±11		
	18		±11						±10			18	±4	±11		
	20		±5						±5			20		±5		
	21		±5						±5			21		±5		
	25											25				
	30											30				
Dimensions in mm																



1) Sensing surface, 2) Data carrier, 3) Tightening torque, 4) LED (CP), 5) LED (Power)

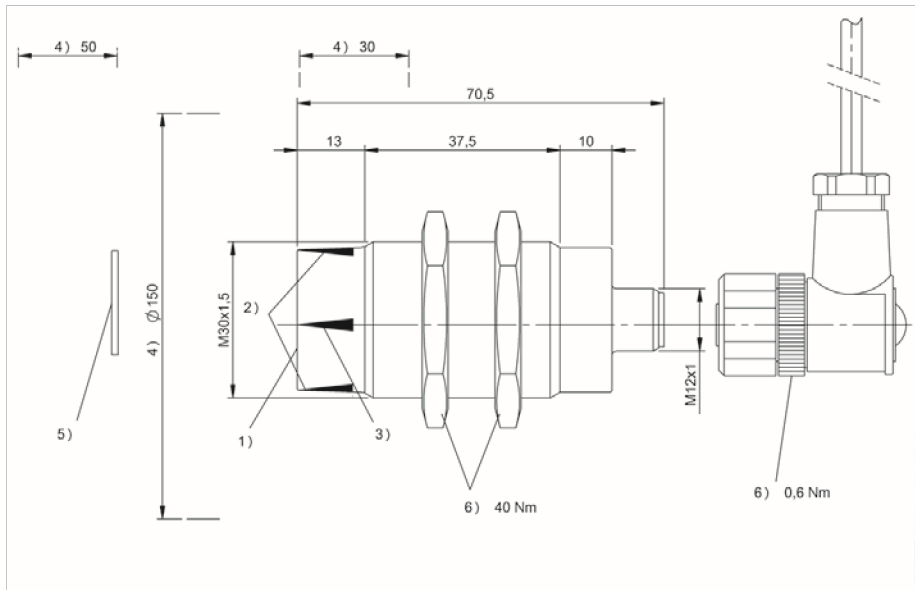
BIS0046		BIS00NU BIS00NW BIS0100		BIS011A	
>50		>0		>20	
>150		>100		>100	
0-30		0-13		0-15	
0-30		0-13		0-15	
±20		±9	0	±11	
±20		±9	5	±11	
±20		±7	10	±10	
±18		±3	12	±8	
±18			13	±8	
±18			15	±4	
±18			18		
±18			20		
±16			21		
±16			25		
±8			30		



For processor units BIS V-6...	BIS00RF BIS VM-300-001-S4
Product Group	HF (13.56 MHz)
Dimension	Ø 30 x 70.5 mm
Installation	metal-free (clear zone)
Antenna type	round
Supported data carrier types	DIN ISO 14443, DIN ISO 15693
Connection	Male, 4-pin
Housing material	Brass, nuts brass with white bronze
Ambient temperature	0...70 °C
Protection degree	IP67
Approval/Conformity	CE, FCC Part 15, IC RSS-210, UL-FILE E227256, Vol.X1, BIS

Appropriate data carrier

	BIS003Y			BIS003Z			BIS0040		BIS0042		BIS0043			BIS0044			
Data carrier distance to metal	>25	>10	>5	>50	>15	>10	>20	>5	>20	>5	>25	>0		>25	>10	>5	
Data carrier clear zone	>100	>60	>50	>150	>90	>70	>100	>100	>100	>100	>100	>0		>100	>60	>50	
Working distance for writing	0-22	0-20	0-15	0-32	0-22	0-12	0-9	0-9	0-11	0-11	0-30	0-16		0-22	0-16	0-10	
Working distance for reading	0-22	0-20	0-15	0-32	0-22	0-12	0-9	0-9	0-11	0-11	0-30	0-16		0-22	0-16	0-10	
Offset at distance																	
0	±15	±12	±8	±20	±15	±6	±7	±6	±10	±7	±18	±10	0	±14	±8	±7	
5	±15	±12	±8	±20	±15	±6	±7	±6	±8	±7	±18	±10	5	±14	±8	±7	
9	±15	±10	±6	±20	±15	±5	±2	±1	±5	±3	±18	±8	8	±12	±6	±2	
12	±15	±8	±4	±20	±15	±4					±16	±6	10	±12	±6	±2	
15	±15	±8	±4	±20	±12						±16	±6	12	±12	±5		
16	±12	±6		±20	±10						±16	±4	15	±12	±4		
18	±12	±6		±20	±8						±16		16	±10	±2		
20	±12	±4		±20	±6						±16		18	±10			
22	±4			±18	±4						±14		20	±10			
25				±14							±14		22	±6			
30				±10							±10		25				
32				±4									30				
35													32				
40													35				
43													40				
45													42				
50													44				
Dimensions in mm																	



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

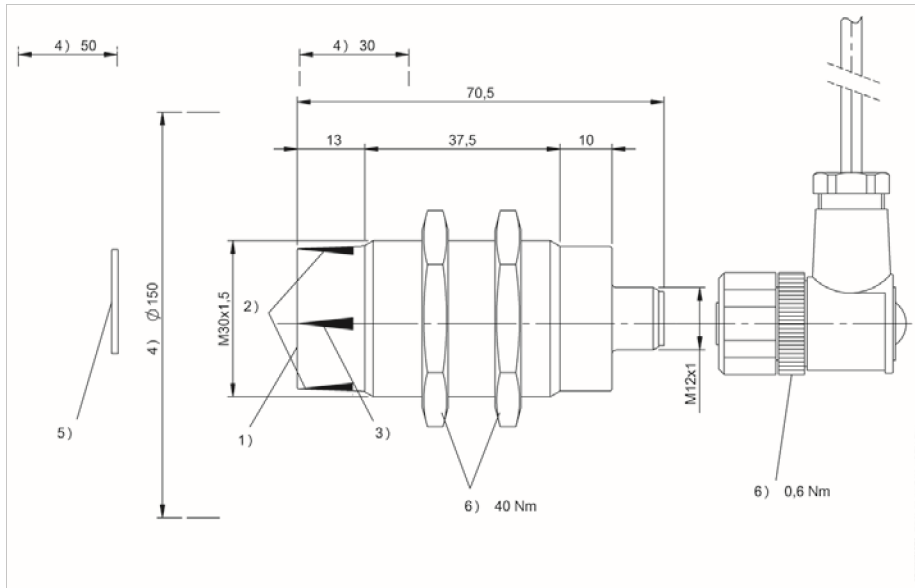
	BIS0045			BIS0046			BIS00YE		BIS00Y4		BIS00LC			BIS00M9 BIS00M8	BIS00NU BIS00NW BIS0100
	>25	>10	>5	>50	>15	>10	>25	>0	>50		>25	>0	>0		>0
	>100	>60	>50	>150	>90	>70	>100	>100	>150		>100	>100	>100		>100
	0-28	0-18	0-10	0-44	0-25	0-15	0-30	0-8	0-42		0-27	0-13	0-22		0-13
	0-28	0-18	0-10	0-44	0-25	0-15	0-30	0-8	0-42		0-27	0-13	0-22		0-13
	±16	±10	±7	±25	±18	±15	±18	±8	±30		0	±16	±10	±13	±10
	±16	±10	±7	±25	±18	±15	±18	±6	±30		5	±16	±10	±13	±10
	±14	±8	±2	±25	±16	±12	±18	±3	±30		10	±16	±7	±13	±9
	±14	±8	±2	±25	±16	±12	±18		±30		13	±14	±5	±11	±5
	±14	±7		±24	±15	±10	±16		±28		15	±14		±11	
	±14	±6		±24	±14	±8	±16		±28		18	±14		±11	
	±14	±3		±24	±12		±16		±28		20	±14		±7	
	±14	±2		±24	±12		±16		±28		22	±12		±7	
	±14			±24	±10		±16		±28		25	±12			
	±12			±22	±8		±16		±24		27	±5			
	±12			±22	±6		±16		±24		30				
				±22			±10		±24		32				
				±16					±24		35				
				±16					±24		40				
				±16					±5		43				
				±10					±5		45				
				±5							50				



For processor units BIS V-6...	BISO132 BIS VM-344-401-S4
Product Group	HF (13.56 MHz)
Dimension	Ø 30 x 70.5 mm
Installation	metal-free (clear zone)
Antenna type	round
Supported data carrier types	DIN ISO 15693, DIN ISO 15693 (High Memory)
Connection	Male, 4-pin
Housing material	Brass, nuts nickel plated brass, nuts brass with white bronze
Ambient temperature	0...70 °C
Protection degree	IP67
Approval/Conformity	CE, FCC Part 15, IC RSS-210, UL-FILE E227256, Vol.X1, BIS

Appropriate data carrier

	BIS0042		BIS00LC		BIS0043 BIS0111		BIS011F BIS011E BIS011A BISO139			BIS0044			BIS0045			
Data carrier distance to metal	>20	>5	>25	>0	>25	>0	>25	>0		>25	>10	>5	>25	>10	>5	
Data carrier clear zone	>100	>100	>100	>100	>100	>0	>100	>100		>100	>60	>50	>100	>60	>50	
Working distance for writing	0-11	0-11	0-27	0-13	0-30	0-16	0-18	0-15		0-22	0-16	0-10	0-28	0-18	0-10	
Working distance for reading	0-11	0-11	0-27	0-13	0-30	0-16	0-18	0-15		0-22	0-16	0-10	0-28	0-18	0-10	
Offset at distance																
0	±10	±7	±16	±10	±18	±10	±12	±11	0	±14	±8	±7	±16	±10	±7	
5	±8	±7	±16	±10	±18	±10	±12	±11	5	±14	±8	±7	±16	±10	±7	
9	±5	±3	±16	±7	±18	±8	±11	±10	8	±12	±6	±2	±14	±8	±2	
13			±14	±5	±16	±6	±10	±9	10	±12	±6	±2	±14	±8	±2	
15			±14		±16	±6	±10	±5	12	±12	±5		±14	±7		
16			±14		±16	±4	±5		15	±12	±4		±14	±6		
18			±14		±16		±5		16	±10	±2		±14	±3		
20			±14		±16				18	±10			±14	±2		
22			±12		±14				20	±10			±14			
25			±12		±14				22	±6			±12			
27			±5		±10				25				±12			
32									30							
35									32							
40									35							
43									40							
45									42							
50									44							
Dimensions in mm																



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

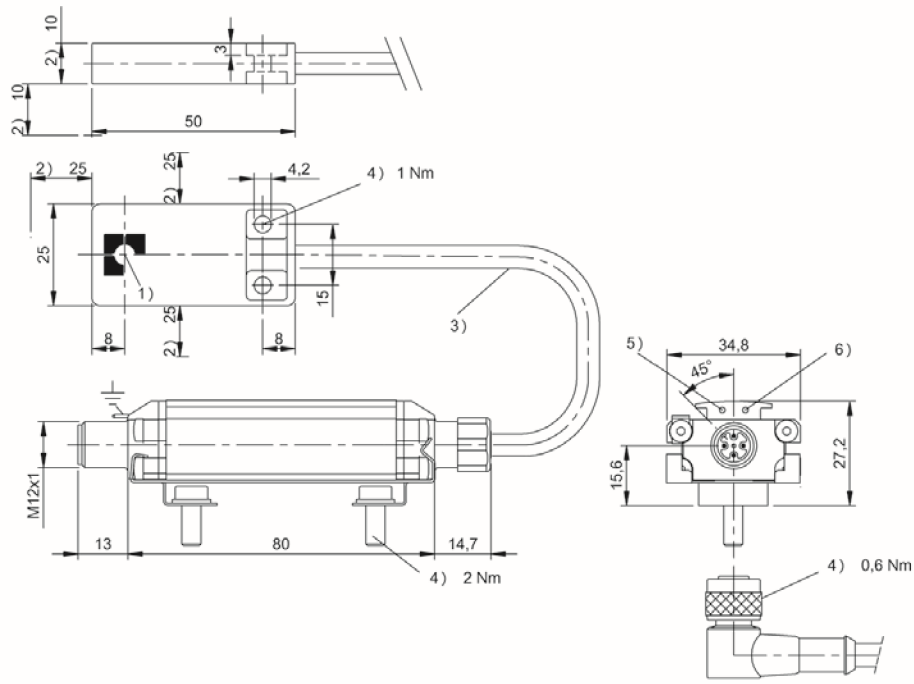
	BIS0046			BIS00YE		BIS00Y4			BIS00M9 BIS00M8		BIS00NU BIS00NW BIS0100	
	>50	>15	>10	>25	>0	>50			>0		>0	
	>150	>90	>70	>100	>100	>150			>100		>100	
	0-44	0-25	0-15	0-30	0-8	0-42			0-22		0-13	
	0-44	0-25	0-15	0-30	0-8	0-42			0-22		0-13	
	±25	±18	±15	±18	±8	±30		0	±13		±10	
	±25	±18	±15	±18	±6	±30		5	±13		±10	
	±25	±16	±12	±18	±3	±30		10	±13		±9	
	±25	±16	±12	±18		±30		12	±11		±5	
	±24	±15	±10	±16		±28		13	±11		±5	
	±24	±14	±8	±16		±28		15	±11			
	±24	±12		±16		±28		18	±11			
	±24	±12		±16		±28		20	±7			
	±24	±10		±16		±28		22	±7			
	±22	±8		±16		±24		28				
	±22	±6		±16		±24		30				
	±22			±10		±24		32				
	±16					±24		35				
	±16					±24		40				
	±16					±5		43				
	±10					±5		45				
	±5							50				



For processor units BIS V-6...	BIS00T9 BIS VM-305-001-S4
Product Group	HF (13.56 MHz)
Dimension	25 x 10 x 50 mm
Installation	metal-free (clear zone)
Antenna type	round
Supported data carrier types	DIN ISO 14443, DIN ISO 15693
Connection	Connector, 4-pin, 0.50 m, PU
Housing material	ABS, GF16, interface aluminum
Ambient temperature	0...70 °C
Protection degree	IP67
Approval/Conformity	CE, UL-FILE E227256, Vol.X1, BIS

Appropriate data carrier

	BIS0040		BIS0042		BIS0044		BIS0048		BIS004A			BIS0043		BIS00M9 BIS00M8		BIS00NU BIS00NW BIS0100	
Data carrier distance to metal	>10	>0	>10	>0	>25		>10	>0	>10	>0		>25	>0	>0		>0	
Data carrier clear zone	>60	>0	>60	>0	>80		>60	>0	>60	>0		>100	>0	>100		>100	
Working distance for writing	0-6	0-4	0-8	0-6	0-13		0-5	0-4	0-7	0-5		0-17	0-11	0-17		0-12	
Working distance for reading	0-6	0-4	0-8	0-6	0-13		0-5	0-4	0-7	0-5		0-17	0-11	0-17		0-12	
Offset at distance																	
0	±3	±3	±4	±4	±6		±3	±3	±4	±3	0	±12	±8	±10		±7	
5	±2		±4	±2	±6		±2		±3	±2	5	±12	±8	±10		±7	
9					±4						8	±12	±6	±10		±6	
12					±2						10	±12	±6	±9		±6	
15											11	±8	±4	±9		±3	
16											12	±8		±9		±3	
18											15	±8		±4			
20											17	±4		±4			
Dimensions in mm																	



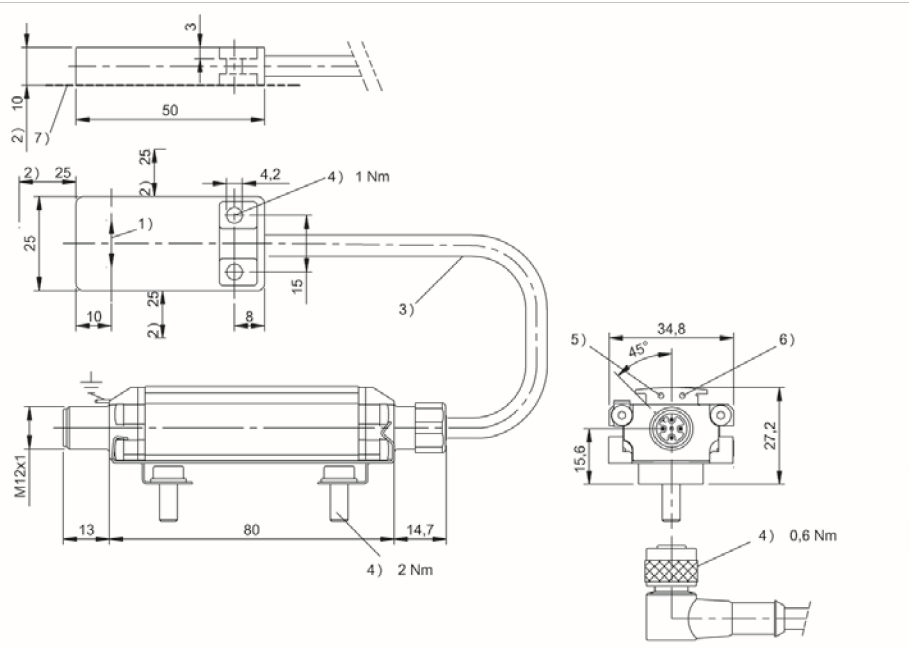
1) Sensing surface, 2) Clear zone, 3) Cable length see text, 4) Tightening torque, 5) LED (Power), 6) LED (CP)



For processor units BIS V-6...	BIS00T6 BIS VM-352-001-S4
Product Group	HF (13.56 MHz)
Dimension	25 x 10 x 50 mm
Installation	metal-free (clear zone)
Antenna type	Rod
Supported data carrier types	DIN ISO 15693
Connection	Connector, 4-pin, 0.50 m, PU
Housing material	ABS, GF16, interface aluminum
Ambient temperature	0...70 °C
Protection degree	IP67
Approval/Conformity	CE, UL-FILE E227256, Vol.X1, BIS

Appropriate data carrier

	BIS00NZ			BIS017F	
Data carrier clear zone A	>27	>27		>200	>200
Data carrier clear zone B	>27	>27		>200	>200
Data carrier clear zone C				>50	>50
Metallic mounting surface 40 × 22 mm					
Metallic mounting surface > 200 × 200 mm					
Working distance for writing	0-22	0-22		0-17	0-17
Working distance for reading	0-22	0-22		0-17	0-17
Offset at distance	X	Y		X	Y
	0	±25 ±5		0	±22 ±9
	5	±25 ±5		5	±22 ±9
	10	±25 ±5		10	±19 ±8
	15	±25 ±5		15	±12 ±6
	20	±15 ±5		17	±3 ±2
	22	±15 ±5		20	
Dimensions in mm					



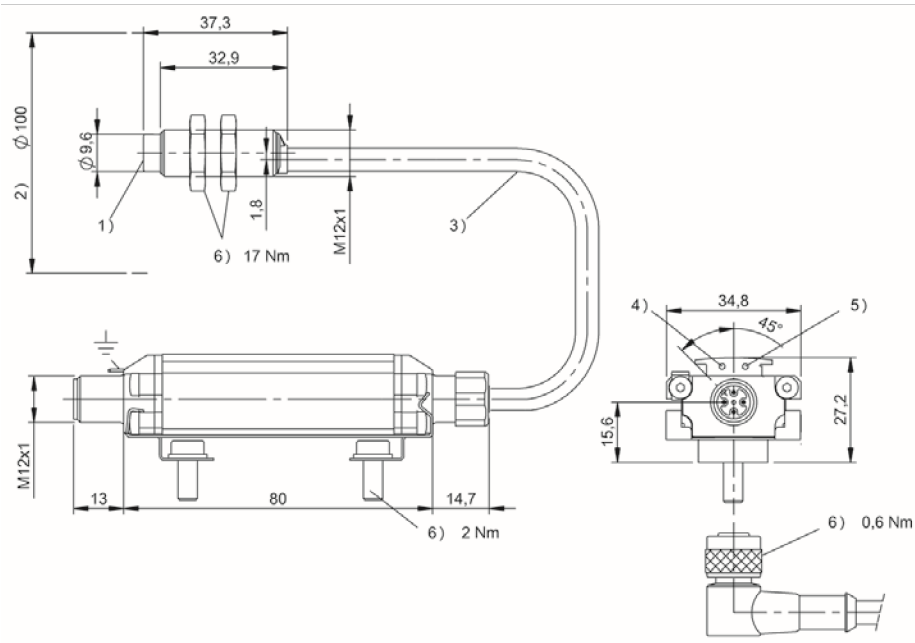
1) Sensing surface, 2) Clear zone, 3) Cable length see text, 4) Tightening torque, 5) LED (Power), 6) LED (CP), 7) Mounting on steel



For processor units BIS V-6...	BISO0T7 BIS VM-306-001-S4
Produktgruppe	HF (13.56 MHz)
Abmessung	Ø 12 x 37.3 mm
Einbau	metallfrei (Freizone)
Antennenform	rund
Unterstützte Datenträgertypen	DIN ISO 14443, DIN ISO 15693
Anschluss	Stecker, 4-polig, 0.50 m, PU
Gehäusematerial	Messing, Interface Aluminium
Umgebungstemperatur	0...70 °C
Schutzart	IP67
Zulassung/Konformität	CE, UL-FILE E227256, Vol.X1, BIS

Appropriate data carrier

	BIS0040		BIS0042		BIS0048		BIS004A	
Data carrier distance to metal	>10		>10		>10		>10	
Data carrier clear zone	>60		>60		>60		>60	
Working distance for writing	0-5		0-6		0-4		0-5	
Working distance for reading	0-5		0-6		0-4		0-5	
Offset at distance								
	0	±2		±2		±2		±2
	2	±2		±2		±2		±2
	4	±1		±1		±1		±1
	5	±1		±1				±1
	6			±1				
Dimensions in mm								



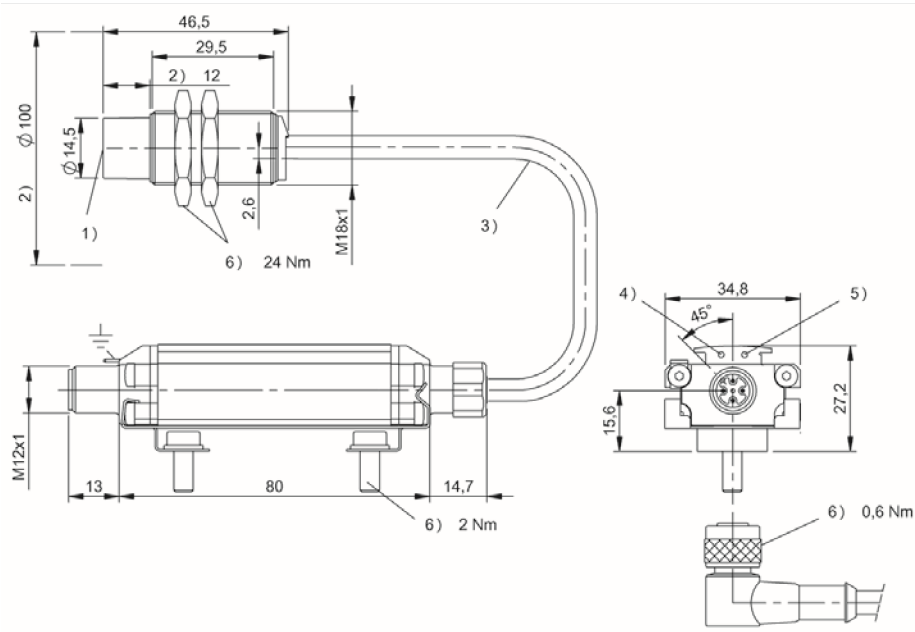
1) Sensing surface, 2) Clear zone, 3) Cable length see text, 4) LED (Power), 5) LED (CP), 6) Tightening torque



For processor units BIS V-6...	BIS00T8 BIS VM-307-001-S4
Product Group	HF (13.56 MHz)
Dimension	Ø 12 x 37.3 mm
Installation	metal-free (clear zone)
Antenna type	round
Supported data carrier types	DIN ISO 14443, DIN ISO 15693
Connection	Connector, 4-pin, 0.50 m, PU
Housing material	Brass, interface aluminum
Ambient temperature	0...70 °C
Protection degree	IP67
Approval/Conformity	CE, UL-FILE E227256, Vol.X1, BIS

Appropriate data carrier

	BIS0040		BIS0042		BIS0044		BIS0048		BIS004A			BIS00YK		BIS00M9 BIS00M8		BIS00NU BIS00NW BIS0100	
Data carrier distance to metal	>10	>0	>10	>0	>25		>10	>0	>10	>0		>10	>0	>0		>0	
Data carrier clear zone	>60	>0	>60	>0	>80		>60	>0	>60	>0		>60	>60	>100		>100	
Working distance for writing	0-6	0-4	0-8	0-6	0-13		0-5	0-4	0-7	0-5		0-10	0-8	0-16		0-12	
Working distance for reading	0-6	0-4	0-8	0-6	0-13		0-5	0-4	0-7	0-5		0-10	0-8	0-16		0-12	
Offset at distance																	
0	±3	±3	±4	±4	±6		±3	±3	±4	±3	0	±7	±5	±9		±7	
5	±2		±4	±2	±6		±2		±3	±2	5	±7	±5	±9		±7	
9					±4						7	±6	±4	±9		±6	
12					±2						8	±6	±2	±9		±6	
15											10	±3		±8		±6	
16											12			±8		±3	
18											14			±8			
20											16			±3			
Dimensions in mm																	



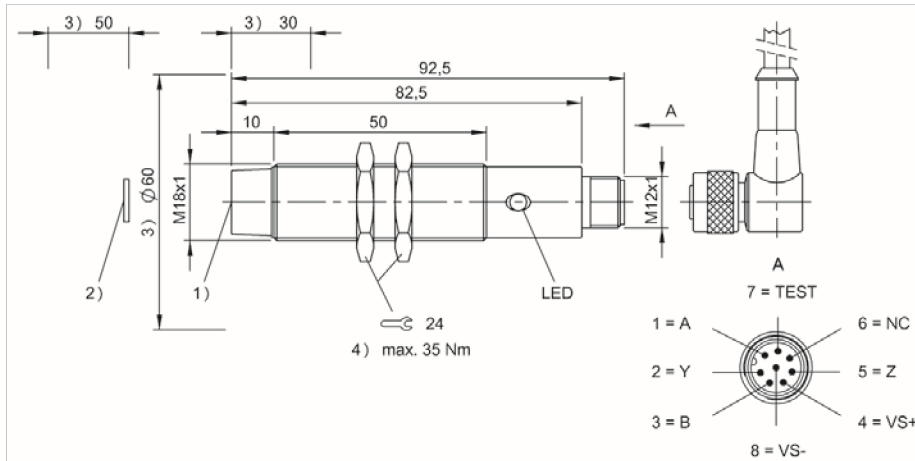
1) Sensing surface, 2) Clear zone, 3) Cable length see text, 4) LED (Power), 5) LED (CP), 6) Tightening torque



For processor units BIS M-60...	BISO057 BIS M-302-001-S115
Product Group	HF (13.56 MHz)
Dimension	Ø 18 x 92.5 mm
Installation	metal-free (clear zone)
Antenna type	round
Supported data carrier types	DIN ISO 14443, DIN ISO 15693
Connection	Male, 8-pin
Housing material	Brass, nuts nickel plated brass
Ambient temperature	0...70 °C
Protection degree	IP67
Approval/Conformity	CE, FCC Part 15, IC RSS-210, UL-FILE E227256, Vol.X1, BIS

Appropriate data carrier

	BISO03Y			BISO03Z			BISO040		BISO042		BISO048		BISO04A		BISO043		
Data carrier distance to metal	>25	>10	>5	>50	>25	>10	>10	>0	>10	>0	>10	>0	>10	>0	>25	>0	
Data carrier clear zone	>60	>50	>50	>60	>50	>50	>60	>0	>60	>0	>60	>0	>60	>0	>60	>0	
Working distance for writing	0-16	0-15	0-10	0-20	0-18	0-10	0-7	0-5	0-9	0-6	0-7	0-5	0-9	0-6	0-20	0-12	
Working distance for reading	0-16	0-15	0-10	0-20	0-18	0-10	0-7	0-5	0-9	0-6	0-7	0-5	0-9	0-6	0-20	0-12	
Offset at distance																	
	0	±10	±8	±4	±18	±14	±8	±5	±4	±5	±5	±4	±3	±4	±3	±14	±10
	5	±10	±8	±4	±18	±14	±6	±4	±3	±5	±3.5	±3	±2	±3	±2	±12	±8
	9	±10	±7	±2	±16	±12	±4			±3.5						±12	±6
	12	±8	±6		±14	±8										±10	±4
	15	±7	±4		±12	±6										±10	
	16	±4			±10	±4										±7	
	18				±8	±4										±7	
	20				±4											±5	
	22																
	25																
	30																
Dimensions in mm																	



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

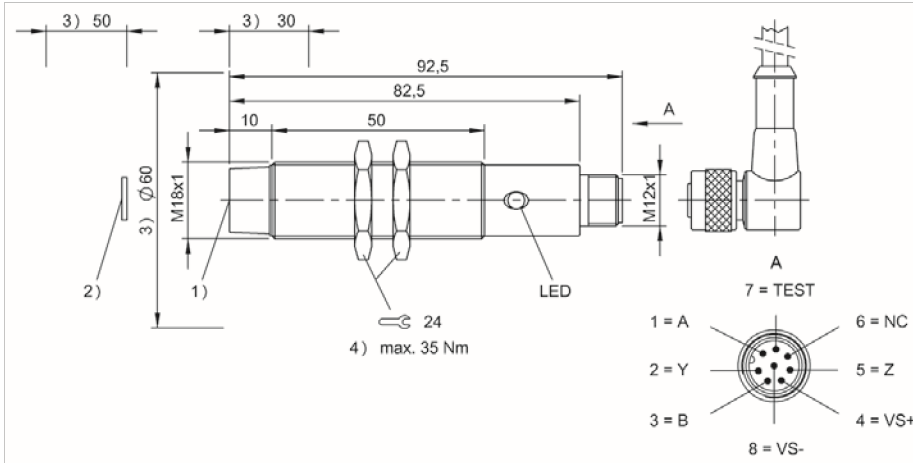
	BIS0044			BIS0045			BIS0046				BIS00M9 BIS00M8		BIS00NU BIS00NW BIS0100		BIS00UC BIS00UE		BIS019C		BIS019E	
	>25	>10	>5	>25	>10	>5	>50	>25	>20		>0		>0		>10		>0	>0	>0	>0
	>80	>50	>50	>80	>50	>50	>150	>90	>70		>100		>100		>60		>100	>0	>100	>0
	0-16	0-12	0-8	0-20	0-12	0-5	0-30	0-22	0-12		0-17		0-13		0-7		0-8	0-7	0-12	0-11
	0-16	0-12	0-8	0-20	0-12	0-5	0-30	0-22	0-12		0-17		0-13		0-7		0-8	0-7	0-12	0-11
	±8	±6	±4	±12	±8	±7	±20	±16	±14		0 ±10		±8		±4		±6	±4.5	±7	±6
	±8	±6	±4	±12	±8	±4	±20	±16	±14		5 ±10		±8		±4		±6	±4.5	±7	±6
	±6	±5		±10	±6		±18	±16	±10		7 ±10		±7		±4		±5.5	±4	±7	±6
	±4	±3		±10	±4		±18	±14	±6		8 ±10		±7				±3	±2	±6.5	±5.5
	±4			±10			±18	±14			10 ±9		±7				±3		±6.5	±5.5
	±3			±5			±16	±12			13 ±9		±4						±6.5	±5.5
				±5			±16	±12			14 ±9								±6.5	±3
				±5			±16	±12			17 ±4								±3	±3
							±12	±8			22								±3	
							±12				25									
							±8				30									



For processor unit BIS00EP	BIS0059 BIS M-302-003-S115
Product Group	HF (13.56 MHz)
Dimension	Ø 18 x 92.5 mm
Installation	metal-free (clear zone)
Antenna type	round
Supported data carrier types	DIN ISO 14443, DIN ISO 15693
Connection	Male, 8-pin
Housing material	Brass, nuts nickel plated brass
Ambient temperature	0...70 °C
Protection degree	IP67
Approval/Conformity	CE, FCC Part 15, IC RSS-210, UL-FILE E227256, Vol.X1, BIS

Appropriate data carrier

	BIS003Y			BIS003Z			BIS0040		BIS0042		BIS0048		BIS004A		BIS0043		
Data carrier distance to metal	>25	>10	>5	>50	>25	>10	>10	>0	>10	>0	>10	>0	>10	>0	>25	>0	
Data carrier clear zone	>60	>50	>50	>60	>50	>50	>60	>0	>60	>0	>60	>0	>60	>0	>60	>0	
Working distance for writing	0-16	0-15	0-10	0-20	0-18	0-10	0-7	0-5	0-9	0-6	0-7	0-5	0-9	0-6	0-20	0-12	
Working distance for reading	0-16	0-15	0-10	0-20	0-18	0-10	0-7	0-5	0-9	0-6	0-7	0-5	0-9	0-6	0-20	0-12	
Offset at distance																	
0	±10	±8	±4	±18	±14	±8	±5	±4	±5	±5	±4	±3	±4	±3	±14	±10	
5	±10	±8	±4	±18	±14	±6	±4	±3	±5	±3.5	±3	±2	±3	±2	±12	±8	
9	±10	±7	±2	±16	±12	±4			±3.5						±12	±6	
12	±8	±6		±14	±8										±10	±4	
15	±7	±4		±12	±6										±10		
16	±4			±10	±4										±7		
18				±8	±4										±7		
20				±4											±5		
22																	
25																	
30																	
Dimensions in mm																	



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

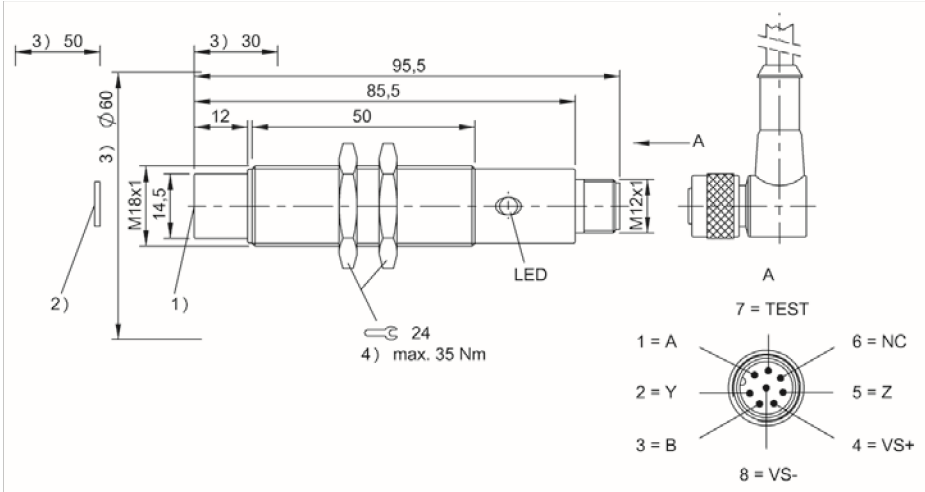
	BIS0044			BIS0045			BIS0046				BIS00M9 BIS00M8		BIS00NU BIS00NW BIS0100		BIS00UC BIS00UE		BIS019C		BIS019E	
	>25	>10	>5	>25	>10	>5	>50	>25	>20		>0		>0		>10		>0	>0	>0	>0
	>80	>50	>50	>80	>50	>50	>150	>90	>70		>100		>100		>60		>100	>0	>100	>0
	0-16	0-12	0-8	0-20	0-12	0-5	0-30	0-22	0-12		0-17		0-13		0-7		0-8	0-7	0-12	0-11
	0-16	0-12	0-8	0-20	0-12	0-5	0-30	0-22	0-12		0-17		0-13		0-7		0-8	0-7	0-12	0-11
	±8	±6	±4	±12	±8	±7	±20	±16	±14	0	±10		±8		±4		±6	±4.5	±7	±6
	±8	±6	±4	±12	±8	±4	±20	±16	±14	5	±10		±8		±4		±6	±4.5	±7	±6
	±6	±5		±10	±6		±18	±16	±10	7	±10		±7		±4		±5.5	±4	±7	±6
	±4	±3		±10	±4		±18	±14	±6	8	±10		±7				±3	±2	±6.5	±5.5
	±4			±10			±18	±14		10	±9		±7				±3		±6.5	±5.5
	±3			±5			±16	±12		13	±9		±4						±6.5	±5.5
				±5			±16	±12		14	±9								±6.5	±3
				±5			±16	±12		17	±4								±3	±3
							±12	±8		22									±3	
							±12			25										
							±8			30										



For processor units BIS M-60...	BIS005A BIS M-304-001-S115
Product Group	HF (13.56 MHz)
Dimension	Ø 18 x 95.5 mm
Installation	metal-free (clear zone)
Antenna type	round
Supported data carrier types	DIN ISO 14443, DIN ISO 15693
Connection	Male, 8-pin
Housing material	Brass, nuts nickel plated brass
Ambient temperature	0...70 °C
Protection degree	IP67
Approval/Conformity	CE, FCC Part 15, IC RSS-210, UL-FILE E227256, Vol.X1, BIS

Appropriate data carrier

	BIS003Y			BIS003Z			BIS0040		BIS0042		BIS0048		BIS004A		BIS0043		
Data carrier distance to metal	>25	>10	>5	>50	>25	>10	>10	>0	>10	>0	>10	>0	>10	>0	>25	>0	
Data carrier clear zone	>60	>50	>50	>60	>50	>50	>60	>0	>60	>0	>60	>0	>60	>0	>60	>0	
Working distance for writing	0-14	0-10	0-8	0-18	0-15	0-10	0-5	0-5	0-7	0-6	0-5	0-4	0-7	0-5	0-18	0-10	
Working distance for reading	0-14	0-10	0-8	0-18	0-15	0-10	0-5	0-5	0-7	0-6	0-5	0-4	0-7	0-5	0-18	0-10	
Offset at distance																	
	0	±10	±8	±4	±18	±14	±8	±5	±4	±5	±5	±4	±2	±4	±3	±14	±10
	5	±10	±8	±4	±18	±14	±6	±4	±3	±5	±3.5	±3		±3	±2	±12	±8
	9	±10	±7		±16	±12	±4			±3						±12	±6
	12	±8			±14	±8										±10	
	15				±12	±6										±10	
	16				±10											±7	
	18				±8											±5	
Dimensions in mm																	



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

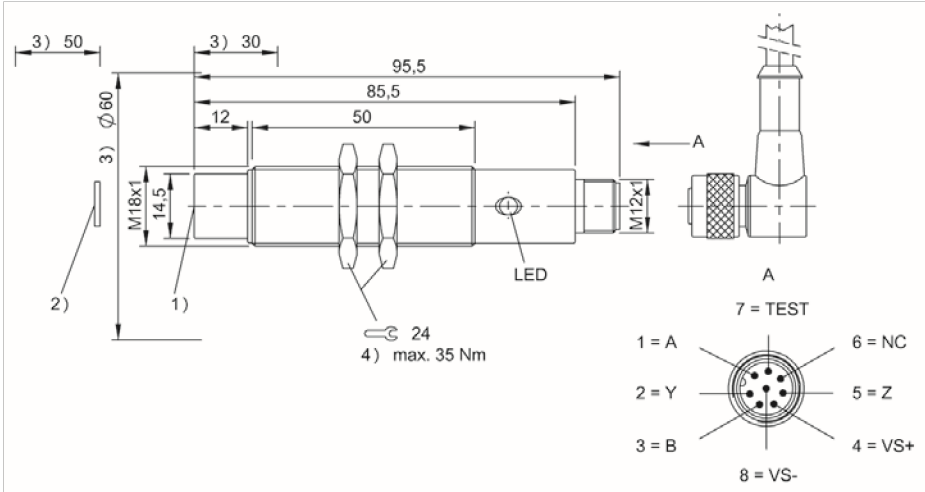
BIS0044				BIS019C		BIS019E	
>25	>10	>5		>0	>0	>0	>0
>80	>50	>50		>100	>0	>100	>0
0-14	0-10	0-8		0-7	0-6.5	0-10	0-10
0-14	0-10	0-8		0-7	0-6.5	0-10	0-10
±8	±6	±4		0	±5	±5	±6.5
±8	±6	±4		2	±5	±5	±6.5
±6	±5			5	±4	±4	±6.5
±4				6	±2	±2	±6
				7	±2		±6
				8			±6
				10			±2



For processor unit BIS00EP	BIS008P BIS M-304-003-S115
Product Group	HF (13.56 MHz)
Dimension	Ø 18 x 95.5 mm
Installation	metal-free (clear zone)
Antenna type	round
Supported data carrier types	DIN ISO 14443, DIN ISO 15693
Connection	Male, 8-pin
Housing material	Brass, nuts nickel plated brass
Ambient temperature	0...70 °C
Protection degree	IP67
Approval/Conformity	CE, FCC Part 15, IC RSS-210, UL-FILE E227256, Vol.X1, BIS

Appropriate data carrier

	BIS003Y			BIS003Z			BIS0040		BIS0042		BIS0048		BIS004A		BIS0043		
Data carrier distance to metal	>25	>10	>5	>50	>25	>10	>10	>0	>10	>0	>10	>0	>10	>0	>25	>0	
Data carrier clear zone	>60	>50	>50	>60	>50	>50	>60	>0	>60	>0	>60	>0	>60	>0	>60	>0	
Working distance for writing	0-14	0-10	0-8	0-18	0-15	0-10	0-5	0-5	0-7	0-6	0-5	0-4	0-7	0-5	0-18	0-10	
Working distance for reading	0-14	0-10	0-8	0-18	0-15	0-10	0-5	0-5	0-7	0-6	0-5	0-4	0-7	0-5	0-18	0-10	
Offset at distance																	
	0	±10	±8	±4	±18	±14	±8	±5	±4	±5	±5	±4	±2	±4	±3	±14	±10
	5	±10	±8	±4	±18	±14	±6	±4	±3	±5	±3.5	±3		±3	±2	±12	±8
	9	±10	±7		±16	±12	±4			±3						±12	±6
	12	±8			±14	±8										±10	
	15				±12	±6										±10	
	16				±10											±7	
	18				±8											±5	
Dimensions in mm																	



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

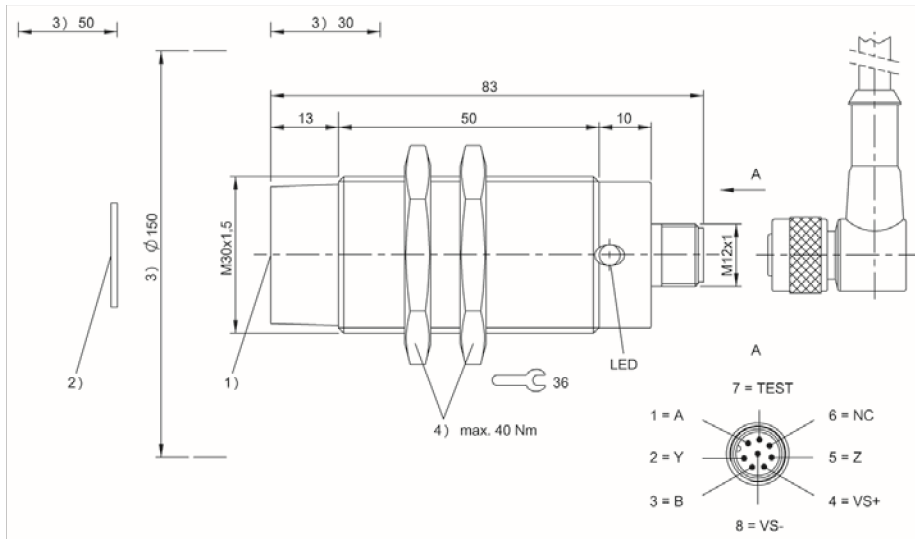
BIS0044						BIS019C	BIS019E	
>25	>10	>5				>0	>0	>0
>80	>50	>50				>100	>0	>100
0-14	0-10	0-8				0-7	0-6.5	0-10
0-14	0-10	0-8				0-7	0-6.5	0-10
±8	±6	±4		0	±5	±5	±6.5	±6.5
±8	±6	±4		2	±5	±5	±6.5	±6.5
±6	±5			5	±4	±4	±6.5	±6.5
±4				6	±2	±2	±6	±6
				7	±2		±6	±6
				8			±6	±6
				10			±2	±2



For processor units BIS M-60...	BIS0053 BIS M-300-001-S115
Product Group	HF (13.56 MHz)
Dimension	Ø 30 x 83 mm
Installation	metal-free (clear zone)
Antenna type	round
Supported data carrier types	DIN ISO 14443, DIN ISO 15693
Connection	Male, 8-pin
Housing material	Brass, nuts nickel plated brass
Ambient temperature	0...70 °C
Protection degree	IP67
Approval/Conformity	CE, FCC Part 15, IC RSS-210, UL-FILE E227256, Vol.X1, BIS

Appropriate data carrier

	BIS003Y				BIS003Z			BIS0040		BIS0042		BIS0043			BIS0044			
Data carrier distance to metal	>25	>10	>5		>50	>15	>10	>20	>5	>20	>5	>25	>0		>25	>10	>5	
Data carrier clear zone	>100	>60	>50		>150	>90	>70	>100	>100	>100	>100	>100	>0		>100	>60	>50	
Working distance for writing	0-22	0-20	0-15		0-32	0-22	0-12	0-9	0-9	0-11	0-11	0-30	0-16		0-22	0-16	0-10	
Working distance for reading	0-22	0-20	0-15		0-32	0-22	0-12	0-9	0-9	0-11	0-11	0-30	0-16		0-22	0-16	0-10	
Offset at distance																		
	0	±15	±12	±8	±20	±15	±6	±7	±6	±10	±7	±18	±10	0	±14	±8	±7	
	5	±15	±12	±8	±20	±15	±6	±7	±6	±8	±7	±18	±10	5	±14	±8	±7	
	9	±15	±10	±6	±20	±15	±5	±2	±1	±5	±3	±18	±8	8	±12	±6	±2	
	12	±15	±8	±4	±20	±15	±4					±16	±6	10	±12	±6	±2	
	15	±15	±8	±4	±20	±12						±16	±6	12	±12	±5		
	16	±12	±6		±20	±10						±16	±4	15	±12	±4		
	18	±12	±6		±20	±8						±16		16	±10	±2		
	20	±12	±4		±20	±6						±16		18	±10			
	22	±4			±18	±4						±14		20	±10			
	25				±14							±14		22	±6			
	30				±10							±10		25				
	32				±4									30				
														32				
														35				
														40				
														42				
Dimensions in mm																		



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

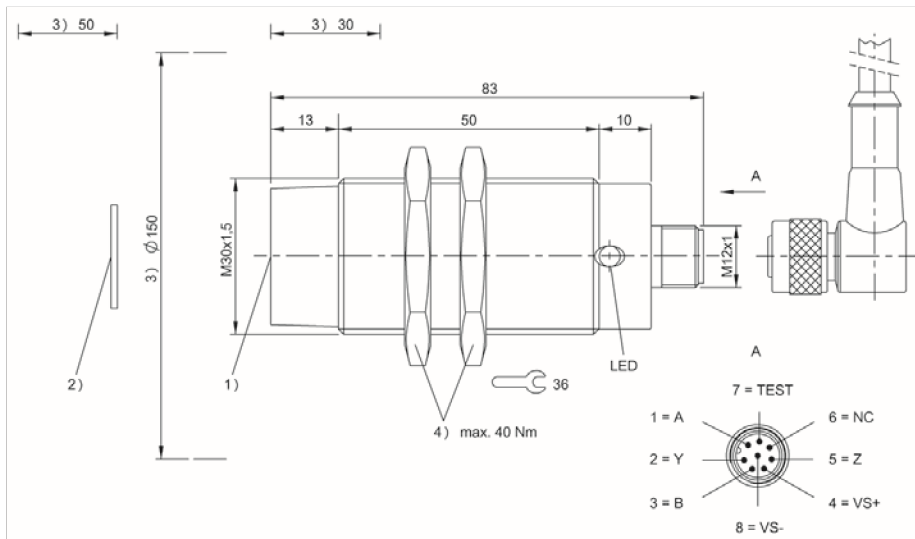
BIS0045			BIS0046			BIS00YE		BIS00Y4		BIS00LC			BIS00M9 BIS00M8		BIS00NU BIS00NW BIS0100	
>25	>10	>5	>50	>15	>10	>25	>0	>50		>25	>0	>0			>0	>0
>100	>60	>50	>150	>90	>70	>100	>100	>150		>100	>100	>100			>100	>100
0-28	0-18	0-10	0-44	0-25	0-15	0-30	0-8	0-42		0-27	0-13	0-22			0-22	0-13
0-28	0-18	0-10	0-44	0-25	0-15	0-30	0-8	0-42		0-27	0-13	0-22			0-22	0-13
±16	±10	±7	±25	±18	±15	±18	±8	±30		0	±16	±10	±13		±13	±10
±16	±10	±7	±25	±18	±15	±18	±6	±30		5	±16	±10	±13		±13	±10
±14	±8	±2	±25	±16	±12	±18	±3	±30		10	±16	±7	±13		±13	±9
±14	±8	±2	±25	±16	±12	±18		±30		13	±14	±5	±11		±11	±5
±14	±7		±24	±15	±10	±16		±28		15	±14		±11		±11	
±14	±6		±24	±14	±8	±16		±28		18	±14		±11		±11	
±14	±3		±24	±12		±16		±28		20	±14		±7		±7	
±14	±2		±24	±12		±16		±28		22	±12		±7		±7	
±14			±24	±10		±16		±28		25	±12					
±12			±22	±8		±16		±24		27	±5					
±12			±22	±6		±16		±24								
			±22			±10		±24								
			±16					±24								
			±16					±24								
			±16					±5								
			±10					±5								



For processor unit BISO0EP	BISO054 BIS M-300-003-S115
Product Group	HF (13.56 MHz)
Dimension	Ø 30 x 83 mm
Installation	metal-free (clear zone)
Antenna type	round
Supported data carrier types	DIN ISO 14443, DIN ISO 15693
Connection	Male, 8-pin
Housing material	Brass, nuts nickel plated brass
Ambient temperature	0...70 °C
Protection degree	IP67
Approval/Conformity	CE, FCC Part 15, IC RSS-210, UL-FILE E227256, Vol.X1, BIS

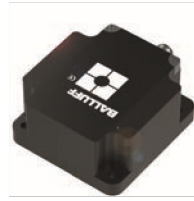
Appropriate data carrier

	BISO03Y			BISO03Z			BISO040		BISO042		BISO043			BISO044			
Data carrier distance to metal	>25	>10	>5	>50	>15	>10	>20	>5	>20	>5	>25	>0		>25	>10	>5	
Data carrier clear zone	>100	>60	>50	>150	>90	>70	>100	>100	>100	>100	>100	>0		>100	>60	>50	
Working distance for writing	0-22	0-20	0-15	0-32	0-22	0-12	0-9	0-9	0-11	0-11	0-30	0-16		0-22	0-16	0-10	
Working distance for reading	0-22	0-20	0-15	0-32	0-22	0-12	0-9	0-9	0-11	0-11	0-30	0-16		0-22	0-16	0-10	
Offset at distance																	
	0	±15	±12	±8	±20	±15	±6	±7	±6	±10	±7	±18	±10	0	±14	±8	±7
	5	±15	±12	±8	±20	±15	±6	±7	±6	±8	±7	±18	±10	5	±14	±8	±7
	9	±15	±10	±6	±20	±15	±5	±2	±1	±5	±3	±18	±8	8	±12	±6	±2
	12	±15	±8	±4	±20	±15	±4					±16	±6	10	±12	±6	±2
	15	±15	±8	±4	±20	±12						±16	±6	12	±12	±5	
	16	±12	±6		±20	±10						±16	±4	15	±12	±4	
	18	±12	±6		±20	±8						±16		16	±10	±2	
	20	±12	±4		±20	±6						±16		18	±10		
	22	±4			±18	±4						±14		20	±10		
	25				±14							±14		22	±6		
	30				±10							±10		25			
	32				±4									30			
Dimensions in mm																	



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

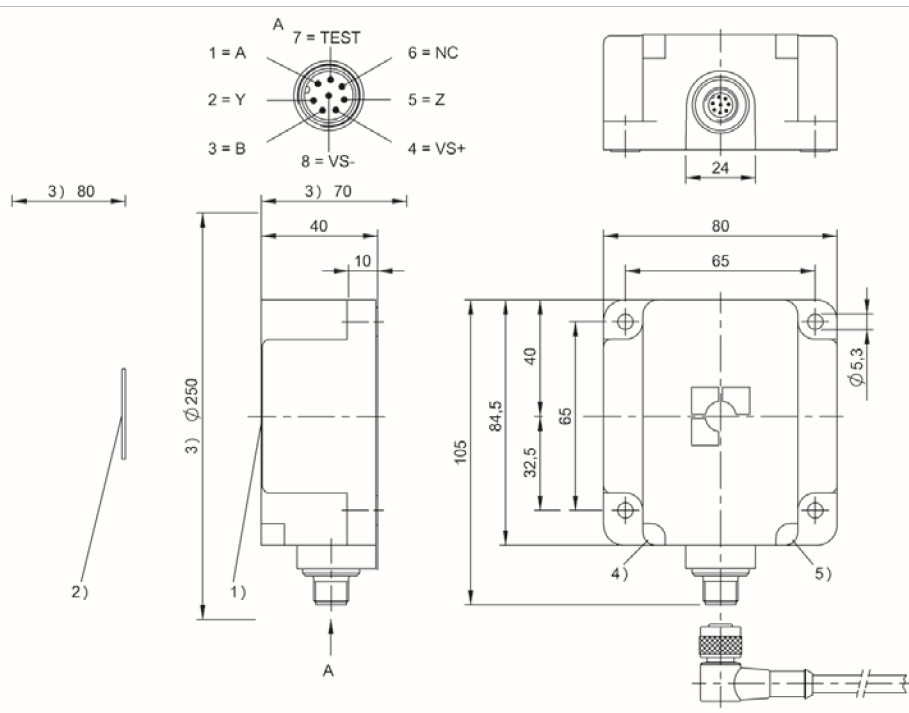
BIS0045			BIS0046			BIS00YE		BIS00Y4		BIS00LC			BIS00M9 BIS00M8		BIS00NU BIS00NW BIS0100	
>25	>10	>5	>50	>15	>10	>25	>0	>50		>25	>0	>0			>0	>0
>100	>60	>50	>150	>90	>70	>100	>100	>150		>100	>100	>100			>100	>100
0-28	0-18	0-10	0-44	0-25	0-15	0-30	0-8	0-42		0-27	0-13	0-22			0-22	0-13
0-28	0-18	0-10	0-44	0-25	0-15	0-30	0-8	0-42		0-27	0-13	0-22			0-22	0-13
±16	±10	±7	±25	±18	±15	±18	±8	±30		0	±16	±10	±13		±13	±10
±16	±10	±7	±25	±18	±15	±18	±6	±30		5	±16	±10	±13		±13	±10
±14	±8	±2	±25	±16	±12	±18	±3	±30		10	±16	±7	±13		±13	±9
±14	±8	±2	±25	±16	±12	±18		±30		13	±14	±5	±11		±11	±5
±14	±7		±24	±15	±10	±16		±28		15	±14		±11		±11	
±14	±6		±24	±14	±8	±16		±28		18	±14		±11		±11	
±14	±3		±24	±12		±16		±28		20	±14		±7		±7	
±14	±2		±24	±12		±16		±28		22	±12		±7		±7	
±14			±24	±10		±16		±28		25	±12					
±12			±22	±8		±16		±24		27	±5					
±12			±22	±6		±16		±24								
			±22			±10		±24								



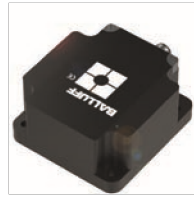
For processor units BIS M-60...	BIS0055 BIS M-301-001-S115
Product Group	HF (13.56 MHz)
Dimension	80 x 40 x 84.5 mm
Installation	metal-free (clear zone)
Antenna type	round
Supported data carrier types	DIN ISO 14443, DIN ISO 15693
Connection	Male, 8-pin
Housing material	PBT
Ambient temperature	0...70 °C
Protection degree	IP67
Approval/Conformity	CE, FCC Part 15, IC RSS-210, UL-FILE E227256, Vol.X1, BIS

Appropriate data carrier

	BIS003Y			BIS003Z			BIS0043 BIS0111		BIS0044		BIS0045		BIS0046		BIS0047		BIS00L8	
Data carrier distance to metal	>50	>10	>5	>50	>25	>10	>50	>20	>50	>30	>50	>30	>50	>30	>80		>1	0
Data carrier clear zone	>200	>60	>50	>200	>150	>150	>200	>60	>200	>100	>200	>100	>200	>100	>250		>70	>70
Working distance for writing	0-34	0-20	0-15	0-45	0-43	0-35	0-45	8-22	0-32	0-20	0-45	0-30	0-70	0-45	0-50		0-32	0-32
Working distance for reading	0-34	0-20	0-15	0-45	0-43	0-35	0-45	8-22	0-32	0-20	0-45	0-30	0-70	0-45	0-50		0-32	0-32
Offset at distance																		
0	±22	±18	±14	±30	±24	±18	±32	±20	±28	±20	±32	±22	±40	±25	±30		±30	±25
5	±22	±18	±14	±30	±24	±18	±32	±20	±28	±20	±32	±22	±40	±25	±30		±30	±25
9	±22	±18	±14	±30	±24	±18	±32	±20	±28	±18	±32	±22	±40	±25	±30		±30	±25
12	±22	±18	±10	±30	±24	±18	±32	±18	±24	±18	±32	±22	±40	±25	±30		±25	±25
15	±22	±18	±10	±30	±24	±18	±32	±18	±24	±15	±32	±20	±40	±25	±30		±25	±25
16	±22	±16	±8	±30	±24	±18	±32	±18	±24	±15	±32	±20	±40	±25	±30		±25	±25
18	±22	±16	±6	±30	±24	±18	±32	±16	±24	±12	±32	±18	±40	±25	±30		±25	±22
20	±22	±16	±4	±30	±24	±18	±32	±16	±24	±8	±32	±16	±40	±25	±30		±25	±22
22	±20	±10		±30	±24	±15	±25	±14	±20		±25	±14	±40	±22	±30		±25	±22
25	±15	±10		±30	±24	±15	±25		±20		±25	±12	±40	±22	±30		±25	±22
30	±15	±4		±30	±20	±12	±25		±12		±25	±10	±40	±22	±28		±20	±17
32	±8			±30	±18	±8	±20		±12		±20		±40	±22	±24		±20	±17
35	±4			±30	±16	±4	±20				±20		±40	±20	±22			
40				±24	±10		±20				±20		±40	±20	±18			
43				±20	±4		±12				±12		±35	±15	±14			
45				±16			±12				±12		±35	±12	±12			
50				±4									±35		±4			
Dimensions in mm																		



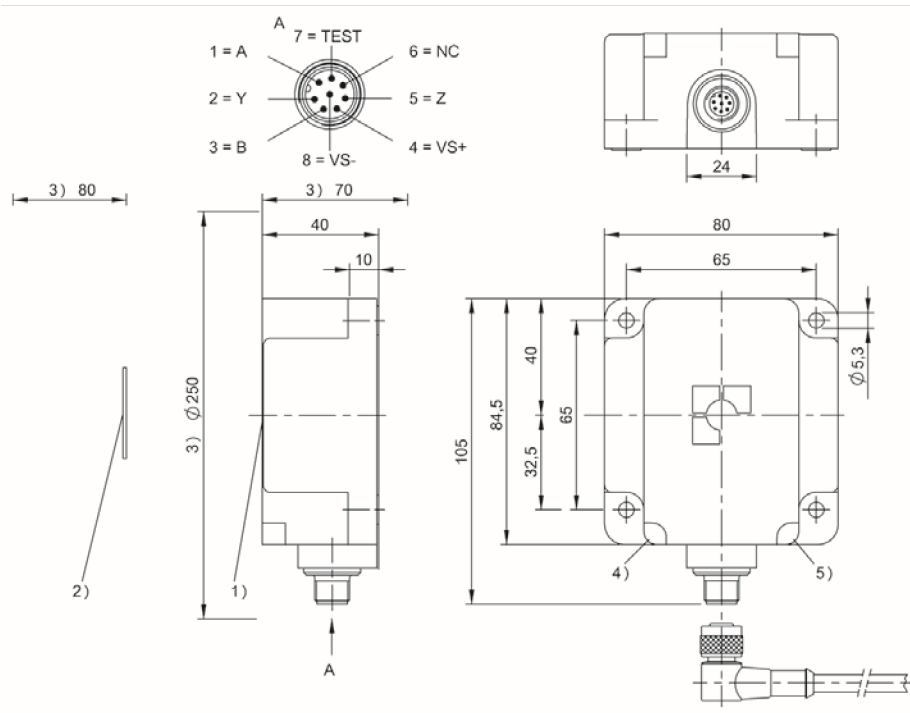
1) Sensing surface, 2) Data carrier, 3) Clear zone, 4) LED (Power), 5) LED (TP)



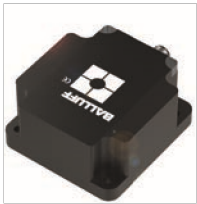
For processor unit BIS00EP	BIS0056 BIS M-301-003-S115
Product Group	HF (13.56 MHz)
Dimension	80 x 40 x 84.5 mm
Installation	metal-free (clear zone)
Antenna type	round
Supported data carrier types	DIN ISO 14443, DIN ISO 15693
Connection	Male, 8-pin
Housing material	PBT
Ambient temperature	0...70 °C
Protection degree	IP67
Approval/Conformity	CE, FCC Part 15, IC RSS-210, UL-FILE E227256, Vol.X1, BIS

Appropriate data carrier

	BIS003Y			BIS003Z			BIS0043 BIS0111		BIS0044		BIS0045		BIS0046		BIS0047		BIS00L8	
Data carrier distance to metal	>50	>10	>5	>50	>25	>10	>50	>20	>50	>30	>50	>30	>50	>30	>80		>1	0
Data carrier clear zone	>200	>60	>50	>200	>150	>150	>200	>60	>200	>100	>200	>100	>200	>100	>250		>70	>70
Working distance for writing	0-34	0-20	0-15	0-45	0-43	0-35	0-45	8-22	0-32	0-20	0-45	0-30	0-70	0-45	0-50		0-32	0-32
Working distance for reading	0-34	0-20	0-15	0-45	0-43	0-35	0-45	8-22	0-32	0-20	0-45	0-30	0-70	0-45	0-50		0-32	0-32
Offset at distance																		
0	±22	±18	±14	±30	±24	±18	±32	±20	±28	±20	±32	±22	±40	±25	±30		±30	±25
5	±22	±18	±14	±30	±24	±18	±32	±20	±28	±20	±32	±22	±40	±25	±30		±30	±25
9	±22	±18	±14	±30	±24	±18	±32	±20	±28	±18	±32	±22	±40	±25	±30		±30	±25
12	±22	±18	±10	±30	±24	±18	±32	±18	±24	±18	±32	±22	±40	±25	±30		±25	±25
15	±22	±18	±10	±30	±24	±18	±32	±18	±24	±15	±32	±20	±40	±25	±30		±25	±25
16	±22	±16	±8	±30	±24	±18	±32	±18	±24	±15	±32	±20	±40	±25	±30		±25	±25
18	±22	±16	±6	±30	±24	±18	±32	±16	±24	±12	±32	±18	±40	±25	±30		±25	±22
20	±22	±16	±4	±30	±24	±18	±32	±16	±24	±8	±32	±16	±40	±25	±30		±25	±22
22	±20	±10		±30	±24	±15	±25	±14	±20		±25	±14	±40	±22	±30		±25	±22
25	±15	±10		±30	±24	±15	±25		±20		±25	±12	±40	±22	±30		±25	±22
30	±15	±4		±30	±20	±12	±25		±12		±25	±10	±40	±22	±28		±20	±17
32	±8			±30	±18	±8	±20		±12		±20		±40	±22	±24		±20	±17
35	±4			±30	±16	±4	±20				±20		±40	±20	±22			
40				±24	±10		±20				±20		±40	±20	±18			
43				±20	±4		±12				±12		±35	±15	±14			
45				±16			±12				±12		±35	±12	±12			
50				±4									±35		±4			
Dimensions in mm																		



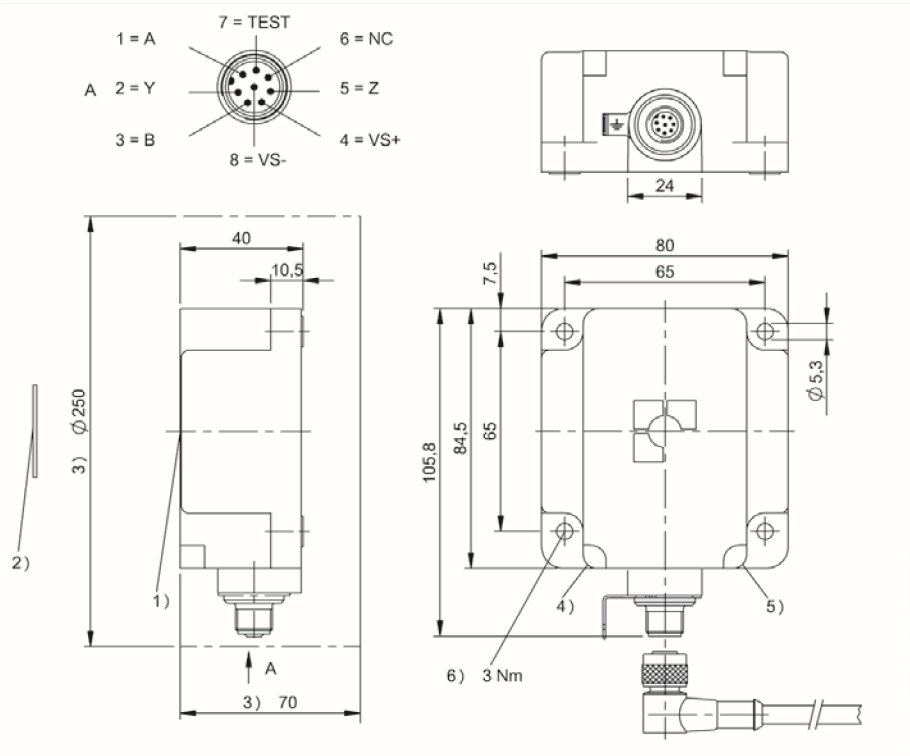
1) Sensing surface, 2) Data carrier, 3) Clear zone, 4) LED (Power), 5) LED (TP)



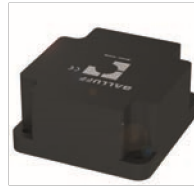
For processor units BIS M-60...	BIS00M6 BIS M-341-001-S115
Product Group	HF (13.56 MHz)
Dimension	80 x 40 x 84.5 mm
Installation	metal-free (clear zone)
Antenna type	round
Supported data carrier types	DIN ISO 14443, DIN ISO 15693
Connection	Male, 8-pin
Housing material	PBT
Ambient temperature	0...70 °C
Protection degree	IP67
Approval/Conformity	CE, FCC Part 15, IC RSS-210, UL-FILE E227256, Vol.X1, BIS

Appropriate data carrier

	BIS0046		BIS0043			BIS00M9 BIS00M8		BIS00NU BIS00NW BIS0100	
Data carrier distance to metal	>50		>50	>0		>0		>0	
Data carrier clear zone	>200		>200	>0		>100		>100	
Working distance for writing	35-90		20-60	0-50		0-46		0-23	
Working distance for reading	35-90		20-60	0-50		0-46		0-23	
Offset at distance									
0				±30	0	±33		±25	
5				±30	5	±33		±25	
9				±30	10	±33		±25	
12				±30	12	±33		±20	
15				±30	16	±33		±20	
16				±30	20	±30		±20	
18				±30	23	±30		±10	
20			±35	±30	25	±30			
22			±35	±30	30	±30			
25			±35	±30	35	±24			
30			±35	±30	40	±24			
35	±55		±30	±20	46	±8			
40	±55		±30	±20	50				
45	±55		±30	±20	55				
50	±55		±30	±20	60				
60	±55		±30		65				
70	±40				70				
80	±40				80				
90	±20				90				
Dimensions in mm									



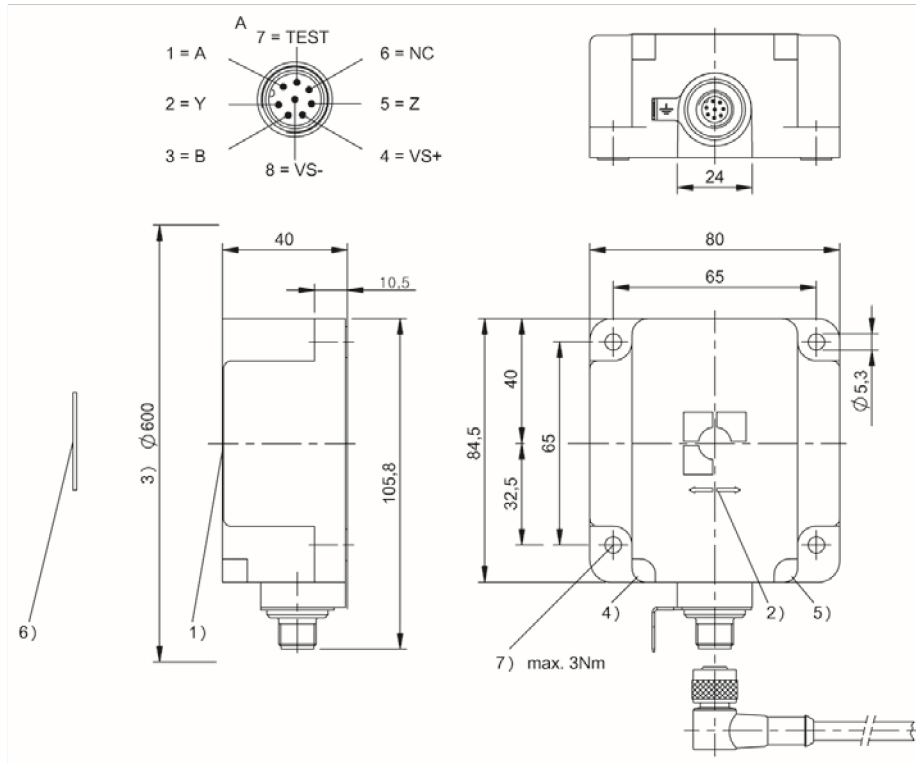
1) Sensing surface, 2) Data carrier, 3) Clear zone, 4) LED (Power), 5) LED (TP)



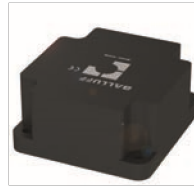
For processor units BIS M-60...	BIS005C BIS M-351-001-S115
Product Group	HF (13.56 MHz)
Dimension	80 x 40 x 84.5 mm
Installation	metal-free (clear zone)
Antenna type	Rod
Supported data carrier types	DIN ISO 14443, DIN ISO 15693
Connection	Male, 8-pin
Housing material	PBT
Ambient temperature	0...70 °C
Protection degree	IP67
Approval/Conformity	CE, FCC Part 15, IC RSS-210, UL-FILE E227256, Vol.X1, BIS

Appropriate data carrier

	BIS004F				BIS004H				BIS00M2				BIS00P3			
Data carrier clear zone A	>200	>200	>200	>200	>200	>200	>200	>200	>200	>200	>10	>10	>240	>240	>240	>240
Data carrier clear zone B	>200	>200	>200	>200	>200	>200	>200	>200	>200	>200	>50	>50	>480	>480	>480	>480
Data carrier clear zone C									>50	>50	>2	>2	>50	>50	0	0
Metallic mounting surface 40 x 22 mm	0-52	0-52			0-52	0-52										
Metallic mounting surface > 200 x 200 mm			0-65	0-65			0-65	0-65								
Working distance for writing	0-52	0-52	0-65	0-65	0-52	0-52	0-65	0-65	0-30	0-30	15-30	15-30	0-100	0-100	0-90	0-90
Working distance for reading	0-52	0-52	0-65	0-65	0-52	0-52	0-65	0-65	0-30	0-30	15-30	15-30	0-100	0-100	0-90	0-90
Offset at distance	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y
0	±60	±25	±65	±26	±25	±60	±26	±65	±35	±20			±100	±20	±100	±20
5	±60	±25	±65	±26	±25	±60	±26	±65	±35	±20			±100	±20	±100	±20
12	±60	±25	±65	±25	±25	±60	±25	±65	±35	±20			±100	±20	±100	±20
15	±60	±25	±65	±25	±25	±60	±25	±65	±35	±20	±35	±15	±100	±20	±100	±20
18	±60	±25	±65	±25	±25	±60	±25	±65	±35	±20	±35	±15	±100	±20	±100	±20
20	±60	±25	±65	±25	±25	±60	±25	±65	±20	±12	±28	±15	±80	±20	±80	±20
22	±60	±25	±65	±25	±25	±60	±25	±65	±20	±12	±28	±15	±80	±20	±80	±20
25	±60	±25	±65	±25	±25	±60	±25	±65					±80	±20	±80	±20
30	±60	±25	±65	±25	±25	±60	±25	±65					±80	±20	±80	±20
32	±50	±25	±65	±25	±25	±50	±25	±65					±80	±20	±80	±20
35	±50	±25	±65	±25	±25	±50	±25	±65					±80	±20	±80	±20
40	±50	±20	±50	±25	±20	±50	±25	±50					±65	±20	±65	±20
45	±25	±20	±50	±25	±20	±25	±25	±50					±65	±20	±65	±20
50	±25	±20	±50	±25	±20	±25	±25	±50					±65	±20	±65	±20
52	±25	±8	±25	±25	±8	±25	±25	±25					±50	±20	±50	±20
60			±25	±10			±10	±25					±40	±20		
65			±25	±10			±10	±25								
Dimensions in mm																



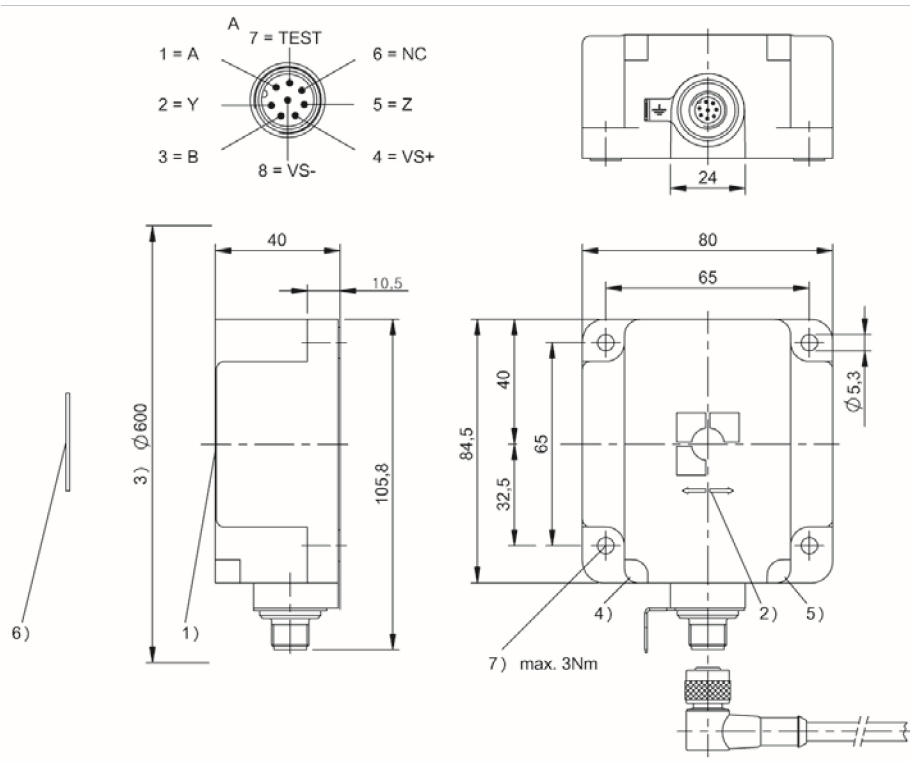
1) Sensing surface, 2) Read/write axis, 3) Clear zone, 4) LED (Power), 5) LED (TP), 6) Data carrier on steel, 7) Tightening torque



For processor unit BIS00EP	BIS00KU BIS M-351-003-S115
Product Group	HF (13.56 MHz)
Dimension	80 x 40 x 84.5 mm
Installation	metal-free (clear zone)
Antenna type	Rod
Supported data carrier types	DIN ISO 14443, DIN ISO 15693
Connection	Male, 8-pin
Housing material	PBT
Ambient temperature	0...70 °C
Protection degree	IP67
Approval/Conformity	CE, FCC Part 15, IC RSS-210, UL-FILE E227256, Vol.X1, BIS

Appropriate data carrier

	BIS004F				BIS004H				BIS00M2				BIS00P3			
Data carrier clear zone A	>200	>200	>200	>200	>200	>200	>200	>200	>200	>200	>10	>10	>240	>240	>240	>240
Data carrier clear zone B	>200	>200	>200	>200	>200	>200	>200	>200	>200	>200	>50	>50	>480	>480	>480	>480
Data carrier clear zone C									>50	>50	>2	>2	>50	>50	0	0
Metallic mounting surface 40 x 22 mm	0-52	0-52			0-52	0-52										
Metallic mounting surface > 200 x 200 mm			0-65	0-65			0-65	0-65								
Working distance for writing	0-52	0-52	0-65	0-65	0-52	0-52	0-65	0-65	0-30	0-30	15-30	15-30	0-100	0-100	0-90	0-90
Working distance for reading	0-52	0-52	0-65	0-65	0-52	0-52	0-65	0-65	0-30	0-30	15-30	15-30	0-100	0-100	0-90	0-90
Offset at distance	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y
0	±60	±25	±65	±26	±25	±60	±26	±65	±35	±20			±100	±20	±100	±20
5	±60	±25	±65	±26	±25	±60	±26	±65	±35	±20			±100	±20	±100	±20
12	±60	±25	±65	±25	±25	±60	±25	±65	±35	±20			±100	±20	±100	±20
15	±60	±25	±65	±25	±25	±60	±25	±65	±35	±20	±35	±15	±100	±20	±100	±20
18	±60	±25	±65	±25	±25	±60	±25	±65	±35	±20	±35	±15	±100	±20	±100	±20
20	±60	±25	±65	±25	±25	±60	±25	±65	±20	±12	±28	±15	±80	±20	±80	±20
22	±60	±25	±65	±25	±25	±60	±25	±65	±20	±12	±28	±15	±80	±20	±80	±20
25	±60	±25	±65	±25	±25	±60	±25	±65					±80	±20	±80	±20
30	±60	±25	±65	±25	±25	±60	±25	±65					±80	±20	±80	±20
32	±50	±25	±65	±25	±25	±50	±25	±65					±80	±20	±80	±20
35	±50	±25	±65	±25	±25	±50	±25	±65					±80	±20	±80	±20
40	±50	±20	±50	±25	±20	±50	±25	±50					±65	±20	±65	±20
45	±25	±20	±50	±25	±20	±25	±25	±50					±65	±20	±65	±20
50	±25	±20	±50	±25	±20	±25	±25	±50					±65	±20	±65	±20
52	±25	±8	±25	±25	±8	±25	±25	±25					±50	±20	±50	±20
60			±25	±10			±10	±25					±40	±20		
65			±25	±10			±10	±25								
Dimensions in mm																



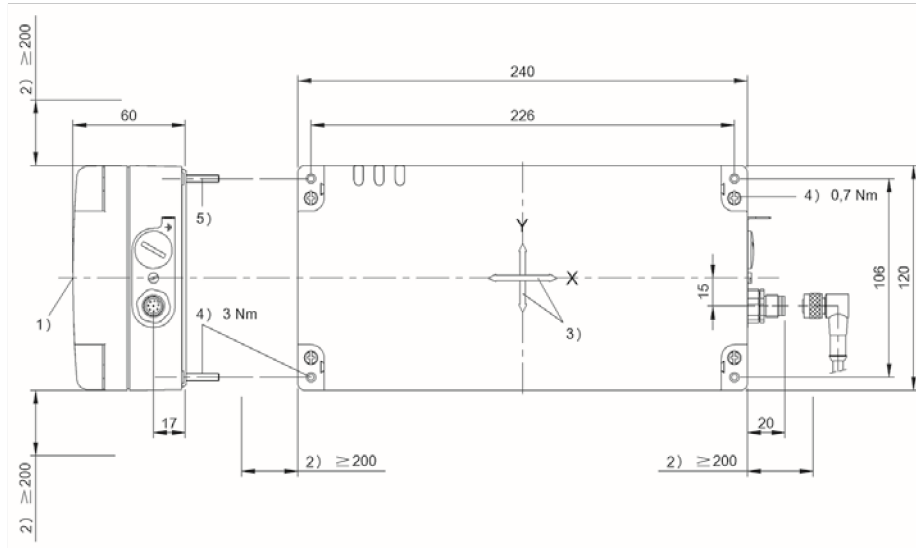
1) Sensing surface, 2) Read/write axis, 3) Clear zone, 4) LED (Power), 5) LED (TP), 6) Data carrier on steel, 7) Tightening torque



For processor units BIS M-60...	BIS00N6 BIS M-340-001-S115
Product Group	HF (13.56 MHz)
Dimension	120 x 60 x 240 mm
Installation	metal-free (clear zone)
Antenna type	round
Supported data carrier types	DIN ISO 15693
Connection	Male, 8-pin
Housing material	PC
Ambient temperature	0...55 °C
Protection degree	IP65
Approval/Conformity	CE, UL-FILE E227256, Vol.X1, BIS

Appropriate data carrier

	BIS00LC					BIS0044		BIS0045		BIS0046				
Data carrier clear zone A	>240		>240			>25		>25		>50		>10		
Data carrier clear zone B	>480		>480			>100		>100		>150		>150		
Data carrier clear zone C	>120		>10			>0		>0		>0		>0		
Metallic mounting surface 40 × 22 mm														
Metallic mounting surface > 200 × 200 mm														
Montage mit BIS Z-HW-002 auf Metall	30-75 30-75													
Working distance for writing	0-100	0-100	30-75	30-75		0-90	0-90	0-140	0-140	0-170	0-170	0-90	0-90	
Working distance for reading	0-100	0-100	30-75	30-75		0-90	0-90	0-140	0-140	0-170	0-170	0-90	0-90	
Offset at distance	X	Y	X	Y		X	Y	X	Y	X	Y	X	Y	
	0	±50	±100			0	±30	±65	±55	±75	±60	±85	±30	±85
	5	±50	±100			10	±30	±65	±55	±75	±60	±85	±30	±85
	10	±50	±100			20	±30	±65	±55	±75	±60	±85	±30	±85
	20	±50	±100			30	±30	±65	±55	±75	±60	±85	±30	±85
	30	±50	±100	±35	±90	40	±30	±65	±55	±75	±60	±85	±30	±85
	40	±50	±100	±35	±85	50	±30	±65	±55	±75	±60	±85	±30	±80
	50	±50	±95	±30	±80	60	±30	±65	±55	±75	±60	±85	±30	±70
	60	±50	±90	±25	±80	70	±30	±65	±55	±75	±60	±85	±30	±55
	70	±50	±90	±25	±75	80	±30	±55	±55	±75	±60	±85	±24	±30
	75	±45	±85	±25	±70	90	±25	±40	±55	±75	±60	±85	±1	±1
	80	±45	±85			100			±55	±75	±60	±85		
	90	±45	±80			120			±55	±75	±60	±85		
	100	±40	±75			140			±50	±65	±60	±85		
	110					160					±55	±75		
Dimensions in mm														



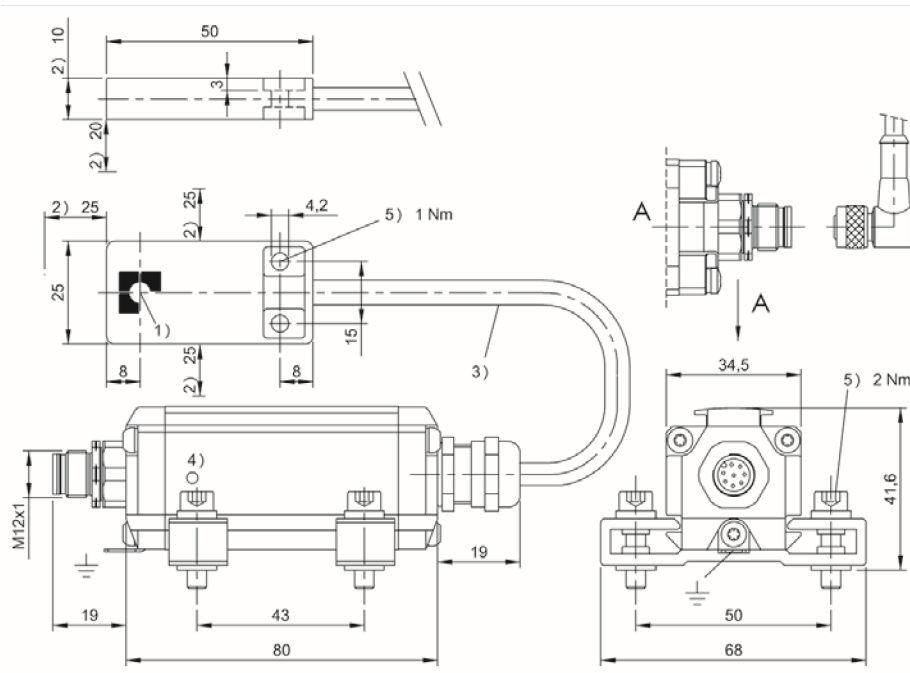
1) Sensing surface, 2) Clear zone, 3) Read/write axis, 4) Tightening torque, 5) 4x screws M4 DIN 912



For processor units BIS M-60...	BIS00NK BIS M-305-001-S115
Product Group	HF (13.56 MHz)
Dimension	25 x 10 x 50 mm
Installation	metal-free (clear zone)
Antenna type	round
Supported data carrier types	DIN ISO 14443, DIN ISO 15693
Connection	Plug, 8-pin, 0.50 m, PU
Housing material	ABS, GF16, interface aluminum
Ambient temperature	0...70 °C
Protection degree	IP67
Approval/Conformity	CE, UL-FILE E227256, Vol.X1, BIS, FCC, IC

Appropriate data carrier

	BIS0040		BIS0042		BIS0044		BIS0048		BIS004A			BIS0043		BIS00M9 BIS00M8		BIS00NU BIS00NW BIS0100			BIS00UC		
Data carrier distance to metal	>10	>0	>10	>0	>25		>10	>0	>10	>0		>25	>0	>0		>0			>10	>0	
Data carrier clear zone	>60	>0	>60	>0	>80		>60	>0	>60	>0		>100	>0	>100		>100			>60	>60	
Working distance for writing	0-6	0-4	0-8	0-6	0-13		0-5	0-4	0-7	0-5		0-17	0-11	0-17		0-12			0-7.5	0-4	
Working distance for reading	0-6	0-4	0-8	0-6	0-13		0-5	0-4	0-7	0-5		0-17	0-11	0-17		0-12			0-7.5	0-4	
Offset at distance																					
	0	±3	±3	±4	±4	±6		±3	±3	±4	±3	0	±12	±8	±10		±7		0	±5	±3.5
	5	±2		±4	±2	±6		±2		±3	±2	5	±12	±8	±10		±7		2	±5	±3.5
	9					±4						8	±12	±6	±10		±6		3	±4	±3
	12					±2						10	±12	±6	±9		±6		4	±4	±1
	15											11	±8	±4	±9		±3		5	±4	
	16											12	±8		±9		±3		6	±4	
	18											15	±8		±4				7.5	±1.5	
	20											17	±4		±4				10		
Dimensions in mm																					



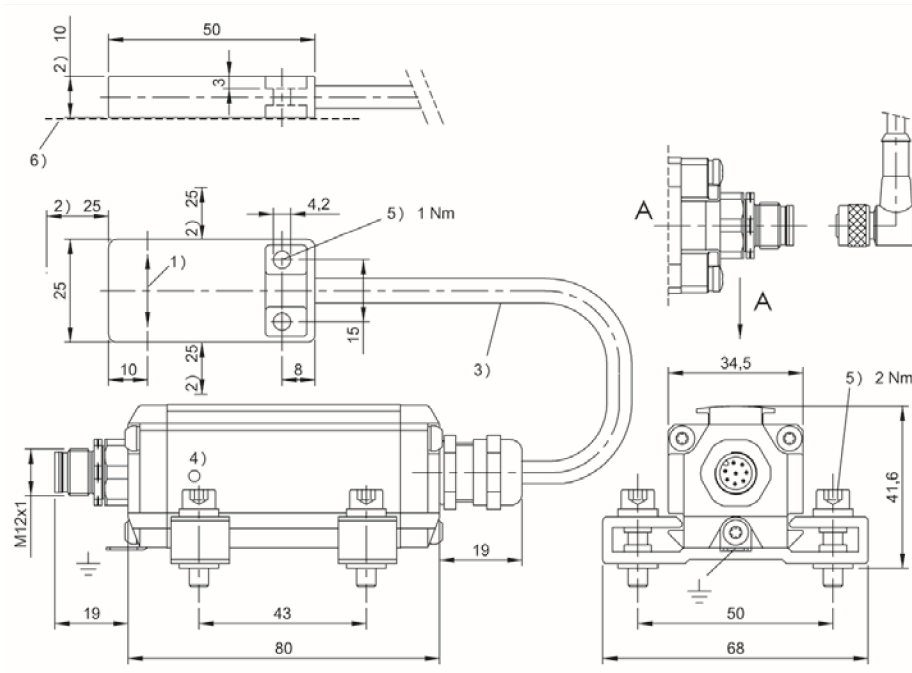
- 1) Sensing surface, 2) Clear zone, 3) Cable length see text, 4) LED function indicator, 5) Tightening torque



For processor units BIS M-60...	BIS00NY BIS M-352-001-S115
Product Group	HF (13.56 MHz)
Dimension	25 x 10 x 50 mm
Installation	metal-free (clear zone)
Antenna type	Rod
Supported data carrier types	DIN ISO 14443, DIN ISO 15693
Connection	Plug, 8-pin, 0.50 m, PU
Housing material	ABS, GF16, interface aluminum
Ambient temperature	0...70 °C
Protection degree	IP67
Approval/Conformity	CE, UL-FILE E227256, Vol.X1, BIS, FCC, IC

Appropriate data carrier

	BIS00NZ		BIS017F		BIS00M2			
Data carrier clear zone A	>27	>27	>200	>200	>200	>200	>200	>200
Data carrier clear zone B	>27	>27	>200	>200	>200	>200	>200	>200
Data carrier clear zone C			>50	>50	>50	>50	>0	>0
Metallic mounting surface 40 × 22 mm								
Metallic mounting surface > 200 × 200 mm								
Working distance for writing	0-22	0-22	0-17	0-17	0-17	0-17	0-20	0-20
Working distance for reading	0-22	0-22	0-17	0-17	0-17	0-17	0-20	0-20
Offset at distance	X	Y	X	Y	X	Y	X	Y
	0	±25 ±5	0	±22 ±9	±22	±10	±25	±12
	5	±25 ±5	5	±22 ±9	±22	±10	±25	±12
	10	±25 ±5	10	±19 ±8	±20	±9	±25	±12
	15	±25 ±5	15	±12 ±6	±16	±7	±22	±10
	20	±15 ±5	17	±3 ±2	±5	±3	±18	±8
	22	±15 ±5	20				±8	±4
Dimensions in mm								



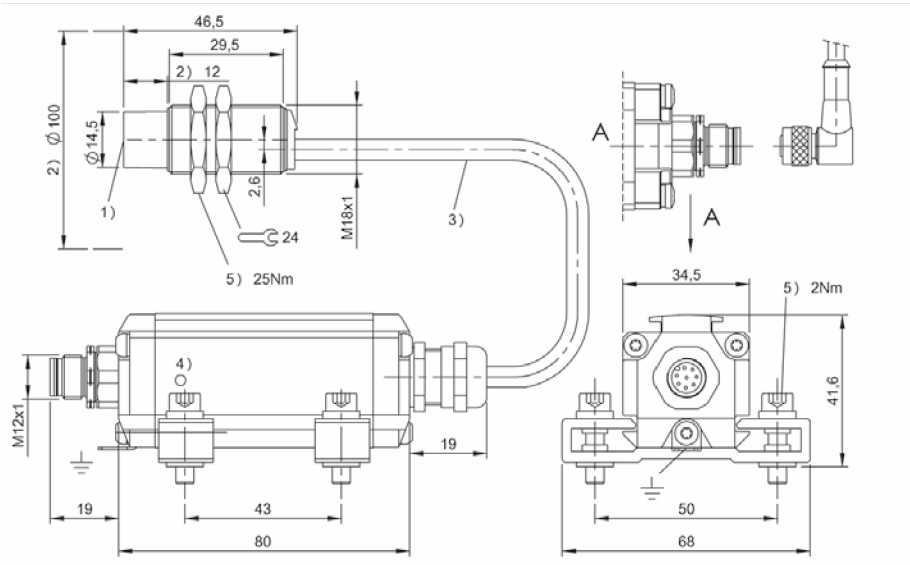
1) Read/write axis, 2) Clear zone, 3) Cable length see text, 4) LED function indicator, 5) Tightening torque, 6) Mounting on steel



For processor units BIS M-60...	BIS00P2 BIS M-307-001-S115
Product Group	HF (13.56 MHz)
Dimension	Ø 18 x 46.5 mm
Installation	metal-free (clear zone)
Antenna type	round
Supported data carrier types	DIN ISO 14443, DIN ISO 15693
Connection	Plug, 8-pin, 0.50 m, PU
Housing material	Brass, interface aluminum
Ambient temperature	0...70 °C
Protection degree	IP67
Approval/Conformity	CE, UL-FILE E227256, Vol.X1, BIS, FCC, IC

Appropriate data carrier

	BIS0040		BIS0042		BIS0044		BIS0048		BIS004A			BIS00YK		BIS00M9 BIS00M8	BIS00NU BIS00NW BIS0100
Data carrier distance to metal	>10	>0	>10	>0	>25		>10	>0	>10	>0		>10	>0	>0	>0
Data carrier clear zone	>60	>0	>60	>0	>80		>60	>0	>60	>0		>60	>60	>100	>100
Working distance for writing	0-6	0-4	0-8	0-6	0-13		0-5	0-4	0-7	0-5		0-10	0-8	0-16	0-12
Working distance for reading	0-6	0-4	0-8	0-6	0-13		0-5	0-4	0-7	0-5		0-10	0-8	0-16	0-12
Offset at distance															
0	±3	±3	±4	±4	±6		±3	±3	±4	±3	0	±7	±5	±9	±7
5	±2		±4	±2	±6		±2		±4	±2	5	±7	±5	±9	±7
9					±4						7	±6	±4	±9	±6
12					±2						8	±6	±2	±9	±6
15											10	±3		±8	±6
16											12			±8	±3
18											14			±8	
20											16			±3	
Dimensions in mm															



1) Sensing surface, 2) Clear zone, 3) Cable length see text, 4) LED function indicator, 5) Tightening torque



For processor units BIS M-62... For processor units BIS V-6... with BIS014N	BIS00WM BIS M-371-000-A01
Product Group	HF (13.56 MHz)
Dimension	113.4 x 42.4 x 118 mm
Installation	metal-free (clear zone)
Antenna type	round
Supported data carrier types	DIN ISO 14443, DIN ISO 15693
Connection	Connector, RCA
Housing material	PA
Ambient temperature	-20...50 °C
Protection degree	IP65
Approval/Conformity	CE

Appropriate data carrier

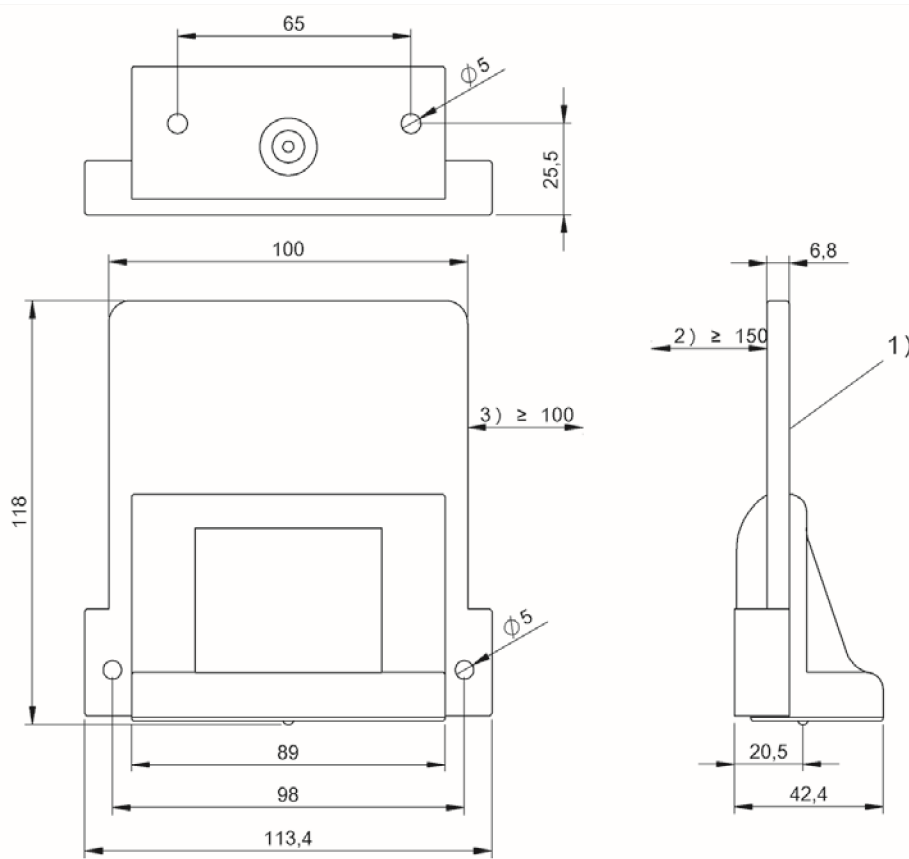
	BIS0043		BIS0111		BIS0044		BIS0045		BIS0046			BIS0119			BIS00YF	
Data carrier distance to metal	>40		>40		>40		>40		>40			>0			>25	
Data carrier clear zone	>230		>230		>220		>230		>250			>120			>230	
Working distance for writing	0-110		0-100		0-70		0-120		0-150			0-50			0-100	
Working distance for reading	0-110		0-100		0-70		0-120		0-150			0-50			0-100	
Offset at distance																
	0	±40		±40		±40		±40		±40		0	±30		0	±75
	20	±40		±40		±40		±40		±40		5	±30		20	±75
	40	±40		±40		±40		±40		±40		15	±30		30	±75
	60	±40		±40		±40		±40		±40		28	±30		40	±75
	70	±40		±40		±25		±40		±40		35	±30		50	±70
	100	±40		±25				±40		±40		50	±20		70	±70
	110	±25						±40		±40					100	±25
	120							±25		±40						
	150									±25						

Dimensions in mm

Appropriate data carrier

	BIS00YE		BIS00YA		BIS00Y9		BIS00Y6		BIS00Y5		BIS00Y4		BIS00Y2	
Data carrier distance to metal	>25		>25		>40		>40		>40		>40		>40	
Data carrier clear zone	>230		>230		>230		>250		>250		>250		>250	
Working distance for writing	0-100		0-40		0-70		25-140		10-205		10-205		10-135	
Working distance for reading	0-100		0-40		0-70		25-140		10-205		10-205		10-135	
Offset at distance														
	0	±75		±30		±40	50	±75		±75		±75		±75
	20	±75		±30		±40	75	±75		±75		±75		±75
	30	±75		±30		±40	100	±75		±75		±75		±75
	40	±75		±20		±40	120	±75		±75		±75		±75
	50	±70				±40	135	±75		±75		±75		±25
	70	±70				±25	140	±25		±75		±75		
	100	±25					190			±75		±75		
							205			±25		±25		

Dimensions in mm



1) Sensing surface, 2) Clear zone, 3) Clear zone surrounding



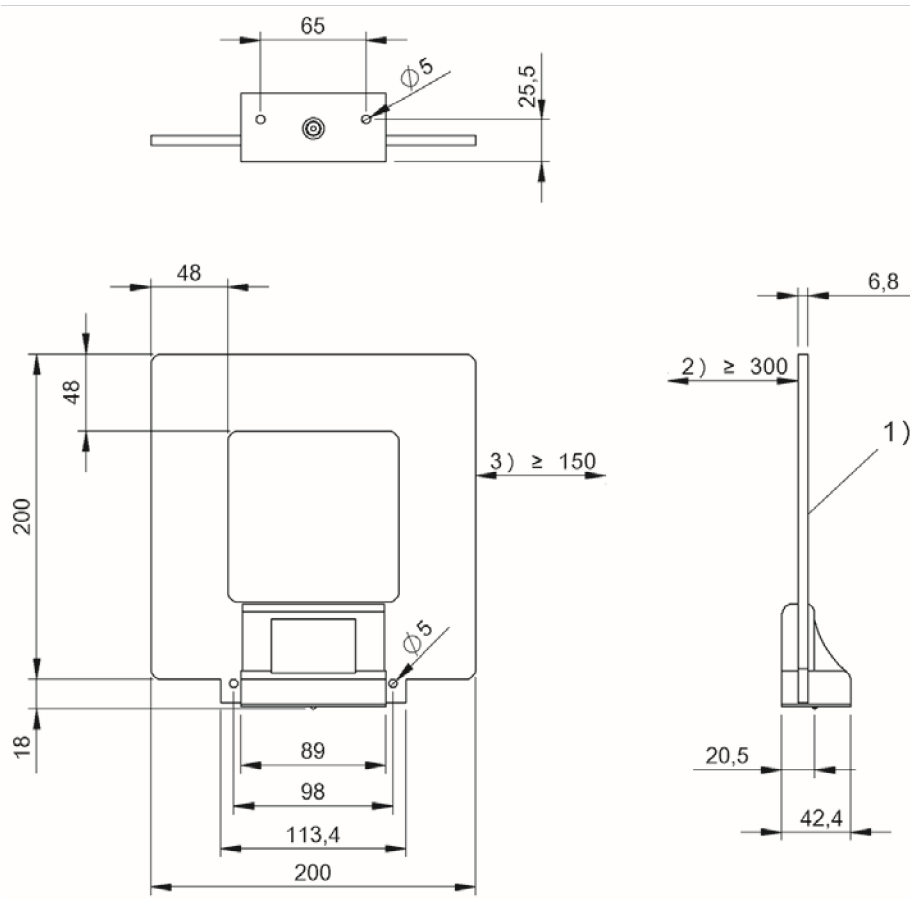
For processor units BIS M-62...	BIS00WL
For processor units BIS V-6... with BIS014N	BIS M-372-000-A01
Product Group	HF (13.56 MHz)
Dimension	200 x 42.4 x 218 mm
Installation	metal-free (clear zone)
Antenna type	round
Supported data carrier types	DIN ISO 14443, DIN ISO 15693
Connection	Connector, RCA
Housing material	PA
Ambient temperature	-20...50 °C
Protection degree	IP65
Approval/Conformity	CE

Appropriate data carrier

	BIS0043	BIS0111	BIS0044	BIS0045	BIS0046		BIS0119		BIS00YF
Data carrier distance to metal	>45	>45	>45	>45	>45		>0		>45
Data carrier clear zone	>430	>430	>420	>430	>450		>420		>430
Working distance for writing	0-160	0-150	0-115	0-175	0-235		0-65		0-160
Working distance for reading	0-160	0-150	0-115	0-175	0-235		0-65		0-160
Offset at distance									
0	±75	±75	±50	±75	±75	0	±50		0 ±100
25	±75	±75	±50	±75	±75	20	±50		20 ±100
50	±75	±75	±50	±75	±75	37	±50		30 ±100
80	±75	±75	±50	±75	±75	65	±30		40 ±100
100	±75	±75	±50	±75	±75	80			60 ±100
115	±75	±75	±30	±75	±75	100			90 ±100
135	±75	±75		±75	±75	115			115 ±50
150	±75	±50		±75	±75				130 ±50
160	±50			±75	±75				145 ±50
175				±50	±75				160 ±25
Dimensions in mm									

Appropriate data carrier

	BIS00YE	BIS00YA	BIS00Y9		BIS00Y6	BIS00Y5	BIS00Y4	BIS00Y2
Data carrier distance to metal	>45	>45	>45		>45	>45	>45	>45
Data carrier clear zone	>430	>430	>430		>450	>450	>450	>450
Working distance for writing	0-145	0-30	0-115		0-230	0-300	0-300	0-190
Working distance for reading	0-145	0-30	0-115		0-230	0-300	0-300	0-190
Offset at distance								
0	±100	±50	±75	0	±100	±100	±100	±100
20	±100	±50	±75	50	±100	±100	±100	±100
30	±100	±30	±75	100	±100	±100	±100	±100
40	±100		±75	150	±100	±100	±100	±100
60	±100		±75	190	±100	±100	±100	±50
90	±100		±75	230	±50	±100	±100	
115	±50		±50	250		±100	±100	
130	±50			300		±50	±50	
145	±25							
160								
Dimensions in mm								



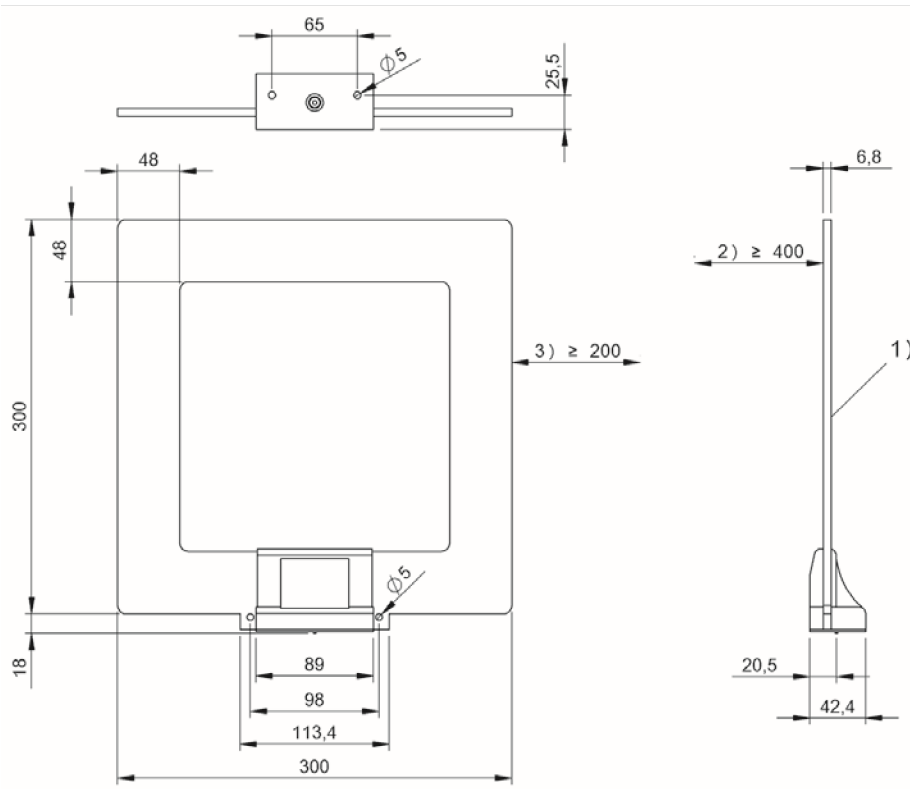
1) Sensing surface, 2) Clear zone, 3) Clear zone surrounding



For processor units BIS M-62... For processor units BIS V-6... with BIS014N	BIS00WK BIS M-373-000-A01
Product Group	HF (13.56 MHz)
Dimension	300 x 42.4 x 318 mm
Installation	metal-free (clear zone)
Antenna type	round
Supported data carrier types	DIN ISO 14443, DIN ISO 15693
Connection	Connector, RCA
Housing material	PA
Ambient temperature	-20...50 °C
Protection degree	IP65
Approval/Conformity	CE

Appropriate data carrier

	BIS00YF	BIS00YE	BIS00Y5	BIS00Y4	BIS00W9
Working distance for writing	0-195	0-185	0-320	0-355	0-360
Working distance for reading	0-195	0-185	0-320	0-355	0-360
Dimensions in mm					



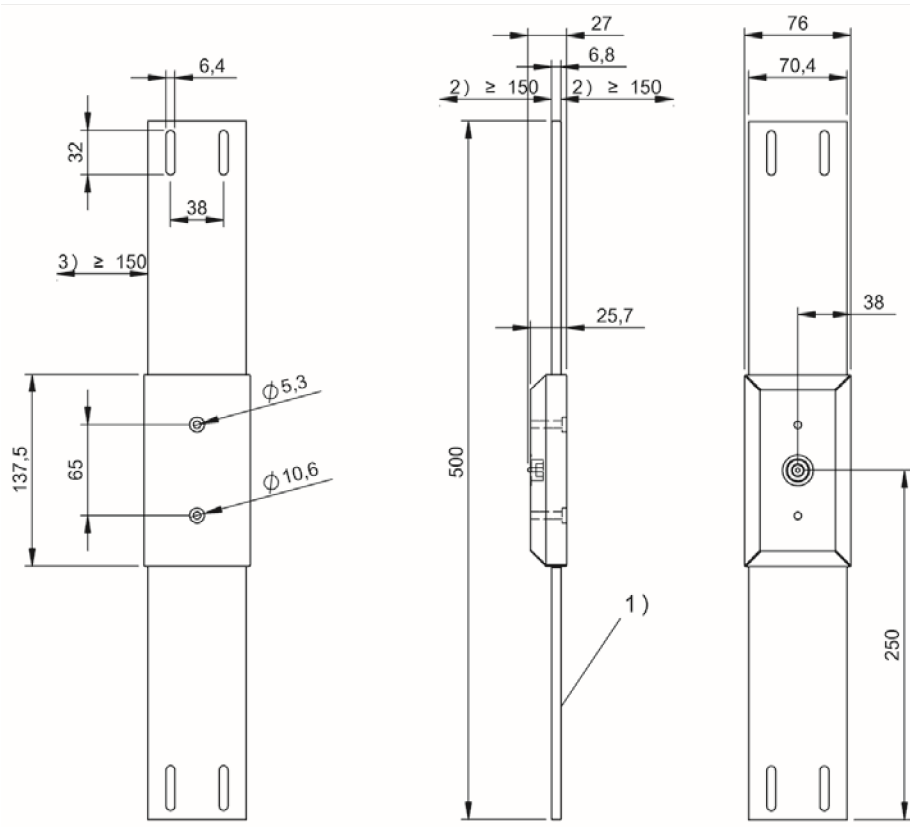
1) Sensing surface, 2) Clear zone, 3) Clear zone surrounding



For processor units BIS M-62... For processor units BIS V-6... with BIS014N	BIS00WN BIS M-370-000-A02
Product Group	HF (13.56 MHz)
Dimension	500 x 27 x 76 mm
Installation	metal-free (clear zone)
Antenna type	round
Supported data carrier types	DIN ISO 14443, DIN ISO 15693
Connection	Connector, RCA
Housing material	PA
Ambient temperature	-20...50 °C
Protection degree	IP65
Approval/Conformity	CE

Appropriate data carrier

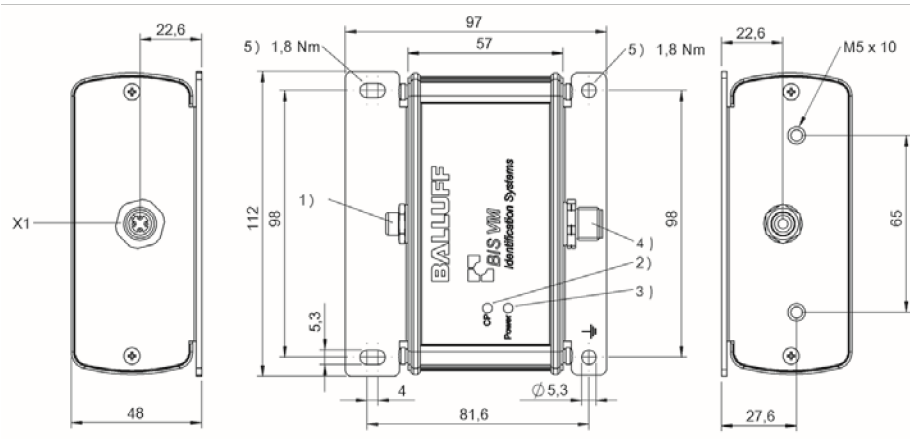
	BIS00Y7	BIS00Y6	BIS00Y5	BIS00Y4	BIS00Y2	BIS00Y1
Working distance for writing	0-48	10-95	0-135	0-130	15-95	0-100
Working distance for reading	0-48	10-95	0-135	0-130	15-95	0-100
Dimensions in mm						



1) Sensing surface, 2) Clear zone, 3) Clear zone surrounding



For antennas BIS M-37...	BIS014N BIS VM-920
Product Group	HF (13.56 MHz)
Dimension	112 x 48 x 97 mm
Connection	Male, 4-pin
Housing material	Aluminum
Ambient temperature	-20...50 °C
Protection degree	IP65
Approval/Conformity	CE



1) Antenna connection, 2) LED (CP), 3) LED (Power), 4) Read head connection X1, 5) Tightening torque



For read/write heads BIS VM (HF 13.56 MHz), BIS VL (LF 125 kHz) and BIS VU (UHF 860/960 MHz) *	BIS013U BIS V-6108-048-C002	
Product Group	Multi-Frequency Processors (BIS V)	
Interface	Profinet I/O (IRT), 2 port Switch	
Supported RFID technologies	LF 125 kHz (BIS VL), HF 13.56 MHz (BIS VM), UHF 860/960 MHz (BIS VU)	
Number of connectable R/W heads / antennas	4	
Operating voltage Ub	24 V DC LPS Class 2	
Housing material	Zinc, die-cast	
Ambient temperature	0...60 °C	
Protection degree	IP65 with connector	
Approval/Conformity	CE, UL Listed	
Connection	2x M12x1-Female, 4-pole, D-coded 7/8"-Male, 5-pole	
Productview	Page 226	

* Use adapter **BISOFC** to connect read/write heads **BIS C (LF 70/455 kHz)**.



BIS013W BIS V-6108-048-C102	BIS00T3 BIS V-6102-019-C001	BIS012E BIS V-6102-019-C101
Multi-Frequency Processors (BIS V)	Multi-Frequency Processors (BIS V)	Multi-Frequency Processors (BIS V)
Profinet I/O (IRT), 2 port Switch	Profibus DP Slave, galvanically isolated	Profibus DP Slave, galvanically isolated
LF 125 kHz (BIS VL), LF 70/455 kHz (BIS C), HF 13.56 MHz (BIS VM), UHF 860/960 MHz (BIS VU)	LF 125 kHz (BIS VL), HF 13.56 MHz (BIS VM), UHF 860/960 MHz (BIS VU)	LF 125 kHz (BIS VL), LF 70/455 kHz (BIS C), HF 13.56 MHz (BIS VM), UHF 860/960 MHz (BIS VU)
4	4	4
24 V DC LPS Class 2	24 V DC LPS Class 2	24 V DC LPS Class 2
Zinc, die-cast	Zinc, die-cast	Zinc, die-cast
0...60 °C	0...60 °C	0...60 °C
IP65 with connector	IP65 with connector	IP65 with connector
CE, UL Listed	CE, UL Listed	CE, UL Listed
2x M12x1-Female, 4-pole, D-coded 7/8"-Male, 5-pole	M12x1-Male, 5-pole, B-coded M12x1-Female, 5-pole, B-coded 7/8"-Male, 5-pole	M12x1-Male, 5-pole, B-coded M12x1-Female, 5-pole, B-coded 7/8"-Male, 5-pole
Page 226	Page 226	Page 226



For read/write heads BIS VM (HF 13.56 MHz), BIS VL (LF 125 kHz) and BIS VU (UHF 860/960 MHz) *	BIS0186 BIS V-6107-039-C005	
Product Group	Multi-Frequency Processors (BIS V)	
Interface	Ethernet TCP/IP, USB	
Supported RFID technologies	LF 125 kHz (BIS VL), HF 13.56 MHz (BIS VM), UHF 860/960 MHz (BIS VU)	
Number of connectable R/W heads / antennas	4	
Operating voltage Ub	24 V DC LPS Class 2	
Housing material	Zinc, die-cast	
Ambient temperature	0...60 °C	
Protection degree	IP65 with connector	
Approval/Conformity	CE, UL Listed	
Connection	M12x1-Female, 4-pole, D-coded M12x1-Female, 5-pole, A-coded 7/8"-Male, 5-pole	
Productview	Page 227	

* Use adapter **BISOFC** to connect read/write heads **BIS C (LF 70/455 kHz)**.



BIS018J BIS V-6107-039-C006	BIS0187 BIS V-6107-039-C105	BIS018K BIS V-6107-039-C106
Multi-Frequency Processors (BIS V)	Multi-Frequency Processors (BIS V)	Multi-Frequency Processors (BIS V)
Ethernet TCP/IP, USB	Ethernet TCP/IP, USB	Ethernet TCP/IP, USB
LF 125 kHz (BIS VL), HF 13.56 MHz (BIS VM), UHF 860/960 MHz (BIS VU)	LF 125 kHz (BIS VL), LF 70/455 kHz (BIS C), HF 13.56 MHz (BIS VM), UHF 860/960 MHz (BIS VU)	LF 125 kHz (BIS VL), LF 70/455 kHz (BIS C), HF 13.56 MHz (BIS VM), UHF 860/960 MHz (BIS VU)
4	4	4
24 V DC LPS Class 2	24 V DC LPS Class 2	24 V DC LPS Class 2
Zinc, die-cast	Zinc, die-cast	Zinc, die-cast
0...60 °C	0...60 °C	0...60 °C
IP65 with connector	IP65 with connector	IP65 with connector
CE, UL Listed	CE, UL Listed	CE, UL Listed
M12x1-Female, 4-pole, D-coded M12x1-Female, 5-pole, A-coded 7/8"-Male, 4-pole	M12x1-Female, 4-pole, D-coded M12x1-Female, 5-pole, A-coded 7/8"-Male, 5-pole	M12x1-Female, 4-pole, D-coded M12x1-Female, 5-pole, A-coded 7/8"-Male, 4-pole
Page 227	Page 227	Page 227



For read/write heads BIS VM (HF 13.56 MHz), BIS VL (LF 125 kHz) and BIS VU (UHF 860/960 MHz) *	BIS012F BIS V-6106-034-C002	
Product Group	Multi-Frequency Processors (BIS V)	
Interface	Ethernet/IP	
Supported RFID technologies	LF 125 kHz (BIS VL), HF 13.56 MHz (BIS VM), UHF 860/960 MHz (BIS VU)	
Number of connectable R/W heads / antennas	4	
Operating voltage Ub	24 V DC LPS Class 2	
Housing material	Zinc, die-cast	
Ambient temperature	0...60 °C	
Protection degree	IP65 with connector	
Approval/Conformity	CE, UL Listed	
Connection	2x M12x1-Female, 4-pole, D-coded 7/8"-Male, 5-pole	
Productview	Page 228	

* Use adapter **BISOFCCK** to connect read/write heads **BIS C (LF 70/455 kHz)**.



BIS0122 BIS V-6106-034-C004	BIS014C BIS V-6106-034-C102	BIS0146 BIS V-6106-034-C104
Multi-Frequency Processors (BIS V)	Multi-Frequency Processors (BIS V)	Multi-Frequency Processors (BIS V)
Ethernet/IP	Ethernet/IP	Ethernet/IP
LF 125 kHz (BIS VL), HF 13.56 MHz (BIS VM), UHF 860/960 MHz (BIS VU)	LF 125 kHz (BIS VL), LF 70/455 kHz (BIS C), HF 13.56 MHz (BIS VM), UHF 860/960 MHz (BIS VU)	LF 125 kHz (BIS VL), LF 70/455 kHz (BIS C), HF 13.56 MHz (BIS VM), UHF 860/960 MHz (BIS VU)
4	4	4
24 V DC LPS Class 2	24 V DC LPS Class 2	24 V DC LPS Class 2
Zinc, die-cast	Zinc, die-cast	Zinc, die-cast
0...60 °C	0...60 °C	0...60 °C
IP65 with connector	IP65 with connector	IP65 with connector
CE, UL Listed	CE, UL Listed	CE, UL Listed
2x M12x1-Female, 4-pole, D-coded 7/8"-Male, 4-pole	2x M12x1-Female, 4-pole, D-coded 7/8"-Male, 5-pole	2x M12x1-Female, 4-pole, D-coded 7/8"-Male, 4-pole
Page 228	Page 228	Page 228



For read/write heads BIS VM (HF 13.56 MHz), BIS VL (LF 125 kHz) and BIS VU (UHF 860/960 MHz) *	BIS00U9 BIS V-6110-063-C002	
Product Group	Multi-Frequency Processors (BIS V)	
Interface	EtherCAT	
Supported RFID technologies	LF 125 kHz (BIS VL), HF 13.56 MHz (BIS VM), UHF 860/960 MHz (BIS VU)	
Number of connectable R/W heads / antennas	4	
Operating voltage Ub	24 V DC LPS Class 2	
Housing material	Zinc, die-cast	
Ambient temperature	0...60 °C	
Protection degree	IP65 with connector	
Approval/Conformity	CE, UL Listed	
Connection	2x M12x1-Female, 4-pole, D-coded 7/8"-Male, 5-pole	
Productview	Page 229	

* Use adapter **BISOFC** to connect read/write heads **BIS C (LF 70/455 kHz)**.



BIS0147 BIS V-6110-063-C102	BIS010P BIS V-6111-073-C003	BIS014E BIS V-6111-073-C103
Multi-Frequency Processors (BIS V)	Multi-Frequency Processors (BIS V)	Multi-Frequency Processors (BIS V)
EtherCAT	CC-Link	CC-Link
LF 125 kHz (BIS VL), LF 70/455 kHz (BIS C), HF 13.56 MHz (BIS VM), UHF 860/960 MHz (BIS VU)	LF 125 kHz (BIS VL), HF 13.56 MHz (BIS VM)	LF 125 kHz (BIS VL), LF 70/455 kHz (BIS C), HF 13.56 MHz (BIS VM)
4	4	4
24 V DC LPS Class 2	24 V DC LPS Class 2	24 V DC LPS Class 2
Zinc, die-cast	Zinc, die-cast	Zinc, die-cast
0...60 °C	0...60 °C	0...60 °C
IP65 with connector	IP65 with connector	IP65 with connector
CE, UL Listed	CE, UL Listed	CE, UL Listed
2x M12x1-Female, 4-pole, D-coded 7/8"-Male, 5-pole	M12x1-Male, 5-pole, A-coded M12x1-Female, 5-pole, A-coded 7/8"-Male, 5-pole	M12x1-Male, 5-pole, A-coded M12x1-Female, 5-pole, A-coded 7/8"-Male, 5-pole
Page 229	Page 229	Page 229



For read/write heads BIS M-3xx-001...	BIS00N1 BIS M-6000-007-050-00-ST15	
Product Group	HF (13.56 MHz)	
Interface	RS232	
Supported RFID technologies	HF 13.56 MHz (BIS M)	
Number of connectable R/W heads / antennas	2	
Operating voltage Ub	19.2...28.8 VDC	
Housing material	ABS	
Ambient temperature	0...60 °C	
Protection degree	IP65 with connector	
Approval/Conformity	CE, cULus	
Connection	Male, 4-pole Male, 5-pole	
Productview	Page 230	



BIS00J0 BIS M-6000-007-050-00-ST24	BIS00L7 BIS M-6008-048-050-06-ST23	BIS00KZ BIS M-6028-048-050-06-ST22
HF (13.56 MHz)	HF (13.56 MHz)	HF (13.56 MHz)
RS232	Profinet I/O (IRT), Profinet I/O (IRT) 2 port Switch	Profinet
HF 13.56 MHz (BIS M)	HF 13.56 MHz (BIS M)	HF 13.56 MHz (BIS M)
2	2	2
19.2...28.8 VDC	19.2...28.8 VDC	19.2...28.8 VDC
ABS	ABS	Aluminum, die-cast
0...60 °C	0...60 °C	0...60 °C
IP65 with connector	IP65 with connector	IP65 with connector
CE, UL-FILE E227256, Vol.X1, BIS	CE, UL-FILE E227256, Vol.X1, BIS	CE, UL-FILE E227256, Vol.X1, BIS
Male, 5-pole, B-coded Male, 5-pole	Female, 4-pole, D-coded M12x1-Female, 4-pole, D-coded Male, 5-pole	2x RJ45-Female, 8-pole Male, 5-pole
Page 230	Page 231	Page 231



For read/write heads BIS M-3xx-001...	BIS00TW BIS M-6028-048-050-06-ST28	
For read/write heads BIS M-3xx-003...		
Product Group	HF (13.56 MHz)	
Interface	Profinet	
Supported RFID technologies	HF 13.56 MHz (BIS M)	
Number of connectable R/W heads / antennas	2	
Operating voltage Ub	19.2...28.8 VDC	
Housing material	Aluminum, die-cast	
Ambient temperature	0...60 °C	
Protection degree	IP65 with connector	
Approval/Conformity	CE, UL-FILE E227256, Vol.X1, BIS	
Connection	Female, 4-pole, D-coded M12x1-Female, 4-pole, D-coded Male, 5-pole	
Productview	Page 232	



BIS00EW BIS M-6002-019-050-03-ST11		BIS00FO BIS M-6022-019-050-03-ST14			
				BIS00EP BIS M-407-039-003-06-S115	
HF (13.56 MHz)		HF (13.56 MHz)		HF (13.56 MHz)	
Profibus DP Slave galvanically isolated		Profibus DP Slave galvanically isolated		Ethernet TCP/IP	
HF 13.56 MHz (BIS M)		HF 13.56 MHz (BIS M)		HF 13.56 MHz (BIS M)	
2		2		1	
19.2...28.8 VDC		19.2...28.8 VDC		19.2...28.8 VDC	
ABS		Aluminum, die-cast		Aluminum	
0...60 °C		0...60 °C		0...60 °C	
IP65 with connector		IP65 with connector		IP67 with connector	
CE, UL-FILE E227256, Vol.X1, BIS		CE, UL-FILE E227256, Vol.X1, BIS		CE, UL-FILE E227256, Vol.X1, BIS	
Male, 5-pole, B-coded M12x1-Female, 5-pole, B-coded Male, 5-pole		Male, 5-pole, B-coded M12x1-Female, 5-pole, B-coded Male, 5-pole		Female, 4-pole, D-coded Male, 5-pole	
Page 232		Page 233		Page 233	



For read/write heads BIS M-3xx-001...	BIS00F2 BIS M-6026-034-050-06-ST19	
Product Group	HF (13.56 MHz)	
Interface	Ethernet/IP	
Supported RFID technologies	HF 13.56 MHz (BIS M)	
Number of connectable R/W heads / antennas	2	
Operating voltage Ub	19.2...28.8 VDC	
Housing material	Aluminum, die-cast	
Ambient temperature	0...60 °C	
Protection degree	IP65 with connector	
Approval/Conformity	CE, UL-FILE E227256, Vol.X1, BIS	
Connection	Female, 4-pole, D-coded Male, 5-pole	
Productview	Page 234	



BIS00EY BIS M-6003-025-050-03-ST12	BIS00F1 BIS M-6023-025-050-03-ST13	BIS00LY BIS M-699-052-050-03-ST11
HF (13.56 MHz)	HF (13.56 MHz)	HF (13.56 MHz)
DeviceNet galvanically isolated	DeviceNet galvanically isolated	CC-Link
HF 13.56 MHz (BIS M)	HF 13.56 MHz (BIS M)	HF 13.56 MHz (BIS M)
2	2	2
19.2...28.8 VDC	19.2...28.8 VDC	21.6...26.4 VDC Supports only LPS/Class 2
ABS	Aluminum, die-cast	Aluminum, die-cast
0...60 °C	0...60 °C	0...55 °C
IP65 with connector	IP65 with connector	IP65 with connector
CE, UL-FILE E227256, Vol.X1, BIS	CE, UL-FILE E227256, Vol.X1, BIS	CE, CLPA, UL-FILE E227256, Vol.X1, BIS
Male, 5-pole Female, 5-pole Male, 5-pole	Male, 5-pole Female, 5-pole Male, 5-pole	Male, 5-pole Female, 5-pole Male, 5-pole
Page 234	Page 235	Page 235



For read/write heads BIS M-37x-000...	BIS00ZJ BIS M-620-068-A01-00-S115	
Product Group	HF (13.56 MHz)	
Interface	RS232	
Supported RFID technologies	HF 13.56 MHz (BIS M)	
Number of connectable R/W heads / antennas	1	
Operating voltage Ub	19.2...28.8 VDC	
Housing material	Aluminum	
Ambient temperature	-20...50 °C	
Protection degree	IP65 with connector	
Approval/Conformity	CE, UL-FILE E227256, Vol.X1, BIS	
Connection	M12x1 connector, 8-pin	
Productview	Page 236	



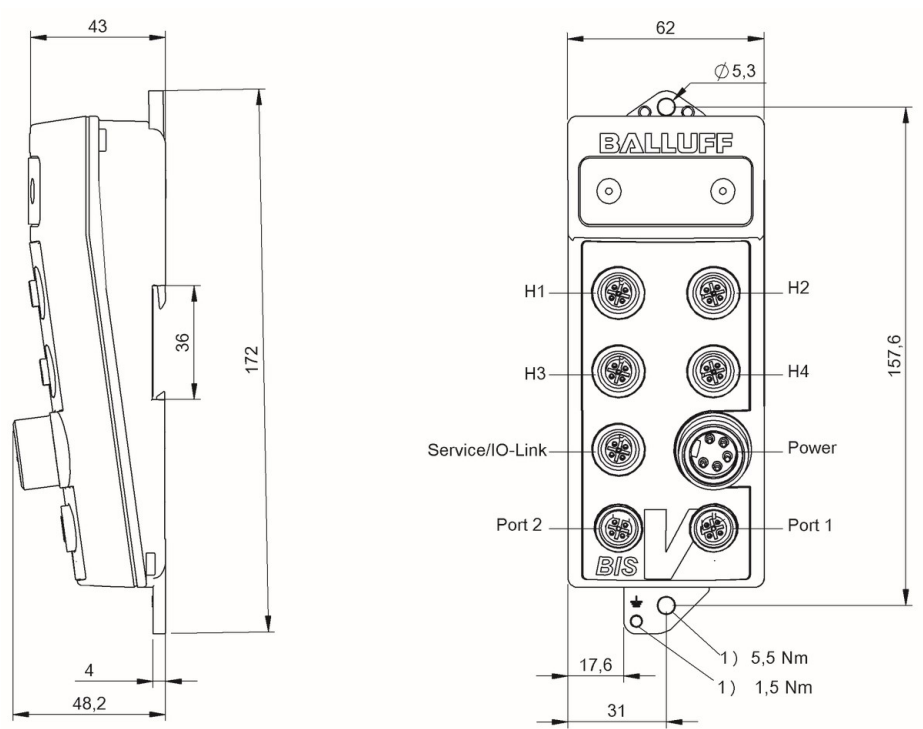
BIS00ZH BIS M-620-068-A01-00-ST29	BIS011P BIS M-628-075-A01-03-ST34	BIS00ZF BIS M-622-070-A01-03-ST33
HF (13.56 MHz)	HF (13.56 MHz)	HF (13.56 MHz)
RS232	Profinet galvanically isolated	Profibus DP Slave galvanically isolated
HF 13.56 MHz (BIS M)	HF 13.56 MHz (BIS M)	HF 13.56 MHz (BIS M)
1	1	1
19.2...28.8 VDC	19.2...28.8 VDC	19.2...28.8 VDC
Aluminum	Aluminum	Aluminum
-20...50 °C	-20...50 °C	-20...50 °C
IP65 with connector	IP65 with connector	IP65 with connector
CE, UL-FILE E227256, Vol.X1, BIS	CE, UL-FILE E227256, Vol.X1, BIS	CE, UL-FILE E227256, Vol.X1, BIS
M12x1 connector, 8-pin	2x M12x1-Female, 4-pole, D-coded M12x1-Male, 5-pole	M12x1-Male, 5-pole, B-coded M12x1-Female, 5-pole, B-coded M12x1-Male, 5-pole
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For read/write heads BIS M-37x-000...	BIS00ZC BIS M-626-069-A01-06-ST31	
Product Group	HF (13.56 MHz)	
Interface	Industrial Ethernet/Ethernet TCP/IP/MODBUS TCP	
Supported RFID technologies	HF 13.56 MHz (BIS M)	
Number of connectable R/W heads / antennas	1	
Operating voltage Ub	19.2...28.8 VDC	
Housing material	Aluminum	
Ambient temperature	-20...50 °C	
Protection degree	IP65 with connector	
Approval/Conformity	CE, UL-FILE E227256, Vol.X1, BIS	
Connection	M12x1-Female, 4-pole, D-coded M12x1-Male, 5-pole	
Productview	Page 238	

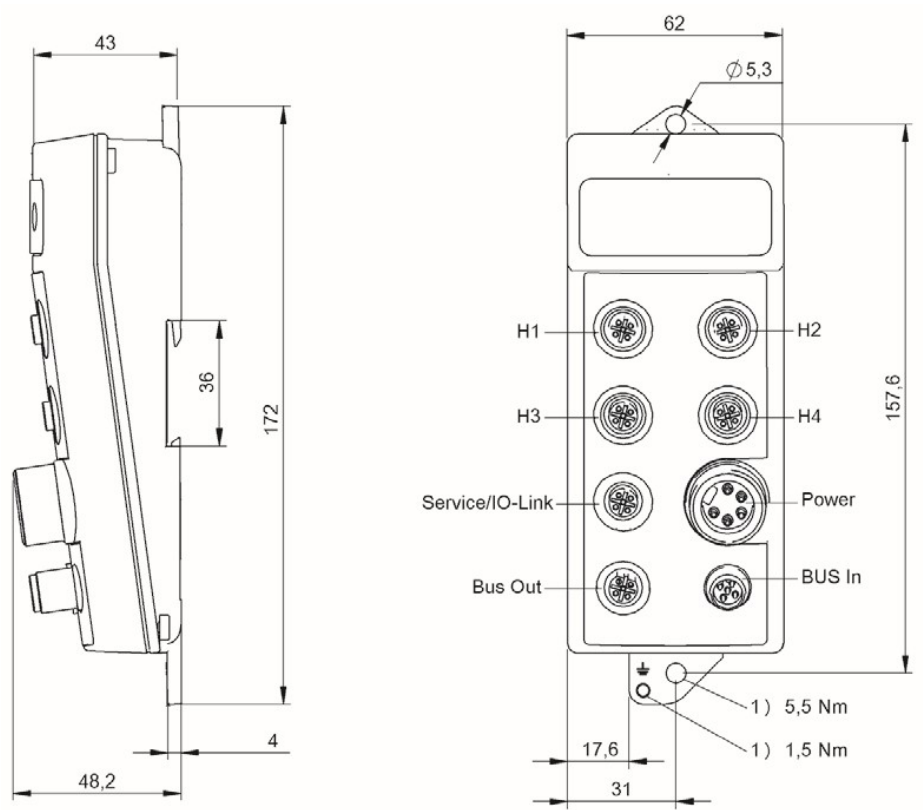


	BIS00ZA BIS M-626-069-A01-06-ST32	BIS00ZE BIS M-623-071-A01-03-ST30	
	HF (13.56 MHz)	HF (13.56 MHz)	
	Industrial Ethernet/Ethernet TCP/IP/MODBUS TCP	DeviceNet galvanically isolated	
	HF 13.56 MHz (BIS M)	HF 13.56 MHz (BIS M)	
	1	1	
	19.2...28.8 VDC	19.2...28.8 VDC	
	Aluminum	Aluminum	
	-20...50 °C	-20...50 °C	
	IP65 with connector	IP65 with connector	
	CE, UL-FILE E227256, Vol.X1, BIS	CE, UL-FILE E227256, Vol.X1, BIS	
	M12x1-Female, 4-pole, D-coded M12x1-Male, 5-pole	M12x1-Male, 5-pole M12x1-Male, 8-pole	
	Page 238	Page 239	



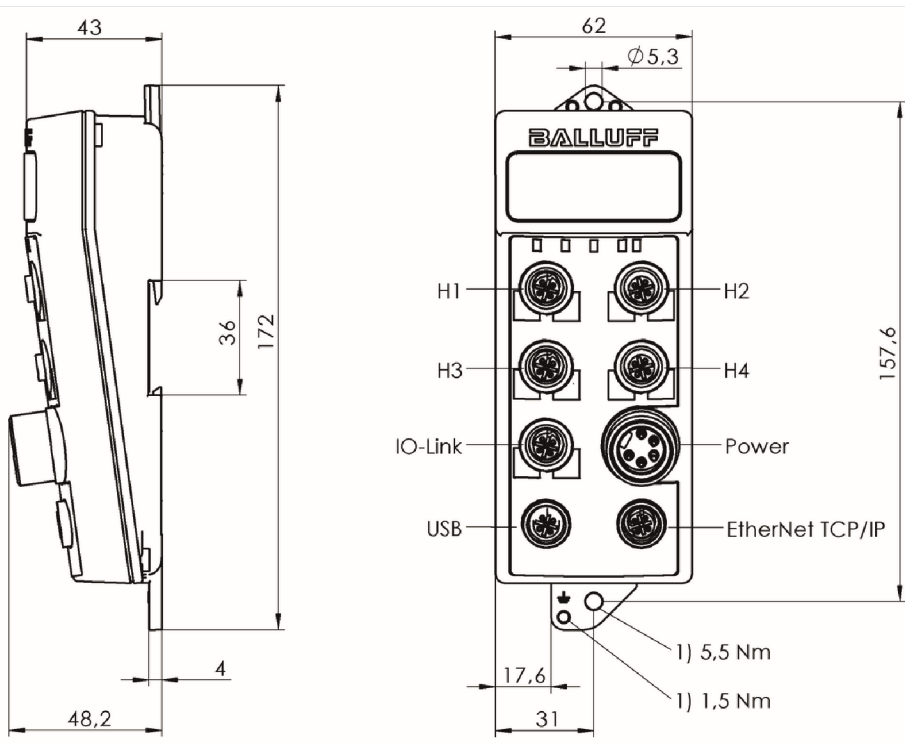
1) Tightening torque

BIS013U, BIS013W



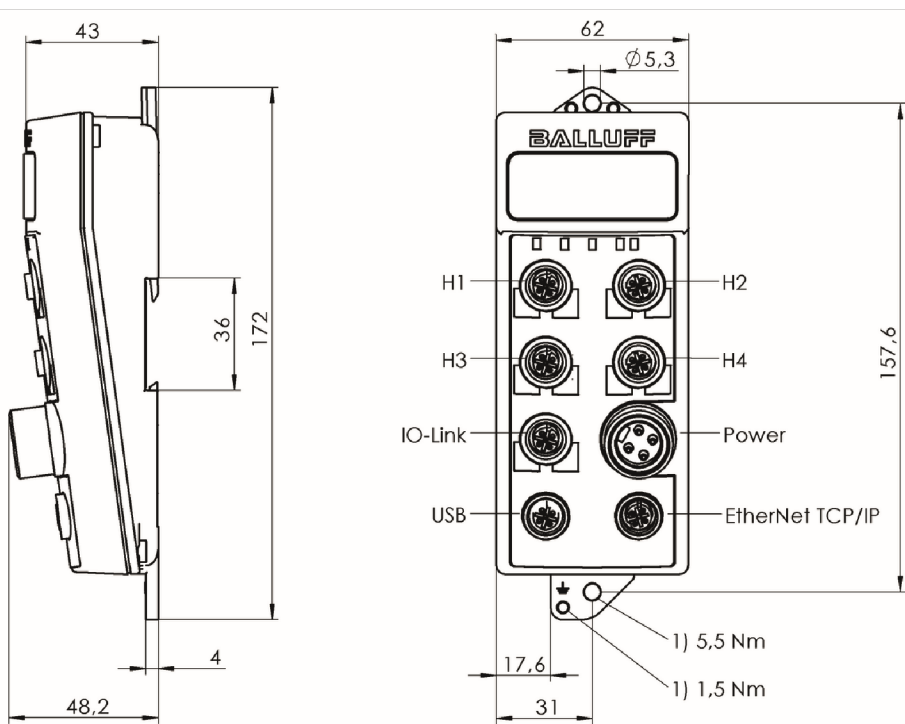
1) Tightening torque

BIS00T3, BIS012E



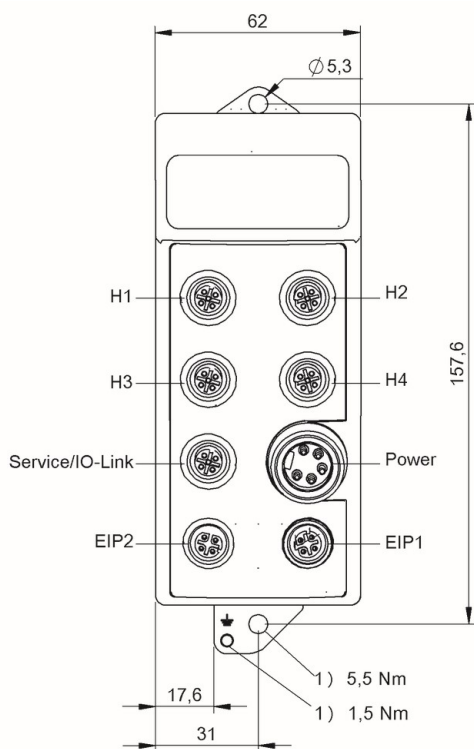
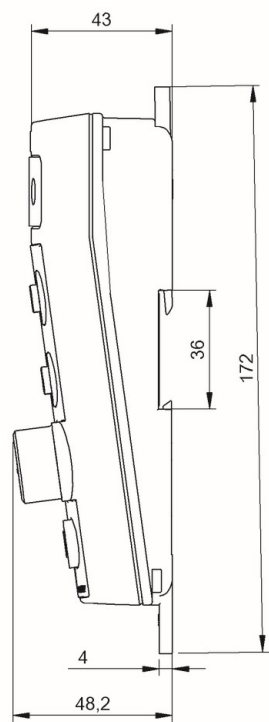
1) Tightening torque

BISO186, BISO187



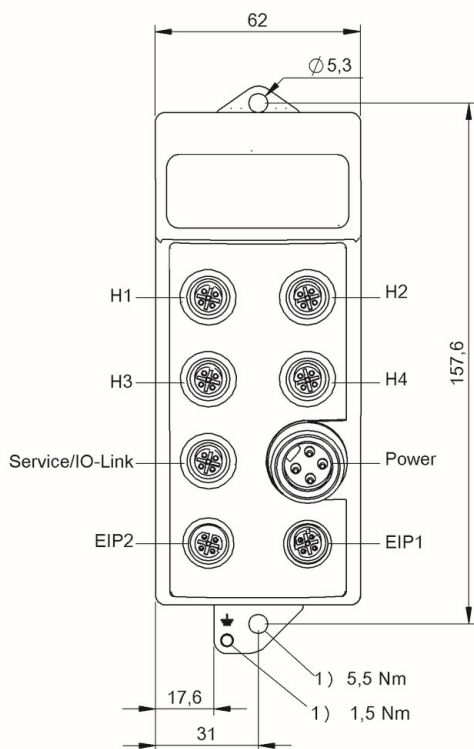
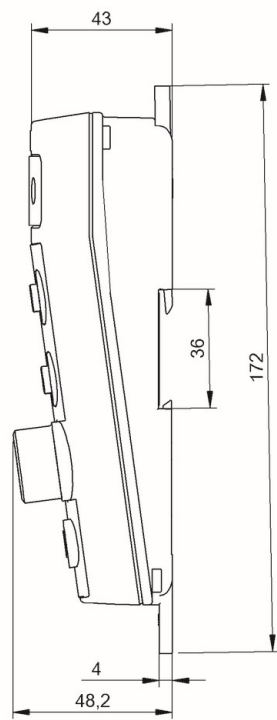
1) Tightening torque

BISO18J, BISO18K



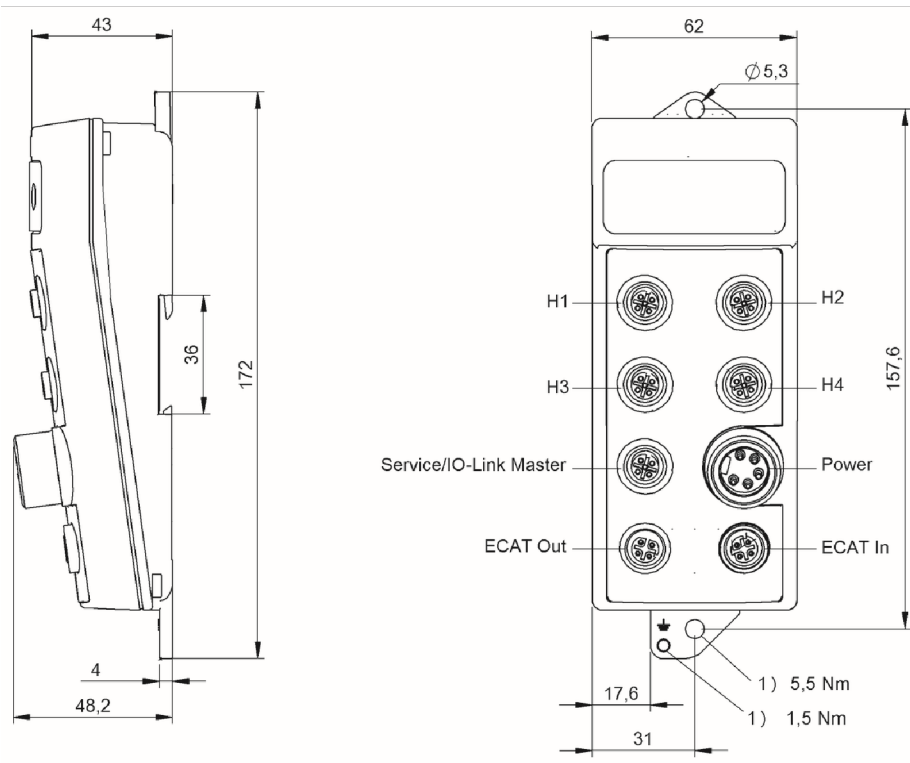
1) Tightening torque

BISO12F, BISO14C

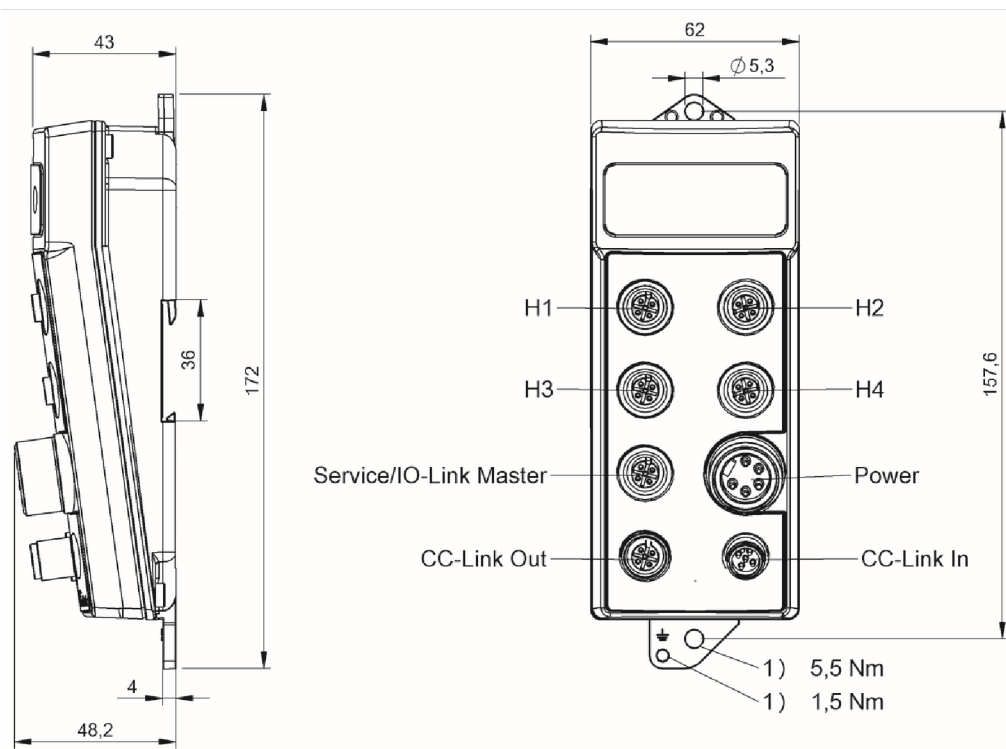


1) Tightening torque

BISO122, BISO146

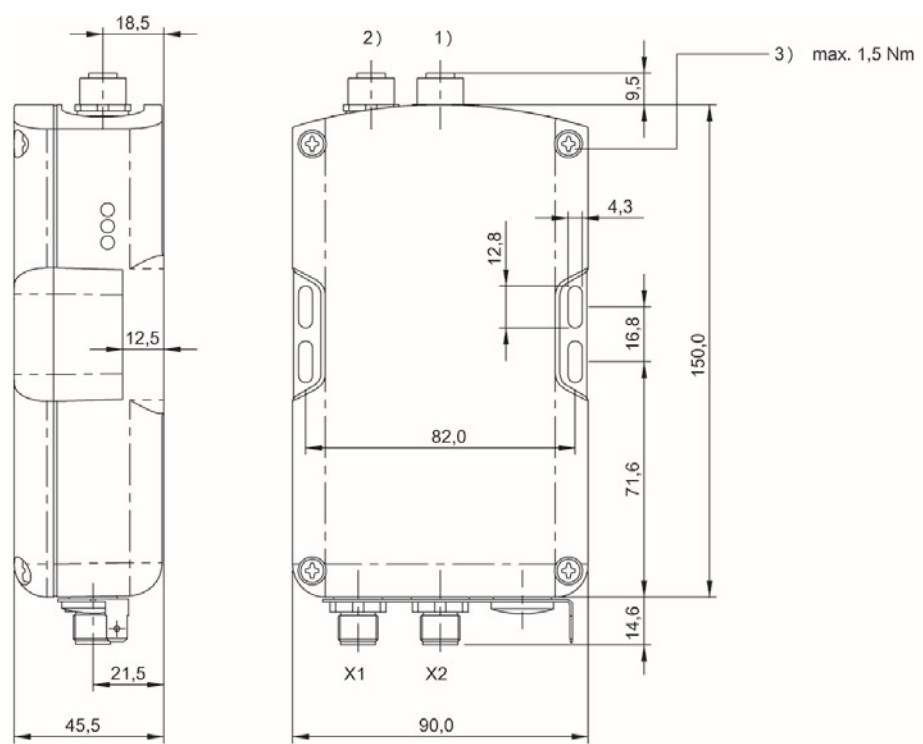


1) Tightening torque

BISO00U9, BISO147

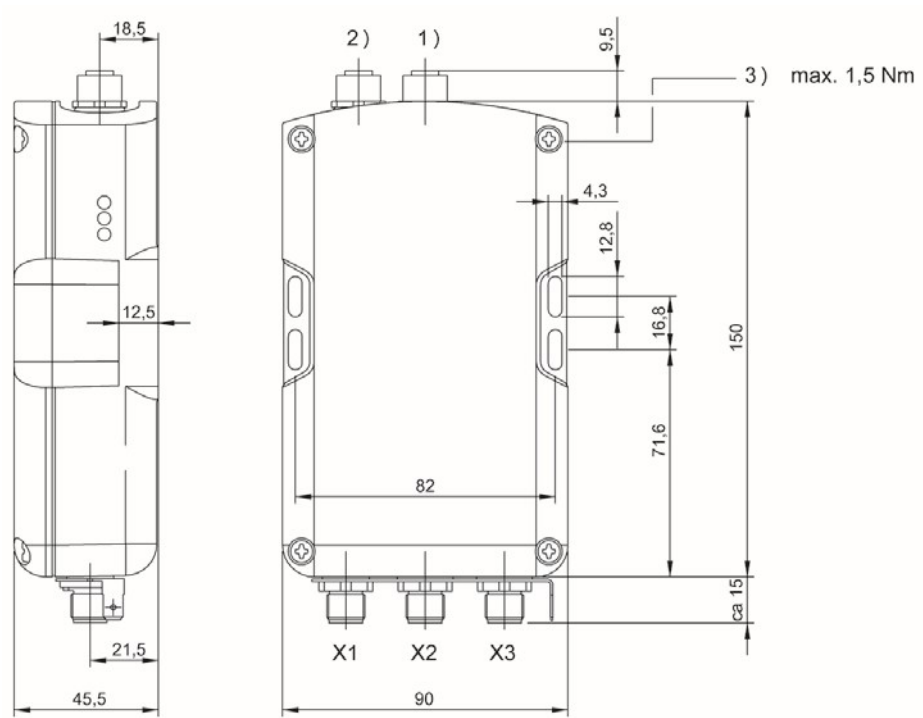
1) Tightening torque

BISO10P, BISO14E



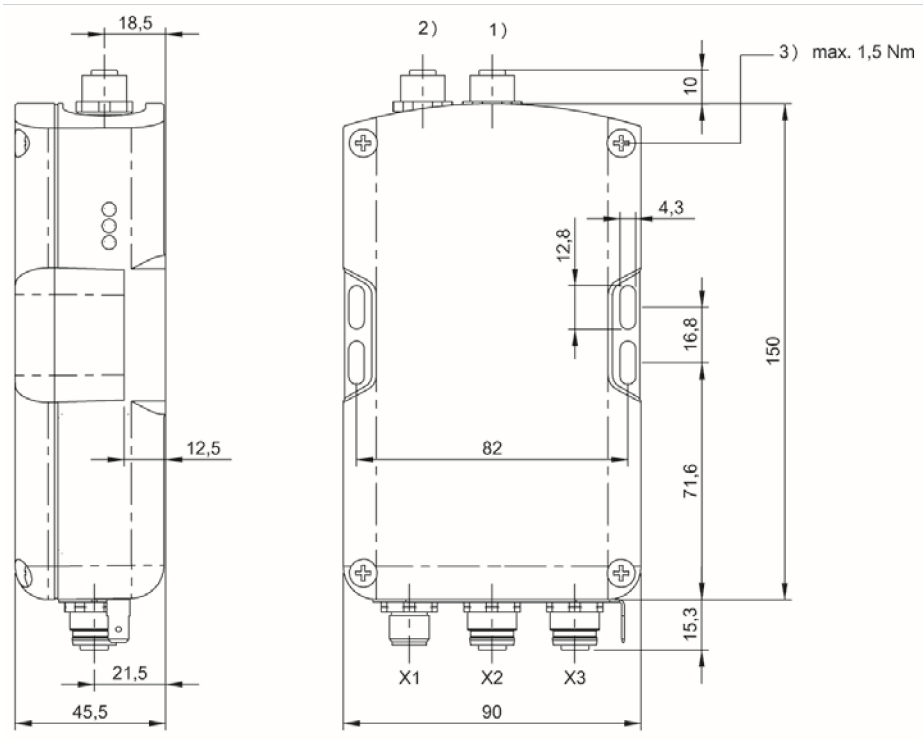
1) Head 1, 2) Head 2, 3) Tightening torque

BIS00N1



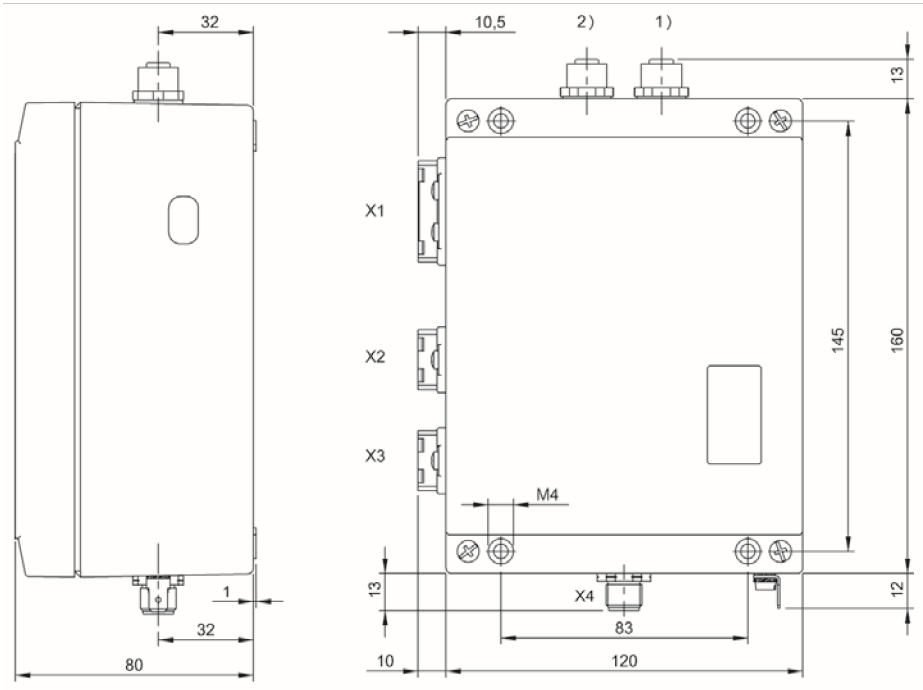
1) Head 1, 2) Head 2, 3) Tightening torque

BIS00J0



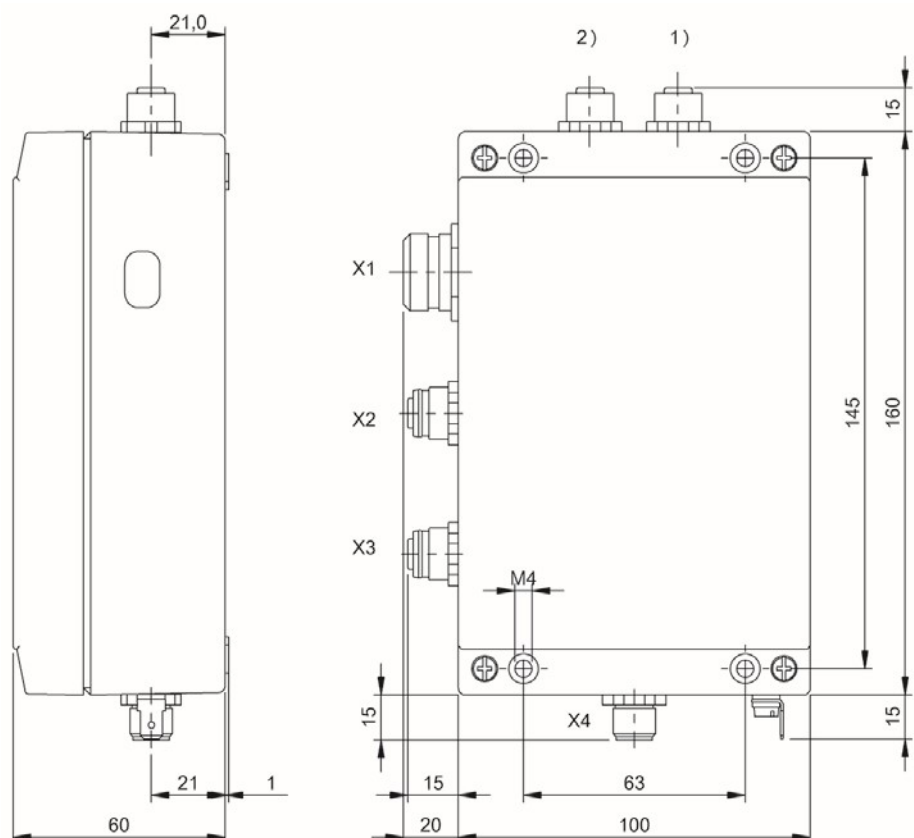
1) Head 1, 2) Head 2, 3) Tightening torque

BISO0L7



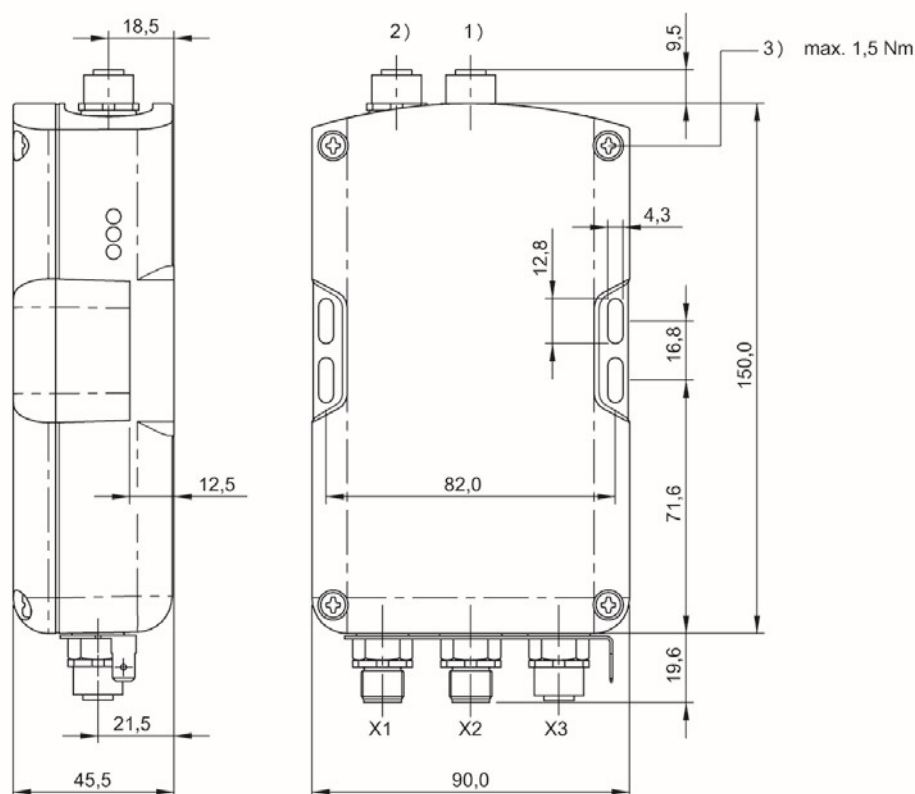
1) Head 1, 2) Head 2

BISO0KZ



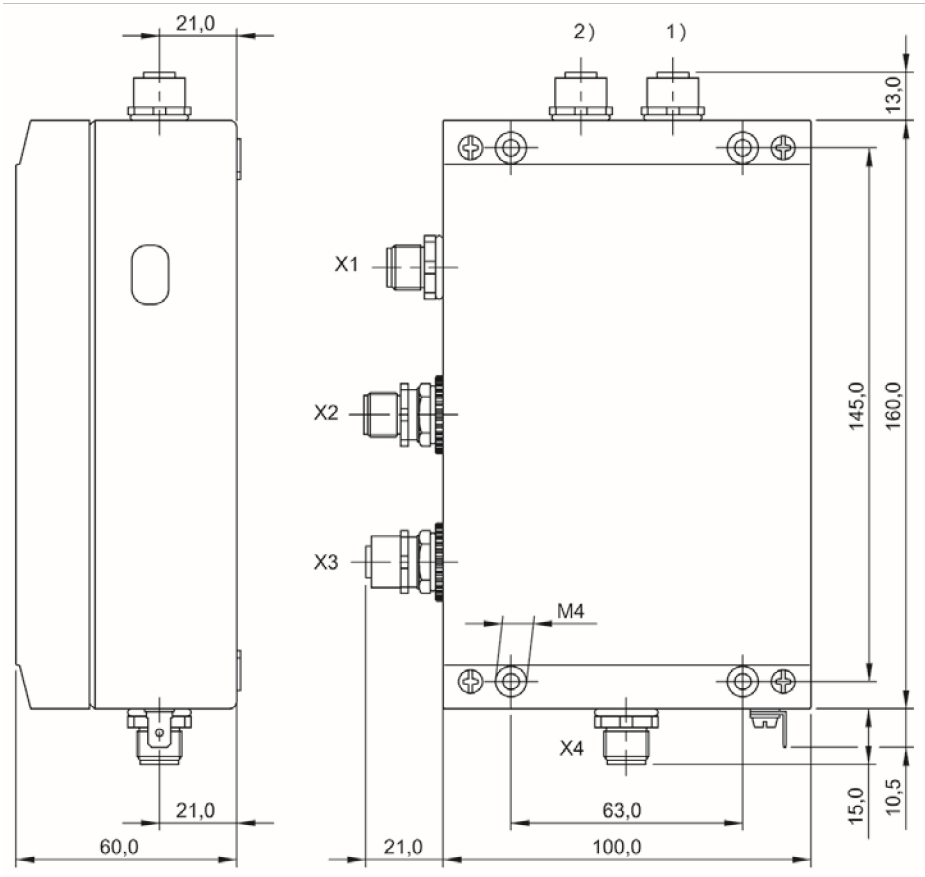
1) Head 1, 2) Head 2

BIS00TW



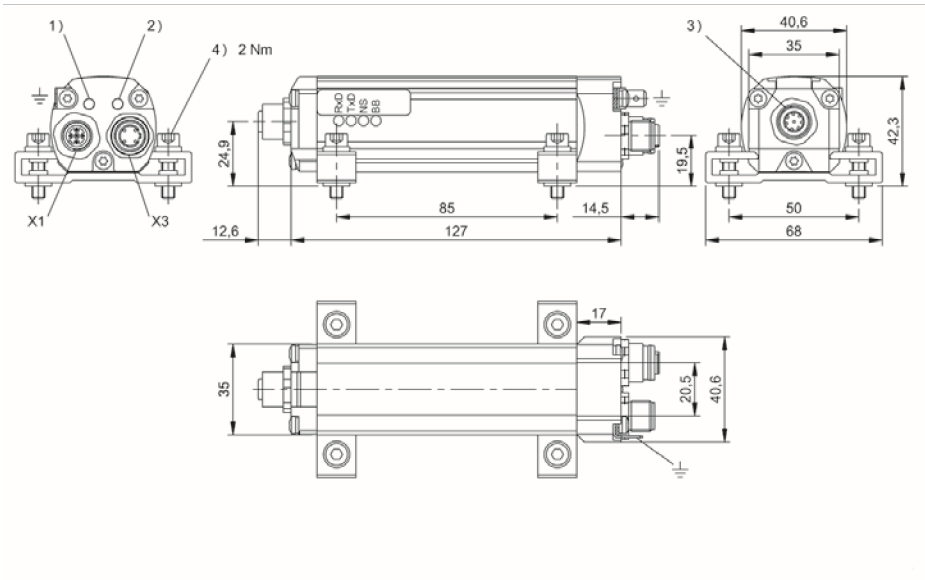
1) Head 1, 2) Head 2, 3) Tightening torque

BIS00EW



1) Head 1, 2) Head 2

BIS00F0



1) LED1 Ethernet Status, 2) LED2 Ethernet Status, 3) Head, 4) Tightening torque

BIS00EP

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Sensors

RFID

Machine Vision and
Optical Identification

Human Machine
Interfaces

Systems

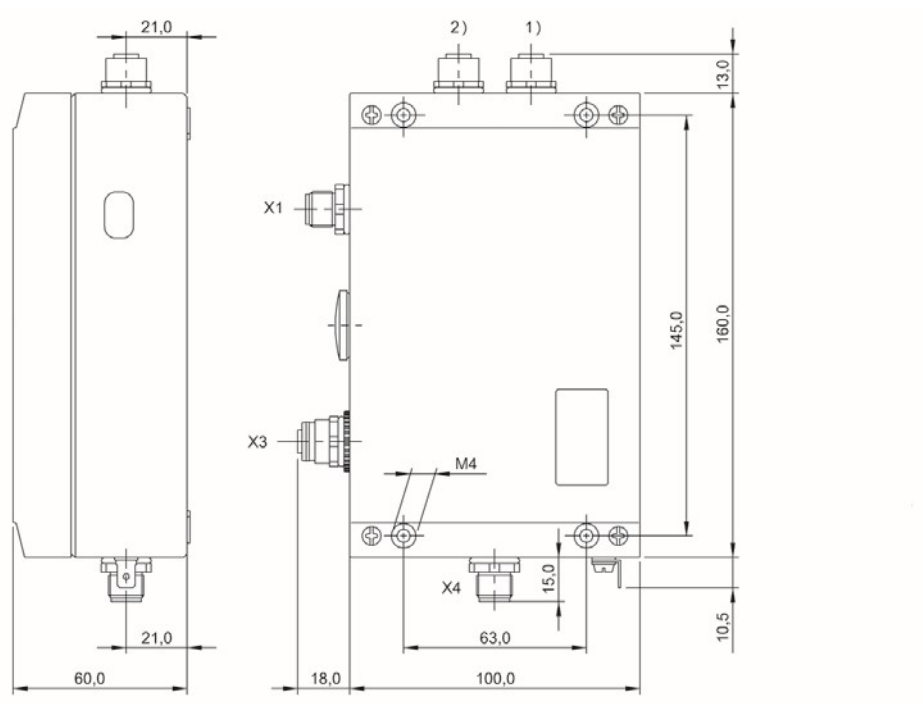
Safety

Industrial Networking

Power Supplies

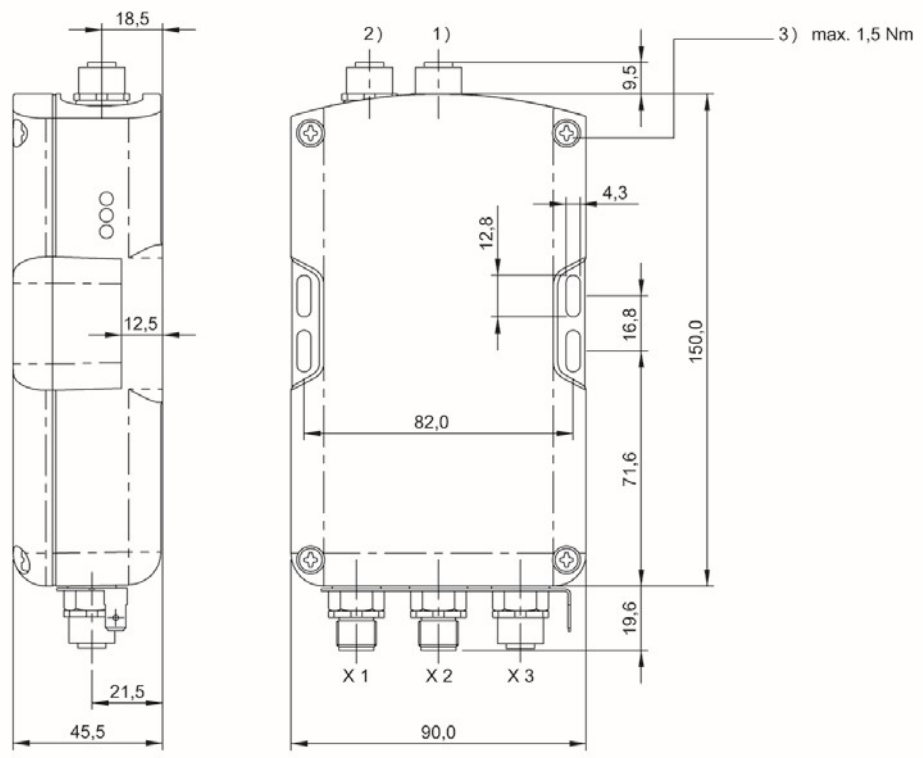
Connectivity

Accessories



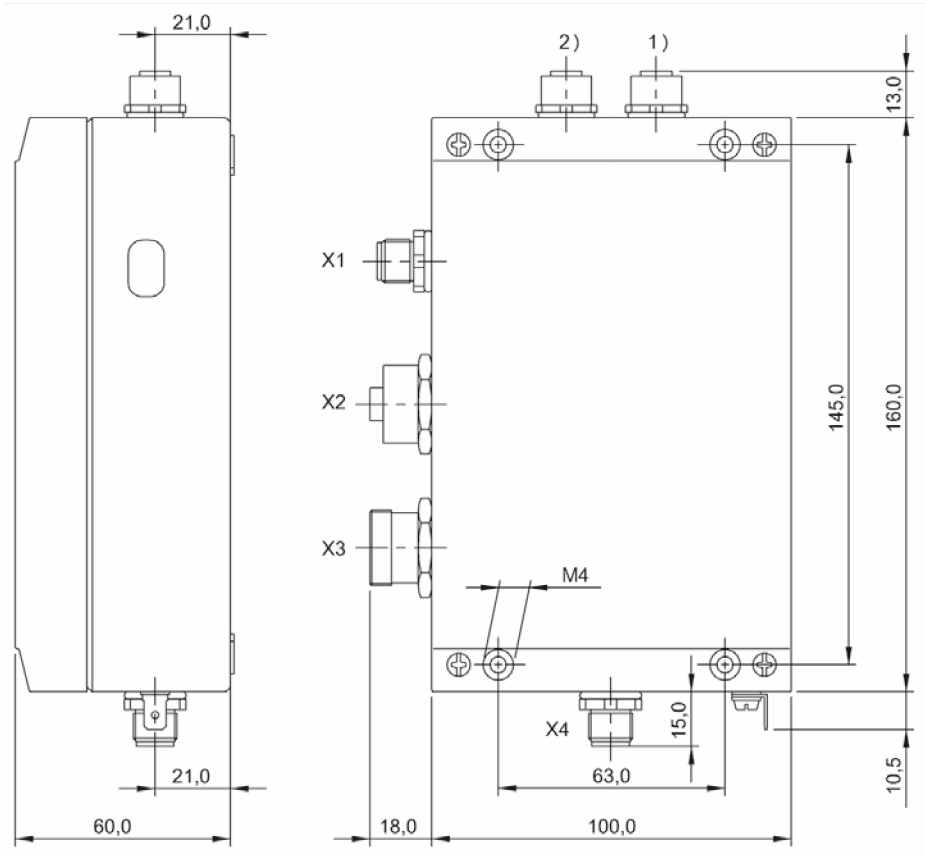
1) Head 1, 2) Head 2

BIS00F2



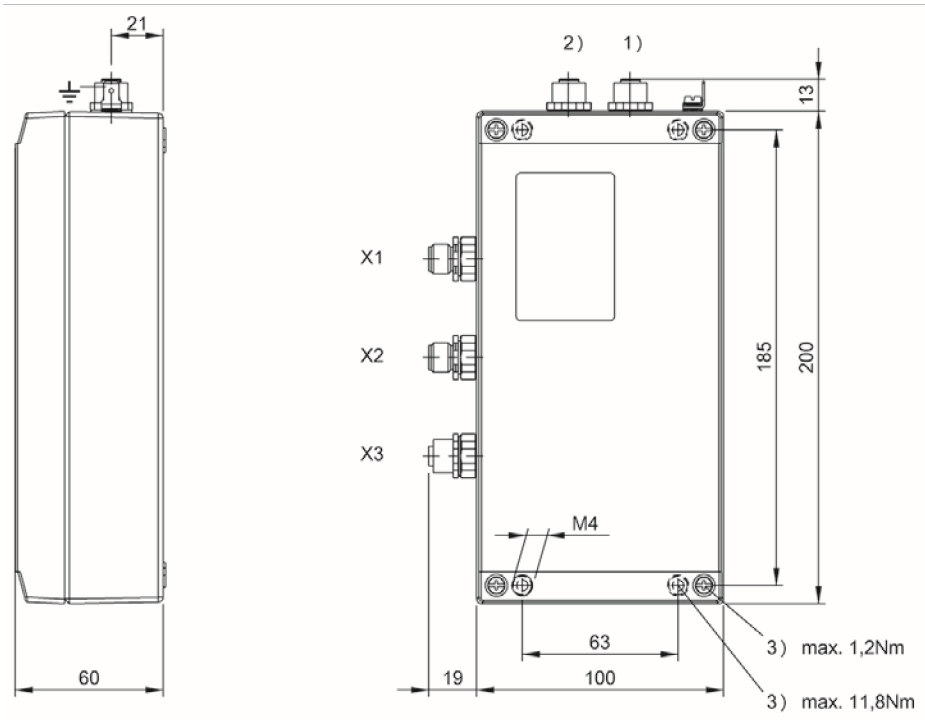
1) Head 1, 2) Head 2, 3) Tightening torque

BIS00EY



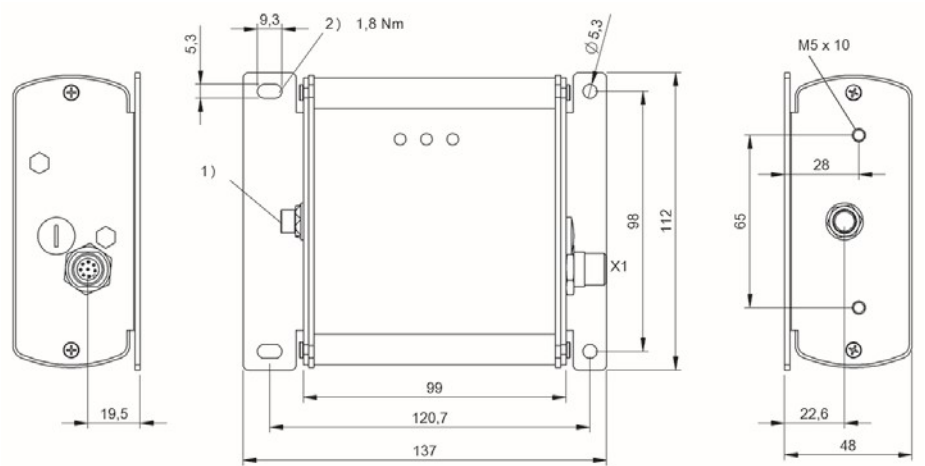
1) Head 1, 2) Head 2

BISO0F1



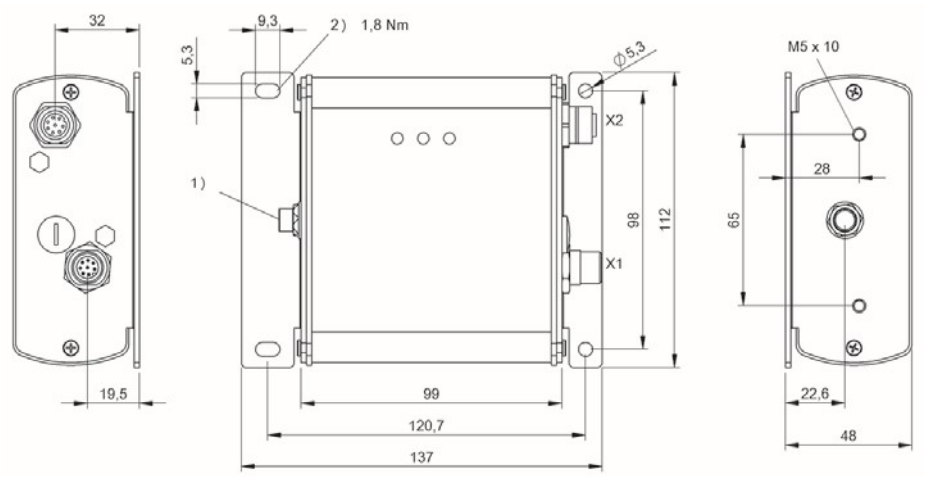
1) Head 1, 2) Head 2, 3) Tightening torque

BISO0LY



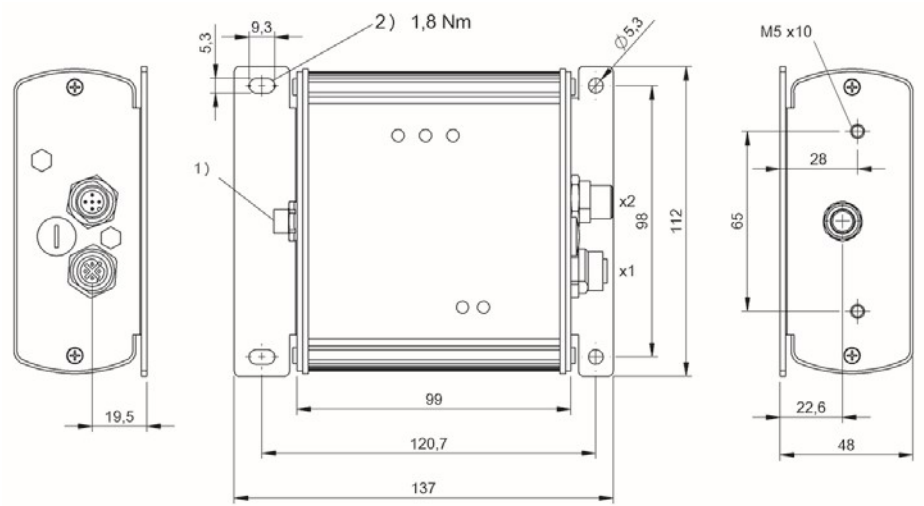
1) Antenna, 2) Tightening torque

BIS00ZJ



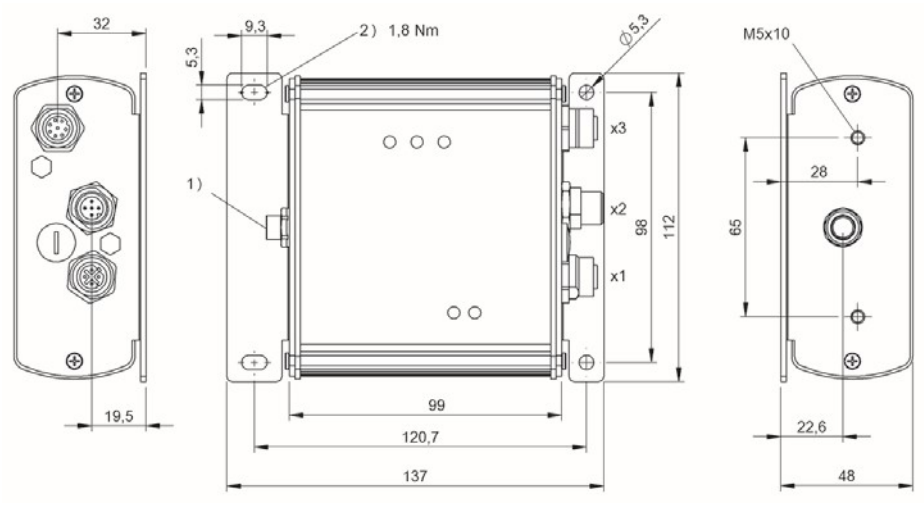
1) Antenna, 2) Tightening torque

BIS00ZH



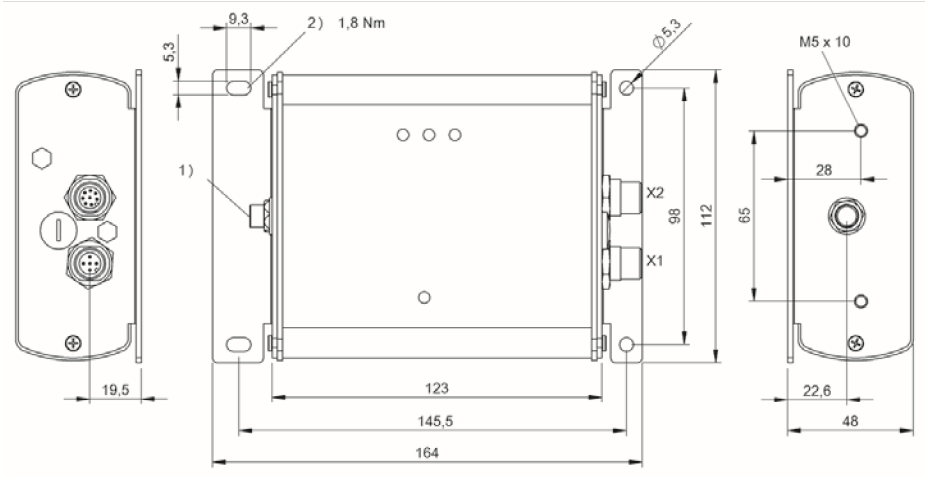
1) Antenna, 2) Tightening torque

BIS00ZC



1) Antenna, 2) Tightening torque

BIS00ZA



1) Antenna, 2) Tightening torque

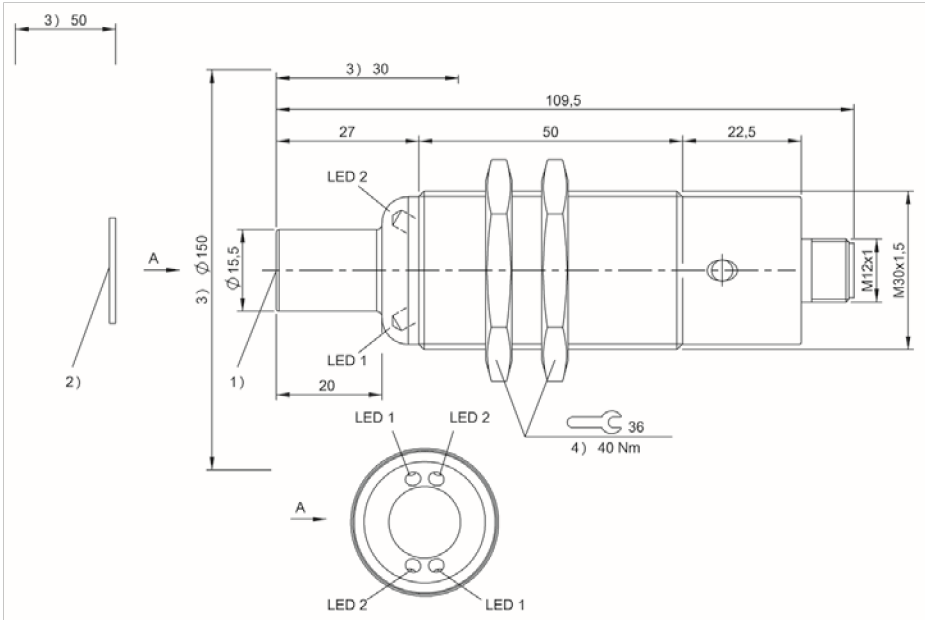
BISO0ZE



	BIS00EK BIS M-400-007-002-00-S115
Product Group	HF (13.56 MHz)
Dimension	Ø 30 x 109.5 mm
Installation	metal-free (clear zone)
Antenna type	round
Supported data carrier types	DIN ISO 14443, DIN ISO 15693
Connection	Connector, M12x1 connector, 8-pin
Housing material	Brass, nuts nickel plated brass
Interface	RS232
Operating voltage Ub	19.2...26.4 VDC
Ambient temperature	0...70 °C
Protection degree	IP67
Approval/Conformity	CE, FCC Part 15, IC RSS-210, UL-FILE E227256, Vol.X1, BIS

Appropriate data carrier

	BIS003Y			BIS003Z			BIS0040		BIS0042		BIS0048		BIS004A		BIS0043		
Data carrier distance to metal	>25	>10	>5	>50	>25	>10	>10	>0	>10	>0	>10	>0	>10	>0	>25	>0	
Data carrier clear zone	>60	>50	>50	>60	>50	>50	>60	>0	>60	>0	>60	>0	>60	>0	>60	>0	
Working distance for writing	0-15	0-12	0-9	0-18	0-18	0-10	0-6	0-5	0-9	0-5	0-5	0-4	0-6	0-5	0-20	0-12	
Working distance for reading	0-15	0-12	0-9	0-18	0-18	0-10	0-6	0-5	0-9	0-5	0-5	0-4	0-6	0-5	0-20	0-12	
Offset at distance																	
	0	±9	±6	±4	±16	±12	±4	±5	±4	±6	±4	±4	±3	±4	±3	±14	±10
	5	±9	±6	±4	±16	±12	±4	±4	±2	±6	±2	±3		±3	±2	±14	±8
	9	±8	±4	±2	±12	±10	±2			±2						±12	±6
	12	±6	±2		±8	±5										±10	±4
	15	±4			±8	±5										±10	
	16				±7	±3										±7	
	18				±6	±2										±7	
	20															±7	
	22																
	25																
Dimensions in mm																	



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

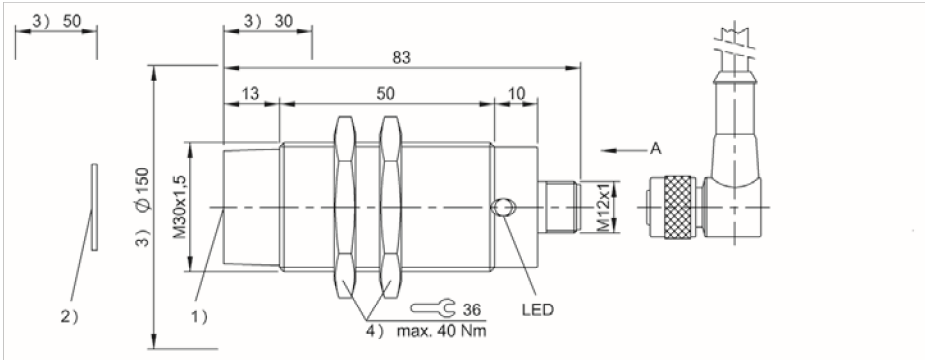
BIS0044			BIS0045			BIS0046			BIS00YE		BIS00NU BIS00NW BIS0100	
>25	>15	>5	>25	>10	>5	>50	>25	>20	>25	>0		
>80	>50	>50	>80	>50	>50	>150	>90	>70	>100	>100		
0-15	0-10	0-6	0-20	0-12	0-5	0-28	0-18	0-10	0-24	0-12		
0-15	0-10	0-6	0-20	0-12	0-5	0-28	0-18	0-10	0-24	0-12		
±8	±6	±4	±12	±8	±7	±20	±14	±14	0 ±14	±7		
±8	±6	±4	±12	±8	±4	±20	±14	±14	5 ±14	±7		
±6	±5		±10	±6		±18	±14	±10	10 ±14	±6		
±4			±10	±4		±18	±12	±6	12 ±12	±2		
±4			±10			±18	±12		15 ±12			
			±7			±16	±10		20 ±12			
			±7			±16	±8		24 ±6			
			±7			±16			30			
						±12			35			
						±12			40			



	BIS00EJ BIS M-400-007-001-00-S115
Product Group	HF (13.56 MHz)
Dimension	Ø 30 x 83 mm
Installation	metal-free (clear zone)
Antenna type	round
Supported data carrier types	DIN ISO 14443, DIN ISO 15693
Connection	Connector, M12x1 connector, 8-pin
Housing material	Brass, nuts nickel plated brass
Interface	RS232
Operating voltage Ub	19.2...26.4 VDC
Ambient temperature	0...70 °C
Protection degree	IP67
Approval/Conformity	CE, UL-FILE E227256, Vol.X1, BIS, FCC, IC

Appropriate data carrier

	BIS003Y			BIS003Z			BIS0040		BIS0042		BIS0043			BIS0044			BIS0045			
Data carrier distance to metal	>25	>10	>5	>50	>15	>10	>20	>5	>20	>5	>25	>0		>25	>10	>5	>25	>10	>5	
Data carrier clear zone	>100	>60	>50	>150	>90	>70	>100	>100	>100	>100	>100	>0		>100	>60	>50	>100	>60	>50	
Working distance for writing	0-20	0-15	0-12	0-28	0-20	0-12	0-7	0-6	0-11	0-7	0-28	0-16		0-20	0-15	0-8	0-28	0-18	0-10	
Working distance for reading	0-20	0-15	0-12	0-28	0-20	0-12	0-7	0-6	0-11	0-7	0-28	0-16		0-20	0-15	0-8	0-28	0-18	0-10	
Offset at distance																				
0																				
5	±14	±10	±6	±20	±15	±6	±7	±6	±9	±6	±16	±10	0	±12	±8	±6	±16	±10	±7	
9	±14	±10	±6	±20	±15	±6	±7	±6	±8	±6	±16	±10	2	±12	±8	±5	±16	±10	±7	
12	±14	±8	±4	±20	±15	±3			±5		±14	±8	5	±12	±8	±5	±16	±10	±7	
15	±10	±4	±2	±20	±13	±2					±14	±6	7	±10	±6	±4	±14	±8	±2	
16	±10	±2		±20	±10						±14	±6	8	±10	±6	±2	±14	±8	±2	
18	±8			±18	±3						±14	±4	9	±10	±6		±14	±8	±2	
20	±6			±16							±14		10	±8	±4		±14	±7	±1	
22	±5			±15							±14		12	±8	±4		±14	±7		
25				±15							±12		13	±8	±2		±14	±6		
30				±10							±12		15	±8	±2		±14	±6		
32													16	±5			±14	±3		
35													18	±5			±14	±2		
40													20	±5			±14			
43													22				±12			
45													25				±12			
50													27				±6			
52													28				±6			
60													30							
65													35							
70													38							
													45							
Dimensions in mm																				



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

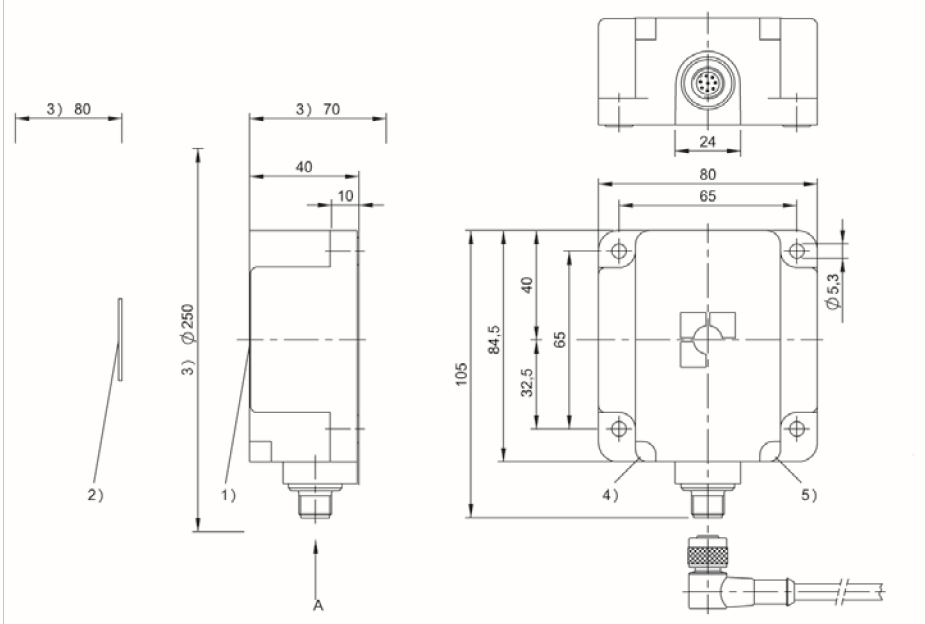
	BIS0046			BIS0048		BIS004A		BIS00LC		BIS00M9 BIS00M8		BIS00NU BIS00NW BIS0100		BIS0143		BIS00YE		BIS00Y7		BIS00Y5		BIS00Y4	
	>50	>15	>10	>20		>20	>0	>25	>0	>0		>0		>25		>25	>0	>25		>50		>50	
	>150	>90	>70	>100		>100	>0	>100	>100	>100		>100		>100		>100	>100	>100		>150		>150	
	0-38	0-25	0-15	0-9.5		0-13	0-7	0-27	0-13	0-22		0-13		0-27		0-30	0-8	0-24		0-50		0-42	
	0-38	0-25	0-15	0-9.5		0-13	0-7	0-27	0-13	0-22		0-13		0-27		0-30	0-8	0-24		0-50		0-42	
	±22	±16	±13	±9		±10	±7	0	±16	±10	±13	±10		0	±18	±18	±8	±18		±30		±30	
	±22	±16	±13	±9		±10	±7	5	±16	±10	±13	±10		5	±18	±18	±8	±18		±30		±30	
	±22	±16	±13	±8		±10	±6	10	±16	±7	±13	±9		7	±18	±18	±6	±18		±30		±30	
	±22	±14	±10	±7		±8	±1	13	±14	±5	±11	±5		8	±18	±18	±3	±18		±30		±30	
	±22	±14	±10	±1		±8		15	±14		±11			10	±18	±18		±18		±30		±30	
	±22	±14	±10	±1		±8		18	±14		±11			15	±16	±18		±16		±30		±28	
	±20	±13	±8			±8		20	±14		±7			20	±16	±18		±16		±30		±28	
	±20	±13	±8			±3		22	±12		±7			24	±10	±16		±5		±25		±24	
	±20	±12	±6			±3		25	±12					25	±10	±16				±25		±24	
	±20	±12	±6					27	±5					27	±5	±5				±25		±24	
	±20	±10						30						30		±5				±25		±24	
	±20	±10						32						35						±25		±24	
	±20	±8						35						40						±25		±5	
	±20	±6						40						42						±5		±5	
	±20	±4						43						45						±5			
	±16							45						50						±5			
	±16							50						40									
	±16							52						42									
	±10							60						45									
	±5							65						50									
								70						55									



	BIS000EM BIS M-401-007-001-00-S115
Product Group	HF (13.56 MHz)
Dimension	80 x 40 x 84.5 mm
Installation	metal-free (clear zone)
Antenna type	round
Supported data carrier types	DIN ISO 14443, DIN ISO 15693
Connection	Connector, M12x1 connector, 8-pin
Housing material	PBT
Interface	RS232
Operating voltage U_b	19.2...26.4 VDC
Ambient temperature	0...70 °C
Protection degree	IP67
Approval/Conformity	CE, FCC Part 15, IC RSS-210, UL-FILE E227256, Vol.X1, BIS

Appropriate data carrier

	BIS003Y			BIS003Z			BIS0047		BIS0043		BIS0044		BIS0045		BIS0046		
Data carrier distance to metal	>50	>25	>10	>50	>25	>10	>80		>50	>20	>50	>30	>50	>30	>50	>30	
Data carrier clear zone	>200	>150	>150	>200	>150	>150	>250		>200	>60	>200	>100	>200	>100	>200	>100	
Working distance for writing	0-28	0-25	0-20	0-45	0-40	0-34	0-50		0-40	0-18	0-30	0-18	0-40	0-25	0-60	0-35	
Working distance for reading	0-28	0-25	0-20	0-45	0-40	0-34	0-50		0-40	0-18	0-30	0-18	0-40	0-25	0-60	0-35	
Offset at distance																	
	0	±22	±18	±12	±30	±24	±16	±30		±30	±16	±25	±18	±30	±20	±35	±25
	5	±22	±18	±12	±30	±24	±16	±30		±30	±16	±25	±18	±30	±20	±35	±25
	9	±22	±18	±10	±30	±24	±16	±30		±30	±16	±25	±15	±30	±20	±35	±25
	12	±22	±16	±8	±30	±24	±14	±30		±25	±16	±20	±15	±25	±20	±35	±25
	15	±22	±16	±8	±30	±24	±14	±30		±25	±16	±20	±12	±25	±18	±35	±25
	16	±20	±15	±6	±30	±20	±12	±30		±25	±16	±20	±12	±25	±18	±35	±25
	18	±20	±13	±4	±30	±20	±10	±30		±25	±14	±20	±8	±25	±16	±35	±25
	20	±20	±12	±2	±30	±20	±10	±30		±25		±20		±25	±14	±35	±25
	22	±16	±8		±24	±18	±8	±30		±20		±15		±20	±12	±35	±22
	25	±12	±4		±24	±18	±8	±30		±20		±15		±20	±10	±35	±22
	30				±24	±15	±6	±28		±20		±10		±20		±35	±22
	32				±20	±12	±4	±24		±15		±10		±15		±35	±22
	35				±20	±10		±22		±15				±15		±35	±20
	40				±15	±5		±18		±15				±15		±35	
	43				±8			±14								±25	
	45				±5			±12								±25	
	50							±4								±25	
	52															±25	
	60															±25	
Dimensions in mm																	



1) Sensing surface, 2) Data carrier, 3) Clear zone, 4) LED (Power), 5) LED (TP)

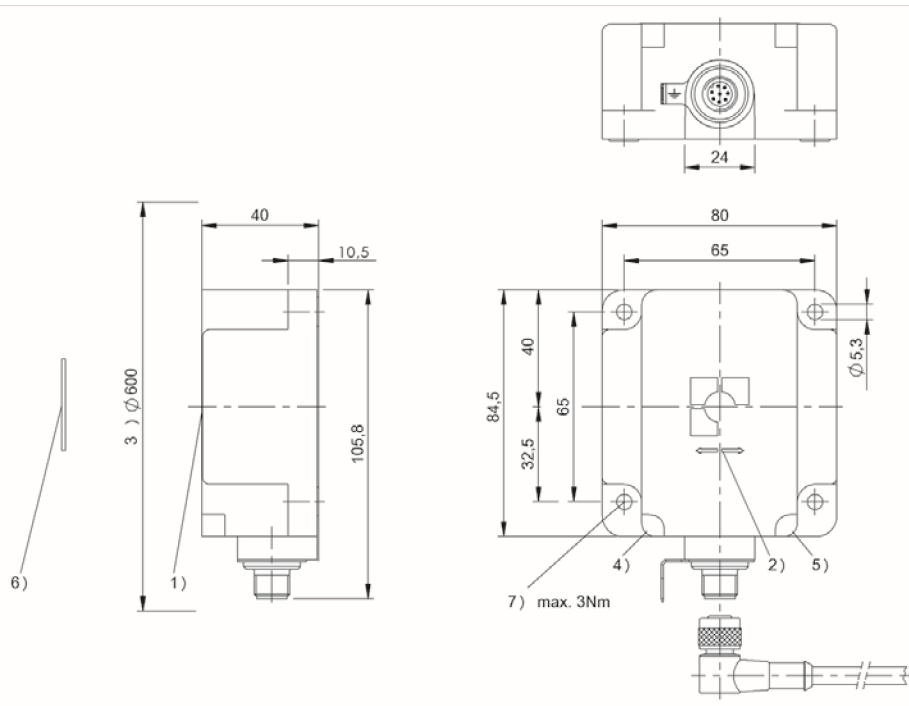
BIS00M9 BIS00M8		BIS00NU BIS00NW BIS0100		BIS00YE		BIS00Y4	
>0		>0		>50		>50	
>100		>100		>200		>200	
0-32		0-16		0-50		0-75	
0-32		0-16		0-50		0-75	
±25		±24		0 ±30		±50	
±25		±24		5 ±30		±50	
±25		±20		10 ±30		±50	
±25		±14		15 ±30		±50	
±25		±4		20 ±30		±50	
±25		±4		25 ±28		±50	
±25				30 ±28		±50	
±25				35 ±28		±50	
±20				40 ±28		±50	
±20				45 ±10		±45	
±15				50 ±10		±45	
±15				55		±45	
				60		±45	
				65		±35	
				70		±35	
				75		±35	
				80			
				85			
				90			



	BIS000ER BIS M-451-007-001-00-S115
Product Group	HF (13.56 MHz)
Dimension	80 x 40 x 84.5 mm
Installation	metal-free (clear zone)
Antenna type	Rod
Supported data carrier types	DIN ISO 14443, DIN ISO 15693
Connection	Connector, M12x1 connector, 8-pin
Housing material	PBT
Interface	RS232
Operating voltage U_b	19.2...26.4 VDC
Ambient temperature	0...70 °C
Protection degree	IP67
Approval/Conformity	CE, FCC Part 15, IC RSS-210, UL-FILE E227256, Vol.X1, BIS

Appropriate data carrier

	BIS004F				BIS004H					BIS00M2				BIS00P3		
Data carrier clear zone A	>200	>200	>200	>200	>200	>200	>200	>200		>200	>200	>10	>10	>240	>240	
Data carrier clear zone B	>200	>200	>200	>200	>200	>200	>200	>200		>200	>200	>50	>50	>480	>480	
Data carrier clear zone C										>50	>50	>2	>2	>50	>50	
Metallic mounting surface 40 × 22 mm	0-52	0-52			0-52	0-52										
Metallic mounting surface > 200 × 200 mm			0-65	0-65			0-65	0-65								
Working distance for writing	0-52	0-52	0-65	0-65	0-52	0-52	0-65	0-65		0-30	0-30	15-30	15-30	0-100	0-100	
Working distance for reading	0-52	0-52	0-65	0-65	0-52	0-52	0-65	0-65		0-30	0-30	15-30	15-30	0-100	0-100	
Offset at distance	X	Y	X	Y	X	Y	X	Y		X	Y	X	Y	X	Y	
	0	±60	±25	±65	±26	±25	±60	±26	±65	0	±35	±20		±60	±20	
	5	±60	±25	±65	±26	±25	±60	±26	±65	5	±35	±20		±60	±20	
	12	±60	±25	±65	±25	±25	±60	±25	±65	10	±35	±20		±60	±20	
	15	±60	±25	±65	±25	±25	±60	±25	±65	15	±35	±20	±35	±15	±60	±20
	18	±60	±25	±65	±25	±25	±60	±25	±65	20	±35	±20	±35	±15	±60	±20
	20	±60	±25	±65	±25	±25	±60	±25	±65	25	±20	±12	±28	±15	±60	±20
	22	±60	±25	±65	±25	±25	±60	±25	±65	30	±20	±12	±28	±15	±60	±20
	25	±60	±25	±65	±25	±25	±60	±25	±65	35				±60	±20	
	30	±60	±25	±65	±25	±25	±60	±25	±65	40				±60	±20	
	32	±50	±25	±65	±25	±25	±50	±25	±65	45				±60	±20	
	35	±50	±25	±65	±25	±25	±50	±25	±65	50				±60	±20	
	40	±50	±20	±50	±25	±20	±50	±25	±50	60				±60	±20	
	45	±25	±20	±50	±25	±20	±25	±25	±50	70				±60	±20	
	50	±25	±20	±50	±25	±20	±25	±25	±50	80				±60	±20	
	52	±25	±8	±25	±25	±8	±25	±25	±25	90				±40	±20	
	60			±25	±10			±10	±25	100				±40	±20	
	65			±25	±10			±10	±25							
Dimensions in mm																



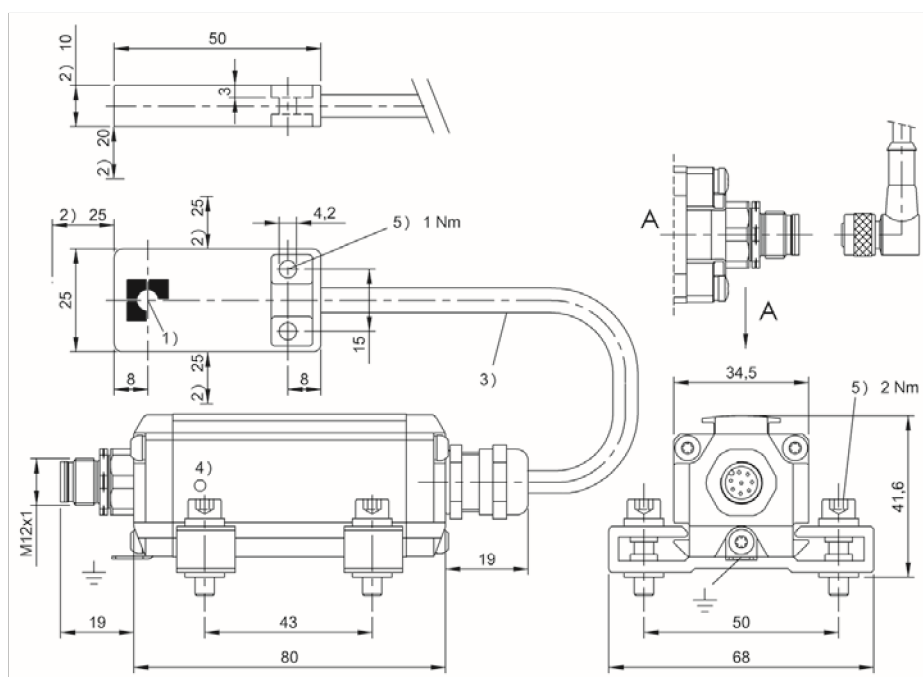
1) Sensing surface, 2) Read/write axis, 3) Clear zone, 4) LED (Power), 5) LED (TP), 6) Data carrier on steel, 7) Tightening torque



	BISO00RU BIS M-402-007-004-00-S115
Product Group	HF (13.56 MHz)
Dimension	25 x 10 x 50 mm
Installation	metal-free (clear zone)
Antenna type	round
Supported data carrier types	DIN ISO 14443, DIN ISO 15693
Connection	Connector, M12x1 connector, 8-pin, 0.50 m, PU
Housing material	ABS, GF16, interface aluminum
Interface	RS232
Operating voltage Ub	19.2...26.4 VDC
Ambient temperature	0...70 °C
Protection degree	IP67
Approval/Conformity	CE, UL-FILE E227256, Vol.X1, BIS, FCC, IC

Appropriate data carrier

	BIS0040		BIS0042		BIS0044		BIS0048		BIS004A		BIS00NU BIS00NW BIS0100		BIS003Y	
Data carrier distance to metal	>10	>0	>10	>0	>25		>10	>0	>10	>0	>0		>25	
Data carrier clear zone	>60	>0	>60	>0	>80		>60	>0	>60	>0	>100		>100	
Working distance for writing	0-6	0-4	0-8	0-6	0-15		0-5	0-4	0-8	0-5	0-9		0-15	
Working distance for reading	0-6	0-4	0-8	0-6	0-15		0-5	0-4	0-8	0-5	0-9		0-15	
Offset at distance														
	0	±4	±3	±5	±4	±8		±4	±3	±4	±4	0	±6	±11
	5	±2		±5	±2	±8		±2		±4	±2	5	±6	±11
	9					±6						7	±6	±9
	12					±4						9	±4	±9
	15					±4						12		±9
	16											15		±5
Dimensions in mm														



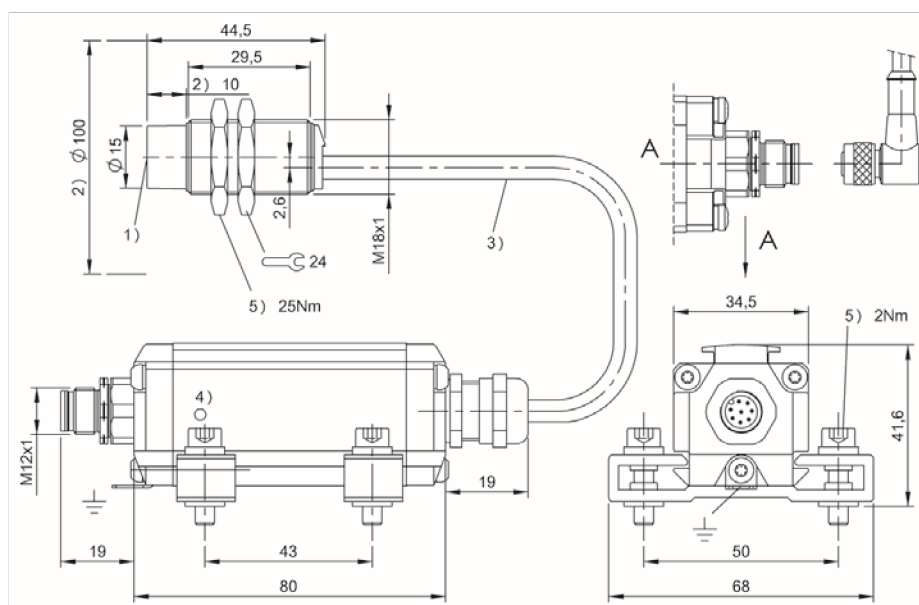
- 1) Sensing surface, 2) Clear zone, 3) Cable length see text, 4) LED function indicator, 5) Tightening torque



	BIS000EN BIS M-402-007-002-00-S115
Product Group	HF (13.56 MHz)
Dimension	Ø 18 x 44.5 mm
Installation	metal-free (clear zone)
Antenna type	round
Supported data carrier types	DIN ISO 14443, DIN ISO 15693
Connection	Connector, M12x1 connector, 8-pin, 0.50 m, PU
Housing material	Brass, interface aluminum
Interface	RS232
Operating voltage Ub	19.2...26.4 VDC
Ambient temperature	0...70 °C
Protection degree	IP67
Approval/Conformity	CE, UL-FILE E227256, Vol.X1, BIS, FCC, IC

Appropriate data carrier

	BIS0040		BIS0042		BIS0048		BIS004A		BIS0044			BIS003Y		BIS0045		
Data carrier distance to metal	>10	>0	>10	>0	>10	>0	>10	>0	>25			>25		>25		
Data carrier clear zone	>60	>0	>60	>0	>60	>0	>60	>0	>80			>100		>100		
Working distance for writing	0-6	0-4	0-8	0-6	0-5	0-4	0-8	0-5	0-15			0-14		0-18		
Working distance for reading	0-6	0-4	0-8	0-6	0-5	0-4	0-8	0-5	0-15			0-14		0-18		
Offset at distance																
	0	±3	±3	±4	±3	±3	±2	±4	±3	±7		0	±10		±12	
	5	±2		±3	±2	±2		±3	±2	±7		5	±10		±12	
	9									±5		10	±9		±11	
	12									±3		14	±5		±10	
	15									±3		15			±10	
	16											18			±5	
Dimensions in mm																



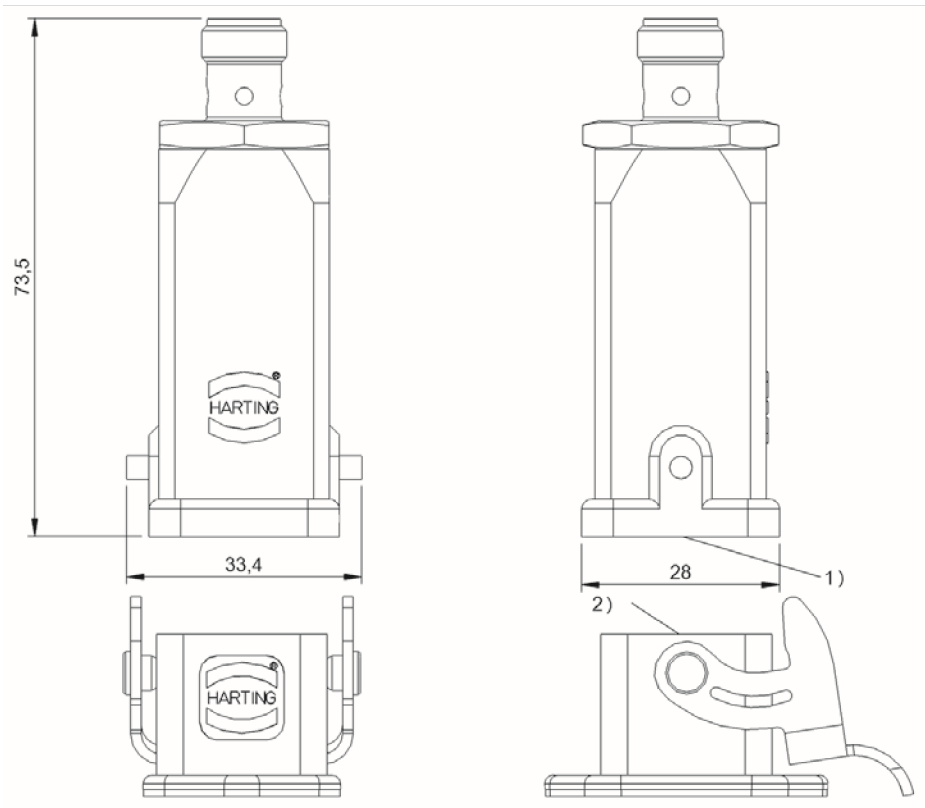
1) Sensing surface, 2) Clear zone, 3) Cable length, 4) LED function indicator, 5) Tightening torque

BIS00YL		BIS00YK		BIS00YE		BIS00NU BIS00NW BIS0100	
>25		>25		>25		>0	
>100		>100		>100		>100	
0-9		0-9		0-20		0-9	
0-9		0-9		0-20		0-9	
±6		±6		±12		±6	
±6		±6		±12		±6	
±5		±5		±12		±6	
±1		±1		±12		±4	
				±12			
				±10			



IO-Link, 10 bytes process data length	BIS018E BIS M-404-045-401-07-S4-SA1
Product Group	HF (13.56 MHz)
Dimension	28 x 60 x 33.4 mm
Installation	metal-free (clear zone) on metal flush in metal
Antenna type	round
Supported data carrier types	DIN ISO 15693, DIN ISO 15693 (High Memory)
Connection	Connector, M12x1 connector, 4-pin
Housing material	Die casting Brass nickel plated, nuts nickel plated brass
Interface	IO-Link 1.1
Operating voltage Ub	18...30 VDC Supports only LPS/Class 2
Ambient temperature	0...70 °C
Protection degree	IP67
Approval/Conformity	CE, FCC Part 15, IC RSS-210

Use with data carrier **BIS0180** only



1) Sensing surface, 2) Data carrier

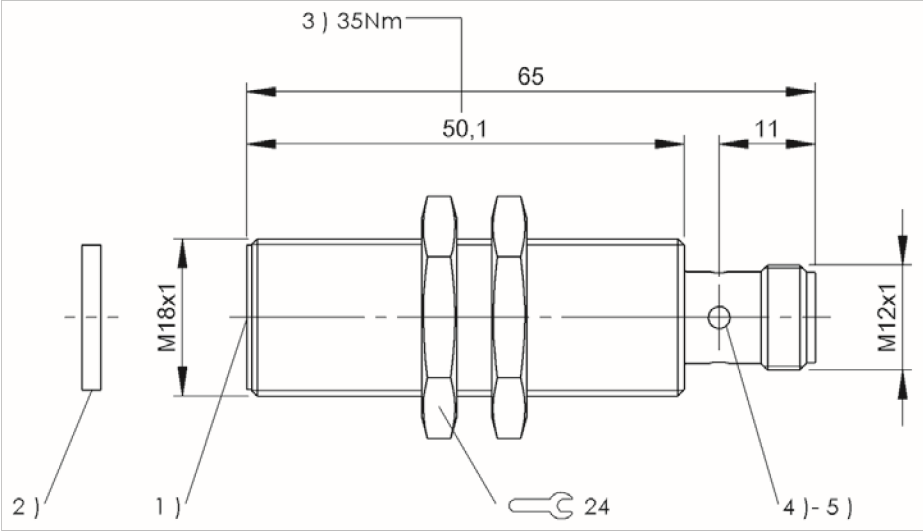


IO-Link, 10 bytes process data length	BISO15R BIS M-404-045-401-07-S4
Product Group	HF (13.56 MHz)
Dimension	Ø 18 x 65 mm
Installation	metal-free (clear zone) on metal flush in metal
Antenna type	round
Supported data carrier types	DIN ISO 15693, DIN ISO 15693 (High Memory)
Connection	Connector, M12x1 connector, 4-pin
Housing material	Brass, nuts nickel plated brass
Interface	IO-Link 1.1
Operating voltage U_b	18...30 VDC Supports only LPS/Class 2
Ambient temperature	0...70 °C
Protection degree	IP67
Approval/Conformity	CE, FCC Part 15, IC RSS-210

Use with **IO-Link master** only

Appropriate data carrier

	BIS0042			BIS0043			BIS011F BIS011E BIS011A BIS0139			BIS004A			BIS0143		
Data carrier distance to metal	>20	>0	>0	>20	>0	>0	>20	>0	>0	>20	>0	>0	>20		
Data carrier clear zone	>100	>100	>0	>100	>100	>0	>100	>100	>0	>100	>100	>0	>100		
Working distance for writing	0-8.5	0-8	0-6	0-11	0-8	0-6	0-6.5	0-6	0-5	0-6	0-5.5	0-3.5	0-13		
Working distance for reading	0-8.5	0-8	0-6	0-11	0-8	0-6	0-6.5	0-6	0-5	0-6	0-5.5	0-3.5	0-13		
Offset at distance															
0	±5	±5	±4	±8	±8	±7	±8	±8	±7	±4.5	±4	±3.5	±8		
2	±5	±5	±4	±8	±8	±7	±8	±8	±7	±4.5	±4	±3	±8		
3.5	±4.5	±4	±3	±8	±7	±6	±7	±7	±6	±4	±3	±1.5	±8		
4	±4.5	±4	±3	±8	±7	±6	±7	±7	±6	±4	±3		±8		
4.5	±4.5	±4	±3	±8	±7	±4	±7	±6	±3	±3.5	±3		±8		
5	±4.5	±4	±3	±8	±7	±4	±7	±6	±3	±3.5	±2		±8		
5.5	±4	±3	±2	±7	±5	±1	±4	±3		±2	±2		±7		
6	±4	±3	±2	±7	±5	±1	±4	±3		±2			±7		
6.5	±4	±3		±7	±5		±4						±7		
7	±4	±3		±7	±5								±7		
8	±2	±2		±7	±4								±7		
8.5	±2			±7									±7		
10				±7									±7		
11				±4									±4		
13													±4		
Dimensions in mm															



1) Sensing surface, 2) Data carrier, 3) Tightening torque, 4) LED (CP), 5) LED (Power)

		BIS0044	BIS00NU BIS00NW BIS0100
		>25	>0
		>100	>100
		0-10	0-9.5
		0-10	0-9.5
	0	±6	±5
	2	±6	±5
	4	±6	±5
	5	±6	±5
	6	±5	±4
	7	±5	±4
	8	±5	±4
	9.5	±3	±2
	10	±3	
	12		
	15		
	20		
	25		
	30		
	35		

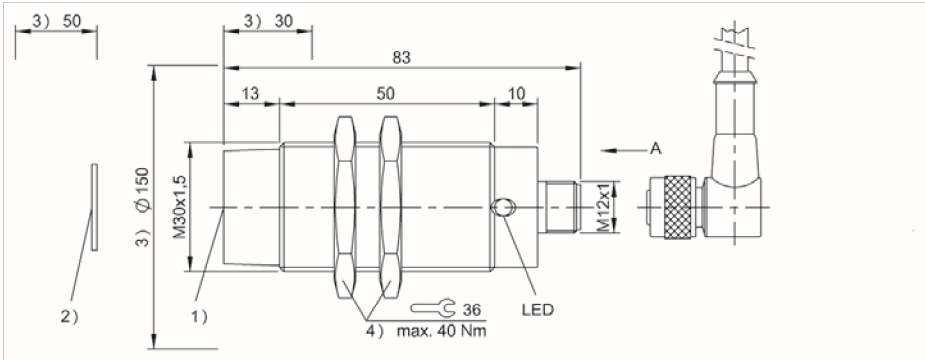


IO-Link, 10 bytes process data length	BIS00LH BIS M-400-045-001-07-S4
Product Group	HF (13.56 MHz)
Dimension	Ø 30 x 83 mm
Installation	metal-free (clear zone)
Antenna type	round
Supported data carrier types	DIN ISO 14443, DIN ISO 15693
Connection	Connector, M12x1 connector, 4-pin
Housing material	Brass, nuts nickel plated brass
Interface	IO-Link 1.1
Operating voltage Ub	18...30 VDC Supports only LPS/Class 2
Ambient temperature	0...70 °C
Protection degree	IP67
Approval/Conformity	CE, UL-FILE E227256, Vol.X1, BIS, FCC, IC

Use with **IO-Link master** only

Appropriate data carrier

	BIS003Y			BIS003Z			BIS0040		BIS0042		BIS0043			BIS0044			BIS0045			
Data carrier distance to metal	>25	>10	>5	>50	>15	>10	>20	>5	>20	>5	>25	>0		>25	>10	>5	>25	>10	>5	
Data carrier clear zone	>100	>60	>50	>150	>90	>70	>100	>100	>100	>100	>100	>0		>100	>60	>50	>100	>60	>50	
Working distance for writing	0-20	0-15	0-12	0-28	0-20	0-12	0-7	0-6	0-11	0-7	0-28	0-16		0-20	0-15	0-8	0-28	0-18	0-10	
Working distance for reading	0-20	0-15	0-12	0-28	0-20	0-12	0-7	0-6	0-11	0-7	0-28	0-16		0-20	0-15	0-8	0-28	0-18	0-10	
Offset at distance																				
0																				
5	±14	±10	±6	±20	±15	±6	±7	±6	±9	±6	±16	±10	0	±12	±8	±6	±16	±10	±7	
9	±14	±10	±6	±20	±15	±6	±7	±6	±8	±6	±16	±10	2	±12	±8	±5	±16	±10	±7	
12	±14	±8	±4	±20	±15	±3			±5		±14	±8	5	±12	±8	±5	±16	±10	±7	
15	±10	±4	±2	±20	±13	±2					±14	±6	7	±10	±6	±4	±14	±8	±2	
16	±10	±2		±20	±10						±14	±6	8	±10	±6	±2	±14	±8	±2	
18	±8			±18	±3						±14	±4	9	±10	±6		±14	±8	±2	
20	±6			±16							±14		10	±8	±4		±14	±7	±1	
22	±5			±15							±14		12	±8	±4		±14	±7		
25				±15							±12		13	±8	±2		±14	±6		
30				±10							±12		15	±8	±2		±14	±6		
32													16	±5			±14	±3		
35													18	±5			±14	±2		
40													20	±5			±14			
43													22				±12			
45													25				±12			
50													27				±6			
52													28				±6			
60													30							
65													35							
70													38							
													45							
Dimensions in mm																				



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

	BIS0046			BIS0048		BIS004A			BIS00LC		BIS00M9 BIS00M8		BIS00NU BIS00NW BIS0100			BIS0143		BIS00YE		BIS00Y7		BIS00Y5		BIS00Y4		
	>50	>15	>10	>20		>20	>0		>25	>0	>0		>0			>25		>25	>0	>25		>50		>50		
	>150	>90	>70	>100		>100	>0		>100	>100	>100		>100			>100		>100	>100	>100		>150		>150		
	0-38	0-25	0-15	0-9.5		0-13	0-7		0-27	0-13	0-22		0-13			0-27		0-30	0-8	0-24		0-50		0-42		
	0-38	0-25	0-15	0-9.5		0-13	0-7		0-27	0-13	0-22		0-13			0-27		0-30	0-8	0-24		0-50		0-42		
	±22	±16	±13	±9		±10	±7		0	±16	±10	±13		±10		0	±18		±18	±8	±18		±30		±30	
	±22	±16	±13	±9		±10	±7		5	±16	±10	±13		±10		5	±18		±18	±8	±18		±30		±30	
	±22	±16	±13	±8		±10	±6		10	±16	±7	±13		±9		7	±18		±18	±6	±18		±30		±30	
	±22	±14	±10	±7		±8	±1		13	±14	±5	±11		±5		8	±18		±18	±3	±18		±30		±30	
	±22	±14	±10	±1		±8			15	±14		±11				10	±18		±18		±18		±30		±30	
	±22	±14	±10	±1		±8			18	±14		±11				15	±16		±18		±16		±30		±28	
	±20	±13	±8			±8			20	±14		±7				20	±16		±18		±16		±30		±28	
	±20	±13	±8			±3			22	±12		±7				24	±10		±16		±5		±25		±24	
	±20	±12	±6			±3			25	±12						25	±10		±16				±25		±24	
	±20	±12	±6						27	±5						27	±5		±5				±25		±24	
	±20	±10							30							30			±5				±25		±24	
	±20	±10							32							35							±25		±24	
	±20	±8							35							40							±25		±5	
	±20	±6							40							42							±5		±5	
	±20	±4							43							45							±5			
	±16								45							50							±5			
	±16								50							40										
	±16								52							42										
	±10								60							45										
	±5								65							50										
									70							55										



IO-Link, 10 bytes process data length	BIS015T BIS M-400-045-401-07-S4
Product Group	HF (13.56 MHz)
Dimension	Ø 30 x 65.9 mm
Installation	metal-free (clear zone) on metal flush in metal
Antenna type	round
Supported data carrier types	DIN ISO 15693, DIN ISO 15693 (High Memory)
Connection	Connector, M12x1 connector, 4-pin
Housing material	Brass, nuts nickel plated brass
Interface	IO-Link 1.1
Operating voltage Ub	18...30 VDC Supports only LPS/Class 2
Ambient temperature	0...70 °C
Protection degree	IP67
Approval/Conformity	CE, FCC Part 15, IC RSS-210

Use with **IO-Link master** only

Appropriate data carrier

	BIS0042			BIS0043 BIS0111			BIS004A			BIS0143			BIS0044			BIS0045			BIS0046		
Data carrier distance to metal	>20			>25	>0	>0	>20			>20			>25			>25			>50		
Data carrier clear zone	>100			>100	>100	>0	>100			>100			>100			>100			>150		
Working distance for writing	0-13			0-21	0-15	0-13	0-9			0-21			0-18			0-21			0-30		
Working distance for reading	0-13			0-21	0-15	0-13	0-9			0-21			0-18			0-21			0-30		
Offset at distance																					
0	±8			±13	±10	±10	±7			±12			0	±9			±13		±20		
5	±8			±13	±10	±10	±7			±12			5	±9			±13		±20		
8	±8			±13	±10	±9	±6			±12			10	±9			±13		±20		
9	±7			±13	±8	±8	±4			±12			13	±8			±12		±18		
10	±7			±13	±8	±8				±12			15	±8			±12		±18		
13	±4			±12	±8	±3				±11			16	±4			±11		±18		
15				±12	±3					±11			18	±4			±11		±18		
18				±11						±10			20				±5		±18		
20				±5						±5			21				±5		±16		
21				±5						±5			25						±16		
30													30						±8		
Dimensions in mm																					

[illegible]

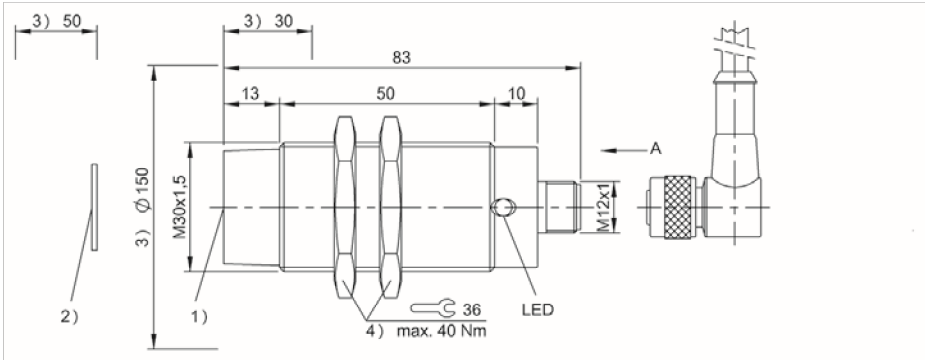


IO-Link, 32 bytes process data length	BIS0108 BIS M-400-072-001-07-S4
Product Group	HF (13.56 MHz)
Dimension	Ø 30 x 83 mm
Installation	metal-free (clear zone)
Antenna type	round
Supported data carrier types	DIN ISO 14443, DIN ISO 15693
Connection	Connector, M12x1 connector, 4-pin
Housing material	Brass, nuts nickel plated brass
Interface	IO-Link 1.1
Operating voltage Ub	18...30 VDC Supports only LPS/Class 2
Ambient temperature	0...70 °C
Protection degree	IP67
Approval/Conformity	CE, UL-FILE E227256, Vol.X1, BIS, FCC, IC

Use with **IO-Link master** only

Appropriate data carrier

	BIS003Y			BIS003Z			BIS0040		BIS0042		BIS0043			BIS0044			BIS0045			
Data carrier distance to metal	>25	>10	>5	>50	>15	>10	>20	>5	>20	>5	>25	>0		>25	>10	>5	>25	>10	>5	
Data carrier clear zone	>100	>60	>50	>150	>90	>70	>100	>100	>100	>100	>100	>0		>100	>60	>50	>100	>60	>50	
Working distance for writing	0-20	0-15	0-12	0-28	0-20	0-12	0-7	0-6	0-11	0-7	0-28	0-16		0-20	0-15	0-8	0-28	0-18	0-10	
Working distance for reading	0-20	0-15	0-12	0-28	0-20	0-12	0-7	0-6	0-11	0-7	0-28	0-16		0-20	0-15	0-8	0-28	0-18	0-10	
Offset at distance																				
0																				
5	±14	±10	±6	±20	±15	±6	±7	±6	±9	±6	±16	±10	0	±12	±8	±6	±16	±10	±7	
9	±14	±10	±6	±20	±15	±6	±7	±6	±8	±6	±16	±10	2	±12	±8	±5	±16	±10	±7	
12	±14	±8	±4	±20	±15	±3			±5		±14	±8	5	±12	±8	±5	±16	±10	±7	
15	±10	±4	±2	±20	±13	±2					±14	±6	7	±10	±6	±4	±14	±8	±2	
16	±10	±2		±20	±10						±14	±6	8	±10	±6	±2	±14	±8	±2	
18	±8			±18	±3						±14	±4	9	±10	±6		±14	±8	±2	
20	±6			±16							±14		10	±8	±4		±14	±7	±1	
22	±5			±15							±14		12	±8	±4		±14	±7		
25				±15							±12		13	±8	±2		±14	±6		
30				±10							±12		15	±8	±2		±14	±6		
32													16	±5			±14	±3		
35													18	±5			±14	±2		
40													20	±5			±14			
43													22				±12			
45													25				±12			
50													27				±6			
52													28				±6			
60													30							
65													35							
70													38							
													45							
Dimensions in mm																				



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

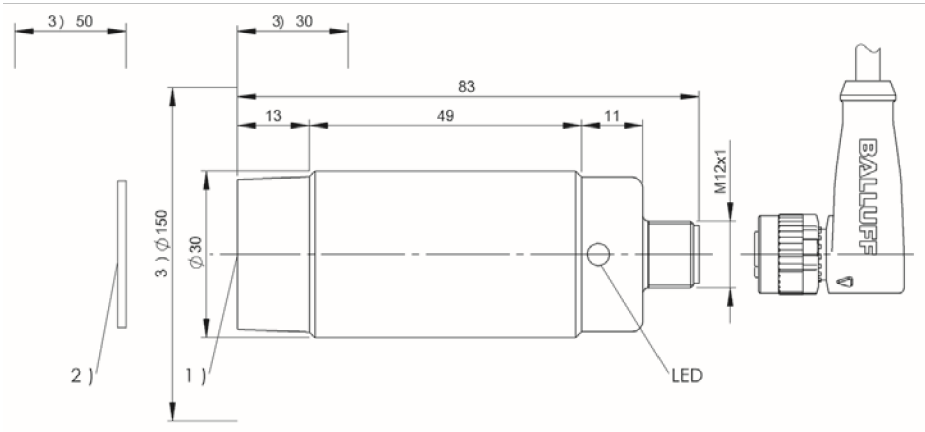
	BIS0046			BIS0048		BIS004A			BIS00LC		BIS00M9 BIS00M8		BIS00NU BIS00NW BIS0100			BIS0143		BIS00YE		BIS00Y7		BIS00Y5		BIS00Y4		
	>50	>15	>10	>20		>20	>0		>25	>0	>0		>0			>25		>25	>0	>25		>50		>50		
	>150	>90	>70	>100		>100	>0		>100	>100	>100		>100			>100		>100	>100	>100		>150		>150		
	0-38	0-25	0-15	0-9.5		0-13	0-7		0-27	0-13	0-22		0-13			0-27		0-30	0-8	0-24		0-50		0-42		
	0-38	0-25	0-15	0-9.5		0-13	0-7		0-27	0-13	0-22		0-13			0-27		0-30	0-8	0-24		0-50		0-42		
	±22	±16	±13	±9		±10	±7		0	±16	±10	±13		±10		0	±18		±18	±8	±18		±30		±30	
	±22	±16	±13	±9		±10	±7		5	±16	±10	±13		±10		5	±18		±18	±8	±18		±30		±30	
	±22	±16	±13	±8		±10	±6		10	±16	±7	±13		±9		7	±18		±18	±6	±18		±30		±30	
	±22	±14	±10	±7		±8	±1		13	±14	±5	±11		±5		8	±18		±18	±3	±18		±30		±30	
	±22	±14	±10	±1		±8			15	±14		±11				10	±18		±18		±18		±30		±30	
	±22	±14	±10	±1		±8			18	±14		±11				15	±16		±18		±16		±30		±28	
	±20	±13	±8			±8			20	±14		±7				20	±16		±18		±16		±30		±28	
	±20	±13	±8			±3			22	±12		±7				24	±10		±16		±5		±25		±24	
	±20	±12	±6			±3			25	±12						25	±10		±16				±25		±24	
	±20	±12	±6						27	±5						27	±5		±5				±25		±24	
	±20	±10							30							30			±5				±25		±24	
	±20	±10							32							35							±25		±24	
	±20	±8							35							40							±25		±5	
	±20	±6							40							42							±5		±5	
	±20	±4							43							45							±5			
	±16								45							50							±5			
	±16								50							40										
	±16								52							42										
	±10								60							45										
	±5								65							50										
									70							55										



IO-Link, 10 bytes process data length	BIS0157 BIS M-406-045-001-07-S4
Product Group	HF (13.56 MHz)
Dimension	Ø 30 x 83 mm
Installation	metal-free (clear zone)
Antenna type	round
Supported data carrier types	DIN ISO 14443, DIN ISO 15693
Connection	Connector, M12x1 connector, 4-pin
Housing material	Stainless steel (1.4404), Adapter PA 6
Interface	IO-Link 1.1
Operating voltage Ub	18...30 VDC Supports only LPS/Class 2
Ambient temperature	0...70 °C
Protection degree	IP68
Approval/Conformity	CE, Ecolab, UL-FILE E227256, Vol.X1, BIS, FCC, IC

Use with **IO-Link master** only

Appropriate data carrier							
	BIS0046			BIS00Y7		BIS00Y4	
Data carrier distance to metal	>50	>15	>10	>50		>50	
Data carrier clear zone	>150	>90	>70	>150		>150	
Working distance for writing	0-38	0-25	0-15	0-24		0-42	
Working distance for reading	0-38	0-25	0-15	0-24		0-42	
Offset at distance							
	0	±22	±16	±13	±18	±28	
	5	±22	±16	±13	±18	±28	
	9	±22	±14	±10	±18	±28	
	12	±20	±13	±8	±16	±28	
	15	±20	±12	±6	±16	±28	
	18	±20	±10		±16	±28	
	20	±20	±8		±16	±28	
	22	±20	±6		±5	±25	
	24	±20	±4		±5	±25	
	25	±20	±4			±25	
	30	±16				±25	
	35	±10				±20	
	38	±10				±5	
	42					±5	
Dimensions in mm							



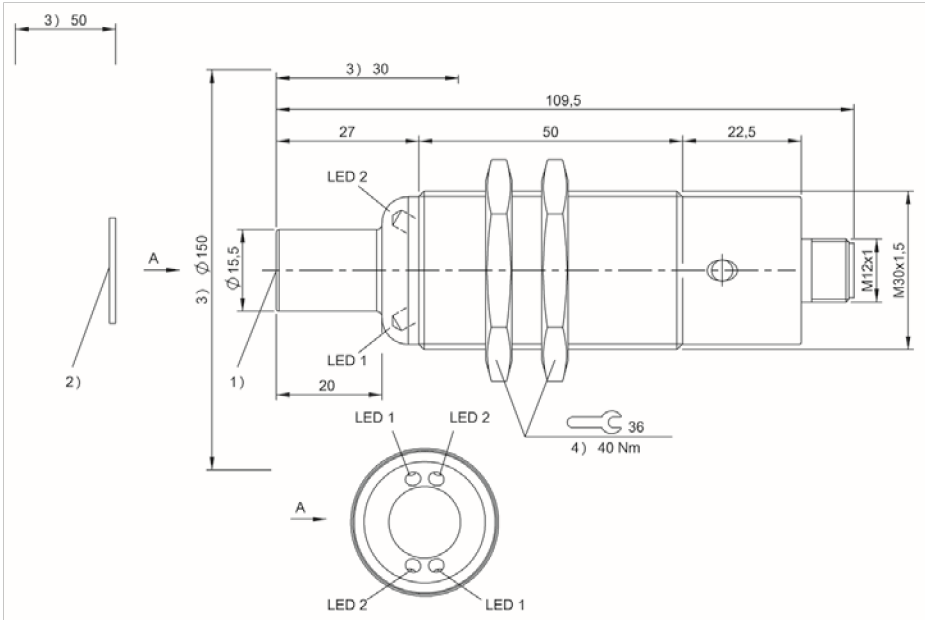
1) Sensing surface, 2) Data carrier, 3) Clear zone



IO-Link, 10 bytes process data length	BIS00LJ BIS M-400-045-002-07-S4
Product Group	HF (13.56 MHz)
Dimension	Ø 30 x 109.5 mm
Installation	metal-free (clear zone)
Antenna type	round
Supported data carrier types	DIN ISO 14443, DIN ISO 15693
Connection	Connector, M12x1 connector, 4-pin
Housing material	Brass, nuts nickel plated brass
Interface	IO-Link 1.1
Operating voltage Ub	18...30 VDC Supports only LPS/Class 2
Ambient temperature	0...70 °C
Protection degree	IP67
Approval/Conformity	CE, FCC Part 15, IC RSS-210, UL-FILE E227256, Vol.X1, BIS

Use with **IO-Link master** only

Appropriate data carrier																	
	BIS003Y			BIS003Z			BIS0040		BIS0042		BIS0048		BIS004A		BIS0043		
Data carrier distance to metal	>25	>10	>5	>50	>25	>10	>10	>0	>10	>0	>10	>0	>10	>0	>25	>0	
Data carrier clear zone	>60	>50	>50	>60	>50	>50	>60	>0	>60	>0	>60	>0	>60	>0	>60	>0	
Working distance for writing	0-15	0-12	0-9	0-18	0-18	0-10	0-6	0-5	0-9	0-5	0-5	0-4	0-6	0-5	0-20	0-12	
Working distance for reading	0-15	0-12	0-9	0-18	0-18	0-10	0-6	0-5	0-9	0-5	0-5	0-4	0-6	0-5	0-20	0-12	
Offset at distance																	
0	±9	±6	±4	±16	±12	±4	±5	±4	±6	±4	±4	±3	±4	±3	±14	±10	
5	±9	±6	±4	±16	±12	±4	±4	±2	±6	±2	±3		±3	±2	±14	±8	
9	±8	±4	±2	±12	±10	±2			±2						±12	±6	
12	±6	±2		±8	±5										±10	±4	
15	±4			±8	±5										±10		
16				±7	±3										±7		
18				±6	±2										±7		
20															±7		
22																	
25																	
Dimensions in mm																	



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

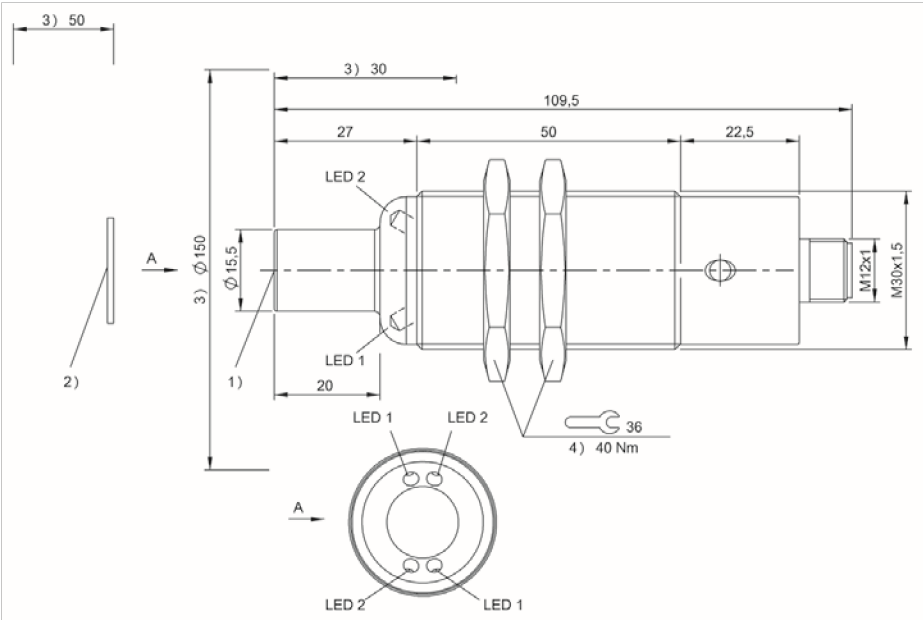
BIS0044			BIS0045			BIS0046			BIS00YE			BIS00NU BIS00NW BIS0100		
>25	>15	>5	>25	>10	>5	>50	>25	>20	>25		>0			
>80	>50	>50	>80	>50	>50	>150	>90	>70	>100		>100			
0-15	0-10	0-6	0-20	0-12	0-5	0-28	0-18	0-10	0-24		0-12			
0-15	0-10	0-6	0-20	0-12	0-5	0-28	0-18	0-10	0-24		0-12			
±8	±6	±4	±12	±8	±7	±20	±14	±14	0 ±14		±7			
±8	±6	±4	±12	±8	±4	±20	±14	±14	5 ±14		±7			
±6	±5		±10	±6		±18	±14	±10	10 ±14		±6			
±4			±10	±4		±18	±12	±6	12 ±12		±2			
±4			±10			±18	±12		15 ±12					
			±7			±16	±10		20 ±12					
			±7			±16	±8		24 ±6					
			±7			±16			30					
						±12			35					
						±12			40					



IO-Link, 32 bytes process data length	BIS0104 BIS M-400-072-002-07-S4
Product Group	HF (13.56 MHz)
Dimension	Ø 30 x 109.5 mm
Installation	metal-free (clear zone)
Antenna type	round
Supported data carrier types	DIN ISO 14443, DIN ISO 15693
Connection	Connector, M12x1 connector, 4-pin
Housing material	Brass, nuts nickel plated brass
Interface	IO-Link 1.1
Operating voltage Ub	18...30 VDC Supports only LPS/Class 2
Ambient temperature	0...70 °C
Protection degree	IP67
Approval/Conformity	CE, FCC Part 15, IC RSS-210, UL-FILE E227256, Vol.X1, BIS

Use with **IO-Link master** only

Appropriate data carrier																	
	BIS003Y			BIS003Z			BIS0040		BIS0042		BIS0048		BIS004A		BIS0043		
Data carrier distance to metal	>25	>10	>5	>50	>25	>10	>10	>0	>10	>0	>10	>0	>10	>0	>25	>0	
Data carrier clear zone	>60	>50	>50	>60	>50	>50	>60	>0	>60	>0	>60	>0	>60	>0	>60	>0	
Working distance for writing	0-15	0-12	0-9	0-18	0-18	0-10	0-6	0-5	0-9	0-5	0-5	0-4	0-6	0-5	0-20	0-12	
Working distance for reading	0-15	0-12	0-9	0-18	0-18	0-10	0-6	0-5	0-9	0-5	0-5	0-4	0-6	0-5	0-20	0-12	
Offset at distance																	
0	±9	±6	±4	±16	±12	±4	±5	±4	±6	±4	±4	±3	±4	±3	±14	±10	
5	±9	±6	±4	±16	±12	±4	±4	±2	±6	±2	±3		±3	±2	±14	±8	
9	±8	±4	±2	±12	±10	±2			±2						±12	±6	
12	±6	±2		±8	±5										±10	±4	
15	±4			±8	±5										±10		
16				±7	±3										±7		
18				±6	±2										±7		
20															±7		
22																	
25																	
Dimensions in mm																	



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

BIS0044			BIS0045			BIS0046			BIS00YE			BIS00NU BIS00NW BIS0100		
>25	>15	>5	>25	>10	>5	>50	>25	>20	>25		>0			
>80	>50	>50	>80	>50	>50	>150	>90	>70	>100		>100			
0-15	0-10	0-6	0-20	0-12	0-5	0-28	0-18	0-10	0-24		0-12			
0-15	0-10	0-6	0-20	0-12	0-5	0-28	0-18	0-10	0-24		0-12			
±8	±6	±4	±12	±8	±7	±20	±14	±14	0 ±14		±7			
±8	±6	±4	±12	±8	±4	±20	±14	±14	5 ±14		±7			
±6	±5		±10	±6		±18	±14	±10	10 ±14		±6			
±4			±10	±4		±18	±12	±6	12 ±12		±2			
±4			±10			±18	±12		15 ±12					
			±7			±16	±10		20 ±12					
			±7			±16	±8		24 ±6					
			±7			±16			30					
						±12			35					
						±12			40					

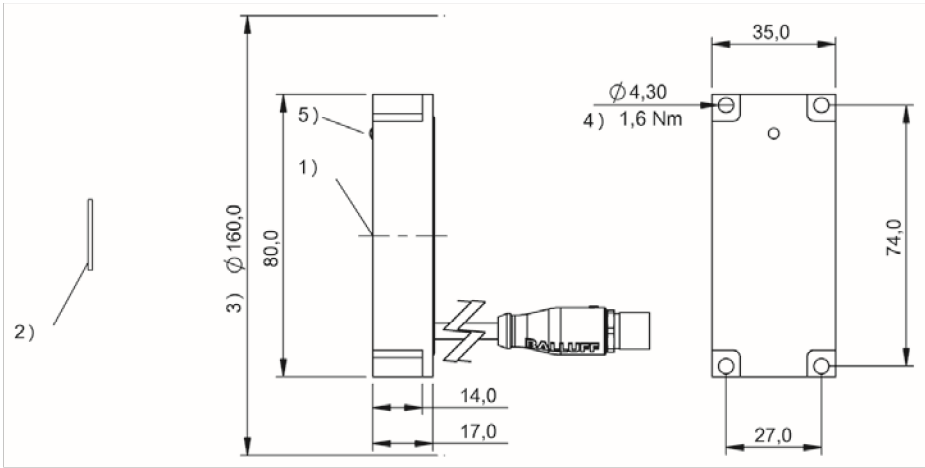


IO-Link, 10 bytes process data length	BIS012N BIS M-405-045-001-07-S4
Product Group	HF (13.56 MHz)
Dimension	35 x 17 x 80 mm
Installation	metal-free (clear zone)
Antenna type	round
Supported data carrier types	DIN ISO 14443, DIN ISO 15693
Connection	Connector, M12x1 connector, 4-pin, 0.30 m
Housing material	ABS
Interface	IO-Link 1.1
Operating voltage Ub	18...30 VDC Supports only LPS/Class 2
Ambient temperature	0...70 °C
Protection degree	IP67
Approval/Conformity	CE, UL-FILE E227256, Vol.X1, BIS

Use with **IO-Link master** only

Appropriate data carrier

	BIS003Y			BIS003Z			BIS0040		BIS0042		BIS0043		BIS0044			
Data carrier distance to metal	>25	>10	>5	>50	>15	>10	>20	>5	>20	>5	>25	>0	>25	>10	>5	
Data carrier clear zone	>100	>60	>50	>150	>90	>70	>100	>100	>100	>100	>100	>0	>100	>60	>50	
Working distance for writing	0-20	0-15	0-12	0-28	0-20	0-12	0-7	0-6	0-11	0-7	0-28	0-16	0-20	0-15	0-8	
Working distance for reading	0-20	0-15	0-12	0-28	0-20	0-12	0-7	0-6	0-11	0-7	0-28	0-16	0-20	0-15	0-8	
Offset at distance																
0	±14	±10	±6	±20	±15	±6	±7	±6	±9	±6	±16	±10	±12	±8	±6	
5	±14	±10	±6	±20	±15	±6	±7	±6	±8	±6	±16	±10	±12	±8	±5	
9	±14	±8	±4	±20	±15	±3			±5		±14	±8	±10	±6		
12	±10	±4	±2	±20	±13	±2					±14	±6	±8	±4		
15	±10	±2		±20	±10						±14	±6	±8	±2		
16	±8			±18	±3						±14	±4	±5			
18	±6			±16							±14		±5			
20	±5			±15							±14		±5			
22				±15							±12					
25				±10							±12					
30																
32																
35																
Dimensions in mm																



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

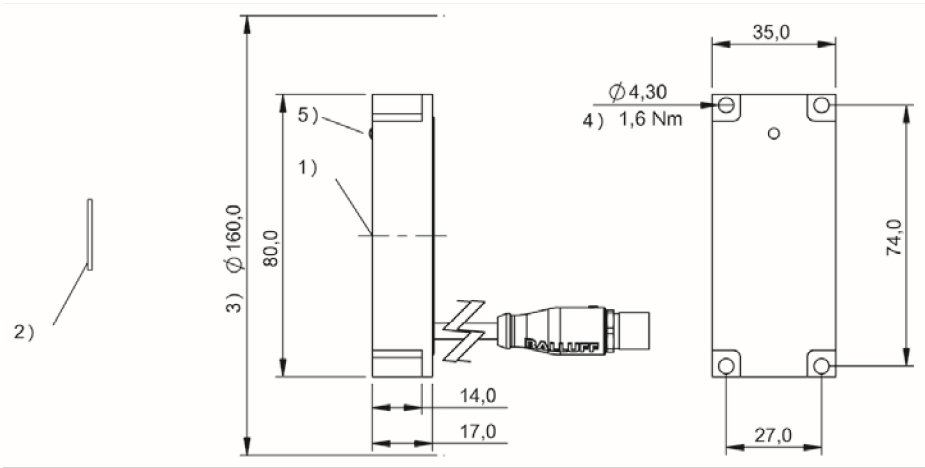
BIS0045			BIS0046			BIS00M9 BIS00M8			BIS00NU BIS00NW BIS0100			BIS012H		
>25	>10	>5	>50	>15	>10	>0			>0			>25		
>100	>60	>50	>150	>90	>70	>100			>100			>100		
0-28	0-18	0-10	0-38	0-25	0-15	0-22			0-13			0-18		
0-28	0-18	0-10	0-38	0-25	0-15	0-22			0-13			0-18		
±16	±10	±7	±22	±16	±13	0	±13		±10			±11		
±16	±10	±7	±22	±16	±13	5	±13		±10					
±14	±8	±2	±22	±14	±10	10	±13		±9					
±14	±7		±20	±13	±8	13	±11		±5					
±14	±6		±20	±12	±6	15	±11							
±14	±3		±20	±10		18	±11							
±14	±2		±20	±10		20	±7							
±14			±20	±8		22	±7							
±12			±20	±6		25								
±12			±20	±4		28								
			±16			30								
			±10			32								
			±10			35								



IO-Link, 10 bytes process data length		BIS0155 BIS M-405-045-008-07-S4
Product Group		HF (13.56 MHz)
Dimension		35 x 17 x 80 mm
Installation		metal-free (clear zone)
Antenna type		round
Supported data carrier types		DIN ISO 14443, DIN ISO 15693
Connection		Connector, M12x1 connector, 4-pin, 0.30 m
Housing material		ABS
Interface		IO-Link 1.1
Operating voltage U _b		18...30 VDC Supports only LPS/Class 2
Ambient temperature		0...70 °C
Protection degree		IP67
Approval/Conformity		CE, UL-FILE E227256, Vol.X1, BIS

Use with **IO-Link master** only

Appropriate data carrier on request



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

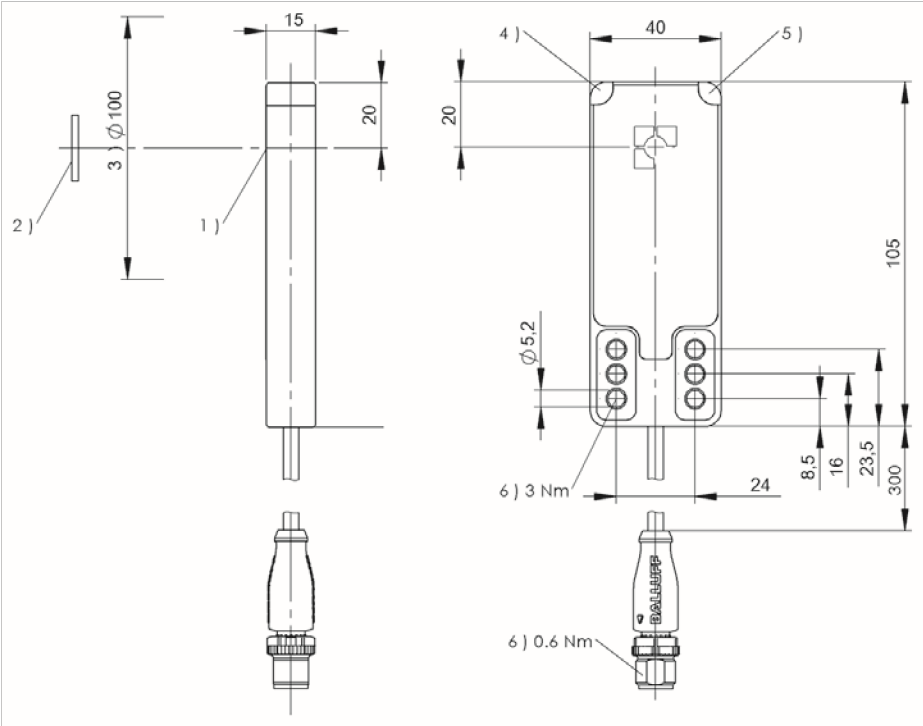


IO-Link, 10 bytes process data length	BISO14J BIS M-408-045-001-07-S4
Product Group	HF (13.56 MHz)
Dimension	40 x 15 x 105 mm
Installation	metal-free (clear zone)
Antenna type	round
Supported data carrier types	DIN ISO 14443, DIN ISO 15693
Connection	Connector, M12x1 connector, 4-pin
Housing material	Zinc, die-cast
Interface	IO-Link 1.1
Operating voltage Ub	18...30 VDC Supports only LPS/Class 2
Ambient temperature	0...70 °C
Protection degree	IP67
Approval/Conformity	CE, FCC Part 15, IC RSS-210

Use with **IO-Link master** only

Appropriate data carrier

	BIS0042		BIS004A		BIS0044		BIS0045		BIS0143		BIS00M9 BIS00M8		BIS00NU BIS00NW BIS0100		
Data carrier distance to metal	>10	>0	>10	>0	>25		>25		>25		>0		>0		
Data carrier clear zone	>60	>60	>60	>60	>100		>100		>100		>100		>100		
Working distance for writing	0-13	0-11	0-11	0-9	0-23		0-28		0-26		0-22		0-13		
Working distance for reading	0-13	0-11	0-11	0-9	0-23		0-28		0-26		0-22		0-13		
Offset at distance															
	0	±10	±8	±8	±8	±15		±16		±15		0	±13	±10	
	4	±10	±8	±8	±8	±15		±16		±15		5	±13	±10	
	5	±10	±8	±8	±7	±15		±16		±15		10	±13	±9	
	6	±9	±7	±7	±7	±15		±16		±15		13	±11	±5	
	7	±9	±7	±7	±6	±15		±16		±15		15	±11		
	8	±9	±7	±7	±6	±15		±16		±15		18	±11		
	9	±9	±7	±7	±3	±15		±16		±15		20	±7		
	10	±7	±4	±4		±15		±16		±15		22	±7		
	11	±7	±4	±4		±12		±15		±13		25			
	13	±4				±12		±15		±13		28			
	15					±12		±15		±13		30			
	20					±12		±15		±13		32			
	23					±5		±10		±5		35			
	25							±10		±5		40			
	26							±5		±5		43			
	28							±5				45			
Dimensions in mm															



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

		BIS00YK	BIS0046	BIS00Y5	BIS00Y4	BIS00LC	
		>10	>25	>50	>50	>25	>0
		>60	>100	>200	>200	>100	>100
		0-13	0-40	0-48	0-48	0-25	0-12
		0-13	0-40	0-48	0-48	0-25	0-12
	0	±9	±25	±26	±30	±15	±10
	5	±9	±25	±26	±30	±15	±10
	10	±8	±25	±26	±30	±15	±8
	12	±4	±25	±26	±30	±13	±2
	13	±4	±25	±26	±30	±13	
	15		±25	±26	±30	±13	
	18		±25	±26	±30	±13	
	20		±25	±26	±30	±13	
	25		±23	±24	±25	±5	
	30		±20	±24	±25		
	36		±20	±24	±25		
	40		±10	±24	±25		
	45			±5	±10		
	48			±5	±10		
	55						
	60						

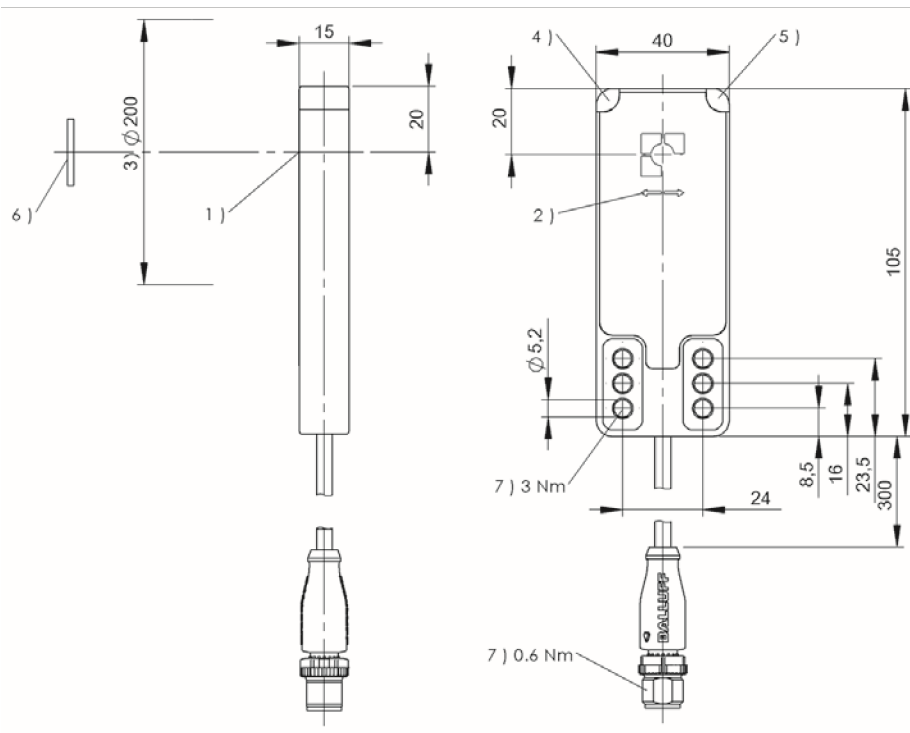


IO-Link, 10 bytes process data length	BIS014K BIS M-458-045-001-07-S4
Product Group	HF (13.56 MHz)
Dimension	40 x 15 x 105 mm
Installation	metal-free (clear zone)
Antenna type	Rod
Supported data carrier types	DIN ISO 14443, DIN ISO 15693
Connection	Connector, M12x1 connector, 4-pin
Housing material	Zinc, die-cast
Interface	IO-Link 1.1
Operating voltage U_b	18...30 VDC Supports only LPS/Class 2
Ambient temperature	0...70 °C
Protection degree	IP67
Approval/Conformity	CE, FCC Part 15, IC RSS-210

Use with **IO-Link master** only

Appropriate data carrier

Appropriate data carrier																	
	BIS004F				BIS004H					BIS00M2		BIS00P3				BIS00NZ	
Data carrier clear zone A	>200	>200	>200	>200	>200	>200	>200	>200		>200	>200	>240	>240	>240	>240	>27	>27
Data carrier clear zone B	>200	>200	>200	>200	>200	>200	>200	>200		>200	>200	>480	>480	>480	>480	>27	>27
Data carrier clear zone C										>50	>50	>50	>50	>0	>0		
Metallic mounting surface 40 × 22 mm	0-38	0-38			0-38	0-38											
Metallic mounting surface > 200 × 200 mm			0-42	0-42			0-34	0-34									
Working distance for writing	0-38	0-38	0-42	0-42	0-38	0-38	0-34	0-34		0-18	0-18	0-54	0-54	0-54	0-54	0-25	0-25
Working distance for reading	0-38	0-38	0-42	0-42	0-38	0-38	0-34	0-34		0-18	0-18	0-54	0-54	0-54	0-54	0-25	0-25
Offset at distance	X	Y	X	Y	X	Y	X	Y		X	Y	X	Y	X	Y	X	Y
	0	±43	±18	±45	±21	±20	±40	±17	±35	0	±22	±12	±60	±30	±60	±30	±20
	5	±43	±18	±45	±21	±20	±40	±17	±35	5	±22	±12	±60	±30	±60	±30	±20
	10	±43	±18	±45	±21	±20	±40	±17	±35	10	±21	±10	±60	±30	±60	±30	±20
	15	±40	±17	±43	±20	±18	±35	±15	±33	15	±16	±8	±55	±27	±55	±27	±15
	20	±40	±17	±43	±20	±18	±35	±15	±33	16	±5	±2	±55	±27	±55	±27	±10
	30	±35	±15	±40	±18	±15	±30	±13	±28	18	±5	±2	±55	±27	±55	±27	±5
	34	±18	±5	±24	±12	±5	±10	±5	±10	30			±55	±27	±55	±27	
	38	±18	±5	±24	±12	±5	±10			35			±50	±25	±50	±25	
	40			±24	±12					40			±50	±25	±50	±25	
	42			±15	±8					45			±35	±17	±35	±17	
	50									50			±35	±17	±35	±17	
	60									54			±15	±7	±15	±7	
Dimensions in mm																	



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

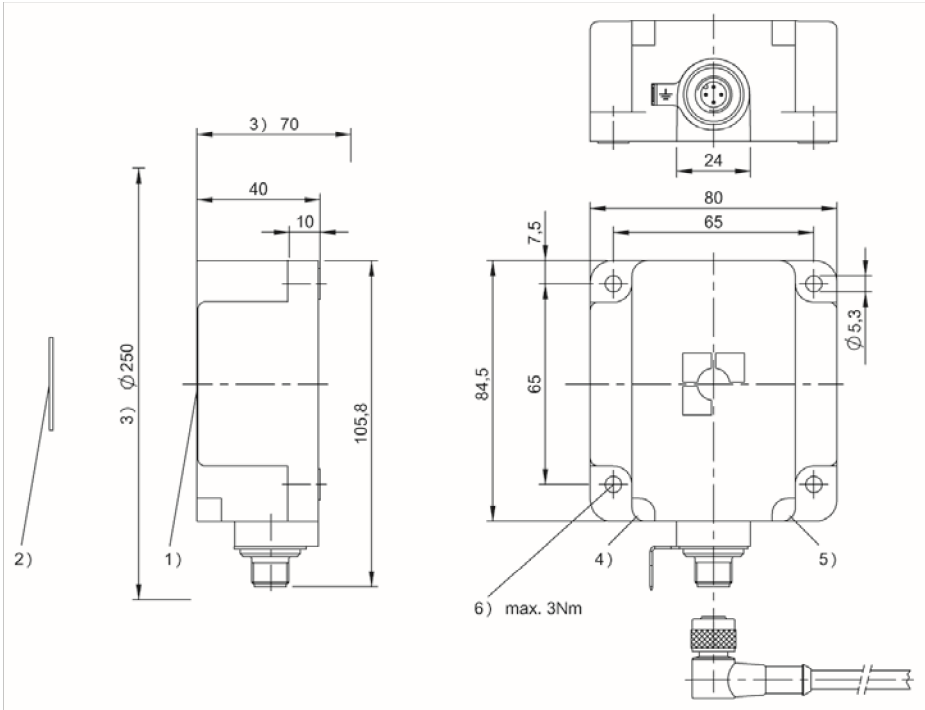


IO-Link, 10 bytes process data length	BIS00LK BIS M-401-045-001-07-S4
Product Group	HF (13.56 MHz)
Dimension	80 x 40 x 84.5 mm
Installation	metal-free (clear zone)
Antenna type	round
Supported data carrier types	DIN ISO 14443, DIN ISO 15693
Connection	Connector, M12x1 connector, 4-pin
Housing material	PBT
Interface	IO-Link 1.1
Operating voltage U_b	18...30 VDC Supports only LPS/Class 2
Ambient temperature	0...70 °C
Protection degree	IP67
Approval/Conformity	CE, FCC Part 15, IC RSS-210, UL-FILE E227256, Vol.X1, BIS

Use with **IO-Link master** only

Appropriate data carrier

	BIS003Y			BIS003Z			BIS0047		BIS0043		BIS0044		BIS0045		BIS0046		
Data carrier distance to metal	>50	>25	>10	>50	>25	>10	>80		>50	>20	>50	>30	>50	>30	>50	>30	
Data carrier clear zone	>200	>150	>150	>200	>150	>150	>250		>200	>60	>200	>100	>200	>100	>200	>100	
Working distance for writing	0-28	0-25	0-20	0-45	0-40	0-34	0-50		0-40	0-18	0-30	0-18	0-40	0-25	0-60	0-35	
Working distance for reading	0-28	0-25	0-20	0-45	0-40	0-34	0-50		0-40	0-18	0-30	0-18	0-40	0-25	0-60	0-35	
Offset at distance																	
0	±22	±18	±12	±30	±24	±16	±30		±30	±16	±25	±18	±30	±20	±35	±25	
5	±22	±18	±12	±30	±24	±16	±30		±30	±16	±25	±18	±30	±20	±35	±25	
9	±22	±18	±10	±30	±24	±16	±30		±30	±16	±25	±15	±30	±20	±35	±25	
12	±22	±16	±8	±30	±24	±14	±30		±25	±16	±20	±15	±25	±20	±35	±25	
15	±22	±16	±8	±30	±24	±14	±30		±25	±16	±20	±12	±25	±18	±35	±25	
16	±20	±15	±6	±30	±20	±12	±30		±25	±16	±20	±12	±25	±18	±35	±25	
18	±20	±13	±4	±30	±20	±10	±30		±25	±14	±20	±8	±25	±16	±35	±25	
20	±20	±12	±2	±30	±20	±10	±30		±25		±20		±25	±14	±35	±25	
22	±16	±8		±24	±18	±8	±30		±20		±15		±20	±12	±35	±22	
25	±12	±4		±24	±18	±8	±30		±20		±15		±20	±10	±35	±22	
30				±24	±15	±6	±28		±20		±10		±20		±35	±22	
32				±20	±12	±4	±24		±15		±10		±15		±35	±22	
35				±20	±10		±22		±15				±15		±35	±20	
40				±15	±5		±18		±15				±15		±35		
43				±8			±14								±25		
45				±5			±12								±25		
50							±4								±25		
52															±25		
60															±25		
Dimensions in mm																	



1) Sensing surface, 2) Data carrier, 3) Clear zone, 4) LED (Power), 5) LED (TP), 6) Tightening torque

BIS00M9 BIS00M8			BIS00NU BIS00NW BIS0100			BIS00YE			BIS00Y4		
>0			>0			>50			>50		
>100			>100			>200			>200		
0-32			0-16			0-50			0-75		
0-32			0-16			0-50			0-75		
±25			±24		0	±30			±50		
±25			±24		5	±30			±50		
±25			±20		10	±30			±50		
±25			±14		15	±30			±50		
±25			±4		20	±30			±50		
±25			±4		25	±28			±50		
±25					30	±28			±50		
±25					35	±28			±50		
±20					40	±28			±50		
±20					45	±10			±45		
±15					50	±10			±45		
±15					55				±45		
					60				±45		
					65				±35		
					70				±35		
					75				±35		
					80						
					85						
					90						

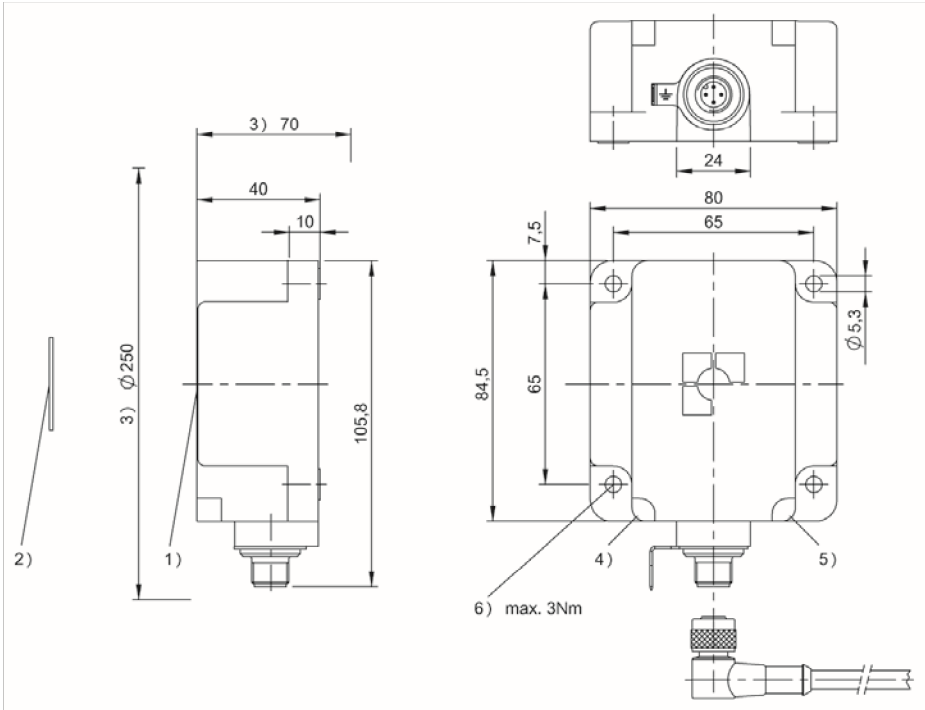


IO-Link, 32 bytes process data length	BIS0102 BIS M-401-072-001-07-S4
Product Group	HF (13.56 MHz)
Dimension	80 x 40 x 84.5 mm
Installation	metal-free (clear zone)
Antenna type	round
Supported data carrier types	DIN ISO 14443, DIN ISO 15693
Connection	Connector, M12x1 connector, 4-pin
Housing material	PBT
Interface	IO-Link 1.1
Operating voltage U_b	18...30 VDC Supports only LPS/Class 2
Ambient temperature	0...70 °C
Protection degree	IP67
Approval/Conformity	CE, FCC Part 15, IC RSS-210, UL-FILE E227256, Vol.X1, BIS

Use with **IO-Link master** only

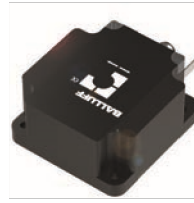
Appropriate data carrier

	BIS003Y			BIS003Z			BIS0047		BIS0043		BIS0044		BIS0045		BIS0046	
Data carrier distance to metal	>50	>25	>10	>50	>25	>10	>80		>50	>20	>50	>30	>50	>30	>50	>30
Data carrier clear zone	>200	>150	>150	>200	>150	>150	>250		>200	>60	>200	>100	>200	>100	>200	>100
Working distance for writing	0-28	0-25	0-20	0-45	0-40	0-34	0-50		0-40	0-18	0-30	0-18	0-40	0-25	0-60	0-35
Working distance for reading	0-28	0-25	0-20	0-45	0-40	0-34	0-50		0-40	0-18	0-30	0-18	0-40	0-25	0-60	0-35
Offset at distance																
0	±22	±18	±12	±30	±24	±16	±30		±30	±16	±25	±18	±30	±20	±35	±25
5	±22	±18	±12	±30	±24	±16	±30		±30	±16	±25	±18	±30	±20	±35	±25
9	±22	±18	±10	±30	±24	±16	±30		±30	±16	±25	±15	±30	±20	±35	±25
12	±22	±16	±8	±30	±24	±14	±30		±25	±16	±20	±15	±25	±20	±35	±25
15	±22	±16	±8	±30	±24	±14	±30		±25	±16	±20	±12	±25	±18	±35	±25
16	±20	±15	±6	±30	±20	±12	±30		±25	±16	±20	±12	±25	±18	±35	±25
18	±20	±13	±4	±30	±20	±10	±30		±25	±14	±20	±8	±25	±16	±35	±25
20	±20	±12	±2	±30	±20	±10	±30		±25		±20		±25	±14	±35	±25
22	±16	±8		±24	±18	±8	±30		±20		±15		±20	±12	±35	±22
25	±12	±4		±24	±18	±8	±30		±20		±15		±20	±10	±35	±22
30				±24	±15	±6	±28		±20		±10		±20		±35	±22
32				±20	±12	±4	±24		±15		±10		±15		±35	±22
35				±20	±10		±22		±15				±15		±35	±20
40				±15	±5		±18		±15				±15		±35	
43				±8			±14								±25	
45				±5			±12								±25	
50							±4								±25	
52															±25	
60															±25	
Dimensions in mm																



1) Sensing surface, 2) Data carrier, 3) Clear zone, 4) LED (Power), 5) LED (TP), 6) Tightening torque

BIS00M9 BIS00M8		BIS00NU BIS00NW BIS0100		BIS00YE		BIS00Y4	
>0		>0		>50		>50	
>100		>100		>200		>200	
0-32		0-16		0-50		0-75	
0-32		0-16		0-50		0-75	
±25		±24	0	±30		±50	
±25		±24	5	±30		±50	
±25		±20	10	±30		±50	
±25		±14	15	±30		±50	
±25		±4	20	±30		±50	
±25		±4	25	±28		±50	
±25			30	±28		±50	
±25			35	±28		±50	
±20			40	±28		±50	
±20			45	±10		±45	
±15			50	±10		±45	
±15			55			±45	
			60			±45	
			65			±35	
			70			±35	
			75			±35	
			80				
			85				
			90				

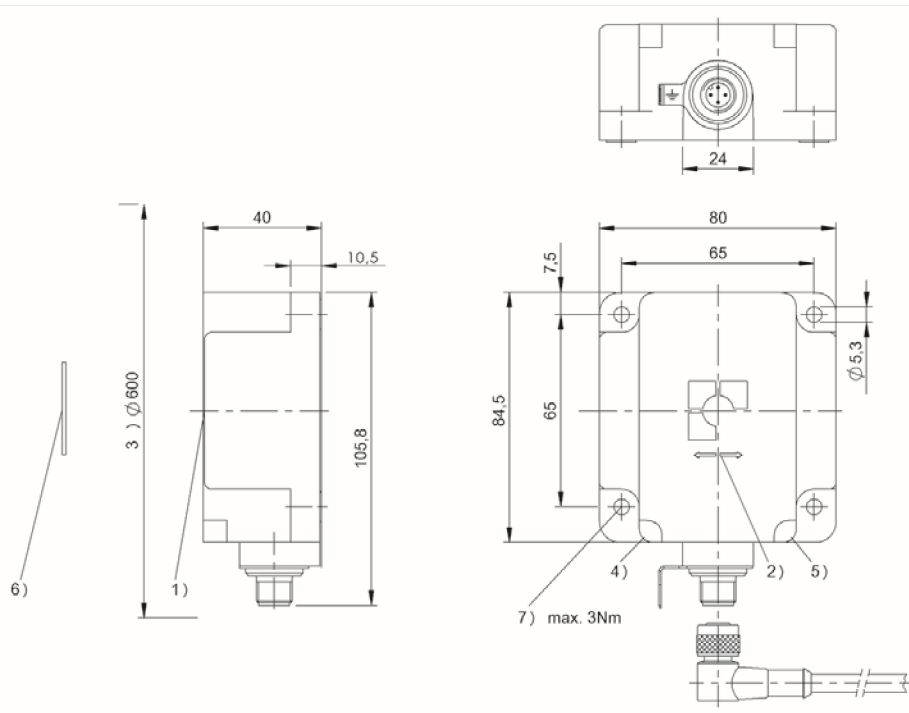


IO-Link, 10 bytes process data length	BIS00LM BIS M-451-045-001-07-S4
Product Group	HF (13.56 MHz)
Dimension	80 x 40 x 84.5 mm
Installation	metal-free (clear zone)
Antenna type	Rod
Supported data carrier types	DIN ISO 14443, DIN ISO 15693
Connection	Connector, M12x1 connector, 4-pin
Housing material	PBT
Interface	IO-Link 1.1
Operating voltage U_b	18...30 VDC Supports only LPS/Class 2
Ambient temperature	0...70 °C
Protection degree	IP67
Approval/Conformity	CE, FCC Part 15, IC RSS-210, UL-FILE E227256, Vol.X1, BIS

Use with **IO-Link master** only

Appropriate data carrier

	BIS004F				BIS004H					BIS00M2				BIS00P3	
Data carrier clear zone A	>200	>200	>200	>200	>200	>200	>200	>200		>200	>200	>10	>10	>240	>240
Data carrier clear zone B	>200	>200	>200	>200	>200	>200	>200	>200		>200	>200	>50	>50	>480	>480
Data carrier clear zone C										>50	>50	>2	>2	>50	>50
Metallic mounting surface 40 × 22 mm	0-52	0-52			0-52	0-52									
Metallic mounting surface > 200 × 200 mm			0-65	0-65			0-65	0-65							
Working distance for writing	0-52	0-52	0-65	0-65	0-52	0-52	0-65	0-65		0-30	0-30	15-30	15-30	0-100	0-100
Working distance for reading	0-52	0-52	0-65	0-65	0-52	0-52	0-65	0-65		0-30	0-30	15-30	15-30	0-100	0-100
Offset at distance	X	Y	X	Y	X	Y	X	Y		X	Y	X	Y	X	Y
	0 ±60	±25	±65	±26	±25	±60	±26	±65		0 ±35	±20			±60	±20
	5 ±60	±25	±65	±26	±25	±60	±26	±65		5 ±35	±20			±60	±20
	12 ±60	±25	±65	±25	±25	±60	±25	±65		10 ±35	±20			±60	±20
	15 ±60	±25	±65	±25	±25	±60	±25	±65		15 ±35	±20	±35	±15	±60	±20
	18 ±60	±25	±65	±25	±25	±60	±25	±65		20 ±35	±20	±35	±15	±60	±20
	20 ±60	±25	±65	±25	±25	±60	±25	±65		25 ±20	±12	±28	±15	±60	±20
	22 ±60	±25	±65	±25	±25	±60	±25	±65		30 ±20	±12	±28	±15	±60	±20
	25 ±60	±25	±65	±25	±25	±60	±25	±65		35				±60	±20
	30 ±60	±25	±65	±25	±25	±60	±25	±65		40				±60	±20
	32 ±50	±25	±65	±25	±25	±50	±25	±65		45				±60	±20
	35 ±50	±25	±65	±25	±25	±50	±25	±65		50				±60	±20
	40 ±50	±20	±50	±25	±20	±50	±25	±50		60				±60	±20
	45 ±25	±20	±50	±25	±20	±25	±25	±50		70				±60	±20
	50 ±25	±20	±50	±25	±20	±25	±25	±50		80				±60	±20
	52 ±25	±8	±25	±25	±8	±25	±25	±25		90				±40	±20
	60		±25	±10			±10	±25		100				±40	±20
	65		±25	±10			±10	±25							
Dimensions in mm															



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

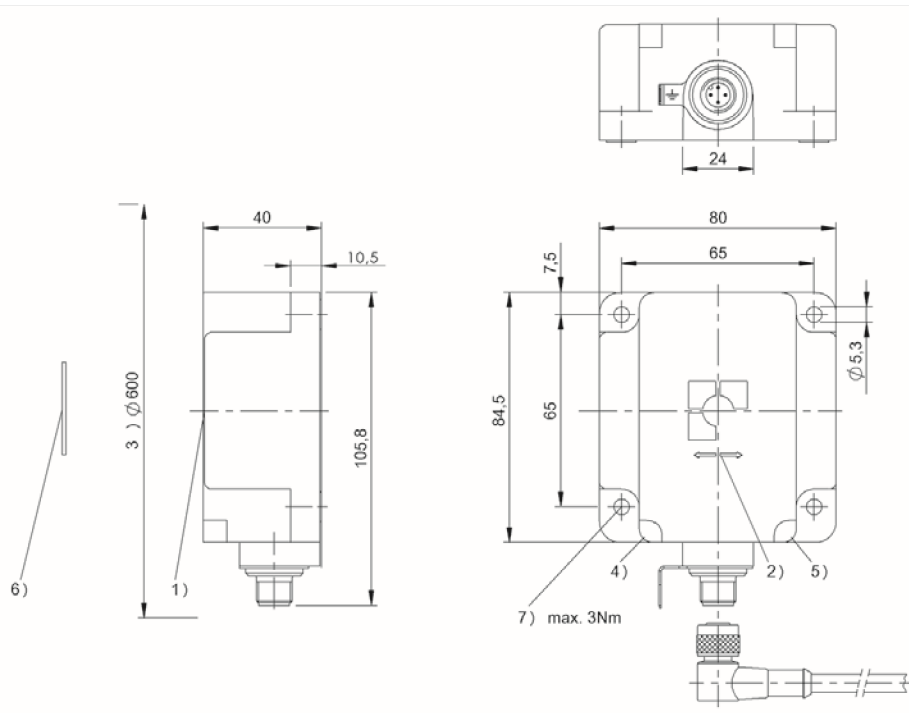


IO-Link, 32 bytes process data length	BIS0103 BIS M-451-072-001-07-S4
Product Group	HF (13.56 MHz)
Dimension	80 x 40 x 84.5 mm
Installation	metal-free (clear zone)
Antenna type	Rod
Supported data carrier types	DIN ISO 14443, DIN ISO 15693
Connection	Connector, M12x1 connector, 4-pin
Housing material	PBT
Interface	IO-Link 1.1
Operating voltage U_b	18...30 VDC Supports only LPS/Class 2
Ambient temperature	0...70 °C
Protection degree	IP67
Approval/Conformity	CE, FCC Part 15, IC RSS-210, UL-FILE E227256, Vol.X1, BIS

Use with **IO-Link master** only

Appropriate data carrier

	BIS004F				BIS004H					BIS00M2				BIS00P3		
Data carrier clear zone A	>200	>200	>200	>200	>200	>200	>200	>200		>200	>200	>10	>10	>240	>240	
Data carrier clear zone B	>200	>200	>200	>200	>200	>200	>200	>200		>200	>200	>50	>50	>480	>480	
Data carrier clear zone C										>50	>50	>2	>2	>50	>50	
Metallic mounting surface 40 × 22 mm	0-52	0-52			0-52	0-52										
Metallic mounting surface > 200 × 200 mm			0-65	0-65			0-65	0-65								
Working distance for writing	0-52	0-52	0-65	0-65	0-52	0-52	0-65	0-65		0-30	0-30	15-30	15-30	0-100	0-100	
Working distance for reading	0-52	0-52	0-65	0-65	0-52	0-52	0-65	0-65		0-30	0-30	15-30	15-30	0-100	0-100	
Offset at distance	X	Y	X	Y	X	Y	X	Y		X	Y	X	Y	X	Y	
	0	±60	±25	±65	±26	±25	±60	±26	±65	0	±35	±20		±60	±20	
	5	±60	±25	±65	±26	±25	±60	±26	±65	5	±35	±20		±60	±20	
	12	±60	±25	±65	±25	±25	±60	±25	±65	10	±35	±20		±60	±20	
	15	±60	±25	±65	±25	±25	±60	±25	±65	15	±35	±20	±35	±15	±60	±20
	18	±60	±25	±65	±25	±25	±60	±25	±65	20	±35	±20	±35	±15	±60	±20
	20	±60	±25	±65	±25	±25	±60	±25	±65	25	±20	±12	±28	±15	±60	±20
	22	±60	±25	±65	±25	±25	±60	±25	±65	30	±20	±12	±28	±15	±60	±20
	25	±60	±25	±65	±25	±25	±60	±25	±65	35					±60	±20
	30	±60	±25	±65	±25	±25	±60	±25	±65	40					±60	±20
	32	±50	±25	±65	±25	±25	±50	±25	±65	45					±60	±20
	35	±50	±25	±65	±25	±25	±50	±25	±65	50					±60	±20
	40	±50	±20	±50	±25	±20	±50	±25	±50	60					±60	±20
	45	±25	±20	±50	±25	±20	±25	±25	±50	70					±60	±20
	50	±25	±20	±50	±25	±20	±25	±25	±50	80					±60	±20
	52	±25	±8	±25	±25	±8	±25	±25	±25	90					±40	±20
	60			±25	±10			±10	±25	100					±40	±20
	65			±25	±10			±10	±25							
Dimensions in mm																



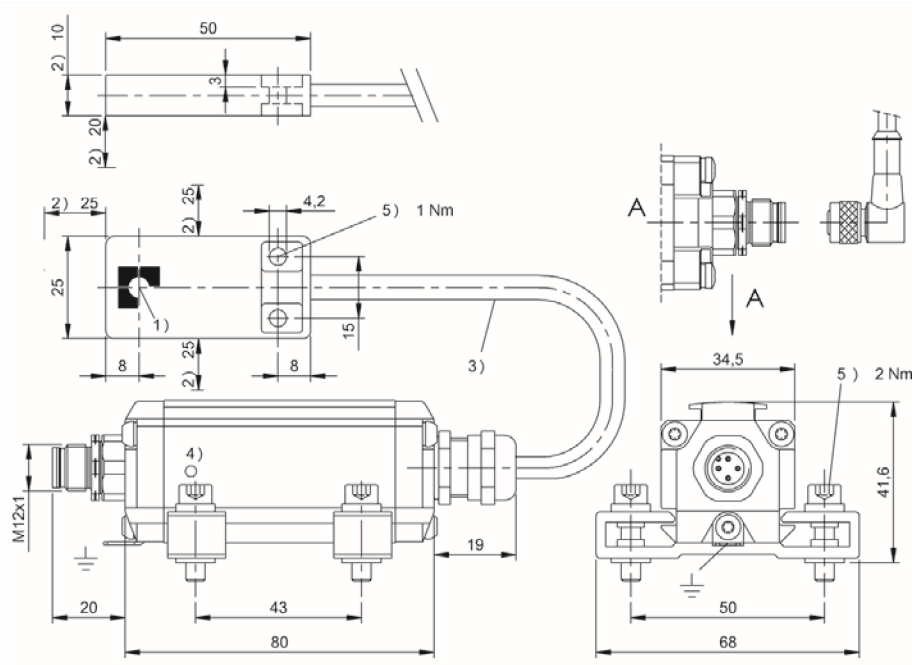
1) Sensing surface, 2) Read/write axis, 3) Clear zone, 4) LED (Power), 5) LED (TP), 6) Data carrier on steel, 7) Tightening torque



IO-Link, 10 bytes process data length	BIS00M1 BIS M-402-045-004-07-S4
Product Group	HF (13.56 MHz)
Dimension	25 x 10 x 50 mm
Installation	metal-free (clear zone)
Antenna type	round
Supported data carrier types	DIN ISO 14443, DIN ISO 15693
Connection	Connector, M12x1 connector, 4-pin, 0.50 m, PU
Housing material	ABS, GF16, interface aluminum
Interface	IO-Link 1.1
Operating voltage Ub	18...30 VDC Supports only LPS/Class 2
Ambient temperature	0...70 °C
Protection degree	IP67
Approval/Conformity	CE, UL-FILE E227256, Vol.X1, BIS

Use with **IO-Link master** only

Appropriate data carrier	BIS0040		BIS0042		BIS0044		BIS0048		BIS004A		BIS00NU BIS00NW BIS0100		BIS003Y	
Data carrier distance to metal	>10	>0	>10	>0	>25		>10	>0	>10	>0	>0		>25	
Data carrier clear zone	>60	>0	>60	>0	>80		>60	>0	>60	>0	>100		>100	
Working distance for writing	0-6	0-4	0-8	0-6	0-15		0-5	0-4	0-8	0-5	0-9		0-15	
Working distance for reading	0-6	0-4	0-8	0-6	0-15		0-5	0-4	0-8	0-5	0-9		0-15	
Offset at distance														
0	±4	±3	±5	±4	±8		±4	±3	±4	±4	0	±6		±11
5	±2		±5	±2	±8		±2		±4	±2	5	±6		±11
9					±6						7	±6		±9
12					±4						9	±4		±9
15					±4						12			±9
16											15			±5
Dimensions in mm														



1) Sensing surface, 2) Clear zone, 3) Cable length see text, 4) LED function indicator, 5) Tightening torque

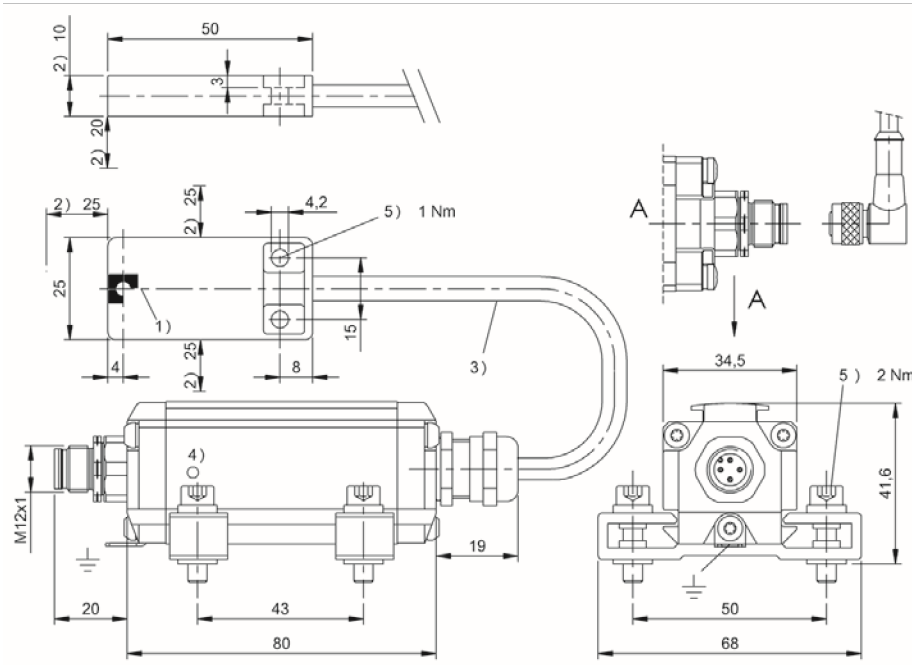


IO-Link, 10 bytes process data length		BISO126 BIS M-402-045-007-07-S4
Product Group		HF (13.56 MHz)
Dimension		25 x 10 x 50 mm
Installation		metal-free (clear zone)
Antenna type		Rod
Supported data carrier types		DIN ISO 14443, DIN ISO 15693
Connection		Connector, M12x1 connector, 4-pin, 0.50 m, PU
Housing material		ABS, GF16, interface aluminum
Interface		IO-Link 1.1
Operating voltage Ub		18...30 VDC Supports only LPS/Class 2
Ambient temperature		0...70 °C
Protection degree		IP67
Approval/Conformity		CE, UL-FILE E227256, Vol.X1, BIS

Use with **IO-Link master** only

Appropriate data carrier

	BISO0UC BISO0UE	
Data carrier distance to metal	>10	
Data carrier clear zone	>60	
Working distance for writing	0-3	
Working distance for reading	0-3	
Offset at distance		
	0	±5
	1	±5
	2	±5
	3	±2
	15	
	16	
Dimensions in mm		



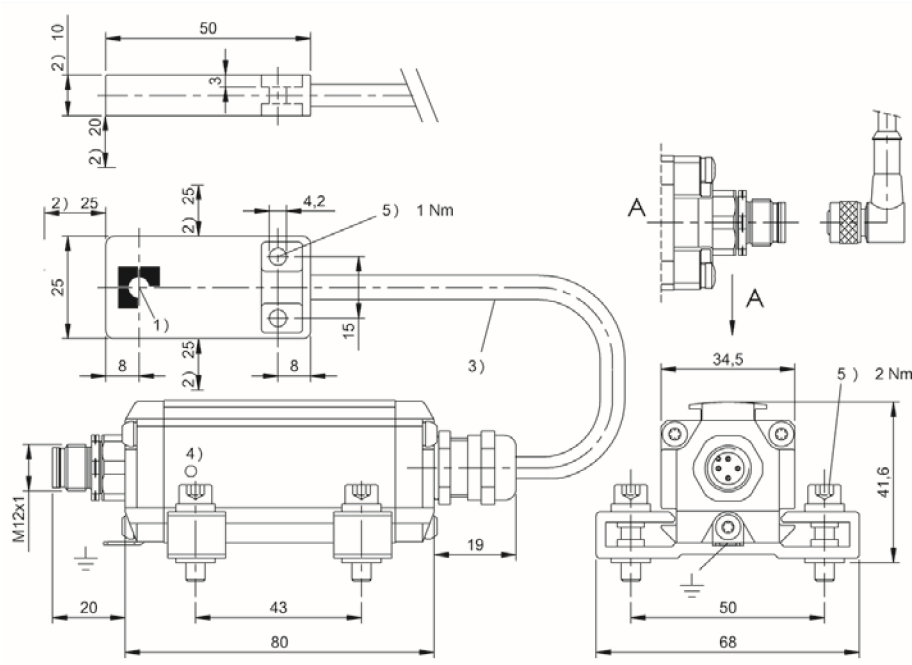
1) Sensing surface, 2) Clear zone, 3) Cable length see text, 4) LED function indicator, 5) Tightening torque



IO-Link, 32 bytes process data length	BISO106 BIS M-402-072-004-07-S4
Product Group	HF (13.56 MHz)
Dimension	25 x 10 x 50 mm
Installation	metal-free (clear zone)
Antenna type	round
Supported data carrier types	DIN ISO 14443, DIN ISO 15693
Connection	Connector, M12x1 connector, 4-pin, 0.50 m, PU
Housing material	ABS, GF16, interface aluminum
Interface	IO-Link
Operating voltage Ub	18...30 VDC Supports only LPS/Class 2
Ambient temperature	0...70 °C
Protection degree	IP67
Approval/Conformity	CE, UL-FILE E227256, Vol.X1, BIS

Use with **IO-Link master** only

Appropriate data carrier	BISO040		BISO042		BISO044		BISO048		BISO04A		BISO0NU BISO0NW BISO100		BISO03Y	
Data carrier distance to metal	>10	>0	>10	>0	>25		>10	>0	>10	>0	>0		>25	
Data carrier clear zone	>60	>0	>60	>0	>80		>60	>0	>60	>0	>100		>100	
Working distance for writing	0-6	0-4	0-8	0-6	0-15		0-5	0-4	0-8	0-5	0-9		0-15	
Working distance for reading	0-6	0-4	0-8	0-6	0-15		0-5	0-4	0-8	0-5	0-9		0-15	
Offset at distance														
0	±4	±3	±5	±4	±8		±4	±3	±4	±4	0	±6	±11	
5	±2		±5	±2	±8		±2		±4	±2	5	±6	±11	
9					±6						7	±6	±9	
12					±4						9	±4	±9	
15					±4						12		±9	
16											15		±5	
Dimensions in mm														



1) Sensing surface, 2) Clear zone, 3) Cable length see text, 4) LED function indicator, 5) Tightening torque

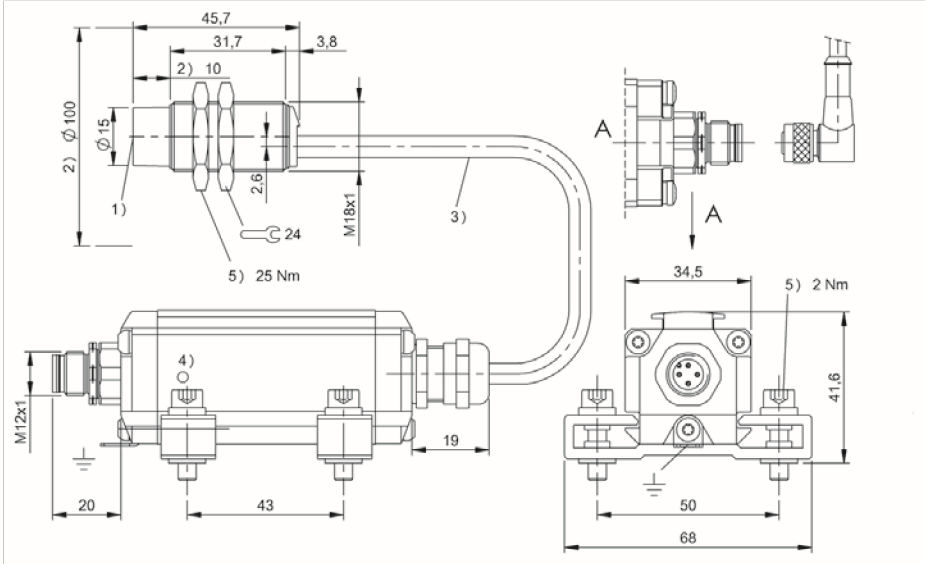


IO-Link, 10 bytes process data length	BIS00LW BIS M-402-045-002-07-S4
Product Group	HF (13.56 MHz)
Dimension	Ø 18 x 45.5 mm
Installation	metal-free (clear zone)
Antenna type	round
Supported data carrier types	DIN ISO 14443, DIN ISO 15693
Connection	Connector, M12x1 connector, 4-pin, 0.50 m, PU
Housing material	Brass, interface aluminum
Interface	IO-Link 1.1
Operating voltage Ub	18...30 VDC Supports only LPS/Class 2
Ambient temperature	0...70 °C
Protection degree	IP67
Approval/Conformity	CE, UL-FILE E227256, Vol.X1, BIS

Use with **IO-Link master** only

Appropriate data carrier

	BIS0040		BIS0042		BIS0048		BIS004A		BIS0044			BIS003Y		BIS0045		
Data carrier distance to metal	>10	>0	>10	>0	>10	>0	>10	>0	>25			>25		>25		
Data carrier clear zone	>60	>0	>60	>0	>60	>0	>60	>0	>80			>100		>100		
Working distance for writing	0-6	0-4	0-8	0-6	0-5	0-4	0-8	0-5	0-15			0-14		0-18		
Working distance for reading	0-6	0-4	0-8	0-6	0-5	0-4	0-8	0-5	0-15			0-14		0-18		
Offset at distance																
0	±3	±3	±4	±3	±3	±2	±4	±3	±7			0	±10	±12		
5	±2		±3	±2	±2		±3	±2	±7			5	±10	±12		
9									±5			10	±9	±11		
12									±3			14	±5	±10		
15									±3			15		±10		
16												18		±5		
Dimensions in mm																



1) Sensing surface, 2) Clear zone, 3) Cable length see text, 4) LED function indicator, 5) Tightening torque

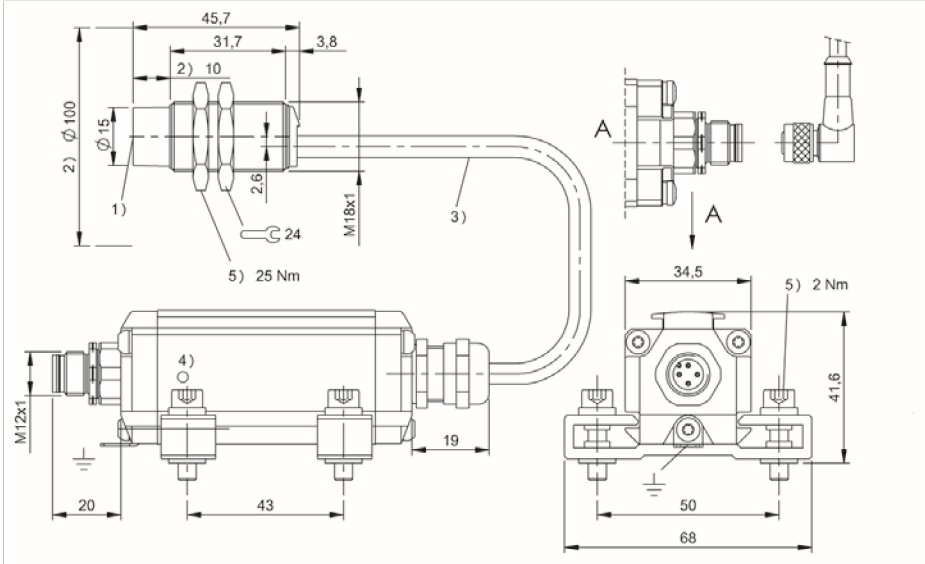
BIS00YL		BIS00YK		BIS00YE		BIS00NU BIS00NW BIS0100	
>25		>25		>25		>0	
>100		>100		>100		>100	
0-9		0-9		0-20		0-9	
0-9		0-9		0-20		0-9	
±6		±6		±12		±6	
±6		±6		±12		±6	
±5		±5		±12		±6	
±1		±1		±12		±4	
				±12			
				±10			



IO-Link, 32 bytes process data length	BIS0105 BIS M-402-072-002-07-S4
Product Group	HF (13.56 MHz)
Dimension	Ø 18 x 45.5 mm
Installation	metal-free (clear zone)
Antenna type	round
Supported data carrier types	DIN ISO 14443, DIN ISO 15693
Connection	Connector, M12x1 connector, 4-pin, 0.50 m, PU
Housing material	Brass, interface aluminum
Interface	IO-Link
Operating voltage Ub	18...30 VDC Supports only LPS/Class 2
Ambient temperature	0...70 °C
Protection degree	IP67
Approval/Conformity	CE, UL-FILE E227256, Vol.X1, BIS

Use with **IO-Link master** only

Appropriate data carrier	BIS0040		BIS0042		BIS0048		BIS004A		BIS0044		BIS003Y		BIS0045	
Data carrier distance to metal	>10	>0	>10	>0	>10	>0	>10	>0	>25		>25		>25	
Data carrier clear zone	>60	>0	>60	>0	>60	>0	>60	>0	>80		>100		>100	
Working distance for writing	0-6	0-4	0-8	0-6	0-5	0-4	0-8	0-5	0-15		0-14		0-18	
Working distance for reading	0-6	0-4	0-8	0-6	0-5	0-4	0-8	0-5	0-15		0-14		0-18	
Offset at distance														
0	±3	±3	±4	±3	±3	±2	±4	±3	±7		0	±10	±12	
5	±2		±3	±2	±2		±3	±2	±7		5	±10	±12	
9									±5		10	±9	±11	
12									±3		14	±5	±10	
15									±3		15		±10	
16											18		±5	
Dimensions in mm														



1) Sensing surface, 2) Clear zone, 3) Cable length see text, 4) LED function indicator, 5) Tightening torque

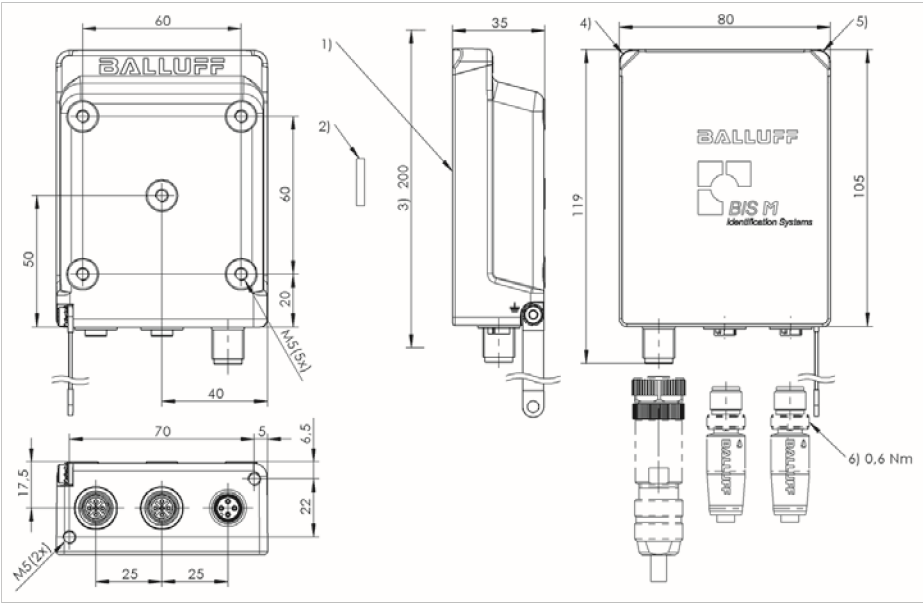
	BIS00YL	BIS00YK	BIS00YE	BIS00NU BIS00NW BIS0100
	>25	>25	>25	>0
	>100	>100	>100	>100
	0-9	0-9	0-20	0-9
	0-9	0-9	0-20	0-9
	±6	±6	±12	±6
	±6	±6	±12	±6
	±5	±5	±12	±6
	±1	±1	±12	±4
			±12	
			±10	



	BIS0179 BIS M-4008-048-001-ST4
Product Group	HF (13.56 MHz)
Dimension	80 x 35 x 119 mm
Installation	metal-free (clear zone) on metal flush in metal
Antenna type	round
Supported data carrier types	DIN ISO 15693, DIN ISO 15693 (High Memory)
Connection	2x M12x1-Female, 4-pole, D-coded M12x1-Male, 4-pole, A-coded
Housing material	Zinc, die-cast
Interface	Profinet I/O (IRT), Profinet I/O (IRT) 2 port Switch
Operating voltage U_b	24 V DC LPS Class 2
Ambient temperature	0...70 °C
Protection degree	IP67
Approval/Conformity	CE

Appropriate data carrier

	BIS0043			BIS011F BIS011E BIS011A BIS0139			BIS0045	BIS0046		BIS0119	BIS00NU BIS00NW BIS0100	
Data carrier distance to metal	>50	>0	>0	>50	>0	>0	>50	>50		>0	>0	
Data carrier clear zone	>200	>200	>0	>200	>200	>0	>200	>200		>100	>100	
Working distance for writing	0-52	0-32	10-19	0-36	0-28	11-18	0-52	0-80		0-38	0-18	
Working distance for reading	0-52	0-32	10-19	0-36	0-28	11-18	0-52	0-80		0-38	0-18	
Offset at distance												
	0	±32	±25	±27	±22		±32	±42		0	±27	±22
	5	±32	±25	±27	±22		±32	±42		5	±27	±22
	10	±32	±25	±20	±27	±22	±32	±42		10	±27	±20
	11	±32	±22	±20	±25	±20	±18	±32		15	±25	±18
	12	±32	±22	±20	±25	±20	±18	±32		18	±25	±10
	16	±32	±22	±15	±25	±20	±15	±32		20	±25	
	17	±32	±22	±15	±25	±20	±2	±32		25	±22	
	18	±32	±22	±8	±25	±20	±2	±32		30	±22	
	19	±32	±22	±8	±25	±20		±32		35	±10	
	20	±32	±22		±25	±20		±32		38	±10	
	25	±28	±15		±22	±15		±28		40		
	28	±28	±15		±22	±1		±28		45		
	30	±28	±15		±22			±28		50		
	32	±28	±10		±5			±28		55		
	36	±28			±5			±28		60		
	40	±28						±28		65		
	50	±12						±12		70		
	52	±6						±6		75		
	65									80		
	75									85		
	80							±5		90		
Dimensions in mm												



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

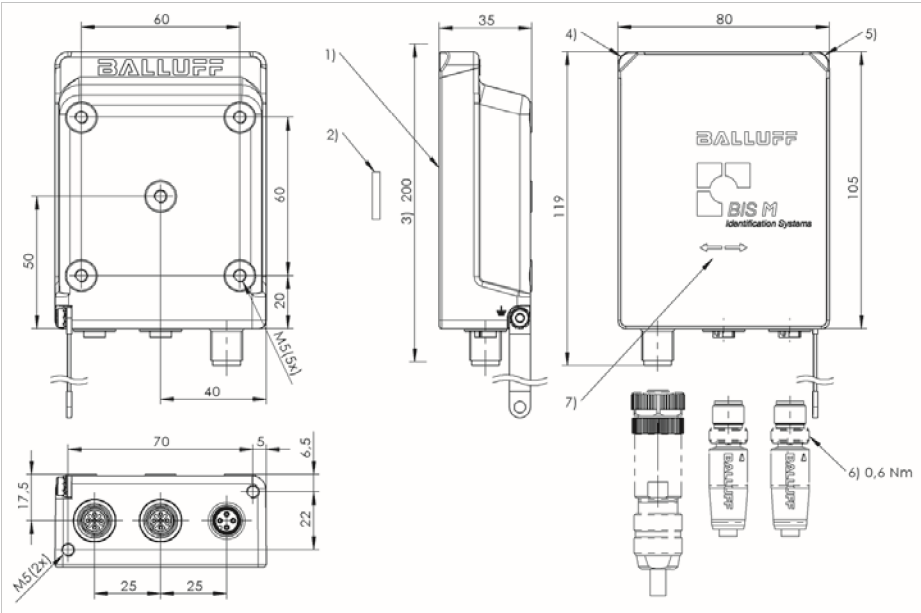
		BIS00YE	BIS00Y9	BIS00Y4	BIS00Y2
		>50	>50	>50	>50
		>200	>200	>200	>200
		0-60	0-55	0-90	0-65
		0-60	0-55	0-90	0-65
	0	±35	±32	±50	±36
	10	±35	±32	±50	±36
	20	±35	±32	±50	±36
	30	±30	±30	±50	±33
	40	±30	±30	±45	±33
	45	±20	±24	±45	±25
	50	±20	±24	±45	±25
	55	±20	±10	±45	±25
	60	±10		±45	±25
	65			±30	±10
	70			±30	
	75			±30	
	80			±30	
	85			±20	
	90			±20	
	100				
	110				
	120				
	130				
	140				
	150				



	BIS017A BIS M-4008-048-002-ST4
Product Group	HF (13.56 MHz)
Dimension	80 x 35 x 119 mm
Installation	metal-free (clear zone) on metal flush in metal
Antenna type	Rod
Supported data carrier types	DIN ISO 15693, DIN ISO 15693 (High Memory)
Connection	2x M12x1-Female, 4-pole, D-coded M12x1-Male, 4-pole, A-coded
Housing material	Zinc, die-cast
Interface	Profinet I/O (IRT), Profinet I/O (IRT) 2 port Switch
Operating voltage U_b	24 V DC LPS Class 2
Ambient temperature	0...70 °C
Protection degree	IP67
Approval/Conformity	CE

Appropriate data carrier

	BIS004F				BIS004H					BIS00M2			BIS00P3				BIS011W BIS011Y BIS011U BIS013E		
Data carrier clear zone A	>200	>200	>200	>200	>200	>200	>200	>200		>200	>200		>240	>240	>240	>240	>240	>240	
Data carrier clear zone B	>200	>200	>200	>200	>200	>200	>200	>200		>200	>200		>480	>480	>480	>480	>480	>480	
Data carrier clear zone C										>50	>50		>50	>50	>0	>0	>50	>50	
Metallic mounting surface 40 × 22 mm	0-65	0-65			0-65	0-65													
Metallic mounting surface > 200 × 200 mm			0-60	0-60			0-45	0-45											
Working distance for writing	0-65	0-65	0-60	0-60	0-65	0-65	0-45	0-45		0-35	0-35		0-100	0-100	0-100	0-100	0-55	0-55	
Working distance for reading	0-65	0-65	0-60	0-60	0-65	0-65	0-45	0-45		0-35	0-35		0-100	0-100	0-100	0-100	0-55	0-55	
Offset at distance																			
Offset at distance	X	Y	X	Y	X	Y	X	Y		X	Y		X	Y	X	Y	X	Y	
0	±70	±30	±65	±30	±30	±70	±25	±50	0	±44	±22	0	±100	±40	±100	±40	±65	±30	
5	±70	±30	±65	±30	±30	±70	±25	±50	5	±44	±22	5	±100	±40	±100	±40	±65	±30	
10	±70	±30	±65	±30	±30	±70	±25	±50	10	±44	±22	10	±100	±40	±100	±40	±65	±30	
15	±70	±30	±65	±30	±30	±70	±25	±50	15	±40	±20	20	±100	±40	±100	±40	±65	±30	
20	±70	±30	±65	±30	±30	±70	±25	±50	20	±40	±20	25	±100	±40	±100	±40	±60	±25	
25	±65	±25	±60	±25	±25	±65	±20	±40	25	±32	±18	30	±100	±40	±100	±40	±60	±25	
30	±65	±25	±60	±25	±25	±65	±20	±40	30	±32	±18	40	±100	±40	±100	±40	±60	±25	
35	±65	±25	±60	±25	±25	±65	±20	±40	35	±10	±3	50	±80	±35	±80	±35	±30	±20	
40	±65	±25	±60	±25	±25	±65	±15	±30	40			55	±80	±35	±80	±35	±20	±10	
45	±40	±20	±40	±20	±20	±40	±5	±5	45			60	±80	±35	±80	±35			
50	±40	±20	±40	±20	±20	±40			50			70	±80	±35	±80	±35			
55	±40	±20	±40	±20	±20	±40			55			75	±80	±35	±80	±35			
60	±40	±20	±20	±10	±20	±40			60			80	±80	±35	±80	±35			
65	±20	±10			±10	±20			80			95	±55	±25	±55	±25			
70									95			100	±30	±10	±30	±10			
Dimensions in mm																			



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

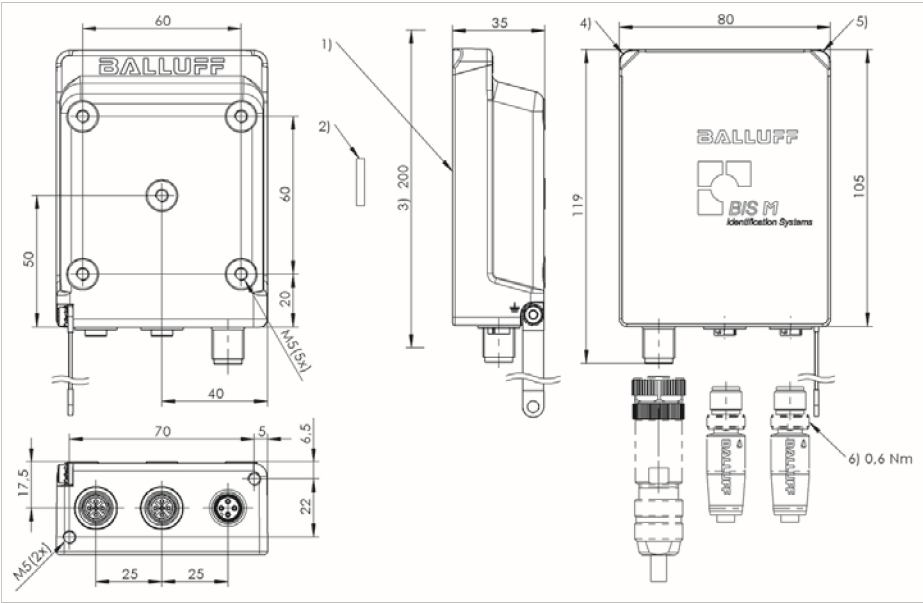
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>200	>200	>200	>200	>200	>200	>200	>200	>200	>200	>200	>200	>200	>200	>200	>200	>27	>27	>27	>27
>200	>200	>200	>200	>200	>200	>200	>200	>200	>200	>200	>200	>200	>200	>200	>200	>27	>27	>27	>27
0-42	0-42			0-42	0-42			0-68	0-68			0-68	0-68					0-30	0-30
		0-42	0-42			0-42	0-42			0-68	0-68			0-58	0-58			0-55	0-55
0-42	0-42	0-42	0-42	0-42	0-42	0-42	0-42	0-68	0-68	0-68	0-68	0-68	0-68	0-58	0-58	0-55	0-55	0-30	0-30
0-42	0-42	0-42	0-42	0-42	0-42	0-42	0-42	0-68	0-68	0-68	0-68	0-68	0-68	0-58	0-58	0-55	0-55	0-30	0-30
X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y
0 ±45	±25	±45	±25	±25	±45	±45	±25	0 ±75	±32	±75	±32	±75	±32	±60	±28	0 ±65	±28	±44	±24
5 ±45	±25	±45	±25	±25	±45	±45	±25	5 ±75	±32	±75	±32	±75	±32	±60	±28	5 ±65	±28	±44	±24
10 ±45	±25	±45	±25	±25	±45	±45	±25	10 ±75	±32	±75	±32	±75	±32	±60	±28	10 ±65	±28	±44	±24
15 ±45	±25	±45	±25	±25	±45	±45	±25	15 ±75	±32	±75	±32	±75	±32	±60	±28	15 ±65	±28	±38	±21
20 ±45	±25	±45	±25	±25	±45	±45	±25	20 ±75	±32	±75	±32	±75	±32	±60	±28	20 ±65	±28	±38	±21
25 ±30	±18	±30	±18	±18	±30	±30	±18	25 ±70	±28	±70	±28	±70	±28	±55	±25	25 ±55	±25	±25	±15
30 ±30	±18	±30	±18	±18	±30	±30	±18	30 ±70	±28	±70	±28	±70	±28	±55	±25	30 ±55	±25	±8	±5
35 ±30	±18	±30	±18	±18	±30	±30	±18	35 ±70	±28	±70	±28	±70	±28	±55	±25	35 ±55	±25		
40 ±20	±10	±20	±10	±10	±20	±20	±10	40 ±70	±28	±70	±28	±70	±28	±55	±25	40 ±55	±25		
42 ±10	±5	±10	±5	±5	±10	±10	±5	45 ±50	±25	±50	±25	±50	±25	±35	±18	45 ±40	±20		
45								50 ±50	±25	±50	±25	±50	±25	±35	±18	50 ±40	±20		
50								55 ±50	±25	±50	±25	±50	±25	±35	±18	55 ±5	±5		
55								58 ±50	±25	±50	±25	±50	±25	±15	±5	60			
60								65 ±50	±25	±50	±25	±50	±25			65			
65								68 ±20	±10	±20	±10	±20	±10			70			



	BIS018A BIS M-4006-034-001-ST4
Product Group	HF (13.56 MHz)
Dimension	80 x 35 x 119 mm
Installation	metal-free (clear zone) on metal flush in metal
Antenna type	round
Supported data carrier types	DIN ISO 15693, DIN ISO 15693 (High Memory)
Connection	2x M12x1-Female, 4-pole, D-coded M12x1-Male, 4-pole
Housing material	Zinc, die-cast
Interface	Ethernet/IP, Ethernet/IP 2 port Switch
Operating voltage U_b	24 V DC LPS Class 2
Ambient temperature	0...70 °C
Protection degree	IP67
Approval/Conformity	CE

Appropriate data carrier

	BIS0043			BIS011F BIS011E BIS011A BIS0139			BIS0045	BIS0046		BIS0119	BIS00NU BIS00NW BIS0100	
Data carrier distance to metal	>50	>0	>0	>50	>0	>0	>50	>50		>0	>0	
Data carrier clear zone	>200	>200	>0	>200	>200	>0	>200	>200		>100	>100	
Working distance for writing	0-52	0-32	10-19	0-36	0-28	11-18	0-52	0-80		0-38	0-18	
Working distance for reading	0-52	0-32	10-19	0-36	0-28	11-18	0-52	0-80		0-38	0-18	
Offset at distance												
	0	±32	±25	±27	±22		±32	±42		0	±27	±22
	5	±32	±25	±27	±22		±32	±42		5	±27	±22
	10	±32	±25	±20	±27	±22	±32	±42		10	±27	±20
	11	±32	±22	±20	±25	±20	±18	±32	±42	15	±25	±18
	12	±32	±22	±20	±25	±20	±18	±32	±42	18	±25	±10
	16	±32	±22	±15	±25	±20	±15	±32	±42	20	±25	
	17	±32	±22	±15	±25	±20	±2	±32	±42	25	±22	
	18	±32	±22	±8	±25	±20	±2	±32	±42	30	±22	
	19	±32	±22	±8	±25	±20		±32	±42	35	±10	
	20	±32	±22		±25	±20		±32	±42	38	±10	
	25	±28	±15		±22	±15		±28	±42	40		
	28	±28	±15		±22	±1		±28	±42	45		
	30	±28	±15		±22			±28	±42	50		
	32	±28	±10		±5			±28	±38	55		
	36	±28			±5			±28	±38	60		
	40	±28						±28	±38	65		
	50	±12						±12	±38	70		
	52	±6						±6	±38	75		
Dimensions in mm												



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

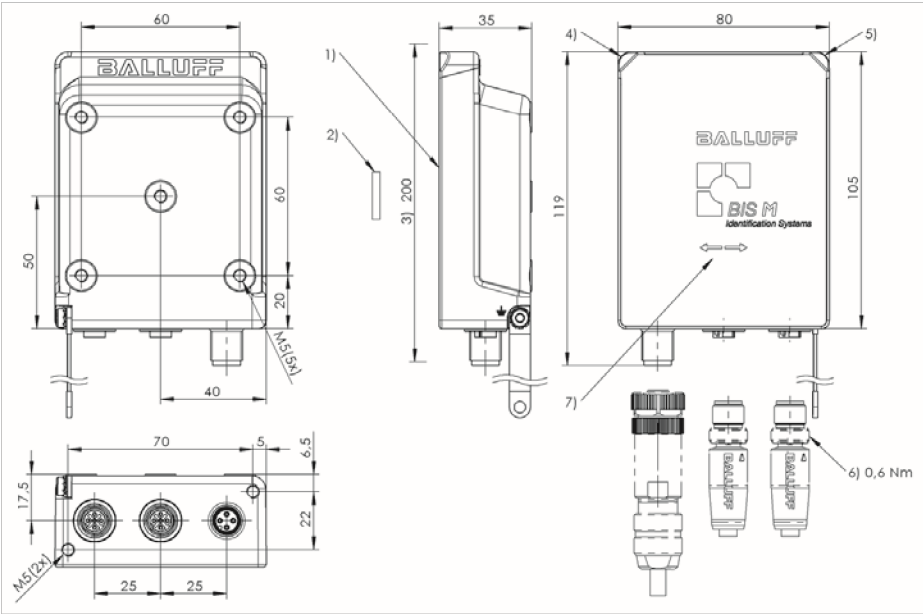
		BIS00YE	BIS00Y9	BIS00Y4	BIS00Y2
		>50	>50	>50	>50
		>200	>200	>200	>200
		0-60	0-55	0-45	0-90
		0-60	0-55	0-45	0-90
	0	±35	±32	±27	±50
	10	±35	±32	±27	±50
	20	±35	±32	±27	±50
	30	±30	±30	±25	±50
	40	±30	±30	±20	±45
	45	±20	±24	±5	±45
	50	±20	±24		±45
	55	±20	±10		±45
	60	±10			±45
	65				±30
	70				±30
	75				±30
	80				±30
	85				±20
	90				±20
	100				
	110				
	120				



	BIS018C BIS M-4006-034-002-ST4
Product Group	HF (13.56 MHz)
Dimension	80 x 35 x 119 mm
Installation	metal-free (clear zone) on metal flush in metal
Antenna type	Rod
Supported data carrier types	DIN ISO 15693, DIN ISO 15693 (High Memory)
Connection	2x M12x1-Female, 4-pole, D-coded M12x1-Male, 4-pole
Housing material	Zinc, die-cast
Interface	Ethernet/IP, Ethernet/IP 2 port Switch
Operating voltage U _b	24 V DC LPS Class 2
Ambient temperature	0...70 °C
Protection degree	IP67
Approval/Conformity	CE

Appropriate data carrier

	BIS004F				BIS004H					BIS00M2			BIS00P3				BIS011W BIS011Y BIS011U BIS013E		
Data carrier clear zone A	>200	>200	>200	>200	>200	>200	>200	>200		>200	>200		>240	>240	>240	>240	>240	>240	
Data carrier clear zone B	>200	>200	>200	>200	>200	>200	>200	>200		>200	>200		>480	>480	>480	>480	>480	>480	
Data carrier clear zone C										>50	>50		>50	>50	>0	>0	>50	>50	
Metallic mounting surface 40 × 22 mm	0-65	0-65			0-65	0-65													
Metallic mounting surface > 200 × 200 mm			0-60	0-60			0-45	0-45											
Working distance for writing	0-65	0-65	0-60	0-60	0-65	0-65	0-45	0-45		0-35	0-35		0-100	0-100	0-100	0-100	0-55	0-55	
Working distance for reading	0-65	0-65	0-60	0-60	0-65	0-65	0-45	0-45		0-35	0-35		0-100	0-100	0-100	0-100	0-55	0-55	
Offset at distance	X	Y	X	Y	X	Y	X	Y		X	Y		X	Y	X	Y	X	Y	
0	±70	±30	±65	±30	±30	±70	±25	±50	0	±44	±22	0	±100	±40	±100	±40	±65	±30	
5	±70	±30	±65	±30	±30	±70	±25	±50	5	±44	±22	5	±100	±40	±100	±40	±65	±30	
10	±70	±30	±65	±30	±30	±70	±25	±50	10	±44	±22	10	±100	±40	±100	±40	±65	±30	
15	±70	±30	±65	±30	±30	±70	±25	±50	15	±40	±20	20	±100	±40	±100	±40	±65	±30	
20	±70	±30	±65	±30	±30	±70	±25	±50	20	±40	±20	25	±100	±40	±100	±40	±60	±25	
25	±65	±25	±60	±25	±25	±65	±20	±40	25	±32	±18	30	±100	±40	±100	±40	±60	±25	
30	±65	±25	±60	±25	±25	±65	±20	±40	30	±32	±18	40	±100	±40	±100	±40	±60	±25	
35	±65	±25	±60	±25	±25	±65	±20	±40	35	±10	±3	50	±80	±35	±80	±35	±30	±20	
40	±65	±25	±60	±25	±25	±65	±15	±30	40			55	±80	±35	±80	±35	±20	±10	
45	±40	±20	±40	±20	±20	±40	±5	±5	45			60	±80	±35	±80	±35			
50	±40	±20	±40	±20	±20	±40			50			70	±80	±35	±80	±35			
55	±40	±20	±40	±20	±20	±40			55			75	±80	±35	±80	±35			
60	±40	±20	±20	±10	±20	±40			60			80	±80	±35	±80	±35			
65	±20	±10			±10	±20			80			95	±55	±25	±55	±25			
70									95			100	±30	±10	±30	±10			
75									100			110							
80									110			120							
Dimensions in mm																			



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

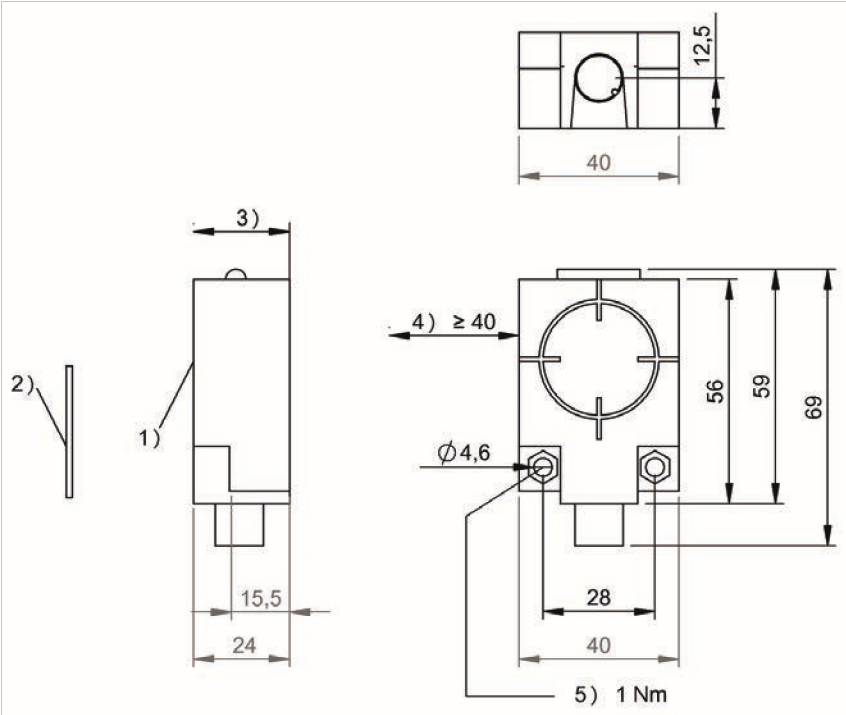
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>200	>200	>200	>200	>200	>200	>200	>200	>200	>200	>200	>200	>200	>200	>200	>200	>27	>27	>27	>27
>200	>200	>200	>200	>200	>200	>200	>200	>200	>200	>200	>200	>200	>200	>200	>200	>27	>27	>27	>27
0-42	0-42			0-42	0-42			0-68	0-68			0-68	0-68					0-30	0-30
		0-42	0-42			0-42	0-42			0-68	0-68			0-58	0-58			0-55	0-55
0-42	0-42	0-42	0-42	0-42	0-42	0-42	0-42	0-68	0-68	0-68	0-68	0-68	0-68	0-58	0-58			0-55	0-55
0-42	0-42	0-42	0-42	0-42	0-42	0-42	0-42	0-68	0-68	0-68	0-68	0-68	0-68	0-58	0-58			0-55	0-55
X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y
0	±45	±25	±45	±25	±25	±45	±45	±25	0	±75	±32	±75	±32	±75	±32	±60	±28	0	±65
5	±45	±25	±45	±25	±25	±45	±45	±25	5	±75	±32	±75	±32	±75	±32	±60	±28	5	±65
10	±45	±25	±45	±25	±25	±45	±45	±25	10	±75	±32	±75	±32	±75	±32	±60	±28	10	±65
15	±45	±25	±45	±25	±25	±45	±45	±25	15	±75	±32	±75	±32	±75	±32	±60	±28	15	±65
20	±45	±25	±45	±25	±25	±45	±45	±25	20	±75	±32	±75	±32	±75	±32	±60	±28	20	±65
25	±30	±18	±30	±18	±18	±30	±30	±18	25	±70	±28	±70	±28	±70	±28	±55	±25	25	±55
30	±30	±18	±30	±18	±18	±30	±30	±18	30	±70	±28	±70	±28	±70	±28	±55	±25	30	±55
35	±30	±18	±30	±18	±18	±30	±30	±18	35	±70	±28	±70	±28	±70	±28	±55	±25	35	±55
40	±20	±10	±20	±10	±10	±20	±20	±10	40	±70	±28	±70	±28	±70	±28	±55	±25	40	±55
42	±10	±5	±10	±5	±5	±10	±10	±5	45	±50	±25	±50	±25	±50	±25	±35	±18	45	±40
45									50	±50	±25	±50	±25	±50	±25	±35	±18	50	±40
50									55	±50	±25	±50	±25	±50	±25	±35	±18	55	±5
55									58	±50	±25	±50	±25	±50	±25	±15	±5	60	
60									65	±50	±25	±50	±25	±50	±25			65	
65									68	±20	±10	±20	±10	±20	±10			70	
70									75									75	
75									80										



	BIS00W4 BIS M-410-068-001-09-S72
Product Group	HF (13.56 MHz)
Dimension	40 x 24 x 56 mm
Installation	metal-free (clear zone)
Antenna type	round
Supported data carrier types	DIN ISO 14443, DIN ISO 15693
Connection	Connector, M12x1 connector, 5-pin
Housing material	PC, with PU potting
Interface	USB 2.0
Operating voltage Ub	5 V DC
Ambient temperature	-20...50 °C
Protection degree	IP67
Approval/Conformity	CE, UL-FILE E227256, Vol.X1, BIS

Appropriate data carrier

	BIS00YL		BIS00YK		BIS00YH		BIS00YF		BIS00YE		BIS00YC		BIS00YA	
Data carrier distance to metal	>10		>10		>10		>25		>25		>25		>25	
Data carrier clear zone	>60		>60		>60		>100		>100		>100		>100	
Working distance for writing	0-17		0-12		0-5		0-48		0-40		0-15		0-15	
Working distance for reading	0-17		0-12		0-5		0-48		0-40		0-15		0-15	
Offset at distance														
	0	±15	±12		±10		±30		±25		0	±15	±15	
	2	±15	±12		±10		±30		±25		5	±15	±15	
	4	±15	±12		±7.5		±30		±25		10	±12	±12	
	5	±15	±12		±5		±30		±25		15	±8	±8	
	10	±14	±10				±30		±25		20			
	12	±12	±5				±25		±20		25			
	15	±12					±25		±20		30			
	17	±7					±25		±20		32			
	20						±25		±20		36			
	25						±25		±20		40			
	30						±25		±20		45			
	35						±20		±12		50			
	40						±20		±12		55			
	45						±12				60			
	48						±12				65			
	75										68			
	80										75			
Dimensions in mm														



1) Sensing surface, 2) Data carrier, 3) Clear zone, 4) Clear zone surrounding, 5) Tightening torque

BIS00Y9		BIS00Y8		BIS00Y7				BIS00Y6		BIS00Y5		BIS00Y4		BIS00Y3		BIS00Y2				BIS0043	
>25		>50		>50				>50		>50		>50		>50		>50				>25	
>100		>150		>150				>150		>150		>150		>150		>150				>120	
0-32		0-32		0-36				0-60		0-68		0-70		23-46		23-46				0-40	
0-32		0-32		0-36				0-60		0-68		0-70		23-46		23-46				0-40	
±20		±22		±25				0 ±35		±40		±44								0 ±22	
±20		±22		±25				5 ±35		±40		±44								5 ±22	
±20		±22		±25				10 ±35		±40		±44								10 ±22	
±16		±20		±25				15 ±35		±40		±44								15 ±22	
±16		±20		±25				20 ±35		±40		±44								20 ±22	
±10		±12		±20				23 ±30		±32		±32		±24		±24				25 ±20	
±10		±12		±20				30 ±30		±32		±32		±24		±24				30 ±20	
±8		±8		±12				32 ±30		±32		±32		±18		±18				35 ±20	
				±12				35 ±30		±32		±32		±18		±18				40 ±10	
								40 ±30		±32		±32		±18		±18					
								46 ±24		±32		±32		±10		±10					
								50 ±24		±32		±32									
								55 ±16		±24		±25									
								60 ±16		±24		±25									
								65		±15		±15									
								68		±15		±15									
								70				±15									

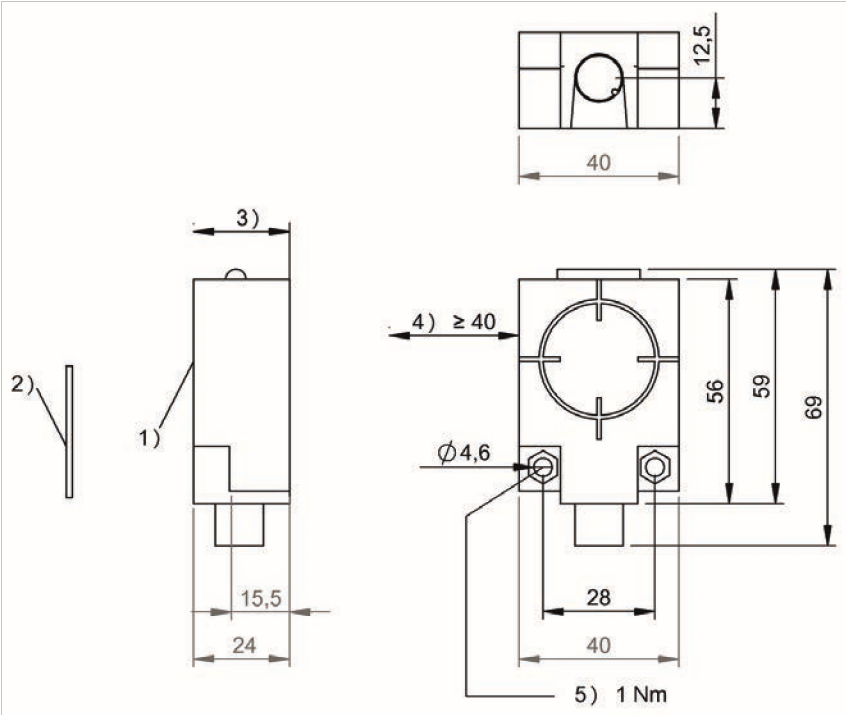


	BIS00W1 BIS M-410-067-001-04-S92
Product Group	HF (13.56 MHz)
Dimension	40 x 24 x 56 mm
Installation	metal-free (clear zone)
Antenna type	round
Supported data carrier types	DIN ISO 14443, DIN ISO 15693
Connection	Connector, M12x1 connector, 5-pin
Housing material	PC, with PU potting
Interface	Subnet 16 (RS485)
Operating voltage Ub	10...30 VDC
Ambient temperature	-20...50 °C
Protection degree	IP67
Approval/Conformity	CE, UL-FILE E227256, Vol.X1, BIS

* Use with **BIS Z-GW-001...** only

Appropriate data carrier

	BIS00YL	BIS00YK	BIS00YH	BIS00YF	BIS00YE		BIS00YC	BIS00YA	
Data carrier distance to metal	>10	>10	>10	>25	>25		>25	>25	
Data carrier clear zone	>60	>60	>60	>100	>100		>100	>100	
Working distance for writing	0-17	0-12	0-5	0-48	0-40		0-15	0-15	
Working distance for reading	0-17	0-12	0-5	0-48	0-40		0-15	0-15	
Offset at distance									
0	±15	±12	±10	±30	±25		0	±15	±15
2	±15	±12	±10	±30	±25		5	±15	±15
4	±15	±12	±7,5	±30	±25		10	±12	±12
5	±15	±12	±5	±30	±25		15	±8	±8
10	±14	±10		±30	±25		20		
12	±12	±5		±25	±20		25		
15	±12			±25	±20		30		
17	±7			±25	±20		32		
20				±25	±20		36		
25				±25	±20		40		
30				±25	±20		45		
35				±20	±12		50		
40				±20	±12		55		
45				±12			60		
48				±12			65		
75							68		
80							75		
Dimensions in mm									



1) Sensing surface, 2) Data carrier, 3) Clear zone, 4) Clear zone surrounding, 5) Tightening torque

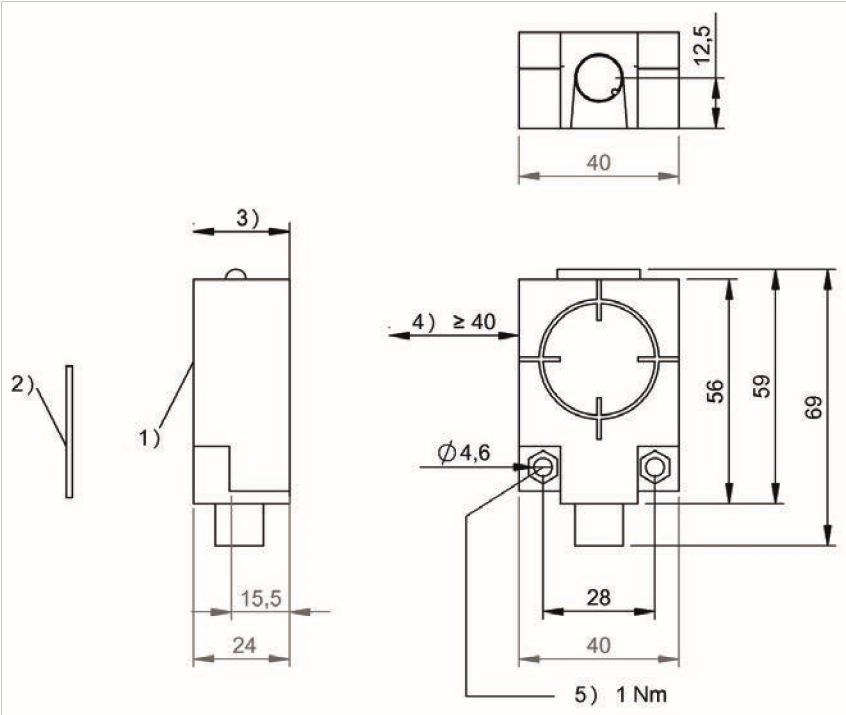
BIS00Y9	BIS00Y8	BIS00Y7	BIS00Y6	BIS00Y5	BIS00Y4	BIS00Y3	BIS00Y2	BIS0043
>25	>50	>50	>50	>50	>50	>50	>50	>25
>100	>150	>150	>150	>150	>150	>150	>150	>120
0-32	0-32	0-36	0-60	0-68	0-70	23-46	23-46	0-40
0-32	0-32	0-36	0-60	0-68	0-70	23-46	23-46	0-40
±20	±22	±25	0 ±35	±40	±44			0 ±22
±20	±22	±25	5 ±35	±40	±44			5 ±22
±20	±22	±25	10 ±35	±40	±44			10 ±22
±16	±20	±25	15 ±35	±40	±44			15 ±22
±16	±20	±25	20 ±35	±40	±44			20 ±22
±10	±12	±20	23 ±30	±32	±32	±24	±24	25 ±20
±10	±12	±20	30 ±30	±32	±32	±24	±24	30 ±20
±8	±8	±12	32 ±30	±32	±32	±18	±18	35 ±20
		±12	35 ±30	±32	±32	±18	±18	40 ±10
			40 ±30	±32	±32	±18	±18	
			46 ±24	±32	±32	±10	±10	
			50 ±24	±32	±32			
			55 ±16	±24	±25			
			60 ±16	±24	±25			
			65	±15	±15			
			68	±15	±15			
			70		±15			



	BIS00W3 BIS M-410-068-001-02-S115
Product Group	HF (13.56 MHz)
Dimension	40 x 24 x 56 mm
Installation	metal-free (clear zone)
Antenna type	round
Supported data carrier types	DIN ISO 14443, DIN ISO 15693
Connection	Connector, M12x1 connector, 8-pin
Housing material	PC, with PU potting
Interface	RS422
Operating voltage Ub	10...30 VDC
Ambient temperature	-20...50 °C
Protection degree	IP67
Approval/Conformity	CE, UL-FILE E227256, Vol.X1, BIS

Appropriate data carrier

	BIS00YL		BIS00YK		BIS00YH		BIS00YF		BIS00YE		BIS00YC		BIS00YA	
Data carrier distance to metal	>10		>10		>10		>25		>25		>25		>25	
Data carrier clear zone	>60		>60		>60		>100		>100		>100		>100	
Working distance for writing	0-17		0-12		0-5		0-48		0-40		0-15		0-15	
Working distance for reading	0-17		0-12		0-5		0-48		0-40		0-15		0-15	
Offset at distance														
	0	±15	±12		±10		±30		±25		0	±15	±15	
	2	±15	±12		±10		±30		±25		5	±15	±15	
	4	±15	±12		±7.5		±30		±25		10	±12	±12	
	5	±15	±12		±5		±30		±25		15	±8	±8	
	10	±14	±10				±30		±25		20			
	12	±12	±5				±25		±20		25			
	15	±12					±25		±20		30			
	17	±7					±25		±20		32			
	20						±25		±20		36			
	25						±25		±20		40			
	30						±25		±20		45			
	35						±20		±12		50			
	40						±20		±12		55			
	45						±12				60			
	48						±12				65			
	75										68			
	80										75			
Dimensions in mm														



1) Sensing surface, 2) Data carrier, 3) Clear zone, 4) Clear zone surrounding, 5) Tightening torque

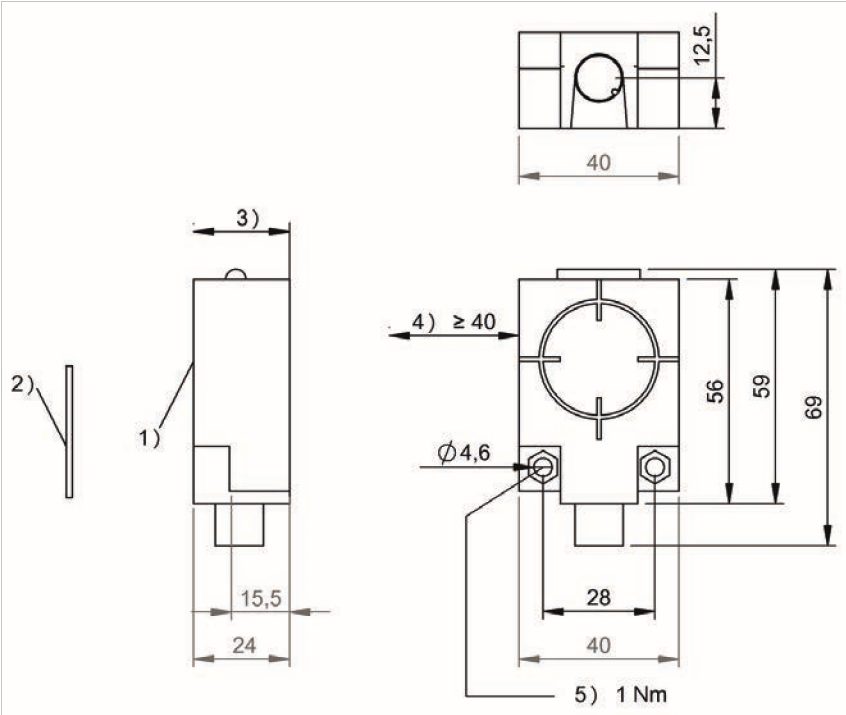
BIS00Y9	BIS00Y8	BIS00Y7	BIS00Y6	BIS00Y5	BIS00Y4	BIS00Y3	BIS00Y2	BIS0043
>25	>50	>50	>50	>50	>50	>50	>50	>25
>100	>150	>150	>150	>150	>150	>150	>150	>120
0-32	0-32	0-36	0-60	0-68	0-70	23-46	23-46	0-40
0-32	0-32	0-36	0-60	0-68	0-70	23-46	23-46	0-40
±20	±22	±25	0 ±35	±40	±44			0 ±22
±20	±22	±25	5 ±35	±40	±44			5 ±22
±20	±22	±25	10 ±35	±40	±44			10 ±22
±16	±20	±25	15 ±35	±40	±44			15 ±22
±16	±20	±25	20 ±35	±40	±44			20 ±22
±10	±12	±20	23 ±30	±32	±32	±24	±24	25 ±20
±10	±12	±20	30 ±30	±32	±32	±24	±24	30 ±20
±8	±8	±12	32 ±30	±32	±32	±18	±18	35 ±20
		±12	35 ±30	±32	±32	±18	±18	40 ±10
			40 ±30	±32	±32	±18	±18	
			46 ±24	±32	±32	±10	±10	
			50 ±24	±32	±32			
			55 ±16	±24	±25			
			60 ±16	±24	±25			
			65	±15	±15			
			68	±15	±15			
			70		±15			



	BIS00W2 BIS M-410-068-001-00-S115
Product Group	HF (13.56 MHz)
Dimension	40 x 24 x 56 mm
Installation	metal-free (clear zone)
Antenna type	round
Supported data carrier types	DIN ISO 14443, DIN ISO 15693
Connection	Connector, M12x1 connector, 8-pin
Housing material	PC, with PU potting
Interface	RS232
Operating voltage Ub	10...30 VDC
Ambient temperature	-20...50 °C
Protection degree	IP67
Approval/Conformity	CE, UL-FILE E227256, Vol.X1, BIS

Appropriate data carrier

	BIS00YL		BIS00YK		BIS00YH		BIS00YF		BIS00YE		BIS00YC		BIS00YA	
Data carrier distance to metal	>10		>10		>10		>25		>25		>25		>25	
Data carrier clear zone	>60		>60		>60		>100		>100		>100		>100	
Working distance for writing	0-17		0-12		0-5		0-48		0-40		0-15		0-15	
Working distance for reading	0-17		0-12		0-5		0-48		0-40		0-15		0-15	
Offset at distance														
	0	±15	±12		±10		±30		±25		0	±15	±15	
	2	±15	±12		±10		±30		±25		5	±15	±15	
	4	±15	±12		±7.5		±30		±25		10	±12	±12	
	5	±15	±12		±5		±30		±25		15	±8	±8	
	10	±14	±10				±30		±25		20			
	12	±12	±5				±25		±20		25			
	15	±12					±25		±20		30			
	17	±7					±25		±20		32			
	20						±25		±20		36			
	25						±25		±20		40			
	30						±25		±20		45			
	35						±20		±12		50			
	40						±20		±12		55			
	45						±12				60			
	48						±12				65			
	75										68			
	80										75			
Dimensions in mm														



1) Sensing surface, 2) Data carrier, 3) Clear zone, 4) Clear zone surrounding, 5) Tightening torque

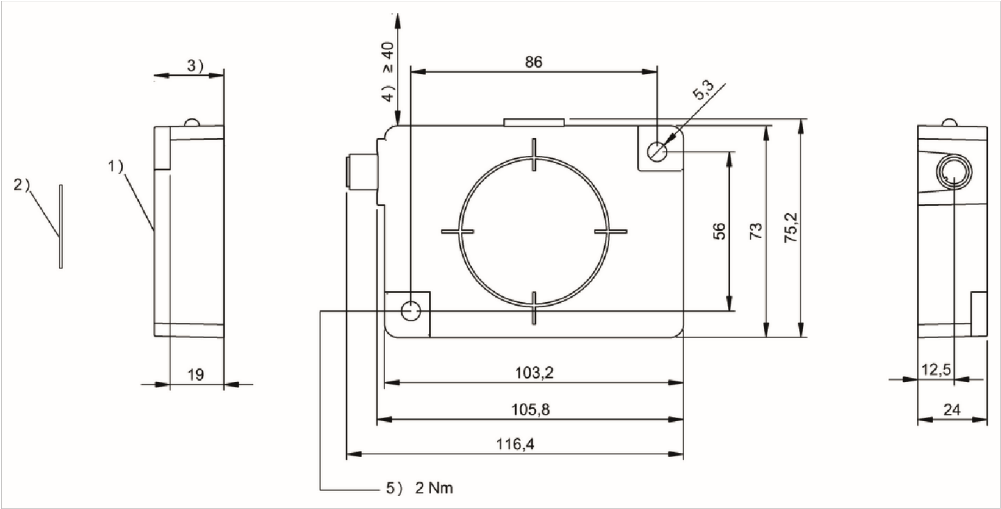
BIS00Y9	BIS00Y8	BIS00Y7	BIS00Y6	BIS00Y5	BIS00Y4	BIS00Y3	BIS00Y2	BIS0043
>25	>50	>50	>50	>50	>50	>50	>50	>25
>100	>150	>150	>150	>150	>150	>150	>150	>120
0-32	0-32	0-36	0-60	0-68	0-70	23-46	23-46	0-40
0-32	0-32	0-36	0-60	0-68	0-70	23-46	23-46	0-40
±20	±22	±25	0 ±35	±40	±44			0 ±22
±20	±22	±25	5 ±35	±40	±44			5 ±22
±20	±22	±25	10 ±35	±40	±44			10 ±22
±16	±20	±25	15 ±35	±40	±44			15 ±22
±16	±20	±25	20 ±35	±40	±44			20 ±22
±10	±12	±20	23 ±30	±32	±32	±24	±24	25 ±20
±10	±12	±20	30 ±30	±32	±32	±24	±24	30 ±20
±8	±8	±12	32 ±30	±32	±32	±18	±18	35 ±20
		±12	35 ±30	±32	±32	±18	±18	40 ±10
			40 ±30	±32	±32	±18	±18	
			46 ±24	±32	±32	±10	±10	
			50 ±24	±32	±32			
			55 ±16	±24	±25			
			60 ±16	±24	±25			
			65	±15	±15			
			68	±15	±15			
			70		±15			



	BIS00W8 BIS M-411-068-001-09-S72
Product Group	HF (13.56 MHz)
Dimension	75 x 24 x 105 mm
Installation	metal-free (clear zone)
Antenna type	round
Supported data carrier types	DIN ISO 14443, DIN ISO 15693
Connection	Connector, M12x1 connector, 5-pin
Housing material	PC, with PU potting
Interface	USB 2.0
Operating voltage U _b	5 V DC
Ambient temperature	-20...50 °C
Protection degree	IP67
Approval/Conformity	CE, UL-FILE E227256, Vol.X1, BIS

Appropriate data carrier

	BIS00YL		BIS00YK		BIS00YF		BIS00YE		BIS00YC		BIS00YA		BIS00Y9	
Data carrier distance to metal	>10		>10		>25		>25		>25		>25		>25	
Data carrier clear zone	>60		>60		>100		>100		>100		>100		>100	
Working distance for writing	0-20		0-13		0-80		0-70		0-26		0-22		38-52	
Working distance for reading	0-20		0-13		0-80		0-70		0-26		0-22		38-52	
Offset at distance														
	0	±22	±22		±50		±42		0	±20	±20			
	5	±22	±22		±50		±42		5	±20	±20			
	9	±19	±20		±50		±42		10	±20	±20			
	12	±19	±12		±50		±42		15	±20	±20			
	13	±19	±5		±50		±42		20	±15	±15			
	15	±19			±50		±42		22	±15	±10			
	20	±14			±50		±42		26	±15				
	22				±40		±39		30					
	26				±40		±39		38				±25	
	30				±40		±39		40				±25	
	35				±40		±39		45				±25	
	40				±40		±39		50				±25	
	45				±35		±36		52				±25	
	50				±35		±36		56					
	60				±35		±36		60					
	65				±30		±28		70					
	70				±30		±28		80					
	75				±30				90					
	80				±30				100					
	90								110					
Dimensions in mm														



1) Sensing surface, 2) Data carrier, 3) Clear zone, 4) Clear zone surrounding, 5) Tightening torque

BIS00Y8	BIS00Y7		BIS00Y6	BIS00Y5	BIS00Y4	BIS00Y3	BIS00Y2		BIS0044	BIS0045
>50	>50		>50	>50	>50	>50	>50		>25	>25
>150	>150		>150	>150	>150	>150	>150		>100	>100
0-56	0-60		0-100	0-110	0-125	11-95	11-75		0-45	0-67
0-56	0-60		0-100	0-110	0-125	11-95	11-75		0-45	0-67
±35	±32		0 ±50	±62	±65				0 ±30	±40
±35	±32		5 ±50	±62	±65				5 ±30	±40
±35	±32		11 ±50	±62	±65	±52	±50		10 ±30	±40
±35	±32		15 ±50	±62	±65	±52	±50		15 ±28	±40
±35	±32		20 ±50	±62	±65	±52	±50		20 ±28	±40
±30	±30		25 ±50	±62	±65	±52	±50		25 ±28	±38
±30	±30		30 ±50	±62	±65	±52	±50		30 ±28	±38
±30	±30		35 ±50	±58	±65	±48	±42		35 ±25	±38
±30	±30		40 ±50	±58	±65	±48	±42		40 ±25	±38
±30	±30		45 ±50	±58	±62	±48	±42		45 ±10	±35
±30	±25		50 ±50	±58	±62	±48	±42		50	±35
±25	±25		55 ±50	±58	±62	±48	±42		55	±35
±25	±20		60 ±50	±58	±62	±48	±35		60	±35
±25	±20		75 ±45	±52	±62	±44	±35		67	±10
	±20		85 ±45	±52	±58	±44			70	
			95 ±45	±52	±58	±40			75	
			100 ±45	±52	±58				80	
			110	±48	±58				85	
			120		±58				90	
			125		±50				95	

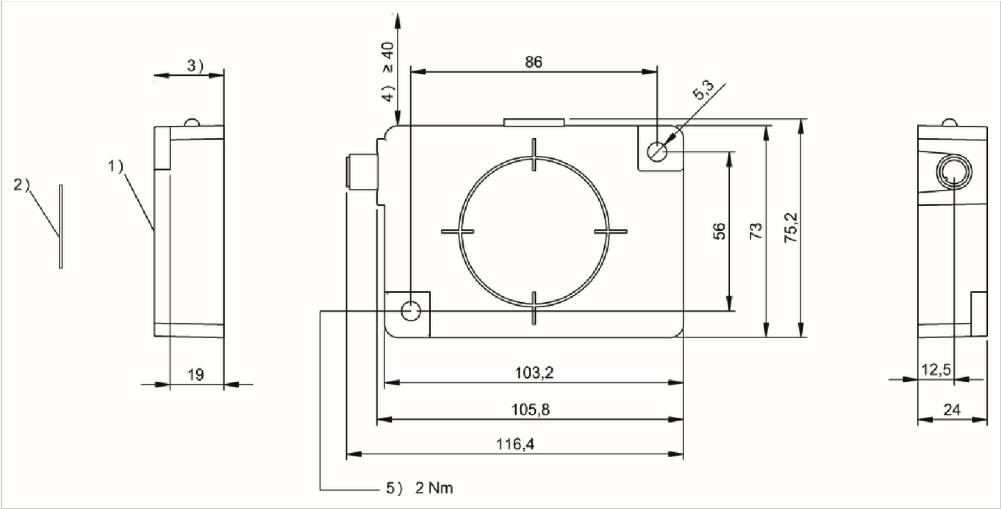


	BIS00W5 BIS M-411-067-001-04-S92
Product Group	HF (13.56 MHz)
Dimension	75 x 24 x 105 mm
Installation	metal-free (clear zone)
Antenna type	round
Supported data carrier types	DIN ISO 14443, DIN ISO 15693
Connection	Connector, M12x1 connector, 5-pin
Housing material	PC, with PU potting
Interface	Subnet 16 (RS485)
Operating voltage Ub	10...30 VDC
Ambient temperature	-20...50 °C
Protection degree	IP67
Approval/Conformity	CE, UL-FILE E227256, Vol.X1, BIS

* Use with **BIS Z-GW-001...** only

Appropriate data carrier

	BIS00YL		BIS00YK		BIS00YF		BIS00YE		BIS00YC		BIS00YA		BIS00Y9	
Data carrier distance to metal	>10		>10		>25		>25		>25		>25		>25	
Data carrier clear zone	>60		>60		>100		>100		>100		>100		>100	
Working distance for writing	0-20		0-13		0-80		0-70		0-26		0-22		38-52	
Working distance for reading	0-20		0-13		0-80		0-70		0-26		0-22		38-52	
Offset at distance														
	0	±22		±22		±50		±42		0	±20		±20	
	5	±22		±22		±50		±42		5	±20		±20	
	9	±19		±20		±50		±42		10	±20		±20	
	12	±19		±12		±50		±42		15	±20		±20	
	13	±19		±5		±50		±42		20	±15		±15	
	15	±19				±50		±42		22	±15		±10	
	20	±14				±50		±42		26	±15			
	22					±40		±39		30				
	26					±40		±39		38			±25	
	30					±40		±39		40			±25	
	35					±40		±39		45			±25	
	40					±40		±39		50			±25	
	45					±35		±36		52			±25	
	50					±35		±36		56				
	60					±35		±36		60				
	65					±30		±28		70				
	70					±30		±28		80				
	75					±30				90				
	80					±30				100				
	90									110				
Dimensions in mm														



1) Sensing surface, 2) Data carrier, 3) Clear zone, 4) Clear zone surrounding, 5) Tightening torque

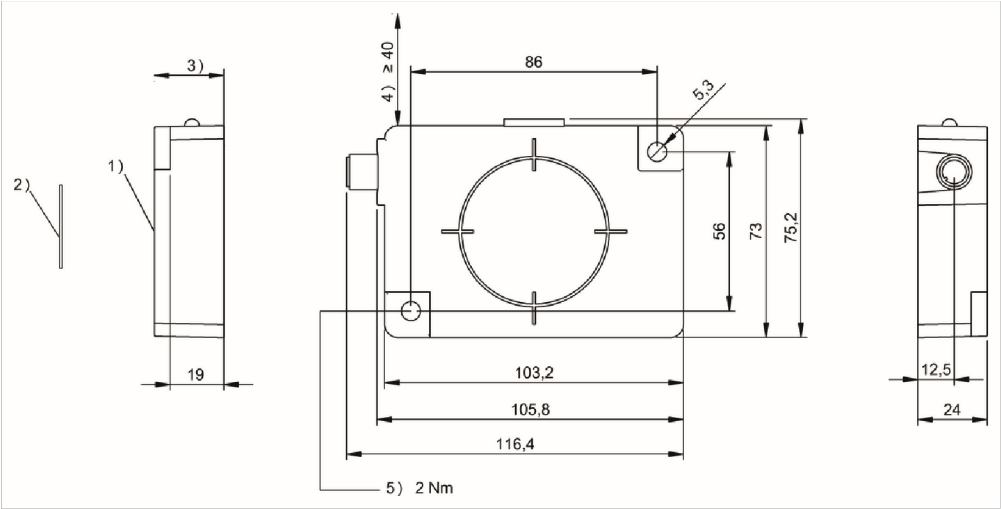
BIS00Y8		BIS00Y7		BIS00Y6		BIS00Y5		BIS00Y4		BIS00Y3		BIS00Y2		BIS0044		BIS0045	
>50	>50	>50	>50	>50	>50	>50	>50	>50	>50	>50	>50	>50	>50	>25	>25	>25	>25
>150	>150	>150	>150	>150	>150	>150	>150	>150	>150	>150	>150	>150	>150	>100	>100	>100	>100
0-56	0-60	0-60	0-100	0-110	0-125	11-95	11-75	11-75	11-75	11-75	11-75	11-75	11-75	0-45	0-67	0-67	0-67
0-56	0-60	0-60	0-100	0-110	0-125	11-95	11-75	11-75	11-75	11-75	11-75	11-75	11-75	0-45	0-67	0-67	0-67
±35	±32	0	±50	±62	±65									0	±30	±40	±40
±35	±32	5	±50	±62	±65									5	±30	±40	±40
±35	±32	11	±50	±62	±65	±52	±50							10	±30	±40	±40
±35	±32	15	±50	±62	±65	±52	±50							15	±28	±40	±40
±35	±32	20	±50	±62	±65	±52	±50							20	±28	±40	±40
±30	±30	25	±50	±62	±65	±52	±50							25	±28	±38	±38
±30	±30	30	±50	±62	±65	±52	±50							30	±28	±38	±38
±30	±30	35	±50	±58	±65	±48	±42							35	±25	±38	±38
±30	±30	40	±50	±58	±65	±48	±42							40	±25	±38	±38
±30	±30	45	±50	±58	±62	±48	±42							45	±10	±35	±35
±30	±25	50	±50	±58	±62	±48	±42							50		±35	±35
±25	±25	55	±50	±58	±62	±48	±42							55		±35	±35
±25	±20	60	±50	±58	±62	±48	±35							60		±35	±35
±25	±20	75	±45	±52	±62	±44	±35							67		±10	±10
	±20	85	±45	±52	±58	±44								70			
		95	±45	±52	±58	±40								75			
		100	±45	±52	±58									80			
		110		±48	±58									85			
		120			±58									90			
		125			±50									95			



	BIS00W7 BIS M-411-068-001-02-S115
Product Group	HF (13.56 MHz)
Dimension	75 x 24 x 105 mm
Installation	metal-free (clear zone)
Antenna type	round
Supported data carrier types	DIN ISO 14443, DIN ISO 15693
Connection	Connector, M12x1 connector, 8-pin
Housing material	PC, with PU potting
Interface	RS422
Operating voltage Ub	10...30 VDC
Ambient temperature	-20...50 °C
Protection degree	IP67
Approval/Conformity	CE, UL-FILE E227256, Vol.X1, BIS

Appropriate data carrier

	BIS00YL		BIS00YK		BIS00YF		BIS00YE		BIS00YC		BIS00YA		BIS00Y9	
Data carrier distance to metal	>10		>10		>25		>25		>25		>25		>25	
Data carrier clear zone	>60		>60		>100		>100		>100		>100		>100	
Working distance for writing	0-20		0-13		0-80		0-70		0-26		0-22		38-52	
Working distance for reading	0-20		0-13		0-80		0-70		0-26		0-22		38-52	
Offset at distance														
	0	±22		±22		±50		±42		0	±20		±20	
	5	±22		±22		±50		±42		5	±20		±20	
	9	±19		±20		±50		±42		10	±20		±20	
	12	±19		±12		±50		±42		15	±20		±20	
	13	±19		±5		±50		±42		20	±15		±15	
	15	±19				±50		±42		22	±15		±10	
	20	±14				±50		±42		26	±15			
	22					±40		±39		30				
	26					±40		±39		38			±25	
	30					±40		±39		40			±25	
	35					±40		±39		45			±25	
	40					±40		±39		50			±25	
	45					±35		±36		52			±25	
	50					±35		±36		56				
	60					±35		±36		60				
	65					±30		±28		70				
	70					±30		±28		80				
	75					±30				90				
	80					±30				100				
	90									110				
Dimensions in mm														



1) Sensing surface, 2) Data carrier, 3) Clear zone, 4) Clear zone surrounding, 5) Tightening torque

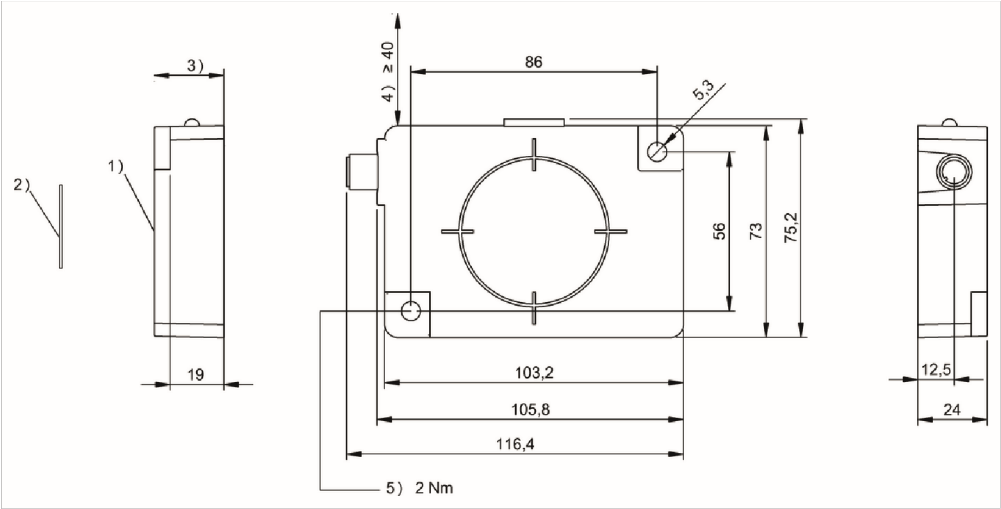
BIS00Y8	BIS00Y7		BIS00Y6	BIS00Y5	BIS00Y4	BIS00Y3	BIS00Y2		BIS0044	BIS0045
>50	>50		>50	>50	>50	>50	>50		>25	>25
>150	>150		>150	>150	>150	>150	>150		>100	>100
0-56	0-60		0-100	0-110	0-125	11-95	11-75		0-45	0-67
0-56	0-60		0-100	0-110	0-125	11-95	11-75		0-45	0-67
±35	±32		0 ±50	±62	±65				0 ±30	±40
±35	±32		5 ±50	±62	±65				5 ±30	±40
±35	±32		11 ±50	±62	±65	±52	±50		10 ±30	±40
±35	±32		15 ±50	±62	±65	±52	±50		15 ±28	±40
±35	±32		20 ±50	±62	±65	±52	±50		20 ±28	±40
±30	±30		25 ±50	±62	±65	±52	±50		25 ±28	±38
±30	±30		30 ±50	±62	±65	±52	±50		30 ±28	±38
±30	±30		35 ±50	±58	±65	±48	±42		35 ±25	±38
±30	±30		40 ±50	±58	±65	±48	±42		40 ±25	±38
±30	±30		45 ±50	±58	±62	±48	±42		45 ±10	±35
±30	±25		50 ±50	±58	±62	±48	±42		50	±35
±25	±25		55 ±50	±58	±62	±48	±42		55	±35
±25	±20		60 ±50	±58	±62	±48	±35		60	±35
±25	±20		75 ±45	±52	±62	±44	±35		67	±10
	±20		85 ±45	±52	±58	±44			70	
			95 ±45	±52	±58	±40			75	
			100 ±45	±52	±58				80	
			110	±48	±58				85	
			120		±58				90	
			125		±50				95	



	BIS00W6 BIS M-411-068-001-00-S115
Product Group	HF (13.56 MHz)
Dimension	75 x 24 x 105 mm
Installation	metal-free (clear zone)
Antenna type	round
Supported data carrier types	DIN ISO 14443, DIN ISO 15693
Connection	Connector, M12x1 connector, 8-pin
Housing material	PC, with PU potting
Interface	RS232
Operating voltage Ub	10...30 VDC
Ambient temperature	-20...50 °C
Protection degree	IP67
Approval/Conformity	CE, UL-FILE E227256, Vol.X1, BIS

Appropriate data carrier

	BIS00YL		BIS00YK		BIS00YF		BIS00YE		BIS00YC		BIS00YA		BIS00Y9	
Data carrier distance to metal	>10		>10		>25		>25		>25		>25		>25	
Data carrier clear zone	>60		>60		>100		>100		>100		>100		>100	
Working distance for writing	0-20		0-13		0-80		0-70		0-26		0-22		38-52	
Working distance for reading	0-20		0-13		0-80		0-70		0-26		0-22		38-52	
Offset at distance														
	0	±22	±22		±50		±42		0	±20	±20			
	5	±22	±22		±50		±42		5	±20	±20			
	9	±19	±20		±50		±42		10	±20	±20			
	12	±19	±12		±50		±42		15	±20	±20			
	13	±19	±5		±50		±42		20	±15	±15			
	15	±19			±50		±42		22	±15	±10			
	20	±14			±50		±42		26	±15				
	22				±40		±39		30					
	26				±40		±39		38				±25	
	30				±40		±39		40				±25	
	35				±40		±39		45				±25	
	40				±40		±39		50				±25	
	45				±35		±36		52				±25	
	50				±35		±36		56					
	60				±35		±36		60					
	65				±30		±28		70					
	70				±30		±28		80					
	75				±30				90					
	80				±30				100					
	90								110					
Dimensions in mm														



1) Sensing surface, 2) Data carrier, 3) Clear zone, 4) Clear zone surrounding, 5) Tightening torque

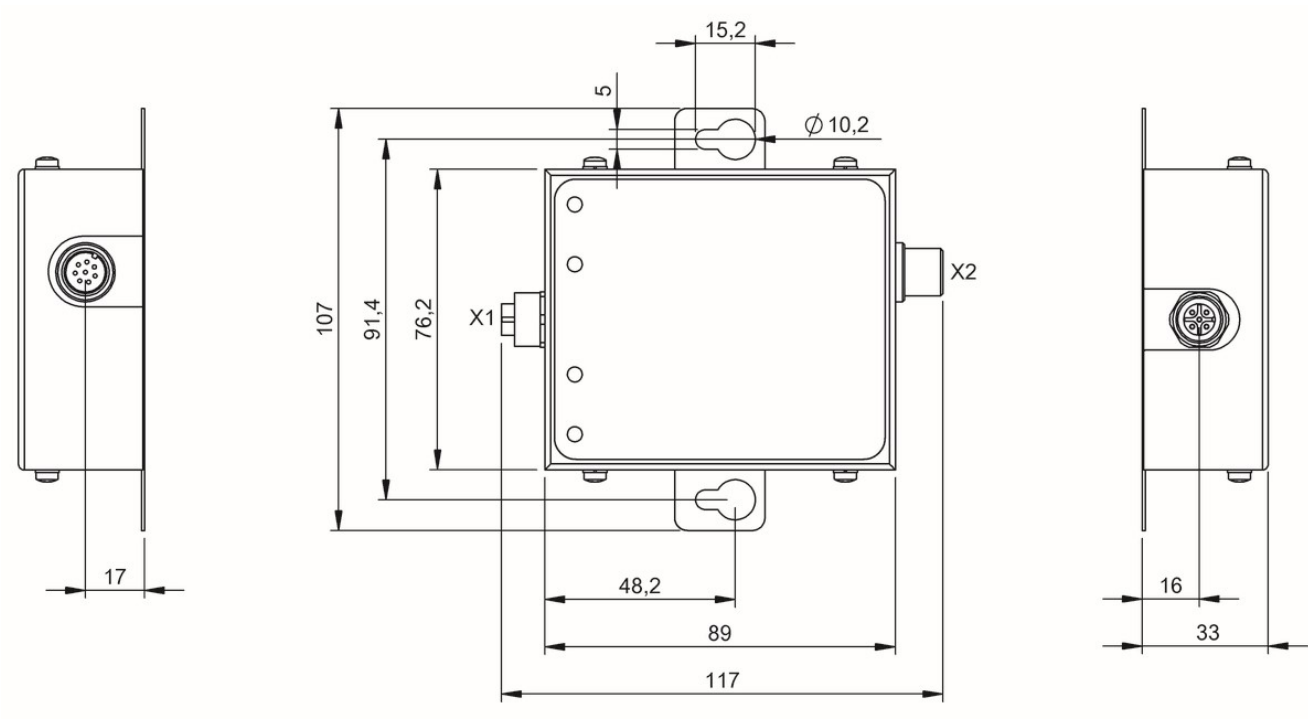
BIS00Y8	BIS00Y7		BIS00Y6	BIS00Y5	BIS00Y4	BIS00Y3	BIS00Y2		BIS0044	BIS0045
>50	>50		>50	>50	>50	>50	>50		>25	>25
>150	>150		>150	>150	>150	>150	>150		>100	>100
0-56	0-60		0-100	0-110	0-125	11-95	11-75		0-45	0-67
0-56	0-60		0-100	0-110	0-125	11-95	11-75		0-45	0-67
±35	±32		0 ±50	±62	±65				0 ±30	±40
±35	±32		5 ±50	±62	±65				5 ±30	±40
±35	±32		11 ±50	±62	±65	±52	±50		10 ±30	±40
±35	±32		15 ±50	±62	±65	±52	±50		15 ±28	±40
±35	±32		20 ±50	±62	±65	±52	±50		20 ±28	±40
±30	±30		25 ±50	±62	±65	±52	±50		25 ±28	±38
±30	±30		30 ±50	±62	±65	±52	±50		30 ±28	±38
±30	±30		35 ±50	±58	±65	±48	±42		35 ±25	±38
±30	±30		40 ±50	±58	±65	±48	±42		40 ±25	±38
±30	±30		45 ±50	±58	±62	±48	±42		45 ±10	±35
±30	±25		50 ±50	±58	±62	±48	±42		50	±35
±25	±25		55 ±50	±58	±62	±48	±42		55	±35
±25	±20		60 ±50	±58	±62	±48	±35		60	±35
±25	±20		75 ±45	±52	±62	±44	±35		67	±10
	±20		85 ±45	±52	±58	±44			70	
			95 ±45	±52	±58	±40			75	
			100 ±45	±52	±58				80	
			110	±48	±58				85	
			120		±58				90	
			125		±50				95	



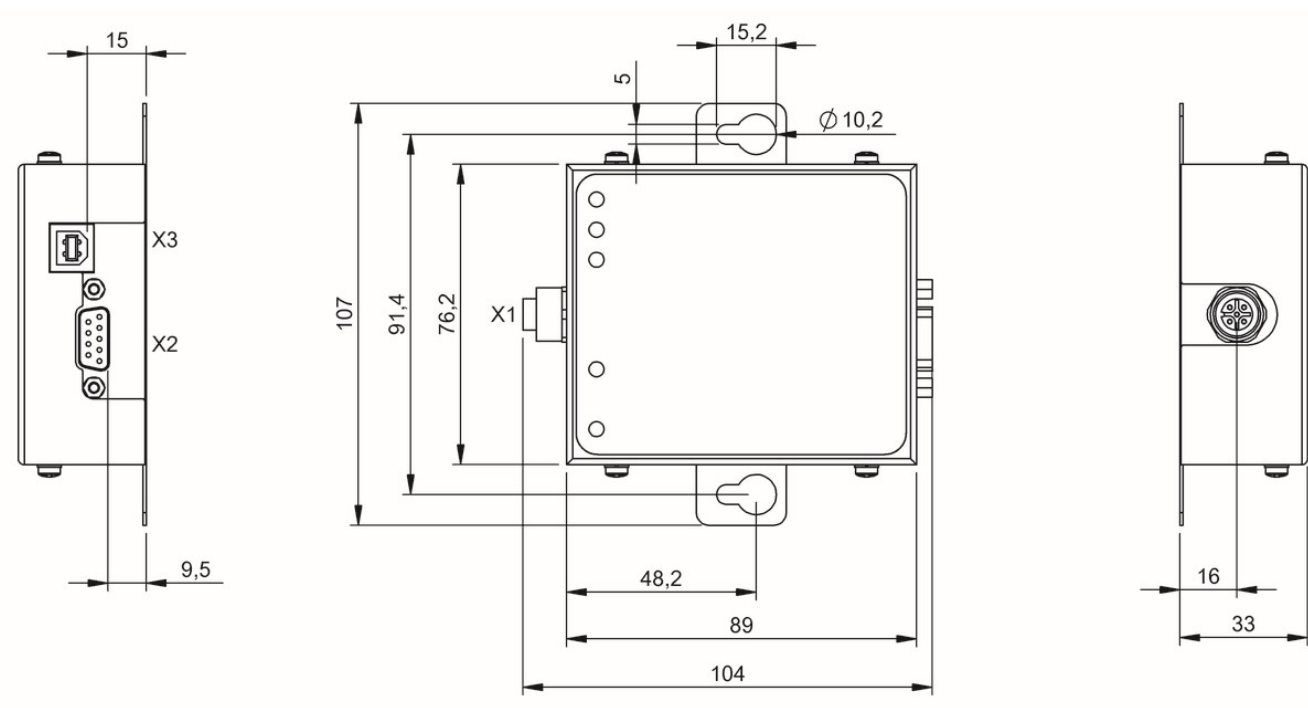
	BAE00.JL BIS Z-GW-001-RS232	
Dimension	107 x 33 x 117 mm	
Interface	RS232	
Auxiliary interfaces	Subnet 16 (RS485)	
Housing material	Aluminum, die-cast	
Ambient temperature	-20...50 °C	
Protection degree	IP30	
Approval/Conformity	CE, FCC Part 15	
Productview	Page 320	



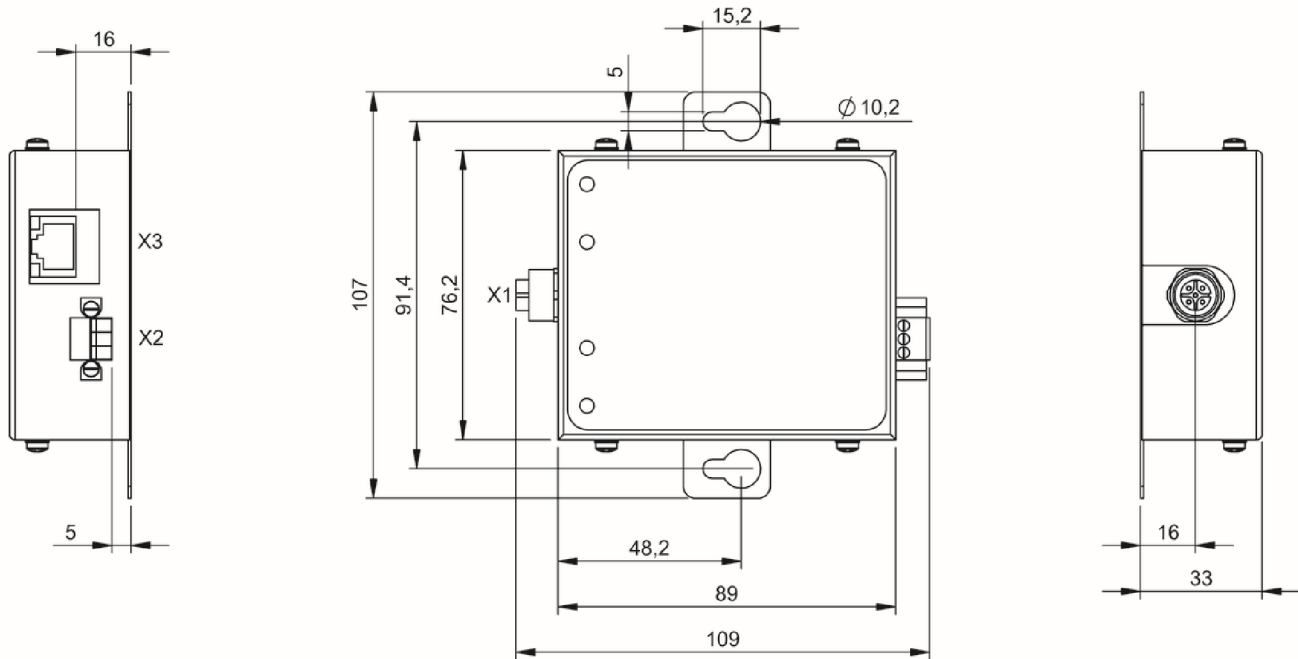
	BAE00JK BIS Z-GW-001-PBS	BAE00JJ BIS Z-GW-001-IND	BAE00JM BIS Z-GW-001-TCP
	107 x 33 x 104 mm	107 x 33 x 109 mm	107 x 33 x 109 mm
	Profibus DP Slave, USB 2.0 galvanically isolated	Industrial Ethernet / MODBUS TCP	Ethernet TCP/IP
	Subnet 16 (RS485)	Subnet 16 (RS485)	Subnet 16 (RS485)
	Aluminum, die-cast	Aluminum, die-cast	Aluminum, die-cast
	-20...50 °C	-20...50 °C	-20...50 °C
	IP30	IP30	IP30
	CE, FCC Part 15	CE, FCC Part 15	CE, FCC Part 15
	Page 320	Page 321	Page 321



BAE00JL



BAE00JK



BAE00JJ, BAE00JM



Standard, WLAN	BAE00M1 BIS M-870-1-008-X-001	
Standard, 1D code reader, WLAN	BAE00CC BIS M-870-1-008-X-004	
Standard, 2D code reader, WLAN	BAE00L3 BIS M-870-1-008-X-005	
Product Group	HF (13.56 MHz)	
Product name	WLAN	
Dimension	100 x 51 x 265 mm	
Antenna type	round	
Supported data carrier types	DIN ISO 14443, DIN ISO 15693	
Use	for data carriers $\varnothing \geq 20$ mm	
Display	TFT Touchscreen-display (color): 480x640 VGA resolution	
Keypad	52 keys, alphanumeric	
Operating voltage U_b	3.7 V DC rechargeable battery pack	
Storage temperature	-40...60 °C	
Ambient temperature	-10...50 °C	
Protection degree	IP65	
Approval/Conformity	CE	
Productview	Page 326	



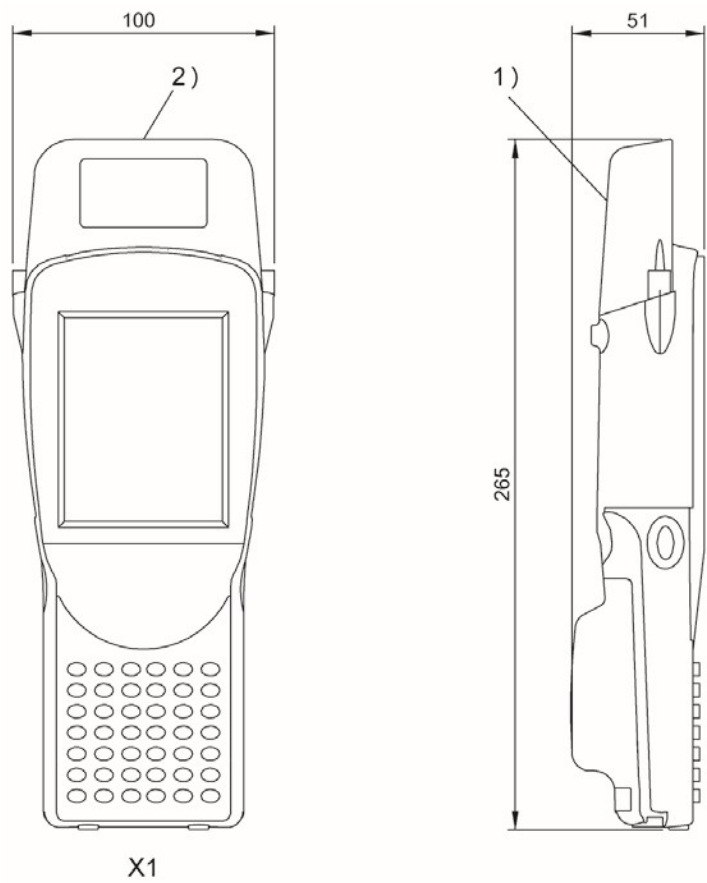
BAE00W4 BIS M-870-1-010-X-001	BAE00U1 BIS M-871-1-008-X-001	BAE00W5 BIS M-871-1-010-X-001
HF (13.56 MHz)	HF (13.56 MHz)	HF (13.56 MHz)
WLAN	WLAN	WLAN
100 x 51 x 265 mm	100 x 51 x 265 mm	100 x 51 x 265 mm
round	Rod	Rod
DIN ISO 15693, DIN ISO 15693 (High Memory)	DIN ISO 14443, DIN ISO 15693	DIN ISO 15693, DIN ISO 15693 (High Memory)
for data carriers $\varnothing \geq 20$ mm	—	—
TFT Touchscreen-display (color): 480x640 VGA resolution	TFT Touchscreen-display (color): 480x640 VGA resolution	TFT Touchscreen-display (color): 480x640 VGA resolution
55 keys, alphanumeric	52 keys, alphanumeric	55 keys, alphanumeric
3.7 V DC rechargeable battery pack	3.7 V DC rechargeable battery pack	3.7 V DC rechargeable battery pack
-40...60 °C	-40...60 °C	-40...60 °C
-10...50 °C	-10...50 °C	-10...50 °C
IP65	IP65	IP65
CE	CE	CE
Page 327	Page 328	Page 328



Standard, WLAN	BAE00F0 BIS M-873-1-008-X-001	
Standard, 1D code reader, WLAN	BAE00E9 BIS M-873-1-008-X-004	
Standard, 2D code reader, WLAN	BAE00KL BIS M-873-1-008-X-005	
Product Group	HF (13.56 MHz)	
Product name	WLAN	
Dimension	100 x 51 x 265 mm	
Antenna type	round	
Supported data carrier types	DIN ISO 14443, DIN ISO 15693	
Use	for data carriers Ø < 20 mm	
Display	TFT Touchscreen-display (color): 480x640 VGA resolution	
Keypad	52 keys, alphanumeric	
Operating voltage U _b	3.7 V DC rechargeable battery pack	
Storage temperature	-40...60 °C	
Ambient temperature	-10...50 °C	
Protection degree	IP65	
Approval/Conformity	CE	
Productview	Page 329	

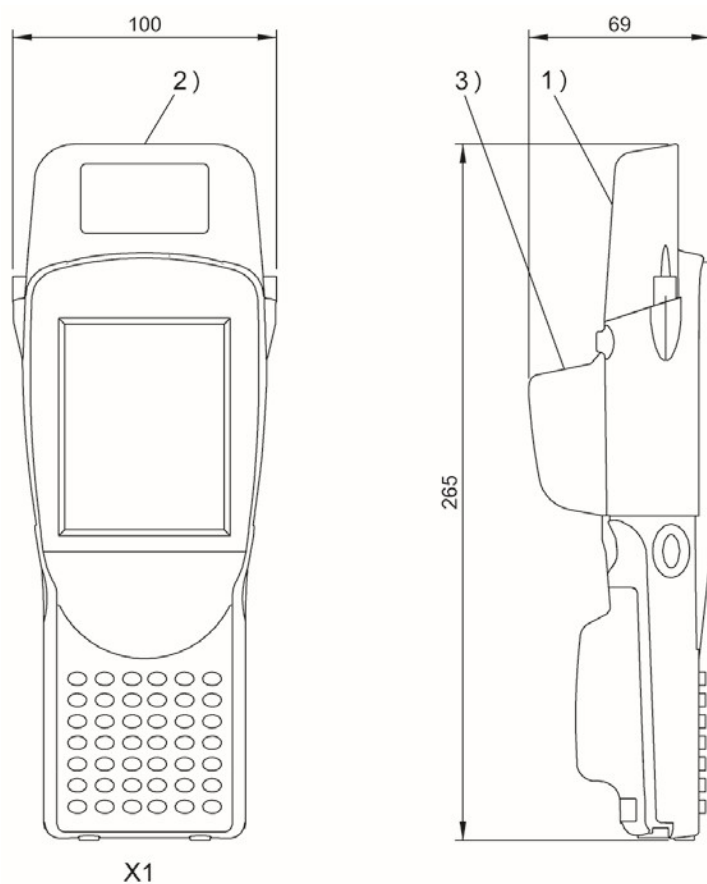


	BAE00W6 BIS M-873-1-010-X-001		
	HF (13.56 MHz)		
	WLAN		
	100 x 51 x 265 mm		
	round		
	DIN ISO 15693, DIN ISO 15693 (High Memory)		
	for data carriers Ø < 20 mm		
	TFT Touchscreen-display (color): 480x640 VGA resolution		
	55 keys, alphanumeric		
	3.7 V DC rechargeable battery pack		
	-40...60 °C		
	-10...50 °C		
	IP65		
	CE		
	Page 330		



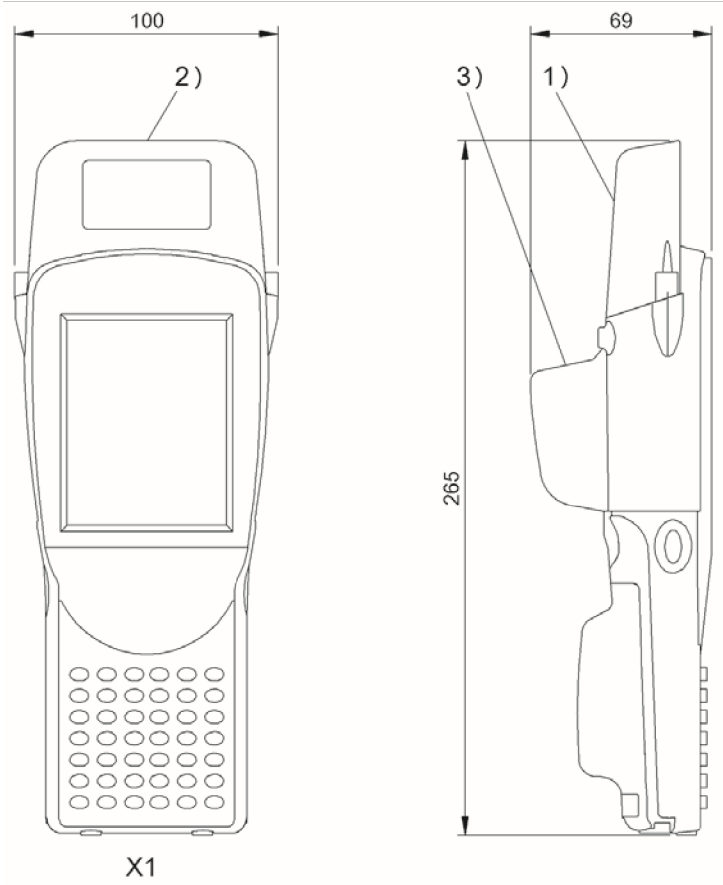
1) Sensing surface, 2) See data for antenna form

BAE00M1



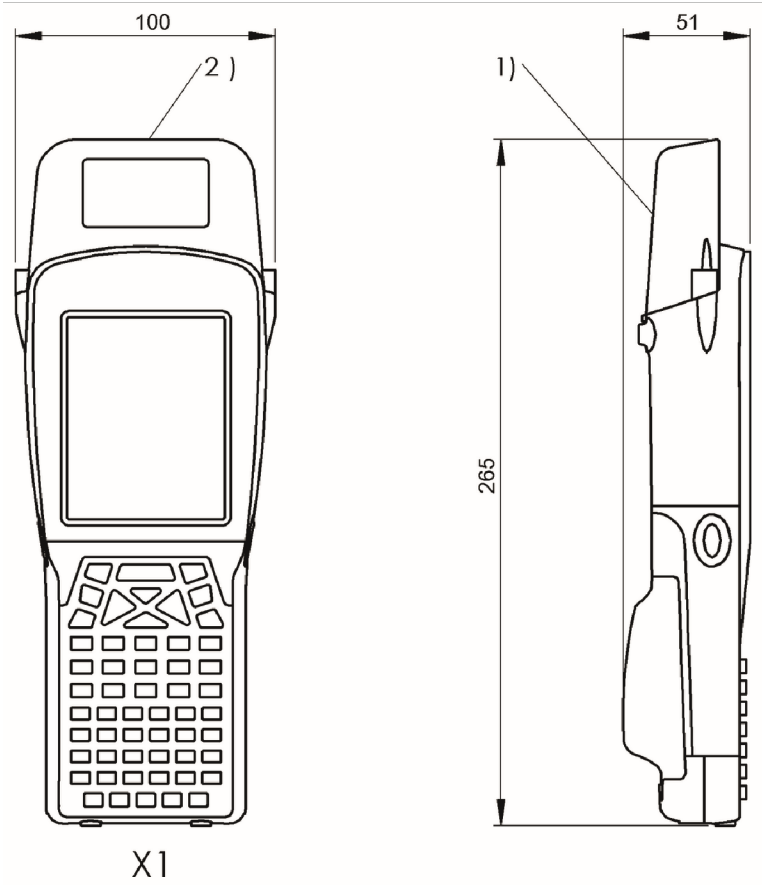
1) Sensing surface, 2) See data for antenna form, 3) Barcode 1D-Scanner

BAE00CC



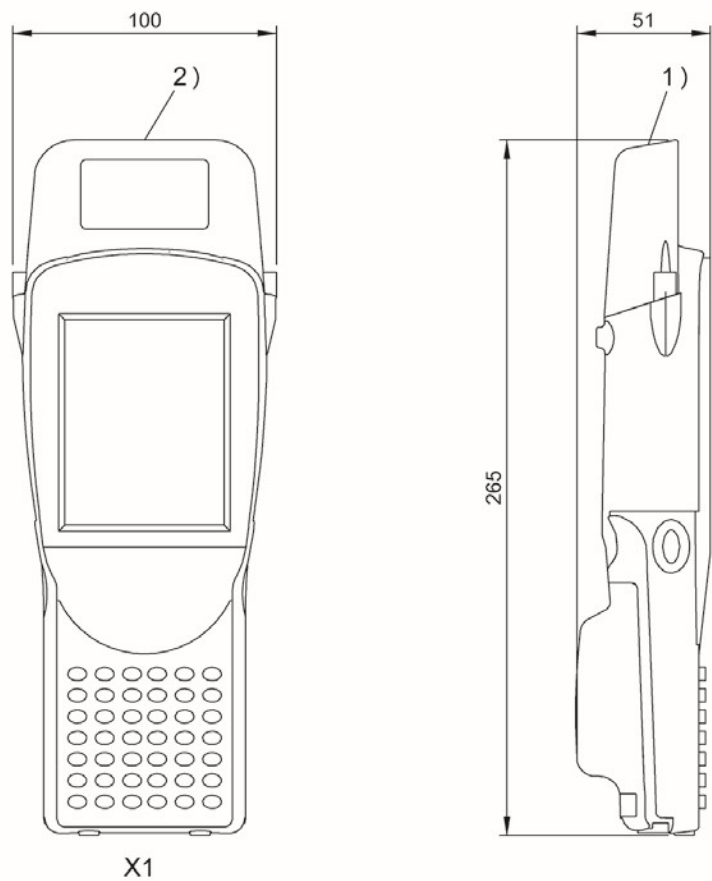
1) Sensing surface, 2) See data for antenna form, 3) Barcode 2D-Scanner

BAE00L3



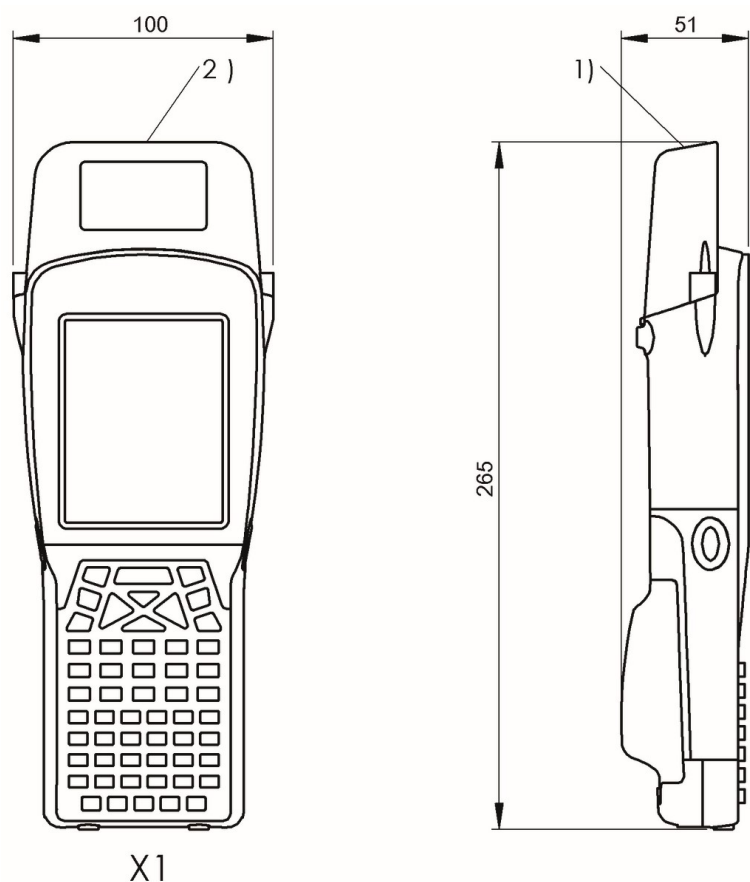
1) Sensing surface, 2) See data for antenna form

BAE00W4



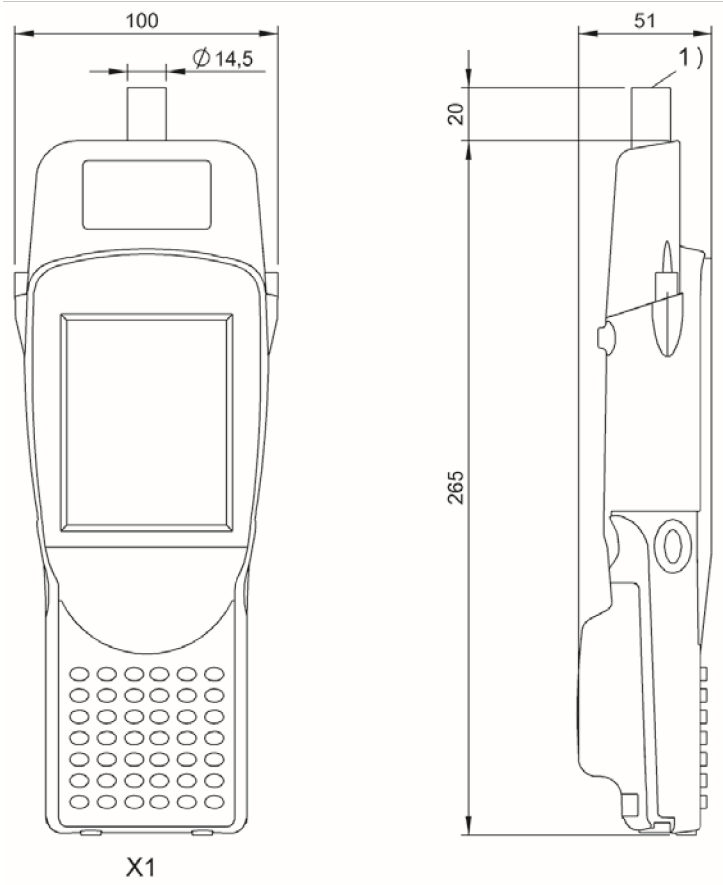
1) Sensing surface, 2) See data for antenna form

BAE00U1



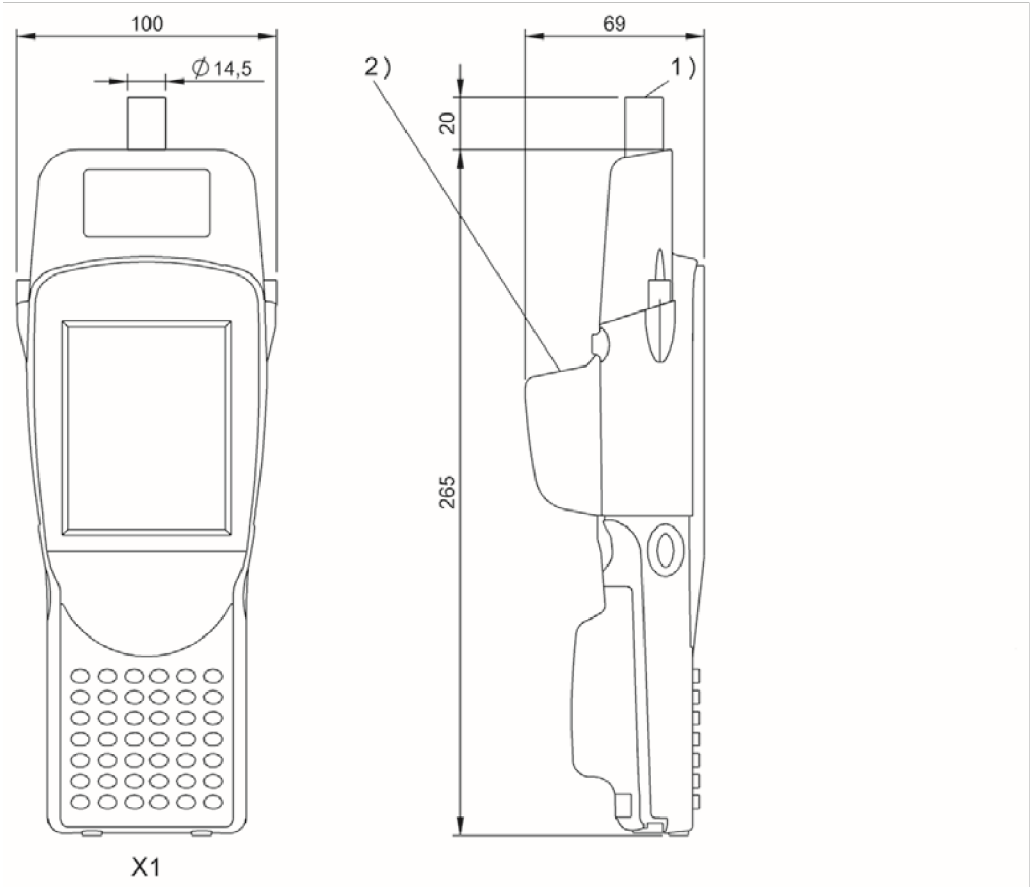
1) Sensing surface, 2) See data for antenna form

BAE00W5



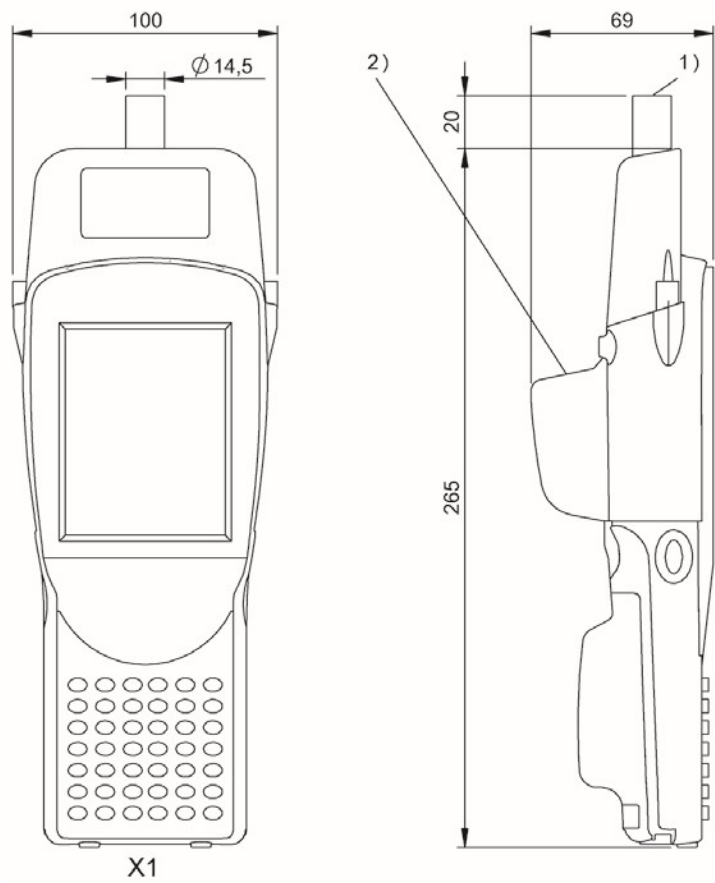
1) Sensing surface, 2) See data for antenna form

BAE00F0



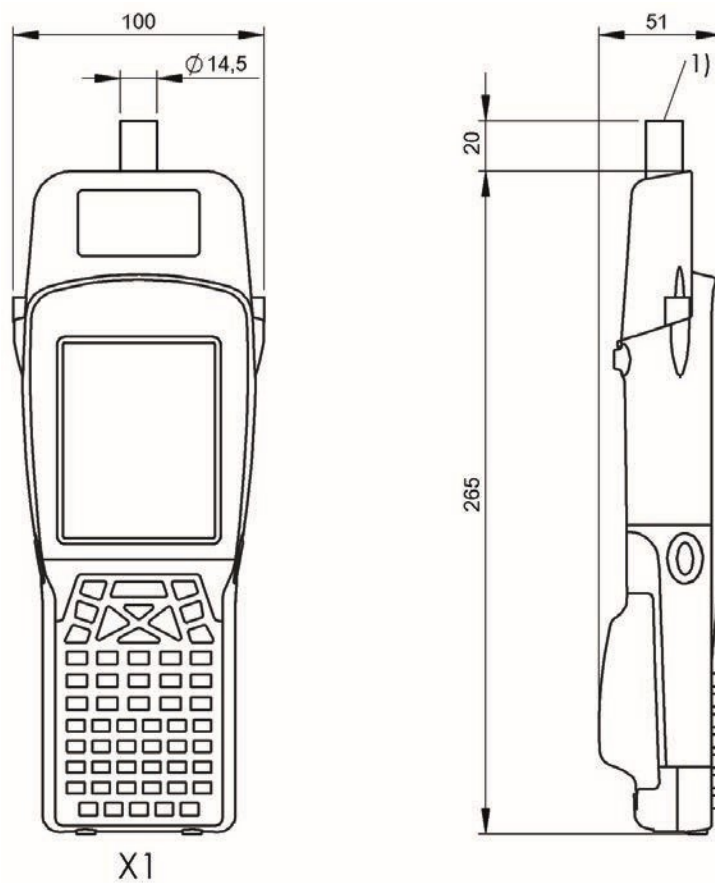
1) Sensing surface, 2) Barcode 1D-Scanner

BAE00E9



1) Sensing surface, 2) Barcode 2D-Scanner

BAE00KL



1) Sensing surface, 2) See data for antenna form

BAE00W6