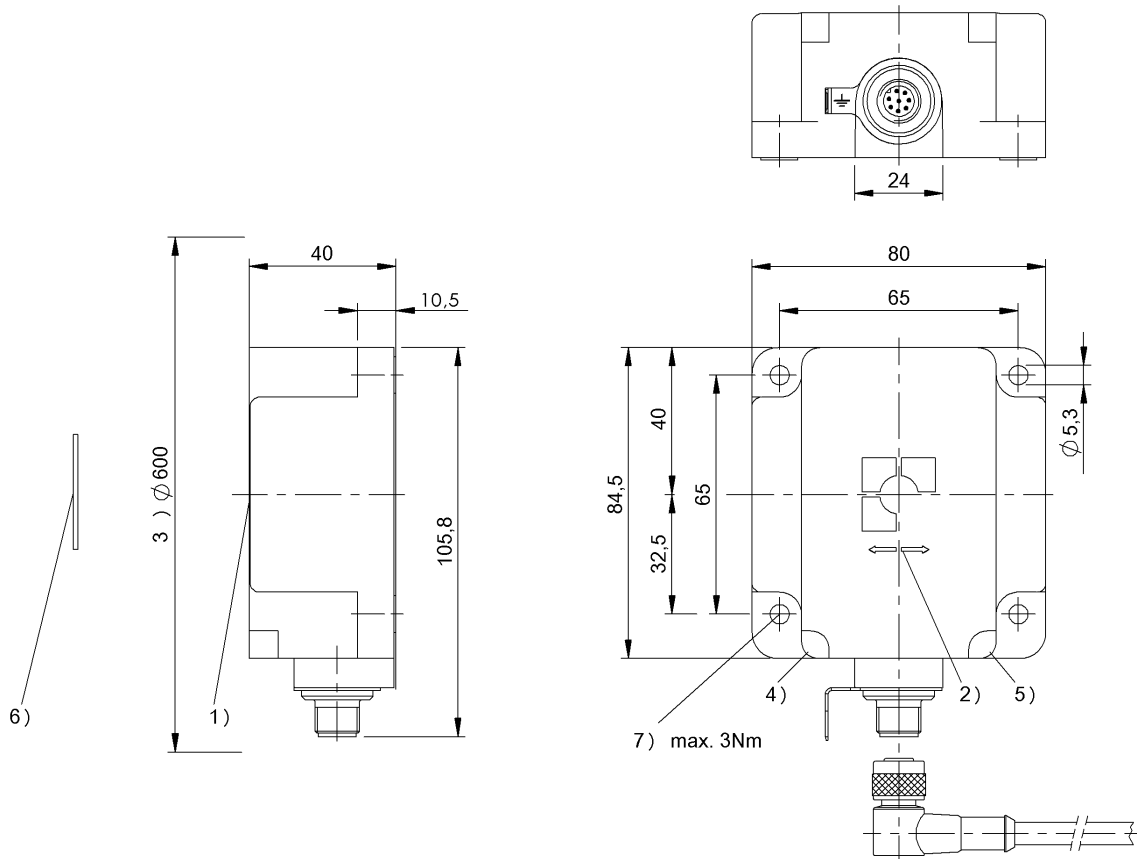


HF (13.56 MHz)
 BIS M-451-007-001-00-S115
 Order Code: BIS00ER

BALLUFF



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



Basic features

Antenna type	Rod
Approval/Conformity	CE FCC Part 15 IC RSS-210 cULus EAC WEEE
Principle of operation	Processor unit

Display/Operation

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

Connection	(RS232/TP OUT): M12x1-Male, 8-pin
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HF (13.56 MHz)
BIS M-451-007-001-00-S115
Order Code: **BIS00ER**

BALLUFF

Electrical data

Current consumption max. at 24 V DC	50 mA
EN 300330-1	Power Class 5
Operating voltage U_b	19.2...26.4 VDC
Output current max.	200 mA
Residual ripple max.	included

Environmental conditions

Ambient temperature	0...70 °C
Continuous shock load	yes
EN 60068-2-27, Shock	yes
EN 60068-2-32 Free fall	yes
EN 60068-2-6, Vibration	yes
IP rating	IP67
Storage temperature	-20...85 °C

Functional Characteristics

Supported data carrier types	DIN ISO 14443 DIN ISO 15693
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Material

Housing material	PBT
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Mechanical data

Application weight	380.00 g
Dimension	80 x 40 x 84.5 mm
Installation	metal-free (clear zone)

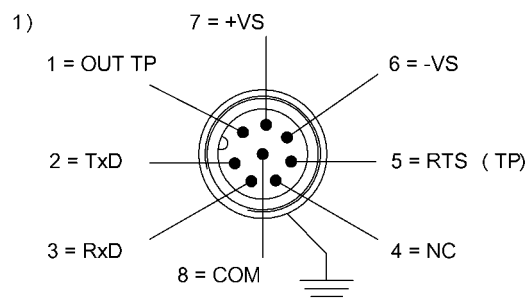
Output/Interface

Interface	RS232
Output TP	PNP

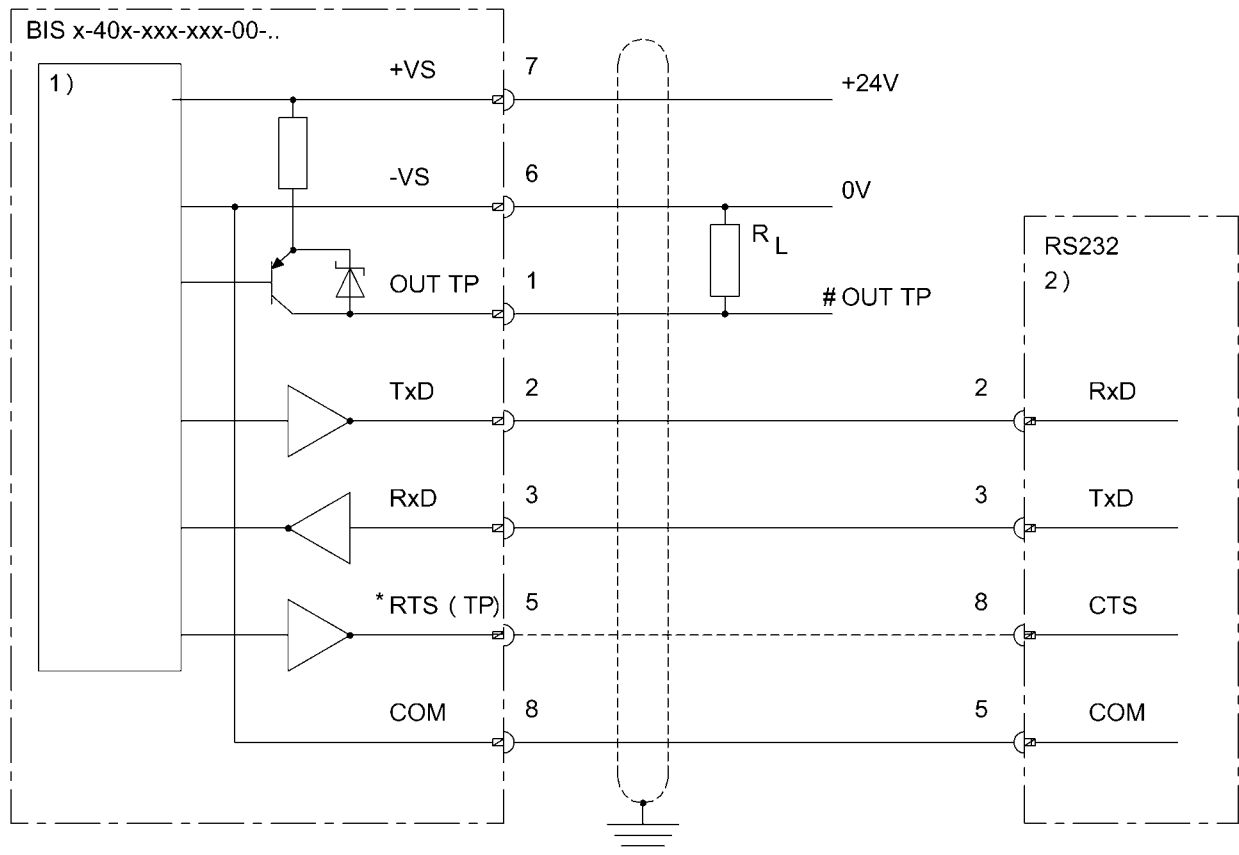
Remarks

Order code for female with 5m cable: BKS-S116-PU-05
For basic equipment order female with cable.
* Connection RTS (TP) enables TP display in program BISCOMRW.EXE.
OUT TP switches to +24V when there is a data carrier in the zone.
Only for data carriers acc. to ISO 15693.
Values are under rated conditions unless otherwise specified.
For installation in metal: Observe clear zone.

Connector Drawings



Wiring Diagrams

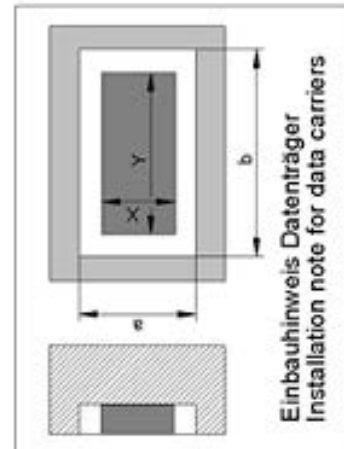


1) Internal circuit
2) 9-pin connection

Help Views

BIS M-451-

	BIS M-150-02/A	BIS M-151-02/A	BIS M-150-02/A	BIS M-151-02/A
passende Datenträger Appropriate data carriers				
Freizone Datenträger in mm (a) Data carrier clear zone in mm	>200 >200	>200 >200	>200 >200	>200 >200
Freizone Datenträger in mm (b) Data carrier clear zone in mm	>200 >200	>200 >200	>200 >200	>200 >200
Datenträger Metall-Montagefläche 40x22 Data carrier metal mounting surface 40x22	0-52 0-52	0-52 0-52		
Datenträger Metall-Montagefläche ≥ 200x200 Data carrier metal mounting surface ≥ 200x200			0-65 0-65	0-65 0-65
Schreibabstand in mm Write distance in mm	0-52 0-52	0-52 0-52	0-65 0-65	0-65 0-65
Leseabstand in mm Read distance in mm	0-52 0-52	0-52 0-52	0-65 0-65	0-65 0-65
Versatz in mm bei Abstand von	X Y	Y X	X Y	Y X
	0 ±60 ±25	±60 ±25	±65 ±26	±65 ±26
	5 ±60 ±25	±60 ±25	±65 ±26	±65 ±26
	12 ±60 ±25	±60 ±25	±65 ±25	±65 ±25
	15 ±60 ±25	±60 ±25	±65 ±25	±65 ±25
	18 ±60 ±25	±60 ±25	±65 ±25	±65 ±25
	20 ±60 ±25	±60 ±25	±65 ±25	±65 ±25
	22 ±60 ±25	±60 ±25	±65 ±25	±65 ±25
	25 ±60 ±25	±60 ±25	±65 ±25	±65 ±25
	30 ±60 ±25	±60 ±25	±65 ±25	±65 ±25
	32 ±50 ±25	±50 ±25	±65 ±25	±65 ±25
	35 ±50 ±25	±50 ±25	±65 ±25	±65 ±25
	40 ±50 ±20	±50 ±20	±50 ±25	±50 ±25
	45 ±25 ±20	±25 ±20	±50 ±25	±50 ±25
	50 ±25 ±20	±25 ±20	±50 ±25	±50 ±25
	52 ±25 ±8	±25 ±8	±25 ±25	±25 ±25
	60		±25 ±10	±25 ±10
	65		±25 ±10	±25 ±10



BIS M-451-__

	BIS M-152-03/A	BIS M-152-03/A	BIS M-153-02/A	BIS M-153-02/A
passende Datenträger Appropriate data carriers				
Freizone Datenträger in mm (a) Data carrier clear zone in mm	>200 >200	>10 >10	>240 >240	>240 >240
Freizone Datenträger in mm (b) Data carrier clear zone in mm	>200 >200	>50 >50	>480 >480	>480 >480
Freizone Datenträger in mm (c) Data carrier clear zone in mm	>50 >50	>2 >2	>50 >50	>50 >50
Schreibabstand in mm Write distance in mm	0-30 0-30	15-30 15-30	0-100 0-100	0-100 0-100
Lesabstand in mm Read distance in mm	0-30 0-30	15-30 15-30	0-100 0-100	0-100 0-100
Versatz in mm bei Abstand von	X Y	X Y	X Y	X Y
	0 ±35 ±20		±60 ±20	±60 ±20
	5 ±35 ±20		±60 ±20	±60 ±20
	10 ±35 ±20		±60 ±20	±60 ±20
	15 ±35 ±20	±35 ±15	±60 ±20	±60 ±20
	20 ±35 ±20	±35 ±15	±60 ±20	±60 ±20
	25 ±20 ±12	±28 ±15	±60 ±20	±60 ±20
	30 ±20 ±12	±28 ±15	±60 ±20	±60 ±20
	35		±60 ±20	±60 ±20
	40		±60 ±20	±60 ±20
	45		±60 ±20	±60 ±20
	50		±60 ±20	±60 ±20
	60		±60 ±20	±60 ±20
	70		±60 ±20	±60 ±20
	80		±60 ±20	±60 ±20
	90		±40 ±20	±40 ±20
	100		±40 ±20	±40 ±20

Offset in mm
at distance

