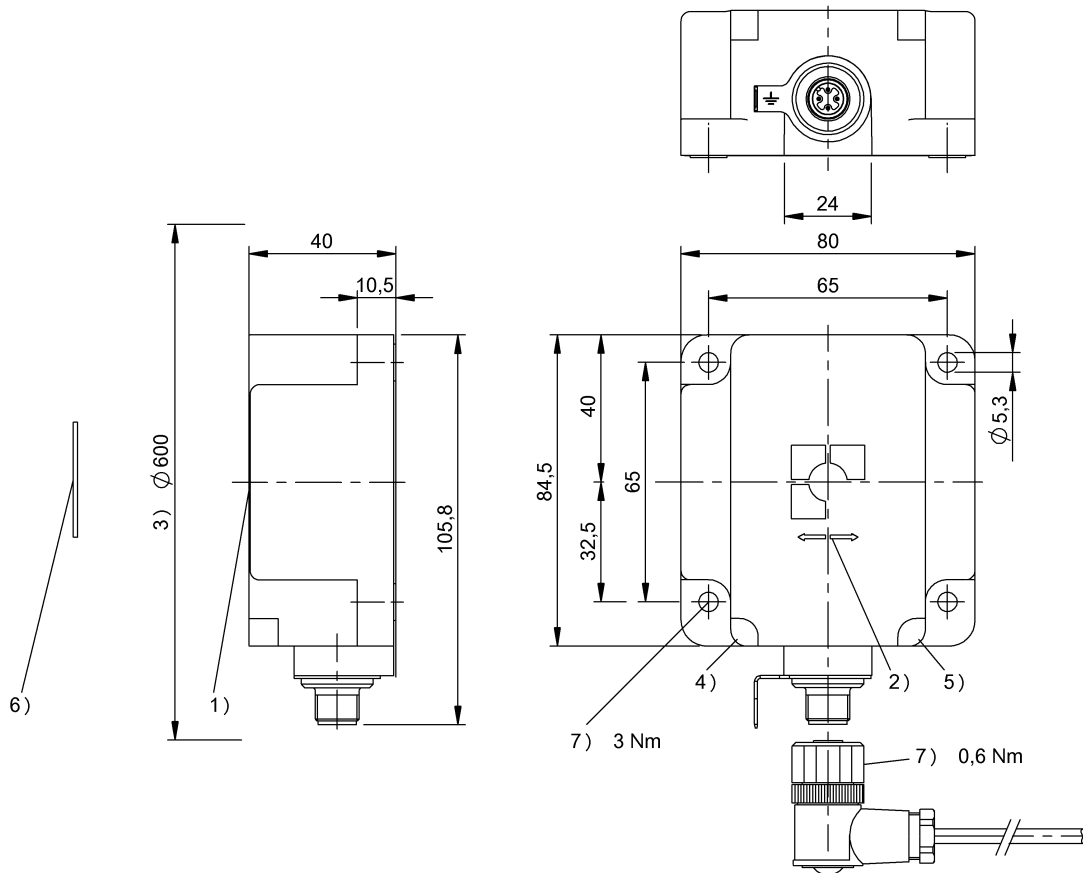




1) Sensing surface, 2) Read/write axis, 3) Clear zone, 4) LED (Power), 5) LED (CP), 6) Data carrier, 7) Tightening torque



Basic features

Antenna type	Rod
Approval/Conformity	CE cULus EAC WEEE
Principle of operation	Read/write head

Display/Operation

Function indicator	Operating, LED yellow flashing CP (Code tag present), LED yellow Power, LED green
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Electrical connection

Connection	Male, 4-pin
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Electrical data

EN 300330-1	Power Class 5
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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 15693 DIN ISO 15693 (High Memory)
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Material

Housing material	PBT
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HF (13.56 MHz)
BIS VM-351-401-S4
Order Code: BIS012Z

BALLUFF

Mechanical data

Application weight 360.00 g

Dimension

80 x 40 x 84.5 mm

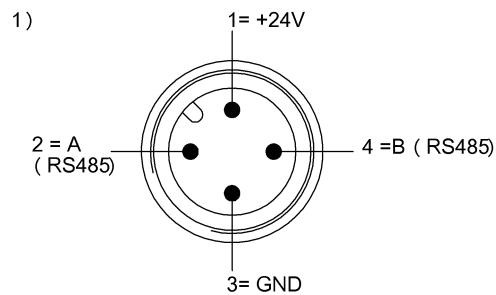
Installation

metal-free (clear zone)

Remarks

Only for data carriers acc. to ISO 15693.
For basic equipment: Accessories see www.balluff.com
Values are under rated conditions unless otherwise specified.
For installation in metal: Observe clear zone.
Only together with BIS V-6xxx

Connector Drawings



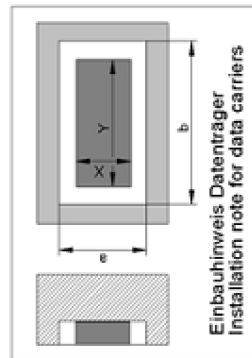
1) View towards connector

Help Views

BIS VM-351-401

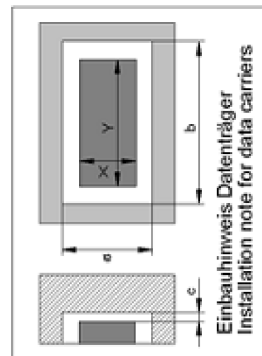
passende Datenträger Appropriate data carriers	BIS M-150-02/A	BIS M-151-02/A	BIS M-150-02/A	BIS M-151-02/A
Freizone Datenträger in mm (a)				
Data carrier clear zone in mm	>200 >200	>200 >200	>200 >200	>200 >200
Freizone Datenträger in mm (b)				
Data carrier clear zone in mm	>200 >200	>200 >200	>200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

Offset in mm
at distance



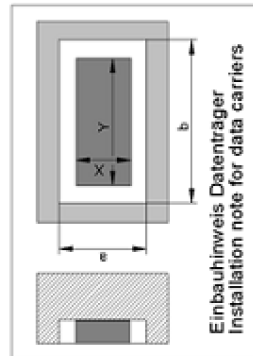
BIS VM-351-401

passende Datenträger Appropriate data carriers	BIS M-152-03/A	BIS M-153-02/A	BIS M-153-02/A	BIS M-153-1x/A	BIS M-157-17/A
Freizone Datenträger in mm (a) Data carrier clear zone in mm	>200 >200	>240 >240	>240 >240	>240 >240	>200 >200
Freizone Datenträger in mm (b) Data carrier clear zone in mm	>200 >200	>480 >480	>480 >480	>480 >480	>200 >200
Freizone Datenträger in mm (c) Data carrier clear zone in mm	>50 >50	>50 >50	>0 >0	>50 >50	>50 >50
Schreibabstand in mm Write distance in mm	0-36 0-36	0-100 0-100	0-110 0-110	0-60 0-60	0-25 0-25
Lesabstand in mm Read distance in mm	0-36 0-36	0-100 0-100	0-110 0-110	0-60 0-60	0-25 0-25
Versatz in mm bei Abstand von	X Y	X Y	X Y	X Y	X Y
0	±45 ±23	±110 ±50	±120 ±50	±70 ±30	±35 ±21
5	±45 ±23	±110 ±50	±120 ±50	±70 ±30	±35 ±21
10	±45 ±23	±110 ±50	±120 ±50	±70 ±30	±35 ±21
15	±45 ±23	±110 ±50	±120 ±50	±70 ±30	±33 ±19
20	±40 ±20	±110 ±50	±120 ±50	±70 ±30	±23 ±13
25	±40 ±20	±100 ±50	±100 ±50	±60 ±30	±7 ±5
30	±36 ±18	±100 ±50	±100 ±50	±60 ±30	
36	±20 ±10	±100 ±50	±100 ±50	±60 ±30	
40		±100 ±50	±100 ±50	±60 ±30	
45		±100 ±50	±100 ±50	±50 ±25	
50		±100 ±50	±100 ±50	±50 ±25	
60		±80 ±35	±80 ±35	±15 ±10	
70		±80 ±35	±80 ±35		
80		±80 ±35	±80 ±35		
90		±80 ±35	±80 ±35		
100		±35 ±15	±80 ±35		
110			±25 ±15		



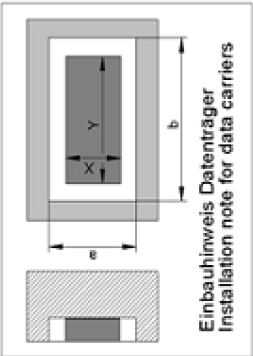
BIS VM-351-401

passende Datenträger Appropriate data carriers	BIS M-155-1x/A	BIS M-155-1x/A	BIS M-155-1x/A	BIS M-156-1x/A	BIS M-156-1x/A
Freizone Datenträger in mm (a) Data carrier clear zone in mm	>200 >200	>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	>200 >200
Datenträger Metall-Montagefläche 40x22 Data carrier metal mounting surface 40x22	0-40 0-40	0-40 0-40	0-42 0-42	0-42 0-42	0-42 0-42
Datenträger Metall-Montagefläche ≥ 200x200 Data carrier metal mounting surface ≥ 200x200	0-40 0-40	0-40 0-40	0-42 0-42	0-42 0-42	0-42 0-42
Schreibabstand in mm Write distance in mm	0-40 0-40	0-40 0-40	0-42 0-42	0-42 0-42	0-42 0-42
Lesabstand in mm Read distance in mm	0-40 0-40	0-40 0-40	0-42 0-42	0-42 0-42	0-42 0-42
Versatz in mm bei Abstand von Offset in mm at distance	X Y 0 ±50 ±24 5 ±50 ±24 12 ±50 ±24 15 ±50 ±24 18 ±50 ±24 20 ±50 ±24 22 ±40 ±22 25 ±40 ±22 30 ±40 ±22 32 ±40 ±22 35 ±40 ±22 40 ±20 ±10 42 50 52 60 65	X Y ±55 ±28 ±55 ±28 ±55 ±28 ±55 ±28 ±55 ±28 ±55 ±28 ±50 ±25 ±50 ±25 ±50 ±25 ±40 ±20 ±40 ±20 ±40 ±20 ±40 ±20 ±20 ±10 ±40 ±20 ±20 ±10	X Y ±50 ±25 ±50 ±25 ±50 ±25 ±45 ±25 ±45 ±22 ±45 ±22 ±45 ±22 ±36 ±19 ±36 ±19 ±36 ±19 ±18 ±10 ±18 ±10	X Y ±50 ±25 ±50 ±25 ±50 ±25 ±45 ±25 ±45 ±22 ±45 ±22 ±45 ±22 ±36 ±19 ±36 ±19 ±36 ±19 ±18 ±10 ±18 ±10	X ±50 ±25 ±50 ±25 ±50 ±25 ±45 ±25 ±45 ±22 ±45 ±22 ±45 ±22 ±36 ±19 ±36 ±19 ±36 ±19 ±18 ±10 ±18 ±10



BIS VM-351-401

passende Datenträger Appropriate data carriers	BIS M-155-20/A	BIS M-155-20/A	BIS M-156-20/A	BIS M-156-20/A	
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	0-75 0-75		0-70 0-70		
Data carrier metal mounting surface 40x22					
Datenträger Metall-Montagefläche ≥ 200x200		0-70 0-70		0-54 0-54	
Data carrier metal mounting surface ≥ 200x200					
Schreibabstand in mm	0-75 0-75	0-70 0-70	0-70 0-70	0-54 0-54	
Write distance in mm					
Lesebstand in mm	0-75 0-75	0-70 0-70	0-70 0-70	0-54 0-54	
Read distance in mm	X Y	X Y	Y X	Y X	
Versatz in mm bei Abstand von	0 ±85 ±35	±80 ±34	±80 ±34	±60 ±30	
Offset in mm at distance	5 ±85 ±35	±80 ±34	±80 ±34	±60 ±30	
	10 ±85 ±35	±80 ±34	±80 ±34	±60 ±30	
	15 ±85 ±35	±80 ±34	±80 ±34	±60 ±30	
	20 ±85 ±35	±80 ±34	±80 ±34	±60 ±30	
	25 ±85 ±35	±75 ±30	±75 ±30	±52 ±25	
	30 ±85 ±35	±75 ±30	±75 ±30	±52 ±25	
	35 ±75 ±30	±75 ±30	±75 ±30	±52 ±25	
	40 ±75 ±30	±75 ±30	±75 ±30	±52 ±25	
	45 ±75 ±30	±65 ±27	±65 ±27	±45 ±20	
	50 ±75 ±30	±65 ±27	±65 ±27	±45 ±20	
	54 ±60 ±25	±65 ±27	±65 ±27	±22 ±12	
	60 ±60 ±25	±65 ±27	±65 ±27		
	65 ±60 ±25	±40 ±20	±40 ±20		
	70 ±60 ±25	±40 ±20	±40 ±20		
	75 ±40 ±15				
	80				



BIS VM-351-401

	BIS M-191-02/A	BIS M-191-02/A			
passende Datenträger Appropriate data carriers					
Freizone Datenträger in mm (a) Data carrier clear zone in mm	>27	>27			
Freizone Datenträger in mm (b) Data carrier clear zone in mm	>27	>27			
Datenträger auf Metall-Montagefläche Data carrier on metal mounting surface					
Montage Metallfrei Mounting non-metal	0-57	0-57			
Schreibabstand in mm Write distance in mm	0-57	0-57			
Leseabstand in mm Read distance in mm	0-57	0-57			
Versatz in mm bei Abstand von Offset in mm at distance	0-57 X	0-57 Y	0-27 X	0-27 Y	
	0 ±70	±35	±40	±20	
	5 ±70	±35	±40	±20	
	10 ±70	±35	±40	±20	
	15 ±70	±35	±30	±18	
	20 ±70	±35	±30	±18	
	25 ±60	±30	±25	±15	
	27 ±60	±30	±15	±5	
	35 ±60	±30			
	40 ±60	±30			
	45 ±50	±25			
	50 ±50	±25			
	57 ±30	±15			
	60				
	65				
	70				
	75				

