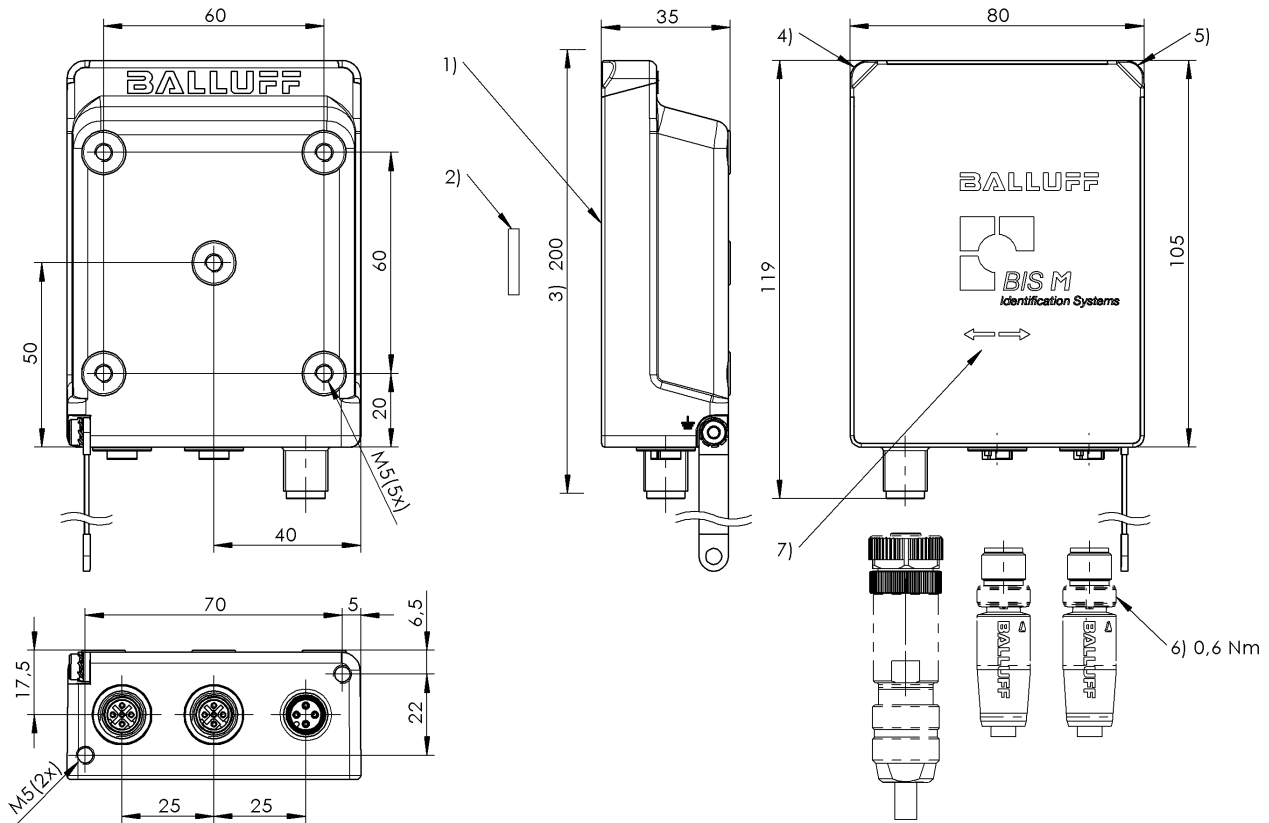


HF (13.56 MHz)  
 BIS M-4008-048-002-ST4  
 訂購代碼: BIS017A

**BALLUFF**



1) 感應面, 2) 數據載體, 3) 緩衝區, 4) LED (電源), 5) LED (CP), 6) 擰緊力矩, 7) 讀寫軸



### Basic features

功能原理	讀寫器
天線形狀	桿式
認證	CE UKCA WEEE

### Electrical data

24 V DC 時最大耗電量	150 mA
工作電壓 $U_b$	19.2 - 28.8 VDC LPS 2 級
額定電壓	24 VDC
餘波, 最大	10 %

### Display/Operation

功能顯示	電源, LED 綠色 CP (代碼存在), LED 黃色 連結端口 1, LED 綠色 系統故障狀態, LED 紅色 總線故障狀態, LED 紅色 活動性端口 2, LED 黃色 活動性, 端口 1, LED 黃色 連結端口 2, LED 綠色
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### Environmental conditions

Area of operation	Indoor
EN 60068-2-27, 衝擊	是
EN 60068-2-32, 自由落體	是
EN 60068-2-6, 振動	是
倉儲溫度	-20...85 °C
受污程度	2
最大高度位置	2000 m
環境溫度	0...70 °C
相對空氣濕度	0 - 90 %, 不凝結
防護等級	IP67, 含插接器

### Electrical connection

接口 (COM 1)	埠 1: M12x1-插口, 4-針, D-編碼
接口 (COM 2)	埠 2: M12x1-插口, 4-針, D-編碼
接口 (電壓供應 IN)	M12x1-插頭, 4-針, A-編碼

HF (13.56 MHz)  
**BIS M-4008-048-002-ST4**  
**訂購代碼: BIS017A**



**Functional Characteristics**

支援的數據載體類型	DIN ISO 15693 DIN ISO 15693 (High Memory)
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**Functional safety**

MTTF (40 °C)	68 a
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**Interface**

介面	Profinet I/O (IRT) ; Profinet I/O (IRT) 2 埠開關
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**Material**

外殼材質	鋅, 壓鑄
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**Mechanical data**

安裝	無金屬 (緩衝區) 在金屬上 鋼製齊平
尺寸	80 x 35 x 119 mm
應用重量	490.00 g

**Remarks**

只能用於符合標準 ISO 15693 的數據載體。

在首次裝備時：附件參見 [www.balluff.com](http://www.balluff.com)

在安裝時，應注意相應國家的技術標準和規定。

在額定條件下，數值不得另行規定。

This device is intended to be supplied by a UL-listed or CSA-certified power supply unit with "Class 2" or LPS power source.

The product is maintenance-free.

The device can be cleaned with a slightly damp cloth.

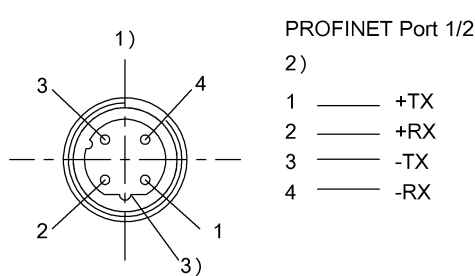
The devices must be installed permanently.

Check the function of the device and all associated components regularly by visual and functional testing. - In the event of malfunctions, take the device out of operation. - Secure the system against unauthorized use. - Check fastening and tighten if necessary. 1 Determine suitable mounting position. 2. Fasten the device with suitable mounting material.

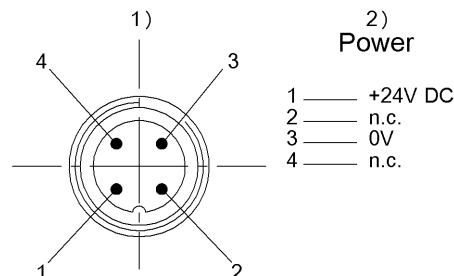
有關 MTTF 及 B10d 的更深入資訊，請參見 MTTF / B10d 認證

此處所提供的 MTTF / B10d 值並非本公司承諾必定達成的特性及 / 或使用壽命；這僅為經驗值，並不具備必須履行的約束力。這些數值並不會構成保固時效期限的延長或對其造成任何形式的影響。

**Connector Drawings**



- 1) 視圖沿插接方向
- 2) 插口, 4 針 / 功能
- 3) 編碼 D



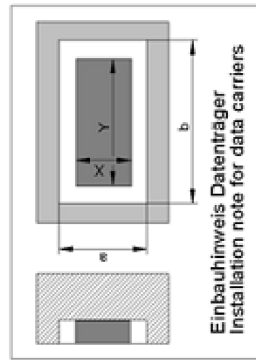
- 1) 視圖沿插接方向
- 2) 插頭, 4 針 / 功能

**Help Views**

**BIS M-4008-002**

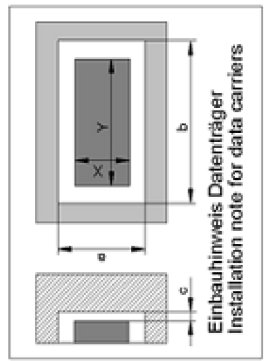
	BIS M-150-02/A	BIS M-151-02/A	BIS M-150-02/A	BIS M-151-02/A
passende Datenträger Appropriate data carriers				
Freizone Datenträger in mm ( a ) Data carrier clear zone in mm	>200 >200	>200 >200	>200 >200	>200 >200
Freizone Datenträger in mm ( b ) Data carrier clear zone in mm	>200 >200	>200 >200	>200 >200	>200 >200
Datenträger Metall-Montagefläche 40x22 Data carrier metal mounting surface 40x22	0-65 0-65	0-65 0-65	0-60 0-60	0-45 0-45
Datenträger Metall-Montagefläche ≥ 200x200 Data carrier metal mounting surface ≥ 200x200	0-65 0-65	0-65 0-65	0-60 0-60	0-45 0-45
Schreibabstand in mm Write distance in mm	0-65 0-65	0-65 0-65	0-60 0-60	0-45 0-45
Lesabstand in mm Read distance in mm	0-65 0-65	0-65 0-65	0-60 0-60	0-45 0-45
Versatz in mm bei Abstand von	X Y	Y X	X Y	Y X
	0 ±70 ±30	±70 ±30	±65 ±30	±50 ±25
	5 ±70 ±30	±70 ±30	±65 ±30	±50 ±25
	10 ±70 ±30	±70 ±30	±65 ±30	±50 ±25
	15 ±70 ±30	±70 ±30	±65 ±30	±50 ±25
	20 ±70 ±30	±70 ±30	±65 ±30	±50 ±25
	25 ±65 ±25	±65 ±25	±60 ±25	±40 ±20
	30 ±65 ±25	±65 ±25	±60 ±25	±40 ±20
	35 ±65 ±25	±65 ±25	±60 ±25	±40 ±20
	40 ±65 ±25	±65 ±25	±60 ±25	±30 ±15
	45 ±40 ±20	±40 ±20	±40 ±20	±5 ±5
	50 ±40 ±20	±40 ±20	±40 ±20	
	55 ±40 ±20	±40 ±20	±40 ±20	
	60 ±40 ±20	±40 ±20	±20 ±10	
	65 ±20 ±10	±20 ±10		
	70			
	75			
	80			

Offset in mm  
at distance



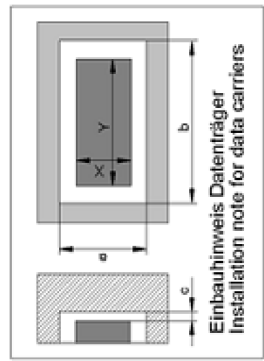
**BIS M-4008-002**

	BIS M-152-03/A								
passende Datenträger									
Appropriate data carriers									
Freizone Datenträger in mm ( a )	>200	>200							
Data carrier clear zone in mm									
Freizone Datenträger in mm ( b )	>200	>200							
Data carrier clear zone in mm									
Freizone Datenträger in mm ( c )	>50	>50							
Data carrier clear zone in mm									
Schreibabstand in mm	0-35	0-35							
Write distance in mm									
Leseabstand in mm	0-35	0-35							
Read distance in mm									
Versatz in mm	X	Y							
bei Abstand von	0	±44	±22						
	5	±44	±22						
	10	±44	±22						
	15	±40	±20						
	20	±40	±20						
	25	±32	±18						
	30	±32	±18						
	35	±10	±3						
	40								
	45								
	50								
	55								
	60								
	80								
	95								
	100								
	110								



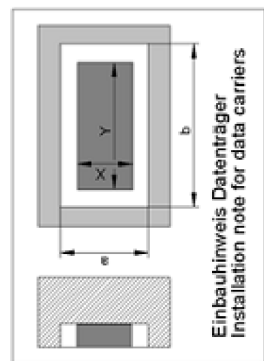
**BIS M-4008-002**

	BIS M-153-02/A	BIS M-153-02/A	BIS M-153-1x/A	BIS M-153-20/A	BIS M-153-20/A
passende Datenträger Appropriate data carriers					
Freizone Datenträger in mm ( a ) Data carrier clear zone in mm	>240 >240	>240 >240	>240 >240	>240 >240	>240 >240
Freizone Datenträger in mm ( b ) Data carrier clear zone in mm	>480 >480	>480 >480	>480 >480	>480 >480	>480 >480
Data carrier clear zone in mm ( c ) Data carrier clear zone in mm	>50 >50	>0 >0	>50 >50	>50 >50	>0 >0
Schreibabstand in mm Write distance in mm	0-100 0-100	0-100 0-100	0-55 0-55	5-75 5-75	5-75 5-75
Lesebestand in mm Read distance in mm	0-100 0-100	0-100 0-100	0-55 0-55	5-75 5-75	5-75 5-75
Versatz in mm bei Abstand von Offset in mm at distance	X Y 0 ±100 ±40 5 ±100 ±40 10 ±100 ±40 20 ±100 ±40 25 ±100 ±40 30 ±100 ±40 40 ±100 ±40 50 ±80 ±35 55 ±80 ±35 60 ±80 ±35 70 ±80 ±35 75 ±80 ±35 80 ±80 ±35 95 ±55 ±25 100 ±30 ±10 110 120	X Y ±100 ±40 ±100 ±40 ±100 ±40 ±100 ±40 ±100 ±40 ±100 ±40 ±100 ±40 ±80 ±35 ±80 ±35 ±80 ±35 ±80 ±35 ±80 ±35 ±55 ±25 ±30 ±10	X Y ±65 ±30 ±65 ±30 ±65 ±30 ±65 ±30 ±60 ±25 ±60 ±25 ±60 ±25 ±30 ±20 ±20 ±10	X Y ±80 ±35 ±80 ±35 ±80 ±35 ±80 ±35 ±70 ±30 ±70 ±30 ±70 ±30 ±40 ±25 ±40 ±25 ±40 ±25 ±15 ±10	X Y ±80 ±35 ±80 ±35 ±80 ±35 ±80 ±35 ±70 ±30 ±70 ±30 ±70 ±30 ±40 ±25 ±40 ±25 ±40 ±25 ±15 ±10



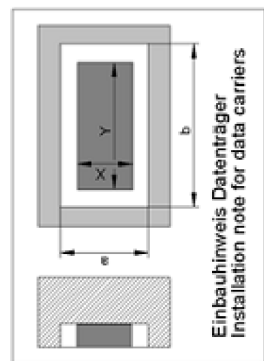
**BIS M-4008-002**

	BIS M-155-1x/A	BIS M-155-1x/A	BIS M-156-1x/A	BIS M-156-1x/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	0-42 0-42	0-42 0-42	0-42 0-42	0-42 0-42
Datenträger Metall-Montagefläche ≥ 200x200 Data carrier metal mounting surface ≥ 200x200	0-42 0-42	0-42 0-42	0-42 0-42	0-42 0-42
Schreibabstand in mm Write distance in mm	0-42 0-42	0-42 0-42	0-42 0-42	0-42 0-42
Lesebstand in mm Read distance in mm	0-42 0-42	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 ±45 ±25 ±45 ±25 ±45 ±25 ±45 ±25 ±45 ±25 ±30 ±18 ±30 ±18 ±30 ±18 ±20 ±10 ±20 ±10 ±10 ±5	X Y ±45 ±25 ±45 ±25 ±45 ±25 ±45 ±25 ±45 ±25 ±30 ±18 ±30 ±18 ±30 ±18 ±20 ±10 ±20 ±10 ±10 ±5	X Y ±45 ±25 ±45 ±25 ±45 ±25 ±45 ±25 ±45 ±25 ±30 ±18 ±30 ±18 ±30 ±18 ±20 ±10 ±20 ±10 ±10 ±5	X Y ±45 ±25 ±45 ±25 ±45 ±25 ±45 ±25 ±45 ±25 ±30 ±18 ±30 ±18 ±30 ±18 ±20 ±10 ±20 ±10 ±10 ±5
	0	5	10	15
	20	25	30	35
	40	42	45	
	50	55	60	65
	70	75		



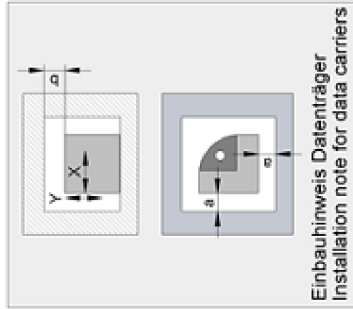
**BIS M-4008-002**

	BIS M-155-20/A	BIS M-155-20/A	BIS M-156-20/A	BIS M-156-20/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	0-68 0-68	0-68 0-68	0-68 0-68	0-68 0-68
Datenträger Metall-Montagefläche ≥ 200x200 Data carrier metal mounting surface ≥ 200x200	0-68 0-68	0-68 0-68	0-68 0-68	0-68 0-68
Schreibabstand in mm Write distance in mm	0-68 0-68	0-68 0-68	0-68 0-68	0-68 0-68
Leseabstand in mm Read distance in mm	0-68 0-68	0-68 0-68	0-68 0-68	0-68 0-68
Versatz in mm bei Abstand von Offset in mm at distance	X Y 0 ±75 ±32 5 ±75 ±32 10 ±75 ±32 15 ±75 ±32 20 ±75 ±32 25 ±70 ±28 30 ±70 ±28 35 ±70 ±28 40 ±70 ±28 45 ±50 ±25 50 ±50 ±25 55 ±50 ±25 58 ±50 ±25 65 ±50 ±25 68 ±20 ±10 75 80	X Y ±75 ±32 ±75 ±32 ±75 ±32 ±75 ±32 ±75 ±32 ±70 ±28 ±70 ±28 ±70 ±28 ±70 ±28 ±50 ±25 ±50 ±25 ±50 ±25 ±50 ±25 ±50 ±25 ±20 ±10	X Y ±75 ±32 ±75 ±32 ±75 ±32 ±75 ±32 ±75 ±32 ±70 ±28 ±70 ±28 ±70 ±28 ±70 ±28 ±50 ±25 ±50 ±25 ±50 ±25 ±50 ±25 ±50 ±25 ±20 ±10	X Y ±60 ±28 ±60 ±28 ±60 ±28 ±60 ±28 ±60 ±28 ±55 ±25 ±55 ±25 ±55 ±25 ±55 ±25 ±35 ±18 ±35 ±18 ±35 ±18 ±15 ±5



**BIS M-4008-002**

	BIS M-191-02/A	BIS M-191-02/A	BIS M-191-02/A	BIS M-191-02/A
passende Datenträger Appropriate data carriers				
Freizone Datenträger in mm ( <b>a</b> ) Data carrier clear zone in mm	>27	>27	>27	>27
Freizone Datenträger in mm ( <b>b</b> ) Data carrier clear zone in mm	>27	>27	>27	>27
Datenträger auf Metall-Montagefläche Data carrier on metal mounting surface				
Montage Metallfrei Mounting non-metal	0-55	0-55	0-30	0-30
Schreibabstand in mm Write distance in mm	0-55	0-55	0-30	0-30
Lesabstand in mm Read distance in mm	0-55	0-55	0-30	0-30
Versatz in mm bei Abstand von Offset in mm at distance	X 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75	Y ±28 ±28 ±28 ±28 ±28 ±25 ±25 ±25 ±25 ±20 ±20 ±5 ±5 ±5 ±5	X ±44 ±44 ±44 ±38 ±38 ±25 ±8	Y ±24 ±24 ±24 ±21 ±21 ±15 ±5



Einbauhinweis Datenträger  
Installation note for data carriers