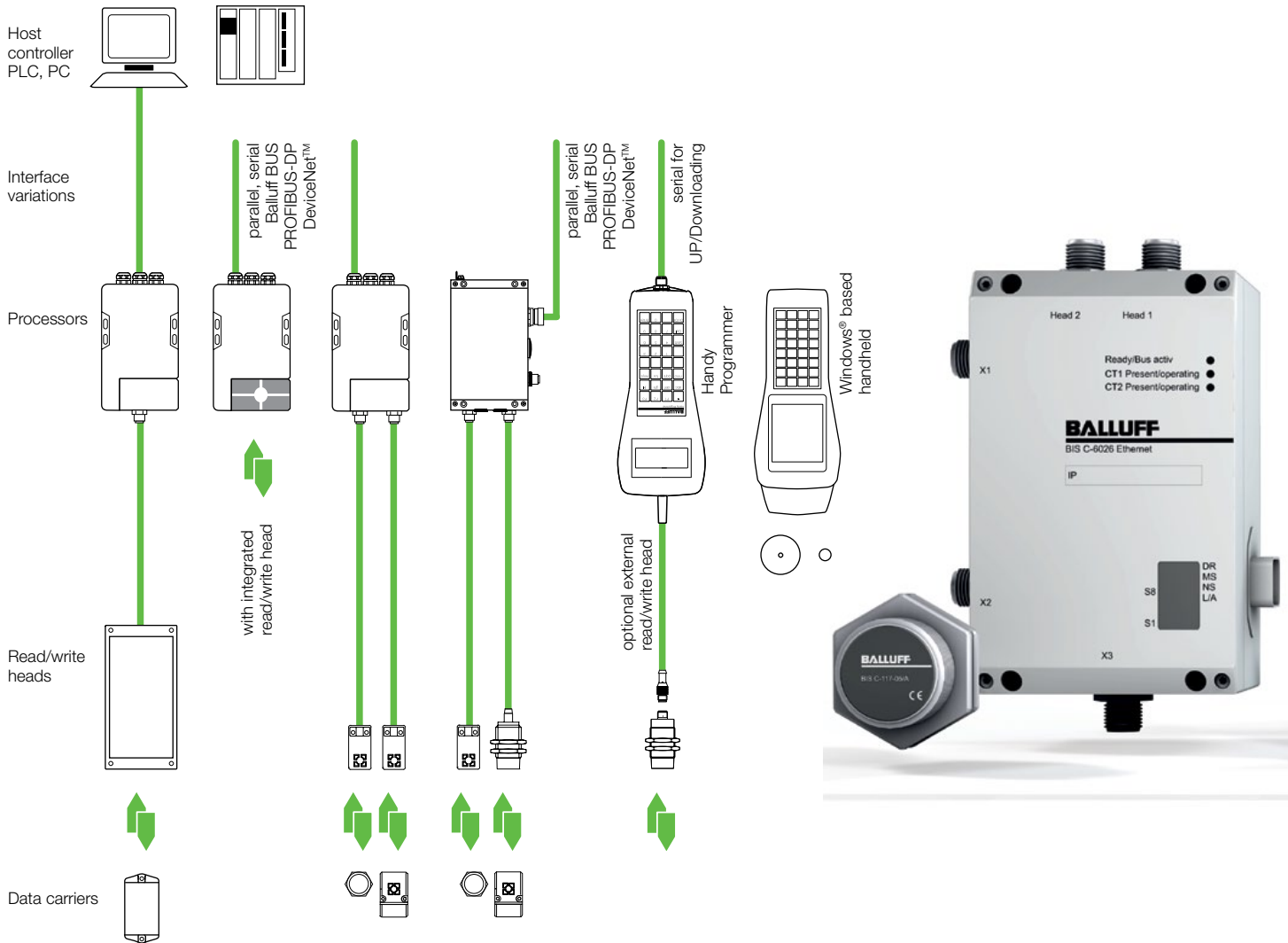




# BIS C Industrial RFID System

## Inductive Identification

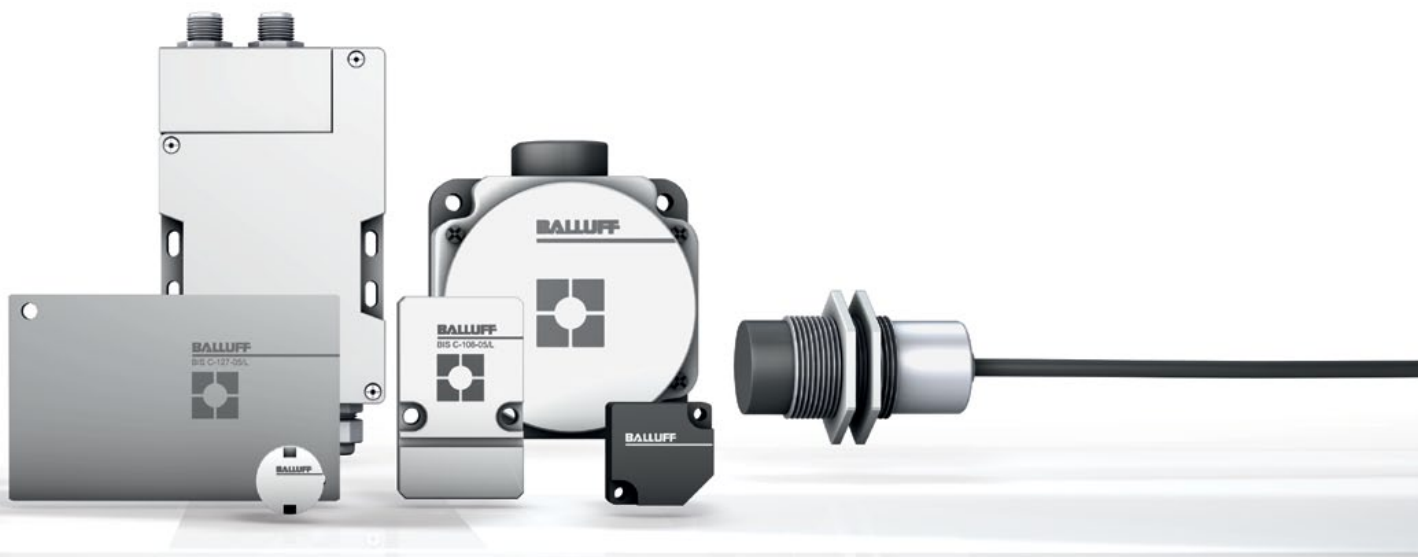
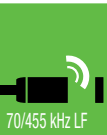
The BIS C system uses a Dual Low Frequency 433KHz read and 70KHz write inductively coupled technology along with passive tags to provide short range RFID solutions up to 100mm for WIP (work in process) or production control such as palletized production or "on part" tracking and quality traceability applications. The BIS C system is also uniquely designed for solving machine tool identification applications. This system can be used flush in, on or off metal and provides hardened re-usable tagging options.



# BIS C Industrial RFID System

## Inductive identification

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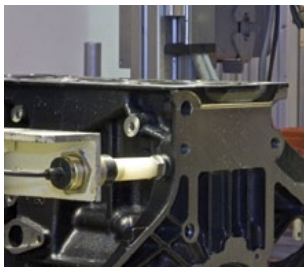


Technical information and definitions can be found on **page 354**

# BIS C Industrial RFID System

## Wide range of applications, many different variants

The versatile BIS C is ideal for a wide range of applications. Select the most suitable BIS C system for your application from the table.



Data carrier		Page
<b>BIS0002</b>	BIS C-100-05/A	189
<b>BIS0004</b>	BIS C-103-05/A	188
<b>BIS0006</b>	BIS C-104-11/A	190
<b>BIS0007</b>	BIS C-104-32/A	190
<b>BIS0009</b>	BIS C-105-05/A	188
<b>BIS000C</b>	BIS C-108-05/L	190
<b>BIS000H</b>	BIS C-108-11/L	190
<b>BIS000K</b>	BIS C-108-32/L	190
<b>BIS000F</b>	BIS C-108-05/L-SA2	192
<b>BIS000J</b>	BIS C-108-11/L-SA2	192
<b>BIS000M</b>	BIS C-117-05/A	189
<b>BIS000N</b>	BIS C-117-05/L	189
<b>BIS000R</b>	BIS C-117-11/L	189
<b>BIS000T</b>	BIS C-121-04/L	188
<b>BIS000W</b>	BIS C-121-04/L-SA1	192
<b>BIS0011</b>	BIS C-122-04/L	188
<b>BIS0015</b>	BIS C-122-11/L	188
<b>BIS0017</b>	BIS C-127-05/L	190
<b>BIS0019</b>	BIS C-128-05/L	189
<b>BIS001C</b>	BIS C-128-11/L	189
<b>BIS001E</b>	BIS C-130-05/L	189
<b>BIS001H</b>	BIS C-130-05/L-SA1	192
<b>BIS001Z</b>	BIS C-133-05/L	193
	BIS C-133-11/L	193
<b>BIS0020</b>	BIS C-134-05/L-H120	193
<b>BIS0021</b>	BIS C-134-11/L	193
<b>BIS00J4</b>	BIS C-140-05/L-M6	193
<b>BIS00J2</b>	BIS C-140-05/L-M8	193
<b>BIS00J3</b>	BIS C-140-11/L-M6	193
<b>BIS00J1</b>	BIS C-140-11/L-M8	193
<b>BIS0028</b>	BIS C-150-05/A	191
<b>BIS002A</b>	BIS C-150-11/A	191
<b>BIS002E</b>	BIS C-150-32/A	191
<b>BIS002K</b>	BIS C-190-05/L	191
<b>BIS002M</b>	BIS C-190-11/L	191
<b>BIS002N</b>	BIS C-190-32/L	191
<b>BIS002P</b>	BIS C-191-05/L	191
<b>BIS002R</b>	BIS C-191-11/L	191



# BIS C Industrial RFID System

## Selection criteria for read/write distances

### How much data do you require?

### How dynamic is your application?

Use the table and combine the BIS C components as you need them.

In three steps you will have selected your BIS C system:

1. First choose the appropriate form factor for your data carrier and the associated read/write heads.

2. Then determine your read/write distance, which also depends on the speed of your system: the faster the data carrier moves, the closer the distance needs to be.

3. Finally determine the desired memory capacity. This will give you the maximum data security.

### Questions?

Whatever your need, whether analysis, selection and return on investment, formats, interfaces and software, installation, disassembly and retrofitting – we are here to help you in every way.

Contact us to take advantage of our personal consultation, individual support and worldwide service.

Mounting	Data carrier	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	90	100	mm
<b>BIS C-300-PU1-</b>																					
<b>BIS C-306-PU1-</b>																					
—	BIS C-100-05/A	■	■																		0...4
—	BIS C-103-05/A	■	■																		0...3.5
—	BIS C-105-05/A	■	■																		0...3.5
—	BIS C-121-04/L	■	■																		0...2
—	BIS C-121-04/L-SA1	■	■																		0...1.2
—	BIS C-122-04/L	■	■																		0...2.5
—	BIS C-130-05/L	■	■																		0...4
—	BIS C-134-_-_-L	■	■																		0...3
—	BIS C-130-05/L	■	■																		0...4
—	BIS C-130-05/L-SA1	■	■																		0...4
—	BIS C-191-_-_/L	■	■																		0...3.5
—	BIS C-140-_-_/L-M_	■	■																		0...3
<b>BIS C-302-PU1-</b>																					
—	BIS C-100-05/A	■	■																		0...4
—	BIS C-103-05/A	■	■																		0...3
—	BIS C-105-05/A	■	■																		0...3
—	BIS C-121-04/L	■	■																		0...1.5
—	BIS C-121-04/L-SA1	■	■																		0...0.7
—	BIS C-122-04/L	■	■																		0...2
—	BIS C-130-05/L	■	■																		0...3.5
—	BIS C-130-05/L-DB-002	■	■																		0...4
—	BIS C-130-05/L-SA1	■	■																		0...4
—	BIS C-191-_-_/L	■	■																		0...3
<b>BIS C-305-PU1-</b>																					
—	BIS C-100-05/A	■	■																		0...4
—	BIS C-103-05/A	■	■																		0...5
—	BIS C-105-05/A	■	■																		0...5
—	BIS C-108-_-_/L	■	■																		0...6
—	BIS C-108-_-_/L-SA2	■	■																		0...6
—	BIS C-117-05/A	■	■																		1...8
—	BIS C-117-05/L	■	■																		0...7
—	BIS C-121-04/L	■	■																		0...2
—	BIS C-121-04/L-SA1	■	■																		0...1.2
—	BIS C-122-04/L	■	■																		0...2.5
—	BIS C-117-05/A	■	■																		0...10
—	BIS C-128-05/L	■	■																		0...6
—	BIS C-130-05/L	■	■																		0...7
—	BIS C-130-05/L-SA1	■	■																		0...7
—	BIS C-134-11/L	■	■																		0...6
—	BIS C-140-_-_/L-M_	■	■																		0...4.5
<b>BIS C-319-PU1-</b>																					
—	BIS C-108-_-_/L	■	■																		0...14
—	BIS C-117-05/L	■	■																		0...15
—	BIS C-130-05/L	■	■																		0...13
—	BIS C-130-05/L-SA1	■	■																		0...13
—	BIS C-134-11/L	■	■																		0...12
—	BIS C-191-_-_/L	■	■																		0...11

— flush in steel    ■ non-flush on steel    ■ non-metal

# BIS C Industrial RFID System

## Selection criteria for read/write distances

Mounting	Data carrier	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	90	100	mm	
<b>BIS C-326-PU1</b>																						
—	BIS C-117-05/L	■	■	■	■	■															0...18	
—	BIS C-128-_/L	■	■	■	■	■															0...15	
—	BIS C-128-_/L	■	■	■	■	■															0...12.5	
—	BIS C-130-_/L	■	■	■	■	■															0...13	
—	BIS C-130-05/L-SA1	■	■	■	■	■															0...13	
—	BIS C-133-_/L	■	■	■	■	■															0...12	
—	BIS C-134-11/L	■	■	■	■	■															0...12	
—	BIS C-190-_/L	■	■	■	■	■															0...18	
<b>BIS C-315-PU1</b>																						
—	BIS C-104-_/A	■	■	■	■	■															1...13	
—	BIS C-108-_/L	■	■	■	■	■															2...16	
—	BIS C-108-_/L-SA2	■	■	■	■	■															2...16	
—	BIS C-117-05/A	■	■	■	■	■															0...15	
—	BIS C-117-05/L	■	■	■	■	■															0...18	
—	BIS C-127-05/L	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	10...30
—	BIS C-128-_/L	■	■	■	■	■															0...18	
—	BIS C-130-05/L	■	■	■	■	■															0...18	
—	BIS C-133-_/L	■	■	■	■	■															0...15	
—	BIS C-134-11/L	■	■	■	■	■															0...16	
—	BIS C-190-_/L	■	■	■	■	■															0...20	
<b>BIS C-310-PU1</b>																						
—	BIS C-104-_/A	■	■	■	■	■															1...11	
—	BIS C-104-_/A	■	■	■	■	■															0...12	
—	BIS C-108-_/L	■	■	■	■	■															0...12	
—	BIS C-108-_/L-SA2	■	■	■	■	■															0...11	
—	BIS C-117-05/A	■	■	■	■	■															1...12	
—	BIS C-117-05/L	■	■	■	■	■															0...13	
—	BIS C-128-_/L	■	■	■	■	■															0...8	
—	BIS C-128-_/L	■	■	■	■	■															0...13	
—	BIS C-130-05/L	■	■	■	■	■															0...11	
—	BIS C-130-05/L-SA1	■	■	■	■	■															0...8	
—	BIS C-133-_/L	■	■	■	■	■															0...10	
—	BIS C-134-11/L	■	■	■	■	■															0...10	
—	BIS C-190-_/L	■	■	■	■	■															0...11	
—	BIS C-191-_/L	■	■	■	■	■															0...10	
—	BIS C-140-_/L-M	■	■	■	■	■															0...7	

— flush in steel    — non-flush on steel    — non-metal



70/455 kHz LF

Range of applications

**Selection criteria**

Data carriers read/write

Tool ID

Palletizing/Logistics

Speciality

Read/write heads

Tool ID

Palletizing/Logistics

Read/write heads

With connector

Long Distances

Data couplers

**Processors**

I/O Interface

Serial

Parallel

PROFIBUS-DP

DeviceNet™

EtherNet/IP™

Ethernet

TCP/IP

PROFINET

Handheld

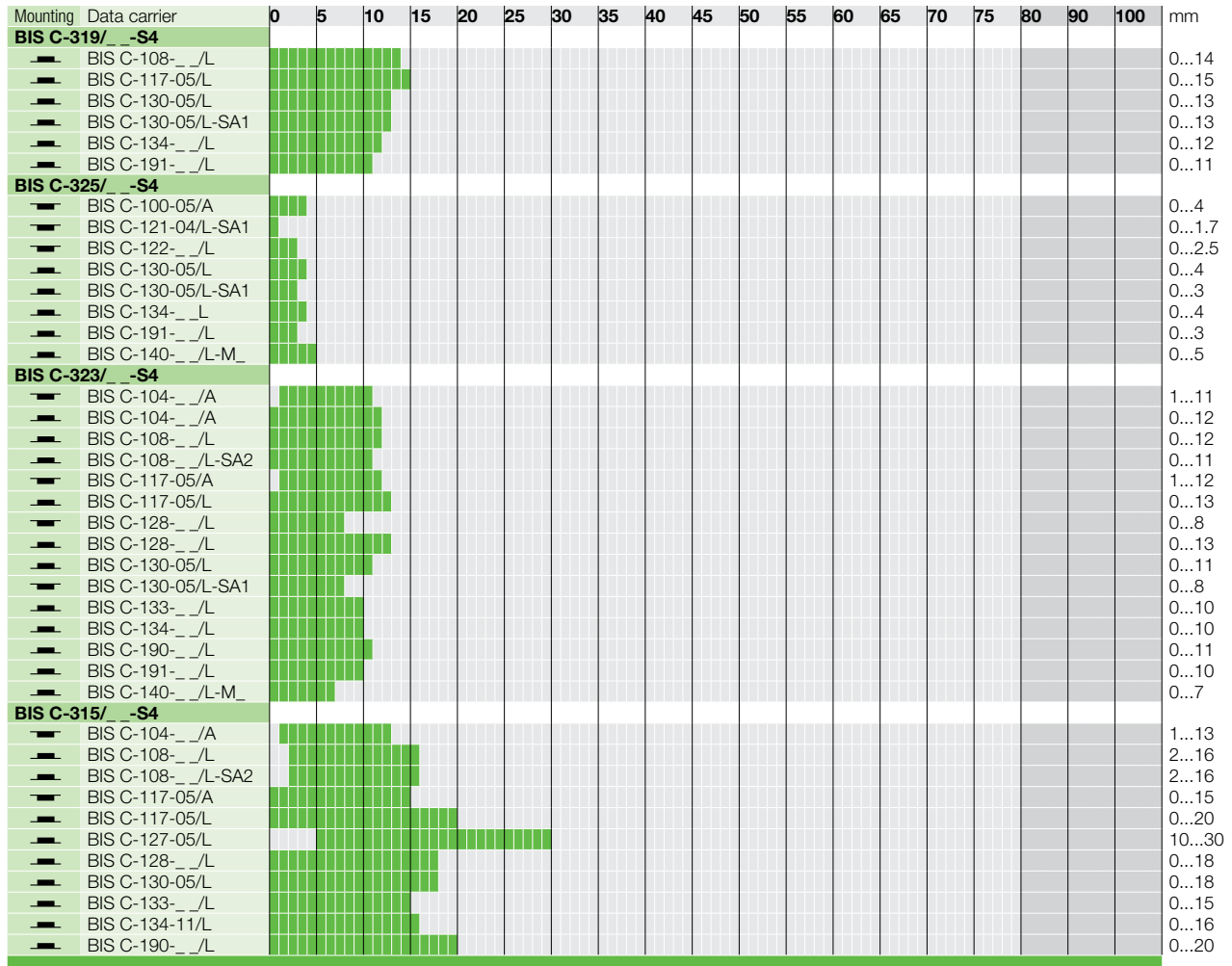
Handy programmer

Read/write gun

Accessories

# BIS C Industrial RFID System

## Selection criteria for read/write distances



— flush in steel    — non-flush on steel    — non-metal

# BIS C Industrial RFID System

## Selection criteria for read/write distances

Mounting	Data carrier	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	90	100	mm
<b>BIS C-324/-S4</b>																					
—	BIS C-104-_/A	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	1...11
—	BIS C-104-_/A	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	0...12
—	BIS C-108-_/L	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	0...12
—	BIS C-108-_/L-SA2	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	0...11
—	BIS C-117-05/A	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	0...12
—	BIS C-117-05/L	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	0...13
—	BIS C-128-_/L	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	0...8
—	BIS C-128-_/L	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	0...13
—	BIS C-130-05/L	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	0...11
—	BIS C-130-05/L-SA1	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	0...8
—	BIS C-133-_/L	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	0...10
—	BIS C-134-11/L	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	0...10
—	BIS C-190-_/L	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	0...11
—	BIS C-191-_/L	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	0...10
—	BIS C-140-_/L-M_	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	0...7
<b>BIS C-327-</b>																					
	BIS C-108-05/L	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	0...8
	BIS C-128-11/L	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	0...8
	BIS C-190-32/L	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	0...8
<b>BIS C-328/-S49</b>																					
	BIS C-122-04/L	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	0...3
	BIS C-122-11/L	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	0...3
<b>BIS C-318-PU1-</b>																					
	BIS C-108-_/L-SA2	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	0...6
	BIS C-108-_/L	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	0...7
	BIS C-117-05/L	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	0...7
	BIS C-127-05/L	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	10...35
	BIS C-128-_/L	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	0...7.5
	BIS C-190-_/L	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	0...8
<b>BIS C-351-PU1-</b>																					
	BIS C-150-05/A	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	0...45
	BIS C-150-11/A	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	0...45
	BIS C-150-32/A	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	0...45
<b>BIS C-350-00.3</b>																					
	BIS C-150-05/A	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	0...100
	BIS C-150-11/A	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	0...100
	BIS C-150-32/A	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	0...100
<b>BIS C-355/05-S92</b>																					
	BIS C-150-05/A	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	0...35
	BIS C-150-11/A	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	0...35
	BIS C-150-32/A	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	0...35

— flush in steel — non-flush on steel — non-metal



70/455 kHz LF

Range of applications

**Selection criteria**

Data carriers read/write

Tool ID

Palletizing/Logistics

Speciality

Read/write heads

Tool ID

Palletizing/Logistics

Read/write heads

With connector

Long Distances

Data couplers

**Processors**

I/O Interface

Serial

Parallel

PROFIBUS-DP

DeviceNet™

EtherNet/IP™

Ethernet

TCP/IP

PROFINET

Handheld

Handy programmer

Read/write gun

Accessories





Dimensions	Ø 9x4.5 mm	Ø 10x4.5 mm	Ø 12x8 mm	Ø 12x6 mm
Housing material	EP	EP	EP	EP
Weight	0.5 g	0.7 g	1.8 g	1.2 g

**BIS C Programmable**

511 bytes	<b>Ordering code</b>	<b>BIS000T</b>	<b>BIS0011</b>		
	Part number	BIS C-121-04/L	BIS C-122-04/L		
1023 bytes	<b>Ordering code</b>			<b>BIS0004</b>	<b>BIS0009</b>
	Part number			BIS C-103-05/A	BIS C-105-05/A
2047 bytes	<b>Ordering code</b>		<b>BIS0015</b>		
	Part number		BIS C-122-11/L		
8 Kbytes	<b>Ordering code</b>				
	Part number				
Operating temperature		0...+70 °C	0...+70 °C	-30...+70 °C	-30...+70 °C
Storage temperature		-30...+85 °C*	-30...+85 °C*	-30...+85 °C*	-30...+85 °C*
Protection per IEC 60529		IP 68	IP 68	IP 68	IP 68

**Appropriate read/write head with max. read/write distance**

Mounting									
BIS C-300	2 mm	3 mm	2,5 mm	3 mm	3,5 mm	4 mm	3,5 mm	4 mm	
BIS C-302	1,5 mm	2,5 mm	2,0 mm	2,5 mm	3 mm	3,5 mm	3 mm	3,5 mm	
BIS C-305	2 mm	3 mm	2,5 mm	3 mm	5 mm	6 mm	5 mm	6 mm	
BIS C-306	2 mm	3 mm	2,5 mm	3 mm	3,5 mm	4 mm	3,5 mm	4 mm	
BIS C-310									
BIS C-315									
BIS C-318									
BIS C-319									
BIS C-323									
BIS C-324									
BIS C-325	1,7 mm	3 mm	2,5 mm	3 mm	4,5 mm	5 mm	4,5 mm	5 mm	
BIS C-326									
BIS C-327									
BIS C-328				3 mm					

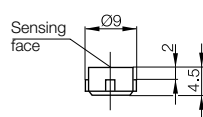
**For installation see technical section.**

\* also available for up to + 120 °C on request

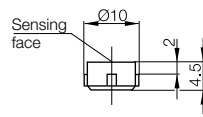
**Mounting (see technical section for details):**

- flush in steel
- non-flush on steel
- non-metal

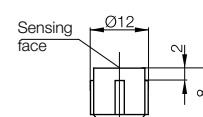
**Antenna type:**



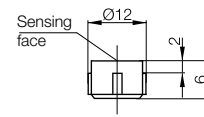
glue into hole Ø 9 H11



glue into hole Ø 10 H11



glue into hole Ø 12 H11



glue into hole Ø 12 H11

DIN 69 873

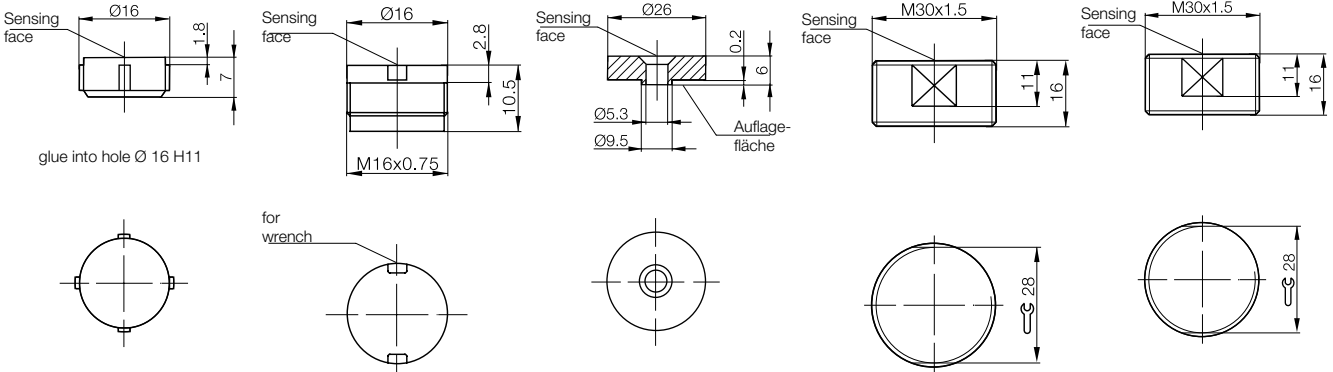




<b>Ø 16x7 mm</b>	<b>Ø 16x10.5 mm</b>	<b>Ø 26x6 mm</b>	<b>Ø 30x16 mm</b>	<b>Ø 30x16 mm</b>
EP	PA 66	EP	PBT	PBT
2 g	3 g	6 g	23 g	5.5 g

<b>BIS001E</b>	<b>BIS0002</b>	<b>BIS0019</b>	<b>BIS000M</b>	<b>BIS000N</b>
BIS C-130-05/L	BIS C-100-05/A	BIS C-128-05/L	BIS C-117-05/A	BIS C-117-05/L
		<b>BIS001C</b>		<b>BIS000R</b>
		BIS C-128-11/L		BIS C-117-11/L
-30...+70 °C	0...+70 °C	-20...+70 °C	-30...+70 °C	-30...+70 °C
-30...+85 °C*	-20...+85 °C	-30...+85 °C*	-30...+85 °C	-30...+85 °C
IP 68	IP 68	IP 68	IP 68	IP 68

4 mm	4 mm	4 mm	4 mm						
		4 mm	4 mm						
6 mm	7 mm	4 mm	4 mm	3,5 mm**	6 mm**	8 mm	10 mm		7 mm
4 mm	4 mm	4 mm	4 mm						
	11 mm			8 mm	3 mm	2 mm	13 mm		13 mm
	18 mm				18 mm	15 mm	22 mm		20 mm
					7,5 mm				7 mm
6 mm	13 mm				14 mm	13 mm	16 mm	8 mm	15 mm
	11 mm			8 mm	13 mm	12 mm	13 mm		13 mm
				8 mm	13 mm	12 mm	13 mm		13 mm
4 mm	5 mm	4 mm	4 mm						
	13 mm				15 mm				18 mm
					8 mm				



glue into hole Ø 16 H11

for wrench

Compatible screws for  
BIS C-128-... data carriers:  
DIN EN ISO 2009 M5  
(countersunk slot head screw)  
DIN EN ISO 7046-1 M5  
(countersunk Phillips head screw)  
Screw tightening torque 2.5 Nm

\*\*BIS C-305, only if BIS C-128-  
\_ is attached using plastic screw.



**Installation tool 710691**  
for BIS C-100-05/A data  
carrier please order separately!



70/455 kHz LF

Range of applications  
Selection criteria

Data carriers  
read/write

**Tool ID**

Palletizing/  
Logistics

Specialty  
Read/write  
heads

Tool ID

Palletizing/  
Logistics

Read/write  
heads

With  
connector

Long  
Distances

Data  
couplers

**Processors**

I/O Interface

Serial

Parallel

PROFIBUS-DP

DeviceNet™

EtherNet/IP™

Ethernet

TCP/IP

PROFINET

Handheld

Handy  
programmer

Read/write  
gun

Accessories



Dimensions	Ø 30x35 mm	52x32x11 mm	85x53x4.5 mm
Housing material	Nickel plated brass	PBT	ABS
Weight	54 g	28 g	30 g

### BIS C Programmable

511 bytes	<b>Ordering code</b>			
	Part number			
1023 bytes	<b>Ordering code</b>		<b>BIS000C</b>	<b>BIS0017</b>
	Part number		BIS C-108-05/L	BIS C-127-05/L
2047 bytes	<b>Ordering code</b>	<b>BIS0006</b>	<b>BIS000H</b>	
	Part number	BIS C-104-11/A	BIS C-108-11/L	
8 Kbytes	<b>Ordering code</b>	<b>BIS0007</b>	<b>BIS000K</b>	
	Part number	BIS C-104-32/A	BIS C-108-32/L	
Operating temperature		-30...+70 °C	-30...+70 °C	0...+60 °C
Storage temperature		-30...+85 °C	-30...+85 °C	-20...+60 °C
Protection per IEC 60529		IP 67	IP 68	IP 65

### Appropriate read/write head with max. read/write distance

Mounting	■	■	■	■	■	■
BIS C-300						
BIS C-305				6 mm		
BIS C-306						
BIS C-310	11 mm	12 mm	5 mm	12 mm		
BIS C-315	13 mm	14 mm	10 mm	16 mm		30 mm
BIS C-318				7 mm		25 mm
BIS C-319			11 mm	14 mm		
BIS C-323	11 mm	12 mm		12 mm		
BIS C-324	11 mm	12 mm		12 mm		
BIS C-325						
BIS C-326						
BIS C-327				8 mm		
BIS C-350						
BIS C-351						

For installation see technical section.

Mounting (see technical section for details):

- flush in steel
- non-flush on steel
- non-metal

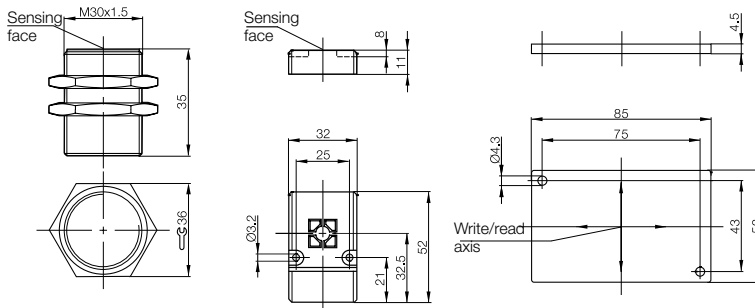
Antenna type:



rod



round



Screw tightening torque 40 Nm

# BIS C Industrial RFID System

## Data carriers read/write



**80x40x22 mm**  
POM  
75 g



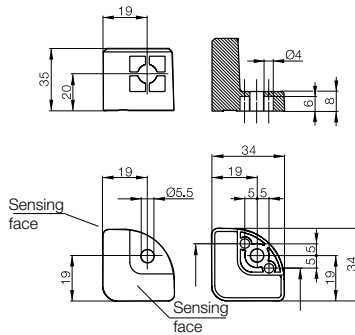
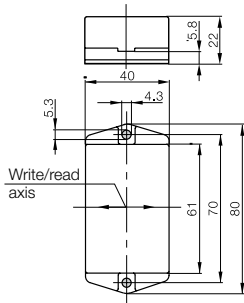
**34x34 mm**  
PBT  
29 g



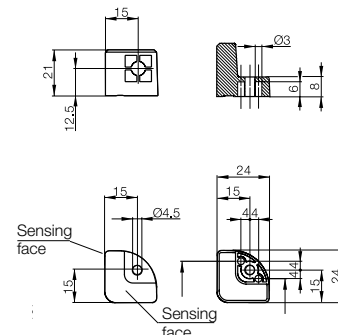
**12.5x12.5 mm**  
PBT  
10 g

<b>BIS0028</b>	<b>BIS002K</b>	<b>BIS002P</b>
BIS C-150-05/A	BIS C-190-05/L	BIS C-191-05/L
<b>BIS002A</b>	<b>BIS002M</b>	<b>BIS002R</b>
BIS C-150-11/A	BIS C-190-11/L	BIS C-191-11/L
<b>BIS002E</b>	<b>BIS002N</b>	
BIS C-150-32/A	BIS C-190-32/L	
-30...+70 °C	-30...+70 °C	-30...+70 °C
-30...+85 °C	-30...+85 °C	-30...+85 °C
IP 68	IP 68	IP 68

					3,5 mm
					3,5 mm
			11 mm		10 mm
			20 mm		
			8 mm		
			11 mm		11 mm
			11 mm		10 mm
					10 mm
					3,5 mm
			18 mm		
			8 mm		
		100 mm			
		50 mm			



Screw tightening torque 1.5 Nm, anti-torquing installation provided by straight pin Ø 4 mm according to DIN EN 22338; DIN EN 28734



Screw tightening torque 1.5 Nm, anti-torquing installation provided by straight pin Ø 3 mm according to DIN EN 22338; DIN EN 28734

**Caution!**  
Reading or writing can be performed on one active surface as desired.



Range of applications  
Selection criteria

**Data carriers read/write**

Tool ID

**Palletizing/Logistics**

Speciality  
**Read/write heads**

Tool ID

Palletizing/Logistics

Read/write heads

With connector

Long Distances

Data couplers

**Processors**

I/O Interface

Serial

Parallel

PROFIBUS-DP

DeviceNet™

EtherNet/IP™

Ethernet

TCP/IP

PROFINET

Handheld

Handy programmer

Read/write gun

Accessories



Dimensions	Ø 11×13 mm	Ø 15.5×7 mm	52×32×11 mm
Housing material	Glass	PBT	PBT
Weight	0.9 g	28 g	28 g

**BIS C Programmable**

511 bytes	<b>Ordering code</b>	<b>BIS000W</b>		
	Part number	BIS C-121-04/L-SA1		
1023 bytes	<b>Ordering code</b>		<b>BIS001H</b>	<b>BIS000F</b>
	Part number		BIS C-130-05/L-SA1	BIS C-108-05/L-SA2
2047 bytes	<b>Ordering code</b>			<b>BIS000J</b>
	Part number			BIS C-108-11/L-SA2
8 Kbytes	<b>Ordering code</b>			
	Part number			
Operating temperature		+10...+70 °C	-30...+70 °C	-30...+70 °C
Storage temperature		+10...+126 °C	-30...+85 °C	-30...+85 °C*
Protection per IEC 60529		IP 68	IP 68	IP 68

**Appropriate read/write head with max. read/write distance**

Mounting					
BIS C-300	1,2 mm			4 mm	4 mm
BIS C-302	0,7 mm				
BIS C-305	1,2 mm			6 mm	7 mm
BIS C-306	1,2 mm			4 mm	4 mm
BIS C-310	1,7 mm			8 mm	11 mm
BIS C-315					4 mm
BIS C-318					10 mm
BIS C-319					16 mm
BIS C-323				7 mm	13 mm
BIS C-324				8 mm	11 mm
BIS C-325				8 mm	11 mm
BIS C-326				4 mm	5 mm
					13 mm
					12 mm
Suitable for	use in autoclaves			use in vacuum	

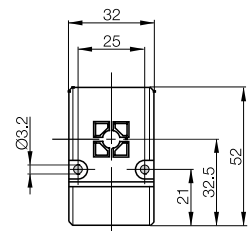
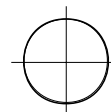
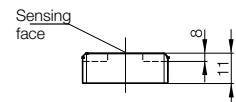
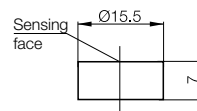
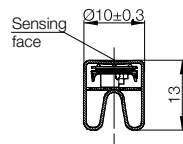
**For installation see technical section.**

\*also available for up to + 120 °C on request

Mounting (see technical section for details):

- flush in steel
- non-flush on steel
- non-metal

Antenna type:



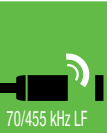
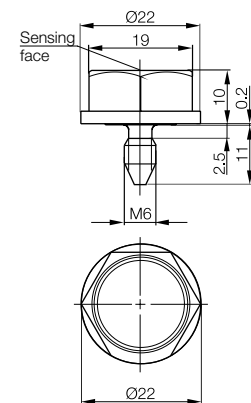
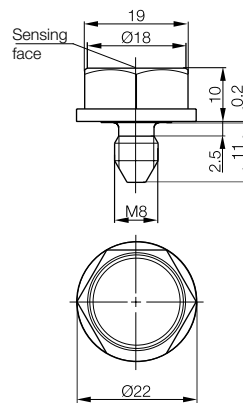
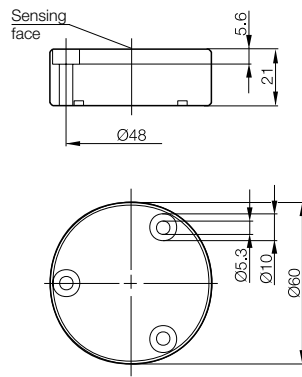
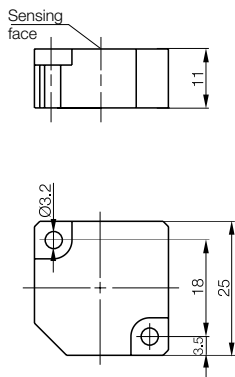
# BIS C Industrial RFID System

## Data carriers read/write

			
<b>25×25 mm</b> PA 66-GF30 9 g	<b>Ø 60×21 mm</b> POM 85 g	<b>Ø 22×21 mm</b> steel, coated 18 g	<b>Ø 22×21 mm</b> steel, coated 18 g

<b>BIS0020</b> BIS C-134-05/L-H120	<b>BIS001Z</b> BIS C-133-05/L	<b>BIS00J2</b> BIS C-140-05/L-M8	<b>BIS00J4</b> BIS C-140-05/L-M6
<b>BIS0021</b> BIS C-134-11/L	<b>BIS C-133-11/L</b>	<b>BIS00J1</b> BIS C-140-11/L-M8	<b>BIS00J3</b> BIS C-140-11/L-M6
-30...+70 °C -30...+85 °C*	-30...+70 °C -30...+85 °C	-30...+70 °C -30...+85 °C	-30...+70 °C -30...+85 °C
IP 68	IP 68	IP 68 / 69K	IP 68 / 69K

3 mm				3 mm		3 mm
	6 mm			4,5 mm		4,5 mm
3 mm	10 mm	10 mm	10 mm	3 mm		3 mm
	16 mm	15 mm	15 mm	7 mm		7 mm
	12 mm					
	10 mm	10 mm	10 mm	7 mm		7 mm
	10 mm	10 mm	10 mm	7 mm		7 mm
	4 mm			5 mm		5 mm
	12 mm	12 mm	12 mm			
use in vacuum		use in vacuum		use in vacuum		use in vacuum



Range of applications

Selection criteria

Data carriers read/write

Tool ID

Palletizing/Logistics

Specialty Read/write heads

Tool ID

Palletizing/Logistics

Read/write heads

With connector

Long Distances

Data couplers

Processors

I/O Interface

Serial

Parallel

PROFIBUS-DP

DeviceNet™

EtherNet/IP™

Ethernet

TCP/IP

PROFINET

Handheld

Handy programmer

Read/write gun

Accessories



Dimensions	<b>Ø 14.5</b>	<b>M16</b>
Housing material	CuZn	CuZn
1 m cable	<b>Ordering code</b> Part number	<b>BIS00P5</b> BIS C-300-PU1-01
5 m cable	<b>Ordering code</b> Part number	<b>BIS005Z</b> BIS C-300-PU1-05
10 m cable	<b>Ordering code</b> Part number	<b>BIS00P6</b> BIS C-300-PU1-10
Mounting	—	
Operating temperature	0...+70 °C	
Storage temperature	-20...+85 °C	
Protection per IEC 60529	IP 67	
Connection to	Processor	
Connection cable	Cable included	

Appropriate data carrier	BIS0002	BIS C-100-05/A	BIS0004	BIS C-103-05/A	BIS0009	BIS C-105-05/A	BIS000T	BIS C-121-04/L	BIS000W	BIS C-121-04/L-SA1	BIS0011	BIS C-122-04/L	BIS001E	BIS C-130-05/L	see data carriers	BIS C-134-_-L	BIS001E	BIS C-130-05/L	BIS001H	BIS C-130-05/L-SA1	see data carriers	BIS C-191-_-L	see data carriers	BIS C-140-_-L-M_-
Mounting	—																							
Write distance in mm	0-4	0-3,5	0-3,5	0-3,5	0-2	0-1,2	0-2,5	0-4	0-3	0-4	0-4	0-3,5	0-3											
Read distance in mm	0-4	0-3,5	0-3,5	0-2	±2	±2,5	±3,5	±4	±5	±5	±4	±3,5	±4	±4	±4	±3	±2							
Offset in mm at distance	0.7 mm																							
	1 mm	±3	±3	±3	±2																			
	3 mm	±2	±2	±2																				

**Caution!**  
At 10 m cable length, read/write distance is reduced by 10 %

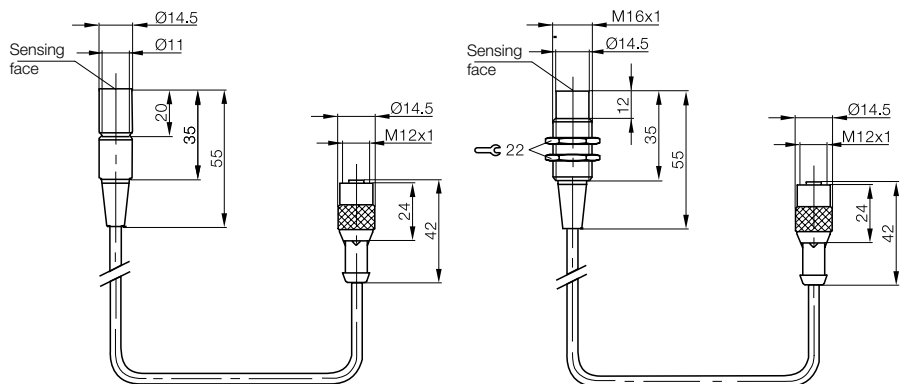
See technical section for dynamic mode information.

Mounting (see technical section for details):

- flush in steel
- non-flush on steel
- non-metal

Antenna type:

- rod
- round



Handle  
**Ordering code: BAM012A**  
Part number: BIS C-300-HG1  
for read/write head BIS C-300-\_-  
Material: POM  
See accessories section for details.

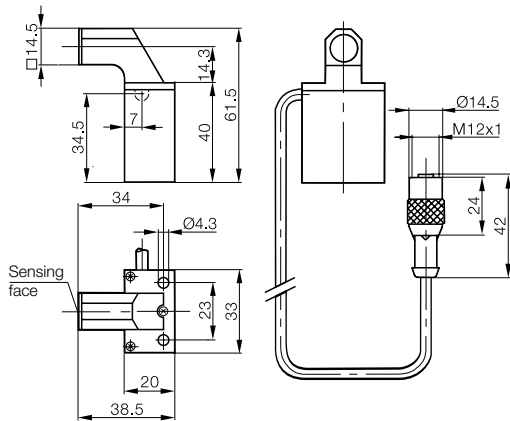
# Conveyors

## BIS C Industrial RFID System Read/write heads

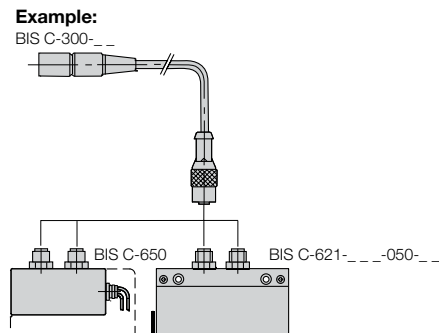


<b>34x33x61.5 mm</b>
AIMg3/PA 66
<b>BIS00PA</b>
BIS C-302-PU1-05
<b>BIS00P9</b>
BIS C-302-PU1-10
0...+70 °C
-20...+85 °C
IP 67
Processor
Cable included

BIS0002	BIS C-100-05/A	BIS0004	BIS C-103-05/A	BIS0009	BIS C-105-05/A	BIS000T	BIS C-121-04/L	BIS000W	BIS C-121-04/L-SA1	BIS0011	BIS C-122-04/L	BIS001E	BIS C-130-05/L	BIS0031	BIS C-130-05/L-DB-002	BIS001H	BIS C-130-05/L-SA1	see data carriers	BIS C-191-_-_-/L
0-4	0-3	0-3	0-3	0-1,5	0-0,7	0-2	0-3,5	0-4	0-4	0-3	0-4	0-3	0-4	0-4	0-4	0-3			
0-4	0-3	0-3	0-3	0-1,5	0-0,7	0-2	0-3,5	0-4	0-4	0-3	0-4	0-3	0-4	0-4	0-4	0-3			
±3	±3	±3	±3	±1,5		±1				±2	±3	±3	±5	±5	±5	±4			
±2	±1,5	±1,5									±2	±3	±3	±3	±2				



Cables on read/write heads must not be shortened, since functionality can then no longer be ensured.



Range of applications  
Selection criteria  
**Data carriers read/write**  
Tool ID  
Palletizing/Logistics  
Speciality  
**Read/write heads**  
**Tool ID**  
Palletizing/Logistics  
Read/write heads  
With connector  
Long Distances

Data couplers

**Processors**  
I/O Interface  
Serial  
Parallel  
PROFIBUS-DP  
DeviceNet™  
EtherNet/IP™  
Ethernet TCP/IP  
PROFINET

Handheld

Handy programmer

Read/write gun

Accessories





Dimensions	<b>50x25x10 mm</b>
Housing material	ABS-GF16
1 m cable	<b>Ordering code</b> <b>BIS0066</b>
	Part number BIS C-305-PU1-01
5 m cable	<b>Ordering code</b> <b>BIS0067</b>
	Part number BIS C-305-PU1-05
10 m cable	<b>Ordering code</b> <b>BIS0068</b>
	Part number BIS C-305-PU1-10
Mounting	■
Operating temperature	0...+70 °C
Storage temperature	-20...+85 °C
Protection per IEC 60529	IP 67
Connection to	Processor
Connection cable	Cable included

Appropriate data carrier	BIS0002	BIS C-100-05/A	BIS0004	BIS C-103-05/A	BIS0009	BIS C-105-05/A	see data carriers	BIS C-108-_/L	see data carriers	BIS C-108-_/L-SA2	BIS000M	BIS C-117-05/A	BIS000N	BIS C-117-05/L	BIS000T	BIS C-121-04/L	BIS000W	BIS C-121-04/L-SA1	BIS0011	BIS C-122-04/L	BIS000M	BIS C-117-05/A	BIS0019	BIS C-128-05/L	BIS001E	BIS C-130-05/L	BIS001H	BIS C-130-05/L-SA1	BIS0021	BIS C-134-11/L	see data carriers	BIS C-140-_/L-M_		
Mounting	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
Write distance in mm	0-4	0-5	0-5	0-5	0-6	0-6	1-8	0-7	0-2	0-1,2	0-2,5	0-10	0-6	0-7	0-7	0-6	0-7	0-7	0-6	0-4,5	0-4,5	0-6	0-7	0-7	0-6	0-7	0-6	0-4,5	0-4,5	0-6	0-4,5	0-4,5		
Read distance in mm	0-4	0-5	0-5	0-6	0-6	1-8	0-7	0-2	0-1,2	0-2,5	0-10	0-6	0-7	0-7	0-6	0-7	0-6	0-7	0-6	0-4,5	0-4,5	0-6	0-7	0-7	0-6	0-7	0-6	0-4,5	0-4,5	0-6	0-4,5	0-4,5		
Offset in mm at distance																																		
	0.7 mm																																	
	1 mm	±3	±4	±4	±8	±8	±5	±8,5	±2			±3	±6	±8	±5	±5	±5	±5	±5	±5	±5	±5	±5	±5	±5	±5	±5	±5	±5	±5	±5	±5	±5	
	3 mm	±2	±3	±3	±7	±7	±4	±7,5				±2	±6	±7	±5	±5	±5	±5	±5	±5	±5	±5	±5	±5	±5	±5	±5	±5	±5	±5	±5	±5	±5	
	5 mm				±5	±5	±3	±6																										
	7 mm						±2	±4																										
	10 mm																																	

**Caution!**  
At 10 m cable length, read/write distance is reduced by 10 %

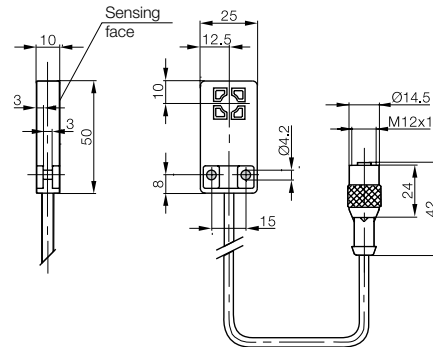
See technical section for dynamic mode information.

Mounting (see technical section for details):

- flush in steel
- non-flush on steel
- non-metal

Antenna type:

- rod
- round



**Data coupler BIS C-380-...**  
for data transmission between data carriers BIS C-1\_\_ and read/write head BIS C-3\_\_ via a contactless extension page 196/197.





Dimensions	<b>80x80x40 mm</b>
Housing material	PBT
1 m cable	<b>Ordering code</b> <b>BIS00PK</b>
	Part number BIS C-315-PU1-01
5 m cable	<b>Ordering code</b> <b>BIS00PL</b>
	Part number BIS C-315-PU1-05
10 m cable	<b>Ordering code</b> <b>BIS00PM</b>
	Part number BIS C-315-PU1-10
Mounting	—
Operating temperature	0...+70 °C
Storage temperature	-20...+85 °
Protection per IEC 60529	IP 67
Connection to	Processor
Connection cable	Cable included

	see data carriers BIS C-104-_/A	see data carriers BIS C-108-_/L	see data carriers BIS C-108-_/L-SA2	BIS000M	BIS C-117-05/A	BIS000N	BIS C-117-05/L	BIS0017	BIS C-127-05/L	see data carriers BIS C-128-_/L	BIS001E	BIS C-130-05/L	see data carriers BIS C-133-_/L	BIS0021	BIS C-134-11/L	see data carriers BIS C-190-_/L
Mounting	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Write distance in mm	1-13	2-16	2-16	0-15	0-18	10-30	0-18	0-18	0-18	0-15	0-16	0-20				
Read distance in mm	1-13	2-16	2-16	0-15	0-18	10-30	0-18	0-18	0-18	0-15	0-16	0-20				
Offset in mm at distance																
0.7 mm																
1 mm	±15	±15		±15	±17		±17	±16	±17	±16	±17	±16	±18			
3 mm	±14	±14	±15	±15	±17		±17	±16	±15	±16	±16	±18				
5 mm	±11	±12	±12	±14	±17		±17	±16	±15	±16	±16	±18				
7 mm	±10	±11	±10	±12	±15		±15	±14	±14	±14	±14	±18				
10 mm	±8	±8	±8	±12	±15	±30	±15	±14	±14	±12	±18					
15 mm					±14	±27	±14	±11			±16					
20 mm						±20										

Appropriate data carrier

**Caution!**  
At 10 m cable length, read/write distance is reduced by 10 %

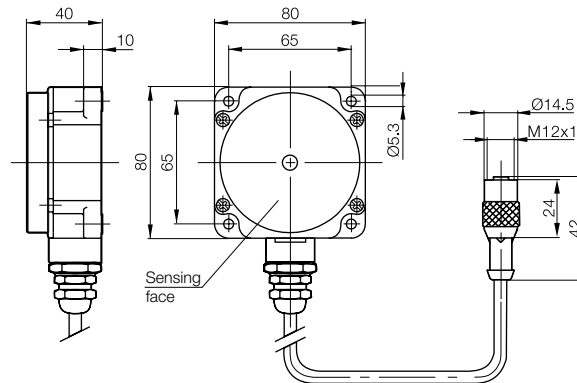
See technical section for dynamic mode information.

Mounting (see technical section for details):

- flush in steel
- non-flush on steel
- non-metal

Antenna type:

- rod
- round



# BIS C Industrial RFID System

## Read/write heads



### M30

Nickel plated brass

### BIS00PF

BIS C-310-PU1-01

### BIS00PH

BIS C-310-PU1-05

### BIS00PJ

BIS C-310-PU1-10

0...+70 °C

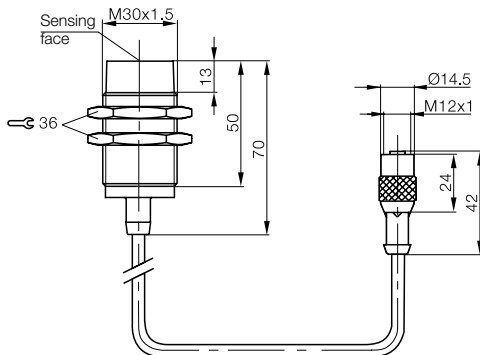
-20...+85 °C

P 67

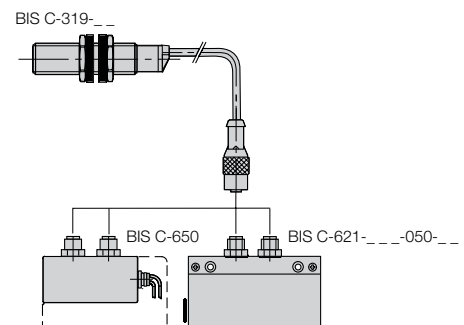
Processor

Cable included

see data carriers	see data carriers	see data carriers	see data carriers	see data carriers	see data carriers	see data carriers	see data carriers	see data carriers	see data carriers	see data carriers	see data carriers	see data carriers	see data carriers	see data carriers	see data carriers	see data carriers	see data carriers	see data carriers	see data carriers
BIS C-104-_/A	BIS C-104-_/A	BIS C-108-_/L	BIS C-108-_/L-SA2	BIS C-117-05/A	BIS C-117-05/L	BIS C-128-_/L	BIS C-128-_/L	BIS C-130-05/L	BIS C-130-05/L-SA1	BIS C-133-_/L	BIS C-134-11/L	BIS C-190-_/L	BIS C-191-_/L	BIS C-140-_/L-M_					
1-11	0-12	0-12	0-11	1-12	0-13	0-8	0-13	0-11	0-8	0-10	0-10	0-11	0-10	0-7					
1-11	0-12	0-12	0-11	1-12	0-13	0-8	0-13	0-11	0-8	0-10	0-10	0-11	0-10	0-7					
±7,5	±7,5	±10	±10	±7,5	±11	±8	±10	±9	±6,5	±10	±9	±10	±8	±5,5					
±7	±7	±9	±9	±7,5	±10	±7	±10	±8	±6	±9	±8	±9	±7,5	±5					
±7	±7	±9	±8,5	±7	±10	±6,5	±9	±7	±5,5	±9	±7	±9	±7	±4					
±7	±7	±8,5	±7,5	±6,5	±9,5	±5,5	±9	±5		±7	±4	±8	±6,5						
												±6,5							



### Example:



Cables on read/write heads must not be shortened, since functionality can then no longer be ensured.



70/455 kHz LF

Range of applications

Selection criteria

Data carriers read/write

Tool ID

Palletizing/Logistics

Speciality

Read/write heads

Tool ID

Palletizing/Logistics

Read/write heads

With connector

Long Distances

Distances

Distances

Distances

Distances

Distances

Distances

Distances

Distances

Distances

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Distances

Distances

# BIS C Industrial RFID System

## Read/write heads



Dimensions	<b>M18</b>	<b>M18</b>
Housing material	PBT	X6CrNiMoTi 17-12-2
for 1 m cable	<b>Ordering code</b>	<b>BIS007P</b>
	Part number	BIS C-319/01-S4
for 5 m cable	<b>Ordering code</b>	<b>BIS007A</b>
	Part number	BIS C-319/05-S4
for 10 m cable	<b>Ordering code</b>	<b>BIS007C</b>
	Part number	BIS C-319/10-S4
Mounting	—	—
Operating temperature	0...+70 °C	0...+70 °C
Storage temperature	-20...+85 °C	-20...+85 °C
Protection per IEC 60529	IP 67	IP 67
Connection to	Processor	Processor
Connection cable	See Connectivity section for cable options	See Connectivity section for cable options

### Appropriate data carrier

	see data carriers BIS C-108-_/L	BIS000N BIS C-117-05/L	BIS001E BIS C-130-05/L	BIS001H BIS C-130-05/L-SA1	see data carriers BIS C-134-_/L	see data carriers BIS C-191-_/L		BIS0002 BIS C-100-05/A	BIS000W BIS C-121-04/L-SA1	see data carriers BIS C-122-_/L	BIS001E BIS C-130-05/L	BIS001H BIS C-130-05/L-SA1	see data carriers BIS C-134-_/L	see data carriers BIS C-191-_/L	see data carriers BIS C-140-_/L-M_
Mounting	—	—	—	—	—	—		—	—	—	—	—	—	—	—
Write distance in mm	0-14	0-15	0-13	0-13	0-12	0-11		0-4	0-1,7	0-2,5	0-4	0-3	0-4	0-3	0-5
Read distance in mm	0-14	0-15	0-13	0-13	0-12	0-11		0-4	0-1,7	0-2,5	0-4	0-3	0-4	0-3,5	0-5
Offset in mm at distance	0.7 mm							±2							
	1 mm	±12	±13	±9	±9	±9		±3,5	±2	±2,5	±4	±4	±4	±4	±3
	3 mm	±12	±12	±9	±9	±9		±3			±2	±2	±2	±3	±3
	5 mm	±11	±12	±9	±9	±9									±2
	7 mm	±11	±11	±8,5	±8,5	±8									
	10 mm	±9	±10	±7,5	±7,5	±6									

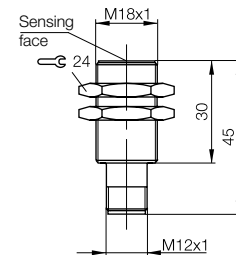
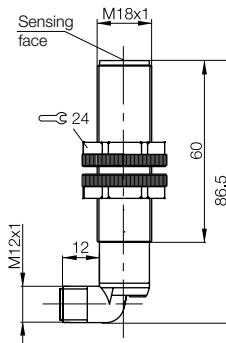
**Caution!**  
At 10 m cable length, read/write distance is reduced by 10 %

See technical section for dynamic mode information.

Mounting (see technical section for details):

- flush in steel
- non-flush on steel
- non-metal

Antenna type:



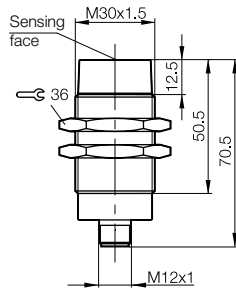
# BIS C Industrial RFID System

## Read/write heads

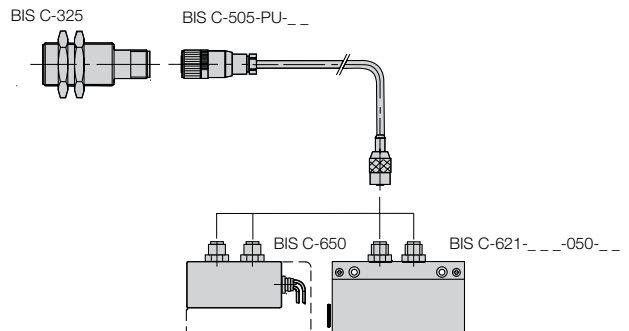


<b>M30</b>
X8CrNiS 18-9
<b>BIS007J</b>
BIS C-323/01-S4
<b>BIS007K</b>
BIS C-323/05-S4
<b>BIS007L</b>
BIS C-323/10-S4
<b>—</b>
-20...+70 °C
-20...+85 °C
IP 67
Processor
Cable included

see data carriers	see data carriers	see data carriers	see data carriers	see data carriers	see data carriers	see data carriers	see data carriers	see data carriers	see data carriers	see data carriers	see data carriers	see data carriers	see data carriers	see data carriers	see data carriers	see data carriers	see data carriers	see data carriers	see data carriers	see data carriers
BIS C-104-_/A	BIS C-104-_/A	BIS C-108-_/L	BIS C-108-_/L-SA2	BIS000M	BIS C-117-05/A	BIS C-117-05/L	BIS C-128-_/L	BIS C-128-_/L	BIS001E	BIS C-130-05/L	BIS001H	BIS C-130-05/L-SA1	BIS C-133-_/L	BIS C-134-_/L	BIS C-190-_/L	BIS C-191-_/L	BIS C-140-_/L-M-			
1-11	0-12	0-12	0-11	1-12	0-13	0-8	0-13	0-11	0-8	0-10	0-10	0-11	0-10	0-11	0-10	0-7				
1-11	0-12	0-12	0-11	1-12	0-13	0-8	0-13	0-11	0-8	0-10	0-10	0-11	0-10	0-11	0-10	0-7				
±7,5	±7,5	±10	±10	±7,5	±11	±8	±10	±9	±6,5	±10	±9	±10	±8	±10	±8	±5,5				
±7	±7	±9	±9	±7,5	±10	±7	±10	±8	±6	±9	±8	±9	±7,5	±9	±7,5	±5				
±7	±7	±9	±8,5	±7	±10	±6,5	±9	±7	±5,5	±9	±7	±9	±7	±9	±7	±4				
±7	±7	±8,5	±7,5	±6,5	±9,5	±5,5	±9	±5		±7	±4	±8	±6,5	±6,5						
												±6,5								



**Example:**



- Range of applications
- Selection criteria
- Data carriers read/write**
- Tool ID
- Palletizing/Logistics
- Speciality
- Read/write heads**
- Tool ID
- Palletizing/Logistics
- Read/write heads**
- With connector
- Long Distances

- Data couplers
- Processors**
- I/O Interface
- Serial
- Parallel
- PROFIBUS-DP
- DeviceNet™
- EtherNet/IP™
- Ethernet TCP/IP
- PROFINET

- Handheld
- Handy programmer
- Read/write gun
- Accessories

Cables on read/write heads must not be shortened, since functionality can then no longer be ensured.









Dimensions	<b>88x43x20 mm</b>	<b>55x30x20 mm</b>
Housing material	POM	POM
for 1 m cable	<b>Ordering code</b>	
	Part number	BIS C-327-01
for 5 m cable	<b>Ordering code</b>	<b>BIS0080</b>
	Part number	BIS C-327-05
for 10 m cable	<b>Ordering code</b>	
	Part number	BIS C-327-10
Mounting	—	—
Operating temperature	0...+70 °C	0...+70 °C
Storage temperature	-20...+85 °C	-20...+85 °C
Protection per IEC 60529	IP 67	IP 67
Connection to	Processor	Processor
Connection cable	Cable included	See Connectivity section for cable options

	BIS000C	BIS001C	BIS002N	BIS0011	BIS0015
Write distance in mm	0-8	0-8	0-8	0-3	0-3
Read distance in mm	0-8	0-8	0-8	0-3	0-3
Offset in mm at distance	0.7 mm				
	1 mm	±6	±6	±6	±2,5
	2 mm	±6	±6	±6	±2,5
	3 mm	±6	±6	±6	±2,5
	4 mm	±5	±5	±5	
	5 mm	±5	±5	±5	
	6 mm	±4	±4	±4	
	10 mm				
	20 mm				

**Caution!**  
At 10 m cable length, read/write distance is reduced by 10 %

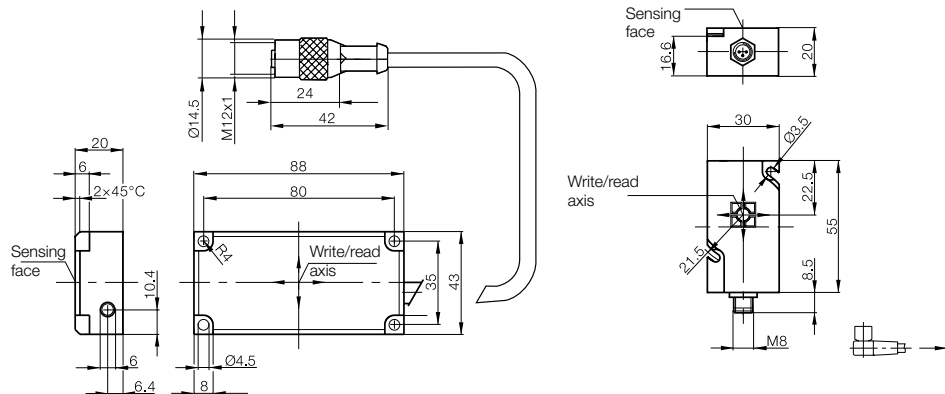
See technical section for dynamic mode information.

**Mounting (see technical section for details):**

- flush in steel
- non-flush on steel
- non-metal

**Antenna type:**

- rod
- round



# BIS C Industrial RFID System

## Read/write heads with connector



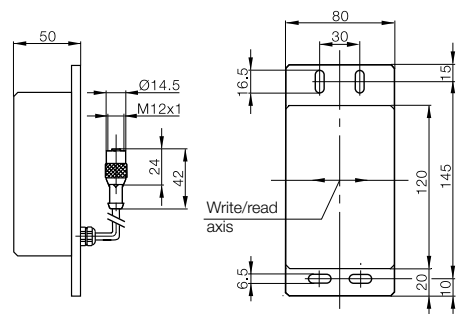
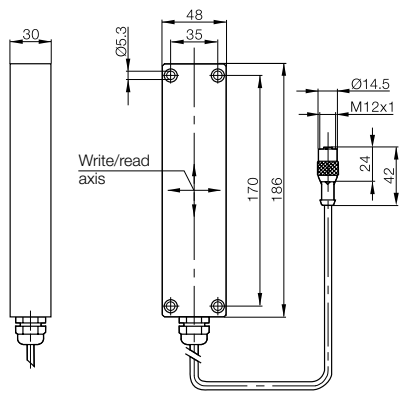
<b>186x48x30 mm</b> PA66	<b>170x80x50 mm</b> POM/Platte A/Mg3
<b>BIS0075</b> BIS C-318-PU1-05	<b>BIS00PN</b> BIS C-351-PU1-05
<b>BIS00L4</b> BIS C-318-PU1-10	<b>BIS00PP</b> BIS C-351-PU1-10
0...+70 °C -20...+85 °C IP 67 Processor Cable included	-20...+80 °C -20...+85 °C IP 67 Processor Cable included

see data carriers BIS C-108-__/_L-SA2	see data carriers BIS C-108-__/_L	BIS000N BIS C-117-05/L	BIS0017 BIS C-127-05/L	see data carriers BIS C-128-__/_L	see data carriers BIS C-190-__/_L																			BIS0028 BIS C-150-05/A	BIS002A BIS C-150-11/A	BIS002E BIS C-150-32/A																		
0-6	0-7	0-7	10-35	0-7,5	8																			0-45	0-45	0-45																		
0-6	0-7	0-7	10-35	0-7,5	8																			0-45	0-45	0-45																		
±8,5	±9,5	9,5		±11	±11																		±15	±15	±15																			
±8,5	±9,5	9,5		±11	±11																		±15	±15	±15																			
±8,5	±9,5	9,5		±11	±11																		±15	±15	±15																			
±8,5	±9,5	9,5		±8	±10																		±15	±15	±15																			
±5,5	±8,5	±8,5		±8	±10																		±15	±15	±15																			
		±8,5	±8,5																				±15	±15	±15																			
						±25																	±15	±15	±15																			
						±20																	±15	±15	±15																			

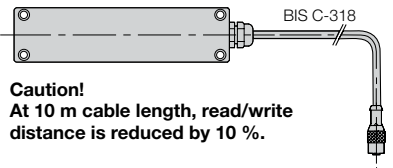


- 70/455 kHz LF
- Range of applications
- Selection criteria
- Data carriers read/write**
- Tool ID
- Palletizing/Logistics
- Speciality
- Read/write heads**
- Tool ID
- Palletizing/Logistics
- Read/write heads With connector**
- Long Distances**
- Data couplers

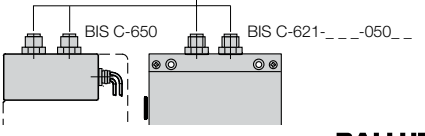
- Processors**
- I/O Interface
- Serial
- Parallel
- PROFIBUS-DP
- DeviceNet™
- EtherNet/IP™
- Ethernet TCP/IP
- PROFINET
- Handheld
- Handy programmer
- Read/write gun
- Accessories



Example:



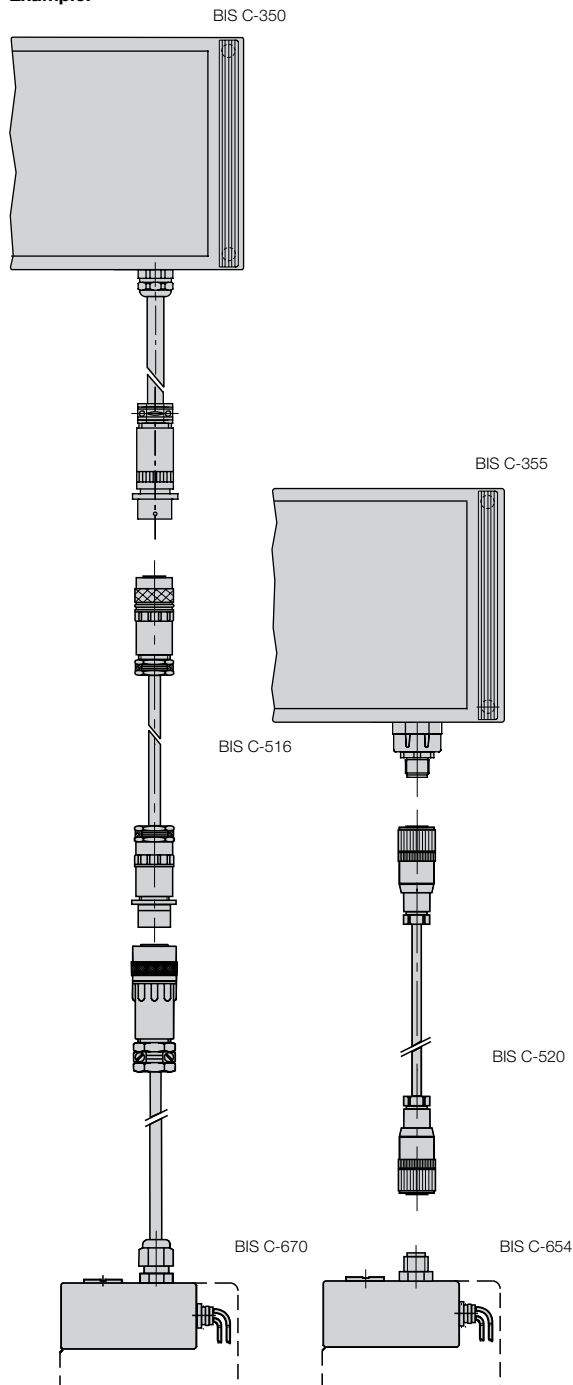
**Caution!**  
At 10 m cable length, read/write distance is reduced by 10 %.



Cables on read/write heads must not be shortened, since functionality can then no longer be ensured.



Example:



Dimensions	
Housing material	
<b>Ordering code</b>	
Part number	
Mounting	
Operating temperature	
Storage temperature	
Protection per IEC 60529	
Connection to	
Connection cable	

**Appropriate data carrier**

Write distance in mm	
Read distance in mm	
Offset in mm at distance	0.7 mm
	1 mm
	3 mm
	5 mm
	7 mm
	10 mm
	15 mm
	20 mm
	35 mm
	42 mm
	60 mm

See technical section for dynamic mode information.

**Mounting (see technical section for details):**

- flush in steel
- non-flush on steel
- non-metal

**Antenna type:**

- rod
- round

# BIS C Industrial RFID System

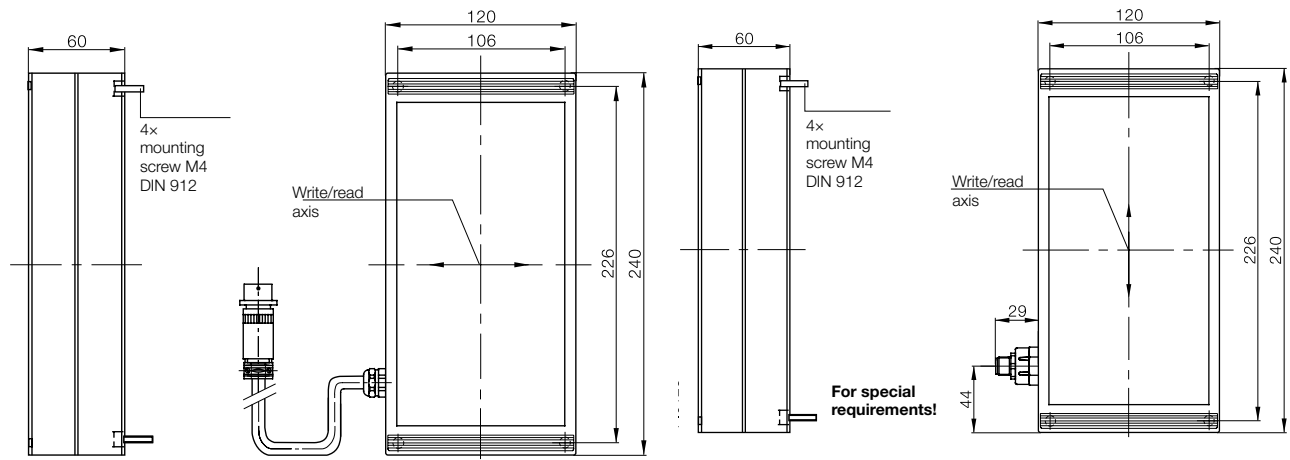
## Read/write heads



dual antenna for increased traverse speed

<b>240×120×60 mm</b>	<b>240×120×60 mm</b>
PC	PC
<b>BIS0086</b>	<b>BIS008E</b>
BIS C-350-00,3	BIS C-355/05-S92
0...+40 °C -20...+85 °C	0...+70 °C -20...+85 °C
IP 67	IP 65
Processor only with connection cable BIS C-516-PU-__ See Connectivity section for cable options	Processor only with connection cable BIS C-520-PVC-05 See Connectivity section for cable options
0.3 m/PUR	See Connectivity section for cable options

<b>BIS0028</b>	<b>BIS002A</b>	<b>BIS002E</b>	<b>BIS0028</b>	<b>BIS002A</b>	<b>BIS002E</b>
BIS C-150-05/A	BIS C-150-11/A	BIS C-150-32/A	BIS C-150-05/A	BIS C-150-11/A	BIS C-150-32/A
90	90	90	0-35	0-35	0-35
100	100	100	0-40	0-40	0-40
±30	±30	±30	±15	±15	±15
±30	±30	±30	±15	±15	±15
±30	±30	±30	±15	±15	±15
±30	±30	±30	±15	±15	±15
±30	±30	±30	±5	±5	±5
±30	±30	±30			

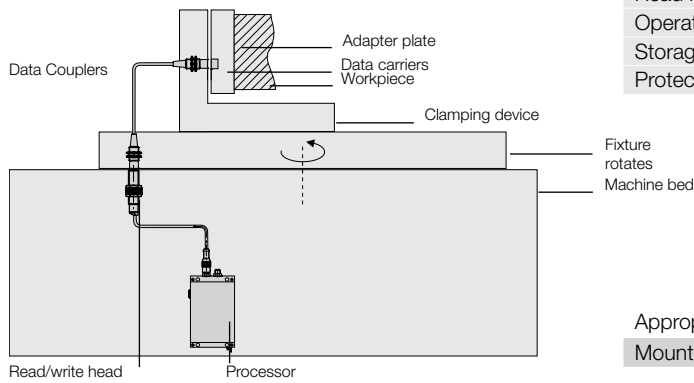


- 70/455 kHz LF
- Range of applications
- Selection criteria
- Data carriers**
- Read/write**
- Tool ID
- Palletizing/Logistics
- Specialty
- Read/write heads**
- Tool ID
- Palletizing/Logistics
- Read/write heads**
- With connector
- Long Distances**

- Data couplers
- Processors**
- I/O Interface
- Serial
- Parallel
- PROFIBUS-DP
- DeviceNet™
- EtherNet/IP™
- Ethernet
- TCP/IP
- PROFINET
- Handheld
- Handy programmer
- Read/write gun
- Accessories



Dimensions	<b>M16/M16</b>
Housing material	Nickel plated brass
<b>Ordering code</b>	<b>BIS00JJ</b>
Part number	BIS C-380-06/06-01
<b>Ordering code</b>	<b>BIS00LU</b>
Part number	BIS C-380-06/06-02
<b>Ordering code</b>	<b>BIS00N9</b>
Part number	BIS C-380-06/06-05
Read head connection	contactless connection
Operating temperature	0...+70 °C
Storage temperature	-20...+85 °C
Protection per IEC 60529	IP 67



Data couplers are used in applications where a dual mechanical interface is mandatory.

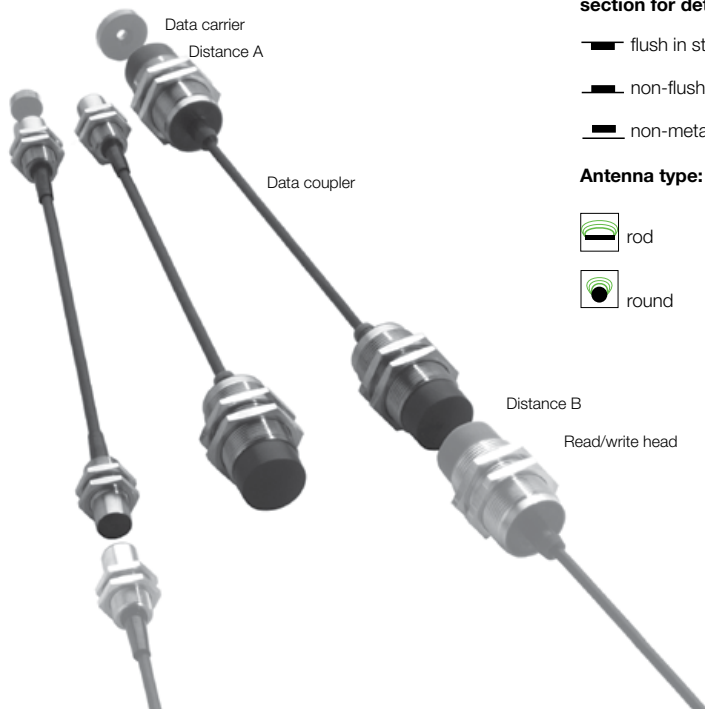
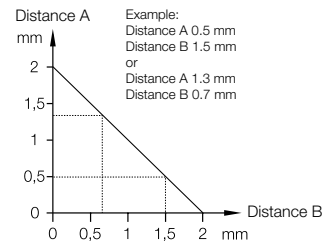
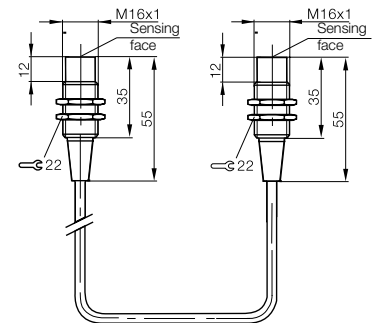
Appropriate data carrier	<b>BIS0002</b> BIS C-100-05/A <b>BIS0004</b> BIS C-103-05/A <b>BIS0009</b> BIS C-105-05/A <b>BIS000T</b> BIS C-121-04/L <b>BIS0011</b> BIS C-122-04/L
Mounting	flush in steel, non-flush on steel, non-metal
Appropriate read/write head	BIS C-300, BIS C-302, BIS C-305, BIS C-306
Max. read/write distance	see diagram

**Mounting (see technical section for details):**

- flush in steel
- non-flush on steel
- non-metal

**Antenna type:**

- rod
- round



# BIS C Industrial RFID System

## Data couplers



<b>50x25x10/M16</b> Nickel plated brass	<b>M16/M30</b> Nickel plated brass	<b>M30/M30</b> Nickel plated brass
<b>BIS00JE</b> BIS C-380-05/06-02	<b>BIS00JM</b> BIS C-380-06/10-02	<b>BIS00JP</b> BIS C-380-10/10-01
<b>BIS00N8</b> BIS C-380-05/06-05 contactless connection 0...+70 °C -20...+85 °C IP 67	<b>BIS00JN</b> BIS C-380-06/10-05 contactless connection 0...+70 °C -20...+85 °C IP 67	<b>BIS00JR</b> BIS C-380-10/10-05 contactless connection 0...+70 °C -20...+85 °C IP 67

<b>BIS0002</b> BIS C-100-05/A <b>BIS0004</b> BIS C-103-05/A <b>BIS0009</b> BIS C-105-05/A <b>BIS000T</b> BIS C-121-04/L <b>BIS0011</b> BIS C-122-04/L	<b>BIS0002</b> BIS C-100-05/A <b>BIS0004</b> BIS C-103-05/A <b>BIS0009</b> BIS C-105-05/A <b>BIS000T</b> BIS C-121-04/L <b>BIS0011</b> BIS C-122-04/L	see data carriers BIS C-104-___/A see data carriers BIS C-108-___/L <b>BIS000N</b> BIS C-117-05/L see data carriers BIS C-128-___/L <b>BIS001E</b> BIS C-130-05/L
BIS C-300 BIS C-302 BIS C-305 BIS C-306 see diagram	BIS C-310 see diagram	BIS C-310 see diagram



Range of applications  
Selection criteria  
**Data carriers read/write**

Tool ID  
Palletizing/Logistics  
Specialty  
**Read/write heads**

Tool ID  
Palletizing/Logistics  
Read/write heads  
With connector  
Long Distances

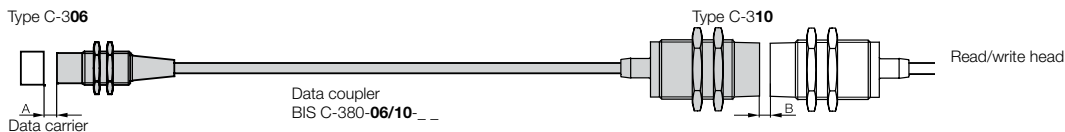
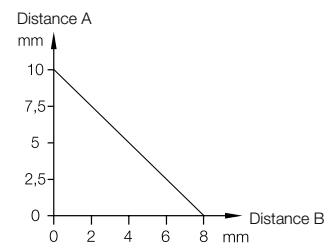
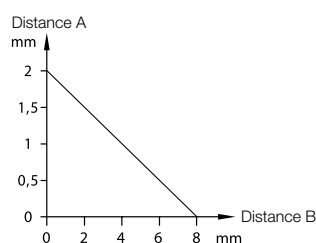
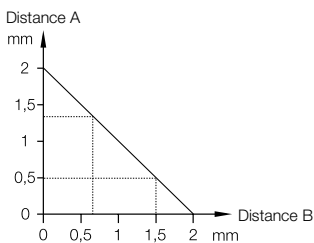
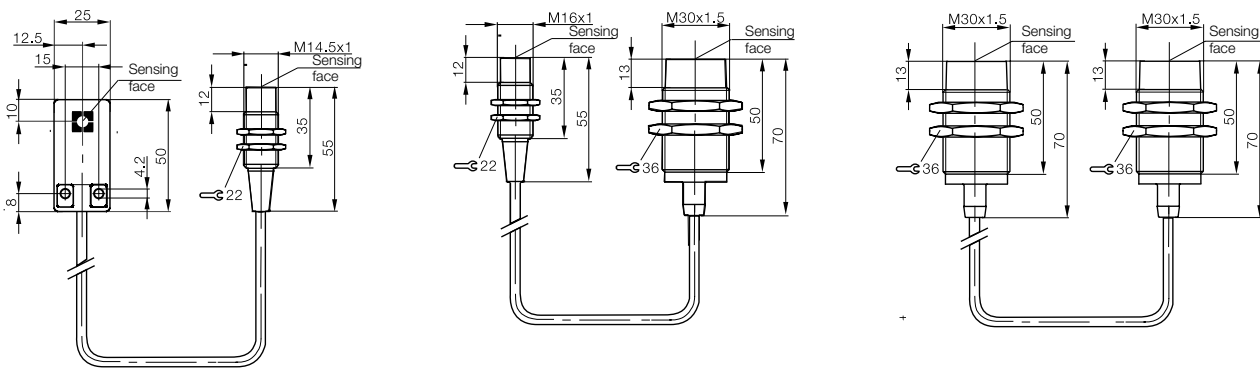
**Data couplers**

**Processors**  
I/O Interface  
Serial  
Parallel  
PROFIBUS-DP  
DeviceNet™  
EtherNet/IP™  
Ethernet  
TCP/IP  
PROFINET

Handheld  
Handy programmer

Read/write gun

Accessories





Dimensions	<b>M30</b>		
Housing material	CuZn nickel plated/PA		
Description/interface	8-bit parallel	8 x 8-bit parallel	2 x 8-bit parallel dynamic*
5 m cable	<b>Ordering code</b>	<b>BIS00H6</b>	<b>BIS00HC</b>
	Part number	BIS C-60R-001-08P-PU-05	BIS C-60R-002-08P-PU-05
10 m cable	<b>Ordering code</b>	<b>BIS00H7</b>	<b>BIS00HE</b>
	Part number	BIS C-60R-001-08P-PU-10	BIS C-60R-002-08P-PU-10
20 m cable	<b>Ordering code</b>	<b>BIS00H8</b>	<b>BIS00TC</b>
	Part number	BIS C-60R-001-08P-PU-20	BIS C-60R-002-08P-PU-20
Mounting	—		
Supply voltage	24 V DC +10/-20 % (incl. ripple)		
Current	max. 300 mA without load		
Output current per output	max. 50 mA		
Voltage drop	≤ 1.5 V		
Leakage current	≤ 0.08 mA		
Operating temperature	0...+50 °C		
Enclosure rating	IP 67		
Tightening torque	20 Nm		
Conductor cross-sections	2 × 0.5 mm <sup>2</sup> and 9 × 0.18 mm <sup>2</sup>		
LED function indicator	yes		

Appropriate data carrier	BIS000T	BIS C-121-04/L	BIS000T	BIS C-121-04/L	BIS0011	BIS C-122-04/L	BIS0004	BIS C-103-05/A	BIS0004	BIS C-103-05/A	BIS001E	BIS C-130-05/L	BIS001E	BIS C-130-05/L	BIS0002	BIS C-100-05/A	BIS0002	BIS C-100-05/A	BIS0019	BIS C-128-05/L	BIS000M	BIS C-117-05/A	BIS000N	BIS C-117-05/L	BIS000C	BIS C-108-05/L	BIS0006	BIS C-104-11/A	BIS000C	BIS C-108-05/L
Mounting	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Write distance in mm																														
Read distance in mm	0-3	1-5	1-5	0-4	1-5	0-5	1-8	0-5	1-6	3-12	1-8	1-8	1-8	1-8	1-8	1-8	1-8	1-8	0-6											
Offset in mm at distance	0.7 mm																													
	1 mm	±2	±3	±3	±4	±2,5	±3	±4	±2,5	±3	±5	±3	±3	±7	±5	±7	±7	±4	±7											
	3 mm	±2	±3	±3	±2,5	±2,5	±3	±5	±3	±3	±7	±5	±7	±7	±7	±7	±4	±7												
	5 mm		±3	±3		±2,5	±3	±5	±3	±3	±6	±5	±7	±7	±7	±4	±6													
	7 mm							±5			±5	±5	±6	±6	±4															

**Mounting (see technical section for details):**

- flush in steel
- non-flush on steel
- non-metal

**Antenna type:**

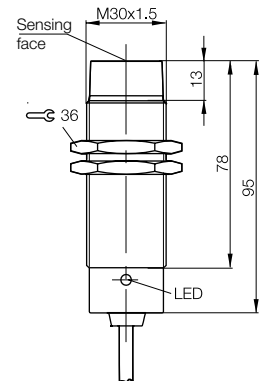
- rod
- round

The BIS C-60R-001-08P-\_\_ read-only system is designed for simple applications of the BIS C read/write system. It is supplied as a read-only system and provides the 8 bits of information without any additional components in parallel format. Three bytes per value are always used starting at Address 0.

The remaining bytes on the data carrier can be used for other purposes with the appropriate processors. For

this function the bytes on the data carrier (starting at Address 0) must be pre-programmed before a read operation can take place.

To easily program the data carrier a processor with serial port and Balluff 007 protocol are used. Programming is easy and fast using the free BISCOMRW software downloadable from the Balluff web site at [www.balluff.com](http://www.balluff.com).









The **compact class BIS C-6** \_ \_ with its reduced dimensions and various interface options can be used wherever ambient conditions require higher protection.

Small, compact, flexible and economical

**Advantages of the BIS C-605 parallel version**

The parallel interface is a read “only” interface. Writing is therefore not possible in parallel mode. However, the processor unit can write a single piece of bit information (OK/NOK, large/small, version 1/version 2) to the data carrier. Bit information is transmitted in the form of a separate output signal.

Description	Ordering code
Parallel	Part number
Supply voltage, Ripple	
Current	
Operating temperature	
Storage temperature	
Protection per IEC 60529	
Read/write head ports	
Control inputs	
Control outputs	
Connection type	
Accessories included	
Connection cable	



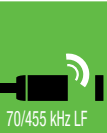
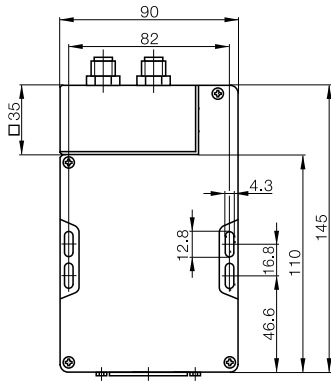
**Adapter or antenna can be rotated in 3 directions**

# BIS C Industrial RFID System

## Processors



Processor
<b>BIS00N7</b>
BIS C-6005-027-650-05-ST4
24 V DC $\pm 20\%$ , $\leq 10\%$
$\leq 400$ mA
0...+60 °C
0...+60 °C
IP 54
2 external
4 (via opto-coupler), 24 V DC
13 (via opto-coupler), 24 V DC
MIN Sub D 25-pin
Configuration software
See Connectivity section for cable options



70/455 kHz LF

Range of applications

Selection criteria

**Data carriers**  
read/write

Tool ID

Palletizing/  
Logistics

Speciality  
**Read/write**  
**heads**

Tool ID

Palletizing/  
Logistics

Read/write  
heads

With  
connector

Long  
Distances

Data  
couplers

**Processors**

I/O Interface  
Serial

**Parallel**

PROFIBUS-DP

DeviceNet™

EtherNet/IP™

Ethernet  
TCP/IP

PROFINET

Handheld

Handy  
programmer

Read/write  
gun

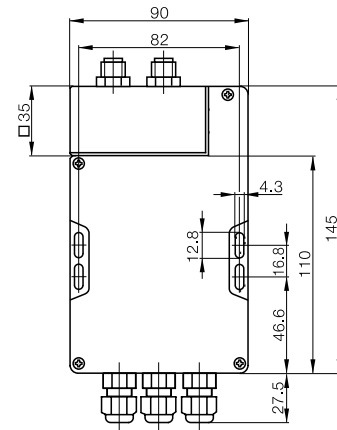
Accessories



Description	Processor
RS232/Balluff dialog	<b>BIS008U</b>
<b>Ordering code</b>	
Part number	BIS C-600-007-650-00-KL1
RS422/RS485, 4-wire, Point-to-Point/Balluff dialog	<b>BIS008W</b>
<b>Ordering code</b>	
Part number	BIS C-600-007-650-02-KL1
Supply voltage, Ripple	24 V DC $\pm 20\%$ , $\leq 10\%$
Current	$\leq 400$ mA
Operating temperature	0...+60 °C
Storage temperature	0...+60 °C
Protection per IEC 60529	IP 65
Read/write head ports	2 external
Control inputs	1 (via opto-coupler), 24 V DC
Control outputs	4 (via opto-coupler), 24 V DC
Connection for	
Connection type	Terminals 3 x Pg 9
Accessories included	Configuration software
Connection cable	



Adapter or antenna can be rotated in 3 directions



The **compact class BIS C-6\_ \_** with its reduced dimensions and various interface options can be used wherever ambient conditions require higher protection.

The devices are ideal for IP 65 applications involving media that is not aggressive to PS plastic.

Small, compact, flexible and economical

Read/write head can be rotated in 3 directions

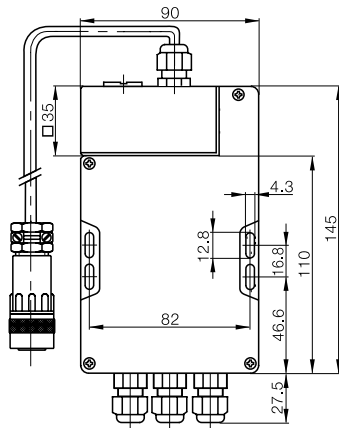
# BIS C Industrial RFID System Processors



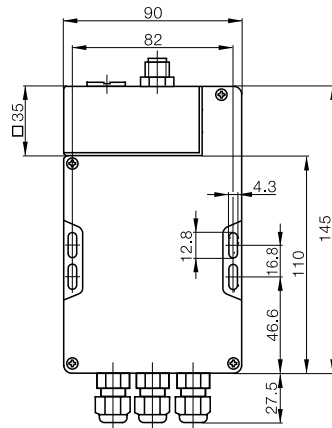
Processor	Processor	Processor
<b>BIS0092</b>		<b>BIS00AZ</b>
BIS C-600-007-670-00-KL1	BIS C-600-007-654-00-KL1	BIS C-620-007-050-00-ST2
		<b>BIS00KW</b>
		BIS C-620-007-050-02-ST2
24 V DC $\pm 20\%$ , $\leq 10\%$	24 V DC $\pm 20\%$ , $\leq 10\%$	24 V DC $\pm 20\%$ , $\leq 10\%$
$\leq 400$ mA	$\leq 400$ mA	$\leq 400$ mA
0...+60 °C	0...+60 °C	0...+60 °C
0...+60 °C	0...+60 °C	0...+60 °C
IP 65	IP 65	IP 65
1 external	1 external/special	2 external
1 (via opto-coupler), 24 V DC	1 (via opto-coupler), 24 V DC	1 connector round 9-pin
4 (via opto-coupler), 24 V DC	4 (via opto-coupler), 24 V DC	1 connector round 5-pin
		RS232/422/485
Terminals 3 x Pg 9	Terminals 3 x Pg 9	Read/write heads BIS C-3_ _ (Exception: BIS C-350)
Configuration software	Configuration software	Configuration software
		See Connectivity section for cable options



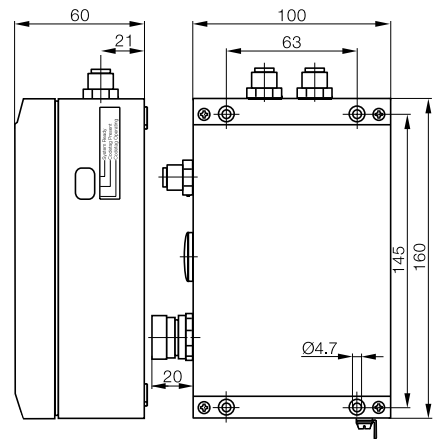
Range of applications  
Selection criteria



for read/write head C-350



for read/write head BIS C-355/05-S92



## Data carriers read/write

- Tool ID
- Palletizing/Logistics
- Speciality
- Read/write heads
- Tool ID
- Palletizing/Logistics
- Read/write heads
- With connector
- Long Distances
- Data couplers

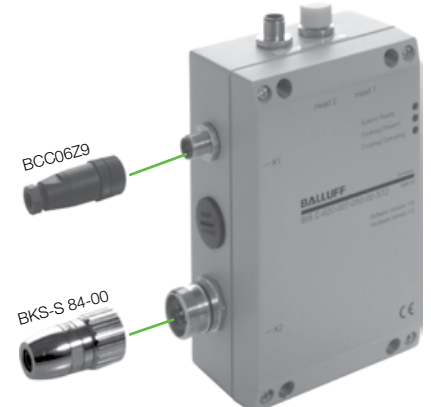
## Processors

- I/O Interface
- Serial
- Parallel
- PROFIBUS-DP
- DeviceNet™
- EtherNet/IP™
- Ethernet
- TCP/IP
- PROFINET

- Handheld
- Handy programmer
- Read/write gun
- Accessories

Processor unit **BIS C-62\_** enclosed in a robust metal housing is suitable for applications requiring degree of protection IP 65. Flexible interface versions and the option of connecting two read/write heads to a single unit are ideal.

The special housing provides effective protection against environmental influences and aggressive media. Impacts do not affect the degree of protection.





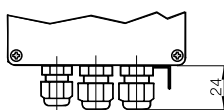
Description	Processor
PROFIBUS-DP with connector	<b>Ordering code</b> <b>BIS009A</b>
	Part number BIS C-6002-019-650-03-ST11
PROFIBUS-DP/memory optimization with connector	<b>Ordering code</b> <b>BIS009M</b>
	Part number BIS C-6002-028-650-03-ST11
PROFIBUS-DP with PG fitting	<b>Ordering code</b> <b>BIS0099</b>
	Part number BIS C-6002-019-650-03-KL2
PROFIBUS-DP/memory optimization with PG fitting	<b>Ordering code</b> <b>BIS009L</b>
	Part number BIS C-6002-028-650-03-KL2
Supply voltage, Ripple	24 V DC $\pm 20\%$ , $\leq 10\%$
Current	$\leq 400$ mA
Operating temperature	0...+60 °C
Storage temperature	0...+60 °C
Protection per IEC 60529	IP 65
Read/write head ports	2 external
Service interface	RS232
Control inputs	1 (via opto-coupler), 24 V DC
Control outputs	2 (via opto-coupler), 24 V DC
Connection version ST11	2 connector round 5-pin, B-coded 1 connector round 5-pin
Connection type clamp terminals KL2	Terminals 1 $\times$ Pg 9, Terminals 2 $\times$ Pg 11
Accessories included	Software GSD file
Connection cable	See Connectivity section for cable options

The **compact class BIS C-600\_** with its reduced dimensions and various interface options can be used wherever ambient conditions require higher protection.

Small, compact, flexible and economical

### Cost-effective identification – operate 2 read/write heads simultaneously

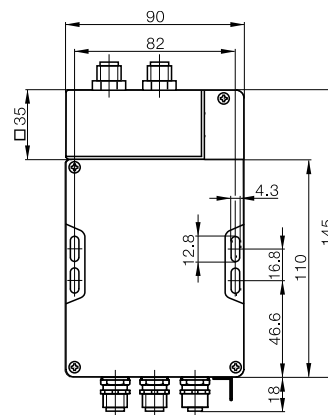
- Selectable division of the data width on the PROFIBUS-DP, from 4 to 128 bytes
- Free assigning of the data width for each read/write head
- Optimum data speed, internal cycle time is shorter than the BUS activation time
- Service friendly, all parameter data are stored in an exchangeable memory
- BUS address selectable with switches
- Compatible with BIS C-602 device family
- Accepts all read/write heads
- Compatible with entire BIS C system



Version KL2



Adapter or antenna can be rotated in 3 directions



# BIS C Industrial RFID System Processors



Processor	Processor	Processor
	<b>BIS009F</b>	<b>BIS009J</b>
	BIS C-6002-019-654-03-ST11	BIS C-6002-019-655-03-ST11
<b>BIS009K</b>		<b>BIS009H</b>
BIS C-6002-019-670-03-KL2		BIS C-6002-019-655-03-KL2
24 V DC $\pm 20\%$ , $\leq 10\%$	24 V DC $\pm 20\%$ , $\leq 10\%$	24 V DC $\pm 20\%$ , $\leq 10\%$
$\leq 400$ mA	$\leq 400$ mA	$\leq 400$ mA
0...+60 °C	0...+60 °C	0...+60 °C
0...+60 °C	0...+60 °C	0...+60 °C
IP 65	IP 65	IP 65
1 external	1 external	4 external
RS232	RS232	RS232
1 (via opto-coupler), 24 V DC	1 (via opto-coupler), 24 V DC	1 (via opto-coupler), 24 V DC
2 (via opto-coupler), 24 V DC	2 (via opto-coupler), 24 V DC	2 (via opto-coupler), 24 V DC
2 connector round 5-pin, B-coded	2 connector round 5-pin, B-coded	2 connector round 5-pin, B-coded
1 connector round 5-pin	1 connector round 5-pin	1 connector round 5-pin
Terminals 1 $\times$ Pg 9, Terminals 2 $\times$ Pg 11	Terminals 1 $\times$ Pg 9, Terminals 2 $\times$ Pg 11	Terminals 1 $\times$ Pg 9, Terminals 2 $\times$ Pg 11
Software GSD file	Software GSD file	Software GSD file
See Connectivity section for cable options	See Connectivity section for cable options	See Connectivity section for cable options



70/455 kHz LF

Range of applications

Selection criteria

Data carriers read/write

Tool ID

Palletizing/Logistics

Specialty

Read/write heads

Tool ID

Palletizing/Logistics

Read/write heads

With connector

Long Distances

Data couplers

Processors

I/O Interface

Serial

Parallel

PROFIBUS-DP

DeviceNet™

EtherNet/IP™

Ethernet TCP/IP

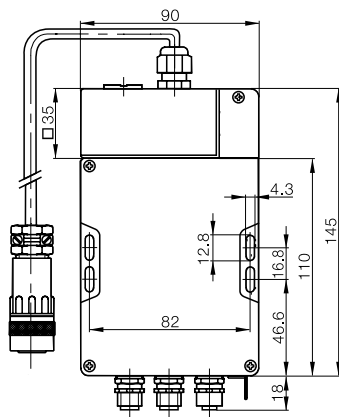
PROFINET

Handheld

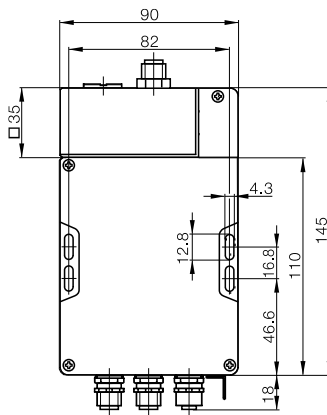
Handy programmer

Read/write gun

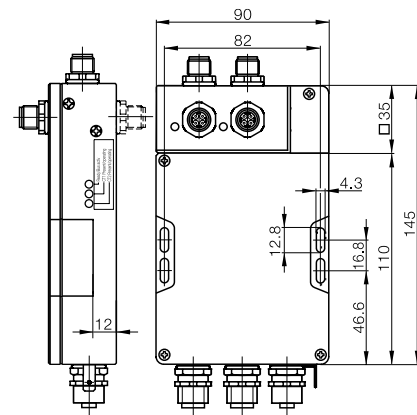
Accessories



for read/write head BIS C-350



for read/write head BIS C-355/\_-S92



Note: 2 read/write heads can be operated simultaneously.



Threaded cover

Ordering code: **BAM0114**

Part number: BKS 12-CS-01

coded for M12 B connector type



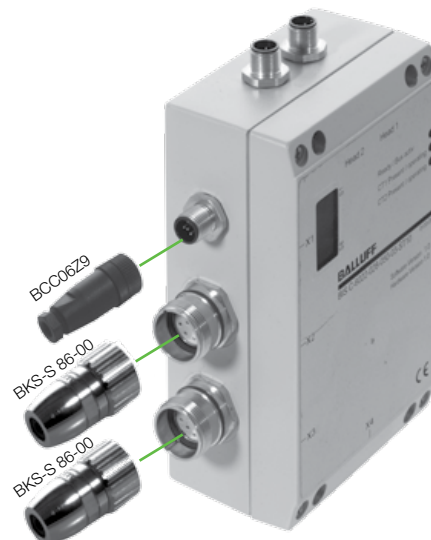
**Cost-effective identification –  
operate 2 read/write heads  
simultaneously!**

**In robust metal housing**

Description		
PROFIBUS-DP	<b>Ordering code</b>	
	Part number	
PROFIBUS-DP (with memory optimized data carrier processing)	<b>Ordering code</b>	
	Part number	
Supply voltage, Ripple		
Current		
Operating temperature		
Storage temperature		
Protection per IEC 60529		
Read/write head ports		
Service interface		
Connection for		
Connection type		
Accessories included		
Connection cable		



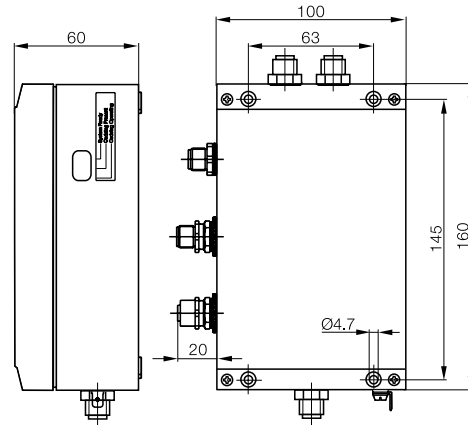
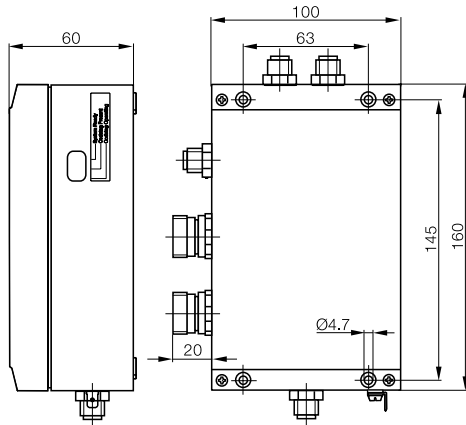
Threaded cover  
**Order code: BAM012P**  
Part number: BKS 23-CS-00  
for M23 connector IP 65 protective  
cover for unused connectors!



# BIS C Industrial RFID System Processors



Processor	Processor
<b>BIS00AL</b>	<b>BIS00AM</b>
BIS C-6022-019-050-03-ST10	BIS C-6022-019-050-03-ST14
<b>BIS00AP</b>	<b>BIS00AR</b>
BIS C-6022-028-050-03-ST10	BIS C-6022-028-050-03-ST14
24 V DC $\pm 20\%$ , $\leq 10\%$	24 V DC $\pm 20\%$ , $\leq 10\%$
$\leq 400$ mA	$\leq 400$ mA
0...+60 °C	0...+60 °C
0...+60 °C	0...+60 °C
IP 65	IP 65
2 external	2 external
RS232	RS232
Read/write heads BIS C-3_ _ Exception: BIS C-350/BIS C-355	Read/write heads BIS C-3_ _ Exception: BIS C-350/BIS C-355
2 connectors round 12-pin, (bus in/out)	Connector round 5-pin, B-coded, (bus in/out)
1 connector round 5-pin (power)	1 connector round 5-pin (power)
1 connector round 4-pin (service)	1 connector round 4-pin (service)
Software GSD file	Software GSD file
See Connectivity section for cable options	See Connectivity section for cable options



Range of applications  
Selection criteria

**Data carriers**  
read/write

Tool ID  
Palletizing/  
Logistics  
Specialty  
**Read/write heads**

Tool ID  
Palletizing/  
Logistics  
Read/write heads  
With connector  
Long Distances

Data couplers

**Processors**

I/O Interface  
Serial  
Parallel  
**PROFIBUS-DP**  
DeviceNet™  
EtherNet/IP™  
Ethernet  
TCP/IP  
PROFINET

Handheld

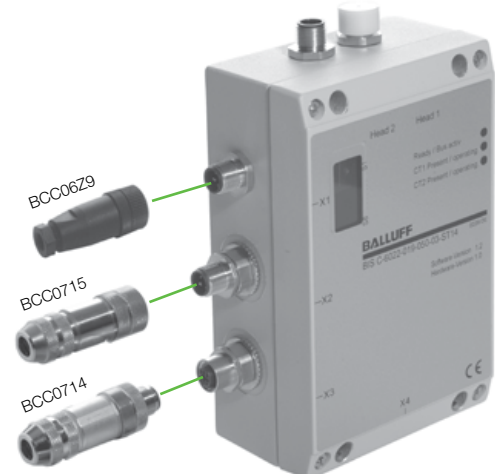
Handy programmer

Read/write gun

Accessories



Threaded cover  
**Ordering code: BAM0114**  
Part number: BKS 12-CS-01  
coded for M12 B connector type







The **compact class BIS C-600\_** with its reduced dimensions and various interface options can be used wherever ambient conditions require higher protection.

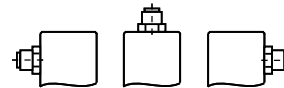
The devices are ideal for IP 65 and applications involving media that is not aggressive to PS plastic.

Small, compact, flexible and economical

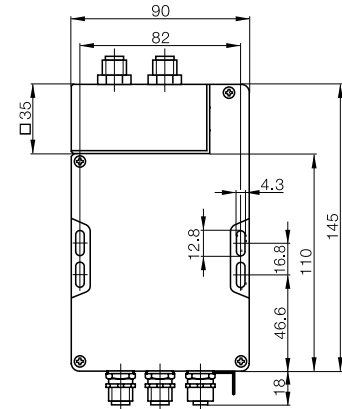
### Cost-effective identification – operate 2 read/write heads simultaneously

- Freely selectable buffer size between 0 and 256 bytes
- Service friendly, all parameter data are stored in an exchangeable memory
- Accepts all read/write heads
- Compatible with entire BIS C system

Description	Processor
DeviceNet™	<b>BIS009N</b>
Ordering code	
Part number	BIS C-6003-025-650-03-ST12
Supply voltage, Ripple	24 V DC ±20 %, ≤ 10 %
Current	≤ 400 mA
Operating temperature	0...+60 °C
Storage temperature	0...+60 °C
Protection per IEC 60529	IP 65
Read/write head ports	2 external
Service interface	RS232
Connection type	3 connector round 5-pin
Accessories included	Software EDS file
Connection cable	See Connectivity section for cable options



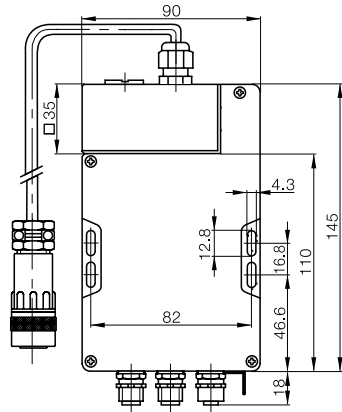
Adapter or antenna can be rotated in 3 directions



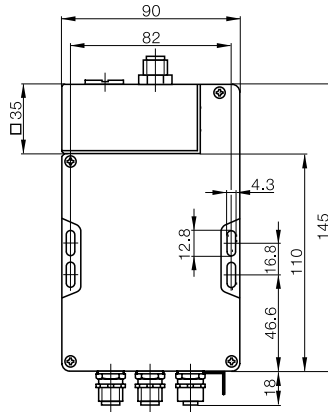
# BIS C Industrial RFID System Processors



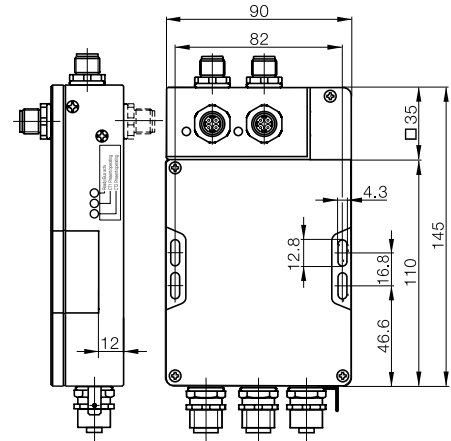
Processor	Processor	Processor
<b>BIS009T</b>		<b>BIS009R</b>
BIS C-6003-025-670-03-ST12	BIS C-6003-025-654-03-ST12	BIS C-6003-025-655-03-ST12
24 V DC $\pm 20\%$ , $\leq 10\%$	24 V DC $\pm 20\%$ , $\leq 10\%$	24 V DC $\pm 20\%$ , $\leq 10\%$
$\leq 400$ mA	$\leq 400$ mA	$\leq 400$ mA
0...+60 °C	0...+60 °C	0...+60 °C
0...+60 °C	0...+60 °C	0...+60 °C
IP 65	IP 65	IP 65
1 external	1 external	4 external
RS232	RS232	RS232
3 connector round 5-pin	3 connector round 5-pin	3 connector round 5-pin
Software EDS file	Software EDS file	Software EDS file
See Connectivity section for cable options	See Connectivity section for cable options	See Connectivity section for cable options



for read/write head BIS C-350



for read/write head BIS C-355/\_ \_-S92



Note: 2 read/write heads can be operated simultaneously.



Range of applications  
Selection criteria  
**Data carriers read/write**  
Tool ID  
Palletizing/Logistics  
Speciality  
**Read/write heads**  
Tool ID  
Palletizing/Logistics  
Read/write heads  
With connector  
Long Distances

Data couplers

**Processors**  
I/O Interface  
Serial  
Parallel  
PROFIBUS-DP  
**DeviceNet™**  
EtherNet/IP™  
Ethernet  
TCP/IP  
PROFINET

Handheld

Handy programmer

Read/write gun

Accessories



**Cost-effective identification –  
operate 2 read/write heads  
simultaneously.**

**In robust metal housing**

Description		
DeviceNet™	<b>Ordering code</b>	
	Part number	
Supply voltage, Ripple		
Current		
Operating temperature		
Storage temperature		
Protection per IEC 60529		
Read/write head ports		
Service interface		
Connection for		
Connection type		
Accessories included		
Accessories (please order separately)		



# BIS C Industrial RFID System Processors



Processor

## BIS00AT

BIS C-6023-025-050-03-ST13

24 V DC  $\pm 20\%$ ,  $\leq 10\%$

$\leq 400$  mA

0...+60 °C

0...+60 °C

IP 65

2 external

RS232

Read/write heads BIS C-3\_ \_

Exception: BIS C-350/BIS C-355

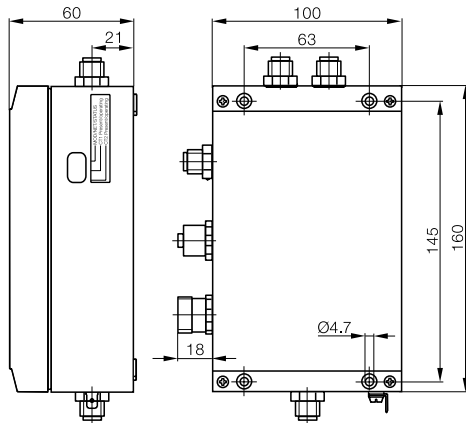
3 connector round 5-pin

1 connector round 4-pin

Software ESD-file

BIS-C -623 threaded cover 7/8"

See Connectivity section for cable options



Threaded cover

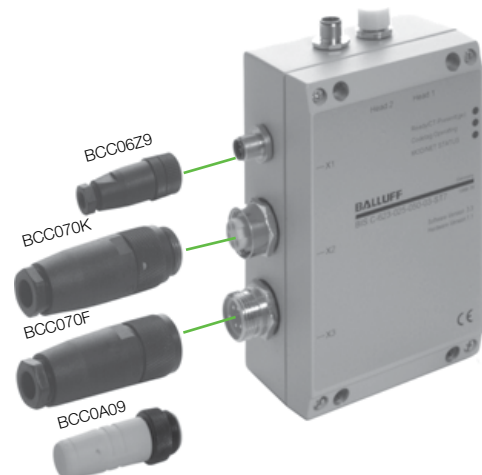
**Ordering code: BAM012T**

Part number: BKS-7/8-CS-00-A

for 7/8" connection

IP 65 protective threaded

cover for unused connectors!



70/455 kHz LF

Range of applications

Selection criteria

**Data carriers read/write**

Tool ID

Palletizing/ Logistics

Speciality

**Read/write heads**

Tool ID

Palletizing/ Logistics

Read/write heads

With connector

Long Distances

Data couplers

**Processors**

I/O Interface

Serial

Parallel

PROFIBUS-DP

**DeviceNet™**

EtherNet/IP™

Ethernet

TCP/IP

PROFINET

Handheld

Handy programmer

Read/write gun

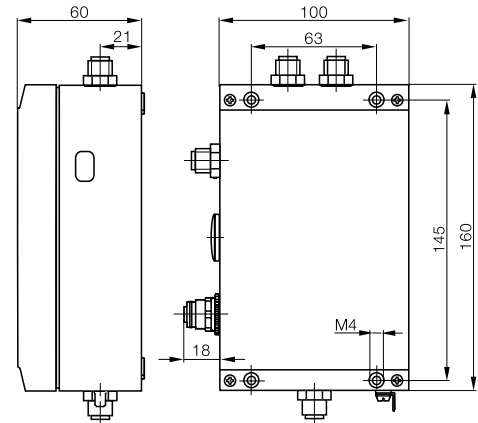
Accessories



**Cost-effective identification – operate 2 read/write heads simultaneously.**

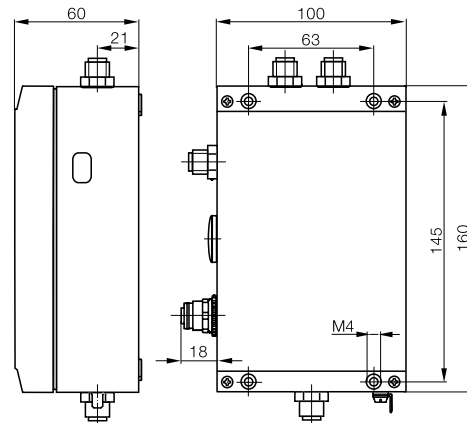
**In robust metal housing**

Description		Processor
EtherNet/IP	<b>Ordering code</b>	<b>BIS00AU</b>
	Part number	BIS C-6026-034-050-06-ST19
Supply voltage, Ripple		24 V DC $\pm 20\%$ , $\leq 20\%$
Current		$\leq 400$ mA
Operating temperature		0...+60 °C
Storage temperature		0...+60 °C
Protection per IEC 60529		IP 65
Read/write head ports		2 external
Service interface		RS232
Connection for		Read/write heads BIS C-3_ _ Exception: BIS C-350 and BIS C-355
Connection type		Connector round 5-pin, D-coded 1 connector 5-pin 1 connector 4-pin
Accessories included		Configuration software
Connection cable		See Connectivity section for cable options





Description		Processor
EtherNet with standard	<b>Ordering code</b>	<b>BIS00AY</b>
TCP/IP protocol	Part number	BIS C-6027-039-050-06-ST19
Supply voltage, Ripple		24 V DC $\pm 20\%$ , $\leq 10\%$
Current		$\leq 400$ mA
Operating temperature		0...+60 °C
Storage temperature		0...+60 °C
Protection per IEC 60529		IP 65
Read/write head ports		2 external
Service interface		RS232
Connection for		Read/write heads BIS C-3_ _ Exception BIS C-350 and BIS C-355
Connection type		Connector round 5-pin, D-coded 1 connector 5-pin 1 connector 4-pin
Accessories included		Configuration software
Connection cable		See Connectivity section for cable options



70/455 kHz LF

Range of applications

Selection criteria

**Data carriers**  
read/write

Tool ID

Palletizing/  
Logistics

Speciality  
**Read/write heads**

Tool ID

Palletizing/  
Logistics

Read/write heads

With connector

Long Distances

Data couplers

**Processors**

I/O Interface  
Serial

Parallel

PROFIBUS-DP

DeviceNet™

**EtherNet/IP™**

PROFINET

Handheld

Handy programmer

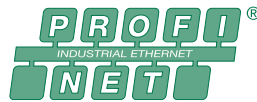
Read/write gun

Accessories

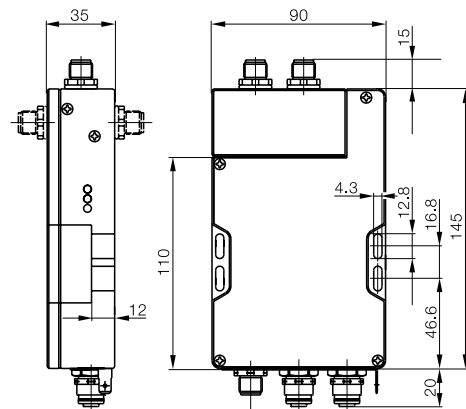
**Cost-effective identification – operate 2 read/write heads simultaneously.**



Description	Processor
PROFINET RT with IRT-capable 2-PORT switch	<b>BIS00K3</b>
Ordering code	
Part number	BIS C-6008-048-650-06-ST23
Supply voltage, Ripple	24 V DC $\pm 10\%$ , $\leq 10\%$
Current	$\leq 400$ mA
Operating temperature	0...+60 °C
Storage temperature	0...+60 °C
Protection per IEC 60529	IP 65
Read/write head ports	2 external
Service interface	RS232 internal
Connection for	Read/write heads BIS C-3_ _ Exception: BIS C-350 and BIS C-355
Connection type	Connector round 5-pin, A-coded 2 connector 4-pin, D-coded
Accessories included	Configuration software
Connection cable	See Connectivity section for cable options



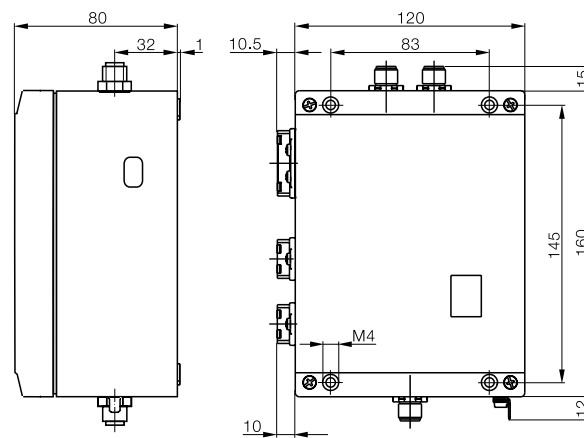
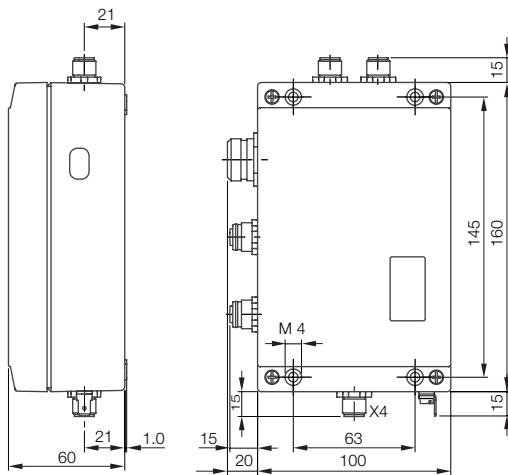
**Adapter or antenna can be rotated in 3 directions**



# BIS C Industrial RFID System Processors



Processor	Processor
<b>BIS00TU</b>	<b>BIS00K4</b>
BIS C-6028-048-050-06-ST28	BIS C-6028-048-050-06-ST22
24 V DC $\pm 10\%$ , $\leq 10\%$	24 V DC $\pm 10\%$ , $\leq 10\%$
$\leq 400$ mA	$\leq 400$ mA
0...+60 °C	0...+60 °C
0...+60 °C	0...+60 °C
IP 65	IP 65
2 external	2 external
RS232	RS232
Read/write heads BIS C-3_ _	Read/write heads BIS C-3_ _
Exception BIS C-350 and BIS C-355	Exception BIS C-350 and BIS C-355
Connector round 5-pin, 7/8"	1 connector 5-pin, Push-pull AIDA
2 connector 4-pin, D-coded	2 connector 8-pin, Push-pull RJ45 AIDA
Configuration software	Configuration software
See Connectivity section for cable options	See Connectivity section for cable options



The robust version solution for connection to ProfiNet with AIDA standard (Automation Initiative of German Domestic Automobile Manufacturers)



70/455 kHz LF

Range of applications

Selection criteria

Data carriers read/write

Tool ID

Palletizing/Logistics

Speciality Read/write heads

Tool ID

Palletizing/Logistics

Read/write heads

With connector

Long Distances

Data couplers

Processors

I/O Interface

Serial

Parallel

PROFIBUS-DP

DeviceNet™

EtherNet/IP™

Ethernet

TCP/IP

**PROFINET**

Handheld

Handy programmer

Read/write gun

Accessories



# BIS C Industrial RFID System

## Standard handheld



### For enhanced operating convenience

Allows portable writing and reading of BIS C data carriers.

Easy operation thanks to:

- Touchscreen with large Windows CE® color display
- Pre-installed Balluff software and keyboard or stylus

Ideal for mobile conditions and challenging environments. Data transfer via optional WLAN or wired USB. The handheld is also modular for expandability.

### Additional options:

A pistol grip and desktop docking/charging station.

Antenna type		
Function		
Housing material		
Standard base	<b>Ordering code</b>	
	Part number	
Standard + WLAN module	<b>Ordering code</b>	
	Part number	
Standard + 1D code reader	<b>Ordering code</b>	
	Part number	
Standard + 2D code reader	<b>Ordering code</b>	
	Part number	
Standard + ID code reader + WLAN	<b>Ordering code</b>	
	Part number	
Standard +2D code reader + WLAN	<b>Ordering code</b>	
	Part number	
Keyboard		
Display		
Supply voltage		
Capacity		
Interface		
Working temperature		
Degree of protection in accordance with IEC 60529		
Read/write head option		
Accessories included		
Appropriate data carrier		
Please order additional accessories separately		

Antenna type:



rod



round

Handheld Standard **BIS C-87\_-1-008-x-000\_**  
Includes charger and stylus



### + Recommended accessories (please order separately)



Description	Pistol grip option	Optional docking station with power supply	Replacement battery 4000mAh rechargeable battery
<b>Part code</b>	<b>FHW0004</b>	<b>FHW0003</b>	<b>WA3010</b>
Part number	11023836	11023834	162936

# BIS C Industrial RFID System

## Standard handheld

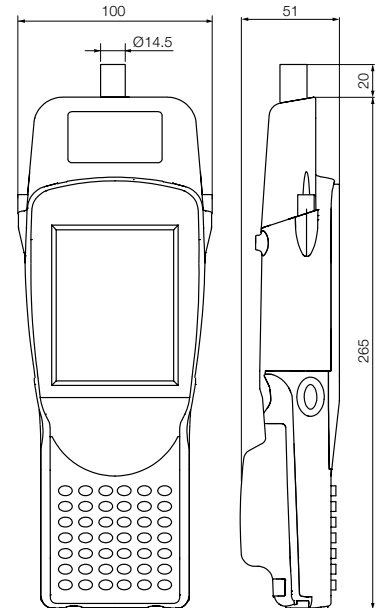
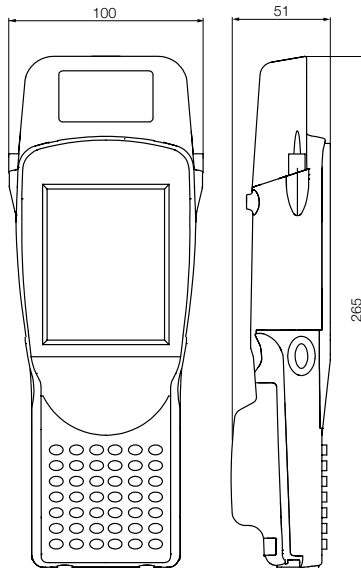
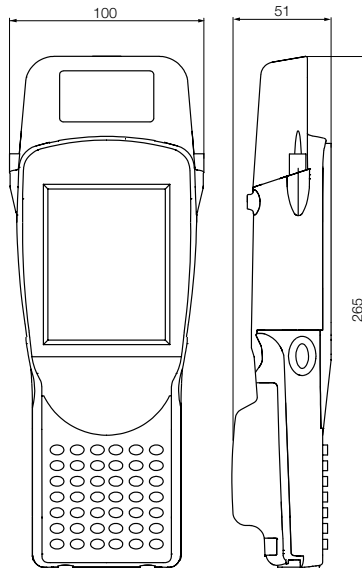


General purpose	Rod	Tool ID
Read/write	Read/write	Read/write
ABS	ABS	ABS
<b>BAE00HW</b>		
BIS C-870-1-008-X-000-3000	BIS C-871-1-008-X-000-3000	BIS C-873-1-008-X-000-3000
<b>BAE00KW</b>		
BIS C-870-1-008-X-001-3000	BIS C-871-1-008-X-001-3000	BIS C-873-1-008-X-001-3000
BIS C-870-1-008-X-002-3000	BIS C-871-1-008-X-002-3000	BIS C-873-1-008-X-002-3000
BIS C-870-1-008-X-003-3000	BIS C-871-1-008-X-003-3000	BIS C-873-1-008-X-003-3000
BIS C-870-1-008-X-004-3000	BIS C-871-1-008-X-004-3000	BIS C-873-1-008-X-004-3000
BIS C-870-1-008-X-005-3000	BIS C-871-1-008-X-005-3000	BIS C-873-1-008-X-005-3000
52 buttons, alphanumeric	52 buttons, alphanumeric	52 buttons, alphanumeric
TFT Touchscreen display	TFT Touchscreen display	TFT Touchscreen display
3.7 V rechargeable battery pack	3.7 V rechargeable battery pack	3.7 V rechargeable battery pack
4000 mA/h	4000 mA/h	4000 mA/h
RS232/Balluff Dialog	RS232/Balluff Dialog	RS232/Balluff Dialog
-10...+50 °C	-10...+50 °C	-10...+50 °C
IP 65	IP 65	IP 65
Integrated	Integrated	Integrated
Charging power supply and stylus	Charging power supply and stylus	Charging power supply and stylus
for BIS C-Data carrier with round coil $\varnothing \geq 35$ mm	for BIS C-Data carrier with rod antenna	for BIS C-Data carrier with round coil $\varnothing \leq 34$ mm
Docking Station and Pistol Grip	Docking Station and Pistol Grip	Docking Station and Pistol Grip



70/455 kHz LF

- Range of applications
- Selection criteria
- Data carriers read/write**
- Tool ID
- Palletizing/Logistics
- Speciality
- Read/write heads**
- Tool ID
- Palletizing/Logistics
- Read/write heads
- With connector
- Long Distances
- Data couplers
- Processors**
- I/O Interface
- Serial
- Parallel
- PROFIBUS-DP
- DeviceNet™
- EtherNet/IP™
- Ethernet TCP/IP
- PROFINET
- Handheld**
- Handy programmer
- Read/write gun
- Accessories





**For enhanced operating convenience**

Allows portable writing and reading of BIS C data carriers.

Easy operation thanks to:

- Touchscreen with large Windows CE® color display
- Pre-installed Balluff software and keyboard or stylus
- Additional pre-installed user-configurable template GUI software for customized user screens.

Ideal for mobile conditions and challenging environments. Data transfer via optional WLAN or wired USB. The handheld is also modular for expandability.

**Additional options:**

A pistol grip and desktop docking/charging station.

Template software program provides customizable data formatting and screens. See page 234 for details.

Antenna type		
Function		
Housing material		
Standard base	<b>Ordering code</b>	
	Part number	
Standard + WLAN module	<b>Ordering code</b>	
	Part number	
Standard + 1D code reader	<b>Ordering code</b>	
	Part number	
Standard + 2D code reader	<b>Ordering code</b>	
	Part number	
Standard + ID code reader + WLAN	<b>Ordering code</b>	
	Part number	
Standard +2D code reader + WLAN	<b>Ordering code</b>	
	Part number	
Keyboard		
Display		
Supply voltage		
Capacity		
Interface		
Working temperature		
Degree of protection in accordance with IEC 60529		
Read/write head option		
Accessories included		
Appropriate data carrier		
Please order additional accessories separately		

Antenna type:



Handheld Standard **BIS C-87\_-1-008-x-000\_**  
Includes charger and stylus



**Recommended accessories**  
(please order separately)



Description	Pistol grip option	Optional docking station with power supply	Replacement battery 4000mAh rechargeable battery
<b>Part code</b>	<b>FHW0004</b>	<b>FHW0003</b>	<b>WA3010</b>
Part number	11023836	11023834	162936

# BIS C Industrial RFID System

## Standard handheld with software

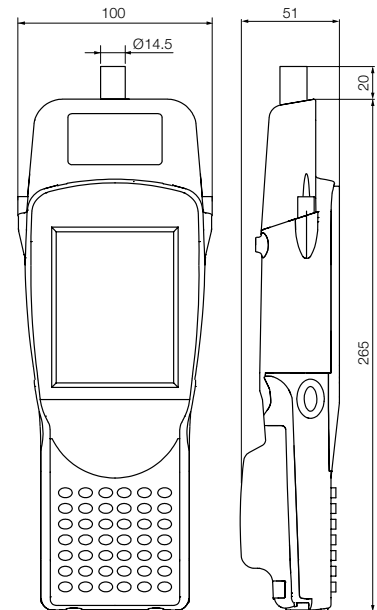
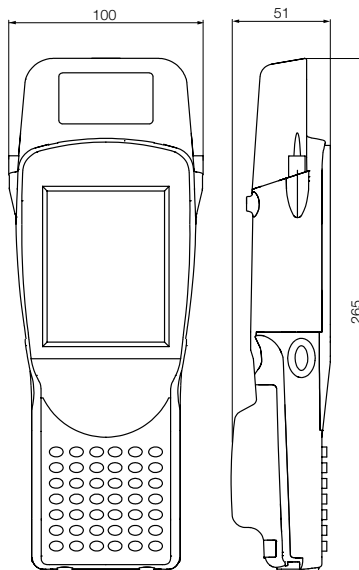
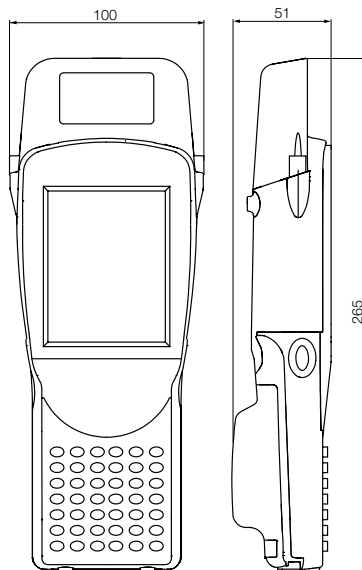


General purpose	Rod	Tool ID
Read/write	Read/write	Read/write
ABS	ABS	ABS
<b>BAE00HH</b>		<b>BAE00HF</b>
BIS C-870-1-008-000-3001	BIS C-871-1-008-000-3001	BIS C-873-1-008-000-3001
BIS C-870-1-008-001-3001	BIS C-871-1-008-001-3001	BIS C-873-1-008-001-3001
BIS C-870-1-008-002-3001	BIS C-871-1-008-002-3001	BIS C-873-1-008-002-3001
BIS C-870-1-008-003-3001	BIS C-871-1-008-003-3001	BIS C-873-1-008-003-3001
BIS C-870-1-008-004-3001	BIS C-871-1-008-004-3001	BIS C-873-1-008-004-3001
BIS C-870-1-008-005-3001	BIS C-871-1-008-005-3001	BIS C-873-1-008-005-3001
52 buttons, alphanumeric	52 buttons, alphanumeric	52 buttons, alphanumeric
TFT Touchscreen display	TFT Touchscreen display	TFT Touchscreen display
3.7 V rechargeable battery pack	3.7 V rechargeable battery pack	3.7 V rechargeable battery pack
4000 mA/h	4000 mA/h	4000 mA/h
RS232/Balluff Dialog	RS232/Balluff Dialog	RS232/Balluff Dialog
-10...+50 °C	-10...+50 °C	-10...+50 °C
IP 65	IP 65	IP 65
Integrated	Integrated	Integrated
Charging power supply and stylus	Charging power supply and stylus	Charging power supply and stylus
for BIS C-Data carrier with round coil $\varnothing \geq 35$ mm	for BIS C-Data carrier with rod antenna	for BIS C-Data carrier with round coil $\varnothing \leq 34$ mm
Docking Station and Pistol Grip	Docking Station and Pistol Grip	Docking Station and Pistol Grip



70/455 kHz LF

- Range of applications
- Selection criteria
- Data carriers read/write**
- Tool ID
- Palletizing/Logistics
- Speciality
- Read/write heads**
- Tool ID
- Palletizing/Logistics
- Read/write heads
- With connector
- Long Distances
- Data couplers
- Processors**
- I/O Interface
- Serial
- Parallel
- PROFIBUS-DP
- DeviceNet™
- EtherNet/IP™
- Ethernet TCP/IP
- PROFINET
- Handheld**
- Handy programmer
- Read/write gun
- Accessories





**For enhanced operating convenience**

Allows portable writing and reading of BIS C data carriers.

Easy operation thanks to:

- Touchscreen with large Windows CE® color display
- Pre-installed Balluff software and keyboard or stylus
- Additional pre-installed user-configurable BIS Portal advanced operation and GUI software for customized user screens and data handling options, including bar code reading integration.

Ideal for mobile conditions and challenging environments. Data transfer via optional WLAN or wired USB. The handheld is also modular for expandability.

**Additional options:**

A pistol grip and desktop docking/charging station.

BISPortal software program provides data formatting and screens, bar code reading and data queries. See page 234 for details.

Antenna type		
Function		
Housing material		
Standard base	<b>Ordering code</b>	
	Part number	
Standard + WLAN module	<b>Ordering code</b>	
	Part number	
Standard + 1D code reader	<b>Ordering code</b>	
	Part number	
Standard + 2D code reader	<b>Ordering code</b>	
	Part number	
Standard + ID code reader + WLAN	<b>Ordering code</b>	
	Part number	
Standard +2D code reader + WLAN	<b>Ordering code</b>	
	Part number	
Keyboard		
Display		
Supply voltage		
Capacity		
Interface		
Working temperature		
Degree of protection in accordance with IEC 60529		
Read/write head option		
Accessories included		
Appropriate data carrier		
Please order additional accessories separately		

Antenna type:



rod



round

Handheld Standard **BIS C-87\_-1-008-x-000\_**  
Includes charger and stylus



**+ Recommended accessories**  
(please order separately)



Description	Pistol grip option	Optional docking station with power supply	Replacement battery 4000mAh rechargeable battery
<b>Part code</b>	<b>FHW0004</b>	<b>FHW0003</b>	<b>WA3010</b>
Part number	11023836	11023834	162936

# BIS C Industrial RFID System

## Standard handheld with software

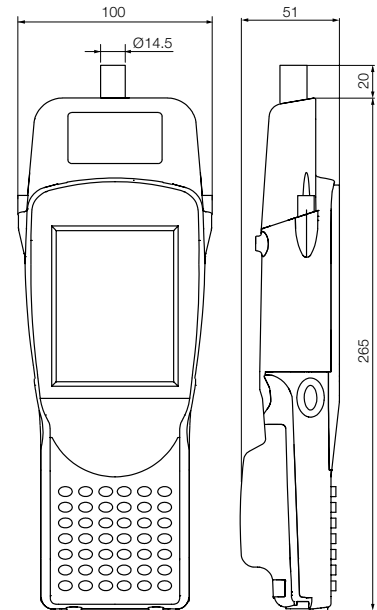
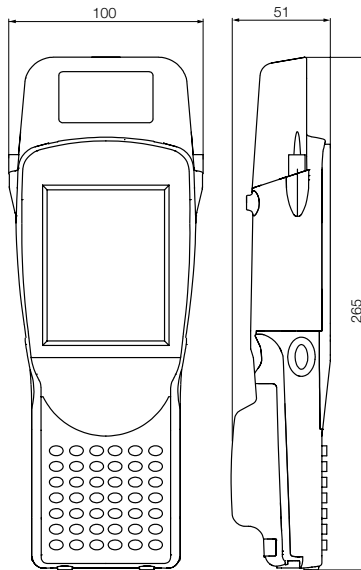
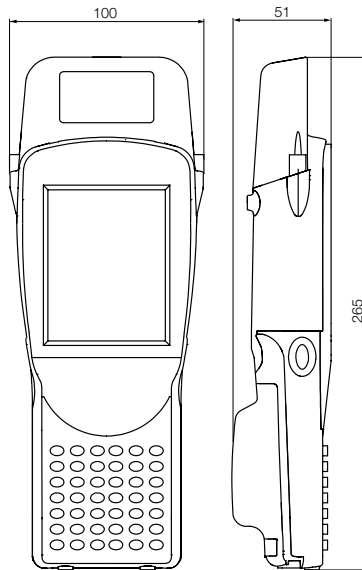


General purpose	Rod	Tool ID
Read/write	Read/write	Read/write
ABS	ABS	ABS
<b>BAE00JZ</b>		<b>BAE00J5</b>
BIS C-870-1-008-000-3002	BIS C-871-1-008-000-3002	BIS C-873-1-008-000-3002
BIS C-870-1-008-001-3002	BIS C-871-1-008-001-3002	BIS C-873-1-008-001-3002
BIS C-870-1-008-002-3002	BIS C-871-1-008-002-3002	BIS C-873-1-008-002-3002
BIS C-870-1-008-003-3002	BIS C-871-1-008-003-3002	BIS C-873-1-008-003-3002
BIS C-870-1-008-004-3002	BIS C-871-1-008-004-3002	BIS C-873-1-008-004-3002
BIS C-870-1-008-005-3002	BIS C-871-1-008-005-3002	<b>BAE00KT</b>
BIS C-870-1-008-005-3002	BIS C-871-1-008-005-3002	BIS C-873-1-008-005-3002
52 buttons, alphanumeric	52 buttons, alphanumeric	52 buttons, alphanumeric
TFT Touchscreen display	TFT Touchscreen display	TFT Touchscreen display
3.7 V rechargeable battery pack	3.7 V rechargeable battery pack	3.7 V rechargeable battery pack
4000 mA/h	4000 mA/h	4000 mA/h
RS232/Balluff Dialog	RS232/Balluff Dialog	RS232/Balluff Dialog
-10...+50 °C	-10...+50 °C	-10...+50 °C
IP 65	IP 65	IP 65
Integrated	Integrated	Integrated
Charging power supply and stylus	Charging power supply and stylus	Charging power supply and stylus
for BIS C-Data carrier with round coil $\varnothing \geq 35$ mm	for BIS C-Data carrier with rod antenna	for BIS C-Data carrier with round coil $\varnothing \leq 34$ mm
Docking Station and Pistol Grip	Docking Station and Pistol Grip	Docking Station and Pistol Grip



70/455 kHz LF

- Range of applications
- Selection criteria
- Data carriers read/write**
- Tool ID
- Palletizing/Logistics
- Speciality
- Read/write heads**
- Tool ID
- Palletizing/Logistics
- Read/write heads
- With connector
- Long Distances
- Data couplers
- Processors**
- I/O Interface
- Serial
- Parallel
- PROFIBUS-DP
- DeviceNet™
- EtherNet/IP™
- Ethernet
- TCP/IP
- PROFINET
- Handheld**
- Handy programmer
- Read/write gun
- Accessories



**Data displayed the way you want it**

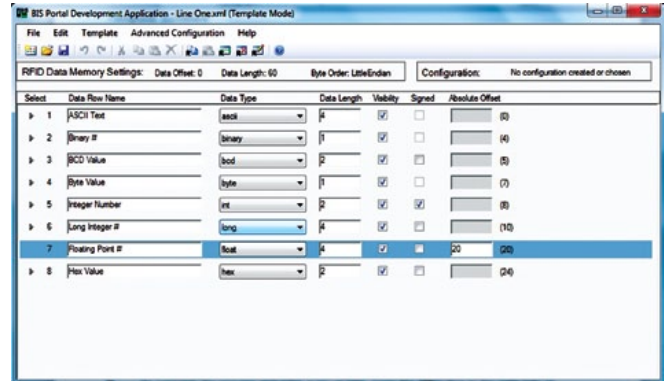
When you require a way to see your critical RFID based data in a legible and logical manner using a mobile device, having a data display solution you can customize without a great deal of time, expense or programing expertise is the answer.

The BIS Template Software solution for Balluff's handhelds allows you to access the data on your RFID tags and display it the way you want it, maximizing access and increasing visibility to your process. It allows you to read and write data to the tag and store or transfer that data to and from the handheld using a simple to customize and easy to understand software interface.

The BISPortal software solution for Balluff's handhelds allows you to get data from your RFID tags and bar codes, then display and search it the way you want, maximizing access and increasing visibility to your process. It allows you to read data from a tag or bar code, write data to a tag, easily search the read data, compare data to a onboard user created database and store or transfer that data to and from the handheld using a simple to customize and easy to understand software interface.

**Simple to customize**

The Template software has a simple Windows™ PC based configuration interface that uses menu driven, pull-down selection options to configure and display your RFID tags data in a logical and application specific manner. You decide and configure customized descriptions and what format your data is shown in without the need for any programming.



Windows™ PC template Development Application interface

**Template driven**

The BIS Portal Development Application uses a simple template configuration method to define the RFID and bar code data and setup the way in which that data will be displayed. Using a template format makes it a simple to understand configuration method, allowing you to create your own customized handheld data screens. No need to do your own programming or hire an integrator. This software also makes configuring and uploading your data to the handheld just as easy.

**RFID data display types include:**

- ASCII
- Binary
- BCD
- Byte
- Integer
- Long integer
- Floating point
- Hexadecimal

### Template Software Solution

#### Benefits of BIS Template software

- Access your RFID data anywhere using a mobile handheld solution.
- Display RFID data the way you want to see it.
- No programming or integration required!

#### Customizable data display

- Data can be displayed using different data formats.
- Raw data can be grouped together and displayed using defined rows.
- User defined descriptions on each row for easy data identification.

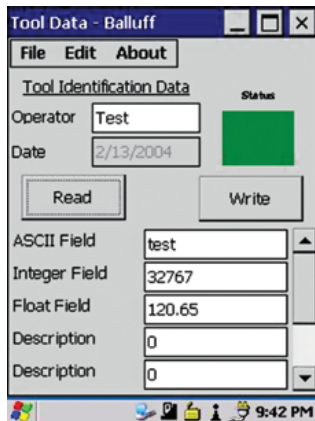
#### Simple display configuration

- Configure a data "template" using the simple PC configuration interface program.
- Transfer the template to the handheld using the PC interface and USB connection.
- Use the automatically installed icon on the handheld's interface desktop to begin using the created template.

#### Balluff Tool ID compatibility

The Template software combined with our BIS Tool ID RFID hardware provides a powerful mobile solution to access Tool ID tag data anywhere on the shop floor with the greatest flexibility.

With the use of this software and a Tool ID RFID tag antenna on a handheld, Tool ID data can be accessed, customized and seen the way you need it. Provide unparalleled mobile access to the Tool data at the machine on the shop floor, tool crib, or anywhere in between.



Handheld data display and interface

### Portal Software Solution

#### Benefits of BISPortal software

- Access your RFID and bar code data anywhere using a mobile handheld solution.
- Display and query RFID and bar code data the way you want.
- No programming or integration required!

#### Customizable data display

- Data can be displayed using different data formats.
- Raw data can be grouped together and displayed using defined rows.
- User defined descriptions on each row make it easy for data identification.

#### Simple display configuration

- Configure a data "template" using the simple PC configuration interface program.
- Create multiple templates for different applications.
- Easily transfer templates and databases to the handheld using the PC interface and USB connection.



Handhelds interface data display, part, and database query screens



Range of applications  
Selection criteria

Data carriers  
read/write

Tool ID  
Palletizing/  
Logistics

Speciality  
Read/write  
heads

Tool ID  
Palletizing/  
Logistics  
Read/write  
heads

With  
connector  
Long  
Distances

Data  
couplers

Processors

I/O Interface  
Serial

Parallel  
PROFIBUS-DP  
DeviceNet™

EtherNet/IP™  
Ethernet  
TCP/IP

PROFINET

Handheld

Handy  
programmer

Read/write  
gun

Accessories



# BIS C Industrial RFID System

## Handy programmer

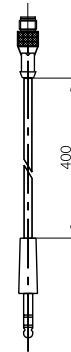
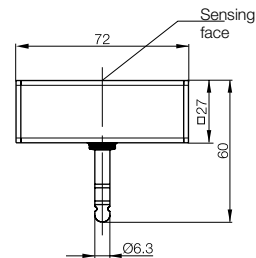
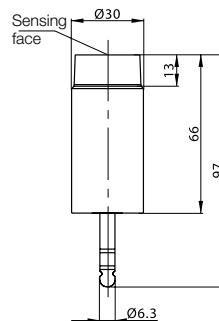
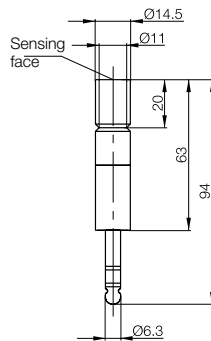


Dimensions	<b>Ø 14.5x63 mm</b>	<b>Ø 30x66 mm</b>	<b>72x27x27 mm</b>	
Housing material	CuZn	POM	PVC	
Function	Read/write head	Read/write head	Read/write head	Adapter cable
<b>Ordering code</b>	<b>BAE0095</b>	<b>BAE0096</b>	<b>BAE0097</b>	<b>BAE0094</b>
Part number	BIS C-851	BIS C-852	BIS C-853	BIS C-850
Operating temperature	0...+70 °C	0...+70 °C	0...+70 °C	0...+70 °C
Storage temperature	-20...+85 °C	-20...+85 °C	-20...+85 °C	-20...+85 °C
Protection per IEC 60529	IP 67	IP 67	IP 67	IP 67
Read head connection	6.3 mm jack socket	6.3 mm jack socket	6.3 mm jack socket	6.3 mm jack socket
Connection to	BIS C-810 BIS C-820 BIS C-720	BIS C-810 BIS C-820 BIS C-720	BIS C-810 BIS C-820 BIS C-720	BIS C-810 BIS C-820 BIS C-720

Appropriate data carrier

BIS C-100_ _	BIS C-100_ _	BIS C-150- _ _/A
BIS C-103_ _	BIS C-104_ _	
BIS C-105_ _	BIS C-108_ _	
BIS C-121_ _	BIS C-117_ _	
BIS C-122_ _	BIS C-128_ _	
	BIS C-130_ _	
	BIS C-190_ _	
	BIS C-191_ _	

Adapter cable for handy programmer or portable device and all read/write heads with M12 connector.



# BIS C Industrial RFID System Handy programmer

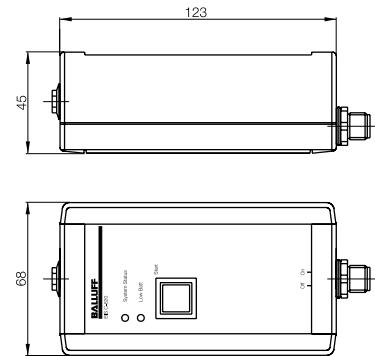
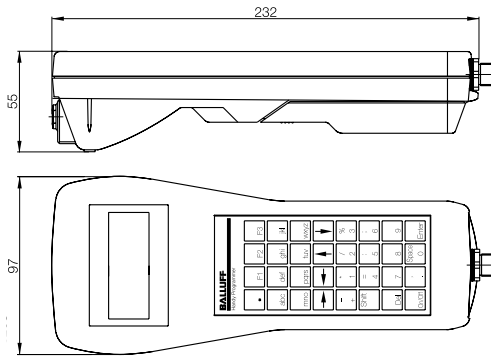


Function	Read/write	Read/write
Housing material	ABS	ABS
<b>Ordering code</b>	<b>BAE0088</b>	<b>BAE008C</b>
Part number	BIS C-810-0-003	BIS C-820-0-004-D
Keyboard	32 buttons, alphanumeric	1 key
Display	LCD-display, 20 characters/4 line	2 LED status/battery
Current	2.4 V rechargeable battery pack NiMH	2x R6 AA rechargeable NiMH
Capacity	1500 mA/h	800 mA/h
Interface	RS232/Balluff Dialog	RS232/Balluff Dialog
Operating temperature	0...+50 °C	0...+50 °C
Protection per IEC 60529	IP 40	IP 40
Read head connection	1x 6.3 mm jack socket	1x 6.3 mm jack socket
Accessories	Carrying case included	

### For maximum flexibility

The handy programmer with read/write function helps you stay mobile and independent. Benefit from increased mobility during repair work, for example. The handy programmer is fitted with an interface for connection to a PC.

Option of customizing menu buttons.



70/455 kHz LF

Range of applications  
Selection criteria

**Data carriers**  
**read/write**

Tool ID

Palletizing/  
Logistics

Speciality  
**Read/write**  
**heads**

Tool ID

Palletizing/  
Logistics

Read/write  
heads

With  
connector

Long  
Distances

Data  
couplers

**Processors**

I/O Interface

Serial

Parallel

PROFIBUS-DP

DeviceNet™

EtherNet/IP™

Ethernet

TCP/IP

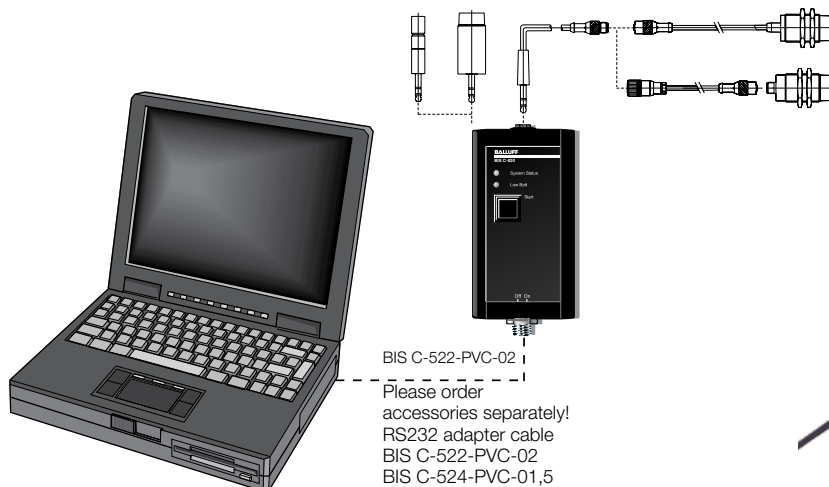
PROFINET

Handheld

**Handy**  
**programmer**

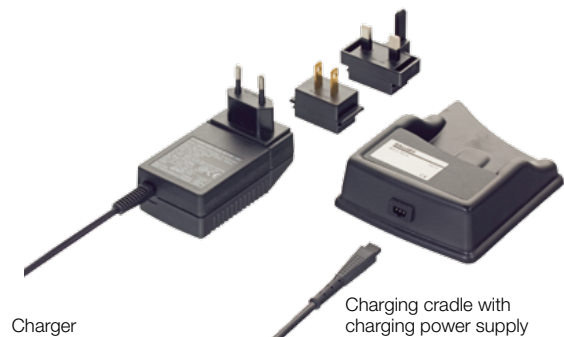
Read/write  
gun

Accessories



BIS C-522-PVC-02

Please order accessories separately!  
RS232 adapter cable  
BIS C-522-PVC-02  
BIS C-524-PVC-01,5  
See Connectivity section for cable options.



Charger  
**Ordering code: BAE0047**  
Part number: BIS C-701-A

Charging cradle with charging power supply  
**Ordering code: BAE048**  
Part number: BIS C-702-A

# BIS C Industrial RFID System

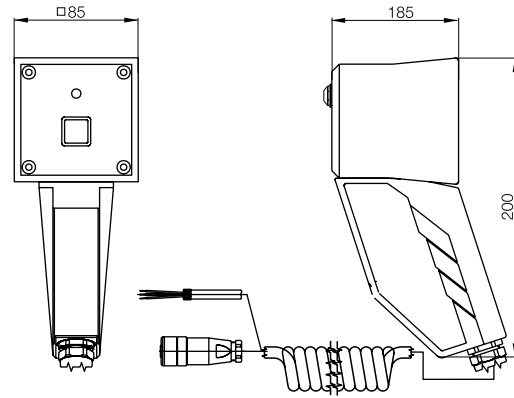
## Read/write gun



### Outstanding operating comfort

Benefit from the advantages of the ergonomic pistol grip with the option of attaching three different read/write heads. The pistol grip rests snugly in your hand while you activate a read/write function at the press of a button. LEDs and an integral buzzer signal the end of the read/write process.

Housing material	PA 66
<b>Ordering code</b>	<b>BAE004C</b>
Part number	BIS C-720-01-03
Keyboard	1 key
Display	1 LED
Operating temperature	0...+70 °C
Storage temperature	-20...+85 °C
Protection per DIN 40 050	IP 40
Read head connection	6.3 mm jack socket
Coiled cable extended	3 m
Connection to	Processor and PLC



See read/write head attachments on page 218.



# BIS C Industrial RFID System Accessories



## Access protection

### And here's how it works

Individual access codes are allocated via programmable data keys, which can then be disabled to prevent further programming.

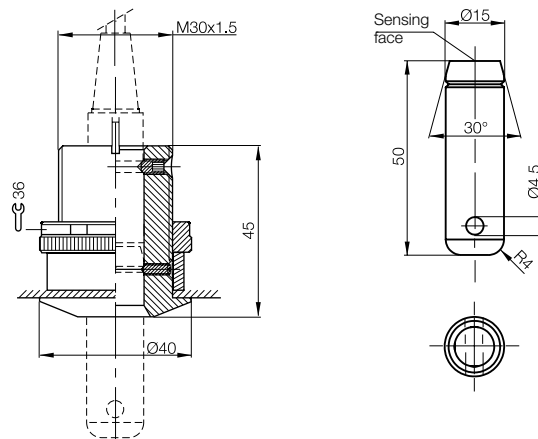
Unauthorized personnel cannot manipulate the data key as a result. The data key is read via an antenna fitted to a special bracket. The processor unit then issues the data.

Different interfaces such as serial, PROFIBUS, INTERBUS, DeviceNet™, Ethernet/IP or parallel interfaces enable simple connection to the monitored system. Available for systems BIS C, BIS L and BIS M.

### The benefits to you

Simple upgrade and rapid replacement without modifying the system software. End users are independent of system providers. The access system is easy to integrate in read/write stations that already use an identification system. Simply connect the access monitoring antenna to the second channel on the existing processor unit. Hardware expenses are reduced to a minimum and software only requires slight modification in order to process both channels.

Version	Access protection	Data carrier
Use	Attachment for read/write head BIS C-300	
<b>Ordering code</b>	<b>BAM012C</b>	<b>BIS002Y</b>
Part number	BIS C-300-ZA1	BIS C-122-04/L-ZC1
Operating temperature	0...+70 °C	-25...+70 °C
Storage temperature	-20...+85 °C	-25...+85 °C
Protection per IEC 60529		IP 67



70/455 kHz LF

Range of applications  
Selection criteria

**Data carriers read/write**

Tool ID  
Palletizing/Logistics  
Speciality  
**Read/write heads**

Tool ID  
Palletizing/Logistics  
Read/write heads  
With connector  
Long Distances

Data couplers

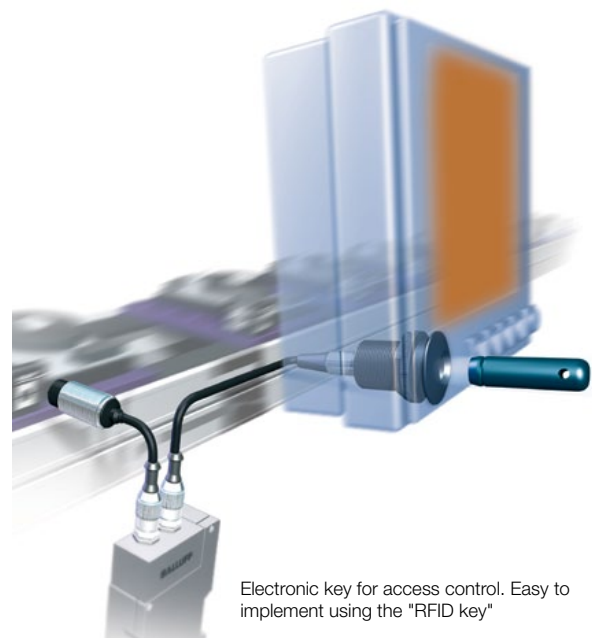
**Processors**  
I/O Interface  
Serial  
Parallel  
PROFIBUS-DP  
DeviceNet™  
EtherNet/IP™  
Ethernet TCP/IP  
PROFINET

Handheld

Handy programmer

**Read/write gun**

**Accessories**



Electronic key for access control. Easy to implement using the "RFID key"