BALLUFF

sensors worldwide

BIS V Industrial RFID System

The new generation for more efficiency

reddot design award
winner 2012

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The new generation for more efficiency

The variable system for intelligence in a small space: connect up to four read/write heads to one evaluation unit

Make quick, contactless data communication noticeably more efficient with Industrial RFID BIS V from Balluff. Only BIS V from Balluff combines RFID and sensors. BIS V, along with the four antenna channels, has an integrated IO-Link master with the latest version, 1.1. The four antenna channels work completely independently of each other. This saves costs, as fewer evaluation units are needed. Through the IO-Link master you have a node for additional information available, so that you can connect further sensors and/or actuators directly and can create a simple network structure.

The high performance BIS V offers maximum convenience. Display and status LEDs support ease of use. And through its USB service interface, standard hardware, like a PC, is easy to connect.
All connections are easily accessible and completely pluggable.
– Function indicator: each read/write head connection has two LEDs for the status and operating state
– Eight monochrome LEDs show the bus status
– LCD indicators with control buttons: setting and displaying the Profibus address and displaying read data carrier UIDs
– USB connection: for fast commissioning without bus connection (reading and writing data carriers), update/upgrade of the evaluation unit or the read/write heads and calling up the operating menu as a PDF file
– Intelligent power plug for saving parameters on site
– Simple mounting on top-hat rails or extruded profiles

Cancel control button	Enter control button
Display	
	Status LEDs
Read/write head connection 1	Read/write head connection 2
Read/write head connection 3	Read/write head connection 4
USB and IO-Link connection	7/8" power plug
Bus out	Bus in

Typical applications for the combination of RFID evaluation units and sensors include identification tasks for material flow control in production systems, for conveyor systems in mechanical engineering, in assembly lines and electric suspension systems or in the entire field of intralogistics.
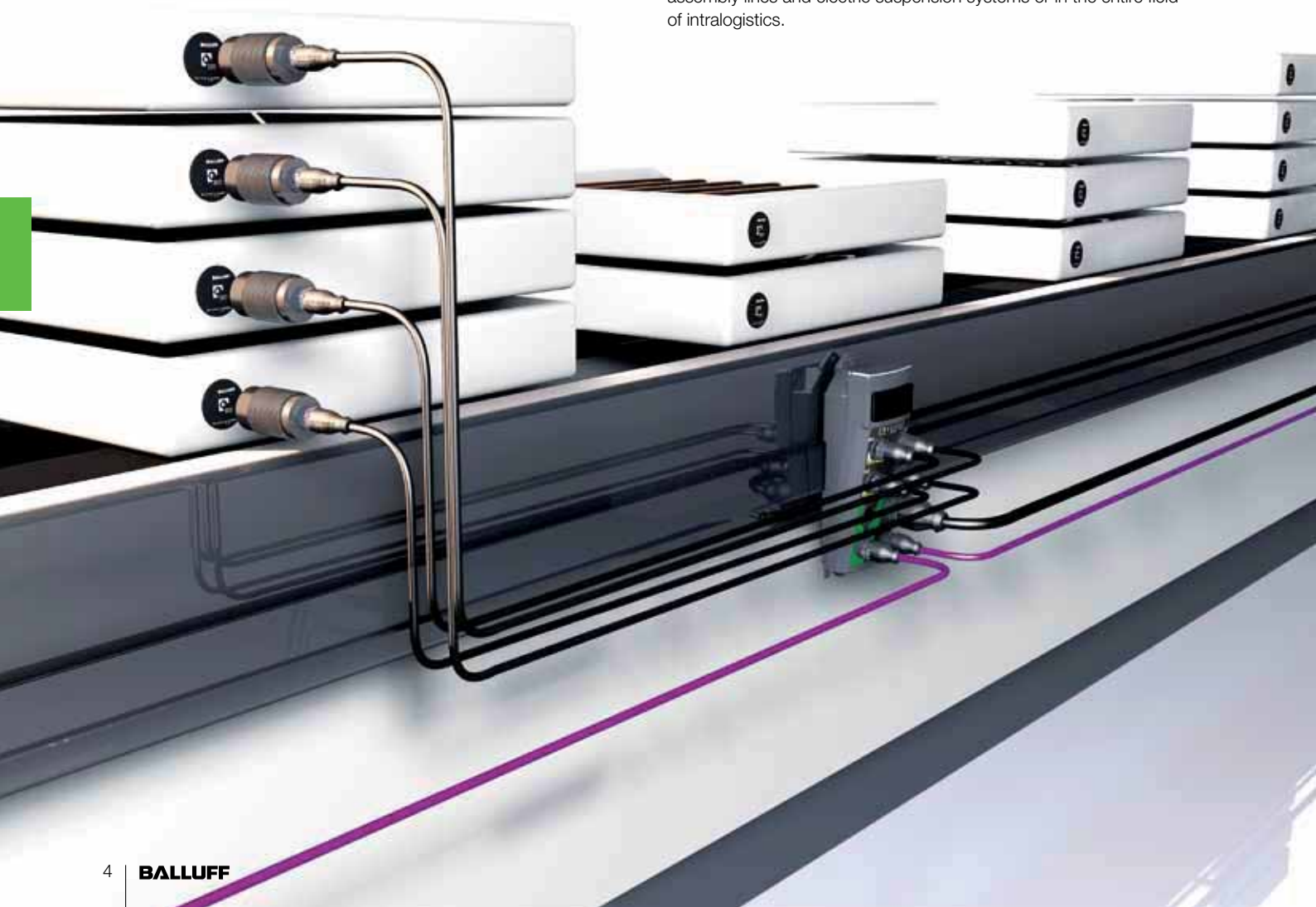
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EtherCAT.

CE

Description		BIS V RFID evaluation unit
Profibus	**Ordering code**	**BIS00T3**
	Part number	BIS V-6102-019-C001
EtherCAT	**Ordering code**	**in preparation**
	Part number	BIS V-6110-063-C002
Power supply		24 V DC ±10 % LPS Class 2
Residual ripple		≤ 10 %
Power supply		≤ 2 A
Ambient temperature T_a		0...+60 °C
Degree of protection as per IEC 60529		IP 65
Housing material		Cast zinc
Weight		800 g
Connection H1 - H4		M12 socket, 5-pin, A-coded
Power connection		7/8" plug, 5-pin
Application interface		IO-Link 1.1, USB 2.0
Application with read/write heads		BIS VM-3… and BIS VL-3…

CC link and **EtherNet/IP** will be available as additional interfaces in the second half of 2012.

The compact EMC-protected metal housing with small dimensions (170×60×40 mm) is perfectly integrated and simple to mount. In control cabinets or in the field up to IP 65, on a top-hat rail, or on a profile.

The BIS V industrial RFID system was developed and qualified according to the principles of GAMP® 5. You can obtain more detailed information upon request at **rfidpharma@balluff.com**

CE
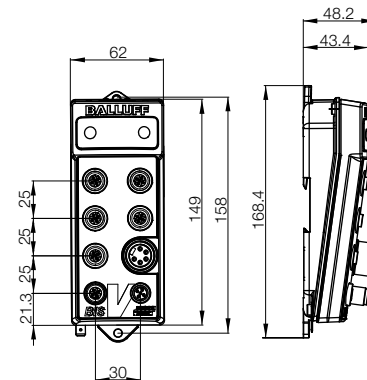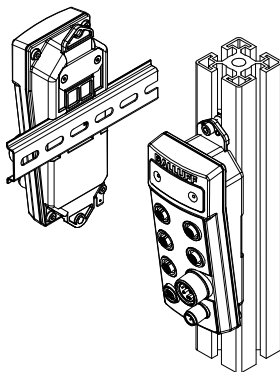
Description	HF read/write head BIS VM	HF read/write head BIS VM	HF read/write head BIS VM	
Dimensions	**M30×1.5**	**80×80×40 mm**	**80×80×40 mm**	
Mounting in steel	non-flush	non-flush	non-flush	
Antenna type	round	round	Rod	
Ordering code	**BIS00RF**	**BIS00T0**	**BIS00T2**	
Part number	BIS VM-300-001-S4	BIS VM-301-001-S4	BIS VM-351-001-S4	
Power supply	≤ 150 mA	≤ 150 mA	≤ 150 mA	
Power supply	18...30 V DC	18...30 V DC	18...30 V DC	
Residual ripple	≤ 1.3 V_{ss}	≤ 1.3 V_{ss}	≤ 1.3 V_{ss}	
Ambient temperature T_a	−25...+55 °C	−25...+55 °C	−25...+55 °C	
Degree of protection as per IEC 60529	IP 67 (with connector)	IP 67 (with connector)	IP 67 (with connector)	
Function indicator	yes	yes	yes	
Housing material	Nickel-plated CuZn (brass)	PBT	PBT	
Weight	100 g	190 g	360 g	
Connection	M12 connector, 4-pin	M12 connector, 4-pin	M12 connector, 4-pin	

Please take the corresponding write/read distance from the Industrial Identification catalog, Chapter BIS M (BIS VM-300... corresponds to BIS M-300...).
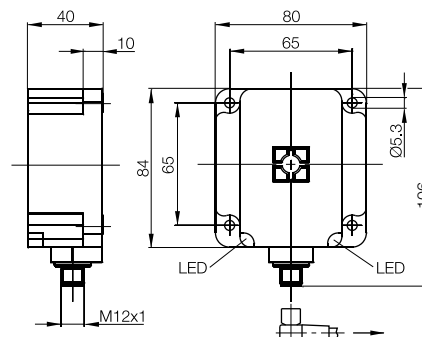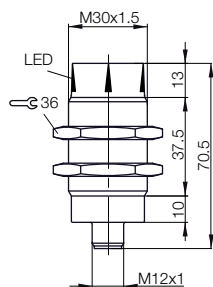
Securing clamp included in the scope of delivery.

Please order matching plug connectors separately.

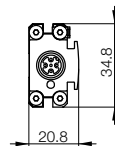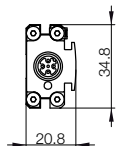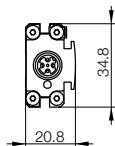(Unshielded cable can be used only for lengths up to 3 m. Cable lengths over 3 m have to be shielded.)
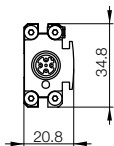
Plug side	Socket side	Cable material	Color	BCC039H	BCC039R	BCC03A8	BCC03AJ	BCC039J	BCC039T	BCC03A9	BCC03AK	BCC039K	BCC039U	BCC03AA	BCC03AL	BCC039L	BCC039W	BCC03AC	BCC03AM	BCC039M	BCC039Y	BCC03AE	BCC03AN
				0.3 m				0.6 m				1 m				1.5 m				2 m			
straight	straight	PUR	black	■				■				■				■				■			
straight	angled	PUR	black		■				■				■				■				■		
angled	straight	PUR	black			■				■				■				■				■	
angled	angled	PUR	black				■				■				■				■				■

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HF read/write head BIS VM	HF read/write head BIS VM	HF read/write head BIS VM	HF read/write head BIS VM
25x50x10 mm	**M12×1**	**M18×1**	**25×50×10 mm**
non-flush	non-flush	non-flush	non-flush
round	round	round	Rod
BIS00T9	**BIS00T7**	**BIS00T8**	**BIS00T6**
BIS VM-305-001-S4	BIS VM-306-001-S4	BIS VM-307-001-S4	BIS VM-352-001-S4
≤ 150 mA	≤ 150 mA	≤ 150 mA	≤ 150 mA
18...30 V DC	18...30 V DC	18...30 V DC	18...30 V DC
≤ 1.3 V_{ss}	≤ 1.3 V_{ss}	≤ 1.3 V_{ss}	≤ 1.3 V_{ss}
−25...+55 °C	−25...+55 °C	−25...+55 °C	−25...+55 °C
IP 67 (with connector)	IP 67 (with connector)	IP 67 (with connector)	IP 67 (with connector)
yes	yes	yes	yes
AlMgSi 0.5/ABS-GF16	AlMgSi 0.5/nickel-plated CuZn	AlMgSi 0.5/nickel-plated CuZn	AlMgSi 0.5/ABS-GF16
200 g	190 g	220 g	370 g
M12 connector, 4-pin	M12 connector, 4-pin	M12 connector, 4-pin	M12 connector, 4-pin
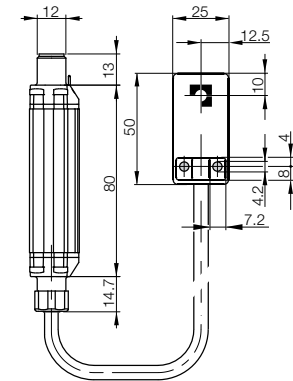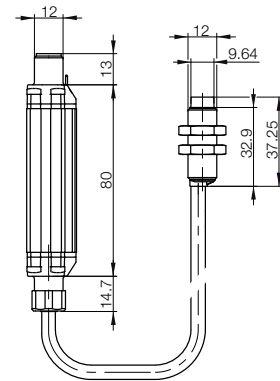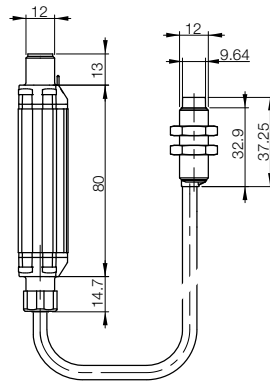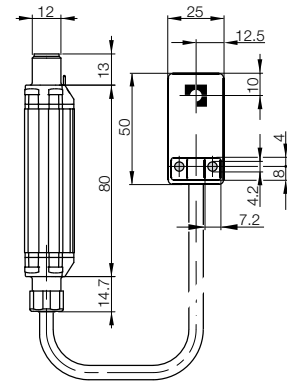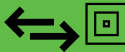
Object Detection

Inductive sensors BES, cylinder sensors BMF, magnetic field sensors BMF, capacitive sensors BCS for object detection, ultrasonic sensors BUS for object detection, photoelectric sensors BOS, fiber optic devices BFB and BFO, through-beam fork sensors BGL, angle sensors BWL, optical window sensors BOW, light grids BLG, contrast sensors BKT, luminescence sensors BLT, color sensors BFS, mechanical and inductive multiple and single position switches BNS

Linear Position Sensing

Micropulse transducers BTL, magnetic linear encoder system BML, incremental encoders BDG, absolute encoders BRG, inductive linear position sensor BIW, inductive positioning system BIP, inductive distance sensors BAW, magnetoinductive position sensors BIL, capacitive distance sensors BCW, photoelectric distance sensors BOD, ultrasonic sensors BUS for analog distance measurement

Fluid Sensors

Pressure sensors BSP, capacitive sensors BCS for level detection, Micropulse filling level sensor BTL

Industrial Identification

Industrial RFID systems BIS, vision sensors BVS

Industrial Networking and Connectivity

Connectors and connection cables BCC, valve connectors BCC, passive splitter boxes BPI, active splitter boxes BNI, inductive couplers BIC, IO-Link, bus systems (Profibus, Profinet, CC-Link, Devicenet, Ethernet), wireless systems BWT, power supplies BAE, electrical devices BAE

Accessories

Brackets and mountings BAM, mounting system BMS

Service

Conception and planning, product and application advice, customized solutions, targeted training

www.balluff.com