BALLUFF

Smart Automation and Monitoring System

RUGGED RFID READ/WRITE HEADS WITH CONDITION MONITORING FUNCTIONS

The Smart Automation and Monitoring System (SAMS) represents Balluff's comprehensive automation philosophy. Thanks to its uniform and standardized operating and configuration concept, long startup times, prolonged training and time-consuming troubleshooting when a device fails unexpectedly are a thing of the past.

In addition to process and condition data, our intelligent components provide valuable diagnostics data. This opens up vast new possibilities – from condition monitoring of the machines and equipment, to predictive maintenance, to entirely new business models.

A part of the SAMS is our new RFID read/write heads (13.56 MHz), which are used for track and trace, production control, or automatic
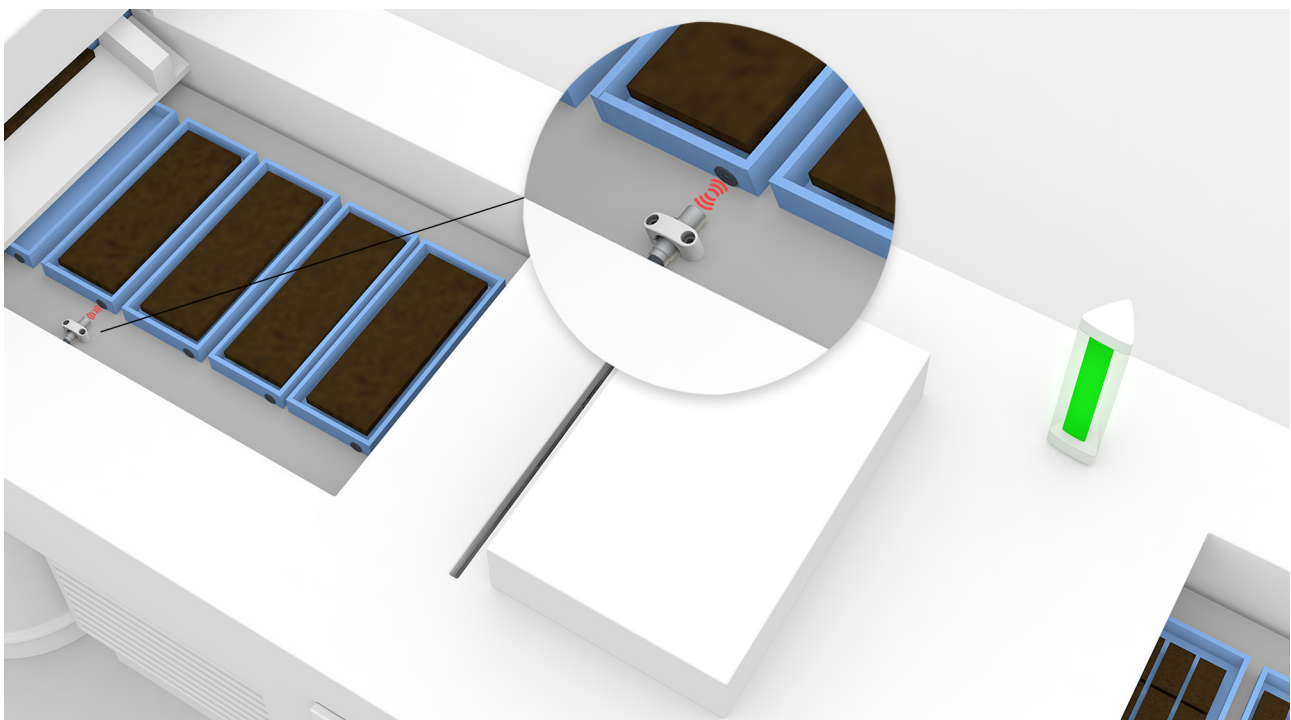
interchangeable part assignment and detection. The maximum transmission rate of 230.4 kBaud (IO-Link COM3) enables fast reading and writing of the data carriers.

These read/write heads with IO-Link interface are designed for use in harsh industrial environments and, thanks to hygiene compatible materials, washdown applications. In applications where aggressive cleaning agents and high pressure are used regularly, our Washdown-Plus promise guarantees they withstand of at least 1000 cleaning cycles.

In addition to reliable identification, these read/write heads also offer numerous condition monitoring functions, such as temperature and signal quality monitoring as well as additional multi-functions.

Features

- Fast read/write times with IO-Link COM3 (230.4 kBaud)
- Hygiene approved materials (stainless 1.4404/PBT)
- Washdown-Plus promise: Exceeds IP69K and guarantees 1000 cleaning cycles
- H_2O_2 resistant
- Expanded IO-Link functionality with smart features

CE c UL us LISTED FC IC
IO-Link   Ecolab

INDUSTRIAL RFID SYSTEMS

	BIS01E5	BIS01E6	BIS01E7	BIS01E2
Dimension	M12 × 65 mm	M18 × 65 mm	M30 × 65 mm	50 × 25 × 10 mm
Housing material	Stainless steel 1.4404/PBT	Stainless steel 1.4404/PBT	Stainless steel 1.4404/PBT	ABS
Radio frequency	HF 13.56 MHz	HF 13.56 MHz	HF 13.56 MHz	HF 13.56 MHz
Interface	IO-Link 1.1	IO-Link 1.1	IO-Link 1.1	IO-Link 1.1
Transfer rate	COM 3 (230.4 kBaud)	COM 3 (230.4 kBaud)	COM 3 (230.4 kBaud)	COM 3 (230.4 kBaud)
Antenna type	Round	Round	Round	Round
Ambient 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
IP rating	IP68, IP69K	IP68, IP69K	IP68, IP69K	IP68, IP69K
Supported data carrier types	DIN ISO 15693, Balluff High Memory	DIN ISO 15693, Balluff High Memory	DIN ISO 15693, Balluff High Memory	DIN ISO 15693, Balluff High Memory
Condition monitoring features	Vibration detection, inclination detection, internal temperature monitoring, voltage and current monitoring, signal quality check, extreme environment status, LED diagnostics			
Multi-functions	Operating hours counter, boot cycle counter, ping for visual localization of the device, Pin 2 for output of internal digital signals			

ACCESSORIES

FOR M12 HOUSING	BAM0159	BAM0037	BAM0218	
FOR M18 HOUSING	BAM015A	BAM0032	BAM037J	
FOR M30 HOUSING	BAM015C	BAM0033		
FOR BLOCK-STYLE HOUSING				BAM01MY
Description	Mounting bracket, stainless steel	Mounting bracket, stainless steel (Ecolab)	Befestigungsschelle Stainless steel	Mounting bracket, stainless steel

CONNECTIVITY

3 M CABLE	BCC0C8L	BCC0E3C	BCC0LY5	BCC0LYF
5 M CABLE	BCC0C02	BCC0E3E	BCC0LY6	BCC0LYH
10 M CABLE	BCC0C03	BCC0E3F	BCC0LY7	BCC0LYJ
20 M CABLE	BCC0C04	BCC0E3H	BCC0LY8	BCC0LYK
Application	Standard	Standard	Washdown	Washdown
Connector 1	M12 female, straight, 5-pin	M12 female, angled, 5-pin	M12 female, angled, 5-pin	M12 female, straight, 5-pin
Connector 2	M12 male, straight, 4-pin	M12 male, straight, 4-pin	M12 male, straight, 4-pin	M12 male, straight, 4-pin
Cable	PUR shielded black, drag-chain compatible	PUR shielded black, drag-chain compatible	PVC with stainless steel union nut, shielded	PVC with stainless steel union nut, shielded