

Solutions for individual packaging sizes

RELIABLE INTERCHANGEABLE PARTS DETECTION WITH RFID

Would you like to optimize your overall system, prevent stoppages and realize shorter production runs? This requires intelligent machines and an intelligent production process.

To realize intelligent production in the packaging, food and beverage industries, Balluff offers mature automation solutions and support in important application areas. Our concepts start with your requirements, so you can change over your machines to different formats quickly and flexibly.

HF RFID technology (13.56 MHz) from Balluff enables automatic detection of interchangeable parts and ensures the correct format set is removed or replaced when retrofitting.

Your advantages

- Short setup times and increased equipment productivity
- Efficient error prevention
- Greater machine flexibility
- Prevention of machine damage from incorrect parts when starting up
- Simple visualization for the operator

In interchangeable parts detection, various system combinations of the processor unit, read/write head, and data carriers are used depending on the application. We can show you how to meet varying requirements in interchangeable parts detection by means of component selection.

Select from the following:

- The BIS V processor unit
- An IO-Link network block as the processor unit
- A read/write head with integrated processor unit



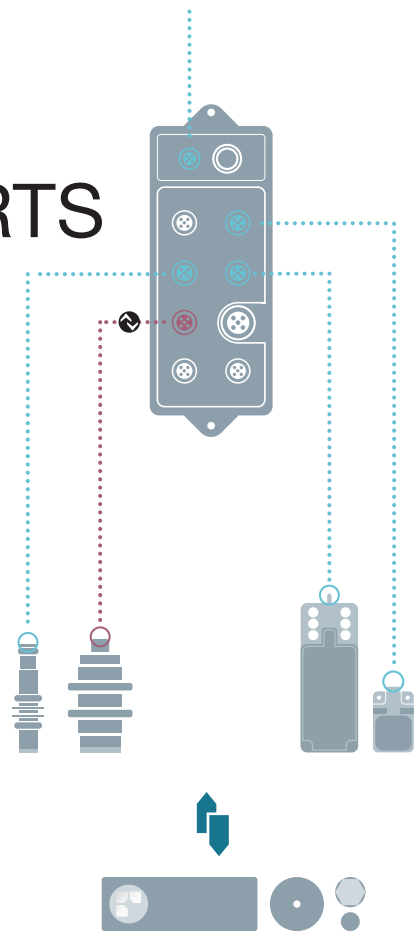
THREE SOLUTIONS FOR INTERCHANGEABLE PARTS DETECTION USING RFID

BIS-V processor unit

Our BIS-V processor unit is especially suitable for transmitting large amounts of data with fast transmission time.

Features

- Much data, fast transmission time
- High flexibility: one device for all established RFID technologies
- Multi-head operation: Operate up to four read/write heads simultaneously
- Visualization via integrated IO-Link master port on machine lamp directly possible



Possible system combinations for interchangeable parts detection*

READ/WRITE HEAD	MATCHING DATA CARRIERS		PROPERTIES
BIS0133	BIS0044	BIS M-110-02/L	
	BIS004A	BIS M-122-02/A	
	BIS00YE	BIS M-132-03/L-HT	High temperature
	BIS00NU	BIS M-143-02/A-M6	Data screw; IP69K
BIS0197	BIS0044	BIS M-110-02/L	
	BIS018Y	BIS M-113-03/L	
	BIS004A	BIS M-122-02/A	
	BIS00NU	BIS M-143-02/A-M6	Data screw; IP69K
BIS013H	BIS0044	BIS M-110-02/L	
	BIS018Y	BIS M-113-03/L	
	BIS004A	BIS M-122-02/A	

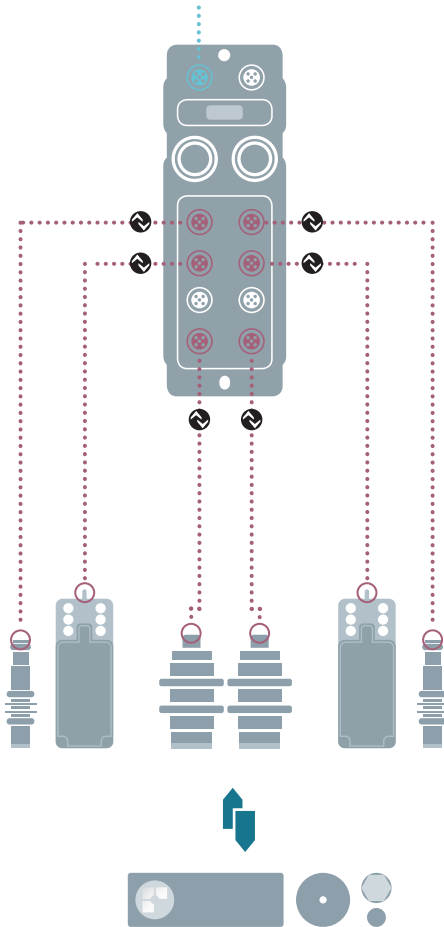
* For longer ranges a UHF RFID solution (860/960 MHz) can also be used.
We will be glad to assist you further in a personal meeting.

IO-Link network block as the processor unit

Our IO-Link network block is ideal for simple identification tasks with a large number of read stations.

Features

- Cost-effective, since no additional processor unit is needed
- Visualization using machine lamp directly possible
- Additional RFID components and IO-Link sensors can be connected, more ports available than with the BIS V version
- Parameterization and diagnostics using IO-Link



Possible system combinations for interchangeable parts detection

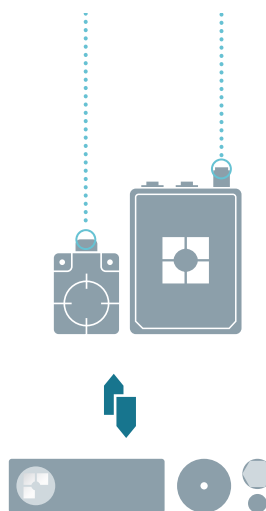
READ/WRITE HEAD	MATCHING DATA CARRIERS		PROPERTIES
BIS014J	BIS0044	BIS M-110-02/L	
	BIS004A	BIS M-122 02/A	
	BIS00NU	BIS M-143-02/A-M6	Data screw; IP69K
BIS0157	BIS00Y5	BIS M-135-03/L	Square
	BIS00Y4	BIS M-135-03/L-HT	High temperature; IP68
	BIS00Y7	BIS M-134-10/L-HT	High temperature; IP68
	BIS0046	BIS M-112-02/L	
	BIS019T	BIS0044	BIS M-110-02/L
	BIS018Y	BIS M-113-03/L	
	BIS004A	BIS M-122-02/A	

Read/write head with integrated processor unit

With this all-in-one solution no additional processor unit is needed.

Features

- Available interfaces: Profinet, Ethernet/IP, USB 2.0
- All-in-one RFID-Reader BIS M-4008 with integrated webserver for configuration, condition monitoring and diagnostics
- Rugged IP67 housing: reliable use in harsh environments
- Status displays directly on the reader housing: facilitates commissioning and minimizes down times



Possible system combinations for interchangeable parts detection

READ/WRITE HEAD	MATCHING DATA CARRIERS		PROPERTIES
BIS017A (Profinet)	BIS012L	BIS M-156-14/A	Rod antenna
	BIS00NZ	BIS M-191-02/A	Corner data carrier, rod antenna
BIS018A (Ethernet/IP)	BIS00YE	BIS M-132-03/L-HT	High temperature; IP68
	BIS00Y4	BIS M-135-03/L-HT	High temperature
	BIS00NU	BIS M-143-02/A-M6	flush mount; IP69K
	BIS0045	BIS M-111-02/L	
BIS00W4 (USB 2.0)	BIS00YE	BIS M-132-03 L-HT	High temperature
	BIS00Y7	BIS M-134-10/L-HT	High temperature
	BIS00YC	BIS M-132-10/L	

RFID configurator

To custom assemble your RFID system for interchangeable parts detection, Balluff offers a convenient RFID configurator. You can start your selection process by beginning with the data carrier, processor unit or read/write head. You will always be shown the matching components for your selection. Simply let your selection be guided by the application.

www.balluff.de/go/rfid-configurator

More information on the web

Learn more about our versatile solutions portfolio for the packaging, food and beverage industries at www.balluff.de/go/pfb