INDUSTRIES

Automotive production and supply, machine tool, packaging, logistics, materials handling, assembly, automation, robotics

Machine tools

Packaging systems

Automotive industry

Robotics

APPLICATION

RFID technology with IO-Link connectivity eliminates hose-coupling errors in fluidized pneumatic-transport systems

Bulk-handling- and pneumatic-transport-system designers use RFID technology to eliminate connection errors at manual hose-coupling stations for fluidizable materials. Coupling stations, with IO-Link-enabled RWMs mounted on each outlet pipe, use manual quick-release hoses to feed materials to multiple machines. RFID tags, mounted integrally within each hose coupling and blanking cap, identify the mating parts uniquely, allowing individual outlet/hose combinations to be verified at the time of connection.

IO-Link
R/W MODULES
RFID

IO-Link – EASY TO GO!

Ideal for Industry 4.0 solutions, IO-Link read/write modules (RWMs) combine two of the key communication standards in one device: ISO 15693 at the read-write head for communication with tags and ISO 61131-9 at the S12 connector for communication with the control system. Their simplified, plug-and-play installation ensures easy, cost-effective integration.

KEY ADVANTAGES

✓ **IO**-Link protocol V1.1 with a single operating mode
   ✓ **IO**-Link Device:
      ✓ Scan UID and Read/Write RFID data on transponder whether automatically or trigger based
      ✓ Two alarms configurable to monitor transponder-in-range time or RSSI level
      ✓ Get UID history list with time stamps
      ✓ Secure mode to add security in the transponder memory access
      ✓ Locate/FindMe function to quickly identify RWM mounted in a machine
      ✓ New Diagnostic function such as individual system time, power-on cycle counter, RFID Error counter
✓ Stand-alone SIO: Switching on tag presence, data comparison and alarm conditions
✓ Temperature range −25°C … +80°C (−13 … 176°F)
✓ Integral S12 connector with integrated bi-color LED
✓ IP67 (IP68 and IP69K for C44)

PRODUCT OVERVIEW

    IO-Link

Housing size mm	M18	M30	C44
Read/write distance max (mm)	26/42	58/60	80

ACCESSORIES

Go to page 290 to see all the accessories

Cables and couplers — Handheld devices — Starter kits

OUTPUT

Housing size
[M18] Cylindrical M18   [M30] Cylindrical M30
[C44] Cubic C44

RLH-[**xxx**]PA-NIS

Housing size
[18] M18   [30] M30

RLS-1[**xx**]1-320

Reference key on pages 294–297

ACCESSORIES

Starter kits
See page 292

Handheld devices
See page 292
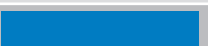
RFID couplers
See page 293

Cables
See page 288

RFID ◉ IO-Link
READ/WRITE MODULES

FAMILY	READ/WRITE DISTANCE MAX. (mm)	HOUSING SIZE (mm)	OPERATING FREQUENCY	STANDARD	
IO-Link	26	M18	HF	ISO/IEC 15693	
	42	M18		ISO/IEC 15693	
	58	M30		ISO/IEC 15693	
	60	M30		ISO/IEC 15693	
	80	40 × 40 (C44)		ISO/IEC 15693	

KEY ADVANTAGES

- ✓ ⊗ **IO**-Link protocol V1.1 with a single operating mode
- ✓ ⊗ **IO**-Link Device:
  - • Scan UID and Read/Write RFID data on transponder whether automatically or trigger based
  - • Two alarms configurable to monitor transponder in range time or RSSI level
  - • Get UID history list with time stamps
  - • Secure mode to add security in the transponder memory access

- • Locate/FindMe function to quickly identify RWM mounted in a machine
- • New Diagnostic function such as individual system time, power-on cycle counter, RFID Error counter
- ✓ Stand-alone SIO: Switching on tag presence, data comparison and alarm conditions
- ✓ Temperature range −25°C … +80°C (−13 … 176°F)
- ✓ Integral S12 connector with integrated bi-color LED
- ✓ IP67 (IP68 and IP69K for C44)

USER MEMORY SIZE (BYTE)	HOUSING MATERIAL	MOUNTING	INTERFACE	CONNECTION / CONNECTOR	AMBIENT TEMPERATURE	PART REFERENCE
96	Chrome-plated brass	Non-embeddable	IO-Link × RFID	M12	−25 … +80°C	**RLH-M18PA-NIS**
16	Chrome-plated brass	Non-embeddable	IO-Link × RFID	M12	−25 … +80°C	**RLS-1181-320**
96	Chrome-plated brass	Non-embeddable	IO-Link × RFID	M12	−25 … +80°C	**RLH-M30PA-NIS**
16	Chrome-plated brass	Non-embeddable	IO-Link × RFID	M12	−25 … +80°C	**RLS-1301-320**
96	PBTP	Non-embeddable	IO-Link × RFID	M12	−25 … +80°C	**RLH-C44PA-NIS**