



#### **APPLICATION**

RFID technology used to identify workpiece carriers and initiate automated washing

In the harsh environment of a washing station, RFID tags and RWMs are exposed to hot water, mechanical shocks, corrosive chemicals and high-pressure jetting. Despite these challenges, identification systems must operate continuously with high reliability.

Typically, RFID tags are mounted on the part carriers. On arrival at the washing station, information from the tag is used to select the correct washing cycle for the part type and process.

#### **INDUSTRIES**

Automotive production and supply, maritime, food and beverage



Autoclave application



Automotive part sensing



Maritime industry



Brewery production equipment

# EXTREME AND WASHDOWN

# HIGHEST MECHANICAL AND CHEMICAL RESISTANCE

Read/write modules (RWMs) and embeddable tags from these two ranges feature robust, full-metal, stainless-steel construction. They offer outstanding performance in metallic environments and are insensitive to dirt and metal chips. For the highest mechanical and chemical resistance, **Washdown** components in food-grade stainless steel (V4A/AISI 316L) are fully sealed and laser welded. They function reliably when immersed in fluids such as water or oil.

#### **KEY ADVANTAGES**

- ✓ LF passive tags, no battery required
- ✓ If the ContriNET protocol is used, LF components can share one network with HF types, including the full range of interfaces
- ✓ Insensitive to dirt
- ✓ Outstanding performance in metallic environments
- ✓ Tags readable/writable through metal
- √ Tags fully embeddable, including in metal
- ✓ Enclosure rating IP68 & IP69K

#### **Extreme RWMs and tags**

- √ All-metal, stainless-steel housings (V2A/AISI 304) resist corrosion, impacts and abrasion
- ✓ Suitable for use in harsh environments, such as the steel industry, agriculture and other outdoor applications
- ✓ Temperature range: tags -40...+95°C (-40...+203°F), RWMs -25...+80°C (-13...+176°F)

#### Washdown RWMs and tags

- ✓ All-metal housings in food-grade stainless steel (V4A/ AISI 316L) resist saltwater, solvents, corrosion, impacts and abrasion
- ✓ Designed for demanding clean-in-place (CIP) applications within the food, pharmaceutical and other industries
- √ Temperature range -40...+125°C (-40...+257°F)



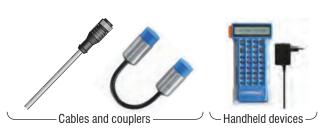


#### **PRODUCT OVERVIEW**

| Housing size mm              | M18 | М30 |
|------------------------------|-----|-----|
| Read/write distance max (mm) | 12  | 12  |

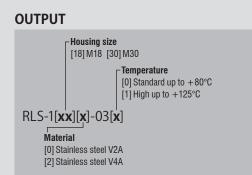
#### **ACCESSORIES**

Go to page 290 to see all the accessories





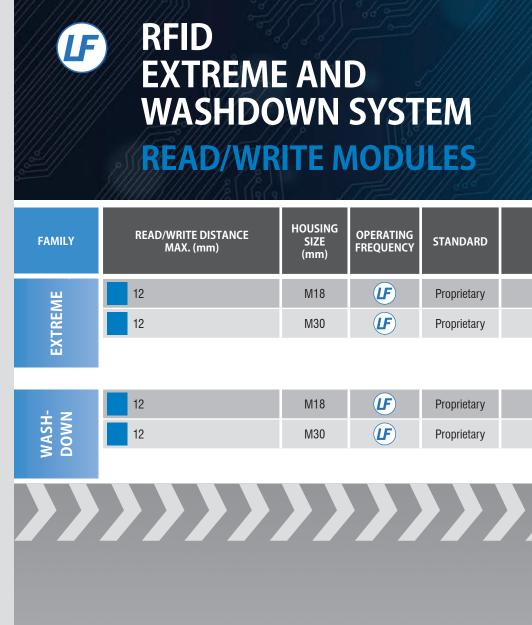
## **RFID EXTREME AND WASHDOWN SYSTEM**



#### **ACCESSORIES**

Reference key on pages 294-297





#### **VIEW RFID DATASHEETS**

 $www.contrinex.com/product\_range/rfid\text{-}extreme$ www.contrinex.com/product\_range/rfid-washdown



#### **KEY ADVANTAGES**

- ✓ If the ContriNET protocol is used, LF components can share one network with HF types, including the full range of interfaces
- ✓ Insensitive to dirt
- ✓ Outstanding performance in metallic environments
- ✓ Enclosure rating IP68 & IP69K
- ✓ Rugged all-metal LF RWMs with impervious sensing face

√ Temperature range -25... +80°C  $(-13...+176^{\circ}F)$ 

#### Washdown

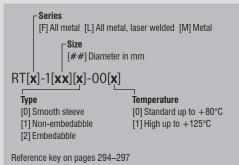
✓ Temperature range -40...+125°C (-40...+257°F)



| USER MEMORY<br>SIZE (BYTE) | HOUSING MATERIAL    | MOUNTING       | INTERFACE                           | CONNECTION/<br>CONNECTOR | AMBIENT<br>TEMPERATURE | PART REFERENCE |
|----------------------------|---------------------|----------------|-------------------------------------|--------------------------|------------------------|----------------|
| 400                        | Stainless-steel V2A | Non-embeddable | ContriNET × RFID                    | M12                      | −25+80°C               | RLS-1180-030   |
| 400                        | Stainless-steel V2A | Non-embeddable | ContriNET × RFID                    | M12                      | −25+80°C               | RLS-1300-030   |
|                            |                     |                |                                     |                          |                        |                |
| 400                        | Stainless-steel V4A | Non-embeddable | ${\sf ContriNET} \times {\sf RFID}$ | M12                      | −40 +125°C             | RLS-1182-031   |
| 400                        | Stainless-steel V4A | Non-embeddable | ${\sf ContriNET} \times {\sf RFID}$ | M12                      | −40 +125°C             | RLS-1302-031   |

## **RFID EXTREME AND WASHDOWN SYSTEM**

#### **OUTPUT**



#### **ACCESSORIES**





| FAMILY   | HOUSING SIZE<br>(mm) | USER MEMORY<br>SIZE (BYTE) | READ/WRITE DISTANCE<br>MAX. (mm) |  |
|----------|----------------------|----------------------------|----------------------------------|--|
|          | Ø 10                 | 240                        | 17                               |  |
|          | Ø 16                 | 240                        | 19                               |  |
| EXTREME  | M16                  | 240                        | 13                               |  |
| EXTE     | Ø 26                 | 240                        | 26                               |  |
|          | M30                  | 240                        | 18                               |  |
|          | M30                  | 240                        | 23                               |  |
|          |                      |                            |                                  |  |
|          | Ø 10                 | 240                        | 17                               |  |
| Ę        | Ø 16                 | 240                        | 13                               |  |
| DOW      | M16                  | 240                        | 13                               |  |
| WASHDOWN | Ø 26                 | 240                        | 26                               |  |
| >        | M30                  | 240                        | 18                               |  |
|          | M30                  | 240                        | 18                               |  |

**,,,,,,,,,,** 

#### **VIEW RFID DATASHEETS**

 $www.contrinex.com/product\_range/rfid\text{-}extreme$ www.contrinex.com/product\_range/rfid-washdown



#### **KEY ADVANTAGES**

- ✓ LF passive tags, no battery required
- ✓ If the ContriNET protocol is used, LF components can share one network with HF types, including the full range of interfaces
- ✓ Insensitive to dirt
- ✓ Outstanding performance in metallic environments
- Tags readable/writable through metal
- √ Tags fully embeddable, including in metal
- ✓ Enclosure rating IP68 & IP69K

#### Extreme

✓ Temperature range -40...+95°C  $(-40...+203^{\circ}F)$ 

#### Washdown

✓ Temperature range -40... +125°C  $(-40...+257^{\circ}F)$ 



|  |                        |             |                     |                |           |                        | 1///                   |                |
|--|------------------------|-------------|---------------------|----------------|-----------|------------------------|------------------------|----------------|
|  | OPERATING<br>FREQUENCY | STANDARD    | HOUSING<br>MATERIAL | MOUNTING       | INTERFACE | STORAGE<br>TEMPERATURE | AMBIENT<br>TEMPERATURE | PART REFERENCE |
|  |                        | Proprietary | Stainless-steel V2A | Embeddable     | RFID      | −40 +95°C              | −40 +80°C              | RTM-0100-000   |
|  |                        | Proprietary | Stainless-steel V2A | Embeddable     | RFID      | −40 +95°C              | −40 +80°C              | RTM-0160-000   |
|  | <b>(          </b>     | Proprietary | Stainless-steel V2A | Embeddable     | RFID      | −40 +95°C              | −40 +80°C              | RTM-2160-000   |
|  |                        | Proprietary | Stainless-steel V2A | Embeddable     | RFID      | −40 +95°C              | −40 +80°C              | RTM-0260-000   |
|  |                        | Proprietary | Stainless-steel V2A | Embeddable     | RFID      | −40 +95°C              | −40 +80°C              | RTM-2300-000   |
|  |                        | Proprietary | Stainless-steel V2A | Non-embeddable | RFID      | −40 +95°C              | −40+80°C               | RTF-1300-000   |
|  |                        |             |                     |                |           |                        |                        |                |
|  |                        | Proprietary | Stainless-steel V4A | Embeddable     | RFID      | −40+125°C              | −40 +125°C             | RTL-0102-001   |
|  |                        | Proprietary | Stainless-steel V4A | Embeddable     | RFID      | −40+125°C              | −40 +125°C             | RTL-0162-001   |
|  |                        | Proprietary | Stainless-steel V4A | Embeddable     | RFID      | −40+125°C              | −40+125°C              | RTL-2162-001   |
|  |                        | Proprietary | Stainless-steel V4A | Embeddable     | RFID      | −40+125°C              | −40+125°C              | RTL-0262-001   |
|  |                        | Proprietary | Stainless-steel V4A | Embeddable     | RFID      | −40+125°C              | −40+125°C              | RTL-1302-001   |
|  |                        | Proprietary | Stainless-steel V4A | Embeddable     | RFID      | −40+125°C              | −40+125°C              | RTL-2302-001   |