

# Wash-down Connectors

## Sensor/Actuator Connectors

Increase productivity with connectors that remain reliable even when subjected to extreme temperatures and excessive mechanical stress caused by high-pressure cleaning.

 **Fast and easy** commissioning saves time and costs

 **International applicability** with global compliance industry standards (UL and ECOLAB)

 **Industrial protection class IP69K** and resistance to aggressive chemicals guarantee long-term functional reliability

### Key Features

- M8 or M12 thread
- Hexagonal stainless steel coupling nut
- Single-ended or double-ended cordsets
- Designed to operate at temperatures of -40 °C to +105 °C in compliance with the IEC standard
- Certification according to UL and ECOLAB
- Stainless steel threaded joint (V4A)
- Gold plated crimp contacts
- 3-, 4-, 5- or 8-poles
- Contact resistance  $\leq 5 \text{ m}\Omega$
- Industrial protection classes IP67, IP68 and IP69K
- M8 and M12 versions in uniform color design
- Polypropylene (PP) housing



Due to the standardized connection technology, the Lumberg Automation wash-down connectors are fast and easy to install, saving you both time and money. The versatility of the wash-down connectors will enhance the profitability of your applications.

**Be certain.**  
**Belden.**

## Applications

The wash-down connectors have been developed for use in the food and beverage sector and in the chemical and pharmaceutical industry. They can be used in bottling plants either for bottling and packaging or bottle cleaning applications since they provide a high standard of hygiene.

This is particularly relevant when reconfiguring production lines. Components need to be suitable for dismantling and reassembly plus be able to withstand cleaning agents. These new wash-down connectors are ideal for this use.

Tell us about the requirements of your applications. Then, let us put our years of experience to work for a custom solution that meets your challenges.

## Benefits

Lumberg Automation wash-down connectors are simple and easy to install, saving you both time and costs.

For maximum flexibility, these M8 and M12 versions are available as straight and right angle connectors. Our wash-down series is also extremely versatile, comprising various numbers of poles and cable lengths (cables are available by the meter).

Additionally, they offer long-term functional reliability due to meeting industrial protection class IP69K and they are resistant to aggressive chemicals.

*IP67/IP68/IP69K  
Connectors for  
temperatures up to 65 °C,  
UL-certified.*

## Broad Product Range with M8 and M12 Connection Technology for Wash-down Applications

Available in versions with different numbers of poles, these wash-down connectors are designed for temperatures of -40 °C to +105 °C in compliance with the IEC standard. Gold-plated crimp contacts ensure reliable data transmission. Designed for high shock and vibration applications, the connectors can also be used in harsh environmental conditions. In addition, the connectors are characterized by high resistance to aggressive chemicals and cleaning agents and are ECOLAB certified.

## Ruggedized Quality

These wash-down connectors use industry-proven M8 or M12 technology and come with ECOLAB's seal of quality and UL certification for operation at up to 65 °C. In other words, they can withstand the highest temperatures, but they also fulfill the most stringent requirements concerning impermeability and resistance to aggressive chemicals and cleaning agents. This ensures reliable data transmission at all times even under extreme environmental conditions.

Other products from Lumberg Automation that can be combined with the new wash-down connectors for optimum solutions:

- Field-attachable connectors with duo male and female connectors plus stainless steel hexagon threaded joint, straight or angular
- Receptacle connectors with stainless steel housing for front mounting (male/female)
  - Control cables No. 520, 521, 522 and 523 as bulk stock on coils/spools with 100 m or 500 m
  - Actuator/sensor distributor with stainless steel housing and threaded joint (with or without diagnostics)
  - AS-Interface modules with stainless steel housing and threaded joint

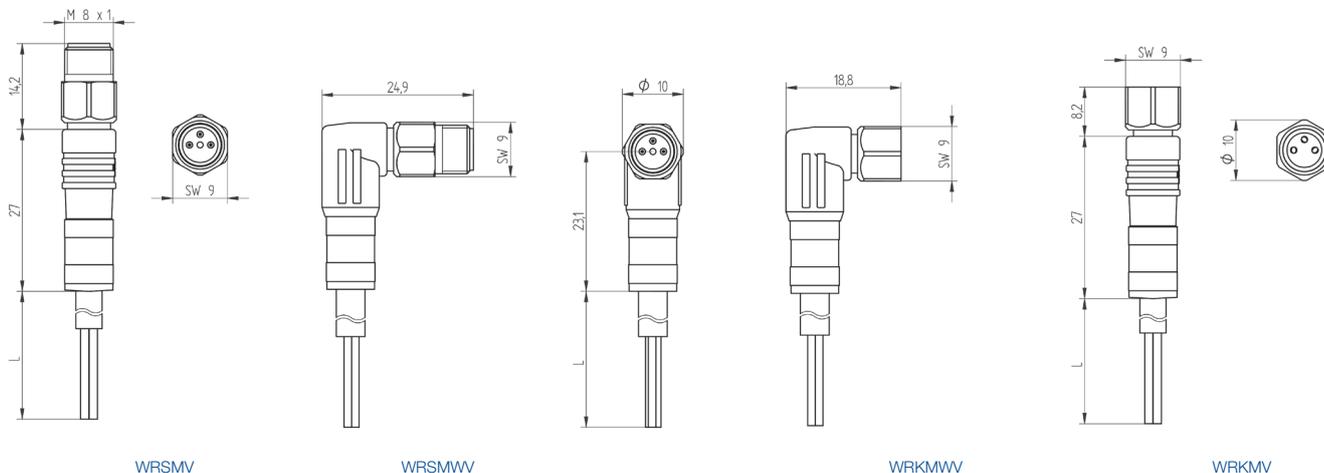


## Technical Information

| Product Description   |  |  |  |  |
|---|--|--|--|--|
| Type  | WRST / WRSWT   | WRKT / WRKWT   | WRSMV / WRSMWV   | WRKMV / WRKMWV   |
|   |   |   |   |   |
|   |   |   |    |   |
| Description   | Actuator/sensor cordset, single-ended, M12 male connector and molded cable, hexagon screw in stainless steel, 3 to 8 poles – especially designed for use in wash-down applications | Actuator/sensor cordset, single-ended, M12 female connector and molded cable, hexagon screw in stainless steel, 3 to 8 poles – especially designed for use in wash-down applications | Actuator/sensor cordset, single-ended, M8 male connector and molded cable, hexagon screw in stainless steel, 3 and 4 poles – especially designed for use in wash-down applications | Actuator/sensor cordset, single-ended, M8 female connector and molded cable, hexagon screw in stainless steel, 3 and 4 poles – especially designed for use in wash-down applications |
| Technical Data  |  |  |  |  |
| Operating Temperature   | -40 °C to +105 °C  |  |  |  |
| Housing/Molded Body   | PP   |  |  |  |
| Insert  | PP   |  |  |  |
| Contact   | CuZn, gold-plated  |  |  |  |
| Receptacle Shell/Knurled Screw/-nut/Hexagon Screw/-nut/Sleeve | Stainless steel  |  |  |  |
| O-Ring  | –  | EPDM   | –  | EPDM   |
| Mechanical Data   |  |  |  |  |
| Protection Class  | IP67/IP68/IP69K <sup>1)</sup>  |  |  |  |
| Electrical Data   |  |  |  |  |
| Contact Resistance  | ≤ 5 mΩ   | ≤ 5 mΩ   | ≤ 5 mΩ   | ≤ 5 mΩ   |
| Nominal Current at 40°C                                       | 3 to 5 poles 4 A<br>8 poles 2 A  | 3 to 5 poles 4 A<br>8 poles 2 A  | 3 to 4 poles 3 A   | 3 to 4 poles 3 A   |
| Rated Voltage   | 3 to 4 poles 250 V<br>5 poles 60 V<br>8 poles 30 V   | 3 to 4 poles 250 V<br>5 poles 60 V<br>8 poles 30 V   | 3 poles 60 V<br>4 poles 30 V   | 3 poles 60 V<br>4 poles 30 V   |
| Rated Impulse Voltage   | 3 to 4 poles 2.5 kV<br>5 poles 1.5 kV<br>8 poles 0.8 kV  | 3 to 4 poles 2.5 kV<br>5 poles 1.5 kV<br>8 poles 0.8 kV  | 3 poles 1.5 kV<br>4 poles 0.8 kV   | 3 poles 1.5 kV<br>4 poles 0.8 kV   |
| Insulation Resistance   | > 10 <sup>9</sup> Ω  | > 10 <sup>9</sup> Ω  | > 10 <sup>9</sup> Ω  | > 10 <sup>9</sup> Ω  |
| Pollution Degree  | 3  | 3  | 3  | 3  |

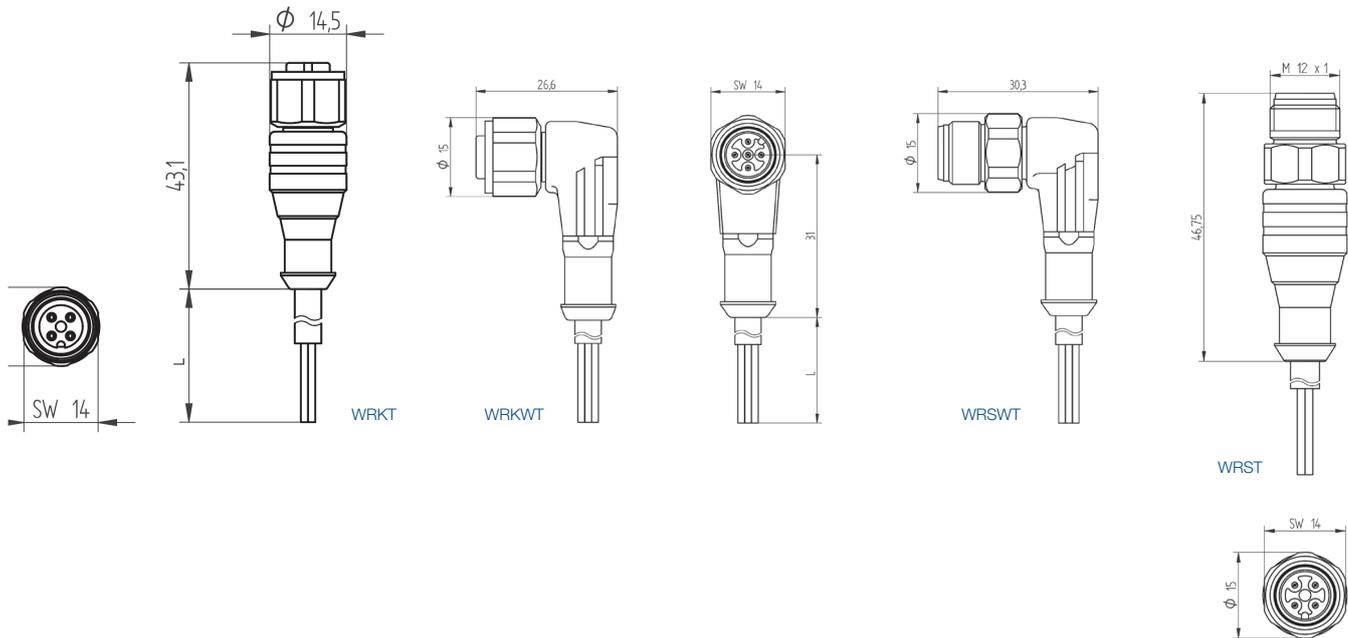
If required, they are also available as M12/M12 cordsets, e.g. WRST...WRKWT... or M8/M12 cordsets e.g. WRSMV...WRKT... or M8/M8 cordsets, e.g. WRSMV...WRKMWV...

1) Only in locked position with its proper counterparts.



Technical modifications reserved. The application of these products in harsh environments should always be checked before use.

## Technical Data (Continued)



## Belden Competence Center

As the complexity of communication and connectivity solutions has increased, so have the requirements for design, implementation and maintenance of these solutions. For users, acquiring and verifying the latest expert knowledge plays a decisive role in this. As a reliable partner for end-to-end solutions, Belden offers expert consulting, design, technical support, as well as technology and product training courses, from a single source: Belden Competence Center. In addition, we offer you the right qualification for every area of expertise through the world's first certification program for industrial networks. Up-to-date manufacturer's expertise, an international service network and access to external specialists guarantee you the best possible support for products.

Irrespective of the technology you use, you can rely on our full support – [lumberg-automation-support.belden.com](http://lumberg-automation-support.belden.com) – from implementation to optimization of every aspect of daily operations.



### About Belden

Belden Inc., a global leader in high quality, end-to-end signal transmission solutions, delivers a comprehensive product portfolio designed to meet the mission-critical network infrastructure needs of industrial, enterprise and broadcast markets. With innovative solutions targeted at reliable and secure transmission of rapidly growing amounts of data, audio and video needed for today's applications, Belden is at the center of the global transformation to a connected world. Founded in 1902, the company is headquartered in St. Louis, USA, and has manufacturing capabilities in North and South America, Europe and Asia.

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