Lumberg Automation Wash-down 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

Ruggedized Quality

These new 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.

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 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 VDE 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.
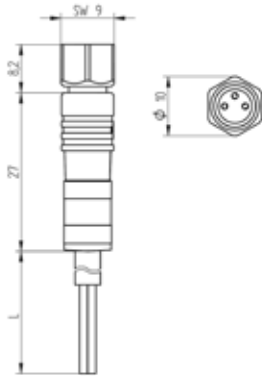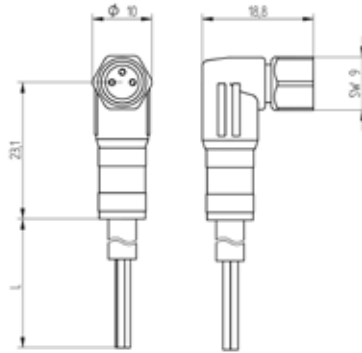
The Advantages at a Glance:

- Connectors designed to operate at temperatures of -40°C to +105°C in compliance with the VDE standard

- Certification according to UL   and ECOLAB

- Stainless steel threaded joint (V4A)

- Industrial protection class IP67/IP68/IP69K

- M8 and M12 versions in uniform color design

- 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

Single-ended Overmolded M8 Connectors for Actuators and Sensors – Female Food & Beverage – Wash-Down Series

Technical Information

Product Description		
Order Designation	**WRKMV**	**WRKMWV**
Description	Actuator/sensor single-ended cordset, M8 female connector, straight, with self-locking screw coupling and overmolded cable, stainless steel hexagonal nut, 3 and 4-pin	Actuator/sensor single-ended cordset, M8 female connector, angled, with self-locking screw coupling and overmolded cable, stainless steel hexagonal nut, 3 and 4-pin
Note	Especially suitable for use in wash-down applications.	
RoHS-compliant (2011/65/EU)	Yes	
(Construction Type) Standard	IEC 61076-2-104	
Approvals	UL, ECOLAB	
Technical Data		
Ambient Temperature	-40 °C to +90 °C (as per UL; connectors designed for operating temperatures from -40 °C to +105 °C as per VDE), mind cable temperature range	
Housing Material/Grip	PP	
Contact Holder Material	PP	
Contact Material/Surface Finish	CuSn, gold over nickel plating	
Screw Coupling Material	Stainless steel	
Mechanical Data		
Degree of Protection	IP67, IP68, IP69K (IEC 60529, only when mated with Hirschmann/Lumberg counterparts)	
Electrical Data		
Contact Resistance	≤ 5 mΩ	
Operating Voltage	3-pin 50 V AC/60 V DC, 4-pin 30 V AC/DC	
Rated Current	3 A	
Pollution Degree	3	
Technical Drawing		

L = Standard length of cable

Pin Assignment

3-pin		4-pin	
	1 = brown 3 = blue 4 = black		1 = brown 2 = white 3 = blue 4 = black

Order Information

Order No.	Order Designation	No. of Pins	Jacket	Characteristics
934729001	WRKMV 3-520/2 M	3	TPE-V, flame-resistant, orange	ECO LAB · UL
934729002	WRKMV 3-520/5 M	3	TPE-V, flame-resistant, orange	ECO LAB · UL
934729003	WRKMV 3-520/10 M	3	TPE-V, flame-resistant, orange	ECO LAB · UL
934729004	WRKMV 3-520/15 M	3	TPE-V, flame-resistant, orange	ECO LAB · UL
934729005	WRKMV 3-520/20 M	3	TPE-V, flame-resistant, orange	ECO LAB · UL
934729006	WRKMV 3-520/25 M	3	TPE-V, flame-resistant, orange	ECO LAB · UL
934729007	WRKMV 4-521/2 M	4	TPE-V, flame-resistant, orange	ECO LAB · UL
934729008	WRKMV 4-521/5 M	4	TPE-V, flame-resistant, orange	ECO LAB · UL
934729009	WRKMV 4-521/10 M	4	TPE-V, flame-resistant, orange	ECO LAB · UL
934729010	WRKMV 4-521/15 M	4	TPE-V, flame-resistant, orange	ECO LAB · UL
934729011	WRKMV 4-521/20 M	4	TPE-V, flame-resistant, orange	ECO LAB · UL
934729012	WRKMV 4-521/25 M	4	TPE-V, flame-resistant, orange	ECO LAB · UL
934730001	WRKMWV 3-520/2 M	3	TPE-V, flame-resistant, orange	ECO LAB · UL
934730002	WRKMWV 3-520/5 M	3	TPE-V, flame-resistant, orange	ECO LAB · UL
934730003	WRKMWV 3-520/10 M	3	TPE-V, flame-resistant, orange	ECO LAB · UL
934730004	WRKMWV 3-520/15 M	3	TPE-V, flame-resistant, orange	ECO LAB · UL
934730005	WRKMWV 3-520/20 M	3	TPE-V, flame-resistant, orange	ECO LAB · UL
934730006	WRKMWV 3-520/25 M	3	TPE-V, flame-resistant, orange	ECO LAB · UL
934730007	WRKMWV 4-521/2 M	4	TPE-V, flame-resistant, orange	ECO LAB · UL
934730008	WRKMWV 4-521/5 M	4	TPE-V, flame-resistant, orange	ECO LAB · UL
934730009	WRKMWV 4-521/10 M	4	TPE-V, flame-resistant, orange	ECO LAB · UL
934730010	WRKMWV 4-521/15 M	4	TPE-V, flame-resistant, orange	ECO LAB · UL
934730011	WRKMWV 4-521/20 M	4	TPE-V, flame-resistant, orange	ECO LAB · UL
934730012	WRKMWV 4-521/25 M	4	TPE-V, flame-resistant, orange	ECO LAB · UL

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

Single-ended Overmolded M8 Connectors for Actuators and Sensors –
Male Food & Beverage – Wash-Down Series

Technical Information

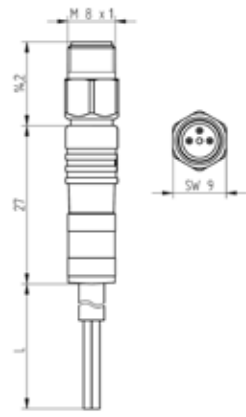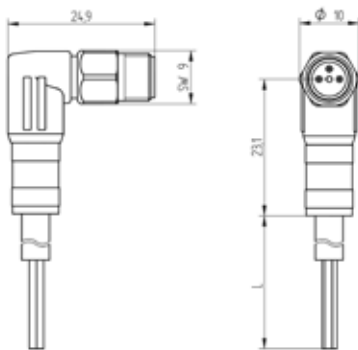| Product Description		
Order Designation	**WRSMV**	**WRSMWV**
Description	Actuator/sensor single-ended cordset, M8 male connector, straight, with self-locking screw coupling and overmolded cable, stainless steel hexagonal screw, 3 and 4-pin	Actuator/sensor single-ended cordset, M8 male connector, angled, with self-locking screw coupling and overmolded cable, stainless steel hexagonal screw, 3 and 4-pin
Note	Especially suitable for use in the food & beverage industry.	
RoHS-compliant (2011/65/EU)	Yes	
(Construction Type) Standard	IEC 61076-2-104	
Approvals	UL (to +90 °C), ECOLAB	
Technical Data		
Ambient Temperature	-40 °C to +105 °C (UL to + 90 °C), mind cable temperature range	
Housing Material/Grip	PP white	
Contact Holder Material	PP white	
Contact Material/Surface Finish	CuSn, gold over nickel plating	
Screw Coupling Material	Stainless steel	
Mechanical Data		
Degree of Protection	IP67, IP68, IP69K (IEC 60529, only when mated with Hirschmann/Lumberg counterparts)	
Electrical Data		
Contact Resistance	≤ 5 mΩ	
Operating Voltage	3-pin 50 V AC/60 V DC, 4-pin 30 V AC/DC	
Rated Current	4 A	
Pollution Degree	3	
Technical Drawing		

L = Standard length of cable

Pin Assignment

3-pin		4-pin	
	1 = brown 3 = blue 4 = black		1 = brown 2 = white 3 = blue 4 = black
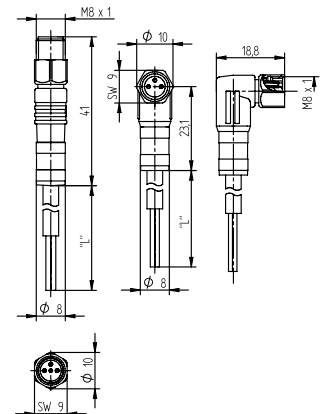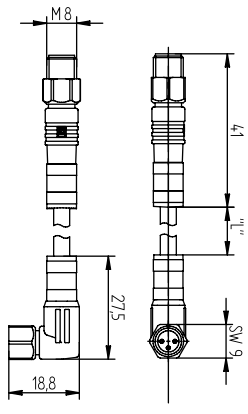
Order Information

Order No.	Order Designation	No. of Pins	Jacket	Characteristics
934731001	WRSMV 3-520/2 M	3	TPE-V, flame-resistant, orange	ECO LAB UL
934731002	WRSMV 3-520/5 M	3	TPE-V, flame-resistant, orange	ECO LAB UL
934731003	WRSMV 3-520/10 M	3	TPE-V, flame-resistant, orange	ECO LAB UL
934731004	WRSMV 3-520/15 M	3	TPE-V, flame-resistant, orange	ECO LAB UL
934731005	WRSMV 3-520/20 M	3	TPE-V, flame-resistant, orange	ECO LAB UL
934731006	WRSMV 3-520/25 M	3	TPE-V, flame-resistant, orange	ECO LAB UL
934731007	WRSMV 4-521/2 M	4	TPE-V, flame-resistant, orange	ECO LAB UL
934731008	WRSMV 4-521/5 M	4	TPE-V, flame-resistant, orange	ECO LAB UL
934731009	WRSMV 4-521/10 M	4	TPE-V, flame-resistant, orange	ECO LAB UL
934731010	WRSMV 4-521/15 M	4	TPE-V, flame-resistant, orange	ECO LAB UL
934731011	WRSMV 4-521/20 M	4	TPE-V, flame-resistant, orange	ECO LAB UL
934731012	WRSMV 4-521/25 M	4	TPE-V, flame-resistant, orange	ECO LAB UL
934732001	WRSMWV 3-520/2 M	3	TPE-V, flame-resistant, orange	ECO LAB UL
934732002	WRSMWV 3-520/5 M	3	TPE-V, flame-resistant, orange	ECO LAB UL
934732003	WRSMWV 3-520/10 M	3	TPE-V, flame-resistant, orange	ECO LAB UL
934732004	WRSMWV 3-520/15 M	3	TPE-V, flame-resistant, orange	ECO LAB UL
934732005	WRSMWV 3-520/20 M	3	TPE-V, flame-resistant, orange	ECO LAB UL
934732006	WRSMWV 3-520/25 M	3	TPE-V, flame-resistant, orange	ECO LAB UL
934732007	WRSMWV 4-521/2 M	4	TPE-V, flame-resistant, orange	ECO LAB UL
934732008	WRSMWV 4-521/5 M	4	TPE-V, flame-resistant, orange	ECO LAB UL
934732009	WRSMWV 4-521/10 M	4	TPE-V, flame-resistant, orange	ECO LAB UL
934732010	WRSMWV 4-521/15 M	4	TPE-V, flame-resistant, orange	ECO LAB UL
934732011	WRSMWV 4-521/20 M	4	TPE-V, flame-resistant, orange	ECO LAB UL
934732012	WRSMWV 4-521/25 M	4	TPE-V, flame-resistant, orange	ECO LAB UL

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

Actuator/Sensor Connectors
Double-ended Overmolded Cordset,
M8 Male Connector to M8 Female Connector, Food & Beverage

Technical Information

Product Description			
Order Designation	WRSMV-WRKMV	WRSMV-WRKMWV	WRSMV-WRKMWV/LED
Description	Cordset for actuators and sensors, M8 male with screw coupling, straight to M8 female straight, with screw coupling and overmolded cable, stainless steel hexagonal nut, 3 and 4-pin	Cordset for actuators and sensors, M8 male with screw coupling, straight, to M8 female angled, with screw coupling and overmolded cable, stainless steel hexagonal nut, 3 and 4-pin	Cordset for actuators and sensors, M8 male with screw coupling, straight to M8 female, angled, with screw coupling and overmolded cable, stainless steel hexagonal nut, with LED operation and function indicators, 3-pin
Note	Especially suitable for use in wash-down applications.		
RoHS-Compliant (2011/65/EU)	Yes		
(Construction Type) Standard	IEC 61076-2-104 (M8)		
Approvals	UL, ECOLAB		
Technical Data			
Ambient Temperature	-40 °C to +90 °C (as per UL; connectors designed for operating temperatures from -40 °C to +105 °C as per VDE)		
Housing Material/Grip	PP		
Contact Holder Material	PP		
Contact Material/Surface Finish	CuSn, Cu/Au		
Screw Coupling Material	Stainless steel		
Mechanical Data			
Degree of Protection	IP67, IP68, IP69K (IEC 60529; only when mated with Hirschmann/Lumberg counterparts)		
Electrical Data			
Contact Resistance	≤ 5 mΩ		
Operating Voltage	3-pin 50 V AC/60 V DC, 4-pin 30 V AC/DC		24 V DC
Rated Current	4 A		
Pollution Degree	3		
Technical Drawing			

L = Standard length of cable

Pin Assignment

3-pin

1 = brown
3 = blue
4 = black

4-pin

1 = brown
2 = white
3 = blue
4 = black

Circuit Diagram

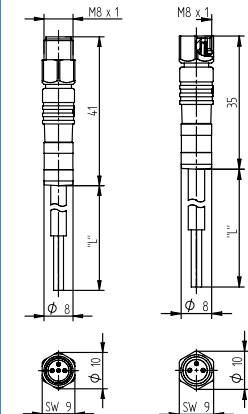**WRKMWV/LED A (PNP make contact)**
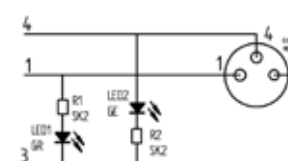
Special circuitry available upon request
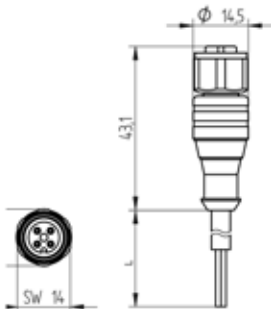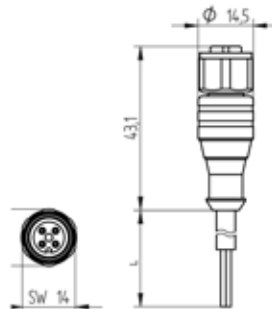
Order Information

Order No.	Order Designation	No. of Pins	Jacket	Characteristics
934737049	WRSMV 3-WRKMV 3-520/0.6 M	3	TPE-V, flame-resistant, orange	
934737050	WRSMV 3-WRKMV 3-520/1 M	3	TPE-V, flame-resistant, orange	
934737051	WRSMV 3-WRKMV 3-520/2 M	3	TPE-V, flame-resistant, orange	
934737052	WRSMV 3-WRKMV 3-520/5 M	3	TPE-V, flame-resistant, orange	
934737053	WRSMV 3-WRKMV 3-520/10 M	3	TPE-V, flame-resistant, orange	
934737054	WRSMV 3-WRKMV 3-520/15 M	3	TPE-V, flame-resistant, orange	
934737061	WRSMV 4-WRKMV 4-521/0.6 M	4	TPE-V, flame-resistant, orange	
934737062	WRSMV 4-WRKMV 4-521/1 M	4	TPE-V, flame-resistant, orange	
934737063	WRSMV 4-WRKMV 4-521/2 M	4	TPE-V, flame-resistant, orange	
934737064	WRSMV 4-WRKMV 4-521/5 M	4	TPE-V, flame-resistant, orange	
934737065	WRSMV 4-WRKMV 4-521/10 M	4	TPE-V, flame-resistant, orange	
934737066	WRSMV 4-WRKMV 4-521/15 M	4	TPE-V, flame-resistant, orange	
934737055	WRSMV 3-WRKMWV 3-520/0.6 M	3	TPE-V, flame-resistant, orange	
934737056	WRSMV 3-WRKMWV 3-520/1 M	3	TPE-V, flame-resistant, orange	
934737057	WRSMV 3-WRKMWV 3-520/2 M	3	TPE-V, flame-resistant, orange	
934737058	WRSMV 3-WRKMWV 3-520/5 M	3	TPE-V, flame-resistant, orange	
934737059	WRSMV 3-WRKMWV 3-520/10 M	3	TPE-V, flame-resistant, orange	
934737060	WRSMV 3-WRKMWV 3-520/15 M	3	TPE-V, flame-resistant, orange	
934737067	WRSMV 4-WRKMWV 4-521/0.6 M	4	TPE-V, flame-resistant, orange	
934737068	WRSMV 4-WRKMWV 4-521/1 M	4	TPE-V, flame-resistant, orange	
934737069	WRSMV 4-WRKMWV 4-521/2 M	4	TPE-V, flame-resistant, orange	
934737070	WRSMV 4-WRKMWV 4-521/5 M	4	TPE-V, flame-resistant, orange	
934737071	WRSMV 4-WRKMWV 4-521/10 M	4	TPE-V, flame-resistant, orange	
934737072	WRSMV 4-WRKMWV 4-521/15 M	4	TPE-V, flame-resistant, orange	
934753001	WRSMV 3-WRKMWV/LED A 3-520/0.6 M	3	TPE-V, flame-resistant, orange	
934753002	WRSMV 3-WRKMWV/LED A 3-520/1 M	3	TPE-V, flame-resistant, orange	
934753003	WRSMV 3-WRKMWV/LED A 3-520/2 M	3	TPE-V, flame-resistant, orange	
934753004	WRSMV 3-WRKMWV/LED A 3-520/5 M	3	TPE-V, flame-resistant, orange	
934753005	WRSMV 3-WRKMWV/LED A 3-520/10 M	3	TPE-V, flame-resistant, orange	
934753006	WRSMV 3-WRKMWV/LED A 3-520/15 M	3	TPE-V, flame-resistant, orange	

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

Single-Ended Overmolded M12 Cordset for Actuators and Sensors – Female Connectors for Food & Beverage – Wash-Down

Technical Information

Product Description		
Order Designation	**WRKT**	**WRKT/LED**
Description	Actuator/sensor cordset, M12 overmolded female connector, straight, stainless steel hexagonal nut	Actuator/sensor cordset, M12 overmolded female connector, straight, LED operation and function indicators, stainless steel hexagonal nut
Note	Especially suitable for use in wash-down applications.	
RoHS-compliant (2011/65/EU)	Yes	
(Construction Type) Standard	IEC 61076-2-101	
Approvals	UL, ECOLAB	
Technical Data		
Ambient Temperature	-40 °C to +105 °C (UL: up to +90 °C), mind cable temperature range	
Housing Material/Grip	PP	
Contact Holder Material	PP	
Contact Material/Surface Finish	CuSn (3, 4, and 5-pin), CuZn (8-pin), gold over nickel plating	
Screw Coupling Material	Stainless steel	
Mechanical Data		
Degree of Protection	IP67, IP68, IP69K (only when mated to associated counterparts)	
Electrical Data		
Contact Resistance	≤ 5 mΩ	
Operating Voltage	3 to 4-pin: 230 V AC/DC, 5-pin: 50 V AC/60 V DC, 8-pin: 30 V AC/DC	24 V DC
Rated Current	3 and 5-pin 4 A, 8-pin 2 A	
Pollution Degree	3	
Technical Drawing		

L = Standard length of cable

Pin Assignment

3-pin	4-pin	5-pin	8-pin
1 = brown 2 = n.c. 3 = blue 4 = black	1 = brown 2 = white 3 = blue 4 = black	1 = brown 2 = white 3 = blue 4 = black 5 = gray	1 = white 5 = gray 2 = brown 6 = pink 3 = green 7 = blue 4 = yellow 8 = red

Circuit Diagram

WRKWT/LED A 4-3-520/...M (3-pin)	WRKWT/LED F 4-521/...M (4-pin)

Order Information

Order No.	Order Designation	No. of Pins	Jacket	Characteristics			
934733001	WRKT 4-3-520/2 M	3	TPE, orange	ECO LAB	UL		
934733002	WRKT 4-3-520/5 M	3	TPE, orange	ECO LAB	UL		
934733003	WRKT 4-3-520/10 M	3	TPE, orange	ECO LAB	UL		
934733007	WRKT 4-521/2 M	4	TPE, orange	ECO LAB	UL		
934733008	WRKT 4-521/5 M	4	TPE, orange	ECO LAB	UL		
934733009	WRKT 4-521/10 M	4	TPE, orange	ECO LAB	UL		
934733013	WRKT 5-522/2 M	5	TPE, orange	ECO LAB	UL		
934733014	WRKT 5-522/5 M	5	TPE, orange	ECO LAB	UL		
934733015	WRKT 5-522/10 M	5	TPE, orange	ECO LAB	UL		
934733019	WRKT 8-523/2 M	8	TPE, orange	ECO LAB	UL		
934733020	WRKT 8-523/5 M	8	TPE, orange	ECO LAB	UL		
934733021	WRKT 8-523/10 M	8	TPE, orange	ECO LAB	UL		
9779	WRKT/LED A 4-3-520/2 M	3	TPE, orange	ECO LAB	UL		
9818	WRKT/LED A 4-3-520/5 M	3	TPE, orange	ECO LAB	UL		
9819	WRKT/LED A 4-3-520/10 M	3	TPE, orange	ECO LAB	UL		
9262	WRKT/LED F 4-521/2 M	4	TPE, orange	ECO LAB	UL		
9261	WRKT/LED F 4-521/5 M	4	TPE, orange	ECO LAB	UL		
9820	WRKT/LED F 4-521/10 M	4	TPE, orange	ECO LAB	UL		

LED A/LED F: PNP make contact
Special circuitry available upon request

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

Single-Ended Overmolded M12 Cordset for Actuators and Sensors – Female Connectors for Food & Beverage – Wash-Down

Technical Information

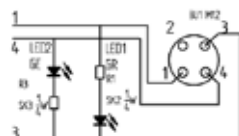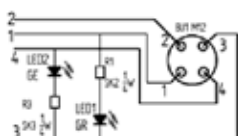| Product Description		
Order Designation	WRKWT	WRKWT/LED
Description	Actuator/sensor cordset, M12 female connector, angled, stainless steel hexagonal nut	Actuator/sensor cordset, M12 female connector, angled, LED operation and function indicators, stainless steel hexagonal nut
Note	Especially suitable for use in wash-down applications.	
RoHS-compliant (2011/65/EU)	Yes	
(Construction Type) Standard	IEC 61076-2-101	
Approvals	UL, ECOLAB	
Technical Data		
Ambient Temperature	-40 °C to +105 °C (UL: up to +90 °C), mind cable temperature range	
Housing Material/Grip	PP	
Contact Holder Material	PP	
Contact Material/Surface Finish	CuSn (3, 4, and 5-pin), CuZn (8-pin), gold over nickel plating	
Screw Coupling Material	Stainless steel	
Mechanical Data		
Degree of Protection	IP67, IP68, IP69K (only when mated to associated counterparts)	
Electrical Data		
Contact Resistance	≤ 5 mΩ	
Operating Voltage	4-pin: 230 V AC/DC, 5-pin: 50 V AC/60 V DC, 8-pin: 30 V AC/DC	24 V DC
Rated Current	3 and 5-pin 4 A, 8-pin 2 A	
Pollution Degree	3	
Technical Drawing		

L = Standard length of cable • B = Operation indicator (green) • F = Function indicator (yellow) • F2 = Function indicator (yellow)

Pin Assignment

3-pin	4-pin	5-pin	8-pin	
1 = brown 2 = n.c. 3 = blue 4 = black	1 = brown 2 = white 3 = blue 4 = black	1 = brown 2 = white 3 = blue 4 = black 5 = gray	1 = white 2 = brown 3 = green 4 = yellow	5 = gray 6 = pink 7 = blue 8 = red

Circuit Diagram

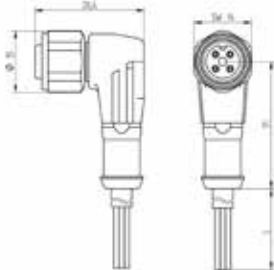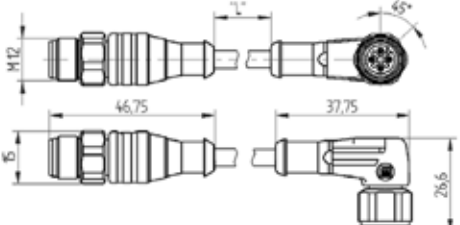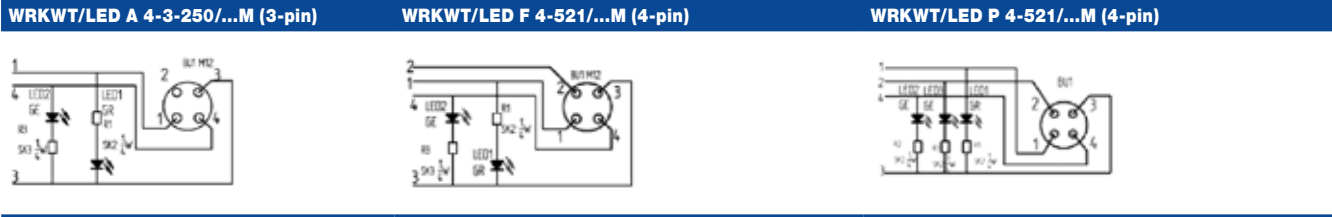| WRKWT/LED A 4-3-250/...M (3-pin)	WRKWT/LED F 4-521/...M (4-pin)	WRKWT/LED P 4-521/...M (4-pin)

Order Information

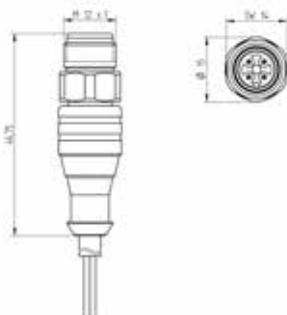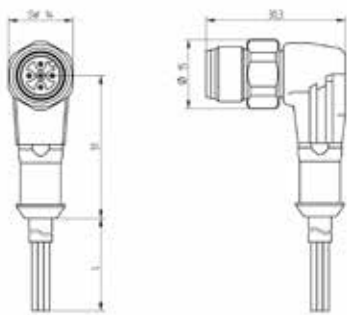| Order No.	Order Designation	No. of Pins	Jacket	Characteristics
934734001	WRKWT 4-3-520/2 M	4	TPE, orange	ECO LAB · UL
934734002	WRKWT 4-3-520/5 M	4	TPE, orange	ECO LAB · UL
934734003	WRKWT 4-3-520/10 M	4	TPE, orange	ECO LAB · UL
934734007	WRKWT 4-521/2 M	4	TPE, orange	ECO LAB · UL
934734008	WRKWT 4-521/5 M	4	TPE, orange	ECO LAB · UL
934734009	WRKWT 4-521/10 M	4	TPE, orange	ECO LAB · UL
934734013	WRKWT 5-522/2 M	5	TPE, orange	ECO LAB · UL
934734014	WRKWT 5-522/5 M	5	TPE, orange	ECO LAB · UL
934734015	WRKWT 5-522/10 M	5	TPE, orange	ECO LAB · UL
934734019	WRKWT 8-523/2 M	8	TPE, orange	ECO LAB · UL
934734020	WRKWT 8-523/5 M	8	TPE, orange	ECO LAB · UL
934734021	WRKWT 8-523/10 M	8	TPE, orange	ECO LAB · UL
9821	WRKWT/LED A 4-3-520/2 M	3	TPE, orange	ECO LAB · UL
9824	WRKWT/LED A 4-3-520/5 M	3	TPE, orange	ECO LAB · UL
9829	WRKWT/LED A 4-3-520/10 M	3	TPE, orange	ECO LAB · UL
9830	WRKWT/LED F 4-521/2 M	4	TPE, orange	ECO LAB · UL
9831	WRKWT/LED F 4-521/5 M	4	TPE, orange	ECO LAB · UL
9832	WRKWT/LED F 4-521/10 M	4	TPE, orange	ECO LAB · UL
9258	WRKWT/LED P 4-521/2 M	4	TPE, orange	ECO LAB · UL
7319	WRKWT/LED P 4-521/5 M	4	TPE, orange	ECO LAB · UL
10502	WRKWT/LED P 4-521/10 M	4	TPE, orange	ECO LAB · UL

LED A/LED F: PNP make contact (yellow-green), LED P: PNP break/make contact (yellow-yellow-green)
Special circuitry available upon request

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

Single-Ended Overmolded M12 Cordset for Actuators and Sensors – Male Connectors for Food & Beverage – Wash-Down

Technical Information

Product Description		
Order Designation	**WRST**	**WRSWT**
Description	Actuator/sensor cordset, M12 overmolded male, straight, stainless steel hexagonal screw	Actuator/sensor cordset, M12 overmolded male, angled, stainless steel hexagonal screw
Note	Especially suitable for use in wash-down applications.	
RoHS-compliant (2011/65/EU)	Yes	
(Construction Type) Standard	IEC 61076-2-101	
Approvals	UL, ECOLAB	
Technical Data		
Ambient Temperature	-40 °C to +105 °C (UL: up to +90 °C), mind cable temperature range	
Housing Material/Grip	PP	
Contact Holder Material	PP	
Contact Material/Surface Finish	CuSn (3, 4, and 5-pin), CuZn (8-pin), nickel underlay and gold-plated	
Screw Coupling Material	Stainless steel	
Mechanical Data		
Degree of Protection	IP67, IP68, IP69K (only when mated to associated counterparts)	
Electrical Data		
Contact Resistance	≤ 5 mΩ	
Operating Voltage	3 to 4-pin: 230 V AC/DC, 5-pin: 50 V AC/60 V DC, 8-pin: 30 V AC/DC	
Rated Current	3 and 5-pin 4 A, 8-pin 2 A	
Pollution Degree	3	
Technical Drawing		

L = Standard length of cable

Pin Assignment

3-pin	4-pin	5-pin	8-pin
1 = brown 3 = blue 4 = black	1 = brown 2 = white 3 = blue 4 = black	1 = brown 2 = white 3 = blue 4 = black 5 = gray	1 = white 5 = gray 2 = brown 6 = pink 3 = green 7 = blue 4 = yellow 8 = red
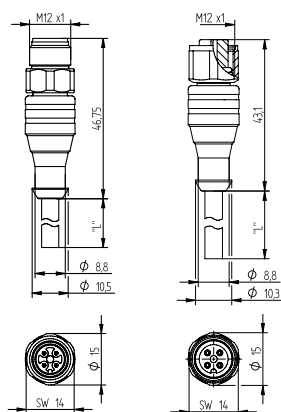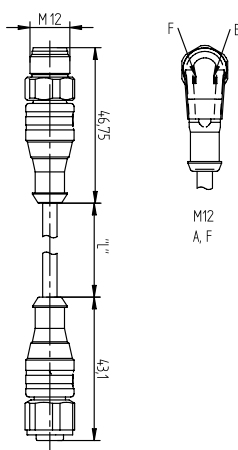
Order Information

Order No.	Order Designation	No. of Pins	Jacket	Characteristics
934735001	WRST 3-520/2 M	3	TPE, orange	ECO LAB · UL
934735002	WRST 3-520/5 M	3	TPE, orange	ECO LAB · UL
934735003	WRST 3-520/10 M	3	TPE, orange	ECO LAB · UL
934735007	WRST 4-521/2 M	4	TPE, orange	ECO LAB · UL
934735008	WRST 4-521/5 M	4	TPE, orange	ECO LAB · UL
934735009	WRST 4-521/10 M	4	TPE, orange	ECO LAB · UL
934735013	WRST 5-522/2 M	5	TPE, orange	ECO LAB · UL
934735014	WRST 5-522/5 M	5	TPE, orange	ECO LAB · UL
934735015	WRST 5-522/10 M	5	TPE, orange	ECO LAB · UL
934735019	WRST 8-523/2 M	8	TPE, orange	ECO LAB · UL
934735020	WRST 8-523/5 M	8	TPE, orange	ECO LAB · UL
934735021	WRST 8-523/10 M	8	TPE, orange	ECO LAB · UL
934736001	WRSWT 3-520/2 M	3	TPE, orange	ECO LAB · UL
934736002	WRSWT 3-520/5 M	3	TPE, orange	ECO LAB · UL
934736003	WRSWT 3-520/10 M	3	TPE, orange	ECO LAB · UL
934736007	WRSWT 4-521/2 M	4	TPE, orange	ECO LAB · UL
934736008	WRSWT 4-521/5 M	4	TPE, orange	ECO LAB · UL
934736009	WRSWT 4-521/10 M	4	TPE, orange	ECO LAB · UL
934736013	WRSWT 5-522/2 M	5	TPE, orange	ECO LAB · UL
934736014	WRSWT 5-522/5 M	5	TPE, orange	ECO LAB · UL
934736015	WRSWT 5-522/10 M	5	TPE, orange	ECO LAB · UL
934736019	WRSWT 8-523/2 M	8	TPE, orange	ECO LAB · UL
934736020	WRSWT 8-523/5 M	8	TPE, orange	ECO LAB · UL
934736021	WRSWT 8-523/10 M	8	TPE, orange	ECO LAB · UL

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

Actuator/Sensor Connectors
Double-ended Overmolded Cordset,
M12 Male Connectors to M12 Female Connectors for Food & Beverage

Technical Information

Product Description		
Order Designation	WRST-WRKT	WRST-WRKT/LED
Description	Cordset for actuators and sensors, M12 male, with self-locking screw coupling, straight, to M12 female, with self-locking screw coupling, straight, stainless steel hexagonal nut, 3, 4, 5, and 8-pin	Cordset for actuators and sensors, M12 male, with self-locking screw coupling, straight, to M12 female, with self-locking screw coupling, angled, stainless steel hexagonal nut, with LED operation and function indicators, 3 and 4-pin
Note	Especially suitable for use in wash-down applications.	
RoHS-Compliant (2011/65/EU)	Yes	
(Construction Type) Standard	IEC 61076-2-101 (M12)	
Approvals	UL, ECOLAB	
Technical Data		
Ambient Temperature	-40 °C to +90 °C (as per UL; connectors designed for operating temperatures from -40 °C to +105 °C as per VDE)	
Housing Material/Grip	PP	
Contact Holder Material	PP	
Contact Material/Surface Finish	CuSn, Cu/Au	
Screw Coupling Material	Stainless steel	
Mechanical Data		
Degree of Protection	IP67, IP68, IP69K (IEC 60529; only when mated with Hirschmann/Lumberg counterparts)	
Electrical Data		
Contact Resistance	≤ 5 mΩ	
Operating Voltage	3 and 4-pin 230 V AC/DC, 5-pin 50 V AC/60 V DC, 8-pin 30 V AC/DC	24 V DC
Rated Current	3, 4, and 5-pin 4 A, 8-pin 2 A	4 A
Pollution Degree	3	
Technical Drawing		

L = Standard length of cable

Pin Assignment

3-pin	4-pin	5-pin	8-pin
1 = brown 2 = n.c. 3 = blue 4 = black	1 = brown 2 = white 3 = blue 4 = black	1 = brown 2 = white 3 = blue 4 = black 5 = gray	1 = white　5 = gray 2 = brown　6 = pink 3 = green　7 = blue 4 = yellow　8 = red

Circuit Diagram

WRST-WRKT/LED A (PNP make contact)	WRST-WRKT/LED F (PNP make contact)
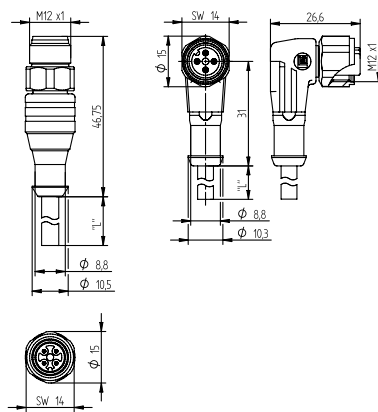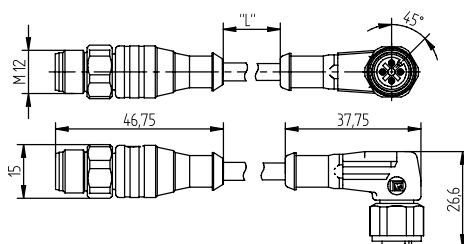
Order Information

Order No.	Order Designation	No. of Pins	Jacket	Characteristics
934737001	WRST 3-WRKT 4-3-520/0.6 M	3	TPE-V, flame-resistant, orange	ECO LAB · UL
934737002	WRST 3-WRKT 4-3-520/1 M	3	TPE-V, flame-resistant, orange	
934737003	WRST 3-WRKT 4-3-520/2 M	3	TPE-V, flame-resistant, orange	
934737004	WRST 3-WRKT 4-3-520/5 M	3	TPE-V, flame-resistant, orange	
934737005	WRST 3-WRKT 4-3-520/10 M	3	TPE-V, flame-resistant, orange	
934737006	WRST 3-WRKT 4-3-520/15 M	3	TPE-V, flame-resistant, orange	
934737007	WRST 4-WRKT 4-521/0.6 M	4	TPE-V, flame-resistant, orange	ECO LAB · UL
934737008	WRST 4-WRKT 4-521/1 M	4	TPE-V, flame-resistant, orange	
934737009	WRST 4-WRKT 4-521/2 M	4	TPE-V, flame-resistant, orange	
934737010	WRST 4-WRKT 4-521/5 M	4	TPE-V, flame-resistant, orange	
934737011	WRST 4-WRKT 4-521/10 M	4	TPE-V, flame-resistant, orange	
934737012	WRST 4-WRKT 4-521/15 M	4	TPE-V, flame-resistant, orange	
10419	WRST 5-WRKT 5-522/0.6 M	5	TPE-V, flame-resistant, orange	ECO LAB · UL
10420	WRST 5-WRKT 5-522/1 M	5	TPE-V, flame-resistant, orange	
10421	WRST 5-WRKT 5-522/2 M	5	TPE-V, flame-resistant, orange	
4213	WRST 5-WRKT 5-522/5 M	5	TPE-V, flame-resistant, orange	
10422	WRST 5-WRKT 5-522/10 M	5	TPE-V, flame-resistant, orange	
10423	WRST 5-WRKT 5-522/15 M	5	TPE-V, flame-resistant, orange	
10426	WRST 8-WRKT 8-523/0.6 M	8	TPE-V, flame-resistant, orange	ECO LAB · UL
10428	WRST 8-WRKT 8-523/1 M	8	TPE-V, flame-resistant, orange	
8890	WRST 8-WRKT 8-523/2 M	8	TPE-V, flame-resistant, orange	
10429	WRST 8-WRKT 8-523/5 M	8	TPE-V, flame-resistant, orange	
10430	WRST 8-WRKT 8-523/10 M	8	TPE-V, flame-resistant, orange	
10431	WRST 8-WRKT 8-523/15 M	8	TPE-V, flame-resistant, orange	
934753019	WRST 3-WRKT/LED A 4-3-520/0.6 M	3	TPE-V, flame-resistant, orange	ECO LAB · UL
934753020	WRST 3-WRKT/LED A 4-3-520/1 M	3	TPE-V, flame-resistant, orange	
934753021	WRST 3-WRKT/LED A 4-3-520/2 M	3	TPE-V, flame-resistant, orange	
934753022	WRST 3-WRKT/LED A 4-3-520/5 M	3	TPE-V, flame-resistant, orange	
934753023	WRST 3-WRKT/LED A 4-3-520/10 M	3	TPE-V, flame-resistant, orange	
934753024	WRST 3-WRKT/LED A 4-3-520/15 M	3	TPE-V, flame-resistant, orange	
934753025	WRST 4-WRKT/LED F 4-521/0.6 M	4	TPE-V, flame-resistant, orange	ECO LAB · UL
934753026	WRST 4-WRKT/LED F 4-521/1 M	4	TPE-V, flame-resistant, orange	
934753027	WRST 4-WRKT/LED F 4-521/2 M	4	TPE-V, flame-resistant, orange	
934753028	WRST 4-WRKT/LED F 4-521/5 M	4	TPE-V, flame-resistant, orange	
934753029	WRST 4-WRKT/LED F 4-521/10 M	4	TPE-V, flame-resistant, orange	
934753030	WRST 4-WRKT/LED F 4-521/15 M	4	TPE-V, flame-resistant, orange	

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

Actuator/Sensor Connectors
Double-ended Overmolded Cordset,
M12 Male Connectors to M12 Female Connectors, Food & Beverage

Technical Information

Product Description		
Order Designation	WRST-WRKWT	WRST-WRKWT/LED
Description	Cordset for actuators and sensors, M12 male, with self-locking screw coupling, straight, to M12 female, with self-locking screw coupling, angled, stainless steel hexagonal nut, 3 to 5-pin	Cordset for actuators and sensors, M12 male, with self-locking screw coupling, straight, to M12 female, with self-locking screw coupling, angled, stainless steel hexagonal nut, with LED operation and function indicators, 4-pin
Note	Especially suitable for use in wash-down applications.	
RoHS-Compliant (2011/65/EU)	Yes	
(Construction Type) Standard	IEC 61076-2-101 (M12)	
Approvals	UL, ECOLAB	
Technical Data		
Ambient Temperature	-40 °C to +90 °C (as per UL; connectors designed for operating temperatures from -40 °C to +105 °C as per VDE)	
Housing Material/Grip	PP	
Contact Holder Material	PP	
Contact Material/Surface Finish	CuSn, Cu/Au	
Screw Coupling Material	Stainless steel	
Mechanical Data		
Degree of Protection	IP67, IP68, IP69K (IEC 60529; only when mated with Hirschmann/Lumberg counterparts)	
Electrical Data		
Contact Resistance	≤ 5 mΩ	
Operating Voltage	3 and 4-pin 230 V AC/DC, 5-pin 50 V AC/60 V DC	24 V DC
Rated Current	4 A	
Pollution Degree	3	
Technical Drawing		

L = Standard length of cable

Pin Assignment

3-pin	4-pin	5-pin
1 = brown 2 = n.c. 3 = blue 4 = black	1 = brown 2 = white 3 = blue 4 = black	1 = brown 2 = white 3 = blue 4 = black 5 = gray

Circuit Diagram
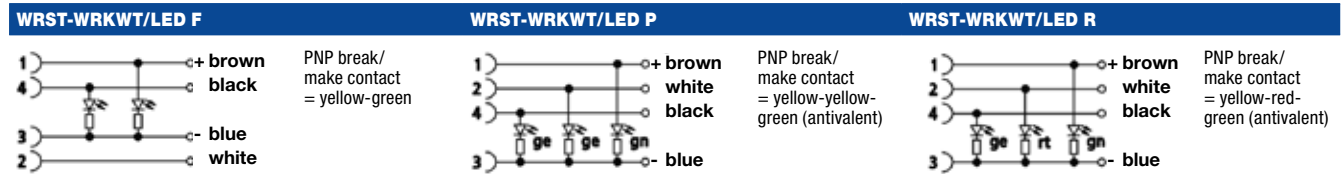
WRST-WRKWT/LED F		WRST-WRKWT/LED P		WRST-WRKWT/LED R	
	PNP break/ make contact = yellow-green		PNP break/ make contact = yellow-yellow-green (antivalent)		PNP break/ make contact = yellow-red-green (antivalent)

Special circuitry available upon request

Order Information

Order No.	Order Designation	No. of Pins	Jacket	Characteristics
934737013	WRST 3-WRKWT 4-3-520/0.6 M	3	TPE-V, flame-resistant, orange	ECO LAB UL
934737014	WRST 3-WRKWT 4-3-520/1 M	3	TPE-V, flame-resistant, orange	
934737015	WRST 3-WRKWT 4-3-520/2 M	3	TPE-V, flame-resistant, orange	
934737016	WRST 3-WRKWT 4-3-520/5 M	3	TPE-V, flame-resistant, orange	
934737017	WRST 3-WRKWT 4-3-520/10 M	3	TPE-V, flame-resistant, orange	
934737018	WRST 3-WRKWT 4-3-520/15 M	3	TPE-V, flame-resistant, orange	
934737019	WRST 4-WRKWT 4-521/0.6 M	4	TPE-V, flame-resistant, orange	ECO LAB UL
934737020	WRST 4-WRKWT 4-521/1 M	4	TPE-V, flame-resistant, orange	
934737021	WRST 4-WRKWT 4-521/2 M	4	TPE-V, flame-resistant, orange	
934737022	WRST 4-WRKWT 4-521/5 M	4	TPE-V, flame-resistant, orange	
934737023	WRST 4-WRKWT 4-521/10 M	4	TPE-V, flame-resistant, orange	
934737024	WRST 4-WRKWT 4-521/15 M	4	TPE-V, flame-resistant, orange	
934753031	WRST 4-WRKWT/LED F 4-521/0.6 M	4	TPE-V, flame-resistant, orange	ECO LAB UL
934753032	WRST 4-WRKWT/LED F 4-521/1 M	4	TPE-V, flame-resistant, orange	
934753033	WRST 4-WRKWT/LED F 4-521/2 M	4	TPE-V, flame-resistant, orange	
934753034	WRST 4-WRKWT/LED F 4-521/5 M	4	TPE-V, flame-resistant, orange	
934753035	WRST 4-WRKWT/LED F 4-521/10 M	4	TPE-V, flame-resistant, orange	
934753036	WRST 4-WRKWT/LED F 4-521/15 M	4	TPE-V, flame-resistant, orange	
934753037	WRST 4-WRKWT/LED P 4-521/0.6 M	4	TPE-V, flame-resistant, orange	ECO LAB UL
934753038	WRST 4-WRKWT/LED P 4-521/1 M	4	TPE-V, flame-resistant, orange	
934753039	WRST 4-WRKWT/LED P 4-521/2 M	4	TPE-V, flame-resistant, orange	
934753040	WRST 4-WRKWT/LED P 4-521/5 M	4	TPE-V, flame-resistant, orange	
934753041	WRST 4-WRKWT/LED P 4-521/10 M	4	TPE-V, flame-resistant, orange	
934753042	WRST 4-WRKWT/LED P 4-521/15 M	4	TPE-V, flame-resistant, orange	
934753043	WRST 4-WRKWT/LED R 4-521/0.6 M	4	TPE-V, flame-resistant, orange	ECO LAB UL
934753044	WRST 4-WRKWT/LED R 4-521/1 M	4	TPE-V, flame-resistant, orange	
934753045	WRST 4-WRKWT/LED R 4-521/2 M	4	TPE-V, flame-resistant, orange	
934753046	WRST 4-WRKWT/LED R 4-521/5 M	4	TPE-V, flame-resistant, orange	
934753047	WRST 4-WRKWT/LED R 4-521/10 M	4	TPE-V, flame-resistant, orange	
934753048	WRST 4-WRKWT/LED R 4-521/15 M	4	TPE-V, flame-resistant, orange	

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Technical modifications reserved.