



## Product: RST 3-RKMWV/LED A 3-224 ☑

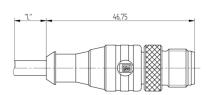
Sensor/Actuator Double-Ended Cordset: Male straight A-coded translucent 3-pin M12 Standard connector to female angled A-coded translucent 3-pin M8 Standard connector with 2xLEDs (PNP), 10-30 V DC, 4 A; PUR black cable, 3-wires, 0.34 mm<sup>2</sup>

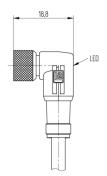
### **Product Description**

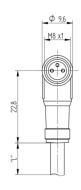
Sensor/Actuator Double-Ended Cordset: Male straight A-coded translucent 3-pin M12 Standard connector to female angled A-coded translucent 3-pin M8 Standard connector with 2xLEDs (PNP), 10-30 V DC, 4 A; PUR black cable, 3-wires, 0.34 mm²

### **Technical Drawing**

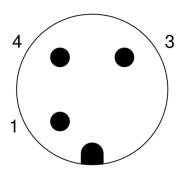




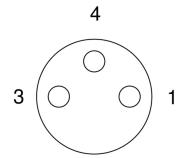


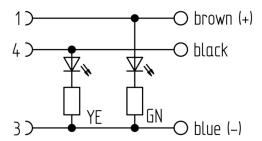


# Male



# Female





## **Technical Specifications**

## Face View Side 1

Pin 1	Pin 3	Pin 4
brown	blue	black

#### Face View Side 2



## **Product Description**

Product Family:	Sensor / Actuator Connectors
Brand:	Lumberg Automation
Connector Type:	Cordset, double ended
Shielding:	Unshielded
Rated Voltage:	30 V
Rated Voltage (UL):	30 V DC
Rated Impulse Voltage:	0.5 kV
Operating Voltage:	10-30 V DC
Rated Current*:	4 A
Rated Current (UL)*:	4 A

## **Technical Data Side 1**

Product Sub Family:	M12 Standard
Type of Contact / Gender:	Male
Connector Design:	Straight
Attachment Type:	Coupling Screw
Number of Pins:	3
Coding:	A
Contact Resistance:	≤ 10 mOhm
Insulation Resistance:	> 10^9 Ohm
Mating Cycles:	≤ 100
Ambient Temperature (Operation)*:	- 40 °C - + 90 °C
Operating Temperature (UL):	max. + 50 °C
Protection Degree / IP Rating**:	IP65, IP67, IP68 (1 m / 24 h), IP69K
Design Standard:	IEC 61076-2-101
Pollution Degree:	3 acc. to DIN EN 60664-1 (VDE 0110-1)
Overvoltage Category:	III acc. to DIN EN 60664-1 (VDE 0110-1)
Contact Base Material:	CuZn
Contact Plating:	Cu/Au
Contact Bearer Material:	TPU-GF
Contact Bearer Color:	Orange
Flammability Class (Contact Bearer):	UL 94 HB

Molded Body Material:	TPU
Molded Body Color:	Translucent
Flammability Class (Molded Body):	UL 94 HB
Attachment Material:	CuZn
Attachment Plating:	Nickel-plated
Fastening Torque (Attachment):	M 12x1: (50-60) Ncm, hand-tight
Note:	Do not connect or disconnect under load.

## **Cable Data**

Cable Number:	224
Conductor Size:	0.34 mm <sup>2</sup>
Number of Wires:	3
Minimal Bending Radius (Fixed Inst):	>5 x D
Minimal Bending Radius (Flexible Inst):	> 10 x D
Cycles (Bending):	> 5 M
Cycles (Torsion):	> 5 M @ ± 360 °/1 m
Conductor material:	Cu
Cable Jacket Material:	PUR
Cable Jacket Color:	black matt similarly RAL 9005
Cable Diameter D:	ø 4.30 ± 0.20 mm
Wire Insulation Material:	PP
Insulated Wire Diameter:	ø 1.30 ± 0.10 mm
Ambient Temperature (Fixed Installation):	- 50 °C - + 80 °C
Ambient Temperature (Flex Installation):	- 25 °C - + 80 °C
Ambient Temperature (Drag Chain Inst):	- 25 °C - + 60 °C
UL Cable Type:	AWM: 20549
Flammability Class (Cable Jacket):	DIN EN 50265-2-2, VDE 0482-265-2-2, IEC 60332-2-2, CSA FT2
Cable Characteristics:	Good microbes and hydrolysis resistance; Mainly plasticizer diffusion free; Exclusion of PVC and silicone; Free of lacquer wetting disturbing substances; Coldness flexibility

## **Technical Data Side 2**

Product Sub Family, Side 2: M8 Standard  Type of Contact / Gender, Side 2: Female  Connector Design, Side 2: Angled  Attachment Type, Side 2: Coupling Nut  Number of Pins, Side 2: 3  Coding, Side 2: A  Contact Resistance, Side 2: \$ 10 mOhm  Insulation Resistance, Side 2: \$ 10 mOhm  Mating Cycles, Side 2: \$ 100  Anthient Temperature (Operation), Side 2: \$ 100  Anthient Temperature (UL), Side 2: max. + 50 °C  Protection Degree / IP Rating, Side 2: IEC 61076-2-104  Pollution Degree, Side 2: 3 acc. to DIN EN 60684-1 (VDE 0110-1)  Contact Base Material, Side 2: CuSh  Contact Bearer Material, Side 2: TPU  Contact Bearer Material, Side 2: TPU  Molded Body Material, Side 2: Orange  Flammability Class (Contact Bearer), Side 2: TPU  Molded Body Material, Side 2: TPU  Molded Body Material, Side 2: TPU  Molded Body Material, Side 2: TPU	recillical Bata Side 2	
Connector Design, Side 2: Angled Attachment Type, Side 2: Coupling Nut Number of Pins, Side 2: 3 Coding, Side 2: A Contact Resistance, Side 2: A Contact Resistance, Side 2: Insulation Resistance, Side 2: > 10 mOhm Insulation Resistance, Side 2: > 1009 Ohm Mating Cycles, Side 2: Anbient Temperature (Operation), Side 2*: -40 °C - +90 °C Operating Temperature (UL), Side 2: max + 50 °C Protection Degree   IP Rating, Side 2**:   IP65, IP67, IP69K Design Standard, Side 2:   IEC 61076-2-104   Pollution Degree, Side 2:   3 acc. to DIN EN 60664-1 (VDE 0110-1)   Overvoltage Category, Side 2:   III acc. to DIN EN 60664-1 (VDE 0110-1)   Contact Base Material, Side 2:   CuSn   Contact Baser Material, Side 2:   Cul/Au   Contact Bearer Material, Side 2:   Orange   Flammability Class (Contact Bearer), Side 2:   UL 94 HB	Product Sub Family, Side 2:	M8 Standard
Attachment Type, Side 2: Coupling Nut  Number of Pins, Side 2: 3  Coding, Side 2: A  Contact Resistance, Side 2: \$10 mOhm  Insulation Resistance, Side 2: \$100 mOhm  Mating Cycles, Side 2: \$100  Ambient Temperature (Operation), Side 2*: \$40 °C - + 90 °C  Operating Temperature (UL), Side 2: max. + 50 °C  Operating Temperature (UL), Side 2: max. + 50 °C  Protection Degree / IP Rating, Side 2**: IEC 61076-2-104  Design Standard, Side 2: IEC 61076-2-104  Pollution Degree, Side 2: 3 acc. to DIN EN 60664-1 (VDE 0110-1)  Overvoltage Category, Side 2: Ill acc. to DIN EN 60664-1 (VDE 0110-1)  Contact Base Material, Side 2: CuSn  Contact Plating, Side 2: Cu/Au  Contact Baerer Material, Side 2: TPU  Contact Bearer Material, Side 2: Orange  Flammability Class (Contact Bearer), Side 2: UL 94 HB	Type of Contact / Gender, Side 2:	Female
Number of Pins, Side 2:  Coding, Side 2:  A  Contact Resistance, Side 2:  Insulation Resistance, Side 2:  > 10°9 Ohm  Mating Cycles, Side 2:  Ambient Temperature (Operation), Side 2*:  Operating Temperature (UL), Side 2:  max. + 50 °C  Protection Degree / IP Rating, Side 2**:  IP65, IP67, IP69K  Design Standard, Side 2:  IEC 61076-2-104  Pollution Degree, Side 2:  3 acc. to DIN EN 60664-1 (VDE 0110-1)  Overvoltage Category, Side 2:  Contact Base Material, Side 2:  CulAu  Contact Bearer Material, Side 2:  TPU  Contact Bearer Material, Side 2:  Orange  Flammability Class (Contact Bearer), Side  2:  UL 94 HB	Connector Design, Side 2:	Angled
Coding, Side 2: A  Contact Resistance, Side 2: ≤ 10 mOhm  Insulation Resistance, Side 2: > 10°9 Ohm  Mating Cycles, Side 2: ≤ 100  Ambient Temperature (Operation), Side 2*: -40 °C - +90 °C  Operating Temperature (UL), Side 2: max. +50 °C  Protection Degree / IP Rating, Side 2**: IP65, IP67, IP69K  Design Standard, Side 2: IEC 61076-2-104  Pollution Degree, Side 2: 3 acc. to DIN EN 60664-1 (VDE 0110-1)  Overvoltage Category, Side 2: III acc. to DIN EN 60664-1 (VDE 0110-1)  Contact Base Material, Side 2: CuSn  Contact Plating, Side 2: TPU  Contact Bearer Material, Side 2: Orange  Flammability Class (Contact Bearer), Side  2: UL 94 HB	Attachment Type, Side 2:	Coupling Nut
Contact Resistance, Side 2:  \$ 10 mOhm  Insulation Resistance, Side 2:  \$ 10^9 Ohm  Mating Cycles, Side 2:  \$ 100  Ambient Temperature (Operation), Side 2*:  -40 °C - + 90 °C  Operating Temperature (UL), Side 2:  max. + 50 °C  Protection Degree / IP Rating, Side 2**:  IP65, IP67, IP69K  Design Standard, Side 2:  IEC 61076-2-104  Pollution Degree, Side 2:  3 acc. to DIN EN 60664-1 (VDE 0110-1)  Overvoltage Category, Side 2:  Ill acc. to DIN EN 60664-1 (VDE 0110-1)  Contact Base Material, Side 2:  Cu/Au  Contact Plating, Side 2:  TPU  Contact Bearer Material, Side 2:  Orange  Flammability Class (Contact Bearer), Side 2:  UL 94 HB	Number of Pins, Side 2:	3
Insulation Resistance, Side 2: > 10^9 Ohm  Mating Cycles, Side 2: ≤ 100  Ambient Temperature (Operation), Side 2*: -40 °C - +90 °C  Operating Temperature (UL), Side 2: max. +50 °C  Protection Degree / IP Rating, Side 2**: IP65, IP67, IP69K  Design Standard, Side 2: IEC 61076-2-104  Pollution Degree, Side 2: 3 acc. to DIN EN 60664-1 (VDE 0110-1)  Overvoltage Category, Side 2: III acc. to DIN EN 60664-1 (VDE 0110-1)  Contact Base Material, Side 2: CuSn  Contact Plating, Side 2: Cu/Au  Contact Bearer Material, Side 2: TPU  Contact Bearer Color, Side 2: Orange  Flammability Class (Contact Bearer), Side 2: UL 94 HB	Coding, Side 2:	A
Mating Cycles, Side 2: \$\leq 100\$  Ambient Temperature (Operation), Side 2*: -40 °C -+90 °C  Operating Temperature (UL), Side 2: max. +50 °C  Protection Degree / IP Rating, Side 2**: IP65, IP67, IP69K  Design Standard, Side 2: IEC 61076-2-104  Pollution Degree, Side 2: 3 acc. to DIN EN 60664-1 (VDE 0110-1)  Overvoltage Category, Side 2: III acc. to DIN EN 60664-1 (VDE 0110-1)  Contact Base Material, Side 2: CuSn  Contact Plating, Side 2: Cu/Au  Contact Bearer Material, Side 2: TPU  Contact Bearer Color, Side 2: Orange  Flammability Class (Contact Bearer), Side 2: UL 94 HB	Contact Resistance, Side 2:	≤ 10 mOhm
Ambient Temperature (Operation), Side 2*: -40 °C - +90 °C Operating Temperature (UL), Side 2: max. +50 °C Protection Degree / IP Rating, Side 2**: IP65, IP67, IP69K Design Standard, Side 2: IEC 61076-2-104 Pollution Degree, Side 2: 3 acc. to DIN EN 60664-1 (VDE 0110-1) Overvoltage Category, Side 2: III acc. to DIN EN 60664-1 (VDE 0110-1) Contact Base Material, Side 2: CuSn Contact Plating, Side 2: Cu/Au Contact Plating, Side 2: TPU Contact Bearer Material, Side 2: Orange Flammability Class (Contact Bearer), Side 2: UL 94 HB	Insulation Resistance, Side 2:	> 10^9 Ohm
Operating Temperature (UL), Side 2: max. + 50 °C  Protection Degree / IP Rating, Side 2**: IP65, IP67, IP69K  Design Standard, Side 2: IEC 61076-2-104  Pollution Degree, Side 2: 3 acc. to DIN EN 60664-1 (VDE 0110-1)  Overvoltage Category, Side 2: III acc. to DIN EN 60664-1 (VDE 0110-1)  Contact Base Material, Side 2: CuSn  Contact Plating, Side 2: Cu/Au  Contact Bearer Material, Side 2: TPU  Contact Bearer Color, Side 2: Orange  Flammability Class (Contact Bearer), Side 2: UL 94 HB	Mating Cycles, Side 2:	≤ 100
Protection Degree / IP Rating, Side 2**: IP65, IP67, IP69K  Design Standard, Side 2: IEC 61076-2-104  Pollution Degree, Side 2: 3 acc. to DIN EN 60664-1 (VDE 0110-1)  Overvoltage Category, Side 2: III acc. to DIN EN 60664-1 (VDE 0110-1)  Contact Base Material, Side 2: CuSn  Contact Plating, Side 2: Cu/Au  Contact Bearer Material, Side 2: TPU  Contact Bearer Color, Side 2: Orange  Flammability Class (Contact Bearer), Side 2  UL 94 HB	Ambient Temperature (Operation), Side 2*:	-40 °C -+90 °C
Design Standard, Side 2: IEC 61076-2-104  Pollution Degree, Side 2: 3 acc. to DIN EN 60664-1 (VDE 0110-1)  Overvoltage Category, Side 2: III acc. to DIN EN 60664-1 (VDE 0110-1)  Contact Base Material, Side 2: CuSn  Contact Plating, Side 2: Cu/Au  Contact Bearer Material, Side 2: TPU  Contact Bearer Color, Side 2: Orange  Flammability Class (Contact Bearer), Side 2: UL 94 HB	Operating Temperature (UL), Side 2:	max. + 50 °C
Pollution Degree, Side 2: 3 acc. to DIN EN 60664-1 (VDE 0110-1)  Overvoltage Category, Side 2: III acc. to DIN EN 60664-1 (VDE 0110-1)  Contact Base Material, Side 2: CuSn  Contact Plating, Side 2: Cu/Au  Contact Bearer Material, Side 2: TPU  Contact Bearer Color, Side 2: Orange  Flammability Class (Contact Bearer), Side 2: UL 94 HB	Protection Degree / IP Rating, Side 2**:	IP65, IP67, IP69K
Overvoltage Category, Side 2: III acc. to DIN EN 60664-1 (VDE 0110-1)  Contact Base Material, Side 2: CuSn  Contact Plating, Side 2: Cu/Au  Contact Bearer Material, Side 2: TPU  Contact Bearer Color, Side 2: Orange  Flammability Class (Contact Bearer), Side 2: UL 94 HB	Design Standard, Side 2:	IEC 61076-2-104
Contact Base Material, Side 2: CuSn  Contact Plating, Side 2: Cu/Au  Contact Bearer Material, Side 2: TPU  Contact Bearer Color, Side 2: Orange  Flammability Class (Contact Bearer), Side 2: UL 94 HB	Pollution Degree, Side 2:	3 acc. to DIN EN 60664-1 (VDE 0110-1)
Contact Plating, Side 2: Cu/Au  Contact Bearer Material, Side 2: TPU  Contact Bearer Color, Side 2: Orange  Flammability Class (Contact Bearer), Side UL 94 HB	Overvoltage Category, Side 2:	III acc. to DIN EN 60664-1 (VDE 0110-1)
Contact Bearer Material, Side 2: TPU  Contact Bearer Color, Side 2: Orange  Flammability Class (Contact Bearer), Side 2: UL 94 HB	Contact Base Material, Side 2:	CuSn
Contact Bearer Color, Side 2: Orange Flammability Class (Contact Bearer), Side 2: UL 94 HB	Contact Plating, Side 2:	Cu/Au
Flammability Class (Contact Bearer), Side 2: UL 94 HB	Contact Bearer Material, Side 2:	TPU
2: OL 34 IID	Contact Bearer Color, Side 2:	Orange
Molded Body Material, Side 2: TPU		UL 94 HB
	Molded Body Material, Side 2:	TPU
Molded Body Color, Side 2: Translucent	Molded Body Color, Side 2:	Translucent
Flammability Class (Molded Body), Side 2: UL 94 HB	Flammability Class (Molded Body), Side 2:	UL 94 HB
Attachment Material, Side 2: CuZn	Attachment Material, Side 2:	CuZn
Attachment Plating, Side 2: Nickel-plated	Attachment Plating, Side 2:	Nickel-plated
O-Ring Material, Side 2: FKM, green	O-Ring Material, Side 2:	FKM, green

Function Indicator, Side 2:	2xLEDs (PNP)
Fastening Torque (Attachment), Side 2:	M 8x1: 30 Ncm, hand-tight

#### **Approvals**

UL-File:	E315587
UL:	UL 2238; cURus

## Safety & Environmental Compliance

RoHS Compliant:	yes
-----------------	-----

#### Resistances

Halogenfree:	DIN EN 50267-2-1, IEC 60754-1, VDE 0482-267-2-1
Oil Resistance:	Good chemical and oil resistance

#### **Notes**

Protection Degree / IP Rating Note:	** only if mounted and locked in combination with Hirschmann / Lumberg Automation connector.
Note Derating:	Notice derating

#### Variants

Item #	Item Description	Cable Length
11749	RST 3-RKMWV/LED A 3-224/0,3 M	0.3 m
11750	RST 3-RKMWV/LED A 3-224/0,6 M	0.6 m
11751	RST 3-RKMWV/LED A 3-224/1 M	1 m
11752	RST 3-RKMWV/LED A 3-224/1,5 M	1.5 m
11753	RST 3-RKMWV/LED A 3-224/2 M	2 m
11754	RST 3-RKMWV/LED A 3-224/3 M	3 m
50494	RST 3-RKMWV/LED A 3-224/4 M	4 m
103598	RST 3-RKMWV/LED A 3-224/4,5 M	4.5 m
11755	RST 3-RKMWV/LED A 3-224/5 M	5 m
84606	RST 3-RKMWV/LED A 3-224/7 M	7 m
60293	RST 3-RKMWV/LED A 3-224/7,5 M	7.5 m
84607	RST 3-RKMWV/LED A 3-224/8 M	8 m
44573	RST 3-RKMWV/LED A 3-224/10 M	10 m
934636020	RST 3-RKMWV/LED A 3-224/15 M	15 m

#### © 2023 Belden, Inc

All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described here in are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "ASIS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. The Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.