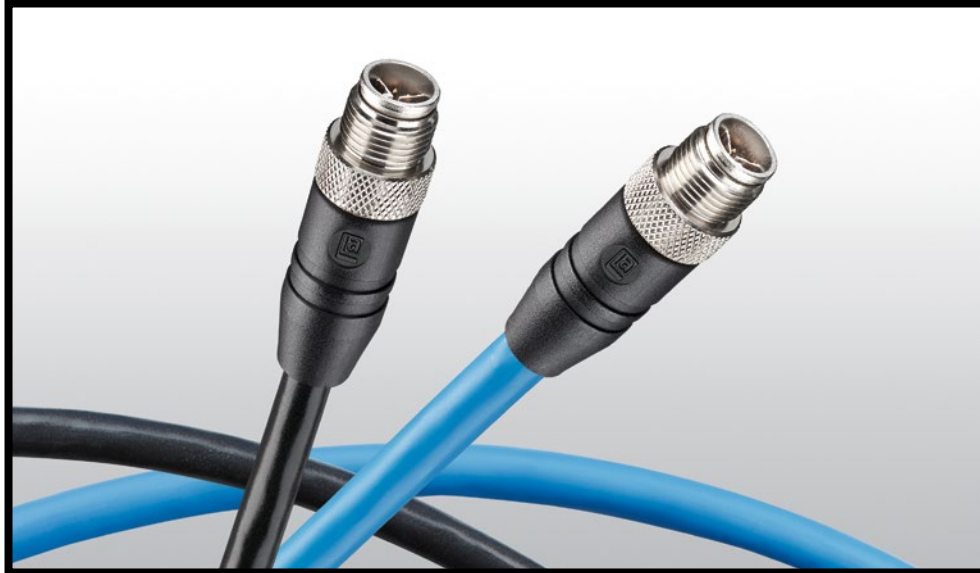


PB00010LA

### BRSTS 8X-552/...M and RSTS 8X-478/...M Cord Sets

New M12, molded cord sets – designed to ensure high-volume data transfer in industrial Ethernet applications – support increasing demands for maximum uptime and reliable data transmission.



**With new Ethernet data cables meeting global certification standards for industrial settings, the M12 cord sets safeguard network data in challenging environments, such as railway and manufacturing applications.**

- **Performance** – the M12 cord sets are designed to ensure data transfer rates of up to 10 Gbit/second.
- **Operational Reliability** – delivers reliable network functionality and high performance in environments that depend on electromagnetic compatibility (EMC).
- **Flexibility** – suitable for applications that require fulfillment of the highest European railway standards and the global UL quality standard, delivering sufficient bandwidth for new and expanded Industrial Ethernet applications.

Built for harsh industrial settings, Lumberg Automation has added two new types of M12 cord sets into its industrial Ethernet portfolio: BRSTS 8X-552/...M for railway applications and RSTS 8X-478/...M for general industrial settings. These robust M12 cord sets are a direct result of the growing use of supervisory systems featuring HD-video surveillance, high-end vision sensors, etc., requiring reliable, high-volume communication. To offer network engineers, electricians, system integrators and machine builders the most efficient solution for establishing operationally reliable, high-speed connections in the field, the new data cord sets allow the integration of digital image processing devices, which call for big data volumes, in your factory layout.

#### Applications

To ensure industrial networks are prepared for increased data demands in the future – as

volumes continue to rise – these new cord sets can reliably transmit up to 10 Gbit of data per second. The M12 cord sets, while sharing many similar technical features, each offer specific capabilities for certain applications:

- The BRSTS 8X-552/...M cord set is designed for use in transportation systems in rolling stocks – in accordance with Europe's stringent DIN EN requirements – where vibration and inflammability pose constant challenges to the consistency of transportation systems, which is an absolute must for the safety of the people traveling.
- The RSTS 8X-478/...M cord set is designed to meet the safety and quality needs of process automation, machine building and material handling applications and will also carry UL's seal of quality in the near future.

#### Your Benefits

The BRSTS 8X-552/...M and RSTS 8X-478/...M cord sets employ industry proven M12 connectors for operating even when facing harsh conditions, maximizing uptime of network activity. The M12 cord sets provide secure network data transfer and flexibility with the Belden product portfolio. At a best-in-class price point, the cord sets also require little investment over time, due to minimal maintenance needs ensuring a long service life. The benefits of these products have been made with global industry standards in mind to withstand the harshest industrial conditions across transportation, automotive and automated settings.

**A new product to serve your needs.  
Be certain.**

The M12 cord sets provide secure network data transfer in high speed and flexibility, maximizing uptime of network activity.



### **BRSTS 8X-552/...M and RSTS 8X-478/...M**

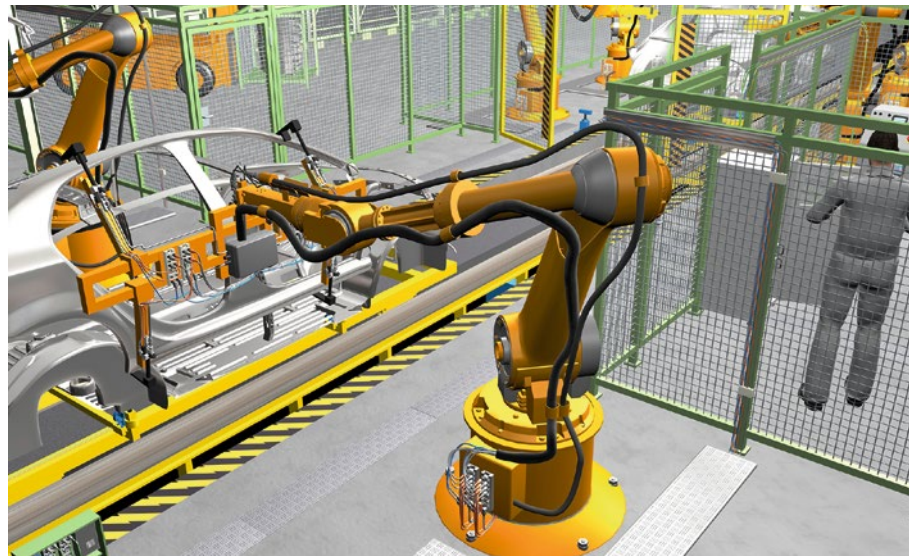
The BRSTS 8X-552/...M and RSTS 8X-478/...M are available in the following configurations: M12, male, 8-pole, X-coded, 360° shielded, single- and double-ended cord sets.

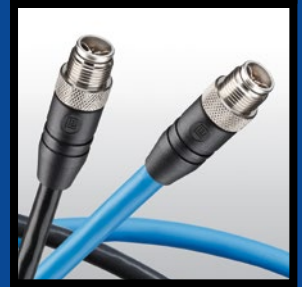
The X-coded connector design (E DIN EN 61076-2-109) safely separates the four pairs to prevent crosstalk – ensuring outstanding performance in environments depending on EMC.

The overmolded cord set design is further complimented by Belden's twisted-pair category 7 shielded cable.




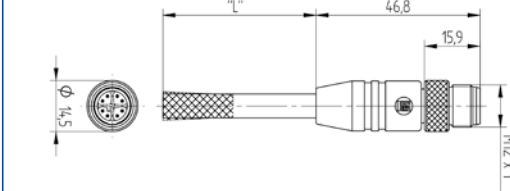
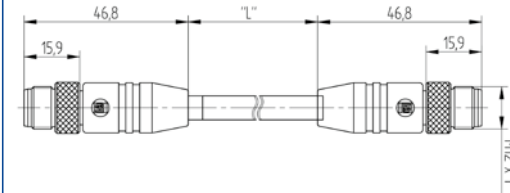
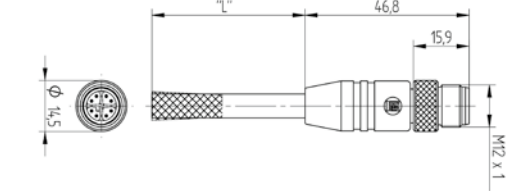
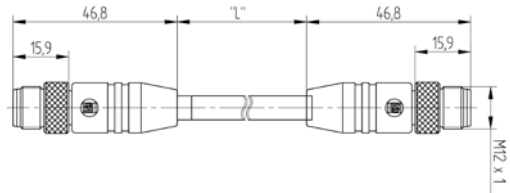
#### **Benefits at a Glance**

- Data transfer rate of up to 10 Gbit/s (Cat 6a)
- Meets IP67 protection degree rating
- Operates at a temperature range from -40 °C to +85 °C
- Rail-approved version (BRSTS 8X-552/...M) meets DIN EN 50155 (in accordance), DIN EN 45545-2, DIN EN 50467, DIN EN 61373
- UL certificate for RSTS 8X-478/...M coming soon
- 360° shielding connected to knurled screw
- Works seamlessly with Belden and Hirschmann industrial Ethernet products: 0986 EMC 600, M12 receptacle 0986 EFC 651 and OCTOPUS switches, among other products

















## Technical Information

Product Description		
Type	RSTS 8X-478/...M RSTS 8X-RSTS 8X-478/...M	BRSTS 8X-552/...M BRSTS 8X-BRSTS 8X-552/...M
Description	 <p>Cat 6a overmolded cord sets, single-ended and double-ended for Industrial Ethernet Gigabit applications, with M12 male connector, X-coded, supports transfer rates up to 10 Gigabit, 360° shielding connected to knurled screw, 8 poles</p> <p>– UL approved version –</p>	 <p>Cat 6a overmolded cord sets, single-ended and double-ended for Industrial Ethernet Gigabit applications, with M12 male connector, X-coded, supports transfer rates up to 10 Gigabit, 360° shielding connected to knurled screw, 8 poles</p> <p>– Rail-approved version –</p>
RoHS (2011/65/EU)	yes	
Standards	IEC 61076-2-109 Control Cable: • ISO/IEC 11801 Cat 7 • EN 50173-1 • TIA/EIA-568-B.2 (May 2001)	IEC 61076-2-109 Control Cable: • ISO/IEC 11801 Cat 7 • EN 50173-1 • DIN 5510-2, EN 45545-2 • TIA/EIA-568-B.2 (May 2001)
Approvals	UL*	DIN EN 50155 (in accordance), DIN EN 45545-2, DIN EN 50467, DIN EN 61373
Technical Data		
Environmental Temperature	-40 °C to +80 °C	-40 °C to +85 °C
Housing Material		PA
Contact Bearer Material		PA
Contact Material, Surface Refinement		CuZn, Cu/Au
Knurled Screw/Nut Material		CuZn, nickel-plated
Mechanical Data		
Degree of Protection (IP), Mounted	IP67 (Only in properly locked position with suitable counterpart)	
Electrical Data		
Contact Resistance	≤ 5 mΩ	
Rated Voltage	48 V	
Rated Current In	0.5 A	
Pollution Degree	3 acc. to DIN EN 60664-1 (VDE 0110)	
Technical Drawing		
<b>Pin Assignment</b>  <p>M12, Male 8 poles X-coded</p> <p>1 = White-orange 2 = Orange 3 = White-green 4 = Green 5 = White-brown 6 = Brown 7 = White-blue 8 = Blue</p>	<p>RSTS 8X-478/...M</p>  <p>RSTS 8X-RSTS 8X-478/...M</p> 	<p>BRSTS 8X-552/...M</p>  <p>BRSTS 8X-BRSTS 8X-552/...M</p> 

\* Pending UL-approved version (RSTS 8X) available in near future.  
The application of these products in harsh environments should always be checked before use.

## Order Information

Order No.	Type	No. of Contacts	Outer Jacket	Characteristics
934809001	RSTS 8X-478/2 M	8	PUR jacket, halogen-free, black	  
934809002	RSTS 8X-478/5 M	8	PUR jacket, halogen-free, black	
934809003	RSTS 8X-478/10 M	8	PUR jacket, halogen-free, black	
934809004	RSTS 8X-478/15 M	8	PUR jacket, halogen-free, black	
934809005	RSTS 8X-RSTS 8X-478/2 M	8	PUR jacket, halogen-free, black	  
934809006	RSTS 8X-RSTS 8X-478/5 M	8	PUR jacket, halogen-free, black	
934809007	RSTS 8X-RSTS 8X-478/10 M	8	PUR jacket, halogen-free, black	
934809008	RSTS 8X-RSTS 8X-478/15 M	8	PUR jacket, halogen-free, black	  
934809009	BRSTS 8X-552/2 M	8	X-FRNC/LSNH jacket, halogen-free, blue	
934809010	BRSTS 8X-552/5 M	8	X-FRNC/LSNH jacket, halogen-free, blue	
934809011	BRSTS 8X-552/10 M	8	X-FRNC/LSNH jacket, halogen-free, blue	
934809012	BRSTS 8X-552/15 M	8	X-FRNC/LSNH jacket, halogen-free, blue	  
934809013	BRSTS 8X-BRSTS 8X-552/2 M	8	X-FRNC/LSNH jacket, halogen-free, blue	
934809014	BRSTS 8X-BRSTS 8X-552/5 M	8	X-FRNC/LSNH jacket, halogen-free, blue	
934809015	BRSTS 8X-BRSTS 8X-552/10 M	8	X-FRNC/LSNH jacket, halogen-free, blue	
934809016	BRSTS 8X-BRSTS 8X-552/15 M	8	X-FRNC/LSNH jacket, halogen-free, blue	

\* Pending UL-approved version (RSTS 8X) available in near future.

## Belden® Connectivity Center

Nowadays it is more important than ever to continuously increase the efficiency of production processes. Safe, cost-effective connectivity solutions for your machinery and plant play an important role in achieving this. Customized solutions tailored to your individual requirements enable you to substantially reduce your total cost of ownership. Thanks to the Belden Connectivity Center, the only one of its kind in the market, we are your worldwide partner when it comes to implementing such solutions, flexibly and rapidly, whether you need customized connectors and cable assemblies, or active and passive I/O modules for fieldbus or Ethernet networks – always in line with our motto “listen, understand, implement and deliver.” You will benefit both from the expertise of our knowledgeable specialists and from our extensive experience as a leading supplier of high-quality automation components. Let us utilize your challenges for our mutual success.

### Always Stay Ahead with Belden

In a highly competitive environment, it is crucial to have reliable partners who are able to add value to your business. When it comes to signal transmissions, Belden is the No. 1 solutions provider. We understand your business and want to know your specific challenges and targets to see how effective signal transmission solutions can push you ahead of the competition. By combining the strengths of our five leading brands, Belden®, GarrettCom®, Hirschmann™, Lumberg Automation™ and Tofino™ Security, we are able to offer the solution you need. Today, it may be a single cable, a switch or a connector, thus solving a specific issue; tomorrow, it can be a complex range of integrated applications, systems and solutions.