**lumbergautomation**
A **BELDEN** BRAND

M8 5-pole B-coded
Sensor/Actuator Connectors

The industry-proven M8 technology offers outstanding handling characteristics, combined with the market's most powerful connection for small electronic applications.

+ Miniaturized High Performance – one-third the size of M12 connector to deliver 2.5 times the power transmission of standard applications.

+ Easy Installation – foolproof mountable B-coding to ensure correct orientation, making the connectors impossible to mismate, even in tight spaces.

+ Cost-effective One stop-solution – provides all necessary configurations for any type of field installation.

Key Features

- 5-pole B-coded design according to IEC 61076-2-104 standard for M8 technology
- Extended power range with a peak of 4A of current and 60 V on two pins
- Straight, angled, molded and receptacle designs, single and double-ended cordsets, T-splitter accessory
- Snap and snap/thread connection options for quick attachment
- Straight screw connection options for maximum mechanical stability in harsh conditions, meeting IP69K standards
- Operating temperature from -40 °C to +90 °C
- Several potential cable configurations
- Certification according UL 2238 standard for cable assemblies and fittings for industrial control and signal distribution
- Complies with IO-Link requirements
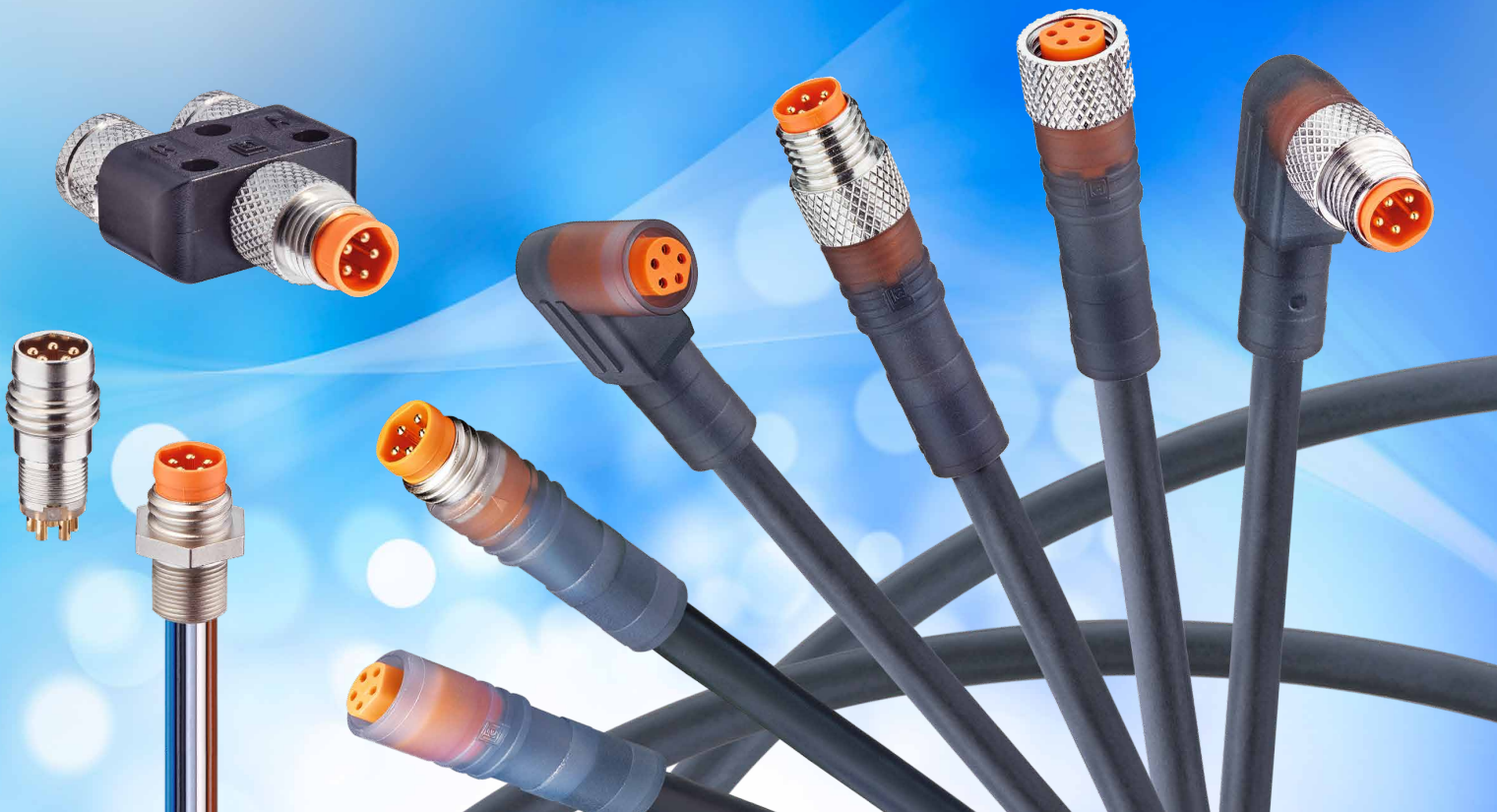
Ensure the lowest total cost for installation and maintenance with the industry's smallest and lightest cordsets meeting high standards for industry 4.0 environments.

**Be certain.
Belden.**

M8 5-pole B-coded Sensor/Actuator Connectors

Miniaturized Power Meets Resistance

Designed for the Industrial Internet of Things (IIoT), the M8 5-pole B-coded series offers a flexible and robust solution for industrial connectivity and communications requirements. The cordsets deliver greater power in a smaller, lighter size, and have both snap connections to provide fast installation and screw connections to increase protection in harsh environments.

The industry's only B-coding design according to IEC 61076-2-104 standard for M8 technology makes the cordsets connectors one-third the size of M12 cordsets, providing easy installation in places where space is tight. In just seconds, you can connect sensors, compact actuators, motors, cabinets and more. You can even connect the newest generation of IO-Link sensors.

The T-splitter accessory enables you to split signals from a single I/O block to maximize use. This feature allows you to connect interfaces in environments where multiple end devices need to be joined in space-restricted areas. These unique cordsets have increased current and voltage ratings and foolproof mountable B-coding to prevent mismating.

Maximize the number of sensors connected to a single device with the cordset's innovative T-splitters. Deliver multiple levels of power and signal transmission from a signal device.

Use the M8 5-pole B-Coded connectors to provide a reliable communication between IO-Link Master and IO-Link devices for cost-effective signal transmission.

Applications

The M8 5-pole B-coded connectors facilitate transmission of power and reliable signals via a compact interface to small electronic drives and sensors, making them an ideal solution for miniature robotic applications.

The screw option provides mechanical resistance and protection from high-pressure water up to IP69K, which is 50 times the pressure typically found in car tires. This makes them first choice for application environments where vibration or water and oil ingress are issues.
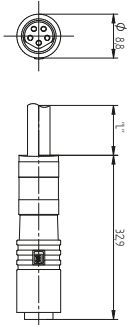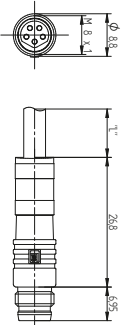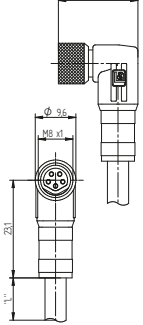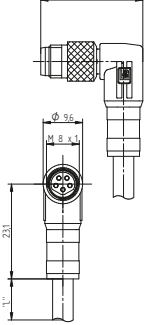
To ensure reliable intralogistics communication in automated storage and retrieval systems, the M8 5-pole B-coded range from Lumberg Automation is best suited to connect different type of automation devices, such as sensors and drives. Furthermore, the M8 5-pole B-coded technology applies to a variety of material handling applications, such as driven conveyor rollers. This provides optimal power transmission, as well drive status information, for the most demanding applications.

Markets

The material handling, machine building as well as other industries with high sensor density will benefit from the product's lightweight and streamlined design, flexible options, easy installation and extended power range.

Technical Information

M8 5-pole B-coded	RKM	RSM	RKMWV/RKMV	RSMWV/RSMV
Product Description	M8 sensor/actuator single-ended cordset, female, straight, with snap-locking coupling and overmolded cable, 5-pin, B-coding	M8 sensor/actuator single-ended cordset, male, straight, with snap-locking coupling and overmolded cable, 5-pin, B-coding	M8 sensor/actuator single-ended cordset, female, straight or angled with coupling nut and overmolded cable, 5-pin, B-coding	M8 sensor/actuator single-ended cordset, male, straight or angled with coupling screw and overmolded cable, 5-pin, B-coding
General Data				
Directive	RoHS (2011/65/EU)			
Construction standard	IEC 61076-2-104			
Number of Pins	5			
Attachment Type	Snap-Locking		Coupling Nut	Coupling Screw
Electrical Data				
Contact Resistance	≤ 10 mOhm			
Rated Current	3 A (0.25 mm² (AWG 24)) / 4 A (0.34 mm² (AWG 22)); UL-certified: 3 A			
Operating Voltage	50 V AC/60 V DC; UL-certified: 30 V AC/DC			
Pollution Degree	3			
Ambient Data				
Ambient Temperature	-40 °C to +90 °C			
Protection Degree	IP65		IP65, IP67 (angled versions with PVC control cable)	
	IP65 (only in combination with RKM connector) IP67 (only in combination with RKMV/RKMWV connector)		up to IP69K (angled versions with PUR control cable) up to IP69K (all straight versions)	
Approvals	UL			
Technical Drawings				

Product Configurator

M8 5-pole B-coded Cordsets

| R | S | M | W | V | | 5 | - | 6 | 7 | 1 | / | 5 | M |

Gender & Connector Design

RSM = Male, cordset, molded
RSMW = Male, cordset, 90° angled, molded

RKM = Female, cordset, molded
RKMW = Female, cordset, 90° angled, molded

Attachment Type

 = Snap-Locking
V = Coupling Screw / Coupling Nut

Pin Assignment

5 = 5-pole

Control Cable

671 = 5x0.34 mm² (AWG22), PVC, Black
293 = 5x0.34 mm² (AWG22), PUR, Black

507 = 5x0.25 mm² (AWG24), PVC, Black
506 = 5x0.25 mm² (AWG24), PUR, Black

Cable length

2M	= 2 meter	15M	= 15 meter
5M	= 5 meter	20M	= 20 meter
10M	= 10 meter	25M	= 25 meter

Please verify your configuration @catalog.belden.com.
Other cable styles and lenghts available upon request.
Please contact: icos-sales@belden.com.

Order Overview

M8 5-pole B-coded	Male	Female
1. Choose Coding ➡		
2. Choose Design ⬇		
Single-Ended Cordsets		
Straight, Snap-Locking	RSM 5-671/*M	RKM 5-671/*M
Straight, Coupling Screw/Coupling Nut	RSMV 5-671/*M	RKMV 5-671/*M
Angled, Snap-Locking, PVC Black	–	RKMW 5-671/*M
Angled, Snap-Locking, PUR Black	–	RKMW 5-293/*M
Angled, Coupling Screw/Coupling Nut, PVC Black	RSMWV 5-671/*M	RKMWV 5-671/*M
Angled, Coupling Screw/Coupling Nut, PUR Black	RSMWV 5-293/*M	RKMWV 5-293/*M
Double-Ended Cordsets		
Straight-to-straight, M8 male to M8 female, Snap-Locking	RSM 5-RKM 5-671/*M	
Straight-to-angled, M8 male to M8 female, Snap-Locking	RSM 5-RKMW 5-671/*M	
Straight-to-straight, M8 male to M8 female, Snap- and Screw-Locking	RSMV 5-RKMV 5-671/*M	
Straight-to-straight, M12 male to M8 female, Screw- and Snap-Locking	RST 5-RKM 5-671/*M	
Straight-to-straight, M12 male to M8 female, Screw-Locking	RST 5-RKMV 5-671/*M	
Straight-to-angled, M12 male to M8 female, Screw-Locking	RST 5-RKMWV 5-671/*M	
Angled-to-straight, M12 male to M8 female, Screw- and Snap-Locking	RSWT 5-RKM 5-671/*M	
Angled-to-straight, M12 male to M8 female, Screw-Locking	RSWT 5-RKMV 5-671/*M	
Angled-to-angled, M12 male to M8 female, Screw-Locking	RSWT 5-RKMWV 5-671/*M	
Receptacles		
Male, Front Mounting, Screw	RSMF 5/0.5	–
Male, Snap- and Screw-Locking	RSMED 5B	–
Accessories		
M8 T-Splitter	ASBS 2 M8	

Blue highlighted product features are available in different variants.