

PB 338

**Lumberg Automation™
Shielded Railway
Connectors**

Compliance with fire protection class including Hazard Level 2 maximizes safety and security.



The Shielded Railway Connectors from Lumberg Automation Comply with International Railway Standards EN 50155, IEC 61373 and DIN CLC/TS 50467 and with Fire Protection Class DIN CEN/TS 45545, DIN 5100 Making Them Suitable for a Wide Range of Applications.

- Molded and field-attachable connectors are inexpensive and easy to install. Bulk cable available upon request.
- Different versions of railway connectors solve a wide range of application requirements..
- The robust and ingress protection class IP67 ensure maximum reliability and a long service life

Specially developed for use in the railway sector, these new shielded connectors comply with all the relevant international norms and standards. This was achieved by combining the legacy M12 connection technology with new components.

The result: extremely reliable connectors that can be used anywhere in the world. Furthermore, these connectors are available as pre-assembled for Industrial Ethernet and ProfiNet cables or in a field-attachable version. They provide optimum solutions for a variety of applications.

Applications

These shielded connectors are railroad approved and offer fast and reliable communication and enhanced system performance in rail transport and local public transport systems. They are deployed in applications critical to the comfort and safety of passengers. These include the networking of control modules regulating doors, heating and air conditioning. Additional applications include reliable connection of IP cameras, passenger counting systems and information displays.

Benefits

The new shielded railway connectors are fast and inexpensive to install. They come with already molded cables or in field-attachable versions where the desired length of cable can be ordered at the same time. The connectors provide flexibility in the installation process for a variety of applications. The Ingress Protection class IP67 and robust design offer maximum reliability and long service life

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



Shielded Railway Connector with Fire Protection Rating Hazard Level 2

Compliant with international railway norms and standards, the shielded connectors are simple and safe to install. The male and female connectors are equipped with spring-clamp terminals, making them easy to install. The connectors are designed to withstand extreme shock and vibration and have an operating temperature range of -40°C to +90°C, making them ideally suited for use in harsh environments.

The Advantages at a Glance

- Molded cable versions and field-attachable versions including cable
- Shock and Vibration-proof M12 connection technology
- Ingress protection class IP67
- Extended temperature range: -40°C to +90°C
- Simple handling with male and female connectors with spring-clamp terminals
- Cat 5 and Cat 5e transmission properties according to ISO IEC 11801 and TIA/EIA-568-B.2
- Standards and approvals: EN 50155, IEC 61373, DIN CLC/TS 50467, DIN 5510, DIN CEN/TS 45545
- Can be ideally combined with OCTOPUS Industrial Ethernet switches from Hirschmann™ and Belden® railway cable




Compliance with railway international norms and standards permit the use of the shielded connectors anywhere in the world.





Product Information Shielded Railway Connector with Fire Protection Rating Hazard Level 2

Technical Information

Product Description				
Type	0985 496 120/* M	0985 496 121/* M	0986 EFC 107	0986 EMC 105
	 	 	 	 
Description	M12 cordset single-ended, Industrial Ethernet data cable, Cat 5 (ProfiNet), single-ended molded with M12 male connector, 4 poles, D coding	M12 cordset double-ended, Industrial Ethernet data cable, Cat 5 (ProfiNet), double-ended molded with M12 male connectors, 4 poles, D coding	Field attachable connector, M12 female connector with threaded joint, shieldable, assembling with spring-type terminals, 4 poles, D coding	Field attachable connector, M12 male connector with threaded joint, shieldable, assembling with spring-type terminals, 4 poles, D coding
Technical Data				
Operating Temperature	-40°C to +85°C	-40°C to +85°C	-40°C to +90°C	-40°C to +90°C
Housing/Molded Body	PA	PA	GD-ZnAl	GD-ZnAl
Insert	PBT	PBT	PBT	PBT
Contact	CuSn, gold-plated	CuSn, gold-plated	stainless steel, silver-plated, gold-plated	stainless steel, silver-plated, gold-plated
Receptacle Shell/Knurled Screw/-nut/Hexagon Screw/-nut/Sleeve	CuZn, tin-plated	CuZn, tin-plated	Shield contacting spring: CuBe, tined	Shield contacting spring: CuBe, tined
O-Ring	–	–	EPDM	EPDM
Mechanical Data				
Protection Class	IP67 (Only in locked position with its proper counterparts.)			
Mode of Connection	–	–	spring-type terminals	spring-type terminals
Connectable Conductor	–	–	max. 0.14 mm ² (with wire end ferrule) to 0.5 mm ²	max. 0.14 mm ² (with wire end ferrule) to 0.5 mm ²
Electrical Data				
Contact Resistance	≤ 5 mΩ	≤ 5 mΩ	≤ 5 mΩ	≤ 5 mΩ
Nominal Current at 40°C	4 A	4 A	4 A	4 A
Nominal Voltage	60 V	60 V	60 V	60 V
Rated Voltage	250 V	250 V	250 V	250 V
Test Voltage	2.0 kV eff./60 s	2.0 kV eff./60 s	1.5 kV eff./60 s	1.5 kV eff./60 s
Insulation Resistance	> 109 Ω	> 109 Ω	> 109 Ω	> 109 Ω
Pollution Degree	3	3	3	3
Approvals				
Railway Standards	EN 50155, IEC 61373, DIN CLC/TS 50467			
Fire Protection	DIN CEN/TS 45545, DIN 5510			



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.

For more information, visit us at:
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