

Automotive Line M12 Sensor Actuator Connector®

M12 Circular PUR Connector with
Welding Spark Resistance

PRODUCT BULLETIN

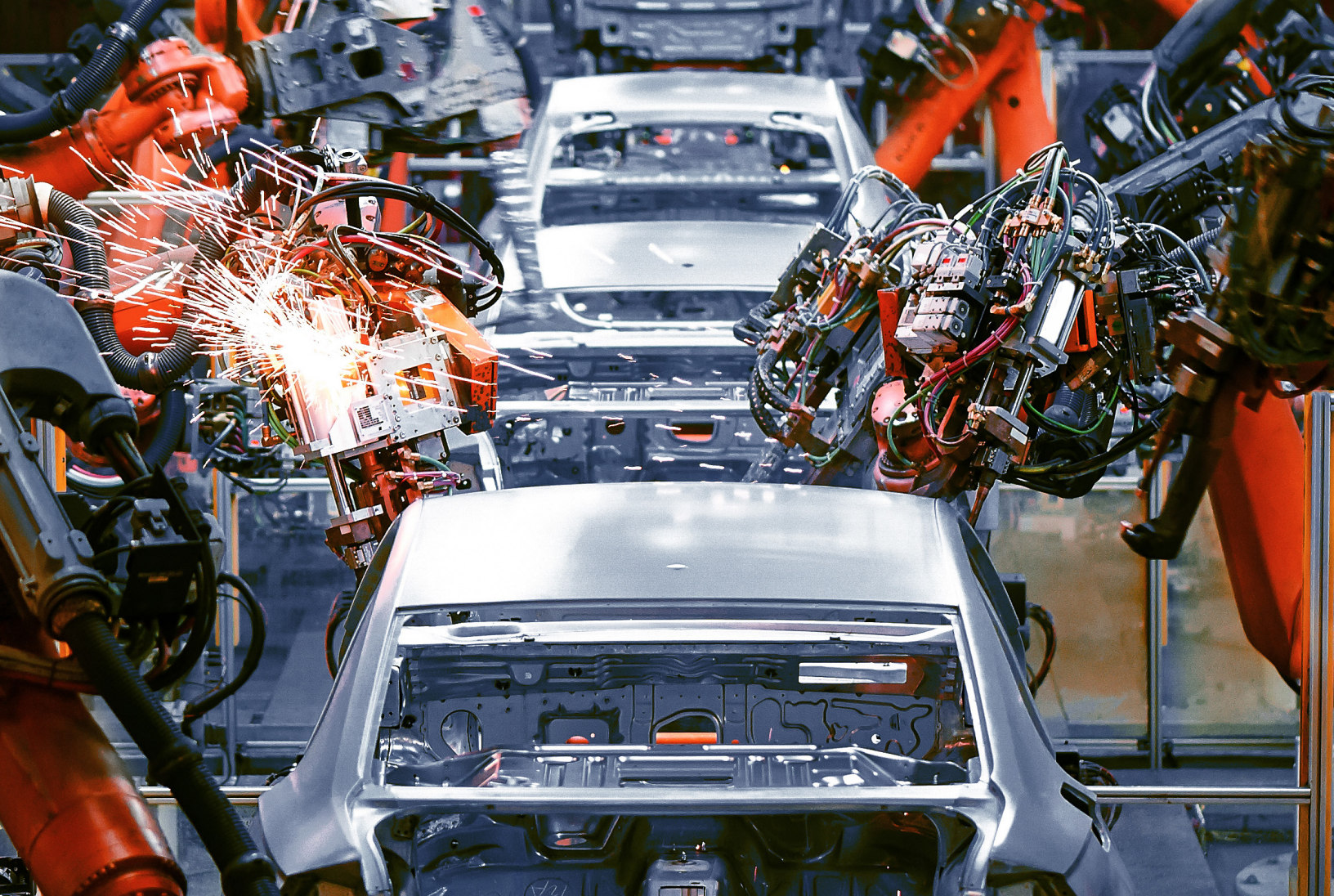
The polyurethane (PUR) Lumberg Automation M12 Sensor Actuator Connector with welding spark resistance promotes safety and supports machine uptime in automotive manufacturing environments

- **Increased safety** through robust PUR M12 circular connector with enhanced thermal resistance to withstand welding sparks.
- **Improved uptime** with durable PUR construction that tolerates higher heat and pressure than standard PVC or silicone connectors.
- **Flame retardant and self-extinguishing cable design** to prevent application damages.



Key Features

- Halogen-free according to IEC 60754-1, and oil resistant according to IEC 60811:404.
- Proofed welding spark resistance according to Belden working instruction AA-43-O-0038-DE Revision 02.
- High signal integrity to ensure reliable signal transmission, which is critical in sensitive applications, like safety.
- Yellow and orange color design to distinguish safety and non-safety applications visually.
- Versatile use due to extensive variant portfolio – including multiple pin options, space-saving angled variants and connectors with light emitting diode (LED) status indicators.
- Unshielded, overmolded design for enhanced flexibility and simplified installation.
- Shockproof IP67-rated connectors optimized for use in harsh environments.



Your Benefits

In automotive manufacturing environments, welding sparks can disrupt operations, increasing downtime to address costly equipment repairs and putting team members at risk. An industry-leading PUR cable with welding spark resistance, the Lumberg Automation M12 Sensor Actuator Connector solves this problem, unlocking new levels of productivity, safety and uptime. Automotive manufacturers gain the flexibility and ease of installation of PUR connectors, plus additional thermal resistance to prevent spark damage, making the switchover from PVC or silicone connectors a smart business decision.

Applications

M12 Sensor Actuator Connectors are purpose-built for automotive manufacturing. Constructed of durable PUR, they can withstand high temperatures and are more resilient and wear-resistant than PVC connectors. Additionally, they can resist high water pressure during equipment cleaning, promoting improved machine performance and equipment longevity. With its industry-unique welding spark resistance, M12 Sensor Actuator Connectors satisfy the stringent requirements of floor conveyor systems, pick-and-place, press shops, chassis welding, inspections and other vital automotive manufacturing processes.

Markets

Developed in partnership with world-leading automotive companies, Lumberg Automation M12 Sensor Actuator Connectors meet the stringent requirements of automotive manufacturing. Automotive factories' high reliance on industrial robots heightens the demands on connectors – which must tolerate vibration, flexing, twisting and welding sparks. M12 Sensor Actuator Connectors meet all these demands and feature extensive variants to address many mission-critical automotive use cases.

Single- or Double Ended Cordsets definition

Connector Head 1 Definition		Connector Head 2 Definition				Cable Set Up				
RST	4	-	RKWT	/	LED R	4	-	1006	/	2M

Design

RKT	M12	Female, Overmolded, Straight, Standard screw attachment
RST	M12	Male, Overmolded, Straight, Standard screw attachment
RKWT	M12	Female, Overmolded, Angled, Standard screw attachment
RSWT	M12	Male, Overmolded, Angled, Standard screw attachment
RKM	M8	Female, Overmolded, Straight, Snap-In attachment
RSM	M8	Male, Overmolded, Straight, Snap-In attachment
RKMV	M8	Female, Overmolded, Straight, Standard screw attachment
RKMVV	M8	Female, Overmolded, Angled, Standard screw attachment
RSM	M8	Male, Overmolded, Straight, Snap-In attachment
RSMV	M8	Male, Overmolded, Straight, Standard screw attachment

Status Control

LED R* With LED (Yellow / Red / Green)

Various LED variants available by request.

Coding & Pin Assignment

3	3 Poles
4	4 Poles
5	5 Poles
4-3	4 Poles, 1 Pole blind

Control Cable

1006	=	4x0,34mm², 1 brown/BN 2 white/WH 3 blue/BU 4 black/BK, PUR, orange cable jacket (RAL 2009), >2 Mio Drag chain, halogen free (IEC 60754-1), oil resistant (IEC 60811:404), cURus AWM Style 20549 (80°C / 300V), flame retardent and self-extinguishing
1008	=	5x0,34mm², 1 brown/BN, 2 white/WH, 3 blue/BU, 4 black/BK, 5 grey/GY, PUR, yellow cable jacket (RAL 1021), >2 Mio Drag chain, halogen free (IEC 60754-1), oil resistant (IEC 60811:404), cURus AWM Style 20549 (80°C / 300V), flame retardent and self-extinguishing

Cable Length

0.3M	=	0.3 meter
0.6M	=	0.6 meter
1 M	=	1 meter

Other cable lengths available.







For Double Ended Cordsets, define both connector heads.

*For more information on different LED variants, please reach out to your Belden contact.

Single Ended Cordsets, M12 molded

	4-pole				5-pole			
	Male		Female		Male		Female	
								
Straight	RST 4-1006/* M	-	RKT 4-1006/* M	-	RST 5-1008/* M	-	RKT 5-1008/* M	-
Straight, LED	-	-	RKT/LED R 4-1006/* M	-	-	-	-	-
Angled	-	RSWT 4-1006/* M	-	RKWT 4-1006/* M	-	RSWT 5-1008/* M	-	RKWT 5-1008/* M
Angeled, LED	-	-	-	RKWT/LED R 4-1006/* M	-	-	-	-

Double Ended Cordsets

	4-pole				5-pole	
						
M12 - M12, Straight to straight	-	-	RST 4-RKT 4-1006/* M	-	RST 4-RKT 4-1008/* M	-
M12 - M12, Straight to straight, LED	-	-	RST 4-RKT/LED R 4-1006/* M	-	-	-
M12 - M12, Straight to angled	-	-	-	RST 4-RKWT 4-1006/* M	-	RST 4-RKWT 4-1008/* M
M12 - M12, Straight to angled, LED	-	-	-	RST 4-RKWT/LED R 4-1006/* M	-	-
M12 - M8, Straight to straight	RST 4-RKMV 4-1006/* M	-	-	-	-	-
M12 - M8, Straight to angled	-	RST 4-RKMV 4-1006/* M	-	-	-	-

Various configurations available by request.