

PB00042LA

### M12 Power Connector

The latest offering of Lumberg Automation M12 connectors is an efficient way to transmit power for long periods of time in harsh conditions.



**The M12 Power connector's compact design and high power transmission make it a cost-effective solution for operations that need a reliable, flexible connector. The M12 Power allows for continuous operations in the harshest environments thanks to new technology that works excellent in high temperatures.**

- **Secure** – outstanding performance in power transmission while fulfilling global standards (UL, VDE). The M12 Power is designed according to DIN EN 61076-2-111.
- **Operational reliability** – transmitting high power even at high ambient temperatures, due to a higher derating grants high up time in production.
- **Efficient** – small size allows highest flexibility in planning your application and saving space while providing cost-effective connectivity. Colored contact bearer makes it easy to identify the codings to speed up installation time.

The M12 Power connector is S-, L-, K- and T-coded and is suitable for connecting drives, control, sensing and actuators in automation control systems.

#### Applications

The M12's K- and S- coding is designed for AC power supplies with 630 V AC/16 A, making it the ideal solution for AC motors and drive for power connections, frequency inverters, motor control switches, auxiliary power distribution for control systems, and direct wiring of LED and conventional lighting fixture systems.

The L- and T-coding versions are designed for DC power supplies with 63 V DC/16 A, which works well for low-voltage supplies, such as power supplies for I/O boxes, fieldbus Ethernet components, network devices, motors and drives, and direct wiring of LED and conventional lighting fixture systems.

Its small size makes it suitable for applications that require little space, like automotive, manufacturing and machine building for power transmission.

#### Your Benefits

The M12 Power connector is optimal suited when transmitting high power in space restricted areas. The high voltage and currents ratings combined with the high derating in harsh environmental conditions make this product portfolio unique among the products available on the market. This low-maintenance connector is installation friendly and available in all variants (attachable, molded, receptacle), straight as well as angled. Its easy handling results in increased efficiency and productivity.

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

## M12 Power Connectors



RKCC 5L/11 5-9 (female connector)



RSCC 5L/11 5-9 (male connector)

M12 Power technology in four different codings fulfill the needs of several applications.

The M12 Power Connector features the well-known and proven Lumberg Automation M12 technology, meeting all the requirements for higher power consumption of control, sensing and actuators in automation control systems. Its four different codings fulfill the needs of several applications, while preventing mismatching connectors with different voltages.

The new generation meets the industry demand for miniaturized connectivity solutions. Especially Lumberg Automation's LioN-Power active I/O modules combined with innovative M12 Power L-coded technology and M8 5-pole B-coded cordsets provide complete connection solution with reduced weight and size needed for installation. Further, it enables a reduction of stock and maintenance costs due to multiprotocol I/O modules with standardized M12 Power connection.

### Benefits at a Glance

- Complete product portfolio - one stop shop solution
- Ratings 16 A up to 630 V
- Optional 360° shielding available
- Temperature range -40 °C to +125 °C
- Conductor size 1.5 mm<sup>2</sup> and 2.5 mm<sup>2</sup> (L&K)
- Crimp technology and screw technology
- Protection class IP65, IP67, IP69K
- Colored contact bearer for easy identification of the coding
- Cable outlet up to 11 mm



RST(S) 4S-RKT(S) 4S



RST(S) 5L-RKT(S) 5L





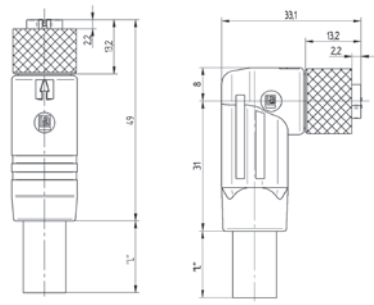
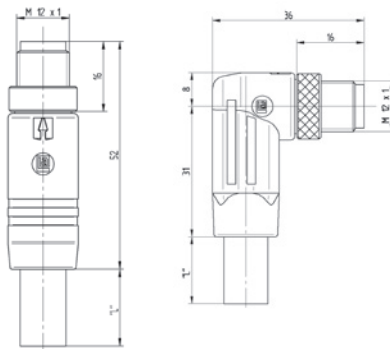
RST(S) 5K-RKT(S) 5K







RST(S) 4T-RKT(S) 4T





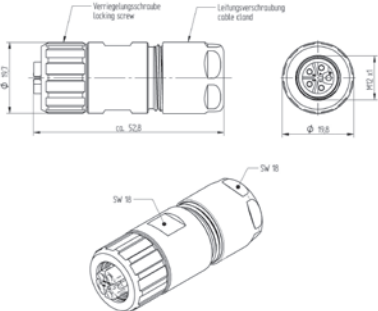
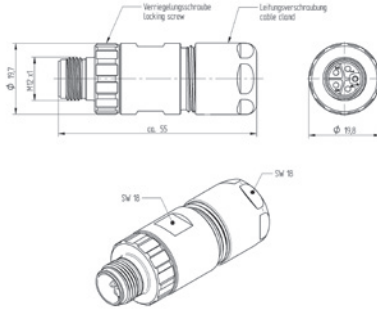
## Technical Information

Product Description		
Type	RK(W)T(S) .../... M	RS(W)T(S) .../... M
		
Description	M12 female shielded/unshielded connector with threaded joint and molded cable, knurled nut with self-locking threaded joint, 360° shielding connected to knurled nut	M12 male shielded/unshielded connector with threaded joint and molded cable, knurled nut with self-locking threaded joint, 360° shielding connected to knurled nut
RoHS-compliant (2011/65/EU)	-	
(Construction Type) Standard	IEC 61076-2-111; S-, L-, K- or T-coded	
Approvals	UL/VDE	
Technical Data		
Ambient Temperature	-40 °C to +125 °C	
Housing Material/Grip	TPE	
Contact Holder Material	PBT GF	
Contact Material/Surface Finish	Cu/Au	
Screw Coupling Material	CuZn	
Mechanical Data		
Degree of Protection	IP65, IP67, IP69K	
Electrical Data		
Contact Resistance	≤10 mΩ	
Rated Voltage	630 V: S and K-coding; 63 V: L and T-coding	
Rated Current	16 A: 1.5 mm <sup>2</sup> and 2.5 mm <sup>2</sup> ; 10 A: 0.75 mm <sup>2</sup>	
Pollution Degree	3 acc. to DIN EN 60664-1 (VDE 0110-1)	
Technical Drawing		
		





## Pin Assignment

	RKT(S) 4S...	RKT(S) 5L...	RKT(S) 5K...	RKT(S) 4T...
	 <ul style="list-style-type: none"> <li>1 = black 1</li> <li>2 = black 2</li> <li>3 = black 3</li> <li>PE = green/yellow</li> </ul>	 <ul style="list-style-type: none"> <li>1 = brown</li> <li>2 = white</li> <li>3 = blue</li> <li>4 = black</li> <li>PE = green/yellow</li> </ul>	 <ul style="list-style-type: none"> <li>1 = black 1</li> <li>2 = black 2</li> <li>3 = black 3</li> <li>4 = black 4</li> <li>PE = green/yellow</li> </ul>	 <ul style="list-style-type: none"> <li>1 = brown</li> <li>2 = white</li> <li>3 = blue</li> <li>4 = black</li> </ul>
Coding	S	L	K	T
Number of Poles	4 (3 + PE)	5 (4 + PE)	5 (4 + PE)	4

## Technical Information

Product Description		
Type	RKC(W)C(S)	RSC(W)C(S)
		
Description	M12 female field attachable shielded/unshielded connector with self-locking threaded joint and knurled nut	M12 male field attachable shielded/unshielded connector with self-locking threaded joint and knurled nut
RoHS-compliant (2011/65/EU)	-	
(Construction Type) Standard	IEC 61076-2-111; S-, L-, K- or T-coded	
Approvals	UL, VDE	
Technical Data		
Ambient Temperature	-40 °C to +125 °C	
Housing Material/Grip	CuZn/Ni, die-cast	
Contact Holder Material	PBT	
Contact Material/Surface Finish	Cu/Au	
Screw Coupling Material	CuZn/Ni	
Mechanical Data		
Degree of Protection	IP67	
Electrical Data		
Contact Resistance	≤3 mΩ	
Rated Voltage	630 V: S and K-coding; 63 V: L and T-coding	
Rated Current	16 A	
Pollution Degree	3	
Technical Drawing		
		

## Pin Assignment

	RKT(S) 4S...	RKT(S) 5L...	RKT(S) 5K...	RKT(S) 4T...
	 <ul style="list-style-type: none"> <li>1 = black 1</li> <li>2 = black 2</li> <li>3 = black 3</li> <li>PE = green/yellow</li> </ul>	 <ul style="list-style-type: none"> <li>1 = brown</li> <li>2 = white</li> <li>3 = blue</li> <li>4 = black</li> <li>PE = green/yellow</li> </ul>	 <ul style="list-style-type: none"> <li>1 = black 1</li> <li>2 = black 2</li> <li>3 = black 3</li> <li>4 = black 4</li> <li>PE = green/yellow</li> </ul>	 <ul style="list-style-type: none"> <li>1 = brown</li> <li>2 = white</li> <li>3 = blue</li> <li>4 = black</li> </ul>
Coding	S	L	K	T
Number of Poles	4 (3 + PE)	5 (4 + PE)	5 (4 + PE)	4
Crimp Range	0.5 to 1.5 mm <sup>2</sup> ; 20 to 16 AWG	0.75 to 2.5 mm <sup>2</sup> ; 18 to 14 AWG	0.75 to 2.5 mm <sup>2</sup> ; 18 to 14 AWG	0.5 to 1.5 mm <sup>2</sup> ; 20 to 16 AWG