



Power connectors

MURR
ELEKTRONIK

stay connected



It has never been easier to energize your application

With Murrelektronik's power connectors, you can easily supply the power you need to the field.

- The M12 power is a highly compact and powerful M12 connector
- The MQ15's quick connection technology enables particularly fast assembly
- The 7/8" connectors are the perfect solution for control circuits.
- Murrelektronik's overmolded M23 connectors ensure simple and secure connection of servo motors and passive distributors

Did you know?

Murrelektronik connectors are 100 percent tested.

At Murrelektronik, we rigorously test our pre-assembled connectors to ensure they meet the highest standards before reaching our customers. Each connector undergoes a precise electrical test, guaranteeing top-quality performance. Our commitment to excellence extends throughout the entire production process, beginning with a meticulous inspection of incoming materials based on well-defined criteria. This quality-focused approach continues through every production stage, culminating in a thorough final inspection before the products leave our facility. The result? Confidence and reliability for us and our customers: Murrelektronik connectors deliver 100 % performance, every time!

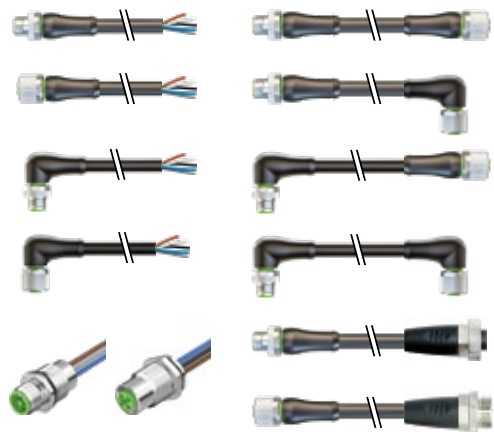
Connectors must meet essential standards, including perfect electrical contact, sealing, and media resistance. In motor connection technology, additional specialized features are crucial: support for large connection cross-sections, high power capacity in compact designs, and, most importantly, integrated vibration protection to keep plugs securely fixed even under extreme vibrations — eliminating the need for re-tightening. Installation is simplified with a convenient width flat, compatible with a torque wrench. Murrelektronik offers an extensive range of power cables designed for diverse applications, available in small quantities starting from a single piece, with lengths ranging from 30 cm to 100 m.



Power connectors from Murrelektronik



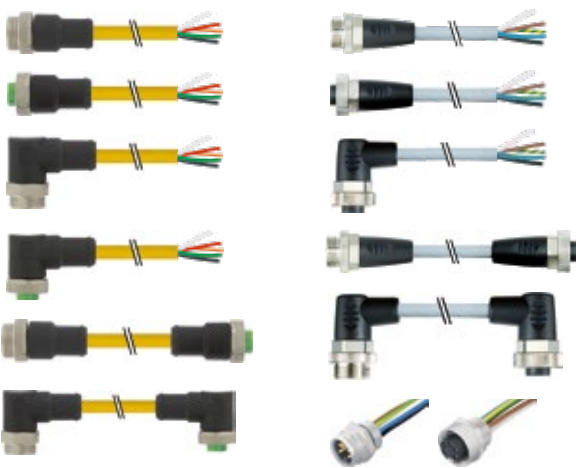
Connectors for linear drives, stepper motors and power supply lines for field bus modules



M12 power connectors

- **Number of poles:** 4 and 5 pole connector versions
- **Coding and applications:**
 - AC applications: S-coded and K-coded
 - DC applications: L-coded (PNO standard for PROFINET) and T-coded
- **Standards:** IEC 61076-2-111
- **Current and voltage values:**
 - 12 A / 16 A (L-coded) per pin at 630 V AC (600 V with UL) or 63 V DC
- **Special features:**
 - Gold-plated contacts, 100 mating cycles
 - Integrated conduit retainer
- **Approvals:** UL listed to 2237 (PVVA – E492831)
- **Protection class:** IP67, suitable for harsh industrial environments

Connectors for industrial automation, sensor technology and power transmission



7/8" (Mini) connectors

- **Number of poles:** 3, 4 and 5 pole connector variants
- **Coding and applications:**
 - Power supply for AC / DC applications
- **Current and voltage values:**
 - 9 A / 10 A / 12 A per pin at 600 V AC/DC
- **Special features:**
 - Highly resistant and halogen-free PUR overmolding
 - Flame-retardant TPE (according to FT4) or halogen-free PUR cables
 - Integrated conduit retainer
- **Approvals:** UL Listed according to 2238 (CYJV – E325311)
- **Protection class:** IP67, suitable for harsh industrial environments

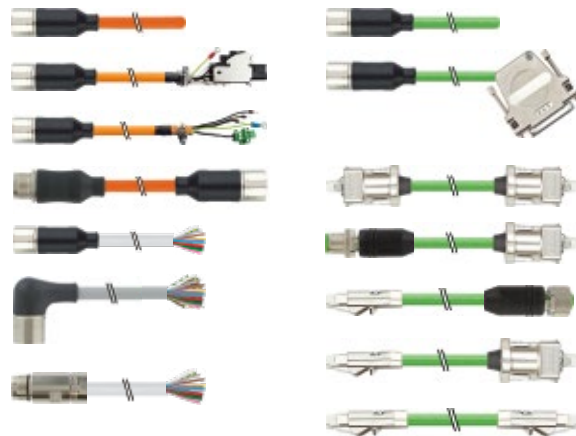
Connectors for asynchronous / three-phase motors up to 7.5 kW



MQ15 connectors

- **Number of poles:** 4 and 6 pole connector versions
- **Coding and applications:**
 - AC applications: Type 3
 - DC applications: Type 2
- **Standards:** IEC 61076-2-116
- **Current and voltage values:**
 - 16 A / 20 A per pin at 630 V AC (600 V with UL) or 48 V DC
- **Special features:**
 - Tool-free quick connection system, reduces installation time by 80 %
 - Integrated conduit retainer
 - Shielded variants for speed-controlled applications
- **Approvals:** UL Listed according to 2237 (PVVA - E492831)
- **Protection class:** IP67, suitable for harsh industrial environments

Connectors for servo drives and passive distributors

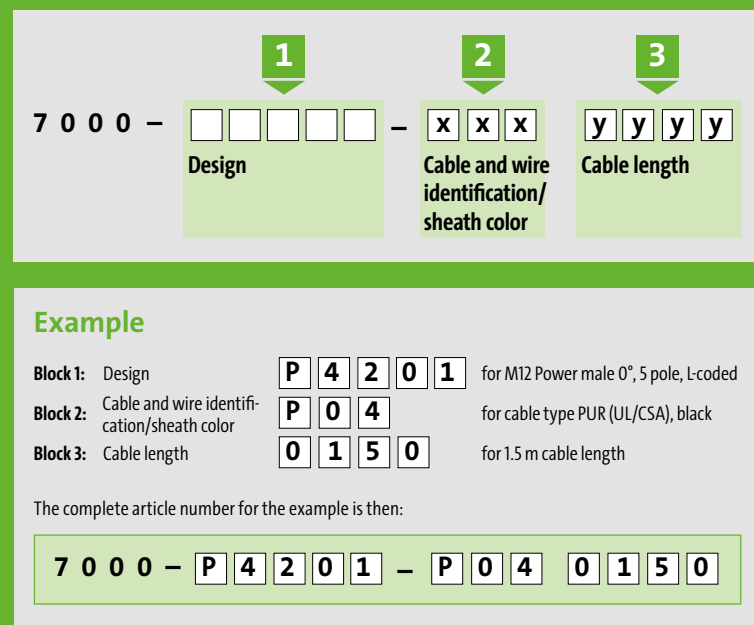


Power and Signal connectors

- **Number of poles:**
 - Power cable: 6 and 8 pole connector variants
 - Signal cable: 17 pole connector variants
 - Distributor supply cable: 12 pole and 19 pole connector variants
- **Coding and applications:**
 - Drive Cliq program with M23 and M12 variants as well as Sub-D signal cables
 - For servo controllers, drive systems and passive distributors
- **Current and voltage values:**
 - Power connectors: up to 630 V AC/DC and 28 A (M40 up to 75 A & M58 up to 150 A)
 - Signal connector: up to 125 V AC/DC and 7.5 A
 - Distributor supply cable: up to 125 V AC/DC and 7.5 A
- **Special features:**
 - On the motor side: M23, M40 and M58 connectors with variable contact assignment
 - Compatible with the Siemens Sinamics program
 - Variants with screw locking and quick connection
- **Protection class:** IP20, IP67

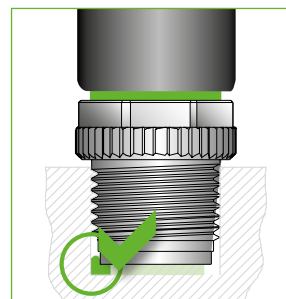


The article number for our **M12 Power**, **MQ15**, **MINI (7/8")** and **M23** connectors consists of three blocks of digits for the design; cable and wire identification/sheath color and cable length. Cable lengths from 2 meters are available in 0.5 meter increments.



The practical torque wrench ensures safe and precise tightening of all M12, 7/8", and M23 connectors from Murrelektronik, eliminating potential errors caused by manual handling.

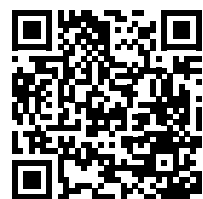
No more sore fingers!



M12	0.6 Nm
7/8"	1.5 Nm
M23	2.0 Nm

	Description	Wrench width	Torque	Art.-No.
	Assembly wrench – M12 Power		0.6 Nm	7000-99094-0000000 
	Torque wrench set – M12 Power			7000-99106-0000000 
	Assembly wrench – 7/8"		1.5 Nm	7000-99096-0000000 
	Torque wrench set – 7/8"			7000-99104-0000000 
	Torque wrench set – M23		2.0 Nm	7000-99110-0000000 

Scan the QR code and find out more in the YouTube video.



M12 power connectors

Small and powerful



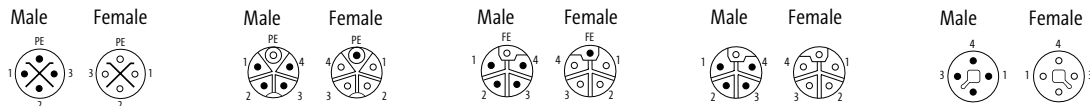
For a reliable energy supply in industrial applications

Murrelektronik's M12 power is a compact yet powerful M12 connector designed for reliable, pluggable connections. It's ideal for linear drives, stepper motors, and power supply lines for fieldbus modules. Offering a high power density in a compact design, it serves as an excellent alternative to 7/8" connectors in space-constrained applications.

The connectors are overmolded with durable, halogen-free PUR, making them well-suited for demanding industrial environments. Additionally, the integrated vibration protection ensures secure and stable connections, even under conditions of shock and vibration.

- Wire cross-section of 1.5 mm² and 2.5 mm²
- Loadable up to 16 A per pole
- 4 standardized M12 codings to prevent mating errors
- Shock and vibration-proof thanks to integrated vibration protection
- PUR cables, drag chain and torsion-resistant

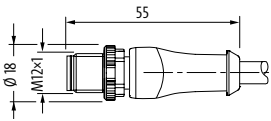
Technical data



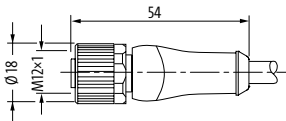
Electrical data	S-coding	K-coding	L-coding	T-coding
Current rating	max. 12 A		max. 16 A (2.5 mm ²) max. 12 A (1.5 mm ²)	max. 12 A
Rated voltage	max. 630 V AC (600 V with UL)		max. 63 V DC	
Contact arrangement	3 + PE	4 + PE	4 + FE	4
Temperature range	-30 ... +85 °C			
Protection when plugged	IP65/67			
Enclosure EMC shielding	unshielded			
Locking / thread type	screw / M12 x 1			
Max. mating cycles	100			
Tightening torque	0.6 Nm			
Wire cross-section	1.5 mm ² 2.5 mm ²			
Standardization / Approval	IEC 61076-2-111, UL Listed nach 2237 (PVVA – E492831)			

Dimensional sketches

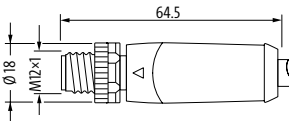
M12-male 0°, with 1.5mm²



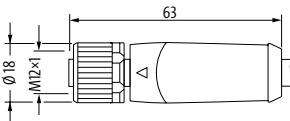
M12-female 0°, with 1.5mm²



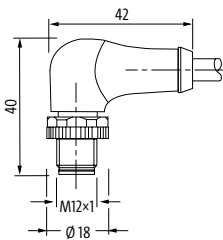
M12-male 0°, with 2.5mm²



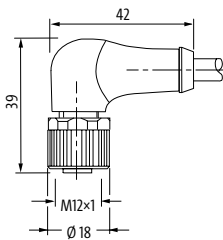
M12-female 0°, with 2.5mm²



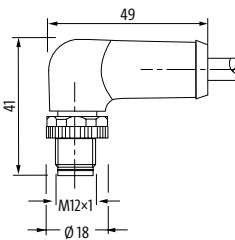
M12-male 90°, with 1.5mm²



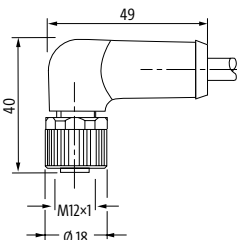
M12-female 90°, with 1.5mm²



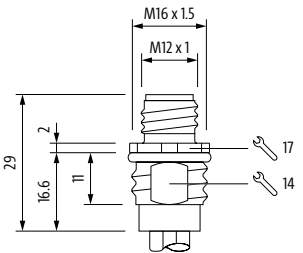
M12-male 90°, with 2.5mm²



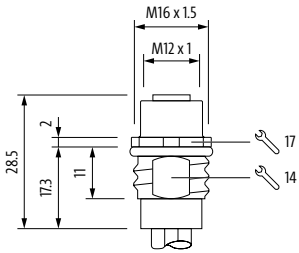
M12-female 90°, with 2.5mm²



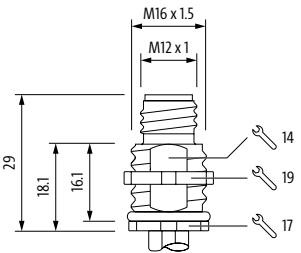
M12-receptacle, male 0°
Front wall mounting



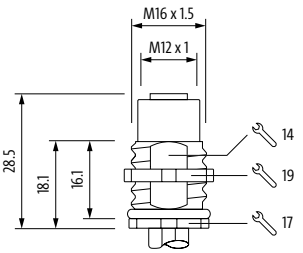
M12-receptacle, female 0°
Front wall mounting



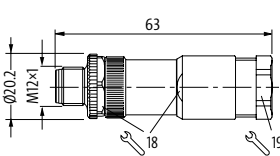
M12-receptacle, male 0°
Rear wall mounting



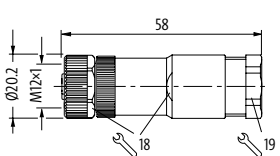
M12-receptacle, female 0°
Rear wall mounting



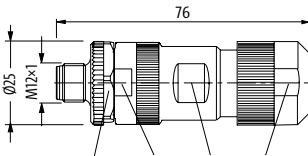
M12-field-wireable connector, male 0°
S-, K-, T-coded, screw clamp connection



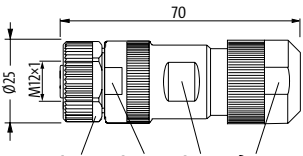
M12-field-wireable connector, female 0°
S-, K-, T-coded, screw clamp connection



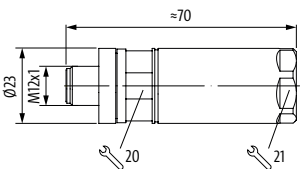
M12-field-wireable connector, male 0°
L-coded, screw clamp connection



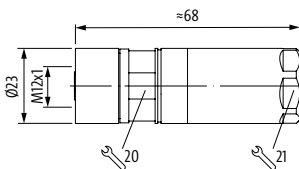
M12-field-wireable connector, female 0°
L-coded, screw clamp connection



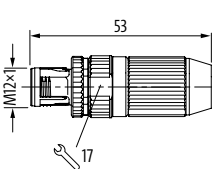
M12-field-wireable connector, male 0°
L-coded, push-lock connection



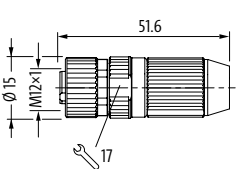
M12-field-wireable connector, female 0°
L-coded, push-lock connection



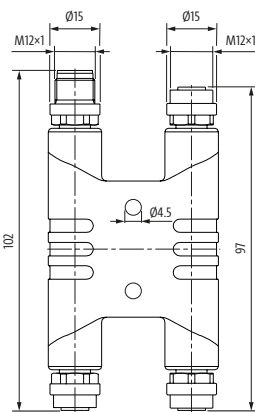
M12-field-wireable connector, male 0°
L-coded, IDC connection



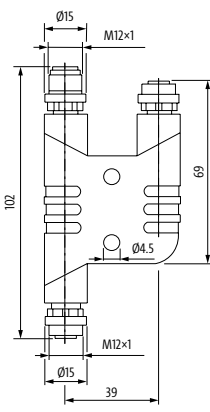
M12-field-wireable connector, female 0°
L-coded, IDC connection



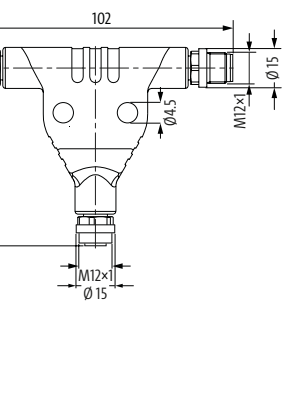
M12-H-coupler, L- and S-coded



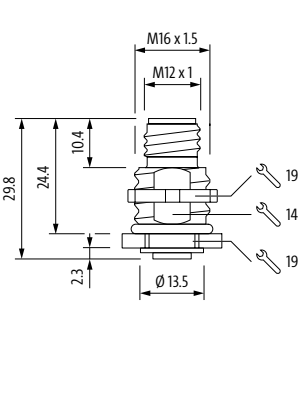
M12-h-coupler, L- and S-coded



M12-T-coupler, L- and S-coded



M12-panel feed through



Ordering data M12 power S-coded

Single ended cable	Description	Art.-No.	Cable identification (xxx)
	Male 0°, 4 pole	7000-P6201-xxxxyyy 	P16 / P36
	Female 0°, 4 pole	7000-P6221-xxxxyyy 	P16 / P36
	Male 90°, 4 pole	7000-P6211-xxxxyyy 	P16 / P36
	Female 90°, 4 pole	7000-P6231-xxxxyyy 	P16 / P36
Connection cable	Description	Art.-No.	Cable identification (xxx)
	Male 0° / female 0°, 4 pole	7000-P6241-xxxxyyy 	P16 / P36
	Male 0° / female 90°, 4 pole	7000-P6251-xxxxyyy 	P16 / P36
	Male 90° / female 0°, 4 pole	7000-P6261-xxxxyyy 	P16 / P36
	Male 90° / female 90°, 4 pole	7000-P6271-xxxxyyy 	P16 / P36
Receptacle	Description	Art.-No.	Strand identification (xxx)
	Male 0°, with strands, front wall mounting, 4 pole	7000-P6281-xxxxyyy 	945 / 996 / P91
	Female 0°, with strands, front wall mounting, 4 pole	7000-P6291-xxxxyyy 	945 / 996 / P91
	Male 0°, with strands, rear wall mounting, 4 pole	7000-P6285-xxxxyyy 	945 / 996 / P91
	Female 0°, with strands, rear wall mounting, 4 pole	7000-P6295-xxxxyyy 	945 / 996 / P91
Field-wireable	Description	Art.-No.	
	Male 0°, screw clamp, cable ø 6–8 mm, 4 pole	7000-P6591-0000000 	Connection cross-section max. 1.5 mm² with ferrule max. 2.5 mm² without ferrule
	Male 0°, screw clamp, cable ø 8–10 mm, 4 pole	7000-P6391-0000000 	
	Female 0°, screw clamp, cable ø 6–8 mm, 4 pole	7000-P6611-0000000 	
	Female 0°, screw clamp, cable ø 8–10 mm, 4 pole	7000-P6491-0000000 	
Panel-feed through	Description	Art.-No.	
	Male 0°, rear wall mounting, 4 pole	7000-P6911-0000000 	
Distributors	Description	Art.-No.	
	T-coupler (1 x male 0°, 2 x female 0°), 4 pole	7000-P6901-0000000 	
	H-coupler (1 x male 0°, 3 x female 0°), 4 pole	7000-P6902-0000000 	
	h-coupler (1 x male 0°, 2 x female 0°), 4 pole	7000-P6903-0000000 	

Ordering data M12 power K-coded

Single ended cable	Description	Art.-No.	Cable identification (xxx)
	Male 0°, 5 pole	7000-P3201-xxxxyyy 	P15 / P35
	Female 0°, 5 pole	7000-P3221-xxxxyyy 	P15 / P35
	Male 90°, 5 pole	7000-P3211-xxxxyyy 	P15 / P35
	Female 90°, 5 pole	7000-P3231-xxxxyyy 	P15 / P35
Connection cable	Description	Art.-No.	Cable identification (xxx)
	Male 0° / female 0°, 5 pole	7000-P3241-xxxxyyy 	P15 / P35
	Male 0° / female 90°, 5 pole	7000-P3251-xxxxyyy 	P15 / P35
	Male 90° / female 0°, 5 pole	7000-P3261-xxxxyyy 	P15 / P35
	Male 90° / female 90°, 5 pole	7000-P3271-xxxxyyy 	P15 / P35
Receptacle	Description	Art.-No.	Strand identification (xxx)
	Male 0°, with strands, front wall mounting, 5 pole	7000-P3281-xxxxyyy 	988 / 995
	Female 0°, with strands, front wall mounting, 5 pole	7000-P3291-xxxxyyy 	988 / 995
	Male 0°, with strands, rear wall mounting, 5 pole	7000-P3285-xxxxyyy 	988 / 995
	Female 0°, with strands, rear wall mounting, 5 pole	7000-P3295-xxxxyyy 	988 / 995
Field-wireable	Description	Art.-No.	
	Male 0°, screw clamp, cable ø 8–13 mm, 5 pole	7000-P3591-0000000 	Connection cross-section max. 2.5 mm²
	Female 0°, screw clamp, cable ø 8–13 mm, 5 pole	7000-P3611-0000000 	
Panel-feed through	Description	Art.-No.	
	Male 0°, rear wall mounting, 5 pole	7000-P3911-0000000 	

Ordering data M12 power L-coded

Single ended cable	Description	Art.-No.	Cable identification (xxx)
	Male 0°, 4 pole	7000-P4101-xxxxyy 	P07 / P37
	Male 0°, 5 pole	7000-P4201-xxxxyy 	P04 / P34
	Female 0°, 4 pole	7000-P4121-xxxxyy 	P07 / P37
	Female 0°, 5 pole	7000-P4221-xxxxyy 	P04 / P34
	Male 90°, 4 pole	7000-P4111-xxxxyy 	P07 / P37
	Male 90°, 5 pole	7000-P4211-xxxxyy 	P04 / P34
	Female 90°, 4 pole	7000-P4131-xxxxyy 	P07 / P37
	Female 90°, 5 pole	7000-P4231-xxxxyy 	P04 / P34
Connection cable	Description	Art.-No.	Cable identification (xxx)
	Male 0° / female 0°, 4 pole	7000-P4141-xxxxyy 	P07 / P37
	Male 0° / female 0°, 5 pole	7000-P4241-xxxxyy 	P04 / P34
	Male 0° / female 90°, 4 pole	7000-P4151-xxxxyy 	P07 / P37
	Male 0° / female 90°, 5 pole	7000-P4251-xxxxyy 	P04 / P34
	Male 90° / female 0°, 4 pole	7000-P4161-xxxxyy 	P07 / P37
	Male 90° / female 0°, 5 pole	7000-P4261-xxxxyy 	P04 / P34
	Male 90° / female 90°, 4 pole	7000-P4171-xxxxyy 	P07 / P37
	Male 90° / female 90°, 5 pole	7000-P4271-xxxxyy 	P04 / P34
Adapter-Connection cable	Description	Art.-No.	Cable identification (xxx)
	M12 male 0° / 7/8" female 0°, 4 pole	7000-P4504-xxxxyy 	P07 / P37
	M12 male 0° / 7/8" female 0°, 5 pole	7000-P4501-xxxxyy 	P04 / P34
	M12 female 0° / 7/8" male 0°, 4 pole	7000-P4554-xxxxyy 	P07 / P37
	M12 female 0° / 7/8" male 0°, 5 pole	7000-P4541-xxxxyy 	P04 / P34
Receptacle	Description	Art.-No.	Strand identification (xxx)
	Male 0°, with strands, front wall mounting, 4 pole	7000-P4181-xxxxyy 	944 / 997
	Male 0°, with strands, front wall mounting, 5 pole	7000-P4281-xxxxyy 	980 / 929
	Female 0°, with strands, front wall mounting, 4 pole	7000-P4191-xxxxyy 	944 / 997
	Female 0°, with strands, front wall mounting, 5 pole	7000-P4291-xxxxyy 	980 / 929
	Male 0°, with strands, rear wall mounting, 4 pole	7000-P4185-xxxxyy 	944 / 997
	Male 0°, with strands, rear wall mounting, 5 pole	7000-P4285-xxxxyy 	980 / 929
	Female 0°, with strands, rear wall mounting, 4 pole	7000-P4195-xxxxyy 	944 / 997
	Female 0°, with strands, rear wall mounting, 5 pole	7000-P4295-xxxxyy 	980 / 929
Field-wireable	Description	Art.-No.	
	Male 0°, screw clamp, cable ø 8–13 mm, 5 pole	7000-P4591-0000000 	Screw clamp: connection cross-section max. 2.5 mm²
	Female 0°, screw clamp, cable ø 8–13 mm, 5 pole	7000-P4611-0000000 	
	Male 0°, push-lock, cable ø 8–13 mm, 5 pole	7000-P4651-0000000 	Push-lock: connection cross-section max. 2.5 mm²
	Female 0°, push-lock, cable ø 8–13 mm, 5 pole	7000-P4661-0000000 	
	Male 0°, IDC, cable ø 5,8–13,5 mm, 5 pole	7000-P4391-0000000 	IDC: connection cross-section max. 1.5 mm²
	Female 0°, IDC, cable ø 5,8–13,5 mm, 5 pole	7000-P4421-0000000 	
Panel-feed through	Description	Art.-No.	
	Male 0°, rear wall mounting, 4 pole	7000-P4915-0000000 	
	Male 0°, rear wall mounting, 5 pole	7000-P4911-0000000 	
Distributors	Description	Art.-No.	
	T-coupler (1 x male 0°, 2 x female 0°), 5 pole	7000-P4901-0000000 	
	H-coupler (1 x male 0°, 3 x female 0°), 5 pole	7000-P4902-0000000 	
	h-coupler (1 x male 0°, 2 x female 0°), 5 pole	7000-P4903-0000000 	

Ordering data M12 power T-coded

Single ended cable	Description	Art.-No.	Cable identification (xxx)
	Male 0°, 4 pole	7000-P7201-xxxxyy 	P07 / P37
	Female 0°, 4 pole	7000-P7221-xxxxyy 	P07 / P37
	Male 90°, 4 pole	7000-P7211-xxxxyy 	P07 / P37
	Female 90°, 4 pole	7000-P7231-xxxxyy 	P07 / P37
Connection cable	Description	Art.-No.	Cable identification (xxx)
	Male 0° / female 0°, 4 pole	7000-P7241-xxxxyy 	P07 / P37
	Male 0° / female 90°, 4 pole	7000-P7251-xxxxyy 	P07 / P37
	Male 90° / female 0°, 4 pole	7000-P7261-xxxxyy 	P07 / P37
	Male 90° / female 90°, 4 pole	7000-P7271-xxxxyy 	P07 / P37
Receptacle	Description	Art.-No.	Strand identification (xxx)
	Male 0°, with strands, front wall mounting, 4 pole	7000-P7281-xxxxyy 	944 / 997
	Female 0°, with strands, front wall mounting, 4 pole	7000-P7291-xxxxyy 	944 / 997
	Male 0°, with strands, rear wall mounting, 4 pole	7000-P7285-xxxxyy 	944 / 997
	Female 0°, with strands, rear wall mounting, 4 pole	7000-P7295-xxxxyy 	944 / 997
Field-wireable	Description	Art.-No.	
	Male 0°, screw clamp, cable ø 6–8 mm, 4 pole	7000-P7591-0000000 	Connection cross-section max. 1.5 mm²
	Male 0°, screw clamp, cable ø 8–10 mm, 4 pole	7000-P7391-0000000 	
	Female 0°, screw clamp, cable ø 6–8 mm, 4 pole	7000-P7611-0000000 	
	Female 0°, screw clamp, cable ø 8–10 mm, 4 pole	7000-P7491-0000000 	
Panel-feed through	Description	Art.-No.	
	Male 0°, rear wall mounting, 4 pole	7000-P7911-0000000 	

Murrelektronik

Quality

Unshielded (xxx)		
	4 pole S-coded	4 pole T-coded L-coded
		
	Standard illustration, deviation possible	
Jacket material	Cable identification connector	
PUR jacket black	P16 – 4x1,5	P07 – 4x1,5
	P36 – 4x2,5	P37 – 4x2,5
Wire insulation	Strand identification receptacle	
PUR strands	945 – 4x1,5	944 – 4x1,5
	996 – 4x2,5	997 – 4x2,5
PE-X strands	P91 – 4x1,5	–

Unshielded (xxx)		
	5 pole K-coded	5 pole L-coded
		
	Standard illustration, deviation possible	
Jacket material	Cable identification connector	
PUR jacket black	P15 – 5x1,5	P04 – 5x1,5
	P35 – 5x2,5	P34 – 5x2,5
Wire insulation	Strand identification receptacle	
PUR strands	988 – 5x1,5	980 – 5x1,5
	995 – 5x2,5	929 – 5x2,5

Standard length in meters (yyyy)				
Single ended cable				
1.5 (0150)	3 (0300)	5 (0500)	7.5 (0750)	10 (1000)
Connection cable				
0.3 (0030)	0.6 (0060)	1 (0100)	1.5 (0150)	2 (0200)
Receptacle				
0.2 (0020)	0.5 (0050)	1 (0100)	2 (0200)	3 (0300)

Other versions available on request. Different lengths up to 2 m can be ordered in 0.2 m increments, from 2 m in 0.5 m increments. Receptacles up to max. 3 m in length.

Cable properties	
Bending radius	Stationary use: min. 5 x outer diameter Flexible use: min. 10 x outer diameter
Bending cycles	max. 5 Mio.
Torsional stress	± 180 ° / m
Torsion cycles	max. 5 Mio.
Temperature range	Stationary use: -50 ... +80 °C Flexible use: -25 ... +80 °C

For more information about
Power Connectors, go to
[Shop.murrelektronik.com](https://shop.murrelektronik.com)



Or simply scan the QR code.



Maximum quality

Murrelektronik connectors are produced using advanced automated processes to guarantee the highest quality standards. These manufacturing lines leverage decades of expertise and innovation in crafting premium M8 and M12 connectors, ensuring exceptional performance and reliability.



Accurate processes

Every stage of production is meticulously monitored to ensure precise processes. For instance, crimp contacts are thoroughly inspected to verify compliance with specified standards during assembly. Additionally, the pull-off force is measured and documented both before and after each tool change, guaranteeing consistent quality.



Sealed to protection class IP67

The power connectors feature robust, halogen-free PUR overmolding, providing sealing in compliance with protection class IP67. The cables are securely and permanently attached to the connector housing, ensuring both excellent strain relief and tamper resistance.



100 % tested

Every Murrelektronik connector undergoes 100 % testing before leaving the factory. This includes a high-voltage test, functional test, contact assignment test, short-circuit test, and a thorough visual inspection to ensure top-quality performance.

MQ15 connectors

Efficient and compact

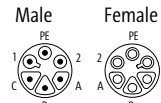
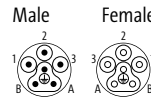
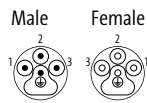


Installation with quick-connection technology

The MQ15 features a quick-connect system that installs in seconds — just a quarter turn is needed, cutting installation time by 80 % compared to traditional screw connections. Designed for asynchronous and three-phase motors up to 7.5 kW, it's ideal for power distribution. With the MQ15 receptacles, motors can be converted to a pluggable solution. The motor integration is possible via the M20 x 1.5 thread without adapters or special modifications.

- Quick-locking system for the shortest installation time
- MQ15 600 V AC – Type 3:
3 power contacts up to 16 A/pin & 2 auxiliary contacts up to 10 A/pin + PE
- MQ15 48 V DC – Type 2:
2 power contacts up to 20 A/pin & 3 auxiliary contacts up to 4 A/pin + PE
- Wire cross-section of 1.5 mm² and 2.5 mm²
- Pre-assembled, overmolded, 100 % tested
- Suitable for industrial use due to tamper resistance and vibration protection

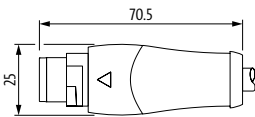
Technical data



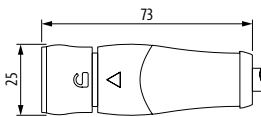
Electrical data	AC – Type 3	DC – Type 2
Current rating	max. 13 A (1.5 mm ²) max. 16 A (2.5 mm ²)	max. 20 A
Rated voltage	max. 630 V AC (600 V AC with UL)	max. 48 V DC
Contact arrangement	3 + PE	2 + PE + 3
Temperature range	-30 ... +85 °C	
Protection class when plugged	IP67	
Enclosure EMC shielding	unshielded / shielded	unshielded
Locking	quick-locking	
Max. mating cycles	500	
Wire cross-section	1.5 mm ² 2.5 mm ²	
Standardization / Approval	IEC 61076-2-116 / UL Listed according to 2237 (PVVA – E492831)	

Dimensional sketches

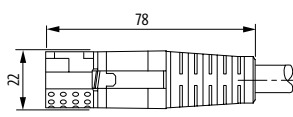
MQ15-male 0° unshielded (AC/DC)



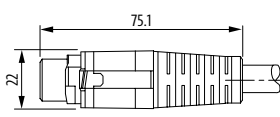
MQ15-female 0° unshielded (AC/DC)



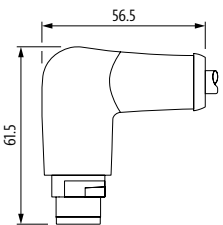
MQ15-male 0° shielded



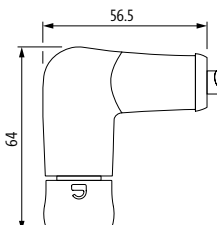
MQ15-female 0° shielded



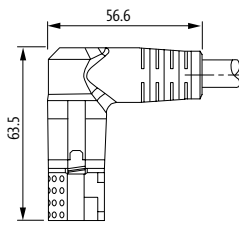
MQ15-male 90° unshielded (AC/DC)



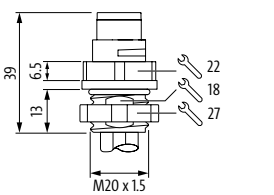
MQ15-female 90° unshielded (AC/DC)



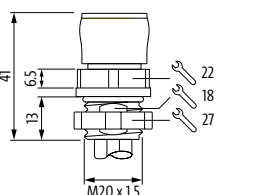
MQ15-female 90° shielded



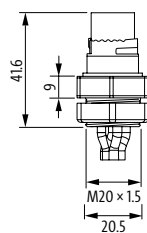
MQ15-receptacle male 0° unshielded (AC/DC)
Front wall mounting



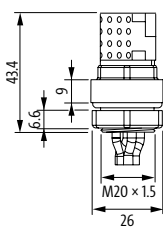
MQ15-receptacle, female 0° unshielded (AC/DC)
Front wall mounting



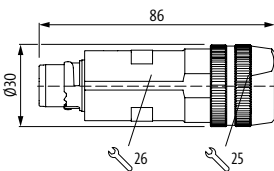
MQ15-receptacle, male 0° shielded, positionable,
Front wall mounting



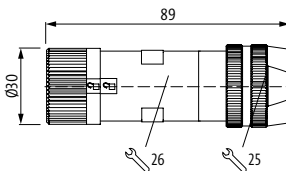
MQ15-receptacle, female 0° shielded, positionable,
Front wall mounting



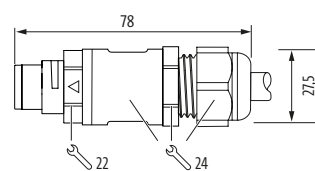
MQ15-field-wireable connector, male 0° screw clamp connection, shielded/unshielded



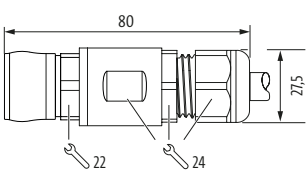
MQ15-field-wireable connector, female 0° screw clamp connection, shielded/unshielded



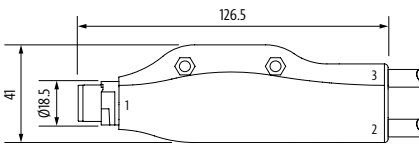
MQ15-field-wireable connector, male 0° crimp connection, unshielded



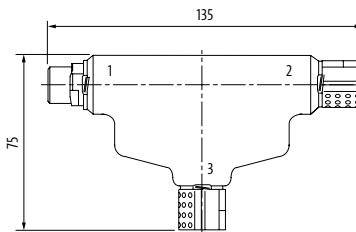
MQ15-field-wireable connector, female 0° crimp connection, unshielded



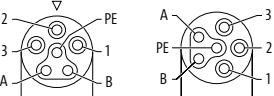
MQ15-h-coupler



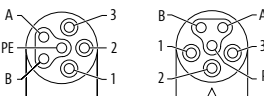
MQ15-T-coupler



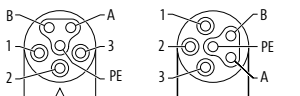
AC – Type 3 contact layout 0°



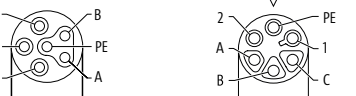
AC – Type 3 contact layout 90°



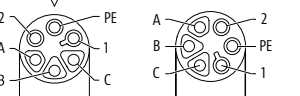
AC – Type 3 contact layout 180°



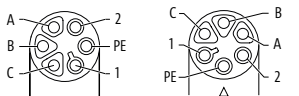
AC – Type 3 contact layout 270°



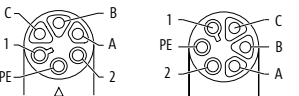
DC – Type 2 contact layout 0°



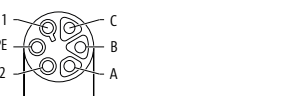
DC – Type 2 contact layout 90°



DC – Type 2 contact layout 180°



DC – Type 2 contact layout 270°



Ordering data MQ15 | 600 V AC – Type 3 | unshielded designs

Single ended cable	Description	Art.-No.	Cable identification (xxx)
	Male 0°, 4 pole	7000-P8201-xxxxyyy ↗	P16 / P71 / P36 / P72
	Male 0°, 6 pole	7000-P8101-xxxxyyy ↗	P63 / P74 / P64 / P73
	Female 0°, 4 pole	7000-P8221-xxxxyyy ↗	P16 / P71 / P36 / P72
	Female 0°, 6 pole	7000-P8121-xxxxyyy ↗	P63 / P74 / P64 / P73
	Female 90° (contact layout 90°), 4 pole	7000-P8231-xxxxyyy ↗	P16 / P71 / P36 / P72
	Female 90° (contact layout 90°), 6 pole	7000-P8131-xxxxyyy ↗	P63 / P74 / P64 / P73
	Female 90° (contact layout 270°), 4 pole	7000-P8232-xxxxyyy ↗	P16 / P71 / P36 / P72
	Female 90° (contact layout 270°), 6 pole	7000-P8132-xxxxyyy ↗	P63 / P74 / P64 / P73
Connection cable	Description	Art.-No.	Cable identification (xxx)
	Male 0° / female 0°, 4 pole	7000-P8241-xxxxyyy ↗	P16 / P71 / P36 / P72
	Male 0° / female 0°, 6 pole	7000-P8141-xxxxyyy ↗	P63 / P74 / P64 / P73
	Male 0° / female 90° (contact layout 90°), 4 pole	7000-P8251-xxxxyyy ↗	P16 / P71 / P36 / P72
	Male 0° / female 90° (contact layout 90°), 6 pole	7000-P8151-xxxxyyy ↗	P63 / P74 / P64 / P73
	Male 0° / female 90° (contact layout 270°), 4 pole	7000-P8252-xxxxyyy ↗	P16 / P71 / P36 / P72
	Male 0° / female 90° (contact layout 270°), 6 pole	7000-P8152-xxxxyyy ↗	P63 / P74 / P64 / P73
Receptacle	Description	Art.-No.	Strand identification (xxx)
	Male 0°, with strands, front wall mounting, 4 pole	7000-P8081-xxxxyyy ↗	P91 / P92
	Male 0°, with strands, front wall mounting, 6 pole	7000-P8181-xxxxyyy ↗	P95 / P96
	Female 0°, with strands, front wall mounting, 4 pole	7000-P8091-xxxxyyy ↗	P91 / P92
	Female 0°, with strands, front wall mounting, 6 pole	7000-P8191-xxxxyyy ↗	P95 / P96
Distribution solution	Description	Art.-No.	Cable identification (xxx)
	h-coupler (1 x male 0°, 2 x female 0°), 4 pole	7000-P8AAH-xxxxyyy ↗	P16 / P36 / P63 / P64 / P71 / P72 / P73 / P74
		7000-P8ABA-xxxxyyy ↗	
		7000-P8ABK-xxxxyyy ↗	
		7000-P8BDA-xxxxyyy ↗	
	h-coupler, (1 x male 0°, 2 x female 0°), 6 pole	7000-P8BDE-xxxxyyy ↗	<i>The last letter of the second article number block corresponds to the following length of the upper outlet:</i> A=0.3 m C=0.6 m E=1 m H=1.5 m K=2 m <i>other lengths available on request</i>
	h-coupler, (1 x male 0° / 1 x female 90° (contact layout 90°) & 1 x female 0°), 4 pole	7000-P8EBA-xxxxyyy ↗	
		7000-P8EBE-xxxxyyy ↗	
	h-coupler, (1 x male 0° / 1 x female 90° (contact layout 90°) & 1 x female 0°), 6 pole	7000-P8FDA-xxxxyyy ↗	
		7000-P8FDE-xxxxyyy ↗	
	h-coupler, (1 x male 0° / 1 x female 90° (contact layout 270°) & 1 x female 0°), 4 pole	7000-P8JBA-xxxxyyy ↗	
		7000-P8JBE-xxxxyyy ↗	
	h-coupler, (1 x male 0° / 1 x female 90° (contact layout 270°) & 1 x female 0°), 6 pole	7000-P8KDA-xxxxyyy ↗	
		7000-P8KDE-xxxxyyy ↗	
	T-coupler (1 x male 0°, 2 x female 0°), 6 pole	7000-P8401-0000000 ↗	

Ordering data MQ15 | 600 V AC – Type 3 | shielded designs

Single ended cable	Description	Art.-No.	Cable identification (xxx)
	Male 0°, 4 pole	7000-P8001-xxxxyyy ↗	P12 / P13
	Male 0°, 6 pole	7000-P8301-xxxxyyy ↗	P11
	Female 0°, 4 pole	7000-P8021-xxxxyyy ↗	P12 / P13
	Female 0°, 6 pole	7000-P8321-xxxxyyy ↗	P11
	Female 90° (contact layout 90°), 4 pole	7000-P8032-xxxxyyy ↗	P12 / P13
	Female 90° (contact layout 90°), 6 pole	7000-P8332-xxxxyyy ↗	P11
	Female 90° (contact layout 270°), 4 pole	7000-P8031-xxxxyyy ↗	P12 / P13
	Female 90° (contact layout 270°), 6 pole	7000-P8331-xxxxyyy ↗	P11
Connection cable	Description	Art.-No.	Cable identification (xxx)
	Male 0° / female 0°, 4 pole	7000-P8041-xxxxyyy ↗	P12 / P13
	Male 0° / female 0°, 6 pole	7000-P8341-xxxxyyy ↗	P11
Receptacle	Description	Art.-No.	Strand identification (xxx)
	Male 0°, with strands, front wall mounting, positionable, 4 pole	7000-P8281-xxxxyyy ↗	P81 / P82
	Male 0°, with strands, front wall mounting, positionable, 6 pole	7000-P8381-xxxxyyy ↗	P80 / P83
	Female 0°, with strands, front wall mounting, positionable, 4 pole	7000-P8291-xxxxyyy ↗	P81 / P82
	Female 0°, with strands, front wall mounting, positionable, 6 pole	7000-P8391-xxxxyyy ↗	P80 / P83

Ordering data MQ15 | Accessories

Field-wireable	Description	Art.-No.
	Male 0° unshielded, 600 V AC – Type 3, screw clamp, cable ø 7–14 mm, 6 pole	7000-P8502-0000000 ↗
	Female 0° unshielded, 600 V AC – Type 3, screw clamp, cable ø 7–14 mm, 6 pole	7000-P8542-0000000 ↗
	Male 0° shielded, 600 V AC – Type 3, screw clamp, cable ø 7–14 mm, 6 pole	7000-P8522-0000000 ↗
	Female 0° shielded, 600 V AC – Type 3, screw clamp, cable ø 7–14 mm, 6 pole	7000-P8572-0000000 ↗
	Male 0°, 600 V AC – Type 3, crimp connection, cable ø 6–13 mm, 6 pole	7000-P8501-0000000 ↗
	Female 0°, 600 V AC – Type 3, crimp connection, cable ø 6–13 mm, 6 pole	7000-P8541-0000000 ↗
	Male 0°, 48 V DC – Type 2, crimp connection, cable ø 6–13 mm, 6 pole	7000-P8508-0000000 ↗
	Female 0°, 48 V DC – Type 2, crimp connection, cable ø 6–13 mm, 6 pole	7000-P8548-0000000 ↗
	Male contact 1.5 mm², 100 pieces	7000-P8911-0000000 ↗
	Female contact 1.5 mm², 100 pieces	7000-P8912-0000000 ↗
	Male contact 2.5 mm², 100 pieces	7000-P8913-0000000 ↗
	Female contact 2.5 mm², 100 pieces	7000-P8914-0000000 ↗
Protective cap	Description	Art.-No.
	10 pieces, for female AC – Type 3 and DC – Type 2, lockable, IP67	7000-P8907-0000000 ↗
	100 pieces, for female AC – Type 3 and DC – Type 2, lockable, IP67	7000-P8906-0000000 ↗
	10 pieces, for male AC – Type 3 and DC – Type 2	7000-P8901-0000000 ↗

Ordering data MQ15 | 48V DC – Type 2 | unshielded designs

Single ended cable	Description	Art.-No.	Cable identification (xxx)
	Male 0°, 6 pole	7000-P8108-xxxxyy ↗	P63
	Male 90° (contact layout 90°), 6 pole	7000-P8118-xxxxyy ↗	P63
	Female 0°, 6 pole	7000-P8128-xxxxyy ↗	P63
	Female 90° (contact layout 90°), 6 pole	7000-P8138-xxxxyy ↗	P63
	Female 90° (contact layout 270°), 6 pole	7000-P8139-xxxxyy ↗	P63
Connection cable	Description	Art.-No.	Cable identification (xxx)
	Male 0° / female 0°, 6 pole	7000-P8148-xxxxyy ↗	P63
	Male 0° / female 90° (contact layout 0°), 6 pole	7000-P8157-xxxxyy ↗	P63
	Male 0° / female 90° (contact layout 90°), 6 pole	7000-P8158-xxxxyy ↗	P63
	Male 0° / female 90° (contact layout 270°), 6 pole	7000-P8159-xxxxyy ↗	P63
	Male 0° / female 90° (contact layout 180°), 6 pole	7000-P8160-xxxxyy ↗	P63
Receptacle	Description	Art.-No.	Strand identification (xxx)
	Male 0°, with strands, front wall mounting, 6 pole	7000-P8188-xxxxyy ↗	P86
	Female 0°, with strands, front wall mounting, 6 pole	7000-P8198-xxxxyy ↗	P86
Distribution solution	Description	Art.-No.	Cable identification (xxx)
	h-coupler, (1 x male 0° / 2 x female 0°), 6 pole	7000-P8LDA-xxxxyy ↗ 7000-P8LDC-xxxxyy ↗ 7000-P8LDE-xxxxyy ↗	P63 <i>The last letter of the second article number block corresponds to the following length of the upper outlet: A=0.3 m C=0.6 m E=1 m H=1.5 m K=2 m Other length variants on request</i>

Unshielded (xxx)			
	4 pole Type 3	6 pole Type 3	6 pole Type 2
			
Jacket material	Cable identification connector		
PUR jacket black	P16 – 4x1,5	P64 – 6x1,5	P48 – 3x2,5+3x0,5
	P36 – 4x2,5	P63 – 6x2,5	P63 – 6x2,5
PVC jacket black	P71 – 4x1,5	P73 – 6x1,5	P74 – 6x2,5
	P72 – 4x2,5	P74 – 6x2,5	–
Wire insulation	Strand identification receptacle		
PE-X strands	P91 – 4x1,5	P95 – 6x1,5	P86 – 3x2,5+3x0,5
	P92 – 4x2,5	P96 – 6x2,5	–

Shielded (xxx)		
	4 pole Type 3	6 pole Type 3
		 Standard illustration, deviation possible
Jacket material	Cable identification connector	
PUR jacket orange	P12 – 4x1,5	P11 – 4x2,5+2x1,5
	P13 – 4x2,5	–
Wire insulation	Strand identification receptacle	
PVC strands	P81 – 4x1,5	P83 – 6x1,5
	P82 – 4x2,5	P80 – 6x2,5

Standard length in meters (yyyy)				
Single ended cable				
1.5 (0150)	3 (0300)	5 (0500)	7.5 (0750)	10 (1000)
Connection cable				
0.3 (0030)	0.6 (0060)	1 (0100)	1.5 (0150)	2 (0200)
Receptacle				
0.2 (0020)	0.5 (0050)	1 (0100)	2 (0200)	3 (0300)

Other versions on request. Different cable lengths up to 2 m can be ordered in 0.2 m increments, from 2 m in 0.5 m increments. Receptacles up to max. 3 m in length.

Cable properties	PVC unshielded	PUR shielded	PUR unshielded
Bending radius	Stationary use: min. 5 x outer diameter Flexible use: min. 10 x outer diameter	Stationary use: min. 5 x outer diameter Flexible use: min. 10 x outer diameter	Stationary use: min. 5 x outer diameter Flexible use: min. 10 x outer diameter
Bending cycles	–	max. 5 Mio.	max. 5 Mio.
Torsional stress	–	± 15 °/m	± 180 °/m
Torsion cycles	–	–	max. 5 Mio.
Temperature range	Stationary use: -40 ... +80 °C Flexible use: -25 ... +80 °C	Stationary use: -35 ...+70 °C Flexible use: -20 ...+60 °C	Stationary use: -50 ...+80 °C Flexible use: -25 ...+80 °C

7/8" (Mini) connectors

Reliable power connectors

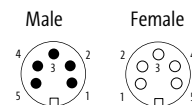
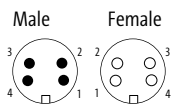
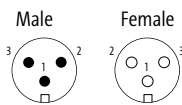


Strong power connectors for industrial automation

7/8" cables are a trusted solution for powering and controlling circuits. As a c(UL)us-listed North American industry standard, they have been reliably used worldwide for decades. Built for durability, these cables are ideal for connecting sensors, actuators, measuring devices, and various other components.

- 3-/4-/5 pole
- With flame-retardant TPE cable according to FT4 or halogen-free PUR cable
- Connector with highly resistant and halogen-free PUR overmolding
- Robust housing with good chemical and oil resistance
- Tight according to protection class IP67

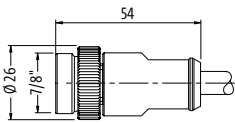
Technical data



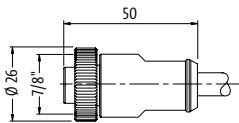
Electrical data	3-pole	4-pole	5-pole
Current rating	max. 12 A	max. 10 A	max. 9 A
Rated voltage	max. 600 V AC/DC		
Contact arrangement	3	4	5
Temperature range	-25 ... +85 °C		
Protection class when plugged	IP67		
Enclosure EMC shielding	unshielded		
Locking / thread type	screw / M23		
Plug-in cycles min.	500		
Tightening torque	1.5 Nm		
Wire cross-section	1.5 mm²		
Standardization / Approval	UL Listed – CYJV – E325311		

Dimensional sketches

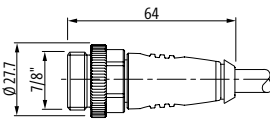
7/8"-(Mini)-male 0°



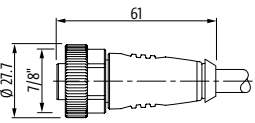
7/8"-(Mini)-female 0°



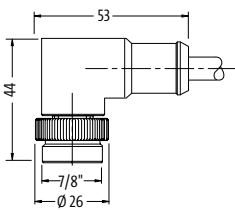
7/8"-male 0°



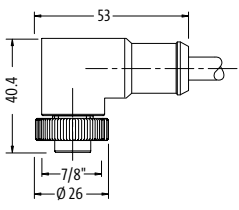
7/8"-female, 0°



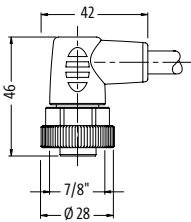
7/8"-(Mini)-male, 90°



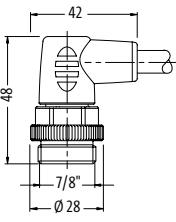
7/8"-(Mini)-female, 90°



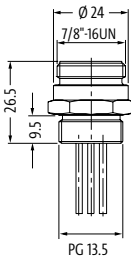
7/8"-male, 90°



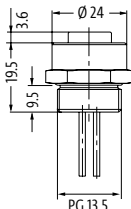
7/8"-female, 90°



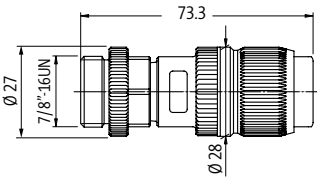
7/8"-receptacle, male 0°
Front wall mounting



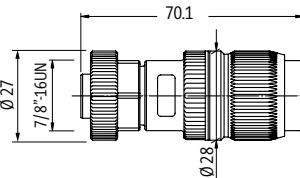
7/8"-receptacle, female 0°
Front wall mounting



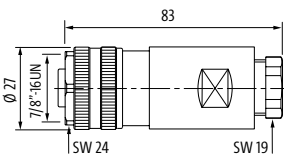
7/8"-field-wireable connector, male 0°
5 pole, IDC connection



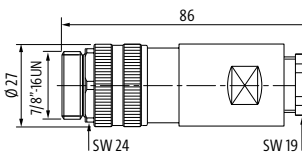
7/8"-field-wireable connector, female 0°
5 pole, IDC connection



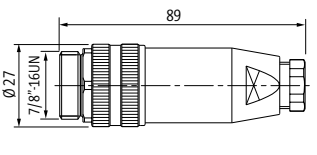
7/8"-field-wireable connector, male 0°
5 pole, screw clamp connection



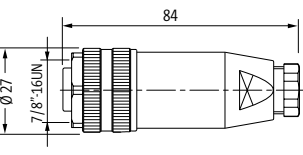
7/8"-field-wireable connector, female 0°
5 pole, screw clamp connection



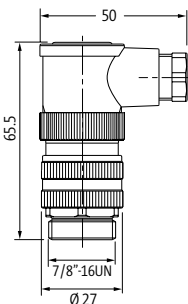
7/8"-field-wireable connector, male 0°
3, 4, 5 pole, screw clamp connection



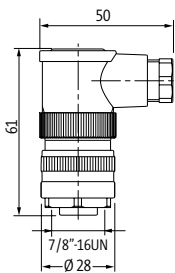
7/8"-field-wireable connector, female 0°
3, 4, 5 pole, screw clamp connection



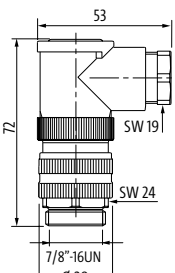
7/8"-field-wireable connector, male 90°
5 pole, IDC connection



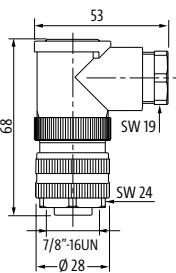
7/8"-field-wireable connector, female 90°
5 pole, IDC connection



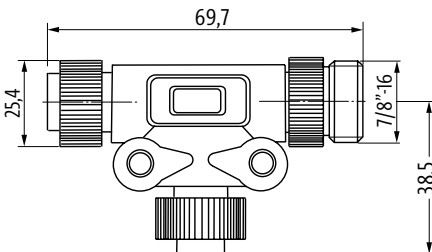
7/8"-field-wireable connector, male 90°
5 pole, IDC connection



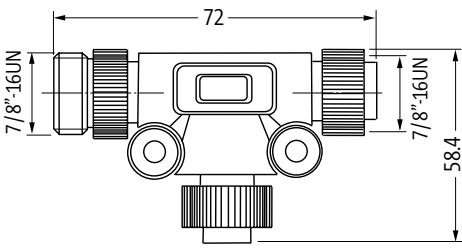
7/8"-field-wireable connector, female 90°
5 pole, IDC connection



7/8"-T-coupler, 3 pole
1x male, 2x female



7/8"-T-coupler, 5 pole
1x male, 2x female



Ordering data 7/8" (Mini) connector

Single ended cable	Description	Art.-No.	Cable identification (xxx)
	Male 0°, 3 pole	7700-A3001-xxxxyy ↗	U1B
	Male 0°, 4 pole	7700-A4001-xxxxyy ↗	U1C
	Male 0°, 5 pole	7700-A5001-xxxxyy ↗	U1D
	Female 0°, 3 pole	7700-A3021-xxxxyy ↗	U1B
	Female 0°, 4 pole	7700-A4021-xxxxyy ↗	U1C
	Female 0°, 5 pole	7700-A5021-xxxxyy ↗	U1D
	Male 90°, 3 pole	7700-A3011-xxxxyy ↗	U1B
	Male 90°, 4 pole	7700-A4011-xxxxyy ↗	U1C
	Male 90°, 5 pole	7700-A5011-xxxxyy ↗	U1D
	Female 90°, 3 pole	7700-A3031-xxxxyy ↗	U1B
	Female 90°, 4 pole	7700-A4031-xxxxyy ↗	U1C
	Female 90°, 5 pole	7700-A5031-xxxxyy ↗	U1D
Connection cable	Description	Art.-No.	Cable identification (xxx)
	Male 0° / female 0°, 3 pole	7700-A3A01-xxxxyy ↗	U1B
	Male 0° / female 0°, 4 pole	7700-A4A01-xxxxyy ↗	U1C
	Male 0° / female 0°, 5 pole	7700-A5A01-xxxxyy ↗	U1D
	Male 0° / female 90°, 3 pole	7700-A3A21-xxxxyy ↗	U1B
	Male 0° / female 90°, 4 pole	7700-A4A21-xxxxyy ↗	U1C
	Male 0° / female 90°, 5 pole	7700-A5A21-xxxxyy ↗	U1D
	Male 90° / female 0°, 3 pole	7700-A3A11-xxxxyy ↗	U1B
	Male 90° / female 0°, 4 pole	7700-A4A11-xxxxyy ↗	U1C
	Male 90° / female 0°, 5 pole	7700-A5A11-xxxxyy ↗	U1D
	Male 90° / female 90°, 3 pole	7700-A3A31-xxxxyy ↗	U1B
	Male 90° / female 90°, 4 pole	7700-A4A31-xxxxyy ↗	U1C
	Male 90° / female 90°, 5 pole	7700-A5A31-xxxxyy ↗	U1D
Field-wireable	Description	Art.-No.	
	Male 0°, IDC, 5 pole	7000-78091-0000000 ↗	connection cross-section max. 1.5 mm²
	Female 0°, IDC, 5 pole	7000-78211-0000000 ↗	
	Male 0°, screw clamp, cable ø 6–8 mm, 3 pole	7000-78071-0000000 ↗	
	Male 0°, screw clamp, cable ø 6–8 mm, 4 pole	7000-78061-0000000 ↗	
	Male 0°, screw clamp, cable ø 6–8 mm, 5 pole	7000-78081-0000000 ↗	
	Female 0°, screw clamp, cable ø 6–8 mm, 3 pole	7000-78191-0000000 ↗	
	Female 0°, screw clamp, cable ø 6–8 mm, 4 pole	7000-78181-0000000 ↗	
	Female 0°, screw clamp, cable ø 6–8 mm, 5 pole	7000-78201-0000000 ↗	
	Male 90°, screw clamp, cable ø 6–8,7 mm, 5 pole	7000-78141-0000000 ↗	
	Female 90°, screw clamp, cable ø 6–8,7 mm, 5 pole	7000-78261-0000000 ↗	
	Male 0°, screw clamp, cable ø 10–12 mm, 5 pole	7000-78101-0000000 ↗	
	Female 0°, screw clamp, cable ø 10–12 mm, 5 pole	7000-78221-0000000 ↗	
	Male 0°, screw clamp, cable ø 8–10 mm, 5 pole	7000-78111-0000000 ↗	connection cross-section max. 2.5 mm²
	Female 0°, screw clamp, cable ø 8–10 mm, 5 pole	7000-78231-0000000 ↗	
	Male 90°, screw clamp, cable ø 8–10 mm, 5 pole	7000-78151-0000000 ↗	
	Female 90°, screw clamp, cable ø 8–10 mm, 5 pole	7000-78271-0000000 ↗	
Distributors	Description	Art.-No.	
	T-coupler, 3 pole	7000-50071-0000000 ↗	
	T-coupler, 3 pole	7700-A3T01-0000000 ↗	
	T-coupler, 5 pole	7000-50061-0000000 ↗	

Ordering data 7/8" (Mini) connector

Single ended cable	Description	Art.-No.	Cable identification (xxx)
	Male 0°, 5 pole	7000-78421-xxxxyy ↗	961 / 962
	Female 0°, 5 pole	7000-78021-xxxxyy ↗	961 / 962
	Female 90°, 5 pole	7000-78051-xxxxyy ↗	961 / 962
Connection cable	Description	Art.-No.	Cable identification (xxx)
	Male 0° / female 0°, 5 pole	7000-50021-xxxxyy ↗	961 / 962
	Male 0° / female 90°, 5 pole	7000-50031-xxxxyy ↗	961 / 962
	Male 90° / female 90°, 5 pole	7000-50051-xxxxyy ↗	961 / 962
Receptacle	Description	Art.-No.	Strand identification (xxx)
	Front wall mounting, male 0°, with strands, 5 pole	7000-78341-xxxxyy ↗	978
	Front wall mounting, female 0°, with strands, 5 pole	7000-78381-xxxxyy ↗	978

Unshielded (xxx)			
	3 pole	4 pole	5 pole
			
	Standard illustration, deviation possible	Standard illustration, deviation possible	Standard illustration, deviation possible
Jacket material	Cable identification connector		
TPE jacket yellow	U1B	U1C	U1D

Unshielded (xxx)	
	5 pole
	
Jacket material	Cable identification connector
PUR jacket gray	961 – PUR 5x1.5 962 – PUR 5x2.5
Wire insulation	Strand identification receptacle
PVC strands	978 – 5x0.75

Standard length in meters (yyyy)				
Single ended cable				
1.5 (0150)	3 (0300)	5 (0500)	7.5 (0750)	10 (1000)
Connection cable				
0.3 (0030)	0.6 (0060)	1 (0100)	1.5 (0150)	2 (0200)
Receptacle				
0.2 (0020)	0.5 (0050)	1 (0100)	–	–

Other versions on request. Different cable lengths up to 2 m can be ordered in 0.2 m increments, from 2 m in 0.5 m increments.

Cable properties	PUR	TPE
Bending radius	Stationary use: min. 5 x outer diameter Flexible use: min. 10 x outer diameter	Stationary use: min. 8 x outer diameter Flexible use: min. 10 x outer diameter
Bending cycles	max. 5 Mio.	max. 2 Mio.
Torsional stress	± 180 °/m	–
Torsion cycles	max. 5 Mio.	–
Temperature range	Stationary use: -50 ... +80 °C Flexible use: -25 ... +80 °C	Stationary use: -50 ... +105 °C Flexible use: -20 ... +90 °C

Murrelektronik

Always ready to listen



Personalized service

Your dedicated sales contact provides reliable support. They understand your challenges, and will work hard to provide the best possible solutions.



Technical expertise - just call us!

For technical support with installation, commissioning, or maintenance of a Murrelektronik product, our experts are just a call away. With in-depth product knowledge, they provide fast and effective solutions to keep your machines and systems running smoothly.



On site for you

Our sales representatives conduct regular visits to collaborate with you in analyzing your applications and processes. By identifying your specific needs, they help develop tailored solutions to optimize your machine and system installation. Whether through simple adjustments or advanced system solutions, the goal is to enhance efficiency and reduce costs.



Competent system consulting

Our system consultants are here to assist you with new machine setups, innovative installation concepts, or the latest advancements in fieldbus technology. This non-binding consultation offers a valuable opportunity to develop customized, forward-thinking solutions tailored to your needs.

M23 connector

Easily and securely connect servomotors



The complete product range from a single source

Murrelektronik's M23 connectors are specifically engineered for reliable connections between servo controllers and drive systems. These high-quality cables provide a robust, interference-free connection in demanding industrial environments.

On the motor side, overmolded M23 connectors are available with various contact assignments. The power connectors offer a wide range of cable terminations, fully compatible with Siemens specifications, making them ideal for connecting to Sinamics drive systems. Additionally, power, signal, and distribution cables with Single ended cables are available for seamless integration into your existing infrastructure.

For fast and easy installations, Murrelektronik also offers M23 connectors with quick-connect technology.

- 360-degree shield support ensures maximum EMC interference immunity
- Permanently integrated protective conduit retainer
- Length variants in 10 centimeter increments from quantity 1
- Shock and vibration protection thanks to vibration protection
- Compatible with standard market solution

Transparent article numbers

The **Siemens designations** are incorporated 1:1 into the Murrelektronik designations and thus ensure an uncomplicated conversion.

i The cable assemblies are made according to the **Siemens standard**

i	for example:
Siemens designation:	6FX5002-5CS01
➔ Murrelektronik article number:	M6FX5002-5CS01

Did you know?

For harsh industrial environments, Murrelektronik offers M12 connectors, a proven alternative for connecting Drive Cliq cables in the field. The use of this solution offers our customers the following advantages:

- ➔ No additional clutch required
 - ➔ Small and simple
 - ➔ Inexpensive
 - ➔ Modular universal mount
- ➔ *M23 DRIVES (SIEMENS) – Signal cables on page 30*

Technical data M23-| M40-| M58 power cable

	Male	Female	Male	Female	Male	Female	Male	Female				
Electrical data	M23				M40				M58			
Current rating	max. 28 A				max. 75 A				max. 150 A			
Rated voltage	max. 630 V AC/DC											
Contact arrangement	3 + PE + 2				3 + PE + 4				3 + PE + 2			
Temperature range	-25 ... +85 °C								-20 ... +85 °C			
Protection class when plugged	IP65/67											
Enclosure EMC shielding	shielded											
Locking	screw, quick-locking											
Max. mating cycles	500								50			
Tightening torque	2.0 Nm								–			
Wire cross-section	1.50 ... 4.00 mm ²				1.50 ... 16.0 mm ²				10.00 ... 50.0 mm ²			

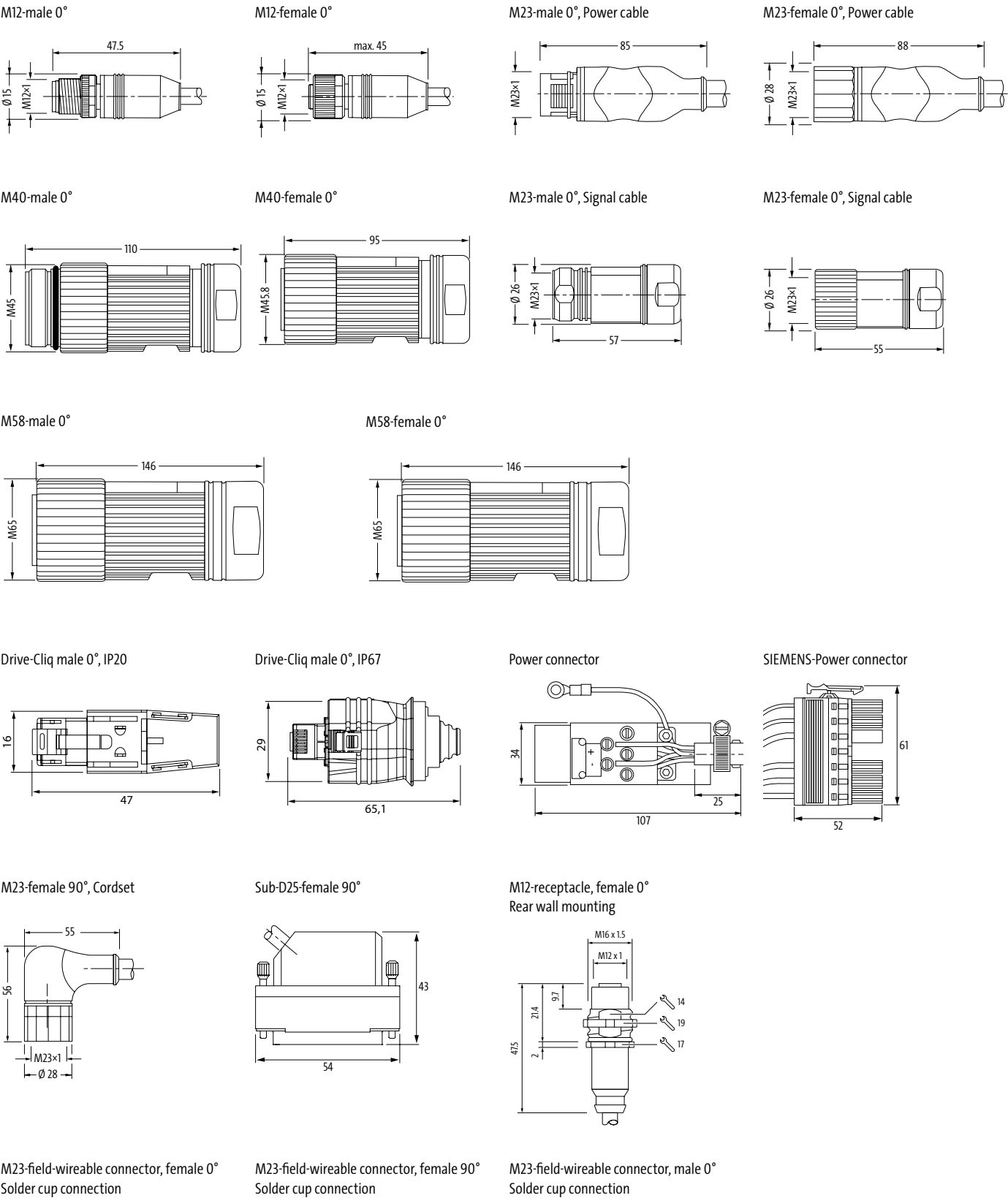
Technical data M12-| M23 signal cable

	Male 	Female 	Male 	Female 	Male 	Female 	Male 	Female 	Male 	Female 
Electrical data	M12 A-coded		M12 Y-coded		M23					
Current rating	max. 2 A		max. 6 A for contact 5 ... 8 max. 0.5 A for contact 1 ... 4		max. 7.5 A					
Rated voltage	max. 30 V AC/DC				max. 125 V AC/DC					
Contact arrangement	8		4 + 4		3 + 9		3 + 14		3 + 16	
Temperature range	-25 ... +85 °C									
Protection class when plugged	IP65/67									
Enclosure EMC shielding	shielded									
Locking	screw				screw, quick-locking					
Max. mating cycles	500									
Tightening torque	0.6 Nm				2.0 Nm					
Wire cross-section	0.34 mm ²		0.2 mm ² 0.38 mm ²		0.08 ... 0.56 mm ² 0.34 ... 1.00 mm ²					

Technical data Drive-Clqi

	Male
Electrical data	Drive-Clqi
Current rating	max. 1.76 A
Rated voltage	max. 30 V AC/DC
Contact arrangement	6
Temperature range	-20 ... +80 °C
Protection class when plugged	IP20/67
Enclosure EMC shielding	shielded
Locking	snap lock
Max. mating cycles	750
Tightening torque	–
Wire cross-section	0.20 ... 0.38 mm²

Dimensional sketches M23-| M40-| M58 power cable, M12-| M23 signal cable



Ordering data M23 DRIVES (SIEMENS) – Power cable

Single ended cable	Description	Art.-No.	Cable identification (xxx)	
			PVC 1.5 mm ² / 2.5 mm ²	PUR 1.5 mm ² / 2.5 mm ²
	Female 0°, without brake wires, 4 pole, screw thread, with power connector	7000-PS015-xxxyyy	865 / 869	854 / 857
			6FX5002-5CS01 /-5CS11	6FX8002-5CS01 /-5CS11
	Female 0°, with brake wires, 6 pole, screw thread, with power connector	7000-PS011-xxxyyy	861 / 863	821/ 833
			6FX5002-5DS01 /-5DS11	6FX8002-5DS01 /-5DS11
	Female 0°, without brake wires, 4 pole, quick connection, with power connector	7050-PS015-xxxyyy	865 / 869	854 / 857
			6FX5002-5CN01 /-5CN11	6FX8002-5CN01 /-5CN11
	Female 0°, with brake wires, 6 pole, quick connection, with power connector	7050-PS011-xxxyyy	861 / 863	821/ 833
			6FX5002-5DN01 /-5DN11	6FX8002-5DN01 /-5DN11
	Female 0°, without brake wires, 4 pole, screw thread, with SIEMENS power connector and spring-loaded terminal	7000-PS415-xxxyyy	865 / 869	854 / 857
			6FX5002-5CS06 /-5CS16	6FX8002-5CS06 /-5CS16
	Female 0°, with brake wires, 6 pole, screw thread, with SIEMENS power connector and spring-loaded terminal	7000-PS411-xxxyyy	861 / 863	821/ 833
			6FX5002-5DS06 /-5DS16	6FX8002-5DS06 /-5DS16
	Female 0°, without brake wires, 4 pole, quick connection, with SIEMENS power connector and spring-loaded terminal	7050-PS415-xxxyyy	865 / 869	854 / 857
			6FX5002-5CN06 /-5CN16	6FX8002-5CN06 /-5CN16
	Female 0°, with brake wires, 6 pole, quick connection, with SIEMENS power connector and spring-loaded terminal	7050-PS411-xxxyyy	861 / 863	821/ 833
			6FX5002-5DN06 /-5DN16	6FX8002-5DN06 /-5DN16
Pre-assembled wire ends	Description	Art.-No.	PVC 1.5 mm ² / 2.5 mm ²	PUR 1.5 mm ² / 2.5 mm ²
	Female 0°, without brake wires 4 pole, screw thread with clamp and single ended cable	7000-PS206-xxxyyy	865 / 869	854 / 857
			6FX5002-5CG01 /-5CG11	6FX8002-5CG01 /-5CG11
	Female 0°, with brake wires 6 pole, screw thread with clamp and pre-assembled wire ends	7000-PS201-xxxyyy	861 / 863	821/ 833
			6FX5002-5DA01 /-5DA11	6FX8002-5DA01 /-5DA11
	Female 0°, without brake wires 4 pole, screw thread cut off evenly	7000-PS505-xxxyyy	865 / 869	854 / 857
			–	–
	Female 0°, with brake wires 6 pole, screw thread cut off evenly	7000-PS501-xxxyyy	861 / 863	821/ 833
			–	–
Connection cable	Description	Art.-No.	PVC 1.5 mm ² / 2.5 mm ²	PUR 1.5 mm ² / 2.5 mm ²
	Male 0° / female 0°, without brake wires 4 pole, screw thread	7000-PS105-xxxyyy	865 / 869	854 / 857
			6FX5002-5CA05 /-5CA15	6FX8002-5CA05 /-5CA15
	Male 0° / female 0°, with brake wires 6 pole, screw thread	7000-PS101-xxxyyy	861 / 863	821/ 833
			6FX5002-5DA05 /-5DA15	6FX8002-5DA05 /-5DA15
	Male 0° / female 0°, without brake wires 4 pole, quick connection	7050-PS105-xxxyyy	865 / 869	854 / 857
			6FX5002-5CN05 /-5CN15	6FX8002-5CN05 /-5CN15
	Male 0° / female 0°, with brake wires 6 pole, quick connection	7050-PS101-xxxyyy	861 / 863	821/ 833
			6FX5002-5DN05 /-5DN15	6FX8002-5DN05 /-5DN15

Excerpt from our portfolio. Further designs on request.

Ordering data M23 DRIVES (SIEMENS) – Signal cable

Connection cable	Description	Art.-No.	Cable identification (xxx)	
			PVC	PUR
	Female 0° / Sub-D25 female 90°, 17 pole full contact assignment, basic cable for absolute encoder EnDat	7000-SS161-xxxxyyy	871	811
			6FX5002-2EQ10	6FX8002-2EQ10
	Female 0° / Sub-D25 female 90°, 17 pole partial contact assignment, basic cable for absolute encoder EnDat	7000-SS211-xxxxyyy	–	811
			–	6FX8002-2CH00
	Female 0° / Sub-D25 female 90°, 17 pole full contact assignment, basic cable for incremental encoder	7000-SS261-xxxxyyy	871	811
			6FX5002-2CA31	6FX8002-2CA31
	Male 0°/ female 0°, 17 pole full contact assignment, extension for incremental encoder	7000-SS265-xxxxyyy	–	811
			–	6FX8002-2CA34
	Male 0°/ female 0°, 17 pole full contact assignment, extension for absolute encoder EnDat	7000-SS165-xxxxyyy	–	811
			–	6FX8002-2EQ14
	Male 0°/ female 0°, 17 pole partially occupied, extension for SSI and EnDat absolute encoders	7000-SS171-xxxxyyy	–	882
			–	6FX8002-2CA31
	Male 0° A-coded / female receptacle 0°, A-coded, 8 pole partial contact assignment	7000-SS085-xxxxyyy	881	880
			–	–
	Male 0° Y-coded / female receptacle 0°, Y-coded, 8 pole partial contact assignment	7000-SS615-xxxxyyy	881	880
			–	–
	Male 0° A-coded / female 0° A-coded, 8 pole partial contact assignment	7000-SS081-xxxxyyy	881	880
			6FX5002-2DC34	6FX8002-2DC34
	Male 0° Y-coded / female 0° Y-coded, 8 pole partial contact assignment	7000-SS611-xxxxyyy	881	880
			–	–
	Male 0° A-coded / Drive-Cliq male 0° IP67, 8 pole partial contact assignment	7000-SS091-xxxxyyy	881	880
			6FX5002-2DC38	6FX8002-2DC38
	Male 0° Y-coded / Drive-Cliq male 0° IP67, 8 pole partial contact assignment	7000-SS621-xxxxyyy	881	880
			–	–
	Drive-Cliq male 0° IP67 with RJ45 / Drive-Cliq male 0° IP67 with RJ45, 6 pole	7000-SS061-xxxxyyy	881	880
			6FX5002-2DC20	6FX8002-2DC20
	Drive-Cliq male 0° IP20 / Drive-Cliq male 0° IP67 with RJ45, 6 pole	7000-SS051-xxxxyyy	881	880
			6FX5002-2DC10	6FX8002-2DC10
	Drive-Cliq male 0° IP20 / female 0° A-coded, 8 pole partial contact assignment	7000-SS071-xxxxyyy	881	880
			6FX5002-2DC30	6FX8002-2DC30
	Drive-Cliq male 0° IP20 / female 0° Y-coded, 8 pole partial contact assignment	7000-SS601-xxxxyyy	881	880
			–	–
	Drive-Cliq male 0° IP20 / female receptacle 0°, A-coded, 8 pole partial contact assignment	7000-SS075-xxxxyyy	881	880
			–	–
	Drive-Cliq male 0° IP20 / female receptacle 0°, Y-coded, 8 pole partial contact assignment	7000-SS605-xxxxyyy	881	–
			–	–
	Drive-Cliq male 0° IP20 / Drive-Cliq male 0° IP20, 4 pole	7000-SS021-xxxxyyy	–	884
			–	6FX2002-1DC00

Excerpt from our portfolio. Further designs on request.

M23 Cordsets, unshielded

Single ended cable	Description	Art.-No.	Cable identification (xxx)
	Female 0°, partial contact assignment, 12 pole	7000-23011-xxxxyyy	333 / 362
		7000-23051-xxxxyyy	
	Female 0°, partial contact assignment, 19 pole	7000-23211-xxxxyyy	363 / 448
		7000-23231-xxxxyyy	
	Female 90°, partial contact assignment, 12 pole	7000-23111-xxxxyyy	333 / 362
		7000-23151-xxxxyyy	
	Female 90°, partial contact assignment, 19 pole	7000-23311-xxxxyyy	363 / 388 / 448
		7000-23331-xxxxyyy	
	Female 0°, full contact assignment, 19 pole	7000-23251-xxxxyyy	398 / 452
	Female 90°, full contact assignment, 19 pole	7000-23351-xxxxyyy	398 / 452
	Male 0°, full contact assignment, 12 pole	7000-23451-xxxxyyy	362
Connection cable	Description	Art.-No.	Cable identification (xxx)
	Male 0° / female 0°, full contact assignment, 19 pole	7000-54401-xxxxyyy	454
Field-wireable	Description	Art.-No.	
	Female 0°, solder cup, 12 pole	7000-23061-0000000	cable diameter Ø 8–14 mm
	Female 0°, solder cup, 19 pole	7000-23261-0000000	
	Female 90°, solder cup, 12 pole	7000-23161-0000000	
	Female 90°, solder cup, 19 pole	7000-23361-0000000	
	Male 0°, solder cup, 19 pole	7000-23281-0000000	cable diameter Ø 3–17 mm

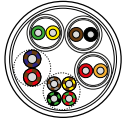
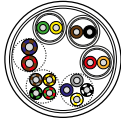
Excerpt from our portfolio. Further designs on request.

Standard length in meters (yyyy)				
Single ended cable				
1.5 (0150)	3 (0300)	5 (0500)	7.5 (0750)	10 (1000)
Connection cable				
0.3 (0030)	0.6 (0060)	1 (0100)	1.5 (0150)	2 (0200)
Receptacle				
0.2 (0020)	0.5 (0050)	1 (0100)	–	–

Other versions on request. Different cable lengths up to 2 m can be ordered in 0.2 m increments, from 2 m in 0.5 m increments.

Shielded (xxx)	Power cable	
	4 pole	6 pole
		
Jacket material	Cable identification connector	
PVC jacket orange	865 – (4x1.5)C 869 – (4x2.5)C	861 – (4x1.5+(2x1.5)C) 863 – (4x2.5+(2x1.5)C)
PUR jacket orange	854 – (4x1.5)C 857 – (4x2.5)C	821 – (4x1.5+(2x1.5)C) 833 – (4x2.5+(2x1.5)C)

Shielded (xxx)	Signal cable	
	4 pole	6 pole
		
Jacket material	Cable identification connector	
PVC jacket green	–	881 – (2x2x0.22+1x2x0.38)C
PUR jacket green	–	880 – (2x2x0.22+1x2x0.38)C
PUR jacket gray	884 – (2x(2x0.22))C	

Shielded (xxx)	Signal cable	
	12 pole	16 pole
		
Jacket material	Cable identification connector	
PVC jacket green	885 – (3x(2x0.14)C+2x0.5+4x0.14)C	871 – (3x(2x0.14)C+2x0.5+4x0.14+4x0.22)C
PUR jacket green	882 – (3x(2x0.14)C+2x0.5+4x0.14)C	811 – (3x(2x0.14)C+2x0.5+4x0.14+4x0.22)C

Unshielded (xxx)	Cordset		
	7 pole	11 pole	15 pole
		 Standard illustration, deviation possible	
Jacket material	Cable identification connector		
PUR/PVC jacket gray	333 – 4x0.34+3x0.75	362 – 8x0.34+3x0.75	388 – 12x0.34+3x0.75
PUR jacket gray	–	363 – 8x0.34+3x0.75	–
PUR jacket gray	–	448 – 8x0.5+3x1.0	–

Unshielded (xxx)	Cordset	
	19 pole	
	 Standard illustration, deviation possible	
Jacket material	Cable identification connector	
PUR/PVC jacket gray	398 – 16x0.34+3x0.75	
PUR jacket gray	452 – 16x0.5+3x1.0	
PUR jacket black	454 – 16x0.5+3x1.0	



Connectors for servo drives with power contact spring

The power contact springs in the M23 female contacts from Murrelektronik have remarkable properties:

- ➔ Excellent spring properties
- ➔ Withstand many times more bending than the best steel springs
- ➔ High electrical conductivity
- ➔ Solidity
- ➔ Excellent resistance to environmental influences such as ozone, light and chemical influences (e.g. solvents)



The power contact springs bridge relative movements between the contacts and thus ensure optimum contacting.

The power contact springs can be used in a wide temperature range. The material used has the property that it is self-cleaning, for example when plugging or unplugging electrical connections.

In addition to Murrelektronik's connectors, this material is used, for example, in high-frequency technology, measurement and control technology, nuclear physics, aerospace and data processing.

Motor connection cables

		MC500	MC800+
Cable types		PVC	PUR
Cable standard		★	★★★
Properties	 Flame retardant	■	■
	 Resistant to chemicals	■	■
	 Resistant to cleaning agents	■	
	 Resistant to oil/lubricants		■
	 UL certified	■	■
	 CSA-certified	■	■
	 UV-resistant		■
	 Halogen-free		■
	 Robust		■
	 Temperature range	-20 ...+80 °C	-50 ...+80 °C
	 Suitable for drag chains		5 Mio.
	 Suitable for torsion		± 30°
	 Suitable for robots		■
Example applications		Packaging machines Food sector Assembly systems Production lines	Machine tools Rotary and swivel tables Machining production



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