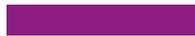




POWER

Connectors for Voltage & Power Supply



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CONNECTORS FOR POWER APPLICATIONS

The M12 connector is widely used and is gaining acceptance as a standardised connector in a wide range of industries. There is an increasing demand for connectors with high power transmission in a compact design.

For higher performances, 7/8 inch solutions have been used so far. However, these are larger and require a lot of space. Therefore, binder offers T- and L-coded connectors for DC voltage supply with up to 63 V, or the codings S and K for AC voltage supply with up to 630 V. These are compact and powerful at the same time with small dimensions.

All four codings are available as cable and panel mount connectors. The standard single wire length of the panel mount connectors is 200 mm, other lengths are available on request. The field-wireable M12 power connector is offered by binder as male and female version. These have a screw clamp connection in accordance with IEC 610776-2-111. With an enclosing plastic housing and a zinc die-cast locking ring, these connectors meet the requirements of protection class IP67/IP68 when mated.

As a special feature, the T- and S-coded parts are designed in such a way that they can be clamped with ferrules in a clamping range of up to 1.5 mm² - without ferrules with 2.5 mm². This makes the connectors suitable for transmitting 12 A per contact. The K- and L-coded M12 transmit up to 16 A, with a clamping range of up to 2.5 mm².

To reduce contact resistance and heat loss, the contact surfaces are coated with gold. The connectors are designed for cable diameters up to 10 mm with T- and S-coding and up to 13 mm with K- and L-coding.

Applications for T- and L-coded M12 include the power supply of motors and drives as well as the control of lighting systems. The S- and K-coded connectors are suitable for applications such as the connection of AC motors, the wiring of lighting systems and the emergency power supply of control systems.

REQUIREMENTS

- Transmission of high electrical power via compact M12 components.
- Power supply from 63 V DC up to 630 V AC.
- Currents up to 16 A.
- Compact design.

ADVANTAGES

- As a leading circular connector specialist, binder has extensive expertise in technology, applications and markets.
- Decades of experience in the development, design and (automated) production of circular connectors.
- Products for reliable voltage and power supply.
- Overmoulded cable connectors 100 percent tested to ensure quality and reliability.
- Customised pre-assembled solutions.



PRODUCT OVERVIEW

■ **M12 Automation Technology**
S-Coding 814 Series

- Screw locking according to DIN EN 61076-2-111
- Cable assembly possible
- Moulded versions
- 2+PE / 3+PE
- 630 V AC up to 16 A
- Wire gauge 1,5 mm² / 2,5 mm²
- Degree of protection IP67
- Screw clamp connection
- Angled connector adjustable in 4 positions
- Easy assembly
- Single wires
- Various variants

M12-S
814 Series



■ **M12 Automation Technology**
K-Coding 824 Series

- Screw locking according to DIN EN 61076-2-111
- Cable assembly possible
- Moulded versions
- 4+PE
- 630 V AC / 12 A
- Wire gauge 1,5 mm² / 2,5 mm²
- Degree of protection IP67
- Screw clamp connection
- Angled connector adjustable in 72° positions
- Easy assembly
- Single wires
- Various variants

M12-K
824 Series



■ **M12 Automation Technology**
T-Coding 813 Series

- Screw locking according to DIN EN 61076-2-111
- Cable assembly possible
- Moulded versions
- 4 contacts
- 63 V DC / 12 A
- Wire gauge 1,5 mm² / 2,5 mm²
- Degree of protection IP67
- Screw clamp connection
- Angled connector adjustable in 4 positions
- Easy assembly
- Dip solder connection / Single wires
- Various variants

M12-T
813 Series



■ **M12 Automation Technology**
L-Coding 823 Series

- Screw locking according to DIN EN 61076-2-111
- Cable assembly possible
- 4+FE
- 63 V DC up to 16 A
- Wire gauge 1,5 mm² / 2,5 mm²
- Degree of protection IP67
- Screw clamp connection
- Angled connector adjustable in 72° positions
- Easy assembly
- Dip solder connection / Single wires
- Various variants

M12-L
823 Series



CONTENTS

Range	Series	Contacts	Degree of protection
■ Connectors for Voltage & Power Supply			
M12-S	814	2+PE / 3+PE	IP67 / IP68
M12-K	824	4+PE	IP67 / IP68
M12-T	813	4	IP67 / IP68
M12-L	823	4+FE	IP67 / IP68

Male cable connector, screw clamp connection



RA US

Male angled connector, screw clamp connection



RA US **VDE**

Female cable connector, screw clamp connection



RA US

Female angled connector, screw clamp connection



RA US **VDE**

Contacts	Cable outlet	Ordering-No.
2+PE	8–10 mm	99 0685 19 03
3+PE	6–8 mm	99 0689 32 04
	8–10 mm	99 0689 19 04

Contacts	Cable outlet	Ordering-No.
2+PE	6–8 mm	99 0685 48 03
3+PE	8–10 mm	99 0689 58 04

Contacts	Cable outlet	Ordering-No.
2+PE	8–10 mm	99 0686 19 03
3+PE	6–8 mm	99 0690 32 04
	8–10 mm	99 0690 19 04

Contacts	Cable outlet	Ordering-No.
2+PE	6–8 mm	99 0686 48 03
3+PE	8–10 mm	99 0690 58 04

Male panel mount connector, screw clamp connection, plastic housing



RA US **VDE**

Male panel mount connector with single wires, plastic housing



Male panel mount connector, front fastened, with single wires, plastic housing



Contacts	Fixing thread	Ordering-No.
3+PE	M20 x 1,5	99 0693 500 04

Contacts	Fixing thread	Ordering-No. ¹⁾
3+PE	M16 x 1,5	09 0691 300 04

Contacts	Fixing thread	Ordering-No. ¹⁾
3+PE	M16 x 1,5	09 0691 320 04

Male panel mount connector with single wires, metal housing



RA US

Male panel mount connector, front fastened, with single wires, metal housing



RA US **VDE**

Male panel mount connector with single wires, metal housing



RA US **VDE**

Male panel mount connector, rectangular flange, with single wires, metal housing



RA US

Contacts	Fixing thread	Ordering-No. ¹⁾
2+PE	M16 x 1,5	09 0687 700 03
3+PE		09 0691 700 04

Contacts	Fixing thread	Ordering-No. ¹⁾
2+PE	M16 x 1,5	09 0687 121 03
3+PE		09 0691 121 04

Contacts	Fixing thread	Ordering-No. ¹⁾
3+PE	M20 x 1,5	09 0691 642 04

Contacts	Fixing thread	Ordering-No. ¹⁾
3+PE	—	09 0691 070 04

Female panel mount connector, screw clamp connection, plastic housing



RA US **VDE**

Female panel mount connector with single wires, plastic housing



Female panel mount connector, front fastened, with single wires, plastic housing



Contacts	Fixing thread	Ordering-No.
3+PE	M20 x 1,5	99 0694 500 04

Contacts	Fixing thread	Ordering-No. ¹⁾
3+PE	M16 x 1,5	09 0692 300 04

Contacts	Fixing thread	Ordering-No. ¹⁾
3+PE	PG 9	09 0692 320 04

Female panel mount connector with single wires, metal housing



RA US

Female panel mount connector, front fastened, with single wires, metal housing



RA US **VDE**

Female panel mount connector with single wires, metal housing



RA US **VDE**

Female panel mount connector, rectangular flange, with single wires, metal housing



RA US

Contacts	Fixing thread	Ordering-No. ¹⁾
2+PE	M16 x 1,5	09 0688 700 03
3+PE		09 0692 700 04

Contacts	Fixing thread	Ordering-No. ¹⁾
2+PE	M16 x 1,5	09 0688 121 03
3+PE		09 0692 121 04

Contacts	Fixing thread	Ordering-No. ¹⁾
3+PE	M20 x 1,5	09 0692 642 04

Contacts	Fixing thread	Ordering-No. ¹⁾
3+PE	—	09 0692 070 04

Male cable connector, moulded



RA US

Male angled connector, moulded



RA US

Contacts	Cable length	Ordering-No. ²⁾
2+PE	2 m	77 0689 0000 50703-0200
	5 m	77 0689 0000 50703-0500
3+PE	2 m	77 0689 0000 50704-0200
	5 m	77 0689 0000 50704-0500

Contacts	Cable length	Ordering-No. ²⁾
2+PE	2 m	77 0687 0000 50703-0200
	5 m	77 0687 0000 50703-0500
3+PE	2 m	77 0687 0000 50704-0200
	5 m	77 0687 0000 50704-0500

Female cable connector, moulded



RA US

Female angled connector, moulded



RA US

Contacts	Cable length	Ordering-No. ²⁾
2+PE	2 m	77 0690 0000 50703-0200
	5 m	77 0690 0000 50703-0500
3+PE	2 m	77 0690 0000 50704-0200
	5 m	77 0690 0000 50704-0500

Contacts	Cable length	Ordering-No. ²⁾
2+PE	2 m	77 0694 0000 50703-0200
	5 m	77 0694 0000 50703-0500
3+PE	2 m	77 0694 0000 50704-0200
	5 m	77 0694 0000 50704-0500

Male cable connector M12 x 1 – female cable connector M12 x 1



RA US

Adapter lead-through for control cabinet, female cable connector M12 x 1 – male cable connector M12 x 1, shielded



Contacts	Cable length	Ordering-No. ¹⁾
2+PE	2 m	77 0690 0689 50703-0200
	5 m	77 0690 0689 50703-0500
3+PE	2 m	77 0690 0689 50704-0200
	5 m	77 0690 0689 50704-0500

Contacts	Fixing thread	Ordering-No.
2+PE	M16 x 1,5	09 5270 10 03
3+PE		09 5271 10 04

Male cable connector, screw clamp connection



Contacts	Cable outlet	Ordering-No.
4+PE	8-13 mm	99 0699 29 05
		99 0699 37 05 with PE connection to the threaded ring

Male angled connector, screw clamp connection



Contacts	Cable outlet	Ordering-No.
4+PE	8-13 mm	99 0699 58 05
		99 0699 370 05 with PE connection to the threaded ring

Female cable connector, screw clamp connection



Contacts	Cable outlet	Ordering-No.
4+PE	8-13 mm	99 0700 29 05
		99 0700 37 05 with PE connection to the threaded ring

Female angled connector, screw clamp connection



Contacts	Cable outlet	Ordering-No.
4+PE	8-13 mm	99 0700 58 05
		99 0700 370 05 with PE connection to the threaded ring

Male panel mount connector with single wires, metal housing



Contacts	Fixing thread	WG	Ordering-No. ¹⁾
4+PE	M16 x 1,5	AWG 16	09 0701 700 05
		AWG 14	09 0701 400 05

Male panel mount connector with single wires, metal housing, **with PE connection to the housing**



Contacts	Fixing thread	WG	Ordering-No. ¹⁾
4+PE	M16 x 1,5	AWG 14	09 0701 37 05

Male panel mount connector with single wires, front fastened, metal housing



Contacts	Fixing thread	WG	Ordering-No. ¹⁾
4+PE	M16 x 1,5	AWG 16	09 0701 300 05
		AWG 14	09 0701 800 05

Female panel mount connector with single wires, metal housing



Contacts	Fixing thread	WG	Ordering-No. ¹⁾
4+PE	M16 x 1,5	AWG 16	09 0702 700 05
		AWG 14	09 0702 400 05

Female panel mount connector with single wires, metal housing, **with PE connection to the housing**



Contacts	Fixing thread	WG	Ordering-No. ¹⁾
4+PE	M16 x 1,5	AWG 14	09 0702 37 05

Female panel mount connector with single wires, front fastened, metal housing



Contacts	Fixing thread	WG	Ordering-No. ¹⁾
4+PE	M16 x 1,5	AWG 16	09 0702 300 05
		AWG 14	09 0702 800 05

Male cable connector, moulded



Contacts	WG	Cable length	Ordering-No. ¹⁾
4+PE	1,5 mm ²	2 m	77 0679 0000 70505-0200
		5 m	77 0679 0000 70505-0500
	2,5 mm ²	2 m	77 0679 0000 50505-0200
		5 m	77 0679 0000 50505-0500

Male angled connector, moulded



Contacts	WG	Cable length	Ordering-No. ¹⁾
4+PE	1,5 mm ²	2 m	77 0677 0000 70505-0200
		5 m	77 0677 0000 70505-0500
	2,5 mm ²	2 m	77 0677 0000 50505-0200
		5 m	77 0677 0000 50505-0500

Female cable connector, moulded



Contacts	WG	Cable length	Ordering-No. ¹⁾
4+PE	1,5 mm ²	2 m	77 0670 0000 70505-0200
		5 m	77 0670 0000 70505-0500
	2,5 mm ²	2 m	77 0670 0000 50505-0200
		5 m	77 0670 0000 50505-0500

Female angled connector, moulded



Contacts	WG	Cable length	Ordering-No. ¹⁾
4+PE	1,5 mm ²	2 m	77 0674 0000 70505-0200
		5 m	77 0674 0000 70505-0500
	2,5 mm ²	2 m	77 0674 0000 50505-0200
		5 m	77 0674 0000 50505-0500

Male cable connector M12 x 1 – female cable connector M12 x 1



Contacts	WG	Cable length	Ordering-No.
4+PE	1,5 mm ²	2 m	77 0679 0670 70505-0200
		5 m	77 0679 0670 70505-0500
	2,5 mm ²	2 m	77 0679 0670 50505-0200
		5 m	77 0679 0670 50505-0500

Male cable connector M12 x 1 – female angled connector M12 x 1



Contacts	WG	Cable length	Ordering-No.
4+PE	1,5 mm ²	2 m	77 0679 0674 70505-0200
		5 m	77 0679 0674 70505-0500
	2,5 mm ²	2 m	77 0679 0674 50505-0200
		5 m	77 0679 0674 50505-0500

Adapter lead-through for control cabinet, female cable connector M12 x 1 – male cable connector M12 x 1, shielded



Contacts	Fixing thread	Ordering-No.
4+PE	M16 x 1,5	09 5290 10 05

Male cable connector, screw clamp connection



Male cable connector, screw clamp connection, stainless steel locking ring



Contacts	Cable outlet	Ordering-No.
4	6–8 mm	99 0629 32 04
	8–10 mm	99 0629 19 04

Male cable connector, screw clamp connection, iris type spring, shieldable



Contacts	Cable outlet	Ordering-No.
4	5–8 mm	99 1631 814 04
	8–9 mm	99 1631 812 04

Male angled connector, screw clamp connection



Contacts	Cable outlet	Ordering-No.
4	8–10 mm	99 0629 58 04

Female cable connector, screw clamp connection



Female cable connector, screw clamp connection, stainless steel locking ring



Contacts	Cable outlet	Ordering-No.
4	6–8 mm	99 0630 32 04
	8–10 mm	99 0630 19 04

Female cable connector, screw clamp connection, iris type spring, shieldable



Contacts	Cable outlet	Ordering-No.
4	5–8 mm	99 1632 814 04
	8–9 mm	99 1632 812 04

Female angled connector, screw clamp connection



Contacts	Cable outlet	Ordering-No.
4	8–10 mm	99 0630 58 04

Male panel mount connector, screw clamp connection, metal housing



Male panel mount connector, front fastened, dip solder, metal housing



Contacts	Fixing thread	Ordering-No.
4	M20 x 1,5	99 0633 500 04

Male panel mount connector with single wires, plastic housing



Contacts	Fixing thread	Ordering-No. ¹⁾
4	M16 x 1,5	09 0631 300 04

Male panel mount connector, front fastened, with single wires, plastic housing



Contacts	Fixing thread	Ordering-No. ¹⁾
4	M16 x 1,5	09 0631 320 04

Male panel mount connector with single wires, metal housing



Male panel mount connector, front fastened, with single wires, metal housing



Contacts	Fixing thread	Ordering-No. ¹⁾
4	M16 x 1,5	09 0631 700 04

Male panel mount connector with single wires, metal housing



Contacts	Fixing thread	Ordering-No. ¹⁾
4	M20 x 1,5	09 0631 642 04

Male panel mount connector, rectangular flange, with single wires, metal housing



Contacts	Fixing thread	Ordering-No. ¹⁾
4	—	09 0631 070 04

Female panel mount connector, screw clamp connection, metal housing



Female panel mount connector, front fastened, dip solder, metal housing



Contacts	Fixing thread	Ordering-No.
4	M20 x 1,5	99 0634 500 04

Contacts	Fixing thread	Ordering-No.
4	M16 x 1,5	09 0632 90 04

Female panel mount connector with single wires, plastic housing



Contacts	Fixing thread	Ordering-No. ¹⁾
4	M16 x 1,5	09 0632 300 04

Female panel mount connector, front fastened, with single wires, plastic housing



Contacts	Fixing thread	Ordering-No. ¹⁾
4	PG 9	09 0632 321 04

Female panel mount connector with single wires, metal housing



Female panel mount connector, front fastened, with single wires, metal housing



Contacts	Fixing thread	Ordering-No. ¹⁾
4	M16 x 1,5	09 0632 700 04

Contacts	Fixing thread	Ordering-No. ¹⁾
4	M16 x 1,5	09 0632 120 04

Female panel mount connector with single wires, metal housing



Contacts	Fixing thread	Ordering-No. ¹⁾
4	M20 x 1,5	09 0632 642 04

Female panel mount connector, rectangular flange, with single wires, metal housing



Contacts	Fixing thread	Ordering-No. ¹⁾
4	—	09 0632 070 04

Male cable connector, moulded



Male angled connector, moulded



Contacts	Cable length	Male cable connector ²⁾	Male angled connector ²⁾
4	2 m	77 0629 0000 50704-0200	77 0627 0000 50704-0200
	5 m	77 0629 0000 50704-0500	77 0627 0000 50704-0500

Female cable connector, moulded



Contacts	Cable length	Male cable connector ²⁾	Male angled connector ²⁾
4	2 m	77 0630 0000 50704-0200	77 0634 0000 50704-0200
	5 m	77 0630 0000 50704-0500	77 0634 0000 50704-0500

Female angled connector, moulded



Male cable connector M12 x 1 – female cable connector M12 x 1



Contacts	Cable length	Ordering-No. ²⁾
4	2 m	77 0630 0629 50704-0200
	5 m	77 0630 0629 50704-0500

Adapter lead-through for control cabinet, female cable connector M12 x 1 – male cable connector M12 x 1, shielded



Contacts	Fixing thread	Ordering-No.
4	M16 x 1,5	09 5260 10 04

Male cable connector, screw clamp connection



Male cable connector, screw clamp connection, stainless steel locking ring



Male angled connector, screw clamp connection



Contacts	Cable outlet	Ordering-No.
4+FE	8-13 mm	99 0639 29 05
		99 0639 37 05 with FE connection to the threaded ring

Contacts	Cable outlet	Ordering-No.
4+FE	8-13 mm	99 0639 39 05

Contacts	Cable outlet	Ordering-No.
4+FE	8-13 mm	99 0639 58 05
		99 0639 370 05 with FE connection to the threaded ring

Female cable connector, screw clamp connection



Female cable connector, screw clamp connection, stainless steel locking ring



Female angled connector, screw clamp connection



Contacts	Cable outlet	Ordering-No.
4+FE	8-13 mm	99 0640 29 05
		99 0640 37 05 with FE connection to the threaded ring

Contacts	Cable outlet	Ordering-No.
4+FE	8-13 mm	99 0640 39 05

Contacts	Cable outlet	Ordering-No.
4+FE	8-13 mm	99 0640 58 05
		99 0640 370 05 with FE connection to the threaded ring

Male panel mount connector with single wires, metal housing



Male panel mount connector with single wires, metal housing, with FE connection to the housing



Male panel mount connector with single wires, front fastened, metal housing



Contacts	Fixing thread	WG	Ordering-No. ¹⁾
4+FE	M16 x 1,5	AWG 16	09 0641 700 05
		AWG 14	09 0641 400 05

Contacts	Fixing thread	WG	Ordering-No. ¹⁾
4+FE	M16 x 1,5	AWG 14	09 0641 37 05

Contacts	Fixing thread	WG	Ordering-No. ¹⁾
4+FE	M16 x 1,5	AWG 14	09 0641 800 05

Male panel mount connector, two-part design, dip solder



Male panel mount connector, front fastened, two-part design, dip solder



Male receptacle, dip solder



Contacts	Fixing thread	Ordering-No.
4+FE	M16 x 1,5	99 0641 20 05

Contacts	Fixing thread	Ordering-No.
4+FE	M16 x 1,5	99 0641 10 05

Contacts	Fixing thread	Ordering-No.
4+FE	M16 x 1,5	09 0641 100 05

Female panel mount connector with single wires, metal housing



Female panel mount connector with single wires, metal housing, with FE connection to the housing



Female panel mount connector with single wires, front fastened, metal housing



Contacts	Fixing thread	WG	Ordering-No. ¹⁾
4+FE	M16 x 1,5	AWG 16	09 0642 700 05
		AWG 14	09 0642 400 05

Contacts	Fixing thread	WG	Ordering-No. ¹⁾
4+FE	M16 x 1,5	AWG 14	09 0642 37 05

Contacts	Fixing thread	WG	Ordering-No. ¹⁾
4+FE	M16 x 1,5	AWG 14	09 0642 800 05

Female panel mount connector, two-part design, dip solder



Female panel mount connector, front fastened, two-part design, dip solder



Female receptacle, dip solder



Contacts	Fixing thread	Ordering-No.
4+FE	M16 x 1,5	99 0642 20 05

Contacts	Fixing thread	Ordering-No.
4+FE	M16 x 1,5	99 0642 10 05

Contacts	Fixing thread	Ordering-No.
4+FE	M16 x 1,5	09 0642 100 05

Male cable connector, moulded



Male angled connector, moulded



Female cable connector, moulded



Female angled connector, moulded



Contacts	WG	Cable length	Male cable connector ²⁾	Male angled connector ²⁾
4+FE	1,5 mm ²	2 m	77 0649 0000 70505-0200	77 0647 0000 70505-0200
		5 m	77 0649 0000 70505-0500	77 0647 0000 70505-0500
	2,5 mm ²	2 m	77 0649 0000 50505-0200	77 0647 0000 50505-0200
		5 m	77 0649 0000 50505-0500	77 0647 0000 50505-0500

Contacts	WG	Cable length	Female cable connector ²⁾	Female angled connector ²⁾
4+FE	1,5 mm ²	2 m	77 0650 0000 70505-0200	77 0654 0000 70505-0200
		5 m	77 0650 0000 70505-0500	77 0654 0000 70505-0500
	2,5 mm ²	2 m	77 0650 0000 50505-0200	77 0654 0000 50505-0200
		5 m	77 0650 0000 50505-0500	77 0654 0000 50505-0500

Male cable connector M12 x 1 – female cable connector M12 x 1



Male cable connector M12 x 1 – female angled connector M12 x 1



Adapter lead-through for control cabinet, female cable connector M12 x 1 – male cable connector M12 x 1, shielded



Contacts	WG	Cable length	Ordering-No.
4+FE	1,5 mm ²	2 m	77 0650 0649 70505-0200
		5 m	77 0650 0649 70505-0500
	2,5 mm ²	2 m	77 0650 0649 50505-0200
		5 m	77 0650 0649 50505-0500

Contacts	WG	Cable length	Ordering-No.
4+FE	1,5 mm ²	2 m	77 0654 0649 70505-0200
		5 m	77 0654 0649 70505-0500
	2,5 mm ²	2 m	77 0654 0649 50505-0200
		5 m	77 0654 0649 50505-0500

Contacts	Fixing thread	Ordering-No.
4+FE	M16 x 1,5	09 5291 10 05

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Specifications may be changed without notice, errors excepted.

Terms: www.binder-connector.com/en/terms

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