



M12 DISTRIBUTION SYSTEMS METAL

- Rugged
- Resistant to media
- Sealed

POTTED FORMS FOR HARSH ENVIRONMENTS

- Metal housing withstands mechanical and thermal stress, with molded cable or maintenance-friendly M23 plug connection
- High quality PUR cable: suitable for C-tracks, halogen-free, wider wire cross sections for higher current capacity
- Shielded models for sensitive digital or analog signals for an EMC compatible installation
- Universal configuration - contacts designed 1:1
- Fully potted

With molded homerun cable or M23 plug connection



MVP12 Metal

- 4-, 8-way
- With LED for PNP or NPN signals
- Without LED for analog signals and voltages up to 125 VAC/DC
- With PUR homerun cable or M23 connection

Page 4.12.1



MVP12 Metal UNIVERSAL

- 4-way
- M12 Pin 1, 2, 3, and 4 freely configurable

Page 4.12.8

M12 DISTRIBUTION SYSTEMS (METAL)

For sensors and actuators

– with molded homerun cable

– unshielded

Approvals: 

MVP12 Metal

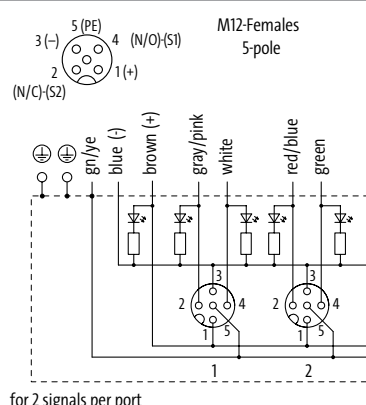
4-way
for PNP signals 24 V DC



MVP12 Metal

8-way
for PNP signals 24 V DC



1 Form		54510	58510
Type		PNP, 5-pole	PNP, 5-pole
Contact layout		 for 2 signals per port	
2 Cable Type		Jacket Color – No./diameter of wires	
PUR (UL/CSA), robots/C-tracks		gray	gray
		448 – 8 × 0.5 + 3 × 1.0 mm ²	452 – 16 × 0.5 + 3 × 1.0 mm ²
3 Cable Length			
3.0 m		0300	
5.0 m		0500	
10.0 m		1000	
15.0 m		1500	
Technical Data			
Operating voltage		24 V DC	
Total current		max. 7.5 A	
Protection		IP65, IP67, IP68	
Temperature range		-20...+90 °C, depending on cable quality	
Contact Layout			
LED display		LED (green): Power / LED (yellow): (S1/S2)	
PIN 1		(+) (NC)/(S2)	
PIN 2		(-) (NO)/(S1)	
PIN 3		(Earth)	
Article No.			
The composition of your article number is explained on page 3.1.i		8 0 0 0 - - - - -	
		1 Form	2 Cable Type
		3 Cable Length	
Notes			

M12 DISTRIBUTION SYSTEMS (METAL)

For sensors and actuators

– with molded homerun cable

– unshielded

Approvals: 

MVP12 Metal

8-way
with potential separation



MVP12 Metal

4-way
without LED

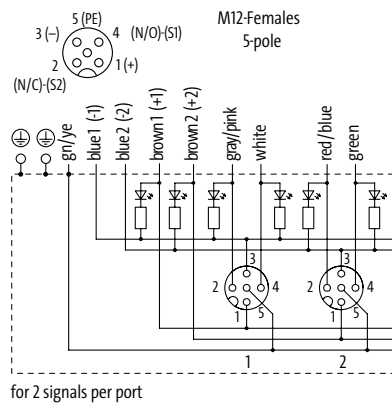


1 Form

58 610

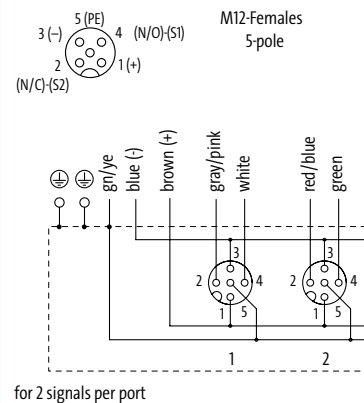
PNP, 5-pole

Type
Contact layout



54 512

without LED, 5-pole (for analog signals)



2 Cable Type

Jacket Color – No./diameter of wires

PUR (UL/CSA), robots/C-tracks

gray
403 – 16 × 0.34 + 5 × 0.75 mm²

gray
448 – 8 × 0.5 + 3 × 1.0 mm²

3 Cable Length

3.0 m **0300**
5.0 m **0500**
10.0 m **1000**
15.0 m **1500**

Technical Data

Operating voltage 24 V DC max. 125 V AC/DC
Total current max. 7.5 A
Protection IP65, IP67, IP68
Temperature range -20...+90 °C, depending on cable quality

Contact Layout

LED display LED (green): Power / LED (yellow): (S1/S2)
PIN 1 (+)
PIN 2 (N/C)/(S2)
PIN 3 (-)
PIN 4 (N/O)/(S1)
PIN 5 (Earth)

Article No.

The composition of your article number is explained on page 3.1.i

8 0 0 0

1 Form

2 Cable Type

3 Cable Length

Notes

M12 DISTRIBUTION SYSTEMS (METAL)

For sensors and actuators

– with molded homerun cable

– shielded

Approvals:  US
Listed

MVP12 Metal

4-way



MVP12 Metal

8-way



1 Form

54515

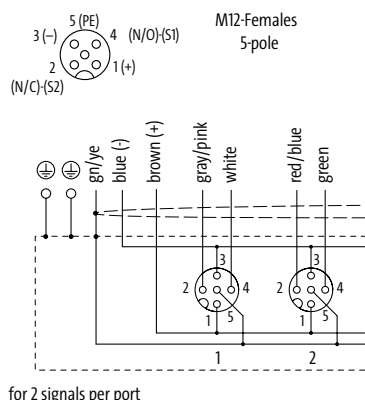
without LED, 5-pole (for analog signals)

58515

without LED, 5-pole (for analog signals)

Type

Contact layout



2 Cable Type

Jacket Color – No./diameter of wires

PUR (UL/CSA), robots/C-tracks

gray

373 – 8 × 0.34 + 3 × 0.75 mm²

gray

401 – 16 × 0.34 + 3 × 0.75 mm²

3 Cable Length

3.0 m

0300

5.0 m

0500

10.0 m

1000

15.0 m

1500

Technical Data

Operating voltage

max. 125 V AC/DC

Total current

max. 7.5 A

Protection

IP65, IP67, IP68

Temperature range

-20...+90 °C, depending on cable quality

Contact Layout

PIN 1

(+)

PIN 2

(NC)/(S2)

PIN 3

(-)

PIN 4

(NO)/(S1)

PIN 5

(Earth)

Shield

via M12 thread

Article No.

The composition of your article number is explained on page 3.1.i

8 0 0 0

-

-

1 Form

2 Cable Type

3 Cable Length

Notes

M12 DISTRIBUTION SYSTEMS (METAL)

For sensors and actuators

– with molded homerun cable

– shielded

Approvals: US Listed

MVP12 Metal

4-way
for PNP signals 24 V DC



MVP12 Metal

8-way
for PNP signals 24 V DC



1 Form		54513	58513
Type		PNP, 5-pole	PNP, 5-pole
Contact layout		for 2 signals per port	
2 Cable Type		Jacket Color – No./diameter of wires	
PUR (UL/CSA), robots/C-tracks		gray	gray
		373 – 8 × 0.34 + 3 × 0.75 mm ²	401 – 16 × 0.34 + 3 × 0.75 mm ²
3 Cable Length			
3.0 m		0300	
5.0 m		0500	
10.0 m		1000	
15.0 m		1500	
Technical Data			
Operating voltage		24 V DC	
Total current		max. 7.5 A	
Protection		IP65, IP67, IP68	
Temperature range		-20...+90 °C, depending on cable quality	
Contact Layout			
LED display		LED (green): Power / LED (yellow): (S1/S2)	
PIN 1		(+)	
PIN 2		(NC)/(S2)	
PIN 3		(-)	
PIN 4		(NO)/(S1)	
PIN 5		(Earth)	
Shield		via M12 thread	
Article No.			
The composition of your article number is explained on page 3.1.i		8 0 0 0	– – – – –
		1 Form	2 Cable Type 3 Cable Length
Notes			

M12 DISTRIBUTION SYSTEMS (METAL)

For sensors and actuators

- M23 plug connection, 19-pole
- for unshielded or shielded use

Approvals:  US Listed

MVP12 Metal
4-way
for PNP signals 24 V DC



MVP12 Metal
8-way
for PNP signals 24 V DC



1	Form	54520	58520
	Type	PNP, 5-pole	PNP, 5-pole
	Contact layout	M12-Females 5-pole M23-Plug 19-pole	

M12 DISTRIBUTION SYSTEMS (METAL)

For sensors and actuators

- M23 plug connection, 19-pole
- for unshielded or shielded use

Approvals:  **UL** US Listed

MVP12 Metal

4-way



MVP12 Metal

8-way



1 Form

54522

58522

Type

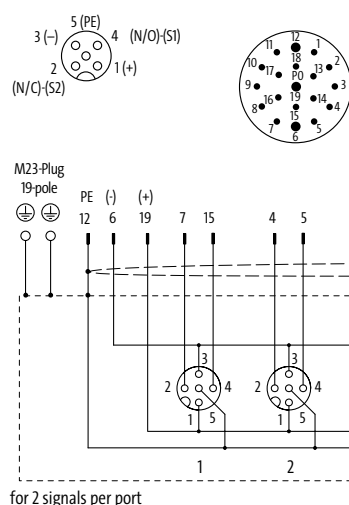
without LED, 5-pole (for analog signals)

without LED, 5-pole (for analog signals)

Contact layout

M12-Females 5-pole

M23-Plug 19-pole



Technical Data

Operating voltage	max. 125 V AC/DC
Operating current per contact	max. 4 A
Total current	max. 7.5 A
Protection	IP65, IP67, IP68
Housing	Zinc die casting, matte nickel plated
Temperature range	-25...+80 °C

Contact Layout

PIN 1	(+)
PIN 2	(NC)/(S2)
PIN 3	(-)
PIN 4	(NO)/(S1)
PIN 5	(Earth)
Shield	via M12 outer thread and M23 outer thread

Article No.

The composition of your article number is explained on page 3.1.i

8 0 0 0

1 Form

0 0 0

0 0 0 0

Notes

M12 DISTRIBUTION SYSTEMS (METAL)

For harsh environments

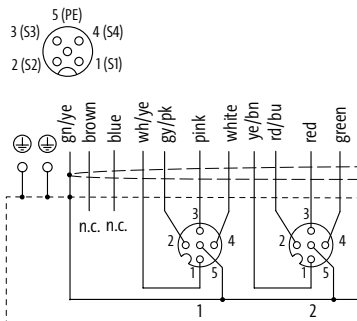
- for unshielded or shielded use

MVP12 Metal UNIVERSAL

with molded homerun cable

4-way



1	Form	54712					
Type		without LED, 5-pole (for analog signals)					
Contact layout		M12-Females 5-pole  for 4 signals per port free arrangeable, PE bridged					
2	Cable Type	Jacket Color – No./diameter of wires					
		gray					
PUR (UL/CSA), robots/C-tracks		401 – 16 × 0.34 + 3 × 0.75 mm²					
3	Cable Length						
3.0 m		0300					
5.0 m		0500					
10.0 m		1000					
15.0 m		1500					
Technical Data							
Operating voltage		max. 42 V AC/DC					
Total current		max. 10 A					
Protection		IP65, IP67, IP68					
Temperature range		-20...+90 °C, depending on cable quality					
Contact Layout							
PIN 1		(S1)					
PIN 2		(S2)					
PIN 3		(S3)					
PIN 4		(S4)					
PIN 5		(Earth)					
Shield		via M12 thread					
Article No.							
The composition of your article number is explained on page 3.1.i		8 0 0 0 – 5 4 7 1 2 –					
		1	Form	2	Cable Type	3	Cable Length
Notes							

M12 DISTRIBUTION SYSTEMS (METAL)

For harsh environments

– for unshielded or shielded use

Approvals:  **UL** US
Listed

MVP12 Metal UNIVERSAL

M23 plug connection, 19-pole
4-way

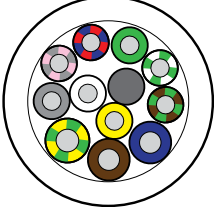
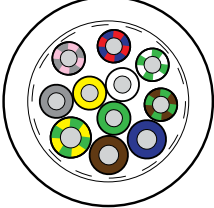


1 Form		54722			
Type		without LED, 5-pole (for analog signals)			
Contact layout		M12-Females 5-pole 5 (PE) 3 (S3) 4 (S4) 2 (S2) 1 (S1) M23-Plug 19-pole 12 6 19 9 7 17 15 13 4 2 5 ⊕ ⊕ ⊖ ⊖ n.c. n.c. 3 2 4 1 5 3 2 4 1 5 1 2 for 4 signals per port			
Technical Data					
Operating voltage		max. 125 V AC/DC			
Operating current per contact		max. 4 A			
Total current		max. 7.5 A			
Protection		IP65, IP67, IP68			
Housing		Zinc die casting, matte nickel plated			
Locking of ports		Screw thread M12 × 1 mm			
Temperature range		-25...+90 °C			
Contact Layout					
PIN 1		(S1)			
PIN 2		(S2)			
PIN 3		(S3)			
PIN 4		(S4)			
PIN 5		(S5)/(Earth)			
Article No.					
The composition of your article number is explained on page 3.1.i		8 0 0 0 - 5 4 7 2 2 - 0 0 0 0 0 0 0			
		1 Form			
Notes					

M12 DISTRIBUTION SYSTEMS (METAL)

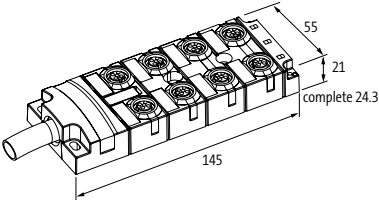
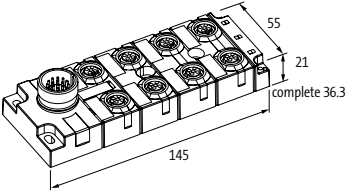
Mounting accessories			Art-No.
	Torque wrench set M12 (0.6 Nm, SW13)	M12 data connenctor molded (standard)	7000-99102-0000000
	Torque wrench M12 (0.6 Nm, SW13)	M12 data connenctor molded (standard)	7000-99109-0000000
	Torque wrench M12 (0.6 Nm, SW14)	M12 data connenctor moulded (Xtreme)	7000-99108-0000000
	Torque wrench M12 (0.6 Nm, SW17)	M12 field-wireable (IDC terminal)	7000-99094-0000000
	Torque wrench M12 (0.6 Nm, SW18)	M12 field-wireable via (screw terminals)	7000-99103-0000000
	DIN-rail adapter with fixing screws, plastic		27905
	Earth connection set		996064
	V2A-base plate	MVP12 Metal, 4-way	996065
		MVP12 Metal, 8-way	996066
	Ground strap 4 mm² 100 mm for hole (M3)		4000-71001-0410003
	End fitting set M3	Ground straps	4000-71003-0101403
Plug accessories			Art-No.
	Torque wrench set M12 (0.6 Nm, SW13)	M12 data connenctor molded (standard)	7000-99102-0000000
	Screw plug M12 × 1 mm Metal, hex, 1 piece		996049

M12 DISTRIBUTION SYSTEMS (METAL)

Plug accessories			Art-No.
	Label plates		
	KES 20 × 8 (white)	(10 pieces/2 plates)	996067
	Adapter M8/M12		
	3-pole	M12 Distribution Systems	7000-42201-0000000
	4-pole	M12 Distribution Systems	7000-42211-0000000
Homerun cable accessories			Art-No.
	Screw plug M23		
	Metal		55352
	Cable rings (50 m), 5-pole, PUR (UL/CSA), halogen free		
	8×0.5 + 3×1.0 mm ²	4-way distribution boxes M12	8000-00000-4485000
	16×0.5 + 3×1.0 mm ²	8-way distribution boxes M12	8000-00000-4525000
	16×0.34 + 5×0.75 mm ²	8-way distribution boxes M12, potentially separated	8000-00000-4035000
	Cable rings (50 m), 5-pole, PUR (UL/CSA), halogen free		
	8×0.34 + 3×0.75 mm ²	4-way distribution boxes M12, shielded	8000-00000-3735000
	16×0.34 + 3×0.75 mm ²	8-way distribution boxes M12, shielded	8000-00000-4015000

M12 DISTRIBUTION SYSTEMS (METAL)

M12 Distribution Systems Technical Data

	Description	4-way	8-way
	MVP Metal and MVP Metal UNIVERSAL Molded homerun cable	95 mm	145 mm
	Description	4-way	8-way
	MVP Metal and MVP Metal UNIVERSAL M23 plug connection	95 mm	145 mm