

## MVP-METALL, 4XM12, 5POLE, PRE-WIRED CABLE

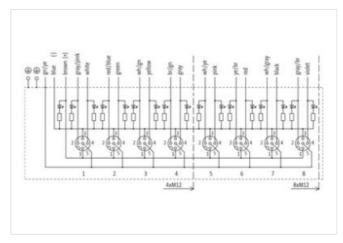
3.0m PUR 8x0,5+3x1,0, UL/CSA

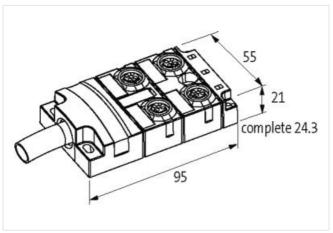
4-way, 5-pole 3.0 m with LED for digital PNP-signals 24 V DC Replaces identical product (Art.No. 27471) Further cable lengths on request.

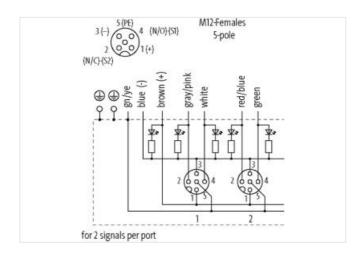
## **Link to Product**

## Illustration









Product may differ from Image









Commercial data		
ECLASS-6.0	27279219	
ECLASS-6.1	27279219	
ECLASS-7.0	27279219	
ECLASS-8.0	27279219	
ECLASS-9.0	27440108	



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ECLASS-10.1	27440108
ECLASS-11.1	27440108
ECLASS-12.0	27440108
ETIM-5.0	EC002585
customs tariff number	85444290
GTIN	4048879350907
Packaging unit	1
Electrical data   Supply	
Operating voltage DC	24 V
Current operating per contact max.	4 A
	44
Installation   Connection	
Mounting set	M12 x 1
Device protection   Electrical	
Degree of protection (EN IEC 60529)	IP65, IP67, IP68
Mechanical data   Material data	
Coating housing	Nickeled
Material housing	Zinc die-casting
Mechanical data   Mounting data	
Mounting method	Schraubgewinde
	Och addy-swillide
Environmental characteristics   Climatic	
Operating temperature min.	-25 °C
Operating temperature max.	90 °C
Additional condition temperature range	depending on cable quality
Installation   Cable	
Cable identification	448
Jacket Color	gray
Type of Certificate	cURus
Amount stranding	1
Stranding	2 wires with Filler twisted
Stranding Stranding factor min.	2 wires with Filler twisted 51 mm
Stranding Stranding factor min. Stranding factor max.	2 wires with Filler twisted 51 mm 51 mm
Stranding Stranding factor min. Stranding factor max. Amount stranding (type 2)	2 wires with Filler twisted 51 mm
Stranding Stranding factor min. Stranding factor max. Amount stranding (type 2) Stranding (type 2)	2 wires with Filler twisted 51 mm 51 mm 1 9 wires around Stranding combination counter-rotating twisted
Stranding Stranding factor min. Stranding factor max. Amount stranding (type 2) Stranding (type 2) Stranding factor min. (type 2)	2 wires with Filler twisted  51 mm  51 mm  1  9 wires around Stranding combination counter-rotating twisted  100 mm
Stranding Stranding factor min. Stranding factor max. Amount stranding (type 2) Stranding (type 2) Stranding factor min. (type 2) Stranding factor max. (type 2)	2 wires with Filler twisted  51 mm  51 mm  1  9 wires around Stranding combination counter-rotating twisted  100 mm  100 mm
Stranding Stranding factor min. Stranding factor max.  Amount stranding (type 2) Stranding (type 2) Stranding factor min. (type 2) Stranding factor max. (type 2) Banding	2 wires with Filler twisted 51 mm 51 mm 1 9 wires around Stranding combination counter-rotating twisted 100 mm 100 mm Fleece
Stranding Stranding factor min. Stranding factor max. Amount stranding (type 2) Stranding (type 2) Stranding factor min. (type 2) Stranding factor max. (type 2) Banding Filler	2 wires with Filler twisted  51 mm  51 mm  1  9 wires around Stranding combination counter-rotating twisted  100 mm  100 mm  Fleece  yes
Stranding Stranding factor min. Stranding factor max. Amount stranding (type 2) Stranding (type 2) Stranding factor min. (type 2) Stranding factor max. (type 2) Banding Filler wire arrangement	2 wires with Filler twisted  51 mm  51 mm  1  9 wires around Stranding combination counter-rotating twisted  100 mm  100 mm  Fleece  yes  white, yellow, (blue, brown, green-yellow, gray, gray-pink, red-blue, green, green-white, brown-green)
Stranding Stranding factor min. Stranding factor max. Amount stranding (type 2) Stranding factor min. (type 2) Stranding factor min. (type 2) Stranding factor max. (type 2) Banding Filler wire arrangement Cable weigth	2 wires with Filler twisted  51 mm  51 mm  1  9 wires around Stranding combination counter-rotating twisted  100 mm  100 mm  Fleece  yes  white, yellow, (blue, brown, green-yellow, gray, gray-pink, red-blue, green, green-white, brown-green)  146,3 g/m
Stranding Stranding factor min. Stranding factor max. Amount stranding (type 2) Stranding factor min. (type 2) Stranding factor min. (type 2) Stranding factor max. (type 2) Banding Filler wire arrangement Cable weigth Material jacket	2 wires with Filler twisted  51 mm  51 mm  1  9 wires around Stranding combination counter-rotating twisted  100 mm  100 mm  Fleece  yes  white, yellow, (blue, brown, green-yellow, gray, gray-pink, red-blue, green, green-white, brown-green)  146,3 g/m  PUR
Stranding Stranding factor min. Stranding factor max. Amount stranding (type 2) Stranding factor min. (type 2) Stranding factor min. (type 2) Stranding factor max. (type 2) Banding Filler wire arrangement Cable weigth Material jacket Shore hardness jacket	2 wires with Filler twisted  51 mm  51 mm  1  9 wires around Stranding combination counter-rotating twisted  100 mm  100 mm  Fleece  yes  white, yellow, (blue, brown, green-yellow, gray, gray-pink, red-blue, green, green-white, brown-green)  146,3 g/m  PUR  94 ± 5 Shore A
Stranding Stranding factor min. Stranding factor max. Amount stranding (type 2) Stranding factor min. (type 2) Stranding factor min. (type 2) Stranding factor max. (type 2) Banding Filler wire arrangement Cable weigth Material jacket Shore hardness jacket Freedom from ingredients (jacket)	2 wires with Filler twisted  51 mm  51 mm  1  9 wires around Stranding combination counter-rotating twisted  100 mm  100 mm  Fleece  yes  white, yellow, (blue, brown, green-yellow, gray, gray-pink, red-blue, green, green-white, brown-green)  146,3 g/m  PUR  94 ± 5 Shore A  lead-free, cadmium-free, CFC-free, halogen-free, silicone-free, LABS-free
Stranding Stranding factor min. Stranding factor max. Amount stranding (type 2) Stranding factor min. (type 2) Stranding factor min. (type 2) Stranding factor max. (type 2) Banding Filler wire arrangement Cable weigth Material jacket Shore hardness jacket Freedom from ingredients (jacket) Outer-diameter (jacket)	2 wires with Filler twisted  51 mm  51 mm  1  9 wires around Stranding combination counter-rotating twisted  100 mm  100 mm  Fleece  yes  white, yellow, (blue, brown, green-yellow, gray, gray-pink, red-blue, green, green-white, brown-green)  146,3 g/m  PUR  94 ± 5 Shore A  lead-free, cadmium-free, CFC-free, halogen-free, silicone-free, LABS-free  9 mm
Stranding Stranding factor min. Stranding factor max. Amount stranding (type 2) Stranding factor min. (type 2) Stranding factor min. (type 2) Stranding factor max. (type 2) Banding Filler wire arrangement Cable weigth Material jacket Shore hardness jacket Freedom from ingredients (jacket) Outer-diameter (jacket) Tolerance outer diameter (sheath)	2 wires with Filler twisted  51 mm  51 mm  1  9 wires around Stranding combination counter-rotating twisted  100 mm  100 mm  Fleece  yes  white, yellow, (blue, brown, green-yellow, gray, gray-pink, red-blue, green, green-white, brown-green)  146,3 g/m  PUR  94 ± 5 Shore A  lead-free, cadmium-free, CFC-free, halogen-free, silicone-free, LABS-free  9 mm  ± 5 %
Stranding Stranding factor min. Stranding factor max.  Amount stranding (type 2) Stranding factor min. (type 2) Stranding factor min. (type 2) Stranding factor max. (type 2) Banding Filler wire arrangement Cable weigth Material jacket Shore hardness jacket Freedom from ingredients (jacket) Outer-diameter (jacket) Tolerance outer diameter (sheath) Material wire insulation	2 wires with Filler twisted  51 mm  51 mm  1  9 wires around Stranding combination counter-rotating twisted  100 mm  100 mm  Fleece  yes  white, yellow, (blue, brown, green-yellow, gray, gray-pink, red-blue, green, green-white, brown-green)  146,3 g/m  PUR  94 ± 5 Shore A  lead-free, cadmium-free, CFC-free, halogen-free, silicone-free, LABS-free  9 mm  ± 5 %  TPE-E
Stranding Stranding factor min. Stranding factor max. Amount stranding (type 2) Stranding factor min. (type 2) Stranding factor min. (type 2) Stranding factor max. (type 2) Banding Filler wire arrangement Cable weigth Material jacket Shore hardness jacket Freedom from ingredients (jacket) Outer-diameter (jacket) Tolerance outer diameter (sheath)	2 wires with Filler twisted  51 mm  51 mm  1  9 wires around Stranding combination counter-rotating twisted  100 mm  100 mm  Fleece  yes  white, yellow, (blue, brown, green-yellow, gray, gray-pink, red-blue, green, green-white, brown-green)  146,3 g/m  PUR  94 ± 5 Shore A  lead-free, cadmium-free, CFC-free, halogen-free, silicone-free, LABS-free  9 mm  ± 5 %
Stranding Stranding factor min. Stranding factor max. Amount stranding (type 2) Stranding factor min. (type 2) Stranding factor min. (type 2) Stranding factor max. (type 2) Banding Filler wire arrangement Cable weigth Material jacket Shore hardness jacket Freedom from ingredients (jacket) Outer-diameter (jacket) Tolerance outer diameter (sheath) Material wire insulation Amount wires Outer diameter insulation	2 wires with Filler twisted  51 mm  51 mm  1  9 wires around Stranding combination counter-rotating twisted  100 mm  100 mm  Fleece yes  white, yellow, (blue, brown, green-yellow, gray, gray-pink, red-blue, green, green-white, brown-green)  146,3 g/m  PUR  94 ± 5 Shore A  lead-free, cadmium-free, CFC-free, halogen-free, silicone-free, LABS-free  9 mm  ± 5 %  TPE-E  8  1,6 mm
Stranding Stranding factor min. Stranding factor max. Amount stranding (type 2) Stranding factor min. (type 2) Stranding factor min. (type 2) Stranding factor max. (type 2) Banding Filler wire arrangement Cable weigth Material jacket Shore hardness jacket Freedom from ingredients (jacket) Outer-diameter (jacket) Tolerance outer diameter (sheath) Material wire insulation Amount wires	2 wires with Filler twisted 51 mm 51 mm 1 9 wires around Stranding combination counter-rotating twisted 100 mm 100 mm Fleece yes white, yellow, (blue, brown, green-yellow, gray, gray-pink, red-blue, green, green-white, brown-green) 146,3 g/m PUR 94 ± 5 Shore A lead-free, cadmium-free, CFC-free, halogen-free, silicone-free, LABS-free 9 mm ± 5 % TPE-E 8 1,6 mm ± 5 %
Stranding Stranding factor min. Stranding factor max. Amount stranding (type 2) Stranding factor min. (type 2) Stranding factor min. (type 2) Stranding factor max. (type 2) Banding Filler wire arrangement Cable weigth Material jacket Shore hardness jacket Freedom from ingredients (jacket) Outer-diameter (jacket) Tolerance outer diameter (sheath) Material wire insulation Amount wires Outer diameter insulation Outer diameter tolerance core insulation Shore hardness wire insulation	2 wires with Filler twisted 51 mm 51 mm 1 9 wires around Stranding combination counter-rotating twisted 100 mm 100 mm Fleece yes white, yellow, (blue, brown, green-yellow, gray, gray-pink, red-blue, green, green-white, brown-green) 146,3 g/m PUR 94 ± 5 Shore A lead-free, cadmium-free, CFC-free, halogen-free, silicone-free, LABS-free 9 mm ± 5 % TPE-E 8 1,6 mm ± 5 % 55 ± 3 Shore D
Stranding Stranding factor min. Stranding factor max. Amount stranding (type 2) Stranding factor min. (type 2) Stranding factor min. (type 2) Stranding factor min. (type 2) Banding Filler wire arrangement Cable weigth Material jacket Shore hardness jacket Freedom from ingredients (jacket) Outer-diameter (jacket) Tolerance outer diameter (sheath) Material wire insulation Amount wires Outer diameter insulation Outer diameter tolerance core insulation	2 wires with Filler twisted 51 mm 51 mm 1 9 wires around Stranding combination counter-rotating twisted 100 mm 100 mm Fleece yes white, yellow, (blue, brown, green-yellow, gray, gray-pink, red-blue, green, green-white, brown-green) 146,3 g/m PUR 94 ± 5 Shore A lead-free, cadmium-free, CFC-free, halogen-free, silicone-free, LABS-free 9 mm ± 5 % TPE-E 8 1,6 mm ± 5 %



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Diameter of single wires	0,1 mm
Conductor crosssection (wire)	0,5 mm <sup>2</sup>
Material conductor wire	Stranded copper wire, bare
Conductor type (wire)	strand class 6
Material wire insulation (Data)	TPE-E
Outer diameter wire insulation (Data)	2,1 mm
Tolerance outer diameter wire insulation (data)	· · · · · · · · · · · · · · · · · · ·
Shore hardness wire insulation (Data)	55 ± 3 Shore D
Ingredient freeness wire insulation (Data)	lead-free, cadmium-free, CFC-free, halogen-free, silicone-free, LABS-free
Amount wires (Data)	3
Amount strands wire (Data)	128
Diameter of single wires (Data)	0,1 mm
Conductor crosssection wire (Data)	1 mm <sup>2</sup>
Material conductor wire (Data)	Stranded copper wire, bare
Wire conductor type (Data)	strand class 6
Max. rated voltage (conductor - conductor)	500 V 300 V
Max. rated voltage (conductor - ground)	
Current load capacity (standard)	to DIN VDE 0298-4
Current load capacity min. wire	5,9 A
Current load capacity min. Wire (Data)	15 A
Electrical resistance line constant wire	39 Ω/km @ 20 °C
Electrical resistance coating wire (Data)	20 Ω/km @ 20 °C
AC withstand voltage (wire - wire)	2 kV @ 60 s
Power frequency withstand voltage (wire - jacket)	2 kV @ 60 s
Min. operating temperature (static)	-40 °C
Max. operating temperature (fixed)	90 °C
Operating temperature min. (dynamic)	-40 °C
Operating temperature max. (dynamic)	90 °C
Flame resistance	UL 1581 § 1090   UL 1581 § 1100 FT2   IEC 60332-2-2
chemical resistance	Good, application-related testing
Gasoline resistance	Good, application-related testing
Oil resistance	DIN EN 60811-404   Good, application-related testing
Bending radius (installation)	x Outer diameter
Bending radius (fixed)	x Outer diameter
Bending radius (dynamic)	10 x Outer diameter
Travel speed (C-track)	5 Mio. @ 25 °C
No. of torsion cycles	0,5 Mio.
Torsion stress	± 180 °/m
Connection type 2	
Family construction form	free cable end
No. of poles	16
Family construction form	M12
Gender	female
Color contact carrier	black
Coding	A
No. of poles	5
PIN 1	+
PIN 2	NC S 2
PIN 3	-
PIN 4	NO S 1
PIN 5	PE