

**M12 male 0° / M12 female 0° A-cod. shielded**

PVC 3x2x0.25+6x0.25 shielded bk UL/CSA 10m

Primary / Master camera cable for Cognex and Zebra

M12 A-coded 12P straight &lt;&gt; M12 A-coded 12P straight

Male straight – female straight

Pinning 1:1

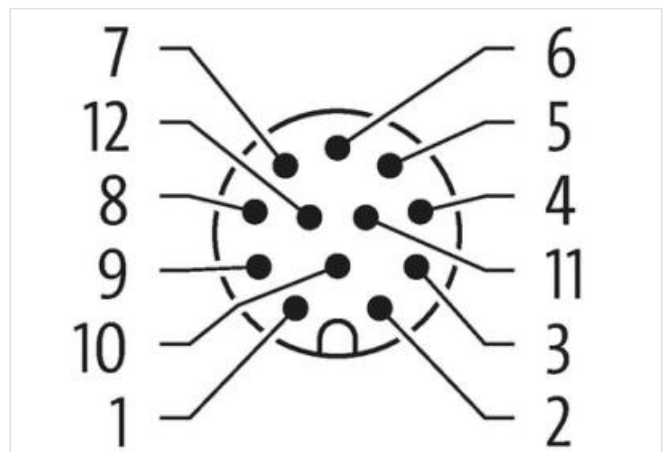
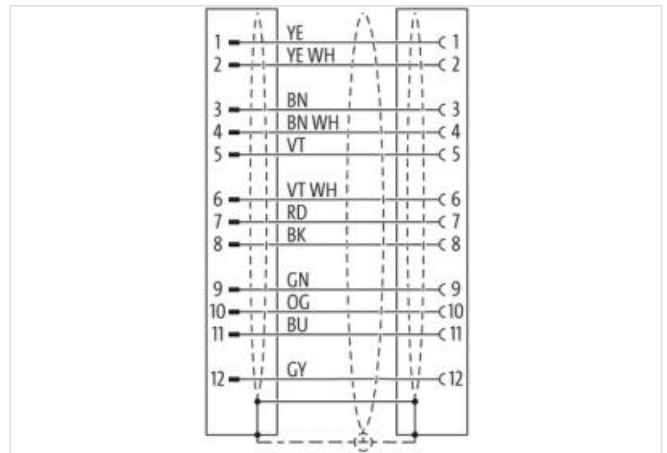
shielded

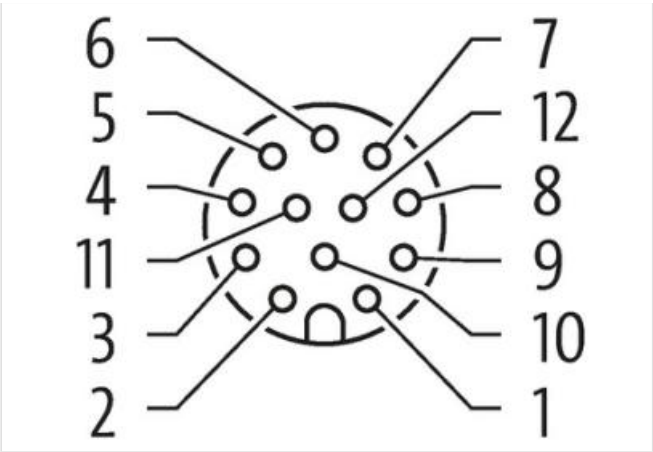
with cable sleeves

Plastic housings with good resistance against chemicals and oils.

The resistance to aggressive media should be individually tested for your application. Further details on request.

Further cable lengths on request.

[Link to Product](#)**Illustration**



Product may differ from Image



Cable length	10 m
Side 1	
Tightening torque	0,6 Nm
Mounting method	inserted, screwed
Family construction form	M12
Thread	M12 x 1
Gender	male
Cable outlet	straight
Coding	A
Material contact	Copper alloy
Material	PUR
No. of poles	12
Width across flats	SW13
Degree of protection (EN IEC 60529)	IP65, IP66K, IP67
Side 2	
Tightening torque	0,6 Nm
Mounting method	inserted, screwed
Family construction form	M12
Thread	M12 x 1
Gender	female
Cable outlet	straight
Coding	A
Material contact	Copper alloy
Material	PUR
No. of poles	12
Width across flats	SW13
Degree of protection (EN IEC 60529)	IP65, IP66K, IP67
Commercial data	
ECLASS-6.0	27279218
ECLASS-6.1	27279218
ECLASS-7.0	27279218
ECLASS-8.0	27279218

ECLASS-9.0	27060311
ECLASS-10.1	27060311
ECLASS-11.1	27060311
ECLASS-12.0	27060311
ETIM-5.0	EC001855
customs tariff number	85444290
GTIN	4048879866750
Packaging unit	1

#### Electrical data | Supply

Operating voltage AC max.	30 V
Operating voltage DC max.	30 V
Operating voltage AC (UL-listed)	30 V
Operating voltage DC (UL-listed)	30 V
Current operating per contact max.	1,5 A

#### Diagnostics

Status indication LED	no
-----------------------	----

#### Installation | Pin assignment

Configuration	fully used
---------------	------------

#### Device protection | Electrical

Degree of protection (EN IEC 60529)	IP65, IP67, IP66K
Additional condition protection degree	inserted, screwed
Pollution Degree	3
Rated surge voltage	0,8 kV
Material group (IEC 60664-1)	I

#### Mechanical data

Contour for corrugated hose	without
-----------------------------	---------

#### Mechanical data | Material data

Coating locking	Nickeled
Color housing	black
Color contact carrier	green
Locking material	Zinc die-casting

#### Mechanical data | Mounting data

Mounting method	inserted, screwed, Shaking protection
-----------------	---------------------------------------

#### Environmental characteristics | Climatic

Operating temperature min.	-25 °C
Operating temperature max.	85 °C
Additional condition temperature range	depending on cable quality

#### Important installation notes

Note on strain relief	Protect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.
Note on bending radius	<b>Attention:</b> Observe the permissible bending radii when laying cables, as the IP protection class can be endangered by excessive bending forces.

#### Conformity

Product standard	DIN EN 61076-2-101 (M12)
------------------	--------------------------

#### Installation | Cable

Cable identification	446
Jacket Color	black
Type of Certificate	cURus
Amount stranding	1
Stranding	3 wires twisted
Amount stranding (type 2)	3

Stranding (type 2)	2 wires twisted
Stranding (type 3)	3 wires with 3 Stranded joints with 1 Hatchet strand around 1 Stranding combination twisted
Cable shielding (type)	copper braid, tinned
Cable shielding (coverage)	65 %
Banding	Fleece, Foil
Drain wire (type)	strand class 6
Drain wire (cross-section)	0,14 mm <sup>2</sup>
wire arrangement	orange, gray, blue, (yellow-white, yellow, green, black, red, white-pink, pink, brown-white, brown)
Cable weighth	104,5 g/m
Material jacket	PVC
Shore hardness jacket	82 ± 3 Shore A
Freedom from ingredients (jacket)	lead-free, cadmium-free, CFC-free
Outer-diameter (jacket)	7,9 mm
Tolerance outer diameter (sheath)	± 5 %
Material wire insulation	PVC
Amount wires	12
Outer diameter insulation	1,19 mm
Outer diameter tolerance core insulation	± 5 %
Shore hardness wire insulation	90 ± 3 Shore A
Ingredient freeness wire insulation	lead-free, cadmium-free, CFC-free
Amount strands (wire)	32
Diameter of single wires	0,1 mm
Conductor crosssection (wire)	0,25 mm <sup>2</sup>
Drain wire (cross-section)	0,14 mm <sup>2</sup>
Material conductor wire	Stranded copper wire, bare
Conductor type (wire)	strand class 6
Traversing distance (C-track)	10 m @ 25 °C   horizontal
Nominal voltage AC max.	300 V
Current load capacity (standard)	to DIN VDE 0298-4
Current load capacity min. wire	3 A
Electrical resistance line constant wire	79 Ω/km @ 20 °C
AC withstand voltage (wire - wire)	3 kV @ 60 s
Power frequency withstand voltage (wire - jacket)	3 kV @ 60 s
AC withstand voltage (wire - shield)	3 kV @ 60 s
Min. operating temperature (static)	-40 °C
Max. operating temperature (fixed)	80 °C
Operating temperature min. (dynamic)	-25 °C
Operating temperature max. (dynamic)	80 °C
Flame resistance	IEC 60332-2-2   UL 1581 § 1090   UL 1581 § 1100 FT2
chemical resistance	Good, application-related testing
Gasoline resistance	Good, application-related testing
Oil resistance	Good, application-related testing   DIN EN 60811-404
Bending radius (fixed)	10 x Outer diameter
Bending radius (dynamic)	20 x Outer diameter
Travel speed (C-track)	2 Mio. @ 25 °C