

M12 male 0° / M12 female 90° A-cod. LED F&B Pro

TPE-S 4x0.34 bu UL robot+drag ch. 2m

Plug Connectors for Food & Beverage

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

Further cable lengths on request.

Male straight

Female 90° with LED

M12 F&B Pro

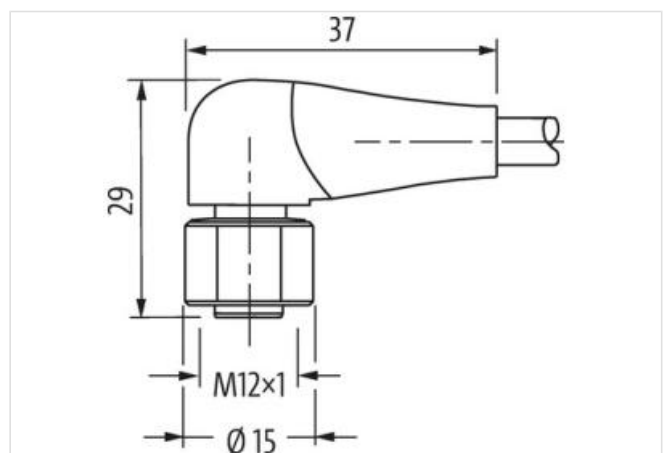
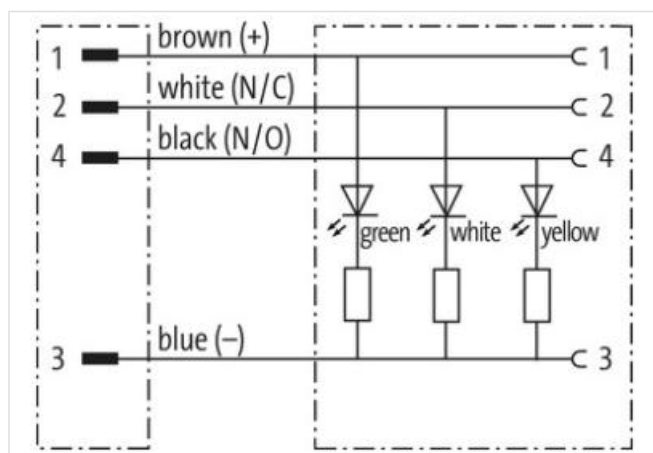
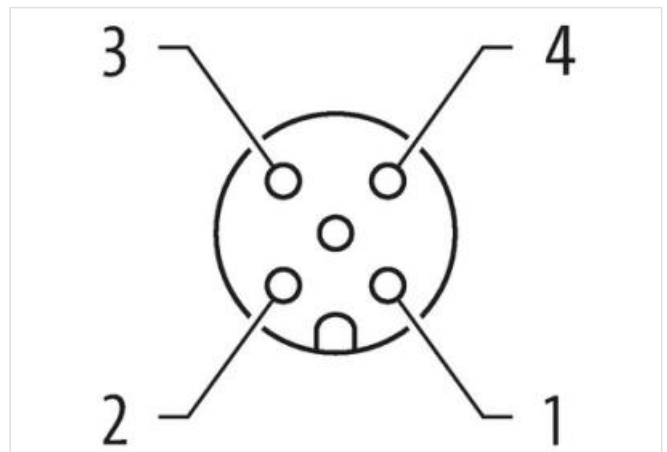
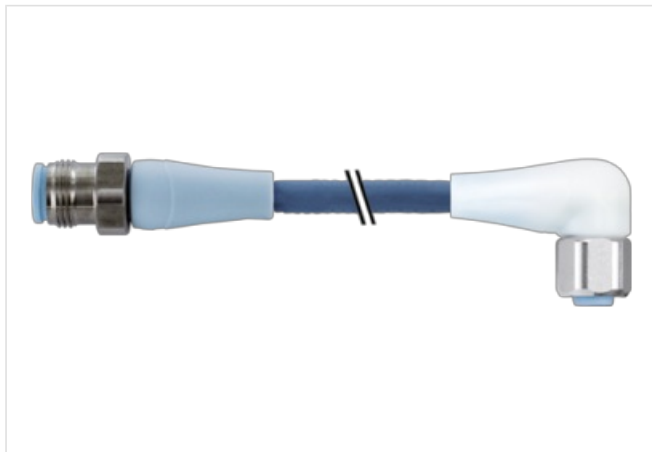
4-pole

Stainless steel 1.4404 (V4A)

without cable sleeves

IP69K

Plastic housings with good resistance against chemicals and oils.

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



Product may differ from Image

Cable length	2 m
Side 1	
Tightening torque	0,6 Nm
Mounting method	inserted, screwed
Coating contact	gold plated
Family construction form	M12
Thread	M12 x 1
Coding	A
Material contact	Copper alloy
No. of poles	4
Width across flats	SW14
Degree of protection (EN IEC 60529)	IP65, IP68, IP69K
Side 2	
Tightening torque	0,6 Nm
Mounting method	inserted, screwed
Coating contact	gold plated
Family construction form	M12
Thread	M12 x 1
Coding	A
Material contact	Copper alloy
No. of poles	4
Degree of protection (EN IEC 60529)	IP65, IP68, IP69K
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	4048879768412
Packaging unit	1
Electrical data Supply	

Operating voltage DC	24 V
Operating voltage DC min.	18 V
Operating voltage DC max.	30 V
Current operating per contact max.	4 A

Diagnostics

Status indication LED	green, white, yellow
-----------------------	----------------------

Device protection | Electrical

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

Color contact carrier	ice blue
Material gasket	EPDM
Material housing	PP
Material contact carrier	PP
Locking material	Stainless steel 1.4404 (V4A)

Mechanical data | Mounting data

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

Environmental characteristics | Climatic

Operating temperature min.	-40 °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	Attention: 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), FDA conform
------------------	---------------------------------------

Installation | Cable

wire arrangement	brown, black, blue, white
Cable identification	321
Jacket Color	blue
Amount stranding	1
Stranding	4 wires twisted
wire arrangement	brown, black, blue, white
Cable weight	29,7 g/m
Material jacket	TPE-S
Shore hardness jacket	47 ± 5 Shore D
Freedom from ingredients (jacket)	lead-free, cadmium-free, CFC-free, halogen-free, silicone-free
Outer-diameter (jacket)	4,7 mm
Tolerance outer diameter (sheath)	± 5 %
Material wire insulation	PP
Amount wires	4
Outer diameter insulation	1,27 mm
Outer diameter tolerance core insulation	± 5 %
Shore hardness wire insulation	64 ± 3 Shore D
Ingredient freeness wire insulation	lead-free, cadmium-free, CFC-free, halogen-free, silicone-free
Amount strands (wire)	42

Diameter of single wires	0,1 mm
Conductor crosssection (wire)	0,34 mm²
Material conductor wire	Stranded copper wire, bare
Conductor type (wire)	strand class 6
Nominal voltage AC max.	300 V
Current load capacity (standard)	to DIN VDE 0298-4
Current load capacity min. wire	4,8 A
Electrical resistance line constant wire	58 Ω/km @ 20 °C
AC withstand voltage (wire - wire)	3 kV @ 60 s
Min. operating temperature (static)	-40 °C
Max. operating temperature (fixed)	105 °C
Operating temperature min. (dynamic)	-25 °C
Operating temperature max. (dynamic)	105 °C
Flame resistance	UL 1581 § 1100 FT2 UL 1581 § 1090 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 (fixed)	5 x Outer diameter
Bending radius (dynamic)	10 x Outer diameter
No. of bending cycles (C-track)	4 Mio. @ 25 °C
Traversing distance (C-track)	10 m @ 25 °C horizontal
Travel speed (C-track)	3 m/s @ 25 °C
No. of torsion cycles	2 Mio.
Torsion stress	± 180 °/m
Torsion speed	35 cycles/min