

## M12 male 0° A-cod. with cable F&B Pro

TPE-S 4x0.34 bu UL robot+drag ch. 3m

Art.No.: 7024-12021-3210300

Weight: 0.099 Country of origin: DE

Model designation: MSAL0-T321 3.0-S24

Plug Connectors for Food & Beverage Further cable lengths on request. Male straight M12 F&B Pro 4-pole Screw, Stainless Steel 1.4404 (V4A) without cable sleeves

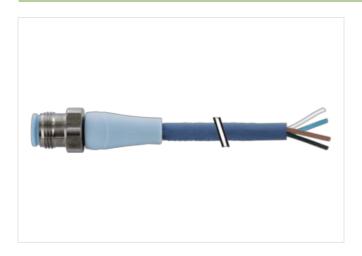
Plastic housings with good resistance against chemicals and oils.

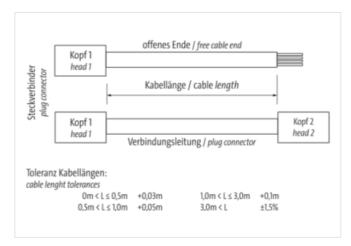
The resistance to aggressive media should be individually tested for your application. Further details on request.

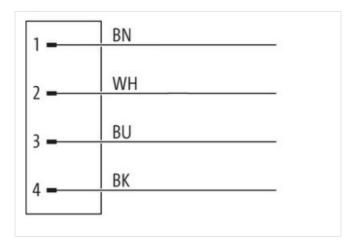
## **Link to Product**

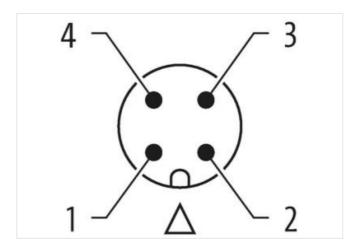
## Illustration

IP69K

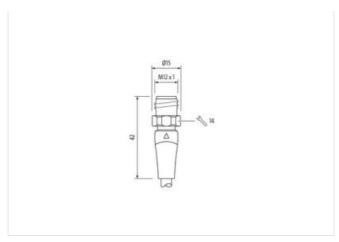












Product may differ from Image



Cable length	3 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	
Stripping length (jacket)	20 mm
Coating contact	gold plated
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
customs tariff number	85444290
EAN	4048879739139
EAN	4048879739139
Packaging unit	1
Packaging unit	1
Electrical data   Supply	



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Operating voltage AC max.	250 V
Operating voltage DC max.	250 V
Operating voltage AC (UL-listed)	30 V
Operating voltage DC (UL-listed)	30 V
Current operating per contact max.	4 A
Diagnostics	
Status indication LED	no
Installation   Connection	
Stripping length (jacket)	20 mm
Device protection   Electrical	
Additional condition protection degree	inserted, screwed
Pollution Degree	3
Rated surge voltage	2,5 kV
Material group (IEC 60664-1)	
Mechanical data	
	without
Contour for corrugated hose	without
Mechanical data   Material data	
Material housing	PP
Color contact carrier	ice blue
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.	105 °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), FDA conform
Installation   Cable	
·	have blade black with
wire arrangement  Cable identification	brown, black, blue, white 321
Jacket Color	blue
Amount stranding	1
Stranding	4 wires twisted
wire arrangement	brown, black, blue, white
Cable weigth	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 insulation	· j=- · · · · · ·



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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 mm <sup>2</sup>
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