

### ÖLFLEX® ROBOT F1 ( C )

Shielded, abrasion- and oil-resistant PUR robot cable for high dynamic bending and torsion motions, UL/cUL AWM certified

ÖLFLEX® ROBOT F1 (C) - Screened power and control cable für bending and torsional load in harsh environmental conditions with UL/cUL AWM certification

Info

Simultaneous bending and torsion Torsion angle up to +/- 180 °/m AWM certification for USA and Canada

LAPP KABEL STUTIGART ÖLFLEX® ROBOT F1 (C) 🤇 🖉 🔤 🔤

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Supplementary automation components from Lapp



Suitable for outdoor use





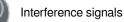
Mechanical resistance



Oil-resistant



Power chain



Torsion-resistant

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## **<b>OLAPP**

## ÖLFLEX® ROBOT F1 ( C )



UV-resistant

#### **Benefits**

Allows much faster speed and accelerations which increases the economic efficiency of the machines Increased durability under harsh conditions thanks to robust PUR outer sheath Resistant to contact with many mineral oil-based lubricants, diluted acids, aqueous alkaline solutions and other chemical media Wide temperature range for applications in harsh climatic environments Certified for the USA and Canada for export-oriented machine, appliance and apparatus manufacturers

#### **Application range**

Industrial machinery and machine tools Automated handling equipment Automotive industry In power chains or moving machine parts Inside of dresspacks of buckling arm robots and for use for gantry robots

#### **Product features**

Abrasion and notch-resistant Flame-retardant High oil-resistance Flexible at low temperatures Low-adhesive surface

#### Norm references / Approvals

UL AWM Style 20940 cUL AWM I/II A/B UL File No. E213974 Designed for up to 10 million torsion cycles For use in power chains: Please comply with assembly guideline Appendix T3 For travel distances up to 10 m

#### **Product Make-up**

Extra-fine strands, 0.14 mm<sup>2</sup> - 0.5 mm<sup>2</sup> made of tinned copper wires, bare above Core insulation: TPE Cores (or core pairs) twisted in layers or bundles Wrapping made of tinned copper wires for versions with individually screened pairs Wrapping of PTFE tape Spiral shield of tinned copper wires, version 12 G 1,5 and 18 G 1,5 with screen braiding PUR outer sheath, colour anthracite

#### **Technical Data**

Classification ETIM 5:	ETIM 5.0 Class-ID: EC000104 ETIM 5.0 Class-Description: Control cable
Classification ETIM 6:	ETIM 6.0 Class-ID: EC000104 ETIM 6.0 Class-Description: Control cable
Core identification code:	Up to 0.34 mm <sup>2</sup> : DIN 47100 cores From 0.5 mm <sup>2</sup> : white cores with black numbers, cores of screened pair (2 x 1.0) are marked with no. $5 + 6$
Conductor stranding:	Extra-fine wire

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Torsion:	Torsion load max. $\pm$ 180 °/m
Minimum bending radius:	Flexible use: 10 x outer diameter Fixed installation: 4 x outer diameter
Nominal voltage:	IEC: up to 0.34 mm <sup>2</sup> 250 Vss. 0.5 - 2.5 mm <sup>2</sup> U <sub>0</sub> /U 300/500 V UL/CSA: up to 1.5 mm <sup>2</sup> 600 V, from 2.5 mm <sup>2</sup> 1000 V
Test voltage:	Up to 0.34 mm <sup>2</sup> : 1500 V From 0.5 mm <sup>2</sup> : 2000 V
Protective conductor:	G = with GN-YE protective conductor X = without protective conductor
Temperature range:	Flexing: -40°C to +80°C Fixed installation: -50°C to +80°C

#### Note

Unless specified otherwise, the shown product values are nominal values at room temperature. Detailed values (e.g. tolerances) are available upon request.

Copper price basis: EUR 150/100 kg. Refer to catalogue appendix T17 for the definition and calculation of copper-related surcharges.

Please find our standard lengths at: www.lappkabel.de/en/cable-standardlengths

Packaging size: coil  $\leq$  30 kg or  $\leq$  250 m, otherwise drum

Please specify the preferred type of packaging (e.g. 1 x 500 m drum or 5 x 100 m coils).

Photographs and graphics are not to scale and do not represent detailed images of the respective products.

Prices are net prices without VAT and surcharges. Sale to business customers only.

Article number	Number of cores and mm <sup>2</sup> per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
	· · ·			
0029653	3 x 2 x 0,25	8.0	38	100
0029654	25 x 0,25	13.8	115	280
0029655	2 x 0,34	5.2	18	54
0029656	3 x 0,34	5.4	20	56
0029657	4 x 0,34	6.6	28	72
0029658	5 x 2 x 0,34	10.2	69	158
Numbered Cores	· ·	·		
0029689	12 G 1,5	15.4	230	380
0029690	18 G 1,5	18.5	340	550
0029664	4 G 1,5	8.8	75.1	120
0029665	4 G 2,5	10.3	116	200
0029691	4 G 1,5 + (2 x 1,0)	11.0	116	213
0029692	4 G 2,5 + (2 x 1,0)	12.0	150	270

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