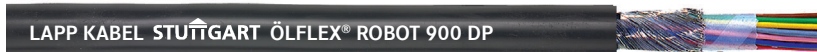
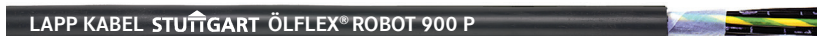


ÖLFLEX® ROBOT 900 P/900 DP

Robotic Cable for Flexing & Torsion Motion



ÖLFLEX® ROBOT 900 P is a multi-conductor control and signal monitoring cable. It is designed to withstand the extreme demands of twisting and bending stresses in robotic applications. ÖLFLEX® ROBOT 900 DP has a tinned copper spiral shield and is designed for use where EMI emissions need to be suppressed.

Recommended Applications

Multi-axis articulated robots with twisting and bending motion; automated handling equipment; cable tracks or moving machine parts.

Approvals



Unshielded Construction

Conductors: Finely stranded bare copper

Insulation: TPE; conductors twisted in layers with low-friction core wrap

Jacket: Black polyurethane

Shielded Construction

Conductors: Finely stranded bare copper

Insulation: TPE; conductors twisted in layers with low-friction core wrap

Shielding: Tinned copper spiral shield

Jacket: Black polyurethane

Application Advantage

- Designed for applications where combined twisting and bending occur
- Specially formulated PUR jacket protects against the harshest of industrial plant environments
- Maximum twist of $\pm 360^\circ/\text{m}$ unshielded for wide variety of robot applications

Cable Attributes, see page 659

OR-05 OIL	FR-02 FLAME	T-01 MOTION	MP-05 MECHANICAL
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Similar Cables

- ÖLFLEX® ROBOT F1
- ÖLFLEX® ROBOT F1 (C)

Complete the Installation

SKINTOP® PG: page 502	SKINTOP® MS-SC: page 528
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Technical Data	
Minimum Bend Radius:	- for torsion and flexing: 15 x cable diameter - shielded: 15 x cable diameter
Maximum Torsion (Twist):	- unshielded: $\pm 360^\circ/\text{m}$ - shielded: $\pm 180^\circ/\text{m}$
Temperature Range:	- for flexible use: -40°C to $+80^\circ\text{C}$
Nominal Voltage:	300/500V
Test Voltage:	- up to 22 AWG: 1500V - 20 AWG & larger: 3000V
Conductor Stranding:	Extra fine wire
Color Code:	- up to 22 AWG: DIN 47100: Chart 8, page 697 - 20 AWG & larger: Black with white numbers, plus green/yellow ground
Approvals:	Based on VDE 0281/0282 & 0812 CE & RoHS

ÖLFLEX® ROBOT 900 P

Part Number	Number of Conductors (incl. ground)	Nominal Outer Diameter (inches) (mm)		Copper Weight (lbs/mft)	Approx. Weight (lbs/mft)	SKINTOP® Non-Metallic PG Thread	Part Number	Number of Conductors (incl. ground)	Nominal Outer Diameter (inches) (mm)		Copper Weight (lbs/mft)	Approx. Weight (lbs/mft)	SKINTOP® Non-Metallic PG Thread
24 AWG (0.25 mm²)							16 AWG (1.50 mm²)						
0028110	7	0.244	6.2	11	32	S2107	0028198	18	0.622	15.8	174	300	S2121
0028116	25	0.402	10.2	40	95	S2113	14 AWG (2.50 mm²)						
20 AWG (0.50 mm²)							0028181	3	0.366	9.3	48	91	S2111
0028145	18	0.441	11.2	58	81	S2113	0028182	4	0.398	10.1	65	115	S2113
0028146	25	0.524	13.3	81	171	S2116	6 AWG (10 mm²)						
19 AWG (0.75 mm²)							0028400	3	0.843	21.4	310	484	S2129
0028160	4	0.260	6.6	19	42	S2109	4 AWG (25 mm²)						
0028164	14	0.441	11.2	68	134	S2113	0028187	3	1.031	26.2	484	791	S2136
18 AWG (1.00 mm²)							2 AWG (35 mm²)						
0028170*	2	0.244	6.2	13	32	S2107	0028189	3	1.134	28.8	677	1047	S2136
0028171	3	0.256	6.5	19	41	S2109							
0028172	4	0.276	7.0	26	51	S2111							
0028174	7	0.366	9.3	45	88	S2111							
0028176	12	0.453	11.5	77	145	S2113							
0028185	16 + 1pr	0.630	16.0	131	253	S2121							
0028178	18	0.520	13.2	116	193	S2116							
0028186	23 + 1 pr	0.681	17.3	176	316	S2129							
0028180	25	0.646	16.4	161	291	S2121							
0028190	34	0.783	19.9	219	384	S2129							
0028191	41	0.878	22.3	264	474	S2129							

* 2c cable does not include ground.

ÖLFLEX® ROBOT 900 DP

Part Number	Number of Conductors (incl. ground)	Nominal Outer Diameter (inches) (mm)		Copper Weight (lbs/mft)	Approx. Weight (lbs/mft)	SKINTOP® MS-SC PG Thread	Part Number	Number of Conductors (incl. ground)	Nominal Outer Diameter (inches) (mm)		Copper Weight (lbs/mft)	Approx. Weight (lbs/mft)	SKINTOP® MS-SC PG Thread
26 AWG (0.14 mm²)							22 AWG (0.34 mm²)						
0028100	12	0.264	6.7	29	46	53112210	0028135	4	0.224	5.7	14	31	53112210
0028105	3pr	0.244	6.2	11	30	53112210	0028136	5pr	0.358	9.1	43	77	53112220
24 AWG (0.25 mm²)							16 AWG (1.50 mm²)						
0028126	25	0.437	11.1	70	123	53112230	0028195	12	0.551	14.0	174	265	53112250

Recommended SKINTOP® assumes minimal OD variance. Additional configurations are available, please see our SKINTOP® Section. Photographs are not to scale and are not true representations of the products in question. For current information go to our website. If not otherwise specified, all values relating to the product are nominal values.