

UNITRONIC® FD P plus

Multi-Conductor 250V PUR Continuous Flex Industrial Communication Cable; Unshielded

LAPP KABEL STUTTGART UNITRONIC® FD P plus



UNITRONIC® FD P plus is a communication cable designed for continuous flexing industrial signal and low voltage control applications. The tear-resistant polyurethane jacket provides excellent service life in harsh environments against most oils, solvents, and coolants.

Recommended Applications

High-speed automated equipment; robotics; CNC and multi-axis cutting equipment; other cable track applications

Approvals



Construction

Conductors: Finely stranded bare copper

Insulation: Polyolefin; non-woven wrapping

Jacket: Specially formulated polyurethane; gray

Application Advantage

- Designed for high flexing applications
- Flexible at -40°C
- Resistant to oils, solvents, and coolants
- Abrasion-resistant & halogen-free jacket
- Resistant to microbes and hydrolysis

Cable Attributes		page 640	
OIL	OR-05	FLAME	FR-02
MOTION	CF-02	MECH.	MP-05

Complete the Installation	
SKINTOP® Strain Relief page 488	EPIC® Connectors page 280

ÖLFLEX® CONNECT Solution	
ÖLFLEX® CONNECT CABLES page 597	

Technical Data

Minimum Bend Radius: - for continuous flexing: 5 x cable diameter	Insulation Resistance: > 5 GΩ x cm
Temperature Range: - for continuous flexing: -40°C to +80°C	Inductance: approx. 0.65 mH/km
Nominal Voltage: - UL AWM: 250V (not for power) 1000V	Conductor Stranding: Extra fine wire per VDE 0295
Test Voltage: 1500V	Color Code: DIN 47100: Chart 8, page 674
Mutual Capacitance: - Conductor/conductor: approx. 18 pF/ft	Approvals: UL: AWM 21576 Canada: cRU AWM I/II A/B FT2 Additional: RoHS

Part Number	Number of Conductors (incl. ground)	Nominal Outer Diameter (in) (mm)	Copper Weight (lbs/mft)	Approx. Weight (lbs/mft)	SKINTOP® Non-Metallic PG Thread	Part Number	Number of Conductors (incl. ground)	Nominal Outer Diameter (in) (mm)	Copper Weight (lbs/mft)	Approx. Weight (lbs/mft)	SKINTOP® Non-Metallic PG Thread
26 AWG (0.14 mm²)						22 AWG (0.34 mm²)					
0028650	3	0.161 4.1	3	17	S1107	0028667	2	0.193 4.9	5	22	S1107
0028651	4	0.173 4.4	4	20	S1107	0028668	3	0.205 5.2	7	28	S1107
0028652	5	0.185 4.7	5	23	S1107	0028669	4	0.224 5.7	9	37	S1107
0028653	7	0.213 5.4	7	32	S1107	0028670	5	0.244 6.2	11	42	S1107
0028654	10	0.252 6.4	9	40	S1109	0028671	7	0.280 7.1	16	54	S1111
0028655	14	0.256 6.5	13	50	S1109	0028672	10	0.346 8.8	23	74	S1111
0028656	18	0.280 7.1	17	58	S1111	0028673	14	0.350 8.9	32	97	S1111
0028657	25	0.339 8.6	24	81	S1111	0028674	18	0.394 10.0	41	118	S1113
24 AWG (0.25 mm²)						0028675	25	0.484 12.3	57	161	S1116
0028658	2	0.177 4.5	3	18	S1107						
0028659	3	0.185 4.7	5	22	S1107						
0028660	4	0.201 5.1	7	26	S1107						
0028661	5	0.220 5.6	8	33	S1107						
0028662	7	0.252 6.4	12	41	S1109						
0028663	10	0.303 7.7	17	54	S1111						
0028664	14	0.307 7.8	24	69	S1111						
0028665	18	0.346 8.8	30	84	S1111						
0028666	25	0.425 10.8	42	115	S1113						

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