

UNITRONIC® FD P plus

Continuous flex 250V multi-conductor PUR 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 648	
OIL	OR-05	FLAME	FR-02
MOTION	CF-02	MECH.	MP-05

Complete the installation	
SKINTOP® strain relief	page 497
EPIC® connectors	page 284

ÖLFLEX® CONNECT solution	
ÖLFLEX® CONNECT CABLES	page 605

Technical data

Minimum bend radius:		
- for continuous flexing:	5 x cable diameter	
Temperature range:		
- for continuous flexing:	-40°C to +80°C	
Nominal voltage:	250V (not for power)	
- UL AWM:	1000V	
Test voltage:	1500V	
Mutual capacitance:		
- conductor/conductor:		approx. 18 pF/ft
Inductance:		approx. 0.65 mH/km
Conductor stranding:		extra fine wire per VDE 0295
Color code:		DIN 47100: chart 8, page 682
Approvals:	UL: AWM 21576 Canada: cRU AWM I/II A/B FT2 Additional: CE & RoHS	

Part number	Number of conductors	Nominal outer diameter		Copper weight	Approx. weight	SKINTOP® SL
		in	mm	lbs/mft	lbs/mft	PG thread
26 AWG (0.14 mm²)						
0028647	2	0.146	3.7	2	13	S1107
0028650	3	0.154	3.9	3	17	S1107
0028651	4	0.165	4.2	4	20	S1107
0028652	5	0.177	4.5	5	23	S1107
0028677	6	0.189	4.8	6	28	S1107
0028653	7	0.201	5.1	7	32	S1107
0028654	10	0.240	6.1	9	40	S1109
0028678	12	0.248	6.3	11	45	S1109
0028656	18	0.268	6.8	17	56	S1111
0028657	25	0.327	8.3	24	81	S1111
24 AWG (0.25 mm²)						
0028658	2	0.169	4.3	3	18	S1107
0028659	3	0.177	4.5	5	22	S1107
0028660	4	0.193	4.9	7	24	S1107
0028661	5	0.209	5.3	8	33	S1107
0028679	6	0.240	6.1	10	37	S1109

Part number	Number of conductors	Nominal outer diameter		Copper weight	Approx. weight	SKINTOP® SL
		in	mm	lbs/mft	lbs/mft	PG thread
0028662	7	0.240	6.1	12	29	S1109
0028663	10	0.291	7.4	17	48	S1111
0028680	12	0.295	7.5	20	58	S1111
0028664	14	0.295	7.5	24	49	S1111
0028665	18	0.335	8.5	30	70	S1111
0028666	25	0.409	10.4	42	89	S1113
22 AWG (0.34 mm²)						
0028667	2	0.185	4.7	5	22	S1107
0028668	3	0.197	5.0	7	26	S1107
0028669	4	0.213	5.4	9	28	S1107
0028670	5	0.232	5.9	11	30	S1107
0028671	7	0.268	6.8	16	37	S1111
0028672	10	0.335	8.5	23	57	S1111
0028673	14	0.339	8.6	32	63	S1111
0028674	18	0.382	9.7	41	88	S1113
0028675	25	0.469	11.9	57	134	S1116