

# UNITRONIC® FD CP (TP) plus

Continuous flex 250V multi-pair PUR industrial communication cable; shielded

LAPP KABEL STUTTGART UNITRONIC® FD CP (TP) plus



UNITRONIC® FD CP (TP) plus is a Type CMX approved multi-pair communication cable designed for continuous flexing industrial signal and data applications. The tear-resistant polyurethane jacket provides excellent service life in harsh environments against most oils, solvents, and coolants. It has a tinned copper braid shield for EMI resistance.

## Recommended applications

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

## Approvals



Cable attributes		page 648	
OIL	OR-05	FLAME	FR-02
MOTION	CF-02*	MECH.	MP-05

## Complete the installation



SKINTOP®  
MS-SC  
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EPIC®  
connectors  
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## ÖLFLEX® CONNECT solution



ÖLFLEX® CONNECT CABLES  
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## Construction

**Conductors:** finely stranded bare copper

**Insulation:** polyolefin

**Pairs:** conductors are paired and twisted together; non-woven wrapping

**Shielding:** tinned copper braid

**Jacket:** specially formulated polyurethane; gray

## Application advantage

- UL/c(UL) CMX approved
- Flexible at -40°C
- Resistant to oils, solvents, and coolants
- Abrasion-resistant & halogen-free jacket
- Resistant to microbes and hydrolysis

## Technical data

**Minimum bend radius:**  
- for continuous flexing: 7.5 x cable diameter

**Temperature range:**  
- for continuous flexing: -40°C to +80°C  
- AWM: up to +80°C  
- CMX: up to +75°C

**Nominal voltage:** 250V (not for power)

**Test voltage:**  
- conductor/conductor: 1500V  
- conductor/shield: 500V

**Mutual capacitance:**  
- up to 0.5 mm<sup>2</sup>: 18 pF/ft  
- up to 1.0 mm<sup>2</sup>: 21 pF/ft

**Inductance:** approx. 0.65 mH/km

**Conductor stranding:** extra fine wire per VDE 0295

**Color code:** DIN 47100: chart 7, page 682

**Approvals:**

UL:	AWM 21576 CMX
Canada:	c(UL) CMX cRU AWM I/II A/B FT2
Additional:	CE & RoHS
*UL Verified ID A522492:	Continuous Flex Test Method Verified

### UNITRONIC® FD CP (TP) plus

Part number	Number of pairs	Nominal outer diameter		Copper weight	Approx. weight	SKINTOP® MS-SC
		in	mm	lbs/mft	lbs/mft	PG thread
<b>26 AWG (0.14 mm²)</b>						
0030910	2	0.232	5.9	13	28	53112210
0030911	3	0.244	6.2	16	36	53112210
0030912	4	0.264	6.7	18	40	53112210
0030913	5	0.287	7.3	25	50	53112220
0030914	6	0.295	7.5	33	61	53112220
0030915	8	0.346	8.8	37	73	53112220
0030916	10	0.398	10.1	40	81	53112230
<b>24 AWG (0.25 mm²)</b>						
0030962	1	0.185	4.7	9	18	53112210
0030919	2	0.260	6.6	22	40	53112220
0030920	3	0.276	7.0	26	48	53112220
0030921	4	0.299	7.6	29	57	53112220
0030922	5	0.335	8.5	35	69	53112230
0030923	6	0.346	8.8	48	88	53112230
0030924	8	0.406	10.3	50	104	53112240
0030925	10	0.465	11.8	60	125	53112240
0030926	14	0.472	12.0	75	147	53112240
<b>22 AWG (0.34 mm²)</b>						
0030963	1	0.201	5.1	13	24	53112210
0030928	2	0.287	7.3	28	54	53112220

Part number	Number of pairs	Nominal outer diameter		Copper weight	Approx. weight	SKINTOP® MS-SC
		in	mm	lbs/mft	lbs/mft	PG thread
0030929	3	0.315	8.0	35	68	53112220
0030930	4	0.343	8.7	40	80	53112230
0030932	6	0.394	10.0	58	111	53112230
0030934	10	0.539	13.7	88	184	53112250
<b>20 AWG (0.5 mm²)</b>						
0030964	1	0.232	5.9	15	32	53112210
0030937	2	0.327	8.3	34	67	53112230
0030938	3	0.346	8.8	48	87	53112230
0030939	4	0.386	9.8	50	99	53112230
0030940	5	0.421	10.7	57	113	53112240
0030941	6	0.445	11.3	67	130	53112240
0030942	8	0.520	13.2	97	191	53112250
0030943	10	0.598	15.2	118	230	53112260
0030944	14	0.610	15.5	145	269	53112260
<b>18 AWG (1 mm²)</b>						
0030955	1	0.248	6.3	28	48	53112210
0030956	2	0.390	9.9	49	87	53112230
0030957	3	0.413	10.5	63	114	53112240
0030958	4	0.465	11.8	79	137	53112240
0030959	5	0.516	13.1	93	159	53112250

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.