

Halogen-free data transmission cable with colour code acc. to DIN 47100 - resistant to a wide range of chemical media

UNITRONIC® ROBUST C (TP):Screened low-freq data cable Twisted pairs Biopetroleum/ cleaner/ hotwater/ hydraulic fluid resistance Outdoor Food Beverage Composting

### Info

Excellent weather resistance Good chemical resistance please see Appendix T1







Food & Beverage



Suitable for outdoor use



Good chemical resistance



Halogen-free



Cold-resistant



**UV-resistant** 

### **Benefits**

Outstanding weather, ozone and UV resistance together with the wide temperature range enable versatile use for indoor and outdoor applications

Resistant to contact with organic oils and the related emulsions as well as a multitude of plant, animal or synthetic-based greases and waxes

Good resistance to ammonia compounds and bio-gases

Good resistance to cold and hot water as well as water-soluble cleaning and cooling agents

Last Update (11.12.2022)

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Product Management www.lappkabel.de

You can find the current technical data in the corresponding data sheet.

PN 0456 / 02\_03.16



Well-suited to steam cleaning

### **Application range**

Machine tool building, medical technology, laundries, car washing equipment, chemical industry, composting plants, sewage works Food and beverage industry, especially for production and processing equipment of milk and meat products For data processing, measurement and control engineering, safety related systems and as electronics cable For indoor and outdoor use

### Product features

Good chemical resistance to ester-based hydraulic fluids

Ozone, UV and weather-resistant according to EN 50396 and HD 605 S2

Halogen-free as per IEC 60754-1, Low corrosivity/ acidity of combustion gases per IEC 60754-2, Low toxicity of comb. gases per EN 50305

Low smoke density according to IEC 61034-2

### Norm references / Approvals

Based on VDE 0812

Certified resistance to disinfection and cleaning solutions used in food and beverage industry

## **Product Make-up**

Fine-wire/multi-wire (0.34 mm²) strand made of bare copper wires Core insulation made of special halogen-free compound TP structure Tinned-copper braiding

Outer sheath made of special TPE

Outer sheath colour: black (RAL 9005)

### **Technical Data**

Conductor stranding:

Classification ETIM 5: ETIM 5.0 Class-ID: EC000830

ETIM 5.0 Class-Description: Data cable

Classification ETIM 6: ETIM 6.0 Class-ID: EC000830

ETIM 6.0 Class-Description: Data cable

Core identification code: DIN 47100 without colour repetition, refer to Appendix T9

Mutual capacitance: C/C approx. 60 nF/km

C/S approx. 100 nF/km

Specific insulation resistance: > 20 GOhm x cm

Inductivity: approx. 0.65 mH/km

Stranded, fine-wire 0.34 mm<sup>2</sup>: 7-wire

Torsion movement in WTG: TW-0 & TW-2, refer to Appendix T0

Minimum bending radius: Occasional flexing: 10 x outer diameter

Fixed installation: 4 x outer diameter

Test voltage: At 0.14 mm<sup>2</sup>: 1200 V

Temperature range: Occasional flexing: -40°C to +90°C

Fixed installation: -50°C to +90°C

### Note

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Unless specified otherwise, the shown product values are nominal values. 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:  $coil \le 30 \text{ kg or} \le 250 \text{ m}$ , 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)
UNITRONIC® ROBUST C	(TP)			,
1032100	2 x 2 x 0.14	5.3	16.1	31
1032101	3 x 2 x 0.14	5.8	19	38
1032102	4 x 2 x 0.14	6.2	23.1	46
1032103	5 x 2 x 0.14	6.4	27.2	54
1032104	6 x 2 x 0.14	7.1	31.3	63
1032105	8 x 2 x 0.14	8.2	43.4	90
1032106	10 x 2 x 0.14	8.7	50.9	93
1032107	12 x 2 x 0.14	8.9	56.6	102
1032108	2 x 2 x 0.25	6.3	22.7	43
1032109	3 x 2 x 0.25	7.1	28.9	56
1032110	4 x 2 x 0.25	7.6	38.3	72
1032111	5 x 2 x 0.25	7.9	45.1	85
1032112	6 x 2 x 0.25	8.5	48.7	96
1032113	8 x 2 x 0.25	10.3	64.3	135
1032114	2 x 2 x 0.34	7.1	27.6	56
1032115	3 x 2 x 0.34	7.8	38.8	74
1032116	4 x 2 x 0.34	8.4	47.5	90
1032117	5 x 2 x 0.34	8.8	58.2	110
1032118	1 x 2 x 0.5	5.6	20.1	37
1032119	2 x 2 x 0.5	7.9	40.3	72
1032120	3 x 2 x 0.5	8.7	51.7	91
1032121	4 x 2 x 0.5	9.4	64.1	112
1032122	5 x 2 x 0.5	10.3	76.6	141
1032123	6 x 2 x 0.5	11.1	91.7	170
1032124	8 x 2 x 0.5	13.1	123.2	238
1032125	10 x 2 x 0.5	14.5	146.4	247
1032126	2 x 2 x 0.75	8.5	48.4	84
1032127	3 x 2 x 0.75	9.4	68.9	114
1032128	4 x 2 x 0.75	10.7	86.2	149
1032129	6 x 2 x 0.75	12.1	131.9	225
1032130	8 x 2 x 0.75	14.7	168.2	315
1032131	2 x 2 x 1.0	9	64.1	98
1032132	3 x 2 x 1.0	10.4	83.5	135



### Outer diameter [mm] Copper index (kg/km) Weight (kg/km) Article number Number of cores and mm<sup>2</sup> per conductor 1032133 4 x 2 x 1.0 11.3 105.7 168