









Low frequency data transmission cables • Halogen-free





# UNITRONIC® ROBUST C (TP)

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

### LAPP KABEL STUTTGART UNITRONIC® ROBUST C (TP)



# Info

- Excellent weather resistance
- Good chemical resistance

#### **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 syntheticbased 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
- · 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 mm<sup>2</sup>) strand made of bare copper wires
- Core insulation made of special halogenfree compound
- · TP structure
- · Tinned-copper braiding
- · Outer sheath made of special TPE Outer sheath colour: black (RAL 9005)

# Technical data

Classification ETIM 5/6 ETIM 5.0/6.0 Class-ID: EC000830

ETIM 5.0/6.0 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

Peak operating voltage (not for power applications) at 0.14 mm<sup>2</sup>: 350 V at ≥ 0.25 mm<sup>2</sup>: 500 V

Specific insulation resistance > 20 GOhm x cm

Inductivity approx. 0.65 mH/km

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

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

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			
1022116	1 4 2 4 0 24	0.4	175	00			

Article number	Number of cores and mm² per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
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
1032133	4 x 2 x 1.0	11.3	105.7	168

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 ≤ 30 kg or ≤ 250 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.

### Accessories

- SKINTOP® ST-HF-M refer to page 693
- · KT 11 cable shears

- DATA STRIP stripping tool refer to page 986
- Fibre Strip DC