


1032100	<b>DATA SHEET</b>	
valid from: 01.01.2019	<b>UNITRONIC® ROBUST C (TP)</b>	

## Application

UNITRONIC® ROBUST C (TP) are halogen free, robust, screened, twisted pair data cables for low frequency applications with outstanding weather, ozone and UV resistance. The cables are among others designed for dry, humid and wet conditions. Considering the temperature range, an outdoor use is possible. At room temperature they are increased resistant to acids, caustic solutions and certain oils. They are not for use with continuous operational movements, tensile strain or restricted guidance.

The twisted pairs with short lay lengths provides good decoupling of the conductor circuits. The screen provides protection against electromagnetic interferences.

## Design

Design	Design based on standard VDE 0812
Conductor	fine wire strands of bare copper wires
Insulation	modified PP, halogen free, copper stabilised
Core identification code	according to DIN 47100
Stranding	cores twisted to pairs, pairs are stranded in layers, wrapping with foil on the outer layer
Screen	Braiding with tinned copper wires
Outer sheath	special halogen free TPE-V compound colour: black (similar RAL 9005)

## Electrical properties at 20°C

Specific volume resistivity	> 20 G $\Omega$ x cm
Mutual capacitance	C/C: approx. 60 nF/km C/S: approx. 100 nF/km (at 800 Hz)
Inductance	approx. 0.65 mH/km
Peak operating voltage	0.14 mm <sup>2</sup> : 350 V (not for power applications) ≥ 0.25 mm <sup>2</sup> : 500 V (not for power applications)
Test voltage	0.14 mm <sup>2</sup> : 1200 V ≥ 0.25 mm <sup>2</sup> : 1500 V

## Mechanical and thermal properties

Minimum bending radius	Flexing: 15 x cable $\emptyset$ Fixed installation: 6 x cable $\emptyset$
Temperature range	Flexing: - 40 °C up to +90 °C Fixed installation: - 50 °C up to +90 °C
Flammability	not flame retardant
Halogen free	according to IEC 60754-1 and EN 50267-2-1
Corrosivity of gases	according to IEC 60754-2 and EN 50267-2-2
Smoke density	according to IEC 61034-2
Toxicity	according to EN 50305
UV resistance	according to ISO 4892-2, method A
Ozone resistance	according to EN 50396 resp. VDE 0473-396, method B
General requirements	This cable is conform to the EU-Directive 2011/65/EU (RoHS, Restriction of the use of certain hazardous substances).

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