

0038302	DATA SHEET	
valid from: 01.01.2019	UNITRONIC® LiHCH (TP)	

Application

UNITRONIC® LiHCH (TP) is a halogen free, screened, twisted pair data cable for low frequency applications. The cable is designed for fixed installation and for conditional flexible use. It is used in dry and damp interiors but not appropriate for outside usage. The twisted pairs with short lay lengths provides good decoupling of the conductor circuits. The screen provides protection against electromagnetic interferences. The cable is used for data processing, measurement and control engineering, safety related systems and as electronic cables.

Design

Design	Design based on standard VDE 0812
Conductor	fine wire strands of bare copper wires
Insulation	special Polyolefin-based compound
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 compound colour: pebble grey (similar RAL 7032)

Electrical properties at 20°C

Specific volume resistivity	> 20 G Ω x cm
Mutual capacitance	C/C: approx. 80 nF/km C/S: approx. 120 nF/km (at 800 Hz)
Inductance	approx. 0.65 mH/km
Peak operating voltage	250 V (not for power applications)
Test voltage	1200 V

Mechanical and thermal properties

Minimum bending radius	Flexing: 15 x cable $\varnothing$ Fixed installation: 6 x cable $\varnothing$
Temperature range	Flexing: - 5 °C up to +70 °C Fixed installation: - 40 °C up to +80 °C
Flammability	flame retardant acc. to IEC 60332-1-2
Halogen free	according to IEC 60754-1
Corrosivity of gases	according to IEC 60754-2
Smoke density	according to IEC 61034-2
Toxicity	according to DIN EN 50305
General requirements	This cable is conform to the EU-Directive 2011/65/EU (RoHS, Restriction of the use of certain hazardous substances).

Creator: PESA / PDC	Document: DB0038302EN	Page 1 of 1
Released: ALTE / PDC	Version: 04	