

UNITRONIC® FD

DB002784 1
valid from: 28.07.2015**Application**

UNITRONIC® FD is a high flexible data cable with an outer sheath from PVC. The cable is designed for special use in power chains, automatic manipulators and in permanently moved machine parts.

Design

Design	Design based on standard VDE 0812
Conductor	superfine wire strands of bare copper wires
Insulation	special PVC-based compound
Core identification code	according to DIN 47100
Stranding	cores stranded in layers, wrapping with fleece on the outer layer
Outer sheath	special PVC-based compound colour: grey (RAL 7001)

Electrical properties at 20°C

Conductor resistance	Cross section	max.
	[mm ²]	[Ω/km]
	0.14	138.0
	0.25	79.0
	0.34	57.0
	0.5	39.0
	0.75	26.0
1.0	19.5	
Specific insulation resistance	> 20 G Ω x cm	
Mutual capacitance	C/C: approx. 120 nF/km (at 800 Hz)	
Inductivity	approx. 0.65 mH/km	
Peak working voltage	0.14 mm ² : 350 V (not for power applications) ≥ 0.25 mm ² : 500 V (not for power applications)	
Test voltage	C/C: 1500 V	

Mechanical and thermal properties

Minimum bending radius	Flexing: 5 x cable Ø Fixed installation: 3 x cable Ø
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
General requirements	This cable is conform to the EU-Directive 2011/65/EU (RoHS, Restriction of the use of certain hazardous substances).