

**UNITRONIC® LAN 200 SF/UTP Cat. 5e H Flex
4x2xAWG 26/7**

DB2170139

valid from: 24.02.2012

Application

Flexible data cable for transmission of digital and analog signals up to 200 MHz. The cable is mainly designed for the use in the area of the workstation. According to TIA/EIA-568, ISO/IEC 11801 2nd edition, EN 50173, EN 50288-2-2, IEC 61156-6. For application in LANs like IEEE 802.3: 10Base-T, 100Base-T, 1000Base-T; FDDI; ISDN; ATM.

Design

Conductor	bare copper AWG 26/7, stranded wire
Insulation	PE, ca. 0.96 mm outer Ø
Core identification code	acc. to IEC 708-1
Stranding	4 pairs, stranded to bundle
Screening	plastic laminated aluminum foil <u>on top:</u> braid of copper wire, tinned wire ca. 0,10 mm
Outer sheath	halogen free compound (FRNC), grey similar to RAL 7035, outer Ø: ca. 5.8 mm

Electrical properties at 20° C

Resistance (loop)	max. 290 Ω/km, acc. to VDE 0812
Insulation resistance	min. 2 GΩxkm
Mutual capacitance	nom. 50 nF/km
Characteristic impedance	100 Ω ±5 Ω (at 100 MHz)
Velocity of propagation	ca. 0.67 c
Signal propagation time	<510 ns/100m
Delay difference	<25 ns/100m
Screening attenuation	>40 dB (up to 100 MHz)
Test voltage	700 V (AC)

Transmission properties

f [MHz]	Attenuation nom. [dB/100m]	NEXT nom. [dB]	ACR nom. [dB/100m]	ELFEXT nom. [dB/100m]	RL nom. [dB]
1	0.30	73	73	68	23
4	0.58	65	64	58	26
10	0.93	62	61	51	30
16	1.19	60	59	45	30
20	1.32	58	57	42	30
31.25	1.68	55	53	38	30
62,5	2.43	50	48	34	30
100	3.12	48	45	30	28
155	3.52	46	42	27	26
200	3.90	45	41	23	24

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Mechanical and thermal properties

Minimum bending radius	during installation: 8 x cable Ø static: 4 x cable Ø
Permissible temperature range	during installation: 0 ° C up to +50 ° C static: -20 ° C up to +70 ° C
Flame propagation	flame retardant acc. to IEC 60332-3-24, 60332-1-2
Smoke gas test	acc. to EN 50267-2-1/EN 50267-2-2, IEC 60754-1/IEC 60754-2, IEC 61034/EN 61034
General requirements	Dangerous and forbidden substances acc. to RoHS directive (2002/95/EG) are not allowed to the manufacturing.