

Product information



Features

Electrically and mechanically high-quality Cat 5e cable satisfying the highest demands! Excellent screen effect thanks to foil and braid. Compatible with all current connecting hardware to: ISO/IEC 11801, EN 50173-1 and EN 50288-2-1.

Applications

Data cable for structured premises cabling. For the transmission of digital and analogue signals, voice, video and data applications. Especially suitable for all class D applications. ISDN, Ethernet 10 Base-T, Fast Ethernet 100 Base-T, Gigabit Ethernet 1000 Base-T, token ring 4/16 Mbit/s, TP-PMD/TP-DDI 125 Mbit/s.

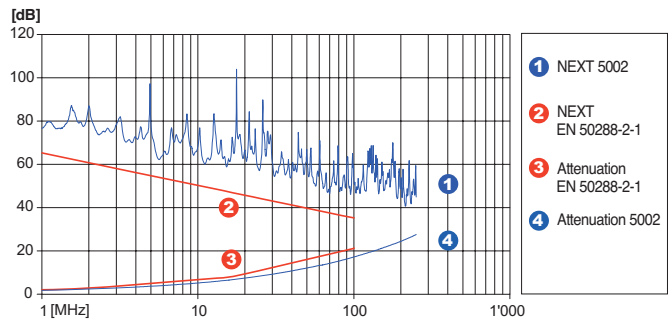
Versions

Article No.	Dimension	Type	Sheath	Sheath Ø	Weight	Cu weight	Fire load		PU
	n x n x mm (AWG)			mm	kg/km	kg/km	kWh/m	MJ/m	
181 114	4 x 2 x 0,54 (AWG24)	HF-4253-U	FR/PVC <sup>1)</sup>	6,0	40,0	19,5	0,16	0,56	1000m Drum
181 113	4 x 2 x 0,54 (AWG24)	HF-4252-U	FRNC/LSOH <sup>2)</sup>	6,0	40,8	19,5	0,14	0,51	1000m Drum
181 170	2x (4 x 2 x 0,54) (AWG24)	HF-4255-U	FR/PVC <sup>1)</sup>	10,7 x 6,1	73,2	39,0	0,27	0,96	on request
181 171	2x (4 x 2 x 0,54) (AWG24)	HF-4254-U	FRNC/LSOH <sup>2)</sup>	10,7 x 6,1	74,4	39,0	0,23	0,82	on request

<sup>1)</sup> FR/PVC = Flame Retardant/Polyvinylchloride;  
<sup>2)</sup> FRNC/LSOH = Flame Retardant Non Corrosive/Low Smoke Zero Halogen

### Electrical Characteristics

Loop resistance at 20°C:	155	Ω/km
Mutual capacitance:	43	pF/m
Impedance at 100MHz:	100	Ω ± 5 Ω
Transfer impedance at 1/10/30 MHz	< 45/90/190 mΩ/m	
Near end unbalance att. LCL :	> 40	dB
Delay Skew:	8	ns/100m
NVP:	76	%



Category	5e				
Frequency [MHz]	1	4	10	100	250
Attenuation [dB/100m]	1,9	3,6	5,6	18,2	29
NEXT [dB]	75	70	65	44	40
PS NEXT [dB]	72	67	62	41	37
ACR [dB]	73	66	59	26	11
PS ACR [dB]	70	63	56	23	8
ELFEXT [dB]	84	69	63	41	31
PS ELFEXT [dB]	81	66	60	38	28
Return loss [dB]	27	31	31	28	24

These performance data are typical measured values.

### Mechanical Characteristics

Bending radius (flat side)	- during draw-in	4P	2x4P
	- permanently installed	≥ 48 mm	≥ 48 mm
Tensile strength		≥ 24 mm	≥ 24 mm
Crush resistance		≤ 91 N	≤ 182 N
Impact		≥ 1000 N/10 cm	
Temperature range	- during installation	≥ 10 Impacts	
	- in operation	0°C to + 50°C	
		-20°C to + 60°C	

### Environmental conditions

Zero halogen	FRNC/LSOH-Variant is Zero halogen according to IEC 60754-2
Smoke density	FRNC/LSOH-Variant according to IEC 61034
Burning characteristics	according to IEC 60332-1

### General Characteristics

Wire colour code	white - blue/blue white - orange/orange white - green/green white - brown/brown (ring marked) according to IEC 189 and IEC 708
Printing	DAETWYLER UNINET 5002 4P FR/PVC resp. DAETWYLER UNINET 5002 4P FRNC/LSOH (+Batch number+meter marks)
Zero halogen	IEC 60754-1/-2, EN 50267-2-1/-2-2,
non corrosive gases	VDE 0482-267-2-1/-2-2 (acc. to FRNC/LSOH)
Flame retardant	IEC 60332-1-2, EN 60332-1-2, VDE 0482-332-1-2
Minimum smoke emission	IEC 61034-1/-2, EN 61034-1/-2 (EN 50268-1/-2), VDE 0482-1034-1/-2 (VDE 0482-268)-1/-2) (acc. to FRNC/LSOH)
EMC	screened
Cat./Class	better than Cat.5e, Class D

Cables

Copper screened

Copper unscreened

Fibre optic

Systems

Accessories

Informations