



- 1 Inner conductor:** AWG23 Bare copper wire
2 PE insulated conductor: 1.3 mm Ø
3 Screen (pair): Alu PETP foil
4 Drain wire: Tinned copper wire
5 Outer sheath: FRNC/LSOH orange RAL 2003



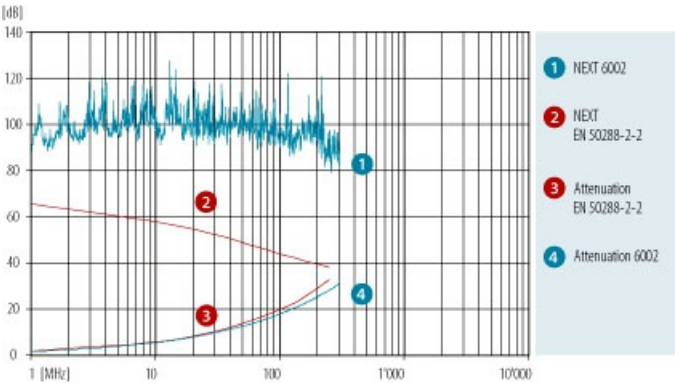
DESCRIPTION

Electrically and mechanically advanced quality Cat.6 data cable - fulfils the requirements of ISO/IEC 11801, IEC 61156-5, EN 50173-1 and EN 50288-5-1.
Good shielding effect due to individually screened pairs.
Compatible with all current connecting hardware in accordance with EN 50173 and ISO/IEC 11801.

APPLICATION

Data cable for structured premises cabling.
For the transmission of digital and analogue voice, video and data signals.
Suitable for all ICT network applications up to class E applications (250 MHz) in accordance with EN 50173-1 and ISO/IEC 11801.
Applicable for Power over Ethernet (PoE) / PoE+.

GRAPH



ELECTRICAL CHARACTERISTICS

Category	1	4	10	5e	6
Frequency [MHz]	1	4	10	100	250
Attenuation [dB/100m]	2.1	3.8	5.9	19.8	30
NEXT [dB]	93	93	93	93	83
PS NEXT [dB]	90	90	90	90	80
ACR-N [dB]	91	89	87	73	53
PS-ACR-N [dB]	88	86	84	70	50
ACR-F [dB]	96	96	96	74	56
PS-ACR-F [dB]	93	93	93	71	53
Return loss [dB]	26	28	30	30	27

These performance data are typical measured values.

ELECTRICAL PROPERTIES

Category:	Cat.6
Coupling attenuation:	55 dB
Delay Skew:	5 ns/100 m
Impedance at 100 MHz, $\pm 5\Omega$:	100 Ω
Loop resistance at 20°C:	< 150 Ω /km
Near end unbalance attenuation LCL at 1-600 MHz:	40 dB
NVP %:	79
operating capacity:	42 pF/m
Transfer impedance 1/10/30 MHz:	< 50/100/200 m Ω /m

SUPPORTED APPLICATIONS

10Base-T, 100Base-T, 1000Base-T, 2.5GBase-T, 5GBase-T, 10GBase-T, Fieldbus

MECHANICAL PROPERTIES

Minimum bending radius during installation:	56 mm
Minimum bending radius permanently installed:	28 mm
Tensile strength (4P):	95 N
Minimal crush resistance / 10cm:	1,000 N
Minimum number of impacts:	10
Installation temperature:	0 °C - +50 °C
Operating temperature:	-20 °C - +60 °C

STANDARDS

Reaction to fire (Euroclasses)	EN 13501-6: D _{ca}
Wire colour	white/bluewhite/orangewhite/greenwhite/brownin accordance with IEC 60189 and IEC 60708
Imprint	DATWYLER «cable type» «additional text» «batch number» «meter marks»
Zero halogen, no corrosive gases	IEC 60754-1/-2, EN 60754-1/-2, VDE 0482-754-1/-2, AREI-RGIE Art.104-SA
Flame propagation	IEC 60332-1-2, EN 60332-1-2, VDE 0482-332-1-2, AREI-RGIE Art.104-F1
Smoke density	IEC 61034-1/-2, EN 61034-1/-2, VDE 0482-1034-1/-2, AREI-RGIE Art.104-SD
PoE	IEEE 802.3af
EMC	shielded
Segregation class	c
Cat./Class	Cat 6 / Class E - limit values as specified by IEC 61156-5 and EN 50288-6-1 guaranteed

VERSIONS

Article No.	DoP	Product	Reaction to fire (Euroclasses)	Dimensions n x p x [mm (AWG)]	Sheath	Sheath colour	Sheath Ø [mm]	Weight [kg/km]	Cu rate [kg/km]	Tensile load [N]	Fire load [MJ/m]	Fire load [kWh/m]	PU
182936		CU 6002 4P	Dca-s2,d1,a1	4 x 2 x 0.55 (AWG23)	FRNC/LSOH	orange	6.8	48	20.0	95 N	0.55 MJ/m	0.15	1000 m drum
18293600DK		CU 6002 4P	Dca-s2,d1,a1	4 x 2 x 0.55 (AWG23)	FRNC/LSOH	orange	6.8	48	20.0	95 N	0.55 MJ/m	0.15	1000 m drum
18293600DL		CU 6002 4P	Dca-s2,d1,a1	4 x 2 x 0.55 (AWG23)	FRNC/LSOH	orange	6.8	48	20.0	95 N	0.55 MJ/m	0.15	500 m drum