



- 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



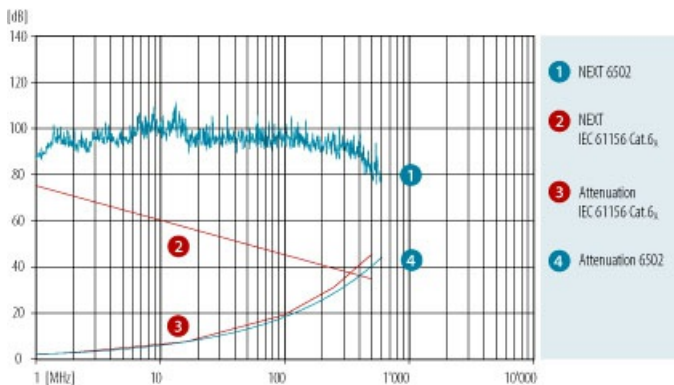
**DESCRIPTION**

Electrically and mechanically improved quality Cat.6A data cable - fulfils the requirements of ISO/IEC 11801, IEC 61156-5, EN 50173-1 and EN 50288-10-1. 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 EA applications (500 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	6 <sub>A</sub>
Frequency [MHz]				100	250	500
Attenuation [dB/100m]	2.1	3.8	5.9	19	30	43
NEXT [dB]	93	93	93	93	83	75
PS NEXT [dB]	90	90	90	90	80	72
ACR-N [dB]	91	89	87	73	53	32
PS-ACR-N [dB]	88	86	84	70	50	29
ACR-F [dB]	96	96	96	74	56	33
PS-ACR-F [dB]	93	93	93	71	53	30
Return loss [dB]	26	28	30	30	27	21

These performance data are typical measured values.

### ELECTRICAL PROPERTIES

Category:	Cat.6 <sub>A</sub>
Coupling attenuation:	55 dB
Delay Skew:	5 ns/100 m
Impedance at 100 MHz, ±5Ω:	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 mΩ/m


### MECHANICAL PROPERTIES

Minimum bending radius during installation:	56 mm
Minimum bending radius permanently installed:	28 mm
Tensile strength (4P):	95 N
Tensile strength (2x4P):	190 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 (Euroclass)	EN 13501-6: C <sub>ca</sub>
Wire colour	white/bluewhite/orangewhite/greenwhite/brown in 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 <sub>A</sub> / Class E <sub>A</sub>

### VERSIONS

Article No.	DoP	Product	Reaction to fire (Euroclass)	Dimensions n x p x [mm (AWG)]	Sheath	Sheath colour	Sheath Ø [mm]	Weight [kg/km]	Cu rate [kg/km]	Fire load [MJ/m]	Fire load [kWh/m]	PU
19145502CL		CU 6502 2x4P	Cca-s1b,d1,a1	2 x (4 x 2 x 0.55 (AWG23))	FRNC/LSZH	orange	7.0 x 14.3	96	40.0	1.10 MJ/m	0.3	500 m drum
19145300CK		CU 6502 4P	Cca-s1a,d1,a1	4 x 2 x 0.55 (AWG23)	FRNC/LSZH	orange	6.8	48	20.0	0.55 MJ/m	0.15	1000 m drum