CU 6502 4P / 2x4P F8

Data cable, U/FTP, Category 6_A, AWG23, Euroclass Dca

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/LS0H orange RAL 2003

DESCRIPTION

Electrically and mechanically improved quality Cat.6_A data cable - fulfils the requirements of ISO/IEC 11801, IEC 61156-5, EN 50173-1 and prEN 50288-10-1.

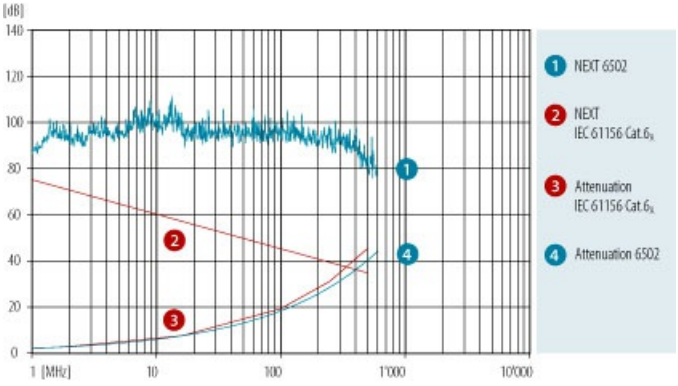
Good shielding effect due to individually screened pairs.
Compatible with all current connecting hardware in accordance with EN 50173 and ISO/IEC 11801.

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 E_A applications (500 MHz) in accordance with EN 50173-1 and ISO/IEC 11801.

Applicable for Power over Ethernet (PoE) / PoE+.
Supported Applications: 10Base-T, 100Base-T, 1000Base-T, 2.5GBase-T, 5GBase-T, 10GBase-T, Fieldbus

GRAPH



ELECTRICAL CHARACTERISTICS

Category				**5e**	**6**	**6_A**
Frequency [MHz]	1	4	10	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.

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ELECTRICAL PROPERTIES

Loop resistance at 20° C:	150 Ω/km
Mutual capacitance:	42 pF/m
Impedance at 100 MHz:	100 Ω ±5 Ω
Transfer impedance at 1/10/30 MHz:	< 50/100/200 mΩ/m
Coupling attenuation (limit curve of critical state - IEC 61156):	> 55 dB
Near end unbalance attenuation LCL at 1/10/100 MHz:	> 40 dB
Delay Skew:	5 ns/100 m
NVP:	79 %

SUPPORTED APPLICATIONS

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

MECHANICAL PROPERTIES

		CU 6502 4P	CU 6502 2x4P F8
Bending radius (flat side)	during draw-in:	≥ 56 mm	≥ 56 mm
	permanently installed:	≥ 28 mm	≥ 28 mm
Tensile strength:		≤ 95 N	≤ 190 N
Crush resistance:		≥ 1000 N/10 cm	
Impact:		≥ 10 impacts	
Temperature range	during installation:	0° C to + 50° C	
	in operation:	-20° C to + 60° C	

STANDARDS

Reaction to fire (Euroclasses)	EN 13501-6:Dca-s2,d1,a1
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_A / Class E_A

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]	Fire load [MJ/m]	Fire load [kWh/m]	PU
19145300DK		CU 6502 4P	Dca-s2,d1,a1	4 x 2 x 0.55 (AWG23)	FRNC/LS0H	orange	6.8	48	20.0	0.55 MJ/m	0.15	1000 m drum
19145300DL		CU 6502 4P	Dca-s2,d1,a1	4 x 2 x 0.55 (AWG23)	FRNC/LS0H	orange	6.8	48	20.0	0.55 MJ/m	0.15	500 m drum
19145500DL		CU 6502 2x4P	Dca-s2,d1,a1	2 x (4 x 2 x 0.55 (AWG23))	FRNC/LS0H	orange		96	40.0	1.10 MJ/m	0.3	500 m drum