

## CU 6502 4P / 2x4P F8

Data cable, U/FTP, Category 6<sub>A</sub>, AWG23, Euroclass Dca  
650 MHz



- 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.6A 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 EA 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

### Construction

Outer sheath material	FRNC/LSZH
Outer sheath colour	orange

### General properties

Installation temperature	0 °C - +50 °C
Operating temperature	-20 °C - +60 °C
Wire colour	white/blue, white/orange, white/green, white/brown, according to IEC 60189 and IEC 60708
Imprint	DATWYLER «cable type» «additional text» «batch number» «meter marks»
Field of application	Indoor

## Electrical properties

Category	Cat.6 <sub>A</sub>
Gbit/s	Up to 10 Gbit/s
Loop resistance at 20 °C	150 Ω/km
Operating capacity	42 pF/m
Impedance at 100 MHz, ±5Ω	100 Ω
NVP %	79
Delay skew	5 ns/100 m
Shielding	shielded
Near end unbalance attenuation LCL at 1-600 MHz	40 dB
Transfer impedance 1/10/30 MHz	< 50/100/200 mΩ/m
Coupling attenuation	55 dB
Segregation class	c

Frequency [MHz]	Category	Attenuation [dB]	NEXT [dB]	PS-NEXT [dB]	ACR-N [dB]	PS-ACR-N [dB]	ACR-F [dB]	Return Loss [dB]
1		2.1	93	90	91	88	96	26
4		3.8	93	90	89	86	96	28
10		5.9	93	90	87	84	96	30
100	5e	19	93	90	73	70	74	30
250	6	30	83	80	53	50	56	27
500	6 <sub>A</sub>	43	75	72	32	29	33	21

The performance data given are typical measured values.

## Mechanical properties

Solid / Flex	Solid wire
AWG	23
Minimum bending radius (permanently installed)	28 mm
Minimal crush resistance / 10cm	1,000 N
Minimum bending radius (during installation)	56 mm
Minimum number of impacts	10

## Standards

Reaction to fire	EN 13501-6
Euroclass	D <sub>ca</sub>
Smoke density	IEC 61034-1/-2, EN 61034-1/-2, VDE 0482-1034-1/-2, AREI-RGIE Section 4.3.3 SD
Zero halogen no corrosive gases	IEC 60754-1/-2, EN 60754-1/-2, VDE 0482-754-1/-2, AREI-RGIE Section 4.3.3 SA
Flame propagation	IEC 60332-1-2, EN 60332-1-2, VDE 0482-332-1-2, AREI-RGIE Section 4.3.3 F1
Cables standard	ISO/IEC 61156-5, EN 50288-10-1
Cat./Class	Cat.6 <sub>A</sub> / Class E <sub>A</sub>
PoE	IEEE 802.3bt Type 4 (100W)

## Versions

Material number	Product	Reaction to fire	Dimensions n x p x [mm (AWG)]	Outer sheath dimensions [mm]	CU rate [kg/km]	Weight [kg/km]	Fire load [kWh/m]	Packing unit	GTIN / EAN
19145300DK	CU 6502 4P	Dca-s2,d1,a1	4 x 2 x 0.55 (AWG23)	6.8	20.0	46.6	0.15	1000 m drum	40393910030914

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19145300DL	CU 6502 4P	Dca-s2,d1,a1	4 x 2 x 0.55 (AWG23)	6.8	20.0	46.6	0.15	500 m drum	40393910030907
19145500DL	CU 6502 2x4P	Dca-s2,d1,a1	2 x (4 x 2 x 0.55 (AWG23))	7.0 x 14.3	40.0	97.6	0.3	500 m drum	40393910030754

Subject to technical modification

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