

# CU 5002 4P

Data cable, F/UTP, Category 5e, AWG24



- 1 Inner conductor:** AWG24 Bare copper wire
- 2 PE insulated conductor:** 1.0 mm Ø, PE Foam Skin
- 3 Drain wire:** Tinned copper wire
- 4 Polyester foil**
- 5 Overall screen:** Alu Polyester foil
- 6 Outer sheath:** FR/PVC grey RAL 7035, FRNC/LS0H orange RAL 2003



## DESCRIPTION

Electrically and mechanically advanced quality Cat.5e data cable - fulfils the requirements of ISO/IEC 11801, IEC 61156-5, EN 50173-1 and EN 50288-2-1.

Excellent shielding effect due to overall screen foils.

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 D applications (100 MHz) in accordance with EN 50173-1 and ISO/IEC 11801.

Applicable for Power over Ethernet (PoE) / PoE+.

## ELECTRICAL CHARACTERISTICS

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-N [dB]	73	66	59	26	11
PS-ACR-N [dB]	70	63	56	23	8
ACR-F [dB]	84	69	63	41	31
PS-ACR-F [dB]	81	66	60	38	28
Return loss [dB]	27	31	31	28	24

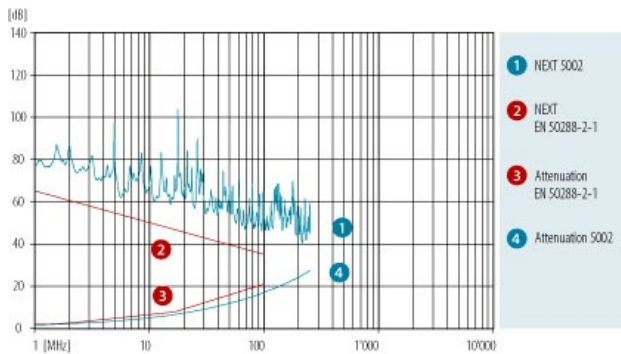
These performance data are typical measured values.

## MECHANICAL PROPERTIES

Bending radius	during draw-in:	≥ 48 mm
	permanently installed:	≥ 24 mm
Tensile strength:		≤ 91 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

## ELECTRICAL PROPERTIES

Loop resistance at 20° C:	155 Ω/km
Mutual capacitance:	43 pF/m
Impedance at 100 MHz:	100 Ω ±5 Ω
Transfer impedance at 1/10/30 MHz:	< 45/90/190 mΩ/m
Coupling attenuation (limit curve of critical state - IEC 61156):	> 40 dB
Near end unbalance attenuation LCL:	> 40 dB
Delay Skew:	8 ns/100 m
NVP:	76 %



## STANDARDS

Wire colour	white - blue/blue white - orange/orange white - green/green white - brown/brown in accordance with IEC 60189 and IEC 60708 (ring marked)
Imprint	DATWYLER «cable type» «additional text» «batch number» «meter marks»
Zero halogen, no corrosive gases	IEC 60754-1/-2, EN 50267-2-1/-2-2, VDE 0482-267-2-1/-2-2, AREI-RGIE Art.104-SA - applies to FRNC/LSOH
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 - applies to FRNC/LSOH
PoE	IEEE 802.3af
EMC	shielded
Cat./Class	Cat 5e / Class D - limit values as specified by IEC 61156-5 and EN 50288-2-1 guaranteed
Segregation class	b

## VERSIONS

Article Number	Product	Sheath	Sheath Ø [mm]	Sheath colour	Weight [kg/km]	Cu rate [kg/km]	Fire load [MJ/m]	Fire load [kWh/m]	Dimension n x p x [mm (AWG)]	PU
181114	CU 5002 4P	FR/PVC	6.2	grey	40.0	19.5	0.56	0.16	4 x 2 x 0.54 (AWG24)	1000 m drum
181113	CU 5002 4P	FRNC/LSOH	6.0	orange	40.8	19.5	0.51	0.14	4 x 2 x 0.54 (AWG24)	1000 m drum