



- 1 Inner Conductor: AWG23 Bare copper wire
- 2 PE insulated conductor: 1.4 Ø
- 3 Screen (pair): Alu PETP foil
- 4 Overall screen: Tinned braided copper
- 5 Outer sheath: FRNC/LSOH Orange RAL 2003



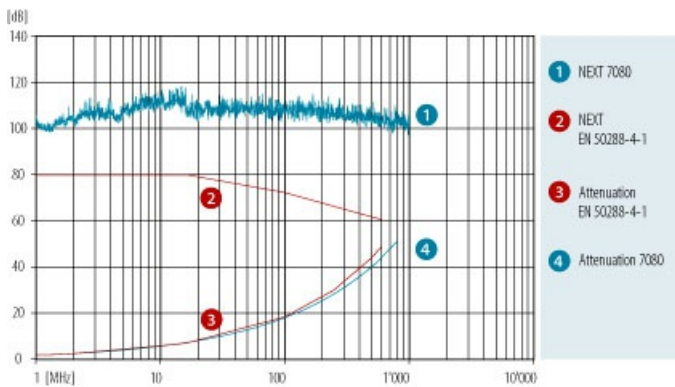
DESCRIPTION

Electrically and mechanically superior quality Cat.7 data cable - exceeds the requirements of ISO/IEC 11801, IEC 61156-5, EN 50173-1 and EN 50288-4-1. Excellent shielding effect due to individually screened pairs and overall copper braid. 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 F applications (600 MHz) in accordance with EN 50173-1 and ISO/IEC 11801 and for the transmission of broadband signals (such as cable TV) in accordance with IEC 15018. Applicable for Power over Ethernet (PoE) / PoE+.

GRAPH



ELECTRICAL CHARACTERISTICS

Category	1	4	10	5e	6	6A	7	800	862	1000
Frequency [MHz]	1	4	10	100	250	500	600	800	862	1000
Attenuation [dB/100m]	1.9	3.6	5.6	17.9	28	41	46	52	54	57
NEXT [dB]	100	100	100	100	100	92	90	84	83	80
PS NEXT [dB]	97	97	97	97	97	89	87	81	80	77
ACR-N [dB]	98	96	94	82	72	58	44	32	29	23
PS-ACR-N [dB]	95	93	91	79	69	55	41	29	26	20
ACR-F [dB]	98	98	98	78	69	56	45	39	37	33
PS-ACR-F [dB]	95	95	95	75	66	53	42	36	34	30
Return loss [dB]	26	30	33	33	28	26	25	23	22	20

These performance data are typical measured values.

CU 7080 4P / 2x4P F8

Data cable, S/FTP, Category 7, AWG23, Euroclass Dca



ELECTRICAL PROPERTIES

Loop resistance at 20° C:	140 Ω/km
Mutual capacitance:	42 pF/m
Impedance at 100 MHz:	100 Ω ±5 Ω
Transfer impedance at 1/10/30 MHz:	< 6/6/10 mΩ/m
Coupling attenuation (limit curve of critical state - IEC 61156):	> 85 dB
Near end unbalance attenuation LCL at 1-600 MHz :	> 40 dB
Delay Skew:	12 ns/100 m
NVP:	81 %

SUPPORTED APPLICATIONS

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

MECHANICAL PROPERTIES

		CU 7080 4P	CU 7080 2x4P F8
Bending radius (flat side)	during draw-in:	≥ 60 mm	≥ 60 mm
	permanently installed:	≥ 30 mm	≥ 30 mm
Tensile strength:		≤ 110 N	≤ 220 N
Crush resistance:		≥ 1000 N/10 cm	≥ 1000 N/10 cm
Impact:		≥ 10 impacts	≥ 10 impacts
Temperature range	during installation:	0° C to + 50° C	0° C to + 50° C
	in operation:	-20° C to + 60° C	-20° C to + 60° C

STANDARDS

Reaction to fire (Euroclasses)	EN 13501-6:D _{ca}
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
Flame spread	IEC 60332-3-24, EN 60332-3-24, AREI-RGIE Art.104-F2
Smoke density	IEC 61034-1/-2, EN 61034-1/-2, VDE 0482-1034-1/-2, AREI-RGIE Art.104-SD
PoE	IEEE 802.3at
EMC	shielded
Segregation class	d
Cat./Class	Cat 7 / Class F - limit values as specified by IEC 61156-5 and EN 50288-4-1 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]	Bending radius [mm]	Tensile load [N]	Fire load [MJ/m]	Fire load [kWh/m]	PU
18291100DK		CU 7080 4P	Dca-s2,d1,a1	4 x 2 x 0.57 (AWG23)	FRNC/LS0H	orange	7.2	55	31.1	30	110 N	0.57 MJ/m	0.16	1000 m drum
18291101DK		CU 7080 4P	Dca-s1,d2,a1	4 x 2 x 0.57 (AWG23)	FRNC/LS0H	orange	7.2	55	31.1	30	110 N	0.57 MJ/m	0.16	1000 m drum
18291102DK		CU 7080 4P	Dca-s2,d2,a1	4 x 2 x 0.57 (AWG23)	FRNC/LS0H	orange	7.2	55	31.1	30	110 N	0.57 MJ/m	0.16	1000 m drum
18291100DL		CU 7080 4P	Dca-s2,d1,a1	4 x 2 x 0.57 (AWG23)	FRNC/LS0H	orange	7.2	55	31.1	30	110 N	0.57 MJ/m	0.16	500 m drum
18291101DL		CU 7080 4P	Dca-s2,d1,a1	4 x 2 x 0.57 (AWG23)	FRNC/LS0H	orange	7.2	55	31.1	30	110 N	0.57 MJ/m	0.16	500 m drum
18291200DL		CU 7080 2x4P	Dca-s2,d1,a1	2 x (4 x 2 x 0.57 (AWG23))	FRNC/LS0H	orange		110	62.2	30	220 N	1.14 MJ/m	0.32	500 m drum
18291201DL		CU 7080 2x4P	Dca-s1,d2,a1	2 x (4 x 2 x 0.57 (AWG23))	FRNC/LS0H	orange		111	62.2	30	220 N	1.14 MJ/m	0.32	500 m drum
18291202DL		CU 7080 2x4P	Dca-s2,d2,a1	2 x (4 x 2 x 0.57 (AWG23))	FRNC/LS0H	orange		110	62.2	30	220 N	1.14 MJ/m	0.32	500 m drum

* Dca-s1,d2,a1 / ** Dca-s2,d2,a1