



- 1 Inner conductor:** AWG22 Bare copper wire
- 2 PE insulated conductor:** 1.6 mm Ø
- 3 Screen (pair):** Alu PETP foil
- 4 Overall screen:** Tinned braided copper
- 5 Outer sheath:** FRNC/LSOH



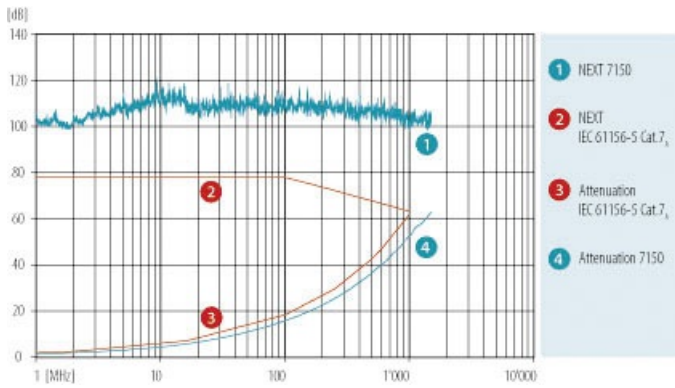
DESCRIPTION

Electrically and mechanically superior quality Cat.7_A data cable - exceeds the requirements of ISO/IEC 11801, IEC 61156-5, IEC 61156-7, EN 50173-1 and EN 50288-9-1. Excellent shielding effect due to individually screened pairs and overall copper braid. Easy identification of wires thanks to longitudinal colour markings. 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_A applications (1000 MHz) in accordance with EN 50173-1 and ISO/IEC 11801. Optimized for the transmission of broadband signals (such as cable TV) in accordance with IEC 15018. Due to the increased wire section eminently suited for Power over Ethernet (PoE) / PoE+. Fully supports the application of HDBaseT (TM) Spec 1.0 and Spec 2.0

GRAPH



ELECTRICAL CHARACTERISTICS

Category	5e	6	6 _A	7	CATV	7 _A	61156-7				
Frequency [MHz]	1	4	10	100	250	500	600	862	1000	1200	1500
Attenuation [dB/100 m]	1.7	3.2	4.9	16.2	26	38	40	49	54	58	68
NEXT [dB]	103	103	103	103	103	98	96	92	90	85	80
PS NEXT [dB]	100	100	100	100	100	95	93	89	87	82	77
ACR-N [dB]	101	100	98	87	77	60	56	43	36	27	12
PS-ACR-N [dB]	98	97	95	84	74	57	53	40	33	24	9
ACR-F [dB]	110	108	106	94	84	71	66	58	55	46	41
PS-ACR-F [dB]	107	105	103	91	81	68	63	55	52	43	38
Return loss [dB]	26	30	33	33	28	26	25	24	23	23	20

These performance data are typical measured values.

ELECTRICAL PROPERTIES

Loop resistance at 20° C:	111 Ω/km
Mutual capacitance:	41 pF/m
Impedance at 100 MHz:	100 Ω ± 5 Ω
Transfer impedance at 1/10/30 MHz:	< 5/5/8 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:	17 ns/100m
NVP:	80%


MECHANICAL PROPERTIES

		CU 7150 4P	CU 7150 2x4P F8
Bending radius (flat side)	during draw-in:	≥ 60 mm	≥ 60 mm
	permanently installed:	≥ 30 mm	≥ 30 mm
Tensile strength:		≤ 130 N	≤ 260 N
Crush resistance:		≤ 1000 N/10 cm	≤ 1000 N/10 cm
Impact resistance:		≤ 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:Dca-s2,d1,a1
Wire colour	white-blue/bluewhite-orange/orangewhite-green/greenwhite-brown/brown(with longitudinal stripes)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 _A / Class F _A - limit values as specified by IEC 61156-5, IEC 61156-7 and EN 50288-9-1 guaranteed

VERSIONS

Article No.	DoP	Product	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
18292500DK		CU 7150 4P	4 x 2 x 0.64 (AWG22)	FRNC/LS0H	orange	7.8	65.3	40.2	0.62 MJ/m	0.18 1000 m drum
18292500DL		CU 7150 4P	4 x 2 x 0.64 (AWG22)	FRNC/LS0H	orange	7.8	65.3	40.2	0.62 MJ/m	0.18 500 m drum
18292600DL		CU 7150 2x4P	2 x (4 x 2 x 0.64 (AWG22))	FRNC/LS0H	orange	16	131.4	80.4	1.24 MJ/m	0.36 500 m drum