



- 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



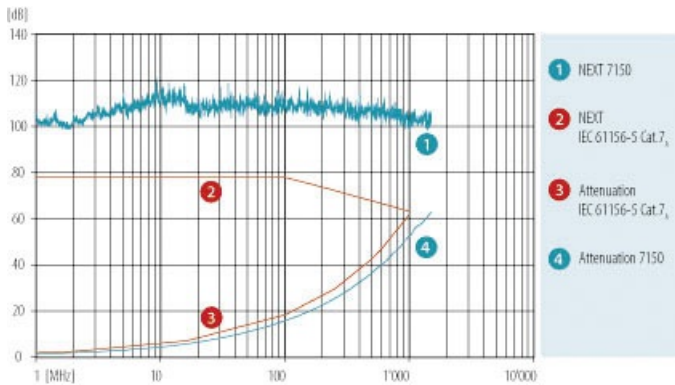
**DESCRIPTION**

Electrically and mechanically superior quality Cat.7A 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 FA 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 ISO/IEC 11801-4. Due to the increased wire section eminently suited for Power over Ethernet PoE / PoE+ / 4PPoE up to 100W. Fully supports the application of HDBaseT (TM) Spec 1.0 and Spec 2.0

**GRAPH**



**ELECTRICAL CHARACTERISTICS**

Category	5e	6	6 <sub>A</sub>	7	CATV	7 <sub>A</sub>	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

Category:	Cat.7 <sub>A</sub>
Coupling attenuation:	85 dB
Delay Skew:	17 ns/100 m
Impedance at 100 MHz, ±5Ω:	100 Ω
Loop resistance at 20°C:	< 111 Ω/km
Near end unbalance attenuation LCL at 1-600 MHz:	40 dB
NVP %:	80
operating capacity:	41 pF/m
Transfer impedance 1/10/30 MHz:	< 5/5/8 mΩ/m

## SUPPORTED APPLICATIONS

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




## MECHANICAL PROPERTIES

Minimum bending radius during installation:	60 mm
Minimum bending radius permanently installed:	30 mm
Tensile strength (4P):	130 N
Tensile strength (2x4P):	260 N
Minimal crush resistance / 10cm:	1,000 N
Minimum number of impacts:	10
Installation temperature:	0 °C - +50 °C
Operating temperature:	-20 °C - +60 °C

## STANDARDS

Reaction to fire (Euroclasses)	EN 13501-6: D <sub>ca</sub>
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 802.3bt
EMC	shielded
Segregation class	d
Cat./Class	Cat 7 <sub>A</sub> / Class F <sub>A</sub> - limit values as specified by IEC 61156-5, IEC 61156-7 and EN 50288-9-1 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]	Fire load [MJ/m]	Fire load [kWh/m]	PU
18292500DK		CU 7150 4P	Dca-s2,d1,a1	4 x 2 x 0.64 (AWG22)	FRNC/LS0H	orange	7.8	65	40.2	0.62 MJ/m	0.18	1000 m drum
18292500DL		CU 7150 4P	Dca-s2,d1,a1	4 x 2 x 0.64 (AWG22)	FRNC/LS0H	orange	7.8	65	40.2	0.62 MJ/m	0.18	500 m drum
18292600DL		CU 7150 2x4P	Dca-s2,d1,a1	2 x (4 x 2 x 0.64 (AWG22))	FRNC/LS0H	orange	16	131	80.4	1.24 MJ/m	0.36	500 m drum