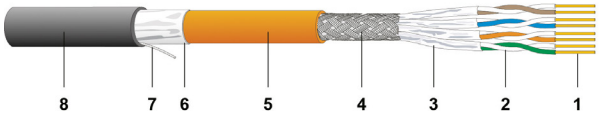
CU 7702 4P FRNC/GG/FRNC

Data cable, S/FTP, Category 7_A, AWG22, Euroclass B2ca

1300 MHz



1 Inner conductor: AWG22 Bare copper wire
2 PE insulated conductor: 1.52 mm Ø
3 Screen (pair): Alu PETP foil
4 Overall screen: Tinned braided copper
5 Sheath: FRNC/LS0H orange RAL 2003
6 Rodent protection: with glass rovings
7 Ripcord
8 Outer sheath: FRNC/LS0H black

Description

Applicable for outdoor installation due to rodent protection and UV resistant outer cable sheath.
Robust cable design with a high mechanical stability.
Electrically and mechanically superior quality Cat.7_A data cable - exceeds the requirements of ISO/IEC 11801-1, IEC 61156-5, EN 50173-1 and EN 50288-9-1.
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 11801-1.

Application

Data cable for structured premise cabling with enhanced mechanical and fire protection performance.
Designed for installation in Tunnels, Metro-Systems and Buildings with augmented requirements.
With rodent protection and UV protected outer sheath. Installation in ducts, tubes and on cable support systems.
Suitable for all ICT network applications up to class F_A applications (1000 MHz) in accordance with EN 50173-1 and ISO/IEC 11801.
Supports 10Base-T, 100Base-T, 1GBase-T (1000Base-T) and 10GBase-T.
Applicable for Power over Ethernet PoE / PoE+ / 4PPoE.

Construction

Outer sheath material	FRNC/LSZH
Outer sheath colour	black

General properties

Installation temperature	0 °C - +50 °C
Operating temperature	-20 °C - +60 °C
Wire colour	white/blue-white, white/orange-white, white/green-white, white/brown-white (with length stripes)
Imprint	DATWYLER «cable type» «additional text» «batch number» «meter marks»
Field of application	Outdoor

Electrical properties

Category	Cat.7_A
GBit/s	Up to 10 Gbit/s
Loop resistance at 20 °C	116 Ω/km
Operating capacity	43 pF/m
Impedance at 100 MHz, ±5Ω	100 Ω
NVP %	76
Delay skew	15 ns/100 m
Shielding	shielded
Near end unbalance attenuation LCL at 1-600 MHz	40 dB
Transfer impedance 1/10/30 MHz	< 5/5/8 mΩ/m
Coupling attenuation	85 dB
Segregation class	d

Frequency [MHz]	Category	Attenuation [dB]	NEXT [dB]	PS-NEXT [dB]	ACR-N [dB]	PS-ACR-N [dB]	ACR-F [dB]	Return Loss [dB]
1		1.7	103	100	101	98	109	26
4		3.4	103	100	100	97	107	30
10		5.3	103	100	98	95	105	33
100	5e	16.9	103	100	86	83	93	33
250	6	27	103	100	76	73	83	28
500	6_A	40	98	95	58	55	70	26
600	7	42	96	93	54	51	65	25
862		53	92	89	39	36	57	24
1,000	7_A	56	90	87	34	31	54	23
1,200		62	85	82	23	20	46	21

The performance data given are typical measured values.

Mechanical properties

Solid / Flex	Solid wire
AWG	22
Minimum bending radius (permanently installed)	48 mm
Minimal crush resistance / 10cm	1,000 N
Minimum bending radius (during installation)	96 mm
Minimum number of impacts	10

Standards

Reaction to fire	EN 13501-6
Euroclass	$B2_{ca}$
Smoke density	IEC 61034-1/-2, EN 61034-1/-2
Zero halogen no corrosive gases	IEC 60754-1/-2, EN 60754-1/-2
Flame propagation	IEC 60332-1-2, EN 60332-1-2, VDE 0482-332-1-2
Cables standard	ISO/IEC 61156-5, EN 50288-9-1
Cat./Class	Cat.7_A / Class F_A
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
19435400BZ	CU 7702 4P	B2ca-s1a,d1,a1	4 x 2 x 0.62 (AWG22)	12.0	34.9	166.7	0.55	by the metre	40393910022711