

## CU 7702 4P flex SHF1

Flexible data cable, S/FTP, Category 7, AWG26, Euroclass Dca



- 1 Inner conductor: AWG26, bare copper wire, stranded
- 2 PE insulated conductor: Ø 0.99 mm
- 3 Screen (pair): Alu PETP foil
- 4 Overall screen: tinned braided copper
- 5 Outer sheath: FRNC/LS0H SHF1



### Description

Electrically and mechanically superior quality Cat.7 patch cord - exceeds the requirements of ISO/IEC 11801, IEC 61156-6, EN 50173-1 and EN 50288-4-2.

Excellent shielding effect due to individually screened pairs and overall copper braid.

Easy wire identification and termination due to different coloured wires.

Compatible with all current connecting hardware in accordance with EN 50173, ISO/IEC 11801 and IEC 60603-7.

Oil resistant, fire retardant and halogen free sheath.

Certified by Det Norske Veritas.

### Application

As patch cord in patch panels and as equipment connection cable, especially suitable for CP (Consolidation Point) applications. Designed for use in industrial areas, particularly for higher requirements in offshore and marine applications.

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.

Optimized for the transmission of broadband signals (such as cable TV) in accordance with IEC 15018.

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

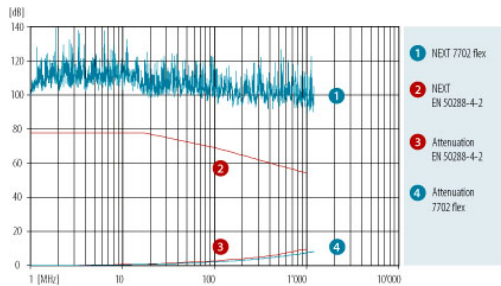
### General Properties

Field of application	Off-Shore and Shipbuilding
Imprint	DATWYLER «cable type» «additional text» «batch number» «meter marks»
Wire colour	white /blue, red/orange, black/green, yellow/brown, according to IEC 60189 and IEC 60708
Installation temperature	0 °C - +50 °C
Operating temperature	-20 °C - +60 °C

### Electrical properties

Category	Cat.7
Coupling attenuation	70 dB
Delay Skew	4 ns/100 m
Gbit/s	Up to 10 Gbit/s
Impedance at 100 MHz, ±5Ω	100 Ω
Loop resistance at 20°C	270 Ω/km
Near end unbalance attenuation LCL at 1-600 MHz	40 dB
NVP %	78

operating capacity	43 pF/m
Segregation class	c
Shielding	shielded
Transfer impedance	10 mΩ/m



Frequency [MHz]	Category	Attenuation [dB] (10M)	NEXT [dB]	ACR-N [dB] (10M)	PS-ACR-N [dB] (10M)	ACR-F [dB] (10M)	Return Loss [dB]
1		0.26	100	100	97	100	26
4		0.5	100	99	96	99	32
10		0.79	100	99	96	99	35
100	5e	2.67	100	97	94	97	30
250	6	4.3	95	91	88	95	27
500	6 <sub>A</sub>	6.2	92	86	83	91	24
600	7	6.71	90	83	80	88	23
800		7.9	90	82	79	87	21
862		8.3	90	82	79	87	21

## Mechanical properties

Solid / Flex	Stranded wire (flexible)
AWG	26
Minimal crush resistance / 10cm	600 N
Minimum bending radius	25.6 mm
Minimum number of impacts	10
Repeated bending	1000 cycles
Tensile strength (4P)	56 N

## Standards

Cat./Class	Cat.7 / Class F
DNV standard	DNVGL-CP-0403
PoE	IEEE 802.3af
Reaction to fire (Euroclasses)	EN 13501-6: D <sub>ca</sub>
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
Smoke Density	IEC 61034-1/-2, EN 61034-1/-2, VDE 0482-1034-1/-2, AREI-RGIE Art.104-SD

## Versions

Material number	Product	Reaction To Fire	Dimensions n x p x [mm (AWG)]	Outer sheath colour	Outer sheath material	Outer sheath diameter [mm]	CU rate [kg/km]	Weight [kg/km]	Fire load [kWh/m]	Packing unit
19439301DK	CU 7702 4P FLEX SHF1	Dca-s1a,d2,a1	4 x 2 x 0.132 (AWG26)	grey	FRNC/LSZH SHF1	6.4	18.1	45	0.138	1000 m drum