

## CU 7080 4P SHF1

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



- 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 SHF1



### 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.

Oil resistant, fire retardant and halogen free sheath.

Certified by Det Norske Veritas.

### Application

Data cable for structured premises cabling - 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 and for the transmission of broadband signals (such as cable TV) in accordance with IEC 15018.

Applicable for Power over Ethernet PoE / PoE+ / 4PPoE up to 100W.

Oil resistant, flame retardant and zero halogen outer sheath.

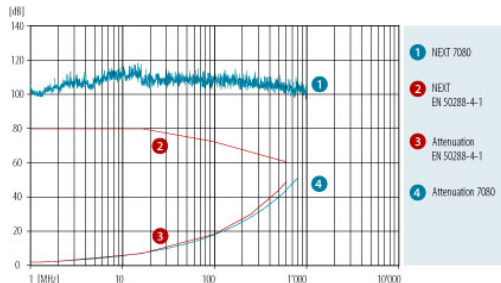
### General Properties

Circuit Integrity	No
Field of application	Off-Shore and Shipbuilding
Inprint	DATWYLER «cable type» «additional text» «batch number» «meter marks»
Wire colour	white - blue/blue, white orange/orange, white green/green, white brown/brown in acc. with IEC 60189 and IEC 60708 (ring marked)
Installation temperature	0 °C - +50 °C
Operating temperature	-20 °C - +60 °C

### Electrical properties

Category	Cat.7
Coupling attenuation	85 dB
Delay Skew	12 ns/100 m
EMC	shielded
Gbit/s	Up to 10 Gbit/s
Impedance at 100 MHz, $\pm 5\Omega$	100 $\Omega$

Loop resistance at 20°C	140 Ω/km
Near end unbalance attenuation LCL at 1-600 MHz	40 dB
NVP %	81
operating capacity	42 pF/m
Segregation class	d
Transfer impedance 1/10/30 MHz	< 6/6/10 mΩ/m



Frequency [MHz]	Category	Attenuation [dB]	NEXT [dB]	PS-NEXT [dB]	ACR-N [dB]	PS-ACR-N [dB]	ACR-F [dB]	Return Loss [dB]
1		1.9	100	97	98	95	98	26
4		3.6	100	97	96	93	98	30
10		5.6	100	97	94	91	98	33
100	5e	17.9	100	97	82	79	78	33
250	6	28	100	97	72	69	69	28
500	6 <sub>A</sub>	41	92	89	58	55	56	26
600	7	46	90	87	44	41	45	25
800		52	84	81	32	29	39	23
862		54	83	80	29	26	37	22
1,000		57	80	77	23	20	33	20

## Mechanical properties

Solid / Flex	Solid wire
AWG	23
Minimal crush resistance / 10cm	1,000 N
Minimum bending radius during installation	60 mm
Minimum bending radius permanently installed	30 mm
Minimum number of impacts	10
Tensile strength (2x4P)	220 N
Tensile strength (4P)	110 N

## Standards

Cat./Class	Cat.7 / Class F
DNV standard	DNVGL-CP-0403
Oil resistance	IEC 60811-404, EN 60811-2-1
PoE	IEEE 802.3bt Type 4 (100W)
Reaction to fire (Euroclasses)	EN 13501-6: D <sub>ca</sub>
Zero halogen no corrosive gases	AREI-RGIE Art.104-SA, EN 60754-1/-2, IEC 60754-1/-2, VDE 0482-754-1/-2
Flame Propagation	AREI-RGIE Art.104-F1, EN 60332-1-2, IEC 60332-1-2, VDE 0482-332-1-2
Flame Spread	AREI-RGIE Art.104-F2, EN 60332-3-24, IEC 60332-3-24
Smoke Density	AREI-RGIE Art.104-SD, EN 61034-1/-2, IEC 61034-1/-2, VDE 0482-1034-1/-2

## 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]	Tensile load [N]	Fire load [kWh/m]	Packing unit
19439101DK	CU 7080 4P SHF1	Dca-s1a,d2,a1	4 x 2 x 0.57 (AWG23)	grey	FRNC/LSZH SHF1	7.6	31.1	61		0.183	1000 m drum

Subject to technical modification

As of 2021-12-13 09:43:09