

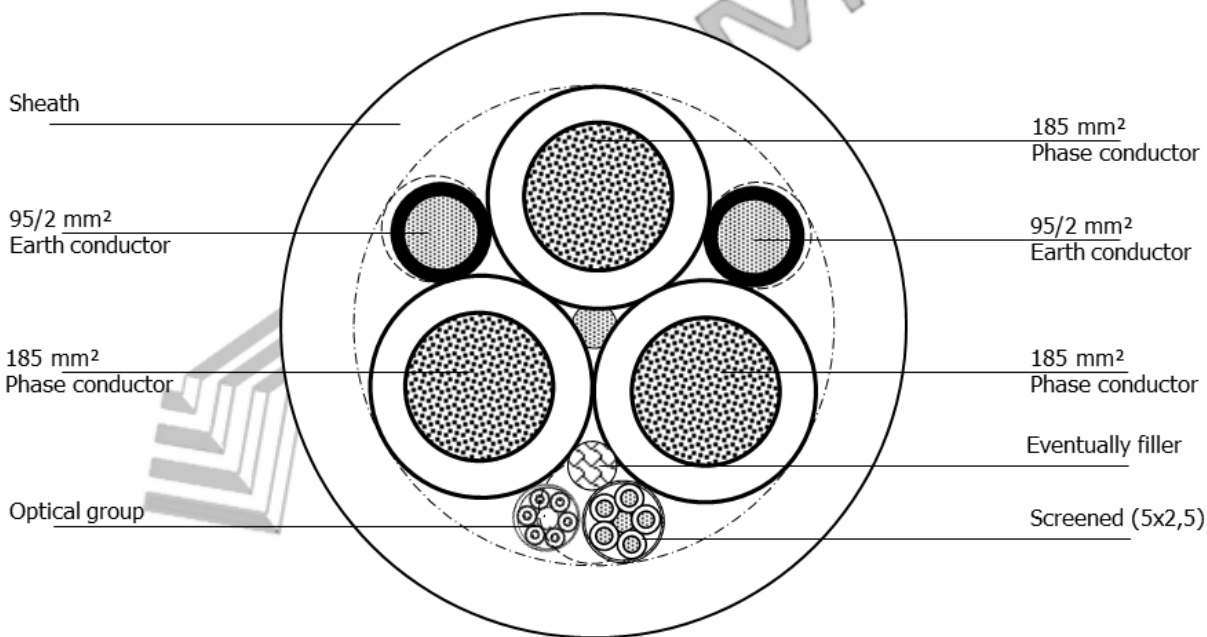
Rev. 0  22/12/2022	<b>TECHNICAL DATA TABLE</b> <b>SHIP TO SHORE CONNECTION CABLE</b> <b>(HVSC systems)</b>	STSX – 1 – 3465_IMQ  Sheet 1 of 3
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**CAVO TIPO / CABLE TYPE**

**PANZERFLEX-PUR 6/10 kV 3x185+2x95/2+1x(5x2,5)St+OFE 6G62,5/125**  
**ref. norme IEC 60092-300 (serie) e / in line with IEC 60092-300 (series) std. and**  
**IEC/ISO/IEEE 80005-1 annex A / in line with IEC/ISO/IEEE 80005-1 std.**  
**per quanto applicabile / where applicable**  
**per temp. ambiente non inferiore a -30°C / for ambient temp. not below -30°C**

**Caratteristiche costruttive / Constructional data**

non in scala / not to scale



Analysis : 52102957  
 PRYSMIAN SAP Code : 20391382 / 20360750 x CAVOTEC

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	<b>(HVSC systems)</b>	

	<b>(phases) 3x185 mm<sup>2</sup></b>	<b>(earth) 2x50 (95/2) mm<sup>2</sup></b>	<b>(pilot cores) 1x(5x2,5)St mm<sup>2</sup></b>	<b>(Optical Fiber Element) 6FO 62,5/125</b>						
Conductors and Optical fibers	Plain annealed copper flexible cl.5 IEC 60228	Plain annealed copper flexible cl.5 IEC 60228	Tinned annealed copper flexible cl.5 IEC 60228	Multi mode G.I. 62,5/125 IEC 60793-2-10 Cat. A1b ISO 11801 EN 50173 OM1 cat.						
- approx. diameter	17,5 mm	9,2 mm	2 mm							
Conductor screen	Semi conductive layer		N/A	N/A						
Insulation / covering	EPR 90 °C	Semi conductive layer	EPR 90 °C	TOL6D 6 6(1MM62,5/125)/T 6 tubes (1 fiber x tube)						
- nominal thickness	3,4 mm	N.A.	0,7 mm							
- approx. diameter	26 mm	12,5 mm	3,5 mm	8 mm						
Insulation screen	Semi conductive layer	N/A	N/A	N/A						
- approx. diameter	27 mm									
Identification	Printed numbers 1-2-3 on semic. layer	N/A	Black cores (*), printed numbers from 1 to 5	Fibers Natural Tubes Red-Blu-other White						
Electrostatic screen	N/A	N/A	Aluminium/PET tape + Tinned copper open braid as drain wire	N/A						
- approx. diameter			10,5 mm							
Cable	See drawing									
Outer sheath	Polyurethane (PUR) halogen free according to EN 50363-10-2, in two layers – BLACK colored the outer one.									
- nominal thickness	7 mm (6 mm min. at any point)									
Dimension / Weight	MAXIMUM Diameter 73 mm / 9,5 kg/m (approx. value)									
Marking (PRYSMIAN generic)	PALAZZO – PANZERFLEX-PUR <i>week/year</i> – 3x185+2x95/2+(5x2,5)St+6FO(62,5/125) 6/10 kV – ISO/IEC/IEEE 80005-1 – SHORE CONNECTION CABLE. DANGER! HIGH VOLTAGE – meter									
Marking (for CAVOTEC)	PALAZZO – CAVOFLEX AMP <i>week/year</i> – 3x185+2x95/2+(5x2,5)St+6FO(62,5/125) 6/10 kV – IEC/ISO/IEEE 80005-1 – SHORE CONNECTION CABLE. DANGER! HIGH VOLTAGE – meter									
Electrical characteristics	Rated Voltage U <sub>0</sub> /U <sub>m</sub> as per IEC/ISO/IEEE 80005-1 - phase 185 mm <sup>2</sup> 6/10(12) kV (ref. IEC 60092-354) - pilot 2,5 mm <sup>2</sup> 150/250(300) V (ref. IEC 60092-376)  Test voltage A.C. (according to IEC 60092-350 Tab. 2) - phase 185 mm <sup>2</sup> 21 kV x 5 minutes - pilot 2,5 mm <sup>2</sup> 1,5 kV x 5 minutes  Maximum D.C. resistance at 20 °C (according to IEC 60228) - phase 185 mm <sup>2</sup> 0,106 Ohm/km - earth 95 mm <sup>2</sup> 0,206 Ohm/km (parallel connected) - pilot 2,5 mm <sup>2</sup> 8,21 Ohm/km  Short circuit current (1 sec., starting temp. 80 °C, final temp. 200 °C., ref. VDE 0250) - phase 185 mm <sup>2</sup> 23,7 kA (26,5 kA considering starting/final temp. 90/250 °C) - earth 50 mm <sup>2</sup> 6,4 kA (7,2 kA considering starting/final temp. 90/250 °C)  Current carrying capacity at 30 °C (conductor temp. 80 °C., ref. VDE 0298) - phase conductors 185 mm <sup>2</sup> stretched laying 461 A mono spiral or 1 layer 369 A 2 layers 281 A Current carrying capacity at 45 °C (conductor temp. 90 °C) Mono spiral or 1 layer 350 A									
De-rating factors for varying ambient temperatures	<b>°C</b>	15	20	25	30	35	40	45	50	60
	<b>k</b>	1,12	1,08	1,04	1,00	0,96	0,91	0,87	0,82	0,71
Mechanical characteristics	Minimum bending radius Static 6 x OD Dynamic 8,5 x OD (ISO/IEC 80005-1 bending test 10±5% x OD) Max permissible tensile load 11100 N (up to 20N/mm <sup>2</sup> on phase conductors only) 16650 N (in shore power application: low speed, tide compensation)									
Thermal	Minimum operating temperature Fully flexible - 30 °C Fixed installation - 40 °C									
Fire Performance	Flame retardant IEC 60332-1-2									

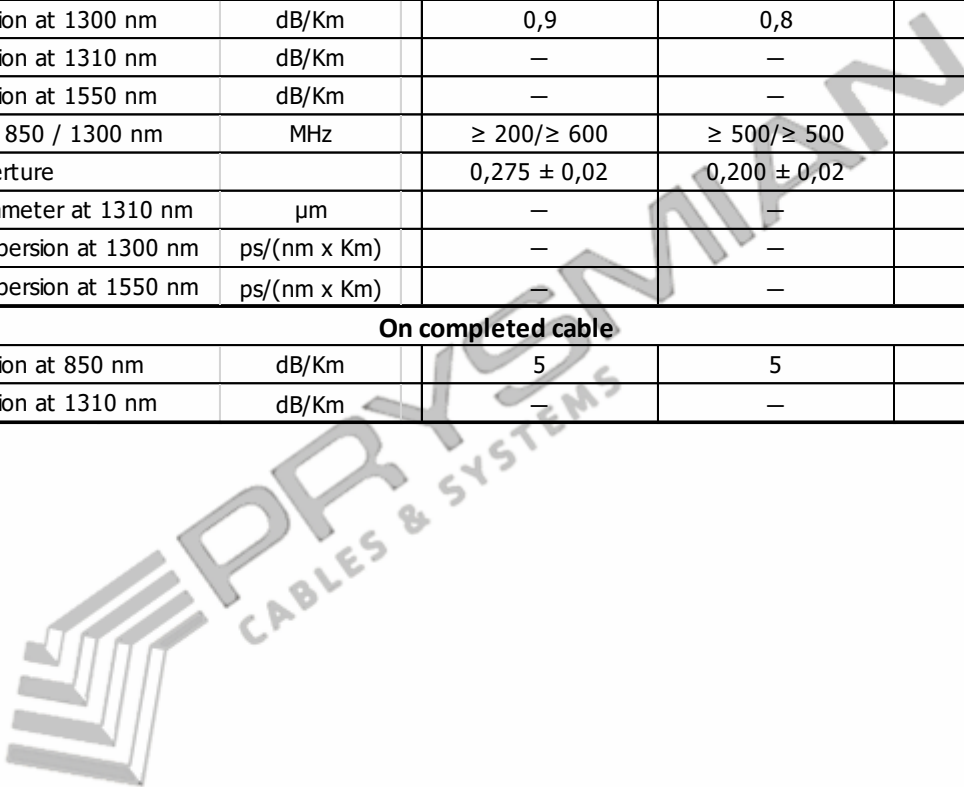
Note: cable is Halogen free (HCl ≤ 0,5 %) but is not to be considered as not toxic

(\*) Alternative suggested instead off-White/Natural uncolored compound

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**Annex A - OPTICAL FIBRE parameters**

		Graded index fiber		Single mode fiber
Fiber type		62,5/125	50/125	9/125
Max attenuation at 850 nm	dB/Km	3,0	2,8	–
Max attenuation at 1300 nm	dB/Km	0,9	0,8	–
Max attenuation at 1310 nm	dB/Km	–	–	0,4
Max attenuation at 1550 nm	dB/Km	–	–	0,3
Bandwidth at 850 / 1300 nm	MHz	≥ 200/≥ 600	≥ 500/≥ 500	–
Numerical aperture		0,275 ± 0,02	0,200 ± 0,02	–
Mode field diameter at 1310 nm	µm	–	–	9,0 ± 0,5
Chromatic dispersion at 1300 nm	ps/(nm x Km)	–	–	≤   3
Chromatic dispersion at 1550 nm	ps/(nm x Km)	–	–	≤ 18
<b>On completed cable</b>				
Max attenuation at 850 nm	dB/Km	5	5	–
Max attenuation at 1310 nm	dB/Km	–	–	0,7



0	22/12/2022	Issue for Omologation. Insert in marking: SHORE CONNECTION CABLE. DANGER! HIGH VOLTAGE	VB	AM
Rev.	Date	Issued for	Prepared	Approved

Compiled by: V. Brambati	Approved by: A. Mazzucato
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