

## Single-core high-voltage oil-filled cable

### Construction

- Hollow conductor of round copper wires, stranded, segmented above 1000 m<sup>2</sup>
- Semi-conducting paper screen
- Conductor insulation of oil cable paper
- Höchstaedter and semiconductor paper tape
- Cotton tape with copper thread
- Corrugated copper sheath, radially watertight
- Corrugation filling, halogen-free
- HDPE outer sheath, halogen-free, black with two red stripes

### Applications

In distribution networks and power stations.

Laying in underground tubes, indoors, in cable ducts, or buried.

A comprehensive range of sealing ends, joints and fixing elements is available from Brugg Cable.

### Special features

Admissible impulse voltage 1425 kV.

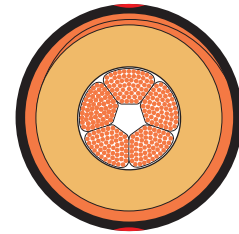
The HPDE outer sheath guarantees excellent insulation. High wear-resistance gives favorable laying conditions.

The cable is free of PCB.

### Standards

SEV 3320.1977 + A1.1990 + A2.1990  
IEC 141-1.1993

### POCUW-T 380/220 kV



### Technical data














Cross-section	Dia-meter	Weight	Oil content	Capacitance	AC resistance at 60°C and 50 Hz	Reactance at 50 Hz ⊙ ⊙ ⊙ s = 25 cm	Impedance at 60°C and 50 Hz	Laying data	
								min. bending radius <sup>1)</sup>	max. pulling force
mm <sup>2</sup>	mm	kg/100m	l/100m	μF/km	Ω/km	Ω/km	Ω/km	mm	kN
400	102	1335	311	0.193	0.055	0.207	0.214	2050	24.0
500	105	1500	330	0.205	0.043	0.201	0.206	2100	30.0
630	108	1680	348	0.218	0.034	0.195	0.198	2200	37.5
800	111	1875	367	0.230	0.027	0.190	0.192	2250	48.0
1000	109	2070	367	0.267	0.021	0.184	0.186	2200	60.0
1200	113	2295	389	0.284	0.018	0.179	0.180	2300	72.0
1600	120	2775	433	0.315	0.014	0.170	0.171	2400	96.0












Notice:

<sup>1)</sup> Min. installation radius =  
0.8 x min. traction radius

– For further information on transport, laying, installation and test standard, see chapter "Technical Information"

**Load currents**
**POCUW-T 380/220 kV**

Laying	in tube elements, buried				open air					
	 s = 25 cm				 s = 2 · d			 touching		
Mode	Regular service		Emerg. service <sup>3)</sup>	Regular or Industrial service		Emerg. service <sup>3)</sup>	Regular or Industrial service		Emerg. service <sup>3)</sup>	
Conductor temperature 60 °C	≤ 80 °C <sup>1)</sup>	80 °C <sup>2)</sup>	95 °C	60 °C	80 °C	95 °C	60 °C	80 °C	95 °C	
Earthing										
Cross-section										
mm <sup>2</sup>	A	A	A	A	A	A	A	A	A	A
400	409	553	553	710	519	718	828	435	631	737
500	458	625	625	809	595	827	954	494	721	844
630	511	700	706	922	684	954	1102	560	823	966
800	560	763	783	1032	771	1079	1250	622	920	1084
1000	597	815	869	1171	881	1251	1454	689	1049	1243
1200	620	842	922	1259	959	1367	1591	738	1133	1347
1600	661	884	1022	1428	1115	1601	1870	831	1293	1545

Laying	buried									
	 touching									
Mode	Regular service		industrial service			Emerg. service <sup>3)</sup>	Regular service		Emerg. service <sup>3)</sup>	
Conductor temperature 60 °C	≤ 80 °C <sup>1)</sup>	80 °C <sup>2)</sup>	60 °C	80 °C <sup>2)</sup>	95 °C	60 °C	≤ 80 °C <sup>1)</sup>	80 °C <sup>2)</sup>	95 °C	
Earthing										
Cross-section										
mm <sup>2</sup>	A	A	A	A	A	A	A	A	A	A
400	384	432	522	478	620	699	354	377	484	657
500	426	462	586	538	701	793	384	402	533	733
630	470	501	655	604	792	898	415	424	583	797
800	510	535	719	664	878	999	425 <sup>1)</sup>	425	626	888
1000	532	535	787	728	982	1125	425 <sup>1)</sup>	425	636	934
1200	535 <sup>1)</sup>	535	829	770	1048	1204	425 <sup>1)</sup>	452	655	978
1600	535 <sup>1)</sup>	535	902	844	1168	1351	425 <sup>1)</sup>	452	685	1055

<sup>1)</sup> Conductor temperature limited by temperature to earth of 50°C

<sup>2)</sup> Transfer temperature to earth exceeding 50°C

<sup>3)</sup> Emergency service for max. 8h/day and 100h/year (transfer temperature to earth exceeding 50°C)

**Notice:**

– For calculation conditions, short-time loading and permissible short-circuit currents, see chapter "Technical Information"

