

Single-core high-voltage oil-filled cable

Construction

- Hollow conductor of round copper wires, stranded, segmented above 1000 m²
- 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

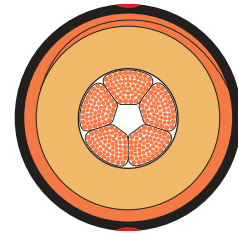
Admissible impulse voltage 1050 kV. The HPDE outer sheath guarantees excellent insulation. High wear-resistance gives favorable laying conditions.

The cable is free of PCB.

Standards

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

POCUW-T 220/127 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 ¹⁾	max. pulling force
mm ²	mm	kg/100m	l/100m	μF/km	Ω/km	Ω/km	Ω/km	mm	kN
240	84	940	220	0.210	0.087	0.216	0.233	1700	14.0
300	85	1000	222	0.214	0.070	0.214	0.225	1700	18.0
400	88	1135	240	0.230	0.055	0.207	0.214	1800	24.0
500	91	1270	258	0.245	0.043	0.201	0.206	1850	30.0
630	94	1440	272	0.262	0.034	0.195	0.198	1900	37.5
800	100	1635	281	0.277	0.027	0.190	0.192	2000	48.0
1000	104	1935	315	0.299	0.021	0.184	0.186	2100	60.0
1200	107	2150	334	0.320	0.018	0.179	0.180	2150	72.0
1600	113	2620	374	0.350	0.014	0.170	0.171	2300	96.0
2000	119	3040	387	0.370	0.012	0.166	0.166	2400	120.0












Notice:

¹⁾ Min. installation radius =
0.8 x min. traction radius

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

Load currents
POCUW-T 220/127 kV

Laying	in tube elements, buried				open air					
	 s = 25 cm				 s = 2 · d			 touching		
Mode	Regular service		Emerg. service ³⁾	Regular or industrial service		Emerg. service ³⁾	Regular or industrial service		Emerg. service ³⁾	
Conductor temperature 60 °C	≤ 80 °C ¹⁾	80 °C ²⁾	95 °C	60 °C	80 °C	95 °C	60 °C	80 °C	95 °C	
Earthing										
Cross-section										
mm ²	A	A	A	A	A	A	A	A	A	A
240	397	490	490	596	460	603	683	403	538	614
300	443	550	550	667	519	679	770	453	604	691
400	506	626	626	767	599	786	892	518	693	794
500	574	712	712	876	690	906	1030	591	794	910
630	651	805	811	1003	795	1047	1191	673	907	1042
800	733	907	916	1140	894	1181	1346	750	1015	1168
1000	828	1011	1037	1299	1033	1364	1555	862	1168	1345
1200	887	1068	1116	1407	1132	1499	1710	931	1267	1463
1600	997	1175	1264	1611	1322	1759	2012	1059	1452	1682
2000	1072	1252	1367	1756	1457	1946	2230	1146	1580	1835

Laying	buried									
	 touching									
Mode	Regular service		Industrial service			Emerg. service ³⁾	Regular service		Emerg. service ³⁾	
Conductor temperature 60 °C	≤ 80 °C ¹⁾	80 °C ²⁾	60 °C	80 °C ²⁾	95 °C	60 °C	≤ 80 °C ¹⁾	80 °C ²⁾	95 °C	
Earthing										
Cross-section										
mm ²	A	A	A	A	A	A	A	A	A	A
240	385	415	474	442	538	594	369	391	455	574
300	431	462	530	495	603	666	408	429	504	639
400	484	512	598	561	685	758	446	459	555	711
500	545	570	675	635	777	861	492	498	614	794
630	610	630	760	716	881	977	537 ¹⁾	537	676	884
800	671	690	840	793	978	1088	567 ¹⁾	567	726	959
1000	755	766	948	900	1113	1239	579 ¹⁾	579	765	1026
1200	799 ¹⁾	799	1009	963	1194	1331	591 ¹⁾	591	797	1080
1600	863 ¹⁾	863	1122	1076	1343	1503	612 ¹⁾	612	848	1168
2000	910 ¹⁾	910	1200	1154	1447	1625	625 ¹⁾	625	878	1222

¹⁾ Conductor temperature limited by transfer temperature to earth of 50°C

²⁾ Transfer temperature to earth exceeding 50°C

³⁾ 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"

