Single-core high-voltage oil-filled cable

POCUW-T 132/76 kV

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

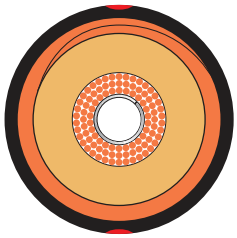
Admissible impulse voltage 650 kV.

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



Technical data

Cross-section	Diameter	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
mm²	mm	kg/100m	l/100m	µF/km	Ω/km	Ω/km	Ω/km	mm	kN
150	62	500	100	0.268	0.144	0.229	0.270	1250	9.0
200	64	570	110	0.288	0.107	0.222	0.247	1300	12.0
240	66	640	122	0.311	0.087	0.216	0.233	1350	14.0
300	67	695	122	0.319	0.070	0.214	0.225	1350	18.0
400	70	810	133	0.345	0.055	0.207	0.214	1400	24.0
500	73	940	148	0.371	0.043	0.201	0.206	1500	30.0
630	76	1115	157	0.399	0.034	0.195	0.198	1550	37.5
800	79	1300	169	0.425	0.027	0.190	0.192	1600	48.0
1000	84	1560	187	0.461	0.021	0.184	0.186	1700	60.0
1200	88	1770	203	0.495	0.018	0.179	0.180	1800	72.0
1600	96	2215	234	0.555	0.014	0.170	0.171	1950	96.0
2000	101	2620	240	0.589	0.012	0.166	0.166	2050	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"

BRUGG Cable

Load currents

POCUW-T 132/76 kV

Laying	in tube elements, buried				open air					
Spacing	s = 25 cm				s = 2 · d			touching		
Mode	Regular service			Emerg. service [3]	Regular or industrial service		Emerg. service [3]	Regular 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 mm²	A	A	A	A	A	A	A	A	A	A
150	321	388	388	465	367	475	537	319	419	477
200	378	459	459	551	435	564	638	377	496	564
240	425	515	515	622	495	643	728	427	562	641
300	477	578	578	699	558	725	821	480	633	721
400	544	661	661	802	647	840	952	552	729	832
500	620	745	754	919	747	972	1102	631	836	955
630	713	852	869	1066	863	1126	1279	721	957	1096
800	800	946	978	1206	982	1285	1461	807	1076	1235
1000	909	1065	1112	1374	1133	1481	1699	936	1248	1431
1200	974	1128	1196	1486	1235	1619	1843	999	1338	1540
1600	1119	1280	1380	1735	1439	1895	2163	1134	1529	1765
2000	1216	1379	1506	1905	1592	2102	2404	1232	1667	1930

Laying	buried									
Spacing	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 mm²	A	A	A	A	A	A	A	A	A	A
150	317	332	381	357	427	469	310	323	374	461
200	370	384	446	418	502	551	359	369	434	538
240	414	425	499	470	564	620	399	406	483	602
300	463	475	559	527	633	696	442	447	536	671
400	526	534	636	601	723	795	495 [1]	495	602	758
500	592	596	718	680	820	903	535 [1]	535	663	842
630	664 [1]	664	810	769	931	1026	582 [1]	582	733	940
800	725 [1]	725	897	853	1036	1145	621 [1]	621	797	1031
1000	824 [1]	824	1025	980	1190	1315	650 [1]	650	851	1114
1200	850 [1]	850	1077	1032	1259	1395	633 [1]	633	846	1121
1600	924 [1]	924	1196	1151	1412	1570	658 [1]	658	898	1207
2000	981 [1]	981	1283	1237	1524	1699	673 [1]	673	928	1259

[1] Conductor temperature limited by transfer temperature to earth of 50°C
[2] Transfer temperature to earth exceeding 50°
[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"