

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
- Lead sheath, radially watertight
- Anti-corrosion protection of impregnated paper tape
- Pressure layer of non-magnetic steel tapes
- 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 750 kV.

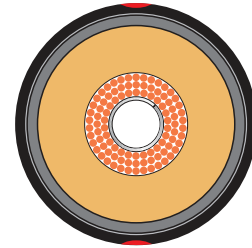
The HPDE outer sheath guarantees excellent insulation. High wear-resistance gives favorable laying conditions.

The cable is free of PCB.

Standards

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

POPB-T 150/87 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
150	60	890	99	0.239	0.144	0.229	0.270	1200	9.0
200	63	1040	107	0.256	0.107	0.222	0.247	1300	12.0
240	66	1130	119	0.276	0.087	0.216	0.233	1350	14.0
300	67	1195	119	0.283	0.070	0.214	0.225	1350	18.0
400	71	1360	130	0.305	0.055	0.207	0.214	1450	24.0
500	74	1555	142	0.327	0.043	0.201	0.206	1500	30.0
630	78	1745	151	0.352	0.034	0.195	0.198	1600	37.5
800	81	1950	162	0.374	0.027	0.190	0.192	1650	48.0
1000	85	2315	184	0.401	0.021	0.184	0.186	1700	60.0
1200	89	2560	196	0.430	0.018	0.179	0.180	1800	72.0
1600	97	3155	223	0.481	0.014	0.170	0.171	1950	96.0
2000	102	3610	227	0.511	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"

Load currents
POPB-T 150/87 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
150	328	398	398	480	380	493	559	328	431	492
240	431	519	523	636	514	667	757	441	580	663
300	484	586	589	716	580	755	856	495	654	746
400	553	663	673	822	674	877	996	573	756	864
500	636	756	776	952	780	1016	1154	656	870	995
630	725	853	886	1093	903	1180	1341	752	1000	1145
800	815	953	1000	1238	1029	1347	1534	850	1134	1300
1000	927	1068	1137	1414	1195	1564	1779	987	1318	1511
1200	1006	1147	1236	1544	1316	1726	1966	1074	1438	1652
1600	1163	1308	1434	1814	1550	2039	2328	1236	1665	1920
2000	1266	1414	1568	1995	1718	2268	2593	1352	1827	2111

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
150	322	331	388	365	437	480	319	327	385	477
240	421	427	509	483	579	636	417	421	505	631
300	472	475	570	540	649	713	460 ¹⁾	460	558	700
400	536	536	649	618	744	817	517 ¹⁾	517	633	799
500	601 ¹⁾	601	736	703	847	932	572 ¹⁾	572	710	904
630	672 ¹⁾	672	833	796	963	1061	628 ¹⁾	628	792	1016
800	745 ¹⁾	745	932	892	1082	1195	688 ¹⁾	688	876	1132
1000	843 ¹⁾	843	1064	1025	1243	1372	728 ¹⁾	728	952	1245
1200	892 ¹⁾	892	1141	1102	1341	1483	734 ¹⁾	734	984	1302
1600	983 ¹⁾	983	1284	1245	1523	1691	780 ¹⁾	780	1069	1435
2000	1055 ¹⁾	1055	1389	1350	1657	1843	818 ¹⁾	818	1131	1532

- ¹⁾ Conductor temperature limited by max. permissible lead sheath temperature 65° or by transfer temperature to earth of 50°C
- ²⁾ Lead sheath temperature limit of 65°C and transfer temperature to earth of 50°C usually exceeded
- ³⁾ Emergency service for max. 8h/day and 100h/year (lead sheath temperature limit of 65°C and transfer temperature to earth of 50°C exceeded)

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

