



Application

Cables are intended for the operation in the control and checkout circuits and for the control and transmission of low power electric signals. Cables keep working ability under the exposure to flame of temperature $(800\pm 50)^{\circ}\text{C}$ within not less than 180 minutes.

Design

Current-carrying conductors

Copper stranded

Fire-resistant barrier

Mica tapes

Insulation

Polyethylene

Screen of the conductors

For the cables of CMПЭВГО-40, CMПЭВЭГО-40 types

Braid of copper wires

Sheath

PVC compound

Collective screen

For the cables of SMPEVGO-40, SMPEVEGO-40 braid of copper tinned wires

Spaces between the designed elements of cables

are filled with sealing compounds

Technical Performances

Type of cable	Voltage, V	Number of the conductors	Nominal cross-section, mm ²
SMPVGO-40, SMPVEGO-40	400	3, 4, 7, 10, 12, 14, 19, 24, 27, 30, 37	0,75, 1,0
		3, 4, 7, 10, 12, 14, 19, 24, 27	1,5
		3, 4, 7, 10, 12, 14, 19	2,5
SMPEVGO-40, SMPEVEGO-40	250	3, 4, 7, 10, 12, 14, 19, 24, 27, 30, 37	0,75
		3, 4, 7, 10, 12, 14, 19, 24, 27	1,0
		3, 4, 7, 10, 12, 14, 19	1,5

Electrical resistance of insulation is not less than 500 MOhm*km

Cables are resistant to the influence of:

- sinusoidal vibrations;
- single-action and repeated - action mechanical shocks;
- acoustic noise;
- high ambient air temperature up to $+65^{\circ}\text{C}$;
- low operating temperature up to : -50°C under the conditions of stationary laying; -15°C under mounting bends;
- ambient temperature variation from minus 50°C to plus 65°C ;
- high air humidity up to 100% under the temperature $+35^{\circ}\text{C}$;
- sea water;
- radial and longitudinal hydrostatic pressure up to 4 MPa;
- solar radiation;
- mold fungi;
- destabilizing factor.

Admissible continuous operating temperature on the current-carrying conductor is 65°C . Cables are resistant to the lubricating oils and diesel (65°C , 24 hours).

Reliability Characteristics

Minimal operating time: — 80000 hours

Minimal service life — 25 years

Fire-safety characteristics

Cables are flame retardant in individual laying acc. to IEC 60332-1-2.

Cables keep working ability under flame with temperature of $(800\pm 50)^{\circ}\text{C}$ within not less than 180 minutes, testing acc. to IEC 60331-21.



Design data of the samples

Number and nominal cross-section of the conductors, mm ²	Cable types							
	SMPVGO-40		SMPVEGO-40		SMPEVGO-40		SMPEVEGO-40	
	D, mm	Weight, kg	D, mm	Weight, kg	D, mm	Weight, kg	D, mm	Weight, kg
3x 0,75	10,4	132	11,6	221	11,7	186	12,9	286
4x 0,75	11,2	156	12,4	252	12,9	230	14,1	340
7x 0,75	13,4	228	14,6	342	15,4	342	16,6	472
10x 0,75	17,1	365	18,3	509	19,8	544	21,0	710
12x 0,75	17,6	392	18,8	540	20,4	593	21,6	764
14x 0,75	18,6	450	19,8	598	21,6	681	22,8	852
19x 0,75	20,6	568	21,8	720	24,1	864	25,3	1056
24x 0,75	24,3	765	25,5	953	28,4	1177	29,6	1396
27x 0,75	24,8	805	26,0	997	29,0	1248	30,2	1471
30x 0,75	25,8	876	27,0	1076	30,2	1362	31,4	1594
37x 0,75	28,0	1034	29,2	1251	32,7	1616	33,9	1867
3x 1,0	10,9	148	12,1	241	12,4	210	13,6	316
4x 1,0	11,8	182	13,0	278	13,5	263	14,7	378
7x 1,0	14,3	266	15,5	387	16,1	381	17,3	517
10x 1,0	18,0	417	19,2	568	20,9	615	22,1	790
12x 1,0	18,7	458	19,9	615	21,5	671	22,7	851
14x 1,0	19,7	516	20,9	673	22,6	768	23,8	947
19x 1,0	21,9	651	23,1	825	25,4	978	26,6	1178
24x 1,0	25,9	892	27,1	1092	30,0	1329	31,2	1560
27x 1,0	26,4	941	27,6	1145	30,6	1411	31,8	1647
30x 1,0	27,5	1024	28,7	1237	-	-	-	-
37x 1,0	29,8	1210	31,0	1440	-	-	-	-
3x 1,5	12,3	196	13,5	301	13,7	261	14,9	377
4x 1,5	13,4	244	14,6	358	15,1	333	16,3	461
7x 1,5	16,0	349	17,2	484	18,1	487	19,3	639
10x 1,5	20,5	558	21,7	729	23,4	785	24,6	980
12x 1,5	21,4	626	22,6	795	24,1	859	25,3	1060
14x 1,5	22,4	703	23,6	881	25,6	992	26,8	1196
19x 1,5	25,2	889	26,4	1090	28,5	1252	29,7	1477
24x 1,5	29,7	1216	30,9	1445	-	-	-	-
27x 1,5	30,4	1285	31,6	1521	-	-	-	-
3x 2,5	13,5	255	14,7	370	-	-	-	-
4x 2,5	14,9	326	16,1	452	-	-	-	-
7x 2,5	17,9	476	19,1	626	-	-	-	-
10x 2,5	23,2	767	24,4	960	-	-	-	-
12x 2,5	23,9	839	25,1	1038	-	-	-	-
14x 2,5	25,3	968	26,5	1169	-	-	-	-
19x 2,5	28,2	1221	29,4	1446	-	-	-	-