



Technical data

- Control cables, special PVC
- Requirements adapted to DIN VDE 0245, 0281, 0293, 0295
- **Temperature range**
flexing -15°C¹⁾ to +80°C
fixed installation -40°C to +80°C
- **Nominal voltage** U₀/U 300/500 V
- **Test voltage** 4000 V
- **Breakdown voltage** min. 8000 V
- **Insulation resistance**
min. 20 MOhm x km
- **Minimum bending radius**
flexing 7,5x cable Ø
fixed installation 4x cable Ø
- **Radiation resistance**
up to 80x10⁶ cJ/kg (up to 80 Mrad)
- ¹⁾ cold bending test, impact resistance test at low temperatures, elongation test at low temperatures. Tested according VDE 0473 Teil 811-1-4, EN 60811-1-4

Cable structure

- Bare copper, fine wire conductors, according to DIN VDE 0295 cl. 5, BS 6360 cl. 5 and IEC 60228 cl. 5
- Core insulation of special PVC Z 7225
- Red cores with continuous white numbering according to DIN VDE 0293 (also available with other core colours)
- Green-yellow earth core in the outer layer (3 cores and above)
- Cores stranded in layers with optimal lay-length
- Outer sheath of special PVC, TM2 to DIN VDE 0281 part 1 and HD 21.1
- Colour grey (RAL 7001)
- with meter marking, change-over in 2009

Properties

- Extensively oil resistant
- Chemical Resistance - see table Technical Informations
- PVC self-extinguishing and flame retardant according to VDE 0482-332-1-2, DIN EN 60332-1-2/ IEC 60332-1 (equivalent DIN VDE 0472 part 804 test method B)
- The materials used in manufacture are cadmium-free and contain no silicone and free from substances harmful to the wetting properties of lacquers

Note

- G = with green-yellow earth core;
x = without green-yellow earth core (OZ).
- Important for assemblers: We supply any "desired length" of stranded cores without outer sheath, core insulation colour acc. RAL 3000 with number combination acc. customers requirement.

Application

These cables are used for flexible use for medium mechanical stresses with free movement without tensile stress or forced movements in dry, moist and wet rooms but not suitable for open air, as measuring and control cables in tool machines, conveyor belts, production lines in machinery production, in air-conditioning and in steel production. The cores have been numbered in such a way that there is no difficulty in recognising them, even if only a small piece of sheathing has been removed. The numbers have been underlined to avoid confusion. The earth core is laid in the outer layer. Selected PVC-compounds guarantee a good flexibility as well as an economic and fast installation.

CE – The product is conformed with the EC Low-Voltage Directive 2006/95/EG.

Part No.	No. cores x cross-sec. mm ²	Outer ø app. mm	Cop. weight kg / km	Weight app. kg / km	AWG-No.	Part No.	No. cores x cross-sec. mm ²	Outer ø app. mm	Cop. weight kg / km	Weight app. kg / km	AWG-No.
10400	2 x 0,5	4,9	9,6	40,0	20	10459	16 G 1	12,3	154,0	300,0	17
10401	3 G 0,5	5,2	14,4	46,0	20	10460	18 G 1	12,9	173,0	343,0	17
10402	4 G 0,5	5,6	19,0	56,0	20	10461	20 G 1	13,7	192,0	375,0	17
10403	5 G 0,5	6,3	24,0	65,0	20	10462	25 G 1	15,6	240,0	485,0	17
10405	7 G 0,5	6,9	33,6	80,0	20	10463	34 G 1	17,9	326,0	650,0	17
10407	10 G 0,5	9,0	48,0	116,0	20	10466	41 G 1	19,4	394,0	770,0	17
10408	12 G 0,5	9,2	58,0	135,0	20						
10409	14 G 0,5	9,7	67,0	150,0	20	10474	2 x 1,5	6,4	29,0	70,0	16
10410	18 G 0,5	11,0	86,0	196,0	20	10475	3 G 1,5	6,8	43,0	90,0	16
10411	20 G 0,5	11,5	96,0	215,0	20	10476	4 G 1,5	7,6	58,0	109,0	16
10412	21 G 0,5	12,2	96,0	240,0	20	10477	5 G 1,5	8,3	72,0	131,0	16
10413	25 G 0,5	13,3	120,0	270,0	20	10479	7 G 1,5	9,2	101,0	184,0	16
10414	30 G 0,5	13,8	144,0	310,0	20	10480	8 G 1,5	10,6	115,0	216,0	16
10415	32 G 0,5	14,3	154,0	323,0	20	10481	9 G 1,5	12,0	130,0	259,0	16
10416	34 G 0,5	15,1	163,0	362,0	20	10483	12 G 1,5	12,2	173,0	309,0	16
						10484	14 G 1,5	13,0	202,0	345,0	16
10424	2 x 0,75	5,3	14,4	46,0	18	10485	16 G 1,5	13,9	230,0	386,0	16
10425	3 G 0,75	5,6	21,6	54,0	18	10486	18 G 1,5	14,8	259,0	440,0	16
10426	4 G 0,75	6,3	29,0	66,0	18	10487	20 G 1,5	15,5	288,0	490,0	16
10427	5 G 0,75	6,9	36,0	80,0	18	10489	25 G 1,5	17,8	360,0	620,0	16
10429	7 G 0,75	7,7	50,0	110,0	18	10490	32 G 1,5	19,5	461,0	790,0	16
10431	9 G 0,75	9,8	65,0	153,0	18	10491	34 G 1,5	20,2	490,0	830,0	16
10432	10 G 0,75	9,8	72,0	162,0	18	10493	42 G 1,5	22,0	605,0	1007,0	16
10433	12 G 0,75	10,0	86,0	179,0	18						
10434	14 G 0,75	10,8	101,0	214,0	18	10499	2 x 2,5	7,8	48,0	112,0	14
10436	18 G 0,75	12,2	130,0	257,0	18	10500	3 G 2,5	8,3	72,0	148,0	14
10437	20 G 0,75	12,7	144,0	286,0	18	10501	4 G 2,5	9,2	96,0	178,0	14
10438	21 G 0,75	13,5	151,0	320,0	18	10502	5 G 2,5	10,1	120,0	221,0	14
10439	25 G 0,75	14,5	180,0	365,0	18	10503	7 G 2,5	11,2	168,0	306,0	14
10440	32 G 0,75	16,1	230,0	455,0	18	10504	8 G 2,5	13,4	192,0	363,0	14
						10505	12 G 2,5	15,1	288,0	498,0	14
10449	2 x 1	5,6	19,2	60,0	17						
10450	3 G 1	6,1	29,0	72,0	17	10515	2 x 4	9,2	77,0	195,0	12
10451	4 G 1	6,6	38,4	86,0	17	10516	3 G 4	9,7	115,0	230,0	12
10452	5 G 1	7,5	48,0	104,0	17	10517	4 G 4	10,8	154,0	295,0	12
10454	7 G 1	8,1	67,0	141,0	17	10518	5 G 4	12,1	192,0	361,0	12
10457	12 G 1	10,8	115,0	230,0	17						

Dimensions and specifications may be changed without prior notice. (RA01)