



Technical data

- Control cables, special PVC
- Conforms to DIN VDE 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 MΩm 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 part 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
- Black 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 2011

Properties

- Extensively oil resistant, oil-/ 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 9005 with number combination acc. customers requirement.
- AWG sizes are approximate equivalent values. The actual cross-section is in mm².
- Please note the cleanroom qualification when ordering.

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 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 approx. mm	Cop. weight kg / km	Weight approx. kg / km	AWG-No.
10001	2 x 0,5	4,9	9,6	40,0	20
10002	3 G 0,5	5,2	14,4	46,0	20
10003	3 x 0,5	5,2	14,4	46,0	20
10004	4 G 0,5	5,6	19,0	56,0	20
10005	4 x 0,5	5,6	19,0	56,0	20
10006	5 G 0,5	6,3	24,0	65,0	20
10007	5 x 0,5	6,3	24,0	65,0	20
10008	6 G 0,5	6,9	29,0	75,0	20
10009	7 G 0,5	6,9	33,6	80,0	20
10010	7 x 0,5	6,9	33,6	80,0	20
10011	8 G 0,5	7,4	38,0	97,0	20
10172	8 x 0,5	7,4	38,0	97,0	20
10012	10 G 0,5	8,3	48,0	116,0	20
10013	12 G 0,5	8,8	58,0	135,0	20
10014	12 x 0,5	8,8	58,0	135,0	20
10015	14 G 0,5	9,7	67,0	150,0	20
10183	16 G 0,5	10,2	76,0	175,0	20
10016	18 G 0,5	11,0	86,0	196,0	20
10017	20 G 0,5	11,5	96,0	215,0	20
10018	21 G 0,5	11,5	101,0	240,0	20
10019	25 G 0,5	12,9	120,0	270,0	20
10020	30 G 0,5	13,8	144,0	310,0	20
10021	32 G 0,5	14,3	154,0	323,0	20
10022	34 G 0,5	14,9	163,0	362,0	20
10023	40 G 0,5	15,6	192,0	434,0	20
10024	42 G 0,5	16,1	202,0	449,0	20

Part no.	No. cores x cross-sec. mm ²	Outer Ø approx. mm	Cop. weight kg / km	Weight approx. kg / km	AWG-No.
10025	50 G 0,5	17,9	240,0	513,0	20
10169	52 G 0,5	17,9	252,0	534,0	20
10026	61 G 0,5	19,0	293,0	625,0	20
10027	65 G 0,5	19,7	312,0	682,0	20
10028	80 G 0,5	21,8	384,0	780,0	20
10029	100 G 0,5	24,3	480,0	980,0	20
10030	2 x 0,75	5,3	14,4	46,0	18
10031	3 G 0,75	5,6	21,6	54,0	18
10032	3 x 0,75	5,6	21,6	54,0	18
10033	4 G 0,75	6,3	28,8	66,0	18
10034	4 x 0,75	6,3	29,0	66,0	18
10035	5 G 0,75	6,9	36,0	80,0	18
10036	5 x 0,75	6,9	36,0	80,0	18
10037	6 G 0,75	7,5	43,0	99,0	18
10177	6 x 0,75	7,5	43,0	99,0	18
10038	7 G 0,75	7,5	50,0	110,0	18
10039	7 x 0,75	7,5	50,0	110,0	18
10040	8 G 0,75	8,2	58,0	130,0	18
10173	8 x 0,75	8,2	58,0	130,0	18
10041	9 G 0,75	8,8	65,0	153,0	18
10042	10 G 0,75	9,2	72,0	162,0	18
10043	12 G 0,75	9,8	86,0	179,0	18
10044	12 x 0,75	9,8	86,0	179,0	18
10045	14 G 0,75	10,6	101,0	214,0	18
10046	15 G 0,75	11,4	108,0	218,0	18
10047	18 G 0,75	12,2	130,0	257,0	18

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