



Application

This flexible control cables is suitable to use as power and control application. They are intended for service as connection cables in machine and system building. Applications include machine tools, production and processing machines, machining centres, transfer lines and handling systems equipment and industries manufacturing pumps, fans, conveyors and air conditioning systems, as well as the food-processing, textile-machines, paper, steelmaking and metal-working industries. They are used under conditions of moderate mechanical loading, in dry, damp and wet areas. Outdoor use possible, provided that the cables are protected from direct sunlight and are permanently installed.

Cable Structure & Features

Conductor material	Bare copper strand
Conductor class	Acc. to Din VDE 0295 and IEC 60228 class 5
Core insulation	PVC
Core identification	Black cores with white numerals for 3 cores and above with G/Y
Stranding	Stranded in layers
Outersheath	PVC
Sheath colour	Grey, RAL 7001

Special Features / Remarks

- 2KV testing voltage
- Largely resistant to acids, bases and usual oils
- Free from lacquer damaging substances and silicone (during production)
- Hazardous areas acc. to IEC60332-1-2, DIN VDE 0472 part 804
- Conform to RoHS
- Conform to 73/23EWG-Guideline CE
- We are pleased to produce special versions, other dimensions, core and jacket colours request.

Option: 600/1000V with Black Outer Sheath are available upon request.

Technical Data

Standard	Acc. to DIN VDE 0281-13
Certification	VDE Regno. 7042
Rated voltage	Uo/U 300/500V
Tested voltage	2kV
Conductor resistance	Acc. to DIN VDE 0295 class 5 resp. IEC60228 class 5
Insulation resistance	Min. 20 MΩx km
Continuous tensile load	15N per mm ² of conductor cross-section for laying an operation of cables with mobile equipment 50N per mm ² of conductor cross-section for fixed installation
Min. bending radius	Fixed: 4 x d, moved: 7.5 x d
Operating temp.	Fixed: -40°C / +70°C Moved: -5 °C / +70°C
Temp. at conductor	+70°C in operation; +150°C in case of short circuit
Burning behavior	Self-extinguishing and flame-retardant acc. DIN VDE 0472part 804, IEC 60332-1-2

Item No.	Dim nxmm ²	Outer Ø mm	Copper weight	Weight kg/km
10410211	2X 0.5	4.9	10	35
10400311	3G 0.5	5.2	15	42
10400411	4G 0.5	5.8	19.2	54
10400511	5G 0.5	6.3	24	63
10400711	7G 0.5	6.8	33.6	81
10401211	12G 0.5	9.1	58	135
10401811	18G 0.5	11	86.4	188
10402111	21G 0.5	12.5	101	221
10402511	25G 0.5	13	120	261
10403011	30G 0.5	16.4	297	429
10403211	32G 0.5	19	163	508
10404011	40G 0.5	18.6	343	542
10405211	52G 0.5	22.6	240	715
10406111	61G 0.5	24.7	293	840

Item No.	Dim nxmm ²	Outer Ø mm	Copper weight	Weight kg/km
10410212	2X 0.75	5.2	14.4	45
10400312	3G 0.75	5.6	21.6	55
10400412	4G 0.75	6.3	28.8	66
10400512	5G 0.75	6.8	36	79
10400712	7G 0.75	7.4	50	101
10401012	10G 0.75	9.6	72	150
10401212	12G 0.75	10.1	86	171
10401512	15G 0.75	11.5	115.5	220
10401812	18G 0.75	11.9	130	244
10402512	25G 0.75	14.1	180	337
10403412	34G 0.75	16.2	245	448
10404212	42G 0.75	17.9	296	538
10405012	50G 0.75	19.4	360	648
10406112	61G 0.75	20.9	439	779

Item No.	Dim nxmm ²	Outer Ø mm	Copper weight	Weight kg/km
10410214	2X 1.0	5.6	19.2	53
10400314	3G 1.0	6.1	28.8	65
10400414	4G 1.0	6.6	38.4	79
10400514	5G 1.0	7.2	48	94
10400614	6G 1.0	8.2	58	113
10400714	7G 1.0	8.2	67	126
10400814	8G 1.0	9.2	77	149
10400914	9G 1.0	9.8	86.5	164.5
10401014	10G 1.0	10.4	96	180
10401214	12G 1.0	10.5	115	205
10401414	14G 1.0	11.4	134	238
10401614	16G 1.0	12	153.6	266
10401814	18G 1.0	13	173	294
10402014	20G 1.0	13.7	192	330
10402414	24G 1.0	14.3	230.4	392.4
10402514	25G 1.0	15.0	240	408
10403414	34G 1.0	17.4	326	551
10404114	41G 1.0	19.2	394	661
10405014	50G 1.0	21.0	480	797
10405614	56G 1.0	21.8	537.8	884.8
10406114	61G 1.0	23.5	624	1,033
10410215	2X 1.5	6.4	29	68
10400315	3G 1.5	6.8	43	84
10400415	4G 1.5	7.3	58	104
10400515	5G 1.5	8.3	72	128
10400615	6G 1.5	8.7	86.5	147
10400715	7G 1.5	9.1	101	166
10400815	8G 1.5	10.3	115	197
10400915	9G 1.5	11.2	130	221
10401015	10G 1.5	11.5	144	243
10401115	11G 1.5	11.8	158.5	261
10401215	12G 1.5	12.2	173	279
10401415	14G 1.5	12.7	202	323
10401615	16G 1.5	13.7	230.4	361
10401815	18G 1.5	14.5	259	407
10401915	19G 1.5	14.9	273.3	430
10402015	20G 1.5	15.7	287.6	453
10402515	25G 1.5	17	360	560
10403215	32G 1.5	19	461.1	704.6
10403415	34G 1.5	19.6	490	746

Item No.	Dim nxmm ²	Outer Ø mm	Copper weight	Weight kg/km
10404215	42G 1.5	21.7	605	895
10405015	50G 1.5	23.6	720	1,089
10406115	61G 1.5	25.7	878	1,309
10408015	80G 1.5	30.1	1211.5	1773.4
10410217	2X 2.5	7.7	48	101
10400317	3G 2.5	8.3	72	132
10400417	4G 2.5	9.1	96	163
10400517	5G 2.5	10.2	120	200
10400717	7G 2.5	11.3	168	267
10401017	10G 2.5	14.6	240	478
10401217	12G 2.5	15.1	288	553
10401417	14G 2.5	15.6	336	628
10401517	15G 2.5	16.1	384	635.5
10401817	18G 2.5	18.2	432	648
10402517	25G 2.5	21.2	600	890
10403417	34G 2.5	28.1	984	1,443.1
10405017	50G 2.5	40.4	682.7	2,426.4
10400320	3G 4	10.1	115.2	214
10400420	4G 4	11	154	249
10400520	5G 4	12.3	192	305
10400720	7G 4	13.7	269	407
10400421	4G 6	12.8	230	365
10400521	5G 6	14.4	288	447
10400721	7G 6	16	403	600
10400422	4G 10	16.5	384	590
10400522	5G 10	18.5	480	722
10400722	7G 10	20.1	672	968
10400323	4G 16	20.3	614	1,087
10400523	5G 16	22.8	768	1,370
10400723	7G 16	24.7	1,075	1,779
10400424	4G 25	25	960	1,582
10400524	5G 25	27.8	1,200	1,998
10400724	7G 25	33.4	1,680	2,830
10400425	4G 35	28.8	344	2,106