

GAMAFLEX PUR

PVC- insulated PUR-sheath flexible control cables



Application

Flexible control cables for nominal voltage U_0/U to 300/500 V with high tear and abrasion resistance and Increased oil- and hydrolyse resistance.

The cables are especially suited for use in the machine, tool making and plant industries for difficult and problem areas, where required high flexibility and wear-, oil- and hydrolyseresistant.

Are suitable for mobile application, non-repetitive movement without tensile load, and for fixed wiring.

The cables are applicable in dry, damp and wet environment under normal mechanical loads. Outdoor use only in accordance with the indicated temperature range.

Technical data

- adapted to: HD 21.1; HD 22.10; DIN VDE 0205/407
- nominal voltage $U_0/U = 300/500V$
- test voltage 4000 V
- conductor temperature in service - max. $+70^{\circ}C$
- permissible conductor temperature at short circuit for 5s max. $+160^{\circ}C$
- insulation resistance: min $20 M\Omega \times km$
- temperature range:
occasional flexing: $- 5^{\circ}C$ to $+70^{\circ}C$;
fixed : $-40^{\circ}C$ to $+80^{\circ}C$
- minimum temperature during installation: $- 5^{\circ}C$
- minimum bending radius: flexing – $12,5 D$; fixed – $4 D$ (D - outer cable diameter)

Cable design

- bare copper fine wire conductors class 5 according IEC 60 228
- insulation - PVC-compound type TI2 acc. to HD 21.1
- core identification - core colour acc. to HD 308 S2
- cores stranded together with optimal lay-length
- outer sheath - special PUR-compund
- outer sheath colour - grey RAL 7001 or other colour on request

Special Properties

- **oilresistant**– $168 h \times 100^{\circ}C$
- **hydrolyseresistant** – $168 h \times 80^{\circ}C$
- **tear stregh** – min $35 N/mm^2$
- **flame retardant**– according to IEC 60332-1/EN 50265-2-1

Number of Cores and Nominal Cross Section	Outer app. Diameter	Copper Weight	Cable Weight		Number of Cores and Nominal Cross Section	Outer app. Diameter	Copper Weight	Cable Weight
n x mm ²	mm	kg/km	kg/km		n x mm ²	mm	kg/km	kg/km
2 x 0,5	4,7	9,6	31		2 x 1,5	6,1	29	60
3 x 0,5	4,9	14,4	37		3 x 1,5	6,5	43	75
4 x 0,5	5,3	19	46		4 x 1,5	7,0	58	93
5 x 0,5	6,0	24	58		5 x 1,5	7,9	72	118
6 x 0,5	6,5	29	67		6 x 1,5	8,6	86	136
7 x 0,5	6,5	34	70		7 x 1,5	8,6	101	145
10 x 0,5	8,2	48	107		10 x 1,5	11,3	144	226
12 x 0,5	8,2	58	112		12 x 1,5	11,3	173	244
14 x 0,5	9,0	67	133		14 x 1,5	12,2	202	287
19 x 0,5	10,1	91	171		19 x 1,5	13,8	274	379
24 x 0,5	12,0	115	223		24 x 1,5	16,2	346	487
27 x 0,5	12,1	130	244		27 x 1,5	16,7	389	538

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n x mm ²	mm	kg/km	kg/km		n x mm ²	mm	kg/km	kg/km
30 x 0,5	12,6	144	268		30 x 1,5	17,3	432	591
37 x 0,5	14,0	178	327		37 x 1,5	19,3	533	731
2 x 0,75	5,1	14,4	39		2 x 2,5	7,6	48	96
3 x 0,75	5,4	22	47		3 x 2,5	8,0	72	120
4 x 0,75	6,1	29	62		4 x 2,5	9,0	96	156
5 x 0,75	6,7	36	75		5 x 2,5	9,8	120	190
6 x 0,75	7,2	43	85		6 x 2,5	10,9	144	225
7 x 0,75	7,2	50	90		7 x 2,5	10,9	168	240
10 x 0,75	9,5	72	144		10 x 2,5	14,3	240	371
12 x 0,75	9,5	86	153		12 x 2,5	14,3	288	403
14 x 0,75	10,1	101	176		14 x 2,5	15,4	336	472
19 x 0,75	11,7	137	238		19 x 2,5	17,6	456	632
24 x 0,75	13,7	173	301					
27 x 0,75	13,8	194	329		2 x 4,0	8,6	77	133
30 x 0,75	14,4	216	363		3 x 4,0	9,3	115	173
37 x 0,75	15,9	266	442		4 x 4,0	10,4	154	224
					5 x 4,0	11,4	192	275
2 x 1,0	5,4	19,2	45		6 x 4,0	12,6	230	323
3 x 1,0	5,7	29	56		7 x 4,0	12,6	269	348
4 x 1,0	6,4	38	72					
5 x 1,0	7,0	48	89		2 x 6,0	10,5	115	209
6 x 1,0	7,9	58	106		3 x 6,0	11,1	173	263
7 x 1,0	7,9	67	112		4 x 6,0	12,3	230	336
10 x 1,0	10,1	96	172		5 x 6,0	13,8	288	421
12 x 1,0	10,1	115	184		6 x 6,0	15,2	346	489
14 x 1,0	10,9	134	216		7 x 6,0	15,2	403	528
19 x 1,0	12,4	182	286					
24 x 1,0	14,7	230	369		2 x 10,0	14,9	192	399
27 x 1,0	14,9	259	405		3 x 10,0	15,8	288	489
30 x 1,0	15,5	288	445		4 x 10,0	17,7	384	624
37 x 1,0	17,1	355	544					