

GAMAFLEX 50-JB CY GAMAFLEX 50-OB CY



Application

As control and supply cables for control units in metal working machines, transportation equipment, production lines, as well as for control and measuring systems at rated voltage U_0/U 300/500 V .

The cables are suitable for flexible applications for free, non-continuous returning movement, without tensile load as well as for fixed laying.

They are oil and chemical resistant under normal operation conditions and are suitable for use in dry, damp or wet interiors. These cables

may only be laid outdoors with UV-protection and in observance of the temperature range.

Technical data

- manufactured acc. to the technical specification TS 03-15-02 A of GAMAKABEL
- rated voltage U_0/U : 300/500 V
- test voltage: 4 kV
- insulation resistance at 70 °C: min 20 GΩ x cm
- maximum conductor temperature: + 70 °C
- max. conductor temperature at short circuit for 5 s : + 160 °C
- temperature range:
occasional flexing: - 15 °C ** to +70 °C; fixed installation : -40 °C to +80 °C
** Tested according EN 60811-1-4: cold bending test, impact resistance test at low temperatures, elongation test at low temperatures.
- minimum temperature during installation: - 5 °C
- minimum bending radius for: mobile - 20 D; fixed - 6 D (D - outer cable diameter)
- flame test: flame-retardant acc. to IEC 60332-1
- sheath colour: silver grey RAL 7001 or other color upon request

Cable design

- copper conductors class 5 according to IEC 60228
- insulation: PVC compound type TI2 according to HD 21.1
- inner covering: PVC compound type TM2 according to HD 21.1
- screen of tinned copper wire braiding: coverage 85±5%
- sheath: PVC compound type TM2 according to HD 21.1
- **GAMAFLEX 50-JB CY** - with green-yellow protective conductor
- **GAMAFLEX 50-OB CY** - without green-yellow protective conductor

Core identification

- up to 5 cores - color identification according HD308 S2
- above 5 cores - color identification according TS 03-15-02 A

No of cores	Cables without green-yellow protective conductor	Cables with green-yellow protective conductor
2	brown, blue	-
3	brown, black, grey	green-yellow, blue, brown
4	blue, brown, black, grey	green-yellow, brown, black, grey
5	blue, brown, black, grey, black	green-yellow, blue, brown, black, grey
6	white, black, blue, brown, grey, red	green-yellow, white, black, blue, brown, grey
7	white, black, blue, brown, grey, red, violet	green-yellow, white, black, blue, brown, grey, red
8	white, black, blue, brown, grey, red, violet, pink	green-yellow, white, black, blue, brown, grey, red, violet
9	white, black, blue, brown, grey, red, violet, pink, orange	green-yellow, white, black, blue, brown, grey, red, violet, pink
10	-	green-yellow, white, black, blue, brown, grey, red, violet, pink, orange

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Number of Conductors and Cross Section	Outer Diameter	Copper Weight	Cable Weight	Number of Conductors and Cross Section	Outer Diameter	Copper Weight	Cable Weight
No x mm ²	mm	kg/km	kg/km	No x mm ²	mm	kg/km	kg/km
2 x 0,5	7,2	41,0	77	2 x 2,5	10,2	112,0	160
3 x 0,5	7,4	45,5	85	3 x 2,5	10,9	146,0	208
4 x 0,5	8,1	55,0	101	4 x 2,5	11,6	167,0	238
5 x 0,5	8,6	66,0	114	5 x 2,5	13,0	200,0	289
6 x 0,5	9,3	73,0	138	6 x 2,5	14,0	248,0	349
7 x 0,5	9,3	81,0	143	7 x 2,5	14,0	288,0	411
10 x 0,5	11,1	115,0	175	10 x 2,5	17,5	402,0	574
2 x 0,75	7,9	46,0	88	2 x 4,0	11,4	160,0	224
3 x 0,75	8,2	57,9	102	3 x 4,0	12,0	220,0	304
4 x 0,75	8,6	64,0	117	4 x 4,0	13,2	294,0	423
5 x 0,75	9,5	77,4	133	5 x 4,0	14,6	328,0	490
6 x 0,75	10,1	89,0	163	6 x 4,0	15,8	360,0	563
7 x 0,75	10,1	102,0	164	7 x 4,0	15,8	388,0	622
10 x 0,75	12,3	140,0	285	2 x 6,0	12,9	195,0	278
2 x 1,0	8,1	56,0	100	3 x 6,0	13,8	270,0	386
3 x 1,0	8,4	65,3	113	4 x 6,0	15,0	361,0	579
4 x 1,0	8,9	78,1	133	5 x 6,0	16,7	441,0	700
5 x 1,0	9,8	89,4	156	6 x 6,0	18,3	510,0	775
6 x 1,0	10,4	112,0	212	7 x 6,0	18,3	542,0	826
7 x 1,0	10,4	126,0	225	2 x 10,0	17,9	330,0	520
10 x 1,0	12,9	166,0	286	3 x 10,0	19,2	475,0	475
2 x 1,5	8,7	66,0	143	4 x 10,0	21,0	558,0	558
3 x 1,5	9,3	83,0	166	2 x 16,0	20,4	502,0	694
4 x 1,5	9,9	100,0	182	3 x 16,0	21,6	672,0	885
5 x 1,5	10,8	125,0	215	4 x 16,0	23,7	910,0	1224
6 x 1,5	11,4	154,0	296	2 x 25,0	23,9	750,0	979
7 x 1,5	11,4	163,0	316	3 x 25,0	26,0	1020,0	1377
10 x 1,5	14,2	211,0	356				

* GAMAFLEX 50-OB CY has up to 9 conductors