GAMAFLEX 20-JZ CY
GAMAFLEX 20-OZ 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 Uo/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 03-12-01B of GAMAKABEL
- rated voltage Uo/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 RAL7001 or other color upon request
- Approval - VDE

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

Core identification in accordance to EN 50334

GAMAFLEX 20-JZ CY - all cores black, with imprinted numbers and green-yellow protective conductor in the outer layer
GAMAFLEX 20-OZ CY - all cores black, with imprinted numbers

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	6,9	41,0	77		2 x 1,5	8,3	66,0	143
3 x 0,5	7,1	45,5	85		3 x 1,5	8,9	83,0	166
4 x 0,5	7,7	55,0	101		4 x 1,5	9,4	100,0	182
5 x 0,5	8,2	66,0	114		5 x 1,5	10,1	125,0	215
6 x 0,5	8,9	73,0	138		6 x 1,5	11,0	154,0	296
7 x 0,5	8,9	81,0	143		7 x 1,5	11,0	163,0	316
10 x 0,5	10,6	115,0	175		10 x 1,5	13,9	211,0	356
12 x 0,5	10,6	138,5	206		12 x 1,5	13,9	280,0	401

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No x mm^2	mm	kg/km	kg/km		No x mm^2	mm	kg/km	kg/km
14 x 0,5	11,2	146,0	222		14 x 1,5	14,8	299,0	492
19 x 0,5	12,7	195,0	290		19 x 1,5	16,5	427,0	610
24 x 0,5	14,4	237,0	410		24 x 1,5	19,2	520,0	744
27 x 0,5	14,7	247,0	473		27 x 1,5	19,7	549,0	787
30 x 0,5	15,2	297,0	438		30 x 1,5	20,5	570,0	842
37 x 0,5	16,6	352,0	522		37 x 1,5	22,3	763,0	1102
2 x 0,75	7,5	46,0	88		2 x 2,5	9,8	112,0	160
3 x 0,75	7,8	57,9	102		3 x 2,5	10,4	146,0	208
4 x 0,75	8,3	64,0	117		4 x 2,5	11,2	167,0	238
5 x 0,75	9,1	77,4	133		5 x 2,5	12,4	200,0	289
6 x 0,75	9,6	89,0	163		6 x 2,5	13,5	248,0	349
7 x 0,75	9,6	102,0	164		7 x 2,5	13,5	288,0	411
10 x 0,75	12,1	140,0	285		10 x 2,5	16,9	402,0	574
12 x 0,75	12,1	177,0	252		12 x 2,5	16,9	477,3	682
14 x 0,75	12,7	192,0	274		14 x 2,5	18,4	518,0	740
19 x 0,75	14,2	250,0	355		19 x 2,5	20,7	625,0	862
24 x 0,75	16,3	298,0	457					
27 x 0,75	16,6	336,0	479		2 x 4,0	11,0	160,0	224
30 x 0,75	17,0	378,0	530		3 x 4,0	11,9	220,0	304
37 x 0,75	19,1	452,0	638		4 x 4,0	12,8	294,0	423
					5 x 4,0	14,0	328,0	490
2 x 1,0	7,8	56,0	100		6 x 4,0	15,2	360,0	563
3 x 1,0	8,1	65,3	113		7 x 4,0	15,2	388,0	622
4 x 1,0	8,6	78,1	133					
5 x 1,0	9,4	89,4	156		2 x 6,0	12,9	195,0	278
6 x 1,0	10,1	112,0	212		3 x 6,0	13,7	270,0	386
7 x 1,0	10,1	126,0	225		4 x 6,0	14,9	361,0	579
10 x 1,0	12,7	166,0	286		5 x 6,0	16,4	441,0	700
12 x 1,0	12,7	188,1	342		6 x 6,0	18,2	510,0	775
14 x 1,0	13,5	215,0	414		7 x 6,0	18,2	452,0	826
19 x 1,0	15,0	297,0	563					
24 x 1,0	17,1	362,0	630		2 x 10,0	17,0	330,0	520
27 x 1,0	17,3	414,0	714		3 x 10,0	18,5	475,0	653
30 x 1,0	18,5	452,0	789		4 x 10,0	20,2	558,0	750
37 x 1,0	20,1	550,0	967					
					2 x 16,0	19,4	502,0	694
					3 x 16,0	20,6	672,0	885
					4 x 16,0	22,5	910,0	1224
					2 x 25,0	23,0	750,0	979
					3 x 25,0	24,6	1020,0	1377