Y- JZ / - OZ

Flexible control cable

Applications

Used as energy or connecting cable or as measuring and control cable in machine tool manufacturing, plant engineering and on assembly and production lines.
Suitable for stationary installation or flexible applications with unrestricted mobility without forced movement control and without exposure to tensile load. Installation in dry, damp and wet environments.
When used for outdoor applications, adequate protection against direct exposure to sunlight must be ensured and the specified temperature limits must be observed.

Design

- Stranded bare Cu conductor, fine wire
- Core insulation: special PVC
- Core identification:
  black cores with printed consecutive number coding with green-yellow protective
  conductor (3 cores and over) in the outer layer
- OZ = without protective conductor
- Cores twisted in layers, with optimal lay lengths
- Outer sheath: special PVC
- Sheath colour: RAL 7001 grey

Electrical and technical specifications

Rated voltage: Uo/U	300/500 V
Test voltage:	4000 V
Insulation resistance at +20° C:	≥ 20 MOhm x km
Bending radius:	15 x cable diameter
Temperature range:	
flexible	– 5° C to +70° C
stationary	–30° C to +70° C

Flame retardant to IEC 60332-1

Cross-section mm²	Cu content kg/km	Outer diameter approx. mm	Weight approx. kg/km
2x0.5 OZ	9.6	4.9	38
3x0.5	14.4	5.2	47
3x0.5 OZ	14.4	5.2	47
4x0.5	19.2	5.7	58
4x0.5 OZ	19.2	5.7	58
5x0.5	24.0	6.0	75
5x0.5 OZ	24.0	6.0	75
6x0.5	28.8	6.5	89
7x0.5	33.6	7.0	93
7x0.5 OZ	33.6	7.0	93
8x0.5	38.4	7.6	110
8x0.5 OZ	38.4	7.6	110
10x0.5	48.0	8.5	142
10x0.5 OZ	48.0	8.5	142
12x0.5	58.0	9.0	150
12x0.5 OZ	58.0	9.0	150
14x0.5	67.0	9.2	172
16x0.5	77.0	10.3	196
18x0.5	86.0	10.7	216
20x0.5	96.0	11.7	231
21x0.5	101.0	11.9	249
25x0.5	120.0	12.7	257
30x0.5	144.0	13.6	308
32x0.5	154.0	13.9	321
34x0.5	163.0	14.6	398
40x0.5	192.0	15.5	452
42x0.5	202.0	16.1	471
50x0.5	240.0	17.5	510
52x0.5	252.0	17.6	530
61x0.5	293.0	18.8	670
65x0.5	312.0	19.7	685
80x0.5	384.0	21.4	778
100x0.5	480.0	23.8	970

Cross-section mm²	Cu content kg/km	Outer diameter approx. mm	Weight approx. kg/km
2x0.75 OZ	14.4	5.5	43
3x0.75	22.0	5.7	61
3x0.75 OZ	22.0	5.7	61
4x0.75	28.8	6.2	75
4x0.75 OZ	28.8	6.2	75
5x0.75	36.0	6.9	100
5x0.75 OZ	36.0	6.9	100
6x0.75	43.2	7.5	114
6x0.75 OZ	43.2	7.5	114
7x0.75	50.0	7.6	125
7x0.75 OZ	50.0	7.6	125
8x0.75	58.0	8.8	140
8x0.75 OZ	58.0	8.8	140
9x0.75	65.0	9.6	148
10x0.75	72.0	9.9	172
12x0.75	86.0	10.1	210
12x0.75 OZ	86.0	10.1	210
14x0.75	101.0	10.8	225
15x0.75	108.0	11.1	240
18x0.75	130.0	12.0	270
20x0.75	144.0	12.9	310
21x0.75	151.0	13.3	334
25x0.75	180.0	14.1	370
30x0.75	216.0	15.0	440
31x0.75	223.2	16.0	450
32x0.75	230.0	16.1	475
34x0.75	245.0	16.2	512
37x0.75	260.0	16.4	533
40x0.75	288.0	17.5	570
41x0.75	296.0	17.7	580
42x0.75	302.0	17.7	590
50x0.75	360.0	19.4	640
61x0.75	439.0	20.8	775
65x0.75	468.0	21.8	895
80x0.75	576.0	23.9	1153
100x0.75	720.0	26.3	1312
2x1.0 OZ	19.2	5.8	57
3x1.0	28.8	6.3	80
3x1.0 OZ	28.8	6.3	80
4x1.0	38.4	6.7	106
4x1.0 OZ	38.4	6.7	106
5x1.0	48.0	7.3	123
5x1.0 OZ	48.0	7.3	123
6x1.0	57.6	8.1	135
7x1.0 OZ	67.0	8.3	149
7x1.0	67.0	8.3	149
8x1.0	77.0	9.5	175
9x1.0	86.4	10.2	200
10x1.0	96.0	10.4	220
10x1.0 OZ	96.0	10.4	220
12x1.0	115.2	10.7	260
12x1.0 OZ	115.2	10.7	260
14x1.0	134.4	11.5	290
16x1.0	153.6	12.0	320
18x1.0	172.8	12.8	350
18x1.0 OZ	172.8	12.8	350
19x1.0	182.0	12.8	360
20x1.0	192.0	13.6	370
21x1.0	205.0	14.1	382
24x1.0	236.0	14.6	444
25x1.0	240.0	14.7	470
26x1.0	252.0	15.1	495
27x1.0	259.0	15.8	530
34x1.0	326.4	17.1	600
36x1.0	346.0	17.5	620
37x1.0	355.0	17.5	631

Cross-section mm²		Cu content kg/km	Outer diameter approx. mm	Weight approx. kg/km
40x1.0		384.0	18.4	678
41x1.0		394.0	18.9	699
42x1.0		403.2	18.9	720
50x1.0		480.0	20.8	926
56x1.0		538.0	21.5	1020
61x1.0		585.6	22.4	1100
65x1.0		624.0	23.3	1170
80x1.0		786.0	25.6	1300
100x1.0		960.0	28.5	1628
2x1.5	OZ	28.8	6.6	100
3x1.5		43.2	6.8	110
3x1.5	OZ	43.2	6.8	110
4x1.5		57.6	7.4	125
4x1.5	OZ	57.6	7.4	125
5x1.5		72.0	8.3	145
5x1.5	OZ	72.0	8.3	145
6x1.5		86.4	9.0	170
7x1.5		100.8	9.1	195
7x1.5	OZ	100.8	9.1	195
8x1.5		115.0	10.8	215
9x1.5		129.0	11.6	232
10x1.5		144.0	11.6	258
12x1.5		172.8	12.3	310
12x1.5	OZ	172.8	12.3	310
14x1.5		202.0	12.8	360
16x1.5		230.4	13.7	390
18x1.5		259.2	14.7	420
19x1.5		279.0	14.9	442
20x1.5		288.0	15.2	498
21x1.5		302.0	16.0	533
25x1.5		360.0	17.2	600
32x1.5		460.8	19.0	700
34x1.5		489.6	19.7	730
40x1.5		576.0	21.5	895
42x1.5		605.0	21.5	900
50x1.5		720.0	23.7	1060
56x1.5		806.0	25.1	1200
61x1.5		878.4	25.5	1320
65x1.5		936.0	26.8	1440
80x1.5		1152.0	29.3	1750
100x1.5		1440.0	32.7	2355
2x2.5	OZ	48.0	7.7	121
3x2.5		72.0	8.3	170
3x2.5	OZ	72.0	8.3	170
4x2.5		96.0	9.1	180
4x2.5	OZ	96.0	9.1	180
5x2.5		120.0	10.2	190
5x2.5	OZ	120.0	10.2	190
7x2.5		168.0	11.2	280
7x2.5	OZ	168.0	11.2	280
8x2.5		192.0	13.1	327
12x2.5		288.0	15.0	510
14x2.5		336.0	16.0	600
18x2.5		432.0	18.0	870
21x2.5		504.0	20.0	905
25x2.5		600.0	21.0	1140
32x2.5		768.0	24.0	1203
34x2.5		816.0	24.7	1320
42x2.5		1008.0	27.4	1610
50x2.5		1200.0	29.7	1885
61x2.5		1464.0	32.0	2475
100x2.5		2400.0	41.0	4005

Cross-section mm²	Cu content kg/km	Outer diameter approx. mm	Weight approx. kg/km
2x4.0 OZ	77.0	9.3	175
3x4.0	115.0	10.1	208
4x4.0	153.6	11.0	270
5x4.0	192.0	12.3	300
7x4.0	268.8	13.6	410
12x4.0	461.0	18.0	710
3x6.0	173.0	11.8	320
4x6.0	230.4	13.1	330
5x6.0	288.0	14.4	430
7x6.0	403.2	16.0	600
3x10	288.0	14.9	543
4x10	384.0	16.5	750
5x10	480.0	18.3	930
7x10	672.0	20.2	1105
3x16	461.0	16.7	828
4x16	614.0	19.1	1050
5x16	768.0	21.5	1300
7x16	1075.0	23.7	1735
3x25	720.0	22.7	1066
4x25	960.0	23.8	1675
5x25	1200.0	26.7	2100
7x25	1680.0	31.0	2705
3x35 JB	1008.0	25.4	1590
4x35 JB	1344.0	28.3	2050
5x35 JB	1680.0	32.0	2635
3x50 JB	1440.0	30.5	2295
4x50 JB	1920.0	34.0	2800
3x70 JB	2016.0	36.0	2860
4x70 JB	2688.0	39.6	4050
3x95 JB	2736.0	41.2	4210
4x95 JB	3648.0	46.0	5500
3x120 JB	3456.0	46.8	5200
4x120 JB	4608.0	52.0	6500
4x150 JB	5760.0	59.0	7900
4x185 JB	7104.0	65.0	9050

OZ = without protective conductor, printed number coding / JB = with protective conductor, coloured cores