

FLEX-CY-JZ/OZ

Number coded, copper screened,
transparent



APPLICATION

- Used as connecting cable, as measuring, power and control cable in machine tool manufacturing, plant engineering and on assembly lines and production lines to meet stringent safety requirements.
- Suitable for fixed installation or flexible applications with unrestricted mobility without forced movement control and without exposure to tensile load.
- Installation in dry and moist rooms; outdoor installation not permitted. These cables with copper screening are ideally suitable for interference-free data and signal transmission in measuring and control technology.
- In EMC-sensitive environments (electromagnetic compatibility)
- Good chemical resistance, largely oil resistant.
- High degree of screening, Low transfer impedance (Max 250 Ω /km at 30 MHz)

BENEFITS

- Space-saving installation due to small cable diameters
- High electrical performance due to 4 kv test voltage

CONSTRUCTION

- Fine strands of bare copper conductor
- Stranding acc. to VDE 0295, class 5
- PVC core insulation black with continuous white figure imprint
- Earth conductor green/yellow
- PVC inner sheath grey
- Overall screen made of tinned copper wire braid coverage approx. 85% - PVC outer sheath transparent



TECHNICAL DATA

Conductor Material

Copper, Bare

Conductor Class

Class 5 acc. to DIN VDE 0295, or IEC 60228

Core Insulation

PVC

Core Identification

DIN VDE 0293: Black cores with white numerals

Stranding

Cores twisted in layers

Outer Sheath

PVC

Sheath Colour

Transparent

Rated Voltage [V]

300/500

Testing Voltage [V]

4000

Conductor Resistance

< 13,7 $\text{M}\Omega \times \text{km}$

Insulation Resistance

> 20 $\text{M}\Omega \times \text{km}$

Current Carrying Capacity

DIN VDE (see technical data)

Min. Bending Radius Fixed [xd]

6 x outer diameter

Min. Bending Radius Moved [xd]

15 x outer diameter

Working Temp Fixed Min/Max [C]

-40°C up to +80

Working Temp Moved Min/Mac [C]

-15°C up to +80

Temp at Conductor Max.

+70°C in operation, +150°C in case of short-circuit

Burning Behaviour

burning behaviour IEC 60332-1: flame-retardant and self-extinguishing

Approvals

VDE 7030

Part No.	No. of cores x cross section	Outer Ø ca. mm	Copper weight kg/100m	Weight kg/100m
21020050	2 x 0.50 OZ	7	4.1	7
21020075	2 x 0.75 OZ	7.5	4.6	8.3
21020100	2 x 1 OZ	7.9	5.6	9.8
21020150	2 x 1.50 OZ	8.7	6.6	12.2
21020250	2 x 2.50 OZ	10	11.2	17
21020400	2 x 4	11.4	12	24.7
21020600	2 x 6	13.6	18	35.3
21021000	2 x 10	16.4	25.6	49.2
21021600	2 x 16	18.6	39	69.8
21030050	3 x 0.50	7.3	4.6	8
21030075	3 x 0.75	7.9	5.8	9.4
21030100	3 x 1	8.2	6.53	11
21030150	3 x 1.50	9	8.3	14.5
21030250	3 x 2.50	10.5	14.6	19.7
21031000	3 x 10	17.4	36.24	50.7
21040050	4 x 0.50	7.9	5.5	9.5
21040075	4 x 0.75	8.4	6.4	11.5
21040100	4 x 1	8.8	7.81	13
21040150	4 x 1.50	9.7	10	16.8
21040250	4 x 2.50	11.5	16.7	25.4
21040400	4 x 4	13.7	23.7	39.4
21040600	4 x 6	15.8	36.1	48.5
21041000	4 x 10	19.4	55.8	73.5
21041600	4 x 16	22.6	91	139.5
21042500	4 x 25	28.9	131	172
21043500	4 x 35	35.6	161	221
21004500	4 x 50	40	259	315
21047000	4 x 70	46	325.7	430
21049500	4 x 95	53	382	560
21050050	5 x 0.50	8.4	6.6	11.1
21050075	5 x 0.75	9.1	7.74	13.6
21050100	5 x 1	9.6	8.94	16
21050150	5 x 1.50	10.6	12.5	20.5
21050250	5 x 2.50	12.5	20	30.2
21050400	5 x 4	15.4	32.8	44.5
21050600	5 x 6	17	44.1	70.2

Part No.	No. of cores x cross section	Outer Ø ca. mm	Copper weight kg/100m	Weight kg/100m
21051000	5 x 10	21.8	71.4	110.5
21051600	5 x 16	25.2	105.3	148
21052500	5 x 25	30	140	209
21053500	5 x 35	38	190.5	295
21070050	7 x 0.50	9.1	8.1	14
21070075	7 x 0.75	9.7	10.2	16.7
21070100	7x 1	10.4	12.6	19.4
21070150	7 x 1.50	11.4	19.6	26.6
21070250	7 x 2.50	14	28.8	39.5
21070400	7x 4	16.2	38.8	61
21070600	7x 6	18.7	50.5	95
21071000	7 x 10	23.2	79.6	103.9
21120050	12 x 0.50	11.5	13.9	21.7
21120075	12 x 0.75	12.7	17.9	25.9
21120100	12 x 1	11.7	18.8	33
213120100	12 x 1 OZ	11.7	18.6	33
21120150	12 x 1.50	15.2	28	42.5
21120250	12 x 2.50	18.2	47.73	62.2
21140100	14 x 1	14	21.5	32
21140150	14 x 1.50	16	29.9	44
21150075	15 x 0.75	13.6	19.9	27.1
21160100	16 x 1	14.6	21.6	39
21180050	18 x 0.50	13.6	15.6	29.5
21180075	18 x 0.75	14.6	24.3	36.5
21180100	18 x 1	15.5	28.6	44.4
21180150	18 x 1.50	17.5	38.9	56.5
21180250	18 x 2.50	22.4	59.8	95.8
21210150	21 x 1.50	18.5	41.4	60
21250050	25 x 0.50	15.3	25	38.4
21250075	25 x 0.75	17.3	30.7	48
21250100	25 x 1	17.9	38.9	56
21250150	25 x 1.50	20.5	53.5	85
21250250	25 x 2.50	26.8	84.8	118.4
21300050	30 x 0.50	16.2	29.7	42.9
21340075	34 x 0.75	19.3	41.3	61.4
21340100	34 x 1	20.3	50.5	73.8

Part No.	No. of cores x cross section	Outer Ø ca. mm	Copper weight kg/100m	Weight kg/100m
21340150	34 x 1.50	23.3	70.2	96.4
21400050	40 x 0.50	18.6	34.3	55.2
21400075	40 x 0.75	20.5	36.94	73.4
21410075	41 x 0.75	21	48.8	72.8
21410100	41 x 1	22.4	57.8	88.5
21410150	41 x 1.50	25.2	84.5	112.3
21500075	50 x 0.75	23	69.5	88.4
21500100	50 x 1	23.6	68.8	103
21500150	50 x 1.50	27.6	100.6	137.2
21610050	61 x 0.50	23.5	43.9	78
21610075	61 x 0.75	24.5	58.4	92
21610100	61 x 1	26.5	78.2	120
21610150	61 x 1.50	30.5	121.2	158
21800050	80 x 0.50	24.5	55.1	88
21800075	80 x 0.75	27	76	120
21800100	80 x 1	30	104	150
21800150	80 x 1.50	33.5	150.8	200
211000050	100 x 0.50	27	68	110
211000075	100 x 0.75	30	97.2	150
211000100	100 x 1	33	136.9	190
211000150	100 x 1.50	37.5	188.2	245