Y-CY-JB / Y-CY-OB

EMC-preferred type, with inner sheath



TECHNICAL DATA

PVC control and connection cable in alignment with DIN VDE 0285-525-2-51 / DIN EN 50525-2-51

Temperature range	flexible -15°C to +80°C fixed -40°C to +80°C
Nominal voltage	0.5 - 1.5 mm²: AC U_0/U 300/500 V 2.5 - 185 mm²: AC U_0/U 450/750 V 2.5 - 185 mm²: fixed and protected installation AC U_0/U 600/1000 V
Test voltage core/core	4000 V
Test voltage core/screen	2000 V
Coupling resistance	at 30 MHz, approx. 250 Ohm/km
Minimum bending radius	flexible 10x Outer-Ø fixed 5x Outer-Ø

CABLE STRUCTURE

- Copper wire bare, finely stranded acc. to DIN VDE 0295 Class 5 / IEC 60228 Class 5
- Core insulation: Special-PVC
- Core identification acc. to JB/OB colour code, colour coded
- Protective conductor: starting with 3 cores, G = with protective conductor GN-YE (JB), X = without protective conductor (OB)
- Cores stranded with optimal lay lengths
- Inner sheath: PVC acc. to DIN VDE 0207-363-4-1 / DIN EN 50363-4-1 (compound type TM2)
- Screen: braided screen of tinned copper wires, approx. coverage 85%
- Outer sheath: PVC acc. to DIN VDE 0207-363-4-1 / DIN EN 50363-4-1 (compound type TM2)
- Sheath colour: transparent
- Length marking: in metres

PROPERTIES

- largely resistant to: oil, for details, see "Technical Information"
- the materials used during manufacturing are cadmium-free, contain no silicone and are free from substances harmful to the wetting properties of lacquers

TESTS

- flame-retardant acc. to DIN VDE 0482-332-1-2 / DIN EN 60332-1-2 / IEC 60332-1-2
- certifications and approvals: EAC

APPLICATION

Used for flexible applications involving medium mechanical stress with free movement, without tensile stress and without forced motion control in dry rooms, however, not suitable for outdoor use. Used as a connection and control cable in measurement and control technology, in machine and machine tool construction, in conveyers and production lines, in computers, as well as signal cables in electronics. Due to the high screening density, interference-free transmission of signals or pulses is ensured. The PVC inner sheath increases the mechanical load capacity of the cable; the transparent PVC outer sheath makes the tinned copper braid optically effective. EMC = Electromagnetic Compatibility; in order to optimise EMC properties, we recommend a double-sided and all-round large contact area of the copper braiding.

NOTES

- the conductor is metrically (mm²) constructed, AWG numbers are approximated, and are for reference only

Part no.	No. cores x cross-sec. mm²	AWG, approx.	Outer Ø mm, approx.	Cu factor per km	Weight kg/km, approx.
16121	2 x 0.5	20	7.0	41.0	67.0
16122	3 G 0.5	20	7.5	45.0	83.0
16123	4 G 0.5	20	7.9	54.0	94.0
16124	5 G 0.5	20	8.6	66.0	108.0
16125	2 x 0.75	19	7.7	46.0	87.0
16126	3 G 0.75	19	8.0	57.0	98.0
16127	4 G 0.75	19	8.9	63.0	113.0
16128	5 G 0.75	19	9.5	76.0	130.0
16129	2 x 1	18	8.0	54.0	97.0
16130	3 G 1	18	8.6	64.0	103.0
16131	4 G 1	18	9.3	76.0	146.0
16132	5 G 1	18	9.9	89.0	169.0
16133	2 x 1.5	16	9.0	64.0	130.0
16134	3 G 1.5	16	9.4	82.0	152.0
16135	4 G 1.5	16	10.0	99.0	168.0
16136	5 G 1.5	16	10.9	123.0	202.0

Part no.	No. cores x cross-sec. mm²	AWG, approx.	Outer Ø mm, approx.	Cu factor per km	Weight kg/km, approx.
16137	2 x 2.5	14	11.2	110.0	180.0
16138	3 G 2.5	14	12.2	148.0	216.0
16139	4 G 2.5	14	13.2	169.0	267.0
16140	5 G 2.5	14	14.4	220.0	347.0
16141	2 x 4	12	13.6	124.0	302.0
16142	3 G 4	12	14.3	178.0	340.0
16143	4 G 4	12	15.7	234.0	410.0
16144	5 G 4	12	17.2	284.0	502.0
16145	2 x 6	10	15.0	176.0	350.0
16146	3 G 6	10	16.2	245.0	450.0
16147	4 G 6	10	17.6	316.0	559.0
16148	5 G 6	10	19.4	442.0	702.0
16149	2 x 10	8	18.4	260.0	500.0
16150	3 G 10	8	19.8	367.0	750.0
16151	4 G 10	8	21.5	549.0	1020.0
16152	5 G 10	8	24.0	604.0	1115.0

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Y-CY-JB / Y-CY-OB

EMC-preferred type, with inner sheath

Part no.	No. cores x cross-sec. mm²	AWG, approx.	Outer Ø mm, approx.	Cu factor per km	Weight kg/km, approx.
16153	4 G 16	6	26.1	807.0	1380.0
16154	5 G 16	6	28.7	940.0	1553.0
16469	4 G 25	4	31.4	1169.0	1890.0
16155	5 G 25	4	34.9	1420.0	2270.0
16470	4 G 35	2	34.2	1680.0	2390.0
16156	5 G 35	2	38.2	2020.0	2885.0
16471	4 G 50	1	40.4	2370.0	3315.0

Part no.	No. cores x cross-sec. mm²	AWG, approx.	Outer Ø mm, approx.	Cu factor per km	Weight kg/km, approx.
16119	5 G 50	1	44.6	2880.0	4150.0
16472	4 G 70	2/0	45.5	3257.0	4600.0
16473	4 G 95	3/0	51.7	4060.0	6060.0
16474	4 G 120	4/0	56.7	5231.0	7315.0
16247	4 G 150	300 kcmil	62.9	7760.0	9340.0
16319	4 G 185	350 kcmil	69.0	8104.0	11120.0

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