Y-CY-JB / Y-CY-OB

EMC-preferred type, with inner sheath





HELUKABEL® Y-CY-JB 5G1,5 QMM / 16136 300/500 V CE

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 U₀/U

300/500 V

2.5 - 185 mm²: AC U₀/U

450/750 V

2.5 - 185 mm²: fixed and protected installation AC U_0/U

600/1000 V

Test voltage core/core4000 VTest voltage core/screen2000 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

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-weight kg/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
16137	2 x 2.5	14	11.2	110.0	180.0
16138	3 G 2.5	14	12.2	148.0	216.0

Part no.	No. cores x cross-sec. mm²	AWG, approx.	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.
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
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



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Part no.	No. cores x cross-sec. mm²	AWG, approx.	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.	Part no.	No. cores x cross-sec. mm²	AWG, approx.
16470	4 G 35	2	34.2	1680.0	2390.0	16473	4 G 95	3/0
16156	5 G 35	2	38.2	2020.0	2885.0	16474	4 G 120	4/0
16471	4 G 50	1	40.4	2370.0	3315.0	16247	4 G 150	300 kcmil
16119	5 G 50	1	44.6	2880.0	4150.0	16319	4 G 185	350 kcmil
16472	4 G 70	2/0	45.5	3257.0	4600.0			

Part no.	No. cores x cross-sec. mm²	AWG, approx.	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.
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

