05VVC4V5-K

EMC-preferred type, with inner sheath, oil resistant





HELUKABEL® 05VVC4V5-K 4G4 QMM / 13172 300/500 V €

TECHNICAL DATA

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

Temperature range flexible -5°C to +70°C fixed -40°C to +70°C Nominal voltage flexible -5°C to +70°C AC U $_0$ /U 300/500 V

 Test voltage core/core
 2000 ∨

 Test voltage core/screen
 2000 ∨

 Breakdown voltage
 4000 ∨

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: PVC acc. to DIN VDE 0207-363-3 / DIN EN 50363-3 (compound type TI2)
- Core identification acc. to DIN VDE 0293-334, black cores with consecutive labeling in white digits
- Protective conductor: starting with 3 cores,
 G = with protective conductor GN-YE, in the outer layer,
 x = without protective conductor
- Cores stranded in layers 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: oil-resistant special PVC acc. to DIN VDE 0207-363-4-1 / DIN EN 50363-4-1 (compound type TM5)

- Sheath colour: grey (RAL 7001)
- · Length marking: in metres

PROPERTIES

- · resistant to: oil
- 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
- oil-resistant acc. to DIN VDE 0473-811-404 / DIN EN 60811-404 / IEC 60811-404
- 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, damp and wet rooms, however, not suitable for outdoor use as a connection cable in machine and machine tool construction, assembly lines, conveyers and production lines. Even various chemical compounds cannot harm the cable. As a cable suitable for damp rooms, it is also preferred for the operation of machines in breweries, bottling plants and car washes. 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.
13170	2 x 4	12	12.8	124.0	236.0
13171	3 G 4	12	13.8	178.0	361.0
13172	4 G 4	12	14.9	234.0	430.0
13173	5 G 4	12	16.3	284.0	509.0
13175	7 G 4	12	19.5	385.0	660.0
13178	12 G 4	12	23.5	581.0	979.0
13179	2 x 6	10	14.2	176.0	296.0
13180	3 G 6	10	15.2	245.0	420.0
13181	4 G 6	10	16.5	316.0	579.0
13182	5 G 6	10	18.3	442.0	719.0
13183	7 G 6	10	21.7	530.0	1031.0
13185	3 G 10	8	18.8	367.0	655.0
13186	4 G 10	8	20.7	549.0	894.0
13187	5 G 10	8	22.7	604.0	927.0

Part no.	No. cores x cross-sec. mm²	AWG, approx.	Outer Ø mm, approx.	Cu factor per km	Weight kg/km, approx.
13188	7 G 10	8	27.8	820.0	1518.0
13190	3 G 16	6	23.0	653.0	993.0
13191	4 G 16	6	25.2	807.0	1340.0
13192	5 G 16	6	27.8	940.0	1626.0
13193	7 G 16	6	33.9	1345.0	2080.0
13196	4 G 25	4	30.7	1169.0	1692.0
13197	5 G 25	4	34.1	1420.0	1972.0
13198	3 G 35	2	31.0	1250.0	1704.0
13199	4 G 35	2	34.1	1680.0	2320.0
13189	5 G 35	2	37.3	2020.0	2780.0
13194	3 G 50	1	35.7	1887.0	2661.0
13195	4 G 50	1	37.7	2370.0	3194.0
13184	5 G 50	1	42.7	2880.0	4247.0

