

H05VV5-F

oil-resistant



HELUKABEL® <HAR> H05VV5-F 18G1,5 QMM / 13044 300/500 V CE

TECHNICAL DATA

PVC control cable acc. to DIN VDE 0285-525-2-51 / DIN EN 50525-2-51, IEC 60227-75

Temperature range	flexible -5°C to +70°C fixed -40°C to +70°C
Nominal voltage	AC U ₀ /U 300/500 V
Test voltage core/core	2000 V
Breakdown voltage	4000 V
Minimum bending radius	flexible 7.5x Outer-Ø fixed 4x 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 T12)
- 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
- 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

Part no.	No. cores x cross-sec. mm ²	AWG, approx.	Outer-Ø min - max mm	Cu-weight kg/km	Weight kg/km, approx.
13122	2 x 0.5	20	5.2 - 6.6	9.7	46.0
13001	3 G 0.5	20	5.5 - 7.0	14.4	54.0
13002	4 G 0.5	20	6.2 - 7.9	19.0	65.0
13003	5 G 0.5	20	6.8 - 8.6	24.0	80.0
13004	6 G 0.5	20	7.6 - 9.6	29.0	104.0
13005	7 G 0.5	20	8.3 - 10.4	33.6	119.0
13920	8 G 0.5	20	9.2 - 11.5	38.0	134.0
13006	9 G 0.5	20	9.7 - 12.1	43.0	136.0
13921	10 G 0.5	20	10.0 - 12.2	48.0	166.0
13007	12 G 0.5	20	10.4 - 12.9	58.0	186.0
13922	14 G 0.5	20	10.9 - 13.6	67.0	215.0
13008	18 G 0.5	20	12.3 - 15.3	86.0	251.0
13009	25 G 0.5	20	14.8 - 18.2	120.0	349.0
13923	27 G 0.5	20	15.1 - 18.6	129.6	373.0
13010	34 G 0.5	20	17.2 - 21.2	163.0	480.0
13924	36 G 0.5	20	17.0 - 20.9	172.0	510.0
13125	41 G 0.5	20	18.8 - 23.1	196.0	570.0
13011	50 G 0.5	20	20.5 - 25.2	240.0	658.0
13123	2 x 0.75	19	5.7 - 7.2	14.1	52.0
13013	3 G 0.75	19	6.0 - 7.6	21.6	68.0
13014	4 G 0.75	19	6.6 - 8.3	29.0	82.0
13015	5 G 0.75	19	7.4 - 9.3	36.0	107.0
13016	6 G 0.75	19	8.1 - 10.1	43.0	132.0

- 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

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 and control 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. The cables may engage in flexible movement after installation, provided the cables are not mechanically overloaded during the movements.

NOTES

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

Part no.	No. cores x cross-sec. mm ²	AWG, approx.	Outer-Ø min - max mm	Cu-weight kg/km	Weight kg/km, approx.
13017	7 G 0.75	19	9.0 - 11.3	50.0	145.0
13926	8 G 0.75	19	9.9 - 12.3	58.0	189.0
13018	9 G 0.75	19	10.6 - 13.2	65.0	194.0
13019	12 G 0.75	19	11.0 - 13.7	86.0	231.0
13927	14 G 0.75	19	11.7 - 14.5	101.0	274.0
13020	18 G 0.75	19	13.2 - 16.4	130.0	313.0
13021	25 G 0.75	19	15.8 - 19.5	180.0	461.0
13928	27 G 0.75	19	16.2 - 19.9	195.0	493.0
13022	34 G 0.75	19	18.0 - 22.3	245.0	614.0
13929	36 G 0.75	19	18.2 - 22.4	259.0	646.0
13126	41 G 0.75	19	20.1 - 24.6	295.0	730.0
13023	50 G 0.75	19	21.9 - 26.8	360.0	896.0
13119	2 x 1	18	5.9 - 7.5	19.0	66.0
13025	3 G 1	18	6.3 - 8.0	29.0	78.0
13026	4 G 1	18	6.9 - 8.7	38.0	104.0
13027	5 G 1	18	7.8 - 9.8	48.0	123.0
13028	6 G 1	18	8.7 - 10.8	58.0	152.0
13029	7 G 1	18	9.5 - 11.8	67.0	183.0
13931	8 G 1	18	10.5 - 13.0	77.0	220.0
13030	9 G 1	18	11.4 - 14.0	86.0	230.0
13031	12 G 1	18	11.8 - 14.6	115.0	269.0
13932	14 G 1	18	12.6 - 14.6	134.0	361.0
13032	18 G 1	18	14.0 - 17.2	173.0	400.0

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Part no.	No. cores x cross-sec. mm ²	AWG, approx.	Outer-ø min - max mm	Cu-weight kg/km	Weight kg/km, approx.
13933	19 G 1	18	14.3 - 17.6	183.0	413.0
13033	25 G 1	18	16.9 - 20.8	240.0	546.0
13934	27 G 1	18	17.0 - 21.0	259.0	582.0
13034	34 G 1	18	19.2 - 23.6	326.0	724.0
13124	36 G 1	18	19.4 - 23.8	348.0	775.0
13935	37 G 1	18	19.4 - 23.8	355.0	785.0
13127	41 G 1	18	21.4 - 26.2	392.0	822.0
13035	50 G 1	18	23.3 - 28.5	480.0	1052.0
13120	2 x 1.5	16	6.8 - 8.6	29.0	77.0
13037	3 G 1.5	16	7.4 - 9.4	43.0	97.0
13038	4 G 1.5	16	8.2 - 10.2	58.0	128.0
13039	5 G 1.5	16	9.1 - 11.4	72.0	149.0
13040	6 G 1.5	16	10.2 - 12.6	86.0	196.0
13041	7 G 1.5	16	11.3 - 14.1	101.0	216.0
13937	8 G 1.5	16	12.2 - 15.1	115.0	271.0
13042	9 G 1.5	16	13.3 - 16.5	130.0	282.0
13043	12 G 1.5	16	13.8 - 17.0	173.0	324.0
13121	14 G 1.5	16	14.7 - 18.1	202.0	372.0
13044	18 G 1.5	16	16.5 - 20.3	259.0	485.0
13938	19 G 1.5	16	16.7 - 20.5	274.0	495.0
13045	25 G 1.5	16	19.9 - 24.4	360.0	671.0
13939	27 G 1.5	16	20.3 - 24.9	389.0	695.0

Part no.	No. cores x cross-sec. mm ²	AWG, approx.	Outer-ø min - max mm	Cu-weight kg/km	Weight kg/km, approx.
13046	32 G 1.5	16	22.2 - 27.1	461.0	820.0
13047	34 G 1.5	16	22.9 - 28.0	490.0	881.0
13940	36 G 1.5	16	23.0 - 28.2	518.0	905.0
13941	37 G 1.5	16	23.0 - 28.2	532.0	920.0
13128	41 G 1.5	16	25.2 - 30.9	590.0	1085.0
13048	50 G 1.5	16	27.7 - 33.9	720.0	1381.0
13943	2 x 2.5	14	8.4 - 10.6	48.0	110.0
13050	3 G 2.5	14	9.2 - 11.4	72.0	154.0
13051	4 G 2.5	14	10.1 - 12.5	96.0	212.0
13052	5 G 2.5	14	11.2 - 13.9	120.0	242.0
13053	7 G 2.5	14	13.6 - 16.8	168.0	350.0
13945	8 G 2.5	14	14.9 - 18.3	192.0	379.0
13054	12 G 2.5	14	16.8 - 20.6	288.0	543.0
13946	14 G 2.5	14	17.8 - 20.6	336.0	611.0
13055	18 G 2.5	14	20.2 - 24.8	432.0	787.0
13056	25 G 2.5	14	24.2 - 29.6	600.0	1175.0
13947	27 G 2.5	14	24.7 - 30.2	648.0	1280.0
13057	34 G 2.5	14	27.9 - 34.1	816.0	1529.0
13948	36 G 2.5	14	28.0 - 34.2	864.0	1791.0
13949	41 G 2.5	14	30.4 - 37.1	984.0	1905.0
13058	50 G 2.5	14	33.0 - 40.3	1200.0	2290.0