

Datasheet
H05VV5-F
UL/CSA

Version 1/2009

PVC Control Cable Oil Resistant
with UL and CSA - Approbation (UL-Style 2587)

Application:

In dry and wet locations for low and medium-level mechanical stress, but not in the open-air. To be used as a termination and connection cable in the control, measuring and signal technology. Suitable as a signal and impulse cable for control and inspection of industrial plants, production lines and machinery. For the connection of production machinery and machine tools. The lines may move after installation, provided the lines are not overloaded mechanically.



Construction:

- 1 fine-stranded bare copper
- 2 core insulation of special-polyvinylchloride (PVC)
- 3 outer sheath of special polyvinylchloride (PVC), grey

Information:

- 0,50 mm² is equivalent to app. AWG 20 (0,519mm²)
- 0,75 mm² is equivalent to app. AWG 18 (0,823mm²)
- 1,00 mm² is equivalent to app. AWG 17 (1,040mm²)
- 1,50 mm² is equivalent to app. AWG 15 (1,650mm²)
- 2,50 mm² is equivalent to app. AWG 13 (2,630mm²)

According to:

- DIN VDE 0281-13, HD 21.13.S1
- UL/CSA (UL-Style 2587)
- DIN EN 60228 class 5 (construction)
- core identification: 1 core green/yellow, other cores black with figures

Technical data:

Nominal voltage U ₀ /U	[V]	600 Volt
Test voltage	[V] _{AC}	3000
Temperature range	in motion	-5 °C till +90 °C
	fixed	-40 °C till +90 °C
Operating temperature	short circuit	°C
Short circuit time	max.	[sec]
Bending radius	one time / fixed	x diameter
Bending radius	in motion	x diameter
Oil-resistant	standard	
Flammability	standard	
Insulation resistance	min.	[MΩm/km]

Number of cores and nominal cross section mm ²	Copper figure kg/km	Cond. construction (appr. value) mm	Overall diameter mm	Weight appr. kg / km
3 G 0,5	15,0	16 x 0,21	6,1	54
4 G 0,5	20,0	16 x 0,21	6,7	67
5 G 0,5	25,0	16 x 0,21	7,5	83
7 G 0,5	35,0	16 x 0,21	8,2	103
12 G 0,5	60,0	16 x 0,21	10,9	182

Number of cores and nominal cross section mm ²	Copper figure	Cond. construction (appr. value)	Overall diameter	Weight
	kg/km	mm	mm	appr. kg / km
18 G 0,5	90,0	16 x 0,21	13,0	262
25 G 0,5	125,0	16 x 0,21	15,2	357
34 G 0,5	170,0	16 x 0,21	17,6	482
41 G 0,5	205,0	16 x 0,21	19,5	588
50 G 0,5	250,0	16 x 0,21	21,3	707
61 G 0,5	305,0	16 x 0,21	22,9	834
3 G 0,75	22,5	24 x 0,21	6,6	66
4 G 0,75	30,0	24 x 0,21	7,3	83
5 G 0,75	37,5	24 x 0,21	8,1	102
7 G 0,75	52,5	24 x 0,21	8,9	129
12 G 0,75	90,0	24 x 0,21	11,9	227
18 G 0,75	135,0	24 x 0,21	14,2	329
25 G 0,75	187,5	24 x 0,21	16,5	449
34 G 0,75	255,0	24 x 0,21	19,2	609
41 G 0,75	307,5	24 x 0,21	21,2	742
50 G 0,75	375,0	24 x 0,21	23,3	893
61 G 0,75	457,0	24 x 0,21	24,9	1.056
3 G 1	30,0	32 x 0,21	6,9	77
4 G 1	40,0	32 x 0,21	7,7	96
5 G 1	50,0	32 x 0,21	8,5	120
7 G 1	70,0	32 x 0,21	9,4	152
12 G 1	120,0	32 x 0,21	12,6	268
18 G 1	180,0	32 x 0,21	15,0	389
25 G 1	250,0	32 x 0,21	17,5	533
34 G 1	340,0	32 x 0,21	20,4	722
41 G 1	410,0	32 x 0,21	22,6	879
50 G 1	500,0	32 x 0,21	24,7	1.059
61 G 1	610,0	32 x 0,21	26,5	1.257
3 G 1,5	45,0	30 x 0,26	8,2	110
4 G 1,5	60,0	30 x 0,26	9,1	138
5 G 1,5	75,0	30 x 0,26	10,1	172
7 G 1,5	105,0	30 x 0,26	11,1	219
12 G 1,5	180,0	30 x 0,26	14,9	388
18 G 1,5	270,0	30 x 0,26	17,9	565
25 G 1,5	375,0	30 x 0,26	20,9	774
34 G 1,5	510,0	30 x 0,26	24,3	1.051
41 G 1,5	614,0	30 x 0,26	26,9	1.281
50 G 1,5	750,0	30 x 0,26	29,5	1.545
61 G 1,5	915,0	30 x 0,26	31,6	1.835
3 G 2,5	75,0	48 x 0,26	9,4	162
4 G 2,5	100,0	48 x 0,26	10,7	205
5 G 2,5	125,0	48 x 0,26	12,0	256
7 G 2,5	175,0	48 x 0,26	13,2	328
12 G 2,5	300,0	48 x 0,26	17,8	581
18 G 2,5	450,0	48 x 0,26	21,3	849
25 G 2,5	625,0	48 x 0,26	24,9	1.167
34 G 2,5	850,0	48 x 0,26	29,0	1.584
50 G 2,5	1.250,0	48 x 0,26	35,2	2.331