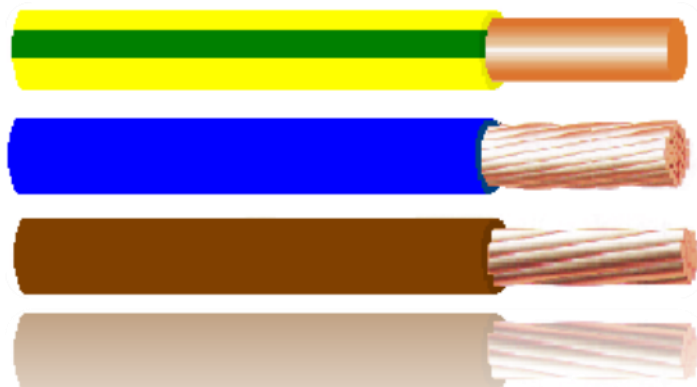


H07V-U, H07V-R, H07V-K 450/750V



HD 21.3
DIN VDE 0281-3
BS 6004

Single core PVC insulated non sheathed
cables for general purposes

Conductor: Annealed copper, class 1 solid (H07V-U), class 2 stranded (H07V-R) or class 5 flexible (H07V-K)
acc. to EN 60228

Insulation: PVC compound type TI1

Colour of insulation: green/yellow, blue, black, brown or other colours

Maximum conductor operating temperature: +70°C

Lowest ambient temperature for fixed installation (static): -30°C

Lowest installation temperature (flexing): -5°C

Maximum short-circuit conductor temperature: +160°C

Test voltage 50Hz: 2500V

Flame propagation: IEC 60332-1-2

Minimum bending radius:	For cable diameter D (mm)			
	D < 8	8 < D < 12	12 < D < 20	D > 20
Normal use	4 D	5 D	6 D	6 D
Careful bending at termination	2 D	3 D	4 D	4 D

Application: installation in surface mounted or embedded conduits, or similar closed systems. Suitable for fixed protected installation in, or on, lighting or controlgear for voltages up to 1000V a.c. or, up to 750V d.c. to earth.

Standard length cable packing: 50 m or 100 m in rings or on spools, or 500 m on drums. Other forms of packing and delivery are available on request.

H07V-U 450/750V

Nominal cross-sectional area of conductor	Number of wires	Radial thickness of insulation	Approximate overall diameter	Approximate net weight	Maximum resistance of conductor at temperature 20°C	Minimum insulation resistance at temperature 70°C
mm ²	n	mm	mm	kg/km	Ω/km	MΩ·km
1.5	1	0.7	2.7	20	12.1	0.011
2.5	1	0.8	3.3	31	7.41	0.010
4	1	0.8	3.7	45	4.61	0.0087
6	1	0.8	4.2	63	3.08	0.0074
10	1	1.0	5.4	105	1.83	0.0072

H07V-R 450/750V

Nominal cross-sectional area of conductor	Number of wires	Radial thickness of insulation	Approximate overall diameter	Approximate net weight	Maximum resistance of conductor at temperature 20°C	Minimum insulation resistance at temperature 70°C
mm ²	n	mm	mm	kg/km	Ω/km	MΩ·km
1.5	7	0.7	3	21	12.1	0.010
2.5	7	0.8	3.6	33	7.41	0.0099
4	7	0.8	4.1	48	4.61	0.0082
6	7	0.8	4.5	66	3.08	0.0070
10	7	1.0	5.8	110	1.83	0.0067
16	7	1.0	6.8	167	1.15	0.0056
25	7	1.2	8.5	262	0.727	0.0053
35	7	1.2	9.6	353	0.524	0.0046
50	19	1.4	11.3	480	0.387	0.0046
70	19	1.4	12.6	672	0.268	0.0040
95	19	1.6	15	932	0.193	0.0039
120	37	1.6	16.4	1158	0.153	0.0035
150	37	1.8	18.4	1432	0.124	0.0035
185	37	2.0	20.3	1789	0.0991	0.0035
240	61	2.2	23.2	2325	0.0754	0.0034
300	61	2.4	25.4	2908	0.0601	0.0033
400	61	2.6	28.5	3756	0.0470	0.0031

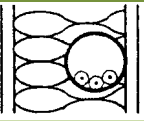
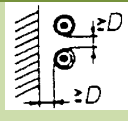
H07V-K, 07V-K 450/750V

Nominal cross-sectional area of conductor	Maximum diameter of wires in conductor	Radial thickness of insulation	Approximate overall diameter	Approximate net weight	Maximum resistance of conductor at temperature 20°C	Minimum insulation resistance at temperature 70°C
mm ²	mm	mm	mm	kg/km	Ω/km	MΩ·km
1	0.21	0.7	2.6	15	19.5	0.010
1.5	0.26	0.7	2.9	20	13.3	0.010
2.5	0.26	0.8	3.6	31	7.98	0.0095
4	0.31	0.8	4.1	45	4.95	0.0078
6	0.31	0.8	4.6	63	3.30	0.0068
10	0.41	1.0	6	107	1.91	0.0065
16	0.41	1.0	7.1	161	1.21	0.0053
25	0.41	1.2	8.7	247	0.780	0.0050
35	0.41	1.2	9.8	344	0.554	0.0043
50	0.41	1.4	11.8	483	0.386	0.0042
70	0.51	1.4	13.6	669	0.272	0.0036
95	0.51	1.6	16.1	886	0.206	0.0036
120	0.51	1.6	17.2	1111	0.161	0.0032
150	0.51	1.8	19.4	1389	0.129	0.0032
185	0.51	2.0	22.1	1697	0.106	0.0032
240	0.51	2.2	24	2210	0.0801	0.0031

*07V-K based on HD 21.3, VDE 0281-3, BS 6004

Current ratings acc. to IEC 60364-5-523

Permissible operating temperature at conductor: 70°C; ambient temperature: 30°C

Installation					
	Single core cables in insulating tubes, in a thermally insulated walls		Single core cables in insulating tubes on a wall		In open air *
Number of loaded cores	2	3	2	3	1
Cross-section, mm ²	Current ratings, A				
0,75	-	-	-	-	15
1	-	-	-	-	19
1,5	14,5	13,5	17,5	15,5	24
2,5	19,5	18	24	21	32
4	26	24	32	28	42
6	34	31	41	36	54
10	46	42	57	50	73
16	61	56	76	68	98
25	80	73	101	89	129
35	99	89	125	110	158
50	119	108	151	134	198
70	151	136	192	171	245
95	182	164	232	207	292
120	210	188	269	239	344
150	240	216	-	-	391
185	273	245	-	-	448
240	321	286	-	-	528
300	367	328	-	-	608
400	-	-	-	-	726

* Current rating acc. to VDE 0298-4, ambient temperature: 30°C

Convention factors for deviating ambient temperature

Ambient temperature, °C	10	15	20	25	30	35	40	45	50	55	60
Conversion factors	1,22	1,17	1,12	1,06	1,00	0,94	0,87	0,79	0,71	0,61	0,50

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