



FLAMEBLOCKER H07Z-R 450/750V

PN -EN 50525-3-41, BS EN 50525-3-41

– Single core non-sheathed cables with low emission of smoke and corrosive gases



Applications:

Single core, non-sheathed cables are suitable particularly for situations in which low emission of smoke and corrosive gases is required in the case of burning. H07Z-R - single core, non-sheathed cables are intended for installation in surface mounted or embedded conduits, or similar closed systems. Suitable for fixed protected installation in, or on, lighting and control gear for voltages up to 1000 V a.c. or, up to 750V d.c. to earth

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

Construction

Conductors	Annealed copper conductor acc. to EN 60228: class 2 stranded H07Z-R
Insulation	PVC typ T13 wg EN 50363-3
Colour of insulation green/yellow	Green/yellow, blue, black, brown, grey, orange, pink, red, turquoise, violet, white

Characteristic

Maximum conductor operating temperature	+90°C			
Lowest ambient temperature for fixed installation	-40°C			
Lowest installation temperature	-5°C			
Maximum short-circuit conductor temperature	+250°C			
Test voltage	2500 V			
UV resistant	EN ISO 4892-2			
Flame propagation	EN 60332-1-2			
Smoke emission	EN 61034-2			
Corrosive and acid gas emission of insulation	EN 60754-2: pH > 4,3; Conductivity < 2,5 μS/mm EN 60754-1: HCL ≤ 0,5%			
CPR – class reaction to fire (acc EN 50575)	Cca, Eca			
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

Parameters

Number and cross-sectional area of conductor	Approximate overall diameter	Approximate net weight of cables	Maximum conductor resistance at temperature 20°C	Minimum insulation resistance at temperature 90°C	CPR – class reaction to fire
mm ²	mm	kg/km	Ω/km	MΩxkm	
1.5	3.0	21	12.1	0.010	Eca
2.5	3.6	32	7.41	0.0090	Eca
4	4.1	47	4.61	0.0077	Dca
6	4.7	67	3.08	0.0065	Dca
10	6.0	111	1.83	0.0065	Cca
16	7.0	168	1.15	0.0050	Cca
25	8.5	262	0.727	0.0050	Cca
35	9.6	353	0.524	0.0043	Cca
50	11.6	478	0.387	0.0043	Cca
70	13.3	674	0.268	0.0035	Cca
95	15.6	932	0.193	0.0035	Cca
120	16.4	1162	0.153	0.0032	Cca
150	18.2	1437	0.124	0.0032	Cca
185	20.3	1774	0.0991	0.0032	Cca
240	23.2	2307	0.0754	0.0032	Cca
300	25.4	2912	0.0601	0.0030	Cca
400	28.5	3729	0.0470	0.0028	Cca
500	32.1	4768	0.0366	0.0028	Cca
630	36.3	6030	0.0283	0.0025	Cca
800*	40.7	7638	0.0221	-	-
1000*	44.1	9500	0.0176	-	-

*based on norm

Current ratings acc. to IEC 60364-5-523

Permissible operating temperature at conductor: 90°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 in Ampere (A)				
1.5	19	17	23	20	24
2.5	26	23	31	28	32
4	35	31	42	37	42
6	45	40	54	48	54
10	61	54	75	66	73
16	81	73	100	88	98
25	106	95	133	117	129
35	131	117	164	144	158
50	158	141	198	175	198
70	200	179	253	222	245
95	241	216	306	269	292
120	278	249	354	312	344
150	318	285	-	-	391
185	362	324	-	-	448
240	424	380	-	-	528
300	486	435	-	-	608
400	-	-	-	-	726
500	-	-	-	-	830
630	-	-	-	-	-

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

Convention factors for deviating ambient temperature

Ambient temperature. °C	10	15	20	25	35	40	45	50	55	60	65
Conversion factors	1.15	1.12	1.08	1.04	0.96	0.91	0.87	0.82	0.76	0.71	0.65