

Protection of Cables and Pipes

			Trunkings Characteristics				Cables, Pipes and Conductors Capacity				
IP44 RoHS			Internal Dim.	Length	Internal Section (S)	Available Section (Su)	Max ø Available	Max. Nr. Conductors H07 V-U			
W x H (mm)	Profile	Ref.	(mm)	(m)	(mm²)	(S/1,4) (mm²)	(mm)	1,5 mm²	2,5 mm²	4 mm²	6 mm²
10 x 10		13100 CBR	8x8	2,00	50	36	6	4	3	2	1
		13100 FBR									
15 x 15		13110 CBR	13x13	2,00	151	108	11	12	8	6	5
		13110 FBR									
20 x 20		13120 CBR	18x18	2,00	280	200	15	22	15	12	9
		13120 FBR									
25 x 25		13140 CBR	22x22	2,00	439	314	19	46	28	22	17
		13140 FBR									
25 x 30		13010 CBR	22x27	2,00	530	379	20	48	32	26	19
		13010 FBR									
30 x 30		13150 CBR	27x27	2,00	670	479	25	52	35	28	21
		13150 FBR									
40 x 40		13020 CBR	37x37	2,00	1281	915	35	116	79	63	47
		13020 FBR									
60 x 40		13030 CBR	56x37	2,00	1974	1410	35	180	122	97	73
		13030 FBR									
80 x 40		13050 CBR	73x36	2,00	2668	1906	35	243	164	132	98
		13050 FBR									
100 x 40		13070 CBR	96x36	2,00	3352	2395	35	305	207	166	123
		13070 FBR									
60 x 60		13040 CBR	56x56	2,00	3102	2216	55	282	191	153	114
		13040 FBR									
80 x 60		13060 CBR	76x56	2,00	4192	2994	55	382	259	207	154
		13060 FBR									
100 x 60		13080 CBR	96x56	2,00	5272	3766	55	480	325	260	194
		13080 FBR									

CBR - Complete White; FBR - Adhesive White Complete.

Table of Cables

Power Cables

Diameter and cross sections of commonly used cables
(Sizes may vary depending on manufacturer)

Type of Cable	Nominal Section (mm)	Diameter (mm)	Section (mm²)
H05 VV-F	2x0,75	7,6	58
H05 VV-F	2x1	8,0	64
H05 VV-F	2x1,5	9,0	81
H05 VV-F	2x2,5	11,0	121
H05 VV-F	3 G 0,75	8,0	64
H05 VV-F	3 G 1	8,4	71
H05 VV-F	3 G 1,5	9,8	96
H05 VV-F	3 G 2,5	12,0	144
H07 V-U	1x1,5	2,8	7,84
H07 V-U	1x2,5	3,4	11,56
H07 V-U	1x4	3,8	14,44
H07 V-U	1x6	4,4	19,36
H07 V-K	1x1,5	3,5	12
H07 V-K	1x2,5	4,2	18
H07 V-K	1x4	4,8	23
H07 V-K	1x6	6,3	40
H07 V-K	1x10	7,6	58
VV-0,6/1 KV	3x16+10	20,7	428
VV-0,6/1 KV	3x25+16	23,0	529
VV-0,6/1 KV	3x35+16	25,0	625
VV-0,6/1 KV	4 G 1,5	11,4	130

IT / Telephone Cables

Diameter and cross sections of some commonly used IT cables: UTP, STP, FTP, Coaxial.
(Sizes may vary depending on manufacturer)

Type of Cable	Diameter (mm)	Section (mm²)
4P UTP Cat. 5e Cable	6,2	37,5
4P FTP Cat. 5e Cable	6,9	47,2
4P UTP Cat. 6 Cable	7,6	57
4P FTP Cat. 6 Cable	8,3	68
RG 59 Cable Coaxial	6,2	38,4
RG 58 Cable Coaxial	5	25
RG 11 Cable Coaxial	10,5	110,3
RG 8 Cable Coaxial	10,3	106,1
RG 7 Cable Coaxial	8,1	65,6
RG 6 Cable Coaxial	7	49
TVHV 1x2x0,5 Cable	4,3	18,5
TVHV 2x2x0,5 Cable	5,0	25
TVHV 3x2x0,5 Cable	5,7	32,5
TVHV 6x2x0,5 Cable	6,5	42,3
TVHV 10x2x0,5 Cable	7,8	60,8
TVHV 15x2x0,5 Cable	8,7	75,7
TVHV 20x2x0,5 Cable	9,7	94,1
TVHV 30x2x0,5 Cable	12,0	144
TVHV 40x2x0,5 Cable	13,5	182,3
TVHV 50x2x0,5 Cable	15,0	225
TVHV 100x2x0,5 Cable	20,0	400

Trunking Selection Criteria

Examples for a Typical Installation:

Cables to install

Type of Cable	Quantity (Q)	Nominal Section (S)	Outside Diameter (D) (mm)	Unitary Section (SU) (SU= DxD)	Total Section (ST) (mm²) (SUxQ)
H07 V-U	20	1x4	3,8	14,44	288,8
H07 V-U	15	1x6	4,4	19,36	290,4
H07 V-U	10	1x2,5	3,4	11,56	115,6
H07 V-U	10	1x4	3,8	14,44	144,4
Total Section of Cables (St)					839,2 mm²
Minimum Trunking Size = Total Section of Cables (St) x K = 839,2 x 1,4 =					1174,88 mm²

Typical K values to ensure better ventilation, crossovers and possible expansion:

K = Filling coefficient

K = 1,4 for LV Cables

K = 1,3 for IT and Telephone Cables

K = 1,2 for Ducting

You may opt for the following EFAPEL trunking:

Trunking			
Reference	Description	Internal Section (mm²)	Available Section (mm²)
10080 HBR	110x34	3115	2225
14030 CBR	60x40	2014	1439

EN 50085-2-1 Standard

Section 6	Classification	Cable Cable Trunkings for Protection of Cables and Pipes			
6.2	Resistance to impact for installation and application	Trunking		Accessories	
		10x10 / 15x15	1 J	10x10 / 15x15	0,5 J
		20x20 / 25x25 / 25x30 / 30x30	2 J	20x20 / 25x25 / 25x30 / 30x30 / 40x40 / 60x40 / 60x60 / 80x40 / 80x60 / 100x40 / 100x60	2 J
		40x40 / 60x40 / 60x60 / 80x40 / 80x60 / 100x40 / 100x60	5 J		
6.3	Minimum stock and transport temperature	-25 °C			
6.3	Minimum installation and operation temperature	-5 °C			
6.3	Maximum operation temperature	60 °C			
6.4	Flame propagation resistance	Non-flame propagation			
6.5	Electrical continuity	Without electrical continuity			
6.6	Electrical insulation characteristics	With electrical insulation			
6.7	Protection degree provided by the enclosure	IP44			
6.8	Protection against corrosive or polluting substances	With medium protection outside and inside			
6.9	Access system to the retention of the cover	The cover can only be opened with a tool			
6.10	Electrical protective separation	With and without electrical protective partition (divider)			
6.101	Intended installation positions	Surface mounted, fixed in the wall or in the ceiling			
6.102	Prevention of contact between liquids and insulated conductors and live parts parts in the case of mounted in the skirting position and in wet floor	Not declared			
6.103	Type	2 (Distribution)			
	Rated voltage	500 V ~			

ASTM G-53 Standard

UV Resistant

Accelerated Ageing Chamber Test	Resistant
UV Test	80 h - without changes
Condensation test	40 h - without changes



RoHS - All the Cable-trunkings and the respective Accessories manufactured by EFAPEL meet the specifications of Directive RoHS 2011/65/EU (including the addendum 2015/863) that restricts the use of certain hazardous substances like lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls (PBB), polybrominated diphenyl ethers (PBDE), Bis (2-ethylhexyl) phthalate (DEHP), butyl benzyl phthalate (BBP), dibutyl phthalate (DBP), diisobutyl phthalate (DIBP).

Protection Index (IK) - EN 50102 Standard**ETS 13** - Cable Trunkings for Protection of Cables and Pipes

Ref.	Outside Dimensions (mm)	Protection Against the Mechanical Impact - IK	
		Trunkings	Accessories
13100	10x10	06	06
13100	15x15		
13120	20x20	07	07
13140	25x25		
13010	25x30	08	07
13150	30x30		
13020	40x40		
13030	60x40		
13040	60x60		
13050	80x40		
13060	80x60		
13070	100x40		
13080	100x60		