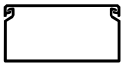
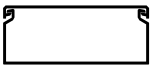
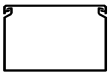
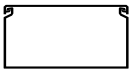
Panelboards

RoHS

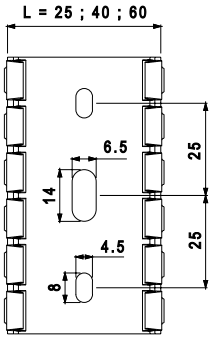
Height (mm)	W x H (mm)	Profile	Ref.	Trunkings Characteristics				Cables, Pipes and Conductors Capacity				
				Internal Dim.	Length	Internal Section (S)	Available Section (Su)	Max ø Available	Max. Nr. Conductors H07 V-U			
				(mm)	(m)	(mm^2)	(S/1,4) (mm^2)	(mm)	1,5 mm^2	2,5 mm^2	4 mm^2	6 mm^2
30	25 x 30		14010 CCZ 14010 HCZ	22x27	2,00	535	382	20	43	29	23	17
40	25 x 40		14100 CCZ 14100 HCZ	22x37	2,00	753	538	20	66	45	36	27
	40 x 40		14020 CCZ 14020 HCZ	37x37	2,00	1282	916	35	105	72	57	43
	60 x 40		14030 CCZ 14030 HCZ	57x37	2,00	2014	1439	35	163	110	88	66
	80 x 40		14050 CCZ 14050 HCZ	77x37	2,00	2763	1974	35	221	150	120	90
	100 x 40		14070 CCZ 14070 HCZ	97x37	2,00	3509	2506	35	279	189	152	113
60	25 x 60		14090 CCZ 14090 HCZ	22x57	2,00	1194	853	20	111	76	60	45
	40 x 60		14110 CCZ 14110 HCZ	37x57	2,00	2024	1446	35	182	123	99	74
	60 x 60		14040 CCZ 14040 HCZ	57x57	2,00	3155	2254	55	283	192	154	115
	80 x 60		14060 CCZ 14060 HCZ	77x57	2,00	4309	3078	55	385	261	209	156
	100 x 60		14080 CCZ 14080 HCZ	97x57	2,00	5458	3899	55	486	329	264	197
80	40 x 80		14120 CCZ 14120 HCZ	37x77	2,00	2763	1974	35	260	176	141	105
	60 x 80		14130 CCZ 14130 HCZ	56x77	2,00	4255	3039	55	401	272	218	162
	80 x 80		14140 CCZ 14140 HCZ	76x77	2,00	5791	4136	75	545	369	296	221
	100 x 80		14150 CCZ 14150 HCZ	96x77	2,00	7344	5246	75	689	467	374	279
100	60 x 100		14160 CCZ 14160 HCZ	56x96	2,00	5290	3779	55	512	347	278	207
	80 x 100		14170 CCZ 14170 HCZ	76x96	2,00	7218	5156	75	697	473	379	282
	100 x 100		14180 CCZ 14180 HCZ	96x96	2,00	9155	6539	95	883	599	480	358

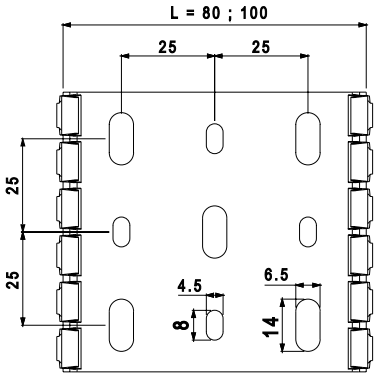
CCZ - Complete Grey; **HCZ** - Complete Grey Halogen Free.

Halogen Free

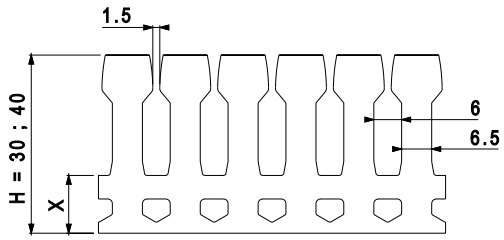
Drilling Scheme for the Base and Lateral Sides of the different Trunking sizes (mm)

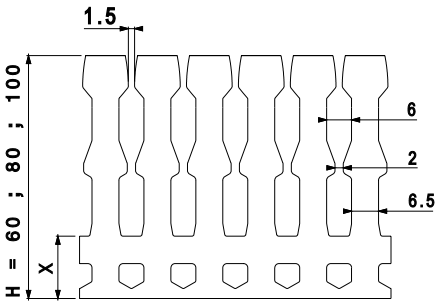
Base Perforation (mm)





Lateral Perforation (mm)





H	X
30	9
40	12,5
60	15
80	18
100	20

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 50085-2-3 Standard

Section 6	Classification	Cable Trunkings for Panelboards
6.3	Minimum stock and transport temperature	-25 °C
6.3	Maximum operation temperature	60 °C
6.4	Flame propagation resistance	Non-flame propagation
6.101	Intended installation positions	Mounted on vertical or horizontal surface except in cover down position

ASTM G-53 Standard

UV Resistant

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

Halogen Free

EN 50085-2-3 Standard

Section 6	Classification	Cable Trunkings for Panelboards
6.3	Minimum stock and transport temperature	-25 °C
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Halogen Free

ASTM G-53 Standard

UV Resistant

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

RoHS

RoHS - All the Cable-trunkings and the respective Accessories manufactured by EFAPEL meet the specifications of Directive RoHS 2011/65/EU (incluing 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).