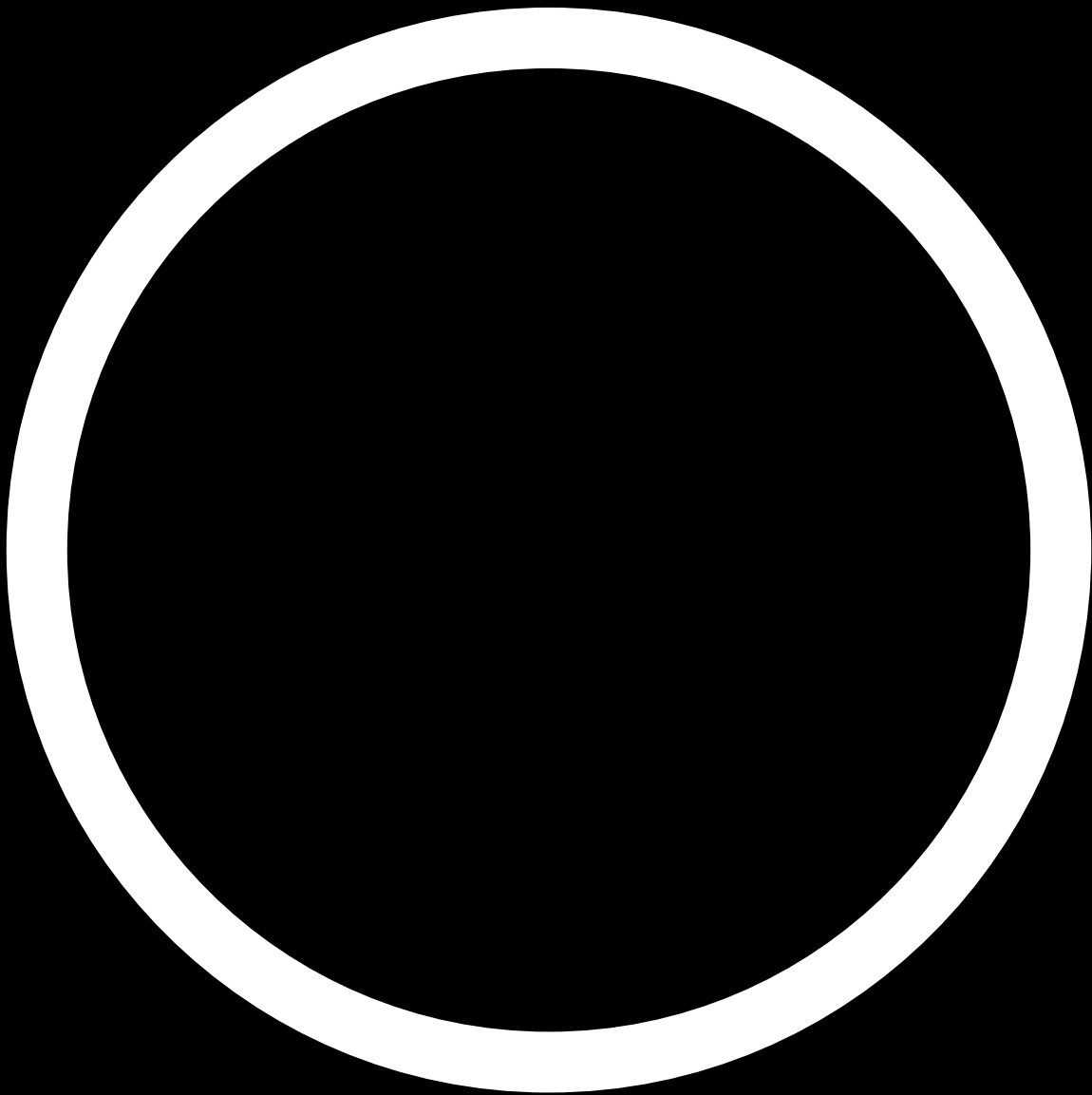




FELIZ

CONICAL COLUMNS

SETTING BY FLANGE OR PLANTING.





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COMPANY

Where we come from, who we are and what we do.

Headquartered in Braga and with more than 6 decades of experience in its field, O FELIZ - Metalomecânica is a company specialized in metallic construction, sheet profiling, cutting and bending of sheets, construction of lighting columns and communication towers, metalworking in stainless steel and laser cutting.

A policy of continuous investment in state of the art equipment and a focus on highly qualified and competent staff allows the company to maintain a production capacity and an immediate response to the market's demands and requests, making it a reference in its fields of action.

With a portfolio of well-known projects and clients, the company has the required knowledge and means to serve in the global market, with solutions starting at the conception and elaboration of the project, all the way to the construction and final assembly.

By focusing on the efficiency of the procedures and keeping a strong market orientation, the company has been able to establish itself in an extremely competitive market, conquering its customer's trust due to the quality of the final product and the ability to follow through within the deadlines.

With a growth strategy aimed at internationalization, O FELIZ - Metalomecânica exports to several countries and has an industrial unit in Angola which has production capacity and the ability to offer solutions for the market's needs and requests.

QUALITY

Quality policy.

Working in an extremely competitive market, where clients are more and more demanding, the Administration of O FELIZ believes that only with a real involvement, a strong market orientation, the optimization of all resources and a reduction of the activities which do not add value, as well as a strict compliance with the legal and statutory requirements applicable to the product, a sustained growth can be possible.

We are committed to this goal, believing that together we will improve the performance of our organization and we will stand as a reference company.

CE marking.

The CE marking exists to allow the free product circulation within the European Economic Space, while the voluntary markings aim at adding value and differentiating the products in their market.

The compliance with the CE marking is evaluated every year by the Certif association, through audits which are external to the product, throughout its entire production process.

Therefore, the European Commission considers the CE marking a "passport" which allows the free and legal circulation of merchandise within its borders, in accordance with their high quality and security standards, both for people and the environment.



REGULATORY ASPECTS

Legal framework.

The Public Lighting columns presented in this catalogue meet the requirements set by the standard EN 40 – Lighting Columns, and they are subject to the EC Conformity Verification, in accordance to the Directive 89/106/EEC – Construction Products.

The safety verifications for Ultimate Limit States and Serviceability Limit States were made following the EN 40-3-3:2003. For its dimensioning and the consequent setting of the service conditions, the following calculation bases were defined:

WIND ZONES

For the quantification of the wind action, we used the contents of the EN 1991-1-4:2005 Actions in Structures – Wind Actions. The base values for the wind's speed that we used were the following:

Zone	V_{ref}
A	28 m/s
B	31 m/s

Zone A: The entire Portuguese territory, except for Zone B;

Zone B: The Azores and Madeira and the regions of the mainland located in a coastal area of 5 km of width or with altitudes higher than 600 m.

PARTIAL SECURITY FACTORS

The partial security factors were defined according to section 5.4 of the EN 40-3-3:2003.

Class	TYPE OF ACTION	
	Wind	Permanents
A	1.4	1.2
B	1.2	1.2

MAXIMUM HORIZONTAL DEFLECTION

The maximum horizontal deflection on the top of the column was limited according to section 6.5.1 of the EN 40-3-3:2003.

Class	1	2	3
Maximum Horizontal Deflection	0,04 (h+w)	0,06 (h+w)	0,10 (h+w)

h – column's nominal height
w – bracket's horizontal projection

The service conditions tables were defined for a Class 3 maximum horizontal deflection. The exposure areas mentioned in the service conditions tables refer to a maximum area of wind exposure per lantern.

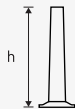
In order to verify the safety of the columns, we adopted a lantern with a characteristic mass of 25 kg.

NOTE:

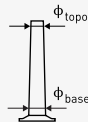
If you have any doubts about the conditions for applicability of a product mentioned in this catalog, please contact the Public Lighting Columns Department at O Feliz.

TECHNICAL SYMBOLS

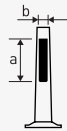
Technical symbols used in this document.



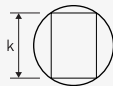
h – nominal height.



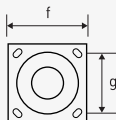
ϕ_{top} - top diameter.
 ϕ_{base} - base diameter.



a - door opening height.
b - door opening width.



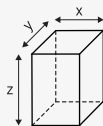
k - useable depth of the electrical compartment.



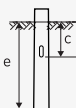
f - flange width.
g - distance between holes.



j - diameter of anchor bolt (metric dimension of the thread).
n - effective length of the anchor bolt.



x=y - width of the solid foundations.
z - depth of the solid foundations.

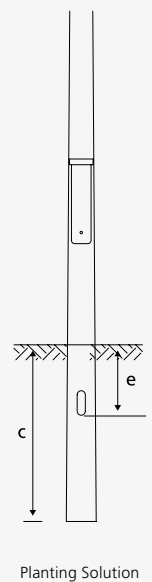
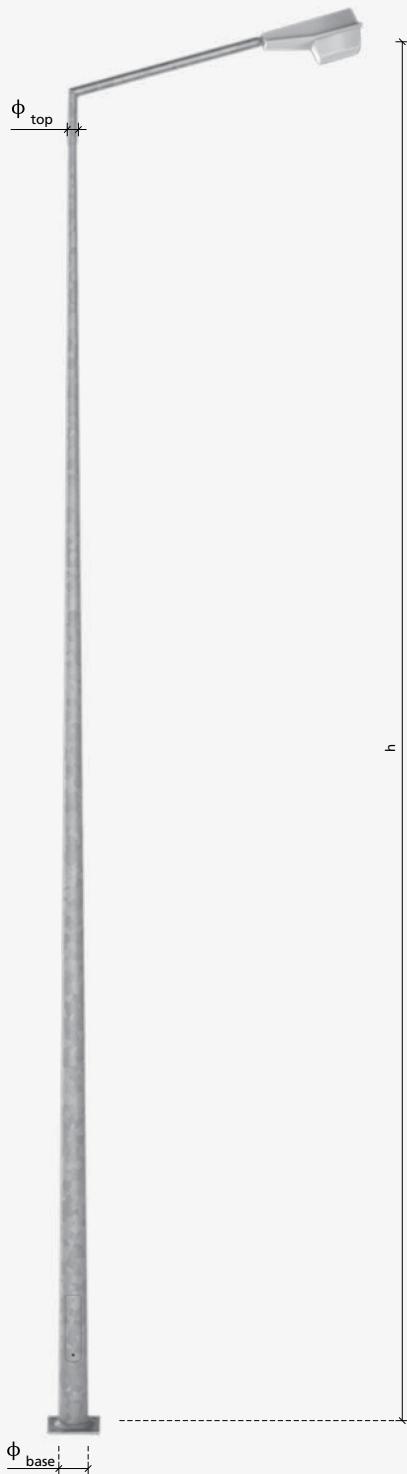


c - distance from the cable entry slot to the incorporation section.
e - planting depth.

TYPES OF COLUMNS

CONICAL COLUMNS

Single or double bracket. Setting by flange or planting.



FOUNDATION

The size of the foundation was defined for a ground with an admissible tension of 300 kPa. In its design, we considered Class C20/25 concrete and A400NR reinforcement steel frame.

ANTI-CORROSION PROTECTION

Hot dip galvanizing in accordance with the standard NP EN ISO 1461. The columns can be delivered with a different painting scheme.

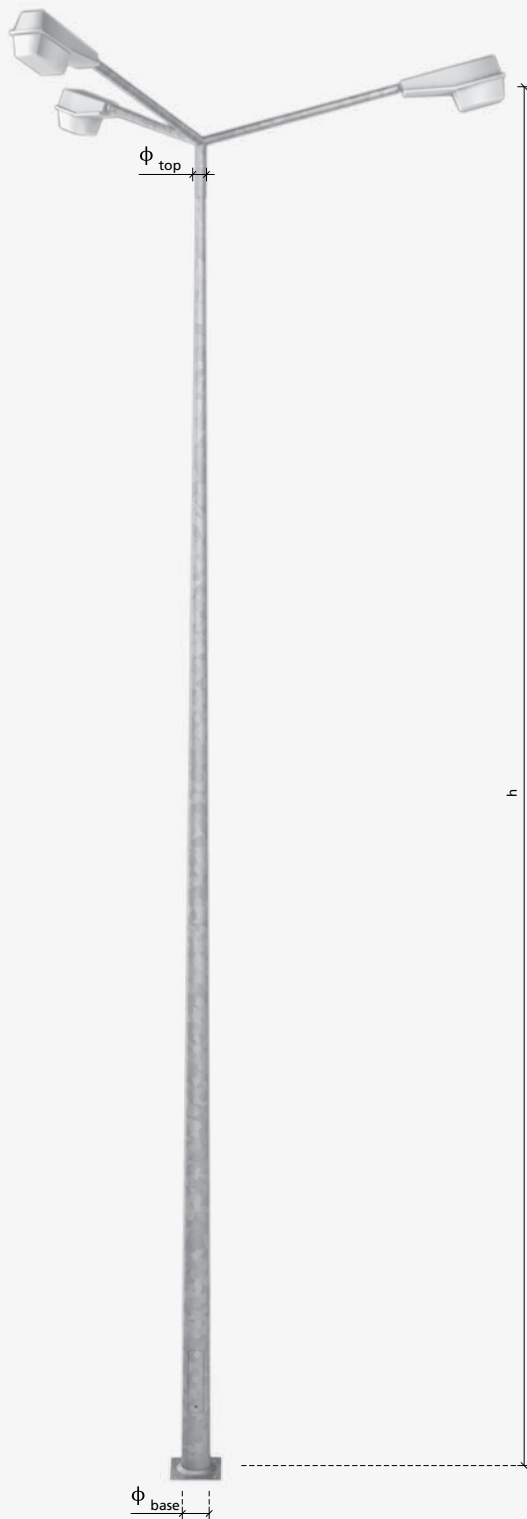
MATERIAL

S275JR steel in accordance with the standard EN 10025-2.

TYPES OF COLUMNS

CONICAL COLUMNS

Triple or quadruple bracket. Setting by flange or planting.



FOUNDATION

The size of the foundation was defined for a ground with an admissible tension of 300 kPa. In its design, we considered Class C20/25 concrete and A400NR reinforcement steel frame.

ANTI-CORROSION PROTECTION

Hot dip galvanizing in accordance with the standard NP EN ISO 1461. The columns can be delivered with a different painting scheme.

MATERIAL

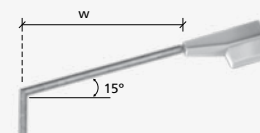
S275JR steel in accordance with the standard EN 10025-2.

BRACKETS

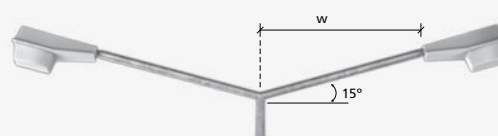
TYPES OF BRACKETS

Cylindrical geometry.

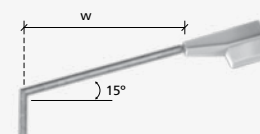
SINGLE BRACKET			
Reference	Description	Series	w [m]
CR302S	Single Cylindrical Bracket 0.50 m 15°	TC2	0.50
CR303S	Single Cylindrical Bracket 0.75 m 15°	TC2	0.75
CR304S	Single Cylindrical Bracket 1.00 m 15°	TC2	1.00
CR305S	Single Cylindrical Bracket 1.25 m 15°	TC2	1.25
CR306S	Single Cylindrical Bracket 1.50 m 15°	TC2	1.50



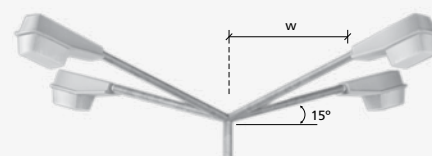
DOUBLE BRACKET			
Reference	Description	Series	w [m]
CR302D	Double Cylindrical Bracket 0.50 m 15°	TC2	0.50
CR303D	Double Cylindrical Bracket 0.75 m 15°	TC2	0.75
CR304D	Double Cylindrical Bracket 1.00 m 15°	TC2	1.00
CR305D	Double Cylindrical Bracket 1.25 m 15°	TC2	1.25
CR306D	Double Cylindrical Bracket 1.50 m 15°	TC2	1.50



TRIPLE BRACKET			
Reference	Description	Series	w [m]
CR302T	Triple Cylindrical Bracket 0.50 m 15°	TC3	0.50
CR303T	Triple Cylindrical Bracket 0.75 m 15°	TC3	0.75
CR304T	Triple Cylindrical Bracket 1.00 m 15°	TC3	1.00
CR305T	Triple Cylindrical Bracket 1.25 m 15°	TC3	1.25
CR306T	Triple Cylindrical Bracket 1.50 m 15°	TC3	1.50



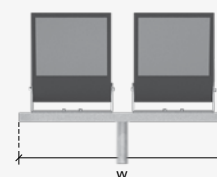
QUADRUPLE BRACKET			
Reference	Description	Series	w [m]
CR302Q	Quadruple Cylindrical Bracket 0.50 m 15°	TC3	0.50
CR303Q	Quadruple Cylindrical Bracket 0.75 m 15°	TC3	0.75
CR304Q	Quadruple Cylindrical Bracket 1.00 m 15°	TC3	1.00
CR305Q	Quadruple Cylindrical Bracket 1.25 m 15°	TC3	1.25
CR306Q	Quadruple Cylindrical Bracket 1.50 m 15°	TC3	1.50



CROSS PIECES

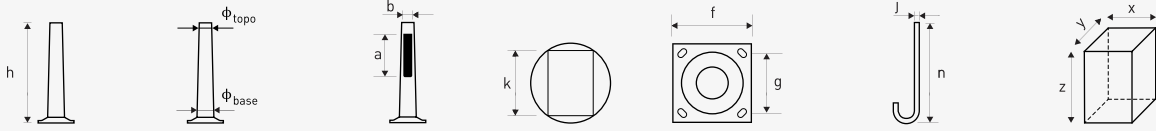
Top.

TOP CROSS PIECE			
Reference	Description	Series	w [m]
00002P	Top Cross Piece 0.50 m	TC1	0.50
00003P	Top Cross Piece 0.75 m	TC2	0.75
00004P	Top Cross Piece 1.00 m	TC2	1.00
00005P	Top Cross Piece 1.25 m	TC3	1.25
00006P	Top Cross Piece 1.50 m	TC3	1.50



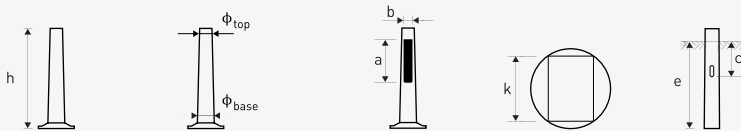
GENERAL CHARACTERISTICS

Post top conical columns. Setting by flange.



Shaft Reference	Nominal Dimensions			Door Opening			Flange		Anchor Bolts		Foundation	
	h	ϕ_{top}	ϕ_{base}	a	b	k	f	g	j	n	x=y	z
	[m]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[m]	[m]
TC1F06	6	60	123	400	65	65	330	250	M16	440	0.60	0.90
TC1F07	7	60	133	400	75	70	330	250	M16	440	0.60	0.90
TC1F08	8	60	143	400	80	85	400	300	M16	440	0.70	0.90
TC1F09	9	60	154	400	90	85	400	300	M20	540	0.70	1.00
TC1F10	10	60	164	400	100	90	400	300	M22	1140	0.70	1.00
TC1F12	12	60	185	400	100	120	400	300	M22	1140	0.70	1.10

Post top conical columns. Setting by planting.



Shaft Reference	Nominal Dimensions			Door Opening			Planting Depth	
	h	ϕ_{top}	ϕ_{base}	a	b	k	e	c
	[m]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
TC1E06	6	60	135	400	65	65	1200	500
TC1E07	7	60	145	400	75	70	1200	500
TC1E08	8	60	156	400	80	85	1200	500
TC1E09	9	60	169	400	90	85	1500	500
TC1E10	10	60	180	400	100	90	1500	500
TC1E12	12	60	203	400	100	120	1700	500

SERVICE CONDITIONS

Load tables. Maximum wind exposure area per lantern [m²].

CLASS A Vref = 28 m/s		
Nominal Height [m]	Post Top [m ²]	M [N.m]
6	0.84	10296
7	0.83	12083
8	0.81	13718
9	0.80	15596
10	0.50	17354
12	0.48	21262

CLASS A Vref = 31 m/s		
Nominal Height [m]	Post Top [m ²]	M [N.m]
6	0.68	10327
7	0.67	12083
8	0.66	13757
9	0.64	15523
10	0.37	17260
12	0.35	21119

CLASS B Vref = 28 m/s		
Nominal Height [m]	Post Top [m ²]	M [N.m]
6	0.90	10303
7	0.85	12079
8	0.80	13786
9	0.70	15612
10	0.64	17294
12	0.62	20903

CLASS B Vref = 31 m/s		
Nominal Height [m]	Post Top [m ²]	M [N.m]
7	0.73	10285
7	0.73	12045
8	0.68	13725
9	0.56	15564
10	0.50	17314
12	0.46	20565

POST TOP CONICAL COLUMN

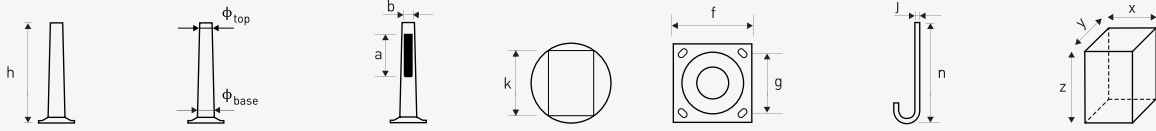
Setting by flange or planting.

Column Reference	Description	Nominal Height [m]	Type of Bracket	
			Post Top	Cross Piece
TC1F06000000	Conical Column Flange 6 m	6	■	
TC1F07000000	Conical Column Flange 7 m	7	■	
TC1F08000000	Conical Column Flange 8 m	8	■	
TC1F09000000	Conical Column Flange 9 m	9	■	
TC1F10000000	Conical Column Flange 10 m	10	■	
TC1F12000000	Conical Column Flange 12 m	12	■	
TC1F0600002P	Conical Column Flange 6 m Cross Piece 0.50 m	6		■
TC1F0700002P	Conical Column Flange 7 m Cross Piece 0.50 m	7		■
TC1F0800002P	Conical Column Flange 8 m Cross Piece 0.50 m	8		■
TC1F0900002P	Conical Column Flange 9 m Cross Piece 0.50 m	9		■
TC1F1000002P	Conical Column Flange 10 m Cross Piece 0.50 m	10		■
TC1F1200002P	Conical Column Flange 12 m Cross Piece 0.50 m	12		■

Column Reference	Description	Nominal Height [m]	Type of Bracket	
			Post Top	Cross Piece
TC1E06000000	Conical Column Planting 6 m	6	■	
TC1E07000000	Conical Column Planting 7 m	7	■	
TC1E08000000	Conical Column Planting 8 m	8	■	
TC1E09000000	Conical Column Planting 9 m	9	■	
TC1E10000000	Conical Column Planting 10 m	10	■	
TC1E12000000	Conical Column Planting 12 m	12	■	
TC1E0600002P	Conical Column Planting 6 m Cross Piece 0.50 m	6		■
TC1E0700002P	Conical Column Planting 7 m Cross Piece 0.50 m	7		■
TC1E0800002P	Conical Column Planting 8 m Cross Piece 0.50 m	8		■
TC1E0900002P	Conical Column Planting 9 m Cross Piece 0.50 m	9		■
TC1E1000002P	Conical Column Planting 10 m Cross Piece 0.50 m	10		■
TC1E1200002P	Conical Column Planting 12 m Cross Piece 0.50 m	12		■

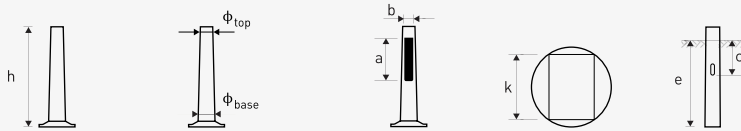
GENERAL CHARACTERISTICS

Post top conical columns with single or double bracket. Setting by flange.



Shaft Reference	Nominal Dimensions			Door Opening			Flange		Anchor Bolts		Foundation	
	h	φ _{top}	φ _{base}	a	b	k	f	g	j	n	x=y	z
	[m]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[m]	[m]
TC2F03	3	66	95	186	45	55	280	200	M16	440	0.60	0.80
TC2F04	4	66	107	186	45	60	280	200	M16	440	0.60	0.80
TC2F05	5	66	118	400	60	70	280	200	M16	440	0.60	0.90
TC2F06	6	66	130	400	60	80	330	250	M16	440	0.60	0.90
TC2F07	7	66	142	400	60	85	330	250	M16	440	0.60	1.00
TC2F08	8	66	153	400	85	95	400	300	M16	440	0.70	1.00
TC2F09	9	66	165	400	100	100	400	300	M20	540	0.70	1.10
TC2F10	10	66	177	400	100	110	400	300	M22	1140	0.70	1.10
TC2F12	12	66	200	400	100	130	400	300	M22	1140	0.70	1.20

Post top conical columns with single or double bracket. Setting by planting.



Shaft Reference	Nominal Dimensions			Door Opening			Planting Depth	
	h	φ _{top}	φ _{base}	a	b	k	e	c
	[m]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
TC2E03	3	66	104	186	45	55	800	500
TC2E04	4	66	116	186	45	60	800	500
TC2E05	5	66	132	400	60	70	1200	500
TC2E06	6	66	144	400	60	80	1200	500
TC2E07	7	66	156	400	60	85	1200	500
TC2E08	8	66	167	400	85	95	1200	500
TC2E09	9	66	183	400	100	100	1500	500
TC2E10	10	66	194	400	100	110	1500	500
TC2E12	12	66	220	400	100	130	1700	500

SERVICE CONDITIONS

Load tables. Maximum wind exposure area per lantern [m²].

CLASS A Vref = 28 m/s											
Nominal Height [m]	SINGLE BRACKET					DOUBLE BRACKET					M [N.m]
	0.50 m [m ²]	0.75 m [m ²]	1.00 m [m ²]	1.25 m [m ²]	1.5 m [m ²]	0.50 m [m ²]	0.75 m [m ²]	1.00 m [m ²]	1.25 m [m ²]	1.5 m [m ²]	
3.00	0.11	0.08	-	-	-	0.44	0.42	0.40	0.38	0.36	6055
4.00	0.49	0.43	0.34	0.30	0.24	0.43	0.41	0.39	0.38	0.36	7660
5.00	0.48	0.41	0.34	0.30	0.23	0.41	0.40	0.39	0.37	0.23	9324
6.00	0.47	0.41	0.33	0.30	0.21	0.26	0.27	0.25	0.24	0.21	11424
7.00	0.47	0.40	0.33	0.30	0.21	0.25	0.25	0.23	0.22	0.20	13452
8.00	0.46	0.40	0.30	0.29	0.20	0.25	0.24	0.22	0.12	0.17	15442
9.00	0.44	0.40	0.28	0.27	0.20	0.15	0.15	0.16	0.13	0.15	17317
10.00	0.35	0.30	0.23	0.25	0.20	0.14	0.15	0.14	0.13	0.13	19726
12.00	0.30	0.30	0.16	0.15	0.15	0.10	0.10	0.08	-	-	23837

CLASS A Vref = 31 m/s											
Nominal Height [m]	SINGLE BRACKET					DOUBLE BRACKET					M [N.m]
	0.50 m [m ²]	0.75 m [m ²]	1.00 m [m ²]	1.25 m [m ²]	1.5 m [m ²]	0.50 m [m ²]	0.75 m [m ²]	1.00 m [m ²]	1.25 m [m ²]	1.5 m [m ²]	
3	0.08	-	-	-	-	0.35	0.33	0.32	0.29	0.28	6061
4	0.44	0.35	0.26	0.24	0.22	0.34	0.32	0.31	0.29	0.27	7670
5	0.42	0.35	0.26	0.24	0.22	0.32	0.31	0.29	0.28	0.15	9362
6	0.42	0.34	0.25	0.24	0.22	0.20	0.18	0.18	0.17	0.15	11500
7	0.39	0.34	0.25	0.24	0.21	0.20	0.18	0.17	0.15	0.15	13562
8	0.36	0.32	0.25	0.24	0.21	0.19	0.18	0.17	0.08	0.07	15450
9	0.34	0.30	0.25	0.19	0.18	0.11	0.12	0.12	0.08	0.07	17352
10	0.24	0.21	0.18	0.18	0.17	0.11	0.11	0.10	0.08	0.08	19484
12	0.22	0.21	0.11	0.09	0.08	-	-	-	-	-	23741

CLASS A Vref = 28 m/s											
Nominal Height [m]	SINGLE BRACKET					DOUBLE BRACKET					M [N.m]
	0.50 m [m ²]	0.75 m [m ²]	1.00 m [m ²]	1.25 m [m ²]	1.5 m [m ²]	0.50 m [m ²]	0.75 m [m ²]	1.00 m [m ²]	1.25 m [m ²]	1.5 m [m ²]	
3	0.13	0.10	0.08	-	-	0.53	0.50	0.48	0.44	0.38	6006
4	0.62	0.55	0.42	0.38	0.35	0.52	0.50	0.45	0.42	0.35	7676
5	0.60	0.53	0.40	0.37	0.35	0.50	0.48	0.43	0.40	0.30	9408
6	0.59	0.53	0.36	0.35	0.35	0.35	0.31	0.32	0.28	0.30	11462
7	0.58	0.53	0.36	0.35	0.34	0.32	0.31	0.30	0.27	0.27	13427
8	0.56	0.52	0.30	0.34	0.34	0.32	0.30	0.29	0.20	0.22	15361
9	0.56	0.52	0.30	0.34	0.32	0.23	0.20	0.23	0.20	0.19	17458
10	0.42	0.41	0.28	0.33	0.31	0.21	0.20	0.20	0.18	0.18	19661
12	0.41	0.41	0.25	0.24	0.23	0.15	0.14	0.13	0.12	0.11	23805

CLASS A Vref = 31 m/s											
Nominal Height [m]	SINGLE BRACKET					DOUBLE BRACKET					M [N.m]
	0.50 m [m ²]	0.75 m [m ²]	1.00 m [m ²]	1.25 m [m ²]	1.5 m [m ²]	0.50 m [m ²]	0.75 m [m ²]	1.00 m [m ²]	1.25 m [m ²]	1.5 m [m ²]	
3	0.10	0.08	-	-	-	0.42	0.40	0.38	0.36	0.34	6013
4	0.57	0.45	0.37	0.32	0.28	0.41	0.39	0.38	0.36	0.34	7708
5	0.58	0.44	0.37	0.32	0.28	0.39	0.38	0.36	0.35	0.22	9374
6	0.55	0.42	0.36	0.30	0.26	0.26	0.24	0.24	0.21	0.22	11449
7	0.49	0.40	0.35	0.29	0.24	0.25	0.23	0.22	0.21	0.20	13432
8	0.45	0.38	0.33	0.29	0.22	0.24	0.23	0.22	0.14	0.14	15103
9	0.43	0.36	0.33	0.26	0.22	0.18	0.16	0.15	0.13	0.14	17227
10	0.32	0.30	0.26	0.25	0.20	0.16	0.15	0.14	0.13	0.13	19653
12	0.30	0.30	0.18	0.16	0.15	0.13	0.11	0.10	0.09	0.08	23894

POST TOP CONICAL COLUMN

Single bracket. Setting by flange.

Column Reference	Description	Nominal Height [m]	Horizontal Projection [m]				
			0.50	0.75	1.00	1.25	1.50
TC2F03CR302S	Conical Column Flange 3 m Single Bracket	3	■				
TC2F04CR302S	Conical Column Flange 4 m Single Bracket	4	■				
TC2F05CR302S	Conical Column Flange 5 m Single Bracket	5	■				
TC2F06CR302S	Conical Column Flange 6 m pSingle Brackets	6	■				
TC2F07CR302S	Conical Column Flange 7 m Single Bracket	7	■				
TC2F08CR302S	Conical Column Flange 8 m Single Bracket	8	■				
TC2F09CR302S	Conical Column Flange 9 m Single Bracket	9	■				
TC2F10CR302S	Conical Column Flange 10 m Single Bracket	10	■				
TC2F12CR302S	Conical Column Flange 12 m Single Bracket	12	■				
TC2F03CR303S	Conical Column Flange 3 m Single Bracket	3		■			
TC2F04CR303S	Conical Column Flange 4 m Single Bracket	4		■			
TC2F05CR303S	Conical Column Flange 5 m Single Bracket	5		■			
TC2F06CR303S	Conical Column Flange 6 m Single Bracket	6		■			
TC2F07CR303S	Conical Column Flange 7 m Single Bracket	7		■			
TC2F08CR303S	Conical Column Flange 8 m Single Bracket	8		■			
TC2F09CR303S	Conical Column Flange 9 m Single Bracket	9		■			
TC2F10CR303S	Conical Column Flange 10 m Single Bracket	10		■			
TC2F12CR303S	Conical Column Flange 12 m Single Bracket	12		■			
TC2F03CR304S	Conical Column Flange 3 m Single Bracket	3			■		
TC2F04CR304S	Conical Column Flange 4 m Single Bracket	4			■		
TC2F05CR304S	Conical Column Flange 5 m Single Bracket	5			■		
TC2F06CR304S	Conical Column Flange 6 m Single Bracket	6			■		
TC2F07CR304S	Conical Column Flange 7 m Single Bracket	7			■		
TC2F08CR304S	Conical Column Flange 8 m Single Bracket	8			■		
TC2F09CR304S	Conical Column Flange 9 m Single Bracket	9			■		
TC2F10CR304S	Conical Column Flange 10 m Single Bracket	10			■		
TC2F12CR304S	Conical Column Flange 12 m Single Bracket	12			■		
TC2F03CR305S	Conical Column Flange 3 m Single Bracket	3				■	
TC2F04CR305S	Conical Column Flange 4 m Single Bracket	4				■	
TC2F05CR305S	Conical Column Flange 5 m Single Bracket	5				■	
TC2F06CR305S	Conical Column Flange 6 m Single Bracket	6				■	
TC2F07CR305S	Conical Column Flange 7 m Single Bracket	7				■	
TC2F08CR305S	Conical Column Flange 8 m Single Bracket	8				■	
TC2F09CR305S	Conical Column Flange 9 m Single Bracket	9				■	
TC2F10CR305S	Conical Column Flange 10 m Single Bracket	10				■	
TC2F12CR305S	Conical Column Flange 12 m Single Bracket	12				■	
TC2F03CR306S	Conical Column Flange 3 m Single Bracket	3					■
TC2F04CR306S	Conical Column Flange 4 m Single Bracket	4					■
TC2F05CR306S	Conical Column Flange 5 m Single Bracket	5					■
TC2F06CR306S	Conical Column Flange 6 m Single Bracket	6					■
TC2F07CR306S	Conical Column Flange 7 m Single Bracket	7					■
TC2F08CR306S	Conical Column Flange 8 m Single Bracket	8					■
TC2F09CR306S	Conical Column Flange 9 m Single Bracket	9					■
TC2F10CR306S	Conical Column Flange 10 m Single Bracket	10					■
TC2F12CR306S	Conical Column Flange 12 m Single Bracket	12					■

POST TOP CONICAL COLUMN

Single bracket. Setting by planting.

Column Reference	Description	Nominal Height [m]	Horizontal Projection [m]				
			0.50	0.75	1.00	1.25	1.50
TC2E03CR302S	Conical Column Planting 3 m Single Bracket	3	■				
TC2E04CR302S	Conical Column Planting 4 m Single Bracket	4	■				
TC2E05CR302S	Conical Column Planting 5 m Single Bracket	5	■				
TC2E06CR302S	Conical Column Planting 6 m Single Bracket	6	■				
TC2E07CR302S	Conical Column Planting 7 m Single Bracket	7	■				
TC2E08CR302S	Conical Column Planting 8 m Single Bracket	8	■				
TC2E09CR302S	Conical Column Planting 9 m Single Bracket	9	■				
TC2E10CR302S	Conical Column Planting 10 m Single Bracket	10	■				
TC2E12CR302S	Conical Column Planting 12 m Single Bracket	12	■				
TC2E03CR303S	Conical Column Planting 3 m Single Bracket	3		■			
TC2E04CR303S	Conical Column Planting 4 m Single Bracket	4		■			
TC2E05CR303S	Conical Column Planting 5 m Single Bracket	5		■			
TC2E06CR303S	Conical Column Planting 6 m Single Bracket	6		■			
TC2E07CR303S	Conical Column Planting 7 m Single Bracket	7		■			
TC2E08CR303S	Conical Column Planting 8 m Single Bracket	8		■			
TC2E09CR303S	Conical Column Planting 9 m Single Bracket	9		■			
TC2E10CR303S	Conical Column Planting 10 m Single Bracket	10		■			
TC2E12CR303S	Conical Column Planting 12 m Single Bracket	12		■			
TC2E03CR304S	Conical Column Planting 3 m Single Bracket	3			■		
TC2E04CR304S	Conical Column Planting 4 m Single Bracket	4			■		
TC2E05CR304S	Conical Column Planting 5 m Single Bracket	5			■		
TC2E06CR304S	Conical Column Planting 6 m Single Bracket	6			■		
TC2E07CR304S	Conical Column Planting 7 m Single Bracket	7			■		
TC2E08CR304S	Conical Column Planting 8 m Single Bracket	8			■		
TC2E09CR304S	Conical Column Planting 9 m Single Bracket	9			■		
TC2E10CR304S	Conical Column Planting 10 m Single Bracket	10			■		
TC2E12CR304S	Conical Column Planting 12 m Single Bracket	12			■		
TC2E03CR305S	Conical Column Planting 3 m Single Bracket	3				■	
TC2E04CR305S	Conical Column Planting 4 m Single Bracket	4				■	
TC2E05CR305S	Conical Column Planting 5 m Single Bracket	5				■	
TC2E06CR305S	Conical Column Planting 6 m Single Bracket	6				■	
TC2E07CR305S	Conical Column Planting 7 m Single Bracket	7				■	
TC2E08CR305S	Conical Column Planting 8 m Single Bracket	8				■	
TC2E09CR305S	Conical Column Planting 9 m Single Bracket	9				■	
TC2E10CR305S	Conical Column Planting 10 m Single Bracket	10				■	
TC2E12CR305S	Conical Column Planting 12 m Single Bracket	12				■	
TC2E03CR306S	Conical Column Planting 3 m Single Bracket	3					■
TC2E04CR306S	Conical Column Planting 4 m Single Bracket	4					■
TC2E05CR306S	Conical Column Planting 5 m Single Bracket	5					■
TC2E06CR306S	Conical Column Planting 6 m Single Bracket	6					■
TC2E07CR306S	Conical Column Planting 7 m Single Bracket	7					■
TC2E08CR306S	Conical Column Planting 8 m Single Bracket	8					■
TC2E09CR306S	Conical Column Planting 9 m Single Bracket	9					■
TC2E10CR306S	Conical Column Planting 10 m Single Bracket	10					■
TC2E12CR306S	Conical Column Planting 12 m Single Bracket	12					■

POST TOP CONICAL COLUMN

Double bracket. Setting by flange.

Column Reference	Description	Nominal Height [m]	Horizontal Projection [m]				
			0.50	0.75	1.00	1.25	1.50
TC2F03CR302D	Conical Column Flange 3 m Double Bracket	3	■				
TC2F04CR302D	Conical Column Flange 4 m Double Bracket	4	■				
TC2F05CR302D	Conical Column Flange 5 m Double Bracket	5	■				
TC2F06CR302D	Conical Column Flange 6 m Double Bracket	6	■				
TC2F07CR302D	Conical Column Flange 7 m Double Bracket	7	■				
TC2F08CR302D	Conical Column Flange 8 m Double Bracket	8	■				
TC2F09CR302D	Conical Column Flange 9 m Double Bracket	9	■				
TC2F10CR302D	Conical Column Flange 10 m Double Bracket	10	■				
TC2F12CR302D	Conical Column Flange 12 m Double Bracket	12	■				
TC2F03CR303D	Conical Column Flange 3 m Double Bracket	3		■			
TC2F04CR303D	Conical Column Flange 4 m Double Bracket	4		■			
TC2F05CR303D	Conical Column Flange 5 m Double Bracket	5		■			
TC2F06CR303D	Conical Column Flange 6 m Double Bracket	6		■			
TC2F07CR303D	Conical Column Flange 7 m Double Bracket	7		■			
TC2F08CR303D	Conical Column Flange 8 m Double Bracket	8		■			
TC2F09CR303D	Conical Column Flange 9 m Double Bracket	9		■			
TC2F10CR303D	Conical Column Flange 10 m Double Bracket	10		■			
TC2F12CR303D	Conical Column Flange 12 m Double Bracket	12		■			
TC2F03CR304D	Conical Column Flange 3 m Double Bracket	3			■		
TC2F04CR304D	Conical Column Flange 4 m Double Bracket	4			■		
TC2F05CR304D	Conical Column Flange 5 m Double Bracket	5			■		
TC2F06CR304D	Conical Column Flange 6 m Double Bracket	6			■		
TC2F07CR304D	Conical Column Flange 7 m Double Bracket	7			■		
TC2F08CR304D	Conical Column Flange 8 m Double Bracket	8			■		
TC2F09CR304D	Conical Column Flange 9 m Double Bracket	9			■		
TC2F10CR304D	Conical Column Flange 10 m Double Bracket	10			■		
TC2F12CR304D	Conical Column Flange 12 m Double Bracket	12			■		
TC2F03CR305D	Conical Column Flange 3 m Double Bracket	3				■	
TC2F04CR305D	Conical Column Flange 4 m Double Bracket	4				■	
TC2F05CR305D	Conical Column Flange 5 m Double Bracket	5				■	
TC2F06CR305D	Conical Column Flange 6 m Double Bracket	6				■	
TC2F07CR305D	Conical Column Flange 7 m Double Bracket	7				■	
TC2F08CR305D	Conical Column Flange 8 m Double Bracket	8				■	
TC2F09CR305D	Conical Column Flange 9 m Double Bracket	9				■	
TC2F10CR305D	Conical Column Flange 10 m Double Bracket	10				■	
TC2F12CR305D	Conical Column Flange 12 m Double Bracket	12				■	
TC2F03CR306D	Conical Column Flange 3 m Double Bracket	3					■
TC2F04CR306D	Conical Column Flange 4 m Double Bracket	4					■
TC2F05CR306D	Conical Column Flange 5 m Double Bracket	5					■
TC2F06CR306D	Conical Column Flange 6 m Double Bracket	6					■
TC2F07CR306D	Conical Column Flange 7 m Double Bracket	7					■
TC2F08CR306D	Conical Column Flange 8 m Double Bracket	8					■
TC2F09CR306D	Conical Column Flange 9 m Double Bracket	9					■
TC2F10CR306D	Conical Column Flange 10 m Double Bracket	10					■
TC2F12CR306D	Conical Column Flange 12 m Double Bracket	12					■

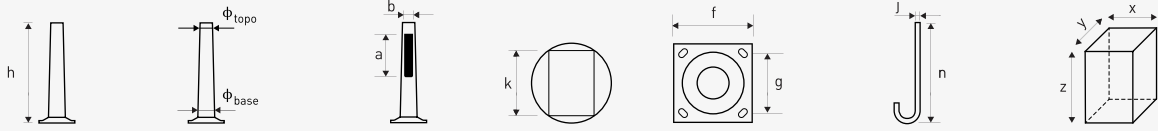
POST TOP CONICAL COLUMN

Double bracket. Setting by planting.

Column Reference	Description	Nominal Height [m]	Horizontal Projection [m]				
			0.50	0.75	1.00	1.25	1.50
TC2E03CR302D	Conical Column Planting 3 m Double Bracket	3	■				
TC2E04CR302D	Conical Column Planting 4 m Double Bracket	4	■				
TC2E05CR302D	Conical Column Planting 5 m Double Bracket	5	■				
TC2E06CR302D	Conical Column Planting 6 m Double Bracket	6	■				
TC2E07CR302D	Conical Column Planting 7 m Double Bracket	7	■				
TC2E08CR302D	Conical Column Planting 8 m Double Bracket	8	■				
TC2E09CR302D	Conical Column Planting 9 m Double Bracket	9	■				
TC2E10CR302D	Conical Column Planting 10 m Double Bracket	10	■				
TC2E12CR302D	Conical Column Planting 12 m Double Bracket	12	■				
TC2E03CR303D	Conical Column Planting 3 m Double Bracket	3		■			
TC2E04CR303D	Conical Column Planting 4 m Double Bracket	4		■			
TC2E05CR303D	Conical Column Planting 5 m Double Bracket	5		■			
TC2E06CR303D	Conical Column Planting 6 m Double Bracket	6		■			
TC2E07CR303D	Conical Column Planting 7 m Double Bracket	7		■			
TC2E08CR303D	Conical Column Planting 8 m Double Bracket	8		■			
TC2E09CR303D	Conical Column Planting 9 m Double Bracket	9		■			
TC2E10CR303D	Conical Column Planting 10 m Double Bracket	10		■			
TC2E12CR303D	Conical Column Planting 12 m Double Bracket	12		■			
TC2E03CR304D	Conical Column Planting 3 m Double Bracket	3			■		
TC2E04CR304D	Conical Column Planting 4 m Double Bracket	4			■		
TC2E05CR304D	Conical Column Planting 5 m Double Bracket	5			■		
TC2E06CR304D	Conical Column Planting 6 m Double Bracket	6			■		
TC2E07CR304D	Conical Column Planting 7 m Double Bracket	7			■		
TC2E08CR304D	Conical Column Planting 8 m Double Bracket	8			■		
TC2E09CR304D	Conical Column Planting 9 m Double Bracket	9			■		
TC2E10CR304D	Conical Column Planting 10 m Double Bracket	10			■		
TC2E12CR304D	Conical Column Planting 12 m Double Bracket	12			■		
TC2E03CR305D	Conical Column Planting 3 m Double Bracket	3				■	
TC2E04CR305D	Conical Column Planting 4 m Double Bracket	4				■	
TC2E05CR305D	Conical Column Planting 5 m Double Bracket	5				■	
TC2E06CR305D	Conical Column Planting 6 m Double Bracket	6				■	
TC2E07CR305D	Conical Column Planting 7 m Double Bracket	7				■	
TC2E08CR305D	Conical Column Planting 8 m Double Bracket	8				■	
TC2E09CR305D	Conical Column Planting 9 m Double Bracket	9				■	
TC2E10CR305D	Conical Column Planting 10 m Double Bracket	10				■	
TC2E12CR305D	Conical Column Planting 12 m Double Bracket	12				■	
TC2E03CR306D	Conical Column Planting 3 m Double Bracket	3					■
TC2E04CR306D	Conical Column Planting 4 m Double Bracket	4					■
TC2E05CR306D	Conical Column Planting 5 m Double Bracket	5					■
TC2E06CR306D	Conical Column Planting 6 m Double Bracket	6					■
TC2E07CR306D	Conical Column Planting 7 m Double Bracket	7					■
TC2E08CR306D	Conical Column Planting 8 m Double Bracket	8					■
TC2E09CR306D	Conical Column Planting 9 m Double Bracket	9					■
TC2E10CR306D	Conical Column Planting 10 m Double Bracket	10					■
TC2E12CR306D	Conical Column Planting 12 m Double Bracket	12					■

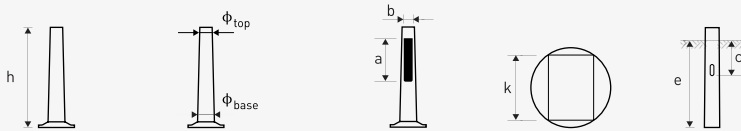
GENERAL CHARACTERISTICS

Post top conical columns with triple or quadruple bracket. Setting by flange.



Reference	Nominal Dimensions			Door Opening			Flange		Anchor Bolts		Foundation	
	h	ϕ_{top}	ϕ_{base}	a	b	k	f	g	j	n	x=y	z
	[m]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[m]	[m]
TC3F06	6	86	160	500	85	90	330	250	M20	540	0.60	1.10
TC3F07	7	86	173	500	90	100	330	250	M20	540	0.60	1.10
TC3F08	8	86	187	500	100	110	400	300	M20	540	0.70	1.10
TC3F09	9	86	200	500	100	120	400	300	M20	540	0.70	1.20
TC3F10	10	86	213	500	100	130	400	300	M22	1140	0.70	1.30
TC3F12	12	86	240	500	100	150	400	300	M24	1200	0.70	1.40

Post top conical columns with triple or quadruple bracket. Setting by planting.



Shaft Reference	Nominal Dimensions			Door Opening			Planting Depth	
	h	ϕ_{top}	ϕ_{base}	a	b	k	e	c
	[m]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
TC3E06	6	86	173	500	85	90	1000	500
TC3E07	7	86	189	500	90	100	1200	500
TC3E08	8	86	203	500	100	110	1200	500
TC3E09	9	86	217	500	100	120	1300	500
TC3E10	10	86	233	500	100	130	1500	500
TC3E12	12	86	263	500	100	150	1700	500

SERVICE CONDITIONS

Load tables. Maximum wind exposure area per lantern [m²].

CLASS A Vref = 28 m/s											
Nominal Height [m]	TRIPLE ARM					QUADRUPLE ARM					M [N.m]
	0.50 m [m ²]	0.75 m [m ²]	1.00 m [m ²]	1.25 m [m ²]	1.5 m [m ²]	0.50 m [m ²]	0.75 m [m ²]	1.00 m [m ²]	1.25 m [m ²]	1.5 m [m ²]	
6	0.39	0.36	0.32	0.29	0.21	0.25	0.21	0.22	0.20	0.18	16579
7	0.33	0.23	0.22	0.22	0.19	0.20	0.20	0.19	0.18	0.17	18951
8	0.28	0.23	0.22	0.21	0.17	0.20	0.19	0.18	0.18	0.17	21600
9	0.26	0.23	0.22	0.21	0.15	0.18	0.19	0.18	0.11	0.14	24080
10	0.25	0.17	0.17	0.15	0.15	0.15	0.13	0.12	0.11	0.12	26446
12	0.17	0.16	0.15	0.15	0.14	0.14	0.13	0.10	0.08	0.09	32465

CLASS A Vref = 31 m/s											
Nominal Height [m]	TRIPLE ARM					QUADRUPLE ARM					M [N.m]
	0.50 m [m ²]	0.75 m [m ²]	1.00 m [m ²]	1.25 m [m ²]	1.5 m [m ²]	0.50 m [m ²]	0.75 m [m ²]	1.00 m [m ²]	1.25 m [m ²]	1.5 m [m ²]	
6	0.31	0.29	0.25	0.23	0.17	0.25	0.18	0.19	0.14	0.16	16515
7	0.25	0.22	0.22	0.18	0.17	0.20	0.17	0.18	0.13	0.15	18782
8	0.24	0.20	0.20	0.17	0.15	0.17	0.15	0.17	0.13	0.13	21445
9	0.22	0.18	0.17	0.16	0.15	0.15	0.15	0.15	0.08	0.09	23256
10	0.19	0.13	0.13	0.12	0.10	0.12	0.11	0.09	0.08	0.09	26755
12	0.13	0.12	0.12	0.11	0.10	0.12	0.10	0.07	0.05	0.05	32112

CLASS A Vref = 28 m/s											
Nominal Height [m]	TRIPLE ARM					QUADRUPLE ARM					M [N.m]
	0.50 m [m ²]	0.75 m [m ²]	1.00 m [m ²]	1.25 m [m ²]	1.5 m [m ²]	0.50 m [m ²]	0.75 m [m ²]	1.00 m [m ²]	1.25 m [m ²]	1.5 m [m ²]	
6	0.47	0.43	0.39	0.35	0.20	0.38	0.27	0.25	0.22	0.22	16508
7	0.36	0.33	0.34	0.28	0.19	0.30	0.25	0.23	0.22	0.21	18879
8	0.34	0.31	0.29	0.28	0.18	0.26	0.23	0.22	0.22	0.21	21451
9	0.33	0.29	0.27	0.27	0.17	0.24	0.23	0.22	0.17	0.14	24124
10	0.30	0.20	0.22	0.20	0.17	0.19	0.19	0.15	0.15	0.14	26396
12	0.22	0.21	0.20	0.20	0.15	0.18	0.18	0.12	0.11	0.11	31933

CLASS A Vref = 31 m/s											
Nominal Height [m]	TRIPLE ARM					QUADRUPLE ARM					M [N.m]
	0.50 m [m ²]	0.75 m [m ²]	1.00 m [m ²]	1.25 m [m ²]	1.5 m [m ²]	0.50 m [m ²]	0.75 m [m ²]	1.00 m [m ²]	1.25 m [m ²]	1.5 m [m ²]	
6	0.37	0.34	0.31	0.28	0.22	0.31	0.19	0.20	0.18	0.17	16503
7	0.27	0.25	0.25	0.22	0.20	0.22	0.18	0.19	0.17	0.16	18791
8	0.27	0.24	0.23	0.20	0.19	0.20	0.18	0.18	0.17	0.16	21383
9	0.25	0.22	0.21	0.20	0.18	0.19	0.18	0.18	0.11	0.12	24204
10	0.24	0.18	0.17	0.15	0.15	0.13	0.12	0.12	0.11	0.12	26588
12	0.16	0.15	0.15	0.14	0.14	0.13	0.13	0.10	0.08	0.08	32558

POST TOP CONICAL COLUMN

Triple bracket. Setting by flange.

Column Reference	Description	Nominal Height [m]	Horizontal Projection [m]				
			0.50	0.75	1.00	1.25	1.50
TC3F06CR302T	Conical Column Flange 6 m Triple Bracket	6	■				
TC3F07CR302T	Conical Column Flange 7 m Triple Bracket	7	■				
TC3F08CR302T	Conical Column Flange 8 m Triple Bracket	8	■				
TC3F09CR302T	Conical Column Flange 9 m Triple Bracket	9	■				
TC3F10CR302T	Conical Column Flange 10 m Triple Bracket	10	■				
TC3F12CR302T	Conical Column Flange 12 m Triple Bracket	12	■				
TC3F06CR303T	Conical Column Flange 6 m Triple Bracket	6		■			
TC3F07CR303T	Conical Column Flange 7 m Triple Bracket	7		■			
TC3F08CR303T	Conical Column Flange 8 m Triple Bracket	8		■			
TC3F09CR303T	Conical Column Flange 9 m Triple Bracket	9		■			
TC3F10CR303T	Conical Column Flange 10 m Triple Bracket	10		■			
TC3F12CR303T	Conical Column Flange 12 m Triple Bracket	12		■			
TC3F06CR304T	Conical Column Flange 6 m Triple Bracket	6			■		
TC3F07CR304T	Conical Column Flange 7 m Triple Bracket	7			■		
TC3F08CR304T	Conical Column Flange 8 m Triple Bracket	8			■		
TC3F09CR304T	Conical Column Flange 9 m Triple Bracket	9			■		
TC3F10CR304T	Conical Column Flange 10 m Triple Bracket	10			■		
TC3F12CR304T	Conical Column Flange 12 m Triple Bracket	12			■		
TC3F06CR305T	Conical Column Flange 6 m Triple Bracket	6				■	
TC3F07CR305T	Conical Column Flange 7 m Triple Bracket	7				■	
TC3F08CR305T	Conical Column Flange 8 m Triple Bracket	8				■	
TC3F09CR305T	Conical Column Flange 9 m Triple Bracket	9				■	
TC3F10CR305T	Conical Column Flange 10 m Triple Bracket	10				■	
TC3F12CR305T	Conical Column Flange 12 m Triple Bracket	12				■	
TC3F06CR306T	Conical Column Flange 6 m Triple Bracket	6					■
TC3F07CR306T	Conical Column Flange 7 m Triple Bracket	7					■
TC3F08CR306T	Conical Column Flange 8 m Triple Bracket	8					■
TC3F09CR306T	Conical Column Flange 9 m Triple Bracket	9					■
TC3F10CR306T	Conical Column Flange 10 m Triple Bracket	10					■
TC3F12CR306T	Conical Column Flange 12 m Triple Bracket	12					■

POST TOP CONICAL COLUMN

Triple bracket. Setting by planting.

Column Reference	Description	Nominal Height [m]	Horizontal Projection [m]				
			0.50	0.75	1.00	1.25	1.50
TC3E06CR302T	Conical Column Planting 6 m Triple Bracket	6	■				
TC3E07CR302T	Conical Column Planting 7 m Triple Bracket	7	■				
TC3E08CR302T	Conical Column Planting 8 m Triple Bracket	8	■				
TC3E09CR302T	Conical Column Planting 9 m Triple Bracket	9	■				
TC3E10CR302T	Conical Column Planting 10 m Triple Bracket	10	■				
TC3E12CR302T	Conical Column Planting 12 m Triple Bracket	12	■				
TC3E06CR303T	Conical Column Planting 6 m Triple Bracket	6		■			
TC3E07CR303T	Conical Column Planting 7 m Triple Bracket	7		■			
TC3E08CR303T	Conical Column Planting 8 m Triple Bracket	8		■			
TC3E09CR303T	Conical Column Planting 9 m Triple Bracket	9		■			
TC3E10CR303T	Conical Column Planting 10 m Triple Bracket	10		■			
TC3E12CR303T	Conical Column Planting 12 m Triple Bracket	12		■			
TC3E06CR304T	Conical Column Planting 6 m Triple Bracket	6			■		
TC3E07CR304T	Conical Column Planting 7 m Triple Bracket	7			■		
TC3E08CR304T	Conical Column Planting 8 m Triple Bracket	8			■		
TC3E09CR304T	Conical Column Planting 9 m Triple Bracket	9			■		
TC3E10CR304T	Conical Column Planting 10 m Triple Bracket	10			■		
TC3E12CR304T	Conical Column Planting 12 m Triple Bracket	12			■		
TC3E06CR305T	Conical Column Planting 6 m Triple Bracket	6				■	
TC3E07CR305T	Conical Column Planting 7 m Triple Bracket	7				■	
TC3E08CR305T	Conical Column Planting 8 m Triple Bracket	8				■	
TC3E09CR305T	Conical Column Planting 9 m Triple Bracket	9				■	
TC3E10CR305T	Conical Column Planting 10 m Triple Bracket	10				■	
TC3E12CR305T	Conical Column Planting 12 m Triple Bracket	12				■	
TC3E06CR306T	Conical Column Planting 6 m Triple Bracket	6					■
TC3E07CR306T	Conical Column Planting 7 m Triple Bracket	7					■
TC3E08CR306T	Conical Column Planting 8 m Triple Bracket	8					■
TC3E09CR306T	Conical Column Planting 9 m Triple Bracket	9					■
TC3E10CR306T	Conical Column Planting 10 m Triple Bracket	10					■
TC3E12CR306T	Conical Column Planting 12 m Triple Bracket	12					■

POST TOP CONICAL COLUMN

Quadruple bracket. Setting by flange.

Column Reference	Description	Nominal Height [m]	Horizontal Projection [m]				
			0.50	0.75	1.00	1.25	1.50
TC3F06CR302Q	Conical Column Flange 6 m Quadruple Bracket	6	■				
TC3F07CR302Q	Conical Column Flange 7 m Quadruple Bracket	7	■				
TC3F08CR302Q	Conical Column Flange 8 m Quadruple Bracket	8	■				
TC3F09CR302Q	Conical Column Flange 9 m Quadruple Bracket	9	■				
TC3F10CR302Q	Conical Column Flange 10 m Quadruple Bracket	10	■				
TC3F12CR302Q	Conical Column Flange 12 m Quadruple Bracket	12	■				
TC3F06CR303Q	Conical Column Flange 6 m Quadruple Bracket	6		■			
TC3F07CR303Q	Conical Column Flange 7 m Quadruple Bracket	7		■			
TC3F08CR303Q	Conical Column Flange 8m Quadruple Bracket	8		■			
TC3F09CR303Q	Conical Column Flange 9 m Quadruple Bracket	9		■			
TC3F10CR303Q	Conical Column Flange 10 m Quadruple Bracket	10		■			
TC3F12CR303Q	Conical Column Flange 12 m Quadruple Bracket	12		■			
TC3F06CR304Q	Conical Column Flange 6 m Quadruple Bracket	6			■		
TC3F07CR304Q	Conical Column Flange 7 m Quadruple Bracket	7			■		
TC3F08CR304Q	Conical Column Flange 8 m Quadruple Bracket	8			■		
TC3F09CR304Q	Conical Column Flange 9 m Quadruple Bracket	9			■		
TC3F10CR304Q	Conical Column Flange 10 m Quadruple Bracket	10			■		
TC3F12CR304Q	Conical Column Flange 12 m Quadruple Bracket	12			■		
TC3F06CR305Q	Conical Column Flange 6 m Quadruple Bracket	6				■	
TC3F07CR305Q	Conical Column Flange 7 m Quadruple Bracket	7				■	
TC3F08CR305Q	Conical Column Flange 8 m Quadruple Bracket	8				■	
TC3F09CR305Q	Conical Column Flange 9 m Quadruple Bracket	9				■	
TC3F10CR305Q	Conical Column Flange 10 m Quadruple Bracket	10				■	
TC3F12CR305Q	Conical Column Flange 12 m Quadruple Bracket	12				■	
TC3F06CR306Q	Conical Column Flange 6 m Quadruple Bracket	6					■
TC3F07CR306Q	Conical Column Flange 7 m Quadruple Bracket	7					■
TC3F08CR306Q	Conical Column Flange 8 m Quadruple Bracket	8					■
TC3F09CR306Q	Conical Column Flange 9 m Quadruple Bracket	9					■
TC3F10CR306Q	Conical Column Flange 10 m Quadruple Bracket	10					■
TC3F12CR306Q	Conical Column Flange 12 m Quadruple Bracket	12					■

POST TOP CONICAL COLUMN

Quadruple bracket. Setting by planting.

Column Reference	Description	Nominal Height [m]	Horizontal Projection [m]				
			0.50	0.75	1.00	1.25	1.50
TC3E06CR302Q	Conical Column Planting 6 m Quadruple Bracket	6	■				
TC3E07CR302Q	Conical Column Planting 7 m Quadruple Bracket	7	■				
TC3E08CR302Q	Conical Column Planting 8 m Quadruple Bracket	8	■				
TC3E09CR302Q	Conical Column Planting 9 m Quadruple Bracket	9	■				
TC3E10CR302Q	Conical Column Planting 10 m Quadruple Bracket	10	■				
TC3E12CR302Q	Conical Column Planting 12 m Quadruple Bracket	12	■				
TC3E06CR303Q	Conical Column Planting 6 m Quadruple Bracket	6		■			
TC3E07CR303Q	Conical Column Planting 7 m Quadruple Bracket	7		■			
TC3E08CR303Q	Conical Column Planting 8m Quadruple Bracket	8		■			
TC3E09CR303Q	Conical Column Planting 9 m Quadruple Bracket	9		■			
TC3E10CR303Q	Conical Column Planting 10 m Quadruple Bracket	10		■			
TC3E12CR303Q	Conical Column Planting 12 m Quadruple Bracket	12		■			
TC3E06CR304Q	Conical Column Planting 6 m Quadruple Bracket	6			■		
TC3E07CR304Q	Conical Column Planting 7 m Quadruple Bracket	7			■		
TC3E08CR304Q	Conical Column Planting 8 m Quadruple Bracket	8			■		
TC3E09CR304Q	Conical Column Planting 9 m Quadruple Bracket	9			■		
TC3E10CR304Q	Conical Column Planting 10 m Quadruple Bracket	10			■		
TC3E12CR304Q	Conical Column Planting 12 m Quadruple Bracket	12			■		
TC3E06CR305Q	Conical Column Planting 6 m Quadruple Bracket	6				■	
TC3E07CR305q	Conical Column Planting 7 m Quadruple Bracket	7				■	
TC3E08CR305Q	Conical Column Planting 8 m Quadruple Bracket	8				■	
TC3E09CR305Q	Conical Column Planting 9 m Quadruple Bracket	9				■	
TC3E10CR305Q	Conical Column Planting 10 m Quadruple Bracket	10				■	
TC3E12CR305Q	Conical Column Planting 12 m Quadruple Bracket	12				■	
TC3E06CR306Q	Conical Column Planting 6 m Quadruple Bracket	6					■
TC3E07CR306Q	Conical Column Planting 7 m Quadruple Bracket	7					■
TC3E08CR306Q	Conical Column Planting 8 m Quadruple Bracket	8					■
TC3E09CR306Q	Conical Column Planting 9 m Quadruple Bracket	9					■
TC3E10CR306Q	Conical Column Planting 10 m Quadruple Bracket	10					■
TC3E12CR306Q	Conical Column Planting 12 m Quadruple Bracket	12					■



PORTUGAL

AVENIDA DE S. LOURENÇO, 41 - CELEIRÓS
APARTADO 2100
4705-444 BRAGA - PORTUGAL

T +351 253 305 600
F +351 253 672 756
GERAL@OFELIZ.PT
WWW.OFELIZ.PT

ANGOLA

E.N. LUANDA-CATETE Km 47
LUANDA-ANGOLA

T +244 933 686 816
INFO@OFELIZANGOLA.COM
WWW.OFELIZANGOLA.COM

MOZAMBIQUE

AVENIDA DA MARGINAL Nº 3987
MAPUTO-MOÇAMBIQUE

T +258 848 994 806
INFO@OFELIZMOZAMBIQUE.COM
WWW.OFELIZMOZAMBIQUE.COM

