
mborghini
automobili
Lamborghini

SELLA 1 - HP

SELLA 1

SELLA 2 - HP

SELLA 2

MINI STELVIO - HP

MINI STELVIO

STELVIO - HP

STELVIO

ROLLE - HP

ROLLE

SUSA

PORDOI

MINI BRERA 1

BRERA 1

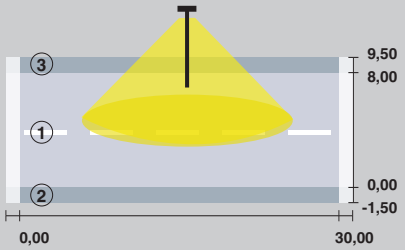
VISCONTI

MONZA

Advantages in installing new projects:

using Sella LED lights instead of high-pressure sodium luminaires enables you to obtain the same lighting results, reducing power and consumptions by 40%-50% depending on the type of road.
Compared to high pressure sodium, LED technology will significantly improve both the quality of the light (which is white and not yellow) and the colour rendering; moreover regular maintenance is no longer needed.
Thanks to high performance LED optics (reflector + auxiliary lens), Sella LED fixtures can be used along roads and keeping the same distance between poles, like for high-pressure sodium lamps. In this way you can save energy without increasing the number of light fixtures.

Example of a lighting system:
3291 Sella 1 - 16 LED
Tot. power consumption @700mA P=84W



Maintenance factor 0,9
Pole height 8m

Area of evaluation: roadW totay	①
Length: 30m - Width 8m	
Grid	10 x 6 points
Street elements	roadway 1
Road surface	C2, q0: 0,070
Selected lighting class	ME3a

Lighting design results	L_m [cd/m²]	U0	UI	TI(%)	SR
Obtained values	1,28	0,44	0,70	10	0,52
Target values	≥1,00	≥0,40	≥0,70	≤15	≥0,50
Compliant / non-compliant	√	√	√	√	√

Area of evaluation: pavement	②
Length: 30m - Width 1,5m	
Grid	10 x 3 points
Street elements	pavement 2
Selected lighting class	S1

Lighting design results	E_m [lx]	E_{min} [lx]
Obtained values	19,24	9,59
Target values	≥15,00	≥5,00
Compliant / non-compliant	√	√

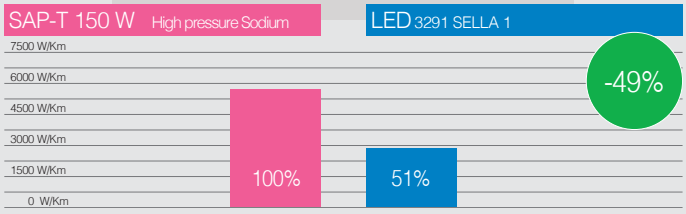
Area of evaluation: pavement	③
Length: 30m - Width 1,5m	
Grid	10 x 3 points
Street elements	pavement 3
Selected lighting class	S2

Lighting design results	E_m [lx]	E_{min} [lx]
Obtained values	11,37	7,02
Target values	≥10,00	≥3,00
Compliant / non-compliant	√	√

Energy efficiency: consuming less energy without giving up the benefits of technological progress. This is the great challenge for the future of our planet. This is because greater energy efficiency means lower consumption without compromising light quality. Being able to distinguish colours and perceive clear details when transiting on urban streets help improve the safety of drivers and pedestrians. In addition, lights that mimic daylight will improve the perception of faces and increase our sense of safety. Thanks to white LED light, cities are safer and more liveable even after dusk.

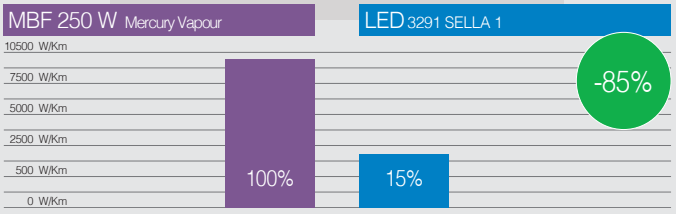
	width	H	distance	Cd/m²	P(W)	W/Km
SAP-T 150 W	8 m	8 m	30 m	1,25	168	5600
SELLA 1 3291 (700mA)	8 m	8 m	30 m	1,28	85	2833

Comparison of consumptions on a ME3a road (C2 type of asphalt):



	width	H	distance	Cd/m²	P(W)	W/Km
MBF 250 W	8 m	8 m	27 m	0,75	275	10185
SELLA 1 3291 (350mA)	8 m	8 m	27 m	0,76	41	1519

Comparison of consumptions on a ME4b road (C2 type of asphalt):



Energy-saving: the possibility to choose the correct drive current for LEDs will allow you to have the right power under specific design conditions, and also help you deal with maintenance and retrofitting problems. Using a lower current will improve the efficiency of fixtures and therefore increase energy savings, whilst a higher current will result in a higher light flux so that you can reduce the number of fixtures.

On request	Power supply	n.LED	W tot	ølm
Sella 1 - art. 3290	350mA - **4000K**	8	**21**	2714m
		16	**41**	5440lm
		24	**61**	8092lm
Sella 1 - art. 3290	530mA - **4000K**	8	**32**	3753lm
		16	**64**	7528lm
		24	**97**	11150lm

On request	Power supply	n.LED	W tot	ølm
Sella 1 - art. 3291	350mA - **4000K**	8	**21**	2697lm
		16	**41**	5404lm
		24	**61**	8077lm
Sella 1 - art. 3291	530mA - **4000K**	8	**32**	3732lm
		16	**64**	7476lm
		24	**97**	11128lm

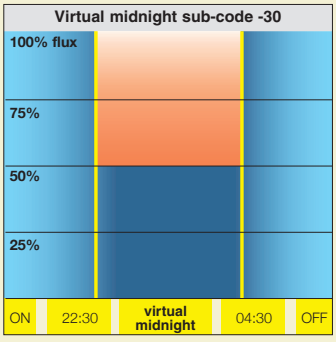
Sella 1 - art. 3290	350mA - **3000K**	8	**21**	2524lm
		16	**41**	5059lm
		24	**61**	7528lm
Sella 1 - art. 3290	530mA - **3000K**	8	**32**	3490lm
		16	**64**	7001lm
		24	**97**	10370lm

Sella 1 - art. 3291	350mA - **3000K**	8	**21**	2508lm
		16	**41**	5026m
		24	**61**	7511lm
Sella 1 - art. 3291	530mA - **3000K**	8	**32**	3470m
		16	**64**	6953lm
		24	**97**	10350lm

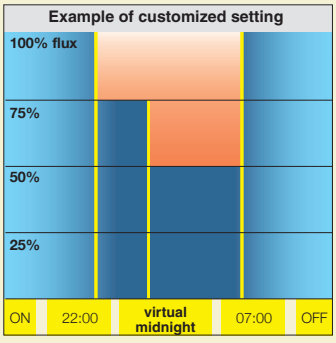
The products of the Sella 1 family are compliant with all applicable tests (third-party certification) pursuant to standard **ANSI C136.31: Street Lighting – Luminaire Vibration.**
- Test level: 3.0G Level 2 for bridge/overpass applications.

Low Flicker: product with a very low flicker; uniform light for greater eye protection.

Virtual midnight: in order to optimize energy efficiency at night when vehicle and pedestrian traffic is lower, the luminaire can be programmed to activate certain pre-set scenarios when it is switched on, at a specific time, or when the light sensor reaches a certain threshold. This device is integrated into the fixture and does not require the installer to make any adjustments on the lighting system. The fixture can be connected with a class II two-wire (phase+neutral) cable or a class I three-wire (phase+netural+ground wire) cable.



Virtual midnight subcode -30: fixtures can be equipped with a device to dim lights in two levels, based on virtual midnight calculation. The reduction of the luminous flux occurs without pilot wire or control phase. The average value between the time the fixture is switched on (sunset) and switched off (sunrise) is the reference point for the device and it is commonly known as "virtual midnight". A microprocessor calculates the desired switching time starting from this reference point. Factory settings are 2.5 hours before (about 10.30 p.m.) and 4.5 hours after (about 4.30 a.m.) the "virtual midnight". When the fixtures are switched on, they operate at 100%, after 4 hours they go down to 50% and after 7 hours they go up to 100% again.



Example of customized virtual midnight setting: fixtures can be equipped with a device to dim lights in different levels, based on virtual midnight calculation. The reduction of the luminous flux occurs without pilot wire or control phase. The average value between the time the fixture is switched on (sunset) and switched off (sunrise) is the reference point for the device and it is commonly known as "virtual midnight". A microprocessor calculates the desired switching time starting from this reference point. When the fixtures are switched on, they operate at 100%, after 2 hours they go down to 75%, after 4 hours they go further down 50% and after 11 hours they go up to 100% again.

ATTENTION: *as standard, all our street fixtures with* ***subcode -00*** *are supplied with programmable driver.*
N.B. *upon request, it is possible to change virtual midnight factory settings.*

Housing and cover: in die-cast aluminium and designed with a very small surface exposed to wind. Cooling fins are integrated into the cover.

Heat sink: the heat dissipation system is specially designed and made to allow the operation of the LED lights with temperatures ensuring excellent performance/efficiency and durability.

Pole connection: in die-cast aluminium and with gaskets to secure the frame according to different inclinations. Adjustable ranges: between 0° and 20° for side mount; and between 0° and 20° for mast-top mounting. Inclination pace: 5°. Suited for poles with a diameter 42-76mm.

Diffuser: extra-clear, tempered glass, 4 mm thick, resistant to thermal shock and impacts (UNI-EN12150-1: 2001).

Coating: the standard powder coating consists of a first metal surface pre-treatment stage and of single layer of UV-stabilised, corrosion and salt resistant polyester powder coating.
The SELLA luminaire **is declared** to have passed the 2000 hours of salt corrosion resistance test in accordance with ASTM B 117 standard and the 2000 hours of UV condensation test in accordance with the ASTM G 154 standard.

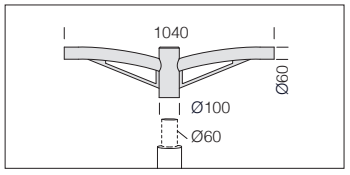
On request: coating compliant with UNI EN ISO 9227 Corrosion tests in artificial atmospheres for aggressive environments.

Standard supply: double insulation switch that cuts off electricity when the cover is opened. Complete with quick connection.

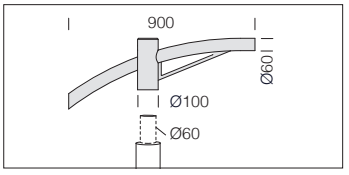
With dedicated electronic device to protect the LED module.
Electronic safety device to protect the LED module and the related ballast compliant with EN 61547:
- Class 2: protection up to 10KV (on request).

Table for the various options for managing the supply point

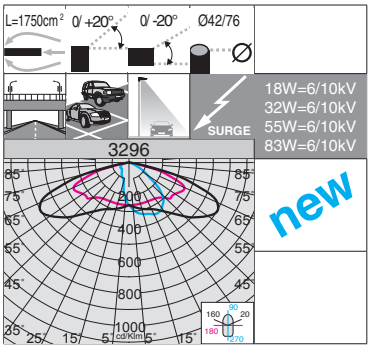
1-10V dimming	Virtual midnight	PLC remote control	Nema Socket	Zhaga Socket	Wi-Fi remote control (to be agreed upon)
Adjustment range from 10%-100% with 1-10V	Stand alone system with reduction of luminous flux and surge protector 6/10 KV	Point-to-point and system management and diagnosis system	It can be installed directly onto the luminaire's body, ideal for the remote control of lights		Point-to-point and system management and diagnosis system with Wi-Fi system
Ordered with **sub-code -12**	Ordered with **sub-code -30**	Ordered with **sub-code -0078**	Ordered with **sub-code -40**	Ordered with **sub-code -0054**	**on request**

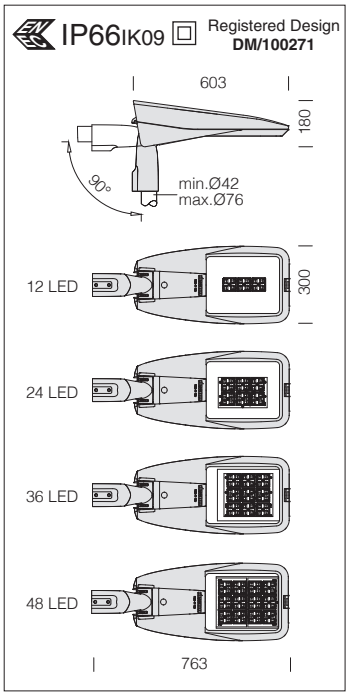


acc. 508 double arm	
grey	991266-00
graphite	991267-00
Suited for poles with a diameter 60mm.	



acc. 504 single arm	
grey	991262-00
graphite	991263-00
Suited for poles with a diameter 60mm.	





Optics: in PMMA, highly resistant to temperature and UV radiation.

LED: Power factor ≥0,9.
Luminous flux maintenance 80%: 80.000h (L80B20).

3296 Sella 1 - high performance					
		CLD CELL			LUMEN OUTPUT (tq= 25 °C)
wattage	colour	weight	code	W tot	K - ølm - CRI
LED	grey	7.20	330900-00	18	4000K - 2722lm - CRI 70
	graphite		330901-00		
LED	grey	7.20	330902-00	32	4000K - **5071lm** - CRI 70
	graphite		330903-00		
LED	grey	7.20	330904-00	55	4000K - **8089lm** - CRI 70
	graphite		330905-00		
LED	grey	7.20	330906-00	83	4000K - 11873lm - CRI 70
	graphite		330907-00		
On request: possibility to control each individual light point (see table on p. 351).					

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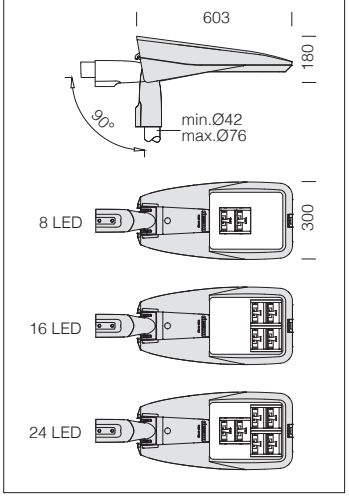

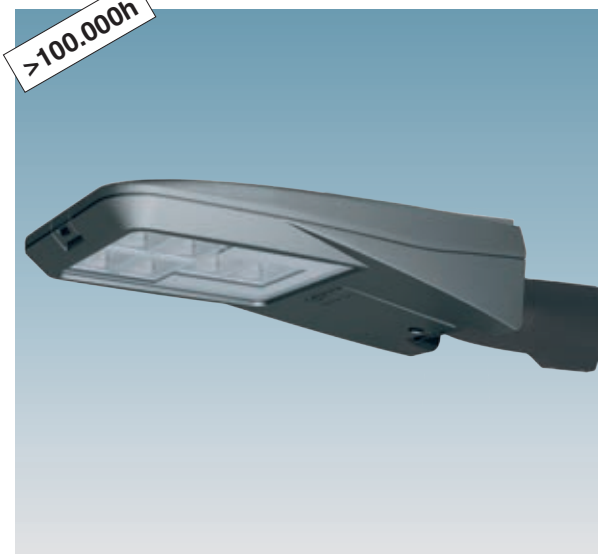

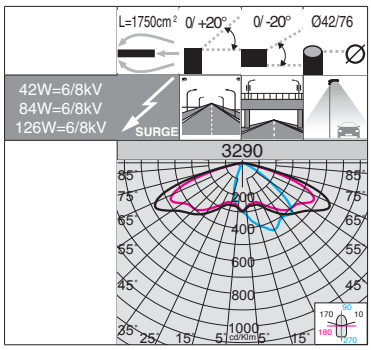

LED: LUMINOUS FLUX MAINTENANCE (including end-of-life failure)					
n. LED	W tot	L80B10 @ta+25°C	L80B10 @ta+50°C	L80B10 @ta+50°C	L90B10 @ta+50°C
8	42 (700mA)	>100.000h	>100.000h	70.000h	50.000h
16	84 (700mA)				
24	126 (700mA)				

Optics: in aluminium coated with very high purity (99.99%) silver using physical vapour deposition (PVD).

LED: Power factor ≥0.92.
Luminous flux maintenance 80%: >100.000h (L80B10).

3290 Sella 1 - ST

wattage (700mA)	colour	CLD CELL weight	CLD CELL code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm 700mA - CRI
LED	grey	7.20	330603-00	42	4000K - 4888lm - CRI 70
	graphite		330600-00		
LED	grey	7.20	330603-39	42	3000K - 4546lm - CRI 70
	graphite		330600-39		
LED	grey	7.20	330604-00	84	4000K - 9777lm - CRI 70
	graphite		330601-00		
LED	grey	7.20	330604-39	84	3000K - 9093lm - CRI 70
	graphite		330601-39		
LED	grey	7.20	330605-00	126	4000K - 14567lm - CRI 70
	graphite		330602-00		
LED	grey	7.20	330605-39	126	3000K - 13547lm - CRI 70
	graphite		330602-39		

On request: possibility to control each individual light point (see table on p. 351).

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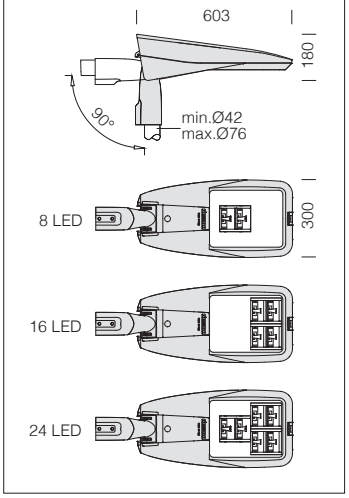
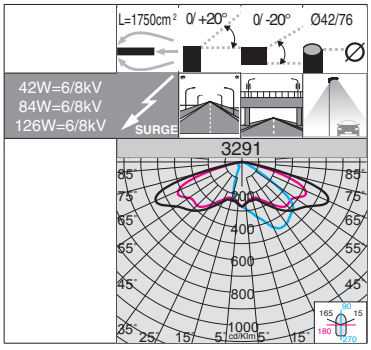




LED: LUMINOUS FLUX MAINTENANCE (including end-of-life failure)					
n. LED	W tot	L80B10 @ta+25°C	L80B10 @ta+50°C	L80B10 @ta+50°C	L90B10 @ta+50°C
8	42 (700mA)	>100.000h	>100.000h	70.000h	50.000h
16	84 (700mA)				
24	126 (700mA)				

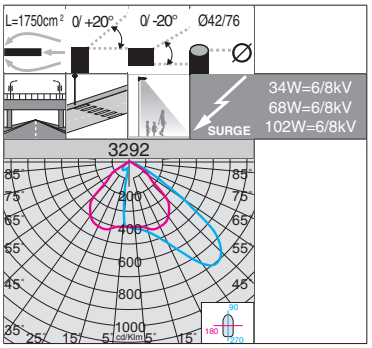
Optics: in aluminium coated with very high purity (99.99%) silver using physical vapour deposition (PVD).

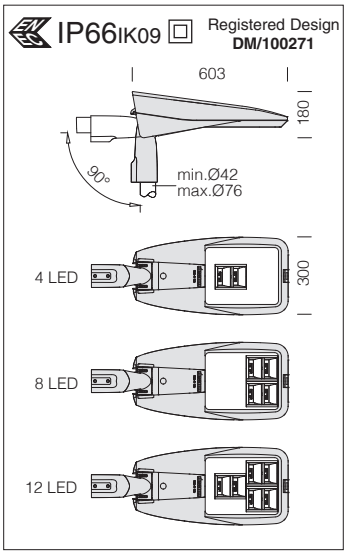
LED: Power factor ≥0.92.
Luminous flux maintenance 80%: >100.000h (L80B10).

3291 Sella 1 - STWB

wattage (700mA)	colour	CLD CELL weight	CLD CELL code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm 700mA - CRI
LED	grey	7.20	330613-00	42	4000K - 4887lm - CRI 70
	graphite		330610-00		
LED	grey	7.20	330613-39	42	3000K - 4545lm - CRI 70
	graphite		330610-39		
LED	grey	7.20	330614-00	84	4000K - 9710lm - CRI 70
	graphite		330611-00		
LED	grey	7.20	330614-39	84	3000K - 9030lm - CRI 70
	graphite		330611-39		
LED	grey	7.20	330615-00	126	4000K - 14539lm - CRI 70
	graphite		330612-00		
LED	grey	7.20	330615-39	126	3000K - 13521lm - CRI 70
	graphite		330612-39		

On request: possibility to control each individual light point (see table on p. 351).





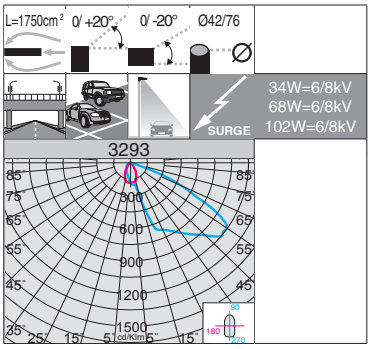
3292 Sella 1 - asymmetric 45°

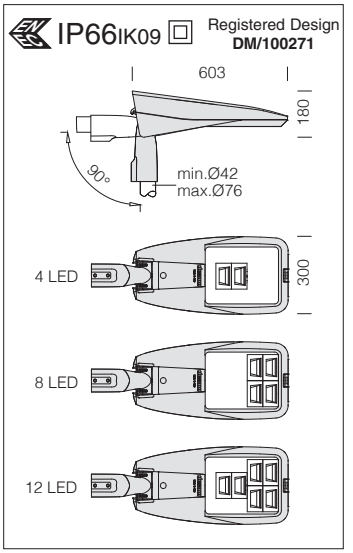
wattage (700mA)	colour	CLD CELL weight	CLD CELL code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm 700mA - CRI
LED	grey	7.20	330664-00	34	4000K - 3654lm - CRI 70
	graphite		330660-00		
LED	grey	7.20	330664-39	34	3000K - 3398lm - CRI 70
	graphite		330660-39		
LED	grey	7.20	330665-00	68	4000K - 7308lm - CRI 70
	graphite		330661-00		
LED	grey	7.20	330665-39	68	3000K - 6796lm - CRI 70
	graphite		330661-39		
LED	grey	7.20	330666-00	102	4000K - 10962lm - CRI 70
	graphite		330662-00		
LED	grey	7.20	330666-39	102	3000K - 10195lm - CRI 70
	graphite		330662-39		

On request: possibility to control each individual light point (see table on p. 351).

Optics: in aluminium coated with very high purity (99.99%) silver using physical vapour deposition (PVD).

LED: Power factor ≥0.92.
Luminous flux maintenance 80%: 80.000h (L80B10).





3293 Sella 1 - asymmetric 60°

wattage (700mA)	colour	CLD CELL weight	CLD CELL code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm 700mA - CRI
LED	grey	7.20	330684-00	34	4000K - 3045lm - CRI 70
	graphite		330680-00		
LED	grey	7.20	330684-39	34	3000K - 2832lm - CRI 70
	graphite		330680-39		
LED	grey	7.20	330685-00	68	4000K - 6130lm - CRI 70
	graphite		330681-00		
LED	grey	7.20	330685-39	68	3000K - 5701lm - CRI 70
	graphite		330681-39		
LED	grey	7.20	330686-00	102	4000K - 9395lm - CRI 70
	graphite		330682-00		
LED	grey	7.20	330686-39	102	3000K - 8737lm - CRI 70
	graphite		330682-39		

On request: possibility to control each individual light point (see table on p. 351).

Optics: in aluminium coated with very high purity (99.99%) silver using physical vapour deposition (PVD).

LED: Power factor ≥0.92.
Luminous flux maintenance 80%: 80.000h (L80B10).

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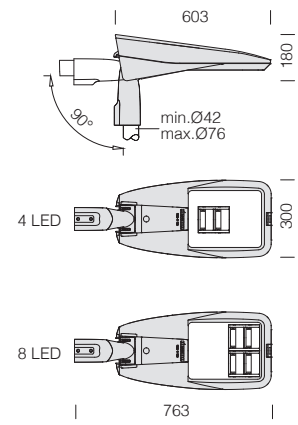
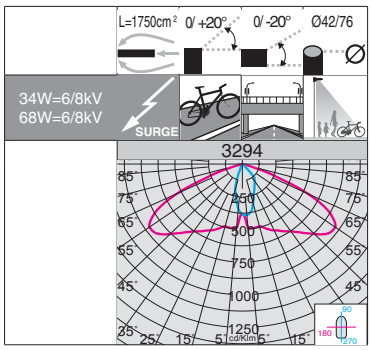




Optics: in aluminium coated with very high purity (99.99%) silver using physical vapour deposition (PVD).

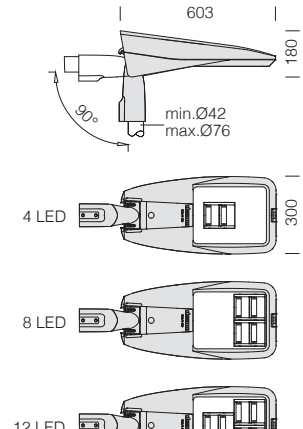
LED: Power factor ≥0.92.
Luminous flux maintenance 80%: 80.000h (L80B10).

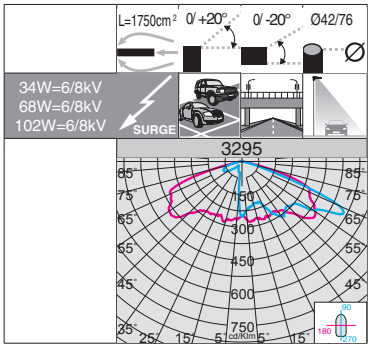
3294 Sella 1 - cycleways

		CLD CELL			LUMEN OUTPUT (tq= 25 °C)
wattage (700mA)	colour	weight	code	W tot	K - ølm 700mA - CRI
LED	grey	7.20	330702-00	**34**	4000K - 3011lm - CRI 70
	graphite		330700-00		
LED	grey	7.20	330702-39	**34**	3000K - 2800lm - CRI 70
	graphite		330700-39		
LED	grey	7.20	330703-00	**68**	4000K - 6015lm - CRI 70
	graphite		330701-00		
LED	grey	7.20	330703-39	**68**	3000K - 5594lm - CRI 70
	graphite		330701-39		

On request: possibility to control each individual light point (see table on p. 351).

IP66 IK09 Registered Design DM/100271





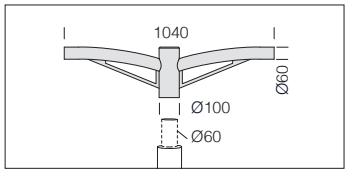
Optics: in aluminium coated with very high purity (99.99%) silver using physical vapour deposition (PVD).

LED: Power factor ≥0.92.
Luminous flux maintenance 80%: 80.000h (L80B10).

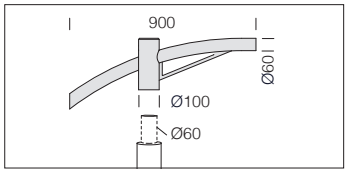
3295 Sella 1 - large areas

		CLD CELL			LUMEN OUTPUT (tq= 25 °C)
wattage (700mA)	colour	weight	code	W tot	K - ølm 700mA - CRI
LED	grey	7.20	330724-00	**34**	4000K - 2862lm - CRI 70
	graphite		330720-00		
LED	grey	7.20	330724-39	**34**	3000K - 2662lm - CRI 70
	graphite		330720-39		
LED	grey	7.20	330725-00	**68**	4000K - 5725lm - CRI 70
	graphite		330721-00		
LED	grey	7.20	330725-39	**68**	3000K - 5324lm - CRI 70
	graphite		330721-39		
LED	grey	7.20	330726-00	**102**	4000K - 8587lm - CRI 70
	graphite		330722-00		
LED	grey	7.20	330726-39	**102**	3000K - 7986lm - CRI 70
	graphite		330722-39		

On request: possibility to control each individual light point (see table on p. 351).



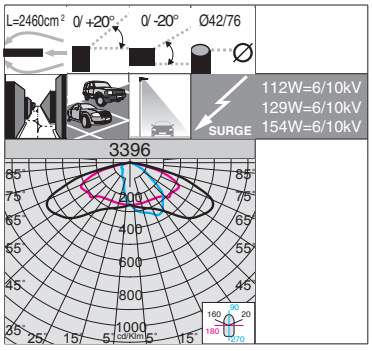
acc. 508 double arm	
grey	991266-00
graphite	991267-00
Suited for poles with a diameter 60mm.	

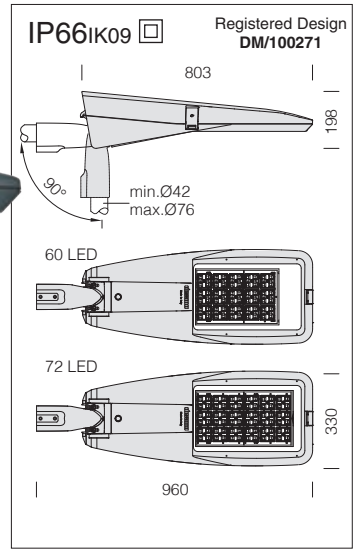


acc. 504 single arm	
grey	991262-00
graphite	991263-00
Suited for poles with a diameter 60mm.	





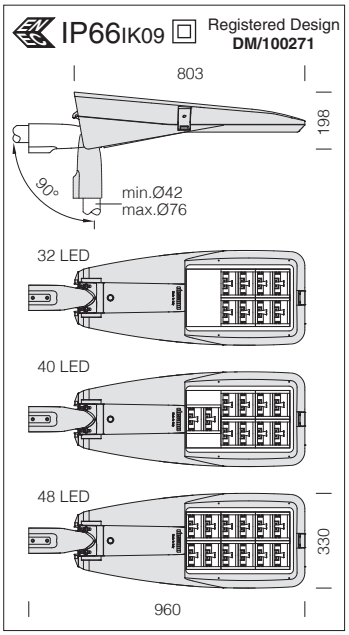


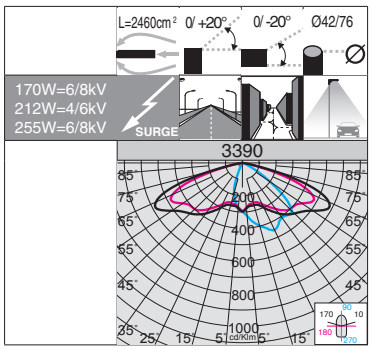


3396 Sella 2 - high performance					
		CLD CELL			LUMEN OUTPUT (tq= 25 °C)
wattage	colour	weight	code	W tot	K - ølm - CRI
LED	grey	11.00	330830-00	112	4000K - 15732lm - CRI 70
	graphite		330831-00		
LED	grey	11.50	330832-00	129	4000K - 18987lm - CRI 70
	graphite		330833-00		
LED	grey	11.50	330834-00	154	4000K - 21050lm - CRI 70
	graphite		330835-00		
On request: possibility to control each individual light point (see table on p. 351).					

Optics: in PMMA, highly resistant to temperature and UV radiation.

LED: Power factor ≥0,9.
Luminous flux maintenance 80%: 80.000h (L80B20).





Optics: in aluminium coated with very high purity (99.99%) silver using physical vapour deposition (PVD).

LED: Power factor ≥0.92.
Luminous flux maintenance 80%: >100.000h (L80B10).

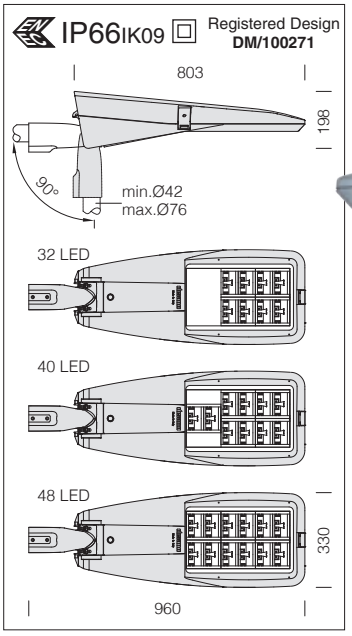
LED: LUMINOUS FLUX MAINTENANCE
(including end-of-life failure)

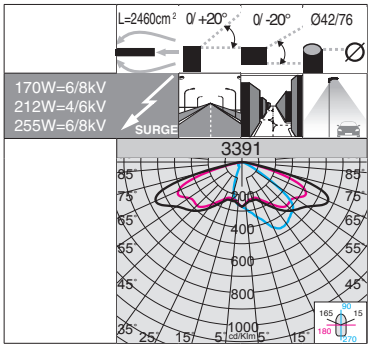
n. LED	W tot	L80B10 @ta+25°C	L80B10 @ta+50°C	L90B10 @ta+25°C	L90B10 @ta+50°C
32	170 (700mA)	>100.000h	>100.000h	70.000h	50.000h
40	212 (700mA)	>100.000h	>100.000h	70.000h	50.000h
48	255 (700mA)	>100.000h	>100.000h	60.000h	40.000h

3390 Sella 2 - ST

wattage (700mA)	colour	CLD CELL weight	CLD CELL code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm 700mA - CRI
LED	grey	11.00	330803-00	**170**	4000K - 20634lm - CRI 70
	graphite		330800-00		
LED	grey	11.00	330803-39	**170**	3000K - 19190lm - CRI 70
	graphite		330800-39		
LED	grey	11.00	330804-00	**212**	4000K - 25792lm - CRI 70
	graphite		330801-00		
LED	grey	11.00	330804-39	**212**	3000K - 23987lm - CRI 70
	graphite		330801-39		
LED	grey	11.00	330805-00	**255**	4000K - 30950lm - CRI 70
	graphite		330802-00		
LED	grey	11.00	330805-39	**255**	3000K - 28784lm - CRI 70
	graphite		330802-39		

On request: possibility to control each individual light point (see table on p. 351).





Optics: in aluminium coated with very high purity (99.99%) silver using physical vapour deposition (PVD).

LED: Power factor ≥0.92.
Luminous flux maintenance 80%: >100.000h (L80B10).

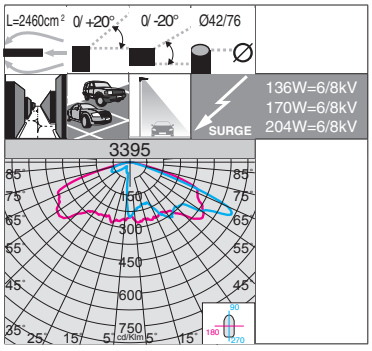
LED: LUMINOUS FLUX MAINTENANCE
(including end-of-life failure)

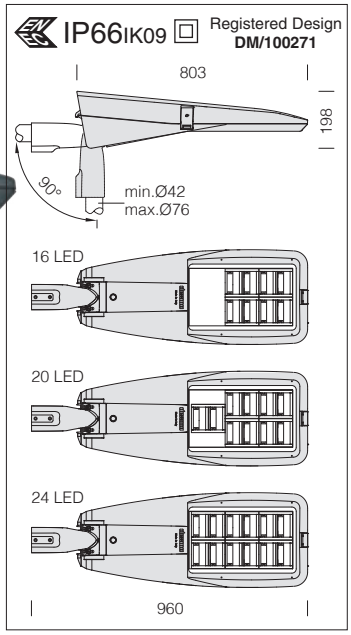
n. LED	W tot	L80B10 @ta+25°C	L80B10 @ta+50°C	L90B10 @ta+25°C	L90B10 @ta+50°C
32	170 (700mA)	>100.000h	>100.000h	70.000h	50.000h
40	212 (700mA)	>100.000h	>100.000h	70.000h	50.000h
48	255 (700mA)	>100.000h	>100.000h	60.000h	40.000h

3391 Sella 2 - STWB

wattage (700mA)	colour	CLD CELL weight	CLD CELL code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm 700mA - CRI
LED	grey	11.00	330813-00	**170**	4000K - 20495lm - CRI 70
	graphite		330810-00		
LED	grey	11.00	330813-39	**170**	3000K - 19060lm - CRI 70
	graphite		330810-39		
LED	grey	11.00	330814-00	**212**	4000K - 25618lm - CRI 70
	graphite		330811-00		
LED	grey	11.00	330814-39	**212**	3000K - 23825lm - CRI 70
	graphite		330811-39		
LED	grey	11.00	330815-00	**255**	4000K - 30742lm - CRI 70
	graphite		330812-00		
LED	grey	11.00	330815-39	**255**	3000K - 28591lm - CRI 70
	graphite		330812-39		

On request: possibility to control each individual light point (see table on p. 351).

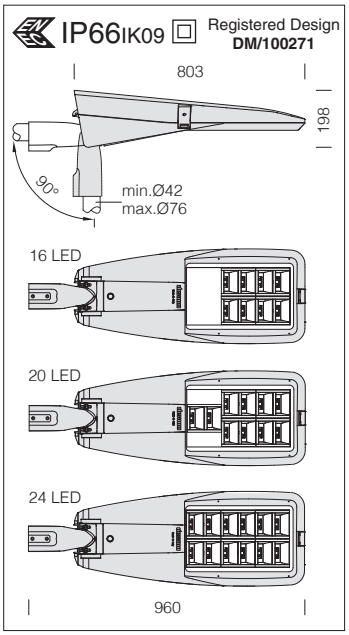


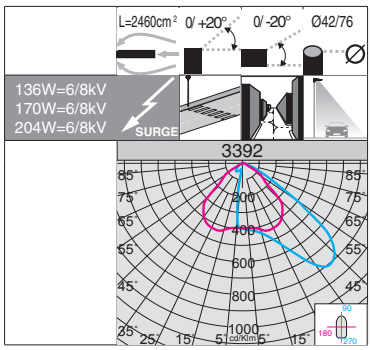


3395 Sella 2 - large areas					
		CLD CELL			LUMEN OUTPUT (tq= 25 °C)
wattage (700mA)	colour	weight	code	W tot	K - ølm 700mA - CRI
LED	grey	11.00	330824-00	136	4000K - 11450lm - CRI 70
	graphite		330820-00		
LED	grey	11.00	330824-39	136	3000K - 10649lm - CRI 70
	graphite		330820-39		
LED	grey	11.00	330825-00	170	4000K - 14312lm - CRI 70
	graphite		330821-00		
LED	grey	11.00	330825-39	170	3000K - 13310lm - CRI 70
	graphite		330821-39		
LED	grey	11.00	330826-00	204	4000K - 17175lm - CRI 70
	graphite		330822-00		
LED	grey	11.00	330826-39	204	3000K - 15973lm - CRI 70
	graphite		330822-39		
On request: possibility to control each individual light point (see table on p. 351).					

Optics: in aluminium coated with very high purity (99.99%) silver using physical vapour deposition (PVD).

LED: Power factor ≥0.92.
Luminous flux maintenance 80%: >100.000h (L80B10).





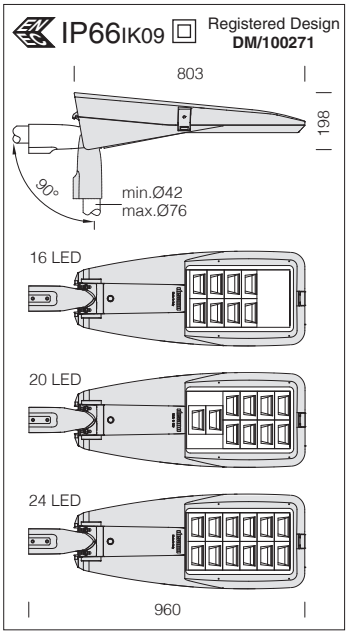
Optics: in aluminium coated with very high purity (99.99%) silver using physical vapour deposition (PVD).

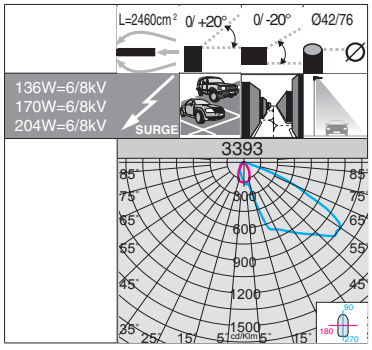
LED: Power factor ≥0.92.
Luminous flux maintenance 80%: >100.000h (L80B10).

3392 Sella 2 - asymmetric 45°

		CLD CELL			LUMEN OUTPUT (tq= 25 °C)
wattage (700mA)	colour	weight	code	W tot	K - ølm 700mA - CRI
LED	grey	11.00	330864-00	**136**	4000K - 14610lm - CRI 70
	graphite		330860-00		
LED	grey	11.00	330864-39	**136**	3000K - 13587lm - CRI 70
	graphite		330860-39		
LED	grey	11.00	330865-00	**170**	4000K - 18262lm - CRI 70
	graphite		330861-00		
LED	grey	11.00	330865-39	**170**	3000K - 16984lm - CRI 70
	graphite		330861-39		
LED	grey	11.00	330866-00	**204**	4000K - 21915lm - CRI 70
	graphite		330862-00		
LED	grey	11.00	330866-39	**204**	3000K - 20381lm - CRI 70
	graphite		330862-39		

On request: possibility to control each individual light point (see table on p. 351).





Optics: in aluminium coated with very high purity (99.99%) silver using physical vapour deposition (PVD).

LED: Power factor ≥0.92.
Luminous flux maintenance 80%: >100.000h (L80B10).

3393 Sella 2 - asymmetric 60°

		CLD CELL			LUMEN OUTPUT (tq= 25 °C)
wattage (700mA)	colour	weight	code	W tot	K - ølm 700mA - CRI
LED	grey	11.00	330884-00	**136**	4000K - 12260lm - CRI 70
	graphite		330880-00		
LED	grey	11.00	330884-39	**136**	3000K - 11402lm - CRI 70
	graphite		330880-39		
LED	grey	11.00	330885-00	**170**	4000K - 15325lm - CRI 70
	graphite		330881-00		
LED	grey	11.00	330885-39	**170**	3000K - 14252lm - CRI 70
	graphite		330881-39		
LED	grey	11.00	330886-00	**204**	4000K - 18390lm - CRI 70
	graphite		330882-00		
LED	grey	11.00	330886-39	**204**	3000K - 17103lm - CRI 70
	graphite		330882-39		

On request: possibility to control each individual light point (see table on p. 351).

What is a smart city?
A smart city is a city where there is a better quality of life and where public spaces can help citizens achieve their full potential and move more freely, while saving time and respecting the environment.
The intelligence of a «Smart City» is a distributed, shared, horizontal and social intelligence. It is an intelligence that promotes the participation of citizens and the organization of the city towards a greater optimization of resources and results. Energy consumption, public resource use and time are all optimized.
With the Web and the new technologies, access to services is easier and public spaces can be organized to favour mobility, save time and turn our cities smarter.
Remote management systems make objects more intelligent and recognizable, so that they can communicate data and provide access to aggregated information.
Thanks to a more efficient use of the Web, everything within a city (urban fittings, public buildings, monuments, etc.) can play an active role and become collectors and distributors of information about traffic, energy consumption, services and assistance to citizens, cultural and touristic attractions and much more.

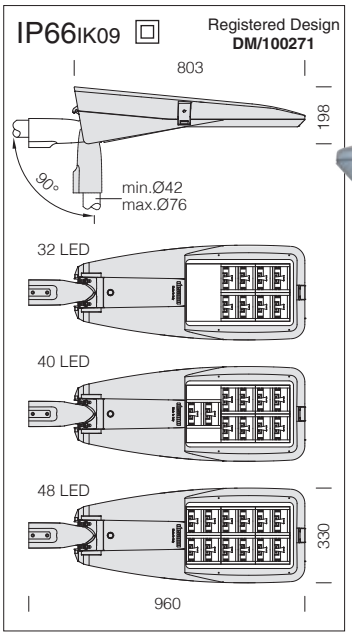
The fixture can be equipped with a **control system which provides lighting managers with the ability to improve the performance of urban and street lighting** installations while saving costs by lowering energy usage, optimising operation and reducing CO_2 emissions. The system incorporates the latest technologies in power electronics, communications and IoT. This makes possible, among other features, an on/off scheduled switching, a dynamic programming of lighting levels, map-based visualizations, automatic alarm reports, real-time fixture monitoring and maintenance scheduling of every single luminaire of multiple installations at once.
The system has a friendly and secure web-based user interface which can be operated anywhere and anytime from any web-connected device such as computers, smartphones and tablets providing real time and accurate control of the lighting infrastructure.

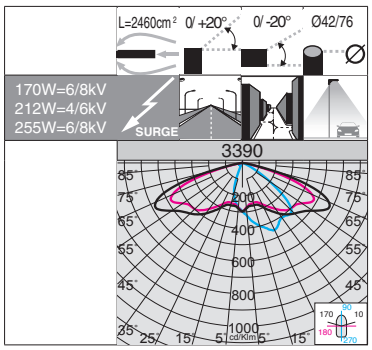
System Highlights

- Flexible solution
  - Valid for new installations as well as for lighting renovation
  - Autonomous system but integrable with other city services platforms
  - Valid worldwide
  - Compatible with most Smart City services platforms
- Values and revenues
  - Better lighting performance
  - Money savings
  - Energy costs reduction
  - Operation costs reduction
- Users
  - Municipalities and County Councils
  - Smart City platforms operators
  - Managers of large infrastructure
- Applications
  - Street and residential lighting (streets, roads)
  - Urban & architectural lighting (monuments, public spaces)
  - Large infrastructure lighting (airports, ports)
  - Large areas and sport lighting (car parks, stadiums)
  - Urban events lighting (celebrations, demostrations)

System Architecture & Components

- System architecture
  - Smart power electronics: LED drivers
  - Wireless network hardware
  - RF Nodes and GSM Gateways
  - Cloud-based data acquisition and network management
  - Management software suite (Network & data management)
  - Web-based multi-device user friendly interface
- Technical aspects
  - Fully programmable electrical parameters and functionalities
  - Connectivity of sensors
  - Self-diagnosis, notification of alarms
  - Mains voltage and frecuency monitoring
  - High efficiency
- Lighting network nodes
  - Multi-hop wireless mesh network
  - IP-based protocol, broad coverage
  - Automatic neighbour discovery, self-organization, ad hoc configuration
  - Extensibility, interoperability, open standards
  - Robust link, reliable and high-performance network
  - Additional sensor data acquisition (optional)
- Gateway
  - Mesh network concentrator
  - 2G/3G/LTE network gateway
  - Time and date precise synch
- Central host and database
  - Local or cloud hosting available
  - End-to-end secured system
  - Smart City and other horizontal management platforms integrability
  - Multi-level data interchange capabilities, app interfaces
  - Business Intelligence and data analytics
- Management Software Suite
  - Lighting configuration, management and maintenance
  - Easy installation, test capabilities
  - Data network management and configuration
  - Reports, statistics and data visualization tools
- Fast commissioning
  - Ease of installation
  - Assembling outside fitting
  - Remote configuration
  - Reliable, outdoor-proof
- Accuracy
  - GPS accurate location
  - Point-to-point management
  - Real-time operation





Optics: in aluminium coated with very high purity (99.99%) silver using physical vapour deposition (PVD).

3390 Sella 2 - ST

		CLD CELL			LUMEN OUTPUT (tq= 25 °C)
wattage (700mA)	colour	weight	code	W tot	K - ølm 700mA - CRI
LED	grey / graphite		On request	170	4000K - 20634lm - CRI 70
LED	grey / graphite		On request	170	3000K - 19190lm - CRI 70
LED	grey / graphite		On request	212	4000K - 25792lm - CRI 70
LED	grey / graphite		On request	212	3000K - 23987lm - CRI 70
LED	grey / graphite		On request	255	4000K - 30950lm - CRI 70
LED	grey / graphite		On request	255	3000K - 28784lm - CRI 70

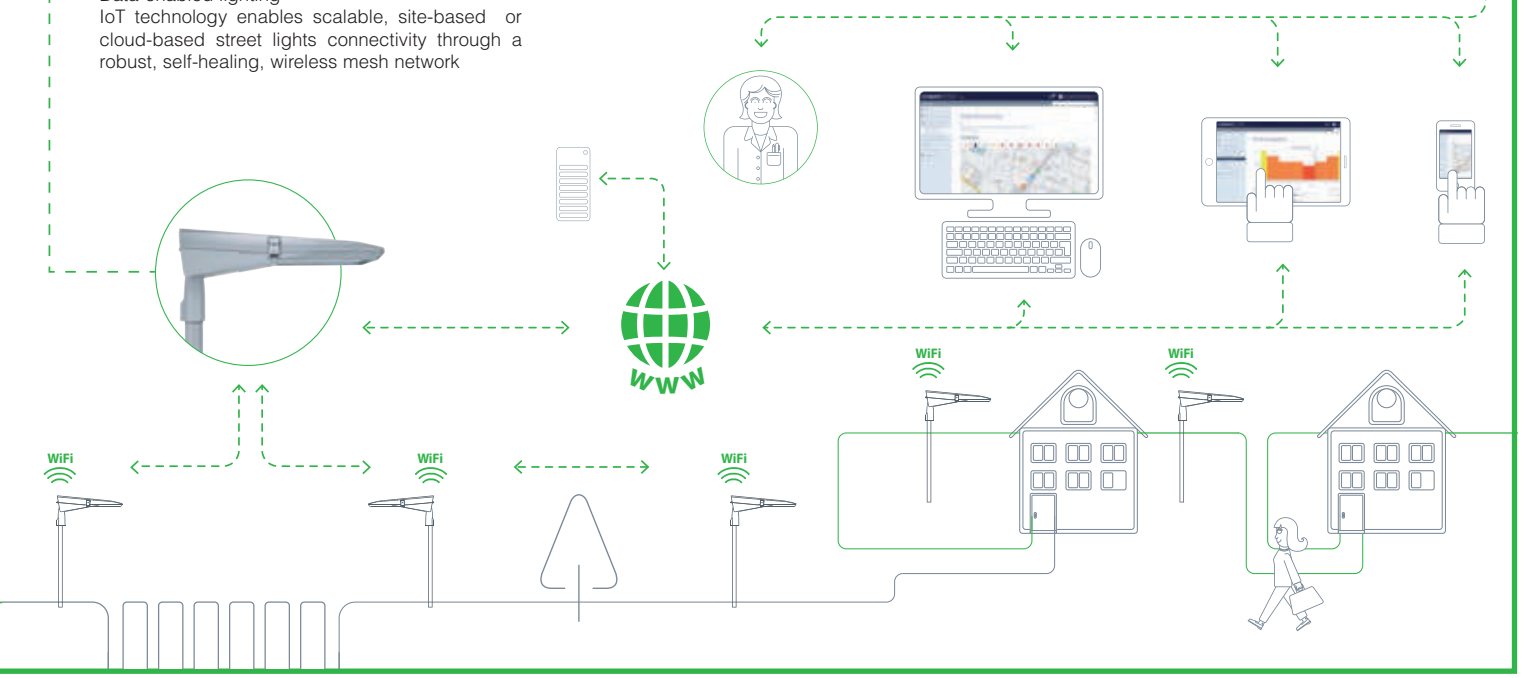
On request: possibility to control each individual light point (see table on p. 351).

Smart City Lighting

- Flexible and avant-garde lighting
  - Programmable lighting
  - Dynamic lighting
  - Reactive to events
  - Makes possible a human centric lighting
  - Increases citizen satisfaction
  - Helps to improve safety on streets
  - Compatible with most existing Smart City & urban services management platforms and easily adaptable thanks to its open architecture
- Environmental sustainability
  - Energy savings
  - Reduction of CO_2 footprint
  - Lower lighting pollution
- Data-enabled lighting
  IoT technology enables scalable, site-based or cloud-based street lights connectivity through a robust, self-healing, wireless mesh network

User Friendly Web-based Interface

- Main functionalities
  - Easy lighting levels & timing configuration
  - Creation of customised lighting schedules
  - Energy consumption monitoring
  - Power supply monitoring
  - Alarms and events reporting
  - Operation time recording
  - Geolocation and mapping of luminaires (multiple map choice)
  - Easy allocation of luminaires by town, street, coordenates, type
  - Manteinance planning
  - Multiple users administration
- Optimum lighting maintenance
  - Possibility of preventive maintenance
  - Optimization of reactive maintenance
- Privacy and security commitment
  - Encrypted communications
  - Safe communications exchange through highest encryptation levels
  - Database access security
  - Secure hosting
  - Cloud protection and data confidentiality
  - Safe access with authentication
  - Highest protection against unauthorized access



The products of the Mini Stelvio family are compliant with all applicable tests (third-party certification) pursuant to standard **ANSI C136.31: Street Lighting – Luminaire Vibration.**
- Test level: 3.0G Level 2 for bridge/overpass applications.

Low Flicker: product with a very low flicker; uniform light for greater eye protection.

Housing and cover: in die-cast aluminium and designed with a very small surface exposed to wind. Cooling fins are integrated into the cover.

Pole connection: in die-cast aluminium and with gaskets to secure the frame according to different inclinations. Adjustable ranges: between 0° and 15° for side mount; and between 0° and 10° for mast-top mounting. Inclination pace: 5°. Suited for poles with a diameter 63-60mm

Diffuser: clear, tempered glass, 4 mm thick, resistant to thermal shock and impacts (UNI-EN 12150-1 : 2001)

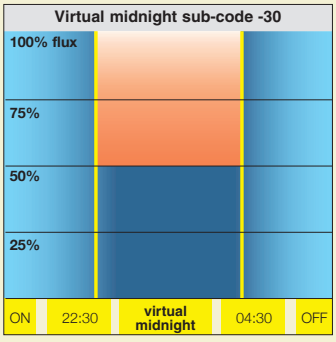
Coating: the standard powder coating consists of a first metal surface pre-treatment stage and of single layer of UV-stabilised, corrosion and salt resistant polyester powder coating.

On request: coating compliant with UNI EN ISO 9227 Corrosion tests in artificial atmospheres for aggressive environments.

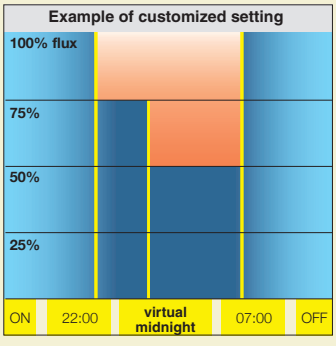
Standard supply: Automatic temperature control inside the device with automatic resetting. Safety diode to protect against voltage peaks compliant with EN 61547. With dedicated electronic device to protect the LED module.

Equipment: complete with IP67 airtight connector for mains connection. Supplied with double insulation switch that cuts off electricity when the cover is opened.

Virtual midnight: in order to optimize energy efficiency at night when vehicle and pedestrian traffic is lower, the luminaire can be programmed to activate certain pre-set scenarios when it is switched on, at a specific time, or when the light sensor reaches a certain threshold. This device is integrated into the fixture and does not require the installer to make any adjustments on the lighting system. The fixture can be connected with a class II two-wire (phase+neutral) cable or a class I three-wire (phase+netural+ground wire) cable.



Virtual midnight subcode -30: fixtures can be equipped with a device to dim lights in two levels, based on virtual midnight calculation. The reduction of the luminous flux occurs without pilot wire or control phase. The average value between the time the fixture is switched on (sunset) and switched off (sunrise) is the reference point for the device and it is commonly known as "virtual midnight". A microprocessor calculates the desired switching time starting from this reference point. Factory settings are 2.5 hours before (about 10.30 p.m.) and 4.5 hours after (about 4.30 a.m.) the "virtual midnight". When the fixtures are switched on, they operate at 100%, after 4 hours they go down to 50% and after 7 hours they go up to 100% again.

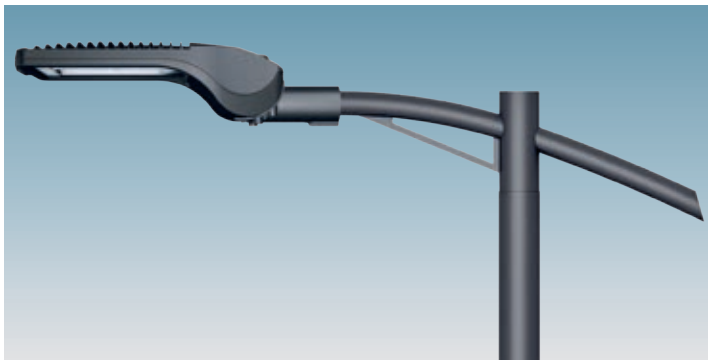


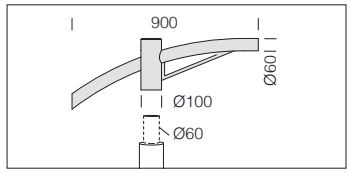
Example of customized virtual midnight setting: fixtures can be equipped with a device to dim lights in different levels, based on virtual midnight calculation. The reduction of the luminous flux occurs without pilot wire or control phase. The average value between the time the fixture is switched on (sunset) and switched off (sunrise) is the reference point for the device and it is commonly known as "virtual midnight". A microprocessor calculates the desired switching time starting from this reference point. When the fixtures are switched on, they operate at 100%, after 2 hours they go down to 75%, after 4 hours they go further down 50% and after 11 hours they go up to 100% again.

ATTENTION: *as standard, all our street fixtures with* ***subcode -00*** *are supplied with programmable driver.*
N.B. *upon request, it is possible to change virtual midnight factory settings.*

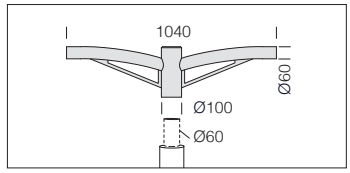
Table for the various options for managing the supply point

1-10V dimming	Virtual midnight	PLC remote control	Nema Socket	Zhaga Socket	Wi-Fi remote control (to be agreed upon)
Adjustment range from 10%-100% with 1-10V	Stand alone system with reduction of luminous flux and surge protector 6/10 KV	Point-to-point and system management and diagnosis system	It can be installed directly onto the luminaire's body, ideal for the remote control of lights		Point-to-point and system management and diagnosis system with Wi-Fi system
Ordered with **sub-code -12**	Ordered with **sub-code -30**	Ordered with **sub-code -0078**	Ordered with **sub-code -40**	Ordered with **sub-code -0054**	**on request**
Upon request: available with AC/DC converter as standard to allow operation in public lighting systems.					



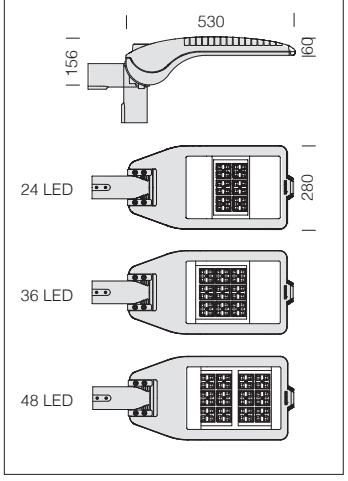


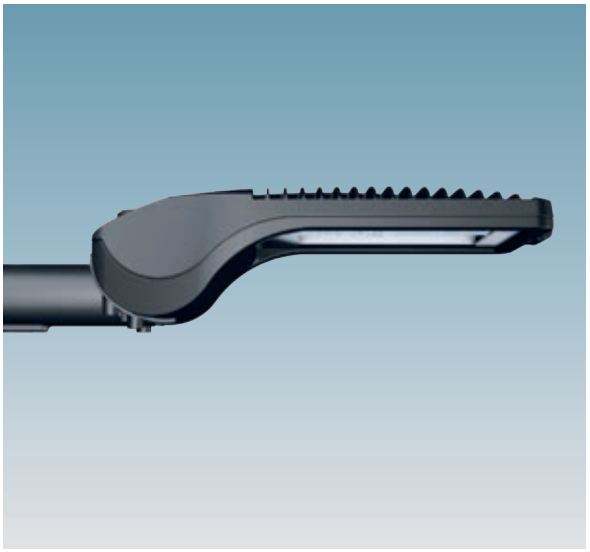
acc. 504 single arm	
anthrac.	991264-00
Suited for poles with a diameter 60mm.	

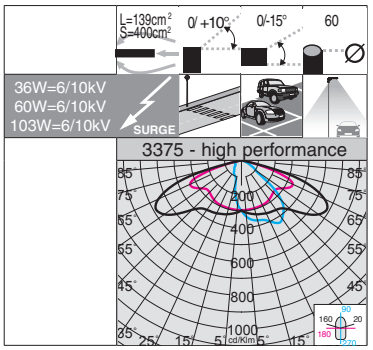


acc. 508 double arm	
anthrac.	991265-00
Suited for poles with a diameter 60mm.	

IP66 IK09







RGO Ethr | +40 C° -30 | U.V. | ZONA 1 | LOW FLICKER | 3000K | 4000K

Optics: in PMMA, highly resistant to temperature and UV radiation.

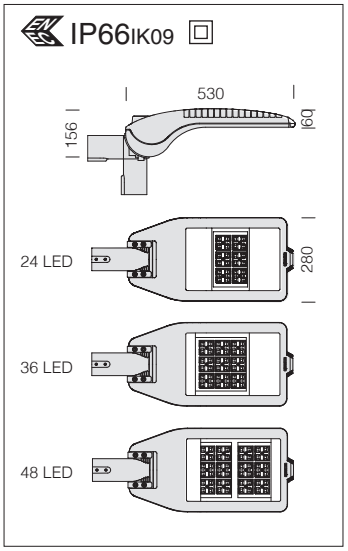
LED: Power factor ≥0.9.
Luminous flux maintenance 80%: 50.000h (L80B20).

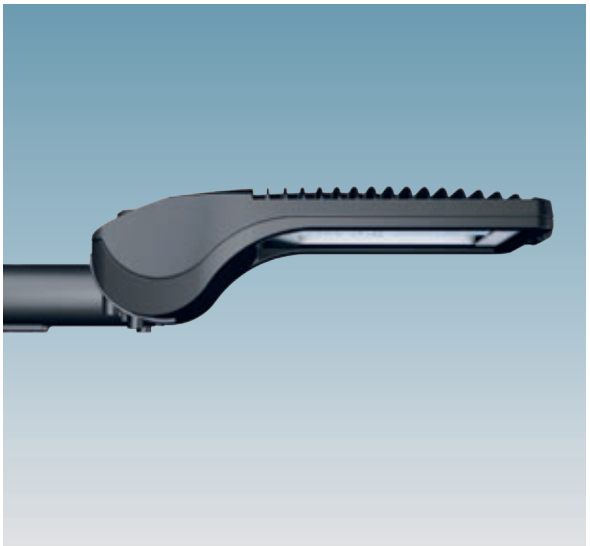
3375 Mini Stelvio - high performance

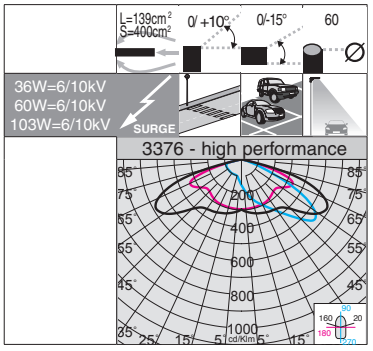
		CLD CELL			LUMEN OUTPUT (tq= 25 °C)
wattage	colour	weight	code	W tot	K - ølm - CRI
LED	anthracite	7.60	340200-00	**36**	4000K - 5523lm - CRI≥70
LED	anthracite	7.60	340200-39		3000K - 5136lm - CRI≥70
LED	anthracite	8.00	340201-00	**60**	4000K - 8262lm - CRI≥70
LED	anthracite	8.00	340201-39		3000K - 7684lm - CRI≥70
LED	anthracite	8.10	340202-00	**103**	4000K - 13483lm - CRI≥70
LED	anthracite	8.10	340202-39		3000K - 12539lm - CRI≥70

On request: possibility to control each individual light point (see table on p. 363).

IP66 IK09







RGO Ethr | +40 C° -30 | U.V. | ZONA 1 | LOW FLICKER | 3000K | 4000K

Optics: in PMMA, highly resistant to temperature and UV radiation.

LED: Power factor ≥0.9.
Luminous flux maintenance 80%: 50.000h (L80B20).

3376 Mini Stelvio - high performance - large areas

		CLD CELL			LUMEN OUTPUT (tq= 25 °C)
wattage	colour	weight	code	W tot	K - ølm - CRI
LED	anthracite	7.60	340210-00	**36**	4000K - 5333lm - CRI≥70
LED	anthracite	7.60	340210-39		3000K - 4960lm - CRI≥70
LED	anthracite	8.00	340211-00	**60**	4000K - 8129lm - CRI≥70
LED	anthracite	8.00	340211-39		3000K - 7560lm - CRI≥70
LED	anthracite	8.10	340212-00	**103**	4000K - 13267lm - CRI≥70
LED	anthracite	8.10	340212-39		3000K - 12338lm - CRI≥70

On request: possibility to control each individual light point (see table on p. 363).

RG0 Ethr

+40 C° -30

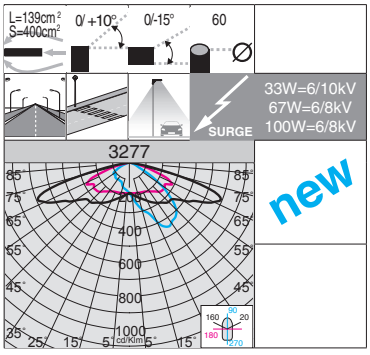
U.V.

ZONA 1

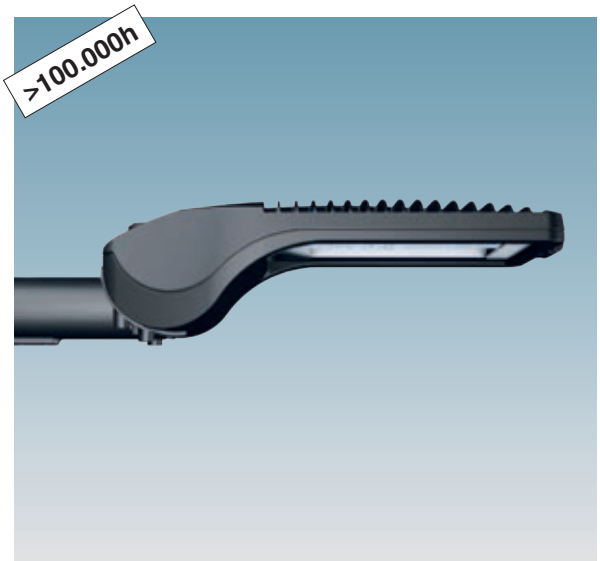
LOW FLICKER

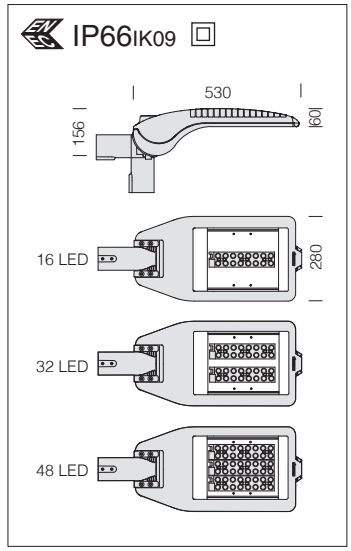
3000K

4000K



Upon request (sub-code -44)	
LED	1750K





3277 Mini Stelvio Fx T2

		CLD CELL			LUMEN OUTPUT (tq= 25 °C)
wattage (700mA)	colour	weight	code	W tot	K - ølm 700mA - CRI
LED	anthracite	7.60	330380-00	**33**	4000K - **4573lm** - CRI≥70
LED	anthracite	7.60	330380-39		3000K - **4345lm** - CRI≥70
LED	anthracite	8.00	330381-00	**67**	4000K - **9142lm** - CRI≥70
LED	anthracite	8.00	330381-39		3000K - **8685lm** - CRI≥70
LED	anthracite	8.10	330383-00	**100**	4000K - **13713lm** - CRI≥70
LED	anthracite	8.10	330383-39		3000K - **13027lm** - CRI≥70

On request: possibility to control each individual light point (see table on p. 363).

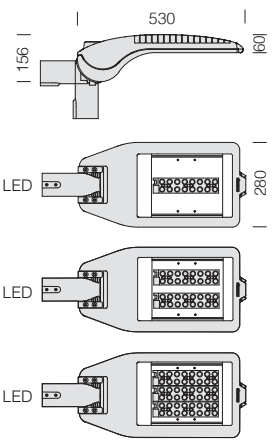
	Power supply	n.LED	W tot	K	ølm
On request	350mA	16	**17**	**4000K**	2426lm
		32	**32**		4851lm
		48	**49**		7275lm
On request	530mA	16	**25**	**4000K**	3613lm
		32	**52**		7223lm
		48	**74**		10834lm

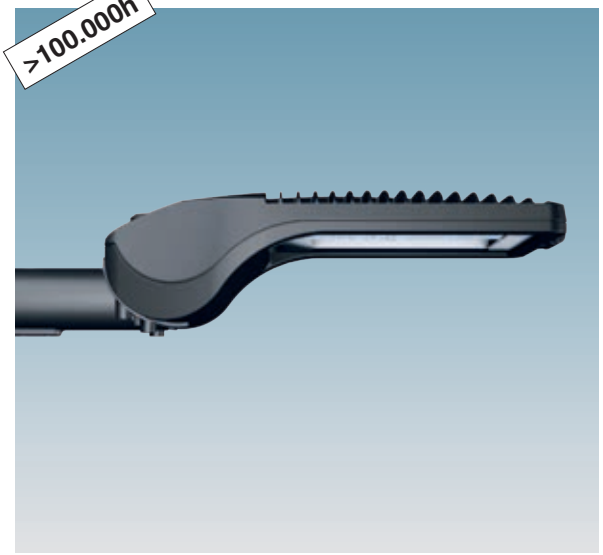
n.LED	W tot	K	ølm
16	**17**	**3000K**	2305lm
32	**32**		4607lm
48	**49**		6911lm
16	**25**	**3000K**	3433lm
32	**52**		6862lm
48	**74**		10293lm

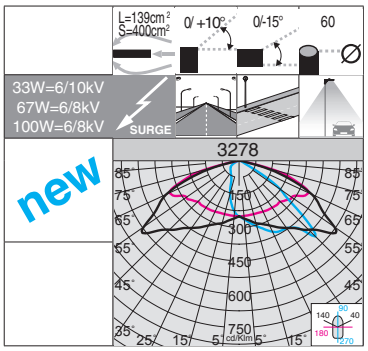
Optics: in PMMA, highly resistant to temperature and UV radiation.

LED: Power factor ≥0.9.
Luminous flux maintenance 80%: 100.000h (L80B10).

IP66 IK09







Upon request (sub-code -44)	
LED	1750K

Optics: in PMMA, highly resistant to temperature and UV radiation.

LED: Power factor ≥0.9.
Luminous flux maintenance 80%: 100.000h (L80B10).

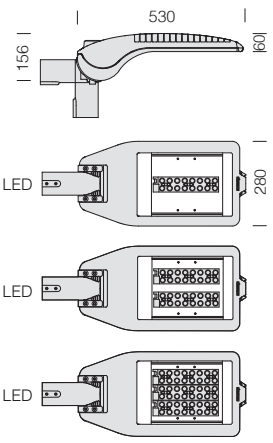
3278 Mini Stelvio Fx T3

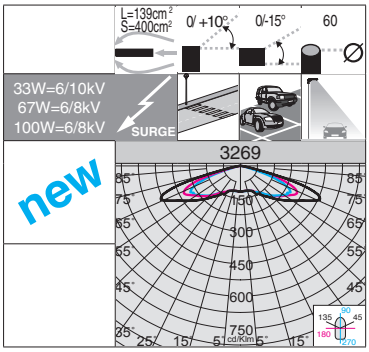
		CLD CELL			LUMEN OUTPUT (tq= 25 °C)
wattage (700mA)	colour	weight	code	W tot	K - ølm 700mA - CRI
LED	anthracite	7.60	330390-00	**33**	4000K - **4728lm** - CRI≥70
LED	anthracite	7.60	330390-39		3000K - **4491lm** - CRI≥70
LED	anthracite	8.00	330391-00	**67**	4000K - **9456lm** - CRI≥70
LED	anthracite	8.00	330391-39		3000K - **8983lm** - CRI≥70
LED	anthracite	8.10	330393-00	**100**	4000K - **14178lm** - CRI≥70
LED	anthracite	8.10	330393-39		3000K - **13470lm** - CRI≥70

	Power supply	n.LED	W tot	K	ølm
On request	350mA	16	**17**	**4000K**	2507lm
		32	**32**		5016lm
		48	**49**		7521lm
On request	530mA	16	**25**	**4000K**	3735lm
		32	**52**		7470lm
		48	**74**		11200lm

n.LED	W tot	K	ølm
16	**17**	**3000K**	2383lm
32	**32**		4766lm
48	**49**		7145lm
16	**25**	**3000K**	3548lm
32	**52**		7096lm
48	**74**		10640lm

IP66 IK09





Upon request (sub-code -44)	
LED	1750K

Optics: in PMMA, highly resistant to temperature and UV radiation.

LED: Power factor ≥0.9.
Luminous flux maintenance 80%: 100.000h (L80B10).

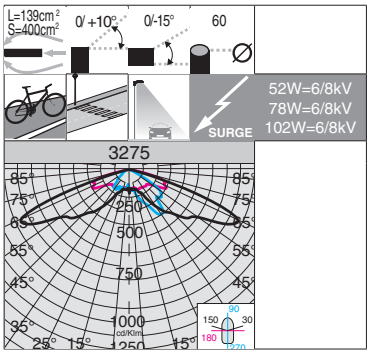
3269 Mini Stelvio Fx T5

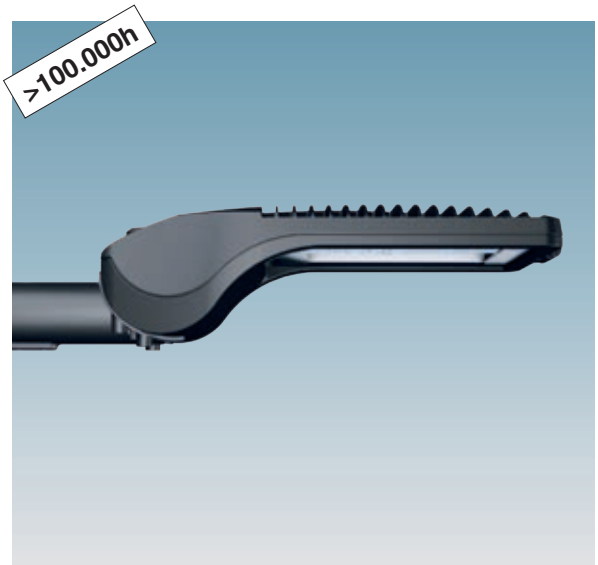
		CLD CELL			LUMEN OUTPUT (tq= 25 °C)
wattage (700mA)	colour	weight	code	W tot	K - ølm 700mA - CRI
LED	anthracite	7.60	330460-00	**33**	4000K - **4510lm** - CRI≥70
LED	anthracite	7.60	330460-39		3000K - **4284lm** - CRI≥70
LED	anthracite	8.00	330461-00	**67**	4000K - **8910lm** - CRI≥70
LED	anthracite	8.00	330461-39		3000K - **8464lm** - CRI≥70
LED	anthracite	8.10	330463-00	**100**	4000K - **13366lm** - CRI≥70
LED	anthracite	8.10	330463-39		3000K - **12698lm** - CRI≥70

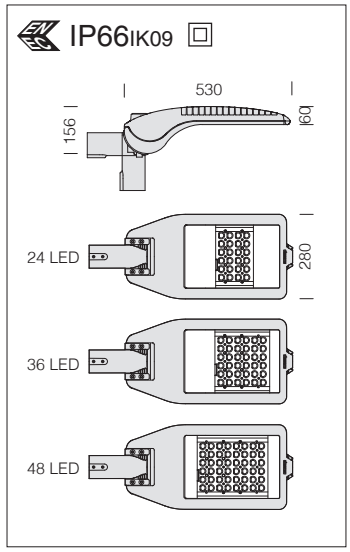
On request: possibility to control each individual light point (see table on p. 363).

	Power supply	n.LED	W tot	K	ølm
On request	350mA	16	**17**	**4000K**	2392lm
		32	**32**		4727lm
		48	**49**		7091lm
On request	530mA	16	**25**	**4000K**	3563lm
		32	**52**		7039lm
		48	**74**		10559lm

n.LED	W tot	K	ølm
16	**17**	**3000K**	2273lm
32	**32**		4490lm
48	**49**		6736lm
16	**25**	**3000K**	3384lm
32	**52**		6687lm
48	**74**		10031lm





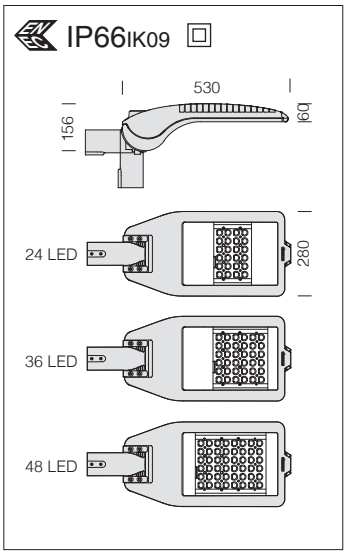


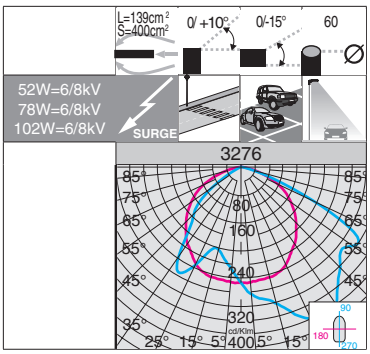
3275 Mini Stelvio plus					
		CLD CELL			LUMEN OUTPUT (tq= 25 °C)
wattage (700mA)	colour	weight	code	W tot	K - ølm 700mA - CRI
LED	anthracite	7.60	330360-00	**52**	4000K - 5424lm - CRI≥70
LED	anthracite	8.00	330361-00	**78**	4000K - 8135lm - CRI≥70
LED	anthracite	8.10	330362-00	**102**	4000K - 10848lm - CRI≥70
On request: possibility to control each individual light point (see table on p. 363).					

Optics: in PMMA, highly resistant to temperature and UV radiation.

LED: Power factor ≥0.9.
Luminous flux maintenance 80%: 100.000h (L80B10).

	Power supply	n.LED	W tot	ølm
On request	350mA	24	**27**	2948lm
		36	**39**	4422lm
		48	**53**	5897lm
On request	530mA	24	**40**	4316lm
		36	**60**	6475lm
		48	**78**	8635lm





Optics: in PMMA, highly resistant to temperature and UV radiation.

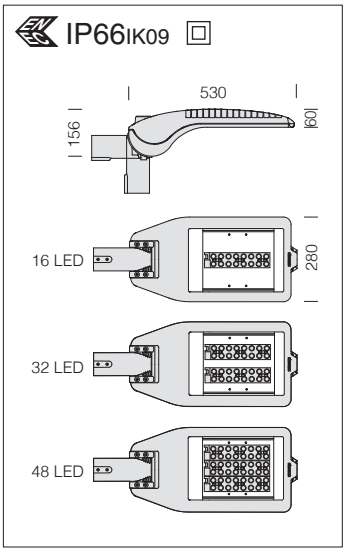
LED: Power factor ≥0.9.
Luminous flux maintenance 80%: 100.000h (L80B10).

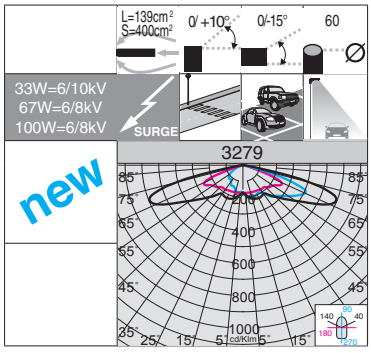
3276 Mini Stelvio plus - asymmetric

		CLD CELL			LUMEN OUTPUT (tq= 25 °C)
wattage (700mA)	colour	weight	code	W tot	K - ølm 700mA - CRI
LED	anthracite	7.60	330370-00	**52**	4000K - 5502lm - CRI≥70
LED	anthracite	8.00	330371-00	**78**	4000K - 7718lm - CRI≥70
LED	anthracite	8.10	330372-00	**102**	4000K - 10326lm - CRI≥70

On request: possibility to control each individual light point (see table on p. 363).

	Power supply	n.LED	W tot	ølm
On request	350mA	24	**27**	2991lm
		36	**39**	4488lm
		48	**53**	5983lm
On request	530mA	24	**40**	4380lm
		36	**60**	6569lm
		48	**78**	8759lm





Upon request (sub-code -44)	
LED	1750K

Optics: in PMMA, highly resistant to temperature and UV radiation.

LED: Power factor ≥0.9.
Luminous flux maintenance 80%: 100.000h (L80B10).

3279 Mini Stelvio Fx T4 - asymmetric

		CLD CELL			LUMEN OUTPUT (tq= 25 °C)
wattage (700mA)	colour	weight	code	W tot	K - ølm 700mA - CRI
LED	anthracite	7.60	330450-00	**33**	4000K - **4571lm** - CRI≥70
LED	anthracite	7.60	330450-39		3000K - **4342lm** - CRI≥70
LED	anthracite	8.00	330451-00	**67**	4000K - **9141lm** - CRI≥70
LED	anthracite	8.00	330451-39		3000K - **8684lm** - CRI≥70
LED	anthracite	8.10	330453-00	**100**	4000K - **13712lm** - CRI≥70
LED	anthracite	8.10	330453-39		3000K - **13027lm** - CRI≥70

On request: possibility to control each individual light point (see table on p. 363).

	Power supply	n.LED	W tot	K	ølm
On request	350mA	16	**17**	**4000K**	2425lm
		32	**32**		4850lm
		48	**49**		7274lm
On request	530mA	16	**25**	**4000K**	3611lm
		32	**52**		7221lm
		48	**74**		10832lm

n.LED	W tot	K	ølm
16	**17**	**3000K**	2304lm
32	**32**		4607lm
48	**49**		6911lm
16	**25**	**3000K**	3430lm
32	**52**		6861lm
48	**74**		10290lm


30
STOP

The products of the Stelvio family are compliant with all applicable tests (third-party certification) pursuant to standard **ANSI C136.31: Street Lighting – Luminaire Vibration.**
- Test level: 3.0G Level 2 for bridge/overpass applications.

Low Flicker: product with a very low flicker; uniform light for greater eye protection.

Housing and cover: in die-cast aluminium and designed with a very small surface exposed to wind. Cooling fins are integrated into the cover.

Pole connection: in die-cast aluminium and with gaskets to secure the frame according to different inclinations. Adjustable ranges: between 0° and 15° for side mount; and between 0° and 10° for mast-top mounting. Inclination pace: 5°. Suited for poles with a diameter 63-60mm

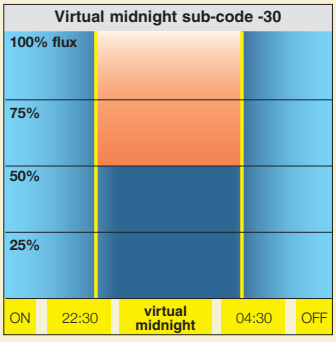
Diffuser: clear, tempered glass, 4 mm thick, resistant to thermal shock and impacts (UNI-EN 12150-1 : 2001)

Coating: the standard powder coating consists of a first metal surface pre-treatment stage and of single layer of UV-stabilised, corrosion and salt resistant polyester powder coating.

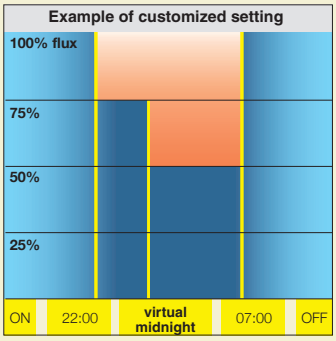
Standard supply: Automatic temperature control inside the device with automatic resetting. Safety diode to protect against voltage peaks compliant with EN 61547. With dedicated electronic device to protect the LED module.

Equipment: complete with IP67 airtight connector for mains connection. Supplied with double insulation switch that cuts off electricity when the cover is opened.

Virtual midnight: in order to optimize energy efficiency at night when vehicle and pedestrian traffic is lower, the luminaire can be programmed to activate certain pre-set scenarios when it is switched on, at a specific time, or when the light sensor reaches a certain threshold. This device is integrated into the fixture and does not require the installer to make any adjustments on the lighting system. The fixture can be connected with a class II two-wire (phase+neutral) cable or a class I three-wire (phase+netural+ground wire) cable.



Virtual midnight subcode -30: fixtures can be equipped with a device to dim lights in two levels, based on virtual midnight calculation. The reduction of the luminous flux occurs without pilot wire or control phase. The average value between the time the fixture is switched on (sunset) and switched off (sunrise) is the reference point for the device and it is commonly known as "virtual midnight". A microprocessor calculates the desired switching time starting from this reference point. Factory settings are 2.5 hours before (about 10.30 p.m.) and 4.5 hours after (about 4.30 a.m.) the "virtual midnight". When the fixtures are switched on, they operate at 100%, after 4 hours they go down to 50% and after 7 hours they go up to 100% again.

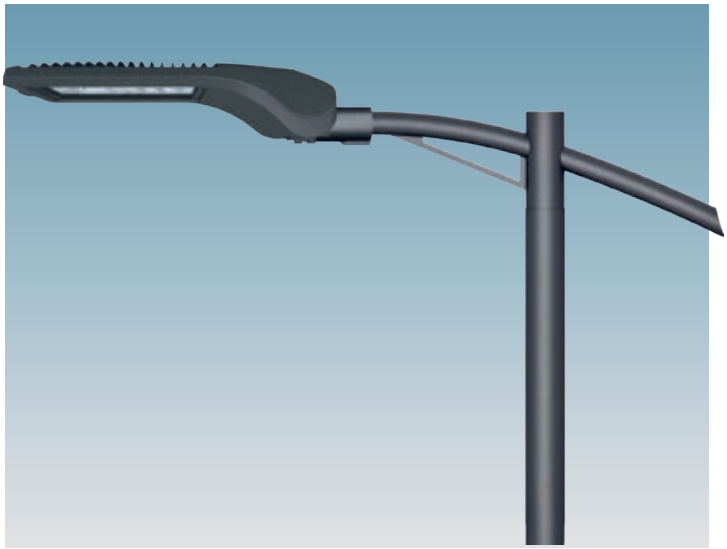


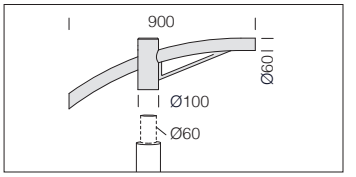
Example of customized virtual midnight setting: fixtures can be equipped with a device to dim lights in different levels, based on virtual midnight calculation. The reduction of the luminous flux occurs without pilot wire or control phase. The average value between the time the fixture is switched on (sunset) and switched off (sunrise) is the reference point for the device and it is commonly known as "virtual midnight". A microprocessor calculates the desired switching time starting from this reference point. When the fixtures are switched on, they operate at 100%, after 2 hours they go down to 75%, after 4 hours they go further down 50% and after 11 hours they go up to 100% again.

ATTENTION: *as standard, all our street fixtures with* ***subcode -00*** *are supplied with programmable driver.*
N.B. *upon request, it is possible to change virtual midnight factory settings.*

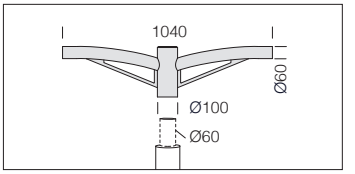
Table for the various options for managing the supply point

1-10V dimming	Virtual midnight	PLC remote control	Nema Socket	Zhaga Socket	Wi-Fi remote control (to be agreed upon)
Adjustment range from 10%-100% with 1-10V	Stand alone system with reduction of luminous flux and surge protector 6/10 KV	Point-to-point and system management and diagnosis system	It can be installed directly onto the luminaire's body, ideal for the remote control of lights		Point-to-point and system management and diagnosis system with Wi-Fi system
Ordered with **sub-code -12**	Ordered with **sub-code -30**	Ordered with **sub-code -0078**	Ordered with **sub-code -40**	Ordered with **sub-code -0054**	**on request**
Upon request: available with AC/DC converter as standard to allow operation in public lighting systems.					

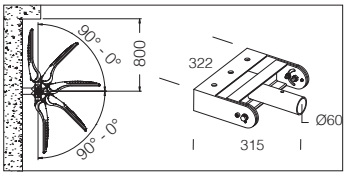




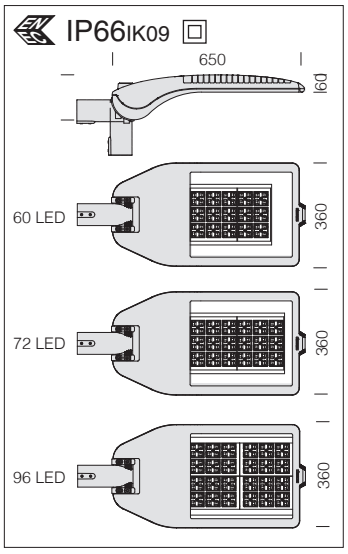
acc. 504 single arm	
anthrac.	991264-00
Suited for poles with a diameter 60mm.	

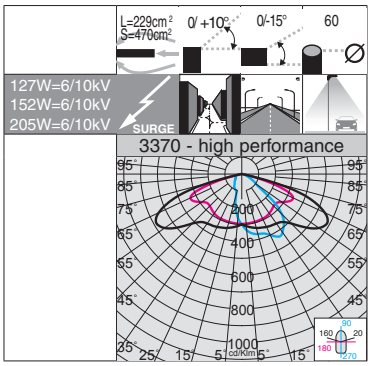


acc. 508 double arm	
anthrac.	991265-00
Suited for poles with a diameter 60mm.	



acc. 578 adjustable bracket	
anthrac.	997709-00
Adjustable bracket for wall mounting or for use on the towers.	





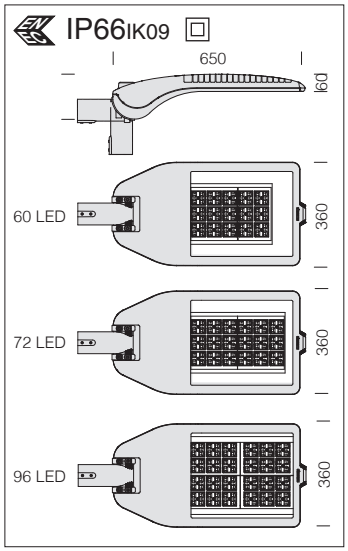
Optics: in PMMA, highly resistant to temperature and UV radiation.

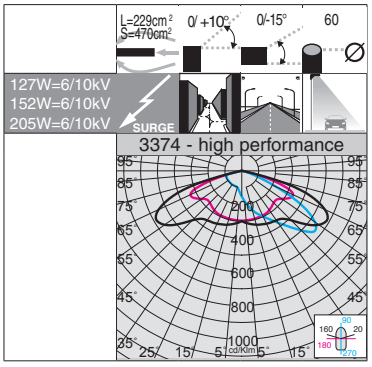
LED: Power factor ≥0.9.
Luminous flux maintenance 80%: 80.000h (L80B20).

3370 Stelvio - high performance

		CLD CELL			LUMEN OUTPUT (tq= 25 °C)
wattage	colour	weight	code	W tot	K - ølm - CRI
LED	anthracite	10.50	340250-00	**127**	4000K - 16892lm - CRI≥70
LED	anthracite	10.50	340250-39		3000K - 15710lm - CRI≥70
LED	anthracite	11.00	340251-00	**152**	4000K - 20594lm - CRI≥70
LED	anthracite	11.00	340251-39		3000K - 19152lm - CRI≥70
LED	anthracite	12.00	340252-00	**205**	4000K - 27458lm - CRI≥70
LED	anthracite	12.00	340252-39		3000K - 25536lm - CRI≥70

On request: possibility to control each individual light point (see table on p. 371).





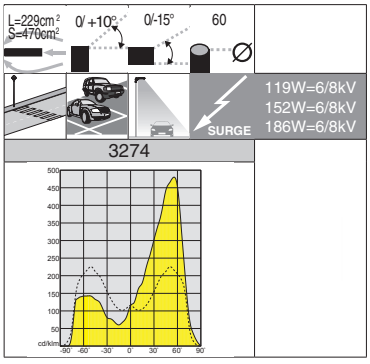
Optics: in PMMA, highly resistant to temperature and UV radiation.

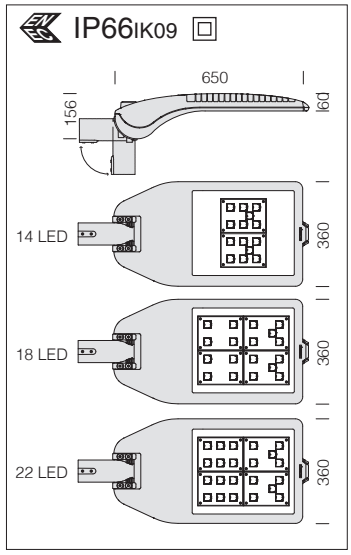
LED: Power factor ≥0.9.
Luminous flux maintenance 80%: 80.000h (L80B20).

3374 Stelvio - high performance - large areas

		CLD CELL			LUMEN OUTPUT (tq= 25 °C)
wattage	colour	weight	code	W tot	K - ølm - CRI
LED	anthracite	10.50	340260-00	**127**	4000K - 16348lm - CRI≥70
LED	anthracite	10.50	340260-39		3000K - 15204lm - CRI≥70
LED	anthracite	11.00	340261-00	**152**	4000K - 19920lm - CRI≥70
LED	anthracite	11.00	340261-39		3000K - 18526lm - CRI≥70
LED	anthracite	12.00	340262-00	**205**	4000K - 26560lm - CRI≥70
LED	anthracite	12.00	340262-39		3000K - 24701lm - CRI≥70

On request: possibility to control each individual light point (see table on p. 371).





Optics: in PMMA, highly resistant to temperature and UV radiation. Flow recovery in V2 polycarbonate.

LED: Power factor ≥0.9.
Luminous flux maintenance 80%: >100.000h (L80B10).

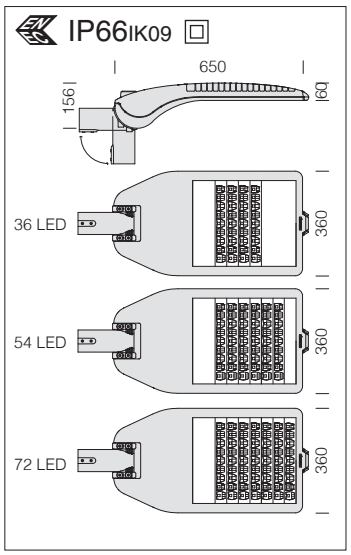
3274 - Stelvio 2 plus - asymmetric

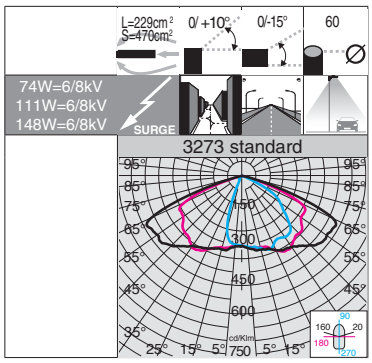
		CLD CELL			LUMEN OUTPUT (tq= 25 °C)
wattage (700mA)	colour	weight	code	W tot	K - ølm 700mA - CRI
LED	anthracite	11.30	320360-00	**119**	4000K - 12817lm - CRI≥70
LED	anthracite	11.30	320360-39		3000K - 11920lm - CRI≥70
LED	anthracite	11.40	320361-00	**152**	4000K - 16481lm - CRI≥70
LED	anthracite	11.40	320361-39		3000K - 15327lm - CRI≥70
LED	anthracite	12.80	320363-00	**186**	4000K - 20144lm - CRI≥70
LED	anthracite	12.80	320363-39		3000K - 18734lm - CRI≥70

On request: possibility to control each individual light point (see table on p. 371).

	Power supply	n.LED	W tot	K	ølm
On request	350mA	14	**58**	**4000K**	6408lm
		18	**75**		8240lm
		22	**91**		10072lm
On request	530mA	14	**90**	**4000K**	9704lm
		18	**116**		12478lm
		22	**142**		15251lm

n.LED	W tot	K	ølm
14	**58**	**3000K**	5959lm
18	**75**		7663lm
22	**91**		9367lm
14	**90**	**3000K**	9025lm
18	**116**		11605lm
22	**142**		14183lm





RG0 Ethr

+40 C° -30

U.V.

ZONA 1

LOW FLICKER

3000K

4000K

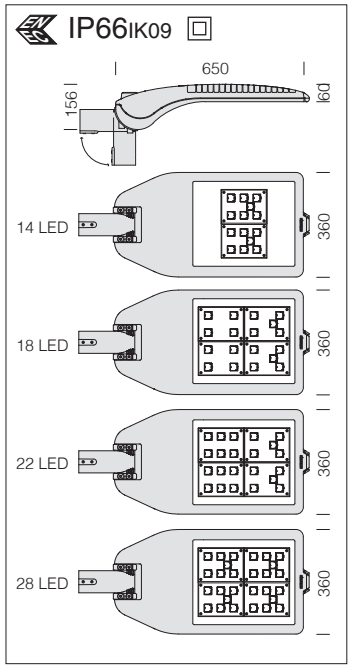
Optics: V0 polycarbonate with micro-faceted finish. Flow recovery in V2 polycarbonate.

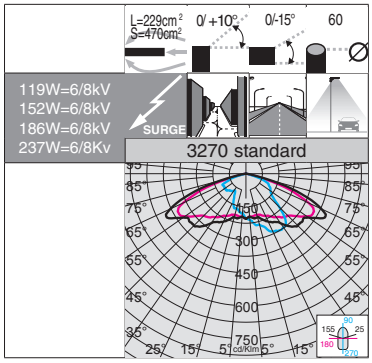
LED: Power factor ≥0.9.
Luminous flux maintenance 80%: >100.000h (L80B10).

Sub-code -30: version with **virtual midnight**.

3273 - Stelvio 1 plus S

		CLD CELL		CLD CELL		LUMEN OUTPUT (tq= 25 °C)
wattage (700mA)	colour	weight	code	code	W tot	K - ølm 700mA - CRI
LED	anthracite	10.00	330344-00	330344-30	**74**	4000K - 8646lm - CRI>70
LED	anthracite	10.00	330344-39			3000K - 8041lm - CRI≥70
LED	anthracite	11.00	330345-00	330345-30	**111**	4000K - 13138lm - CRI>70
LED	anthracite	11.00	330345-39			3000K - 12218lm - CRI≥70
LED	anthracite	12.00	330347-00	330347-30	**148**	4000K - 17517lm - CRI>70
LED	anthracite	12.00	330347-39			3000K - 16291lm - CRI≥70





RG0 Ethr

+40 C° -30

U.V.

ZONA 1

LOW FLICKER

3000K

4000K

Optics: in PMMA, highly resistant to temperature and UV radiation. Flow recovery in V2 polycarbonate.

LED: Power factor ≥0.9.
Luminous flux maintenance 80%: >100.000h (L80B10).

Sub-code -30: version with **virtual midnight**.

On request: possibility to control each individual light point (see table on p. 371).

3270 - Stelvio 1 plus

		CLD CELL		CLD CELL		LUMEN OUTPUT (tq= 25 °C)
wattage (700mA)	colour	weight	code	code	W tot	K - ølm 700mA - CRI
LED	anthracite	11.30	330342-00	330342-30	**119**	4000K - 13099lm - CRI≥70
LED	anthracite	11.30	330342-39			3000K - 12182lm - CRI≥70
LED	anthracite	11.40	330348-00	330348-30	**152**	4000K - 16842lm - CRI≥70
LED	anthracite	11.40	330348-39			3000K - 15663lm - CRI≥70
LED	anthracite	12.80	330343-00	330343-30	**186**	4000K - 20586lm - CRI≥70
LED	anthracite	12.80	330343-39			3000K - 19145lm - CRI≥70
LED	anthracite	12.80	330349-00	330349-30	**237**	4000K - 26198lm - CRI≥70
LED	anthracite	12.80	330349-39			3000K - 24364lm - CRI≥70

	Power supply	n.LED	W tot	K	ølm
On request	350mA	14	**58**	**4000K**	7214lm
		18	**75**		9276lm
		22	**91**		11340lm
		28	**116**		13099lm
On request	530mA	14	**90**	**4000K**	9824lm
		18	**116**		12630lm
		22	**142**		15437lm
		28	**179**		19836lm

n.LED	W tot	K	ølm
14	**58**	**3000K**	6709lm
18	**75**		8627lm
22	**91**		10546lm
28	**116**		12182lm
14	**90**	**3000K**	9136lm
18	**116**		11746lm
22	**142**		14356lm
28	**179**		18447lm

Housing and cover: in die-cast aluminium and designed with a very small surface exposed to wind. Cooling fins are integrated into the cover.

Pole connection: in die-cast aluminium and with gaskets to secure the frame according to different inclinations. Adjustable ranges: between 0° and 20° for side mount; and between 0° and 15° for mast-top mounting. Inclination pace: 5°. Suited for poles with a diameter 46-76.

Diffuser: clear, tempered glass, 4 mm thick, resistant to thermal shock and impacts (UNI-EN 12150-1 : 2001)

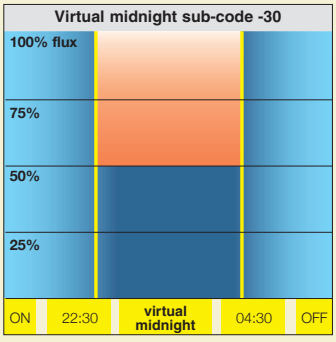
Coating: the standard powder coating consists of a first metal surface pre-treatment stage and of single layer of UV-stabilised, corrosion and salt resistant polyester powder coating.

Standard supply: automatic temperature control inside the device with automatic resetting. Safety diode to protect against voltage peaks compliant with EN 61547. With dedicated electronic device to protect the LED module. Complete with quick connection.

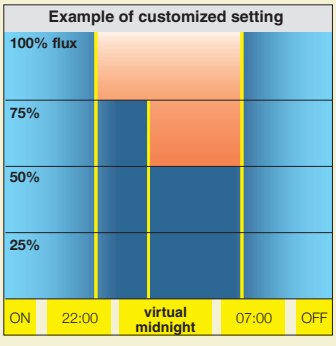
Energy-saving: the possibility to choose the correct drive current for LEDs will allow you to have the right power under specific design conditions, and also help you deal with maintenance and retrofitting problems. Using a lower current will improve the efficiency of fixtures and therefore increase energy savings, whilst a higher current will result in a higher light flux so that you can reduce the number of fixtures.

Low Flicker: product with a very low flicker; uniform light for greater eye protection.

Virtual midnight: in order to optimize energy efficiency at night when vehicle and pedestrian traffic is lower, the luminaire can be programmed to activate certain pre-set scenarios when it is switched on, at a specific time, or when the light sensor reaches a certain threshold. This device is integrated into the fixture and does not require the installer to make any adjustments on the lighting system. The fixture can be connected with a class II two-wire (phase+neutral) cable or a class I three-wire (phase+netural+ground wire) cable.



Virtual midnight subcode -30: fixtures can be equipped with a device to dim lights in two levels, based on virtual midnight calculation. The reduction of the luminous flux occurs without pilot wire or control phase. The average value between the time the fixture is switched on (sunset) and switched off (sunrise) is the reference point for the device and it is commonly known as “virtual midnight”. A microprocessor calculates the desired switching time starting from this reference point. Factory settings are 2.5 hours before (about 10.30 p.m.) and 4.5 hours after (about 4.30 a.m.) the “virtual midnight”. When the fixtures are switched on, they operate at 100%, after 4 hours they go down to 50% and after 7 hours they go up to 100% again.

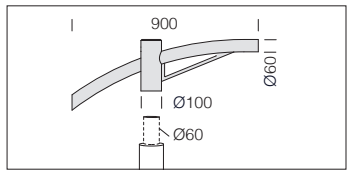


Example of customized virtual midnight setting: fixtures can be equipped with a device to dim lights in different levels, based on virtual midnight calculation. The reduction of the luminous flux occurs without pilot wire or control phase. The average value between the time the fixture is switched on (sunset) and switched off (sunrise) is the reference point for the device and it is commonly known as “virtual midnight”. A microprocessor calculates the desired switching time starting from this reference point. When the fixtures are switched on, they operate at 100%, after 2 hours they go down to 75%, after 4 hours they go further down 50% and after 11 hours they go up to 100% again.

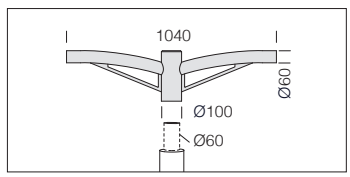
ATTENTION: *as standard, all our street fixtures with* ***subcode -00*** *are supplied with programmable driver.*
N.B. *upon request, it is possible to change virtual midnight factory settings.*

Table for the various options for managing the supply point

1-10V dimming	Virtual midnight	PLC remote control	Nema Socket	Zhaga Socket	Wi-Fi remote control (to be agreed upon)
Adjustment range from 10%-100% with 1-10V	Stand alone system with reduction of luminous flux and surge protector 6/10 KV	Point-to-point and system management and diagnosis system	It can be installed directly onto the luminaire's body, ideal for the remote control of lights		Point-to-point and system management and diagnosis system with Wi-Fi system
Ordered with **sub-code -12**	Ordered with **sub-code -30**	Ordered with **sub-code -0078**	Ordered with **sub-code -40**	Ordered with **sub-code -0054**	**on request**
Upon request: available with AC/DC converter as standard to allow operation in public lighting systems.					

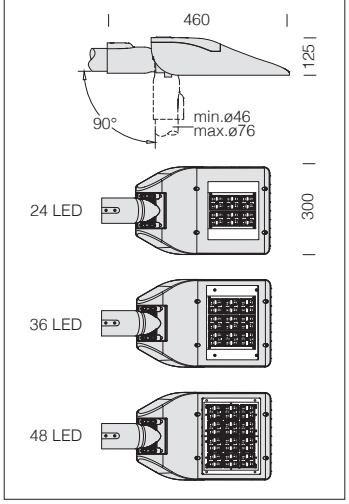


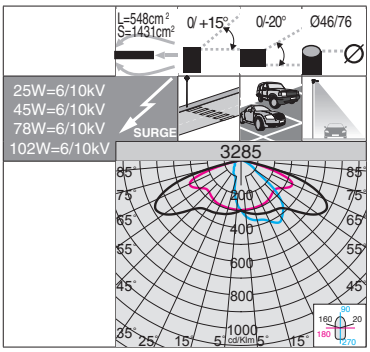
acc. 504 single arm	
grey	991262-00
Suited for poles with a diameter 60mm.	



acc. 508 double arm	
grey	991266-00
Suited for poles with a diameter 60mm.	

IP66 IK09





RG0 Ethr
+40 C° -30
U.V.
ZONA 1
LOW FLICKER
3000K
4000K

Optics: in PMMA, highly resistant to temperature and UV radiation.

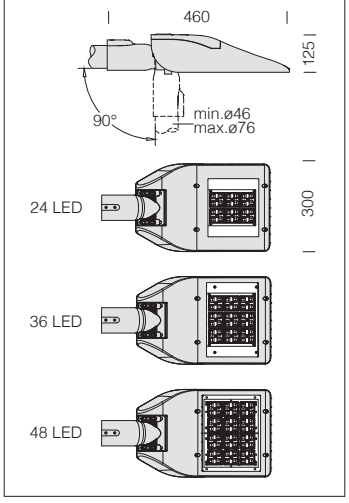
LED: Power factor ≥0,9.
Luminous flux maintenance 80%: 80.000h (L80B20).

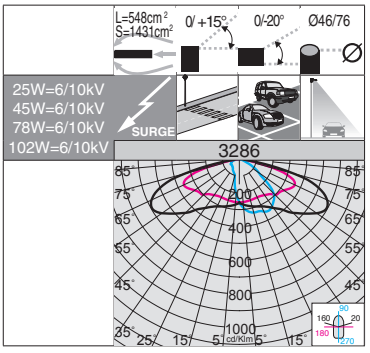
3285 Rolle - high performance

		CLD CELL			LUMEN OUTPUT (tq= 25 °C)
wattage	colour	weight	code	W tot	K - ølm - CRI
LED	grey	6.50	340100-00	**25**	4000K - 4346lm - CRI 70
LED	grey	6.50	340100-39		3000K - 4287lm - CRI 70
LED	grey	7.00	340101-00	**45**	4000K - 7412lm - CRI 70
LED	grey	7.00	340101-39		3000K - 7266lm - CRI 70
LED	grey	7.00	340102-00	**78**	4000K - 11561lm - CRI 70
LED	grey	7.00	340102-39		3000K - 11221lm - CRI 70
LED	grey	7.00	340103-00	**102**	4000K - 15415lm - CRI 70
LED	grey	7.00	340103-39		3000K - 13828lm - CRI 70

On request: possibility to control each individual light point (see table on p. 377).

IP66 IK09





RG0 Ethr
+40 C° -30
U.V.
ZONA 1
LOW FLICKER
3000K
4000K

Optics: in PMMA, highly resistant to temperature and UV radiation.

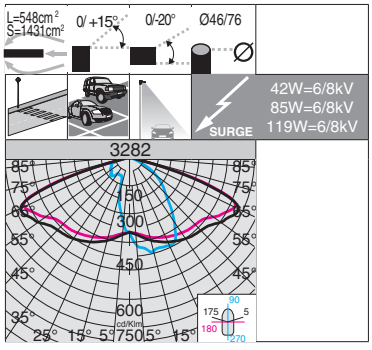
LED: Power factor ≥0,9.
Luminous flux maintenance 80%: 80.000h (L80B20).

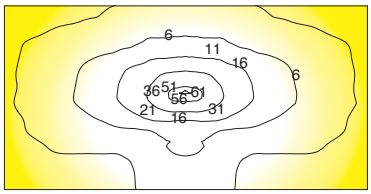
3286 Rolle - high performance

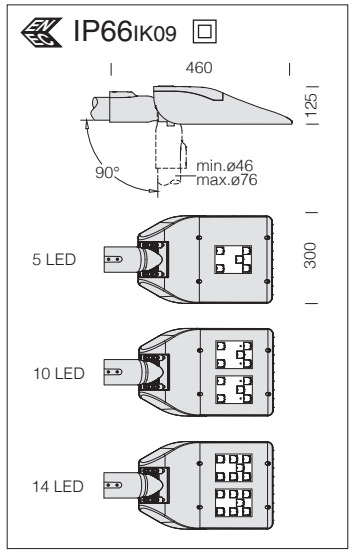
		CLD CELL			LUMEN OUTPUT (tq= 25 °C)
wattage	colour	weight	code	W tot	K - ølm - CRI
LED	grey	6.50	340110-00	**25**	4000K - 4229lm - CRI 70
LED	grey	6.50	340110-39		3000K - 4172lm - CRI 70
LED	grey	7.00	340111-00	**45**	4000K - 7212lm - CRI 70
LED	grey	7.00	340111-39		3000K - 7071lm - CRI 70
LED	grey	7.00	340112-00	**78**	4000K - 11251lm - CRI 70
LED	grey	7.00	340112-39		3000K - 10920lm - CRI 70
LED	grey	7.00	340113-00	**102**	4000K - 15001lm - CRI 70
LED	grey	7.00	340113-39		3000K - 13033lm - CRI 70

On request: possibility to control each individual light point (see table on p. 377).

Rolle - LED - design Alessandro Pedretti







3282 Rolle - T3					
		CLD CELL			LUMEN OUTPUT (tq= 25 °C)
wattage (700mA)	colour	weight	code	W tot	K - ølm 700mA - CRI
LED	grey	7.70	330420-00	**42**	4000K - 4606lm - CRI 70
LED	grey	7.70	330420-39		3000K - 4284lm - CRI 70
LED	grey	7.70	330421-00	**85**	4000K - 9214lm - CRI 70
LED	grey	7.70	330421-39		3000K - 8569lm - CRI 70
LED	grey	7.70	330422-00	**119**	4000K - 12900lm - CRI 70
LED	grey	7.70	330422-39		3000K - 11997lm - CRI 70
On request: possibility to control each individual light point (see table on p. 377).					

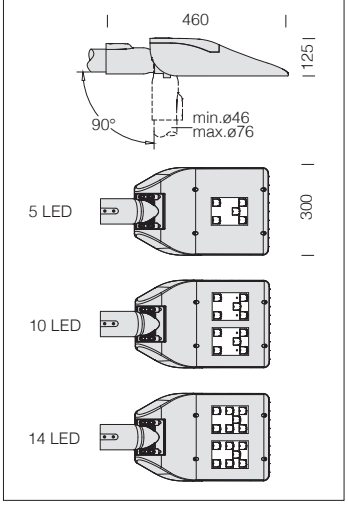
Optics: in PMMA, highly resistant to temperature and UV radiation. Flow recovery in V2 polycarbonate.

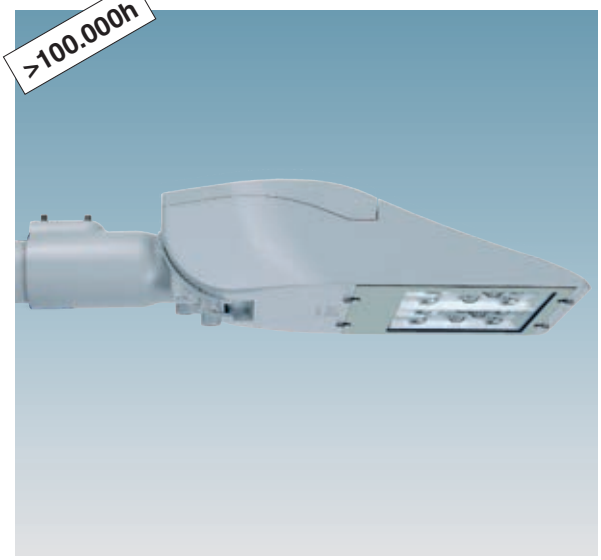
LED: Power factor ≥0,9.
Luminous flux maintenance 80%: >100.000h (L80B10).

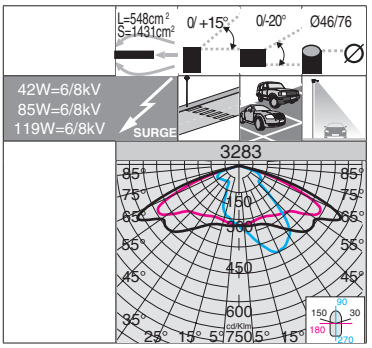
	Power supply	n.LED	W tot	K	ølm
On request	350mA	5	**21**	**4000K**	2538lm
		10	**42**		5077lm
		14	**58**		7107lm
On request	530mA	5	**32**	**4000K**	3455lm
		10	**64**		6910lm
		14	**90**		9675lm

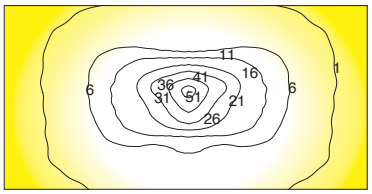
n.LED	W tot	K	ølm
5	**21**	**3000K**	2360lm
10	**42**		4722lm
14	**58**		6610lm
5	**32**	**3000K**	3213lm
10	**64**		6426lm
14	**90**		8998lm

IP66 IK09









Optics: in PMMA, highly resistant to temperature and UV radiation. Flow recovery in V2 polycarbonate.

LED: Power factor ≥0,9.
Luminous flux maintenance 80%: >100.000h (L80B10).

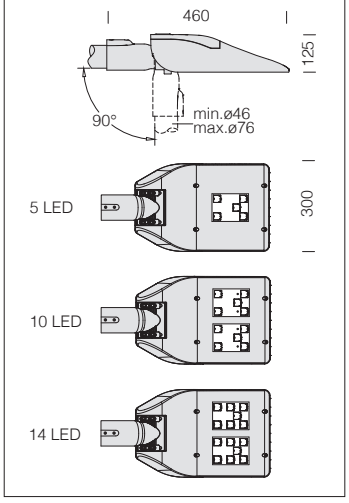
3283 Rolle - T4

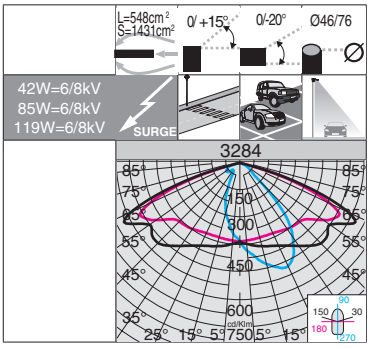
		CLD CELL			LUMEN OUTPUT (tq= 25 °C)
wattage (700mA)	colour	weight	code	W tot	K - ølm 700mA - CRI
LED	grey	7.70	330430-00	42	4000K - 4623lm - CRI 70
LED	grey	7.70	330430-39		3000K - 4299lm - CRI 70
LED	grey	7.70	330431-00	85	4000K - 9247lm - CRI 70
LED	grey	7.70	330431-39		3000K - 8600lm - CRI 70
LED	grey	7.70	330432-00	119	4000K - 12946lm - CRI 70
LED	grey	7.70	330432-39		3000K - 12040lm - CRI 70

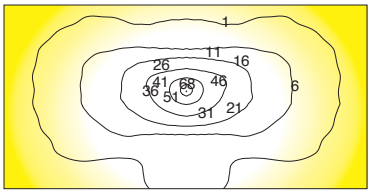
	Power supply	n.LED	W tot	K	ølm
On request	350mA	5	21	4000K	2548lm
		10	42		5096lm
		14	58		7133lm
On request	530mA	5	32	4000K	3467lm
		10	64		6935lm
		14	90		9709lm

n.LED	W tot	K	ølm
5	21	3000K	2370lm
10	42		4739lm
14	58		6634lm
5	32	3000K	3224lm
10	64		6450lm
14	90		9029lm

IP66 IK09







Optics: in PMMA, highly resistant to temperature and UV radiation. Flow recovery in V2 polycarbonate.

LED: Power factor ≥0,9.
Luminous flux maintenance 80%: >100.000h (L80B10).

3284 Rolle - T5

		CLD CELL			LUMEN OUTPUT (tq= 25 °C)
wattage (700mA)	colour	weight	code	W tot	K - ølm 700mA - CRI
LED	grey	7.70	330440-00	42	4000K - 4659lm - CRI 70
LED	grey	7.70	330440-39		3000K - 4333lm - CRI 70
LED	grey	7.70	330441-00	85	4000K - 9320lm - CRI 70
LED	grey	7.70	330441-39		3000K - 8668lm - CRI 70
LED	grey	7.70	330442-00	119	4000K - 13049lm - CRI 70
LED	grey	7.70	330442-39		3000K - 12136lm - CRI 70

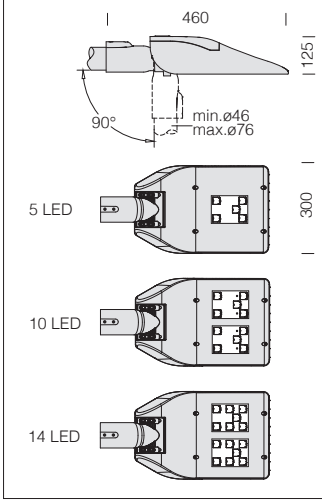
On request: possibility to control each individual light point (see table on p. 377).

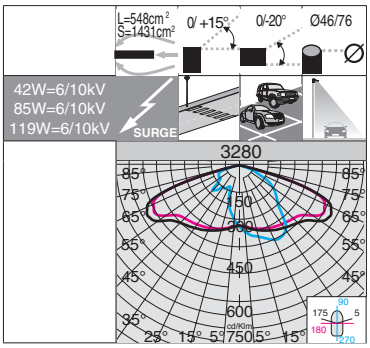
	Power supply	n.LED	W tot	K	ølm
On request	350mA	5	21	4000K	2566lm
		10	42		5135lm
		14	58		7190lm
On request	530mA	5	32	4000K	3495lm
		10	64		6990lm
		14	90		9787lm

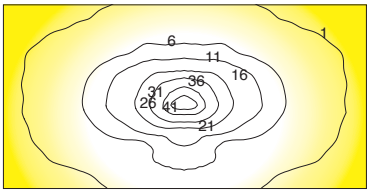
n.LED	W tot	K	ølm
5	21	3000K	2386lm
10	42		4776lm
14	58		6687lm
5	32	3000K	3250lm
10	64		6501lm
14	90		9102lm


PM

IP66 IK09







RG0 Ethr

+40 C° -30

U.V.

ZONA 1

LOW FLICKER

3000K

4000K

Optics: in PMMA, highly resistant to temperature and UV radiation. Flow recovery in V2 polycarbonate.

LED: Power factor ≥0,9.
Luminous flux maintenance 80%: >100.000h (L80B10).

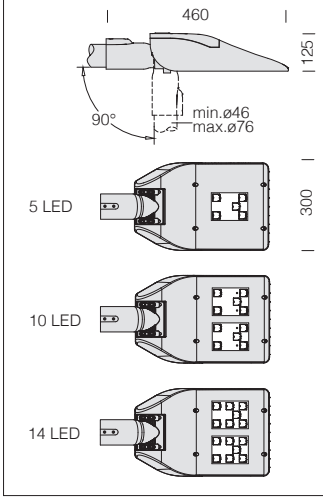
3280 Rolle - T1

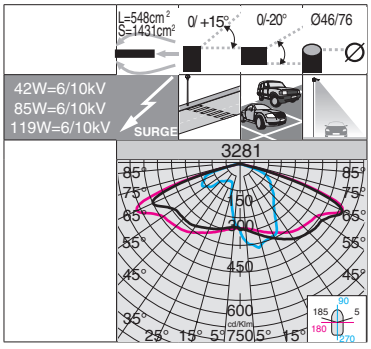
		CLD CELL			LUMEN OUTPUT (tq= 25 °C)
wattage (700mA)	colour	weight	code	W tot	K - ølm 700mA - CRI
LED	grey	7.70	330400-00	**42**	4000K - 4561lm - CRI 70
LED	grey	7.70	330400-39		3000K - 4242lm - CRI 70
LED	grey	7.70	330401-00	**85**	4000K - 9122lm - CRI 70
LED	grey	7.70	330401-39		3000K - 8483lm - CRI 70
LED	grey	7.70	330402-00	**119**	4000K - 12772lm - CRI 70
LED	grey	7.70	330402-39		3000K - 11878lm - CRI 70

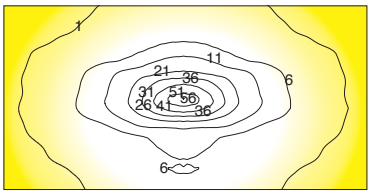
	Power supply	n.LED	W tot	K	ølm
On request	350mA	5	**21**	**4000K**	2508lm
		10	**42**		5017lm
		14	**58**		7024lm
On request	530mA	5	**32**	**4000K**	3420lm
		10	**64**		6842lm
		14	**90**		9579lm

n.LED	W tot	K	ølm
5	**21**	**3000K**	2332lm
10	**42**		4666lm
14	**58**		6532lm
5	**32**	**3000K**	3181lm
10	**64**		6383lm
14	**90**		8908lm

IP66 IK09







RG0 Ethr

+40 C° -30

U.V.

ZONA 1

LOW FLICKER

3000K

4000K

Optics: in PMMA, highly resistant to temperature and UV radiation. Flow recovery in V2 polycarbonate.

LED: Power factor ≥0,9.
Luminous flux maintenance 80%: >100.000h (L80B10).

3281 Rolle - T2

		CLD CELL			LUMEN OUTPUT (tq= 25 °C)
wattage (700mA)	colour	weight	code	W tot	K - ølm 700mA - CRI
LED	grey	7.70	330410-00	**42**	4000K - 4613lm - CRI 70
LED	grey	7.70	330410-39		3000K - 4290lm - CRI 70
LED	grey	7.70	330411-00	**85**	4000K - 9225lm - CRI 70
LED	grey	7.70	330411-39		3000K - 8579lm - CRI 70
LED	grey	7.70	330412-00	**119**	4000K - 12916lm - CRI 70
LED	grey	7.70	330412-39		3000K - 12012lm - CRI 70

On request: possibility to control each individual light point (see table on p. 377).

	Power supply	n.LED	W tot	K	ølm
On request	350mA	5	**21**	**4000K**	2536lm
		10	**42**		5074lm
		14	**58**		7104lm
On request	530mA	5	**32**	**4000K**	3453lm
		10	**64**		6906lm
		14	**90**		9669lm

n.LED	W tot	K	ølm
5	**21**	**3000K**	2358lm
10	**42**		4719lm
14	**58**		6607lm
5	**32**	**3000K**	3211lm
10	**64**		6423lm
14	**90**		8992lm

Anti-light pollution optical system : the modularity of the optical system, the solutions used for the electronic circuit design and the optimal control of operating temperatures, make the Susa line a highly professional, flexible and reliable product, capable of guaranteeing huge application advantages in several situations

Housing: in die-cast aluminium and designed with a very small surface exposed to wind. Cooling fins are integrated into the cover.

Pole connection: in die-cast aluminium and with gaskets to secure the frame. Suited for poles with a diameter 45-60mm.

Optics: in PMMA, highly resistant to temperature and UV radiation.

Coating: the standard powder coating consists of a first metal surface pre-treatment stage and of single layer of UV-stabilised, corrosion and salt resistant polyester powder coating.

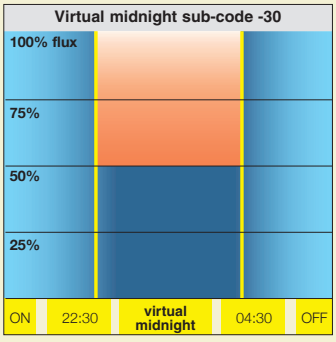
Standard supply: automatic temperature control inside the device with automatic resetting. Safety diode to protect against voltage peaks compliant with EN 61547. With dedicated electronic device to protect the LED module. Complete with quick connection.

Equipment: silicone rubber gasket; external screws and bolts in stainless steel; air recirculation valve. Insulation connector for quick installation with **no need to open the fixture.**

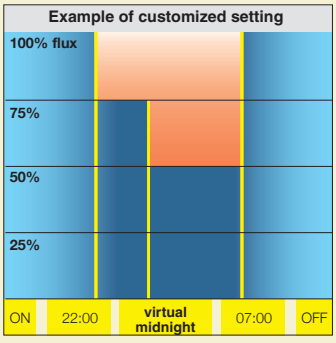
Photometric performance: designed with an optical system capable of controlling the potential glare created by the growing light intensity of LEDs while achieving high photometric performance. This allows the application in street lighting schemes where there is a significant distance between the poles.

Low Flicker: product with a very low flicker; uniform light for greater eye protection.

Virtual midnight: in order to optimize energy efficiency at night when vehicle and pedestrian traffic is lower, the luminaire can be programmed to activate certain pre-set scenarios when it is switched on, at a specific time, or when the light sensor reaches a certain threshold. This device is integrated into the fixture and does not require the installer to make any adjustments on the lighting system. The fixture can be connected with a class II two-wire (phase+neutral) cable or a class I three-wire (phase+netural+ground wire) cable.



Virtual midnight subcode -30: fixtures can be equipped with a device to dim lights in two levels, based on virtual midnight calculation. The reduction of the luminous flux occurs without pilot wire or control phase. The average value between the time the fixture is switched on (sunset) and switched off (sunrise) is the reference point for the device and it is commonly known as “virtual midnight”. A microprocessor calculates the desired switching time starting from this reference point. Factory settings are 2.5 hours before (about 10.30 p.m.) and 4.5 hours after (about 4.30 a.m.) the “virtual midnight”. When the fixtures are switched on, they operate at 100%, after 4 hours they go down to 50% and after 7 hours they go up to 100% again.

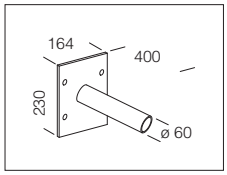


Example of customized virtual midnight setting: fixtures can be equipped with a device to dim lights in different levels, based on virtual midnight calculation. The reduction of the luminous flux occurs without pilot wire or control phase. The average value between the time the fixture is switched on (sunset) and switched off (sunrise) is the reference point for the device and it is commonly known as “virtual midnight”. A microprocessor calculates the desired switching time starting from this reference point. When the fixtures are switched on, they operate at 100%, after 2 hours they go down to 75%, after 4 hours they go further down 50% and after 11 hours they go up to 100% again.

ATTENTION: *as standard, all our street fixtures with* ***subcode -00*** *are supplied with programmable driver.*
N.B. *upon request, it is possible to change virtual midnight factory settings.*

Table for the various options for managing the supply point

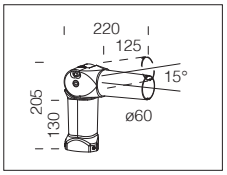
1-10V dimming	Virtual midnight	Nema Socket	Zhaga Socket
Adjustment range from 10%-100% with 1-10V	Stand alone system with reduction of luminous flux and surge protector 6/10 KV	It can be installed directly onto the luminaire's body, ideal for the remote control of lights	
Ordered with **sub-code -12**	Ordered with **sub-code -30**	Ordered with **sub-code -40**	Ordered with **sub-code -0054**



acc. 248
wall bracket

grey	997708-00

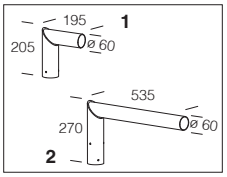
In steel. For wall mounting. Connection Ø 60.



acc. 405
articulated connect.

grey	991407-00

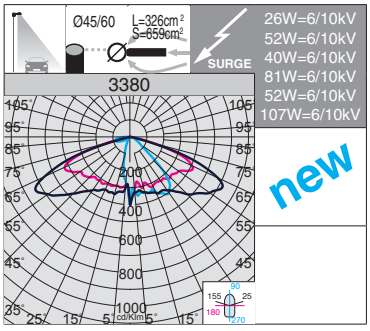
To be used for pole installation Ø60. Adjustable connection at 90°.

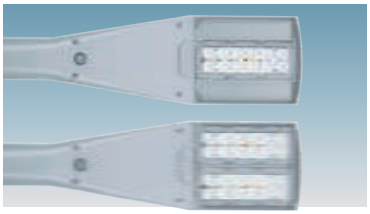


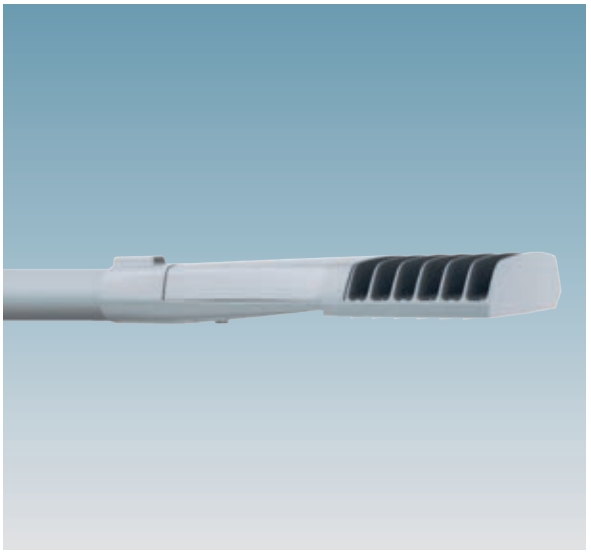
acc. 205
mast-top mounting

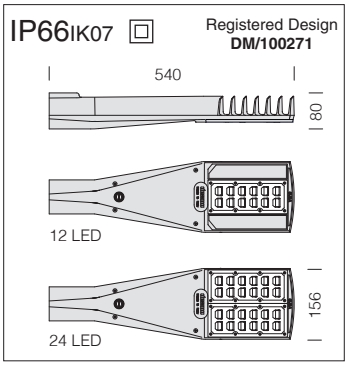
1	grey	426941-00
2	grey	426948-00

To be used for pole installation Ø60. 90° fixed.









LED: power factor ≥0,92. Luminous flux maintenance:		
80%	80.000h (L80B10)	350mA
80%	70.000h (L80B10)	530mA
80%	60.000h (L80B10)	700mA

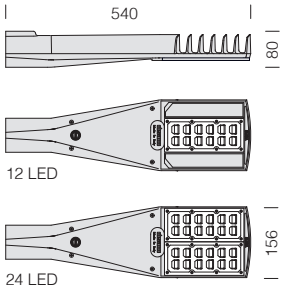
Version best suited for medium-height poles.

On request: possibility to control each individual light point (see table on p. 385).

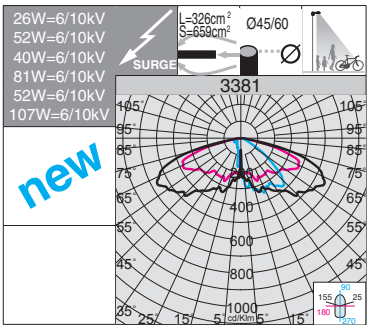
3380 Susa ME - residential amenities

		CLD CELL			LUMEN OUTPUT (tq= 25 °C)
wattage (350mA)	colour	weight	code	W tot	K - ølm 350mA - CRI
LED	grey	2.30	340504-00	**26**	4000K - **3600lm** - CRI 80
LED	grey	2.30	340504-39		3000K - **3348lm** - CRI 80
LED	grey	2.50	340505-00	**52**	4000K - **7385lm** - CRI 80
LED	grey	2.50	340505-39		3000K - **6868lm** - CRI 80
wattage (530mA)					K - ølm 530mA - CRI
LED	grey	2.30	340500-00	**40**	4000K - 5145lm - CRI 80
LED	grey	2.30	340500-39		3000K - 4785lm - CRI 80
LED	grey	2.50	340501-00	**81**	4000K - 9979lm - CRI 80
LED	grey	2.50	340501-39		3000K - 9280lm - CRI 80
wattage (700mA)					K - ølm 700mA - CRI
LED	grey	2.30	340502-00	**52**	4000K - 6372lm - CRI 80
LED	grey	2.30	340502-39		3000K - 5926lm - CRI 80
LED	grey	2.50	340503-00	**107**	4000K - 12360lm - CRI 80
LED	grey	2.50	340503-39		3000K - 11495lm - CRI 80

IP66 IK07 Registered Design DM/100271



LED: power factor ≥0,92. Luminous flux maintenance:		
80%	80.000h (L80B10)	350mA
80%	70.000h (L80B10)	530mA
80%	60.000h (L80B10)	700mA



new

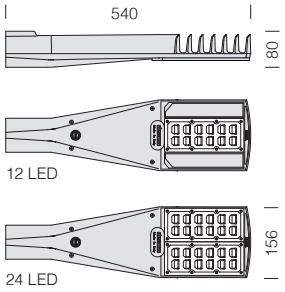
Version best suited for lighting installations where poles are spaced farther apart.

On request: possibility to control each individual light point (see table on p. 385).

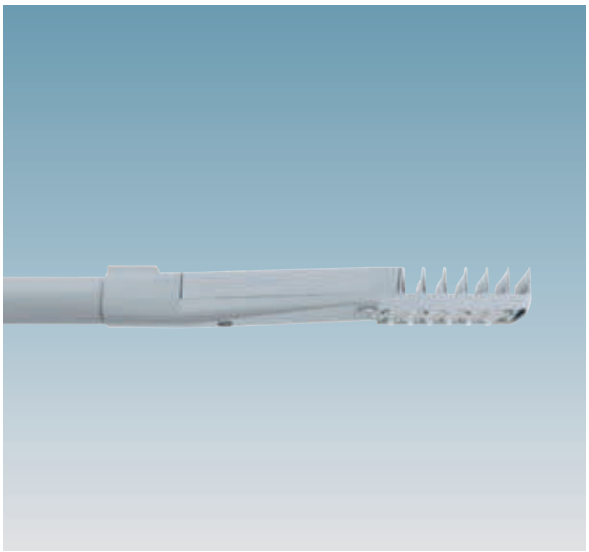
3381 Susa T3 - residential amenities

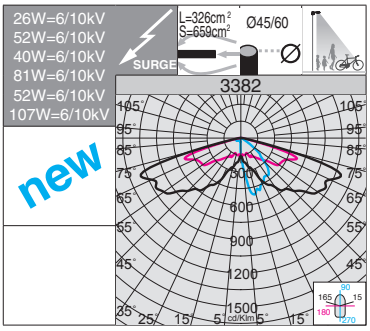
		CLD CELL			LUMEN OUTPUT (tq= 25 °C)
wattage (350mA)	colour	weight	code	W tot	K - ølm 350mA - CRI
LED	grey	2.30	340514-00	26	4000K - **3780lm** - CRI 80
LED	grey	2.30	340514-39		3000K - **3516lm** - CRI 80
LED	grey	2.50	340515-00	52	4000K - **7316lm** - CRI 80
LED	grey	2.50	340515-39		3000K - **6800lm** - CRI 80
wattage (530mA)					K - ølm 530mA - CRI
LED	grey	2.30	340510-00	40	4000K - 5109lm - CRI 80
LED	grey	2.30	340510-39		3000K - 4751m - CRI 80
LED	grey	2.50	340511-00	81	4000K - 9887lm - CRI 80
LED	grey	2.50	340511-39		3000K - 9195lm - CRI 80
wattage (700mA)					K - ølm 700mA - CRI
LED	grey	2.30	340512-00	52	4000K - 6328lm - CRI 80
LED	grey	2.30	340512-39		3000K - 5885lm - CRI 80
LED	grey	2.50	340513-00	107	4000K - 12246lm - CRI 80
LED	grey	2.50	340513-39		3000K - 11389lm - CRI 80

IP66 IK07 Registered Design DM/100271

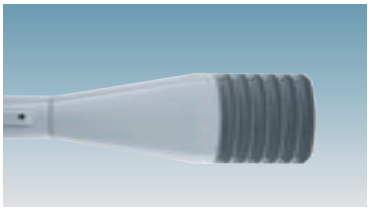


LED: power factor ≥0,92. Luminous flux maintenance:		
80%	80.000h (L80B10)	350mA
80%	70.000h (L80B10)	530mA
80%	60.000h (L80B10)	700mA





new



On request: possibility to control each individual light point (see table on p. 385).

3382 Susa T2 - cycleways

		CLD CELL			LUMEN OUTPUT (tq= 25 °C)
wattage (350mA)	colour	weight	code	W tot	K - ølm 350mA - CRI
LED	grey	2.30	340524-00	26	4000K - **3770lm** - CRI 80
LED	grey	2.30	340524-39		3000K - **3500lm** - CRI 80
LED	grey	2.50	340525-00	52	4000K - **7298lm** - CRI 80
LED	grey	2.50	340525-39		3000K - **6788lm** - CRI 80
wattage (530mA)					K - ølm 530mA - CRI
LED	grey	2.30	340520-00	40	4000K - 5098lm - CRI 80
LED	grey	2.30	340520-39		3000K - 4741lm - CRI 80
LED	grey	2.50	340521-00	81	4000K - 9863lm - CRI 80
LED	grey	2.50	340521-39		3000K - 9173lm - CRI 80
wattage (700mA)					K - ølm 700mA - CRI
LED	grey	2.30	340522-00	52	4000K - 6314lm - CRI 80
LED	grey	2.30	340522-39		3000K - 5872lm - CRI 80
LED	grey	2.50	340523-00	107	4000K - 12217lm - CRI 80
LED	grey	2.50	340523-39		3000K - 11362lm - CRI 80

Housing/Frame: in die-cast aluminium with latch.

Diffuser: tempered glass, 4 mm thick, resistant to thermal shock and impact (UNI En 12150-1/2001).

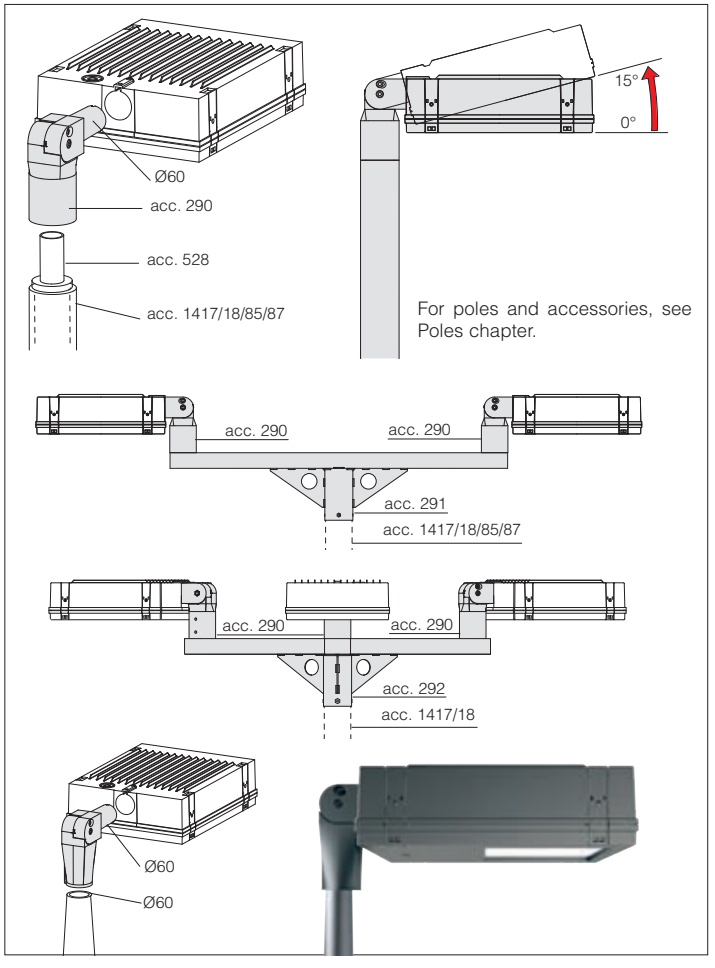
Optics: in PMMA, highly resistant to temperature and UV radiation

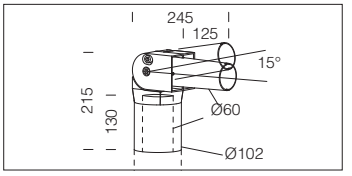
Coating: the standard liquid immersion coating consists of a first metal surface pre-treatment stage, a successive epoxy cataphoresis corrosion and salt resistant coating, and a final layer of bi-component acrylic liquid UV-stabilised coating.

Equipment: automatic temperature control device. In the event of an unexpected temperature rise caused by particular weather conditions or LED malfunctioning, the system will reduce the drive current as the LED gets warmer, reducing the lamp's operating temperature and guaranteeing proper operation. Supplied with safety diode to protect against voltage peaks compliant with EN 61547; complete with IP67 airtight connector for mains connection.

LED: Power factor ≥0.9.
Luminous flux maintenance 80%: 80.000h (L80B20).

Accessories Pordoi

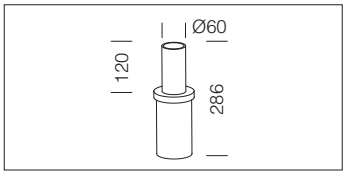




acc. 290 joint

graphite	991442-00

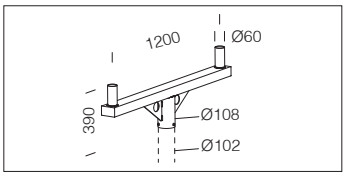
Always use for application with poles with acc. 1417/18 (see section on "Poles")



acc. 528 mast-top connection

graphite	991463-00

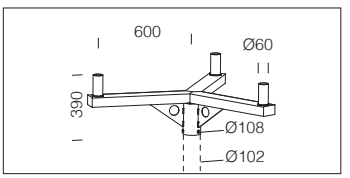
In steel. To be used as a mast-top connection



acc. 291 dual arm

graphite	991444-00

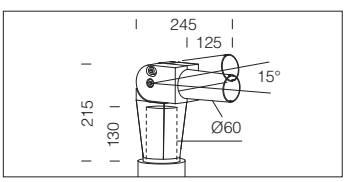
Always use with 2 acc. 290 for mounting on dual arm. We recommend using poles acc. 1417/18/85/87 (see section on "Poles")



acc. 292 triple arm

graphite	991446-00

Always use with 3 acc. 290 for mounting on triple arm. We recommend using poles acc. 1485/1487 (see section on "Poles")

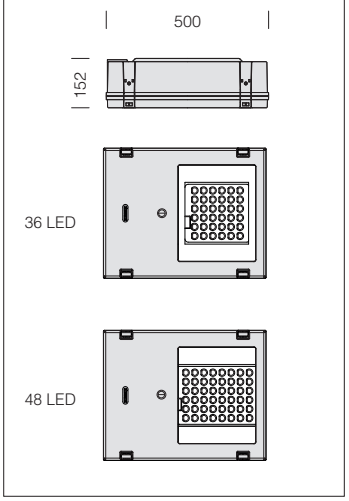


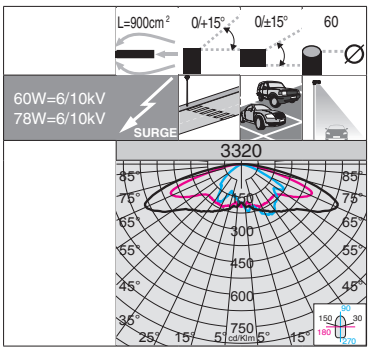
acc. 290 joint

graphite	991439-00

To be used for installation on poles with ø60.

IP66 IK09



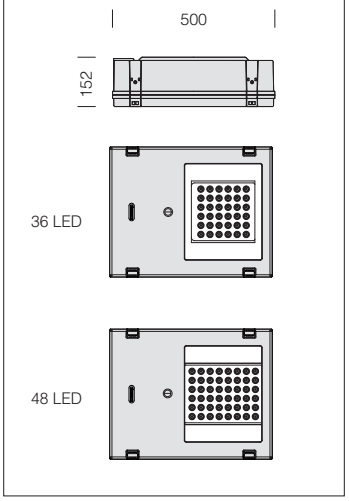


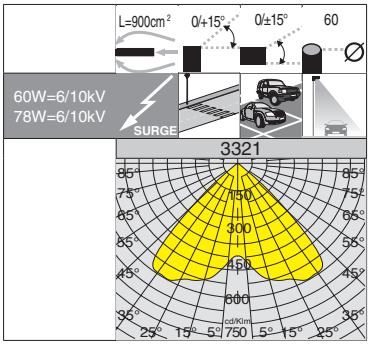
3320 - Pordoi 4 - street lighting

		CLD CELL			LUMEN OUTPUT (tq= 25 °C)
wattage (530mA)	colour	weight	code	W tot	K - ølm 530mA - CRI
LED	graphite	10.00	328150-00	**60**	4000K - 6706lm - CRI>70
LED	graphite	10.00	328151-00	**78**	4000K - 8943lm - CRI>70

On request: possibility to control each individual light point (see table on p. XIX).

IP66 IK09





3321 - Pordoi 5 - wide beam

		CLD CELL			LUMEN OUTPUT (tq= 25 °C)
wattage (530mA)	colour	weight	code	W tot	K - ølm 530mA - CRI
LED	graphite	10.00	328160-00	**60**	4000K - 7656lm - CRI>70
LED	graphite	10.00	328161-00	**78**	4000K - 10208lm - CRI>70

On request: possibility to control each individual light point (see table on p. XIX).

Housing: in die-cast aluminium.

Cover: in die-cast aluminium, tool-free hinge opening. With sealing latches and stainless steel safety device against accidental closure.

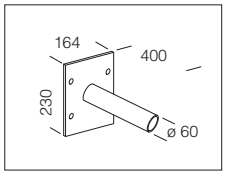
Diffuser: tempered glass, 5 mm thick, resistant to thermal shock and impacts (UNI EN 12150-1:2001 tests).

Optics: in PMMA, highly resistant to temperature and UV radiation.

Coating : the standard powder coating consists of a first metal surface pre-treatment stage and of single layer of UV-stabilised, corrosion and salt resistant polyester powder coating.

Equipment: automatic temperature control device. In the event of an unexpected temperature rise caused by particular weather conditions or LED malfunctioning, the system will reduce the drive current as the LED gets warmer, reducing the lamp's operating temperature and guaranteeing proper operation. Electronic safety device to protect the LED module and the related ballast compliant with EN 61547. With dedicated electronic device to protect the LED module. Swivelling socket with protractor on the housing; it can be adjusted by loosening the bolts without taking the entire device apart. Supplied with quick IP67 connector.

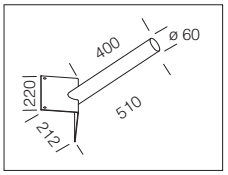
Accessories Mini Brera1 and Brera1



acc. 248
wall bracket

1.30	997708-00

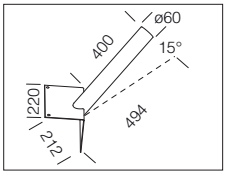
In grey steel. For wall mounting. Connection Ø 60.



acc. 249
corner bracket

1.90	997803-00

In grey steel. For wall corner mounting. Connection Ø 60.

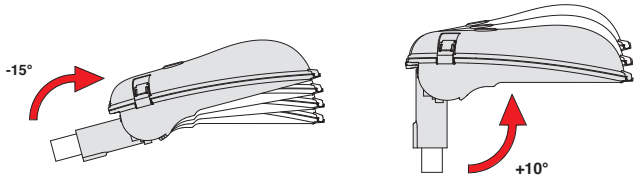


acc. 49
corner bracket

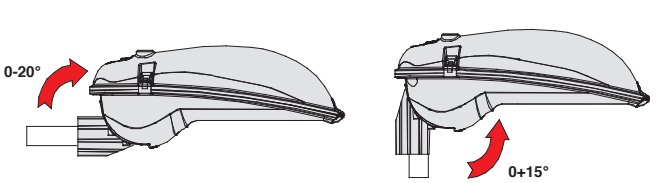
1.90	997802-00

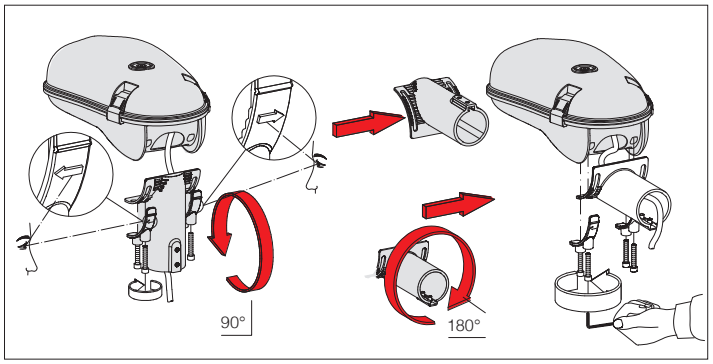
In grey steel. For wall corner mounting. Connection Ø 60. Angle 15°.

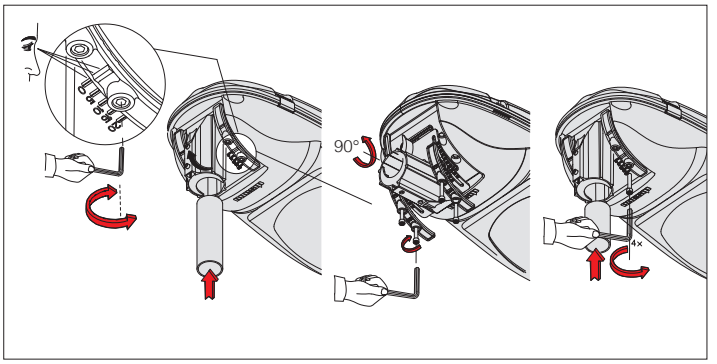
art. 1680 - Mini Brera1



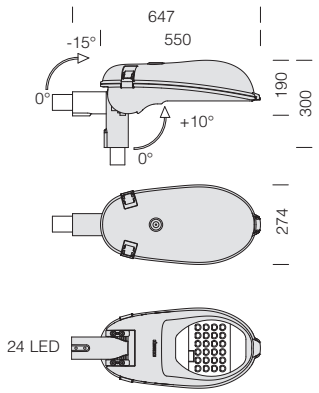
art. 1681 - Brera1

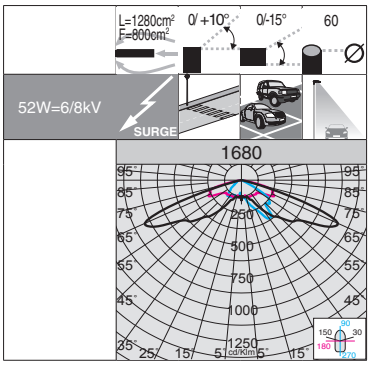






IP66IK09





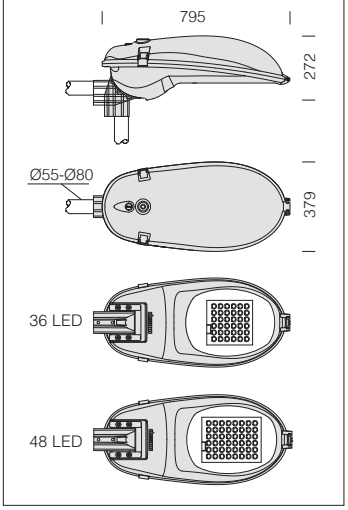
LED: Power factor ≥0.9.
Luminous flux maintenance 80%: >100.000h (L80B10).

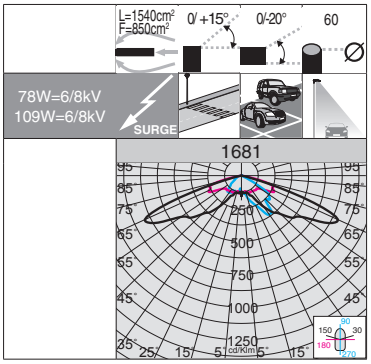
1680 - Mini Brera 1

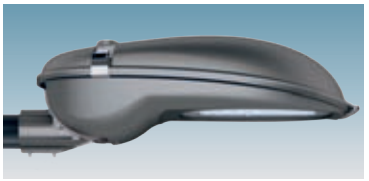
		CLD CELL			LUMEN OUTPUT (tq= 25 °C)
wattage (700mA)	colour	weight	code	W tot	K - ølm 700mA - CRI
LED	graphite	5.40	325350-00	**52**	4000K - 5435lm - CRI>70

On request: possibility to control each individual light point (see table on p. XIX).

IP66IK09







LED: Power factor ≥0.9.
Luminous flux maintenance 80%: >100.000h (L80B10).

1681 - Brera 1

		CLD CELL			LUMEN OUTPUT (tq= 25 °C)
wattage (700mA)	colour	weight	code	W tot	K - ølm 700mA - CRI
LED	graphite	12.70	325370-00	**78**	4000K - 8144lm - CRI>70
LED	graphite	13.00	325371-00	**109**	4000K - 10860lm - CRI>70

On request: possibility to control each individual light point (see table on p. XIX).

Housing: in die-cast aluminium. Closing hooks are made of die-cast aluminium with retractable safety screws and AISI 304 stainless steel springs.

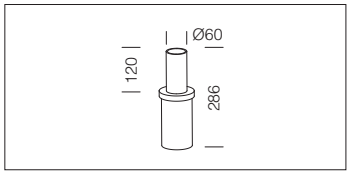
Diffusers: in tempered glass, 5 mm thick, resistant to thermal and mechanical shock (UNI EN 12150-1/2001).

Coating: the standard liquid immersion coating consists of a first metal surface pre-treatment stage, a successive epoxy cataphoresis corrosion and salt resistant coating, and a final layer of bi-component acrylic liquid UV-stabilised coating.

Equipment: temperature control inside the device with automatic resetting. Safety diode to protect against voltage peaks compliant with EN 61547. With dedicated electronic device to protect the LED module.

Upon request: available with AC/DC converter as standard to allow operation in public lighting systems.

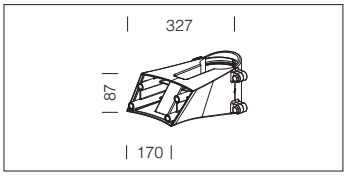
Accessories



acc. 528 mast-top connection

graphite	991463-00

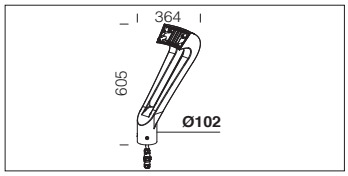
In galvanised steel. To be used as a mast-top connection



acc. 281 single pole mounting arm

graphite	991432-00

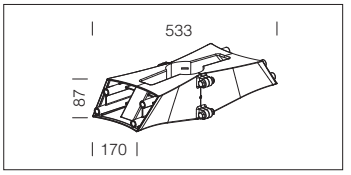
In die-cast aluminium. We recommend using poles acc. 1485/87 – 1417/18



acc. 280 fork

graphite	991430-00

In die-cast aluminium.
To be used for mast-top connection. We recommend using poles acc. 1485/1487

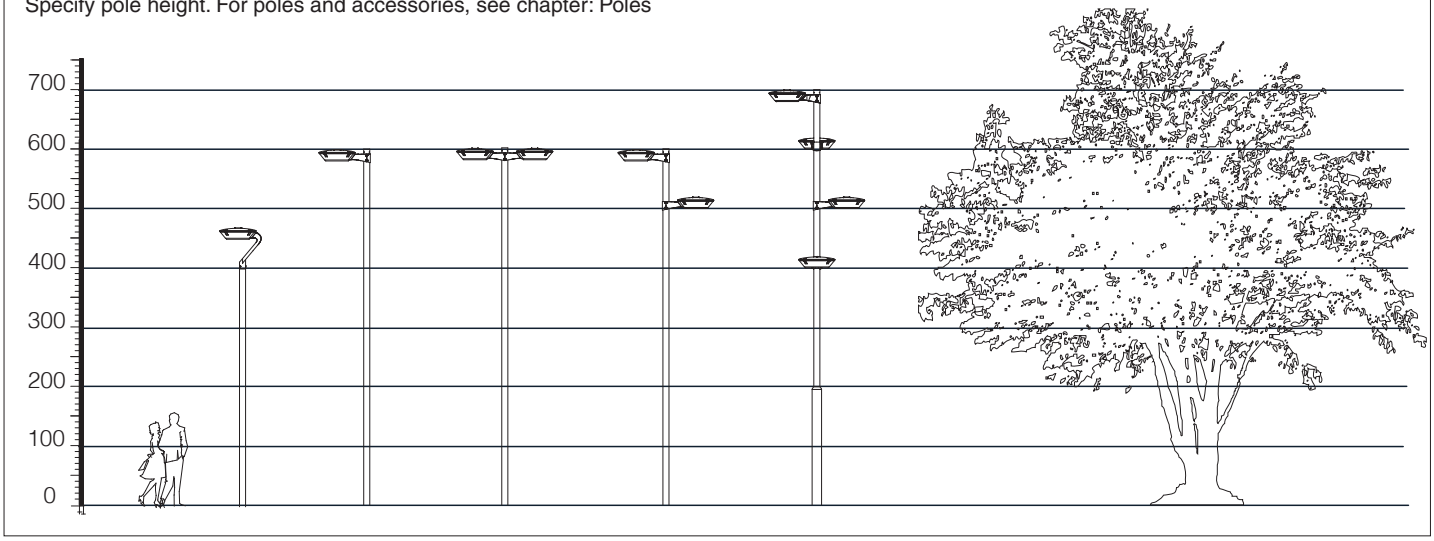


acc. 282 dual pole mounting arm

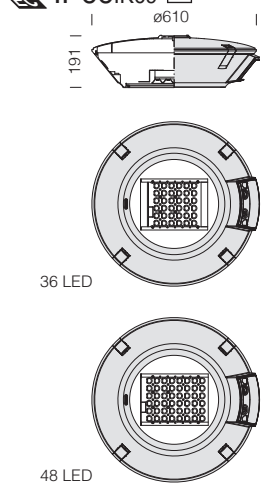
graphite	991434-00

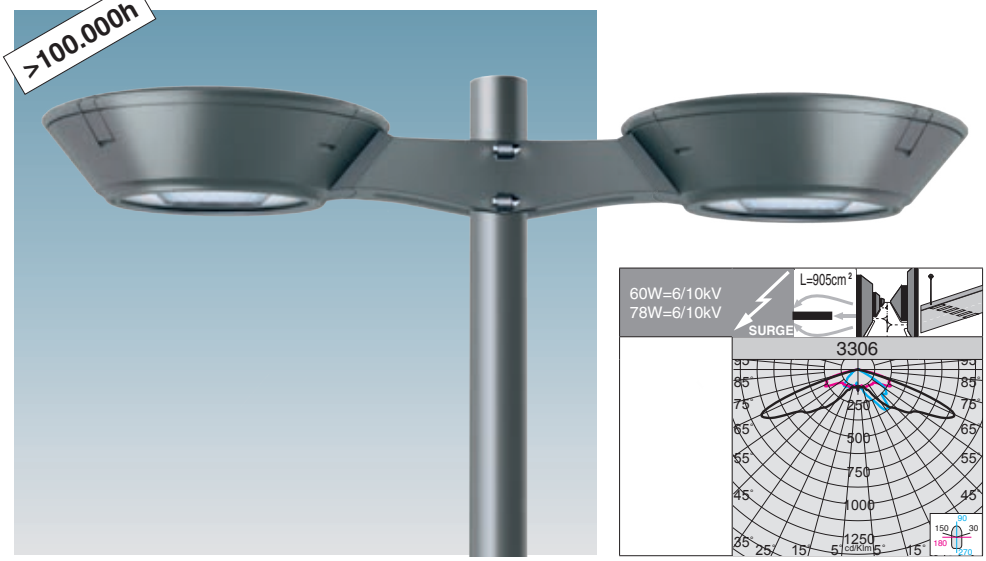
In die-cast aluminium. We recommend using poles acc. 1485/87 – 1417/18

Specify pole height. For poles and accessories, see chapter: Poles



IP66 IK09





Optics: in PMMA, highly resistant to temperature and UV radiation.

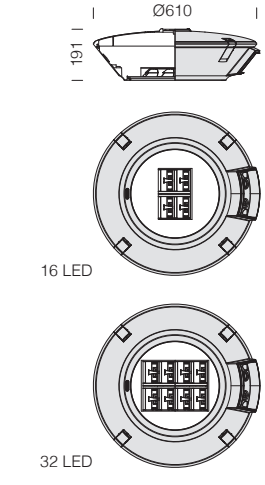
LED: Power factor ≥0.9.
Luminous flux maintenance 80%: >100.000h (L80B10).

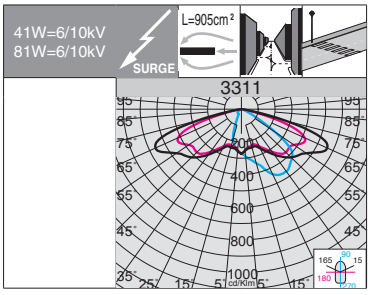
3306 Visconti 7 - street lighting

		CLD CELL			LUMEN OUTPUT (tq= 25 °C)
wattage (530mA)	colour	weight	code	W tot	K - ølm 530mA - CRI
LED	graphite	10.60	328070-00	**60**	4000K - 6937lm - CRI>70
LED	graphite	10.60	328071-00	**78**	4000K - 9252lm - CRI>70
On request: possibility to control each individual light point (see table on p. XIX).					

	Power Supply	n.LED	W tot	ølm
On request	350mA	36	**37**	4581lm
		48	**51**	6110lm

IP66 IK09





Optics: in aluminium coated with very high purity (99.99%) silver using physical vapour deposition (PVD).

LED: Power factor ≥0.9.
Luminous flux maintenance 80%: >100.000h (L80B10).

3311 Visconti 12 - STWB

		CLD CELL			LUMEN OUTPUT (tq= 25 °C)
wattage (350mA)	colour	weight	code	W tot	K - ølm 350mA - CRI
LED	graphite	10.60	328030-00	**41**	4000K - 5404lm - CRI 70
LED	graphite	10.60	328031-00	**81**	4000K - 10430lm - CRI 70
On request: possibility to control each individual light point (see table on p. XIX).					

Housing/Frame: in die-cast aluminium.

Diffuser: tempered glass, 5 mm thick, resistant to thermal shock and impacts (UNI EN 12150-1:2001 tests)

Optics: in PMMA, highly resistant to temperature and UV radiation.

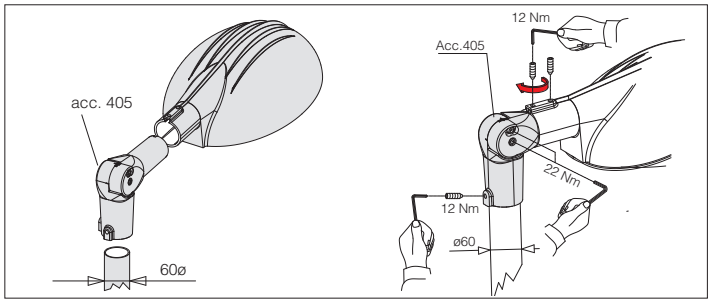
Coating: the standard liquid immersion coating consists of a first metal surface pre-treatment stage, a successive epoxy cataphoresis corrosion and salt resistant coating, and a final layer of bi-component acrylic liquid UV-stabilised coating.

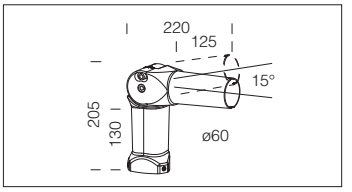
UNI EN ISO 9227

On request: coating compliant with UNI EN ISO 9227 Corrosion tests in artificial atmospheres for aggressive environments.

Standard supply: temperature control inside the device with automatic resetting. Supplied with double insulation switch.

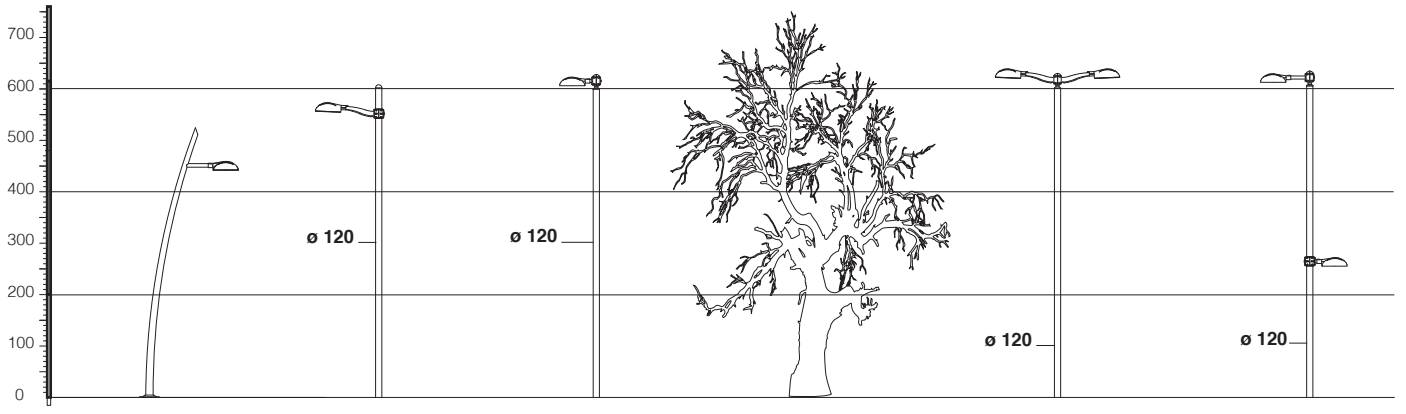
Monza Accessories



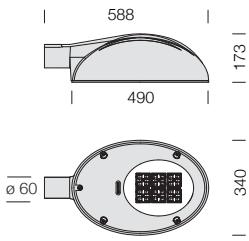


acc. 405 articulated connect.	
grey	991385-00
To be used for Monza pole installation ø 60. Adjustable connection at 90°.	

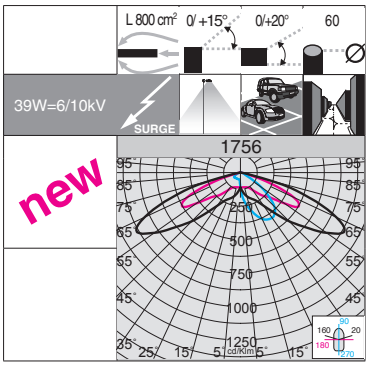
Specify pole height. For poles and accessories, see chapter: Poles



*IP66 IK09



LED: Power factor ≥0,9.
Luminous flux maintenance 80%: 80.000h (L80B20).

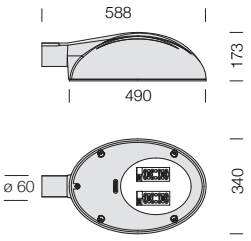


1756 Monza HP - high performance

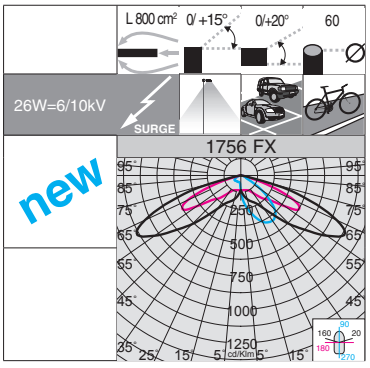
		CLD CELL			LUMEN OUTPUT (tq= 25 °C)
wattage	colour	weight	code	W tot	K - ølm - CRI
LED	grey 9007	6.00	423066-00	39	4000K - **5580lm** - CRI 70
LED	grey 9007	6.00	423066-39		3000K - **5189lm** - CRI 70

On request: possibility to control each individual light point (see table on p. XIX).

*IP66 IK09



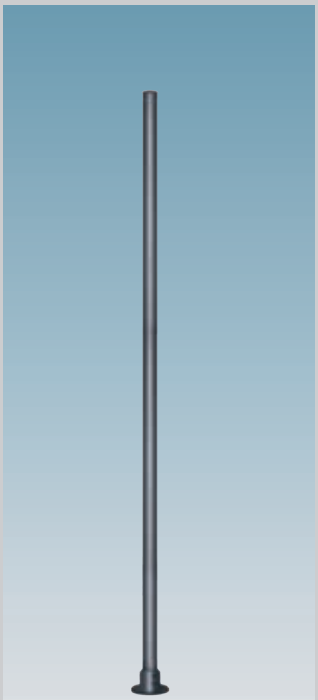
LED: Power factor ≥0.9.
Luminous flux maintenance 80%: >100.000h (L80B10).



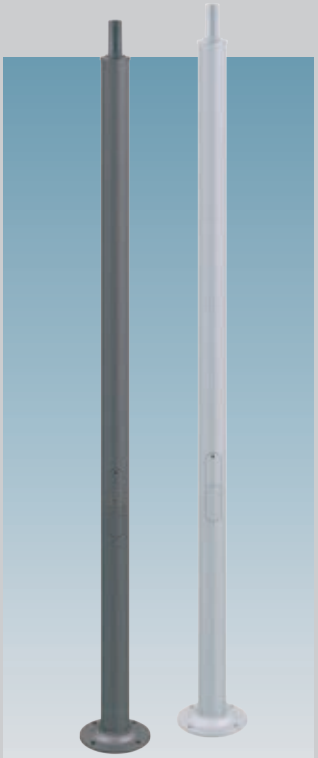
1756 Monza - FX

		CLD CELL			LUMEN OUTPUT (tq= 25 °C)
wattage (270mA)	colour	weight	code	W tot	K - ølm 270mA - CRI
LED	grey 9007	6.00	423065-00	26	4000K - **3723lm** - CRI 70
LED	grey 9007	6.00	423065-39		3000K - **3462lm** - CRI 70

On request: possibility to control each individual light point (see table on p. XIX).

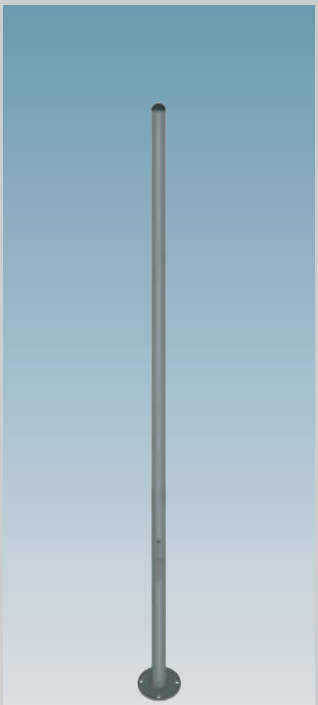


FIBREGLASS POLES

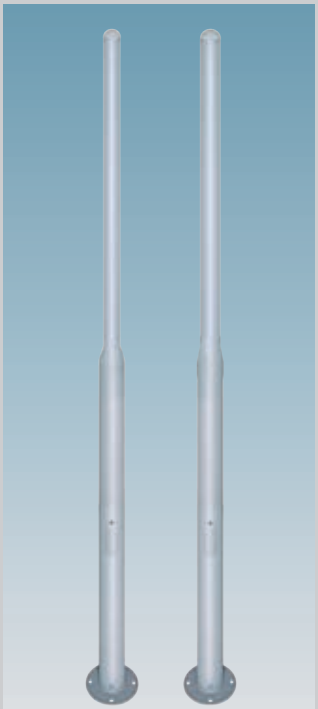


FLUTED POLES

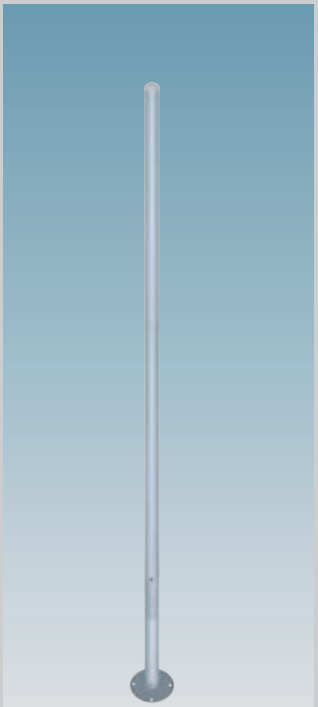
"CONE-SHAPED" - "URBAN" POLE



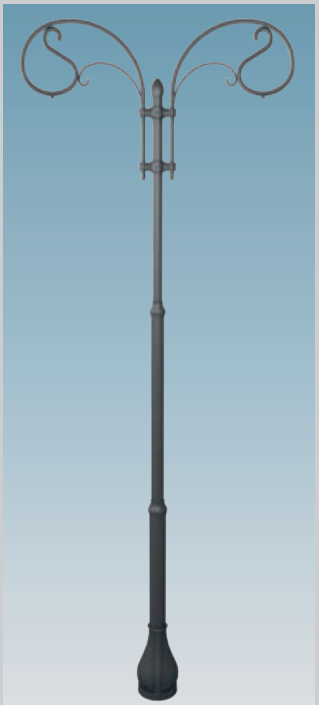
STEEL POLE



STEEL POLE

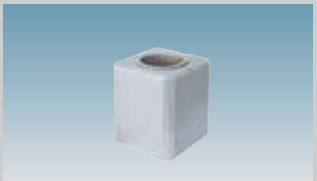


STEEL POLE



"LIBERTY" POLE

"VIRGOLA" POLE

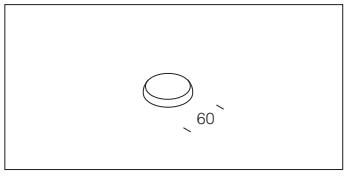


Pole performance features

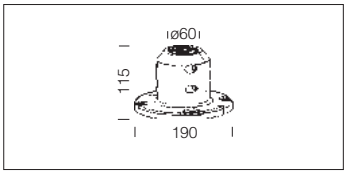
Fibreglass poles have a round or cone-shaped cross-section (dimensions depend on mechanical requirements).
Compared with aluminium or steel poles they offer the following advantages:
- lighter weight
- less maintenance
- surfaces are not attacked by corrosive agents
- electrically insulated
- less dangerous when impact occurs
- extremely flexible in the wind.

Certificated poles: These poles are recommended for small-size luminaires (decorative factor), in private areas, (anti-vandalism factor). They can be installed both on a base or buried according to measurements.

Accessories

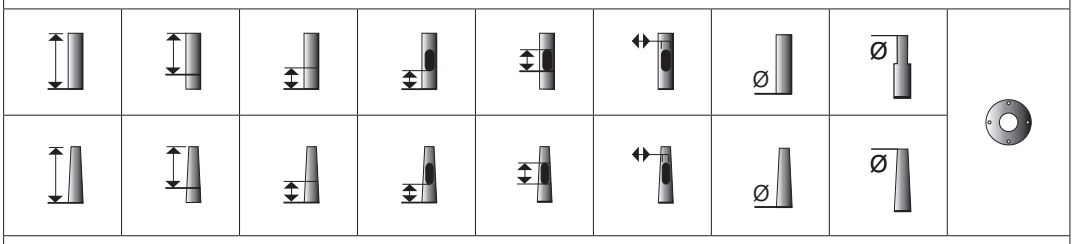


acc. 115 pole cap	
black	991331-00
In fiber glass nylon. To apply to Ø60 mm pole. End cap for the pole top.	



acc. 50 base for acc 5	
black	991216-00
In f.g. nylon; supplied with burying anchor. For use with poles max 1900 high. Connection Ø 60.	

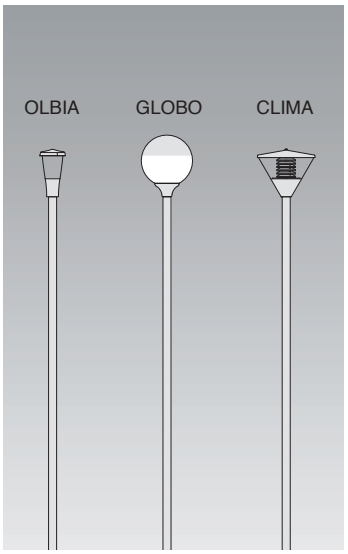
Legend Poles pictograms

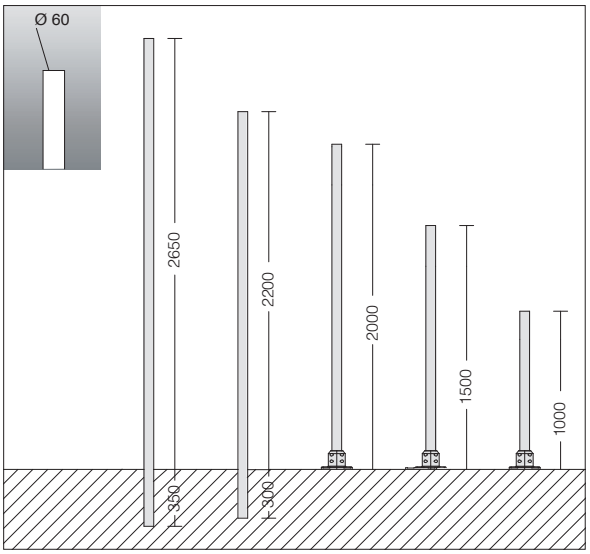


Total height pole	Height above ground or spotlight	Height of pole sunk into the ground	Distance ground/ inspection window (if present)	Height of inspection window (if present)	Width of inspection of window (if present)	Diameter of pole in relation to the ground	Diameter head/Pole	Diameter of base and log bolt holes (if present)

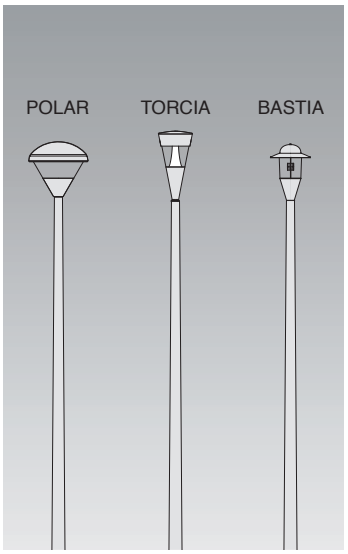
Fibreglass poles: table of general features

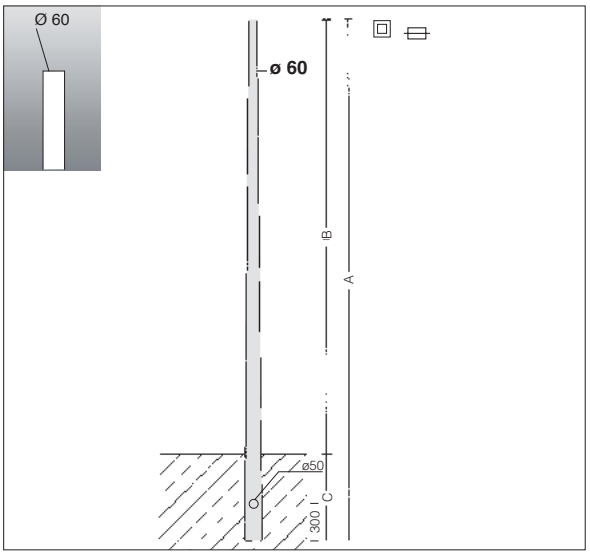
h pole	diam. Ø	recommended on base	recomended sinking h. mn
1000	Ø 60	acc. 50	
1500	Ø 60	acc. 50	
2000	Ø 60	acc. 50	250
2500	Ø 60		300
3000	Ø 60		350
3600	Ø 60/120		400
4600	Ø 60/137		500
5600	Ø 60/154		600





	acc 5 pole ø 60 without window					
colour	code				Ø	Ø
black	991903-00	1000	800	200		
black	991904-00	1500	1250	250		
black	991905-00	2000	1750	250	**ø 60**	**ø 60**
black	991906-00	2500	2200	300		
black	991907-00	3000	2650	350		
Cone-shaped fibreglass pole, black, corrosion resistant, mechanical high-resistance and UV stabilized.						

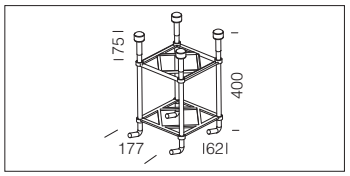




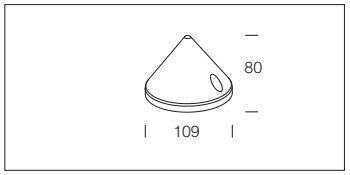
	acc 1278 cone-shaped pole without window					
colour	code				Ø	Ø
black	428617-00	3600	3200	400	**ø 120**	
black	428618-00	4600	4100	500	**ø 137**	**ø 60**
black	428619-00	5600	5000	600	**ø 154**	
Cone-shaped pole in f.g., black, corrosion-proof, high mechanical resistance and UV-stabilised.						

Fluted pole ø 100

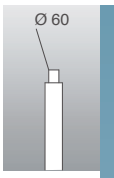
Fluted pole made of extruded aluminium, anodised by 15/20µ thick tin salt electrocoating; graphite or natural oxidised colour.
With die-cast inspection window (186x45mm), protective fuse holder, 16A fuse, 4-pole/3-way removable terminal block = 10 sqmm, 2,5 sqmm connection. With hole for insertion of power supply cable. Die-cast aluminium adapter, Ø60 mm. For the version with base, 4 log bolts to be sunk into the ground, bolts and lids have to be purchased.
Standard insulation class II.
When using Insulation Class I fixtures, appropriate grounding connections should be included in the system.
NOTE. Before selecting the appropriate pole, make all necessary wind pressure resistance tests, pursuant to the Standards or Legislative Decrees in force in the countries where the pole will be mounted and based on the assumed loads specified in Standard EN 40-3-1

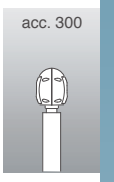


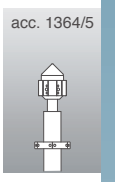
acc. 299 log bolts
991396-00
Log bolts are to be always bought with the pole 1408.

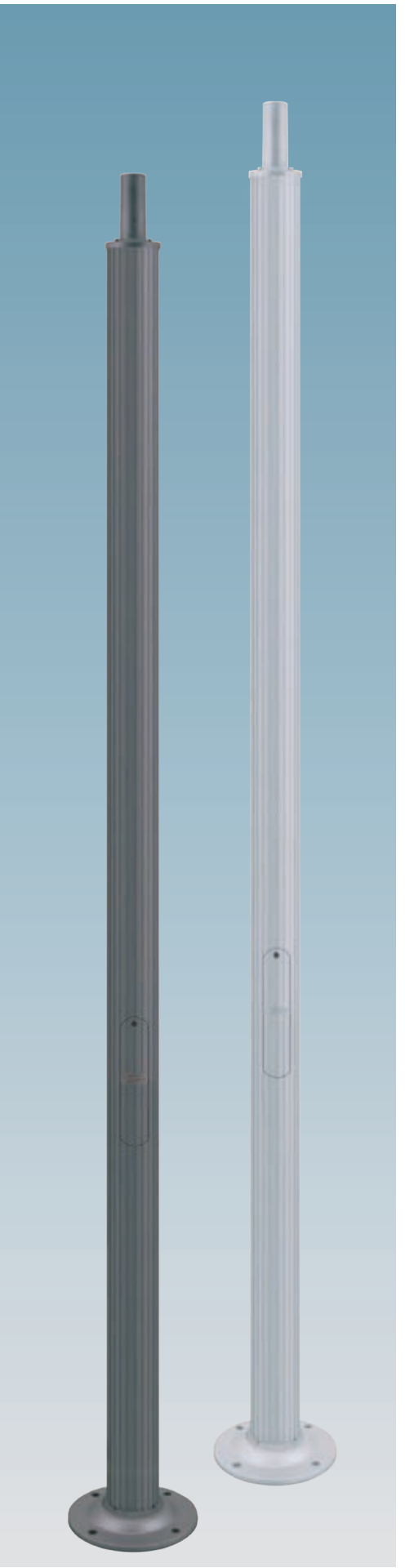


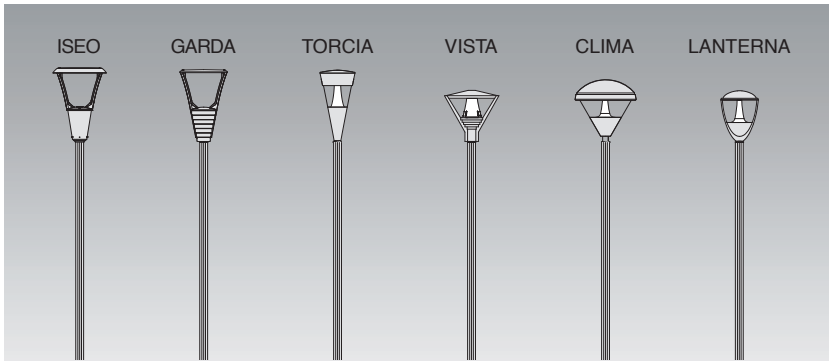
acc. 367 cover for poles	
ox. nat.	426998-00
graphite	426997-00
Made of aluminium. To be used when a particular aesthetic finish is desired.	

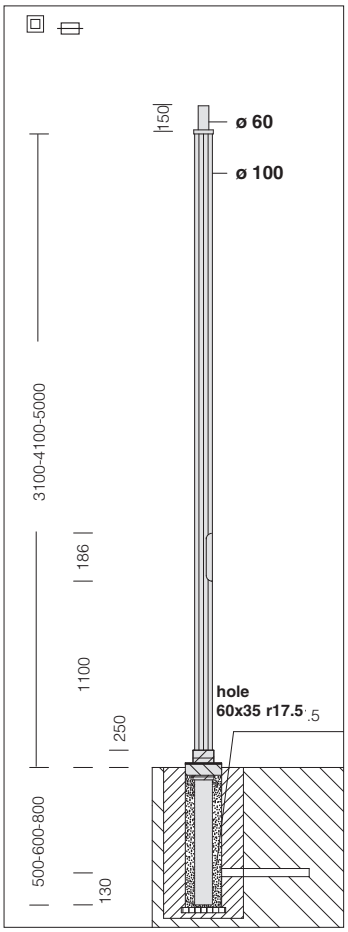




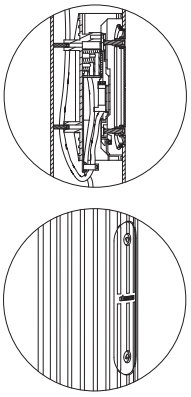




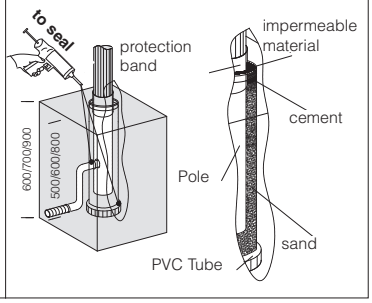




Inspection window with easily removable terminal block for quick connection.

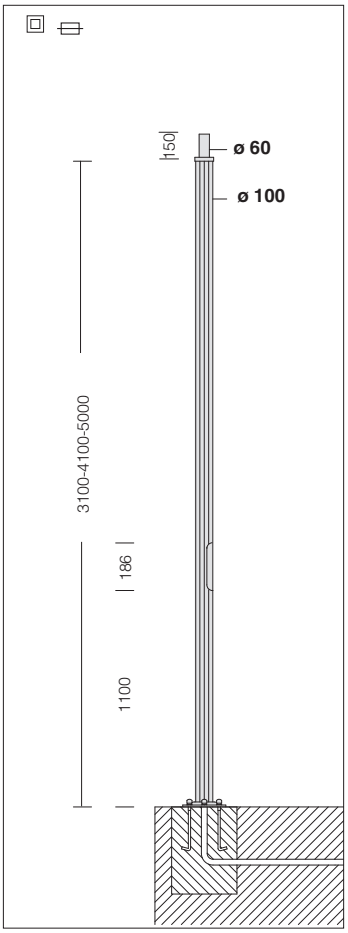


The size of the plinth depends on the type of pole, the composition used, the type of terrain on which the plinth stands, and the material of which it is made.

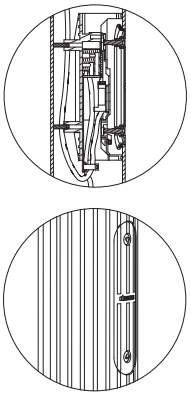


acc. 1409 fluted pole Ø 100

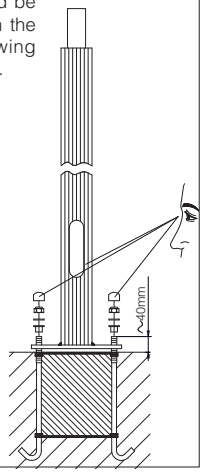
colour	code								
oxy natural	426334-00	3600	3100	500	1100	186	45	**Ø 100**	Ø 60
oxy natural	426335-00	4700	4100	600					
oxy natural	426336-00	5800	5000	800					
graphite	426327-00	3600	3100	500					
graphite	426328-00	4700	4100	600					
graphite	426329-00	5800	5000	800					



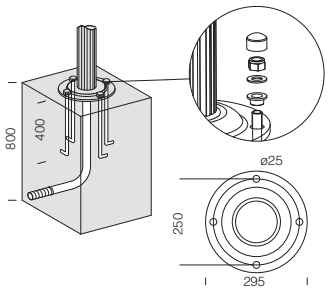
Inspection window with easily removable terminal block for quick connection.



For correct installation of pole and base, the ceiling cap should be fitted as shown in the assembly drawing featured opposite.



Cement base dimensions (subject to soil variations) for underground sinking of the 4 log bolts of acc. 1408.



acc. 1408 fluted pole with base Ø 100

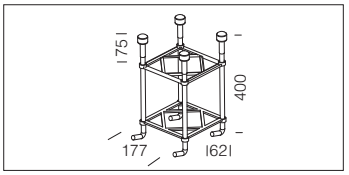
colour	code							
oxy natural	426337-00	3100	1100	186	45	**Ø 100**	Ø 60	Ø 295 hole Ø 25
oxy natural	426338-00	4100						
oxy natural	426339-00	5000						
graphite	426324-00	3100						
graphite	426325-00	4100						
graphite	426326-00	5000						

Log bolts are to be bought separately acc. 299.

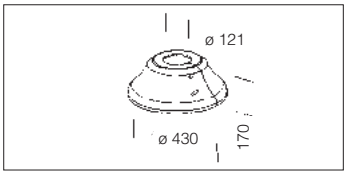
Fluted pole ø 120

Fluted pole made of extruded aluminium, anodised by 15/20µ thick tin salt electrocoating; graphite or natural oxidised colour.
With die-cast inspection window (186x45mm), protective fuse holder, 16A fuse, 4-pole/3-way=10mm², derivation 2,5 sqmm, removable terminal block = 6 sqmm, 4 sqmm connection. With hole for insertion of power supply cable. Die-cast aluminium adapter, Ø60 mm.
For the version with base, 4 log bolts to be sunk into the ground, bolts and lids have to be purchased. Standard insulation class II.
When using Insulation Class I fixtures, appropriate earthing connections should be included in the system.

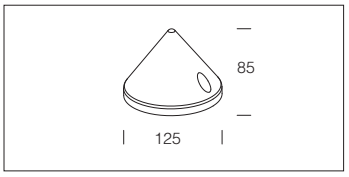
NOTE. Before selecting the appropriate pole, make all necessary wind pressure resistance tests, pursuant to the Standards or Legislative Decrees in force in the countries where the pole will be mounted and based on the assumed loads specified in Standard EN 40-3-1



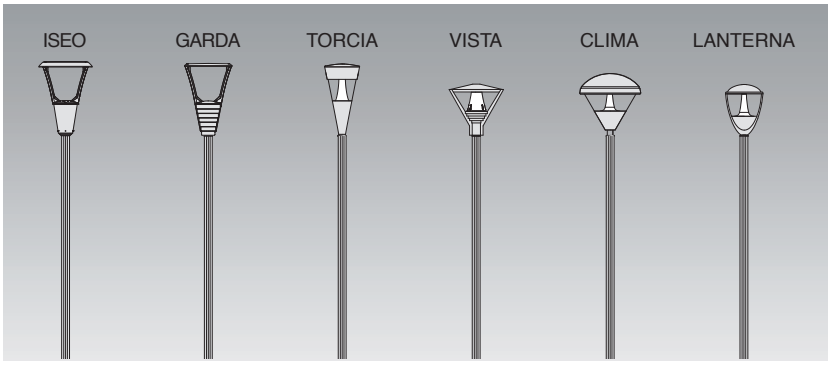
acc. 299 log bolts
991396-00
Log bolts are to be always used with the pole 1508.

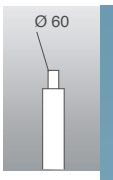


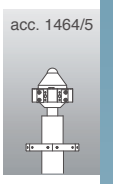
acc. 222 base pole cover	
grey	991378-00
graphite	991381-00
Made of die-cast aluminium. To be used as base pole cover acc. 1508.	

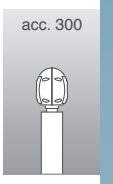


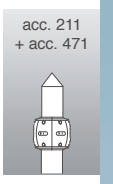
acc. 471 acc. 367 cover for poles	
grey	991461-00
graphite	991462-00
Made of aluminium. To be used when a particular aesthetic finish is desired.	

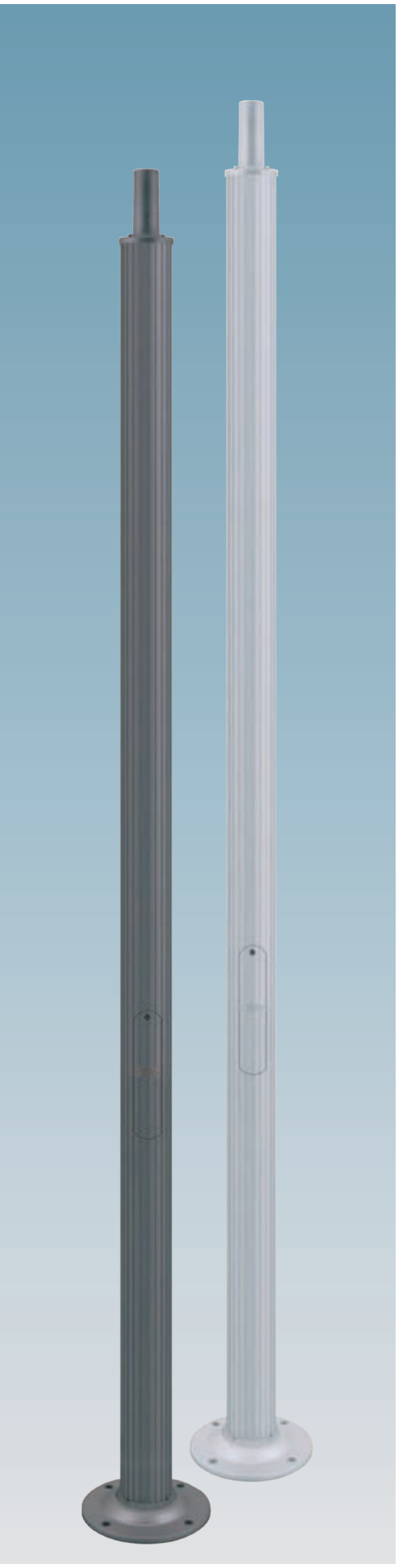


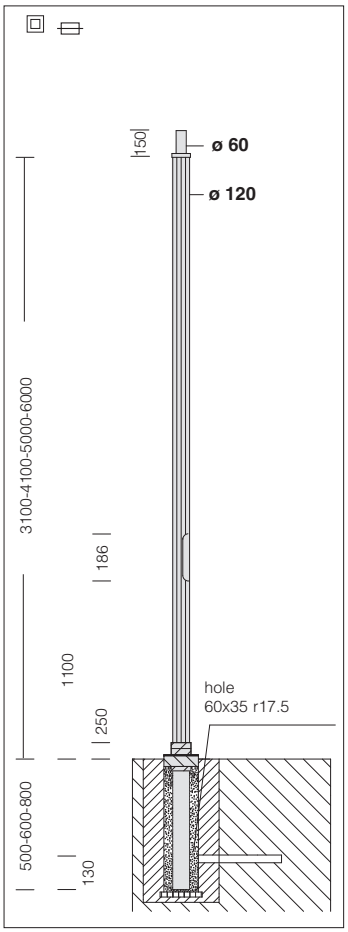


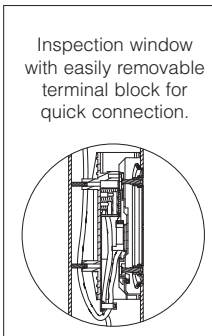






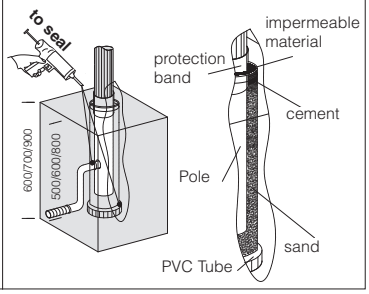






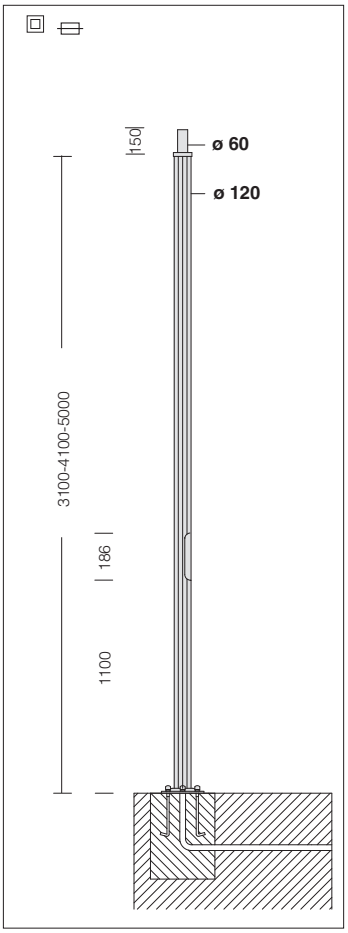
Inspection window with easily removable terminal block for quick connection.

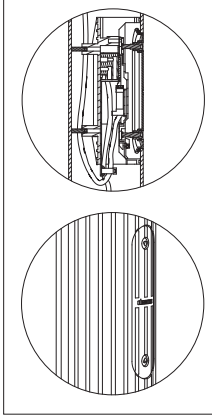
The size of the plinth depends on the type of pole, the composition used, the type of terrain on which the plinth stands, and the material of which it is made.



acc. 1509 fluted pole Ø 120

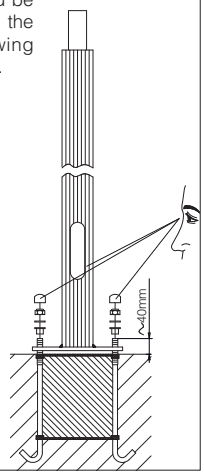
colour	code							ø	Ø
oxy natural	426374-00	3600	3100	500	1100	186	45	**Ø 120**	Ø 60
oxy natural	426375-00	4700	4100	600					
oxy natural	426376-00	5800	5000	800					
oxy natural	426373-00	6800	6000	800					
graphite	426366-00	3600	3100	500					
graphite	426367-00	4700	4100	600					
graphite	426368-00	5800	5000	800					
graphite	426369-00	6800	6000	800					



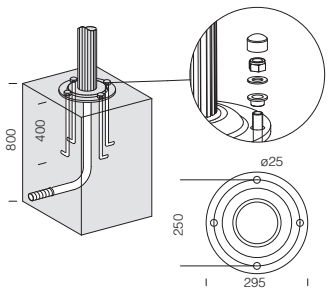


Inspection window with easily removable terminal block for quick connection.

For correct installation of pole and base, the ceiling cap should be fitted as shown in the assembly drawing featured opposite.



Cement base dimensions (subject to soil variations) for underground sinking of the 4 log bolts of acc. 1508.



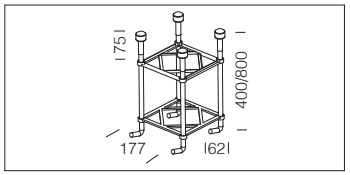
acc. 1508 fluted pole with base Ø 120

colour	code					ø	Ø	
oxy natural	426377-00	3100	1100	186	45	**Ø 120**	Ø 60	Ø 295
oxy natural	426378-00	4100						hole Ø 25
oxy natural	426379-00	5000						
graphite	426362-00	3100						
graphite	426363-00	4100						
graphite	426364-00	5000						

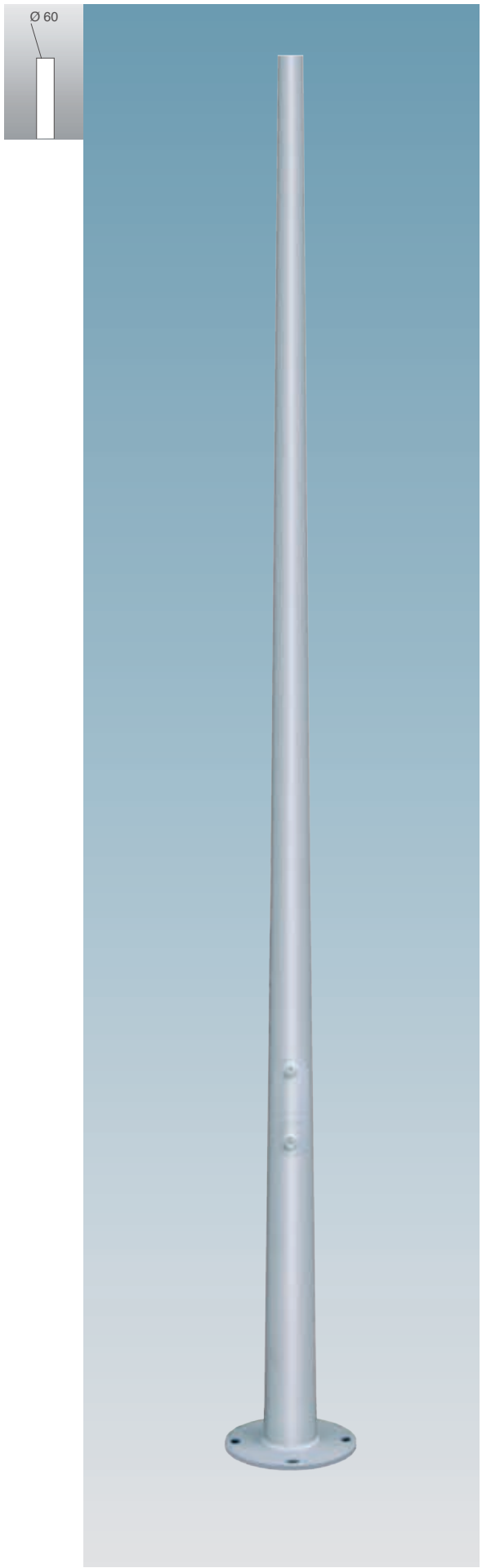
Log bolts are to be bought separately acc. 299.

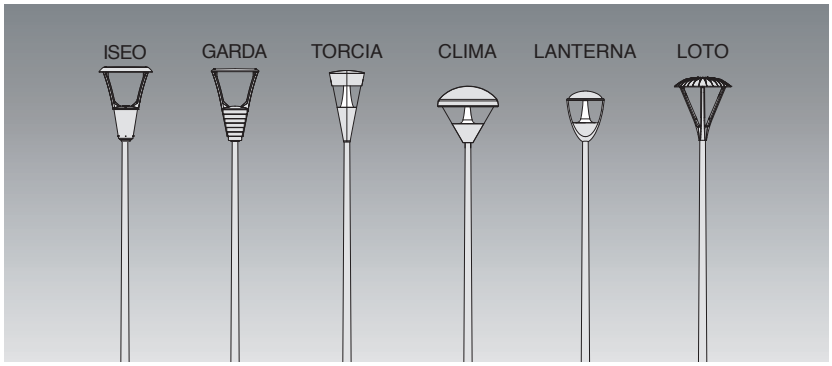
Tapered steel lighting pole. With hole for insertion of power supply cable, pole-head connection, ø60.
For the version with base, 4 log bolts to be sunk into the ground, bolts and lids have to be purchased. Size of inspection window 38x132 (h 3 000) - 45x186 (h 4000-5000-6000-7000-8000), supplied with protection fuse holder, 2 fuses, 16A, removable terminal block, 4 poles/3 holes = 10sqmm and shunt 2,5sqmm.
Standard insulation class II. When using Insulation Class I fixtures, appropriate grounding connections should be included in the system.

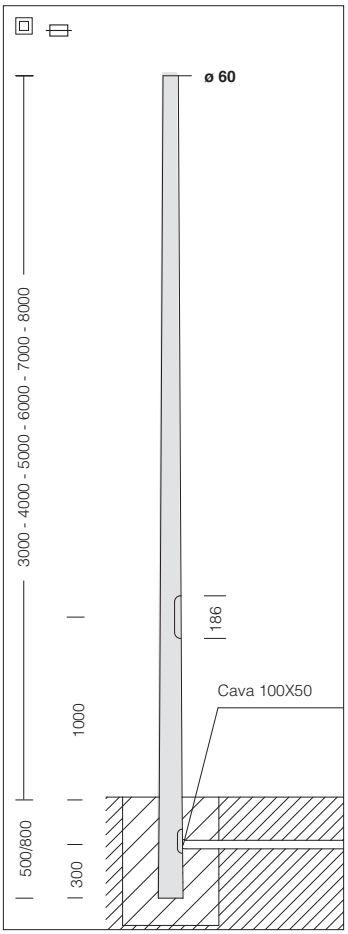
NOTE: The possibility to attach an assembly to the pole is subject to a wind pressure resistance assessment in the areas regulated by CNR-UNI standard 10032-67, according to load assumptions in UNI standard 40/6.



acc. 299 log bolts	
h=3000/4000/5000/6000	991396-00
h=7000/8000	991314-00
Log bolts are to be always used with the pole 1480.	

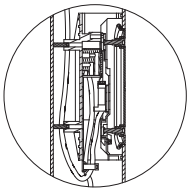




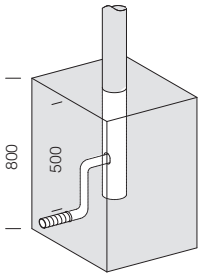


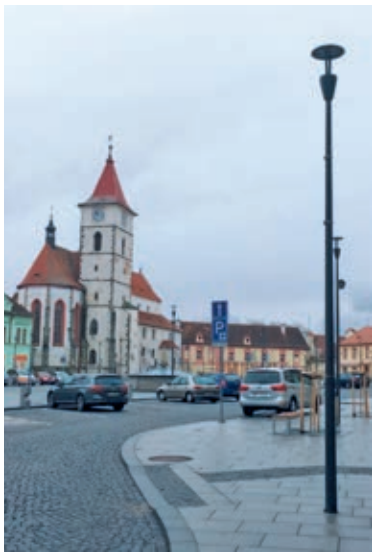
ON REQUEST
Possibility of supplyng poles with the following colour paint finishes:
pearl, blue, RAL 3003, 5011, 7026, 9011, 8015, 5002 7024, 7016, 9006, 7037, 6004, 8019, 6011, 7022, 1015, 9010.

Inspection door with easily removable terminal board for quick connection.



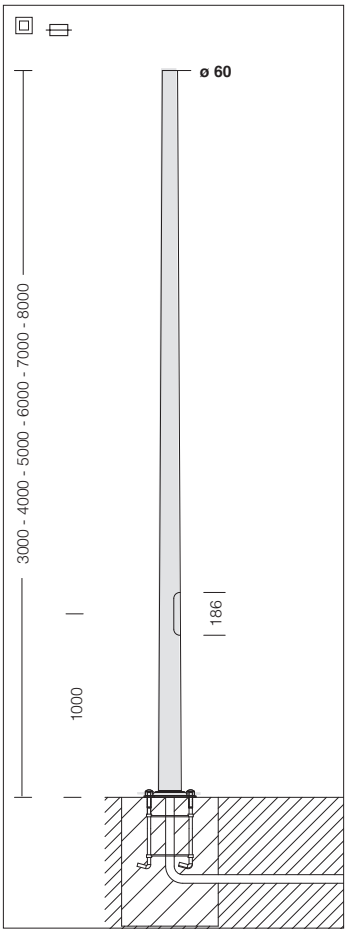
Concrete base dimensions (subject to soil variations).





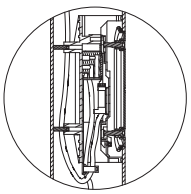
acc. 1481 - steel cone-shaped to be buried-with window

colour	code							Ø	Ø
grey	425150-00	3500	3000	500	1000	186	45	**Ø 89**	Ø 60
grey	425151-00	4500	4000	500				**Ø 89**	
grey	425152-00	5500	5000	500				**Ø 102**	
grey	425153-00	6800	6000	800				**Ø 127**	
grey	425158-00	7800	7000	800				**Ø 127**	
grey	425167-00	8800	8000	800				**Ø 139**	
graphite	425154-00	3500	3000	500				**Ø 89**	
graphite	425155-00	4500	4000	500				**Ø 89**	
graphite	425156-00	5500	5000	500				**Ø 102**	
graphite	425157-00	6800	6000	800				**Ø 127**	
graphite	425159-00	7800	7000	800				**Ø 127**	
graphite	425168-00	8800	8000	800				**Ø 139**	

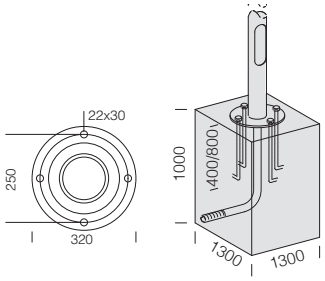


ON REQUEST
Possibility of supplyng poles with the following colour paint finishes:
pearl, blue, RAL 3003, 5011, 7026, 9011, 8015, 5002 7024, 7016, 9006, 7037, 6004, 8019, 6011, 7022, 1015, 9010.

Inspection door with easily removable terminal board for quick connection.



Concrete base dimensions (subject to soil variations).



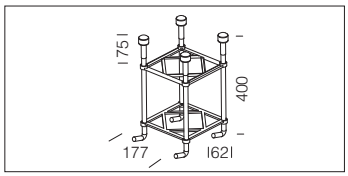
acc. 1480 - steel cone-shaped with base-with window

colour	code					Ø	Ø	
grey	425050-00	3000	1000	186	45	**Ø 89**	Ø 60	Ø 320 hole Ø 22x30
grey	425051-00	4000				**Ø 89**		
grey	425052-00	5000				**Ø 102**		
grey	425053-00	6000				**Ø 127**		
grey	425058-00	7000				**Ø 127**		
grey	425067-00	8000				**Ø 139**		
graphite	425054-00	3000				**Ø 89**		
graphite	425055-00	4000				**Ø 89**		
graphite	425056-00	5000				**Ø 102**		
graphite	425057-00	6000				**Ø 127**		
graphite	425059-00	7000				**Ø 127**		
graphite	425068-00	8000				**Ø 139**		

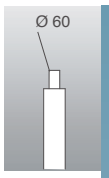
Log bolts are to be bought separately acc. 299.

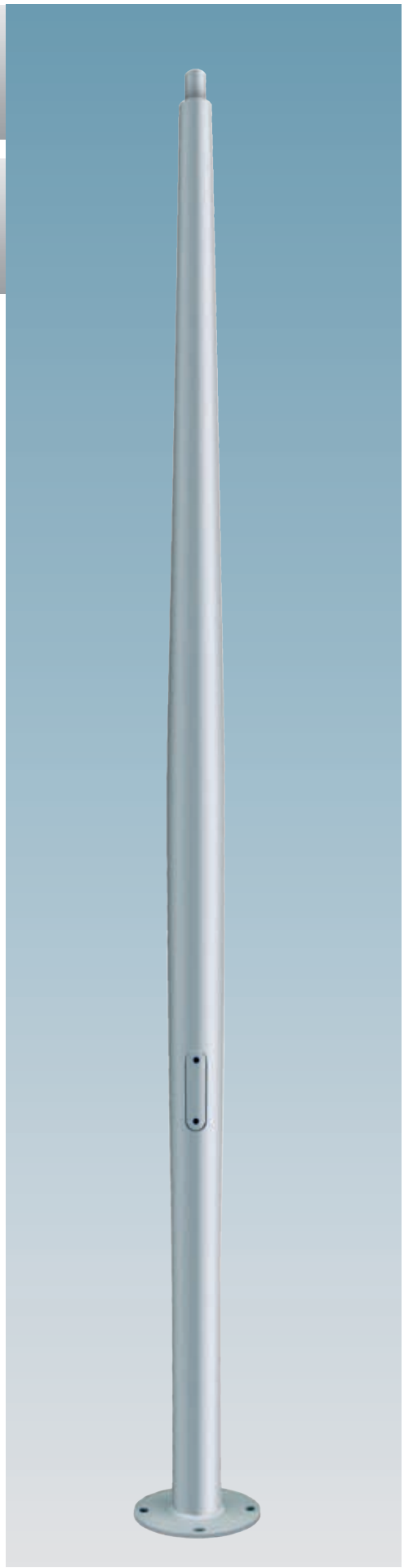
Tapered steel lighting pole. With hole for insertion of power supply cable, pole-head connection, ø60.
For the version with base, 4 log bolts to be sunk into the ground, bolts and lids have to be purchased. Size of inspection window 38x132 (h 3 000) - 45x186 (h 4000-5000-6000), supplied with protection fuse holder, 2 fuses, 16A, removable terminal block, 4 poles/3 holes = 6sqmm and shunt 4sqmm.
Standard insulation class II. When using Insulation Class I fixtures, appropriate grounding connections should be included in the system.

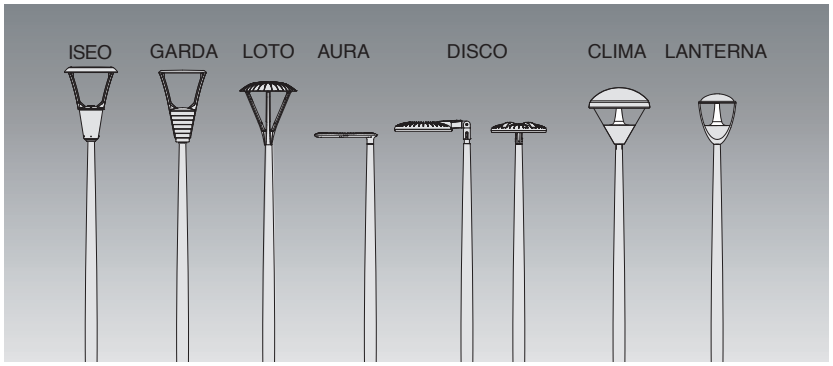
NOTE. Before selecting the appropriate pole, make all necessary wind pressure resistance tests, pursuant to the Standards or Legislative Decrees in force in the countries where the pole will be mounted and based on the assumed loads specified in Standard EN 40-3-1

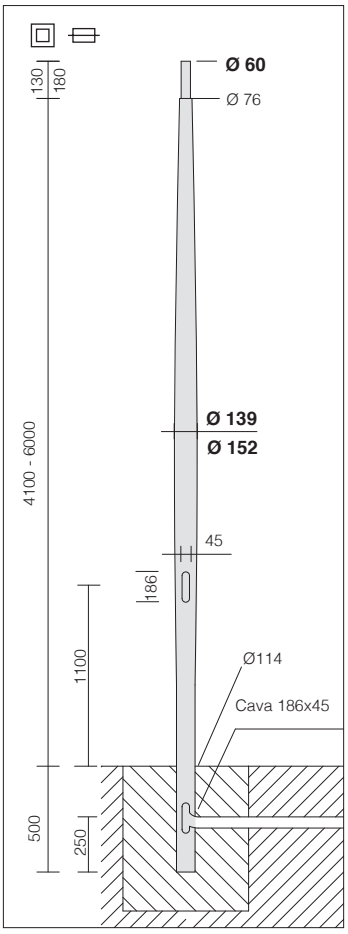


acc. 299 log bolts	
	991396-00
Log bolts are to be always used with the pole 1477.	

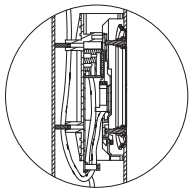




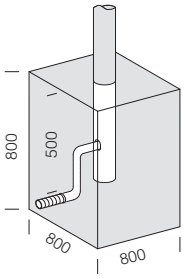


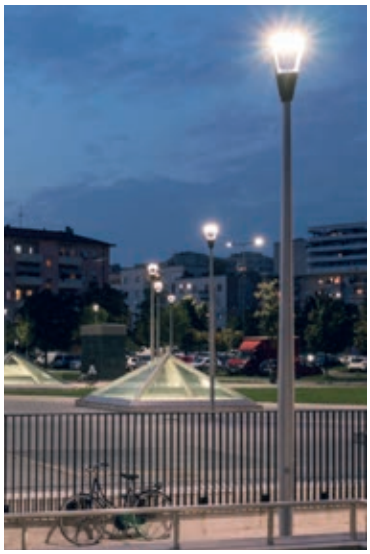


Inspection door with easily removable terminal board for quick connection.



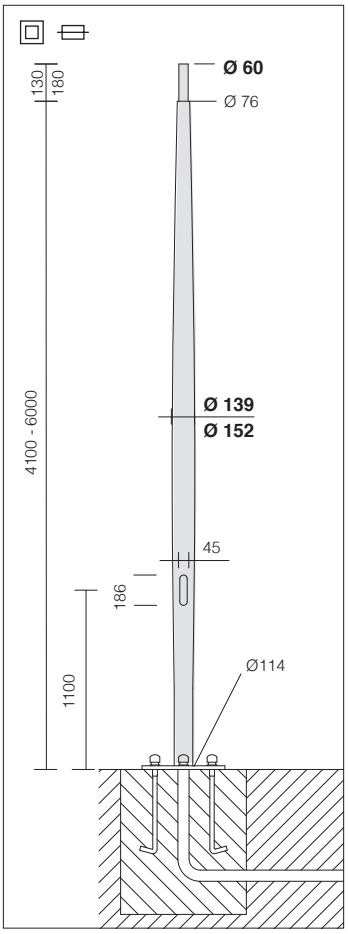
Concrete base dimensions (subject to soil variations).



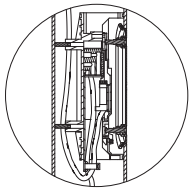


acc. 1478 - pole Urban to be buried

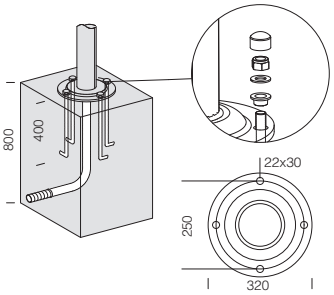
colour	code							Ø	Ø
grey	425370-00	4600	4100	500	1100	186	45	**Ø 114**	Ø 60
graphite	425371-00	4600	4100	500					
grey	425373-00	6500	6000	500				**Ø 127**	
graphite	425374-00	6500	6000	500					



Inspection door with easily removable terminal board for quick connection.



Concrete base dimensions (subject to soil variations).



acc. 1477 - pole Urban with base

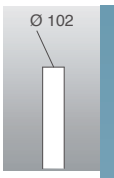
colour	code					Ø	Ø	
grey	425360-00	4100	1100	186	45	**Ø 114**	Ø 60	ø320 22x30
graphite	425361-00	4100						
grey	425363-00	6000				**Ø 127**		
graphite	425364-00	6000						

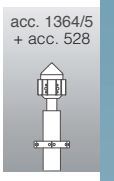
Log bolts are to be bought separately acc. 299.

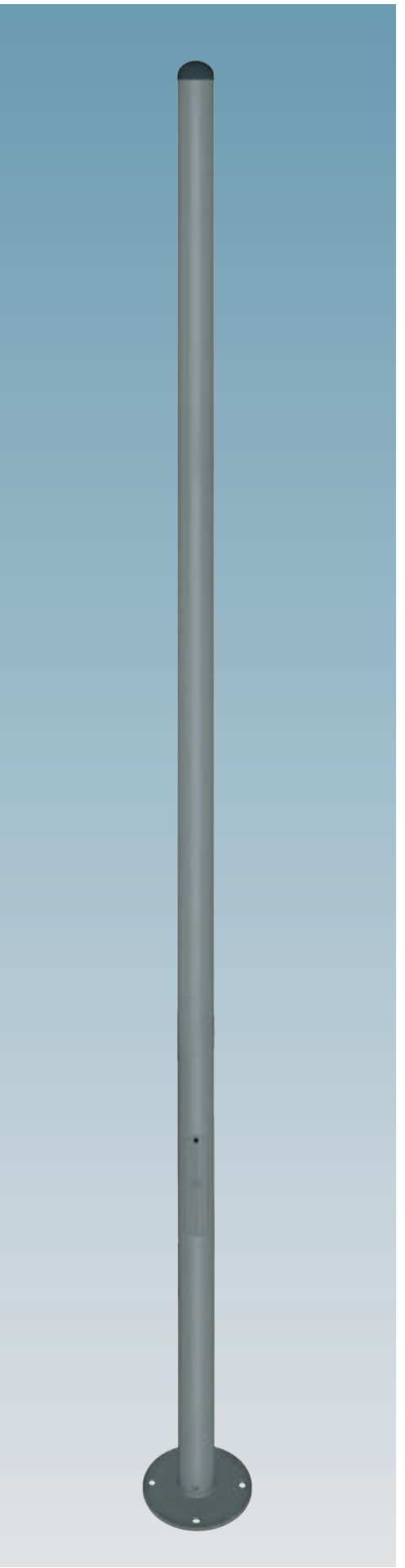
Steel pole ø 102

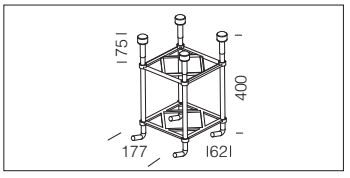
Steel pole ø 102. With die-cast aluminium inspection window (186x45mm), complete with 2 protection fuse holders, 2 fuses, 16A, removable 4-pole terminal block. With hole for insertion of power supply cable. For the version with base, 4 log bolts to be sunk into the ground, bolts and lids have to be purchased.

NOTE. Before selecting the appropriate pole, make all necessary wind pressure resistance tests, pursuant to the Standards or Legislative Decrees in force in the countries where the pole will be mounted and based on the assumed loads specified in Standard EN 40-3-1

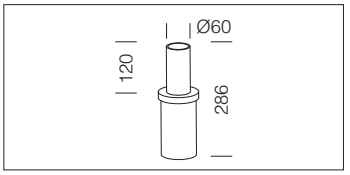




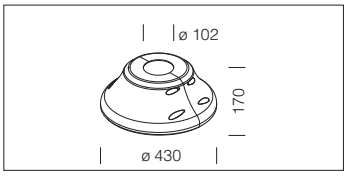




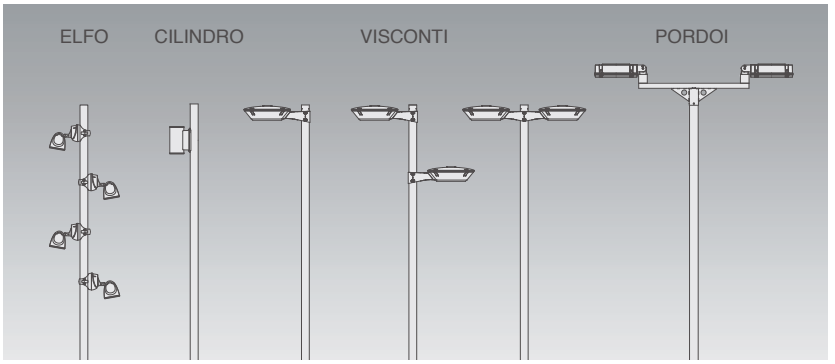
acc. 299 log bolts	
h=5000	991396-00
h=7000	991314-00
Log bolts are to be always used with the pole 1485.	

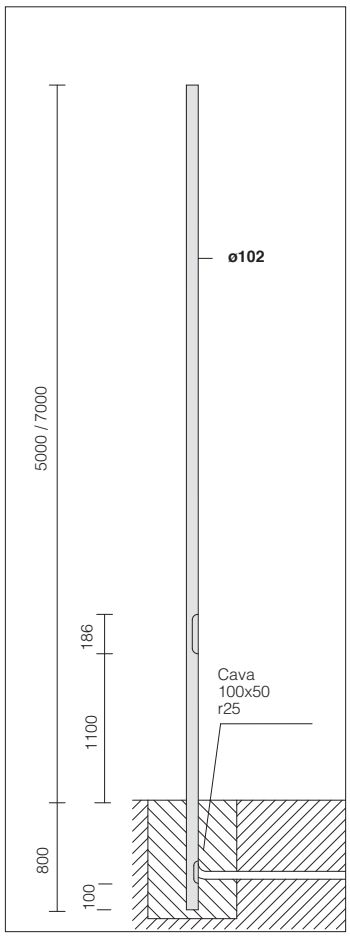


acc. 528 mast-top adapter	
graphite	991463-00
It enables the installation of fixtures on top of poles in single-lamps configurations.	



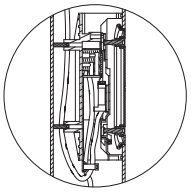
acc. 222 base pole cover	
graphite	991315-00
To be used as base pole cover acc. 1485/1487	



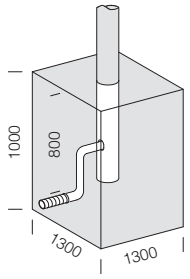


ON REQUEST
Possibility of supplyng poles with the following colour paint finishes:
RAL 3003, 5011, 7026, 9011, 8015, 5002 7024, 7016, 9006, 7037, 6004, 8019, 6011, 7022, 1015, 9010.

Inspection door with easily removable terminal board for quick connection.

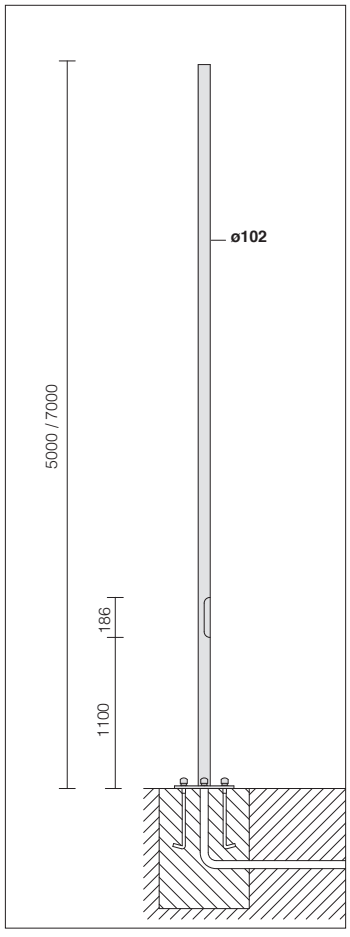


Concrete base dimensions (subject to soil variations)



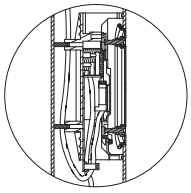
acc. 1487 steel pole to be buried

colour	code							Ø	Ø
graphite	425064-00	5800	5000	800	1100	186	45	**Ø 102**	Ø 102
graphite	425065-00	7800	7000	800					

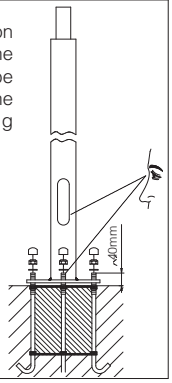


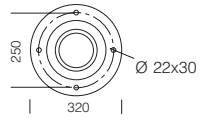
ON REQUEST
Possibility of supplyng poles with the following colour paint finishes:
RAL 3003, 5011, 7026, 9011, 8015, 5002 7024, 7016, 9006, 7037, 6004, 8019, 6011, 7022, 1015, 9010.

Inspection door with easily removable terminal board for quick connection.

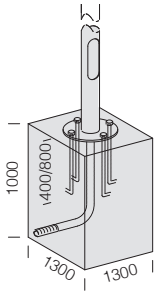


For correct installation of pole and base, the ceiling cap should be fitted as shown in the assembly drawing featured opposite.





Concrete base dimensions (subject to soil variations)



acc. 1485 steel pole with base

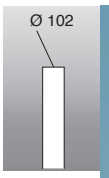
colour	code					Ø	Ø	
graphite	425074-00	5000	1100	186	45	**Ø 102**	Ø 102	Ø 320 hole Ø 22x30
graphite	425075-00	7000						

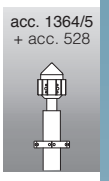
Log bolts are to be bought separately acc. 299.

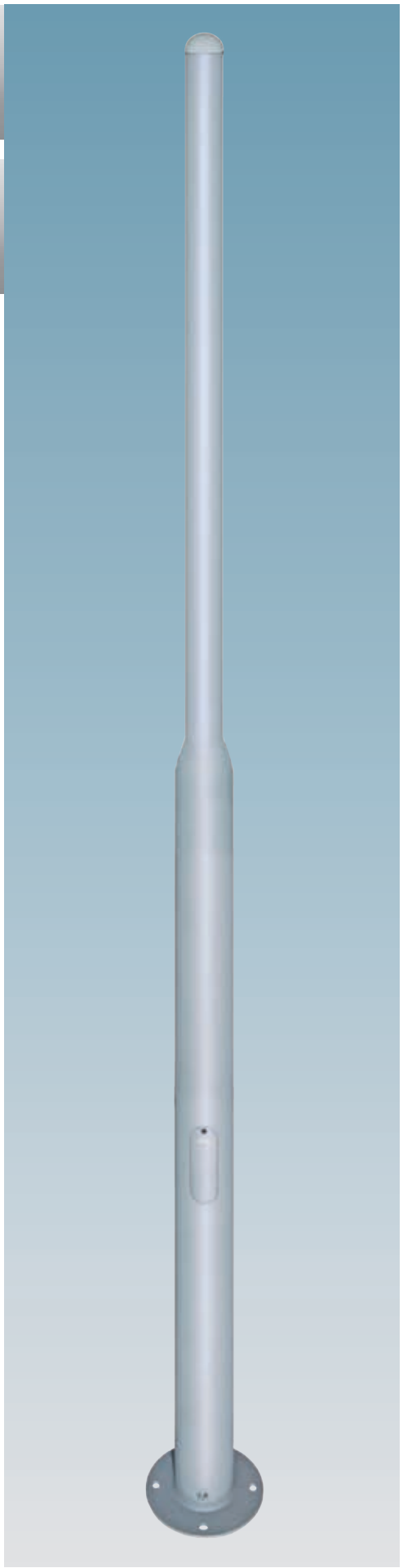
Steel pole Ø 102 -159

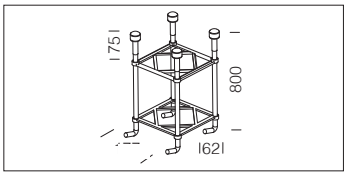
Steel pole ø 102-159. With die-cast aluminium inspection window (186x45mm), complete with 2 protection fuse holders, 2 fuses, 16A, removable 4-pole terminal block. With hole for insertion of power supply cable. For the version with base, 4 log bolts to be sunk into the ground, bolts and lids have to be purchased.

NOTE. Before selecting the appropriate pole, make all necessary wind pressure resistance tests, pursuant to the Standards or Legislative Decrees in force in the countries where the pole will be mounted and based on the assumed loads specified in Standard EN 40-3-1

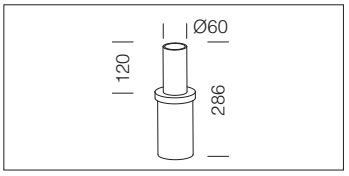




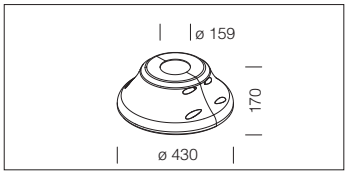




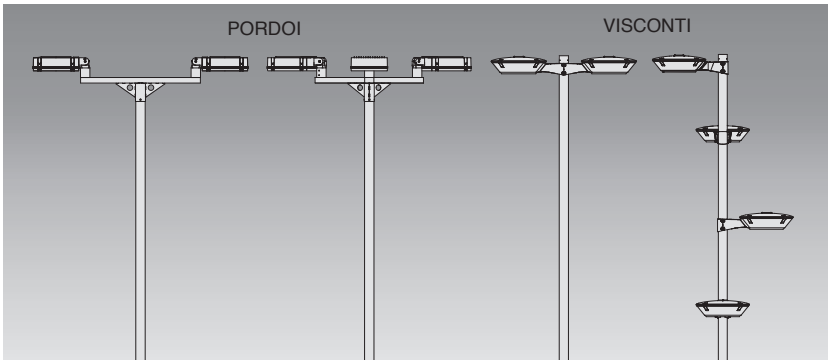
acc. 299 log bolts
991314-00
Log bolts are to be always used with the pole 1417.

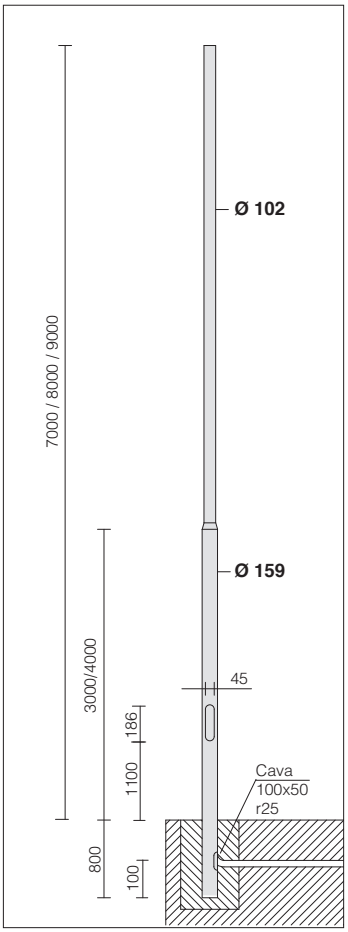


acc. 528 mast-top connection	
graphite	991463-00
In galvanised steel. To be used as a mast-top connection	



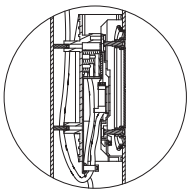
acc. 223 base pole cover	
grey	991333-00
graphite	991320-00
To be used as base pole cover acc. 1417/1418.	



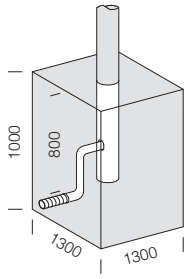


ON REQUEST
Possibility of supplyng poles with the following colour paint finishes:
RAL 3003, 5011, 7026, 9011, 8015, 5002 7024, 7016, 9006, 7037, 6004, 8019, 6011, 7022, 1015, 9010.

Inspection door with easily removable terminal board for quick connection.

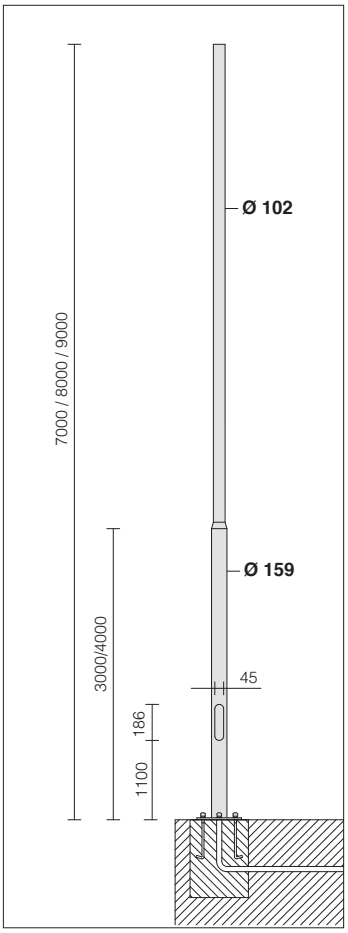


Concrete base dimensions (subject to soil variations)



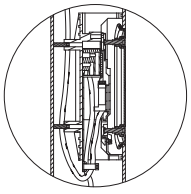
acc. 1418 steel pole to be buried

colour	code							Ø	Ø
grey	426770-00	7800	7000	800	1100	186	45	**Ø 159**	Ø 102
graphite	426771-00	7800	7000	800	1100				
grey	426772-00	8800	8000	800	1100				
graphite	426773-00	8800	8000	800	1100				
grey	426774-00	9800	9000	800	1100				
graphite	426775-00	9800	9000	800	1100				

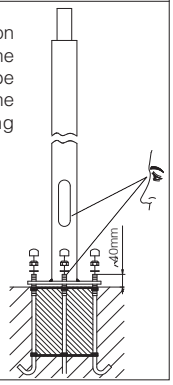


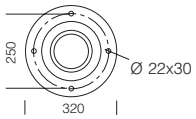
ON REQUEST
Possibility of supplyng poles with the following colour paint finishes:
RAL 3003, 5011, 7026, 9011, 8015, 5002 7024, 7016, 9006, 7037, 6004, 8019, 6011, 7022, 1015, 9010.

Inspection door with easily removable terminal board for quick connection.

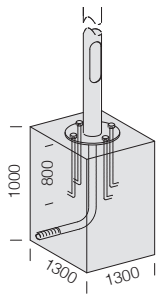


For correct installation of pole and base, the ceiling cap should be fitted as shown in the assembly drawing featured opposite.





Concrete base dimensions (subject to soil variations)



acc. 1417 steel pole with base

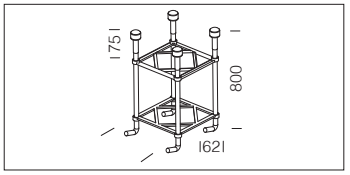
colour	code					Ø	Ø	
grey	426760-00	7000	1100	186	45	**Ø 159**	Ø 102	Ø 320 hole Ø 22x30
graphite	426761-00	7000	1100					
grey	426762-00	8000	1100					
graphite	426763-00	8000	1100					
grey	426764-00	9000	1100					
graphite	426765-00	9000	1100					

Log bolts are to be bought separately acc. 299.

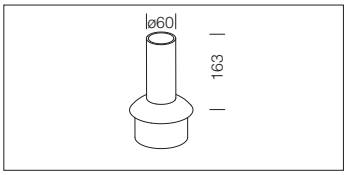
Steel pole Ø 120 -159

Hot-dip galvanised steel poles.
With die-cast inspection window (186x45mm), 2 protection fuse holders, 2 fuses, 16A, 4-pole/3-way removable terminal block = 10 sqmm, 2,5 sqmm connection. With hole for insertion of power supply cable. For the version with base, 4 log bolts to be sunk into the ground, bolts and lids have to be purchased. Standard insulation class II.
When using Insulation Class I fixtures, appropriate grounding connections should be included in the system.

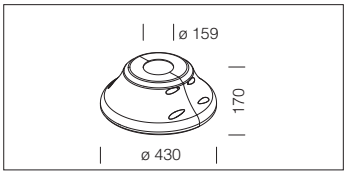
NOTE. Before selecting the appropriate pole, make all necessary wind pressure resistance tests, pursuant to the Standards or Legislative Decrees in force in the countries where the pole will be mounted and based on the assumed loads specified in Standard EN 40-3-1



acc. 299 log bolts
991396-00
Log bolts are to be always bought with the pole 1415.

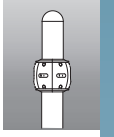


acc. 368 mast-top-pole connec.	
grey	427002-00
graphite	427003-00
In galvanized steel. To be used as a mast-top-pole connection on poles acc. 1415/1416.	

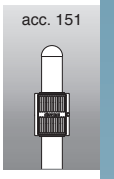


acc. 223 base pole cover	
grey	991333-00
graphite	991320-00
To be used as base pole cover acc. 1415/1416.	

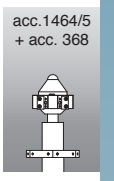
acc. 211



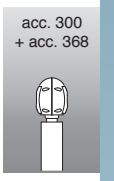
acc. 151

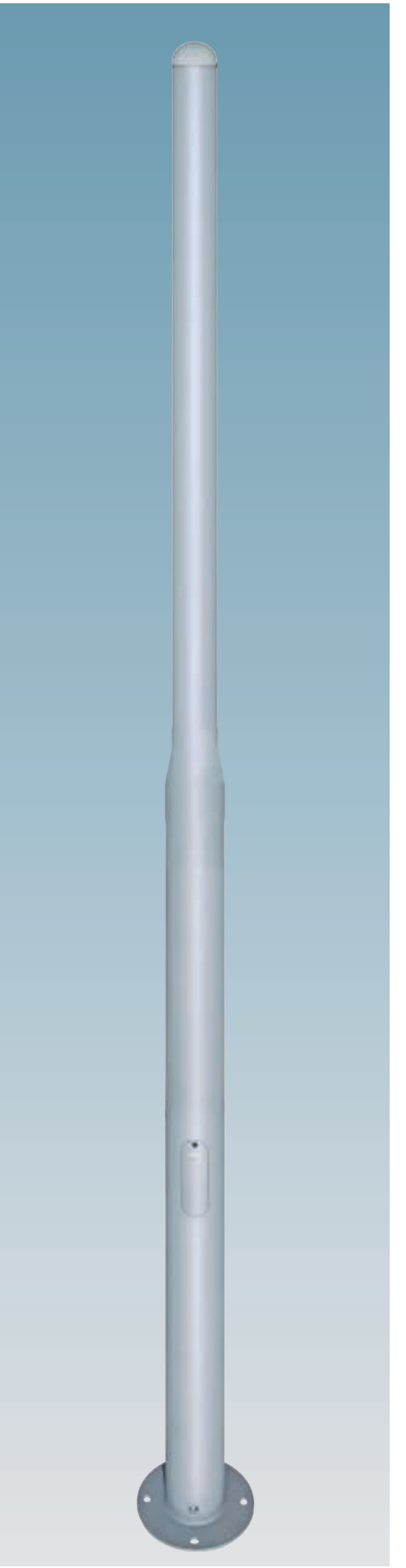


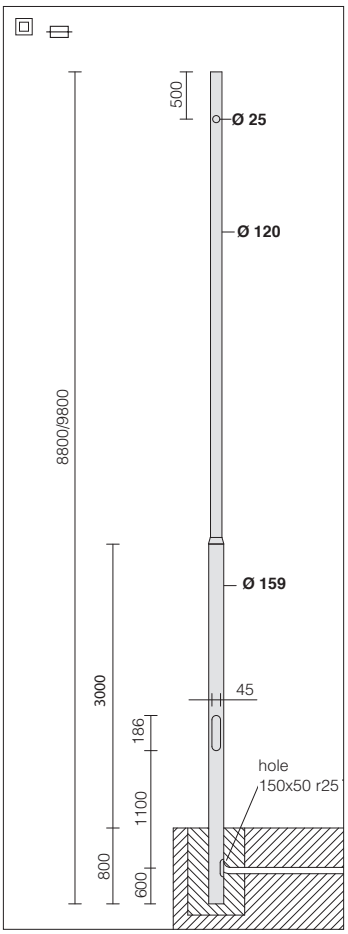
acc.1464/5
+ acc. 368



acc. 300
+ acc. 368

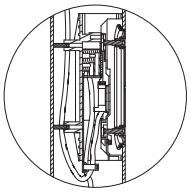




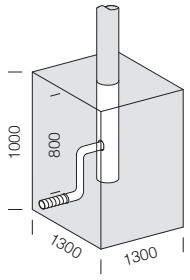


ON REQUEST
Possibility of supplying poles with the following colour paint finishes:
RAL 3003, 5011, 7026, 9011, 8015, 5002 7024, 7016, 9006, 7037, 6004, 8019, 6011, 7022, 1015, 9010.

Inspection door with easily removable terminal board for quick connection.

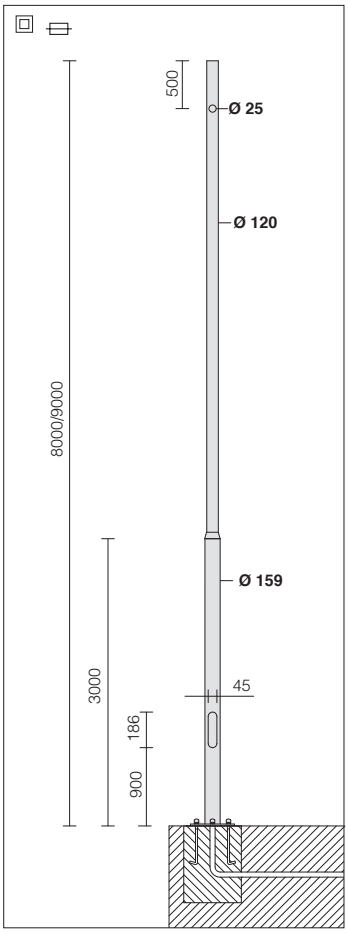


Concrete base dimensions (subject to soil variations)



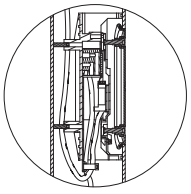
acc. 1416 steel pole to be buried

colour	code							Ø	Ø
grey	426750-00	8800	8000	800	1100	186	45	**Ø 159**	Ø 121
graphite	426751-00	8800	8000	800					
grey	426752-00	9800	9000	800					
graphite	426753-00	9800	9000	800					

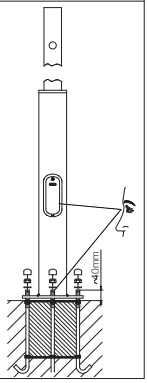


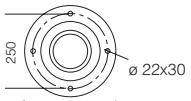
ON REQUEST
Possibility of supplying poles with the following colour paint finishes:
RAL 3003, 5011, 7026, 9011, 8015, 5002 7024, 7016, 9006, 7037, 6004, 8019, 6011, 7022, 1015, 9010.

Inspection door with easily removable terminal board for quick connection.

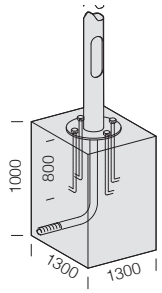


For correct installation of pole and base, the ceiling cap should be fitted as shown in the assembly drawing featured opposite





Concrete base dimensions (subject to soil variations)

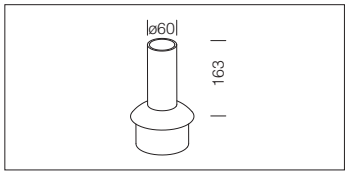


acc. 1415 steel pole with base

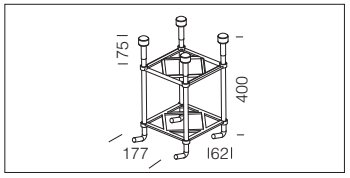
colour	code					Ø	Ø	
grey	426740-00	8000	1100	186	45	**Ø 159**	Ø 121	Ø 320 hole Ø 22x30
graphite	426741-00	8000						
grey	426742-00	9000						
graphite	426743-00	9000						

Log bolts are to be bought separately acc. 299.

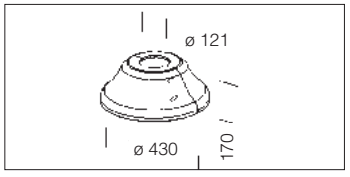
Hot-dip galvanised steel poles. With die-cast inspection window (186x45mm), 2 protection fuse holders, 2 fuses, 16A, 4-pole/3-way=10mm², derivation 2,5 sqmm, removable terminal block = 6 sqmm, 4 sqmm connection. With hole for insertion of power supply cable; with holes at different heights according to use. For the version with base, 4 log bolts to be sunk into the ground, bolts and lids have to be purchased. Standard insulation class II. When using Insulation Class I fixtures, appropriate grounding connections should be included in the system.



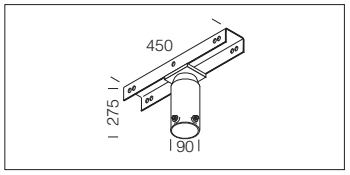
368 mast-top-pole connec.	
grey	427002-00
graphite	427003-00
In galvanized steel. To be used as a mast-top-pole connection on poles acc. 1491/1493 ø120.	



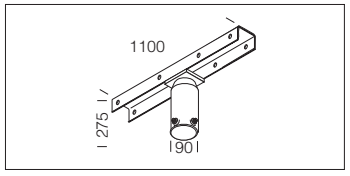
acc. 299 log bolts	
h=6000	991396-00
h=7000/8000	991314-00
Log bolts are to be always used with the pole 1493.	



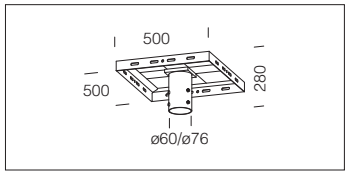
acc. 222 base pole cover	
grey	991378-00
graphite	991381-00
In die-cast aluminium. To be used as a base pole cover acc. 1493.	



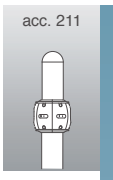
acc. 59 pole bracket	
galvanized	997900-00
Bracket for pole mounting 1 or 2 end-to-end floodlights. For Ø 60/76 mm poles.	

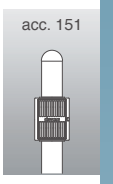


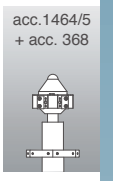
acc. 60 pole bracket	
galvanized	997901-00
Bracket for pole mounting 2 or 4 end-to-end exterior floodlights. For Ø 60/76 mm poles.	

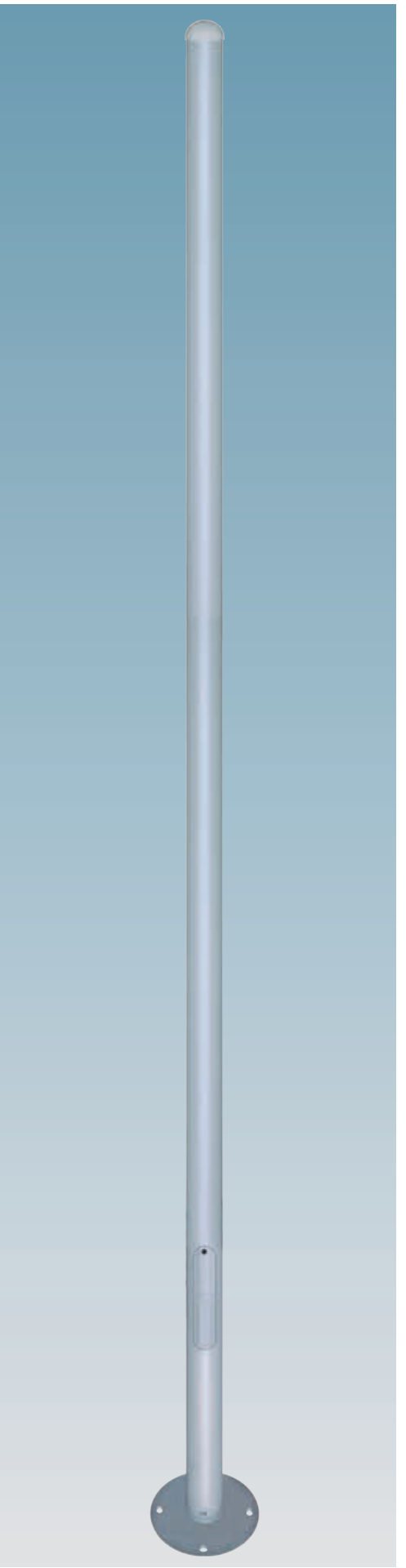


acc. 164 pole attachment	
galvanized	998097
Made in galvanized steel. To be used to apply on a pole until 4 fixture ø60/ø76.	

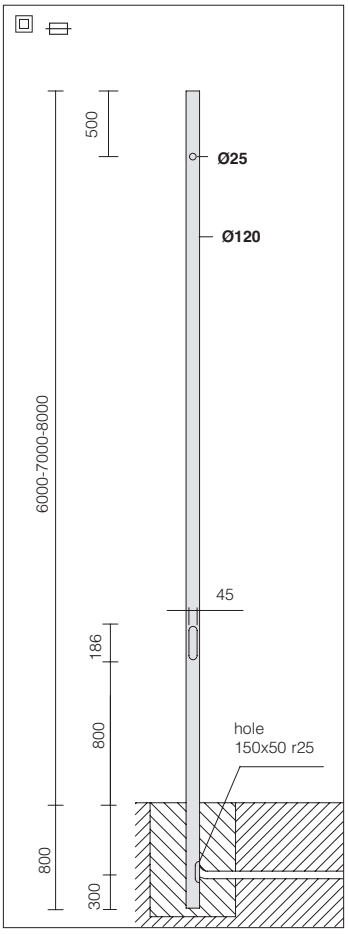






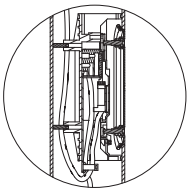


NOTE. Before selecting the appropriate pole, make all necessary wind pressure resistance tests, pursuant to the Standards or Legislative Decrees in force in the countries where the pole will be mounted and based on the assumed loads specified in Standard EN 40-3-1

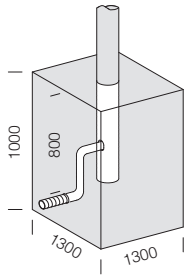


ON REQUEST
Possibility of supplying poles with the following colour paint finishes:
RAL 3003, 5011, 7026, 9011, 8015, 5002 7024, 7016, 7037, 6004, 8019, 6011, 7022, 1015, 9010.

Inspection door with easily removable terminal board for quick connection.



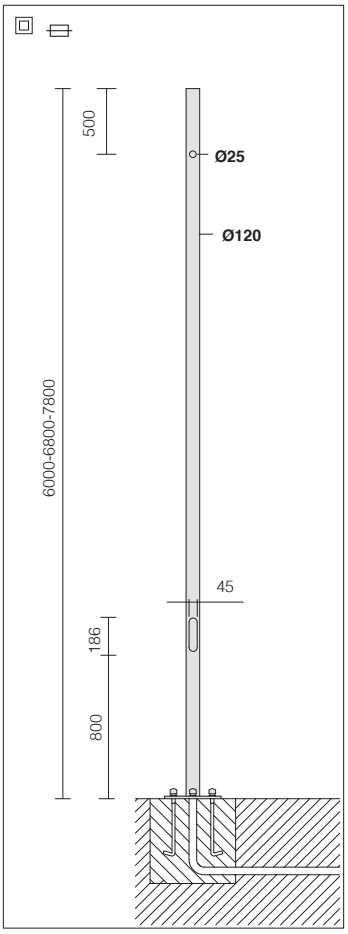
Concrete base dimensions (subject to soil variations)



acc. 1491 steel pole to be buried

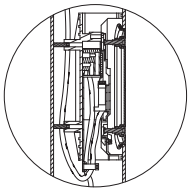
colour	code							Ø
grey	426177-00	6800	6000	800	800	186	45	**Ø 120**
grey	426178-00	7800	7000					
grey	426179-00	8800	8000					
graphite	426149-00	6800	6000					
graphite	426153-00	7800	7000					
graphite	426159-00	8800	8000					

Supplied with end cap and holes to let the cables through.

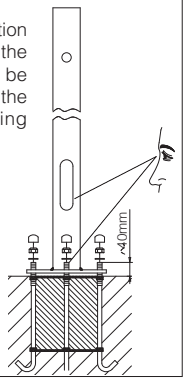


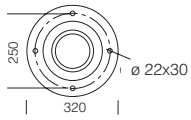
ON REQUEST
Possibility of supplying poles with the following colour paint finishes:
RAL 3003, 5011, 7026, 9011, 8015, 5002 7024, 7016, 7037, 6004, 8019, 6011, 7022, 1015, 9010.

Inspection door with easily removable terminal board for quick connection.

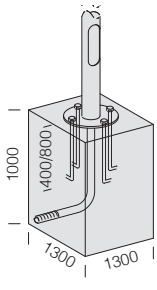


For correct installation of pole and base, the ceiling cap should be fitted as shown in the assembly drawing featured opposite.





Concrete base dimensions (subject to soil variations)



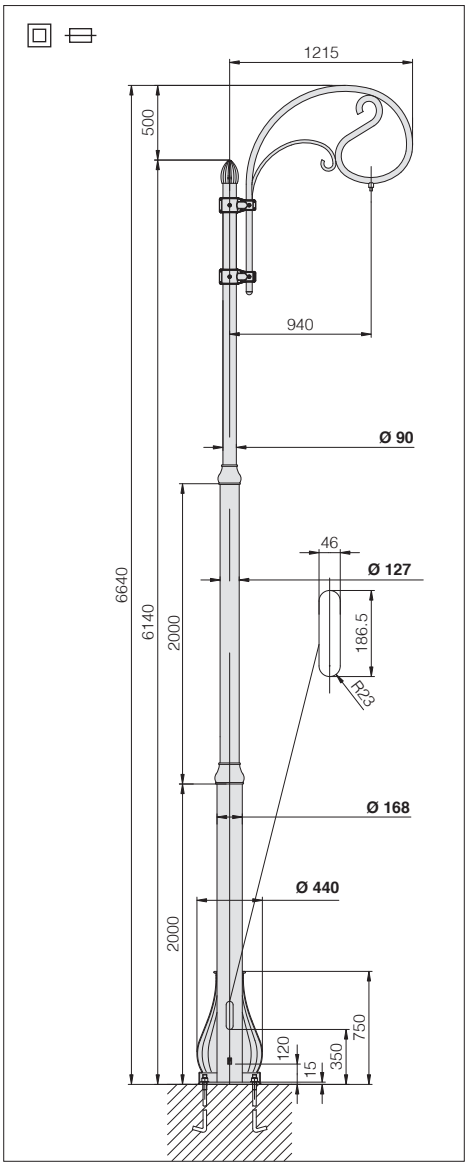
acc. 1493 steel pole with base

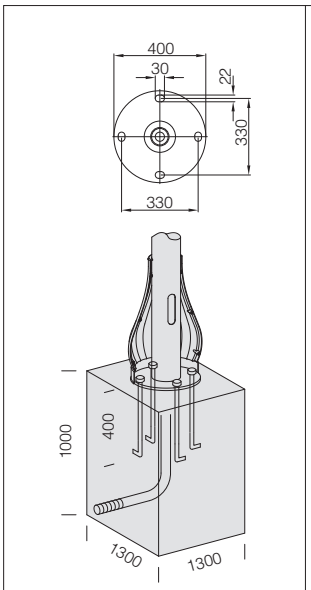
colour	code					Ø	
grey	426197-00	6000	800	186	45	**Ø 120**	Ø 320 hole Ø 22x30
grey	426198-00	6800					
grey	426199-00	7800					
graphite	426187-00	6000					
graphite	426188-00	6800					
graphite	426189-00	7800					

Supplied with end cap and holes to let the cables through. **Log bolts are to be bought separately acc. 299.**

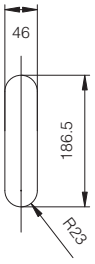
Liberty Pole, complete with one or two brackets. Internal steel pole with die-cast aluminium coating.
Die-cast aluminium inspection window. Complete with 2 protection fuse holders, 2 fuses, 16A, removable 4-pole terminal block, 16sqmm cross section.

NOTE: The possibility to attach an assembly to the pole is subject to a wind pressure resistance assessment in the areas regulated by CNR-UNI standard 10032-67, according to load assumptions in UNI UNI 40/6 standard. An accurate and suitable protection or insulation of the surfaces involved is recommended to avoid any direct contact with the new masonry or concrete screed.

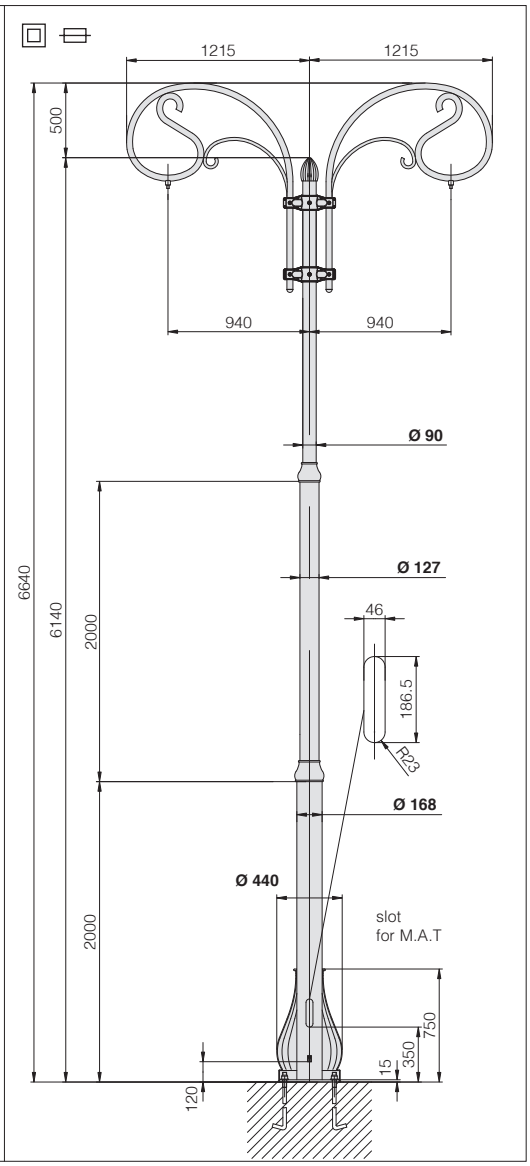




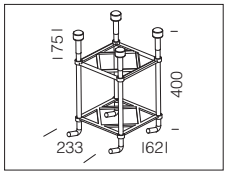
Cement base dimensions (subject to soil variations) for underground sinking of the 4 log bolts of acc. 1498.



Inspection window with easily removable terminal block for quick connection.



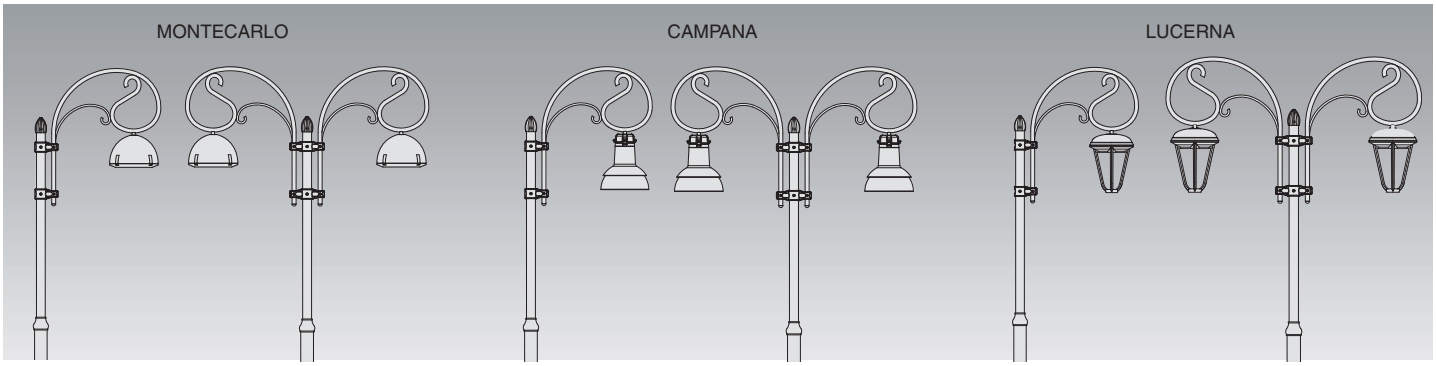
acc. 297 log bolts
426448-00
Log bolts are always to be used with the pole 1498.



acc. 1498 Liberty pole

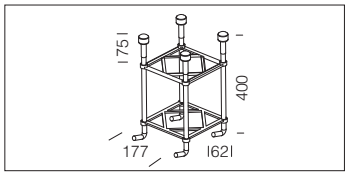
version	colour	code					Ø	Ø	
with 1 arm	graphite	425200-00	6140	350	186.5	46	**Ø 440**	Ø 90	Ø 400 hole 30x22
with 2 arms	graphite	425202-00							

Log bolts are to be bought separately acc. 297.

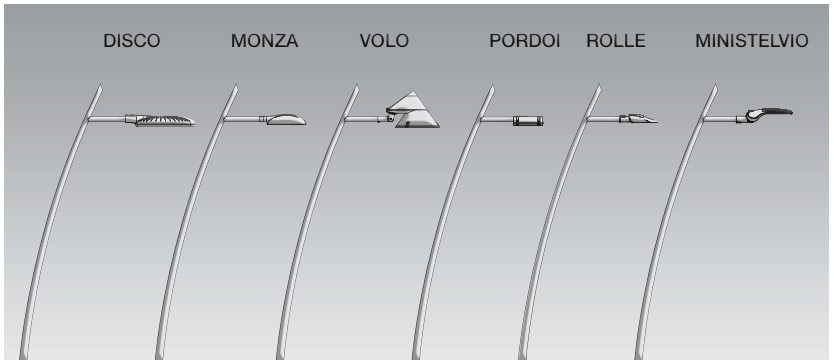


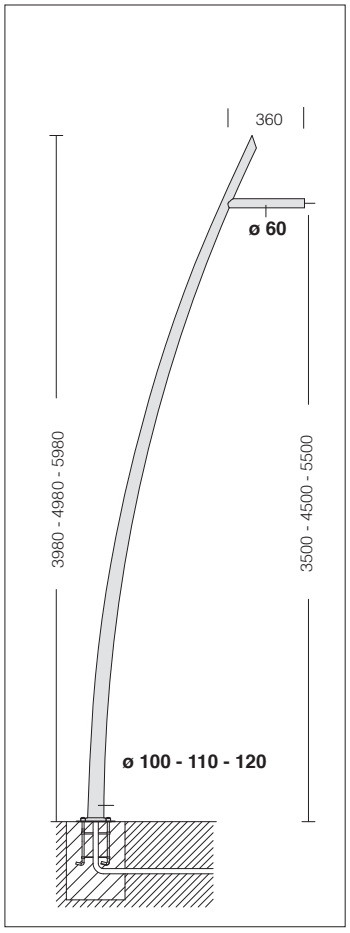
Tapered steel lighting pole. With hole for insertion of power supply cable, pole-head connection, ø60.
For the version with base, 4 log bolts to be sunk into the ground, bolts and lids have to be purchased.
When using insulation Class I fixtures, appropriate grounding connections should be included in the system.

NOTE. Before selecting the appropriate pole, make all necessary wind pressure resistance tests, pursuant to the Standards or Legislative Decrees in force in the countries where the pole will be mounted and based on the assumed loads specified in Standard EN 40-3-1

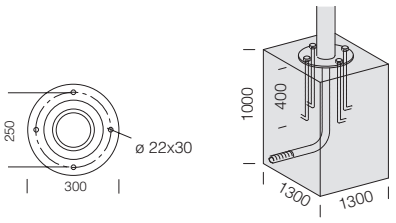


acc. 299 log bolts	
	991396-00
Log bolts are to be always used with the pole 1490.	





Cement base dimensions
(subject to soil variations)

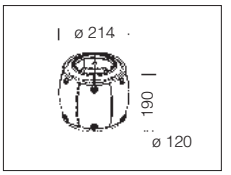


acc. 1490 “Virgola” pole

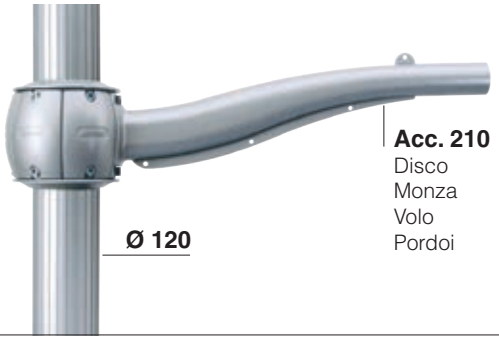
colour	code			Ø	Ø	
grey	425080-00	3980	3500	**Ø 100**	Ø 60	Ø 250 hole Ø 22x30
grey	425081-00	4980	4500	**Ø 110**		
grey	425082-00	5980	5500	**Ø 120**		

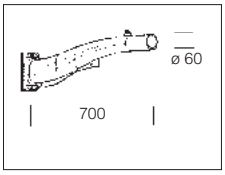
Painted pole in galvanized steel. Complete with cap and cable insertion hole.
Log bolts are to be bought separately acc. 299.
On request pole to be buried

For poles: Fluted Ø120, Steel Ø120, Steel Ø120-152, Steel Ø120-193

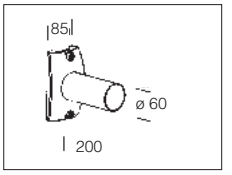


acc. 211 Sector connector	
grey	426952-00
graphite	426953-00
In aluminium. To be used for pole mounting ø 120.	

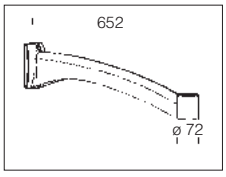




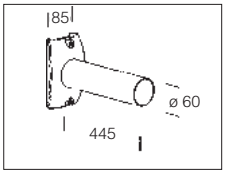
acc. 210 Sector arm	
grey	426950-00
graphite	426951-00
Made of aluminium. To be used with acc. 211 for pole mounting.	



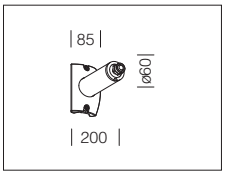
acc. 327 arm	
grey	426942-00
graphite	426943-00
Made of die-cast aluminium. To be used with acc. 211-300 for installation of Monza, Metropolis, Volo.	



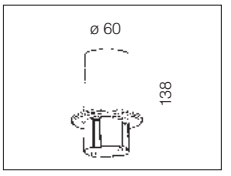
acc. 301 arm Oliva	
grey	426972-00
graphite	426973-00
Made of aluminium. To be used with acc. 300-303-304 for pole mounting or acc. 302/309 for wall mounting.	



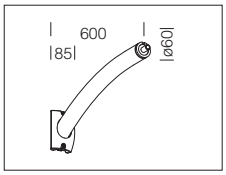
acc. 328 arm	
grey	426944-00
graphite	426945-00
Made of die-cast aluminium. To be used with acc. 211-300 for installation of Monza, Metropolis, Volo.	



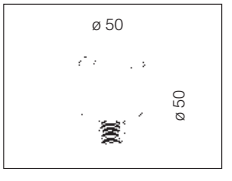
acc. 381 short arm	
grey	326503-00
To be used with access. 211-300 for Iride installation.	



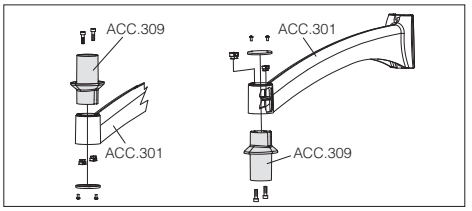
acc. 303 connection ø 60	
grey	426976-00
graphite	426977-00
Made of aluminium. To be always used with acc. 301 for pole arm installation of Torcia, Vista, Polar, Clima.	

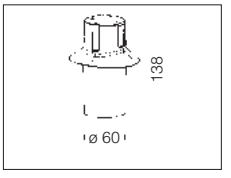


acc. 382 curved arm	
grey	326506-00
To be used with access. 211-300 for Iride installation.	



acc. 304 threaded connection	
galvan.	426978-00
Threaded connection to be used with acc. 301 for wall or pole installation of Campana, Montecarlo.	

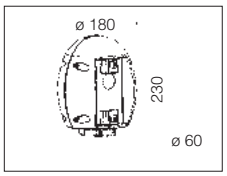




acc. 309 attachment ø 60	
grey	426993-00
graphite	426994-00
Made of aluminium.To be always used with acc. 301 when Lanterna is to be installed on a pole arm.	

For poles: Fluted Ø120, Cone-Shaped, Steel Ø120, Steel Ø120-152, Steel Ø120-193

acc. 300 Oliva connector	
grey	426970-00
graphite	426971-00
Made of aluminium. To be installed on ø60.	



Acc. 327/328
Disco
Monza
Volo
Pordoi

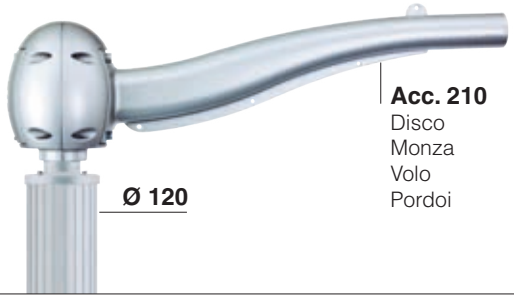
Ø 120

Acc. 309
Lanterna

Acc. 303
Torcia
Vista

Acc. 301

Acc. 304
Campana

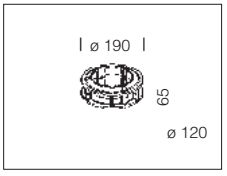


Acc. 210
Disco
Monza
Volo
Pordoi

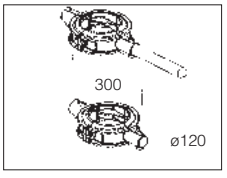
Ø 120

Ø 120

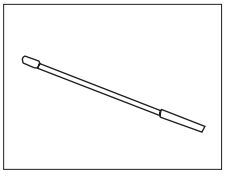
acc. 212 ring	
grey	426954-00
graphite	426955-00
In aluminium. To be used with acc. 214/215 for pole mounting ø 120.	



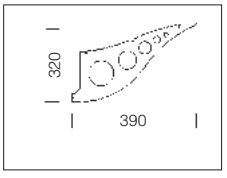
acc. 213 long banner connec.	
grey	426956-00
graphite	426957-00
In aluminium. To be used for pole mounting ø 120 of a flag.	



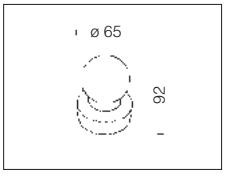
acc. 215 finishing tie rod	
	426960-00
In steel. To be used with acc. 212.	

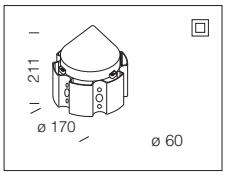


acc. 214 small banner connec.	
grey	426958-00
graphite	426959-00
In aluminium. To be used with acc. 212 for pole mounting.	

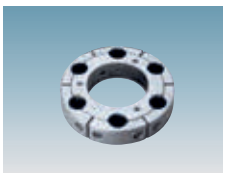


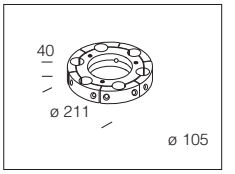
acc. 305 end cap	
grey	426979-00
graphite	426980-00
To be used when on the acc. 210 no fixtures are installed. For an aesthetic finish.	



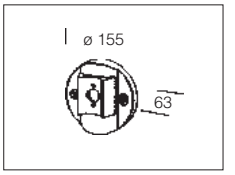


acc. 1364 Corona	
grey	426988-00
graphite	426926-00
Made of die-cast aluminium. For up to 6 arms acc. 1362 or 1363. Equipped with terminal block.	

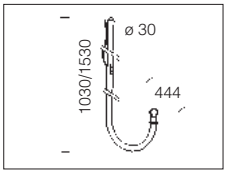




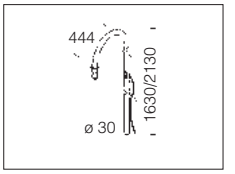
acc. 1365 Corona flange	
grey	426989-00
graphite	426999-00
Made of die-cast aluminium. Complete with 6 arm-stop devices to reinforce the assembly.	



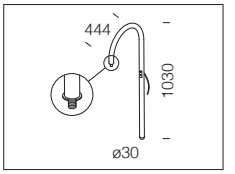
acc. 1361 wall mounting	
grey	426987-00-00
graphite	426961-00
Die-cast aluminium spacer and base. To install arms acc 1362 or 1363.	



acc. 1362 upward arm Ø30	
1000 grey	426906-00
1500 grey	426907-00
1000 graphite	426946-00
1500 graphite	426947-00
Ø 60 steel.	

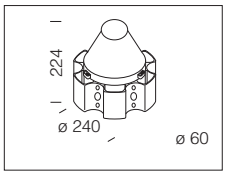


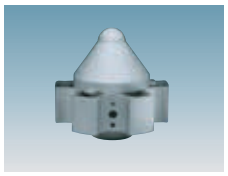
acc. 1363 downward arm Ø30	
1600 grey	426916-00
2100 grey	426917-00
1600 graphite	427008-00
2100 graphite	427009-00
Ø 60 steel.	



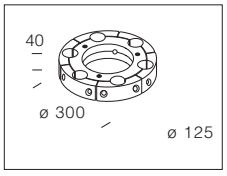
1373 curved arm	
grey	426920-00
graphite	427014-00
In tropicalized steel. Apply to acc. 1364/65 and pole acc. 1408/1409.	

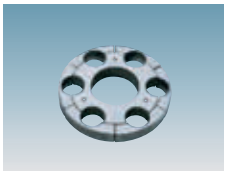
acc. 1464 Corona	
grey	426990-00
graphite	427000-00
Made of die-cast aluminium. For up to 6 arms acc. 1462 or 1463. Equipped with terminal block.	

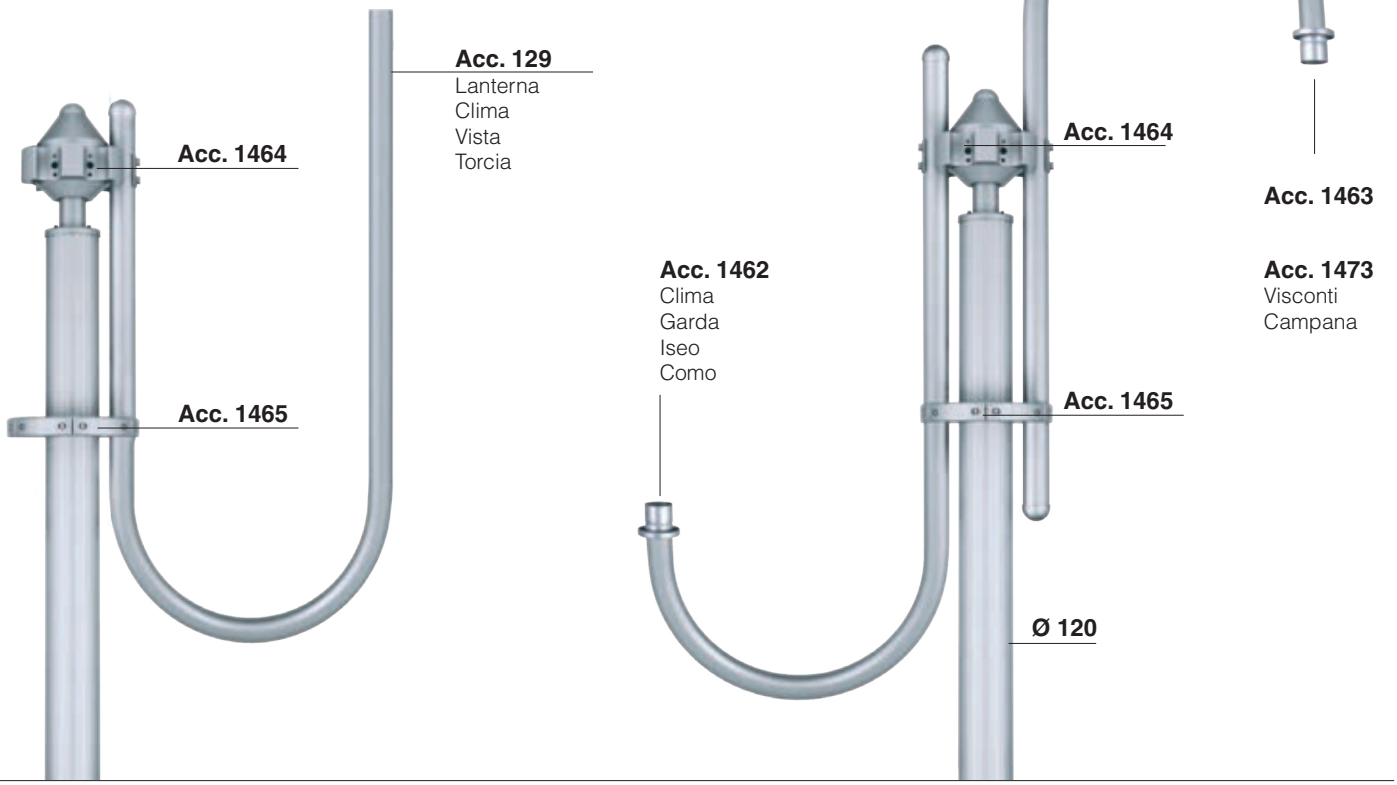




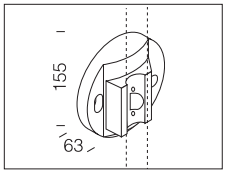
acc. 1465 Corona flange	
grey	426991-00
graphite	427001-00
Made of die-cast aluminium. Complete with 6 arm-stop devices to reinforce the assembly.	



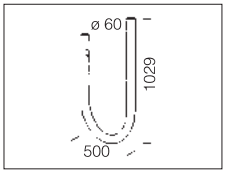




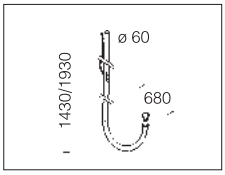
acc. 1461 wall attachment	
grey	426992-00
graphite	427012-00
Die-cast aluminium spacer and base. For arm mounting use acc. 1462 or 1463.	



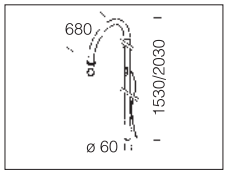
acc. 129 curved arm	
grey	991329-00
graphite	991321-00
Apply to Corona Ø120 series.	



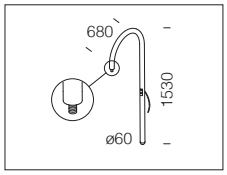
acc. 1462 upward arm Ø60	
1430 grey	426908-00
1930 grey	426909-00
1430 graphite	426966-00
1930 graphite	426967-00
Ø 60 steel.	



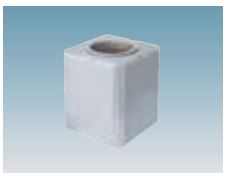
acc. 1463 downward arm Ø60	
1530 grey	426918-00
2030 grey	426919-00
1530 graphite	427016-00
2030 graphite	427017-00
Ø 60 steel.	

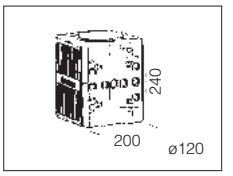


acc. 1473 curved arm	
grey	426921-00
graphite	427013-00
In tropicalized steel. Apply to acc. 1464/1465.	

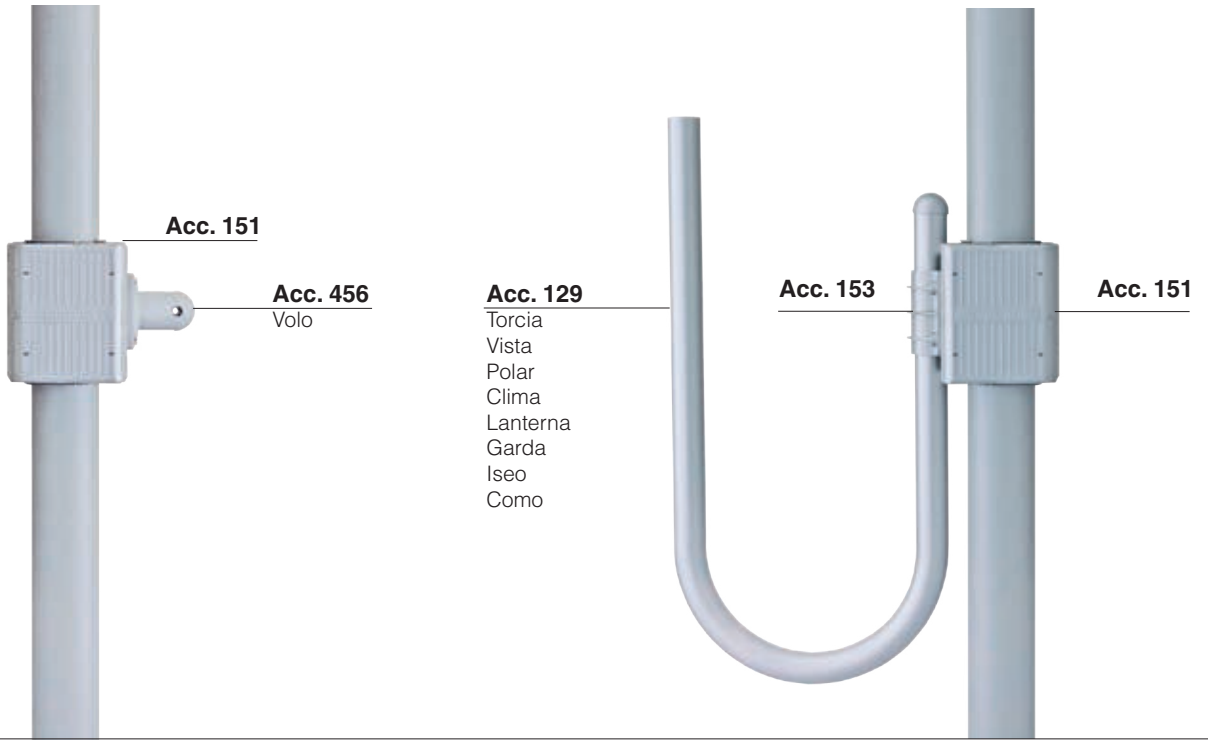


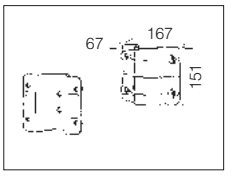
For Ø120 poles



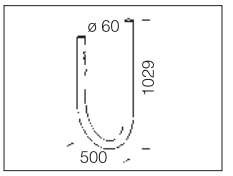


acc. 151 Lione cube	
grey	991365-00
graphite	991310-00
Made of die-cast aluminium. To be used when installing the products on poles Ø120.	

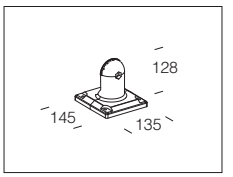




acc. 153 Arm connection	
grey	991359-00
Made of die-cast aluminium. To be used with acc. 151 when installing curved arms (acc. 129) on poles.	



acc. 129 bent arm	
grey	991329-00
graphite	991321-00
Tropicalised steel. Apply to accessories 151-153.	



acc. 456 small wall connection	
graphite	991402-00
grey	991403-00
To be used to install art. Volo, on 'Lione' cube. With anti-slip rack. Adjustable connection.	

A range of Disano floodlights can also be fixed to the "Lione" cube:

Punto
Litio
Indio

UNI EN 40 STANDARD

The UNI standard contains specific prescriptions concerning lighting poles, defined as supports designed to hold one or more lighting fixtures and composed of one or more parts: a stem, an extension, and an arm if required. The regulation applies to pole of a nominal height of 20 m or less, and poles with shelf of a nominal height of 18 m or less. The regulation applies both to straight poles for lighting fixtures with top mast mounting, and poles for fixtures with side mast mounting. The standard specifies the materials to be used in manufacturing poles for public illumination, provides recommendations on corrosion protection treatments, and determines the characteristics of electric gear compartments, cable raceways and grounding terminals of straight poles. Part 3-1 specifies the loads to be considered in designing lighting poles, providing bases for the calculation carried out when designing the illuminant's support structure, represented by the pole. The same part indicates the procedures for the correct measurement of the load due to the wind, as well as all the load variables to be considered. The standard enables a calculation of the action of the wind throughout the entire national territory, divided into nine geographic areas depending on wind intensity. The regulation refers directly to UNI standard ENV 1991-2-4; based on the latter, it provides the speed of the wind to be considered for the relevant installation area. The regulation indicates that the reference speed determines the calculation pressure, which in turn has to be adjusted applying the appropriate coefficients depending on the components' shapes, installation area characteristics, pole physical and geometric characteristics, etc.

TESTING OF THE COMPOSITIONS IN THE SHOWN CATALOGUE - All metal pole assemblies in the "urban decoration" and "residential" lines presented in the catalogue can be tested by Disano in accordance with UNI standard EN 40. Testing for conformity with UNI STANDARD EN 40 can be obtained upon request from our headquarters.
Testing of lighting systems is performed to determine:
- pole's resistance to bending due to wind thrust.
- pole's resistance to twist due to wind thrust on asymmetric assemblies.
- maximum vertical and horizontal warp due to wind thrust and to the assembly's own loads.

For those particular assemblies which are not tested in accordance with UNI standards EN 40/6 no area-related data are provided; however, indications are given on maximum estimated tolerable wind speed (in red) and anchor base dimensioning calculated according to the latter measure.

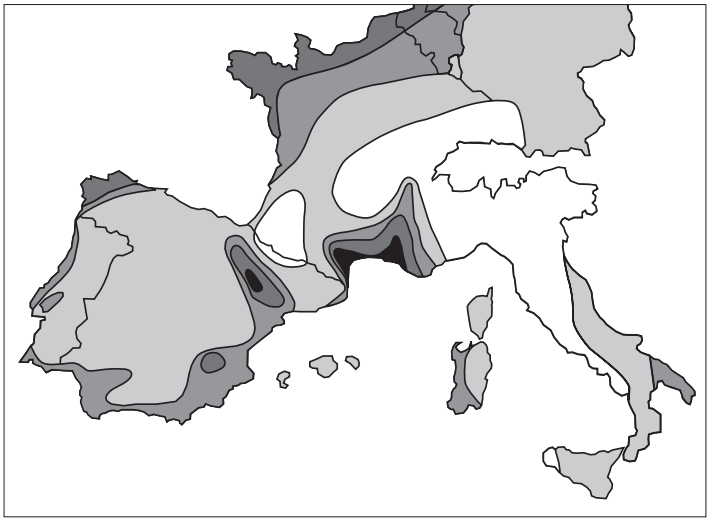
TEST - The action of the wind causes bending stress on the pole due to the momentum generated by the horizontal thrust force acting upon the elements that make up the lighting system with arms equal to the height of the respective centres of gravity.
Tests have been carried out on the lighting systems to ascertain:
- the resistance of the pole to the compressive stress caused by the weights of all the elements making up the composition;
- the resistance of the pole to the bending stress generated by the thrust stress of the wind;
- the resistance of the pole to the torsion stress generated by the thrust stress of the wind;
- the resistance of the pole to the shear stress at the base due to the con trast exercised by the inertia of the concrete foundation plinth;
- the size of foundation plinth required to ensure stability of the combined compressive and bending stress transmitted to the pole.

The bending test was carried out using the yield point as the maximum stress value. Resistance was ascertained as in UNI EN standard 40/8, at the critical points in the structure that is at the base of the pole and at the lower edge of the inspection window where present. All calculations were carried out according to the definitions described below:
The load system considered included the weight of each lighting fixture and the thrusts caused by the action of the wind.
The weights of each of the main elements making up the compositions studied were taken into consideration, including:
- weight of the pole and of all the accessories;
- weight of the overall lighting fixture or of the reflectors and related bases.

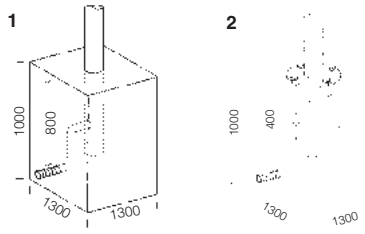
The vertical forces due to these masses were considered as it applied in the respective fields of gravity.
The dynamic pressure for the calculations due to the wind were obtained by multiplying the basic dynamic pressure, set down by the regulations as 50ON/sq mm, by various factors which take account of the variation in the height above ground level, of the nominal height of the pole, of its dynamic behaviour when there are gusts of wind, of the location where it is installed. The basic dynamic pressure refers to a height of 10 m above ground level. Variation in the height above ground level has been assumed to be half the nominal height of the pole, considering the fact that, in general, poles for urban decor are installed at ground level. If they are installed at a different level, specific tests must be carried out. The dynamic increase coefficient, defined by UNI EN standard 40/6 takes account of the increase in loads when there are oscillations caused by gusts of wind. Coefficients which take into account the shape of the lighting fixture and of the pole have been calculated for each type and height.

SIZING OF THE FOUNDATION PLINTH

In calculating the correct size for the foundation plinth, reference is made to low quality concrete with low resistance since this permits a wide margin of safely. The depth used in the calculations, at which the pole should be buried in the concrete, is given in the catalogue and varies according to the type of pole used in the composition; the depth of the plinth is increased by 10 cm over that measurement to avoid punching and sinking of the pole within the concrete. The base chosen is square shaped to ensure the same response to the action of the wind from whatever direction it blows. In the case of fluted poles with base (acc. 1408 - 1508) which do not need to be buried in a foundation plinth, but are connected to it by log bolts, it is assumed that the log bolts to be buried in the concrete of which the foundation plinth is made are suitably sized to withstand the stress conditions generated by the load assumptions. The stability of the foundation plinth also depends upon the type of ground on which it is laid; the tests were carried out with a ground resistance value of 1.5 kg/sq cm, corresponding to medium to low resistance ground. With these conditions, a check of the force required to overturn the lighting fixture-plinth system was carried out, considering the plinth as simply standing on the ground. The system is subject to the moment generated by the horizontal thrust stresses acting on the elements that make up the lighting system with arms equal to the distance of the respective centres of gravity from the deepest point of the plinth. Stability against overturn is ensured by the weight of the lighting fixture, by the correct size of the concrete plinth and by the resistance offered by the ground. These calculations have permitted the identification of the minimum size of plinth required to prevent overturning, sliding or sinking.



Example of application of a fluted pole of type acc. 1491/1495 (**1**) and 1493/1496 (**2**). The plinth's size depends on the type of pole, the composition, the terrain on which it stands and the material.



Example of application of a fluted pole of type acc. (**3**) and 1308/1408/1508 (**4**). The plinth's size depends on the type of pole, the composition, the terrain on which it stands and the material.