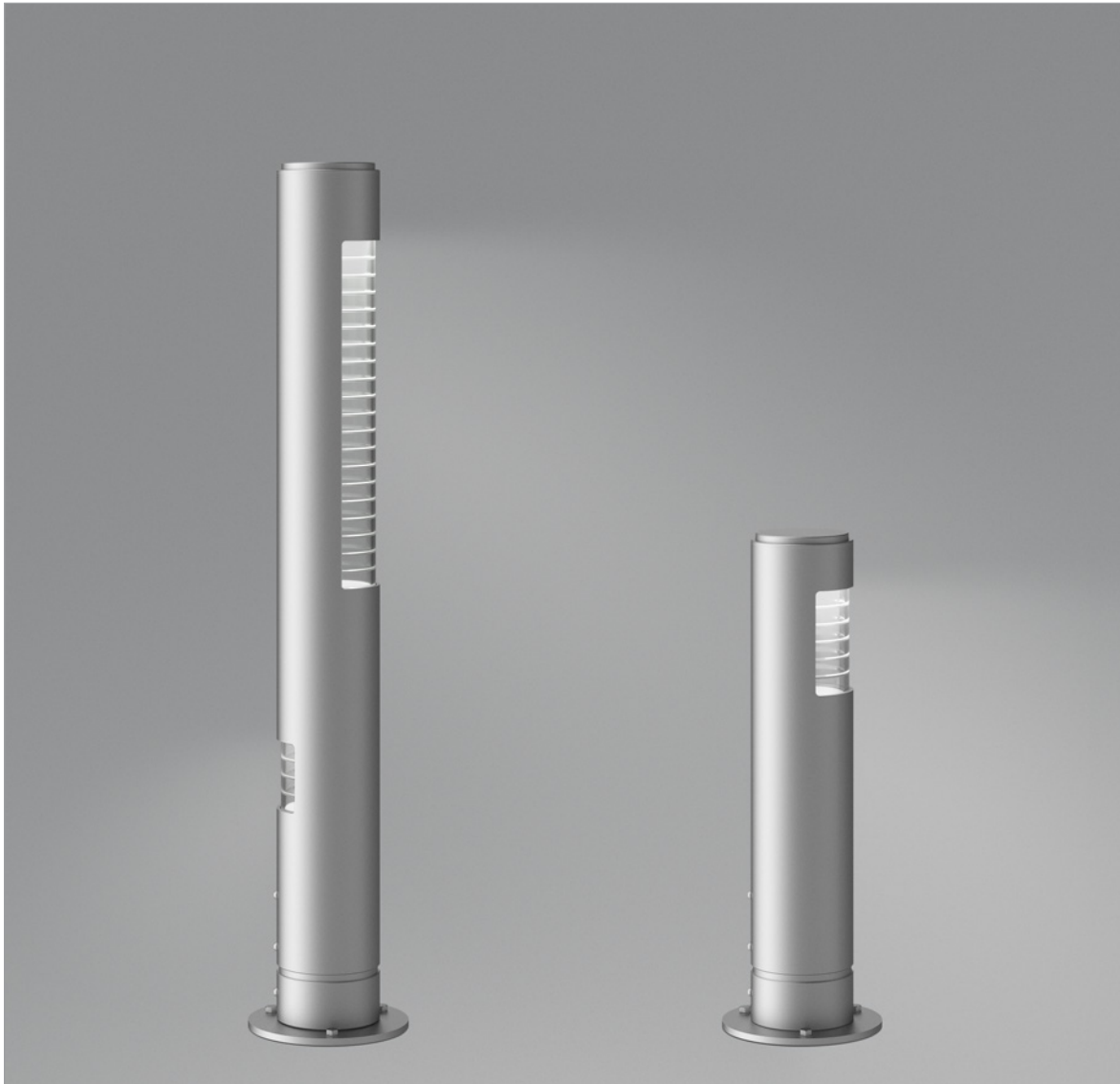


Dua Bollard + Dua Bollard Low

Design: Juul I Frost Architects



Dua is a new family of outdoor luminaires by Juul I Frost Architects.

The taller Dua Bollard is minimalistic and yet characteristic in its slim and asymmetrical design. The two light sources combine primary light with glowing light on the surroundings. The lower Dua Bollard Low has light in forward direction only.

Both bollards are build in modules making it easy to service and update the luminaires.

Dua Bollard Low leads the way and will combine buildings and facilities that are spread over a large area, for instance at schools, factories, hospitals etc.

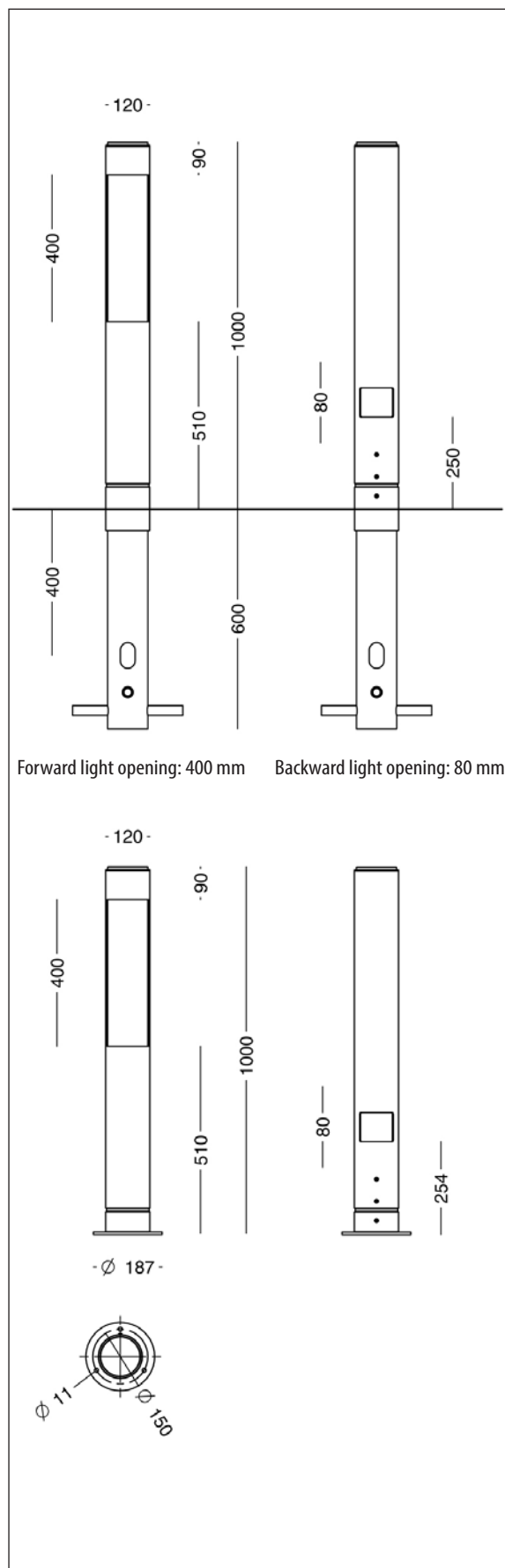
Types:
Bollards and Columns

Sizes:
H 3000, Ø 120 mm
H 1000, Ø 120 mm
H 570, Ø 120 mm

Technology:
COB LED

Dua Bollard - LED

Design: Juul | Frost Architects



Luminaire spec:

Material:	Aluminium
Finish:	Graphite grey: YW355F Silver grey: Y2370I Corten brown: YX355F Black: Noir 900 Sablé SN351F
Shade:	Tube with inside spinned grooves, UV-resistant polycarbonate
Mounting:	With rooted or flanged base
Connection:	Max three cables, 5 x 16 mm ²
Classification:	IP55, class II
Weight:	Flanged model: 8 kg Rooted model: 12 kg
Lamp type:	LED, exchangeable

LED and driver spec:

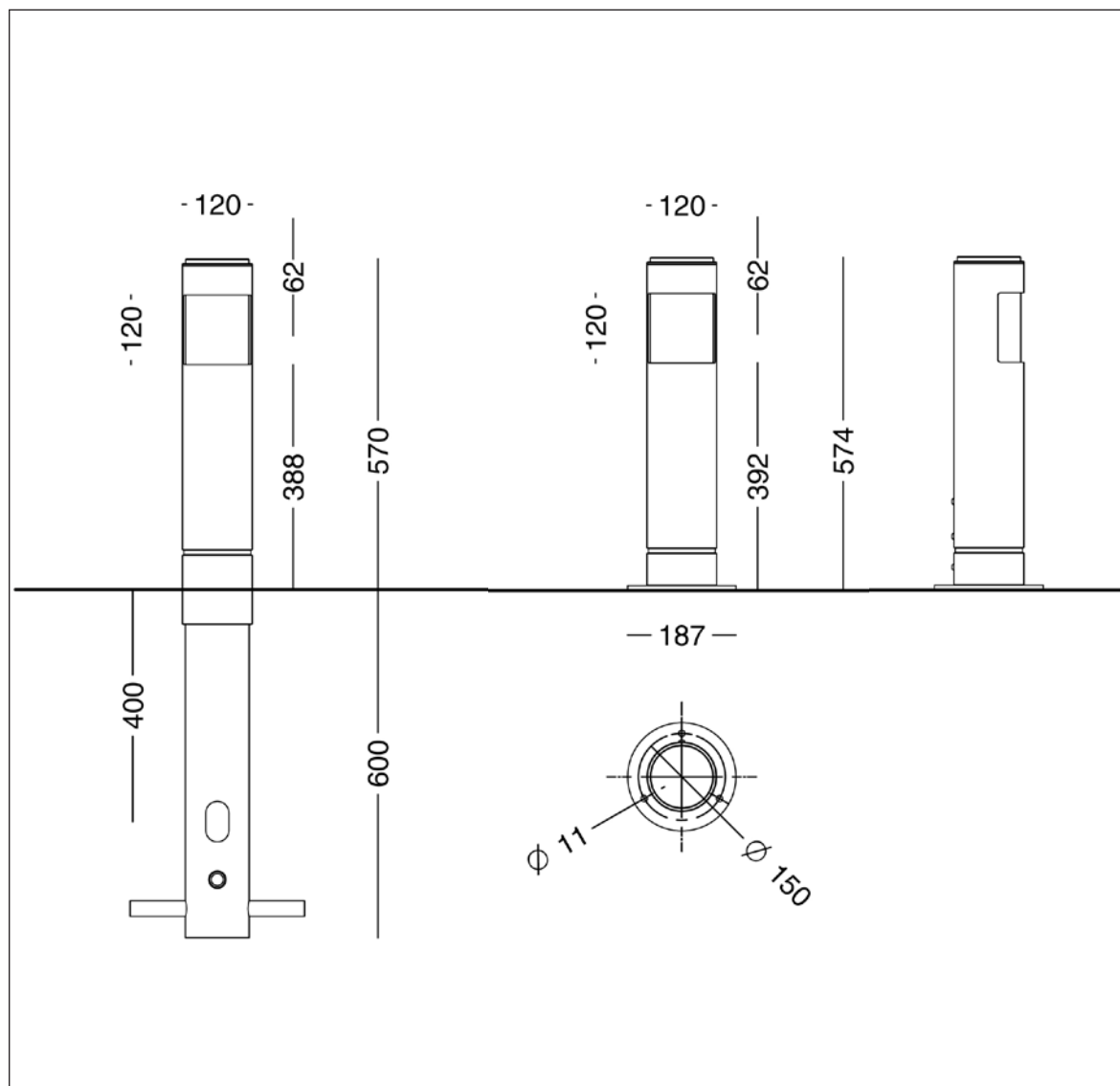
LED:	Bridgelux V8 + V6
Operational life:	min 100,000 hours at ta max 25°C, L100B10
Power consumption:	9 or 12 W
Colour temperature:	2700, 3000, or 4000 Kelvin
Energy eff class:	F
Colour rendering:	min 90 Ra
Colour accuracy:	3 steps SDCM

Standard driver:	TCL, 20 W, -25°C, dimming optional
Inrush current:	max 5 A (50% after 50 μs)
Operational life:	min 100,000 hours

Programmable driver:	Xitanium Full Xi FP 22 W, 0.3-1.0 A
Inrush current:	max 14 A (50% after 400 μs)
Dimming:	5 steps dimming within the lumen intervals
Surge protection:	L/N-GND: 8 kV, L-N: 6 kV
Operational life:	min 100,000 hours

Dua Pullert Low - LED

Design: Juul | Frost Architects



Luminaire spec:

Material:	Aluminium
Finish:	Graphite grey: YW355F Silver grey: Y2370I Corten brown: YX355F Black: Noir 900 Sablé SN351F
Shade:	Tube with inside spinned grooves, UV-resistant polycarbonate
Mounting:	With rooted or flanged base
Connection:	Max two cables, 5 x 6 mm ²
Classification:	IP55, class II
Weight:	Flanged model: 6 kg Rooted model: 8 kg
Lamp type:	LED, exchangeable

LED and driver spec:

LED:	Bridgelux V8
Operational life:	min 100,000 hours at ta max 25°C, L100B10
Power consumption:	6 or 9 W
Colour temperature:	2700, 3000, or 4000 Kelvin
Energy eff class:	F
Colour rendering:	min 90 Ra
Colour accuracy:	3 steps SDCM
Standard driver:	TCL, 20 W, -25°C, dimming optional
Inrush current:	max 5 A (50% after 25 μs)
Operational life:	min 100,000 hours

Dua Bollards - Item Numbers

Design: Juul I Frost Architects

Variants

Dua Bollard								
Item No.	Mounting		Lamp type, Bridgelux V8 + V6					
7980-	rooted base		9 W, 250 mA					
7981-	flanged base		9 W, 250 mA					
7855-	rooted base		12 W, 350 mA					
7858-	flanged base		12 W, 350 mA					
Dua Bollard Low								
Item No.	Mounting		Lamp type, Bridgelux V8					
7983-	rooted base		6 W, 250 mA					
7984-	flanged base		6 W, 250 mA					
7856-	rooted base		9 W, 350 mA					
7859-	flanged base		9 W, 350 mA					
Select colour, colour temperature etc. in the table below.								
Combine with:	Colour		Colour temperature		Dimming		Protection class	
	4	graphite grey	927	2700 K, 90 Ra	V	1-10 V	empty	class II
	9	silver grey	930	3000 K, 90 Ra	D	Dali	J	class I
	17	corten brown	940	4000 K, 90 Ra	E	programmable		
	66	black noir 900						
							Extra surge protection	
							X	10 kV
Example Order No.:	7980-4930 = Dua Bollard for embedment, graphite grey, 9 W LED, 3000 K 90 Ra, cl. II							

Dua Bollard - number per fuse

Driver type	Philips Xi FP 22W	TCI Mini Jolly XX 20W
Product variant	Dua Bollard	Dua Bollard
Fuse type	Recommended per fuse	Recommended per fuse
B 4A	7	
B 6A	11	
B 10A	18	31
B 13A	23	
B 16A	29	50
B 20A	36	62
B 25A	45	78
B 32A	58	
B 40A	72	
C 4A	12	
C 6A	18	
C 10A	30	52
C 13A	39	65
C 16A	49	85
C 20A	60	104
C 25A	75	130
C 32A	98	
C 40A	120	
Melting fuse as C		