

I. ALUMINIUM COLUMNS

Aluminium cylindrical bollards SA



APPLICATION:

to illuminate avenues by shopping centers, car parks,, entrances of buildings and they can be also used inside buildings in decorative illuminated passages and shopping galleries.

TECHNICAL INFORMATION:

- voltage: 230V, AC, 50 Hz,
- material: aluminium alloy – Aluminium pipe with external diameter Ø150,
- protection degree: IP44 (Insulation class I) or IP65 (Insulation class II),
- cylindrical diffuser: white PC-UV (SAM), transparent PC-UV with stainless steel louvre reflector (SAP),
- height: 600 mm, 900 mm and 1200 mm,
- for height 1200mm cab be made in version with niche chamber for connection box – marked with additional letter W,
- mounting: on concrete footing B-0 or reinforcement basket Z-0, using three 8 mm wall fixing plugs or directly to the ground (rooted bollards marked dz),
- available in version with flat top version – in code marked with additional letter P.

ADVANTAGES:

- fast, easy access to control gear due to gear frame mounting. Assembling and disassembling without the use of tools,
- eliminate light emissions due to use white diffuser in bollards SAM or stainless steel louvre reflector in bollards SAP,
- may be supplied in any RAL colour.

SAM LED 11W – bollards with white diffuser in insulation class II (IP65) in which LED diodes were used as light source.

TECHNICAL INFORMATION:

- 9 LED diodes XLamp XR-E feed by power 1,2 W
- light source with dyed temperature 6500 K (white cool),
- exit luminous flux from LED module: 1400lm
- voltage: 230 V, 50 Hz (feeder),
- total power consumption (diodes + feeder) - 11 W
- temperature range work: -40°C to +30°C
- lifetime of light source on level 50 thousand hours with middle environment temperature 15°C or lower.

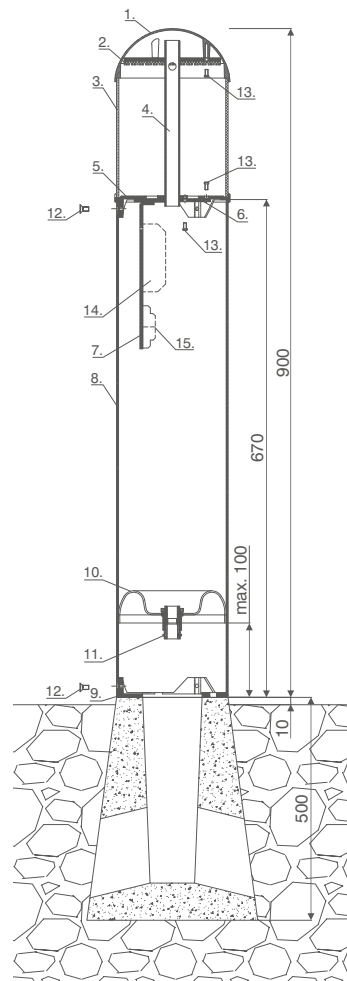
ADVANTAGES:

- high light effectiveness LED diodes as light source,
- good lighting uniformity and light distribution,
- energy-saving – lower from discharge lamps power consumption by the comparable visual sensation,
- LED diodes high durability allows reduce costs by maintenance and service,
- lack of ultraviolet radiation and infrared radiation,
- efficient, modern save light source for natural environment (without toxic chemical mercuric compounds).



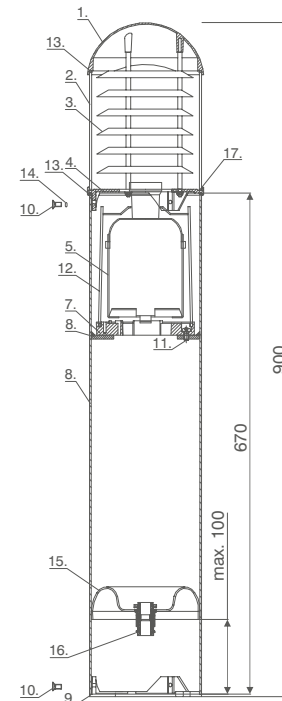
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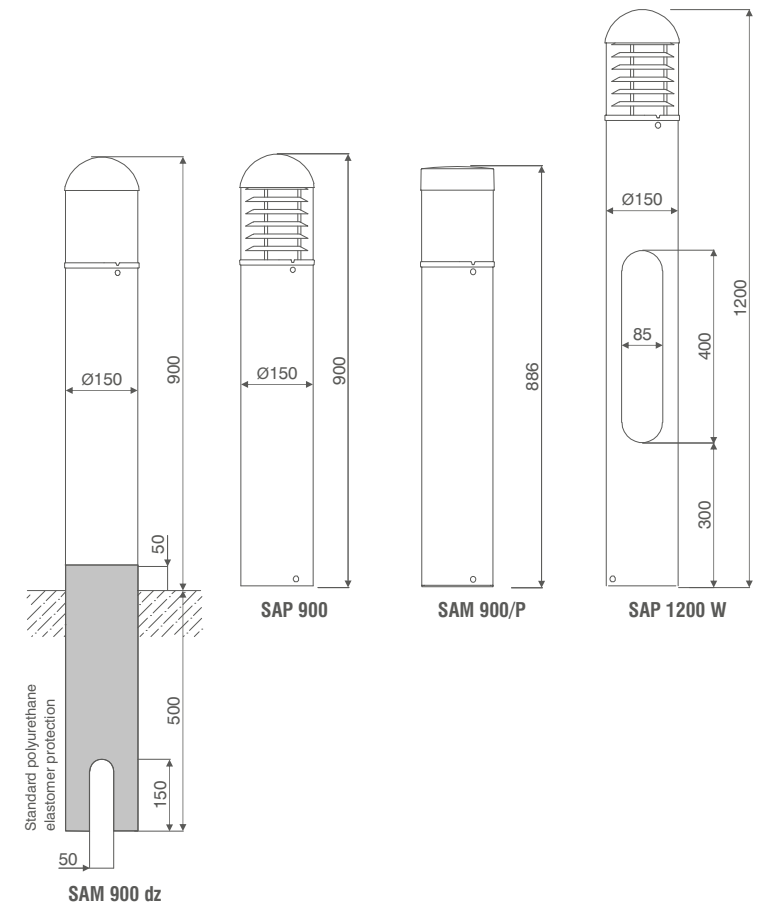
SAM 900 LED II cl. IP 65

1. Cap
2. LED module
3. White diffuser
4. Framing
5. Indirect ring
6. Flaming mounting
7. Control gear mounting
8. Aluminium pipe Ø150x2,5
9. Holder
10. Bottom stuffing-box
11. Cable stuffing-box
12. Screw M6x12 A2 DIN7991 allen socket with bolt
13. Screw M4x8 A2 DIN7500
14. Fedder
15. Plug-in socket connection



SAP 900 II cl. IP 65

1. Cap
2. Transparent diffuser PC-UV
3. Stainless steel louvre reflector
4. Indirect ring
5. Gear frame with accessories
6. Insulating insert with ring for mounting luminaire
7. Insert fixing console
8. Pipe Ø150x2,5
9. Base
10. Screw M6x12 A2 allen socket with bolt
11. Screw M6x12 A2
12. Electrical gear cover
13. Flat gasket
14. Round gasket Ø5x2
15. Bottom stuffing-box
16. Cable stuffing-box
17. Silicone gasket



SAM 900 dz

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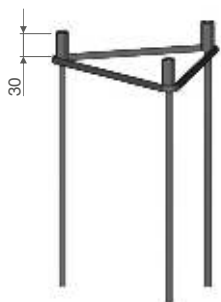
Light source type	Aluminium cylindrical bollards SA																																
	TYPE	SAM600				SAP600				SAM900				SAP900				SAM1200				SAP1200				SAM1200W				SAP1200W			
	HEIGHT [m]	0,6								0,9								1,2															
	TYPE	mounted on footing	dz - rooted	mounted on footing	dz - rooted	mounted on footing	dz - rooted	mounted on footing	dz - rooted	mounted on footing	dz - rooted	mounted on footing	dz - rooted	mounted on footing	dz - rooted	mounted on footing	dz - rooted	mounted on footing	dz - rooted	mounted on footing	dz - rooted	mounted on footing	dz - rooted	mounted on footing	dz - rooted	mounted on footing	dz - rooted						
Sodium S-50W E-27	ANODIZED	45001/C.. 45001/C../P	45060/C.. 45060/C../P	45030/C.. 45030/C../P	45088/C.. 45088/C../P	45008/C.. 45008/C../P	45067/C.. 45067/C../P	45037/C.. 45037/C../P	45095/C.. 45095/C../P	45015/C.. 45015/C../P	45074/C.. 45074/C../P	45044/C.. 45044/C../P	45102/C.. 45102/C../P	45022/C.. 45022/C../P	45081/C.. 45081/C../P	45051/C.. 45051/C../P	45109/C.. 45109/C../P																
	PAINTED	45001M 45001M/P	45060M 45060M/P	45030M 45030M/P	45088M 45088M/P	45008M 45008M/P	45067M 45067M/P	45037M 45037M/P	45095M 45095M/P	45015M 45015M/P	45074M 45074M/P	45044M 45044M/P	45102M 45102M/P	45022M 45022M/P	45081M 45081M/P	45051M 45051M/P	45109M 45109M/P																
	WEIGHT [kg]	4,45	5,35	4,55	5,65	5,35	6,55	5,55	6,75	6,25	7,55	6,55	7,75	6,45	7,85	6,75	8,15																
Sodium S-70W E-27	ANODIZED	45002/C.. 45002/C../P	45061/C.. 45061/C../P	45031/C.. 45031/C../P	45089/C.. 45089/C../P	45009/C.. 45009/C../P	45068/C.. 45068/C../P	45038/C.. 45038/C../P	45096/C.. 45096/C../P	45016/C.. 45016/C../P	45075/C.. 45075/C../P	45045/C.. 45045/C../P	45103/C.. 45103/C../P	45023/C.. 45023/C../P	45082/C.. 45082/C../P	45052/C.. 45052/C../P	45110/C.. 45110/C../P																
	PAINTED	45002M 45002M/P	45061M 45061M/P	45031M 45031M/P	45089M 45089M/P	45009M 45009M/P	45068M 45068M/P	45038M 45038M/P	45096M 45096M/P	45016M 45016M/P	45075M 45075M/P	45045M 45045M/P	45103M 45103M/P	45023M 45023M/P	45082M 45082M/P	45052M 45052M/P	45110M 45110M/P																
	WEIGHT [kg]	4,55	5,65	4,85	5,85	5,55	6,75	5,85	6,95	6,55	7,75	6,75	7,95	6,75	8,15	6,95	8,35																
Metal halide MH-70W E-27	ANODIZED	45003/C.. 45003/C../P	45062/C.. 45062/C../P	45032/C.. 45032/C../P	45090/C.. 45090/C../P	45010/C.. 45010/C../P	45069/C.. 45069/C../P	45039/C.. 45039/C../P	45097/C.. 45097/C../P	45017/C.. 45017/C../P	45076/C.. 45076/C../P	45046/C.. 45046/C../P	45104/C.. 45104/C../P	45024/C.. 45024/C../P	45083/C.. 45083/C../P	45053/C.. 45053/C../P	45111/C.. 45111/C../P																
	PAINTED	45003M 45003M/P	45062M 45062M/P	45032M 45032M/P	45090M 45090M/P	45010M 45010M/P	45069M 45069M/P	45039M 45039M/P	45097M 45097M/P	45017M 45017M/P	45076M 45076M/P	45046M 45046M/P	45104M 45104M/P	45024M 45024M/P	45083M 45083M/P	45053M 45053M/P	45111M 45111M/P																
	WEIGHT [kg]	4,65	5,65	4,85	5,95	5,65	6,75	5,85	7,05	6,55	7,75	6,75	8,05	6,75	8,15	6,95	8,35																
Metal halide MH-70W ELECTRONIC E-27	ANODIZED	45003E/C.. 45003E/C../P	45062E/C.. 45062E/C../P	45032E/C.. 45032E/C../P	45090E/C.. 45090E/C../P	45010E/C.. 45010E/C../P	45069E/C.. 45069E/C../P	45039E/C.. 45039E/C../P	45097E/C.. 45097E/C../P	45017E/C.. 45017E/C../P	45076E/C.. 45076E/C../P	45046E/C.. 45046E/C../P	45104E/C.. 45104E/C../P	45024E/C.. 45024E/C../P	45083E/C.. 45083E/C../P	45053E/C.. 45053E/C../P	45111E/C.. 45111E/C../P																
	PAINTED	45003ME 45003ME/P	45062ME 45062ME/P	45032ME 45032ME/P	45090ME 45090ME/P	45010ME 45010ME/P	45069ME 45069ME/P	45039ME 45039ME/P	45097ME 45097ME/P	45017ME 45017ME/P	45076ME 45076ME/P	45046ME 45046ME/P	45104ME 45104ME/P	45024ME 45024ME/P	45083ME 45083ME/P	45053ME 45053ME/P	45111ME 45111ME/P																
	WEIGHT [kg]	3,45	4,45	3,65	4,75	4,45	5,55	4,65	5,85	5,35	6,65	5,65	6,95	5,55	6,95	5,85	7,25																
Metal halide MH-100W E-27	ANODIZED	45004/C.. 45004/C../P	45063/C.. 45063/C../P	45033/C.. 45033/C../P	45091/C.. 45091/C../P	45011/C.. 45011/C../P	45070/C.. 45070/C../P	45040/C.. 45040/C../P	45098/C.. 45098/C../P	45018/C.. 45018/C../P	45077/C.. 45077/C../P	45047/C.. 45047/C../P	45105/C.. 45105/C../P	45025/C.. 45025/C../P	45084/C.. 45084/C../P	45054/C.. 45054/C../P	45112/C.. 45112/C../P																
	PAINTED	45004M 45004M/P	45063M 45063M/P	45033M 45033M/P	45091M 45091M/P	45011M 45011M/P	45070M 45070M/P	45040M 45040M/P	45098M 45098M/P	45018M 45018M/P	45077M 45077M/P	45047M 45047M/P	45105M 45105M/P	45025M 45025M/P	45084M 45084M/P	45054M 45054M/P	45112M 45112M/P																
	WEIGHT [kg]	4,75	5,85	5,15	6,05	5,75	6,95	6,05	7,15	6,75	7,95	6,95	8,15	6,95	8,35	7,15	8,55																
LED 11W	ANODIZED	45005/C.. 45005/C../P	45064/C.. 45064/C../P	x	x	45012/C.. 45012/C../P	45071/C.. 45071/C../P	x	x	45019/C.. 45019/C../P	45078/C.. 45078/C../P	x	x	45026/C.. 45026/C../P	45085/C.. 45085/C../P	x	x																
	PAINTED	45005M 45005M/P	45064M 45064M/P	x	x	45012M 45012M/P	45071M 45071M/P	x	x	45019M 45019M/P	45078M 45078M/P	x	x	45026M 45026M/P	45085M 45085M/P	x	x																
	WEIGHT [kg]	3,55	4,55	x	x	4,55	5,65	x	x	5,45	6,75	x	x	5,65	7,15	x	x																
CFL compact 23W E-27	ANODIZED	45006/C.. 45006/C../P	45066/C.. 45066/C../P	45036/C.. 45036/C../P	45094/C.. 45094/C../P	45014/C.. 45014/C../P	45073/C.. 45073/C../P	45043/C.. 45043/C../P	45101/C.. 45101/C../P	45021/C.. 45021/C../P	45080/C.. 45080/C../P	45050/C.. 45050/C../P	45108/C.. 45108/C../P	45028/C.. 45028/C../P	45087/C.. 45087/C../P	45056/C.. 45056/C../P	45115/C.. 45115/C../P																
	PAINTED	45006M 45006M/P	45066M 45066M/P	45036M 45036M/P	45094M 45094M/P	45014M 45014M/P	45073M 45073M/P	45043M 45043M/P	45101M 45101M/P	45021M 45021M/P	45080M 45080M/P	45050M 45050M/P	45108M 45108M/P	45028M 45028M/P	45087M 45087M/P	45056M 45056M/P	45115M 45115M/P																
	WEIGHT [kg]	3,25	4,25	3,45	4,55	4,45	5,35	4,45	5,65	5,15	6,45	5,45	6,65	5,35	6,75	5,65	7,05																
Unit volume	[m³]	0,015	0,028	0,015	0,028	0,023	0,036	0,023	0,036	0,031	0,043	0,031	0,043	0,031	0,043	0,031	0,043																

/P - with flat cap, dz - rooted, M - painted, C.. - anodized - number of anodizing colour - p. 11

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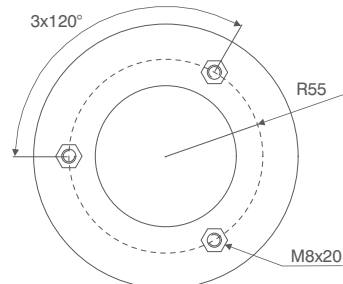
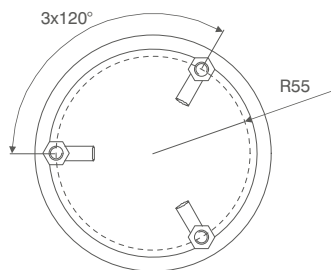
Mounting	Type	Code	Weight [kg]	Volume [m ³]
Concrete footing	B-0	311100	18,0	0,010
Reinforcement basket	Z-0	311200	0,5	0,004



Reinforcement basket
Z-0



Concrete footing
B-0





I. ALUMINIUM COLUMNS

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SAM 600



SAM 900 LED



SAP 900/P



SAM 900 LED



« Lamp-diffuser



« Lamp



« Shield (PC)



« Universal gear frame with accessories



« Cylindrical pipe



« Screw M6x12



« Bollard base

