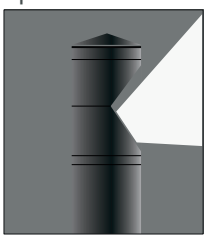
TRION LED BOLLARDS
Class I IP65 IK10

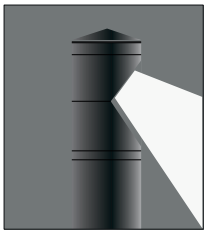
EMFA's Trion series combines a die-cast aluminium head with an extrusion aluminium pipe to provide a sturdy, outdoor bollard/pole. The fixture is designed to light pathways, landscapes and open spaces. The TRION bollard can give light both in the downward and upward direction. The light is very directional and honeycomb louvers can be used to avoid extra glare. The head and pipe are connected by a hidden screw within the pipe. The head contains LEDs that can be powered up to 27W. An optional galvanized steel anchorage kit is available for mounting into concrete. An alternative option is sleeve anchors for mounting onto existing concrete.



Up



Down



Head
Die cast aluminium
With Screwless lock system
Outer Asymmetrical Grill
Die cast aluminium
Diffuser
Tempered Glass
Pipe
Extrusion aluminium
Paint
Electrostatic powder



Trion 1 Single



Trion 1 Twin



Trion 2 Single



Trion 2 Twin



EMFA

TRION LED BOLLARDS IP65

Led : Power or COB LEDs

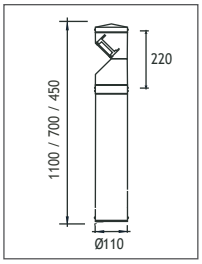
Voltage : 240 VAC with integrated driver (12-24 VDC on request)

Diffuser : Tempered Clear or Frosted Glass

Finish : EMFA Anthracite · RAL 7039 / 7016 / 9005 / 9016 / 6013 / 8014 – other RAL on request

Trion 1 Single

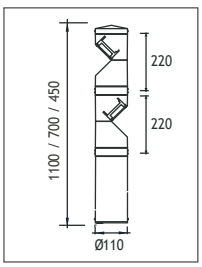




Power	Kelvin	Real Lumen Output	Lens	Code No 45 cm	70 cm	110 cm
6W LED	2700 K	570 lm	10°,25°,40°	171001	171101	171201
6W LED	3000 K	570 lm	10°,25°,40°	171002	171102	171202
6W LED	4500 K	581 lm	10°,25°,40°	171003	171103	171203
6W LED	6000 K	592 lm	10°,25°,40°	171004	171104	171204
11W LED	2700 K	1045 lm	10°,25°,40°	171011	171111	171211
11W LED	3000 K	1045 lm	10°,25°,40°	171012	171112	171212
11W LED	4500 K	1065 lm	10°,25°,40°	171013	171113	171213
11W LED	6000 K	1087 lm	10°,25°,40°	171014	171114	171214

Trion 1 Twin

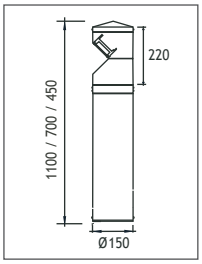




Power	Kelvin	Real Lumen Output	Lens	Code No 70 cm	90 cm	110 cm
6W LED	2700 K	570 lm	10°,25°,40°	172001	172101	172201
6W LED	3000 K	570 lm	10°,25°,40°	172002	172102	172202
6W LED	4500 K	581 lm	10°,25°,40°	172003	172103	172203
6W LED	6000 K	592 lm	10°,25°,40°	172004	172104	172204
11W LED	2700 K	1045 lm	10°,25°,40°	172011	172111	172211
11W LED	3000 K	1045 lm	10°,25°,40°	172012	172112	172212
11W LED	4500 K	1065 lm	10°,25°,40°	172013	172113	172213
11W LED	6000 K	1087 lm	10°,25°,40°	172014	172114	172214

Trion 2 Single

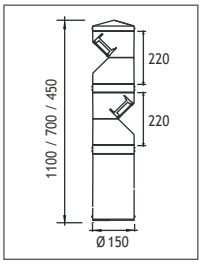




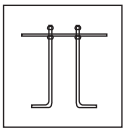
Power	Kelvin	Real Lumen Output	Lens	Code No 45 cm	70 cm	110 cm
11W LED	2700 K	1045 lm	10°,25°,40°	173001	173101	173201
11W LED	3000 K	1045 lm	10°,25°,40°	173002	173102	173202
11W LED	4500 K	1065 lm	10°,25°,40°	173003	173103	173203
11W LED	6000 K	1087 lm	10°,25°,40°	173004	173104	173204
24W LED	2700 K	2280 lm	10°,25°,40°	173011	173111	173211
24W LED	3000 K	2280 lm	10°,25°,40°	173012	173112	173212
24W LED	4500 K	2350 lm	10°,25°,40°	173013	173113	173213
24W LED	6000 K	2395 lm	10°,25°,40°	173014	173114	173214

Trion 2 Twin





Power	Kelvin	Real Lumen Output	Lens	Code No 70 cm	90 cm	110 cm
11W LED	2700 K	1045 lm	10°,25°,40°	174001	174101	174201
11W LED	3000 K	1045 lm	10°,25°,40°	174002	174102	174202
11W LED	4500 K	1065 lm	10°,25°,40°	174003	174103	174203
11W LED	6000 K	1087 lm	10°,25°,40°	174004	174104	174204
24W LED	2700 K	2280 lm	10°,25°,40°	174011	174111	174211
24W LED	3000 K	2280 lm	10°,25°,40°	174012	174112	174212
24W LED	4500 K	2350 lm	10°,25°,40°	174013	174113	174213
24W LED	6000 K	2395 lm	10°,25°,40°	174014	174114	174214



For Trion **Anchor** Code No: 953651

HARRAN MINI LED BOLLARD
Class I IP65 IK10

Finish : EMFA Anthracite · RAL 7039 / 7016 / 9005 / 9016 / 6013 / 8014 – other RAL on request

EMFA's HARRAN Bollard series combines a die-cast aluminium head with an extrusion aluminium pipe to provide a sturdy, outdoor bollard. The fixture is designed to light pathways, landscapes and open spaces. The HARRAN Bollard gives light both in the downward and upward direction. The light is very directional. Visors and honeycomb louvers can be used to avoid extra glare. The head contains LEDs that can be powered up to 6W. An optional galvanized steel anchorage kit is available for mounting into concrete. An alternative option is sleeve anchors for mounting onto existing concrete.



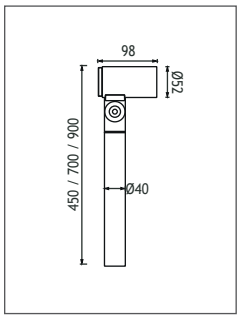




Body
Die cast aluminium
Paint
Electrostatic powder
Gearbox Cover
Stainless steel
Gaskets
Silicone
Diffusers
Tempered Glass

Harran Mini Single

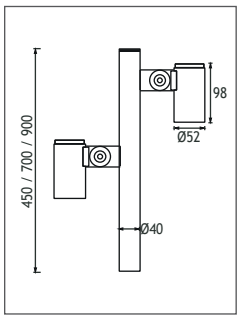




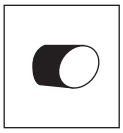
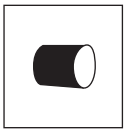
Power	Kelvin	Real Lumen Output	Lens	Code No 45 cm	70 cm	90 cm
6W LED	2700 K	570 lm	10°,25°,40°	175001	175101	175201
6W LED	3000 K	570 lm	10°,25°,40°	175002	175102	175202
6W LED	4500 K	581 lm	10°,25°,40°	175003	175103	175203
6W LED	6000 K	592 lm	10°,25°,40°	175004	175104	175204

Harran Mini Twin





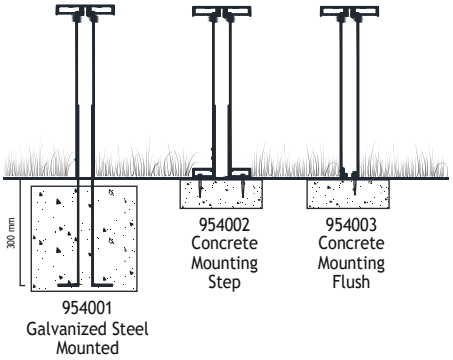
Power	Kelvin	Real Lumen Output	Lens	Code No 45 cm	70 cm	90 cm
2x6W LED	2700 K	1140 lm	10°,25°,40°	176001	176101	176201
2x6W LED	3000 K	1140 lm	10°,25°,40°	176002	176102	176202
2x6W LED	4500 K	1162 lm	10°,25°,40°	176003	176103	176203
2x6W LED	6000 K	1186 lm	10°,25°,40°	176004	176104	176204

For Harran	Picket	Visor	Cylinder Visor	Honeycomb
				
	Code No: 953661	Code No: 953662	Code No: 953663	Code No: 953664

LEON LED BOLLARD
Class I IP65

EMFA's Leon Bollard combines a die-cast aluminium head housing an LED unit with an extrusion aluminium pipe. The bollard is designed to light pathways, landscapes and open spaces. The Leon bollard gives light only in the downward direction. This avoids any kind of glare and light pollution. The head and pipe are connected by a hidden screw within the pipe. The head contains LEDs that can be powered up to 12W. An optional galvanized steel anchorage kit is available for mounting into concrete. An alternative option is sleeve anchors for mounting onto existing concrete or a picket to mount into the earth.





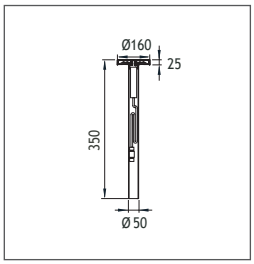
Head
Die cast aluminium
Diffusers
Frosted polyamide 6.6
Pipe
Extrusion aluminium
Paint
Electrostatic powder

CIRCULAR LED

Led : Circular LEDs (6W or 12W)
Voltage : 240 VAC with integrated driver (12-24 VDC on request)
CRI : >80
Finish : EMFA Anthracite · RAL 7039 / 7016 / 9005 / 9016 / 6013 / 8014 – other RAL on request

350mm

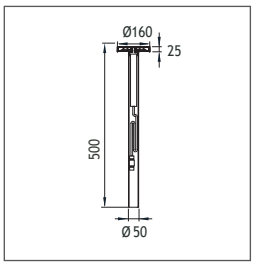




Power	Kelvin	Real Lumen Output	Code No
6W	2700 K	570 lm	177003
6W	3000 K	570 lm	177001
6W	4000 K	581 lm	177002
12W	2700 K	1140 lm	177013
12W	3000 K	1140 lm	177011
12W	4000 K	1162 lm	177012

500mm

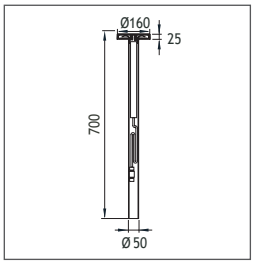




Power	Kelvin	Real Lumen Output	Code No
6W	2700 K	570 lm	177103
6W	3000 K	570 lm	177101
6W	4000 K	581 lm	177102
12W	2700 K	1140 lm	177113
12W	3000 K	1140 lm	177111
12W	4000 K	1162 lm	177112

700mm





Power	Kelvin	Real Lumen Output	Code No
6W	2700 K	570 lm	177203
6W	3000 K	570 lm	177201
6W	4000 K	581 lm	177202
12W	2700 K	1140 lm	177213
12W	3000 K	1140 lm	177211
12W	4000 K	1162 lm	177212



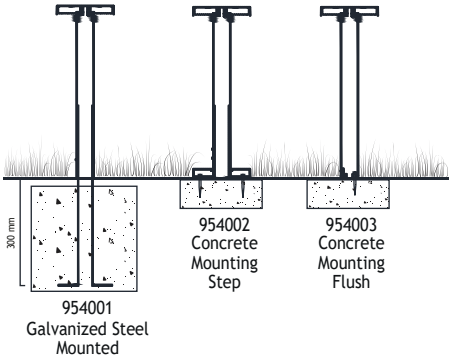
LEON WOOD

LED BOLLARD
Class I IP65

Real wood is the preferred material of architects for cutting edge designs. Our LEON Wood bollard is made of IROKO wood with an incredibly smooth finish. The Wood Bollard can blend into the architecture of a building and mature together with its surroundings. The simple form of the Wood Bollard is emphasized with the light that comes out from the solid structure.



Head
Die cast aluminium & Wood
Diffusers
Frosted polyamide 6.6
Pipe
Wood

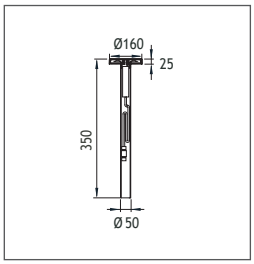


CIRCULAR LED

Led : Circular LEDs (6W or 12W)
Voltage : 240 VAC with integrated driver (12-24 VDC on request)
CRI : >80
Finish : EMFA Anthracite · RAL 7039 / 7016 / 9005 / 9016 / 6013 / 8014 – other RAL on request

350mm

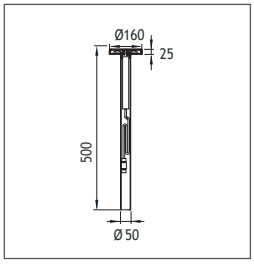




Power	Kelvin	Real Lumen Output	Code No
6W	2700 K	570 lm	189001
6W	3000 K	570 lm	189002
6W	4000 K	581 lm	189003
12W	2700 K	1140 lm	189011
12W	3000 K	1140 lm	189012
12W	4000 K	1162 lm	189013

500mm

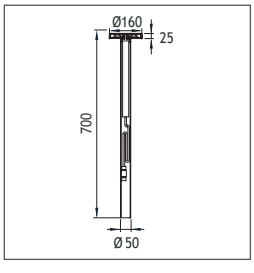




Power	Kelvin	Real Lumen Output	Code No
6W	2700 K	570 lm	189101
6W	3000 K	570 lm	189102
6W	4000 K	581 lm	189103
12W	2700 K	1140 lm	189111
12W	3000 K	1140 lm	189112
12W	4000 K	1162 lm	189113

700mm





Power	Kelvin	Real Lumen Output	Code No
6W	2700 K	570 lm	189201
6W	3000 K	570 lm	189202
6W	4000 K	581 lm	189203
12W	2700 K	1140 lm	189211
12W	3000 K	1140 lm	189212
12W	4000 K	1162 lm	189213

LEON 2

LED BOLLARD
Fixed & Adjustable
Class I IP65

Fixed



Adjustable



Head
Die Cast Aluminium
Diffusers
Frosted polyamide 6.6
Pipe
316L Stainless Steel
Paint
Electrostatic powder

CIRCULAR LED

Led : Circular LEDs (6W or 12W)
Voltage : 12-24V External Driver
(12-24 VDC on request)
CRI : >80
Finish : EMFA Anthracite · RAL 7039 / 7016 / 9005 / 9016 / 6013 / 8014 – other RAL on request

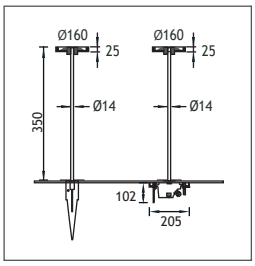
350mm

Fixed



Adjustable





Power	Kelvin	Real Lumen Output	Code No Fixed	Code No Adjustable
6W	2700 K	570 lm	270003	270103
6W	3000 K	570 lm	270001	270101
6W	4000 K	581 lm	270002	270102
12W	2700 K	1140 lm	270013	270113
12W	3000 K	1140 lm	270011	270111
12W	4000 K	1162 lm	270012	270112

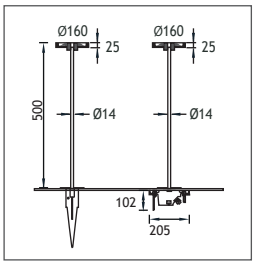
500mm

Fixed



Adjustable





Power	Kelvin	Real Lumen Output	Code No Fixed	Code No Adjustable
6W	2700 K	570 lm	271003	271103
6W	3000 K	570 lm	271001	271101
6W	4000 K	581 lm	271002	271102
12W	2700 K	1140 lm	271013	271113
12W	3000 K	1140 lm	271011	271111
12W	4000 K	1162 lm	271012	271112

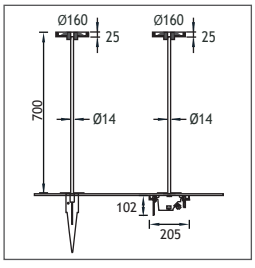
700mm

Fixed

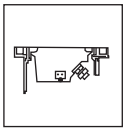


Adjustable





Power	Kelvin	Real Lumen Output	Code No Fixed	Code No Adjustable
6W	2700 K	570 lm	272003	272103
6W	3000 K	570 lm	272001	272101
6W	4000 K	581 lm	272002	272102
12W	2700 K	1140 lm	272013	272113
12W	3000 K	1140 lm	272011	272111
12W	4000 K	1162 lm	272012	272112





For LEON 2

Recessing Tube
Internal Driver
Code No: 953641

Picket
External Driver
Code No: 953642

EMFA



LEON 2 STONE

LED BOLLARD
Fixed & Adjustable
Class I IP65



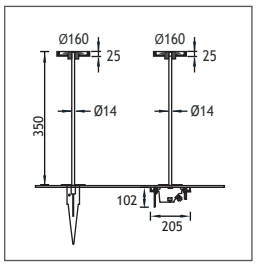
Head
Die cast aluminium & Stone
Diffusers
Frosted polyamide 6.6
Pipe
316L Stainless Steel
Paint
Electrostatic powder

CIRCULAR LED

Led : Circular LEDs (6W or 12W)
Voltage : 12-24V External Driver
(12-24 VDC on request)
CRI : >80
Finish : EMFA Anthracite · RAL 7039 / 7016 / 9005 / 9016 / 6013 / 8014 – other RAL on request

350mm

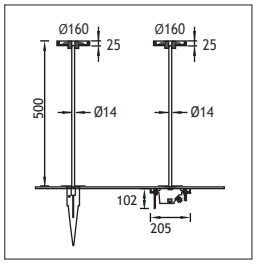




Power	Kelvin	Real Lumen Output	Code No Fixed	Code No Adjustable
6W	2700 K	570 lm	280001	280101
6W	3000 K	570 lm	280002	280102
6W	4000 K	581 lm	280003	280103
12W	2700 K	1140 lm	280011	280111
12W	3000 K	1140 lm	280012	280112
12W	4000 K	1162 lm	280013	280113

500mm

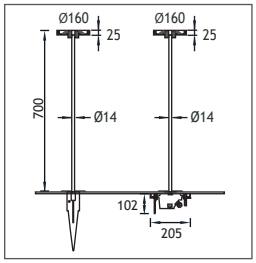




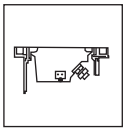
Power	Kelvin	Real Lumen Output	Code No Fixed	Code No Adjustable
6W	2700 K	570 lm	281001	281101
6W	3000 K	570 lm	281002	281102
6W	4000 K	581 lm	281003	281103
12W	2700 K	1140 lm	281011	281111
12W	3000 K	1140 lm	281012	281112
12W	4000 K	1162 lm	281013	281113

700mm





Power	Kelvin	Real Lumen Output	Code No Fixed	Code No Adjustable
6W	2700 K	570 lm	282001	282101
6W	3000 K	570 lm	282002	282102
6W	4000 K	581 lm	282003	282103
12W	2700 K	1140 lm	282011	282111
12W	3000 K	1140 lm	282012	282112
12W	4000 K	1162 lm	282013	282113



For LEON 2 **Recessing Tube** Internal Driver Code No: 953641



Picket External Driver Code No: 953642

EMFA

LEON 3

LED ACRYLIC BOLLARD
Fixed & Adjustable
Class I IP65

Fixed



Adjustable



Head
Die Cast Aluminium
Diffusers
Frosted polyamide 6.6
Pipe
316L Stainless Steel
Paint
Electrostatic powder

CIRCULAR LED

Led : Circular LEDs (6W or 12W)
Voltage : 12-24V External Driver
(12-24 VDC on request)
CRI : >80
Finish : EMFA Anthracite · RAL 7039 / 7016 / 9005 / 9016 / 6013 / 8014 – other RAL on request

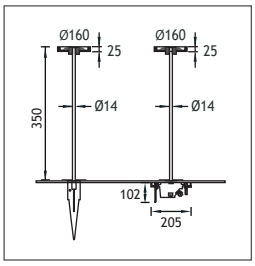
350mm

Fixed



Adjustable





Power	Kelvin	Real Lumen Output	Code No Fixed	Code No Adjustable
6W	2700 K	570 lm	275003	275103
6W	3000 K	570 lm	275001	275101
6W	4000 K	581 lm	275002	275102

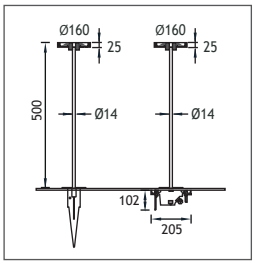
500mm

Fixed



Adjustable





Power	Kelvin	Real Lumen Output	Code No Fixed	Code No Adjustable
6W	2700 K	570 lm	276003	276103
6W	3000 K	570 lm	276001	276101
6W	4000 K	581 lm	276002	276102

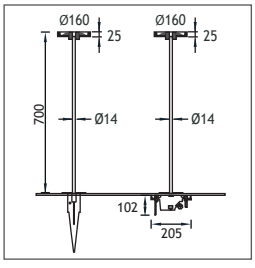
700mm

Fixed

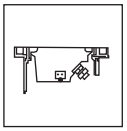


Adjustable





Power	Kelvin	Real Lumen Output	Code No Fixed	Code No Adjustable
6W	2700 K	570 lm	277003	277103
6W	3000 K	570 lm	277001	277101
6W	4000 K	581 lm	277002	277102



For LEON 3 **Recessing Tube**
Internal Driver
Code No: 953641



Picket
External Driver
Code No: 953642

EMFA



KIBIRA LED BOLLARDS IP65

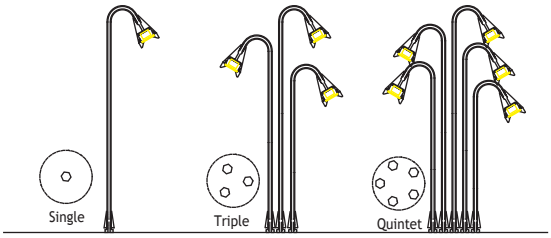
Cover
Die cast aluminium
Body
Die cast aluminium
die cast aluminium bottom and connection box.
Gaskets
Silicone
Diffusers
4 mm Tempered Glass (Aluminium Cover)
Screws
316L Stainless steel
Glands
2 x PG 13.5
Recessing Tube
Polyamide 6

POWER LED

Led : LEDs (1W or 3W)
Voltage : 240 VAC with External driver (12-24 VDC on request)
Diffuser : Tempered Glass
Lens : 10°,25° or 40°
Finish : EMFA Anthracite · RAL 7039 / 7016 / 9005 / 9016 / 6013 / 8014 – other RAL on request

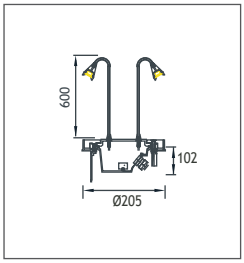






600mm

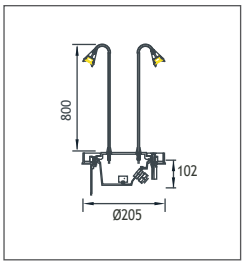




Power	Kelvin	Real Lumen Output	Code No Single	Triple	Quinet
1W	2700 K	95 lm	191003	192003	193003
1W	3000 K	95 lm	191001	192001	193001
1W	4000 K	97 lm	191002	192002	193002
3W	2700 K	285 lm	191013	192013	193013
3W	3000 K	285 lm	191011	192011	193011
3W	4000 K	290 lm	191012	192012	193012

800mm

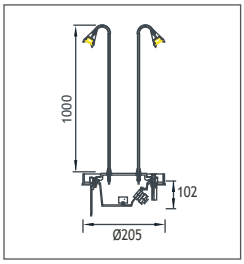




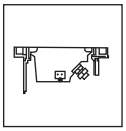
Power	Kelvin	Real Lumen Output	Code No Single	Triple	Quinet
1W	2700 K	95 lm	191103	192103	193103
1W	3000 K	95 lm	191101	192101	193101
1W	4000 K	97 lm	191102	192102	193102
3W	2700 K	285 lm	191113	192113	193113
3W	3000 K	285 lm	191111	192111	193111
3W	4000 K	290 lm	191112	192112	193112

1000mm





Power	Kelvin	Real Lumen Output	Code No Single	Triple	Quinet
1W	2700 K	95 lm	191203	192203	193203
1W	3000 K	95 lm	191201	192201	193201
1W	4000 K	97 lm	191202	192202	193202
3W	2700 K	285 lm	191213	192213	193213
3W	3000 K	285 lm	191211	192211	193211
3W	4000 K	290 lm	191212	192212	193212



For Kibira
Recessing Tube
Internal Driver
Code No: 953591



Picket
External Driver
Code No: 953592

EMFA





SARDES

LED BOLLARDS
IP65





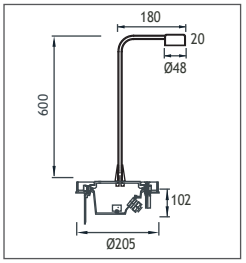
Cover
Die cast aluminium
Body
Die cast aluminium
die cast aluminium bottom and connection box.
Gaskets
Silicone
Diffusers
4 mm Tempered Glass (Aluminium Cover)
Screws
316L Stainless steel
Glands
2 x PG 13.5
Recessing Tube
Polyamide 6

POWER LED

Led : LEDs (1W or 3W)
Voltage : 240 VAC with External driver (12-24 VDC on request)
Diffuser : Tempered Frosted Glass
Lens : 10°,25° or 40°
Finish : EMFA Anthracite · RAL 7039 / 7016 / 9005 / 9016 / 6013 / 8014 – other RAL on request

600mm

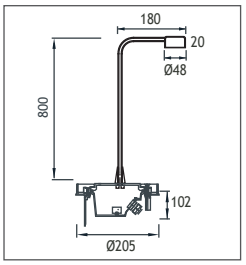




Power	Kelvin	Real Lumen Output	Code No
1W	2700 K	95 lm	196001
1W	3000 K	95 lm	196002
1W	4000 K	97 lm	196003
3W	2700 K	285 lm	196011
3W	3000 K	285 lm	196012
3W	4000 K	290 lm	196013

800mm

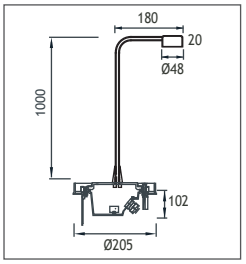




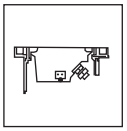
Power	Kelvin	Real Lumen Output	Code No
1W	2700 K	95 lm	196101
1W	3000 K	95 lm	196102
1W	4000 K	97 lm	196103
3W	2700 K	285 lm	196111
3W	3000 K	285 lm	196112
3W	4000 K	290 lm	196113

1000mm





Power	Kelvin	Real Lumen Output	Code No
1W	2700 K	95 lm	196201
1W	3000 K	95 lm	196202
1W	4000 K	97 lm	196203
3W	2700 K	285 lm	196211
3W	3000 K	285 lm	196212
3W	4000 K	290 lm	196213





For Sardes
Recessing Tube
Internal Driver
Code No: 953671

Picket
External Driver
Code No: 953672

EMFA



KIBIRA MUSHROOM LED BOLLARD



KIBIRA MUSHROOM

LED BOLLARDS
IP65

Cover
Die cast aluminium
Body
Die cast aluminium
die cast aluminium bottom and connection box.
Gaskets
Silicone
Diffusers
4 mm Tempered Glass (Aluminium Cover)
Screws
316L Stainless steel
Glands
2 x PG 13.5
Recessing Tube
Polyamide 6

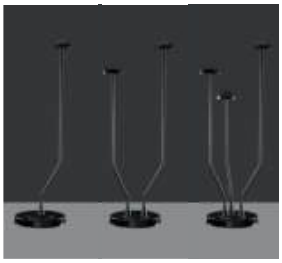

Single

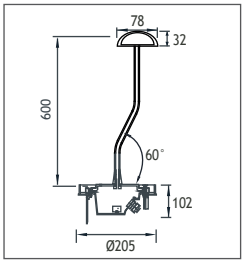

Twin


Triple

Led : LEDs (3W)
Voltage : 240 VAC with External driver
(12-24 VDC on request)
Diffuser : Diffuse Acrylic
Finish : EMFA Anthracite · RAL 7039 / 7016 / 9005 / 9016 / 6013 / 8014 – other RAL on request

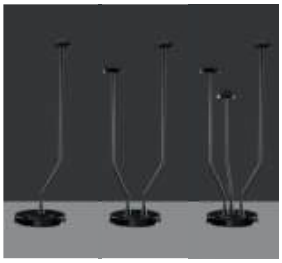
600mm

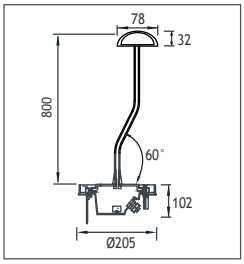




Power	Kelvin	Real Lumen Output	Code No Single	Twin	Triple
3W	2700 K	285 lm	222011	222111	222211
3W	3000 K	285 lm	222012	222112	222212
3W	4000 K	290 lm	222013	222113	222213

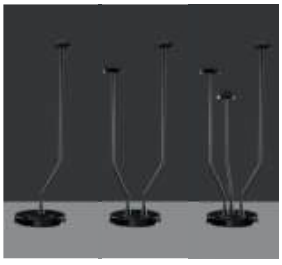
800mm

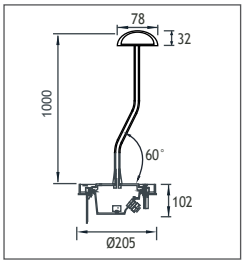




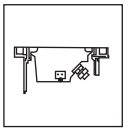
Power	Kelvin	Real Lumen Output	Code No Single	Twin	Triple
3W	2700 K	285 lm	223011	223111	223211
3W	3000 K	285 lm	223012	223112	223212
3W	4000 K	290 lm	223013	223113	223213

1000mm





Power	Kelvin	Real Lumen Output	Code No Single	Twin	Triple
3W	2700 K	285 lm	224011	224111	224211
3W	4000 K	290 lm	224012	224112	224212
3W	4000 K	290 lm	224013	224113	224213



For Kibira
Recessing Tube
Internal Driver
Code No: 953731



Picket
External Driver
Code No: 953732

EMFA

PERINTHOS

ADJUSTABLE LED BOLLARDS
IP65



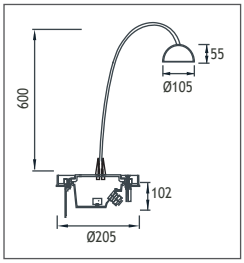
Cover
Die cast aluminium
Body
Die cast aluminium
die cast aluminium bottom and connection box.
Gaskets
Silicone
Diffusers
4 mm Tempered Glass (Aluminium Cover)
Screws
316L Stainless steel
Glands
2 x PG 13.5
Recessing Tube
Polyamide 6

POWER LED

Led : LEDs (6W or 11W)
Voltage : 240 VAC with External driver (12-24 VDC on request)
Diffuser : Tempered Glass
Lens : 10°,25° or 40°
Finish : EMFA Anthracite · RAL 7039 / 7016 / 9005 / 9016 / 6013 / 8014 – other RAL on request

600mm

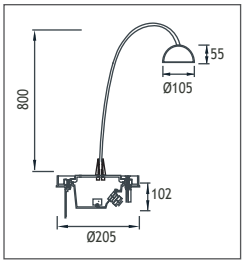




Power	Kelvin	Real Lumen Output	Code No
6W	2700 K	570 lm	198001
6W	3000 K	570 lm	198002
6W	4000 K	581 lm	198003
11W	2700 K	1045 lm	198011
11W	3000 K	1045 lm	198012
11W	4000 K	1065 lm	198013

800mm

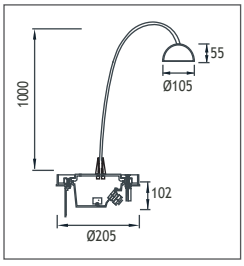




Power	Kelvin	Real Lumen Output	Code No
6W	2700 K	570 lm	198101
6W	3000 K	570 lm	198102
6W	4000 K	581 lm	198103
11W	2700 K	1045 lm	198111
11W	3000 K	1045 lm	198112
11W	4000 K	1065 lm	198113

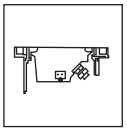
1000mm





Power	Kelvin	Real Lumen Output	Code No
6W	2700 K	570 lm	198201
6W	3000 K	570 lm	198202
6W	4000 K	581 lm	198203
11W	2700 K	1045 lm	198211
11W	3000 K	1045 lm	198212
11W	4000 K	1065 lm	198213

For Perinthos



Recessing Tube
Internal Driver
Code No: 953741



Picket
External Driver
Code No: 953742

EMFA

KIZIKOS

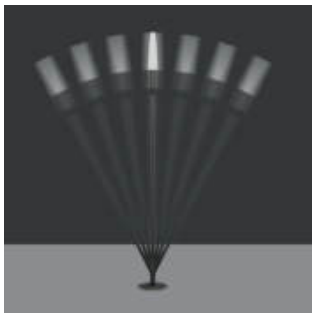
LED BOLLARDS
IP65

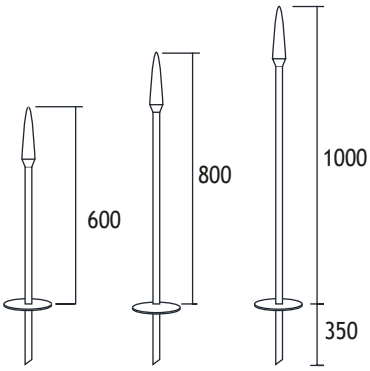
Head
Die cast aluminium
Diffusers
Acrylic
Pipe
Stainless steel
Paint
Electrostatic powder

POWER LED

Led : LEDs (1W or 3W)
Voltage : 240 VAC with External driver (12-24 VDC on request)
Diffuser : >80
Finish : EMFA Anthracite · RAL 7039 / 7016 / 9005 / 9016 / 6013 / 8014 – other RAL on request

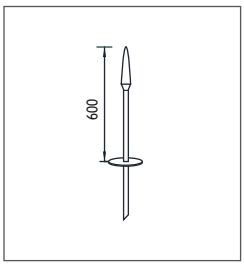






600mm

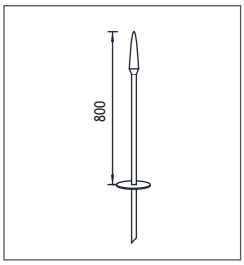




Power	Kelvin	Real Lumen Output	Code No
1W	2700 K	95 lm	194003
1W	3000 K	95 lm	194001
1W	4000 K	97 lm	194002
3W	2700 K	285 lm	194013
3W	3000 K	285 lm	194011
3W	4000 K	290 lm	194012

800mm

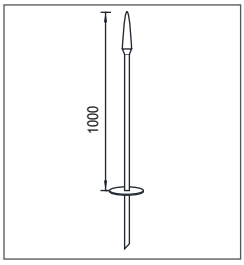




Power	Kelvin	Real Lumen Output	Code No
1W	2700 K	95 lm	194103
1W	3000 K	95 lm	194101
1W	4000 K	97 lm	194102
3W	2700 K	285 lm	194113
3W	3000 K	285 lm	194111
3W	4000 K	290 lm	194112

1000mm





Power	Kelvin	Real Lumen Output	Code No
1W	2700 K	95 lm	194203
1W	3000 K	95 lm	194201
1W	4000 K	97 lm	194202
3W	2700 K	285 lm	194213
3W	3000 K	285 lm	194211
3W	4000 K	290 lm	194212



KIZIKOS MINI
LED BOLLARD



KIZIKOS MINI LED BOLLARDS IP65

Head
Die cast aluminium
Diffusers
Acrylic
Pipe
Stainless steel
Paint
Electrostatic powder

Lampholder : Gu4
Led : 1,5W LED LAMP
Voltage : 12 VAC with External driver
Diffuser : Clear or Frosted Acrylic
Finish : EMFA Anthracite · RAL 7039 / 7016 / 9005 / 9016 / 6013 / 8014 – other RAL on request

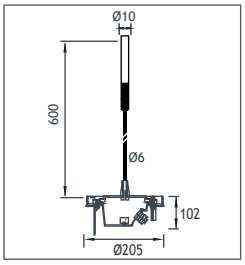




600mm





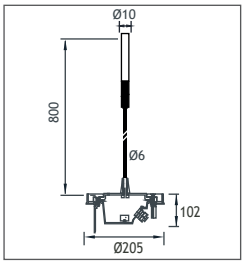


Power	Kelvin	Real Lumen Output	Code No Single	Code No Triple
1,5W	2700 K	143 lm	194301	194401
1,5W	3000 K	143 lm	194302	194402
1,5W	4000 K	149 lm	194303	194403

800mm





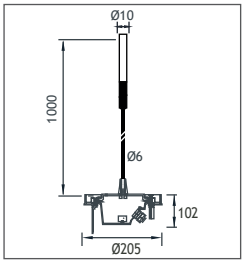


Power	Kelvin	Real Lumen Output	Code No Single	Code No Triple
1,5W	2700 K	143 lm	195301	195401
1,5W	3000 K	143 lm	195302	195402
1,5W	4000 K	149 lm	195303	195403

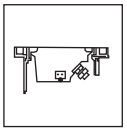
1000mm







Power	Kelvin	Real Lumen Output	Code No Single	Code No Triple
1,5W	2700 K	143 lm	196301	196401
1,5W	3000 K	143 lm	196302	196402
1,5W	4000 K	149 lm	196303	196403



For Kizikos **Recessing Tube** Internal Driver Code No: 953751



Picket External Driver Code No: 953752



ANI 1 ALUM LED BOLLARD
Class I IP65 IK08

EMFA's Ani Bollard combines a die-cast aluminium head housing an LED unit with an extrusion aluminium pipe. The bollard is designed to light pathways, landscapes and open spaces. The Ani bollard gives light only in the downward direction. This avoids any kind of glare and light pollution. The head and pipe are connected by a hidden screw within the pipe. The head contains LEDs that can be powered up to 12W. An optional galvanized steel anchorage kit is available for mounting into concrete. An alternative option is sleeve anchors for mounting onto existing concrete or a picket to mount into the earth.


Asym. Glass

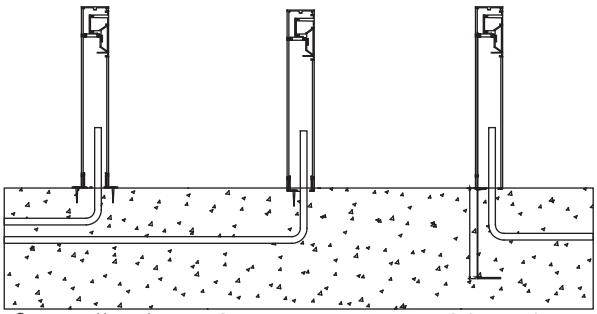

Trenched Glass


Milky Glass


Clear Glass



Profile
Aluminium
Body
Die cast aluminium
Gaskets
Silicone
Diffusers
4 mm Tempered Glass
Screws
316L Stainless steel
Glands
PG 11

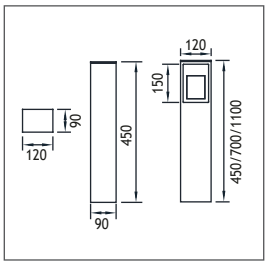


Linear LEDs

Led	: Linear LEDs
Voltage	: 240 VAC with integrated driver (12-24 VDC on request)
Diffuser	: 4 mm Tempered Glass
Beam Angle	: 45° / 60° / 90°
Mac Adam	: 3
CRI	: >80
L.O.R %	: %70

SYMMETRICAL

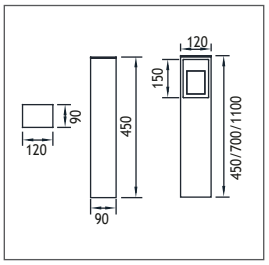




Power	Kelvin	Real Lumen Output	Beam Angle	450 mm	700 mm	1100 mm
6W	2700 K	570 lm	45° / 60° / 90°	452003	452103	452203
6W	3000 K	570 lm	45° / 60° / 90°	452001	452101	452201
6W	4000 K	581 lm	45° / 60° / 90°	452002	452102	452202
12W	2700 K	1140 lm	45 / 60° / 90°	452013	452113	452213
12W	3000 K	1140 lm	45° / 60° / 90°	452011	452111	452211
12W	4000 K	1162 lm	45° / 60° / 90°	452012	452112	452212

ASYMMETRICAL





Power	Kelvin	Real Lumen Output	Beam Angle	450 mm	700 mm	1100 mm
6W	2700 K	570 lm	45° / 60° / 90°	452503	452603	452703
6W	3000 K	570 lm	45° / 60° / 90°	452501	452601	452701
6W	4000 K	581 lm	45° / 60° / 90°	452502	452602	452702
12W	2700 K	1140 lm	45 / 60° / 90°	452513	452613	452713
12W	3000 K	1140 lm	45° / 60° / 90°	452511	452611	452711
12W	4000 K	1162 lm	45° / 60° / 90°	452512	452612	452712

ANI 1 WOOD LED BOLLARDS
Class I IP65 IK08

Real wood is the preferred material of architects for cutting edge designs. Our ANI Wood bollard is made of IROKO wood with an incredibly smooth finish. The Wood Bollard can blend into the architecture of a building and mature together with its surroundings. The simple form of the Wood Bollard is emphasized with the light that comes out from the solid structure.



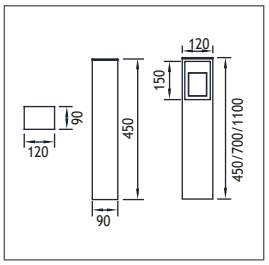
Body
Wood
Gaskets
Silicone
Diffusers
4 mm Tempered Glass
Screws
316L Stainless steel
Glands
PG 11

Linear LEDs

Led : Linear LEDs
Voltage : 240 VAC with integrated driver (12-24 VDC on request)
Diffuser : 4 mm Tempered Glass
Beam Angle : 45° / 60° / 90°
Mac Adam : 3
CRI : >80
L.O.R % : %70

ASYMMETRICAL





Power	Kelvin	Real Lumen Output	Beam Angle	450 mm	700 mm	1100 mm
6W	2700 K	570 lm	45° / 60° / 90°	465001	465101	465201
6W	3000 K	570 lm	45° / 60° / 90°	465002	465102	465202
6W	4000 K	581 lm	45° / 60° / 90°	465003	465103	465203
12W	2700 K	1140 lm	45 / 60° / 90°	465011	465111	465211
12W	3000 K	1140 lm	45° / 60° / 90°	465012	465112	465212
12W	4000 K	1162 lm	45° / 60° / 90°	465013	465113	465213

ANI 4 ALUM LED BOLLARD
Class I IP55 IK08

Profile
Aluminium
Body
Die cast aluminium
Gaskets
Silicone
Diffusers
4 mm Tempered Glass
Screws
316L Stainless steel
Glands
PG 11


Asym. Glass


Trenched Glass

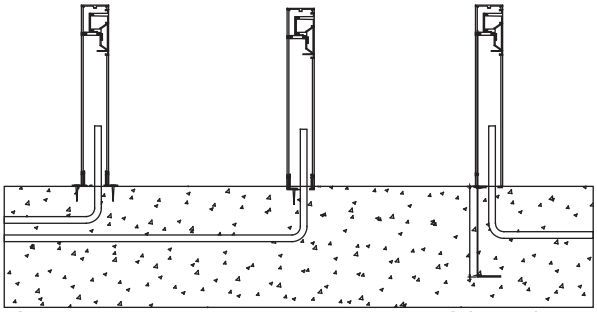

Milky Glass


Clear Glass



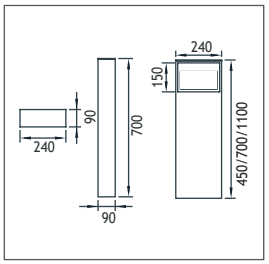
Linear LEDs

Led	: Linear LEDs
Voltage	: 240 VAC with integrated driver (12-24 VDC on request)
Diffuser	: 4 mm Tempered Glass
Beam Angle	: 45° / 60° / 90°
Mac Adam	: 3
CRI	: >80
L.O.R %	: %70
Finish	: EMFA Anthracite · RAL 7039 / 7016 / 9005 / 9016 / 6013 / 8014 — other RAL on request



SYMMETRICAL

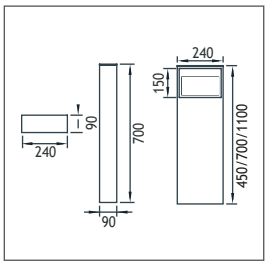




Power	Kelvin	Real Lumen Output	Beam Angle	450 mm	700 mm	1100 mm
24W	2700 K	2280 lm	45° / 60° / 90°	459003	459103	459203
24W	3000 K	2280 lm	45° / 60° / 90°	459001	459101	459201
24W	4000 K	2320 lm	45° / 60° / 90°	459002	459102	459202
36W	2700 K	3420 lm	45° / 60° / 90°	459013	459113	459213
36W	3000 K	3420 lm	45° / 60° / 90°	459011	459111	459211
36W	4000 K	3520 lm	45° / 60° / 90°	459012	459112	459212

ASYMMETRICAL





Power	Kelvin	Real Lumen Output	Beam Angle	450 mm	700 mm	1100 mm
24W	2700 K	2280 lm	45° / 60° / 90°	459503	459603	459703
24W	3000 K	2280 lm	45° / 60° / 90°	459501	459601	459701
24W	4000 K	2320 lm	45° / 60° / 90°	459502	459602	459702
36W	2700 K	3420 lm	45° / 60° / 90°	459513	459613	459713
36W	3000 K	3420 lm	45° / 60° / 90°	459511	459611	459711
36W	4000 K	3520 lm	45° / 60° / 90°	459512	459612	459712

BELLA LED BOLLARDS
Class I IP65 IK08

Head
Die cast aluminium
Diffuser
Tempered Glass 4 mm
Pipe
Extrusion aluminium
Base
Polyamide (black color)
Paint
Electrostatic powder



LINEAR LEDS

Voltage : 240V AC with integrated driver (12V DC or 24V DC on request)
Diffuser : Clear Glass 4 mm
Cable : Potted 5 m 3x0,75 H03 VV-F
Finish : EMFA Anthracite · RAL 7039 / 7016 / 9005 / 9016 / 6013 / 8014 – other RAL on request

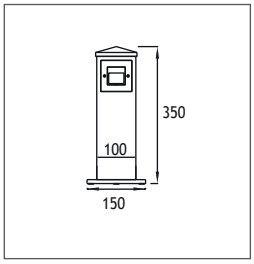


Socket can be installed optionally
953761



ONE WAY ASYMMETRICAL

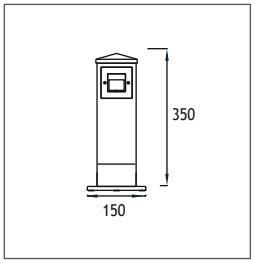




Power	Kelvin	Real Lumen Output	Code No
3W	2700 K	285 lm	149103
3W	3000 K	285 lm	149101
3W	5000 K	306 lm	149102

TWO WAY ASYMMETRICAL

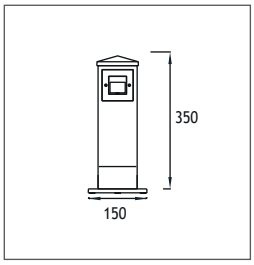




Power	Kelvin	Real Lumen Output	Code No
3W	2700 K	285 lm	149113
3W	3000 K	285 lm	149111
3W	5000 K	306 lm	149112

TWO WAY ASYMMETRICAL + SYMMETRICAL





Power	Kelvin	Real Lumen Output	Code No
3W	2700 K	285 lm	149123
3W	3000 K	285 lm	149121
3W	5000 K	306 lm	149122

L TYPE LED BOLLARDS
Class I IP65 IK08

3W or 6W COB LED
Head
Die cast aluminium
Diffuser
Tempered Glass 4 mm
Pipe
Extrusion aluminium
Base
Die cast aluminium
Paint
Electrostatic powder



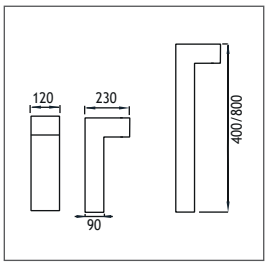


COB LED

Voltage : 240V AC with integrated driver (12V DC or 24V DC on request)
Diffuser : Clear Glass 4 mm
Cable : Potted 5 m 3x0,75 H03 VV-F
Finish : EMFA Anthracite · RAL 7039 / 7016 / 9005 / 9016 / 6013 / 8014 – other RAL on request

COB LED BOLLARDS





Power	Kelvin	Real Lumen Output	40 cm	80 cm
3W COB LED	2700 K	285 lm	125003	125201
3W COB LED	3000 K	285 lm	125001	125202
3W COB LED	5000 K	306 lm	125002	125203
6W COB LED	2700 K	570 lm	125011	125103
6W COB LED	3000 K	570 lm	125012	125101
6W COB LED	5000 K	612 lm	125013	125102

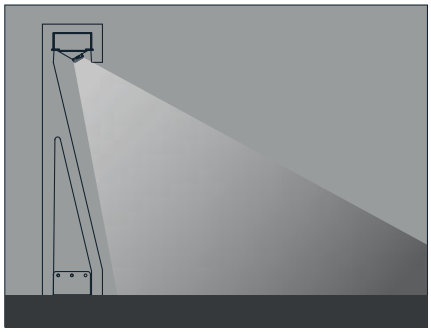
BETON LED BOLLARDS
Class I IP67 IK10

Exposed concrete is the preferred material of architects for cutting edge designs. Our BETON bollard is made of heavy duty concrete with an incredibly smooth finish. The BETON can blend into the architecture of a building and mature together with its surroundings. The simple form of the BETON is emphasized with the light that comes out from the solid structure.



Asymmetrical

Led : Linear LEDs
Voltage : 240 VAC with integrated driver (12-24 VDC on request)
Diffuser : 4mm Tempered Glass
Beam Angle : 45° / 60° / 90°
Mac Adam : 3
CRI : >80
L.O.R % : %70

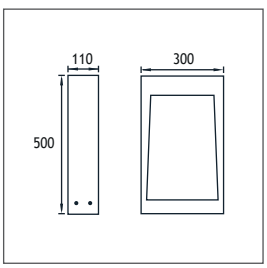






LEDs
Only highest quality LEDs such as Cree or Toplite are used in production allowing for maximum lumen output and maximum lifetime. Most LEDs run on 350mA or 700mA depending on how much light output is required. The white color temperature binning is 200K at most, and always on the same x,y coordinates on the CIE diagram in accordance with Energy Star. This ensures consistent supply of the same color temperature over time. As LEDs are constantly developing and becoming more efficient, lumen output given in this catalogue are current as of March 2020. At 2700K, 3000K, and 4000K LED lumen output per led is 110lm; at 6000K the lumen output per led is 125lm. Total Lighting Output as printed in this catalogue is the actual light output of the entire fixture. The minimum CRI of the LEDs used is 85 with a majority of products over 90.





Power	Kelvin	Real Lumen Output	Lens	Code No
6W	2700 K	570 lm	45°,60°,90°	190003
6W	3000 K	570 lm	45°,60°,90°	190001
6W	4500 K	581 lm	45°,60°,90°	190002
12W	2700 K	1162 lm	45°,60°,90°	190013
12W	3000 K	1162 lm	45°,60°,90°	190011
12W	4500 K	1278 lm	45°,60°,90°	190012



For BETON
Anchor
Code No: 953716

EMFA



BETON L TYPE LED BOLLARDS
Class I IP67 IK10

Exposed concrete is the preferred material of architects for cutting edge designs. Our BETON bollard is made of heavy duty concrete with an incredibly smooth finish. The BETON can blend into the architecture of a building and mature together with its surroundings. The simple form of the BETON is emphasized with the light that comes out from the solid structure.

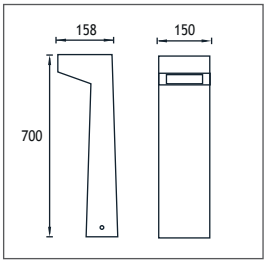




Asymmetrical

Led : LEDs
Voltage : 240 VAC with integrated driver (12-24 VDC on request)
Diffuser : 4mm Tempered Glass
Beam Angle : Asymmetrical
Mac Adam : 3
CRI : >80
L.O.R % : %70





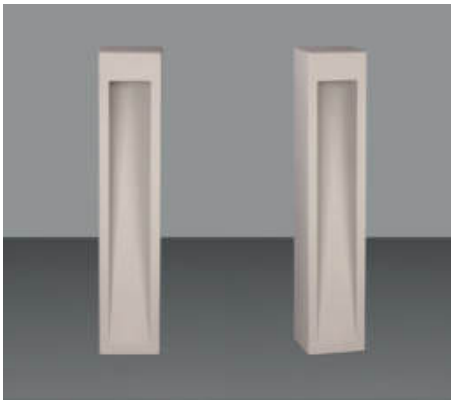
Power	Kelvin	Real Lumen Output	Code No
10W	2700 K	950 lm	190101
10W	3000 K	950 lm	190102
10W	4500 K	968 lm	190103



For BETON **Anchor** Code No: 953771

BETON SQUARE LED BOLLARDS
Class I IP67 IK10

Exposed concrete is the preferred material of architects for cutting edge designs. Our BETON bollard is made of heavy duty concrete with an incredibly smooth finish. The BETON can blend into the architecture of a building and mature together with its surroundings. The simple form of the BETON is emphasized with the light that comes out from the solid structure.

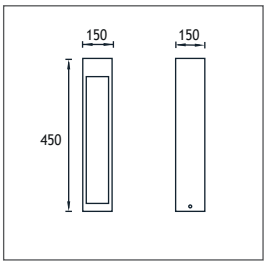




Asymmetrical

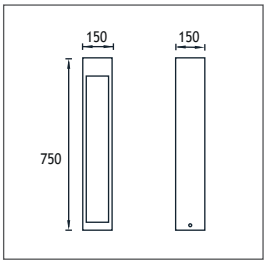
Led : LEDs
Voltage : 240 VAC with integrated driver
(12-24 VDC on request)
Diffuser : 4mm Tempered Glass
Beam Angle : Asymmetrical
Mac Adam : 3
CRI : >80
L.O.R % : %70





Power	Kelvin	Real Lumen Output	Code No
10W	2700 K	950 lm	190201
10W	3000 K	950 lm	190202
10W	4500 K	968 lm	190203





Power	Kelvin	Real Lumen Output	Code No
10W	2700 K	950 lm	190301
10W	3000 K	950 lm	190302
10W	4500 K	968 lm	190303



For BETON
Anchor
Code No: 953771

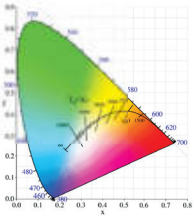
EMFA

ODEON BOLLARD
Class I IP67 IK10

EMFA's Odeon Bollard combines a die-cast aluminium head housing an LED unit with an extrusion aluminium pipe. The bollard is designed to light pathways, landscapes and open spaces. The unit comes with 5 different options of heads depending on how much light is required and into which direction: with one head, two adjacent heads, two opposite heads, three heads, or four heads. The head and pipe are connected by a hidden screw within the pipe. One head contains 20 medium-power LEDs consuming 6W and providing over 500lm light output. An optional galvanized steel anchorage kit is available for mounting into concrete. An alternative option is sleeve anchors for mounting onto existing concrete or a picket to mount into the earth.



Head
Die cast aluminium
Diffusers
Frosted polyamide 6.6
Pipe
Extrusion aluminium
Paint
Electrostatic powder



"Customization" is EMFA's standard
EMFA offers many combinations for each fixture, as all fixtures are made in house. A combination of 6 standard paint colors, 8 LED colors, 2 wattages, and 5 or more lenses and reflectors are available to make the fixture suitable for the required application. This is done without increasing lead-time and is available for large as well as small quantities.



LEDs
Only highest quality LEDs such as Cree or Toplite are used in production allowing for maximum lumen output and maximum lifetime. Most LEDs run on 350mA or 700mA depending on how much light output is required. The white color temperature binning is 200K at most, and always on the same x,y coordinates on the CIE diagram in accordance with Energy Star. This ensures consistent supply of the same color temperature over time. As LEDs are constantly developing and becoming more efficient, lumen output given in this catalogue are current as of March 2020. At 2700K, 3000K, and 4000K LED lumen output per led is 110lm; at 6000K the lumen output per led is 125lm. Total Lighting Output as printed in this catalogue is the actual light output of the entire fixture. The minimum CRI of the LEDs used is 85 with a majority of products over 90.

Thermal Management
All fixtures are designed to withstand ambient temperatures of at least 50°C. The LEDs are mounted on metal core pcbs, which are mounted to the aluminium body of the fixture so that the entire fixture acts as a heat sink. Extensive testing is performed in EMFA's laboratory to ensure these values are maintained so that the lifetime of the LED is not compromised.

ODEON BOLLARD
Class I IP67 IK10



POWER LED or CPB LED

Led : Medium power LEDs

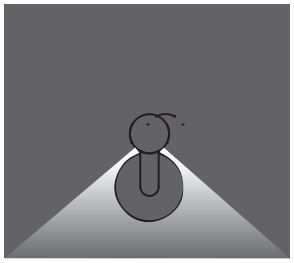
Voltage : 240 VAC with External driver (12-24 VDC on request)

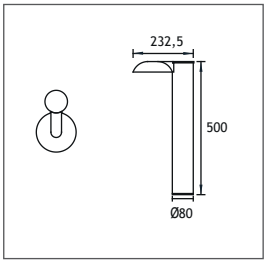
Diffuser : Polyamide 6.6

Finish : EMFA Anthracite · RAL 7039 / 7016 / 9005 / 9016 / 6013 / 8014 – other RAL on request

Mono

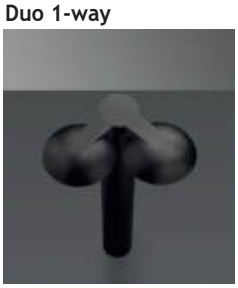


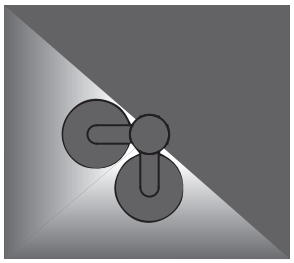


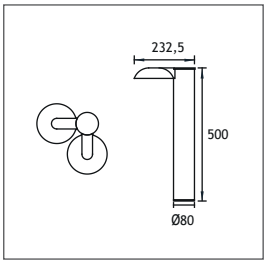


Power	Kelvin	Real Lumen Output	Code No
1x 6W	2700 K	1x 570 lm	178103
1x 6W	3000 K	1x 570 lm	178101
1x 6W	4000 K	1x 585 lm	178102

Duo 1-way



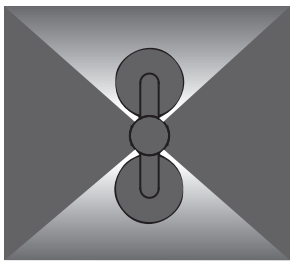


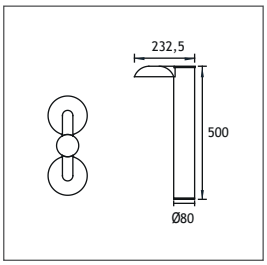


Power	Kelvin	Real Lumen Output	Code No
2x 6W	2700 K	2x 570 lm	178113
2x 6W	3000 K	2x 570 lm	178111
2x 6W	4000 K	2x 585 lm	178112

Duo 2-way



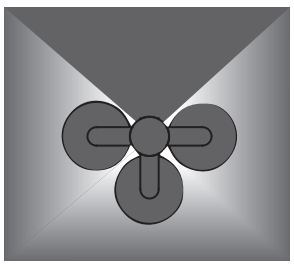


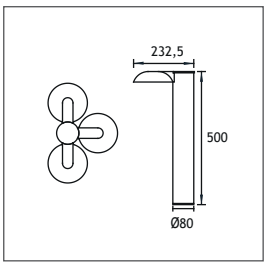


Power	Kelvin	Real Lumen Output	Code No
2x 6W	2700 K	2x 570 lm	178123
2x 6W	3000 K	2x 570 lm	178121
2x 6W	4000 K	2x 585 lm	178122

Trio



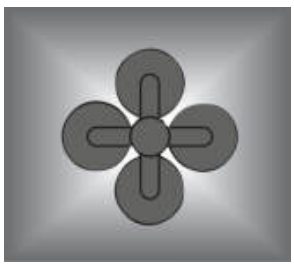


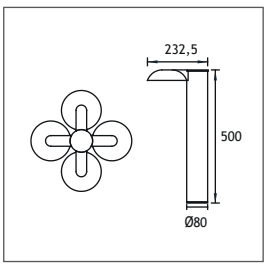


Power	Kelvin	Real Lumen Output	Code No
3x 6W	2700 K	3x 570 lm	178133
3x 6W	3000 K	3x 570 lm	178131
3x 6W	4000 K	3x 585 lm	178132

Multi







Power	Kelvin	Real Lumen Output	Code No
4x 6W	2700 K	4x 570 lm	178143
4x 6W	3000 K	4x 570 lm	178141
4x 6W	4000 K	4x 585 lm	178142

EMFA

DION

WALL AND GROUND BOLLARDS
Class I IP65 IK10

EMFA's Dion series combines a die-cast aluminium head with an extrusion aluminium pipe to provide a sturdy, outdoor bollard. The bollards are designed to light pathways, landscapes and open spaces. The unit comes with 5 different heads for various light outputs and applications. A screwless bayonet lock system allows for easy dismounting of the head. The unit comes in 4 sizes: 300mm, 450mm, 700mm, and 1100mm, as well as with 3 lamp options: LED, Fluorescent, Metal Halide. In combination with the fluorescent lamp, an optional LED pilot lamp is available to light the bollard when the primary light source is off to continue marking a path while saving energy. An optional galvanized steel anchorage kit is available for mounting into concrete. An alternative option is sleeve anchors for mounting onto existing concrete.

Head
Die cast aluminium
With Screwless lock system
(Electrical lock on request)
Outer Protective Grill
Die cast aluminium
Diffuser
Frosted polycarbonate
Pipe
Extrusion aluminium
Paint
Electrostatic powder





Accessories:

2 x LED Pilot Lamps
Lit when main Light Source is turned off. Available in:

Code No 956101 - Blue
Code No 956102 - Red
Code No 956103 - Yellow
Code No 956104 - Green

Code Number should be indicated along with bollard code number

















DION LED BOLLARDS IP65

LINEAR LED or FLUO

Led : Medium power LEDs

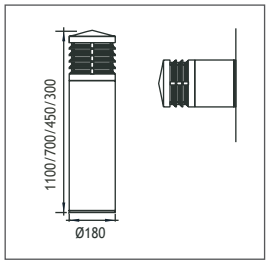
Voltage : 240 VAC with integrated driver
(12-24 VDC on request)

Diffuser : Polyamide 6.6

Finish : EMFA Anthracite · RAL 7039 / 7016 / 9005 / 9016 / 6013 / 8014 – other RAL on request

DION 1

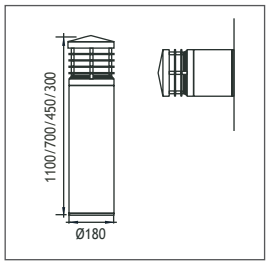




Power	30 cm	45 cm	70 cm	110 cm
Led Lamp E27	143101	143201	143301	143401
METAL HALIDE 35W		143221	143321	143421
LINEAR LED 12W		143231	143341	143331

DION 2

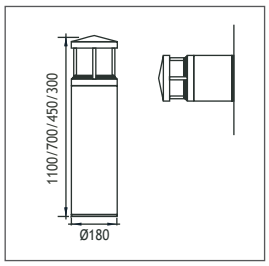




Power	30 cm	45 cm	70 cm	110 cm
Led Lamp E27	144101	144201	144301	144401
METAL HALIDE 35W		144221	144321	144421
LINEAR LED 12W		144231	144341	144331

DION 3

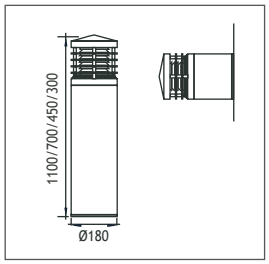




Power	30 cm	45 cm	70 cm	110 cm
Led Lamp E27	145101	145201	145301	145401
METAL HALIDE 35W		145221	145321	145421
LINEAR LED 12W		145231	145341	145331

DION 4

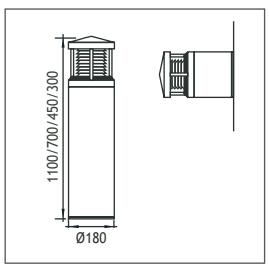




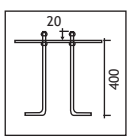
Power	30 cm	45 cm	70 cm	110 cm
Led Lamp E27	146101	146201	146301	146401
METAL HALIDE 35W		146221	146321	146421
LINEAR LED 12W		146231	146341	146331

DION 5

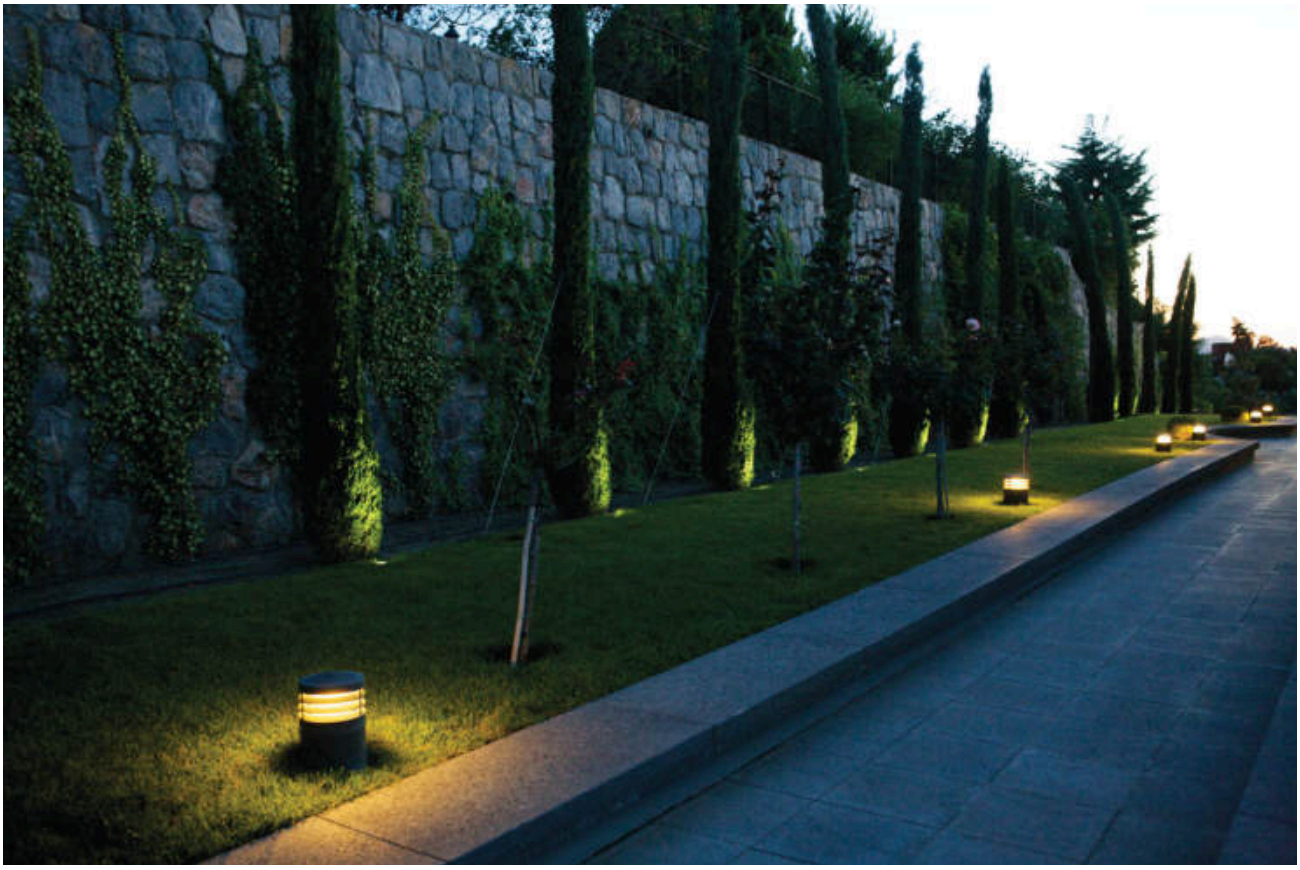




Power	30 cm	45 cm	70 cm	110 cm
Led Lamp E27	147101	147201	147301	147401
METAL HALIDE 35W		147221	147321	147421
LINEAR LED 12W		147231	147341	147331



For DION
Anchor
Code No: 955201





MILET

BOLLARD
Class I IP65 IK08



The Milet Indirect series consists of an on-wall fixture and a bollard using LED or LED lamp. The fixtures are made of a combination of a die cast aluminium head and an aluminium pipe painted with electrostatic powder paint. The wall fixture allows for a custom made sign showing room numbers or names. For the LED versions, a specially developed potted power cable is used to effectively bond with the cast resin and stop any water ingress. For the LED lamp versions, an IP connection box is provided to allow for a secure connection of the on-site cable.

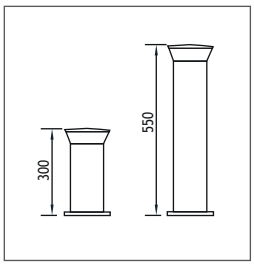
Cover
Die cast aluminium
Paint
Black or grey electrostatic powder
Pipe
Extrusion aluminium
Connection
IP connection box
Gaskets
Silicone
Diffusers
Polycarbonate

DOM LED or LED LAMP

Voltage : 240V A.C with integrated driver (24V AC or DC on request)
Lens : 40°
Diffuser : Polycarbonate
Cable : Potted 5 m 3x0,75 H03 VV-F

DOM LED

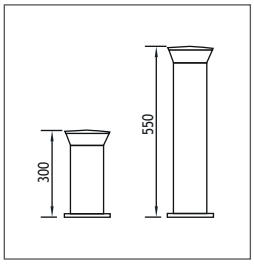




Power	Kelvin	300mm	550mm
11W	3000 K	291121	292221

LED LAMP





Power	Kelvin	300mm	550mm
Led Lamp	G9	291101	291201



EMFA

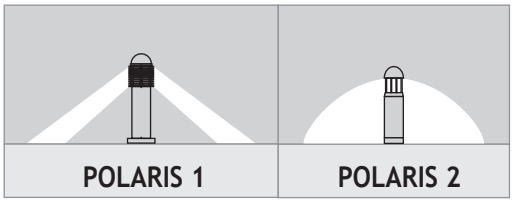
POLARIS

ALUMINIUM BOLLARDS
Class I IP43 IK10

FLUO
Bottom Base
Polyamide (black color)
Outer Grill
Die cast aluminium
Pipe
Extrusion aluminium
Paint
Electrostatic powder
Diffuser
Polycarbonate or
Glass (incandescent and mercury lamps)





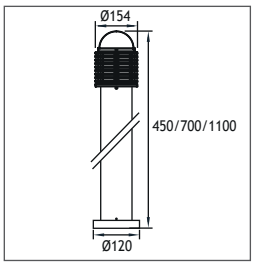


DOM LED or FLUO

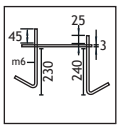
Voltage : 240V A.C with integrated driver (24V AC or DC on request)
Lens : 40°
Diffuser : Polycarbonate
Cable : Potted 5 m 3x0,75 H03 VV-F
Finish : EMFA Anthracite · RAL 7039 / 7016 / 9005 / 9016 / 6013 / 8014 – other RAL on request

POLARIS 1





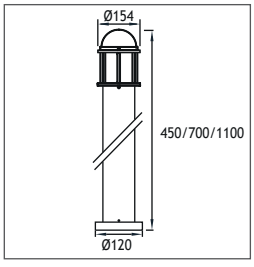
Power	Lampholder	45 cm	70 cm	110 cm
Led Lamp	E27	124101	124201	124301



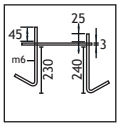
For POLARIS 1 **Anchor**
Code No: 953611

POLARIS 2





Power	Lampholder	45 cm	70 cm	110 cm
Led Lamp	E27	126101	126201	126301



For POLARIS 2 **Anchor**
Code No: 953621

LARA ACRYLIC BOLLARDS
Class I IP55

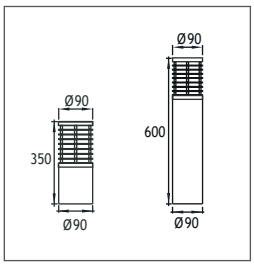
FLUO
LARA (35/60 cm)

Lampholder : G24 q-1
Reflector : -
Diffuser : Acrylic Pipe
Transformer : Electronic
Finish : EMFA Anthracite · RAL 7039 / 7016 / 9005 / 9016 / 6013 / 8014 – other RAL on request









Power	Lampholder	35 cm	60 cm
COMPACT FLUO 13W	G24 q-1	294101	294201



EMFA




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NOVOTEL

BELKIS 1

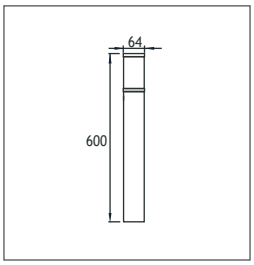
BOLLARDS
Class I IP55

FLUO
Lampholder : E27 / G9
Reflector : -
Diffuser : Acrylic Pipe
Transformer : Electronic
Finish : EMFA Anthracite · RAL 7039 / 7016 / 9005 / 9016 / 6013 / 8014 – other RAL on request



600mm

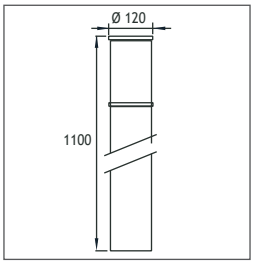




Power	Lampholder	Code No
Led Lamp	G9	292201

1100mm





Power	Lampholder	Code No
Led Lamp	E27	292301


SELÇUKLU KONGRE MERKEZİ



GOREME

LED BOLLARDS
Class I IP65 IK10

Bottom Base
Polyamide (black color)
Inner Grill
Polycarbonate
Pipe
Extrusion aluminium
Paint
Electrostatic powder
Diffuser
Polycarbonate
Anchor



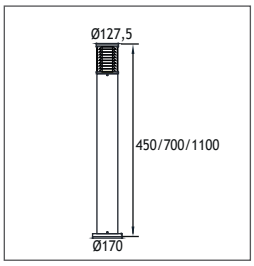


LINEAR LED

Voltage : 240 V AC with integrated driver (24V AC or DC on request)
Cable : Potted 5 m 3x0,75 H03 VV-F
Finish : EMFA Anthracite · RAL 7039 / 7016 / 9005 / 9016 / 6013 / 8014 – other RAL on request

GOREME 1

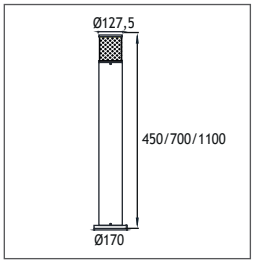




Power	Kelvin	Real Lumen Output	45 cm	70 cm	110 cm
12W	2700 K	1140 lm	127003	127103	127203
12W	3000 K	1140 lm	127001	127101	127201
12W	4000 K	1162 lm	127002	127102	127202

GOREME 2





Power	Kelvin	Real Lumen Output	45 cm	70 cm	110 cm
12W	2700 K	1140 lm	127503	127603	127703
12W	3000 K	1140 lm	127501	127601	127701
12W	4000 K	1162 lm	127502	127602	127702
24W	2700 K	2280 lm	127513	127613	127713
24W	3000 K	2280 lm	127511	127611	127711
24W	4000 K	2320 lm	127512	127612	127712

BOW GARDEN FIXTURE
Class I IP44 IK10

Body
Glass reinforced
polyester
Diffuser
Acrylic
Reflector
Anodized aluminium
Bracket
Stainless Steel



LINEAR LED or FLUO

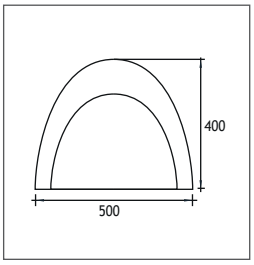
Voltage : 240V A.C with integrated driver
(24V AC or DC on request)

Cable : Potted 5 m 3x0,75 H03 VV-F

Finish : EMFA Anthracite · RAL 7039 / 7016 / 9005 /
9016 / 6013 / 8014 – other RAL on request

LINEAR LED





Power	Kelvin	Real Lumen Output	Code No
2x3W	2700 K	570 lm	129122
2x3W	3000 K	570 lm	129121



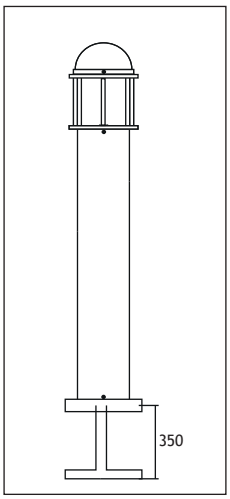
EMFA

RAMBO

VANDALPROOF BOLLARD
Class I IP65 IK10

Head
Die cast aluminium
Pipe
Steel
Paint
Electrostatic powder paint
Diffuser
Polycarbonate
Anchor
Die cast iron



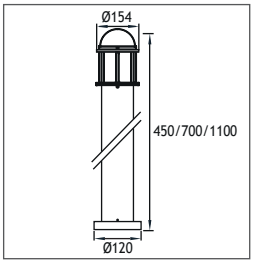




LINEAR LED or FLUO

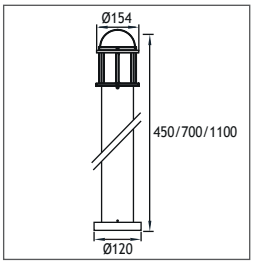
Voltage : 240V A.C with integrated driver (24V AC or DC on request)
Cable : Potted 5 m 3x0,75 H03 VV-F
Finish : EMFA Anthracite · RAL 7039 / 7016 / 9005 / 9016 / 6013 / 8014 – other RAL on request





Power	Lampholder	Code No
Led Lamp	E27	128101





Power	Kelvin	Real Lumen Output	Code No
LINEAR LED 12W	2700 K	1140 lm	128142
LINEAR LED 12W	3000 K	1140 lm	128141


ODTÜ

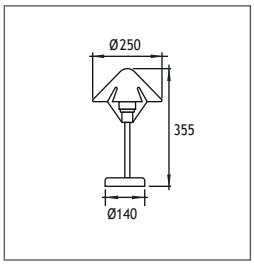
MUSHROOM

GARDEN FIXTURE
Class I IP67 IK10

Top Cover
Aluminium
Inner Body
Die cast aluminium
Diffuser
Tempered Glass
Gaskets
Silicone
Lampholder: Gu10
Finish
EMFA Anthracite · RAL 7039 / 7016 / 9005 / 9016 / 6013 / 8014 – other RAL on request

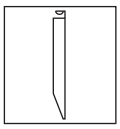






Power	Lampholder	Code No
Led Lamp	Gu10	129501

For Mushroom



Picket
Code No: 953501



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