GENERAL INFORMATION

TREE GRATE SYSTEMS



1. Concrete Foundation



2. Cantilever Frame



3. Tree Grate



4. Tree Guard



1. CONCRETE FOUNDATIONS

Protect the ground around the tree roots from becoming compacted. Designed for the respective tree grate's size and form, the foundations have a single-component construction with notched openings to allow the growth of roots. Fitted with threaded studs for frame attachment. Choice of 260 mm or 400 mm height.

2.CANTILEVER FRAMES

The two-part construction bolts to concrete foundation and enables:

- Easy paving
- Completion of adjacent earth work and surfacing
- Planting after the completion of construction work
- Installation of the tree grates after the completion of construction work

3.TREE GRATES

Two-segment construction sits unfastened in the frame. Holes drilled into the inner rim of the grates permit the attachment of any Hess tree guard. All of the tree grates come with watering holes and covers. May be ordered with openings and hardware to accommodate in-ground luminaires.

4.TREE GUARDS

Serve both protective and decorative functions. Two-part construction bolts together and fastens with provided screw set and fasteners. Grade compensation easily accommodates differences of up to 3%.



The name Hess has always stood for excellent product quality. All the tree grates bear the designation "Made in Germany".

The manufacture of the tree grates, the materials and the workmanship are subject to regular, strict quality control, which is verifiable. This gives Hess the confidence to guarantee the high quality of the surfaces and environmentally friendly casting as well as the tested and certified wheel load capacity of 5 tonnes.

CANTILEVER TREE GRATE SYSTEM

The tree grate system spans the earth around the tree, preventing the ground from becoming compacted.

TREE GUARDS

Serve both protective and decorative functions. Two-part construction bolts together and fastens with Screw Set 2 to the tree grate. Grade compensation easily accommodates grade slopes of up to 3%.

TREE GRATES

Four-segment construction bolts together and sits unfastened in the frame. Holes drilled into the inner rim of the grates permit the attachment of any Hess tree guard. All the tree grates come with watering holes and covers. May be ordered with openings and hardware to accommodate luminaires.

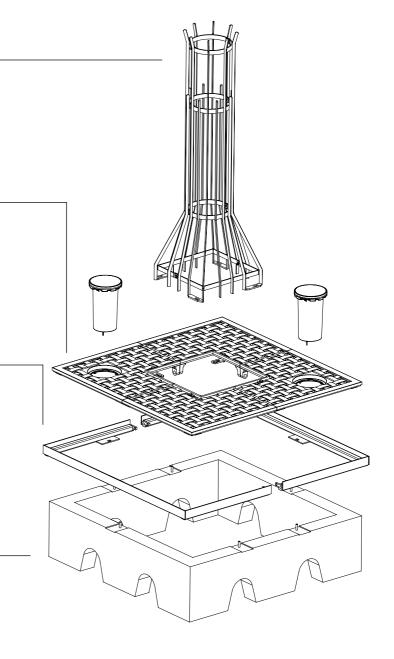
CANTILEVER FRAMES

The two-part construction bolts to concrete foundation and enables:

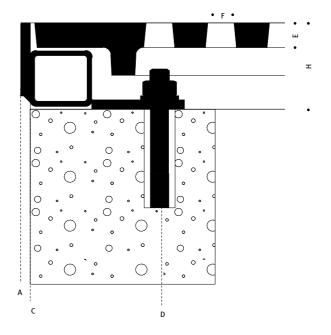
- Easy paving
- Completion of adjacent earth work and surfacing
- Planting after the completion of construction work
- Installation of the tree grates after the completion of construction work

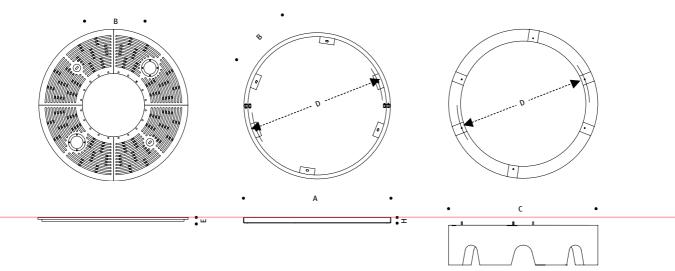
CONCRETE FOUNDATIONS

Protect the ground around the tree roots from becoming compacted. Designed for the respective tree grate's size and form, the foundations have a single-component construction with notched openings to allow the growth of roots. Fitted with threaded studs for frame attachment. Choice of 260 mm or 400 mm height.



- A Outer measurement of frame
- B Grate opening size
- C Outer measurement of concrete foundation
- D Fastening reference
- E Inlay depth of the grate in the frame
- H Installation height of the frame incl. cast grate
- S Width of grate slits



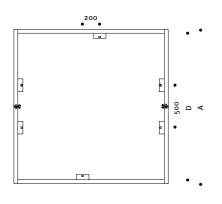


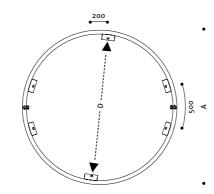
4 S - C A N T I L E V E R F R A M E

Constructed from flat galvanised steel section. Available in square or round shape. Two-part construction bolts together and enables surface work to be performed easily. Fitted for mounting to Hess concrete foundations.

Order No.	Nominal Dimensions	Dimensions in mn		m
		Α	Н	D
30.41215.4	Q 1500	1500	70	1320
30.41218.4	Q 1800	1800	70	1640
30.41220.4	Q 2000	2000	70	1780
30.41110.0	R 1000	1000	70	825
30.41218.6	R 180	1800	70	1620
30.41215.6	R 1500	1500	70	1330
30.41220.6	R 2000	2000	70	1780

- A Outer measurement
- H Height
- D Fastening reference





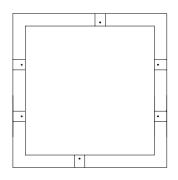
4S-CONCRETE FOUNDATIONS

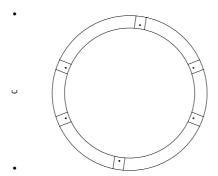
Serve as foundations for the steel frame construction in which Hess tree grates are installed. Fitted with threaded studs protruding from the top of the foundation for attachment of the frame. Single-element poured construction. Available in either round or square form and in two heights, 260 and 400 mm. Additional charge: Two-element foundation.

Order No.	Nominal Dimensions		Dimensions in mm	
Height 260 mm		С	D	
30.70015.4	Q 1500	1490	1320	
30.70018.4	Q 1800	1810	1640	
30.70020.4	Q 2000	1990	1780	
30.70010.0	R 1000	995	825	
30.70015.6	R 1500	1500	1330	
30.70018.6	R 1800	1790	1620	
30.70020.6	R 2000	1990	1780	

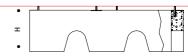
Order No.	Nominal Dimensions	Dimensi	Dimensions in mm	
Height 400 mm		С	D	
30.70015.5	Q 1500	1490	1320	
30.70018.5	Q 1800	1810	1640	
30.70020.5	Q 2000	1990	1780	
30.70010.2	R 1000	995	825	
30.70015.7	R 1500	1500	1330	
30.70018.7	R 1800	1790	1620	
30.70020.7	R 2000	1990	1780	

- C Outer measurement
- H Height
- D Fastening reference











WASTE RECEPTACLES





Impressive in their function and appearance, Hess litter receptacles are a welcome addition to any site.

4 . WASTE RECEPTACLES







PUNTO

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VAREDO

VAREDO. Waste Receptacles

Square container, steel, galvanised, varnished. Centred stand. Upward opening container for emptying. Stainless steel cover with triangular locking mechanism. 60 L capacity

All RAL (classic unicolour shades), Hess DB and Hess glimmer colours.

Additional charge: Equipped with integrated ashtray.

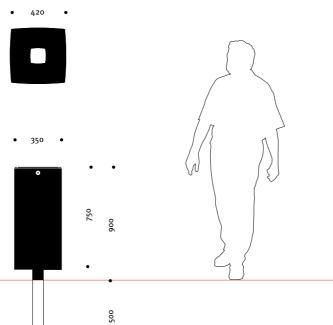






Product Name	Mounting	Order No.	Colour	Capacity	
VAREDO	ground	80.32200.0	RAL, mica or DB finish	60 l	

Product information www.hess.eu/2640



Order No. 80.32200.0

CARPO

CARPO. Waste Receptacles

Galvanised steel post and container. Reduced mouth size and rain-protected opening. Container opens to the side for emptying. Triangular locking mechanism. Includes inner mounted retainer ring for litter bags. Choice of RAL, mica or DB finish.

Capacity: 60 l or 90 l

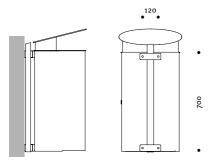
Additional charge: Flange plate. Integrated ash receptacle.



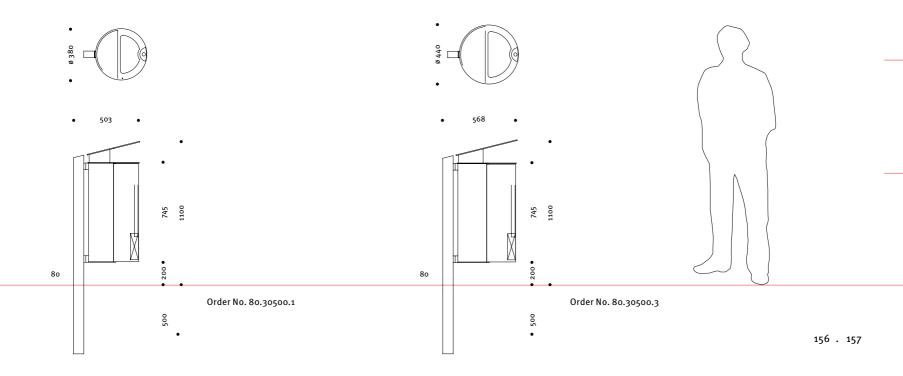


Product Name	Mounting	Order No.	Colour	Capacity
CARPO 380	ground	80.30500.0	RAL, mica or DB finish	60 l
CARPO 440	ground	80.30500.1	RAL, mica or DB finish	90 l
CARPO 380	wall	80.30500.3	RAL, mica or DB finish	60 l
CARPO 440	wall	80.30501.3	RAL, mica or DB finish	90 l

Product information www.hess.eu/o310



Order No. 80.30500.0



PUNTO

PUNTO. Waste Receptacle

Galvanised steel post and container. Reduced mouth size. Tip function eases emptying. Triangular locking mechanism. PE liner. Choice of RAL, mica or DB finish.

Capacity: Punto 500 = 32 l; Punto 700 = 45 l

Additional charge: Flange plate. Metal liner. Integrated ash receptacle.





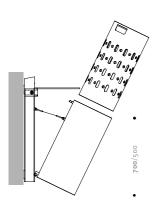




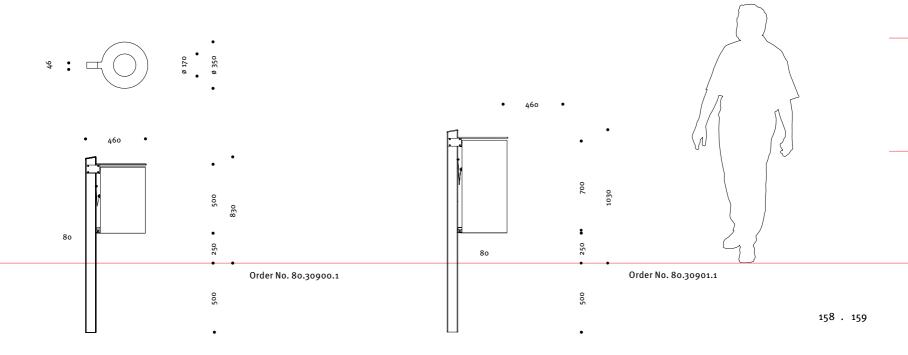


Product Name	Mounting	Order No.	Colour	Capacity
PUNTO 500	ground	80.30900.1	RAL, mica or DB finish	32 l
PUNTO 700	ground	80.30901.1	RAL, mica or DB finish	45 l
PUNTO 500	wall	80.30900.3	RAL, mica or DB finish	32 l
PUNTO 700	wall	80.30901.3	RAL, mica or DB finish	45 l

Product information www.hess.eu/o301



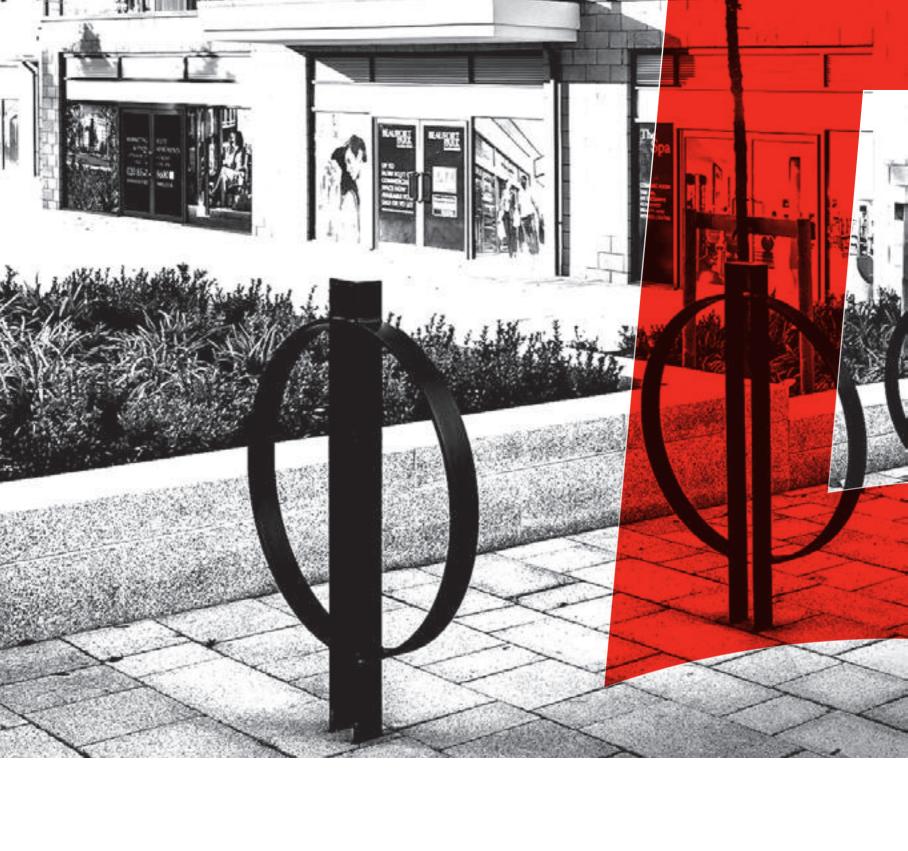
Order No. 80.30901.3 Order No. 80.30900.3





PUNTO
VILLINGEN-SCHWENNINGEN . GERMANY







BICYCLE RACKS

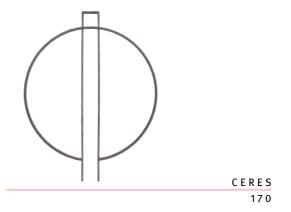




A welcome sight for bicyclists! Aesthetically pleasing and functionally oriented, Hess bicycle racks feature direct contact between the bike and rack for superior front wheel and theft protection. A must for the integration and accommodation of bicyclists in urban environments.

5 . BICYCLE RACKS







TENDO

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VAREDO

VAREDO. Bicycle Rack

Bollard with square aluminium section and continuous embedded base. Aluminium U-bracket, welded on All RAL (classic unicolour shades), Hess DB and Hess glimmer colours.

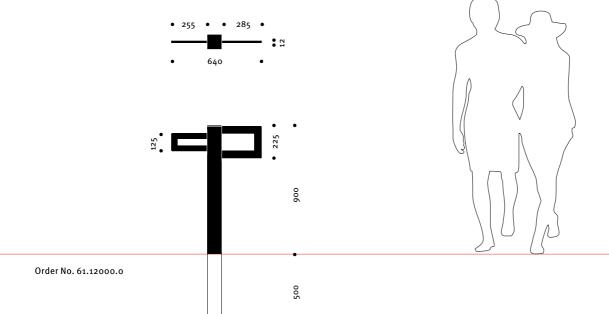
Additional charge: Square flange plate





Product Name	Order No.	Colour	
VAREDO	61.12000.0	RAL, mica or DB finish	

Product information www.hess.eu/2630



CERES

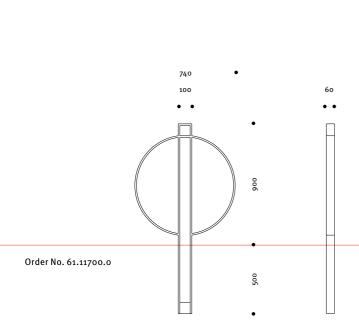
C E R E S . Bicycle Rack Galvanised steel construction. Choice of RAL, mica or DB finish.

Additional charge: Flange plate.



Product Name	Order No.	Colour	
CERES	61.11700.0	RAL, mica or DB finish	

Product information www.hess.eu/o8o7









TENDO

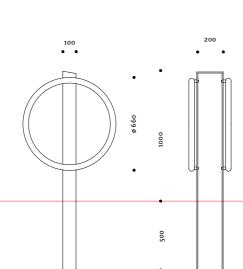
TENDO. Bicycle Rack Galvanised steel construction. Choice of RAL, mica or DB finish.

Additional charge: Flange plate.

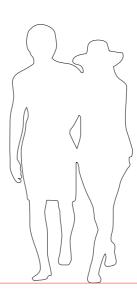


Product Name	Order No.	Colour
TENDO	61.00010.0	RAL, mica or DB finish

Product information www.hess.eu/o8o1



Order No. 61.00010.0

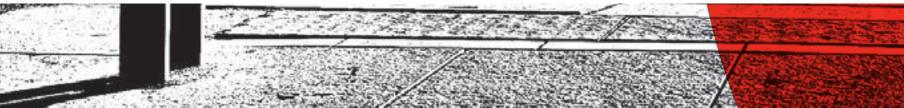




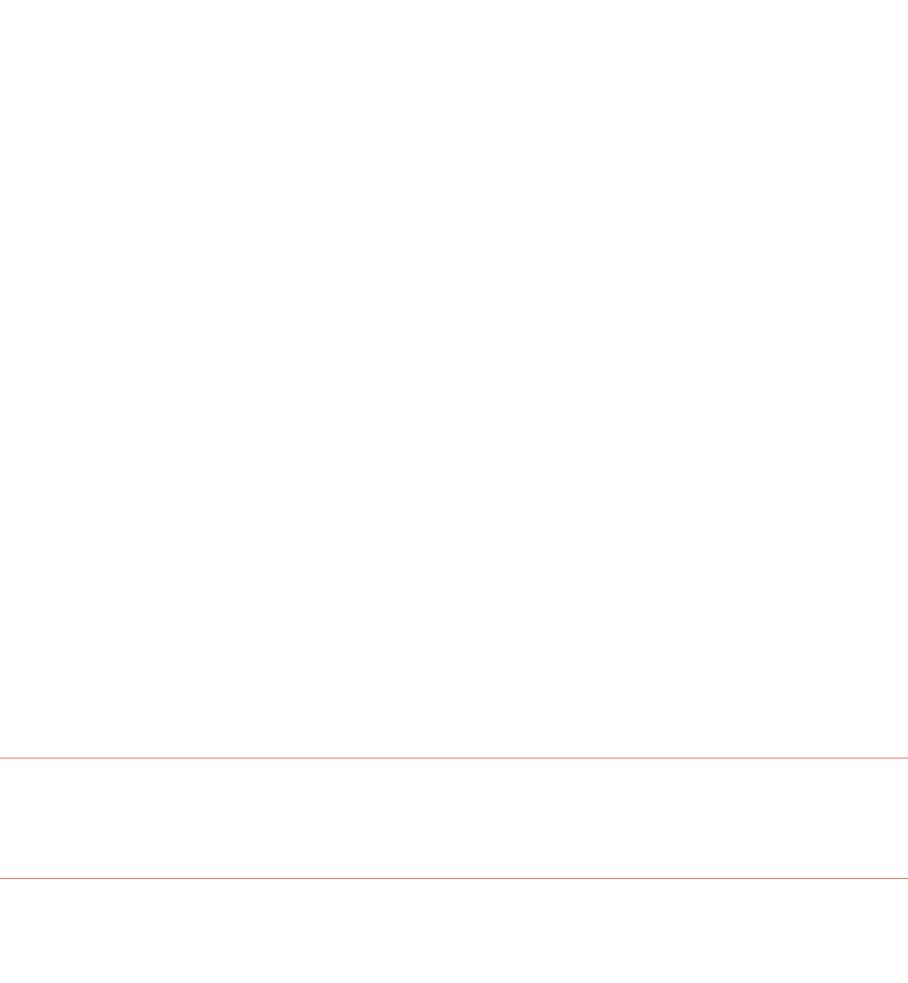
TENDO LOS ANGELES . USA











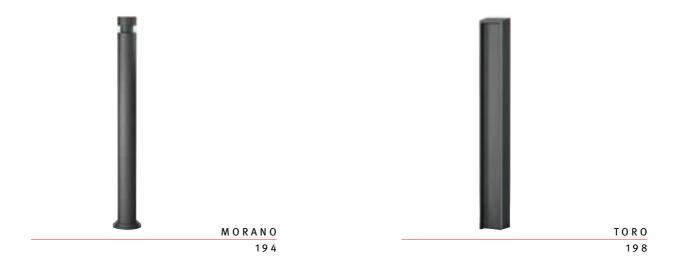


Hess's range of bollards is distinguished by variety and includes vintage, classic, modern minimalist and avant-garde forms in cast metals or steel. There's something to match every architectural style.

6 . BARRIER SYSTEMS







VAREDO

VAREDO. Barrier Bollard

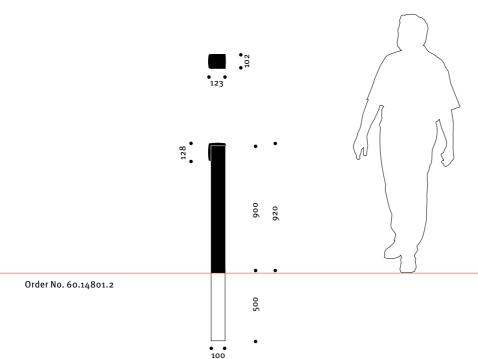
Blocking bollard with square aluminium tube for fixed installation with continuous embedded base. L-shaped cast-aluminium cap. All RAL (classic unicolour shades), Hess DB and Hess glimmer colours.

Additional charge: Square flange plate





Product Name	Height	Order No.	Order No.
		Type A	Туре С
	mm	fixed	flange mount
VAREDO	900	60.15000.0	60.15000.2







REGOR

R E G O R . Barrier Bollard Galvanised steel construction. Choice of RAL, mica or DB finish.

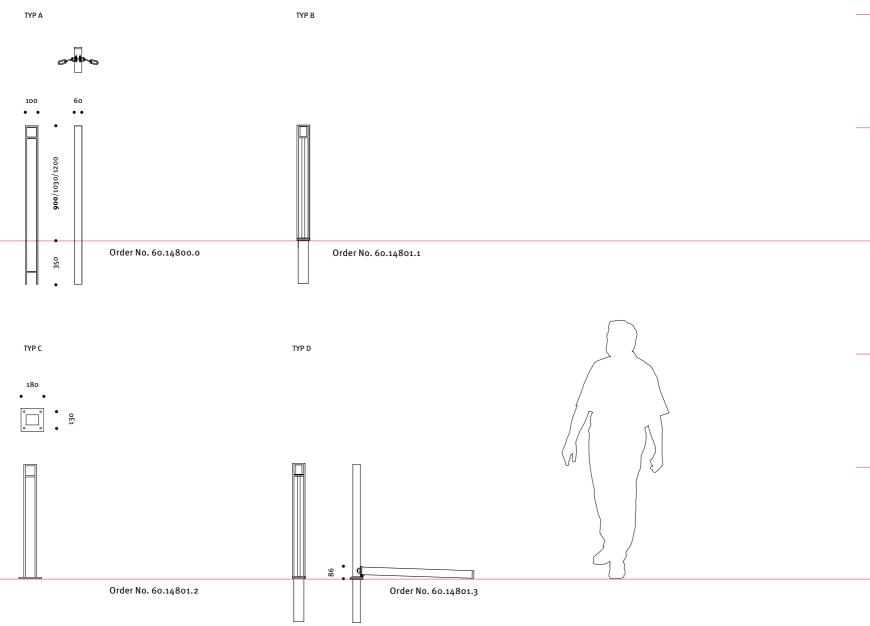
Additional charge: Bicoloured finish (consult factory). Type C with subsurface flange plate (on request). Chain fastener. Chain







Product Name	Height	Order No.	Order No.	Order No.	Order No.
		Type A	Туре В	Type C	Type D
	mm	fixed	detachable	flange mount	collapsible
REGOR	900	60.14800.0	60.14800.1	60.14800.2	60.14800.3
	1030	60.14801.0	60.14801.1	60.14801.2	60.14801.3
	1200	60.14802.0	60.14802.1	60.4802.2	60.14802.3



REGOR

TYPES OF MOUNTING

Fixed Bollards
TYPE A

Designed with base that embeds in concrete.
Detachment is not possible.

Detachable Bollards TYPE B

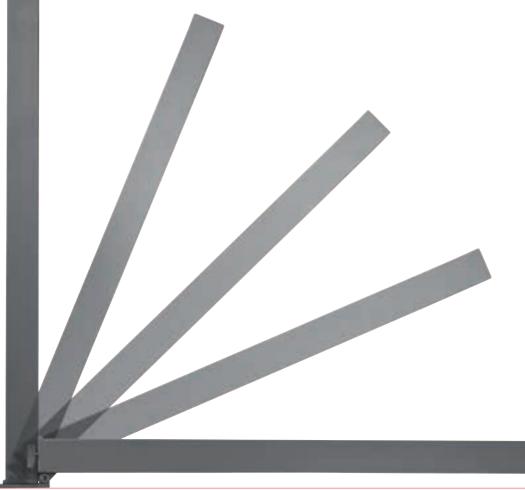
Mount to separate embedded base from which they detach via triangular locking mechanism. Recessed in the top of the bollard, the triangular lock head engages and disengages with a special tool.

The head turns a camshaft engaging or disengaging the bollard in place. The embedded base installs grade flush in a permanent anchor footing.

Flange Mount Bollards TYPE C

Employ a flanged base mounting plate instead of embedded base, which mounts via bolts and screw anchors.

Also available with flange plate that installs 200 mm below grade to enable surfacing, paving, etc.



Collapsible Bollards TYPE D

Come with separate embedded base. Collapse at the joint after being disengaged by means of the triangular keyed locking mechanism.

Recessed in the top of the bollard, the triangular lock head operates with a special tool.

The head turns a camshaft releasing or locking the bollard in place. Embedded base installs grade flush in permanent anchor footing.

REGOR

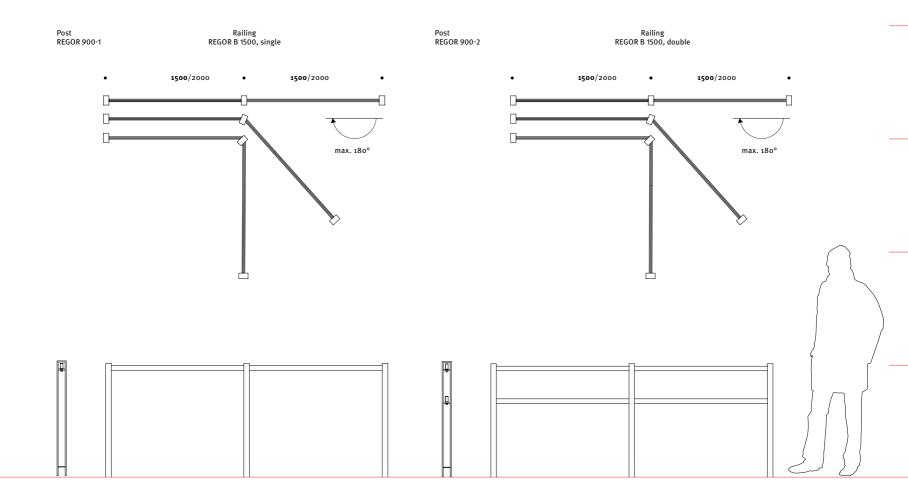
 $R \; E \; G \; O \; R$. Barrier System

 $\label{lem:combine} \textbf{Galvanised steel rail and post elements combine as site requirements dictate.}$

90 - 180° post-to-post placement. Choice of RAL, mica or DB finish.



Product Name	Height	Post				
	mm	Mounting	Suitable for	Suitable for	Rail	
			1 Rail	2 Rails	(individual)	
			REGOR 900-1	REGOR 900-2	REGOR B 1500	
REGOR	900	Type A Fixed	60.14810.0	60.14820.0	60.64800.1	
	900	Type C Flange Mount	60.14810.2	60.14820.2	60.64800.1	
	-		REGOR 1030-1	REGOR 1030-2	REGOR B 2000	
REGOR	1030	Type A Fixed	60.14811.0	60.14821.0	60.64801.1	
	1030	Type C Flange Mount	60.14811.2	60.14821.2	60.64801.1	



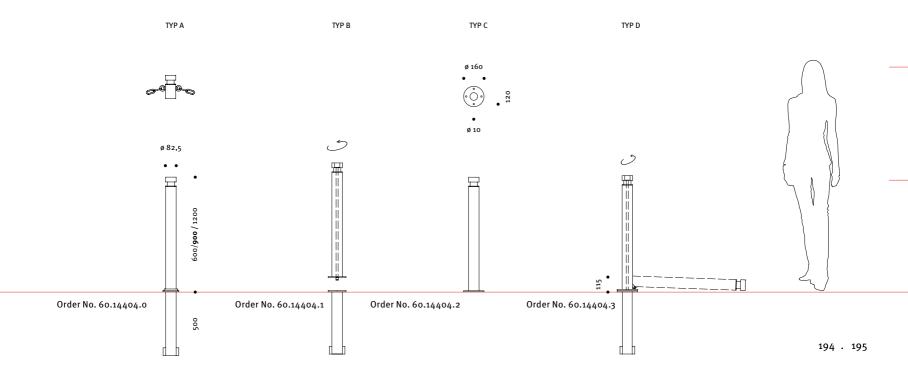
MORANO

M O R A N O . Barrier Bollard Galvanised steel bollard construction and aluminium cap. Choice of RAL, mica or DB finish.

Additional charge: Bicoloured finish (consult factory). Chain fastener. Chain



Product Name	Height	Order No.	Order No.	Order No.	Order No.
	Type A		Туре В	Type C	Type D
mm fixed		fixed	detachable	flange mount	collapsible
MORANO	600	60.14403.0	60.14403.1	60.14403.2	60.14403.3
	900	60.14404.0	60.14404.1	60.14404.2	60.14404.3
	1200	60.14405.0	60.14405.1	60.14405.2	60.14405.3





MORANO KINTZHEIM . FRANCE



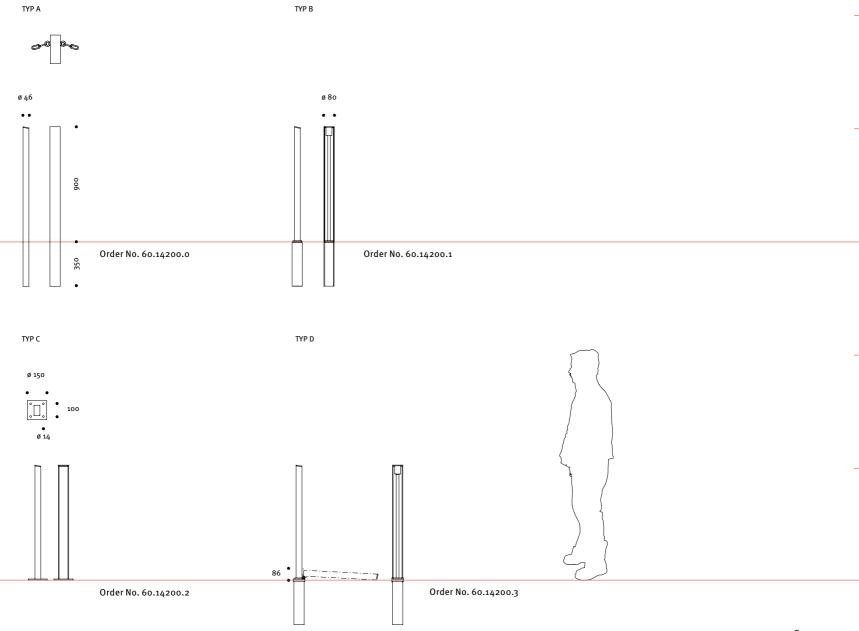
TORO

T O R O . Barrier Bollard Galvanised steel construction. Choice of RAL, mica or DB finish.

Additional charge: Bicoloured finish (consult factory). Chain link.



Product Name	Height	Order No.	Order No.	Order No.	Order No.	
		Type A	Туре В	Type C	Type D	
	mm	fixed	detachable	flange mount	collapsible	
TORO	ORO 60.14201.0		60.14201.1	60.14201.2	60.14201.3	
	900	60.14200.0	60.14200.1	60.14200.2	60.14202.4	
	1200	60.14203.0	60.14203.1	60.14203.2	60.14203.4	



PARIS

PARIS 1100. Barrier Bollard

Galvanised steel construction with aluminium cap. Choice of RAL, mica or DB finish.

Additional charge: Bicoloured finish (consult factory).

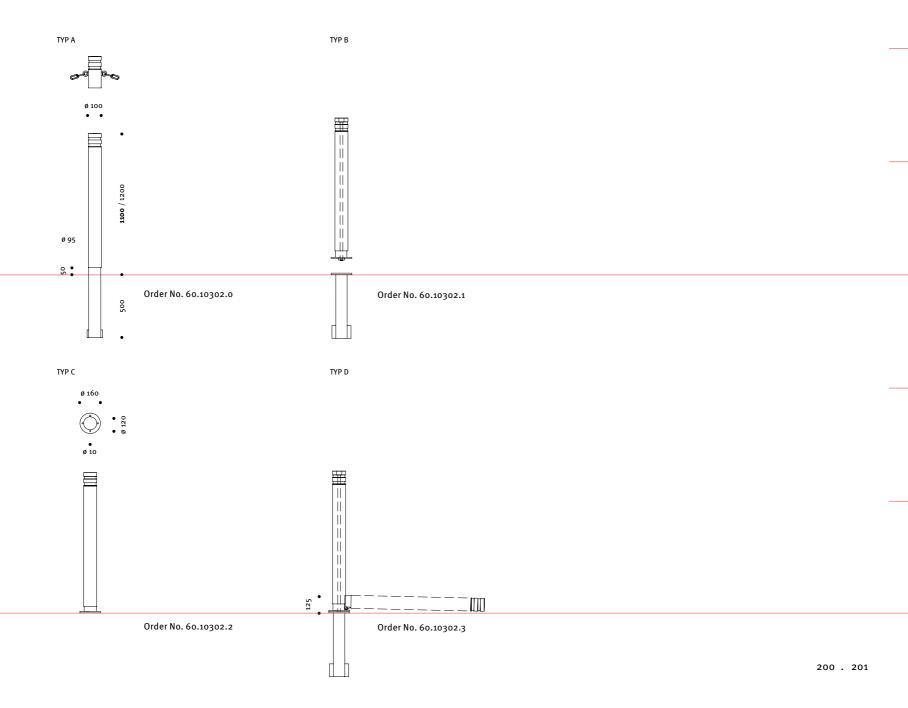
PARIS 1200. Barrier Bollard

 $\label{lem:cap:choice} \textbf{Galvanised steel construction with a luminium cap. Choice of RAL, mica or DB finish.}$

Additional charge: Bicoloured finish (consult factory).



Product Name	Height	Order No.	Order No. Order No.		Order No.
		Type A Type B		Type C	Type D
	mm	fixed	detachable	flange mount	collapsible
PARIS 600	600	60.10301.0	60.10301.1	60.10301.2	_
PARIS 1100	1100	60.10302.0	60.10302.1	60.10302.2	60.10302.3
PARIS 1200	1200	60.10303.0	60.10303.1	60.10303.2	60.10303.3

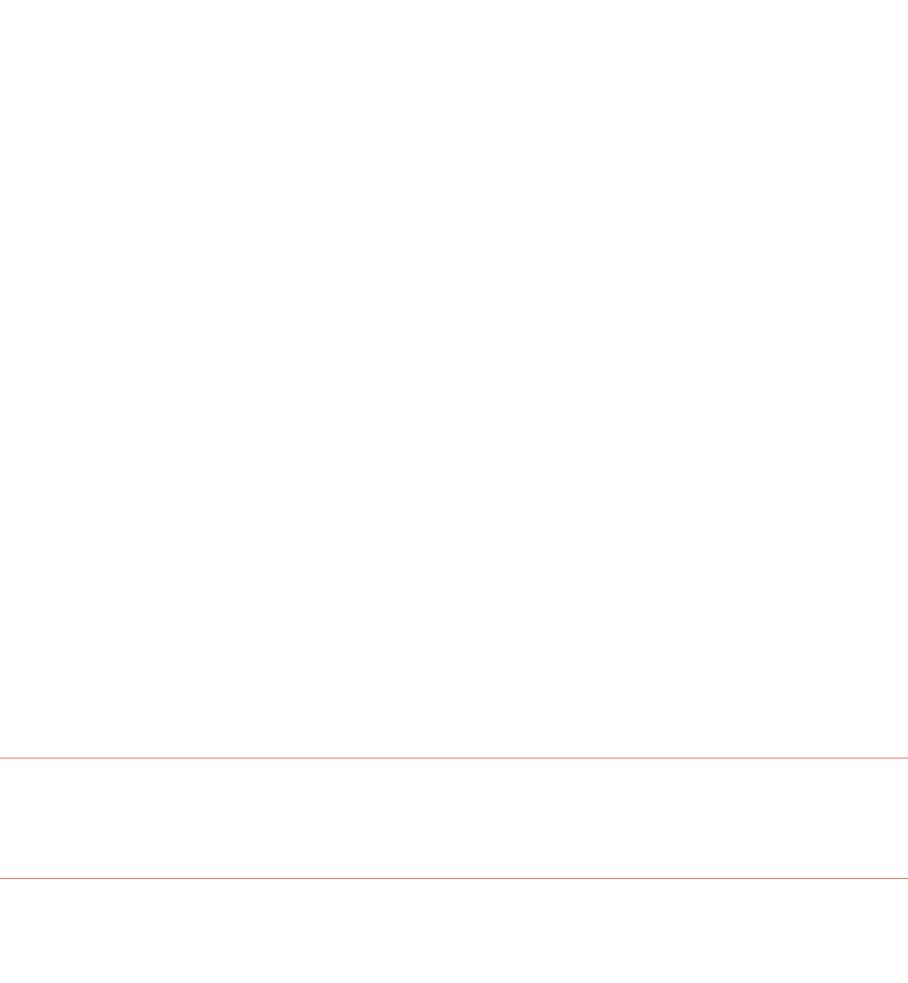








POWER AND WATER BOLLARDS





Function is the first quality on which power and water bollards are measured. For Hess, packaging function in an attractive suit is by no means of little importance, as is readily apparent.

7 . POWER AND WATER BOLLARDS





 $\mathsf{M} \; \mathsf{O} \; \mathsf{R} \; \mathsf{A} \; \mathsf{N} \; \mathsf{O}$

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INSTALLATION

Description of power bollard installation using TOLEDO 250 as an example.

Installation Description



Open Door Operation
During operation, the door remains
open and the power cable extends out
of the bollard.

Closed Door Operation
The door remains closed during
operation with power cable running out
of the outlet in the closed door.

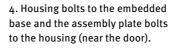
1. First, the embedded base installs in the ground.

2. The electrical assembly mounts to the embedded base. Electrical assembly wires to mains. Bollard housing and electrical assembly plate require earthing.











5. Out of service

TOLEDO 250

TOLEDO 250 GS. Power Bollard

Designed for closed door operation. Comes with two access doors and cable outlet. Steel housing galvanised in and out. Includes separate bolt-on embedded base with two cable openings. Access doors come with cylinder locks for reliable safety and security. Electrical assembly plate provided for configuration by others. Choice of RAL, RAL, mica or DB finish.

Additional charge: Electrical configuration GS 1 – GS 6, pre-wired and ready for connection.

TOLEDO 250 W. Water Bollard Designed for open door operation. Comes with two access doors.





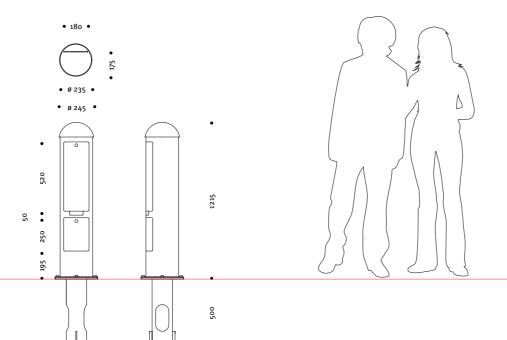




Fig.: Configuration examples

Product Name	Housing Art. No.	Colour	
TOLEDO 250 GS	60.12405.0	RAL, mica or DB finish	
TOLEDO 250 W	60.12412.0	RAL, mica or DB finish	

Order No.: Housing Art. No. + Configuration



TOLEDO 250

IMPORTANT: Operation of the power bollard shall be subject to applicable local and national codes, guidelines and laws. The electrical assembly plate is designed for configuration by others (GS o). Any other configurations shown here serve solely as examples of potential con-figurations.

	Configuration	Schuko 250 V / 16 A	CEE 250 V / 16 A 3p. 6 h	CEE 400 V / 16 A 5p. 6 h	CEE 400 V / 32 A 5p. 6 h	
			<u></u>		 ©	
	GS o	_	_	_	-	
00	GS 1	6	_	-	_	
ŎŎ	GS 2	-	6	-	-	
	GS 3	3	-	1	-	
	GS 4	3	-	-	1	
ŏ	GS 5	-	3	1	-	
	GS 6	-	3	-	1	

Configuration	Water Faucet 3/4"	Water Metre 3/4" cold	Shut-off Valve 5/4"		
W 1	2	2	1		

^{*} For illustration purposes only

Autom	atic Circ	uit Breaker	Underground Cable
В Туре			Max.
16 A	16 A	32 A	1 x
1р.	зр.	зр.	5 X 16 ²
-	-	-	-
6	-	-	1
6	-	-	1
3	1	-	1
3	-	1	1
 3	1	-	1
3	_	1	1

TOLEDO 350

TOLEDO 350 GS. Power Bollard

Designed for closed door operation. Comes with two access doors and cable outlet. Steel housing galvanised in and out. Includes separate bolt-on embedded base with two cable openings. Access doors come with cylinder locks for reliable safety and security. Electrical assembly plate provided for configuration by others. Choice of RAL, mica or DB finish.

Additional charge: Electrical configuration GS 7 – GS 12, pre-wired and ready for connection.

TOLEDO 350 W. Water Bollard
Designed for open door operation. Comes with one access door.







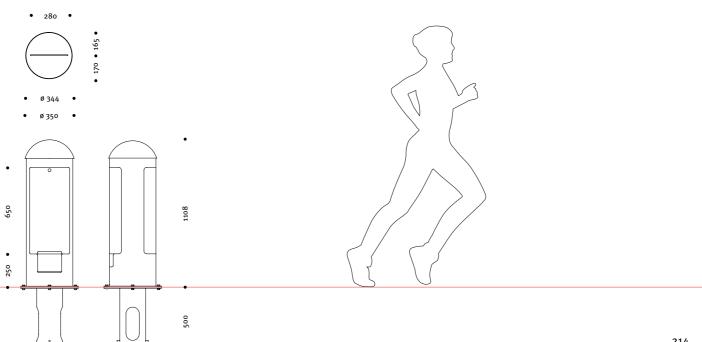


Fig.: Configuration examples

Product Name	Housing Art. No.	Colour
TOLEDO 350 GS	60.12404.0	RAL, mica or DB finish
TOLEDO 350 W	60.12421.0	RAL, mica or DB finish

Order No.: Housing Art. No. + Configuration

Product information www.hess.eu/0792



TOLEDO 350

IMPORTANT: Operation of the power bollard shall be subject to applicable local and national codes, guidelines and laws. The electrical assembly plate is designed for configuration by others (GS o). Any other configurations shown here serve solely as examples of potential con-figurations.

Configuration Sc	Schuko 250 V / 16 A	CEE 250 V / 16 A 3p. 6 h	CEE 400 V / 16 A 5p. 6 h	CEE 400 V / 32 A 5p. 6 h	Automa B Type	Automatic Circuit Breaker	
					16 A 1	16 A	32 A
					1p.	3р.	3p.
GS o	-	-	-	-	_	-	_
GS 7	10	-	-	-	10	_	_
GS 8	-	10	-	-	10	-	-
GS 9	6	_	2	-	6	2	-
GS 10	6	-	-	2	6	_	2
GS 11	-	4	2	-	4	2	-
GS 12	_	4	-	2	4	-	2

Configuration	Water Faucet 3/4"	Water Metre 3/4" cold	Shut-off Valve 5/4"	
			4 .	
			₹ ₩	
W 1	3	3	1	

^{*} For illustration purposes only

RCD		Undergro	ound
Bodily	Injury Protection 30 mA	Cable Ma	ax.
40 A	63 A	2 X	2 X
4p.	4p.	5 X 16 ²	5 X 25 ²
-	_	_	_
2	_	1	Α
2	-	1	Α
2	_	1	Α
1	1	1	A
2	_	1	Α
1	1	1	A

A = on request

MORANO

MORANO GS. Power Bollard

Designed for closed door operation. Comes with two access doors and cable outlet. Steel housing galvanised in and out. Includes separate bolt-on embedded base with two cable openings. Electrical assembly plate provided for configuration by others. Access doors come with cylinder locks for reliable safety and security. Choice of RAL, mica or DB finish.

Additional charge: Electrical configuration GS 1 – GS 6, pre-wired and ready for connection.

MORANO W. Water Bollard

Designed for open door operation. Comes with two access doors.







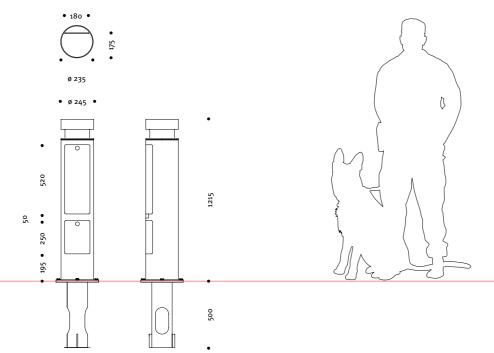


Fig.: Configuration examples

Product Name	Housing Art. No.	Colour
MORANO GS	60.14401.0	RAL, mica or DB finish
MORANO W	60.14410.0	RAL, mica or DB finish

Product information www.hess.eu/0795

Order No.: Housing Art. No. + Configuration



MORANO

IMPORTANT: Operation of the power bollard shall be subject to applicable local and national codes, guidelines and laws. The electrical assembly plate is designed for configuration by others (GS o). Any other configurations shown here serve solely as examples of potential con-figurations.

GS o	-	-	-	-	
GS 1	6	_	_	-	
GS 2	-	6	-	-	
GS 3	3	-	1	-	
GS 4	3	-	-	1	
GS 5	3	-	1	-	
GS 6	-	3	=	1	

Configuration	Water Faucet 3/4"	Water Metre 3/4" cold	Shut-off Valve 5/4"		
			4 .		
			E		
W 1	2	2	1		

^{*} For illustration purposes only

Autor	natic C	ircuit Breaker	Underground
В Тур	e		Cable Max.
16 A	16 A	32 A	1 X
1р.	зр.	3p.	5 X 16 ²
-	-	-	_
6	-	-	1
6	-	-	1
3	1	-	1
3	-	1	1
 3	1	_	1
3	-	1	1





PLANTERS



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Decoratively useful shapes and proportions — Hess makes public design complete and all-encompassing. Available in different sizes, Hess planters beautify streetscapes and add green vitality to urban and corporate environments.

8 . PLANTERS





PALMA R

230



PALMA L 234

PALMA Q

PALMA Q. Planter. Square Aluminium construction with closed bottom. Includes non-adjusting feet. Choice of RAL, mica or DB finish.

NOTE: Version B-Outdoor - Comes with drain pipe assembly and plug for outdoor use.





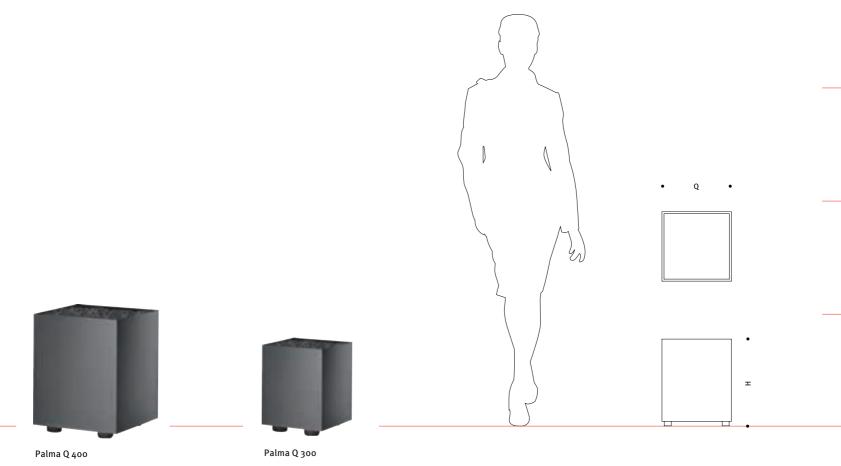


Palma Q 600

Palma Q 800/540

Product Name	Order No.		Colour	Dimensions in	
				Q	Н
	Version A-INDOOR	Version B-OUTDOOR			
PALMA Q 300	90.21600.0	90.21601.0	RAL, mica or DB finish	□ 300	375
PALMA Q 400	90.21600.1	90.21601.1	RAL, mica or DB finish	□ 400	540
PALMA Q 600	90.21600.2	90.21601.2	RAL, mica or DB finish	□ 600	750
PALMA Q 800/540	90.21600.3	90.21601.3	RAL, mica or DB finish	□ 800	540
PALMA Q 800/900	90.21600.4	90.21601.4	RAL, mica or DB finish	□ 800	900

Product information www.hess.eu/o890



PALMA R

PALMA R. Planter. Round Aluminium construction with closed bottom. Includes non-adjusting feet. Choice of RAL, mica or DB finish.

NOTE: Version B-Outdoor - Comes with drain pipe assembly and plug for outdoor use.



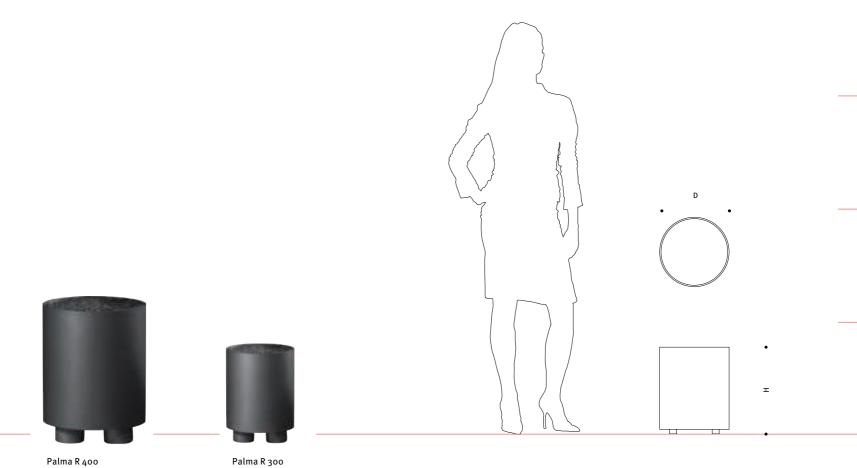




alma R 800/900 Palma R 600 Palma R 800/540

Product Name	Order No.		Colour	Dimensio	ons in mm
				D	Н
	Version A - INDOOR	Version B - OUTDOOR			
PALMA R 300	90.21500.0	90.21500.0	RAL, mica or DB finish	ø 300	375
PALMA R 400	90.21500.1	90.21501.1	RAL, mica or DB finish	ø 400	540
PALMA R 600	90.21500.2	90.21501.2	RAL, mica or DB finish	ø 600	750
PALMA R 800/540	90.21500.3	90.21501.3	RAL, mica or DB finish	ø 800	540
PALMA R 800/900	90.21500.4	90.21501.4	RAL, mica or DB finish	ø 800	900

Product information www.hess.eu/o895





PALMA Q DONAUESCHINGEN . GERMANY



PALMA L

PALMA L. Planter. Long Aluminium construction with closed bottom. Includes non-adjusting feet. Choice of RAL, mica or DB finish.

NOTE: Version B-Outdoor - Comes with drain pipe assembly and plug for outdoor use.

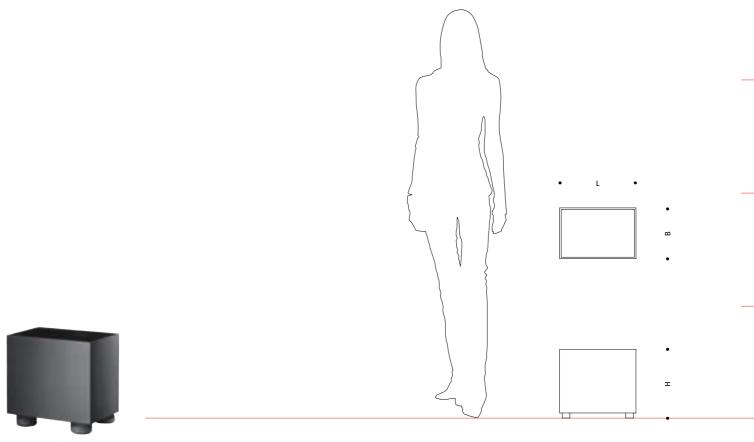




Palma L 600/400

Product Name	Order No.		Colour	Dimen	Dimensions in mm	
				L	В	Н
	Version A - INDOOR	Version B - OUTDOOR				
PALMA L 450/300	90.21700.0	90.21700.0	RAL, mica or DB finish	450	300	375
PALMA L 600/400	90.21700.1	90.21701.1	RAL, mica or DB finish	600	400	540
PALMA L 800/600	90.21700.2	90.21702.1	RAL, mica or DB finish	800	600	75

Product information www.hess.eu/0891

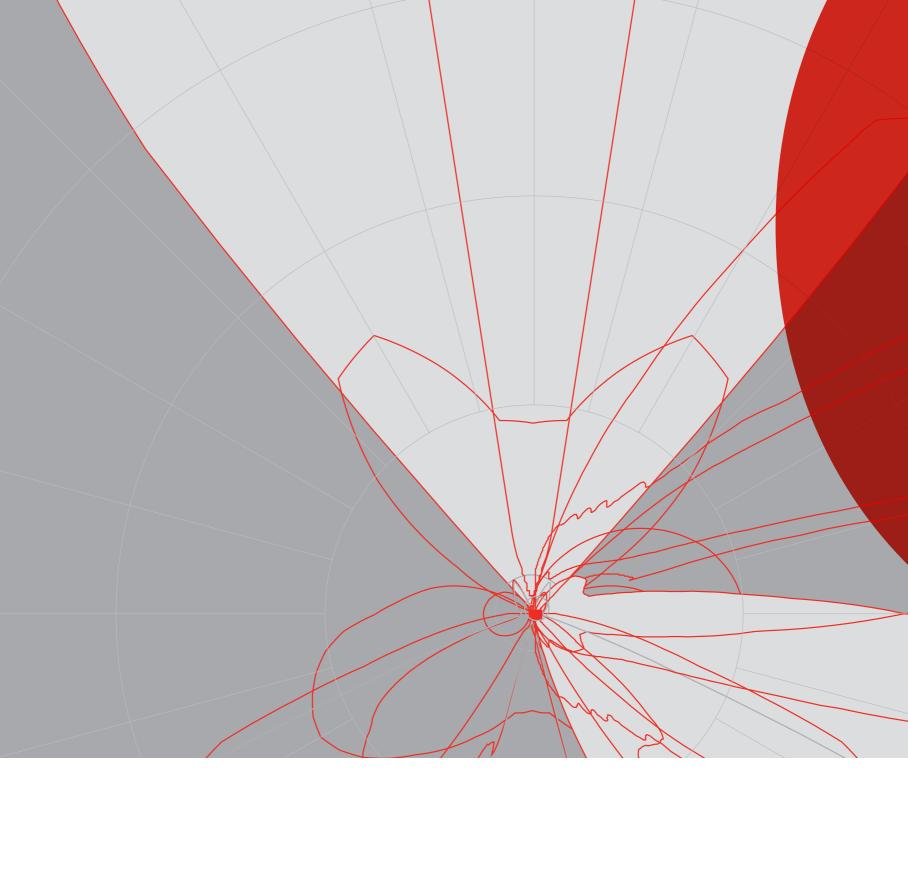


Palma L 450/300

L Length

B Width

H Height





TECHNICAL INFORMATION

SYMBOLE

With the purchase of Hess luminaires, the customer obtains the assurance of excellent quality and enduring durability. Hess's DIN ISO 9001 certification is evidence of its commitment to providing high quality service and products. Hess GmbH commits itself to compliance with all existing environmental laws and regulations. Hess's DIN EN ISO 9001 certification verifies our compliance.

Hess lighting systems comply with national and international safety regulations. The applicable indications are displayed on the rating plates. Excluding the luminaires with Class III protection rating, all Hess luminaires are designed to operate with 230 V, 50 Hz supply voltage in compliance with DIN-IEC 38.

SAFETY SYMBOLS



ENEC

The ENEC mark (European Norms Electrical Certification) is a European approval and certification marking for lighting fixtures and electrical components used in lighting systems. It certifies that a product complies with currently applicable European standards and signifies that inspection by the respective testing institute has been performed. The ENEC marking appears together with the identification number of the national testing institute and is often displayed with the institute's logo. Every Hess product is CE-compliant. ENEC certificates are available for selected models in the various product families.



CE

The CE marking signifies that the product conforms to all the essential requirements of all relevant EU directives. It is applied to the luminaire, packaging or accompanying documents by the manufacturer or importer. It is not the mark of any particular approval institute.



F Mark

Luminaires suitable for mounting on normally combustible surfaces.

TECHNICAL SYMBOLS



Minimum distance to illuminated surface



Nominal temperature of cables



High pressure sodium lamp requires an external ignitor.



High pressure sodium lamp requires an internal ignitor.

SAFETY CLASSIFICATIONS

The luminaires are designated in three classes according to the protection they provide against high contact voltage.



Protection rating I: Luminaires in this class have basic electrical insulation and all of their potentially electrically conductive parts are connected to a protective conductor. The protective conductor displays this marking.



Protection rating II: Live parts are fitted with additional insulation.

Connection to a protective conductor is not permitted.



Protection rating III: Luminaires in this class operate on safety low voltage (SELV) and require no extra protective measures.



Wood from sustained forest

management: The ash used for the benches has been obtained from sources using PEFC certified forest management practices. PEFC is the world's leading certification organisation for sustainable forestry.

INGRESS PROTECTION SYMBOLS



Splash water protected Ingress protection IPX4



Multi-directional nozzle projected water protection

Ingress protection IPX5

Watertight (immersible under limited conditions)

Ingress protection IPX7



Submersible (prolonged submersion under pressure)

Ingress protection IPX8



Dust protected Ingress protection IP5X

Dust tight

Ingress protection IP6X

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