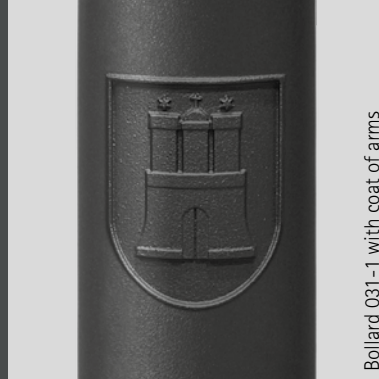
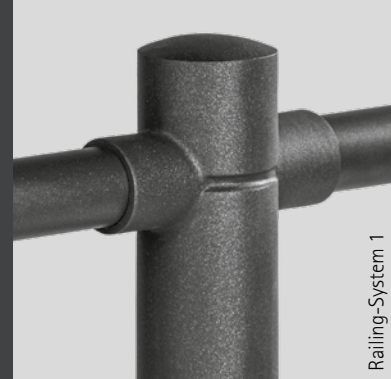




Bench 146



Bollard 031 - 1 with coat of arms



Railing-System 1



Waste-Container 545



Lighting-Bollard 230 LED



Bicycle-Stand 480

# STREET FURNITURE

## 2023

# Contacts

---

## ABES S.à r.l. Niederanven/Luxembourg



**ROTGER BARICH**  
*ABES Manager*  
+352 . 28 67 65 10  
rbarich@abes-online.com



**HEIKE BARICH**  
*Administration/Distribution*  
+352 . 28 67 65 11  
hbarich@abes-online.com



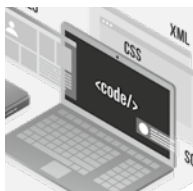
**FRANZISKA DITTMER**  
*Administration/Distribution*  
+352 . 28 67 65 12  
fdittmer@abes-online.com



**THOMAS KRIMGEN**  
*Administration/Distribution*  
+352 . 28 67 65 15  
tkrimgen@abes-online.com



**CHRISTOPH MARZI**  
*Technical Purchasing*  
+352 . 28 67 65 16  
cmarzi@abes-online.com



**MICHEL REUTER**  
*Online Shop, Web Development*  
+352 . 28 67 65 14  
mreuter@abes-online.com



**DORIS SCHÄFER**  
*Media Design*  
+352 . 28 67 65 13  
dschaefer@abes-online.com

---

## Sales and Distribution Germany (Howatec GmbH) Siegen/Germany



**LUTZ BARICH**  
*HOWATEC Manager*  
+49 (0)271 . 4059-688  
mail@abes-deutschland.de



**CHRISTEL RAU**  
*Distribution*  
+49 (0)271 . 4059-699  
crau@abes-deutschland.de



**PHILIPP SYNDIKUS**  
*Drafter*  
+49 (0)271 . 4059-699  
psyndikus@abes-deutschland.de

---

## STOCK Wormeldange/Luxembourg



**NICO CRISTANTIELLI**  
*Stock*  
+352 . 26 74 70 85  
lager@abes-online.com



**THOMAS ENDRES**  
*Stock*  
+352 . 26 74 70 85  
lager@abes-online.com





## "A smart bollard has to give in ..."

We have been committed to this motto for almost 30 years. Our bollards, regular as well as LED, combined with the 3p-Technology mounting system with integrated predetermined breaking point we have developed, have set new standards. In hundreds of cities and municipal facilities, 3p-Technology has become the standard mounting system. From page 10 you can read what is behind this cost-saving and up-to-date technology.

In our current catalog 2023 you will also find a wide range of future-oriented street furniture for public spaces and for a livable environment.

If you are looking for solutions to specific problems or need support in the selection of appropriate city furniture for your planning project, do not hesitate to contact us. Your ideas are the focus of our efforts. Free samplings are just as much a part of our service as telephone consultations and personal presentations on site.

We are looking forward to help you.

Lutz Barich

Rotger Barich

### Innovative technology combined with unique design

Founded in 1994, ABES focuses on the design of urban furniture and elements for public space since 1999.

ABES' 3p-Technology system was developed with the customer's needs in mind. This advanced technology, by now used as standard mounting system in many cities, allows easy, time-saving and low-cost repair of public furniture. The main idea is to connect bollards with a junction piece having a predetermined breaking point. If damaged, object and foundation stay intact, and only the junction piece has to be replaced on site.

ABES offers unique products with an individual character. They attract attention, inspire people, and encourage viewers to engage in a variety of opinions and discussions, which creates their uniqueness. This has been confirmed by the "Design Centre North Rhine-Westphalia" by giving the red dot award to the Bicycle-Stand 450-1 (formerly Signum I) and the Bollard 001-1 (formerly Metropol 520 5RK), which are built using 3p-Technology. We use a

variety of first-class materials for ABES products.

Apart from galvanised or stainless steel and selected woods, ABES is increasingly using cast iron or cast aluminium. These materials, which have been somewhat forgotten, have special characteristics so that regular welding techniques cannot be used for them.

Last but not least, cast technology is extraordinarily environmentally friendly because 95% of the materials originate from recycled resources, and the products themselves can be almost completely recycled. When choosing these raw materials, you are helping our environment by saving scarce resources and avoiding waste production.

Discover the aesthetically and technically innovative ABES products for yourself.

Bicycle-Stand 450-1  
Page 136/138



Bench 146-2 | Page 94

## INSTRUCTIVE. INFORMATIVE. INTERESTING.

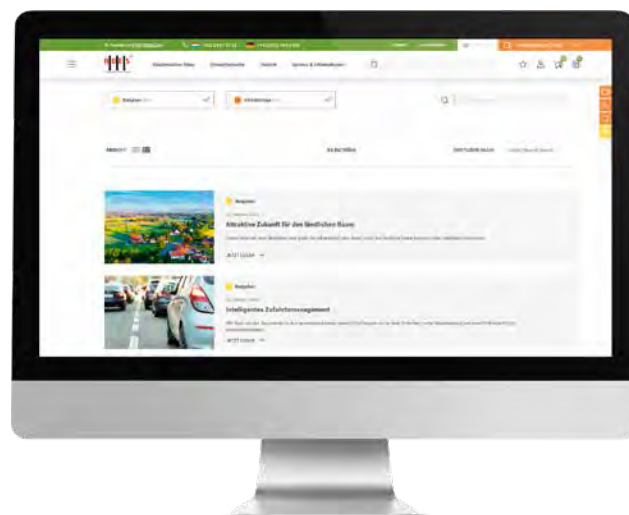


## Online practical guides and technical articles

Interesting and informative articles on the topics urban planning and development. New contributions are published regularly.

Stay up-to-date and receive the latest updates with our newsletter (from 2023).

<https://abes-online.com/en/publications/>



Technical article   
[www.abes-online.com](https://www.abes-online.com)

## Urban planning, urban development and identity

Cities are, in most contexts, growing structures. What often seems arbitrary and random overall is basically a series of changes that have been, at the time of their creation, a reasonable intervention in existing urban structures – always oriented towards the conditions, the requirements, and the possibilities.

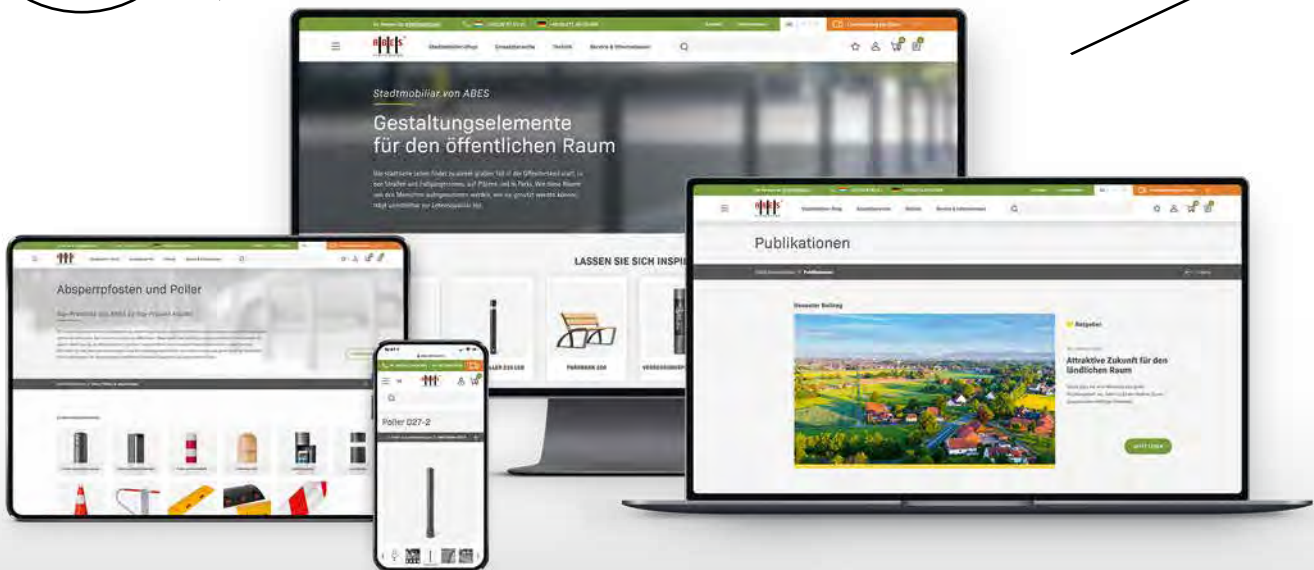
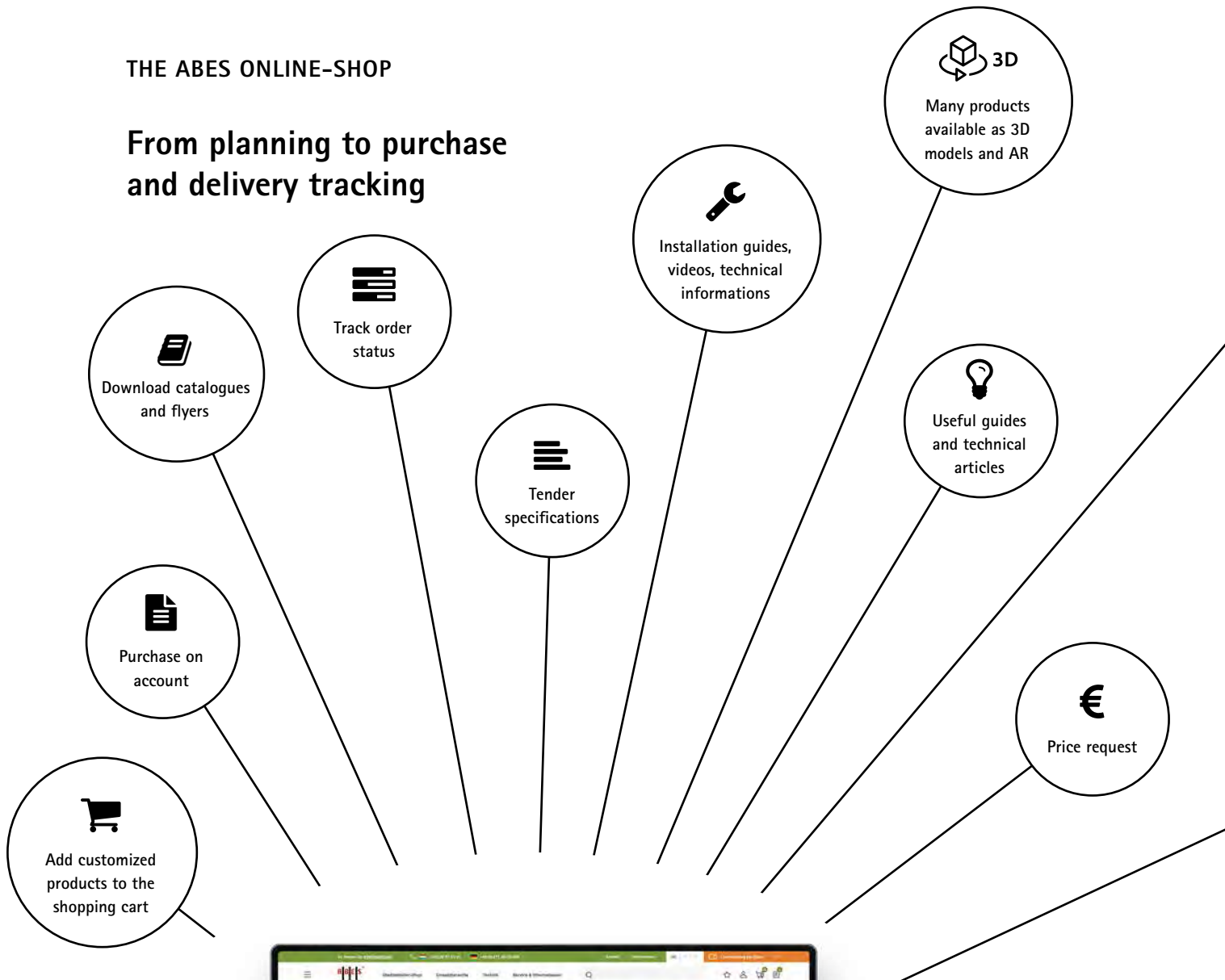
Read the full article on our website:

<https://abes-online.com/en/guides-en/urban-planning-urban-development-and-identity/>



## THE ABES ONLINE-SHOP

### From planning to purchase and delivery tracking



ABES ONLINE-SHOP:  
WWW.ABES-ONLINE.COM/EN

## Calculate your individual savings in the event of damage



Interactive cost  
calculator  
3p-Technology



In general, a car or a truck hitting a bollard results in considerable repair costs. The interactive cost calculator lets you determine the cost advantages of the 3p-Technology fastening system for bollards:

- Adjust the values in the yellow boxes according to your prices
- Click the button "Savings with 3p-Technology" below the cost calculation to get your result.

Example:

Savings with 3p-Technology 515,60 €

<https://abes-online.com/en/3p-Technology/3p-cost-comparison/>

## Download product offers in PDF format instantly



Offers in PDF format



- Navigate to a product page, select the requested options and decide on the amount to be calculated

- Click the button "PDF" below the amount  
The PDF is automatically generated

- Click the button "Open"

You can open the PDF in a PDF reader or save it to your hard drive and print it out if necessary

FURTHER OPTIONS FOR YOU:

DETAILED PDF WITH DESCRIPTIONS

ADD TO QUOTE

FURTHER OPTIONS FOR YOU:

DOWNLOAD PDF

ADD TO QUOTE

PDF





## CONTENT

INTRODUCTION	2
ABES ONLINE-SHOP	4
PRODUCT OVERVIEW	153
ACCESSORIES	154
ADDITIONAL INFORMATION	BOTH COVER FOLD-OUTS



NEW RELEASES	8-9
PROJECTS & REFERENCES	150



01	
<b>3P-TECHNOLOGY</b>	<b>10</b>
What is the ABES 3p-Technology?	10
The 3p-Technology and its individual parts	12
An overview of the 3p-Technology	14
Innovations in the 3p-Technology world: 3p-Snaplock/3p-Multiflange	16
BASt report	19



02	
<b>BOLLARDS</b>	<b>20</b>
Overview	22
Mounting variants	26
Finishing variants	27
Special models – with logo	28
Cast aluminium	30
Steel + Stainless steel	58
Barrier railings	66
Function bollards	70
Feeder bollards	74
LED Lighting bollards	76



03	
<b>BENCHES &amp; TABLES</b>	<b>86</b>
Overview	88
Benches & tables	90
Leaning bench/Lean-on bench	108
Lounger/Seating bollard	109





Project: Orscholz-Cloef, Germany | Bench 144 | Page 93

## 04

### WASTE CONTAINERS

110

Overview	112
Waste Containers with 3p-Technology	113
Waste Containers	118



## 05

### BICYCLE STANDS

120

Overview	122
Bicycle stands recommended by the ADFC	123
Row configurations	128
Bicycle stands	130



## 05-2

### BICYCLE STANDS: E-MOBILITY

140

Charging stands	140
Charging bollard	141



## 06

### PARKLANDS & CITY

142

Overview	144	Tree Guard	148
Bicycle-Stand 453 as handrail	145	Fire Basket	149
Planters	145		



## NEW RELEASES 2022

### 3P-MULTIFLANGE

3p-Technologie

17

NEW VERSION OF OUR TRIED-AND-TESTED 3P-TECHNOLOGY

- Simple screwing of a connecting flange to a pad foundation
- Compatible with existing 3p products

3p-Technologie



### BOLLARD 076-50

Steel

61

AN ADDITION TO THE BOLLARD SERIES 076

3p-Technologie



### E-MOBILITY

CHARGING-BOLLARD 665 with three sockets

- For charging E-bikes, for example
- Identical with Bollard 065 and Lighting-Bollard 265 LED

73



### MODULAR

#### RAILING-SYSTEM 1

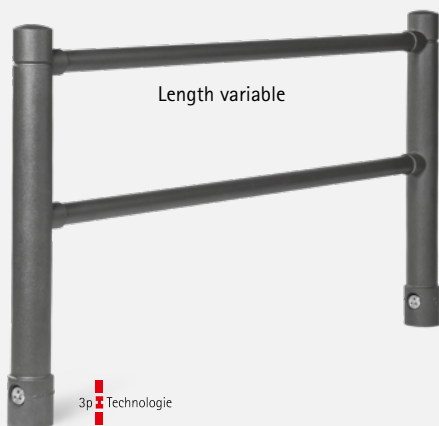
for selected ABES\* cast aluminium bollards

67

Length variable

Extendable as required

3p-Technologie



### MODULAR

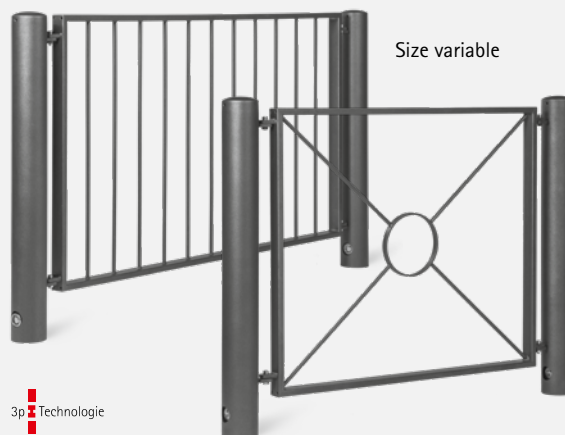
#### RAILING-SYSTEM 2

for cylindrical steel or cast aluminium bollards

67

Size variable

3p-Technologie



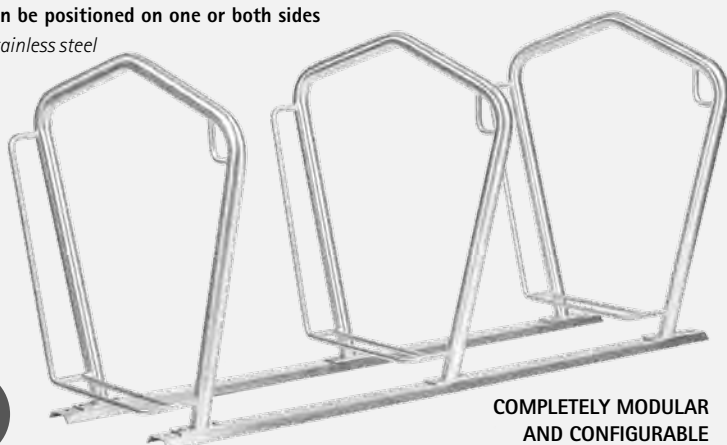
### RECOMMENDED BY THE ADFC

#### BICYCLE-STAND 480

single rack and rack row system on trapezoidal rails, wheel can be positioned on one or both sides

Steel + Stainless steel

124-127



COMPLETELY MODULAR AND CONFIGURABLE



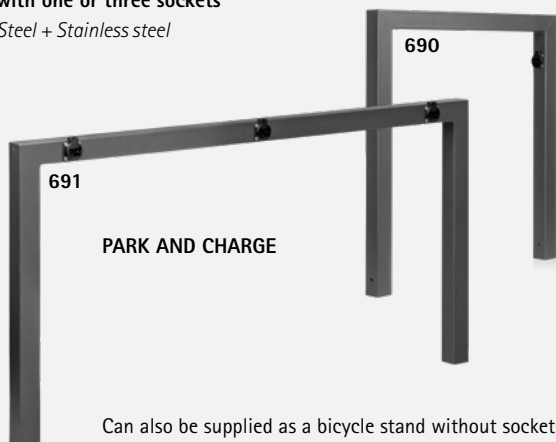
\*e.g. all ABES Classics, see p. 30ff

**E-MOBILITY**
**CHARGING-STAND 690 + 691**

with one or three sockets

Steel + Stainless steel

140


**MODULAR**
**TRAPEZOIDAL RAILS FOR BICYCLE-STANDS**

rail systems for all common ABES bicycle racks and stands

128

**COMPLETELY  
MODULAR AND  
CONFIGURABLE**

**BASE 030  
for waste containers**

Cast iron

112

- Available for Waste-Containers 527-545
- Also suitable for other outdoor furniture
- Removable due to 3p-Technology



3p Technologie

**WASTE-CONTAINER 522**

for fastening  
to posts and poles  
Steel

118

- Possible to fit to selected ABES bollard models\*
- Container identical in construction with Waste-Container 523



3p Technologie

**WASTE-CONTAINER 545**

Steel

113

- Convenient side removal of the inner container
- Sloping cover – impossible to place rubbish on top
- Lockable side door
- Removable due to 3p-Technology



3p Technologie

**MODULAR**
**BENCH 148**

Steel + Wood

**ASSEMBLE YOUR  
DESIRED CONFIGURATION**


96-97

**LEANING-BENCH 110**

Steel

108

**LEAN BACK: RELAX WHILST  
WAITING FOR THE BUS AND  
READ THE PAPER!**

- Possible to fit on selected bollard models or to the wall





## What is the ABES 3p-Technology?

### Help through ABES 3p-Technology

#### A complete repairs system

In 2001, ABES has launched 3p-Technology, a mounting system that allows a bollard that has been hit to be repaired in a very short time and in just a few steps.

The core of 3p-Technology is a junction piece with a predetermined breaking point.

Under the effect of an external force carried out by a car, a conventional bollard, including ground shell and locking mechanism, is seriously damaged or even destroyed.

This does not apply to bollards with 3p-Technology: their junction piece yields and breaks at the predetermined breaking point. Except for possible scratches on the bollard, every part, including the foundation and the pavement, remains intact. The junction piece is replaced, and in just a few minutes the bollard is ready for use again – without having lost any of its stability.

In numerous cities and municipal facilities, the 3p-Technology has become the standard mounting system.

#### It's not just bollards offering flexibility and easy assembly

While the 3p-Technology was originally developed for bollards, it is today also used in other street furniture, such as benches, bins and LED illuminated bollards, all of which enable the same easy assembly and maintenance.

#### In addition to simple maintenance, the system also offers further advantage:

Objects featuring the 3p-Technology are removable, giving you lots of freedom when it comes to design and layout. Bollards or benches can be easily removed during large events like Christmas markets or public gatherings, and reassembled afterwards in the blink of an eye.

All 3p-Technology products can similarly replace each other: the junction piece can be fitted onto any base, meaning you can easily replace a bin with a bollard if necessary.

Only the 3p-Technology can offer such design freedom!

## THE PROBLEM

### Defective bollards on the street

Crooked or broken bollards can be seen in every city. These pictures are certainly quite familiar. The replacement of conventional bollards is laborious, it takes a lot of manpower and time. This results in high costs.



Enter your repair costs and compare:

<https://abes-online.com/en/3p-Technology/3p-cost-comparison/>



## THE SOLUTION



## Bollards with 3p-Technology

The ABES 3p-Technology is the solution. If the bollard has been rammed or knocked over by a vehicle, the junction piece with predetermined breaking point gives way.



Bollard hit by a car.



The replaceable junction piece breaks at the predetermined breaking point. The bollard and foundation with base generally remain intact.



The broken junction piece is replaced with a new one, and the bollard can be immediately reassembled.



More informations and videos:  
<https://abes-online.com/en/3p-Technology/>

## Advantages at a glance



### COST ADVANTAGES IN CASE OF DAMAGE

- ⊕ Cost savings up to 90% compared to all conventional and known steel or cast aluminium bollards
- ⊕ Less than 3 minutes working time
- ⊕ Bollards, foundations with floor sleeves and plaster usually remain intact

### MOUNTING ADVANTAGES

- ⊕ Quick replacement with simple tools on site
- ⊕ Removable
- ⊕ Absolutely accurate and firm



### SIMPLIFIED STORAGE

ONE single ground shell for all products with 3p-Technology

- ⊕ Easy stockpiling
- ⊕ Less storage space
- ⊕ Lower storage costs

All ABES bollards, lighting bollards, waste containers, etc. can be mounted alternately on the same ground shell.



## The 3p-Technology and its individual parts



### STANDARD

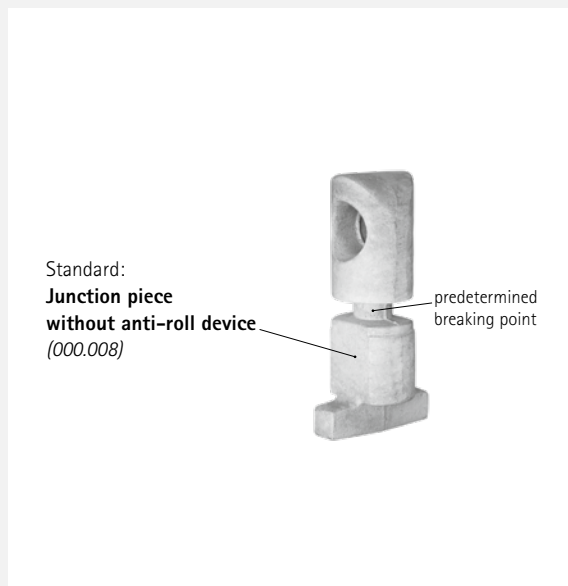
#### CLAMPING CONE SET with hex head screw

- Tightens the system firmly

Consisting of: M12 hexagonal head screw, N1 clamping cone without internal thread, N2 clamping cone with internal thread or N1 with M12 nut

*Material: stainless steel 1.4301*

Before installation, it's recommended to lubricate hex head screw and nut with a special ceramic paste. Please inquire! We will be happy to advise you.



### STANDARD

#### JUNCTION PIECE WITH PREDETERMINED BREAKING POINT without anti-roll device

- Links bollard to the ground shell
- Breaks at the predetermined breaking point when damaged by a vehicle
- Can be instantly replaced if damaged

*Material: cast iron, galvanised*



### STANDARD

#### GROUND SHELL 300 mm (hybrid)\*

- Extremely robust component for long-lasting concrete embedment

*Material: cast iron, galvanised*

Note: In order to prevent the interruption of the construction process, the ground shells can be delivered in advance, if requested.

\* The hybrid ground shell can also be used for bollards with 3p-Snaplock (see page 16).



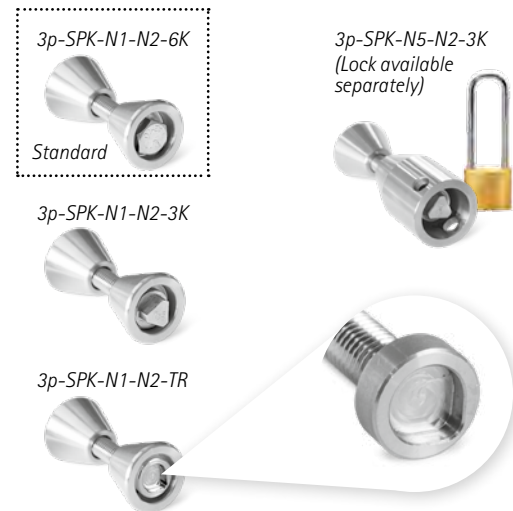
**OPTIONS**

**3p-SPK-N1-N2-3K** Clamping cone set with triangular head screw

**3p-SPK-N5-N2-3K** Clamping cone set with lengthened clamping cone (N5)  
Additional protection with a padlock in order to prevent unauthorised removal (e.g. fire brigade padlock), possible use with triangular head screw or with hex head screw

**3p-SPK-N1-N2-TR** Clamping cone set with ABES bolt (Drop shaped)  
Special head screw with drop shaped drive  
Can only be opened with an optional special tools; hence protection against unauthorised opening with standard tools (utility model protection)

**3p-Accessories** see page 154

**OPTIONS**

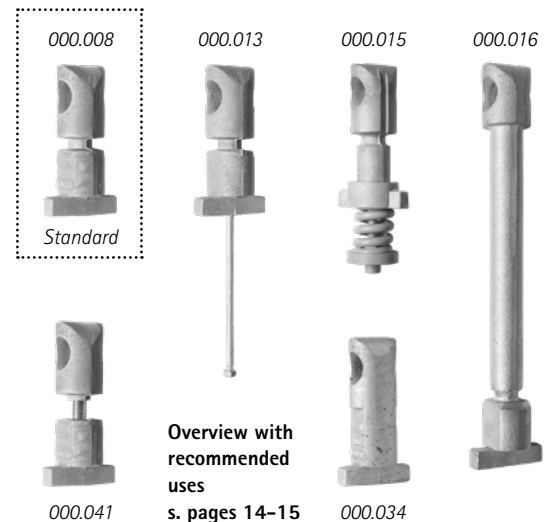
**000.013** Junction piece with anti-roll device  
The metal rod prevents the bollard from rolling away

**000.015** Junction piece with steel spring (3p-Flex)  
The bollard returns to its initial position after impact (8-10° tilt), and only breaks if the breaking load is exceeded

**000.016** Junction piece with extended connection (3p-High)  
Allows to open and close the locking mechanism with long fire brigade triangular keys without a break

**000.034** Junction piece without predetermined breaking point  
Solid protection for people and objects

**000.041** Height-adjustable junction piece  
· Height can be adjusted with a threaded rod  
· Compensates for the gap between bollard and ground shell, if it ends below level, e.g. with paving stones of different heights

**OPTIONS**

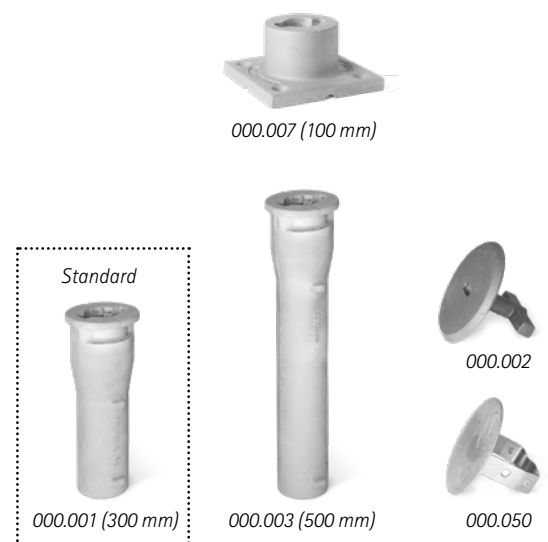
**000.003** Ground shell 500 mm (hybrid)\*  
For additional stability on unstabilised subsoil, cobblestone pavement etc.



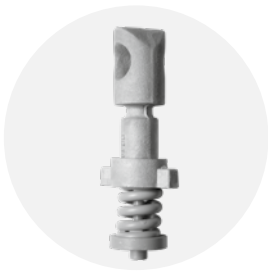



**000.007** Ground shell 100 mm  
As special solution in case of small mounting depth, e.g. car parks, bridges etc.


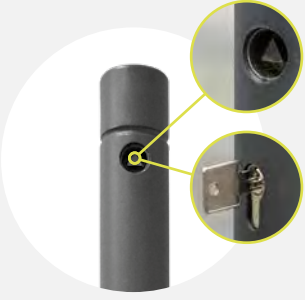


**Ground shell cover**  
Reduces risk of tripping, prevents soiling


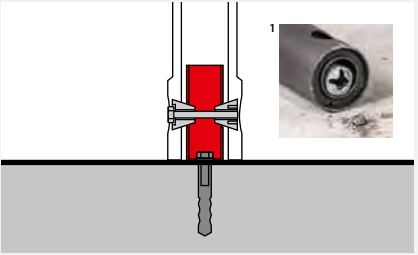
**000.002** Cast aluminium

**000.050** S235 Steel with spring, hot-dip galvanised



Fixed mounting with 3p ground shells			
Removable <u>WITH</u> predetermined breaking point			
3p-Technology			
	Junction piece <u>without</u> anti-roll device 000.008 (Standard) 	Junction piece <u>with</u> anti-roll device 000.013 	Junction piece <u>with steel spring (3p-Flex)</u> 000.015 
Properties when hit by a vehicle	<ul style="list-style-type: none"> <li>· Breaks at the predetermined breaking point</li> </ul>	<ul style="list-style-type: none"> <li>· Breaks at the predetermined breaking point</li> <li>· Metal rod prevents the bollard from rolling away (e.g. on slopes)</li> </ul>	<ul style="list-style-type: none"> <li>· 8–10° flexure, bollard returns to original position after impact</li> <li>· The predetermined breaking point yields if the spring is overexpanded</li> </ul>
Recommended areas of application	<ul style="list-style-type: none"> <li>· Parked cars/Stationary traffic</li> <li>· Inner-city traffic</li> <li>· Parking places</li> </ul>	<ul style="list-style-type: none"> <li>· On slopes</li> <li>· Parked cars/Stationary traffic</li> <li>· Inner-city traffic</li> <li>· Parking places</li> </ul>	<ul style="list-style-type: none"> <li>· Parked cars/Stationary traffic</li> <li>· Delivery traffic</li> <li>· Parking places</li> </ul>
Features	<ul style="list-style-type: none"> <li>· Flexible, since removable (with predetermined breaking point)</li> <li>· Low repair costs after impacts</li> </ul>		
Removable	Yes		
Repair costs after impacts	Minor		
Vehicle damage after impacts	Minor to medium		
			

Fixed mounting with 3p ground shells	
Removable <u>WITHOUT</u> predetermined breaking point	
3p-Technology	3p-Snaplock
<p>Junction piece <u>without</u> predetermined breaking point</p> <p>000.034</p> 	<p>Triangular or cylinder lock</p> 
<ul style="list-style-type: none"> <li>Higher resistance to impacts as there is no breaking point</li> </ul>	<ul style="list-style-type: none"> <li>Higher resistance to impacts as there is no breaking point</li> </ul>
<ul style="list-style-type: none"> <li>Multiple consecutive rows can be used as simple object protection</li> </ul>	<ul style="list-style-type: none"> <li>Critical locations, where the removal has to be done quickly in case of emergency</li> </ul>
<ul style="list-style-type: none"> <li>Flexible, since removable (without predetermined breaking point)</li> <li>Higher resistance to impacts</li> </ul>	<ul style="list-style-type: none"> <li>Self-latching, thus allowing a quick insertion</li> <li>Available for selected cast aluminium models (also with cast emblem) up to Ø 100 mm</li> <li>Hybrid ground shell, also suited for every 3p product with a predetermined breaking point</li> </ul>
Yes	Yes
High	High
High	High
	

Screw-on
Removable
3p-Multiflange
<p>Connecting flange (multiflange) for screwing to pad foundation</p> 
<ul style="list-style-type: none"> <li>Yields under increased pressure load</li> </ul>
<ul style="list-style-type: none"> <li>Parked cars/Stationary traffic</li> <li>Inner-city traffic</li> <li>Parking places</li> <li>Locations with no installation depth</li> </ul>
<ul style="list-style-type: none"> <li>Low fitting costs: Pad foundation instead of a deep foundation for a ground sleeve</li> <li>Bollards, clamping cones and screws are 100 % compatible with the 3p-Technology</li> <li>Low repair costs after collision</li> </ul>
Yes
Minor
Minor to medium


## 3p-Snaplock

*Self-latching fastening system for bollards.*

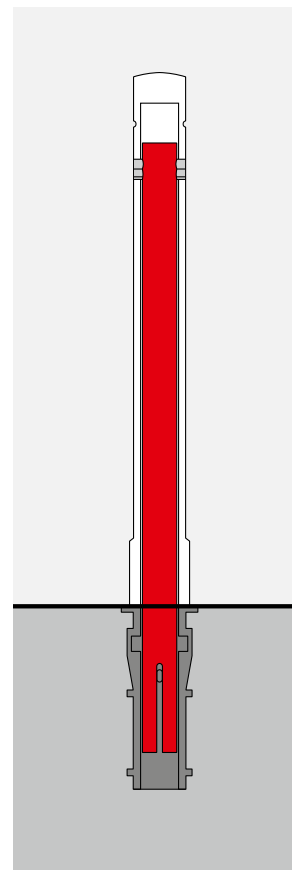
*Quick positioning into the ground shell, easy removal without bending over.*



The Snaplock system was the result of extensive development efforts, fulfilling a frequent customer request: Cast aluminium bollards that can be fitted by simply snapping them into the ground shell.

### Advantages at a glance

- ⊕ Self-latching when inserted into the ground socket – snaps in automatically
- ⊕ Easy bollard removal – unlocking with locking cylinder or triangular lock on the bollard head
- ⊕ High flexibility due to hybrid ground shell<sup>1</sup> with integrated snap-in spigot, on which all 3p products with junction pieces can be fastened
- ⊕ Selected cast aluminium bollard models<sup>2</sup> (also with moulded coat of arms) up to a diameter of 100 mm can be supplied.



Easy and intuitive removal with little effort.



Bollards with junction pieces (3p-Technology) fit in the same ground shell.



Available with triangular or cylinder lock

- Removable fastening system without predetermined breaking point
- Optionally with triangular or cylinder lock
- Delivery includes hybrid ground shell\* to embed in concrete

<sup>1</sup> Suitable for the 3p-Snaplock as well as for the proven 3p-Technology.

<sup>2</sup> ABES bollard models already integrated in the urban landscape can be used.

## NOVELTY: 3p-Multiflange

*Bollard fastening system using a screwed connection flange to a pad foundation.*

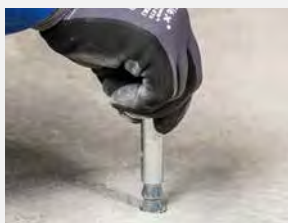
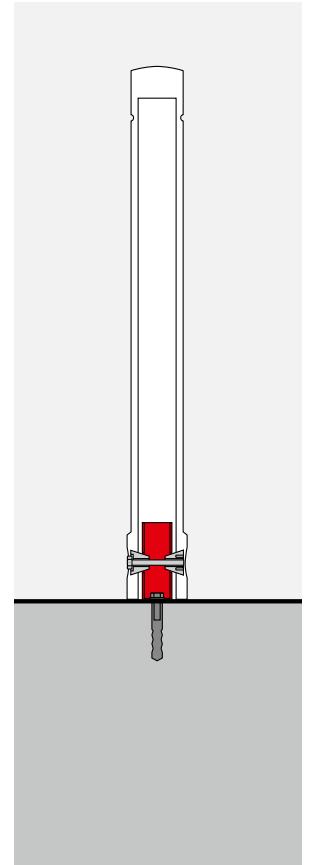


The new multi-flange fastening system has all the 3p-Technology advantages, but does not require a ground shell. A connecting flange is screwed onto a pad foundation instead.

The bollard is connected to the flange with two clamping cones and a screw (same selection as with conventional 3p-Technology).

### Advantages at a glance

- ⊕ Internal screwed flange connection, invisible and inaccessible from the outside
- ⊕ Low installation costs due to a simple pad foundation
- ⊕ Compatible with 3p-Technology products
- ⊕ After a vehicle impact, only the screw and the connecting flange need replacing



**Top:** Threaded sleeve is set in pad foundation.

**Bottom:** Connecting flange is fastened to the threaded sleeve with an M12 hex head screw.



Bollard and connecting flange are firmly connected to each other by means of clamping cones and a screw (hexagonal, drop shape or triangular screw).

The plate of the connecting flange, which has a cross-shaped cut on the underside, gives way specifically after an impact on the bollard without causing major damage to the bollard or the foundation.

All barrier posts or bollards suited for the conventional 3p-Technology (with ground shell and junction piece) can be used.

### Features

- The connecting flange screws on the threaded sleeve are on the inside and are invisible and inaccessible from the outside.
- Low installation costs: pad foundation instead of a deep foundation for a ground shell
- Low repair costs after impact:
  - Affordable and quick connecting flange replacement
  - In general, no damage to the paving
  - The bollard can be reused
- Bollards, clamping cones, and screws are 100 % compatible with 3p-Technology
- Low storage costs due to easy stocking







# Bundesanstalt für Straßenwesen (Federal Highway Research Institute)



Report n° V4 – 61/2002 dated Sep 13, 2002  
on the

## Characteristics of a bollard system regarding the effort required for repair

### APPLICATION

**Applicant:** ABES Büro Deutschland  
Zur Ehreneiche 3  
57250 Netphen

**Application date:** 27 August 2002

**Subject of application:** Confirmation of the effort required to repair a damaged bollard



1 | Bollard before damage



2 | Damaged bollard

### MATERIAL

**Description\*:** **Metropol bollard with 3p-Technology including:**

- Ground shell n° 000.001, ductile cast iron GGG, embedded at ground level
- Junction piece, ductile cast iron GGG, with hexagon bolt and nut M12, stainless steel 1.4301, n° 000.008
- Clamping cone, stainless steel 1.4301, Nr. 000.004
- Anchor, galvanised steel ST37, n° 000.013
- Bollard, cast iron GG 20, n° 001.003

**Serial number:** None

**Condition:** New

\*provided by applicant



3 | Bollard system after damage

The junction piece yields, the bollard falls over and is held to the ground shell by an anchor. The bollard itself, the ground shell and the foundations do not show any visible signs of damage (see figure 3).

The bollard is mounted with a new junction piece within 3 minutes (see figure 4 and figure 5). After repair, the bollard is firmly fixed in place.



4 | Junction piece: damaged (right) and replacement (left)



5 | Repairing the bollard

### TEST

A properly installed Metropol bollard with 3p-Technology is damaged by a car (see figure 1 and figure 2).



(Dipl.-Phys. U. Ellmers)  
Oberregierungsrat

(Dipl.-Phys. D. Heuzeroth)  
Regierungsrat

## 02

## BOLLARDS

Barrier posts or bollards are natural parts of our cityscapes. Elegant boundaries or driveway and walkway markings are just a few of their many applicabilities. The various ABES designs, ranging from classic to modern, allow the harmonic integration of bollards in any environment.

These objects are permanently exposed to the risk of being knocked over by cars pulling in and out of parking bays. To counteract this risk, ABES has developed the 3p-Technology for bollard fastening as an alternative to fixed mounting. This is an easy and low-cost way to replace damaged bollards.




















1: Bollard 055-2 page 59 | 2: Bollard 005-2 page 46 | 3: Bollard 001 page 31















BOLLARD 001 page 31











































		CAST ALUMINIUM										
												
		001	001-1	002	003	004	005-1	005-2	006-1	006-2	007	008
Catalogue page		31	31	37	52	49	46	46	38	39	45	31
Available in the online shop as a 3D model and for AR												
Material	Cast aluminium (with powder coating)	■	■	■	■	■	■	■	■	■	■	■
	Steel S235 (galvanised)	-	-	-	-	-	-	-	-	-	-	-
	Steel S235 (galvanised with powder coating)	-	-	-	-	-	-	-	-	-	-	-
	Stainless steel 1.4301 (smoothed, grain 240)	-	-	-	-	-	-	-	-	-	-	-
	Stainless steel 1.4301 (pickled/glass bead blasted)	-	-	-	-	-	-	-	-	-	-	-
	Stainless steel 1.4301 (with powder coating)	-	-	-	-	-	-	-	-	-	-	-
Mounting	Rubber granulate	-	-	-	-	-	-	-	-	-	-	-
	Fixed mounting (concrete embedment)	001.001	001.011	002.001	003.001	004.001	005.001	005.201	006.001	006.201	007.001	008.001
	Removable with 3p-Technology	001.020	001.040	002.020	003.020	004.020	005.020	005.220	006.020	006.220	007.020	008.020
	Removable with 3p-High	○	-	○	○	004.030	○	○	○	○	007.030	○
	Removable with 3p-Snaplock	○	-	-	-	-	-	-	-	-	-	○
	Option: Fold-down	-	-	-	-	-	-	-	-	-	-	-
	Option: With flanges to enable screwing	-	-	-	-	-	-	-	-	-	-	-
	Ground rosette included with 3p-Technology	-	-	-	-	-	-	-	-	-	-	-
Measurements	Ground rosette as an option	-	-	-	-	-	-	-	-	-	-	-
	Height above ground level (mm)	870	520	820	738	820	890	900	870	870	905	870
	Diameter (top/bottom, mm)	85/120	85/120	140	144/120	112/180	70/170	80/140	95/120	95/120	84/98	85/120
	Compatible 3p ground shells: 100 mm/300 mm (standard)/500 mm	○/●/○	○/●/○	○/●/○	○/●/○	○/●/○	○/●/○	○/●/○	○/●/○	○/●/○	○/●/○	○/●/○
	Weight (approx. in kg, for fixed mounting + 1.5 kg)	11	7	15,5	10	11,8	10,5	13	11	11	10	11
Design		hrd	hrd	hrd	hrd				hrd	hrd		hrd
















		CAST ALUMINIUM											
													
		021-1	021-2	022	023	024	025	027-1	027-2	027-7	027-8	028	029
		600 mm	900 mm					600 mm	870 mm	Railing bollard			
Catalogue page		41		51	45	41	47	30		68		48	43
New 2022										2022			
Available in the online shop as a 3D model and for AR													
Material	Cast aluminium (with powder coating)	■	■	■	■	■	■	■	■	■	■	■	■
	Steel S235 (galvanised)	-	-	-	-	-	-	-	-	-	-	-	-
	Steel S235 (galvanised with powder coating)	-	-	-	-	-	-	-	-	-	-	-	-
	Stainless steel 1.4301 (smoothed, grain 240)	-	-	-	-	-	-	-	-	-	-	-	-
	Stainless steel 1.4301 (pickled/glass bead blasted)	-	-	-	-	-	-	-	-	-	-	-	-
	Stainless steel 1.4301 (with powder coating)	-	-	-	-	-	-	-	-	-	-	-	-
	Rubber granulate	-	-	-	-	-	-	-	-	-	-	-	-
Mounting	Fixed mounting (concrete embedment)	021.001.060	021.001.090	022.001	023.001	024.001	025.001	027.001.060	027.001	027.701	027.801	028.001	029.001
	Removable with 3p-Technology	021.020.060	021.020.090	022.020	023.020	024.020	025.020	027.001.060	027.020	027.720	027.820	028.020	029.020
	Removable with 3p-High	-	○	○	023.030	○	○	-	027.030	-	-	○	○
	Removable with 3p-Snaplock	-	-	-	-	-	-	-	027.040/050	-	-	-	-
	Option: Fold-down	-	-	-	-	-	-	-	027.005	-	-	-	-
	Option: With flanges to enable screwing	-	-	-	-	-	-	-	-	-	-	-	-
Measurements	Ground rosette included with 3p-Technology	-	-	-	-	-	-	-	-	-	-	-	-
	Ground rosette as an option	-	-	-	-	-	-	-	-	-	-	-	-
	Height above ground level (mm)	600	900	935	910	870	850	600	870	870	870	900	900
	Diameter (top/bottom, mm)	86/100		140	85/100	80/100	85/140	85/98		85/98	85/98	90	80/100
	Compatible 3p ground shells: 100 mm/300 mm (standard)/500 mm	○/●/○		○/●/○	○/●/○	○/●/○	○/●/○	○/●/○		○/●/○	○/●/○	○/●/○	○/●/○
	Weight (approx. in kg, for fixed mounting + 1.5 kg)	7,8	10,9	12	10,5	10,7	10,7	7	10	11	11	12,5	10,4
Design						tw		hrd		hrd			






MODULAR  
see p. 68

■ = Material | ● = Standard | ○ = Option (with a surcharge) | - = Not available | hrd = hammer.runge.design | tw = Thomas Wüsten | nt = Nico Thurm

														
009-1	009-2	010	011	012	013	014-1	014-2	014-3	015	016	017	018	019	020
870 mm	1200 mm					900 mm	1000 mm	1300 mm						
31	30	50	37	49		43			40	30	40	44	53	51
														
■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
009.001	009.001.120	010.001	011.001	012.001	013.001	014.001	014.001.100	014.001.130	015.001	016.001	017.001	018.001	019.001	020.001
009.020	009.020.120	010.020	011.020	012.020	013.020	014.020	014.020.100	014.020.130	015.020	016.020	017.020	018.020	019.020	020.020
○	○	○	○	012.030	013.030	○	○	○	○	○	○	○	○	○
○	-	○	-	-	-	-	-	-	-	○	-	-	-	-
-	-	010.005	-	-	-	-	-	-	-	016.005	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
870	1200	870	860	820	820	900	1000	1300	950	870	750	850	850	895
85/ 120		85/98	102 x 96/108	140	125/160		85/98		105	85/98	105	90/130	160	74/102
○/●/○		○/●/○	○/●/○	○/●/○	○/●/○		○/●/○		○/●/○	○/●/○	○/●/○	○/●/○	○/●/○	○/●/○
11	13	10	11,5	15,5	11,9	10	11,5	14	14	10	12	12,9	11,5	10
hrd		hrd	hrd	hrd						hrd				

















														
031-1	031-2	032	034	037-1	038	039	040	041	043	055-1	057	058	060	061
870 mm	1200 mm													
34		36	40	55	42	48	42	50	31	55	54	54	36	35
														
■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
031.001	031.001.120	032.001	034.001	037.001	038.001	039.001	040.001	041.001	043.001	055.001	057.001	058.001	060.001	061.001
031.020	031.020.120	032.020	034.020	037.020	038.020	039.020	040.020	041.020	043.020	055.020	057.020	058.020	060.020	061.020
031.030	○	-	○	-	○	○	○	○	○	-	-	-	-	061.030
○	-	-	-	-	-	-	-	-	○	-	-	-	-	○
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	●	-	-	-	-	-	-	-	-	-	-	-	-
-	-	○	-	-	-	-	-	-	-	-	-	-	-	-
870	1200	860	780	720	830	870	900	925	870	600	1000	1000	750	870
98		96×100	90/100	220	80/100	61/80/170	82/100	185	85/120	180	150	250	102/140	98
○/●/○		○/●/○	○/●/○	○/●/○	○/●/○	○/●/○	○/●/○	○/●/○	○/●/○	○/●/○	○/●/○	○/●/○	○/●/○	○/●/○
15,8	21	8	7,4	22	8,5	11	10,5	15		11	13,5	30	29	11
									hrd				nt	

								 							
		062	064	068	069	070	071	059		063	065	066	074		
Catalogue page		44	57	47	56	56	57	64		62	63	63	62		
New 2022															
Available in the online shop as a 3D model and for AR															
Material	Cast aluminium (with powder coating)	■	■	■	■	■	■	-	-	-	-	-	-	-	
	Steel S235 (galvanised)	-	-	-	-	-	-	■	-	-	-	■	-	-	
	Steel S235 (galvanised with powder coating)	-	-	-	-	-	-	-	■	■	■	-	■	-	
	Stainless steel 1.4301 (smoothed, grain 240)	-	-	-	-	-	-	-	-	-	-	-	-	■	
	Stainless steel 1.4301 (pickled/glass bead blasted)	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Stainless steel 1.4301 (with powder coating)	-	-	-	-	-	-	-	-	-	-	-	-	-	
Mounting	Rubber granulate	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Fixed mounting (concrete embedment)	062.001	064.001	068.001	069.001	070.001	071.001	059.001	059.101	063.001	065.001	066.001	066.101	074.001	074.101
	Removable with 3p-Technology	062.020	064.020	068.020	069.020	070.020	071.020	059.020	059.120	063.020	065.020	066.020	066.120	074.020	074.120
	Removable with 3p-High	○	○	○	○	○	○	-	-	○	○	○	○	○	○
	Removable with 3p-Snaplock	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Fixed mounting I	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Measurements	Fixed mounting II	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Option: With flanges to enable screwing	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Ground rosette included with 3p-Technology	-	●	-	-	-	●	●	●	●	●	●	●	-	-
	Ground rosette as an option	-	○	-	-	-	○	○	○	○	○	○	○	-	-
Measurements	Individual height	-	-	-	-	-	-	○		○	○	○		○	
	Height above ground level (mm)	910	1200	950	800	880	937	900		1000	900	900		1000	
	Diameter (top/bottom, mm)	104/115	100 × 100	82/97	85/120	83/98	90 × 90	80 × 80		100 × 100	70 × 140	70 × 70		120 × 120	
	Compatible 3p ground shells: 100 mm/300 mm (standard)/500 mm	○/●/○	○/●/○	○/●/○	○/●/○	○/●/○	○/●/○	○/●/○		○/●/○	○/●/○	○/●/○		○/●/○	
	Weight (approx. in kg, for fixed mounting+1.5 kg)	10	25	8,2	9	10	14	13,5		20	13	8,5		15	
Design															

		LIGHTING BOLLARDS													
															
		200				200 LED				210 LED			220 LED		
		Acryl glass: clear		Acryl glass: satined		Acryl glass: clear		Acryl glass: satined		6000 K	4000 K	2700 K	6000 K	4000 K	2700 K
Catalogue page		84				85				76			77		
New 2022															
Available in the online shop as a 3D model and for AR															
Material	Cast aluminium (with powder coating)	-	-	-	-	-	-	-	-	■	■	■	■	■	■
	Steel S235 (galvanised)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Steel S235 (galvanised with powder coating)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Stainless steel 1.4301 (smoothed, grain 240)	■	-	■	-	■	-	■	-	-	-	-	-	-	-
	Stainless steel 1.4301 (pickled/glass bead blasted)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Stainless steel 1.4301 (with powder coating)	-	■	-	■	-	■	-	■	-	-	-	-	-	-
Mounting	Rubber granulate	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Fixed mounting (concrete embedment)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Removable with 3p-Technology	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Removable with 3p-Technology for (LED-)lighting bollards	-	-	-	-	-	-	-	-	210.020	210.120	210.220	220.020	220.120	220.220
	Removable with 3p-High	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Option: With flanges to enable screwing	200.001	201.001	200.010	201.010	200.101	201.101	200.110	201.110	-	-	-	-	-	-
Measurements	Ground rosette included with 3p-Technology	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Ground rosette as an option	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Individual height	○				○				-			-		
	Height above ground level (mm)	620				620				870			600		
	Diameter (top/bottom, mm)	159				159				98			180		
	Compatible 3p ground shells: 100 mm/300 mm (standard)/500 mm	-				-				○/●/○			○/●/○		
Weight (approx. in kg, for fixed mounting+1.5 kg)		6				6				15,5			13,5		
Design															

■ = Material | ● = Standard | ○ = Option (with a surcharge) | - = Not available | hrd = hammer.runge.design | tw = Thomas Wüsten | nt = Nico Thurm



																					
042-1	042-2	056	095	096	037-2	055-2	089	076-10	076-20	076-30	076-40	076-50	079								
1000 mm	1200 mm							Flat	Slightly curved	Round	Spherical	Round/Ring									
58-59								60-61					64								
			2022	2022									2022								
																					
-	-	-	-	-	-	-	-	-	-	-	-	-	-								
-	-	-	-	-	-	-	-	-	-	-	-	-	-								
■	-	■	-	■	■	■	■	■	-	■	■	■	■								
-	■	-	■	-	-	-	-	-	○	○	○	○	■								
-	-	-	-	-	-	-	-	-	-	-	-	-	-								
-	-	-	-	-	-	-	-	-	○	○	○	○	-								
-	-	-	-	-	-	-	-	-	-	-	-	-	-								
042.001	042.101	042.001.120	042.101.120	056.001	056.101	095.001	096.001	-	-	089.001	089.101	076.201	076.301	076.001	076.101	076.401	076.501	076.701	076.801	079.201	079.301
042.020	042.120	042.020.120	042.120.120	056.020	056.120	095.020	098.020	037.120	055.120	089.020	089.120	076.220	076.320	076.020	076.120	076.420	076.520	076.720	076.820	079.220	079.320
042.030	042.130	042.030.120	042.130.120	056.030	056.130	○	○	-	-	○	○	○	○	○	○	○	○	○	○	○	○
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	037.101	055.101	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	037.102	055.102	-	-	-	-	-	-	-	-	-	-	-	-
○	○	○	○	○	○	○	○	-	-	○	○	○	○	○	○	○	○	○	○	○	○
-	-	-	-	-	-	-	-	-	-	●	●	●	●	●	●	●	●	●	●	-	-
-	-	-	-	-	-	-	-	-	-	○	○	○	○	○	○	○	○	○	○	-	-
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
1000	1200	1000	1000	1000	720	600	750			940	952	980	1020	871						1097	
108		108		133	168	220	180	90		76					108						
○/●/○		○/●/○		○/●/○	○/●/○	○/●/○	○/●/○	○/●/○		○/●/○					○/●/○						
10	12	11,5		17	23	22	13,5	9		7,5	7,5	7,5	10	7,5						13	

									 <div>FUNCTION BOLLARDS</div>  							
230 LED			240 LED		265 LED-A	265 LED-B	266 LED		267 LED	026-1	026-2	665	525	300-1	300-2	
6000 K	4000 K	2700 K	6000 K	2800 K	RGB + white 4000 K		RGB + white 4000 K		4000 K	600 mm	900 mm	Charging bollard	Bollard ashtray	Feeder bollards		
78			79		80		81		83	72		73	65	74	75	
												2022				
																
					-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-			-	-	-	-	-	-	-	-	-	
-	-	-	-	-					-	-	-					
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-			-	-	-	-	
-	-	-	-	-	-	-	-	●	026.001	026.101	●	525.001	525.011	-	-	
-	-	-	-	-	-	-	-	-	026.020	026.120	-	525.020	525.022	-	-	
230.020	230.120	230.220	240.020	240.120	265.120	265.220	266.120	267.020	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	○	○	○	●	-	-	●	525.040	525.140	300.010	300.020	
-	-	-	-	-	●	●	●	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	○	○	○	○	-	-	○	○	○	○	○	
1000			870		900		900	1060	600	900	900	1097	1335	1340		
150			85/120		70 × 140		70 × 70	101,6	200		70 × 140	108	245	245		
○/●/○			○/●/○		○/●/○		○/●/○	○/●/○	○/●/○	○/●/○	-	○/●/○	-	-		
20			10		13		8,5	10	13	14,5	16	13,5	56,5	56,5		
			hrd													

### Mounting variants

#### ABES 3p-Technology (standard)



*Standard system with junction piece and predetermined breaking point*

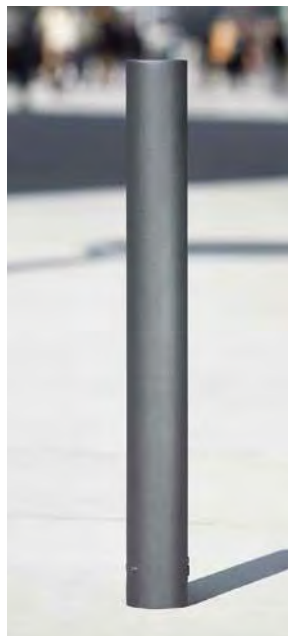
3p-Technologie is by far the most frequently ordered type of mounting. It is used in more than 85% of cases, because it significantly reduces costs.



**3p-Technology (standard)**  
(see pages 10–19)



**3p-High**



**Fixed mounting**



**Screw-on**



**Fold-down\***

\*The embeddable fold-down version is currently available for the following bollards: 001, 010, 016, 027-1/-2, 032, 059

#### ABES 3p-Snaplock



*Self-latching fastening system for bollards. Quick positioning into the ground shell, easy removal without bending over.*



Easy and intuitive removal with little effort.



Bollards with junction pieces (3p-Technologie) fit in the same ground shell.



Available with triangular or cylinder lock

- Removable fastening system without predetermined breaking point
- Optionally with triangular or cylinder lock
- Delivery includes hybrid ground shell\* to embed in concrete
- Selected cast aluminium bollard models (also with moulded coat of arms) up to a diameter of 100 mm can be supplied

\* Suitable for the new 3p-Snaplock as well as for the proven 3p-Technologie.

## Finishing variants

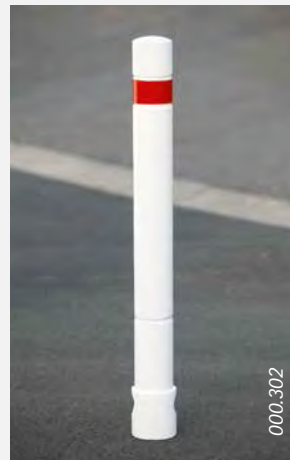
Paintwork, reflective tapes, finishings, eyelets, chains etc. are available on request.



1 ring — reflective tape



3 rings — reflective tape



1 ring — powder-coated



5 rings — powder-coated



With eyelets & chain



Stainless steel: smoothed,  
grain 240 (standard)



Cat's eye reflectors

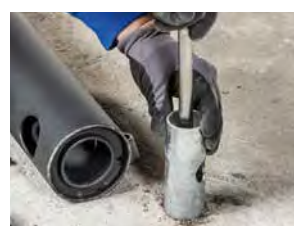
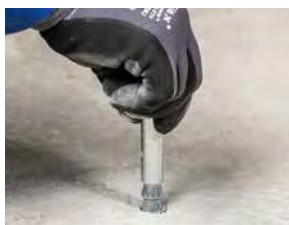


Door stopper

## NOVELTY: 3p-Multiflange



Bollard fastening system using a screwed connection flange to a pad foundation.



**Top:** Threaded sleeve is set in pad foundation.

**Bottom:** Connecting flange is fastened to the threaded sleeve with an M12 hex head screw.



Bollard and connecting flange are firmly connected to each other by means of clamping cones and a screw (hexagonal, drop shape or triangular screw).

The plate of the connecting flange, which has a cross-shaped cut on the underside, gives way specifically after an impact on the bollard without causing major damage to the bollard or the foundation.

All barrier posts or bollards suited for the conventional 3p-Technologie (with ground shell and junction piece) can be used.

### Features

- The connecting flange screws on the threaded sleeve are on the inside and are invisible and inaccessible from the outside.
- Low installation costs: pad foundation instead of a deep foundation for a ground shell
- Low repair costs after impact:
  - Affordable and quick connecting flange replacement
  - In general, no damage to the paving
  - The bollard can be reused
- Bollards, clamping cones, and screws are 100 % compatible with 3p-Technologie
- Low storage costs due to easy stocking

## Your personal ABES bollard

*Give your bollard an individual touch and customize it with your coat of arms, your company logo or useful pictograms!*

- ✓ Applicable for all cast aluminium bollards if their geometry allows it.
- ✓ From a specific order volume, depending on the shape of the emblem, we bear the non-recurring costs for the mold. Afterwards, single bollards with emblem can also be ordered at list price.

**We assist you in designing your personal bollard.  
Feel free to contact us!**



**BOLLARD 027-2 Heidelberg | Uferstraße**

*Examples:*



Kayl-Tétange



Volksbanken Raiffeisenbanken



Sparkassen



Saarburg



Brilon



Hamburg



Saarbrücken



Walferdange



Lorentzweiler



Mamer



Bitburg



Lintgen





Schengen



Luxemburg City



Airport Hamburg



Eckernförde

INDIVIDUAL. TOP QUALITY. EFFICIENT.

## 3 reasons for removable<sup>1</sup> bollards with emblem:

*Individual concept. Top quality processing.  
Efficient maintenance costs.*



<sup>1</sup> Also available with other fastening options <sup>2</sup> Also available in every Classic-RAL colour

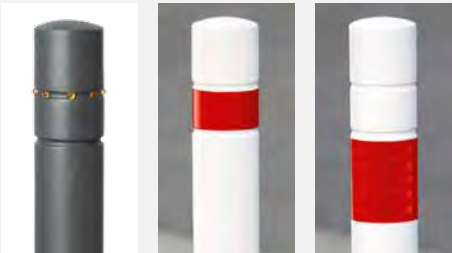


THE ABES CLASSICS

Design: hammer.runge.design | Registered design M 9801747.0

Special models

Cat's eye reflectors, one powder-coated ring or one ring of reflective tape (*f. l. t. r.*)



Also available for other models (*see pages 27 and 155 f.*)



WITH CYLINDRICAL BASE

ABES CLASSICS

Cast aluminium

Specifications

Cylindrical cast aluminium bollard with a slightly domed top and a cylindrical base. Smooth or with one or three circumferential groove(s). (*See online shop for product-related texts*)

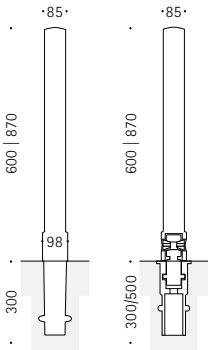
Mounting

Removable with 3p-Technologie  
Alternative: concrete embedment

Finish

Powder coating in standard RAL colours or DB 703

			Fixed mounting	3p-Technologie	3p-High	Fold-down
<b>Bollard 016</b>	870 mm	0 grooves	<b>016.001</b>	<b>016.020</b>	-	<b>016.005</b>
<b>Bollard 027-1</b>	600 mm	1 groove	<b>027.001.060</b>	<b>027.020.060</b>	-	-
<b>Bollard 027-2</b>	870 mm	1 groove	<b>027.001</b>	<b>027.020</b>	<b>027.030</b>	<b>027.005</b>
<b>Bollard 010</b>	870 mm	3 grooves	<b>010.001</b>	<b>010.020</b>	-	<b>010.005</b>



## With conical base



All ABES Classics also available as **lighting bollards with LED strip or spots** (e.g. Bollard 008 as an Lighting-Bollard 240 LED, see p. 79)

## WITH CONICAL BASE

## ABES CLASSICS

Cast aluminium

## Specifications

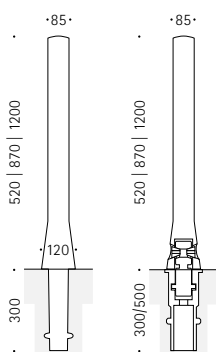
Cylindrical cast aluminium bollard with a slightly domed top and a conical base. Smooth or with one, three or ten circumferential groove(s).  
(See online shop for product-related texts)

## Mounting

Removable with 3p-Technologie  
Alternative: concrete embedment

## Finish

Powder coating in standard RAL colours or DB 703



			Fixed mounting	3p-Technologie
<b>Bollard 009-1</b>	870 mm	0 grooves	<b>009.001</b>	<b>009.020</b>
<b>Bollard 009-2</b>	1200 mm	0 grooves	<b>009.001.120</b>	<b>009.020.120</b>
<b>Bollard 043</b>	870 mm	1 groove	<b>043.001</b>	<b>043.020</b>
<b>Bollard 008</b>	870 mm	3 grooves	<b>008.001</b>	<b>008.020</b>
<b>Bollard 001</b>	870 mm	10 grooves	<b>001.001</b>	<b>001.020</b>
<b>Bollard 001-1</b>	520 mm	5 grooves	<b>001.011</b>	<b>001.040</b>





- |   |               |  |
|---|---------------|--|
| 1 | BOLLARD 008   | Mersch <i>Luxembourg</i>               |
| 2 | BOLLARD 027-2 | Saarbrücken <i>Germany</i>             |
| 3 | BOLLARD 027-2 | Daun <i>Germany</i>                    |
| 4 | BOLLARD 001   | Grevenmacher <i>Luxembourg</i>         |
| 5 | BOLLARD 001   | Luxembourg-Kirchberg <i>Luxembourg</i> |
| 6 | BOLLARD 001   | Grevenmacher <i>Luxembourg</i>         |











**BOLLARD 031**

031-1 | *Cast aluminium* | 870 mm

031-2 | *Cast aluminium* | 1200 mm

**Specifications**

Cylindrical bollard made of cast aluminium, with a flat top.

**Mounting**

Removable with 3p-Technologie

Alternative: concrete embedment

**Finish**

Powder coating in standard RAL colours or DB 703

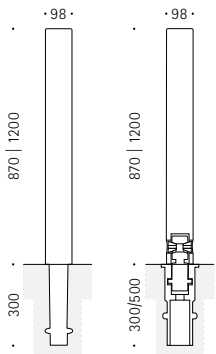


**Bollard 031-1** also available as **Lighting Bollard 210 LED** (see p. 76)

		Fixed mounting	3p-Technologie	3p-High
<b>Bollard 031-1</b>	870 mm	<b>031.001</b>	<b>031.020</b>	<b>031.030</b>
<b>Bollard 031-2</b>	1200 mm	<b>031.001.120</b>	<b>031.020.120</b>	-

CA

3p Technologie





## BOLLARD 061

Cast aluminium | 870 mm

### Specifications

Cylindrical cast aluminium bollard with a flat top and a cast-in circumferential groove.

### Mounting

Removable with 3p-Technology

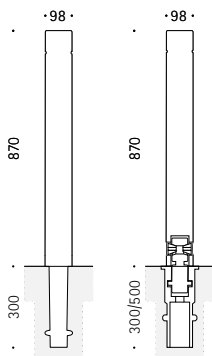
Alternative: concrete embedment

### Finish

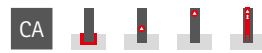
Powder coating in standard RAL colours or DB 703

### Note

Identical with Bollard 031, additionally: cast-in circumferential groove



	Fixed mounting	3p-Technology	3p-High
<b>Bollard 061</b> 870 mm	<b>061.001</b>	<b>061.020</b>	<b>061.030</b>



**1 BOLLARD 031-1**  
with 3p-Technology  
DB 703, 870 mm  
Art. N° 031.020  
**Sandweiler Luxembourg**

**2-3 BOLLARD 031-1**  
with 3p-Technology  
DB 703, 870 mm  
Art. N° 031.020  
**Rotondes Luxembourg**





## BOLLARD 060

Cast aluminium | 750 mm

### Specifications

Cylindrical bollard made of cast aluminium with a flat top and a narrowed upper part with four intermitting, protruding rings.

### Mounting

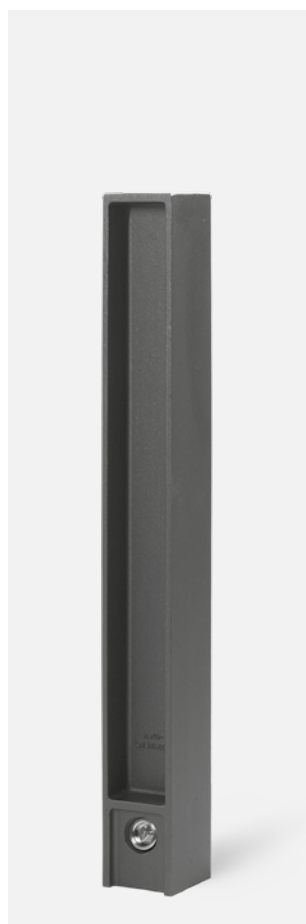
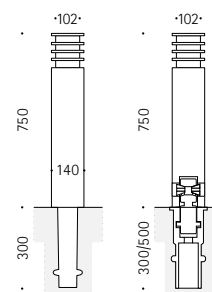
Removable with 3p-Technologie

Alternative: concrete embedment

### Finish

Powder coating in standard RAL colours or DB 703

	Fixed mounting	3p-Technologie
<b>Bollard 060</b>	<b>060.001</b>	<b>060.020</b>
<div> <div>CA</div> <div></div> <div></div> <div></div> <div>3D</div> </div> <div>3p-Technologie</div>		



## BOLLARD 032

Cast aluminium | 860 mm

### Specifications

Rectangular cast aluminium bollard fitted flush with the top, with inward vertical walls.

### Mounting

Removable with 3p-Technologie

Alternative: concrete embedment

### Finish

Powder coating in standard RAL colours or DB 703

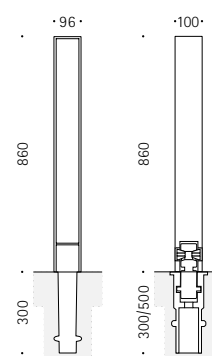
### Note

The ground rosette is part of the delivery (3p-Technologie)

Rosette 135 x 135 mm. Completely covers the ground shell

Material: S235 steel, hot-dip galvanised and powder-coated in bollard paint

	Fixed mounting	3p-Technologie
<b>Bollard 032</b>	<b>032.001</b>	<b>032.020</b>
<div> <div>CA</div> <div></div> <div></div> <div></div> <div>3D</div> </div> <div>3p-Technologie</div>		





## BOLLARD 012

Cast aluminium | 820 mm

### Specifications

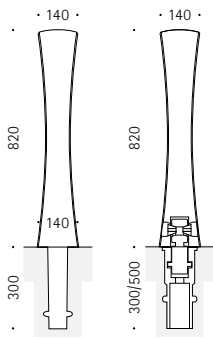
Cast aluminium bollard with a triangular base shape and a slightly domed top. The bollard tapers towards the middle.

### Mounting

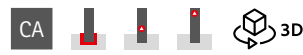
Removable with 3p-Technology  
Alternative: concrete embedment

### Finish

Powder coating in standard RAL colours or DB 703



	Fixed mounting	3p-Technology	3p-High
<b>Bollard 012</b>	<b>012.001</b>	<b>012.020</b>	<b>012.030</b>



Design: hammerrunge.design | Registered design M 98017470



## BOLLARD 002

Cast aluminium | 820 mm

### Specifications

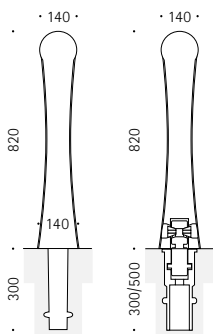
Bollard made of cast aluminium with a triangular base and a sphere set on top. The bollard tapers towards its centre.

### Mounting

Removable with 3p-Technology  
Alternative: concrete embedment

### Finish

Powder coating in standard RAL colours or DB 703



	Fixed mounting	3p-Technology
<b>Bollard 002</b>	<b>002.001</b>	<b>002.020</b>



Design: hammerrunge.design | Registered design M 98017470





Design: hammer.rungedesign | Registered design M 9801747.0

### BOLLARD 006-1

Cast aluminium | 870 mm

#### Specifications

Conical bollard made of cast aluminium with two cast-in eyelets at the top.

#### Mounting

Removable with 3p-Technologie

Alternative: concrete embedment

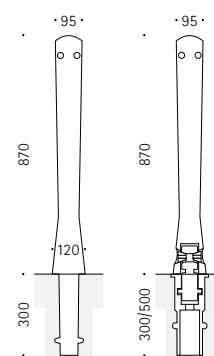
#### Finish

Powder coating in standard RAL colours or DB 703



	Fixed mounting	3p-Technologie
<b>Bollard 006-1</b>	<b>006.001</b>	<b>006.020</b>

CA



**1 BOLLARD 006-1**  
with 3p-Technologie  
DB 703, 870 mm  
Art. N° 006.020  
**Hörnum-Sylt** Germany

**2 BOLLARD 006-1**  
with 3p-Technologie  
DB 703, 870 mm  
Art. N° 006.020  
**Bunbury** Australia

**3 BOLLARD 006-2**  
with 3p-Technologie  
DB 703, 870 mm  
Art. N° 006.220  
**Walferdange** Luxembourg





## BOLLARD 006-2

Cast aluminium | 870 mm

### Specifications

Bollard made of cast aluminium tapering towards its middle.

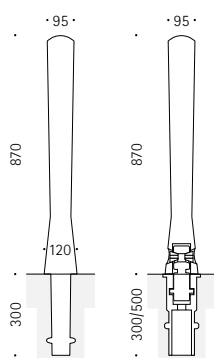
### Mounting

Removable with 3p-Technologie

Alternative: concrete embedment

### Finish

Powder coating in standard RAL colours or DB 703



	Fixed mounting	3p-Technologie
<b>Bollard 006-2</b>	<b>006.201</b>	<b>006.220</b>



3p Technologie



Design: hammerung.design | Registered design M 98017470





## BOLLARD 034

*Cast aluminium | 780 mm*

### Specifications

Cylindrical bollard made of cast aluminium with a cast, narrow groove that separates the slightly tapering top from the bollard and an accentuated cylindrical base.

### Mounting

Removable with 3p-Technologie

Alternative: concrete embedment

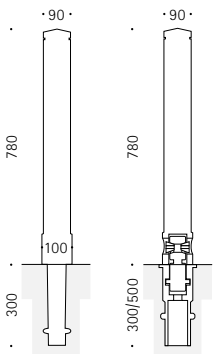
### Finish

Powder coating in standard RAL colours or DB 703

	Fixed mounting	3p-Technologie
<b>Bollard 034</b>	<b>034.001</b>	<b>034.020</b>

CA

3p Technologie



## BOLLARD 015 | 017

**015** | *Cast aluminium | 950 mm*

**017** | *Cast aluminium | 750 mm*

### Specifications

Cylindrical bollard made of cast aluminium with an ornamental ring on the flat top and at the base.

### Mounting

Removable with 3p-Technologie

Alternative: concrete embedment

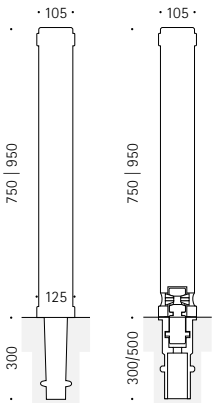
### Finish

Powder coating in standard RAL colours or DB 703

	Fixed mounting	3p-Technologie
<b>Bollard 015</b> 950 mm	<b>015.001</b>	<b>015.020</b>
<b>Bollard 017</b> 750 mm	<b>017.001</b>	<b>017.020</b>

CA

3p Technologie





## BOLLARD 024

Cast aluminium | 870 mm

### Specifications

Cylindrical bollard made of cast aluminium with a cast recess separating the bollard optically from its top and a distinct cylindrical base.

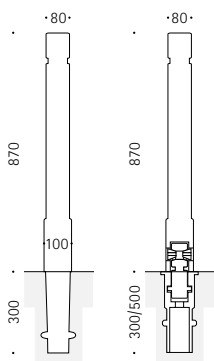
### Mounting

Removable with 3p-Technologie

Alternative: concrete embedment

### Finish

Powder coating in standard RAL colours or DB 703



	Fixed mounting	3p-Technologie
<b>Bollard 024</b>	<b>024.001</b>	<b>024.020</b>



Design: Thomas Wüsten - GP



## BOLLARD 021

**021-1** | Cast aluminium | 600 mm

**021-2** | Cast aluminium | 900 mm

### Specifications

Cylindrical cast aluminium bollard with a flat top by an accentuated by an elongated recess.

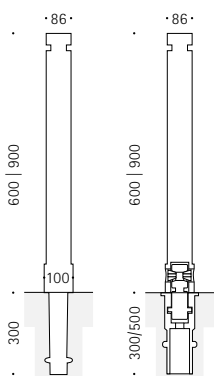
### Mounting

Removable with 3p-Technologie

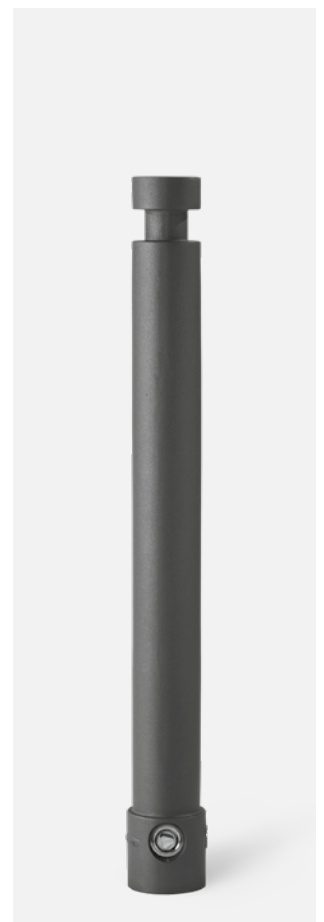
Alternative: concrete embedment

### Finish

Powder coating in standard RAL colours or DB 703



		Fixed mounting	3p-Technologie
<b>Bollard 021-1</b>	600 mm	<b>021.001.060</b>	<b>021.020.060</b>
<b>Bollard 021-2</b>	900 mm	<b>021.001.090</b>	<b>021.020.090</b>







## BOLLARD 038

*Cast aluminium | 830 mm*

### Specifications

Cylindrical cast aluminium bollard with a circumferential ring below the spherical top piece.

### Mounting

Removable with 3p-Technologie

Alternative: concrete embedment

### Finish

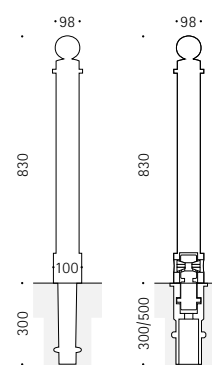
Powder coating in standard RAL colours or DB 703

	Fixed mounting	3p-Technologie
<b>Bollard 038</b>	<b>038.001</b>	<b>038.020</b>

CA



3p-Technologie



## BOLLARD 040

*Cast aluminium | 900 mm*

### Specifications

Cylindrical cast aluminium bollard with a top sphere, a peripheral ring below the top, and another ring above the pedestal.

### Mounting

Removable with 3p-Technologie

Alternative: concrete embedment

### Finish

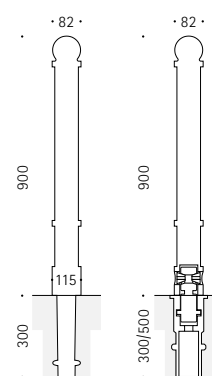
Powder coating in standard RAL colours or DB 703

	Fixed mounting	3p-Technologie
<b>Bollard 040</b>	<b>040.001</b>	<b>040.020</b>

CA



3p-Technologie





## BOLLARD 014

014-1 | Cast aluminium | 850 mm

014-2 | Cast aluminium | 1000 mm

014-3 | Cast aluminium | 1300 mm

### Specifications

Smooth cylindrical bollard made of cast aluminium with a sphere on the top.

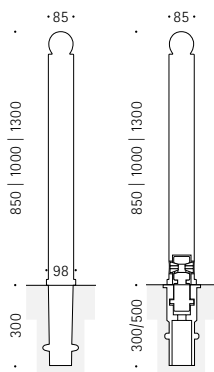
### Mounting

Removable with 3p-Technology

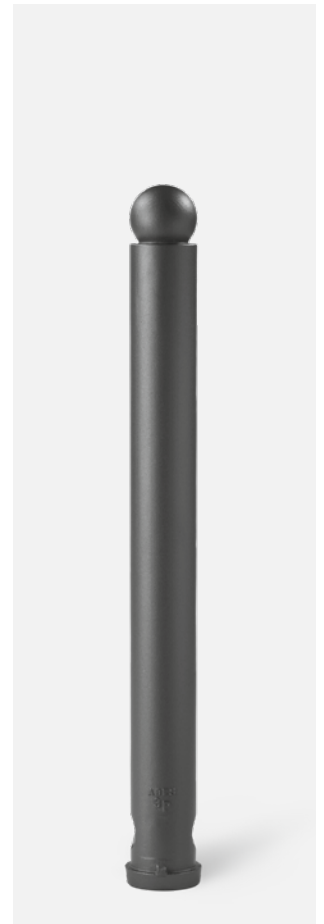
Alternative: concrete embedment

### Finish

Powder coating in standard RAL colours or DB 703



		Fixed mounting	3p-Technology
<b>Bollard 014-1</b>	850 mm	<b>014.001</b>	<b>014.020</b>
<b>Bollard 014-2</b>	1000 mm	<b>014.001.100</b>	<b>014.020.100</b>
<b>Bollard 014-3</b>	1300 mm	<b>014.001.130</b>	<b>014.020.130</b>



## BOLLARD 029

Cast aluminium | 900 mm

### Specifications

Cylindrical smooth bollard made of cast aluminium with a spherical top.

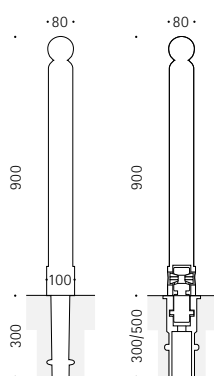
### Mounting

Removable with 3p-Technology

Alternative: concrete embedment

### Finish

Powder coating in standard RAL colours or DB 703



	Fixed mounting	3p-Technology
<b>Bollard 029</b>	<b>029.001</b>	<b>029.020</b>





## BOLLARD 018

*Cast aluminium | 850 mm*

### Specifications

Bollard made of cast aluminium with a cylindrical base on a pedestal, several indentations and rings and a sphere on top.

### Mounting

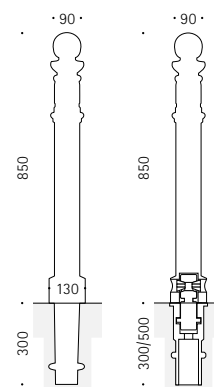
Removable with 3p-Technologie

Alternative: concrete embedment

### Finish

Powder coating in standard RAL colours or DB 703

	Fixed mounting	3p-Technologie
<b>Bollard 018</b>	<b>018.001</b>	<b>018.020</b>



## BOLLARD 062

*Cast aluminium | 910 mm*

### Specifications

Cylindrical bollard made of cast aluminium with a two-part base and a protruding ring below the enlarged spherical head.

### Mounting

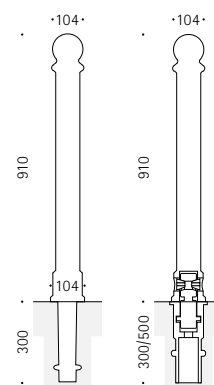
Removable with 3p-Technologie

Alternative: concrete embedment

### Finish

Powder coating in standard RAL colours or DB 703

	Fixed mounting	3p-Technologie
<b>Bollard 062</b>	<b>062.001</b>	<b>062.020</b>





## BOLLARD 023

Cast aluminium | 910 mm

### Specifications

Cylindrical bollard made of cast aluminium with a top sphere, with a horizontal indentation, and an accentuated base.

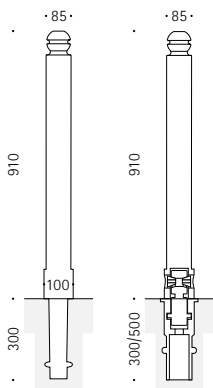
### Mounting

Removable with 3p-Technology

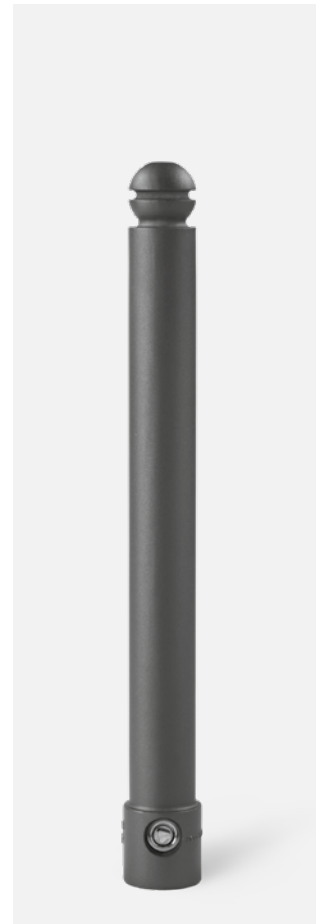
Alternative: concrete embedment

### Finish

Powder coating in standard RAL colours or DB 703



	Fixed mounting	3p-Technology	3p-High
<b>Bollard 023</b>	<b>023.001</b>	<b>023.020</b>	<b>023.030</b>



## BOLLARD 007

Cast aluminium | 905 mm

### Specifications

Cylindrical bollard with a smooth surface, made of cast aluminium with a circumferential groove and a leveled sphere as top piece.

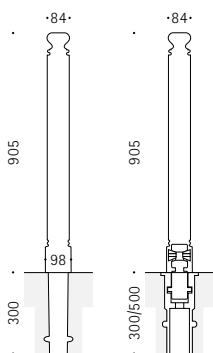
### Mounting

Removable with 3p-Technology

Alternative: concrete embedment

### Finish

Powder coating in standard RAL colours or DB 703



	Fixed mounting	3p-Technology	3p-High
<b>Bollard 007</b>	<b>007.001</b>	<b>007.020</b>	<b>007.030</b>







## BOLLARD 005-1

Cast aluminium | 890 mm

### Specifications

Cylindrical bollard made of cast aluminium with three multilayered rings, as well as a spherical top piece.

### Mounting

Removable with 3p-Technologie

Alternative: concrete embedment

### Finish

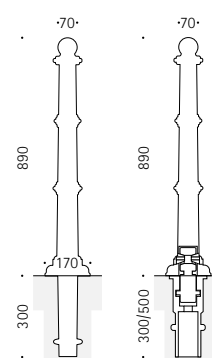
Powder coating in standard RAL colours or DB 703

	Fixed mounting	3p-Technologie
<b>Bollard 005-1</b>	<b>005.001</b>	<b>005.020</b>

CA



3p-Technologie



## BOLLARD 005-2

Cast aluminium | 900 mm

### Specifications

Cylindrical bollard made of cast aluminium with two multilayered rings, a cylindrical base about 100 mm high and a sphere as top piece.

### Mounting

Removable with 3p-Technologie

Alternative: concrete embedment

### Finish

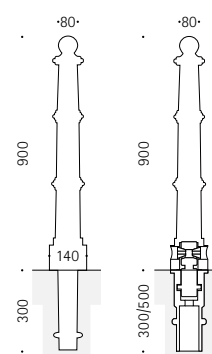
Powder coating in standard RAL colours or DB 703

	Fixed mounting	3p-Technologie
<b>Bollard 005-2</b>	<b>005.201</b>	<b>005.220</b>

CA



3p-Technologie





## BOLLARD 068

Cast aluminium | 950 mm

### Specifications

Cylindrical bollard made of cast aluminium surrounded by two multilayered rings and a tapering cone on top.

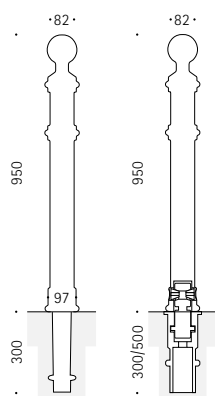
### Mounting

Removable with 3p-Technologie

Alternative: concrete embedment

### Finish

Powder coating in standard RAL colours or DB 703



	Fixed mounting	3p-Technologie
<b>Bollard 068</b>	<b>068.001</b>	<b>068.020</b>



## BOLLARD 025

Cast aluminium | 850 mm

### Specifications

Cylindrical bollard made of cast aluminium with two paired rings and a ring below a flattened hemisphere at the top.

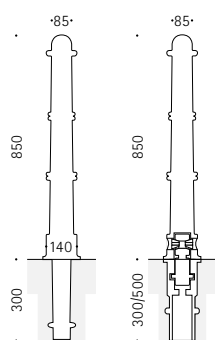
### Mounting

Removable with 3p-Technologie

Alternative: concrete embedment

### Finish

Powder coating in standard RAL colours or DB 703



	Fixed mounting	3p-Technologie
<b>Bollard 025</b>	<b>025.001</b>	<b>025.020</b>





## BOLLARD 039

Cast aluminium | 870 mm

### Specifications

Cylindrical bollard made of cast aluminium, with a revolving three split ring below the hemispherical top, as well as above the base.

### Mounting

Removable with 3p-Technologie

Alternative: concrete embedment

### Finish

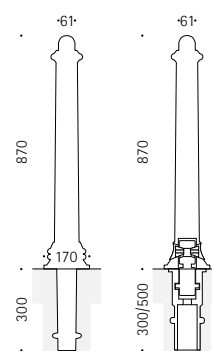
Powder coating in standard RAL colours or DB 703

	Fixed mounting	3p-Technologie
<b>Bollard 039</b>	<b>039.001</b>	<b>039.020</b>

CA



3p-Technologie



## BOLLARD 028

Cast aluminium | 900 mm

### Specifications

Cylindrical bollard made of cast aluminium with a two-part base and a hemisphere on top, separated by a ring.

### Mounting

Removable with 3p-Technologie

Alternative: concrete embedment

### Finish

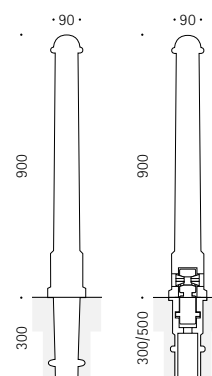
Powder coating in standard RAL colours or DB 703

	Fixed mounting	3p-Technologie
<b>Bollard 028</b>	<b>028.001</b>	<b>028.020</b>

CA



3p-Technologie





## BOLLARD 004

Cast aluminium | 820 mm

### Specifications

Cone-shaped bollard made of cast aluminium with a circumferential ring which optically separates the top from the rest of the bollard, and a second broader circumferential ring at the base.

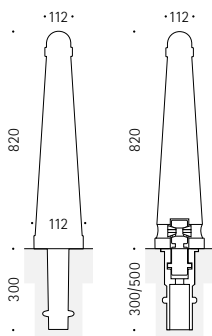
### Mounting







Removable with 3p-Technologie

Alternative: concrete embedment

### Finish

Powder coating in standard RAL colours or DB 703



	Fixed mounting	3p-Technologie	3p-High
<b>Bollard 004</b>	<b>004.001</b>	<b>004.020</b>	<b>004.030</b>
     			



## BOLLARD 013

Cast aluminium | 820 mm

### Specifications

Slightly cone-shaped bollard made of cast aluminium with a circumferential ring which optically separates the top from the rest of the bollard, and a second broader circumferential ring at the base.

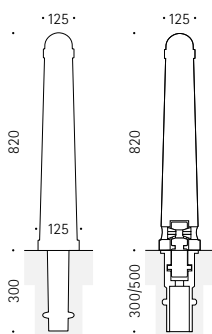
### Mounting





Removable with 3p-Technologie

Alternative: concrete embedment

### Finish

Powder coating in standard RAL colours or DB 703



	Fixed mounting	3p-Technologie	3p-High
<b>Bollard 013</b>	<b>013.001</b>	<b>013.020</b>	<b>013.030</b>
   			







Design: hammerjungdesign | Registered design M 9801747.0

## BOLLARD 011

*Cast aluminium | 860 mm*

### Specifications

Oval bollard made of cast aluminium with a spiral-shaped head and a protruding vertical joint.

### Mounting

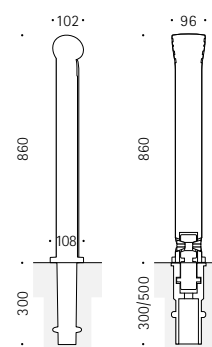
Removable with 3p-Technologie

Alternative: concrete embedment

### Finish

Powder coating in standard RAL colours or DB 703

	Fixed mounting	3p-Technologie
<b>Bollard 011</b>	<b>011.001</b>	<b>011.020</b>



## BOLLARD 041

*Cast aluminium | 925 mm*

### Specifications

Subdivided cast aluminium bollard on a hexagonal base, tapering towards the top and ending in an acorn-shaped figure. The six sides show rectangular, cast-in recesses.

### Mounting

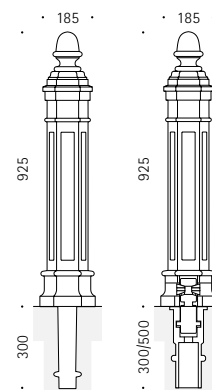
Removable with 3p-Technologie

Alternative: concrete embedment

### Finish

Powder coating in standard RAL colours or DB 703

	Fixed mounting	3p-Technologie
<b>Bollard 041</b>	<b>041.001</b>	<b>041.020</b>





## BOLLARD 020

Cast aluminium | 895 mm

### Specifications

Cylindrical bollard made of cast aluminium with three circumferential paired rings, several vertical recesses and a flat top.

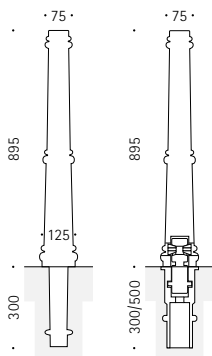
### Mounting




Removable with 3p-Technologie

Alternative: concrete embedment

### Finish

Powder coating in standard RAL colours or DB 703



	Fixed mounting	3p-Technologie
<b>Bollard 020</b>	<b>020.001</b>	<b>020.020</b>
  		



## BOLLARD 022

Cast aluminium | 935 mm

### Specifications

Slightly conical bollard made of cast aluminium with several vertical recesses in the middle section. The upper section is accentuated by a circumferential ring, a smooth surface and a slightly protruding tapering top piece. The base is characterised by a smooth shell enclosed by two rings.

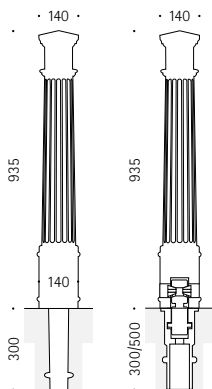
### Mounting




Removable with 3p-Technologie

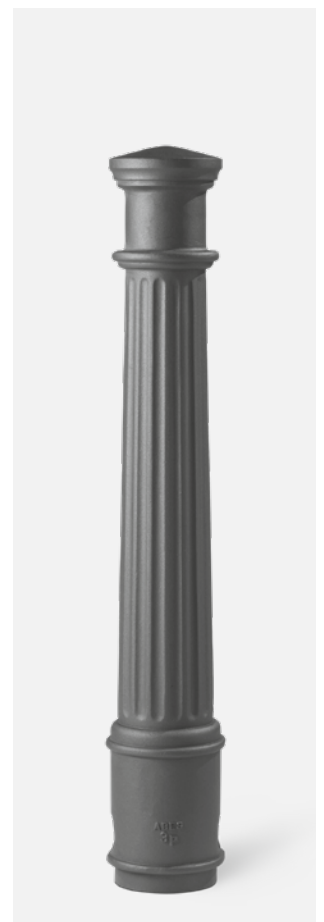
Alternative: concrete embedment

### Finish

Powder coating in standard RAL colours or DB 703



	Fixed mounting	3p-Technologie
<b>Bollard 022</b>	<b>022.001</b>	<b>022.020</b>
  		





Design: hammerungdesign | Registered design M 9801747.0

## BOLLARD 003

Cast aluminium | 738 mm

### Specifications

Cylindrical bollard made of cast aluminium with twelve window-like cast indentations, a protruding top and a distinct cylindrical base.

### Mounting

Removable with 3p-Technologie

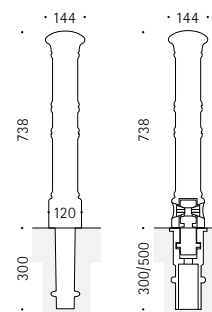
Alternative: concrete embedment

### Finish

Powder coating in standard RAL colours or DB 703



	Fixed mounting	3p-Technologie
<b>Bollard 003</b>	<b>003.001</b>	<b>003.020</b>
<div> <div>CA</div> <div> </div> <div> </div> <div>  3D </div> <div>  3p-Technologie </div> </div>		



### 1-2 BOLLARD 003

with 3p-Technologie

RAL 7016, 738 mm

Art. N° 003.020

Echternach Luxembourg





## BOLLARD 019

Cast aluminium | 850 mm

### Specifications

Conical cast aluminium bollard with four wing-like side parts which taper further up into eyelets. The top is domed.

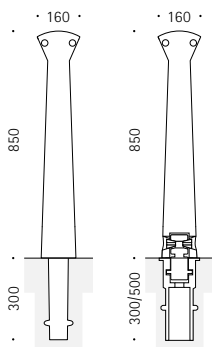
### Mounting

Removable with 3p-Technologie

Alternative: concrete embedment

### Finish

Powder coating in standard RAL colours or DB 703



	Fixed mounting	3p-Technologie
<b>Bollard 019</b>	<b>019.001</b>	<b>019.020</b>



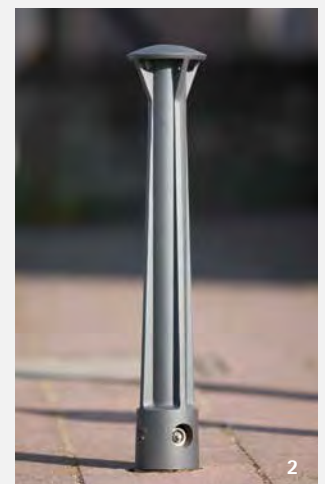
### 1-2 BOLLARD 019

with 3p-Technologie

DB 703, 850 mm

Art. N° 019.020

**Nommern** Luxembourg







## BOLLARD 057

Cast aluminium | 150 · 1000 mm

### Specifications

Cylindrical bollard made of cast aluminium with a flat top and a broad ring-shaped recess in the upper region.

### Mounting

Removable with 3p-Technologie

Alternative: concrete embedment

### Finish

Powder coating in standard RAL colours or DB 703

	Fixed mounting	3p-Technologie
<b>Bollard 057</b>	<b>057.001</b>	<b>057.020</b>

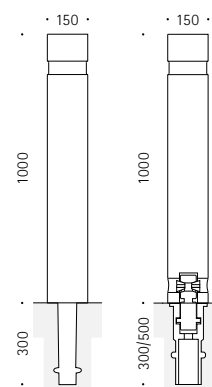
CA



3p-Technologie



**Bollard 057** also available as  
**Lighting Bollard 230 LED**  
(see p. 78)



## BOLLARD 058

Cast aluminium | 250 · 1000 mm

### Specifications

Cylindrical bollard made of cast aluminium with a flat top and a broad ring-shaped recess in the upper region.

### Mounting

Removable with 3p-Technologie

Alternative: concrete embedment

### Finish

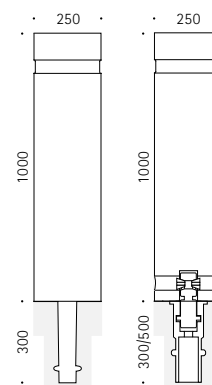
Powder coating in standard RAL colours or DB 703

	Fixed mounting	3p-Technologie
<b>Bollard 058</b>	<b>058.001</b>	<b>058.020</b>

CA

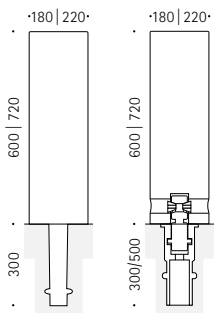


3p-Technologie





**Bollard 055-1** also available as  
**Lighting Bollard 220 LED**  
(see p. 77)



## BOLLARD 037-1 | 055-1

**037-1** | Cast aluminium | 220 · 720 mm

**055-1** | Cast aluminium | 180 · 600 mm

### Specifications

Cylindrical bollard made of cast aluminium with a flat top.

### Mounting

Removable with 3p-Technology

Alternative: concrete embedment

### Finish

Powder coating in standard RAL colours or DB 703

		Fixed mounting	3p-Technology
<b>Bollard 037-1</b>	220 · 720 mm	<b>037.001</b>	<b>037.020</b>
<b>Bollard 055-1</b>	180 · 600 mm	<b>055.001</b>	<b>055.020</b>



1



2

**1 BOLLARD 055-1**  
with 3p-Technology  
DB 703, 180 · 600 mm  
Art. N° 055.020  
**Cologne Germany**

**2-3 BOLLARD 058**  
with 3p-Technology  
DB 703, 250 · 1000 mm  
Art. N° 058.020  
**Manchester Great Britain**



3



## BOLLARD 069

Cast aluminium | 800 mm

### Specifications

Cylindrical cast aluminium bollards with a wide, circular recess at the top and a tapering base.

### Mounting

Removable with 3p-Technologie

Alternative: concrete embedment

### Finish

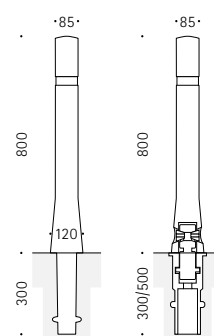
- Powder coating in standard RAL colours or DB 703
- Reflective tape protected in the recess

	Fixed mounting	3p-Technologie
<b>Bollard 069</b>	<b>069.001</b>	<b>069.020</b>

CA



3p Technologie



## BOLLARD 070

Cast aluminium | 880 mm

### Specifications

Cylindrical cast aluminium bollards with a wide, circular recess at the top and a cylindrical base.

### Mounting

Removable with 3p-Technologie

Alternative: concrete embedment

### Finish

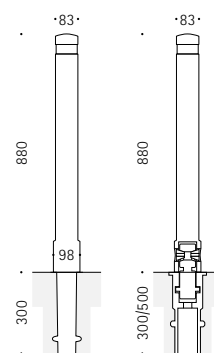
- Powder coating in standard RAL colours or DB 703
- Reflective tape in the recess (optional)

	Fixed mounting	3p-Technologie
<b>Bollard 070</b>	<b>070.001</b>	<b>070.020</b>

CA



3p Technologie





## BOLLARD 064

Cast aluminium | 1200 mm

### Specifications

Square bollard made of cast aluminium with a flat top.

### Mounting

Removable with 3p-Technology

Alternative: concrete embedment

### Finish

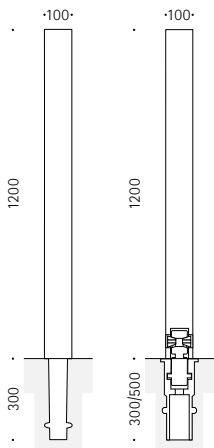
Powder coating in standard RAL colours or DB 703

### Note

The ground rosette is part of the delivery (3p-Technology)

Completely covers the ground shell

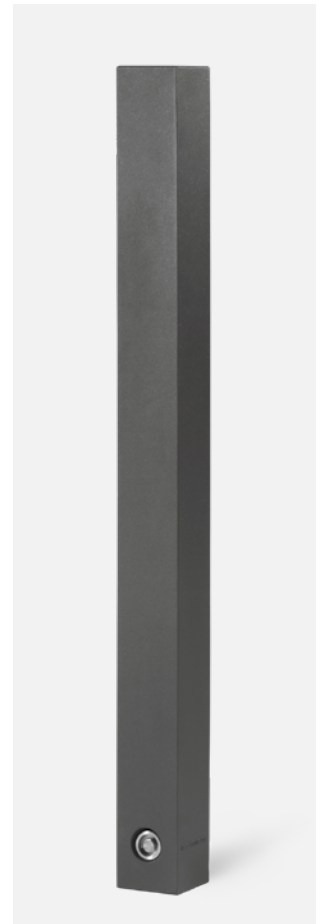
Material: S235 steel, hot-dip galvanised and powder-coated in bollard paint



	Fixed mounting	3p-Technology
<b>Bollard 064</b>	<b>064.001</b>	<b>064.020</b>



3p-Technologie



## BOLLARD 071

Cast aluminium | 937 mm

### Specifications

Square cast aluminium bollards with rounded corners, a wide circular recess at the top, and flat head piece.

### Mounting

Removable with 3p-Technology

Alternative: concrete embedment

### Finish

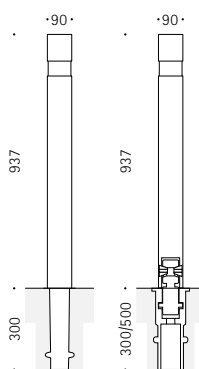
Powder coating in standard RAL colours or DB 703

### Note

The ground rosette is part of the delivery (3p-Technology)

Completely covers the ground shell

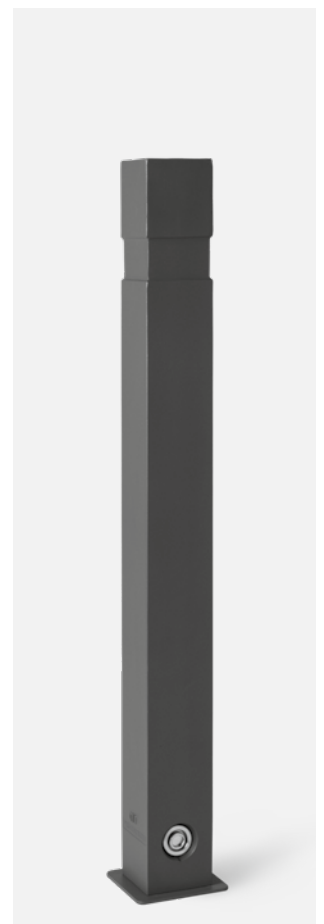
Material: S235 steel, hot-dip galvanised and powder-coated in bollard paint



	Fixed mounting	3p-Technology
<b>Bollard 071</b>	<b>071.001</b>	<b>071.020</b>

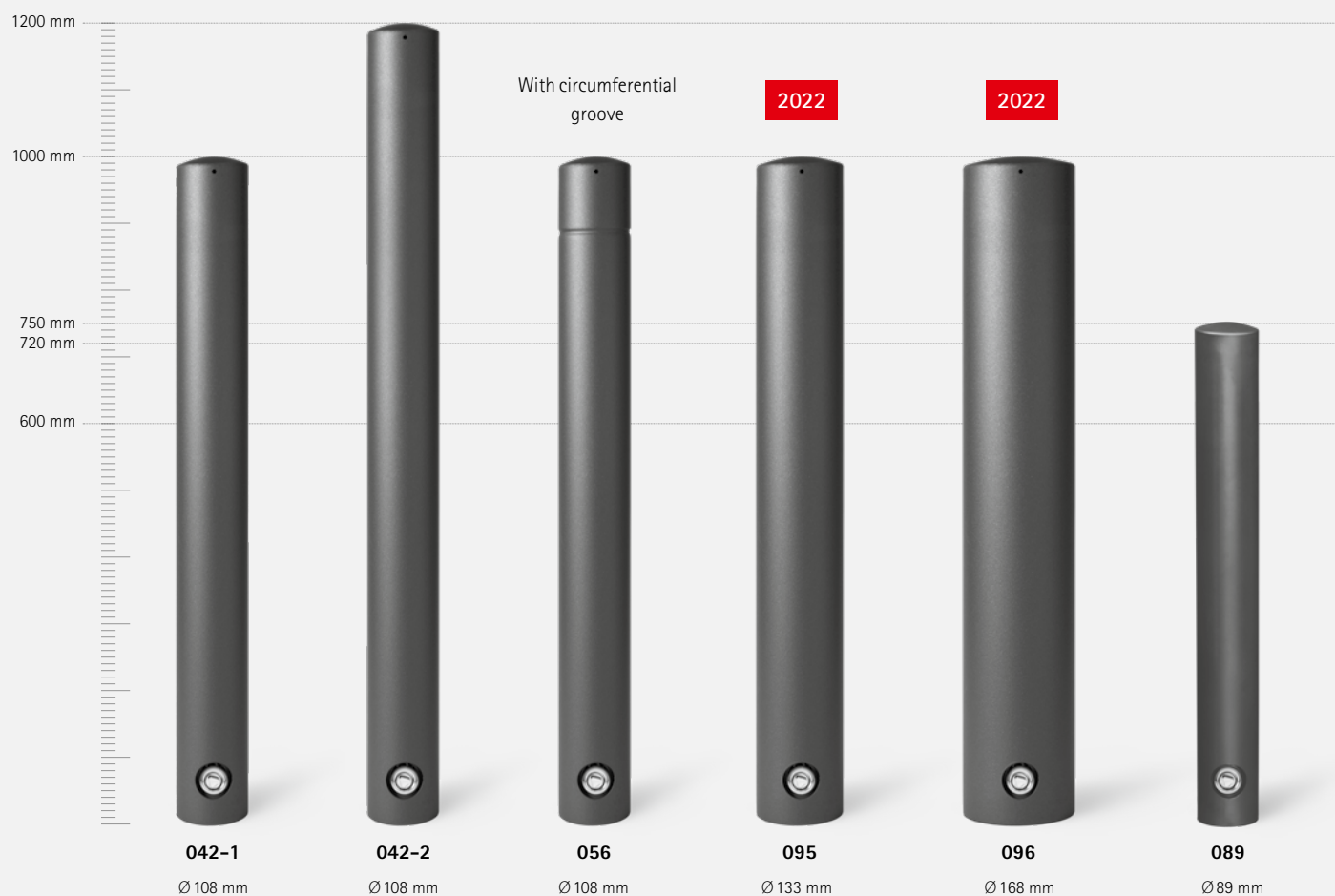


3p-Technologie





## 02 BOLLARDS *Steel + Stainless steel*



- 1 **BOLLARD 042-1**  
RAL 7016 Anthracite grey  
**Walferdange Luxembourg**
- 2 **BOLLARD 037-2**  
DB 703 Glimmer grey  
**Esch-Belval Luxembourg**
- 3 **BOLLARD 042-1**  
DB 703 Glimmer grey  
**Remshalden Germany**
- 4 **BOLLARD 037-2**  
DB 703 Glimmer grey  
**Esch-Belval Luxembourg**



Height is  
customisable  
on all bollards  
on request



037-2

Ø 220 mm



055-2

Ø 180 mm

## CYLINDRICAL BOLLARDS MADE OF STEEL AND STAINLESS STEEL

*Steel + Stainless steel*

### Specifications

Fully cylindrical bollards made of galvanised steel/stainless steel with a slightly domed top. Bollard 056 also with all round groove.

### Mounting

Removable with 3p-Technologie

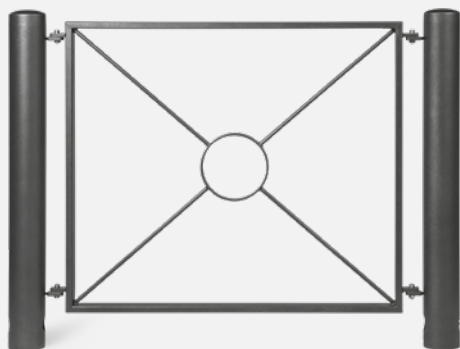
Alternative: concrete embedment or with external flange to enable screwing (only for bollards with a diameter up to 110 mm)

### Finish

- Stainless steel 1.4301 smoothed, grain 240  
Optional: electropolished/high-gloss or glass bead blasted (Bollard 037-2 and 055-2 on customer request)
- Steel S235, galvanised with powder coating in standard RAL colours or DB 703
- Height can be adjusted on customer request



3p Technologie



Bollard 042-1 with Railing 851 (see page 69)



Data sheet with article numbers and further information in the ABES online shop:

<https://abes-online.com/wp-content/uploads/2022/10/ABES-cylindrical-bollards-steel-EN.pdf>



## BOLLARD 076

Steel



2022



076-10



076-20



076-30



076-40



076-50

**Diameter 76 mm:**

Suitable for multipurpose clips to fasten signs, bins, dog waste containers etc.



Sample application



076-10



076-20



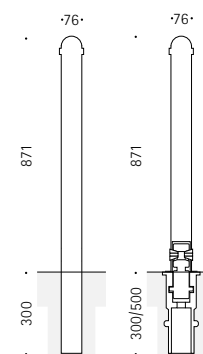
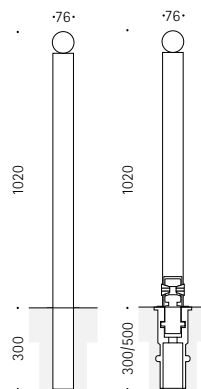
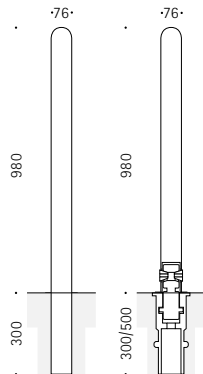
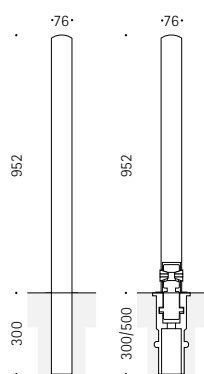
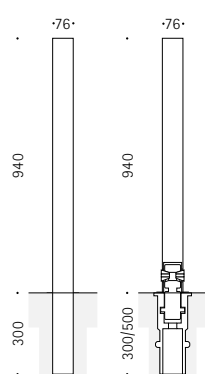
076-30



076-40



076-50



**BOLLARD 076***Steel***Specifications**

- 076-10** Cylindrical bollard made of galvanised steel with flat top.
- 076-20** Cylindrical bollard made of galvanised steel with slightly curved top.
- 076-30** Cylindrical bollard made of galvanised steel with round top.
- 076-40** Cylindrical bollard made of galvanised steel with a spherical top.
- 076-50** Cylindrical bollard made of galvanised steel with a circumferential ring below the round top.

**Mounting**

Removable with 3p-Technology

Alternative: concrete embedment

Optional: with flange to enable screwing

**Finish**

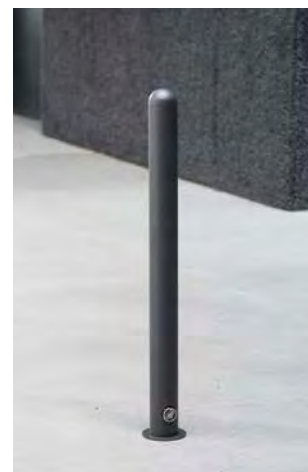
- Steel S235, galvanised with powder coating in standard RAL colours or DB 703
- Stainless steel 1.4301 on request
- Suitable for multipurpose clips to fasten signs, bins, dog waste containers etc.
- Height can be adjusted on customer request

**Note**

The ground rosette is part of the delivery (for 3p-Technology)

Completely covers the ground shell

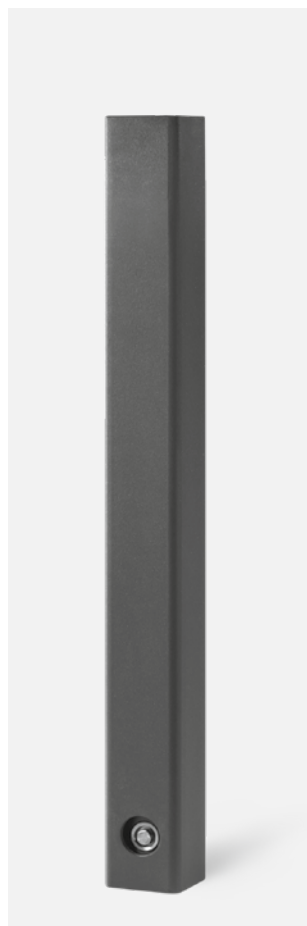
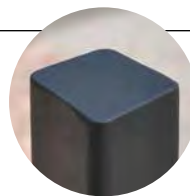
Material: S235 steel, hot-dip galvanised and powder-coated in bollard paint



	Top shape	Material	Fixed mounting	3p-Technology
<b>Bollard 076-10</b>	Flat	Steel S235, galvanised	<b>076.201</b>	<b>076.220</b>
		Steel S235, galvanised/powder-coated	<b>076.301</b>	<b>076.320</b>
<b>Bollard 076-20</b>	Slightly curved	Steel S235, galvanised	<b>076.001</b>	<b>076.020</b>
		Steel S235, galvanised/powder-coated	<b>076.101</b>	<b>076.120</b>
<b>Bollard 076-30</b>	Round	Steel S235, galvanised	<b>076.401</b>	<b>076.420</b>
		Steel S235, galvanised/powder-coated	<b>076.501</b>	<b>076.520</b>
<b>Bollard 076-40</b>	Spherical	Steel S235, galvanised/powder-coated	<b>076.701</b>	<b>076.720</b>
<b>Bollard 076-50</b>	Spherical/ring	Steel S235, galvanised/powder-coated	<b>076.801</b>	<b>076.820</b>





**BOLLARD 063***Steel | 1000 mm***Specifications**

Square bollard made of galvanised steel with rounded corners (approx. 15 mm radius) and a flat top.

**Mounting**

Removable with 3p-Technologie

Alternative: concrete embedment

**Finish**

- Steel S235, galvanised with powder coating in standard RAL colours or DB 703
- Height can be adjusted on customer request

**Note**

The ground rosette is part of the delivery (3p-Technologie)

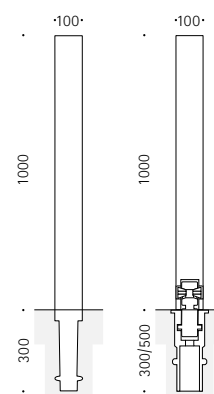
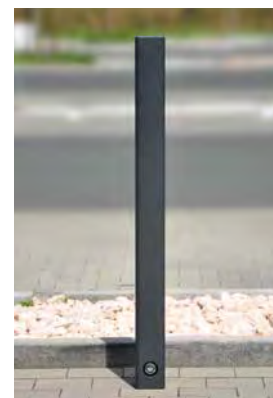
Completely covers the ground shell

Material: S235 steel, hot-dip galvanised and powder-coated in bollard paint

	Fixed mounting	3p-Technologie
<b>Bollard 063</b>	<b>063.001</b>	<b>063.020</b>



3p-Technologie

**BOLLARD 074***Stahl + Stainless steel | 1000 mm***Specifications**

Square steel bollard with slightly pyramidal square top.

**Mounting**

Removable with 3p-Technologie

Alternative: concrete embedment

**Finish**

- Stainless steel 1.4301 smoothed, grain 240  
Optional: electropolished/high-gloss
- Steel S235, galvanised with powder coating in standard RAL colours or DB 703
- Height can be adjusted on customer request

**Note**

The ground rosette is part of the delivery (3p-Technologie)

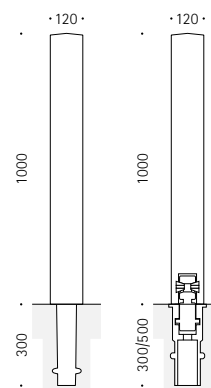
Completely covers the ground shell

Material: S235 steel, hot-dip galvanised and powder-coated in bollard paint

	Fixed mounting	3p-Technologie
<b>Bollard 074 Steel</b>	<b>074.001</b>	<b>074.020</b>
<b>Bollard 074 Stainless steel</b>	<b>074.101</b>	<b>074.120</b>

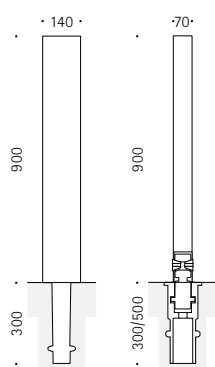


3p-Technologie





Also available as **Lighting-Bollard 265 LED (1)** (s. p. 80) and as **Charging-Bollard 665 with 3 sockets (2)** (s. p. 73)



## BOLLARD 065

Steel | 900 mm

### Specifications

Rectangular bollard made of steel with a flat top.

### Mounting

Removable with 3p-Technology

Alternative: concrete embedment

### Finish

- Steel S235, galvanised with powder coating in standard RAL colours or DB 703
- Height can be adjusted on customer request

### Note

The ground rosette is part of the delivery (3p-Technology)

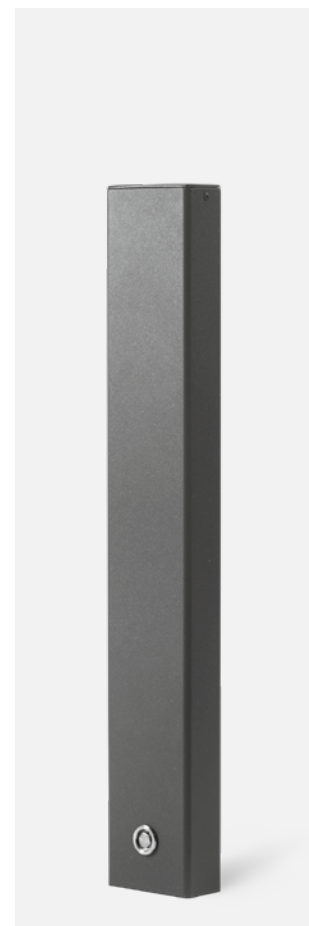
Completely covers the ground shell

Material: S235 steel, hot-dip galvanised and powder-coated in bollard paint

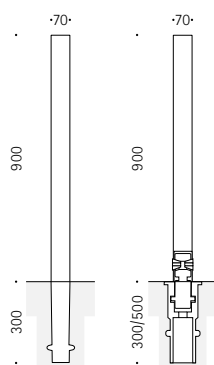
	Fixed mounting	3p-Technology
<b>Bollard 065</b>	<b>065.001</b>	<b>065.020</b>



3p-Technologie



**Bollard 066** also available as **Lighting Bollard 266 LED** (see p. 81)



## BOLLARD 066

Steel | 900 mm

### Specifications

Square steel bollard with slightly rounded corners and a flat, square top.

### Mounting

Removable with 3p-Technology

Alternative: concrete embedment

### Finish

- Steel S235, galvanised with powder coating in standard RAL colours or DB 703
- Height can be adjusted on customer request

### Note

The ground rosette is part of the delivery (3p-Technology)

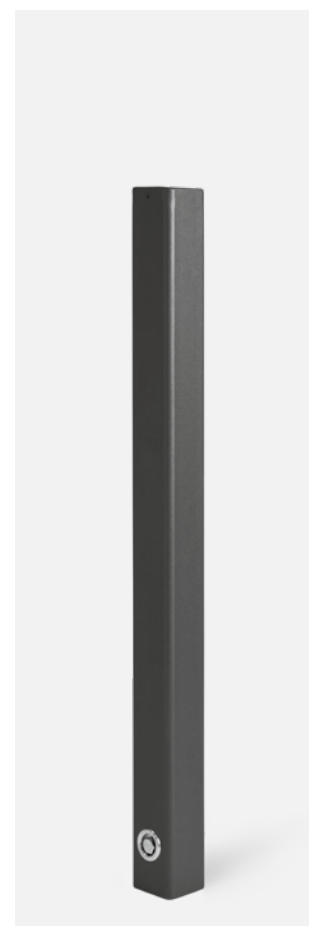
Completely covers the ground shell

Material: S235 steel, hot-dip galvanised and powder-coated in bollard paint

		Fixed mounting	3p-Technology
<b>Bollard 066</b>	Galvanised	<b>066.001</b>	<b>066.020</b>
<b>Bollard 066</b>	Powder-coated	<b>066.101</b>	<b>066.120</b>



3p-Technologie





## BOLLARD 059

Steel | 900 mm

### Specifications

Square bollards made of flat steel with two open sides, a choice of one or more (on request and at a surcharge) horizontal, central divisions and a solid base.

### Mounting

Removable with 3p-Technologie

Alternative: concrete embedment

### Finish

- Steel S235, galvanised with powder coating in standard RAL colours or DB 703
- Height can be adjusted on customer request

### Note

The ground rosette is part of the delivery (3p-Technologie)

Completely covers the ground shell

Material: S235 steel, hot-dip galvanised and powder-coated in bollard paint

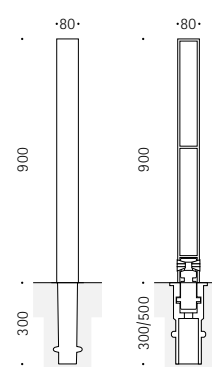
		Fixed mounting	3p-Technologie
<b>Bollard 059</b>	Galvanised	<b>059.001</b>	<b>059.020</b>
<b>Bollard 059</b>	Powder-coated	<b>059.101</b>	<b>059.120</b>



3p-Technologie



**Bollard 059** can also be used as a leaning bollard for bicycles



## BOLLARD 079

Steel + Stainless steel | 1097 mm

### Specifications

Fully cylindrical bollard with a slanted top.

### Mounting

Removable with 3p-Technologie

Alternative: concrete embedment or with flange to enable screwing

### Finish

- Stainless steel 1.4301 smoothed, grain 240
- Optional: electropolished/high-gloss
- Steel S235, galvanised with powder coating in standard RAL colours or DB 703
- Other heights and diameters available on request

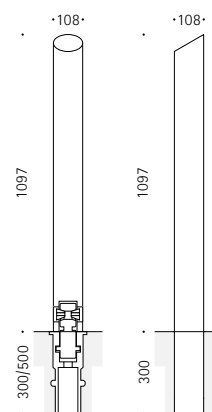
### Note

Also available with a cigarette slo as Bollard-Ashtray 525, see page 65

		Fixed mounting	3p-Technologie	For screwing
<b>Bollard 079</b>	Steel S235	<b>079.201</b>	<b>079.220</b>	<b>079.240</b>
<b>Bollard 079</b>	Stainless steel	<b>079.301</b>	<b>079.320</b>	<b>079.340</b>



3p-Technologie



**BOLLARD-ASHTRAY 525***Steel + Stainless steel | 1097 mm***Specifications**

Fully cylindrical bollard ashtray with a sloping slot area. Labelling in the form of an outlined, laser-printed cigarette symbol.

**Mounting**

Removable with 3p-Technology

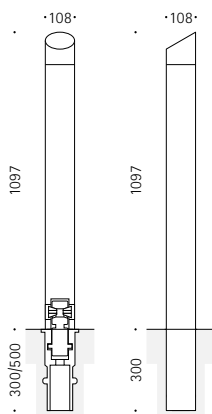
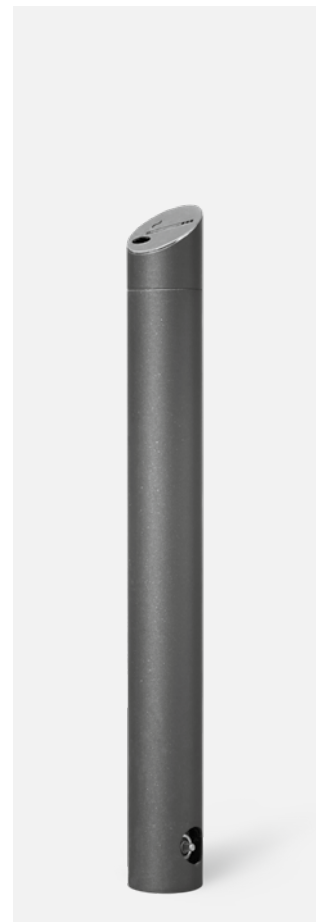
Alternative: concrete embedment or with flange to enable screwing

**Finish**

- Stainless steel 1.4301 smoothed, grain 240  
Optional: electropolished/high-gloss
- Steel S235, galvanised with powder coating in standard RAL colours or DB 703
- May be unlocked for emptying using a triangular key
- Height can be adjusted on customer request

**Note**

Identical with Bollard 079 (without ashtray), see page 64



		Fixed mounting	3p-Technology	For Screwing
<b>Bollard-Ashtray 525</b>	Steel	<b>525.001</b>	<b>525.020</b>	<b>525.040</b>
<b>Bollard-Ashtray 525</b>	Stainless steel	<b>525.011</b>	<b>525.022</b>	<b>525.140</b>



The only bollard ashtray with predetermined breaking point







## RAILING SYSTEMS WITH 3P-TECHNOLOGY

MODULAR

### Bollards with connection for railings

Bollards are often placed where vehicles are not supposed to go.

Their main functions include:

- ✓ **SEPARATING:**  
Footpaths from roadways
- ✓ **CHANNELLING:**  
Directing the movement of crowds, cyclists, vehicles
- ✓ **PROTECTING:**  
Prevent people from entering roadways carelessly or unknowingly at blind spots

Bollards as a stand-alone product in conjunction with railing systems complement each other in many parts of the cityscape, because they make the composition of the street furniture appear more homogeneous.

Based on the 3p-Technology fastening system, we have developed two different connections:

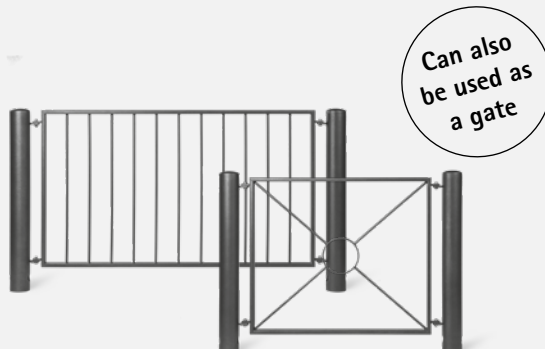
#### RAILING-SYSTEM 1

For selected cast aluminium bollards  
(e.g. all ABES Classics, see p. 30ff)



#### RAILING-SYSTEM 2

For cylindrical steel or cast aluminium bollards

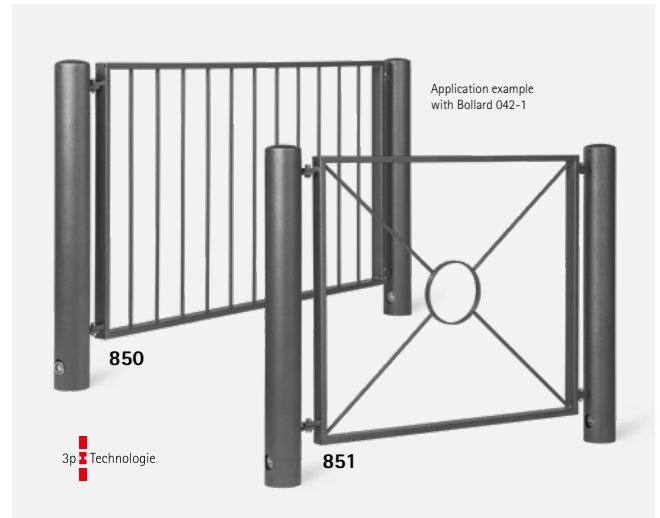


**FOR CAST ALUMINIUM BOLLARDS****RAILING-SYSTEM 1****2022****Railing-Bollard 027-7** | end bollard – cast aluminium**Railing-Bollard 027-8** | center bollard – cast aluminium**Railing 810** | set of railing tubes – steel

Railing-System 1 is only possible with cast aluminium bollards because the locating hole for the railing tube is moulded as an integral component into the bollard. As a matter of principle, the shape of the bollard must be suitable for this locating hole, i.e. it should have a cylindrical, rectangular or flat shape (examples: 001, 008, 009, 010, 016, 027, 043 among others).

**Advantages at a glance**

- ⊕ ABES bollard models already integrated in the urban landscape can be used.
- ⊕ Railing tubes can be cut to the required length on the construction site or on request as needed.
- ⊕ After inserting the tubes into the locating holes, these can be fixed in situ if required, for example using grub screws.
- ⊕ The barrier can be extended as required (modular).
- ⊕ The bollards can be customised if desired with a moulded municipal coat of arms or logo.

**FOR STEEL OR CAST ALUMINIUM BOLLARDS****RAILING-SYSTEM 2****2022****Railing 850** | with vertical truss bars – steel**Railing 851** | with diagonal truss bars – steel

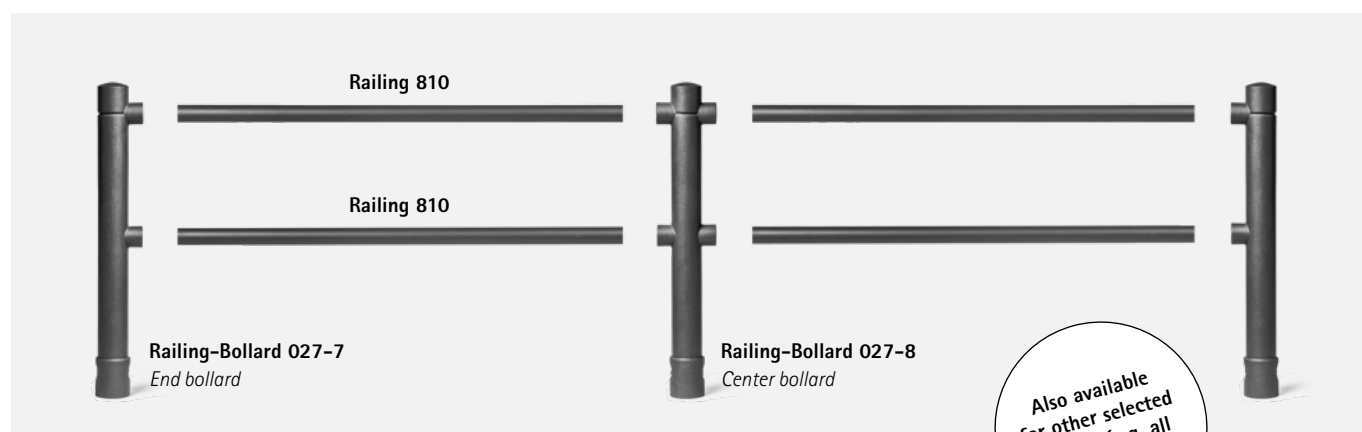
Railing-System 2, consisting of at least two end-to-end cylindrical ABES bollards\* with 3p-Technologie, acting as railing end bollards or centre bollards using two or four horizontal and angle-adjustable universal brackets. This means that they can be used on one or more sides for an ABES Railing 850 or 851.

**Advantages at a glance**

- ⊕ Can be attached to all straight, non-conical bollards.
- ⊕ Most ABES bollard models can be subsequently fitted with corresponding supports.
- ⊕ Changes of direction between 2 bollards of up to approx. 150° are possible using the articulated joint.
- ⊕ The barrier can be extended as required (modular).
- ⊕ On aluminium bollards if desired with a moulded municipal coat of arms or logo.
- ⊕ Individual truss bars on request.

**Configure your own  
individual 3p-Technologie  
RAILING-SYSTEM 1**
**Railing-System 1 – Railing Configurator**
<https://abes-online.com/en/abes-bollard-027-2-with-railings/>
**Railing 850 (with vertical truss bars):**
<https://abes-online.com/en/product/railing-850-with-vertical-truss-bars/>
**Railing 851 (with diagonal truss bars):**
<https://abes-online.com/en/product/railing-851-with-diagonal-truss-bars/>

\*Bollards not included in delivery



#### FOR CAST ALUMINIUM BOLLARDS

### RAILING-SYSTEM 1

#### Specifications

#### RAILING-BOLLARD 027-7 (end bollard)

Cylindrical bollard with a groove at the top and a cylindrical base with two casted circular tube sockets for the connection of an ABES Railing 810 on one side.

#### RAILING-BOLLARD 027-8 (center bollard)

Cylindrical bollard with a groove at the top and a cylindrical base with four casted circular tube sockets for the connection of an ABES Railing 810 on two sides.

#### RAILING 810 (railing tubes)

Set of two steel tubes Ø 48 mm, 2000 mm length, to connect to ABES Railing-Bollards 027-7 or 027-8.

#### Mounting

Removable with 3p-Technology

Alternative: concrete embedment or with self-engaging 3p-Snaplock fastening system

#### Finish

Powder coating in standard RAL colours or DB 703

#### Notes

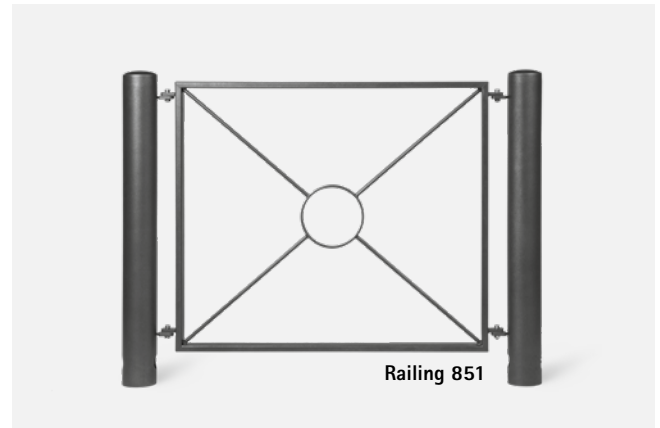
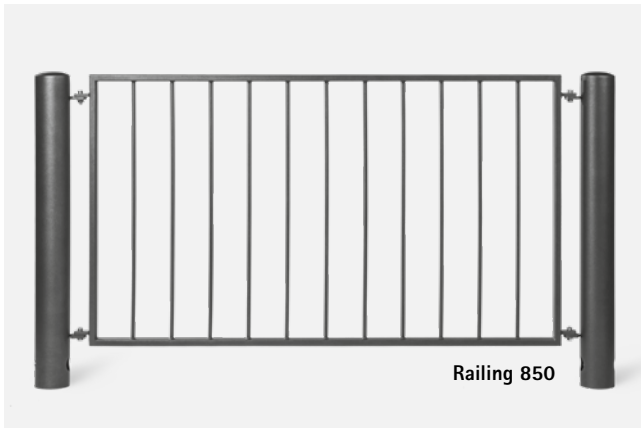
- Railing-Bollards 027-7/-8 identical with Bollard 027-2
- Also available for other cast aluminium bollards (e.g. all ABES Classics, see page 30ff).
- The shape of the bollard must be suitable for this locating hole, i.e. it should have a cylindrical, rectangular or flat shape.



◀ Bollard models (here Bollard 027-2 with Heidelberg coat of arms) already integrated in the urban landscape can be used.

▼ System extendable as required.



**FOR STEEL OR CAST ALUMINIUM BOLLARDS****RAILING-SYSTEM 2****Specifications****RAILING 850 (with vertical truss bars)**

Railing 850, consisting of a frame made of 50 × 50 × 2 mm flat steel with Ø 12 mm vertical steel truss bars, powder-coated in standard RAL or DB 703 glimmer grey, as well as two lugs for the fixation with screws on each side, supported by two ABES bollards\* by means of two universal supports on each side.

**Mounting**

Universal support with adjustable angle

**Finish**

Powder coating in standard RAL colours or DB 703

**Note**

The illustration shows Railing 850 fastened to two removable ABES Bollards 042-1 (see pages 58-59).

**Specifications****RAILING 851 (with diagonal truss bars)**

Railing 851, consisting of a frame made of 50 × 50 × 2 mm flat steel with Ø 12 mm diagonal steel truss bars and a centered circle-shaped rolled flat steel ornament, powder-coated in standard RAL or DB 703 glimmer grey, as well as two lugs on each side, supported by two ABES bollards\* with dedicated universal supports.

**Mounting**

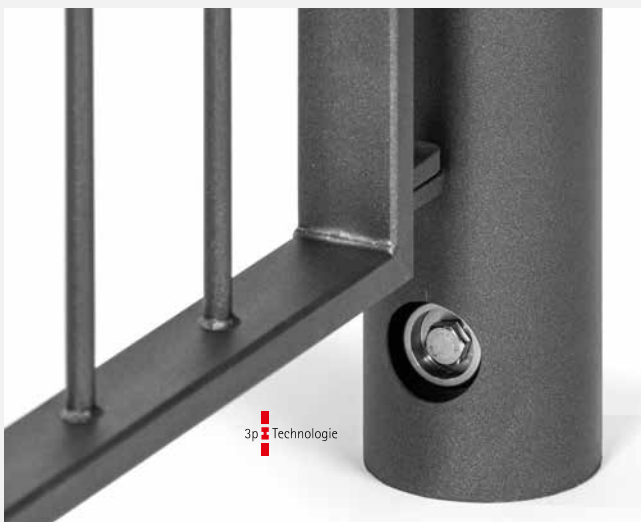
Universal support with adjustable angle

**Finish**

Powder coating in standard RAL colours or DB 703

**Note**

The illustration shows Railing 851 fastened to two removable ABES Bollards 042-1 (see pages 58-59).



Most ABES bollards with 3p-Technologie can be used.

► Supports included in delivery can be subsequently fastened to existing bollards.

▼ The angle of the railing to the bollard is variable.



\*Bollards not included in delivery



## FUNCTION BOLLARDS & LIGHTING BOLLARDS



1: Lighting-Bollard 210 LED *page 76* | 2: Lighting-Bollard 220 LED *page 77*  
3: Feeder-Bollard 300-2 *page 75*



- Suitable for playgrounds and sports fields
- Low risk of injury due to rubber granulate
- High stability due to internal steel tube
- Can be used as seat



## BOLLARD 026

026-1 | Rubber granulate | 600 mm

026-2 | Rubber granulate | 900 mm

### Specifications

Dual waisted bollard made of rubber granulate with a distinct top, middle and base section.

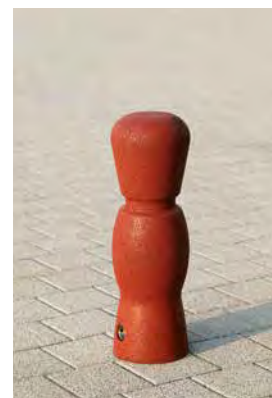
### Mounting

Removable with 3p-Technologie

Alternative: concrete embedment

### Finish

- Rubber granulate (anthracite)
- Available colours (not RAL): reddish-brown (see photo), grey, green

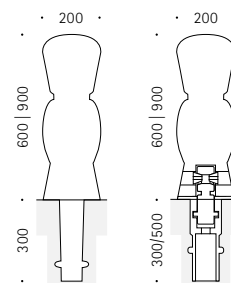


		Fixed mounting	3p-Technologie
<b>Bollard 026-1</b>	600 mm	<b>026.001</b>	<b>026.020</b>
<b>Bollard 026-2</b>	900 mm	<b>026.101</b>	<b>026.120</b>

RUB



3p-Technologie



## BOLLARD-ASHTRAY 525

Steel + Stainless steel | 1097 mm

### Specifications

Fully cylindrical bollard ashtray with a sloping slot area. Labelling in the form of an outlined, laser-printed cigarette symbol.

### Mounting

Removable with 3p-Technologie

Alternative: concrete embedment or with flange to enable screwing

### Finish

- Stainless steel 1.4301 smoothed, grain 240  
Optional: electropolished/high-gloss
- Steel S235, galvanised with powder coating in standard RAL colours or DB 703
- May be unlocked for emptying using a triangular key
- Height can be adjusted on customer request

		Fixed mounting	3p-Technologie	For screwing
<b>525</b>	Steel S235	<b>525.001</b>	<b>525.020</b>	<b>525.040</b>
<b>525</b>	Stainless steel 1.4301	<b>525.011</b>	<b>525.022</b>	<b>525.140</b>

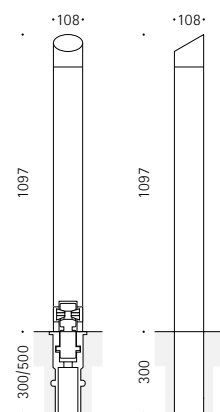
ST

AISI



3D

3p-Technologie





Type F sockets included in delivery are fitted on site into the openings provided.

## CHARGING-BOLLARD 665 with 3 sockets

Steel | 900 mm

### Specifications

Rectangular steel bollards with a flat locking top part, prepared for fitting three Type F sockets (each 230 V, 16 A, IP54) for connecting e-bikes, for example.

### Mounting

With flange to enable screwing

### Finish

- Steel S235, galvanised with powder coating in standard RAL colours or DB 703
- Height can be adjusted on customer request

### Technical information

with regard to a Type F (Schuko) socket

Power supply:	230 Volt DC
Power rating:	16 A
IP Code:	IP54

### Note

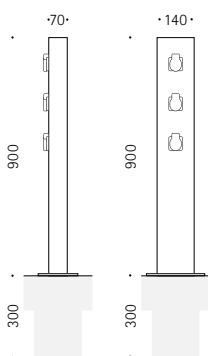
- Electrical configurations on demand at an additional cost.
- Other technical components, such as a residual-current circuit-breaker (FI), controls or cables, are not included in the scope of delivery.
- The fuse protection and connection must be carried out on site by a specialist firm (trained personnel).

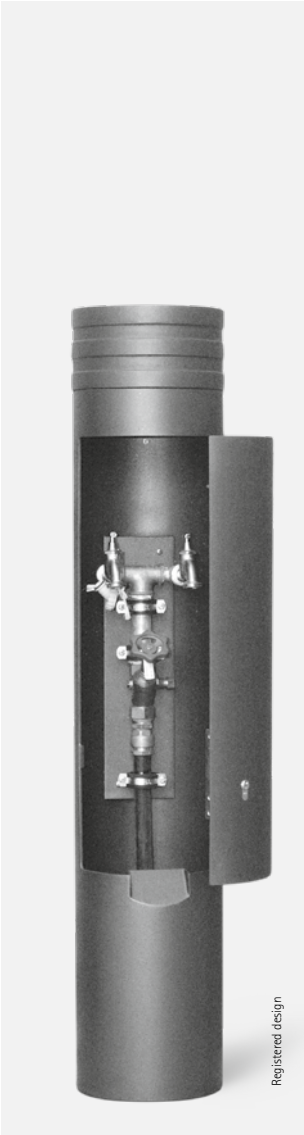
Identical with Bollard 065, see p. 63 and Lighting-Bollard 265 LED, on p. 80



Identical with  
Bollard 065 and  
Lighting-Bollard  
265 LED

- Can be used for example as a charging station for e-bikes.
- Type F (Schuko) mains sockets incl. fixing material included in delivery.





## FEEDER-BOLLARD 300-1

Steel | 1335 mm

### Specifications

Cylindrical tube with two grooves at the top and a flattened upper end. Access to the internal circuit via a lockable door, including cable slide. IP Code IP44.

### Mounting

Screw-on inside the bollard

### Finish

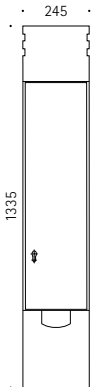
- Hot-dip galvanised steel S235, cast aluminium top, powder coating in standard RAL colours or DB 703
- Standard design with adapter plate without electricity and water connections
- Incl. cable slide (operation possible with the flap closed)

► Equipment with either electrical or water connection possible at an additional cost.

► Can be used as a bicycle charging station.



Can also be used as a bicycle charging station.



	Fixed mounting
Feeder-Bollard 300-1	300.010



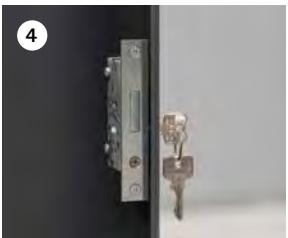
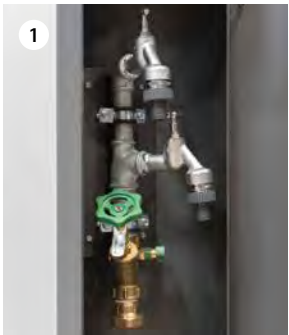
### FEEDER-BOLLARD 300-1

Eli Luxembourg



### FEEDER-BOLLARD 300-1 AND 300-2

- Fittings for electrical or water connection (optional)**  
*Example: Water connection with two 3/4" tapping points with hose coupling and an emptying facility before periods of frost.*
- Incl. cable feeder**  
*Wires can be led out through the cable feeder, enabling operation even when the flap is closed.*
- Lockable access panel**  
*With profile cylinder lock*
- Delivery incl. 3 keys**







## FEEDER-BOLLARD 300-2

Steel | 1340 mm

### Specifications

Cylindrical tube with a circumferential set-on ring in the top section as well as a hemispherical upper closure. Access to the internal circuit via a lockable door, including cable slide. IP Code IP44.

### Mounting

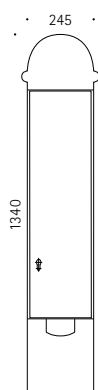
Screw-on inside the bollard



### Finish

- Hot-dip galvanised steel S235, cast aluminium top, powder coating in standard RAL colours or DB 703
- Standard design with adapter plate without electricity and water connections
- Incl. cable slide (operation possible with the flap closed)

► Equipment with either electrical or water connection possible at an additional cost.

► Can be used as a bicycle charging station.



	Fixed mounting
Feeder-Bollard 300-2	300.020
 	



Registered design



1

1 FEEDER-BOLLARD 300-2  
Daun Germany

2 FEEDER-BOLLARD 300-1/  
FEEDER-BOLLARD 300-2  
Mersch Luxembourg



2

## LED – BLAZING ROLE MODELS

*The LED lighting bollards 210, 220, 230 and 240 are setting an example in matters of energy consumption. With a power consumption of less than 4 watts per hour, they significantly reduce the urban electricity costs compared to conventional light sources.*

*All these models are available with 3p-Technology only.*



## LIGHTING-BOLLARD 210 LED

Cast aluminium | 870 mm

## Specifications

Fully cylindrical lighting bollard made of cast aluminium with a flat top. With LED lighting in the head section, 2 LED strips each with 14 LEDs and Perspex diffuser (PMMA). Operated with 24 V extra-low voltage, 2 m connector cable with plug coupling in the base. IP Code IP67.

## Mounting

Available only with 3p-Technology

## Finish

Powder coating in standard RAL colours or DB 703

## Technical information

- Light unit: 2 LED strips, each with 14 LEDs
- Power supply: 24 Volt DC
- Power input: 4 W
- Luminous flux: approx. 430 lm
- Beam angle: vertical 360°, horizontal approx. 120°
- Light colour: 6000 K, 4000 K or 2700 K
- IP Code: IP67

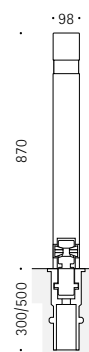
## Note

- Including power cable, consisting of a bollard-sided cable with a plug (IP67, 50 cm) and a ground-sided cable with a socket (IP67, 150 cm).
- Technical components for power supply and control are not included. The connection has to be made by the customer.

Identical with Bollard 031-1, see page 34



			3p-Technology
Lighting-Bollard 210 LED	6000 K	Cool white	210.020
Lighting-Bollard 210 LED	4000 K	Neutral white	210.120
Lighting-Bollard 210 LED	2700 K	Warm white	210.220



No risk of  
electric shock  
due to low 24 V  
voltage

## ADVANTAGES AT A GLANCE

- Significantly lower power consumption by LEDs
- Considerably longer life than conventional light sources
- LED unit is replaceable
- No risk of electric shock, since safety extra-low voltage
- The junction piece can be replaced in a few minutes only
- Quick disassembly for short-term space requirements
- Ground shell can be covered, therefore no risk of tripping

## LIGHTING-BOLLARD 220 LED

Cast aluminium | 180 · 600 mm

### Specifications

Fully cylindrical lighting bollard made of cast aluminium with a flat top. With LED lighting in the lower section, 1 LED strip of 21 LEDs and acrylic glass diffuser (PMMA). Operated with 24 V extra-low voltage, 2 m connector cable with plug coupling in the base. IP Code IP67.

### Mounting

Available only with 3p-Technologie

### Finish

Powder coating in standard RAL colours or DB 703

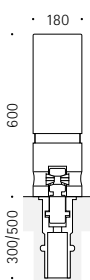
### Technical information

- Light unit: 1 LED strip of 21 LEDs
- Power supply: 24 Volt DC
- Power input: 3 W
- Luminous flux: approx. 320 lm
- Beam angle: vertical 360°, horizontal approx. 120°
- Light colour: 6000 K, 4000 K or 2700 K
- IP Code: IP67

### Note

- Including power cable, consisting of a bollard-sided cable with a plug (IP67, 50 cm) and a ground-sided cable with a socket (IP67, 150 cm).
- Technical components for power supply and control are not included. The connection has to be made by the customer.

Identical with Bollard 055-1, see page 55



			3p-Technologie
<b>Lighting-Bollard 220 LED</b>	6000 K	Cool white	<b>220.020</b>
<b>Lighting-Bollard 220 LED</b>	4000 K	Neutral white	<b>220.120</b>
<b>Lighting-Bollard 220 LED</b>	2700 K	Warm white	<b>220.220</b>





## LIGHTING-BOLLARD 230 LED

Cast aluminium | 150 · 1000 mm

### Specifications

Continuous cylindrical light bollard made of cast aluminium with a flat top. With LED lighting in the head section, 1 LED strip of 21 LEDs and acrylic glass diffuser (PMMA). Operated with 24 V extra-low voltage, 2 m connector cable with plug coupling in the base. IP Code IP67.

### Mounting

Available only with 3p-Technology

### Finish

Powder coating in standard RAL colours or DB 703

### Technical information

- Light unit: 1 LED strip of 21 LEDs
- Power supply: 24 Volt DC
- Power input: 3 W
- Luminous flux: approx. 320 lm
- Beam angle: vertical 360°, horizontal approx. 120°
- Light colour: 6000 K, 4000 K or 2700 K
- IP Code: IP67

### Note

- Including power cable, consisting of a bollard-sided cable with a plug (IP67, 50 cm) and a ground-sided cable with a socket (IP67, 150 cm).
- Technical components for power supply and control are not included. The connection has to be made by the customer.

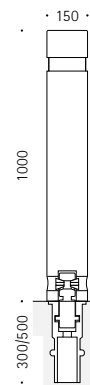
Identical with Bollard 057, see page 54



			3p-Technology
<b>Lighting-Bollard 230 LED</b>	6000 K	Cool white	<b>230.020</b>
<b>Lighting-Bollard 230 LED</b>	4000 K	Neutral white	<b>230.120</b>
<b>Lighting-Bollard 230 LED</b>	2700 K	Warm white	<b>230.220</b>



3p-Technologie





## LIGHTING-BOLLARD 240 LED

Cast aluminium | 870 mm

### Specifications

Cylindrical cast aluminium bollard with three circumferential grooves and a conical base. Ring-shaped installation of six LED spotlights in V4A stainless steel casing between the first and second groove. Operated with 12 V DC safety extra-low voltage, 2 m connector cable with plug coupling in the base. IP Code IP67.

### Mounting

Available only with 3p-Technologie

### Finish

Powder coating in standard RAL colours or DB 703

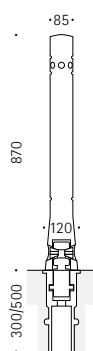
### Technical information

- Light unit: 6 × LED spotlights, Ø 25 mm
- Power supply: 12 Volt DC
- Power input: 1.5 W (6 × 0.25 W)
- Luminous flux: 6 × approx. 16 lm
- Beam angle: vertical 360°, horizontal approx. 120°
- Light colour: 5000 K (cool white), 2700 K (warm white)
- IP Code: IP67

### Note

- Including power cable, consisting of a bollard-sided cable with a plug (IP67, 50 cm) and a ground-sided cable with a socket (IP67, 150 cm).
- Technical components for power supply and control are not included. The connection has to be made by the customer.

Identical with Bollard 008, see page 31



			3p-Technologie
Lighting-Bollard 240 LED	5000 K	Cool white	240.020
Lighting-Bollard 240 LED	2700 K	Warm white	240.120



3p-Technologie



Design: hammerrunge.design | Registered design M 98017470





Lighting-Bollard 265 LED-A

## LIGHTING-BOLLARD 265 LED

Steel | 900 mm

### Specifications

#### Lighting-Bollard 265 LED-A:

Rectangular steel bollard with a flat top and a vertical LED light strip (650 mm) on both narrow sides. Each with 2 LED strips, acrylic glass (PMMA) diffuser, operated using 24 V safety extra-low voltage, 2 m connector cable with plug socket at the base of the bollard. IP Code IP67.

#### Lighting-Bollard 265 LED-B:

Rectangular steel bollard with a flat top and a vertical LED light strip (550 mm) on both wide sides. Each with 2 LED strips, acrylic glass (PMMA) diffuser, operated using 24 V safety extra-low voltage, 2 m connector cable with plug socket at the base of the bollard. IP Code IP67.

### Mounting

Removable with 3p-Technologie

Optional: with flange to enable screwing

### Finish

- Steel S235, galvanised with powder coating in standard RAL colours or DB 703
- Height can be adjusted on customer request

### Technical information

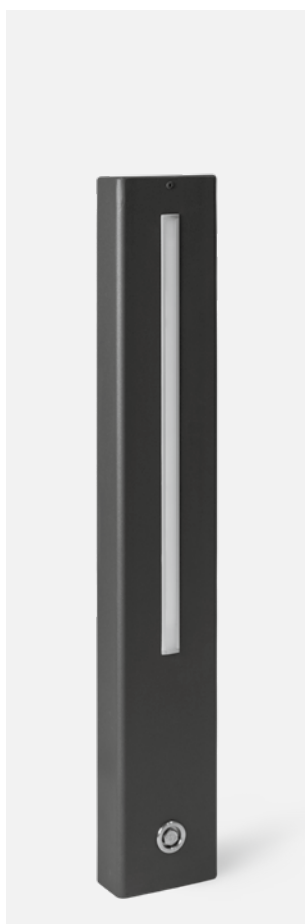
- Light unit: 2 LED strips (550 mm/650 mm)
- Power supply: 24 Volt DC
- Power input (max.): approx. 2 × 8 W (550 mm) resp. approx. 2 × 9.5 W (650 mm)
- Luminous flux (max.): approx. 2 × 360 lm (550 mm) resp. approx. 2 × 430 lm (650 mm)
- Beam angle: 120°
- Light colour: RGB + white (4000 K)
- IP Code: IP67

### Note

- Including power cable, consisting of a bollard-sided cable with a plug (IP67, 50 cm) and a ground-sided cable with a socket (IP67, 150 cm).
- Technical components for power supply and control are not included. The connection has to be made by the customer.
- The ground rosette is part of the delivery (for 3p-Technologie)  
Completely covers the ground shell  
Material: S235 steel, hot-dip galvanised and powder-coated in bollard paint

Identical with Bollard 065, see page 63

and Charging-Bollard 665 with 3 sockets, see page 73

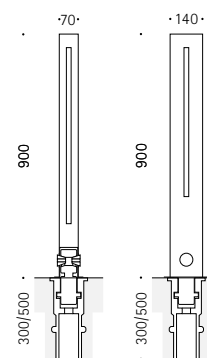


Lighting-Bollard 265 LED-B

		3p-Technologie
<b>Lighting-Bollard 265 LED-A</b>	RGB + white (4000 K)	<b>265.120</b>
<b>Lighting-Bollard 265 LED-B</b>	RGB + white (4000 K)	<b>265.220</b>



3p-Technologie



**LIGHTING-BOLLARD 266 LED**

Steel | 900 mm

**Specifications**

Square steel bollard with a flat top and a vertical LED light strip (650 mm) on two opposite sides. Each with 2 LED strips, acrylic glass (PMMA) diffuser, operated using 24 V safety extra-low voltage, 2 m connector cable with plug socket at the base of the bollard. IP Code IP67.

**Mounting**

Removable with 3p-Technology

Optional: with flange to enable screwing

**Finish**

- Steel S235, galvanised with powder coating in standard RAL colours or DB 703
- Height can be adjusted on customer request

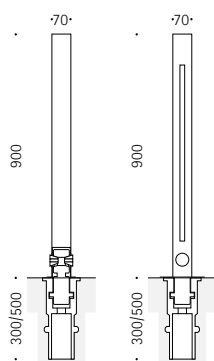
**Technical information**






- Light unit: 2 LED strip (650 mm)
- Power supply: 24 Volt DC
- Power input (max.): approx.  $2 \times 8.5 \text{ W}$
- Luminous flux (max.): approx.  $2 \times 430 \text{ lm}$
- Beam angle:  $120^\circ$
- Light colour: RGB + 4000 K
- IP Code: IP67

**Note**

- Including power cable, consisting of a bollard-sided cable with a plug (IP67, 50 cm) and a ground-sided cable with a socket (IP67, 150 cm).
- Technical components for power supply and control are not included. The connection has to be made by the customer.
- The ground rosette is part of the delivery (for 3p-Technology)  
Completely covers the ground shell  
Material: S235 steel, hot-dip galvanised and powder-coated in bollard paint

Identical with Bollard 066, see page 63



		3p-Technology
<b>Lighting-Bollard 266 LED</b>	RGB + white (4000 K)	<b>266.120</b>
    		



**LIGHTING-BOLLARD 267 LED**

Steel | 1060 mm

**Specifications**

Fully cylindrical lighting bollard made of steel with a flat top. Lighting unit, consisting of a light fixture with 4 LED strips and a diffuser made of satined acrylic glass. Operates with 24 V safety extra-low voltage. 2 m power cable with plug and socket coupling in the lower part of the bollard. IP Code IP67.

**Mounting**

Removable with 3p-Technologie

Optional: with flange to enable screwing

**Finish**

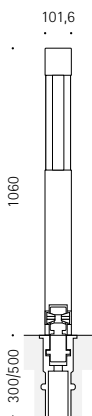
- Steel S235, galvanised with powder coating in standard RAL colours or DB 703
- Height can be adjusted on customer request

**Technical information**

- Light unit: 4 LED strips with a length of approx. 30 cm each
- Power supply: 24 volt DC
- Power input (max.): 11,5 W
- Luminous flux (max.): approx. 960 lm approx. 960 lm (lighting unit, without diffuser)
- Beam angle: 360°
- Light colour: 4000 K (white)
- IP Code: IP67 at the base

**Note**

- Including power cable, consisting of a bollard-sided cable with a plug (IP67, 50 cm) and a ground-sided cable with a socket (IP67, 150 cm).
- Technical components for power supply and control are not included. The connection has to be made by the customer.



			3p-Technologie
<b>Lighting-Bollard 267 LED</b>	4000 K	Neutral white	<b>267.020</b>



3p-Technologie



## LIGHTING-BOLLARD 200

Stainless steel | 620 mm

### Specifications

Fixed mounting: Cylindrical stainless-steel lighting bollard as permanent fixtures. With satined or clear acryl glass. Reflective slats surround the light unit. With standard lighting. Internal cable plus electric ballast for connection to a 230 Volt (AC) power source. IP Code IP54.

### Mounting

Screw-on (fixed mounting)

### Finish

- Stainless steel 1.4301 smoothed, grain 240
- Stainless steel 1.4301 with powder coating in standard RAL colours or DB 703
- Available with satined or clear acryl glass
- Supplied with standard Dulux D/E 13 watts TC-DEL lighting (26 watts available on request with a surcharge)
- Lower fitting: hexagon shell safety screws with pin, incl. key

### Note

- Including power cable, consisting of a bollard-sided cable with a plug (IP67, 50 cm) and a ground-sided cable with a socket (IP67, 150 cm).
- Technical components for power supply and control are not included. The connection has to be made by the customer.

	Light unit	Acryl glass	Finish	Fixed mounting
Lighting-Bollard 200	standard	Clear	Pickled/smoothed	200.001
Lighting-Bollard 200	standard	Satined	Pickled/smoothed	200.010
Lighting-Bollard 200	standard	Clear	Powder coating	201.001
Lighting-Bollard 200	standard	Satined	Powder coating	201.010



### Technical information

(Standard lighting)

- Light unit: Osram Dulux TC-DEL 13 watts
- Connection voltage: 230 Volt AC
- Luminous flux: 900 lm
- Light colour: 830 K (warm white)
- Protection class 1, IP Code IP54



Stainless steel, satined acryl glass







## LIGHTING-BOLLARD 200 LED

Stainless steel | 620 mm

### Specifications

Fixed mounting: Cylindrical stainless-steel lighting bollard as permanent fixtures. With satined or clear acryl glass. Reflective slats surround the light unit. With energy efficient LED technology. Internal cable plus electric ballast for connection to a 230 Volt (AC) power source. IP Code IP54.

### Mounting

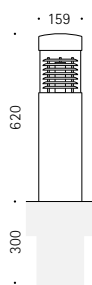
Screw-on (fixed mounting)

### Finish

- Stainless steel 1.4301 smoothed, grain 240
- Stainless steel 1.4301 with powder coating in standard RAL colours or DB 703
- Available with satined or clear acryl glass
- Supplied with LED stick with 3 × 3 LEDs
- Lower fitting: hexagon shell safety screws with pin, incl. key

### Note

- Including power cable, consisting of a bollard-sided cable with a plug (IP67, 50 cm) and a ground-sided cable with a socket (IP67, 150 cm).
- Technical components for power supply and control are not included. The connection has to be made by the customer.



	Light unit	Acryl glass	Finish	Fixed mounting
<b>Lighting-Bollard 200 LED</b>	LED stick	Clear	Pickled/smoothed	<b>200.101</b>
<b>Lighting-Bollard 200 LED</b>	LED stick	Satined	Pickled/smoothed	<b>200.110</b>
<b>Lighting-Bollard 200 LED</b>	LED stick	Clear	Powder coating	<b>201.101</b>
<b>Lighting-Bollard 200 LED</b>	LED stick	Satined	Powder coating	<b>201.110</b>



LED, Stainless steel, clear acryl glass



### Technical information

(LED stick)

- Light unit: LED stick with 3 × 3 LEDs
- Connection voltage: 230 Volt AC
- Power: 9 watts (incl. 11 watts driver unit)
- Luminous flux: 1000 lm
- Max. power input: 350 mA
- Light colour: 3000 K (warm white)
- Protection class 1, IP Code IP54

## 03

## BENCHES &amp; TABLES

Since park benches are meant to invite passers-by to rest and relax, they should be comfortable. Located in public parks or squares they add to the urban space with their aesthetic appearance. In public places, the bench is not only a resting place or viewpoint: meeting others, communicating with people of different ages, strangers before, symbolise the function of the bench in the urban context.

ABES benches are a tasteful composition of robust steel, stainless steel and aluminium frames, which – combined with wooden, steel and stainless steel supports – make a finely designed outdoor furniture. Weatherproof materials and solid anchoring to the ground protect the benches from vandalism and can be installed all year round.

BENCH 146-2

page 94



1: Bench 100 page 98 | 2: Bench 141-1 page 90 | 3: Seating-Bollard 105 page 109


















CAST  
ALUMINIUM  
FRAME


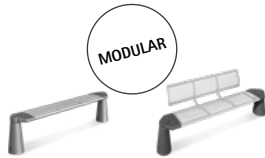







## 03 BENCHES & TABLES Overview

									
		100	103	103	113	113	104	107-1	107-2
		With back rest	Stainless steel supports	Wooden supports	Stainless steel supports	Wooden supports	Modular	Round tube frame	
Catalogue page		98	100	101	100	101	106	102	
NEW 2022					2022	2022			
Available in the online shop as a 3D model/for AR									
Model	Bench without back rest	-	-	-	■	■	■	■	-
	Bench with back rest	■	■	■	■	■	-	-	■
	Stool	-	-	-	-	-	■	-	-
	Chair	-	-	-	-	-	-	-	-
	Table	-	-	-	-	-	-	-	-
Material	Cast aluminium (with powder coating)	-	-	-	-	-	■	-	-
	Steel S235 (galvanised with powder coating)	■	-	■	-	-	-	■	■
	Stainless steel 1.4301 (smoothed, grain 240)	■	■	■	■	■	-	■	■
	Modular configuration	-	-	-	-	-	■	-	-
Mounting	For screwing	■	■	■	■	■	■	■	■
	For concrete embedding	-	-	-	-	-	-	■	■
	Free standing	■	■	■	■	■	■	(■)	(■)
	Removable with 3p-Technology	-	-	-	-	-	-	-	-
Options	Individual color (RAL/DB)	○	○	○	○	○	○	○	○
	Individual length	○	-	-	-	-	-	-	-
	Individual (seat) height	-	○	○	○	○	-	○	○
	Individual wooden slats	○	-	○	-	-	-	-	-
Measurements	Total width (mm)	1700	2380	2380	2380	1896	modular	1585	1585
	Total height (mm)	740	835	835	835 (445)	835 (445)	modular	576	840
	Total depth (mm)	760	730	730	614	614	modular	340	522
	Seat width (mm)	1700	2380	2380	2284	1800	modular	1500	1500
	Seat height (mm)	420	430	430	445	445	452	437	437
	Weight (approx. in kg)	79	90	62,5	75	52	modular	26	46
	Design	hrd	Charles O. Job	Charles O. Job					

									
		143-1	143-2	143	144-1	144-2	144	146-1	146-2
		Without back rest	With back rest	Table	Without back rest	With back rest	Table	Without back rest	With back rest
Catalogue page		92			93			94	
NEW 2022									
Available in the online shop as a 3D model/for AR									
Model	Bench without back rest	■	-	-	■	-	-	■	-
	Bench with back rest	-	■	-	-	■	-	-	■
	Stool	-	■	-	-	-	-	-	-
	Chair	-	-	■	-	-	-	-	-
	Table	-	-	■	-	-	■	-	-
Material	Cast aluminium (with powder coating)	-	-	-	-	-	-	■	■
	Steel S235 (galvanised with powder coating)	■	■	■	■	■	■	-	-
	Stainless steel 1.4301 (smoothed, grain 240)	-	-	-	-	-	-	-	-
	Modular configuration	-	-	-	-	-	-	-	-
Mounting	For screwing / for screw fixing	■	■	■	■	■	■	■	■
	For concrete embedding	■	■	■	■	■	■	-	-
	Free standing	■	■	■	-	-	-	■	■
	Removable with 3p-Technology	-	-	-	-	-	-	-	-
Options	Individual color (RAL/DB)	○	○	○	○	○	○	○	○
	Individual length	○	○	○	○	○	○	○	○
	Individual (seat) height	○	○	○	○	○	○	-	-
	Individual wooden slats	○	○	○	○	○	○	○	○
Measurements	Total width (mm)	610/1590/1890	610/1590/1890	1587	1587	1587	1587	2100	2100
	Total height (mm)	453	823	750	453	813	750	602	877
	Total depth (mm)	444	544	735	400	544	735	615	588
	Seat width (mm)	520/1500/1800	520/1500/1800	-	1500	1500	-	2000	2000
	Seat height (mm)	453	453	-	453	453	-	447	447
	Weight (approx. in kg)	13/18	16/23	31	18	23	31	18	23
	Design	Stefan Wehrmann 3Dsign			Stefan Wehrmann 3Dsign			Stefan Wehrmann 3Dsign	

■ = Model | ● = Finish | ○ = Option (with a surcharge) | - = Not available | hrd = hammer.runge.design

									
109-1	109-2	121-1	121-2	131	141-1	141-2	142-1	142-2	
Rectangular tube frame		Without back rest	With back rest	Without back rest	Without back rest	With back rest	Without back rest	With back rest	
103		105		104	90		91		
									
■	-	■	-	■	■	-	■	-	
-	■	-	■	-	-	■	-	■	
-	-	-	-	-	-	-	-	■	
-	-	-	-	-	-	-	-	-	
-	-	■	■	■	-	-	-	-	
■	■	-	-	-	■	■	■	■	
■	■	-	-	-	-	-	-	-	
-	-	■	■	■	-	-	-	-	
■	■	■	■	■	-	-	-	-	
○	○	○	-	○	○	○	○	○	
-	-	-	-	-	○	○	○	○	
○	○	-	-	-	-	-	-	-	
-	-	-	-	○	○	○	○	○	
1585	1585	2060	2060	2060	960/1940/2240	960/1940/2240	1702/2002	722	
576	840	458	820	450	453	823	550	550	
340	522	340	528	340	430	537	440	440	
1500	1500	1500	1500	1500	520/1500/1800	520/1500/1800	1500/1800	520	
437	437	458	458	450	453	453	453	453	
26	46	48	61	48	22	27	22	16	
		hammer.runge.design		hammer.runge.design	Stefan Wehrmann		Stefan Wehrmann 3Dsign		

								
147	148-1	148-2	148	145	105	108	110	1.120
With back rest	Without back rest	With back rest	Table	Stool	Seating bollard	Lean-on bench	Leaning bench	Lounger
99	96-97			107	109	108	108	109
								
-	■	-	-	-	-	-	-	-
■	-	■	-	■	■	-	-	-
-	-	-	-	-	-	-	-	-
-	-	-	■	-	■	-	-	-
-	-	-	-	■	-	-	-	-
-	-	-	-	-	■	-	-	-
■	■	■	■	■	-	■	■	■
-	-	-	-	-	-	-	-	-
-	■	■	-	-	-	-	-	-
■	■	■	■	■	■	■	■	-
■	-	-	-	■	■	■	-	-
■	■	■	■	-	-	-	-	■
-	-	-	-	-	■	-	-	-
○	○	○	○	○	○	○	○	○
-	○	○	○	○	-	-	○	-
-	-	-	-	○	-	-	-	-
-	○	○	○	○	-	○	○	-
1800	520/1500/1800	520/1500/1800	1800	401	574	350	740	1000
800	500	920	750	453	750	450	1250	760
780	420	420	681	401	574	350	300	1840
1800	520/1500/1800	520/1500/1800	-	342	-	350	-	1000
448	500	500	-	453	-	450	-	420
40	18	20	-	9	12	8	105	62,5
Max Steffen			Stefan Wehrmann		Charles O. Job	J. P. Gillen		

Every bench is also available without wood (except lean-on bench 108 and lounger 1.120). Blueprints for the wooden slats are then part of the delivery.





## BENCH 141

Steel

141-1 | without back rest

141-2 | with back rest

### Specifications

**Bench 141-1 without back rest**, consisting of two semi-circular steel side parts capable of holding five wooden slats ending level with the steel frames.

### Bench 141-2 with back rest

Optionally includes a back rest consisting of three wooden slats connected to steel girder.

### Mounting

Screw-on

### Finish

- Steel S235, galvanised with powder coating in standard RAL colours or DB 703
- Seating slats made of Robinia wood. Other wood species (e. g. meranti, douglas fir or thermo ash) are available on request at a surcharge
- The following changes are possible for an extra price: colour, length and wooden surface

		Seat width	Seat height	W	D	H	For screwing
<b>Bench 141-1</b>	Without back rest	1800	453	2240	430	453	<b>141.001</b>
<b>Bench 141-2</b>	With back rest	1800	453	2240	537	823	<b>141.101</b>





## BENCH 142

Steel

**142-1** | without back rest

**142-2** | with back rest

### Specifications

**Bench 142-1 without back rest**, consisting of two steel side parts bent outwards at the top, capable of holding five wooden slats. The side parts are higher than the seating slats and serve as armrests.

### Bench 142-2 with back rest

Optionally includes a back rest consisting of three wooden slats connected to steel girders.

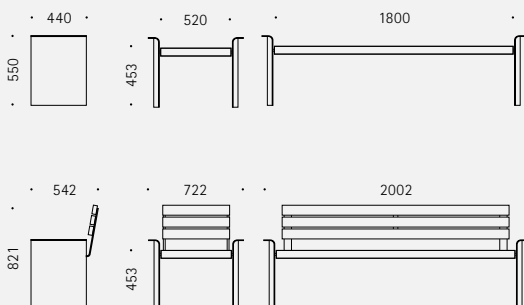
### Mounting

Screw-on

### Finish

- Steel S235, galvanised with powder coating in standard RAL colours or DB 703
- Seating slats made of Robinia wood. Other wood species (e. g. meranti, douglas fir or thermo ash) are available on request at a surcharge
- The following changes are possible for an extra price: colour, length and wooden surface

		Seat width	Seat height	W	D	H	For screwing
<b>Bench 142-1</b>	Bench without back rest	1800	453	2002	440	550	<b>142.001</b>
<b>Bench 142-1</b>	Stool	520	453	722	440	550	<b>142.002</b>
<b>Bench 142-2</b>	Bench with back rest	1800	453	2002	542	821	<b>142.101</b>
<b>Bench 142-2</b>	Chair	520	453	722	542	821	<b>142.102</b>



Design: Stefan Wehrmann 3Dsign



## BENCH 143

Steel

143-1 | without back rest

143-2 | with back rest

### Specifications

**Bench 143-1 without back rest**, consisting of two perpendicular side parts made of steel profiles, which hold five wooden slats.

**Bench 143-2 with back rest** consisting of three wooden slats connected to steel girders.

### Mounting

Screw-on or concrete embedment

### Finish

- Steel S235, galvanised with powder coating in standard RAL colours or DB 703
- Seating slats made of Robinia wood. Other wood species (e. g. meranti, douglas fir or thermo ash) are available on request at a surcharge
- The following changes are possible for an extra price: colour, length and wooden surface

## TABLE 143

### Specifications

Table consisting of two perpendicular side parts made of steel profiles and a rectangular steel frame into which eight wooden slats are set flush. The lower areas of the side parts are stabilised lengthways and diagonally by supports.

		Seat width	Seat height	W	D	H	For concrete embedding	For screwing
<b>Bench 143-1</b>	Bench w/o back rest	1800	453	1890	444	453	<b>143.051</b>	<b>143.001</b>
<b>Bench 143-1</b>	Bench w/o back rest	1500	453	1590	444	453	<b>143.053</b>	<b>143.003</b>
<b>Bench 143-1</b>	Stool	520	453	610	444	453	<b>143.052</b>	<b>143.002</b>
<b>Bench 143-2</b>	Bench with back rest	1800	453	1890	544	823	<b>143.151</b>	<b>143.101</b>
<b>Bench 143-2</b>	Bench with back rest	1500	453	1590	544	823	<b>143.153</b>	<b>143.103</b>
<b>Bench 143-2</b>	Chair	520	453	610	544	823	<b>143.152</b>	<b>143.102</b>
<b>Table 143</b>		-	-	1587	735	750	<b>143.550</b>	<b>143.500</b>





## BENCH 144

Steel

**144-1** | without back rest

**144-2** | with back rest

### Specifications

**Bench 144-1 without back rest**, consisting of two T-shaped side parts made of steel profiles, connected to a rectangular steel frame into which four wooden slats are set flush as a seating slat.

**Bench 144-2 with back rest** consisting of three wooden slats connected to steel girders.

### Mounting

Screw-on or concrete embedment

### Finish

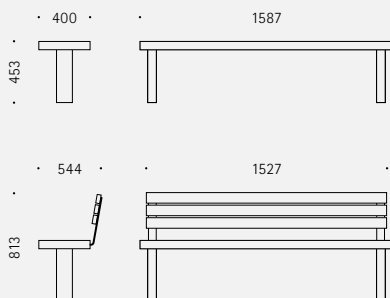
- Steel S235, galvanised with powder coating in standard RAL colours or DB 703
- Seating slats made of Robinia wood. Other wood species (e. g. meranti, douglas fir or thermo ash) are available on request at a surcharge
- The following changes are possible for an extra price: colour and wooden surface

## TABLE 144

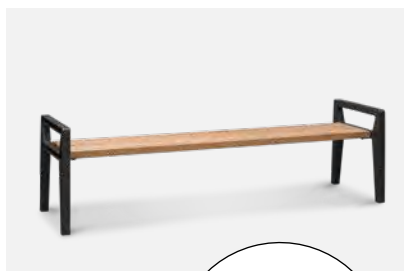
### Specifications

Table consisting of two T-shaped side parts made of steel profiles, connected to a rectangular steel frame into which eight wooden slats are set flush. The lower areas of the side parts are stabilised lengthways by a support.

		Seat width	Seat height	W	D	H	For concrete embedding	For screwing
<b>Bench 144-1</b>	Without back rest	1500	453	1587	400	453	<b>144.051</b>	<b>144.001</b>
<b>Bench 144-2</b>	With back rest	1500	453	1587	544	813	<b>144.151</b>	<b>144.101</b>
<b>Table 144</b>		-	-	1587	735	750	<b>144.550</b>	<b>144.500</b>



Design: Stefan Wehrmann 3Dsign



CAST  
ALUMINIUM  
FRAME

## BENCH 146

Cast aluminium

146-1 | without back rest

146-2 | with back rest

### Specifications

#### Bench 146-1 without back rest

Armrests and wood slatting, consisting of two cast aluminium frames, each with two legs, an inwardly inclined panel and supports for the seat.

#### Bench 146-2 with back rest

Armrests and wood slatting, consisting of two cast aluminium frames, each with two legs, an inwardly inclined panel and supports for the seat. The back rest and armrests merge with one another, forming an almost 90° angle to one another.

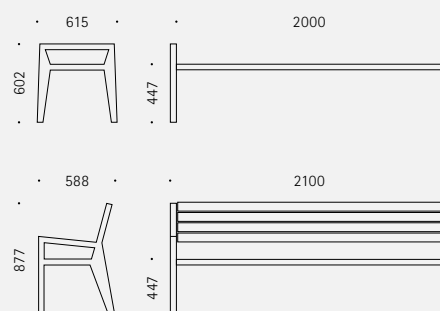
### Mounting

Screw-on

### Finish

- Powder coating in standard RAL colours or DB 703
- Seating slats made of hardwood
- The following changes are possible for an extra price: colour, length and wooden surface

		Seat width	Seat height	W	D	H	For screwing
<b>Bench 146-1</b>	Without back rest	2000	447	2100	615	602	<b>146.101</b>
<b>Bench 146-2</b>	With back rest	2000	447	2100	588	877	<b>146.201</b>



Design: Stefan Wehrmann 3Design







### Advantages at a glance

- ⊕ Durable frame made of cast aluminium with powder coating
- ⊕ Reasonably priced
- ⊕ Modern, elegant design
- ⊕ Ideal for city centres and parks



**CAST  
& COST-  
EFFECTIVE**



## BENCH 148

Steel

148-1 | without back rest

148-2 | with back rest

### Specifications

**Bench 148-1 without back rest** is a park bench without back rest and arm rests, comprising a frame with rectangular side panels made of sheet steel, to take up five wooden slats which fit flush with the frame.

**Bench 148-2 with back rest** is a park bench with back rest and arm rests, comprising a frame with rectangular side panels made of sheet steel, to take up five wooden slats which fit flush with the frame. Back rest consisting of four wooden slats connected by flat steel girders to the main frame.

### Mounting

Free standing or screw-on (recommended)

### Finish

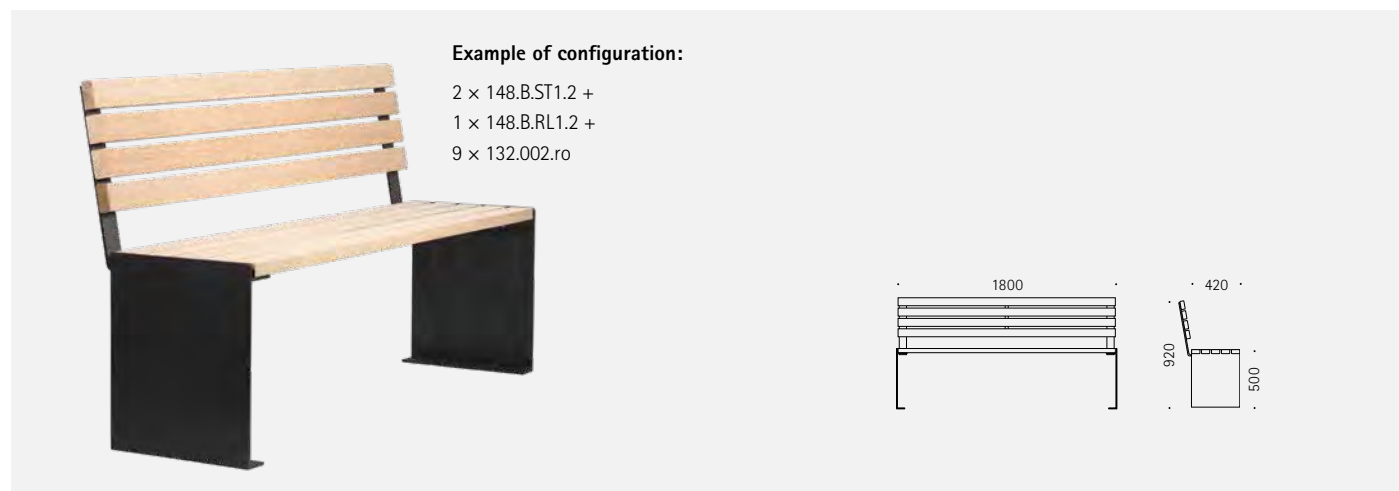
- Steel S235, galvanised with powder coating in standard RAL colours or DB 703
- Seating slats made of Robinia wood. Other wood species (e. g. meranti, douglas fir or thermo ash) are available on request at a surcharge
- The following changes are possible for an extra price: colour, length and wooden surface

		For screwing
<b>Bench 148</b>	Frame-side, galvanised	<b>148.B.ST1.1</b>
<b>Bench 148</b>	Frame-side, galvanised with powder coating	<b>148.B.ST1.2</b>
<b>Bench 148</b>	Frame-centre section, galvanised	<b>148.B.ST2.1</b>
<b>Bench 148</b>	Frame-centre section, galvanised with powder coating	<b>148.B.ST2.2</b>
<b>Bench 148</b>	Backrest-frame pair, galvanised	<b>148.B.RL1.1</b>
<b>Bench 148</b>	Backrest-frame pair, galvanised with powder coating	<b>148.B.RL1.2</b>
<b>Wooden slat*</b>	Robinia, 1800 mm	<b>132.002.ro</b>

\*) A seat requires 5 wooden slats, a backrest 4 wooden slats. Other types of wood and lengths are available on request.



2022





**MODULAR**  
Configure your  
bench in our  
online shop!

#### MODULAR

### BENCH 148

*Modular bench combination with row connection*

#### Specifications

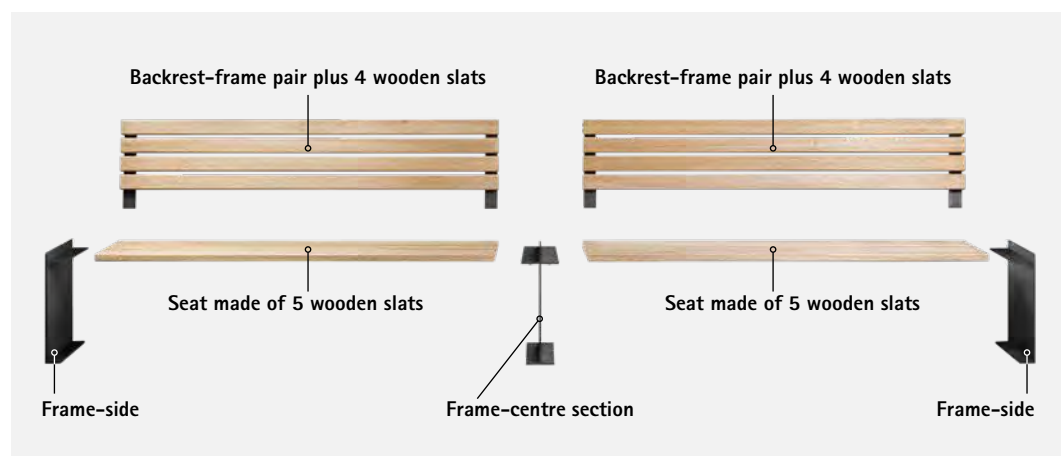
Modular park bench with flat steel frame of rectangular side parts without armrests, which serve as a receptacle for five flush-fitting wooden supports. Frame with holder for wooden slats on one or both sides, enabling row connections. Matching Table 148 is available in the same design on request.

#### Mounting

Free standing or screw-on (recommended)

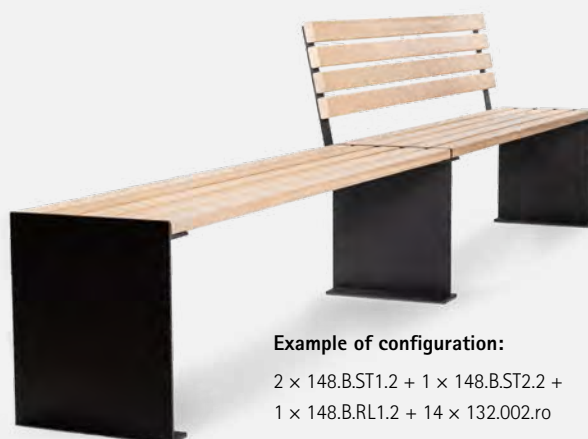
#### Finish

See page 96



#### Example of configuration:

2 × 148.B.ST1.2 + 1 × 148.B.ST2.2 +  
2 × 148.B.RL1.2 + 18 × 132.002.ro



#### Example of configuration:

2 × 148.B.ST1.2 + 1 × 148.B.ST2.2 +  
1 × 148.B.RL1.2 + 14 × 132.002.ro



BENCH 100

"The Original Design"

Steel + Stainless steel

Specifications

Park bench with back rest made of 140 mm wide steel profiles to hold the wooden slats. The profiles are bent and closed at the footing. The wooden slats align with the frames.

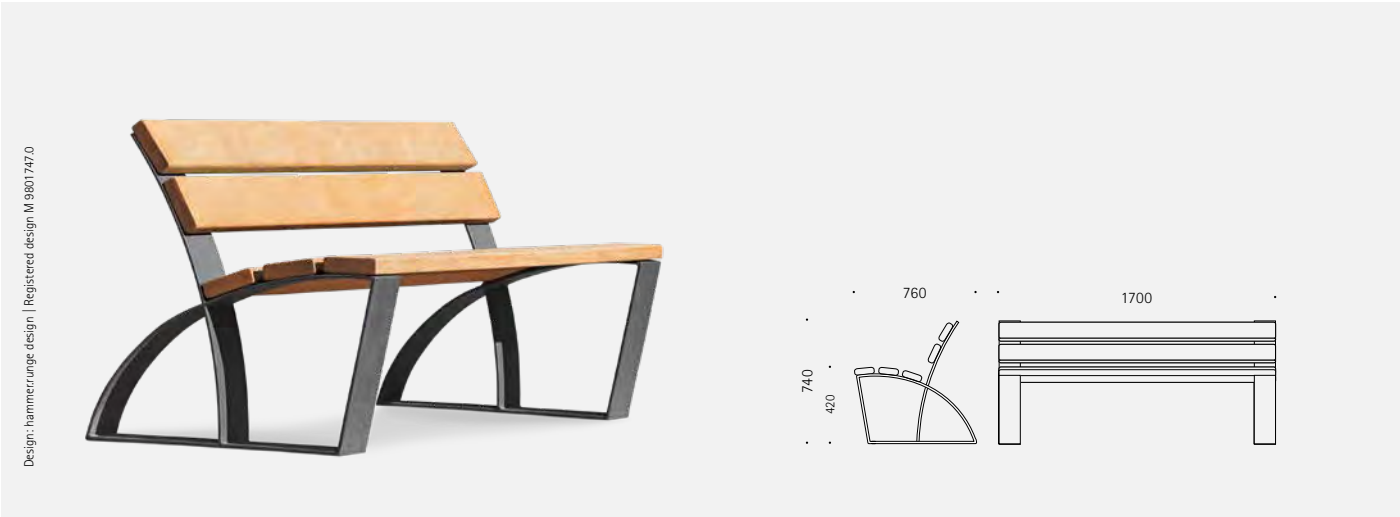
Mounting

Screw-on

Finish

- Stainless steel 1.4301 smoothed, grain 240  
Optional: electropolished/high-gloss
- Steel S235, galvanised with powder coating in standard RAL colours or DB 703
- Seating slats made of hardwood
- The following changes are possible for an extra price:  
colour, length and wooden surface

		Seat width	Seat height	W	D	H	S235 steel	Stainless steel 1.4301
Bench 100	With back rest	1700	420	1700	760	740	100.002	100.003







## BENCH 147

Steel

### Specifications

Bench with back rest, frame made of bent steel tubes without armrests, accommodating two seats conically converging towards the center, and a slanted wooden back rest.

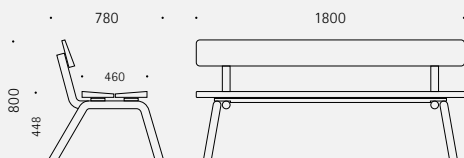
### Mounting

Free standing, Screw-on or concrete embedment

### Finish

- Steel S235, galvanised with powder coating in standard RAL colours or DB 703
- Seating slats made of hardwood

		Seat width	Seat height	W	D	H	Steel S235
<b>Bench 147</b>	Free standing	1800	448	1800	780	800	<b>147.101</b>
<b>Bench 147</b>	For screwing	1800	448	1800	780	800	<b>147.111</b>
<b>Bench 147</b>	For concrete embedding	1800	448	1800	780	800	<b>147.151</b>



Design: Max Steffen | Registered design





## BENCH 103

### WITH STAINLESS STEEL SUPPORTS

Stainless steel

#### Specifications

Bench made of curved and mitred stainless steel tubes, with two diagonally opposite backrests. The stainless steel frame holds seats and backrests made of closed stainless steel profiles.

#### Mounting

Screw-on (recommended) or free standing

#### Finish

- Stainless steel 1.4301 smoothed, grain 240
- Optional: electropolished/high-gloss



	Supports	Seat width	Seat height	W	D	H	Stainless steel 1.4301
<b>Bench 103</b>	Stainless steel	2 x approx. 900	430	2380	730	835	<b>103.203</b>



Design: Charles O. Job | Registered design 129813

Stainless steel supports

New design with stainless steel seats for the "Métropole européenne de Lille" (MEL), World Capital of Design 2020

[www.designiscapital.com/projet](http://www.designiscapital.com/projet)

730

835  
430

2380



## BENCH 103

### WITH WOODEN SUPPORTS

Steel + Stainless steel

#### Specifications

Park bench made of bent steel tubes adjusted to miter with two diagonally opposite back rests. The steel frame is designed to accommodate seating supports and back rests made of wood.

#### Mounting

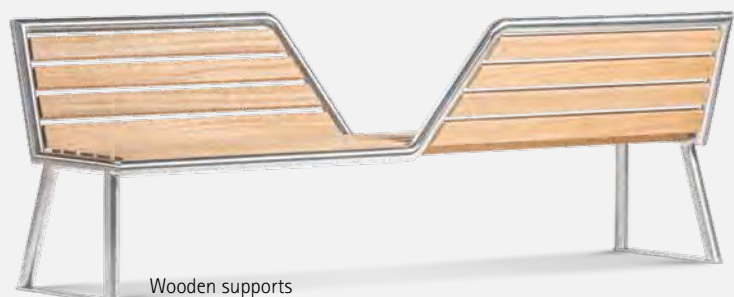
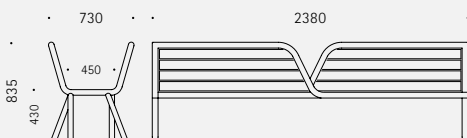
Screw-on (recommended) or free standing

#### Finish

- Stainless steel 1.4301 smoothed, grain 240  
Optional: electropolished/high-gloss
- Steel S235, galvanised with powder coating in standard RAL colours or DB 703



	Supports	Seat width	Seat height	W	D	H	S235 steel	Stainless steel 1.4301
<b>Bench 103</b>	Wood	2 × approx. 900	430	2380	730	835	<b>103.102</b>	<b>103.103</b>



Design: Charles O. Job | Registered design 129813



- Also available as bench for senior\* citizen
- 10 cm higher
  - Seating surface tilted slightly forward

### BENCH 107

#### ROUND TUBE FRAME

Steel + Stainless steel

107-1 | without back rest

107-2 | with back rest

#### Specifications

**Bench 107-1 without back rest**, consisting of two U-shaped steel tube frames including mounting options for a seating slat made of several steel tube profiles.

**Bench 107-2 with back rest**, connected to the seat's rear tube with crescent-shaped suspensions.

#### Mounting

Screw-on (recommended) or free standing

#### Finish

- Stainless steel 1.4301 pickled  
Optional: electropolished/high-gloss
- Steel S235, galvanised with powder coating in standard RAL colours or DB 703
- Other colours and lengths available on request at a surcharge

		Seat width	Seat height	W	D	H	S235 steel	Stainless steel 1.4301
<b>Bench 107-1</b>	Without back rest	1500	437	1585	340	576	<b>107.001</b>	<b>107.003</b>
<b>Bench 107-2</b>	With back rest	1500	437	1585	522	840	<b>107.101</b>	<b>107.103</b>



\*Against surcharge





## BENCH 109

### RECTANGULAR TUBE FRAME

Steel

**109-1** | without back rest

**109-2** | with back rest

#### Specifications

**Bench 109-1 without back rest**, consisting of two rectangular hollow steel elements without armrests, including attachment options for a seat made of multiple steel tube profiles.

**Bench 109-2 with back rest**, connected to the seat's rear tube with crescent-shaped suspensions.

#### Mounting

Removable with 3p-Technology, with flange to enable screwing or concrete embedment

**Bench 109-3 Seat cover**, to bolt onto stone or concrete.

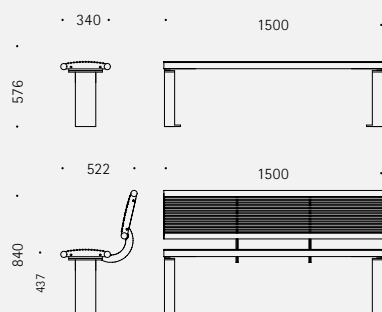
#### Finish

- Steel S235, galvanised with powder coating in standard RAL colours or DB 703
- Other colours and lengths available on request at a surcharge

		Seat width	Seat height	W	D	H	Steel S235
<b>Bench 109-1</b>	Without back rest, for screwing	1500	437	1585	340	437	<b>109.102</b>
<b>Bench 109-1</b>	Without back rest, with 3p-Technology	1500	437	1585	340	437	<b>109.120</b>
<b>Bench 109-1</b>	Without back rest, for concrete embedment	1500	437	1585	340	437	<b>109.101</b>
<b>Bench 109-2</b>	With back rest, for screwing	1500	437	1585	522	840	<b>109.202</b>
<b>Bench 109-2</b>	With back rest, with 3p-Technology	1500	437	1585	522	840	<b>109.220</b>
<b>Bench 109-2</b>	With back rest, for concrete embedment	1500	437	1585	522	840	<b>109.201</b>
<b>Bench 109-3</b>	Screw-on seat cover	1500	-	1585	340	-	<b>109.302</b>



3p-Technologie



Rectangular tube frame  
(also available with 3p-Technology)



MODULAR

## BENCH 131

Cast aluminium

### Specifications

Bench system without back rest, made of at least two conical cast aluminium bollards with a diameter of 220 mm at the base. The upper end serves to support three seating slats. Each bench bollard has a groove all around the top to distinguish the bollards from the seat support.

### Mounting

Removable with 3p-Technology

Alternative: concrete embedment

### Finish

- Bench bollard: cast aluminium, powder coating in standard RAL colours or DB 703 (other colours available on request at a surcharge)
- Seating slats made of hardwood
- The following changes are possible for an extra price: colour, wooden surface

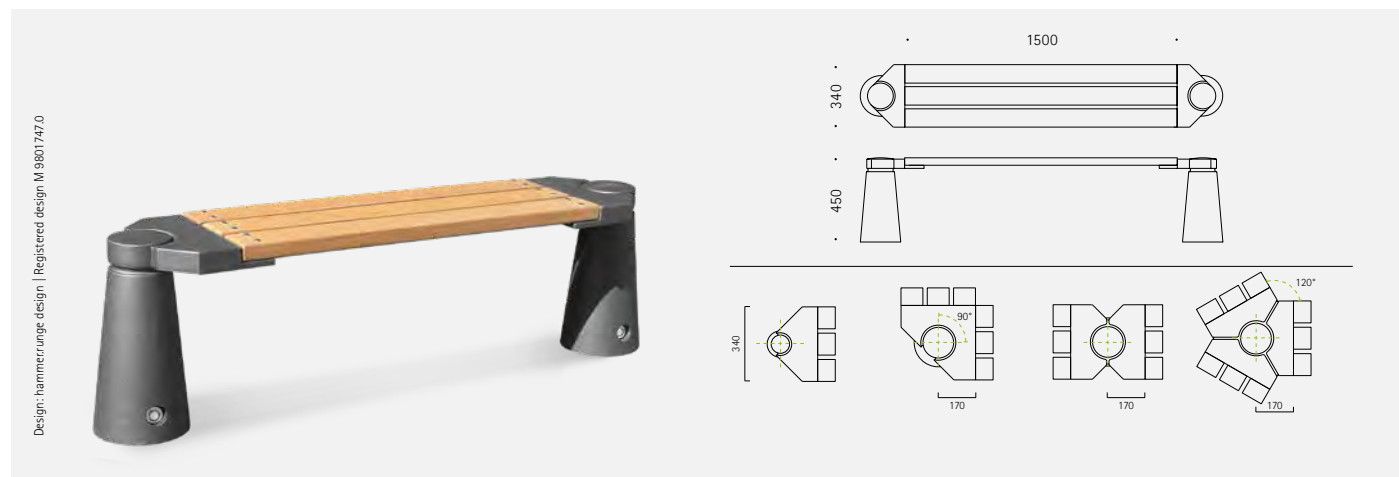
		Fixed mounting	Removable (3p-Technology) *
<b>Bench 131</b>	Bench bollard as end piece	<b>131.004</b>	<b>131.005</b>
<b>Bench 131</b>	90° right-angle junction	<b>131.006</b>	<b>131.007</b>
<b>Bench 131</b>	180° series junction	<b>131.008</b>	<b>131.009</b>
<b>Bench 131</b>	120° star-shaped formation	<b>131.010</b>	<b>131.011</b>
<b>Bench 131</b>	Set of hardwood bench seats		<b>132.001</b>

### \*Bench 131 equipment (removable with 3p-Technology)

- Ground shell 300 mm (000.001)
- Junction piece (000.008)
- Clamping cone set with hex head screw (3p-SPK-N1-N2-6K)

### Example of a Bench 131

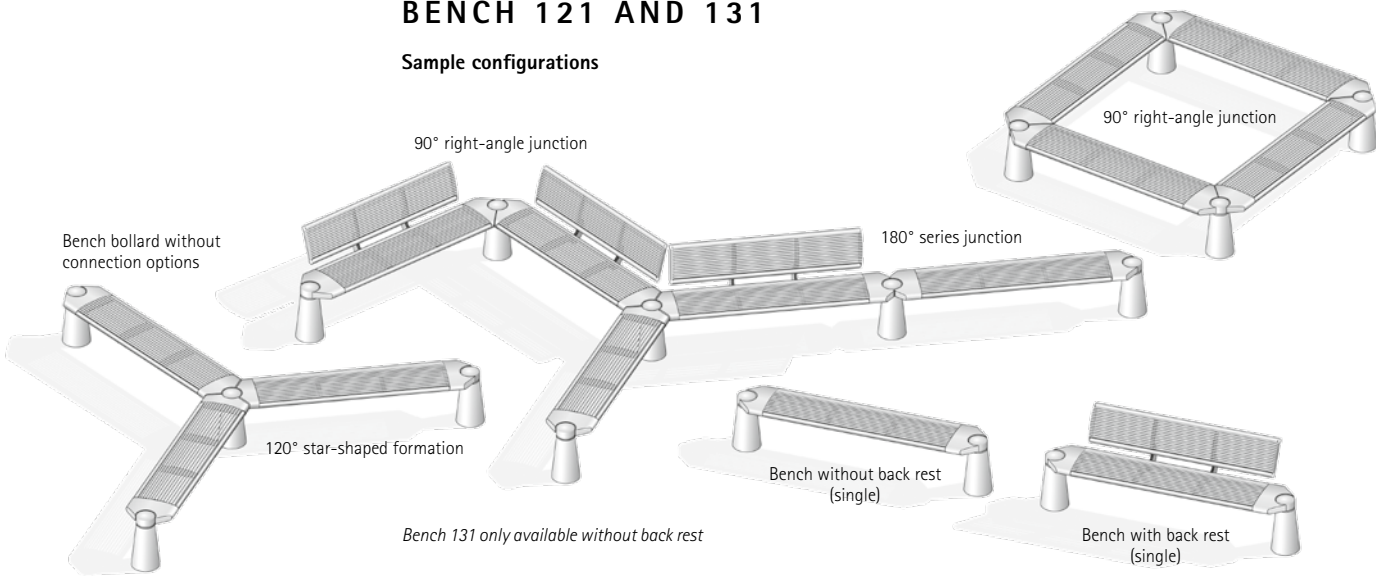
	Fixed mounting	Removable (3p-Technology)*
2 cast aluminium bench bollards	<b>2 x 131.004</b>	<b>2 x 131.005</b>
1 set of hardwood bench seats	<b>1 x 132.001</b>	<b>1 x 132.001</b>





## BENCH 121 AND 131

## Sample configurations



## BENCH 121

Cast aluminium

121-1 | without back rest

121-2 | with back rest

MODULAR

**\*Bench 121 equipment (removable with 3p-Technology)**

- Ground shell 300 mm (000.001)
- Junction piece (000.008)
- Clamping cone set with hex head screw (3p-SPK-N1-N2-6K)

**Specifications**

**Bench 121-1 without back rest**, made of two conical cast aluminium bollards with a diameter of 220 mm at the base. The upper end serves to support 14 seat strips. Each bench bollard has a groove all around the top to distinguish the bollards from the seat support.

**Bench 121-2 with back rest**, connected to the rear tube of the seat support on sickle-shaped suspensions.

**Mounting**

Removable with 3p-Technology

Alternative: concrete embedment

**Finish**

- Bench bollard: cast aluminium, powder coating in standard RAL colours or DB 703 (other colours available on request at a surcharge)
- Bench seats and back rests: Stainless steel 1.4301 smoothed, grain 240
- Bench seats and back rests: Steel S235, galvanised with powder coating in standard RAL colours or DB 703

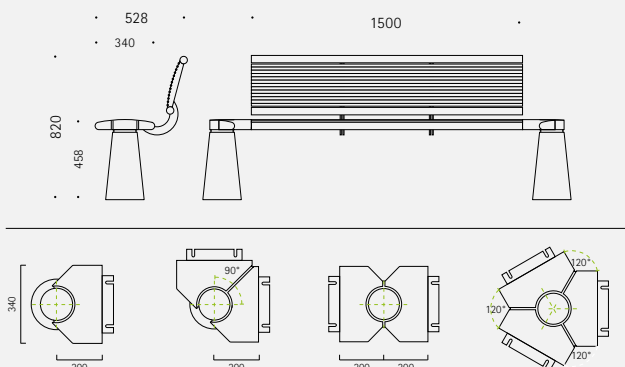


More information and article numbers in the ABES Online Shop:

[https://abes-online.com/en/prod\\_cat/benches-and-tables/benches/](https://abes-online.com/en/prod_cat/benches-and-tables/benches/)



3p-Technologie



Design: hammerrunge design | Registered design M 9801747.0



**MODULAR**

## BENCH 104

Cast aluminium

### Specifications

Cast aluminium bench system without back rest, consisting of four basic units. The system has a modular construction:

- A straight seating unit
- A seating unit bent at a 45° angle
- A seating unit bent at a 90° angle
- Base with inward-facing legs, joined to a plate at the lower end, with the upper end of the plate supporting the seating units

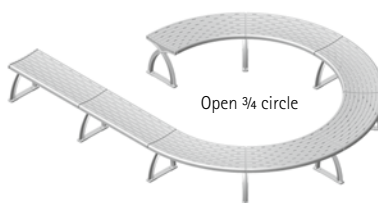
### Mounting

Screw-on (recommended) or free standing

### Finish

- Powder coating in standard RAL colours or DB 703 (other colours available on request at a surcharge)

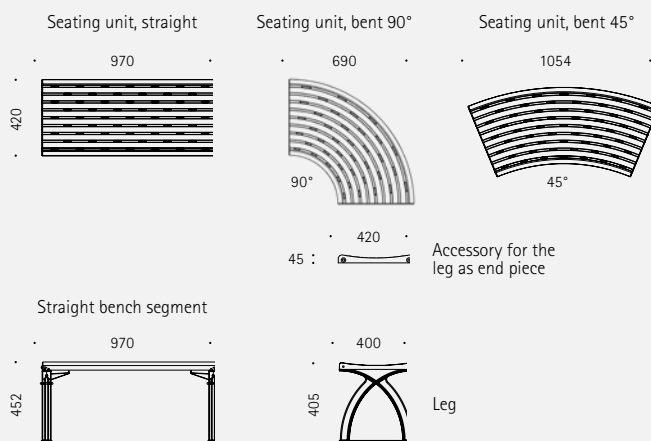
### Sample configuration



More installation examples in the ABES online shop:

<https://abes-online.com/en/product/bench-104/>

		For screwing
<b>Bench 104</b>	Seating unit, straight	<b>104.101</b>
<b>Bench 104</b>	Seating unit, bent 45°	<b>104.201</b>
<b>Bench 104</b>	Seating unit, bent 90°	<b>104.202</b>
<b>Bench 104</b>	Leg	<b>104.301</b>
<b>Bench 104</b>	Accessory for the leg as end piece	<b>104.350</b>





## STOOL 145

Steel

### Specifications

Stool consisting of a revolving square steel frame sitting on a steel profile and into which four wooden slats are set flush.

### Finish

- Steel S235, galvanised with powder coating in standard RAL colours or DB 703
- Seating slats made of hardwood
- The following changes are possible for an extra price: colour and wooden surface

## TABLE 145

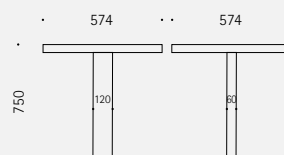
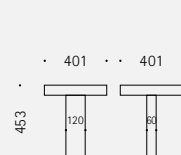
### Specifications

Table consisting of an encompassing square steel frame which sits on a steel profile and into which six wooden slats are set flush.

### Mounting

Screw-on or concrete embedment

	Seat width	Seat height	W	D	H	For concrete embedment	For screwing
<b>Stool 145</b>	342	453	401	401	453	<b>145.051</b>	<b>145.001</b>
<b>Table 145</b>	-	-	574	574	750	<b>145.550</b>	<b>145.500</b>



Design: Stefan Wehrmann 3Design



## LEANING-BENCH 110

Steel

### Specifications

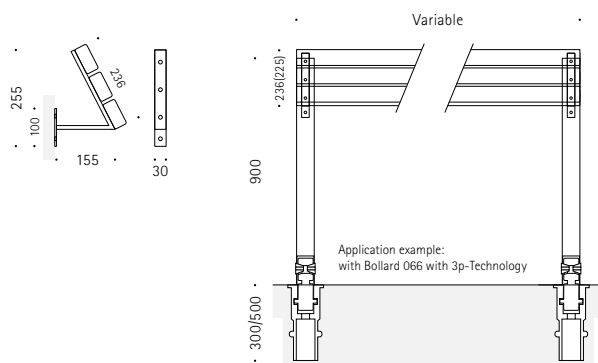
Lean-back element for mounting on continuous vertical surfaces, consisting of three hardwood slats fixed on a pair of flat steel supports that are mitered and welded at an angle of approx. 63°.

### Mounting

To be fastened to continuous vertical surfaces, such as two removable ABES Bollards 066 with 3p-Technology. (s. p. 63)

### Finish

- Steel S235, galvanised with powder coating in standard RAL colours or DB 703
- Slats made of hardwood
- The following changes are possible for an extra price: colour, length and wooden surface



For screw fixing

**Leaning-Bench 110** Steel S235, wooden support **110.101**



## LEAN-ON-BENCH 108

Steel

### Specifications

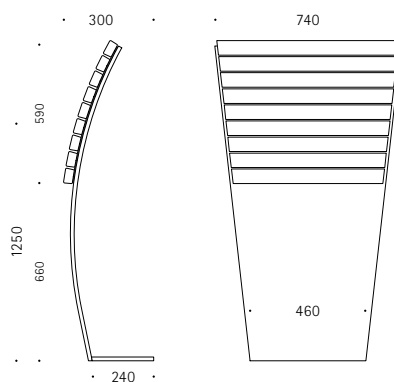
Back to top widening lean-on element with a curved profile. The upper half is equipped with a wooden covering.

### Mounting

Screw-on or concrete embedment

### Finish

- Steel S235, galvanised with powder coating in standard RAL colours or DB 703
- Lean-on surface made of wood



For screwing For concrete embedding

**108** Steel S235, wooden support **108.101** **108.151**





## LOUNGER 1.120

Steel

### Specifications

Lounger with ergonomically shaped surface, wooden slats and base made of zinc-phosphated (KTL) and powder-coated steel.

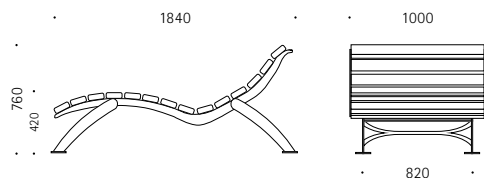
### Mounting

Free standing

### Finish

- Frame: steel S235, zinc-phosphated (KTL) and powder-coated in RAL 7016 (anthracite grey)
- Bench supports: 14 slats of thermo-wood (ash)

► Details see in ABES Online Shop



		Free standing
<b>Lounger 1.120</b>	Steel S235, wooden support	<b>1.120.001</b>



Design: Charles O. Job | Registered design 129813

## SEATING-BOLLARD 105

Cast aluminium

### Specifications

One-piece seat bollard made of cast aluminium with small diamond-shaped apertures in the circular seat supported by a cylindrical leg, tapering slightly at the base.

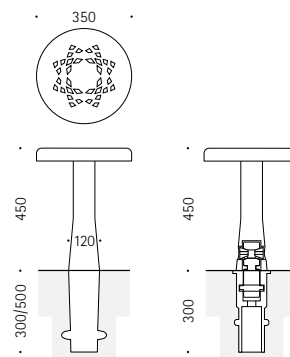


### Mounting

Removable with 3p-Technology  
Alternative: concrete embedment

### Finish

- Powder coating in standard RAL colours or DB 703 (other colours available on request at a surcharge)



	Fixed mounting	3p-Technology
<b>Seating-Bollard 105</b>	<b>105.001</b>	<b>105.101</b>



3p-Technologie



# 04

## WASTE CONTAINERS

Waste containers are essential for a well-kept urban environment. ABES' models impress with their sophisticated functionality and attractive design, and fit perfectly into the cityscape.

The containers are robust and resistant to vandalism. They are supplied with a cover to prevent rainwater from leaking in, as well as from having unwanted household waste disposed of here. Separate internal containers facilitate cleaning, thereby ensuring hygienic waste disposal.

Waste-Container 545

















page 113



1: Bollard-Ashtray 525 page 119 | 2: Waste-Container 523 page 119  
3: Waste-Container 529 page 117





											
	522	523	524	525	527	529	530	531	540	541	545
				Bollard ashtray							
Catalogue page	118	119	118	65/119	116	117	117	116	114	115	113
NEW 2022	2022										2022
Available in the online shop as a 3D model and for AR											
Material											
Steel S235 (galvanised)	-	-	■	-	-	-	-	-	-	-	-
Steel S235 (galvanised with powder coating)	■	■	■	■	-	■	■	■	■	■	■
Stainless steel 1.4301 (smoothed, grain 240)	-	-	-	-	■	○	○	-	-	-	-
Stainless steel 1.4301 (with powder coating)	-	-	-	-	-	-	-	-	-	-	-
Mounting											
For screwing (with flanges)	-	■	-	525.040	525.140	-	-	-	-	-	-
For concrete embedding	-	-	■	525.001	525.011	■	■	■	■	■	■
Removable with ground shell	-	-	■	-	-	-	-	-	-	-	-
Removable with 3p-Technology	-	-	-	525.020	525.022	■	■	■	■	■	■
For post/mast fixing	■	-	-	-	-	-	-	-	-	-	-
Configuration											
Incl. internal container	●	●	●	●	●	●	●	●	●	●	●
Covered slot	●	●	●	-	-	-	-	-	-	-	●
Unlocking/emptying using a triangular key	●	●	●	●	●	●	●	●	●	●	●
Lateral emptying	●	●	-	-	-	-	-	-	●	●	●
Emptying at the top	-	-	●	●	●	●	●	●	-	-	-
Ashtray/cigarette slot	○	○	-	●	●	●	●	●	●	●	○
Individual color (RAL/DB)	○	○	○	○	○	○	○	○	○	○	○
Measurements											
Capacity (liters)	25	50	33	3,5	3,5	75	75	50	50	50/75	50/75
Height above ground level (mm)	-	969,5	1100	1097	1097	1181	910	855	1027	1027/1181	855/910
Container diameter (mm)	420	462	385	108	108	400	400	350	350	350/400	350/400
Container height (mm)	650		620	-	-	961	690	635	807	807/961	635/690
Weight (approx. in kg)	18	24	9	13,5	13,5	40	40	37	37	37/40	37/40
Design		hrd+hz									

■ = Model | ● = Configuration | ○ = Option (with a surcharge) | - = Not available | hrd+hz = hammer.runge design and Heiko Zetzsche

3p-Technologie



2022

## BASE 030 WITH 3P-TECHNOLOGY Stable & removable

Conically tapered, removable base with 3p-Technology made of galvanised and coated cast iron. Cast-on adapter plate with four drill holes for attaching street furniture on site.

Can also be used for other outdoor furniture (third-party products).

NEW:  
With immediate  
effect, all Waste  
Containers 527-545  
with Base 030

- ▶ Waste containers with 3p-Technology can be removed at any time and cleaned at the building yard, for example.
- ▶ Can also be supplied as a cylindrical base on request.

More about  
3p-Technology:  
see pages 10-19

## LATERAL EMPTYING

## WASTE-CONTAINER 545

Steel | 75 + 50 liters

## Specifications

Cylindrical waste container made of steel with a slanted top and a front-facing slot on the side. Lateral door with internal hinges, triangular lock and curved opening flap for the easy removal of the inner container. The waste container is supplied together with the Base 030 and has a separate cigarette slot (on demand).

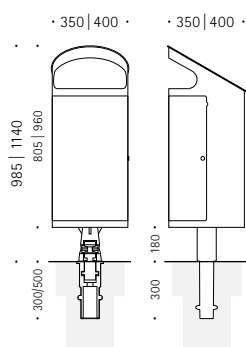
## Mounting

Removable with 3p-Technology (Base 030)

Alternative: concrete embedment

## Finish

- Steel S235, galvanised with powder coating in standard RAL colours or DB 703
- Other colours available on request at a surcharge
- Cigarette slot: Stainless steel 1.4301 (on demand)
- Incl. internal container
- Emptying: Lateral door for an easier removal of the inner container
- May be unlocked for emptying using a triangular key



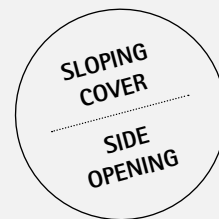
			Without cigarette slot	With cigarette slot
545	75 liters	Fixed mounting	545.201	545.401
545	75 liters	With 3p-Technology	545.220	545.420
545	50 liters	Fixed mounting	545.101	545.301
545	50 liters	With 3p-Technology	545.120	545.320

ST



2022

3p-Technologie



All ABES bollards, lighting bollards, waste containers etc. with 3p-Technology can be installed alternately on the same ground socket.

\* Delivery since 2022 with Base 030 (on request and at a surcharge with cylindrical base), see page 112



Waste containers with 3p-Technology\* can be removed at any time and cleaned at the yard for example.



**LATERAL  
DOOR**  
For an easier  
removal of the  
container



#### LATERAL EMPTYING

### WASTE-CONTAINER 540

Steel | 75 + 50 liters

#### Specifications

Cylindrical waste container made of steel with an O-shaped slanted slot and a separate cigarette slot. Lateral door with internal hinges, triangular lock and curved opening flap for the easy removal of the inner container. The waste container is supplied together with the Base 030.

#### Mounting

Removable with 3p-Technology (Base 030)

Alternative: concrete embedment

#### Finish

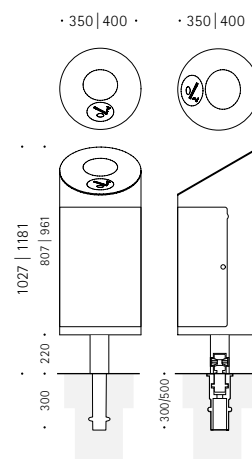
- Steel S235, galvanised with powder coating in standard RAL colours or DB 703
- Other colours available on request at a surcharge
- Cigarette slot: Stainless steel 1.4301
- Incl. internal container
- Emptying: Lateral door for an easier removal of the inner container
- May be unlocked for emptying using a triangular key

			Steel S235
Waste-Container 540	75 liters	Fixed mounting	540.201
Waste-Container 540	75 liters	With 3p-Technology	540.220
Waste-Container 540	50 liters	Fixed mounting	540.101
Waste-Container 540	50 liters	With 3p-Technology	540.120

ST

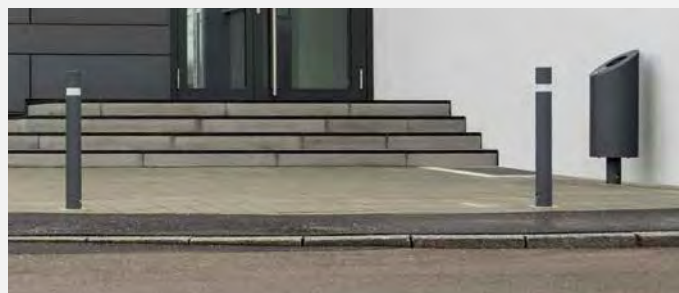


3p-Technologie



#### ADVANTAGES AT A GLANCE

- Waste container stands completely firm without moving
- Due to its solid shell, the container generally remains undamaged after an impact
- Over 90% cost reduction for repairs
- Junction piece can be replaced in less than 3 minutes
- Only one call-out – reduced staff and vehicle costs
- Repair work does not have to be done on site
- Quick to disassemble if more space is needed at short notice
- Ground shells can be locked to prevent risk of tripping



### WASTE CONTAINERS WITH 3P-TECHNOLOGY Practical but stylish

This type of waste container combines functionality with design. Its classic cylindrical shape fits into any cityscape.

Its strong outer shell is extremely damage-resistant and also provides enough space for signs or billboards. When combined with the optional 3p-Flex junction piece, the waste container is even more resistant to everyday (traffic) inconveniences.

3p-Technologie

► **ABES Waste-Containers equipped with 3p-Technology are always removable. They can easily be carried to different locations (e.g. the building yard) for cleaning or maintenance work.**

*More about  
3p-Technology:  
see pages 10-19*



## LATERAL EMPTYING

### WASTE-CONTAINER 541

Steel | 75 + 50 liters

#### Specifications

Cylindrical waste container made of steel with an O-shaped horizontal slot and a separate cigarette slot. Lateral door with internal hinges, triangular lock and curved opening flap for the easy removal of the inner container. The waste container is supplied together with the Base 030.

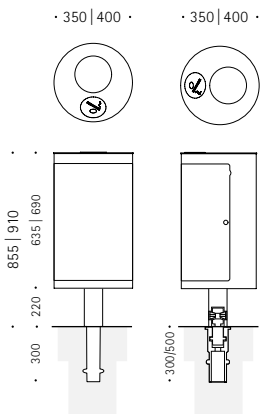
#### Mounting

Removable with 3p-Technology (Base 030)

Alternative: concrete embedment

#### Finish

- Steel S235, galvanised with powder coating in standard RAL colours or DB 703
- Other colours available on request at a surcharge
- Cigarette slot: Stainless steel 1.4301
- Incl. internal container
- Emptying: Lateral door for an easier removal of the inner container
- May be unlocked for emptying using a triangular key



				Steel S235
Waste-Container 541	75 liters	Fixed mounting		541.201
Waste-Container 541	75 liters	With 3p-Technology		541.220
Waste-Container 541	50 liters	Fixed mounting		541.101
Waste-Container 541	50 liters	With 3p-Technology		541.120



Laterally opening door for the comfortable removal of the inner container.



Curved opening flap for an easier opening of the door.



#### EMPTYING AT THE TOP

### WASTE-CONTAINER 527 | 531

527 | Steel | 75 liters

531 | Steel | 50 liters

#### Specifications

Cylindrical steel waste container with O-shaped, sloping slot area, separate cigarette slot and top opening lid. The waste container is supplied together with the Base 030.

#### Mounting

Removable with 3p-Technology (Base 030)

Alternative: concrete embedment

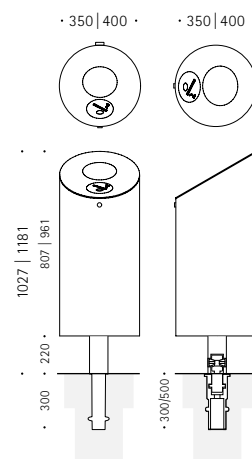
#### Finish

- Steel S235, galvanised with powder coating in standard RAL colours or DB 703
- Other colours available on request at a surcharge
- Cigarette slot: Stainless steel 1.4301
- Incl. internal container
- May be unlocked for emptying using a triangular key

			Steel S235
Waste-Container 527	75 liters	Fixed mounting	527.001
Waste-Container 527	75 liters	With 3p-Technology	527.020
Waste-Container 531	50 liters	Fixed mounting	531.001
Waste-Container 531	50 liters	With 3p-Technology	531.020



3p-Technologie



► ABES Waste-Containers equipped with 3p-Technology are always removable. They can easily be carried to different locations (e.g. the building yard) for cleaning or maintenance work.

More about  
3p-Technology:  
see pages 10-19

**EMPTYING AT THE TOP**

## WASTE-CONTAINER 529 | 530

529 | Steel | 75 liters

530 | Steel | 50 liters

### Specifications

Cylindrical steel waste container with O-shaped, horizontal slot area and separate cigarette slot. The waste container is supplied together with the Base 030.

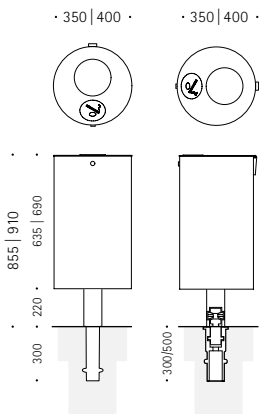
### Mounting

Removable with 3p-Technology (Base 030)

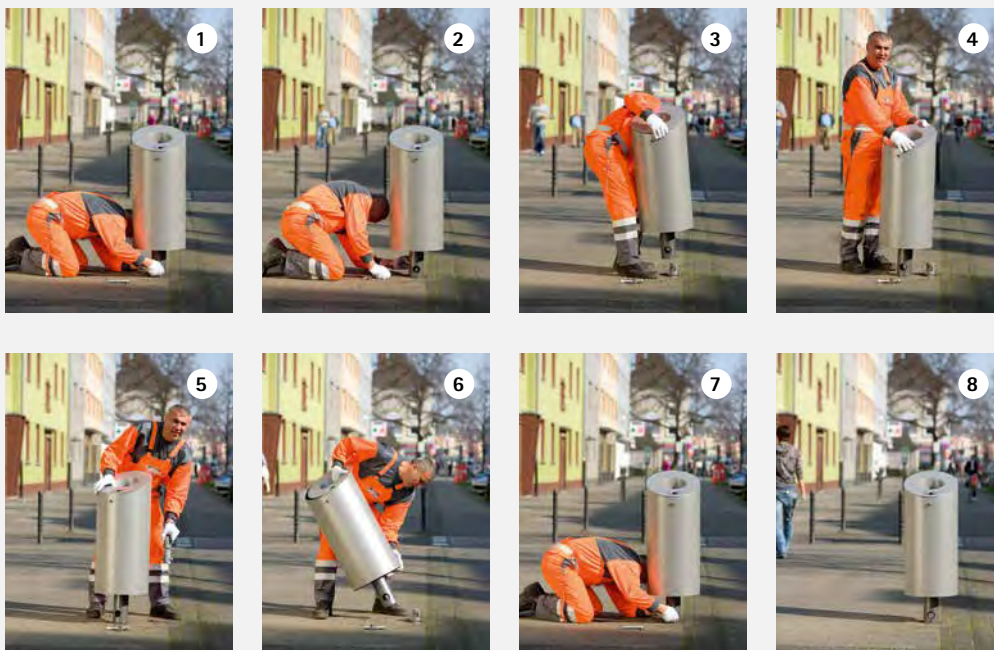
Alternative: concrete embedment

### Finish

- Steel S235, galvanised with powder coating in standard RAL colours or DB 703
- Other colours available on request at a surcharge
- Cigarette slot: Stainless steel 1.4301
- Incl. internal container
- May be unlocked for emptying using a triangular key



			Steel S235
Waste-Container 529	75 liters	Fixed mounting	<b>529.001</b>
Waste-Container 529	75 liters	With 3p-Technology	<b>529.020</b>
Waste-Container 530	50 liters	Fixed mounting	<b>530.001</b>
Waste-Container 530	50 liters	With 3p-Technology	<b>530.020</b>



### Simple disassembly and assembly due to 3p-Technology

#### Removing waste container

- 1 Unscrew
- 2 Remove junction piece
- 3 Lift waste container out
- 4 Finished

#### Mounting waste container

- 5 Insert junction piece
- 6 Set up waste container
- 7 Screw in tightly
- 8 Finished



## WASTE-CONTAINER 522

Steel | 25 liters

### Specifications

Waste Container for post or mast fixing consisting of a frame with two parallel pipes, a surrounding rim, a cover as well as a cylindrical steel container which is hinged to the frame and can be swung down.

### Mounting

To be fixed on a post or mast (sold separately), e.g. ABES Bollard 027-2 with 3p-Technologie

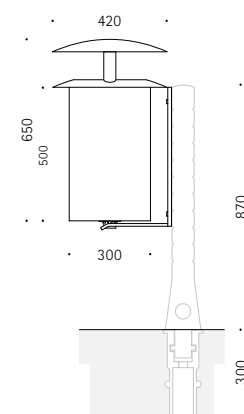
### Finish

- Powder coating in standard RAL colours or DB 703
- Other colours or multicoloured configurations are available on request at a surcharge
- Incl. internal container or alternatively with spikes to hold bin liners
- Cover including ashtray available as an optional accessory
- May be unlocked for emptying using a triangular key

	Container
<b>Waste-Container 522</b> S235 steel, powder-coated	<b>522.002</b>



3p-Technologie



## WASTE-CONTAINER 524

Steel | 33 liters

### Specifications

Cylindrical waste container covered with a lid and holding a capacity of approx. 33 l, affixed to a circular post. A triangular lock must be opened to empty the container.

### Mounting

Concrete embedment or insertion into a standard ground shell (not 3p-Technologie)

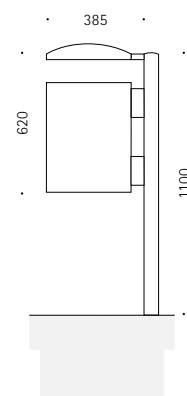
### Finish

- Hot-dip galvanised steel S235, alternatively with powder coating in standard RAL colours or DB 703
- Other colours available on request at a surcharge
- Incl. internal container
- May be unlocked for emptying using a triangular key

	For concrete embedding
<b>Waste-Container 524</b> S235 steel, galvanised	<b>524.001</b>
<b>Waste-Container 524</b> S235 steel, powder-coated	<b>524.002</b>



3p-Technologie







## WASTE-CONTAINER 523

Steel | 50 liters

### Specifications

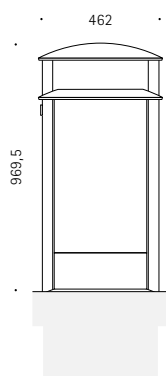
The first part of the stand-alone waste container consists of a frame made of two parallel tubes, connected by a lower and an upper rim as well as a cover, the second part consists of a cylindrical steel container to be hung into the frame. The container can be swung off the frame. The container is attached to the ground from the inside. Contains approx. 50 l.

### Mounting

On the ground from the interior of the container base

### Finish

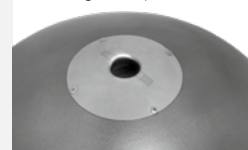
- Powder coating in standard RAL colours or DB 703
- Other colours or multicoloured configurations are available on request at a surcharge
- Incl. internal container or alternatively with spikes to hold bin liners
- Cover including ashtray available as an optional accessory
- May be unlocked for emptying using a triangular key



		For Screwing
<b>Waste-Container 523</b>	S235 steel, powder-coated	<b>523.002</b>
<b>Waste-Container 523</b>	Ashtray, stainless steel 1.4301	<b>500.001</b>



Optional:  
including ashtray



Design: hammerungdesign and Heko Zetzsche



Identical with Bollard 079 (with-out ashtray), see page 64

## BOLLARD-ASHTRAY 525

Steel + Stainless steel | 1097 mm

### Specifications

Fully cylindrical bollard ashtray with a sloping slot area. Labelling in the form of an outlined, laser-printed cigarette symbol.

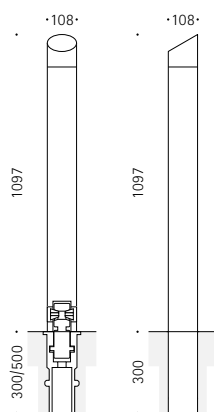
### Mounting

Removable with 3p-Technology

Alternative: concrete embedment or with flange to enable screwing

### Finish

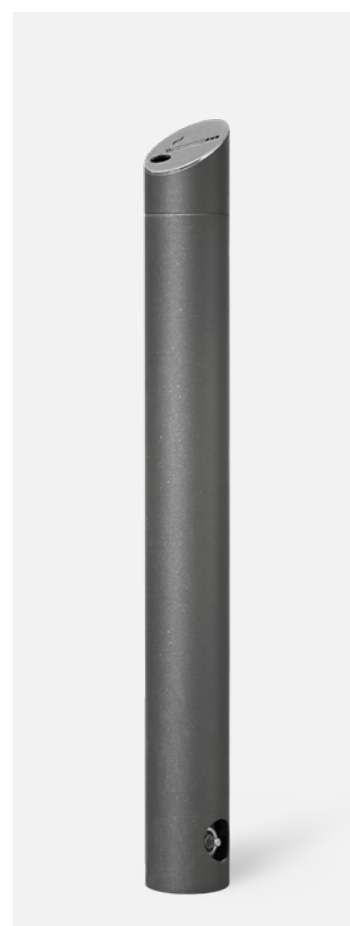
- Stainless steel 1.4301 smoothed, grain 240
- Optional: electropolished/high-gloss
- Steel S235, galvanised with powder coating in standard RAL colours or DB 703
- May be unlocked for emptying using a triangular key
- Height can be adjusted on customer request



		Fixed mounting	3p-Technology	For Screwing
<b>Bollard-Ashtray 525</b>	Steel	<b>525.001</b>	<b>525.020</b>	<b>525.040</b>
<b>Bollard-Ashtray 525</b>	Stainless steel	<b>525.011</b>	<b>525.022</b>	<b>525.140</b>



3p-Technologie



## 05

## BICYCLE STANDS

ABES bicycle stands are characterised by functionality and modern design, provide a firm grip and prevent the bikes from falling over, or having their wheels bent. The stands also allow bikes to be locked up securely, thereby protecting them from theft. The shape and function of the Bicycle-Stand 450-1 was given the "red dot" award by the NRW Design Centre for its high design quality.

The bicycle stands offer a wide variety of setup combinations, allowing different sized groups of stands to be combined. Their sophisticated design makes the various stands attractive objects in the urban setting. The tube constructions can be fitted with a curved cover, making it harder for the bikes to roll away, which allows them to be parked without risk to other road users.



1: Bicycle-Stand 453 LED page 130 | 2: Bicycle-Stand 451 page 137  
3: Bicycle-Stand 450-1 row configuration page 139

BICYCLE-STAND 453 page 130








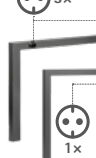



































Also available as  
a row system on  
trapezoidal rails



		BICYCLE STANDS			BICYCLE STANDS				E-MOBILITY	
										
		450-1	450-2	451	480				690	691
					Single sided Low	Single sided High	Double sided Low	Double sided High	With 1 socket	With 3 sockets
Catalogue page		136-139	136-138	137-138	124-127				140	
NEW 2022					2022				2022	
Available in the online shop as a 3D model and for AR										
Material	Steel S235 (galvanised)	■	■	■	■	■	■	■	■	■
	Steel S235 (galvanised with powder coating)	■	■	■	■	■	■	■	■	■
	Stainless steel 1.4301 (smoothed, grain 240)	■	■	■	■	■	■	■	■	■
	For concrete embedding (Installation depth: ~300 mm)	■	■	■	■	■	■	■	■	■
Mounting	Removable with ground shell(s)	■	■	■	-	-	-	-	□	□
	For screwing (with flanges)	-	-	-	■	■	■	■	■	■
	Row system on trapezoidal rails (modular)		-	-					-	-
	Prepared for Schuko sockets	-	-	-	-	-	-	-	●	●
Options	Individual color (RAL/DB)	○	○	○	○	○	○	○	○	○
	Cover plate	○	○	○	-	-	-	-	-	-
	Option: knee rail	-	-	-	-	-	-	-	●	●
	Customised dimensions	-	-	-	-	-	-	-	○	○
Measurements	Height above ground level (mm)	845	845	855	815	1065	815	1065	900	800
	Length (in mm)	683	1240	340	720	720	720	720	850	1500
	Width/diameter (in mm)	224	224	290	188	188	256	256	60	60
	Height wheel support (mm)	-	-	-	67	317	67	317	-	-
	Weight (approx. in kg)	8	10	8	6	6	6	6	-	-
Design		hrd	hrd	hrd	cm					

		BICYCLE STANDS									
											
		453	453 LED	471	472	474	452	461	470	476	477
		Rectangular steel profile		Flat steel			Steel tube round/n-shaped			Steel tube round/U-shaped	
Catalogue page		130-131		132	133	133	134			135	
NEW 2022							2022				
Available in the online shop as a 3D model and for AR											
Material	Steel S235 (galvanised)	■	■	■	■	■	■	■	■	■	■
	Steel S235 (galvanised with powder coating)	■	■	■	■	■	■	■	■	■	■
	Stainless steel 1.4301 (smoothed, grain 240)	■	■	■	■	■	■	■	■	■	■
	For concrete embedding (Installation depth: ~300 mm)	■	■	■	■	■	■	■	■	■	■
Mounting	Removable with ground shell(s)	■	■	■	-	-	■	■	■	■	■
	For screwing (with flanges)	■	■	■	■	■	■	■	■	■	■
	Row system on trapezoidal rails (modular)		-							-	-
	With LED strip	-	●	-	-	-	-	-	-	-	-
Options	Individual color (RAL/DB)	○	○	○	○	○	○	○	○	○	○
	Cover plate	-	-	-	-	-	-	-	-	-	-
	Option: knee rail	○	○	●	●	●	●	●	●	●	●
	Customised dimensions	○	○	○	○	○	○	○	○	○	○
Measurements	Height above ground level (mm)	860	860	800	800	900	800	800	860	900	900
	Length (in mm)	820	820	800	850	900	900	800	860	700	350
	Width/diameter (in mm)	50	50	60	80	80	42,4	60,3	48,3	48	48
	Weight (approx. in kg)	6,5	6,5	6,5	7,5	7,5	5,5?	5,5?	5,5	7	5,5
Design											

■ = Model | □ = On request | ● = Configuration | ○ = Option (with a surcharge) | - = Not available | hrd = hammer.runge.design | jpg = J. P. Gillen | cm = Christoph Marzi



## Bicycle stands recommended by the ADFC

Finding the right model among a large selection of bicycle stands is mostly not easy. In order to define a common standard for bicycle parking facilities, the "Allgemeine Deutsche Fahrrad-Club" (ADFC) has summarized certain criteria in a certification.

Even though our bicycle racks have proven themselves in all imaginable situations over the past 25 years, from this year we are offering bicycle parking racks that have received a recommendation including a test number after a certification process by the ADFC.

On the topic of cycling, the ADFC is considered as an institution in Germany. As an interests group, it is committed to the consistent promotion of bicycles in road traffic. Furthermore, the association supports manufacturers in the development of serviceable products related to bicycles. The ADFC experts have also made recommendations for bicycle parkers which are all met by our ADFC

recommended bicycle stands: they are easy to use and are suitable for a wide range of bike models. They also offer the option of securing bikes on both the front and the rear wheel. Furthermore, the ADFC certified bicycle stands are protected against vandalism, offer extra space between the individual bikes and are no hazardous obstacle for pedestrians. Last but not least, their design prevents the handlebar of the bike to turn, even with strong cross winds, and provides a stable and secure stand even in poor conditions.

See for yourself the advantages of our ADFC recommended bicycle stands – you will find the entire range on the following pages.



Fahrradparker 480  
Q2103, 04/2021  
Geprüft nach DIN 79008





# SINGLE-SIDED WHEEL POSITION

## BICYCLE-STAND 480

Steel + Stainless steel

### Specifications

#### SINGLE RACK

Bicycle stand with single-sided bike support made of triple bent steel tube with a tube diameter of 42 mm. Lateral steel bar construction to store one bicycle with the front wheel at a 90° angle. Inward eyelet for attaching a bicycle lock.

#### RACK ROW SYSTEM

Bicycle-Stand 480 as rack row system with single-sided bike support, consisting of two, three or four Bicycles-Stands 480 with single-sided bike support with low/low or alternating low/high bike support heights that are screwed on trapezoidal rails. Each bicycle stand is made of a triple bent steel tube with a tube diameter of 42 mm and has a lateral steel bar construction to store one bicycle with the front wheel at a 90° angle. Inward eyelet for attaching a bicycle lock.

Using row connectors, several rack row systems of 2, 3 or 4 racks can be joined together to form a continuous system of any length.

### Mounting

**Single rack:** For concrete embedment or removable with ground shells

**Rack row system:** For screwing onto trapezoidal rails at +/- 0 mm.

### Finish

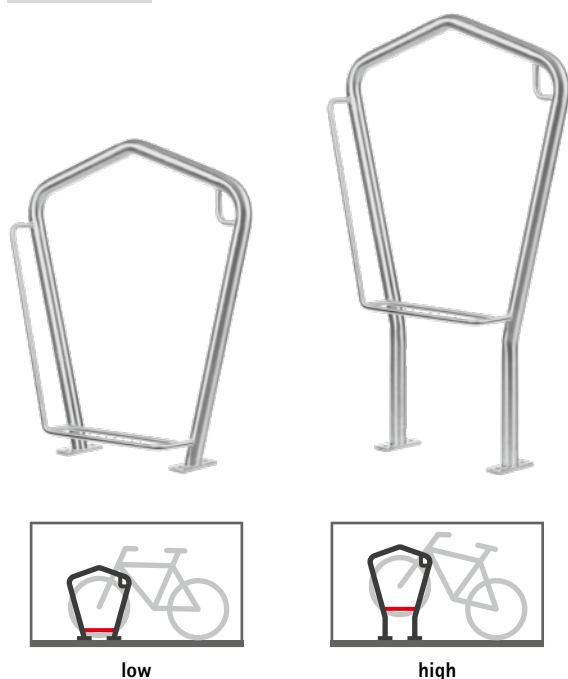
- Stainless steel 1.4301 smoothed, grain 240  
Optional: electropolished/high-gloss
- Steel S235, galvanised with powder coating in standard RAL colours or DB 703
- Other colors, different rack spacings or bike support angles are possible on demand.

### Features

- Suitable for all bicycles with a tire width up to 60 mm.
- Rack spacing according to the recommendation of the ADFC: with low/low bike support heights 700 mm, with low/high bike support heights 500 mm
- ADFC recommended quality according to DIN79008, Quality Label Test Number Q2103, 04/2021

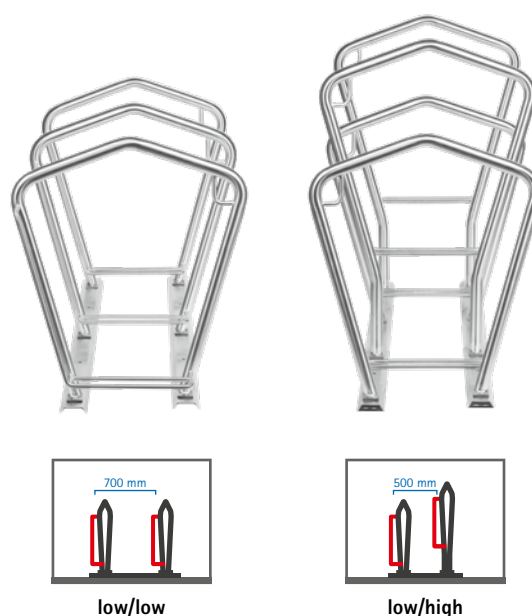


#### SINGLE RACK



#### RACK ROW SYSTEM

on trapezoidal rails



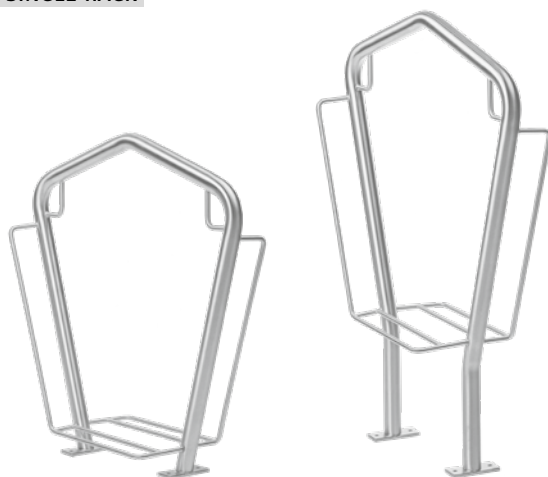
## DOUBLE-SIDED WHEEL POSITION

## BICYCLE-STAND 480

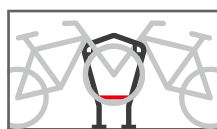
Steel + Stainless steel



## SINGLE RACK



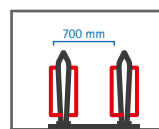
low



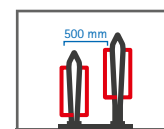
high

## RACK ROW SYSTEM

on trapezoidal rails



low/low



low/high

## Specifications

## SINGLE RACK

Bicycle stand with double-sided bike support made of triple bent steel tube with a tube diameter of 42 mm. Two lateral steel bar constructions to store two bicycles with their front wheels at a 90° angle opposite to each other. Inward eyelets for attaching bicycle locks.

## RACK ROW SYSTEM

Bicycle-Stand 480 as rack row system with double-sided bike support, consisting of two, three or four Bicycles-Stands 480 with double-sided bike support with low/low or alternating low/high bike support heights that are screwed on trapezoidal rails. Each bicycle stand is made of a triple bent steel tube with a tube diameter of 42 mm and has two lateral steel bar construction to store two bicycles with their front wheels at a 90° angle opposite to each other. Inward eyelets for attaching bicycle locks.

Using row connectors, several rack row systems of 2, 3 or 4 racks can be joined together to form a continuous system of any length.

## Mounting

**Single rack:** For concrete embedment or removable with ground shells

**Rack row system:** For screwing onto trapezoidal rails at +/- 0 mm.

## Finish

- Stainless steel 1.4301 smoothed, grain 240  
Optional: electropolished/high-gloss
- Steel S235, galvanised with powder coating in standard RAL colours or DB 703
- Other colors, different rack spacings or bike support angles are possible on demand.

## Features

- Suitable for all bicycles with a tire width up to 60 mm.
- Rack spacing according to the recommendation of the ADFC: with low/low bike support heights 700 mm, with low/high bike support heights 500 mm
- ADFC recommended quality according to DIN79008, Quality Label Test Number Q2103, 04/2021





## BICYCLE-STAND 480

Steel + Stainless steel



◀ Suitable for all bicycles with a tire width up to 60 mm.

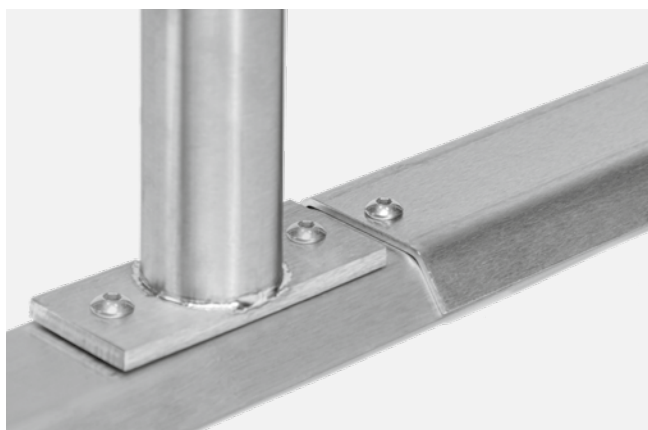
▶ Inward eyelet for attaching a bicycle lock.



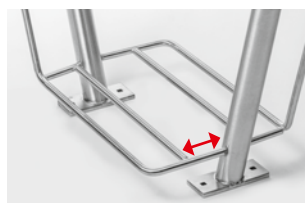
◀ Rack row system on trapezoidal rails with single-sided bike support.

▶ Finishing examples:

- ① Steel S235, galvanised with powder coating in DB 703
- ② Steel S235, galvanised
- ③ Stainless steel 1.4301 smoothed, grain 240



▼▶ No contact of painted bike parts with the stable main stand due to inclined wheel position.



▲ Double or triple row system, can be combined as needed with row connectors.

◀ Wheel position low/high for space-saving parking: ADFC-recommended wheel base 500 mm (in case of low/low: 700 mm).

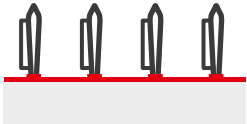

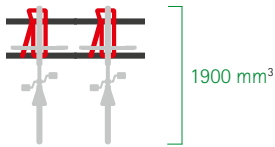
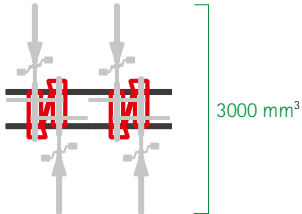
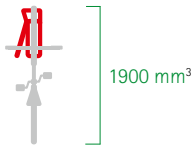
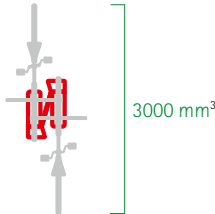
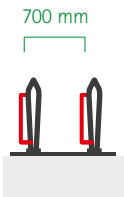
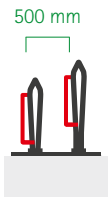

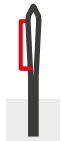


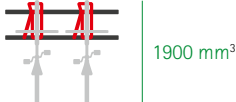

▶ Storage depth for wheel position on both sides approx. 3000 mm.





## CONFIGURATION ASSISTANT for bicycle stands recommended by the ADFC

Six simple steps to the desired configuration.

STEP 1: FASTENING			
<b>FOR SCREW FIXING</b> Single racks in a row – mounted on trapezoidal rails <sup>1</sup> 		<b>FOR CONCRETE EMBEDMENT</b> Single rack 	
STEP 2: SINGLE OR DOUBLE SIDED BIKE SUPPORT			
<b>SINGLE SIDED</b> One bike support per rack 	<b>DOUBLE SIDED</b> Two bike supports per rack 	<b>SINGLE SIDED</b> One bike support per rack 	<b>DOUBLE SIDED</b> Two bike supports per rack 
STEP 3: BIKE SUPPORT HEIGHT			
<b>LOW/LOW</b> Rack spacing recommended by the ADFC: 700 mm 	<b>LOW/HIGH</b> Rack spacing recommended by the ADFC: 500 mm 	<b>LOW</b> Free arrangement <sup>2</sup> 	<b>HIGH</b> Free arrangement <sup>2</sup> 
STEP 4: BIKE SUPPORT ANGLE			
Available only for single sided and low/low configuration <b>45° LEFT</b> ergonomically recommended 		<b>45° RIGHT</b> 	<b>90°</b> 
		<b>FREE CHOICE OF ANGLE FOR SINGLE RACK</b> Determined by the client 	
STEP 5: CHOICE OF MATERIAL			
<b>ST</b> STEEL S235, GALVANISED	<b>ST</b> STEEL S235, GALVANISED AND POWDER-COATED	<b>AISI</b> STAINLESS STEEL 1.4301	
STEP 6: NUMBER OF RACKS			
<b>Single side option:</b> One bike support per rack <b>Double side option:</b> Two bike supports per rack			

<sup>1</sup>Extended version for underground bolting on request    <sup>2</sup>ADFC recommended rack spacing: 700 mm or 500 mm    <sup>3</sup>Storage depth for common bikes with a total length of approx. 1900 mm

MODULAR. INNOVATIVE. FLEXIBLE.

## Racks in a row: Bicycle stands on trapezoidal rails for dowelling

For nearly all ABES bicycle racks and stands, we are now offering the bike stand option as racks in a row on trapezoidal rails.

There is a choice of row systems with 2, 3 or 4 stands. All other system sizes can be configured by linking them together using the series connectors developed for this purpose.

Use the online configurator in our online shop to put the required system together.

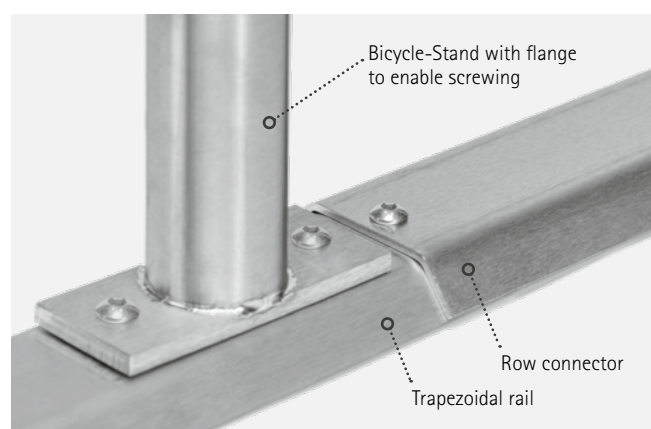


All the single stands marked with this symbol can be supplied as a row system on trapezoidal rails.

\*Exceptions: 453 LED, 450-2, 451, 476, 477, 690, 691



Trapezoidal rail



Double or triple row system, can be combined as needed with row connectors.



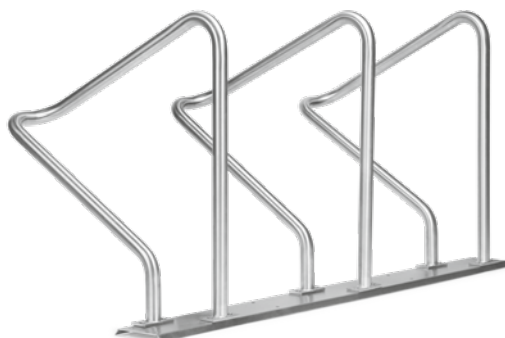
Bicycle-Stand 480 (see page 124-127)



Bicycle-Stand 452 (see page 134)



Bicycle-Stand 453 (see page 130)



Bicycle-Stand 450-1 Trapezoidal rail flatter due to design (see page 139)





Page 134

Bicycle-Stand 452 | Triple rack row system



Page 139

Bicycle-Stand 450-1 | Triple rack row system



Page 130

Bicycle-Stand 453 | Connection of double and triple rack row system

Bicycle-Stand 480 | 4 racks in a row | Single-sided | Low/high



Page 124





## BICYCLE-STAND 453

Steel + Stainless steel

### Specifications

U-rack made of perpendicular steel profiles (rectangular profile 50 × 20 mm mitre-cut), optionally with knee rail.



## BICYCLE-STAND 453 LED

Steel + Stainless steel

### Specifications

Bike rail made of right-angled steel profiles with LED strip on the underside of the cross tube (50 × 20 mm rectangular profile, mitre-cut). Operated with 24 V low voltage, 1 m connector cable with plug socket at the base of the rail. IP Code IP67, optionally with knee rail.

### Technical information

LED strip (approx. 25 × 655 mm) on the underside of the cross tube

Power supply:	24 Volt DC
Power input:	ca. 6,7 W
Luminous flux:	approx. 560 lm
Beam angle:	120°
Light colour:	4000 K
Light output:	CRI > 80
IP Code IP67:	IP67
Connector cable:	approx. 2 m

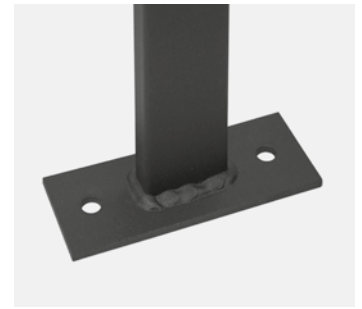
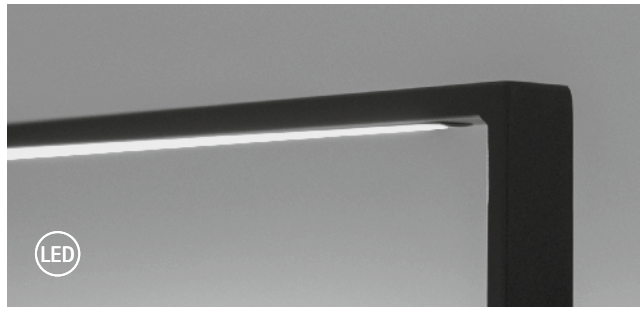
### Note

- Including power cable, consisting of a bollard-sided cable with a plug (IP67, 50 cm) and a ground-sided cable with a socket (IP67, 150 cm).
- Technical components for power supply and control are not included. The connection has to be made by the customer.

The LED unit is available as a spare part and be replaced in case of damage.



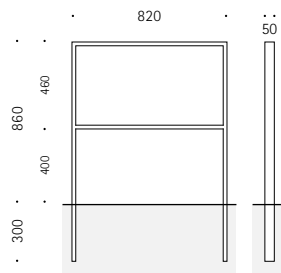
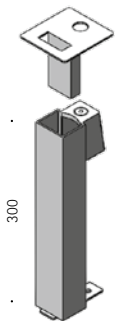




Usable side by side  
as a handrail or railing  
(see page 145)



**Ground shell with  
clamping cover  
rosette**  
(removable version)\*



#### Mounting

- Concrete embedment
- Options: removable with ground shells or version with two flanges to enable screwing
- **Can also be supplied as a row system on trapezoidal rails (without LED)** (see page 128)

#### Finish

- Stainless steel 1.4301 smoothed, grain 240  
Optional: electropolished/high-gloss
- Steel S235, galvanised with powder coating in standard RAL colours or DB 703
- Other colours available on request at a surcharge
- Profile dimensions, heights and widths other than specified are available on request and at an additional cost
- Optionally with knee rail

		Concrete embedding/Removable*	With flanges to enable screwing
<b>453</b>	Steel S235, galvanised	<b>453.001</b>	<b>453.240</b>
<b>453</b>	Steel S235, powder-coated	<b>453.011</b>	<b>453.040</b>
<b>453</b>	Stainless steel 1.4301	<b>453.002</b>	<b>453.140</b>

		Concrete embedding	Removable*	With flanges to enable screwing
<b>453 LED</b>	Steel S235, galvanised	<b>453.101</b>	<b>453.201</b>	<b>453.540</b>
<b>453 LED</b>	Steel S235, powder-coated	<b>453.111</b>	<b>453.211</b>	<b>453.340</b>
<b>453 LED</b>	Stainless steel 1.4301	<b>453.102</b>	<b>453.202</b>	<b>453.440</b>

Accessories for the removable version \*

<b>Pair of ground shell with clamping cover rosette for 453 + 453 LED</b>	Steel, galvanised	<b>458.002 + 458.005</b>
<b>Pair of ground shell with clamping cover rosette for 453 + 453 LED</b>	Steel, powder-coated	<b>458.002 + 458.007</b>
<b>Pair of ground shell with clamping cover rosette for 453 + 453 LED</b>	Stainless steel	<b>458.002 + 458.006</b>
<b>Cover plates for ground shells</b>		<b>458.003</b>

\*For the removable version, two ground shells and clamping cover rosettes are mandatory.





## BICYCLE-STAND 471

Steel + Stainless steel

### Specifications

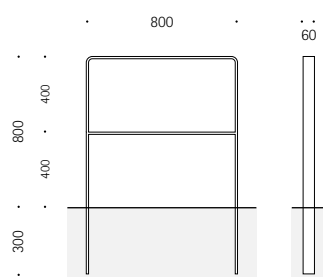
Bike rail with rounded edges made of 60 × 12 mm flat steel, optionally with or without knee rail.

### Mounting

- Concrete embedding
- Alternative: version with two flanges to enable screwing
- Option: removable with ground shells
- **Also available as a row system on trapezoidal rails**  
(see page 128)

### Finish

- Stainless steel 1.4301 smoothed, grain 240  
Optional: electropolished/high-gloss
- Steel S235, galvanised with powder coating in standard RAL colours or DB 703
- Other colours available on request at a surcharge
- Additional material thicknesses, heights and widths available upon request and at a surcharge
- Optionally with or without knee rail



		Concrete embedding	With flanges to enable screwing
<b>Bicycle-Stand 471 without knee rail</b>	Steel S235, galvanised	<b>471.001</b>	<b>471.040</b>
<b>Bicycle-Stand 471 without knee rail</b>	Steel S235, powder-coated	<b>471.101</b>	<b>471.140</b>
<b>Bicycle-Stand 471 without knee rail</b>	Stainless steel 1.4301	<b>471.201</b>	<b>471.240</b>
<b>Bicycle-Stand 471 with knee rail</b>	Steel S235, galvanised	<b>471.301</b>	<b>471.340</b>
<b>Bicycle-Stand 471 with knee rail</b>	Steel S235, powder-coated	<b>471.401</b>	<b>471.440</b>
<b>Bicycle-Stand 471 with knee rail</b>	Stainless steel 1.4301	<b>471.501</b>	<b>471.540</b>





## BICYCLE-STAND 472

Steel + Stainless steel

### Specifications

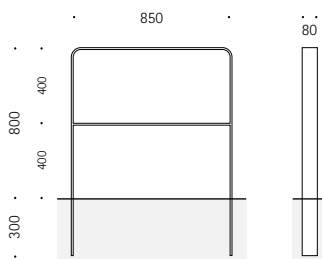
Rack with knee rail and rounded edges made of 80×10 mm bent flat steel.

### Mounting

- Concrete embedment
- Alternative: version with two flanges to enable screwing
- **Also available as a row system on trapezoidal rails**  
(see page 128)

### Finish

- Stainless steel 1.4301 smoothed, grain 240  
Optional: electropolished/high-gloss
- Steel S235, galvanised with powder coating in standard RAL colours or DB 703
- Other colours available on request at a surcharge
- Additional material thicknesses, heights and widths available upon request and at a surcharge
- Optionally without knee rail



## BICYCLE-STAND 474

Steel + Stainless steel

### Specifications

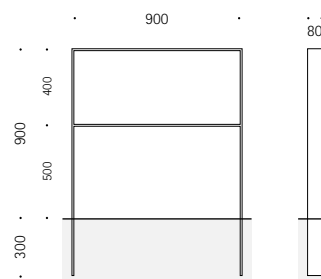
Rack with knee rail made of flat steel 80×10 mm with mitred edges and welded (90°).

### Mounting

- Concrete embedment
- Alternative: version with two flanges to enable screwing
- **Also available as a row system on trapezoidal rail**  
(see page 128)

### Finish

- Stainless steel 1.4301 smoothed, grain 240  
Optional: electropolished/high-gloss
- Steel S235, galvanised with powder coating in standard RAL colours or DB 703
- Other colours available on request at a surcharge
- Additional material thicknesses, heights and widths available upon request and at a surcharge
- Optionally without knee rail





## BICYCLE-STAND MADE OF ROUND TUBING (n-shaped)

Steel + Stainless steel

### Specifications

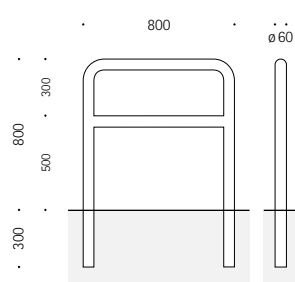
Bike rails made of an n-shaped bent steel tube in different diameters, optionally with or without knee rail.

### Mounting

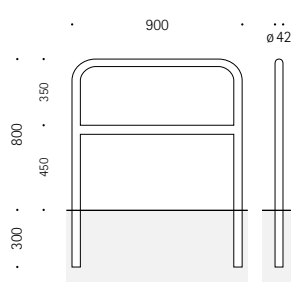
- Concrete embedment
- Alternative: version with two flanges to enable screwing
- Option: removable with ground shells
- **Also available as a row system on trapezoidal rails**  
(see page 128)

### Finish

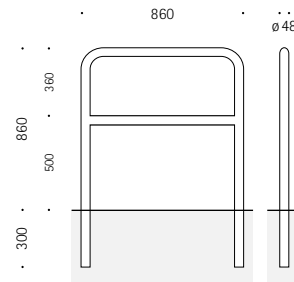
- Stainless steel 1.4301 smoothed, grain 240  
Optional: electropolished/high-gloss
- Steel S235, galvanised with powder coating in standard RAL colours or DB 703
- Other colours available on request at a surcharge
- Tube dimensions, heights and widths other than specified are available on request and at an additional cost
- Optionally with or without knee rail



461



452



470







## BICYCLE-STAND MADE OF ROUND TUBING (U-shaped)

Steel + Stainless steel

### Specifications

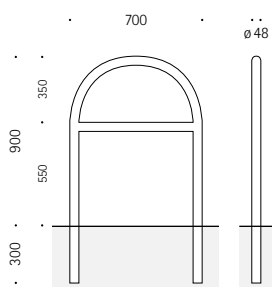
U-racks made of steel tube with a tube diameter of 48 mm, optionally with or without knee rail.

### Mounting

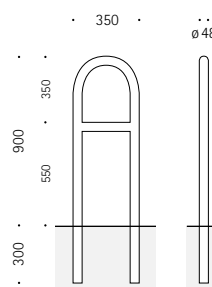
- Concrete embedment
- Alternative: version with two flanges to enable screwing
- Option: removable with ground shells
- **Also available as a row system on trapezoidal rails**  
(see page 128)

### Finish

- Stainless steel 1.4301 smoothed, grain 240  
Optional: electropolished/high-gloss
- Steel S235, galvanised with powder coating in standard RAL colours or DB 703
- Other colours available on request at a surcharge
- Tube dimensions, heights and widths other than specified are available on request and at an additional cost
- Optionally with or without knee rail



476



477



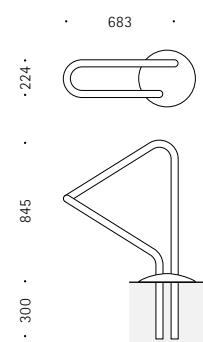


## BICYCLE-STAND 450-1

Steel + Stainless steel

### Specifications

Frame made of bent steel tubes with a 42.4 × 2.5 mm diameter, a vertical rear tube, and mutually offset tube ends.



		Bicycle stand	Cover plate (optional)
450-1	Steel S235, galvanised	450.001	455.001
450-1	Steel S235, powder-coated	450.011	455.011
450-1	Stainless steel 1.4301	450.002	455.002

Ground shell for removable model: **456.002**

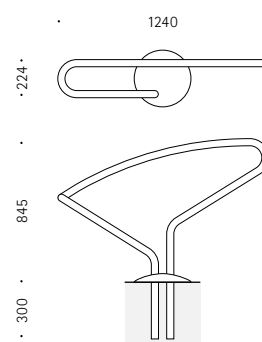


## BICYCLE-STAND 450-2

Steel + Stainless steel

### Specifications

Frame made of bent steel tubes with a 42.4 × 2.5 mm diameter, an overhanging rear tube, as well as mutually offset tube ends.



		Bicycle stand	Cover plate (optional)
450-2	Steel S235, galvanised	450.003	455.001
450-2	Steel S235, powder-coated	450.013	455.011
450-2	Stainless steel 1.4301	450.004	455.002

Ground shell for removable model: **456.002**



Design: hammer runge design | Registered design DIM/05/006

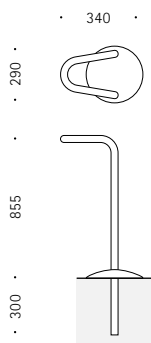


## BICYCLE-STAND 451

Steel + Stainless steel

### Specifications

Frame made of bent steel tubes with a 42.4 x 2.5 mm diameter and parallel tube ends.



		Bicycle stand	Cover plate (optional)
451	Steel S235, galvanised	451.003	455.003
451	Steel S235, powder-coated	451.013	455.013
451	Stainless steel 1.4301	451.004	455.004

Ground shell for removable model: 456.003



### Mounting

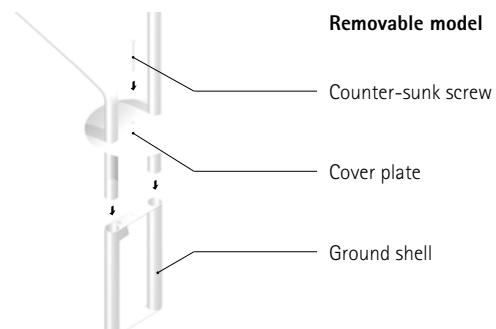
- Concrete embedment (only one foundation required)
- Alternative: removable with ground shell
- Optional (only 450-1): **Also available as a row system on trapezoidal rail** (see page 128)

### Finish

- Stainless steel 1.4301 smoothed, grain 240  
Optional: electropolished/high-gloss
- Steel S235, galvanised with powder coating in standard RAL colours or DB 703
- Other colours available on request at a surcharge

### Note

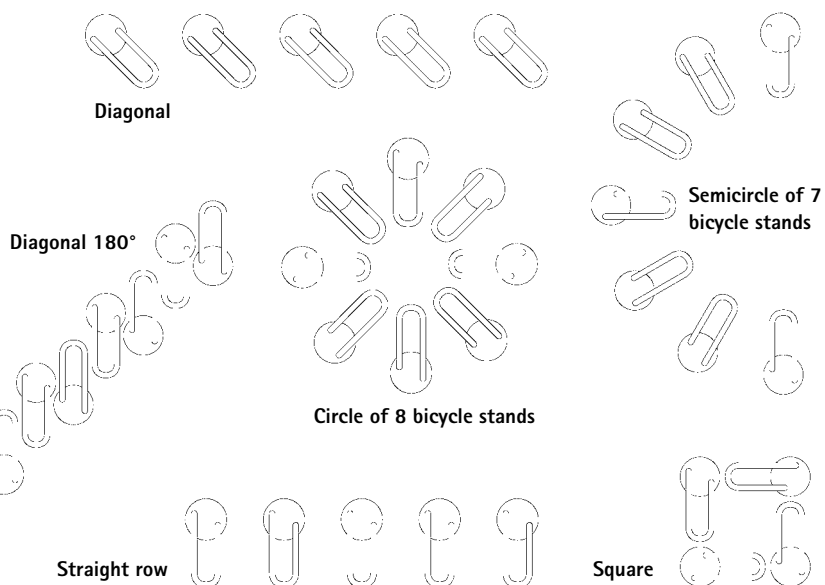
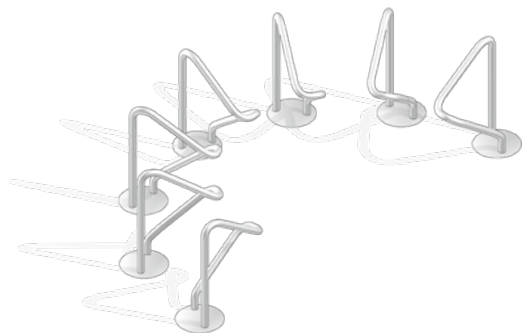
For the removable version, the cover plate is needed.



## BICYCLE-STAND 450 | 451

### Sample configurations

These examples for designing parking areas with the ABES Bicycle-Stand 450 or 451 may serve as inspiration for the variety of configuration options.



### 1 Bicycle-Stand 450-1 row configuration

Powder-coated,  
DB703 glimmer grey

### 2 Bicycle-Stand 450-1

Powder-coated,  
DB703 glimmer grey

### 3 Bicycle-Stand 450-2

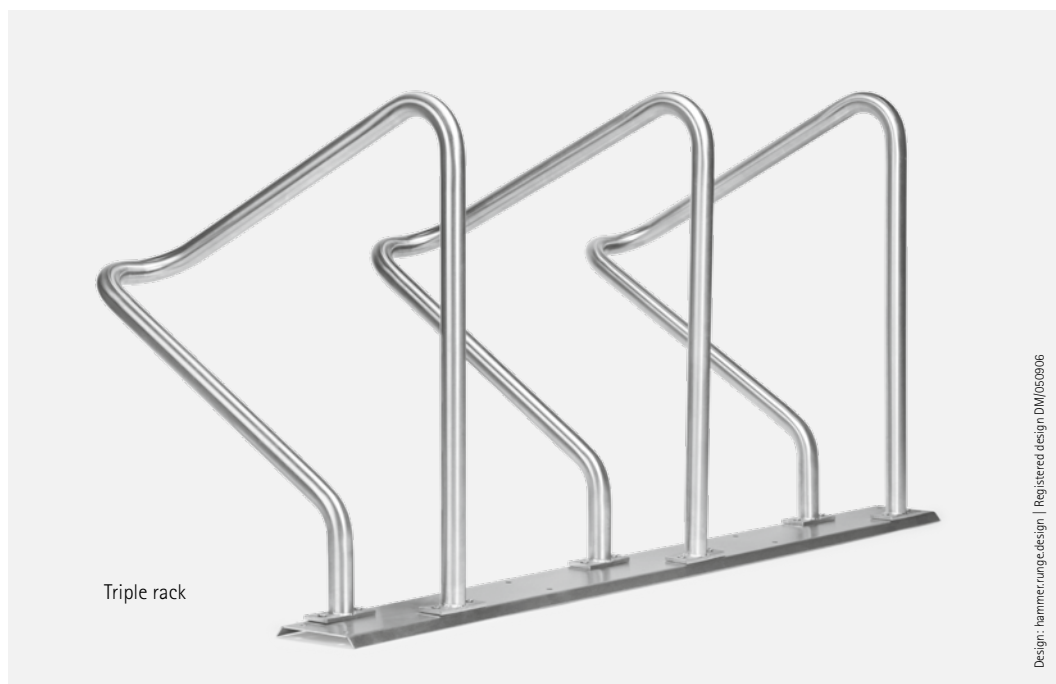
Powder-coated,  
DB703 glimmer grey





**Note**

The division into segments of 2 or 3 racks and the row connector allow the installation of any number of racks to create a row parking facility.



## BICYCLE-STAND 450-1 row configuration on trapezoidal rail

Steel + Stainless steel | 2-unit or 3-unit row system, can be combined as desired using row connectors

**Specifications**

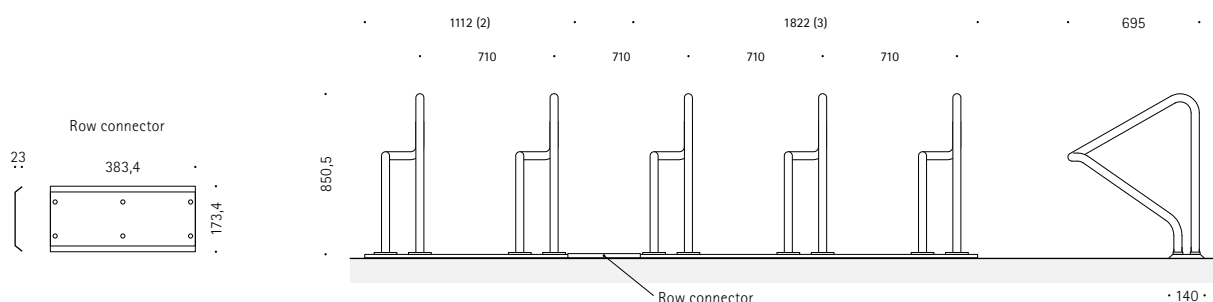
Two or three side-by-side hoops made of bent steel tube with a tube diameter of  $42.4 \times 2.5$  mm, a vertical rear tube and with staggered tube ends with welded on flange. Each stand is screwed onto the trapezoidal rail at an angle of  $90^\circ$  (on request  $45^\circ$ ), which can be connected at both ends to form a row.

**Mounting**

· Row system on trapezoidal rail (see page 128)

**Finish**

- Stainless steel 1.4301 smoothed, grain 240  
Optional: electropolished/high-gloss
- Steel S235, galvanised with powder coating in standard RAL colours or DB 703
- Other colours available on request at a surcharge

**Installation example: combination of 2 and 3 rack row system**

		Double rack	Triple rack	Row connector
<b>450-1 Row configuration</b>	Steel S235, galvanised	<b>450.201</b>	<b>450.301</b>	<b>450.901</b>
<b>450-1 Row configuration</b>	Steel S235, powder-coated	<b>450.211</b>	<b>450.311</b>	<b>450.903</b>
<b>450-1 Row configuration</b>	Stainless steel 1.4301	<b>450.202</b>	<b>450.302</b>	<b>450.902</b>





## CHARGING STANDS made of rectangular steel profile

Steel + Stainless steel

### Specifications

#### CHARGING-STAND 690 with one socket

Stand made of rectangular steel profile (60 × 60 mm), mitred and welded, with a Type F socket (each 230 V, 16 A, IP54) fitted on the inside of the post for connecting an e-bike.

#### CHARGING-STAND 691 with three sockets

Stand made of rectangular steel profile (60 × 60 mm), mitred and welded, with three Type F sockets (each 230 V, 16 A, IP54) fitted on the cross tube for connecting e.g. e-bikes.

### Finish

- Stainless steel 1.4301 smoothed, grain 240  
Optional: electropolished/high-gloss
- Steel S235, galvanised with powder coating in standard RAL colours or DB 703
- Other colours available on request at a surcharge
- Profile dimensions, heights and widths other than specified are available on request and at an additional cost
- Optionally with knee rail

### Mounting

- Concrete embedment
- Alternative: version with two flanges to enable screwing
- Option: removable with ground shells

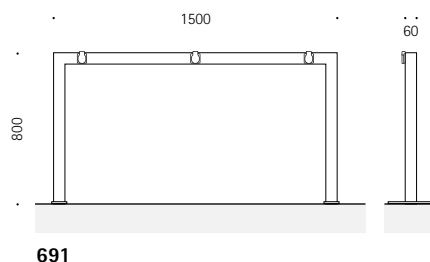
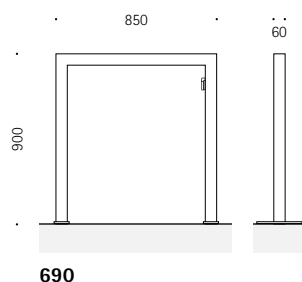
### Technical information

Power supply:	230 Volt DC
Power rating:	16 A
IP Code:	IP54

### Notes

- Electrical configurations on demand at an additional cost.
- Other technical components, such as a residual-current circuit-breaker (FI), controls or cables, are not included in the scope of delivery.
- The fuse protection and connection must be carried out on site by a specialist firm.

- ▶ Can be used for example as a charging station for e-bikes.
- ▶ Type F (Schuko) mains sockets incl. fixing material included in delivery.



Can also be supplied as a bicycle stand without sockets



Type F sockets included in delivery are fitted on site into the openings provided.

## CHARGING-BOLLARD 665 with three sockets

Steel | 900 mm

### Specifications

Rectangular steel bollards with a flat locking top part, prepared for fitting three Type F sockets (each 230 V, 16 A, IP54) for connecting e-bikes, for example.

### Mounting

With flange to enable screwing

### Finish

- Steel S235, galvanised with powder coating in standard RAL colours or DB 703
- Height can be adjusted on customer request

### Technical information

with regard to a Type F (Schuko) socket

Power supply:	230 Volt DC
Power rating:	16 A
IP Code:	IP54

### Notes

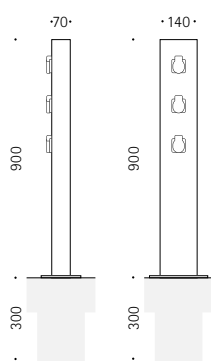
- Electrical configurations on demand at an additional cost.
- Other technical components, such as a residual-current circuit-breaker (FI), controls or cables, are not included in the scope of delivery.
- The fuse protection and connection must be carried out on site by a specialist firm.

Identical with Bollard 065, see p. 63 and Lighting-Bollard 265 LED, on p. 80



Identical with  
Bollard 065 and  
Lighting-Bollard  
265 LED

- ▶ Can be used for example as a charging station for e-bikes.
- ▶ Type F (Schuko) mains sockets incl. fixing material included in delivery.



ST



2022

# 06

## PARKLANDS & CITY

### Handrail

Attractive and safe route guidance in the city center.

### Tree stand

Removable (Christmas) tree stand (with 3p-Technology) for your festive city center.

### Planters

Shrubs, small trees and other plants in the city.

### Tree guard

For the protection of trees or plants.

### Fire basket

Pleasurable anticipation of a social gathering after work.



1: Tree-Guard 662 page 148 | 2: Fire-Basket 935 page 149

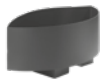
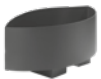









PLANTER 720

page 147





									
		<b>710 S</b>	<b>710 M</b>	<b>710 L</b>	<b>710 XL</b>	<b>720</b>	<b>721</b>	<b>722</b>	<b>730</b>
		Planter	Planter	Planter	Planter	Planter	Planter	Planter	Planter
<b>Catalogue page</b>		<b>146</b>	<b>146</b>	<b>146</b>	<b>146</b>	<b>147</b>	<b>147</b>	<b>147</b>	<b>145</b>
<b>NEW 2022</b>								<b>2022</b>	<b>2022</b>
Material	Aluminium (with powder coating)	-	-	-	-	720.004	721.004	-	-
	Steel S235 (galvanised)	-	-	-	-	-	-	-	-
	Steel S235 (galvanised with powder coating)	-	-	-	-	-	-	-	-
	Steel S235 (with epoxide- and powder coating)	-	-	-	-	□	□	722.001	730.001
	Stainless steel 1.4301 (with powder coating)	710.002	711.002	712.002	713.002	-	-	-	-
Mounting	For concrete embedding	-	-	-	-	-	-	-	-
	Removable with ground shell(s)	-	-	-	-	-	-	-	-
	With flanges to enable screwing	-	-	-	-	-	-	-	-
	Free standing	■	■	■	■	■	■	■	■
Options	Individual color (RAL/DB)	○	○	○	○	○	○	○	○
	Customised laser cuttings	○	○	○	○	○	○	○	○
	Individual dimensions	-	-	-	-	-	-	-	-
Measurements	Length (in mm)	1200	1500	1800	2000	700	1000	600	-
	Width (in mm)	691	650	750	801	700	700	600	Ø 700
	Height inside (in mm)	390	390	490	490	700	700	550	675 (700)
	Total height with feet (in mm)	500	500	600	600	780	780	600	780
	Capacity (approx. in liters)	210	250	430	450	343	490	198	260
	Weight (approx. in kg)	65	68	85	87	35	45	28	31
Design	Doris Herrmann								

				
		<b>662</b>	<b>935</b>	<b>453 (LED)</b>
		Tree Guard	Fire Basket	Bicycle stand as handrail/railing
<b>Catalogue page</b>		<b>148</b>	<b>149</b>	<b>145</b>
<b>NEW 2022</b>				
Material	Aluminium (with powder coating)	-	-	-
	Steel S235 (galvanised)	662.001	-	■
	Steel S235 (galvanised with powder coating)	662.011	-	■
	Sheet steel (untreated)	-	935.001	-
	Stainless steel 1.4301 (smoothed, grain 240)	662.002	-	■
Mounting	For concrete embedding	■	-	■
	Removable with ground shell(s)	■	-	■
	With flanges to enable screwing	□	-	■
	Free standing	-	■	-
Options	With LED strip	-	-	○
	With knee rail	-	-	○
	Individual color (RAL/DB)	○	-	○
	Customised laser cuttings	-	○	-
	Individual dimensions	○	-	○
Measurements	Length (in mm)	1200	-	820 / each stand
	Width (in mm)	1200	Ø 355	50
	Height (in mm)	Variable	750	860
	Capacity (approx. in liters)	-	50	-
	Weight (approx. in kg)	15	5	6,5 / each stand
Design	J. P. Gillen			

■ = Model | □ = On request | ● = Configuration | ○ = Option (with a surcharge) | - = Not available

## BICYCLE-STAND 453 (LED) as handrail or railing

Steel + Stainless steel

### Specifications

U-rack made of perpendicular steel profiles (rectangular profile 50 x 20 mm mitre-cut). Other profile dimensions, heights and widths are available upon request at a surcharge.

### Finish

- Stainless steel 1.4301 smoothed, grain 240  
Optional: electropolished/high-gloss
- Steel S235, galvanised with powder coating in standard RAL colours or DB 703
- Optionally with knee rail



For more informations see: BICYCLE-STAND 453 (LED) page 130



## PLANTER 730

Steel

### Specifications

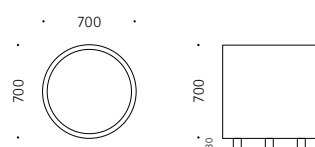
Plant pot with round basic shape and vertical side walls. The base has water drainage holes. The container stands on three individual feet made of square tubes.

### Mounting

Free standing element

### Finish

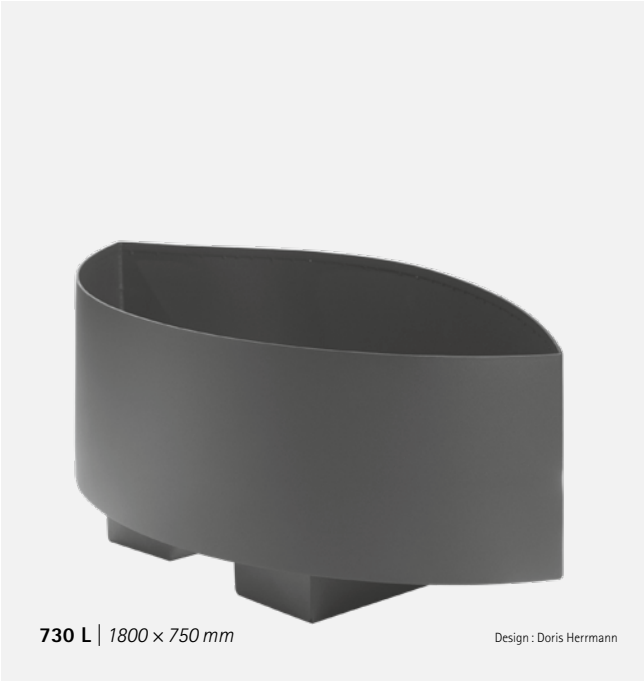
- Steel with epoxide- and powder coating in standard RAL colours or DB 703
- Containers are also available without legs and with welded frames for chain suspension upon request



► Customised laser cuts available

	Steel, powder-coated	
<b>Planter 730</b>	Ø 700 mm	<b>730.001</b>





## PLANTER 710

*Stainless steel*

### Specifications

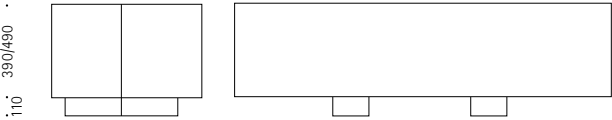
Plant pot with curved sides that taper at both ends. The base has water drainage holes. The container stands on rectangular tubes which serve as supports for hoisting equipment. The apertures of the tubes can be covered with removable caps.

### Mounting

Free standing element

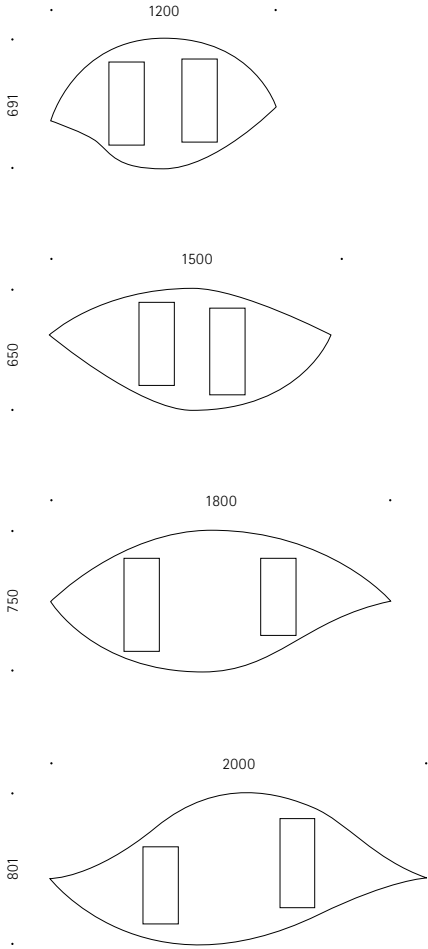
### Finish

- Stainless steel 1.4301 with powder coating in standard RAL colours or DB 703
- Other colours available on request at a surcharge

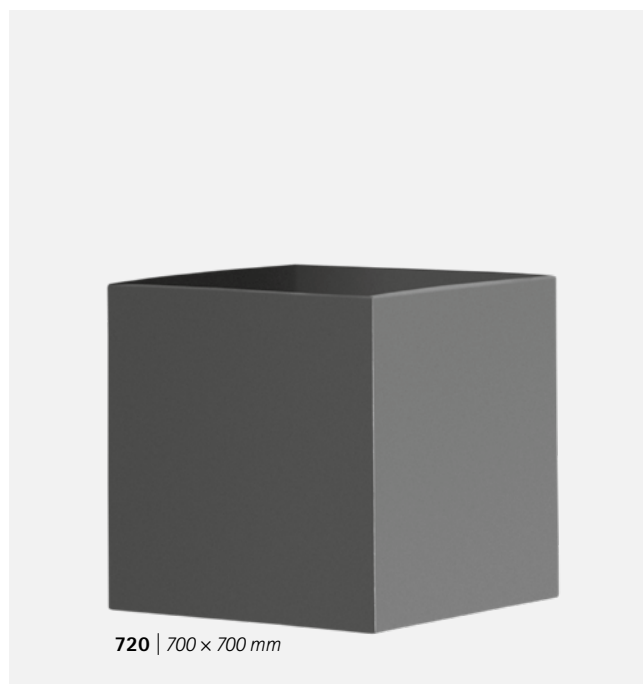


### ► Customised laser cuts available

Stainless steel 1.4301, powder-coated				
Planter 710	S	1200 x 691 mm	710.002	
Planter 710	M	1500 x 650 mm	711.002	
Planter 710	L	1800 x 750 mm	712.002	
Planter 710	XL	2000 x 801 mm	713.002	





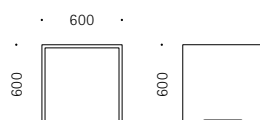
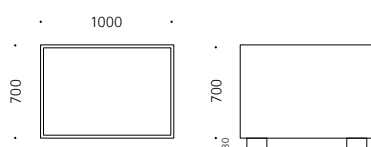
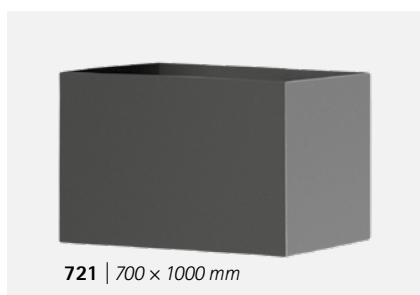


## PLANTER 720 | 721 | 722

720 | Aluminium | 700 × 700 mm

721 | Aluminium | 700 × 1000 mm

722 | Steel | 600 × 600 mm



### Specifications

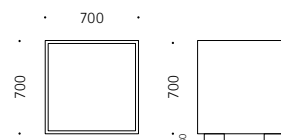
Plant pot with square or oblong basic shape and vertical side walls. The base has water drainage holes. The container stands on four individual feet made of square tubes.

### Mounting

Free standing element

### Finish

- Aluminium with powder coating in standard RAL colours or DB 703
- Steel with epoxide- and powder coating in standard RAL colours or DB 703
- Containers are also available without legs and with welded frames for chain suspension upon request



### ► Customised laser cuts available

		powder-coated
<b>Planter 720</b>	700 mm × 700 mm	<b>720.004</b>
<b>Planter 721</b>	700 mm × 1000 mm	<b>721.004</b>
<b>Planter 722</b>	600 mm × 600 mm	<b>722.004</b>





## TREE-GUARD 662

Steel + Stainless steel

### Specifications

A bent, U-shaped steel frame with a diameter of 48.3 × 2.6 mm.

Three foundations are required.

Optional: a ground shell for the removable model

### Mounting

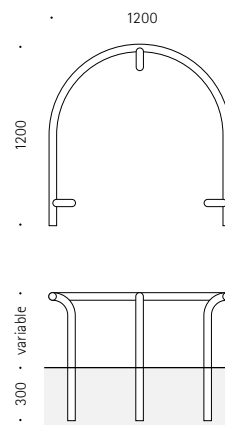
Concrete embedment or inserted into a standard ground shell

(not available with 3p-Technology)

Optional: with flanges to enable screwing

### Finish

- Stainless steel 1.4301 smoothed, grain 240  
Optional: electropolished/high-gloss
- Steel S235, galvanised with powder coating in standard RAL colours or DB 703
- Other colours available on request at a surcharge



	Concrete embedding
S235 steel, galvanised	<b>662.001</b>
S235 steel, powder-coated	<b>662.011</b>
Stainless steel 1.4301	<b>662.002</b>
Ground shell for removable model	<b>600.200</b>





## FIRE-BASKET 935

Sheet steel | 50 l

### Specifications

Fire basket made of non-galvanised sheet steel with three welded feet and capacity of approx. 50 liters. Suitable as a simple fireplace or grill for all kinds of occasions.

Customised laser cuts at the top, middle and base ensure diverse designs, and make the basket unique.

The holes in the upper area may be used for spits. A grate is available as an accessory.

Using non-galvanised sheet steel ensures no harmful vapours are formed as heat builds up.

### Mounting

Free-standing, with three feet

### Finish

- Untreated steel
- Default or customised laser cutting

### Measurements

Diameter: approx. 355 mm

Height: approx. 750 mm

Weight: approx. 5,0 kg

		Sheet steel
<b>Fire-Basket 935</b>	without laser cutting	<b>935.001</b>
<b>Fire-Basket 935</b>	with flame	<b>935.101</b>
<b>Fire-Basket 935</b>	with flame + name	<b>935.201</b>
<b>Fire-Basket 935</b>	with 1 preferred laser cutting	<b>935.301</b>
<b>Fire-Basket 935</b>	with 2 preferred laser cuttings	<b>935.401</b>

### Accessories

Matching grate	935.002
Soil protection	935.003

- ▶ Ask about additional accessories
- ▶ Customised laser cuttings possible

ST



PROJECTS  
AND  
REFERENCES

A Selection



Hosingen | Luxembourg



Achern | Germany



Saarburg | Germany



Hamburg | Germany



Cannes | France



Altdorf near Nuremberg | Germany





Odense | Denmark



Bexbach | Germany



Eschdorf, SEBES | Luxembourg



Saarbrücken | Germany



Heidelberg, SNP dome | Germany

Ask for references in your area!

Pictures of projects:  
<https://abes-online.com/en/projects/>







Category	Product name	Page
Waste Containers	WASTE-CONTAINER 522 <i>NEW 2022</i>	118
	WASTE-CONTAINER 523	119
	WASTE-CONTAINER 524	118
	WASTE-CONTAINER 527	116
	WASTE-CONTAINER 529	117
	WASTE-CONTAINER 530	117
	WASTE-CONTAINER 531	116
	WASTE-CONTAINER 540	114
	WASTE-CONTAINER 541	115
	WASTE-CONTAINER 545 <i>NEW 2022</i>	113
Bollards	BASE 030 <i>NEW 2022</i>	112
	BOLLARD 001	31
	BOLLARD 001-1	31
	BOLLARD 002	37
	BOLLARD 003	52
	BOLLARD 004	49
	BOLLARD 005-1	46
	BOLLARD 005-2	46
	BOLLARD 006-1	38
	BOLLARD 006-2	39
	BOLLARD 007	45
	BOLLARD 008	31
	BOLLARD 009-1   -2	31
	BOLLARD 010	30
	BOLLARD 011	50
	BOLLARD 012	37
	BOLLARD 013	49
	BOLLARD 014-1   -2   -3	43
	BOLLARD 015	40
	BOLLARD 016	30
	BOLLARD 017	40
	BOLLARD 018	44
	BOLLARD 019	53
	BOLLARD 020	51
	BOLLARD 021-1   -2	41
	BOLLARD 022	51
	BOLLARD 023	45
	BOLLARD 024	41
	BOLLARD 025	47
	BOLLARD 026-1   -2	72
	BOLLARD 027-1   -2	30
	BOLLARD 028	48
	BOLLARD 029	43
	BOLLARD 031-1   -2	34
	BOLLARD 032	36
	BOLLARD 034	40
	BOLLARD 037-1	55
	BOLLARD 037-2	58-59
	BOLLARD 038	42
	BOLLARD 039	48
	BOLLARD 040	42
	BOLLARD 041	50
	BOLLARD 042-1   -2	58-59
	BOLLARD 043	31
	BOLLARD 055-1	55
	BOLLARD 055-2	58-59
	BOLLARD 056	58-59
	BOLLARD 057	54
	BOLLARD 058	54
	BOLLARD 059	64
	BOLLARD 060	36
	BOLLARD 061	35
	BOLLARD 062	44
	BOLLARD 063	62
	BOLLARD 064	57
	BOLLARD 065	63
	BOLLARD 066	63
	BOLLARD 068	47
	BOLLARD 069	56
	BOLLARD 070	56
	BOLLARD 071	57

Category	Product name	Page
	BOLLARD 074	62
	BOLLARD 076-10/-20/-30/-40/-50	60-61
	BOLLARD 079	64
	BOLLARD 089	58-59
	BOLLARD 095 <i>NEW 2022</i>	58-59
	BOLLARD 096 <i>NEW 2022</i>	58-59
	BOLLARD-ASHTRAY 525	65
	FEEDER-BOLLARD 300-1	74
	FEEDER-BOLLARD 300-2	75
Tree Guard	TREE-GUARD 662	148
E-Mobility	CHARGING-BOLLARD 665 <i>NEW 2022</i>	73/141
	CHARGING-STAND 690 <i>NEW 2022</i>	140
	CHARGING-STAND 691 <i>NEW 2022</i>	140
Bicycle Stands	BICYCLE-STAND 452	134
	BICYCLE-STAND 453	130-131
	BICYCLE-STAND 453 LED	130-131
	BICYCLE-STAND 461 <i>NEW 2022</i>	134
	BICYCLE-STAND 470	134
	BICYCLE-STAND 471	132
	BICYCLE-STAND 472	133
	BICYCLE-STAND 474	133
	BICYCLE-STAND 476	135
	BICYCLE-STAND 477	135
	BICYCLE-STAND 450-1	136-138
	BICYCLE-STAND 450-2	136-138
	BICYCLE-STAND 450-1 row configuration	139
	BICYCLE-STAND 451	137-138
	BICYCLE-STAND 480 <i>NEW 2022</i>	124-127
Fire Basket	FIRE-BASKET 935	149
Railing-Systems	RAILING-BOLLARD 027-7 <i>NEW 2022</i>	68
	RAILING-BOLLARD 027-8 <i>NEW 2022</i>	68
	RAILING 810 <i>NEW 2022</i>	68
	RAILING 850 <i>NEW 2022</i>	69
	RAILING 851 <i>NEW 2022</i>	69
Lighting Bollards	LIGHTING-BOLLARD 200	84
	LIGHTING-BOLLARD 200 LED	85
	LIGHTING-BOLLARD 210 LED	76
	LIGHTING-BOLLARD 220 LED	77
	LIGHTING-BOLLARD 230 LED	78
	LIGHTING-BOLLARD 240 LED	79
	LIGHTING-BOLLARD 265 LED	80
	LIGHTING-BOLLARD 266 LED	81
	LIGHTING-BOLLARD 267 LED	83
Benches & Tables	BENCH 100	98
	BENCH 103	100-101
	BENCH 104	106
	BENCH 107-1   -2	102
	BENCH 109-1   -2	103
	BENCH 113 <i>NEW 2022</i>	100-101
	BENCH 121-1   -2	105
	BENCH 131	104
	BENCH 141-1   -2	90
	BENCH 142-1   -2	91
	BENCH 143-1   -2	92
	BENCH 144-1   -2	93
	BENCH 146-1   -2	94
	BENCH 148-1   -2 <i>NEW 2022</i>	96-97
	BENCH 147	99
	LEAN-ON-BENCH 108	108
	LEANING-BENCH 110 <i>NEW 2022</i>	108
	LOUNGER 1.120	109
	SEATING-BOLLARD 105	109
	STOOL 145	107
	TABLE 143	92
	TABLE 144	93
	TABLE 145	107
Planters	PLANTER 710	146
	PLANTER 720   721   722 <i>NEW 2022</i>	147
	PLANTER 730 <i>NEW 2022</i>	145
Accessories	COMPONENTS OF 3P-TECHNOLOGY	10-19

## 3P-TECHNOLOGY



### Ground shells (cast iron, galvanised)



**Ground shell 300 mm\***  
(standard for 3p-Technologie)

000.001



**Ground shell 500 mm**  
for additional stability with unstabilised subsoil,  
cobblestone pavement etc.

000.003



**Ground shell 100 mm**  
as special solution in case of small mounting  
depth, e.g. car parks, bridges etc.

000.007

### Junction pieces w. predetermined breaking point (cast iron, galvanised)



**Junction piece without anti-roll device\***  
(standard for 3p-Technologie)

000.008



**Junction piece with anti-roll device**  
After a collision with a vehicle, the metal rod  
prevents the bollard to roll away.

000.013



**Junction piece w. anti-roll device + cable slot**  
for LED lighting bollards  
The metal rod prevents the rolling away of the  
bollard after a collision with a vehicle

000.017



**Junction piece with short anti-roll device**  
for ground shell 100 mm (000.005)  
The metal rod prevents the rolling away of the  
bollard after a collision with a vehicle

000.018



**Junction piece extended version**  
for 3p-High  
Allows to open and close the locking  
mechanism with long fire brigade triangular  
keys without offsets

000.016



**Junction piece 3p-Flex (without cable slot)**  
The bollard returns to its initial position after  
impact (8-10° tilt), and only breaks if the breaking  
load is exceeded.

000.015

### Junction pieces w/o predetermined breaking point (cast iron, galvanised)



**Junction piece w/o predetermined breaking point**  
Solid protection for people and objects.  
Does not break in case of an impact.

000.034



**Height-adjustable junction piece**  
Height can be adjusted with a threaded rod  
Compensates for the gap between bollard and  
ground shell, if it ends below level, e.g. with  
paving stones of different heights.

000.041

### Clamping cone sets (stainless steel 1.4301)



**Clamping cone set with hex head screw\***  
(standard for 3p-Technologie)  
N1 + N2 + hexagonal head screw

3p-SPK-  
N1-N2-  
6K



**Clamping cone set with triangular head screw**  
N1 + N2 + triangular head screw

3p-SPK-  
N1-N2-  
3K



**Clamping cone set w. lengthened clamping cone**  
N5 (75 mm) + N2 + triangular head screw  
Additional protection by a padlock in order to  
prevent unauthorised removal. Possible use with  
triangular head screw.

3p-SPK-  
N5-N2-  
3K



**Clamping cone set with ABES Bolt - Teardrop shaped**  
Screw with special head, with droplet-shaped hole  
Can only be opened with optional special tool  
so as to prevent it from being opened without  
authorisation using standard tools  
(Utility model protection)

3p-SPK-  
N1-N2-  
TR

### Screws and clamping cones (stainless steel 1.4301)



**Hexagonal head screw**  
spare part, M12, length 80 mm

000.009



**Triangular head screw**  
spare part, M12, length 75 mm

000.019



**ABES Bolt - Teardrop shaped**  
special asseccory, M12, length 75 mm

000.035



**Cover caps (pair)**, for hexagonal head screw  
grey or black, plastic

000.006



**Clamping cone N1\***  
spare part, without internal thread

N1.000








**Clamping cone N2\***  
spare part, three-slotted and with internal thread  
(suitable tool see next page: 000.029/000.026)














N2.001

\* Part of the standard delivery for products with 3p technology.



	<b>Clamping cone N4</b> lengthened, for protection by a padlock	<b>N4.000</b>
	<b>Clamping cone N5</b> lengthened, for protection by a padlock	<b>N5.000</b>
<b>Ground shell covers</b>		
	<b>Ground shell cover</b> cast aluminium, powder-coated in DB 703	<b>000.002</b>
	<b>Ground shell cover with ressort</b> steel S235, galvanised	<b>000.050</b>
<b>Tools</b>		
	<b>Nut for triangular head screws</b> M12, stainless steel 1.4571	<b>000.027</b>
	<b>Nut for ABES Bolts - Teardrop shaped</b> stainless steel 1.4571	<b>000.037</b>
	<b>Nut with 3-pin adapter</b> to tighten the clamping cone N2.001 stainless steel 1.4571	<b>000.029</b>
	<b>Socket wrench for triangular head screws</b> robust design	<b>000.024</b>
	<b>Socket wrench for ABES Bolts - Teardrop shaped</b> robust design	<b>000.036</b>
	<b>Socket wrench with 3-pin adapter</b> to tighten the clamping cone N2.001 robust design	<b>000.026</b>
	<b>Triangular key</b> simple, with short holder, M12 x 75 mm	<b>000.011</b>
	<b>Triangular key</b> simple, with long holder, M12 x 160 mm	<b>000.014</b>
<b>Ground rosettes (steel S235, galvanised, powder-coated in bollard paint)</b>		
	<b>Ground rosette</b> for <u>Bollard 032</u> with 3p-Technologie	<b>000.032</b>
	<b>Ground rosette</b> for <u>Bollard 066</u> with 3p-Technologie	<b>000.066</b>
	<b>Ground rosette</b> for <u>Bollard 014</u> with 3p-Technologie	<b>000.030</b>

## BOLLARDS

<b>Chains &amp; accessories (galvanised, powder-coated in bollard paint)</b>		
	<b>Chain 8 x 52 mm</b> sold per meter	<b>000.100</b>
	<b>Eylet</b>	<b>000.200</b>
	<b>Shackle</b>	<b>000.300</b>
	<b>Chainlink for eylet</b>	<b>000.303</b>
<b>Special models</b>		
	<b>Bollard 001, 5 rings red painted</b> RAL 3020/9016	<b>000.301</b>
	<b>Bollard 008 + 010, 1 ring red painted</b> RAL 3020/9016	<b>000.302</b>
	<b>1 ring of reflective foil</b> 100 mm wide; red, white or red/white	<b>000.321</b>
	<b>2 rings of reflective foil</b> 100 mm wide; red, white or red/white	<b>000.322</b>
	<b>3 rings of reflective foil</b> 100 mm wide; red, white or red/white	<b>000.323</b>
	<b>Cat's eye reflectors</b> affixed reflectors	<b>000.326</b>
	<b>Finished with logo</b> individual production	<b>000.327</b>
	<b>1 cutting of reflective foil</b> 100 mm wide; red, white or red/white, self-adhesive, for manual installation	<b>000.328</b>
	<b>Reflective foil sold by the meter</b> 50 mm or 100 mm wide; red, white or red/white, self-adhesive, to apply individually	<b>on demand</b>
	<b>Powder coating except standard RAL colours</b> free of charge for more than 9 bollards in the same colour	<b>000.310</b>

## ACCESSORIES

### Stainless steel – surface treatments



**Smoothed**  
e. g. grain 240 (standard)

000.410



**Electropolishing** (high-gloss)

000.420

### Special coatings



**Long-lasting phosphorescent coating**  
Maintains fluorescent properties permanently

on  
demand

## GENERAL

### Bicycle stands



**Ground shells (pair), 300 mm**  
**for Bicycle-Stand 453 and 453 LED**  
(needed for removable version)

458.002



**Clamping cover rosette 458**  
**for Bicycle-Stand 453 and 453 LED**  
(needed for removable version)  
*steel S235, galvanised* 458.005  
*steel S235, galvanised, powder-coated in RAL or DB* 458.007  
*stainless steel 1.4301, smoothed, grain 240* 458.006



**Cover plates for ground shells (pair)**  
**for Bicycle-Stand 453 and 453 LED**

458.003



**Ground shell for removable model**  
**for Bicycle-Stand 451**  
*galvanised*

456.003



**Ground shell for removable model**  
**for Bicycle-Stand 450-1 and 450-2**  
*galvanised*

456.002



**Cover plate**  
**for Bicycle-Stand 451**  
*steel S235, galvanised* 455.003  
*steel S235, galvanised, powder-coated in RAL or DB* 455.013  
*stainless steel 1.4301, smoothed, grain 240* 455.004



**Ground shell for removable model**  
**for Bicycle-Stand 450-1 and 450-2**  
*steel S235, galvanised* 455.001  
*steel S235, galvanised, powder-coated in RAL or DB* 455.011  
*stainless steel 1.4301, smoothed, grain 240* 455.002

### Waste containers



**Triangular key for waste containers**  
standard

500.003

### Ground shells (other)



**Ground shell, ø 48 mm**  
for standard tube with diameter 48 mm  
(e.g. for Tree-Guard 662)

600.200



**Ground shell, ø 60 mm**  
for standard tube with diameter 60 mm

600.201



**Ground shell, ø 76 mm**  
for standard tube with diameter 76 mm

600.202

### Clean & care products



**Ceramic grease aerosol**

on  
demand



**Liqui Moli assembly paste**

on  
demand



**Touch-up paint (RAL or DB colour)**  
correct small defects in the product's coating

on  
demand

### Color Fans



**RAL K7 CLASSIC colour fan**  
containing 213 RAL CLASSIC colours

000.341



**DB Glimmer Grey fan**  
TL / TP-KOR steel structures  
attachment H - colour cards, 14 shades

000.340

# EXPLANATION OF SYMBOLS & TENDER SPECIFICATIONS

## DELIVERABLE MOUNTING VARIANTS



### With 3p-Technology

Removable with 3p-Technology. Comprising a 300 mm ground shell, junction piece with predetermined breaking point (without anti-roll device), one clamping cone with internal thread, one clamping cone without internal thread and a hex head bolt as a standard.

*All bollards (except feeder bollards) can be supplied with 3p-Technology.*



### With 3p-Technology for LED lighting bollards

Comprising a 300 mm ground shell, junction piece with predetermined breaking point, anti-roll device and cable slot, one clamping cone with internal thread, one clamping cone without internal thread and a hex head bolt as a standard.



### With 3p-Technology "3p-High"

Removable with 3p-Technology.

For the use of long fire brigade triangular keys without offsets.

*Is basically possible with all bollards. Extended junction piece required for 3p-High.*



### With 3p-Snaplock (self-latching)

Removable with 3p-Snaplock.

Optionally with triangular or cylinder lock.



### Fixed mounting



### Screw-on (with flange)



with socket(s)



### Removable with ground shells



with socket(s)



### Fold down



### Free standing (for benches)



### Available as a row system on trapezoidal rails (for bicycle stands)

## FINISH



### Products made of cast aluminium

Powder coating in standard RAL colours or DB 703



### Products made of steel S235\*

Steel S235, galvanised with powder coating in standard RAL colours or DB 703



### Products made from stainless steel 1.4301\*

Stainless steel 1.4301 pickled and smoothed, grain 240  
Optional: electropolished/high-gloss

Other colours available on request at a surcharge.

**Only for bollards:** Accessories and special requirements such as different colours, red and white paint, reflective film or powder coating of chains, rings, shackles, etc. in the same colour as the bollard are available on request at a surcharge

*(except feeder bollards and Bollard 026)*

\*For bollards, the height can be adjusted individually *(except feeder bollards)*



### The ground rosette is part of the delivery (3p-Technology)

Completely covers the ground shell, material: S235 steel, hot-dip galvanised and powder coated in bollard paint



### With LED Light unit



### Available in the online shop as a 3D model and for AR

All presentations and descriptions in the brochure, as well as the product models and properties, including the 3p-Technology, are given for information purposes only.

Due to the unpredictability of daily usage, no guarantee can be given for the described product properties. All products have been carefully developed for a tough everyday use and are built accordingly robust.

We reserve the right to make technical or optical amendments without prior notice at any given time or when we believe this serves the further development and improvement of our products.

"ABES" and "3p-Technology" are registered word and figurative trademarks.

Catalogue design: Doris Schäfer

Photography: Kai Funk, Sebastian Gross, Guy Wolff, Moritz Leg and ABES

Printed: October 2022

For detailed product descriptions, tender texts and installation instructions for download, visit [www.abes-online.com](http://www.abes-online.com)



**ABES S.à r.l.**

48, rue Gabriel Lippmann

L-6947 Niederanven

Phone: +352 . 28 67 65 01

Fax: +352 . 28 67 65 20

Email: [shop@abes-online.com](mailto:shop@abes-online.com)