

LORO-X Balcony drains

for balconies made of precast concrete parts without additional steel covering, galvanized with additional coating, Series I, IK and GS as single and direct drains DN 50, DN 70 and DN 100

For setting in concrete

Series I, vertical runoff

with integrated dome for an „invisible“ support of the push-fit socket as single or direct drain



Series I, horizontal runoff

as single drain with separate formwork dome



For balconies with tapping hole

Series IK, vertical runoff

with integrated dome and clamping collar for an exact clamping when setting into the tapping hole



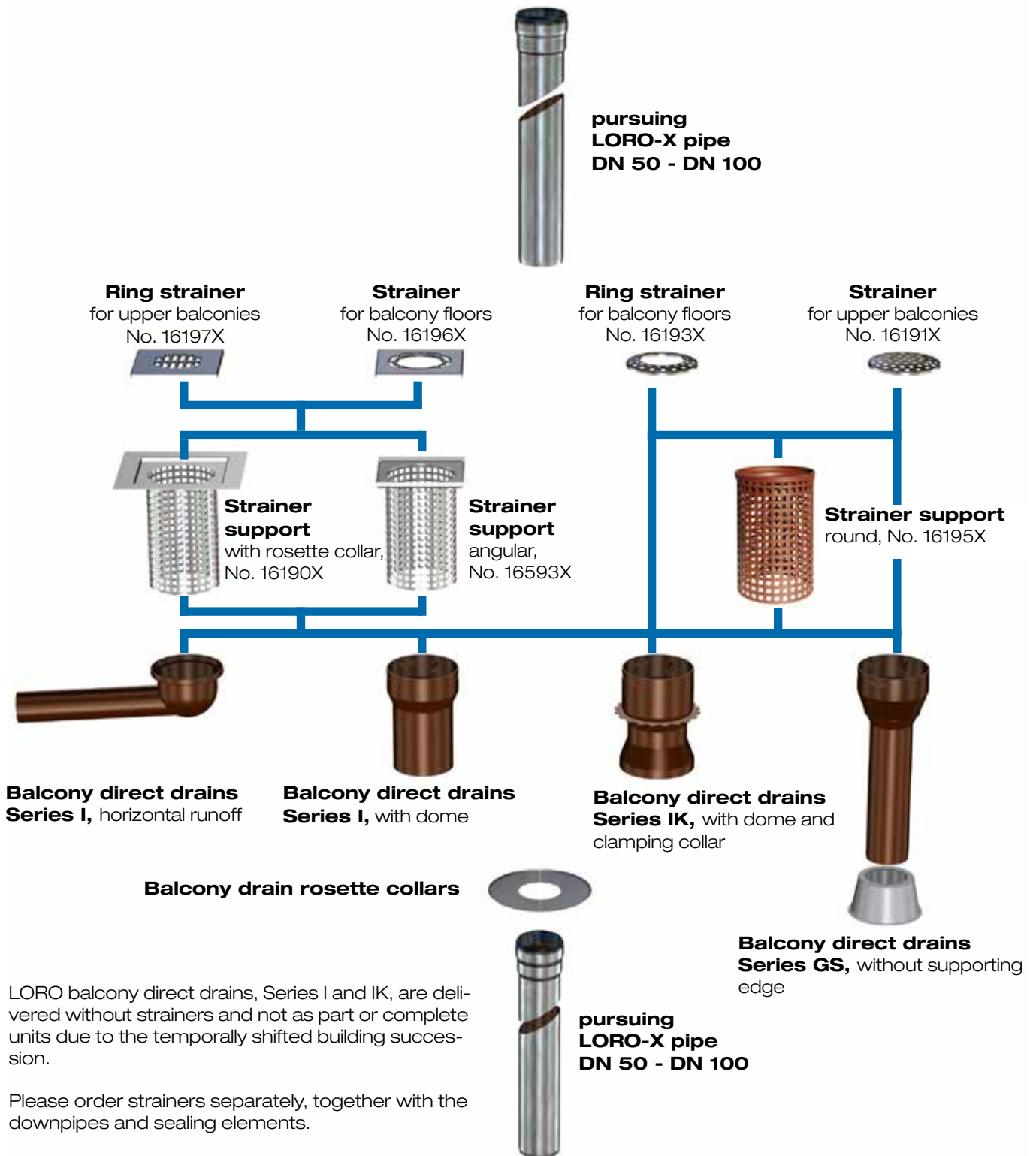
Advantages:

- galvanized steel with additional coating
- equipped with dome and clamping collar
- break-proof up to 2 mm wall thickness and UV-resistant
- reliable quality: used for over 50 years in the precast concrete sector
- standard availability of the drains for a plate thickness of 95-220 mm
- special designs for intermediate lengths available upon request

Setup diagramm/System components

Series I, IK and GS: LORO Balcony direct drains

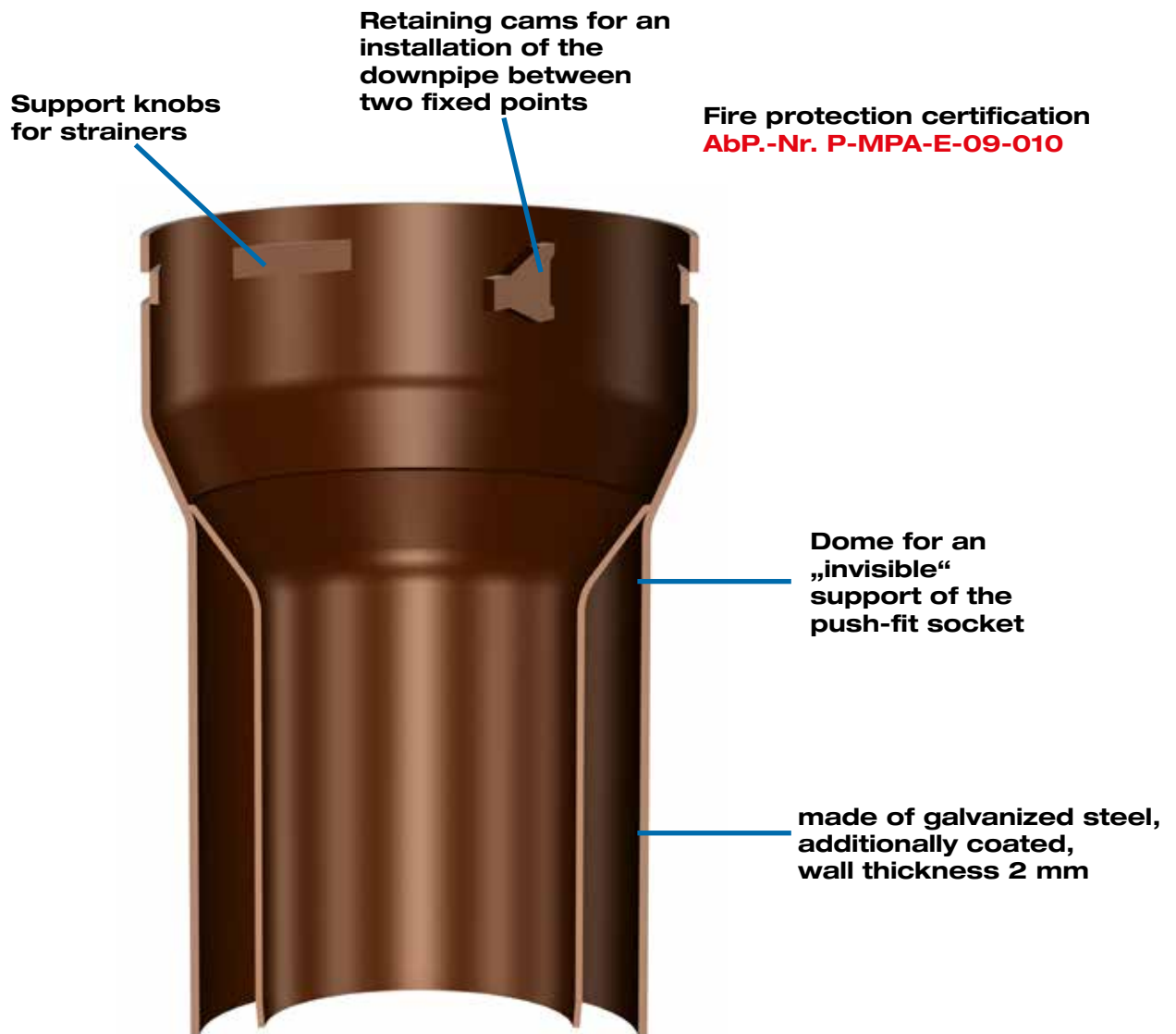
DN 50 - DN 100, made of galvanized steel, additional coating



LORO balcony direct drains, Series I and IK, are delivered without strainers and not as part or complete units due to the temporally shifted building succession.

Please order strainers separately, together with the downpipes and sealing elements.

LORO Balcony direct drains Series I, DN 50 - DN 100

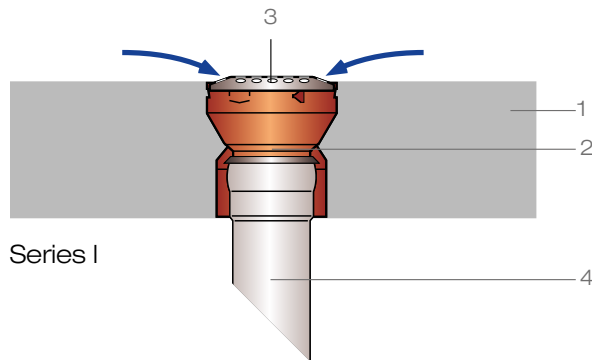


- Fire protection for DN 50-70/R90 or DN 100/R60 has been examined and certified according to AbP.-Nr. P-MPA-E-09-010
- Stability within the LORO-X system in case of mechanical and physical strain
- Protection against corrosion at the drain in case of existing adhesion on the steel ground
- Resistance against contact corrosion (e. g. for zinc pipes), against pitting or stress corrosion and in the case of contact with reinforced steel
- Galvanized steel offers an increased protection in the case of chloride pollution in comparison to conventional stainless steel in 1.4301
- A very good compatibility with alkaline and carbonated concrete
- High diffusion resistance towards steam and oxygen

Application Examples

Series I and IK:

Balconies made of waterproof concrete components, without additional covering.



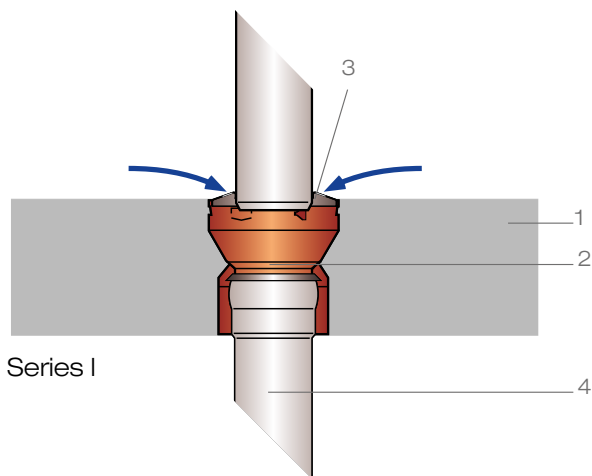
Series I

for upper balconies

- 1 Concrete component slab
- 2 Direct drain with dome, encased in concrete component slab
- 3 Strainer made of stainless steel for upper balconies
- 4 LORO-X steel discharge pipe

LORO solution:

LORO balcony direct drains with dome, Series I, vertical runoff, with strainer made of stainless steel for upper balconies.



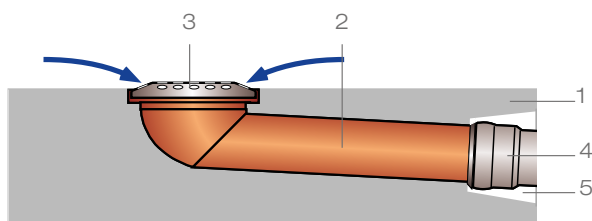
Series I

for balcony floors

- 1 Concrete component slab
- 2 Direct drain with dome, encased in concrete component slab
- 3 Strainer made of stainless steel with pipe penetration
- 4 LORO-X steel discharge pipe

LORO solution:

LORO balcony direct drains with dome, Series I, vertical runoff, with strainer made of stainless steel for balcony floors.



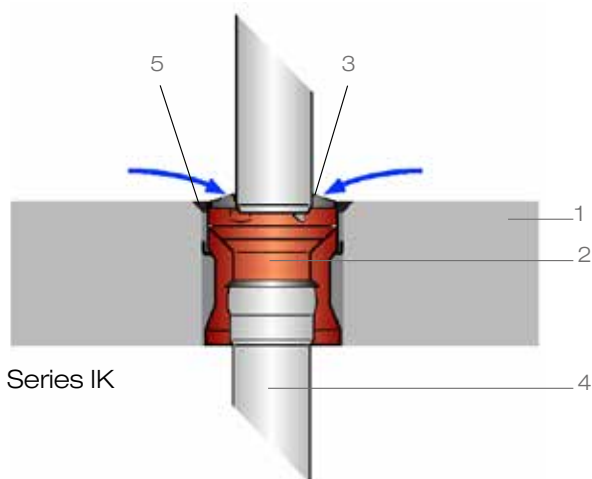
Series I

for horizontal installation

- 1 Concrete component slab
- 2 Direct drain, encased in concrete component slab
- 3 Strainer made of stainless steel for upper balconies
- 4 LORO-X steel discharge pipe
- 5 Recess made with help of LORO formwork dome see page 15

LORO solution:

LORO balcony direct drains, Series I, horizontal runoff, with strainer made of stainless steel for upper balconies.



Series IK

with tapping hole - for balcony floors

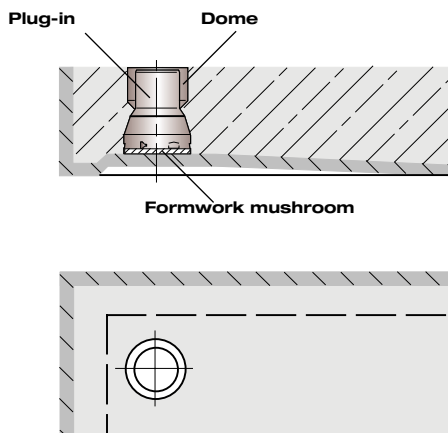
- 1 Balcony slab
- 2 Direct drain with dome and clamping collar
- 3 Strainer made of stainless steel for balcony floors
- 4 LORO-X steel discharge pipe
- 5 Sealing

LORO solution:

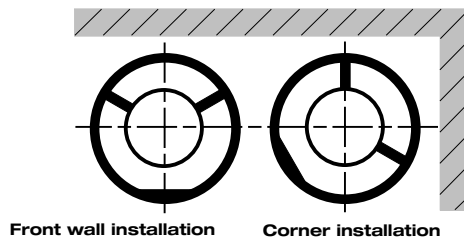
LORO balcony direct drains with dome, Series IK, vertical runoff, with strainer made of stainless steel for balcony floors.

See pages 13 - 14 for article numbers of Series I and IK

Installation instruction



Pay attention to the position of the retaining cams!



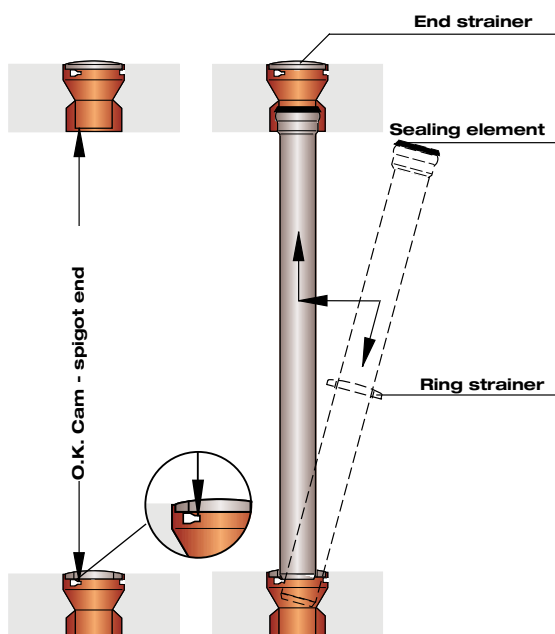
Hints for civil engineers and workers at the concrete plant:

- 1) The aforementioned products are available in the following plate thicknesses: 95 mm, 120 mm, 140 mm, 160 mm, 180 mm, 200 mm, 220 mm.
- 2) For a safe fixation on the formwork (negative form), the concrete plant has to produce formwork mushrooms with the following diameters:
 - direct drain DN 50 = mushroom diameter 97 mm
 - direct drain DN 70 = mushroom diameter 118 mm
 - direct drain DN 100 = mushroom diameter 140 mm
- 3) When fastening the formwork mushroom in the formwork, please pay attention to the following:
 - a) The direct drain has to be positioned vertically in the concrete component.
 - b) In order to guarantee a vertical direction of the downpipe, one has to pay attention to the perpendicular position of the drains while manufacturing and installing the plates.
 - c) During compacting and post-treatment please keep the formwork dome free of concrete remains or remove them at an early stage.
 - d) After stripping the formwork, the drain has to be checked regarding an impeccable condition of the dome, of the plug-in and of the position of the strainer.

Calculation and Installation of the Downpipes

Installation instruction:

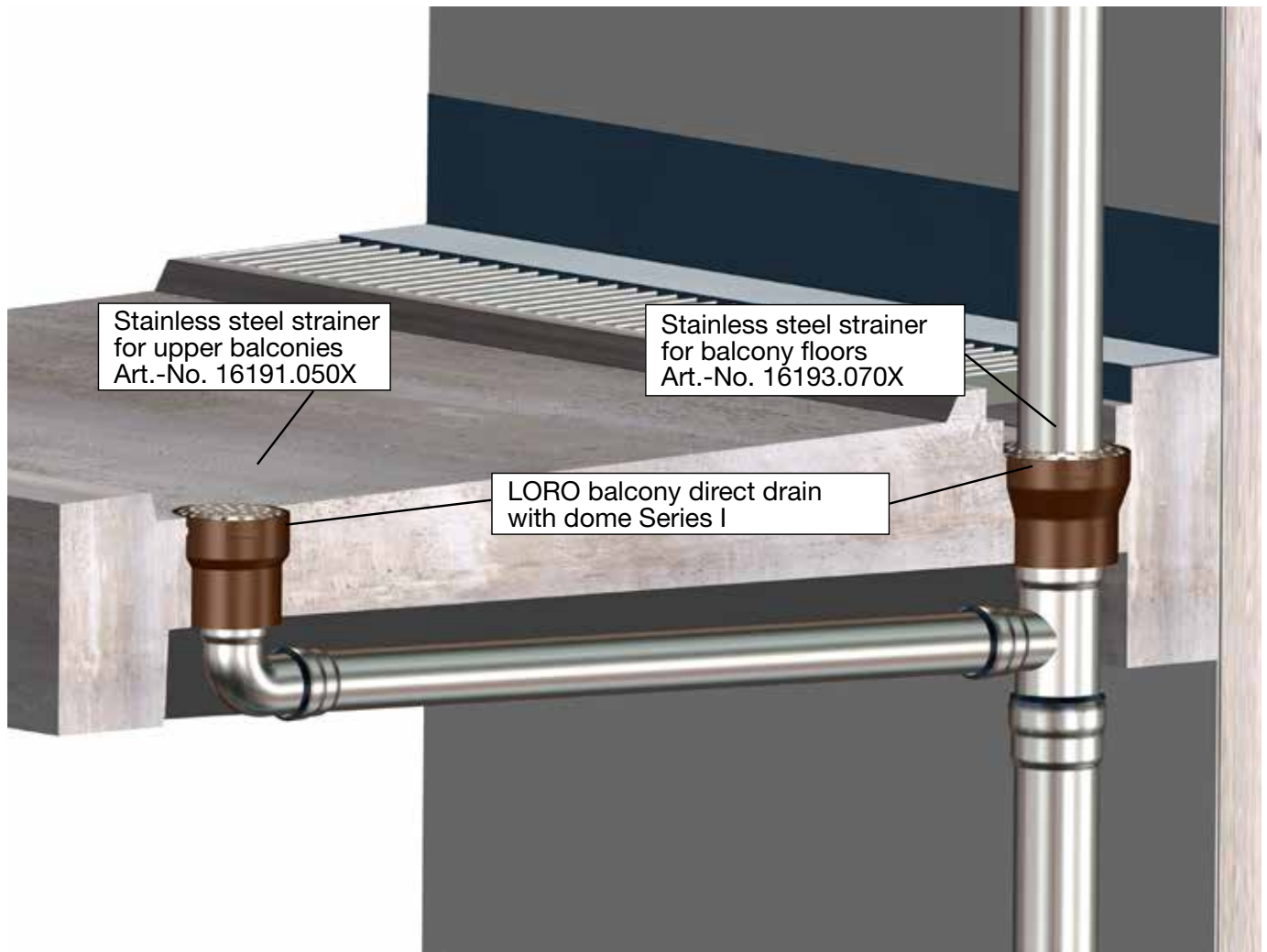
- 1) Check the LORO direct drains that have been set in concrete. If necessary, remove concrete remains and clean the cams.
- 2) Determine the length from the upper edge of the cam of the lower direct drain to the spigot end of the upper direct drain. Add 25 mm (applies to all nominal diameters). Thus, the pipe length is calculated.
- 3) Shorten the pipe to the desired length, insert the sealing element and cover it with lubricant. Push the ring strainer No. 16193X onto the downpipe (curvature of the strainer on the upper side).
- 4) Slantingly insert the downpipe into the lower direct drain, past both cams. Position the downpipe vertically and push the socket onto the plug-in of the upper direct drain. Pay attention to the correct position of the sealing element.
- 5) Position the downpipe on both cams of the lower direct drain and push the ring strainer into the drain body. Thus, the downpipe is fastened.
- 6) On the top balcony, push the end strainer No. 16191X into the drain body.



Application examples

LORO-X Series I

Single drain, offset with LORO-X steel discharge pipe, to the LORO-X Series I direct drain, in combination with a customary drainage gutter

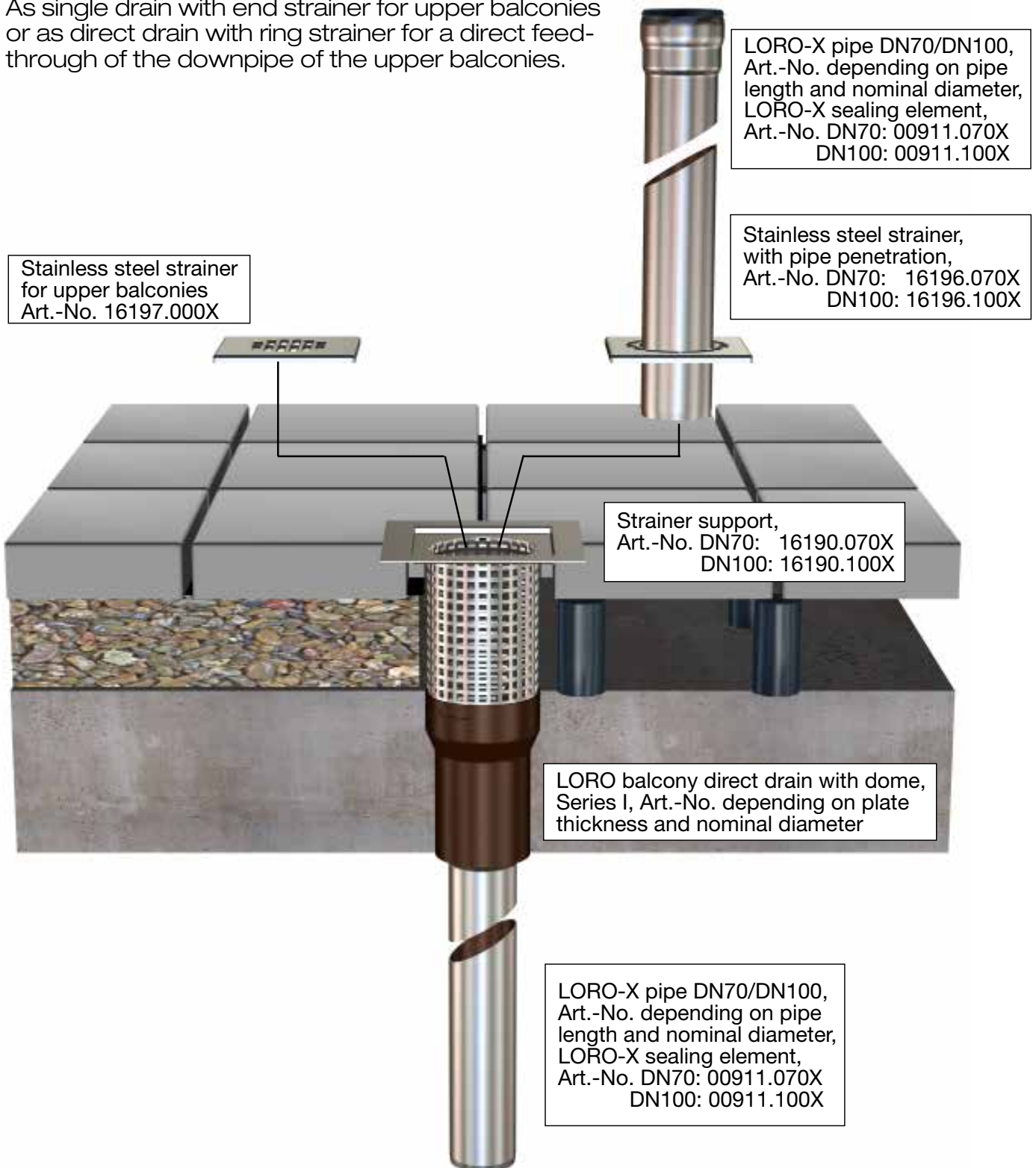


Application examples

LORO-X Series I

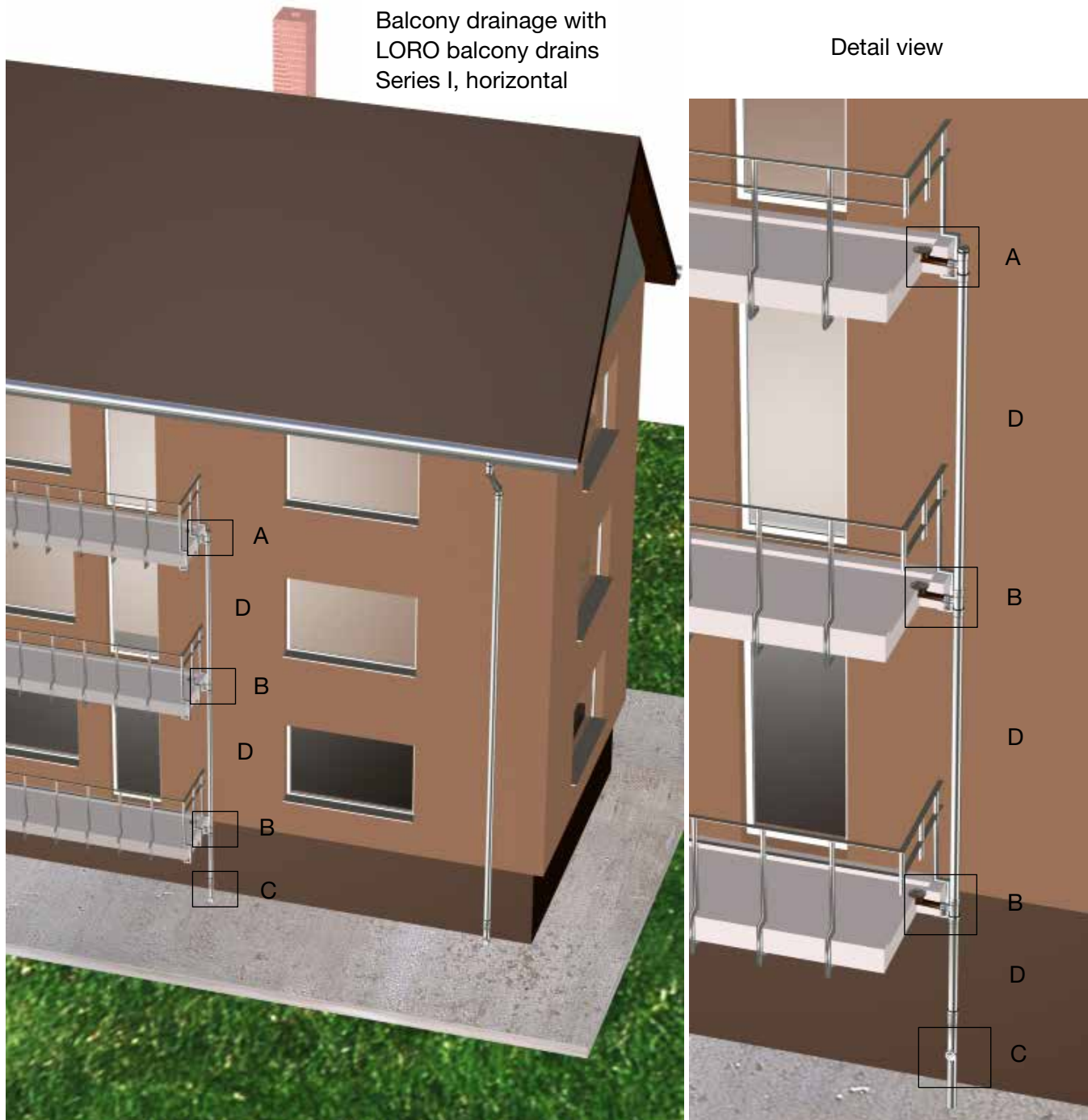
Balcony drain with perforated strainer support for the drainage of seepage inside the balcony structure.

As single drain with end strainer for upper balconies or as direct drain with ring strainer for a direct feed-through of the downpipe of the upper balconies.



Application examples

LORO-X Series I Horizontal version



A - LORO balcony direct drain Series I, Art.-No. 16362.050X, strainer, Art.-No. 16191.070X, reducing branch, Art.-No. 00230.CB0X, closing plug, Art.-No. 00800.070X

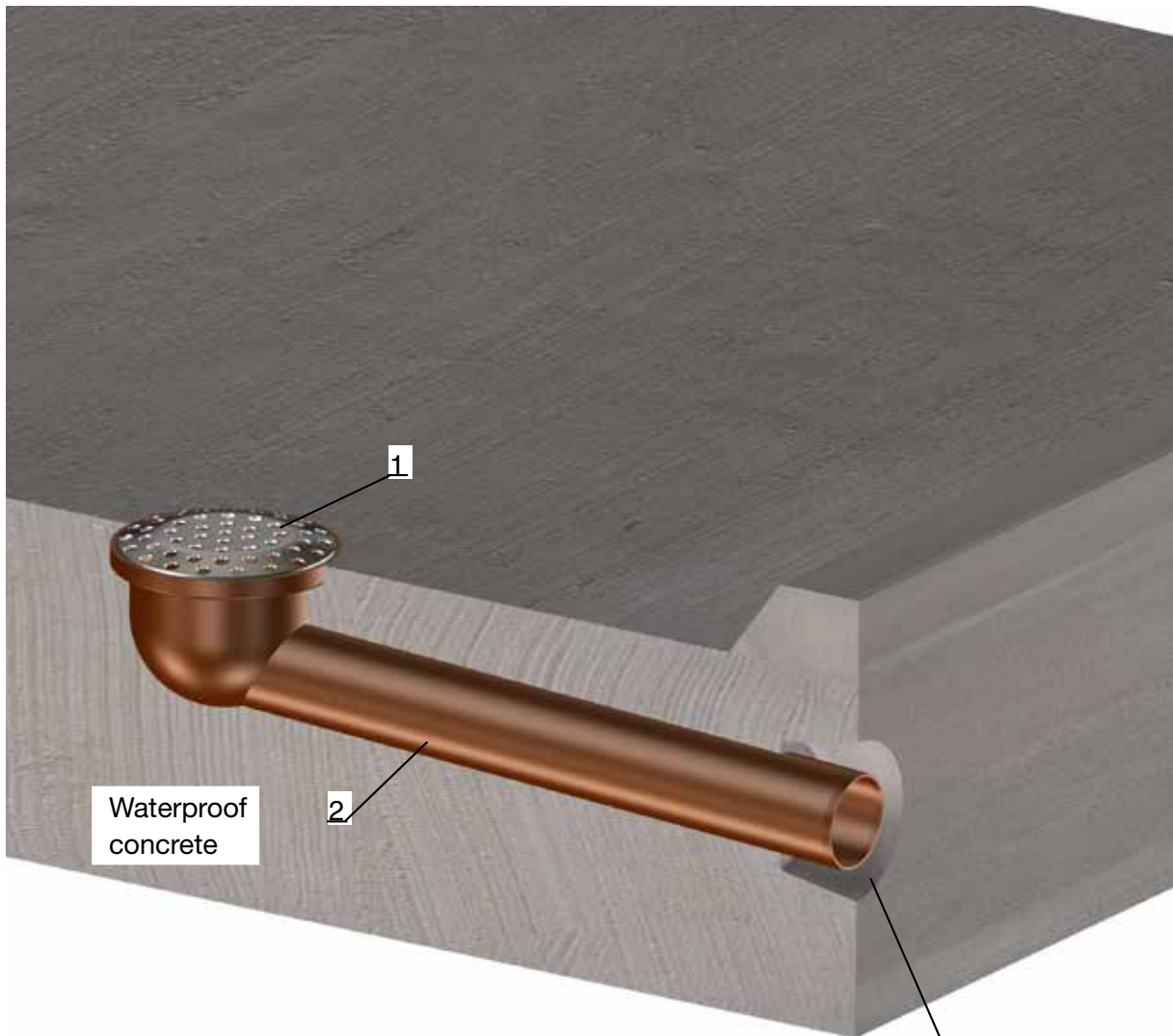
B - identical to position A, without closing plug however

C - LORO rain standpipe, Art.-No. 05510.070X

D - LORO-X pipe DN 70

Application examples

LORO-X Series I Horizontal version



For balconies made of waterproof concrete parts,
without additional covering
1 - LORO Ring strainer, Art.-No. 16191.070X
2 - LORO Balcony direct drain, Art.-No. 16362.050X

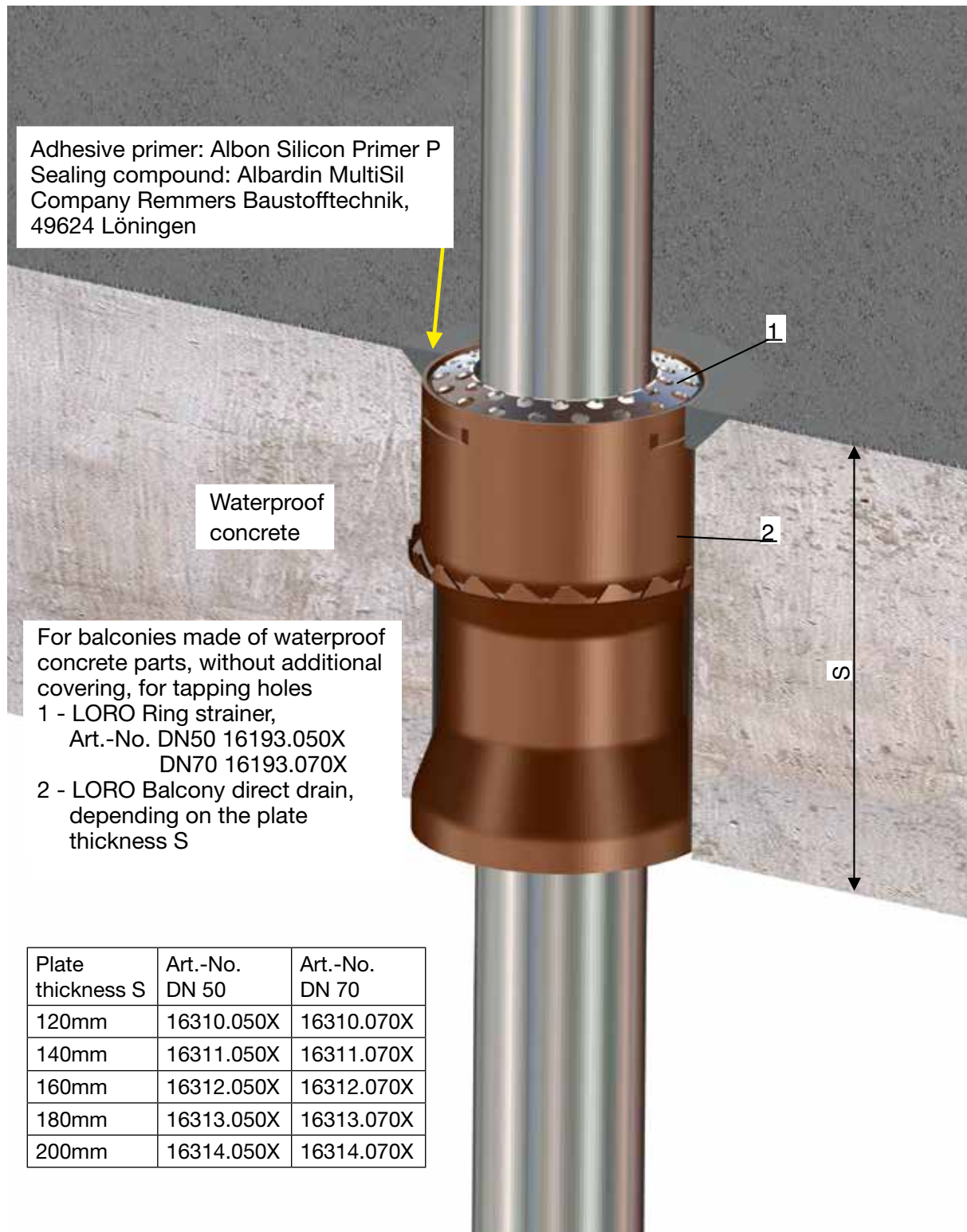
LORO Formwork dome, as concrete placing aid,
Art.-No. 18100.050X



Application examples

LORO-X Series IK

with clamping collar for an exact clamping in tapping holes. The annular gap of the tapping hole will be closed on site.

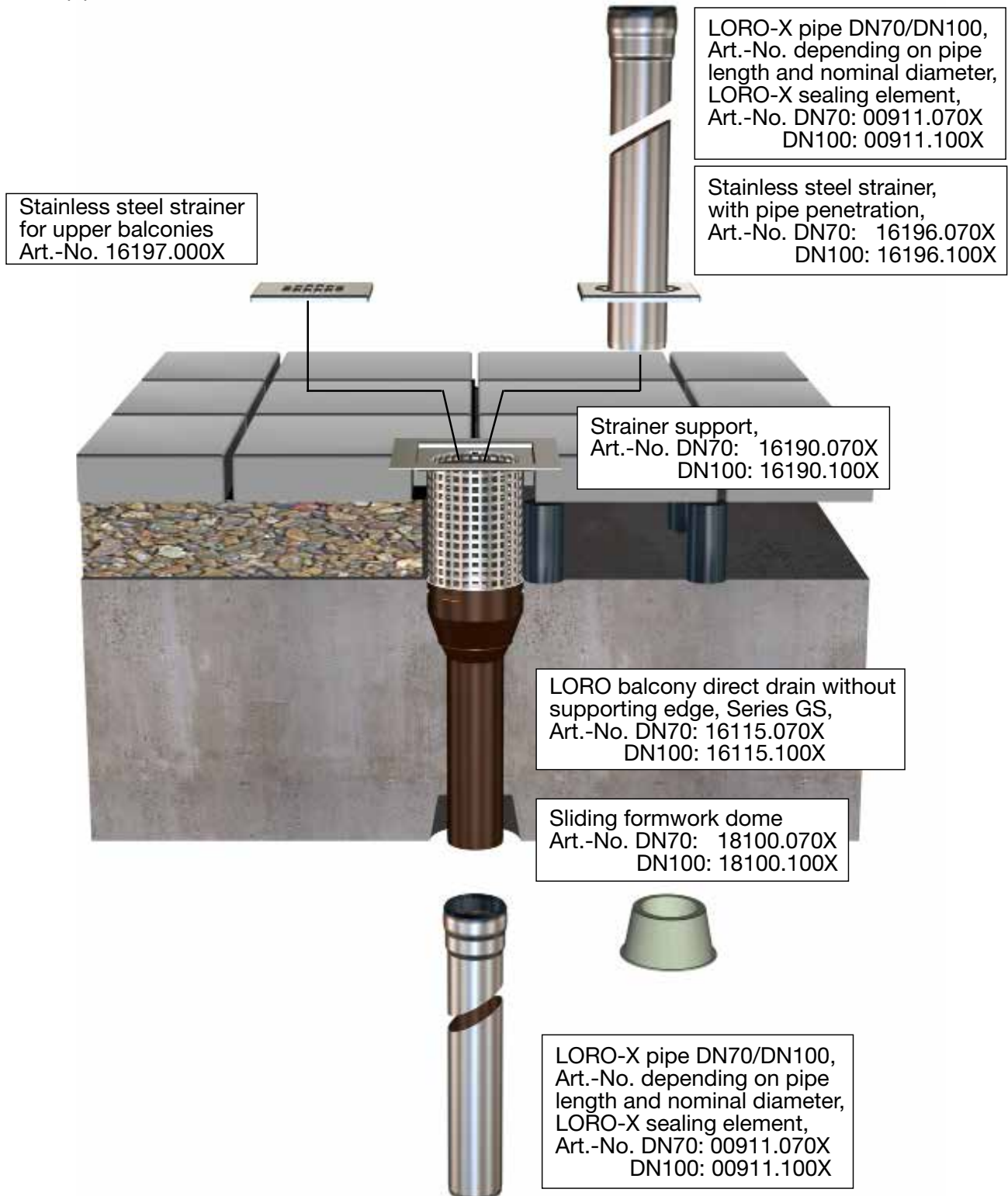


Application examples

LORO-X Series GS

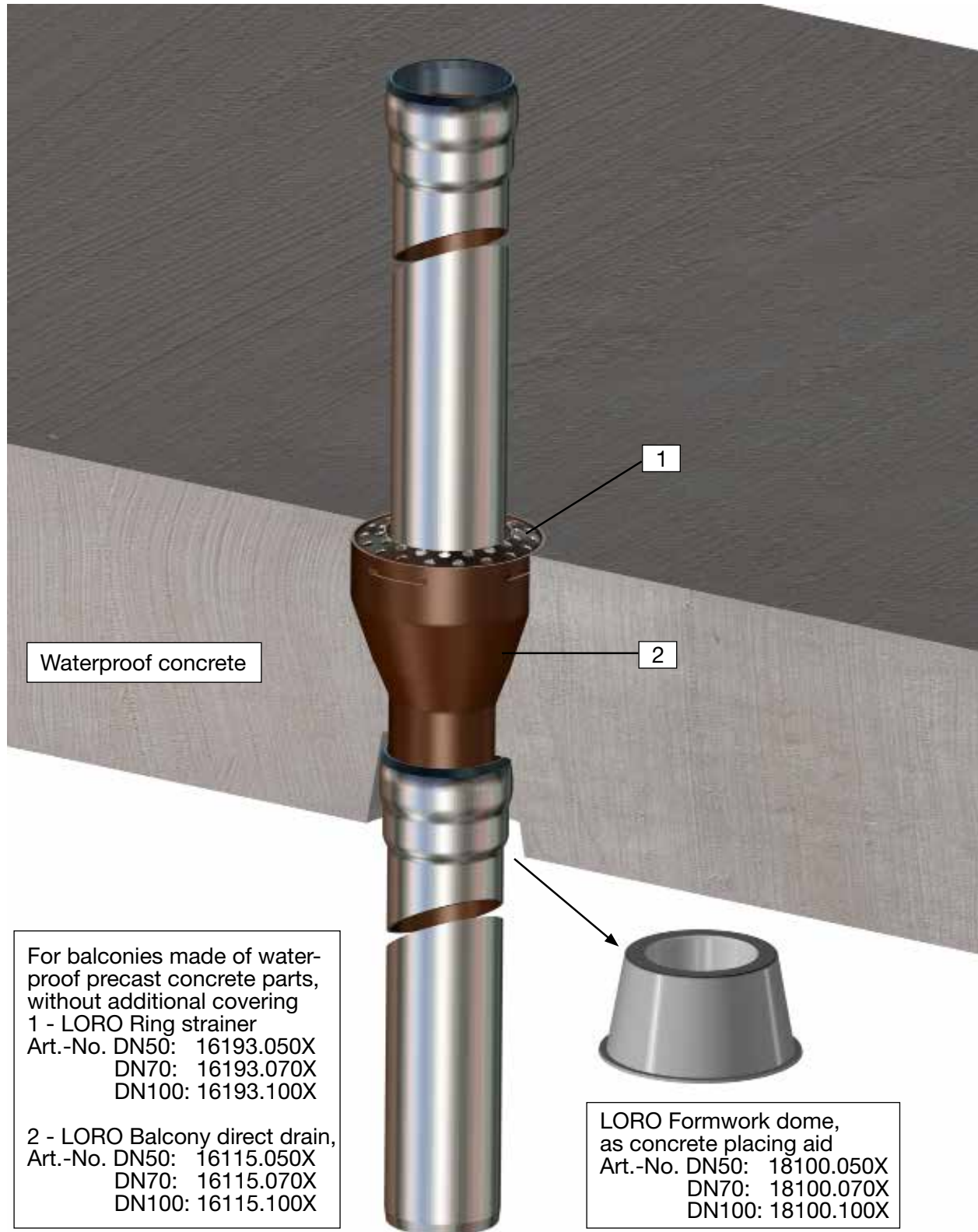
Balcony drain with perforated strainer support for the drainage of seepage inside the balcony structure.

As single drain with end strainer for upper balconies or as direct drain with ring strainer for a direct feed-through of the downpipe of the upper balconies.



Application examples

LORO-X Series GS



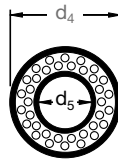
Dimensions and Weights

LORO Balcony direct drains with dome, Series I

Strainer for balcony floors

 Discharge rate: 0.7 l/s $\hat{=}$ DN 50

Material: stainless steel

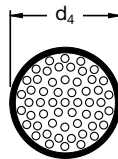


Art.-No.	DN	d ₄	d ₅	h
16193.050X	50	98	55	0,03
16193.070X	70	118	75	0,1
16193.100X	100	140	104	0,1

Strainer for upper balconies

 Discharge rate: 0.7 l/s $\hat{=}$ DN 50

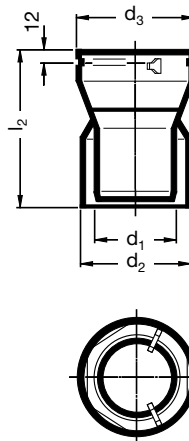
Material: stainless steel



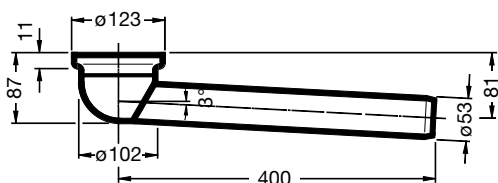
Art.-No.	DN	d ₄	h
16191.050X	50	98	0,03
16191.070X	70	118	0,1
16191.100X	100	140	0,1

Direct drain with dome

Material: galvanized steel, additionally coated

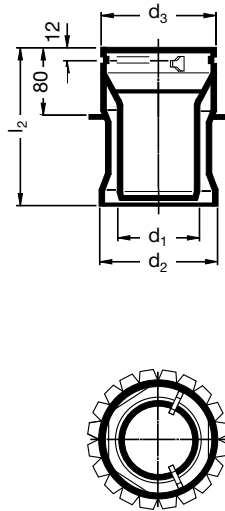


Art.-No.	DN	d ₁	d ₂	d ₃	l ₂	kg
16375.050X	50	53	89	102	95	0,7
16370.050X	50	53	89	102	120	0,7
16371.050X	50	53	89	102	140	0,8
16372.050X	50	53	89	102	160	0,8
16373.050X	50	53	89	102	180	0,9
16374.050X	50	53	89	102	200	1,1
16376.050X	50	53	89	102	220	1,1
16375.070X	70	73	102	122	95	0,8
16370.070X	70	73	102	122	120	0,9
16371.070X	70	73	102	122	140	1,0
16372.070X	70	73	102	122	160	1,2
16373.070X	70	73	102	122	180	1,5
16374.070X	70	73	102	122	200	1,6
16376.070X	70	73	102	122	220	1,6
16370.100X	100	102	133	145	120	1,4
16371.100X	100	102	133	145	140	1,7
16372.100X	100	102	133	145	160	1,7
16373.100X	100	102	133	145	180	1,9
16374.100X	100	102	133	145	200	2,2
16376.100X	100	102	133	145	220	2,4



Dimensions and Weights

LORO Balcony direct drains with dome for tapping holes, Series IK



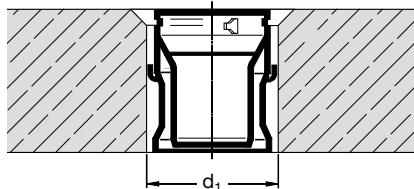
Direct drain with dome and clamping collar*
Material: galvanized steel, additionally coated

Art.-No.	DN	d ₁	d ₂	d ₃	l ₂	kg
16310.050X	50	53	108	102	120	0,9
16311.050X	50	53	108	102	140	0,9
16312.050X	50	53	108	102	160	1,0
16313.050X	50	53	108	102	180	1,1
16314.050X	50	53	108	102	200	1,3
16310.070X	70	73	128	123	120	1,1
16311.070X	70	73	128	123	140	1,2
16312.070X	70	73	128	123	160	1,4
16313.070X	70	73	128	123	180	1,6
16314.070X	70	73	128	123	200	1,8

* See page 13 for strainers for balcony floors or for upper balconies.

Recess dimensions

Tapping hole

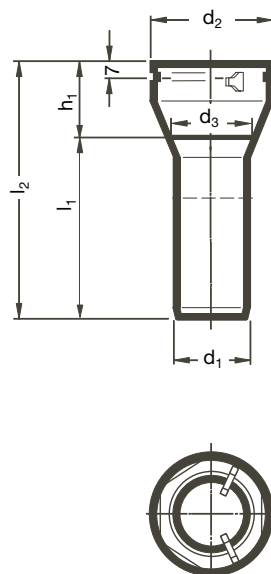


DN	d ₁
50	112
70	132

LORO Balcony direct drains without supporting edge, Series GS

Drain body

Material: galvanized steel, additionally coated up to plate thickness 350 mm



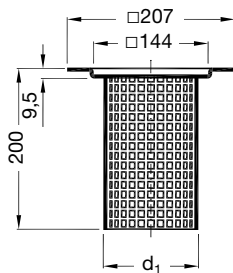
Art.-No.	DN	d ₁	d ₂	d ₃	l ₁	l ₂	h ₁	kg
	50	53	102	63	278	350	72	1.1
16115.070X	70	73	122	89	270	350	80	1.4
16115.100X	100	102	145	112	278	350	72	2.1

* See page 13 for strainers for balcony floors or for upper balconies.

Dimensions and Weights

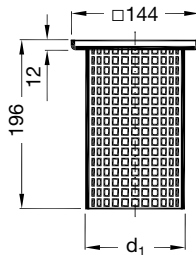
LORO-X Strainer support for balcony drains, Series I, IK and GS

The LORO-X strainer support for balcony drains of Series I, IK and GS constitutes a high-quality alternative to the standard strainer supports made of plastic. End strainers for single drains as well as ring strainers for direct drains can be inserted into the strainer support. The circumferential collar as ornamental sheet upgrades the balcony drainage on the second, visible drainage level.



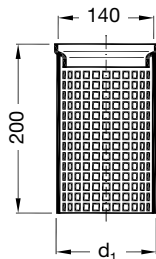
LORO-X Strainer support, with rosette collar for balcony drains Series I, IK, G, GF and GS
Material: stainless steel

Art.-No.	DN	d ₁
16190.070X	70	117
16190.100X	100	139



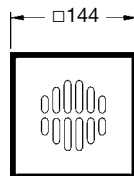
LORO-X Strainer support, angular for balcony drains Series I, IK, G, GF and GS
Material: stainless steel

Art.-No.	DN	d ₁
16593.070X	70	117
16593.100X	100	139



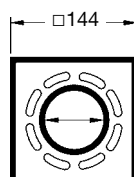
LORO-X Strainer support, round for balcony drains Series I, IK, G, GF und GS
Material: galvanized steel

Art.-No.	DN	d ₁
16195.050X	50	97
16195.070X	70	117
16195.100X	100	139



Strainer for upper balconies, quadratic

Art.-No.
16197.000X

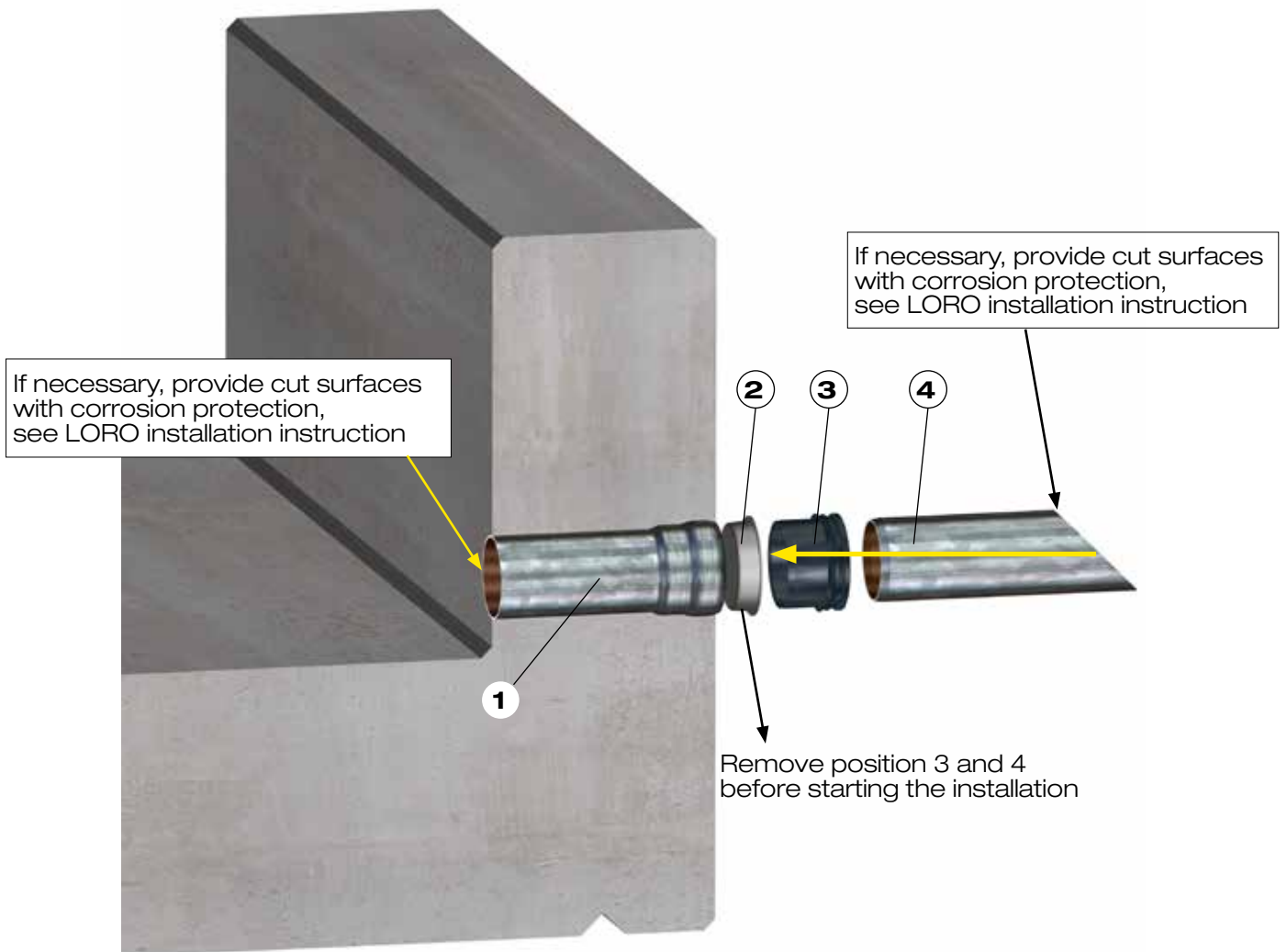


Strainer for balcony floors, quadratic

Art.-No.	DN
16196.070X	70
16196.100X	100

Application examples

Emergency drainage



1. LORO-X Pipe with one socket
2. LORO-X Socket protection caps as aide for concrete-placing
3. LORO-X VAC sealing element
4. LORO-X Spout

Dimensions and Weights

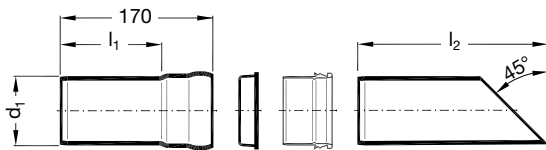
LORO-X Waterproof concrete spout for balconies to be set in concrete at the concrete plant



The LORO-X waterproof concrete spout consists of 4 parts. Regarding the installation, it is an ideal option for raised building components made of waterproof concrete that are produced at the concrete plant.

First, the base body (1) is set in concrete at the concrete plant. During the concrete placing, the socket protection cap (2) prevents the unintentional entrance of concrete into the spout. There are no dangerously protruding parts during the transport to the site since the base body ends flush on both sides.

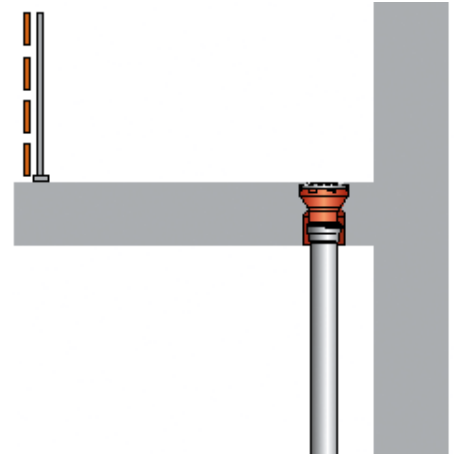
Only after the installation on site, the protruding spout (4) is inserted together with the sealing element (3).



Art.-No.	DN	d ₁	l ₁	l ₂	kg
15190.040X	40	42	140	159	0,6
15190.050X	50	53	132	159	0,7
15190.070X	70	73	115	174	1,0

Specification sheet LX 989

Balcony drainage Series I, IK, G, GF, GS, for upper balconies

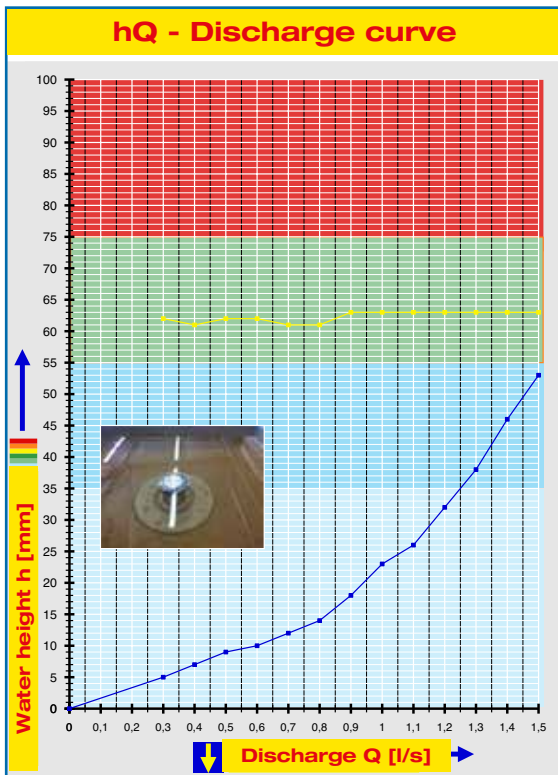


Main drainage	
Gravity flow	
Silent	
Discharge rate:	1.25 l/s
Water height:	35 mm
Roof penetration:	95 to 350 mm
Diameter:	DN 50
LX-Number:	LX 989
Weir height:	-
Drain:	ventilated
Downpipe:	ventilated
Downpipe height:	-
Drainage:	-
Flange:	-

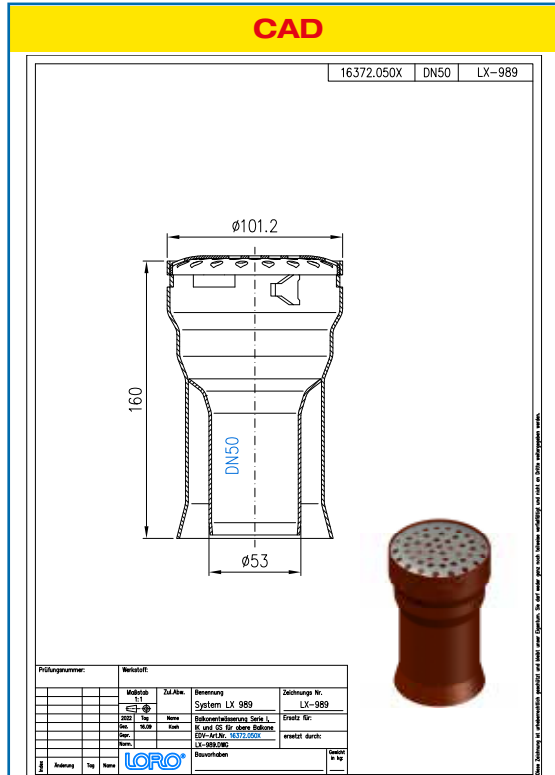
LX 989 Piece list

- 1 x Art.-No. Choose drain on page 2!
- 1 X Art.-No. 16191.050X, Strainer for upper balconies
- 1 x Art.-No. 01005.050X, LORO-X Pipe with one socket
- 1 x Art.-No. 00911.050X, LORO-X Sealing elements

1 x Art.-No. 00986.000X, LORO-X Lubricant



System power



System shape

Water height	mm	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80
Discharge	l/s	0,3	0,6	0,8	0,9	1,06	1,16	1,25	1,32	1,38	1,43	1,5	-	-	-	-	-
Silent																	

LORO Balcony Drainage, Series I, IK, G, GF and GS

DN 50

with strainer for upper balconies

LX989-12X

with dome,
Series I
Drain Art.-No.
for plate thickness from:

95 mm: No. 16375.050X
120 mm: No. 16370.050X
140 mm: No. 16371.050X
160 mm: No. 16372.050X
180 mm: No. 16373.050X
200 mm: No. 16374.050X
220 mm: No. 16376.050X



Strainer
for upper balconies

Art.-No. 16191.050X



LX989-12X

with dome and clamping collar,
Series IK
Drain Art.-No.
for plate thickness from:

120 mm: No. 16310.050X
140 mm: No. 16311.050X
160 mm: No. 16312.050X
180 mm: No. 16313.050X
200 mm: No. 16314.050X



Attachment
for height adjustment
30 mm - 60 mm
Art.-No. 16192.050X



Accessories

Strainer support

Art.-No. 16195.050X



with strainer for upper balconies

LX989-12X

without supporting edge,
Series GS
Drain Art.-No.
for plate thickness:
up to 350 mm: No. 16115.050X



Strainer
for upper balconies
Art.-No. 16191.050X



LX989-12X

with supporting edge,
Series G
Drain Art.-No.
for downpipe length from:
250 mm: No. 16111.050X
3000 mm: No. 16131.050X



Strainer support

Art.-No. 16195.050X



LX989-12X

with supporting edge,
Series GF
Drain Art.-No. 16110.050X



Attachment
for height adjustment
30 mm - 60 mm
Art.-No. 16192.050X



Accessories

Sliding formwork dome

Art.-No. 18100.050X



Specification sheet LX 990

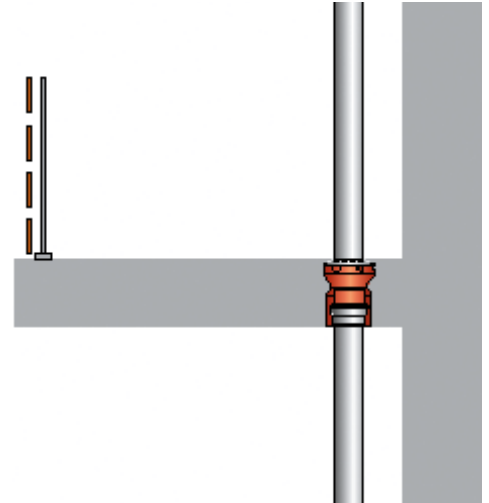
Balcony drainage Series I, IK, G, GF, GS, for balcony floors

Main drainage

Gravity flow

Silent

Discharge rate:	1.09 l/s
Water height:	35 mm
Roof penetration:	95 to 350 mm
Diameter:	DN 50
LX-Number:	LX 990
Weir height:	-
Drain:	ventilated
Downpipe:	ventilated
Downpipe height:	-
Drainage:	-
Flange:	-



LX 990 Piece list

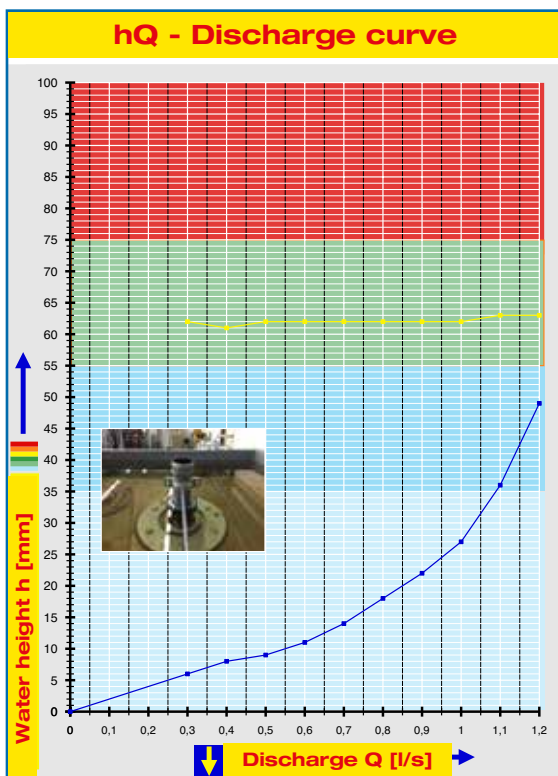
1 x Art.-No. Choose drain on page 2!

1 X Art.-No. 16193.050X, Ringstrainer for balcony floors

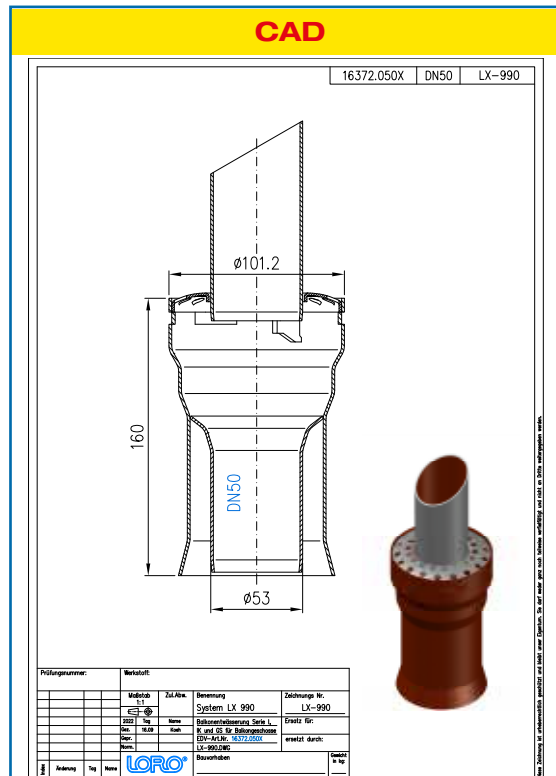
1 x Art.-No. 01005.050X, LORO-X Pipe with one socket

1 x Art.-No. 00911.050X, LORO-X Sealing elements

1 x Art.-No. 00986.000X, LORO-X Lubricant



System power



System shape

Water height	mm	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80
Discharge	l/s	-	0,55	0,72	0,85	0,95	1,03	1,09	1,13	1,17	1,2	-	-	-	-	-	-
Silent																	

LORO Balcony Drainage, Series I, IK, G, GF and GS

DN 50

with ring strainer for balcony floors

LX990-12X

with dome,
Series I
Drain Art.-No.
for plate thickness from:

- 95 mm: No. 16375.050X
- 120 mm: No. 16370.050X
- 140 mm: No. 16371.050X
- 160 mm: No. 16372.050X
- 180 mm: No. 16373.050X
- 200 mm: No. 16374.050X
- 220 mm: No. 16376.050X



Ring strainer
for balcony floors

Art.-No. 16193.050X



LX990-12X

with dome and clamping collar,
Series IK
Drain Art.-No.
for plate thickness from:

- 120 mm: No. 16310.050X
- 140 mm: No. 16311.050X
- 160 mm: No. 16312.050X
- 180 mm: No. 16313.050X
- 200 mm: No. 16314.050X



Attachment
for height adjustment
30 mm - 60 mm
Art.-No. 16192.050X

Accessories

Strainer support

Art.-No. 16195.050X



with ring strainer for balcony floors

LX990-12X

without supporting edge,
Series GS
Drain Art.-No.
for plate thickness:
up to 350 mm: No. 16115.050X



Ring strainer
for balcony floors

Art.-No. 16193.050X



LX990-12X

with supporting edge,
Series G
Drain Art.-No.
for downpipe length from
250 mm: No. 16111.050X
3000 mm: No. 16131.050X



Accessories

Sliding formwork dome

Art.-No. 18100.050X



Strainer support

Art.-No. 16195.050X



LX990-12X

with supporting edge,
Series GF
Drain Art.-No. 16110.050X

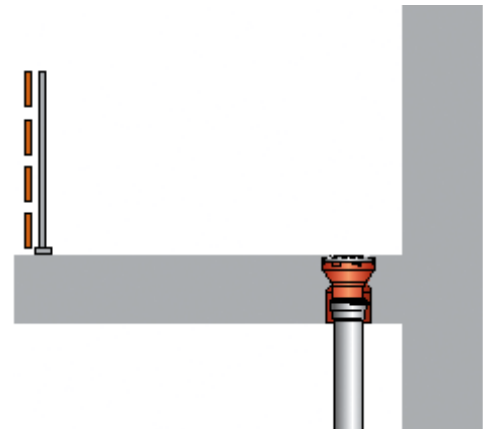


Attachment
for height adjustment
30 mm - 60 mm
Art.-No. 16192.050X



Specification sheet LX 991

Balcony drainage Series I, IK, G, GF, GS, for upper balconies



Main drainage	
Gravity flow	
Silent	
Discharge rate:	1.71 l/s
Water height:	35 mm
Roof penetration:	95 to 350 mm
Diameter:	DN 70
LX-Number:	LX 991
Weir height:	-
Drain:	ventilated
Downpipe:	ventilated
Downpipe height:	-
Drainage:	-
Flange:	-

LX 991 Piece list

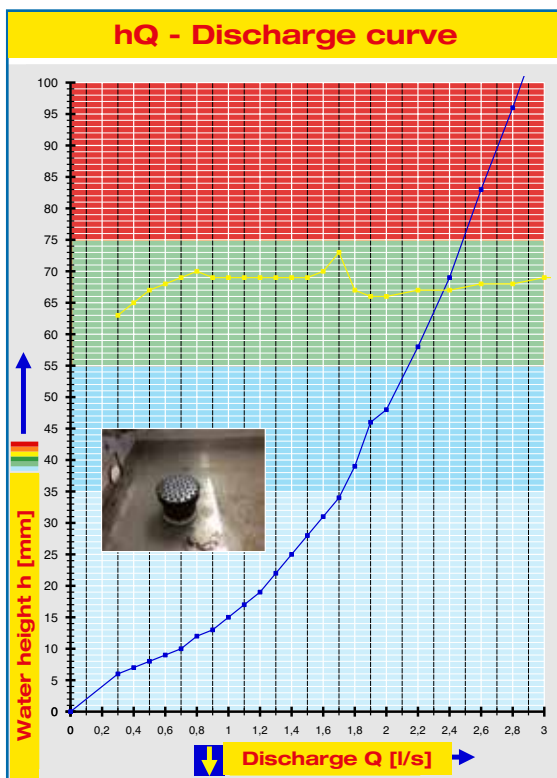
1 x Art.-No. Choose drain on page 2!

1 X Art.-No. 16191.070X, Strainer for upper balconies

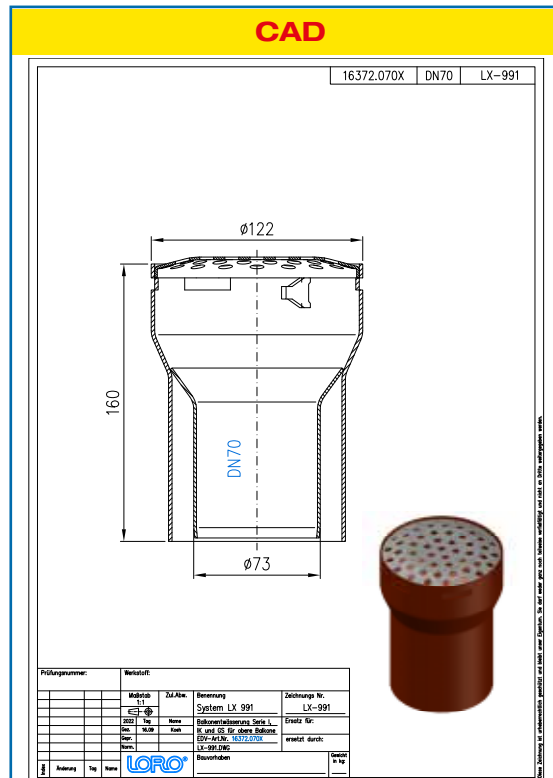
1 x Art.-No. 01005.070X, LORO-X Pipe with one socket

1 x Art.-No. 00911.070X, LORO-X Sealing elements

1 x Art.-No. 00986.000X, LORO-X Lubricant



System power



System shape

Water height	mm	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80
Discharge	l/s	-	0,70	1,0	1,23	1,4	1,56	1,71	1,81	1,89	2,03	2,13	2,23	2,32	2,41	2,49	2,58
Silent																	

LORO Balcony Drainage, Series I, IK, G, GF and GS

DN 70

with strainer for upper balconies

LX991-12X

with dome,
Series I
Drain Art.-No.
for plate thickness from:

95 mm: No. 16375.070X
120 mm: No. 16370.070X
140 mm: No. 16371.070X
160 mm: No. 16372.070X
180 mm: No. 16373.070X
200 mm: No. 16374.070X
220 mm: No. 16376.070X



Strainer
for upper balconies

Art.-No. 16191.070X



LX991-12X

with dome and clamping collar,
Series IK
Drain Art.-No.
for plate thickness from:

120 mm: No. 16310.070X
140 mm: No. 16311.070X
160 mm: No. 16312.070X
180 mm: No. 16313.070X
200 mm: No. 16314.070X



Attachment
for height adjustment
30 mm - 60 mm
Art.-No. 16192.070X



Accessories

Strainer support

Art.-No. 16195.070X



with ring strainer for upper balconies

LX991-12X

without supporting edge,
Series GS
Drain Art.-No.
for plate thickness:
up to 350 mm: Nr. 16115.070X



Strainer
for upper balconies
Art.-No. 16191.070X



LX991-12X

with supporting edge,
Series G
Drain Art.-No.
for downpipe length from
250 mm: No. 16111.070X
3000 mm: No. 16131.070X



Sliding formwork dome
Art.-No. 18100.070X



Strainer support

Art.-No. 16195.070X



LX991-12X

with supporting edge,
Series GF
Drain Art.-No. 16110.070X



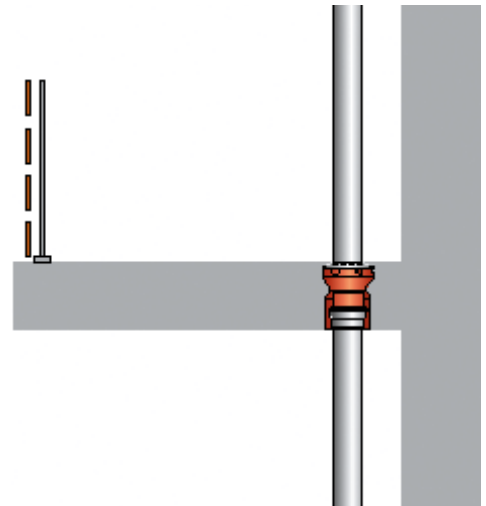
Attachment
for height adjustment
30 mm - 60 mm
Art.-No. 16192.070X



Accessories

Specification sheet LX 992

Balcony drainage Series I, IK, G, GF, GS, for balcony floors



Main drainage

Gravity flow

Silent

Discharge rate:	1.36 l/s
Water height:	35 mm
Roof penetration:	95 to 350 mm
Diameter:	DN 70
LX-Number:	LX 992
Weir height:	-
Drain:	ventilated
Downpipe:	ventilated
Downpipe height:	-
Drainage:	-
Flange:	-

LX 992 Piece list

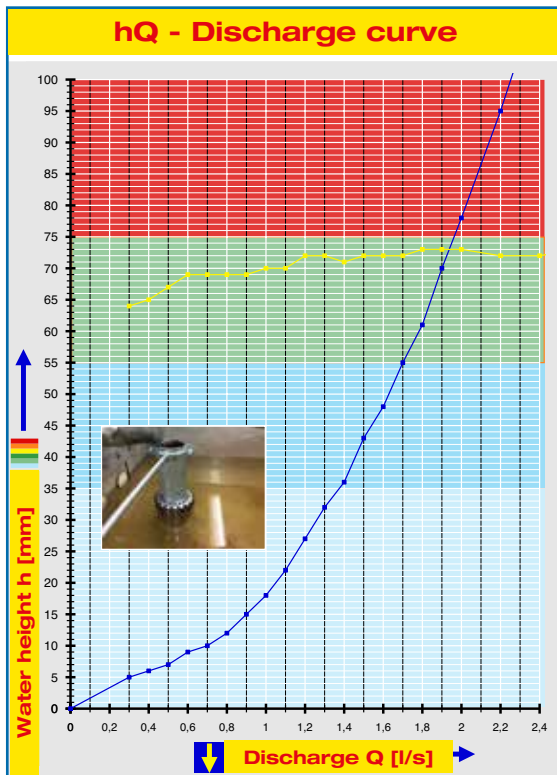
1 x Art.-No. Choose drain on page 2!

1 X Art.-No. 16193.070X, Ring strainer for balcony floors

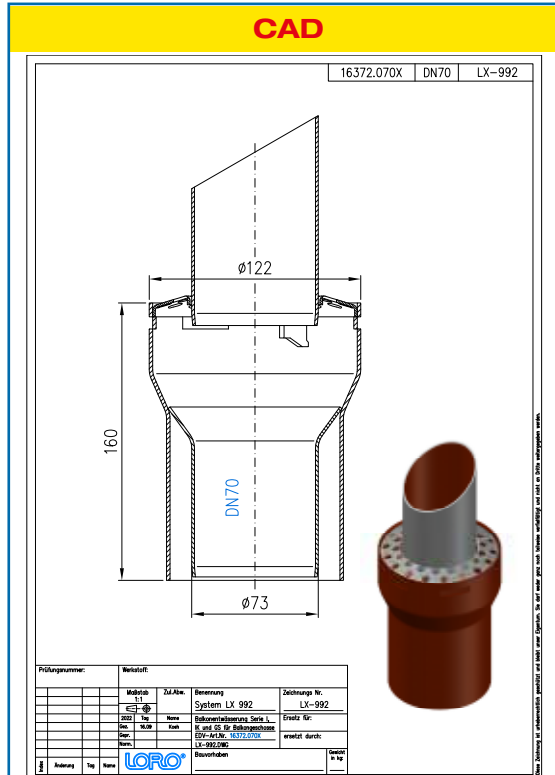
1 x Art.-No. 01005.070X, LORO-X Pipe with one socket

1 x Art.-No. 00911.070X, LORO-X Sealing elements

1 x Art.-No. 00986.000X, LORO-X Lubricant



System power



System shape

Water height	mm	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80
Discharge	l/s	0,3	0,7	0,9	1,05	1,15	1,25	1,36	1,45	1,53	1,62	1,70	1,78	1,84	1,9	1,96	2,02
Silent																	

LORO Balcony Drainage, Series I, IK, G, GF and GS

DN 70

with ring strainer for balcony floors

LX992-12X

with dome,
Series I
Drain Art.-No.
for plate thickness from:

95 mm: No. 16375.070X
120 mm: No. 16370.070X
140 mm: No. 16371.070X
160 mm: No. 16372.070X
180 mm: No. 16373.070X
200 mm: No. 16374.070X
220 mm: No. 16376.070X



Ring strainer
for balcony floors

Art.-No. 16193.070X



LX992-12X

with dome and clamping collar,
Series IK
Drain Art.-No.
for plate thickness from:

120 mm: No. 16310.070X
140 mm: No. 16311.070X
160 mm: No. 16312.070X
180 mm: No. 16313.070X
200 mm: No. 16314.070X



Attachment
for height adjustment
30 mm - 60 mm
Art.-No. 16192.070X



Accessories

Strainer support

Art.-No. 16195.070X



with ring strainer for balcony floors

LX992-12X

without supporting edge,
Series GS
Drain Art.-No.
for plate thickness:
up to 350 mm: No. 16115.070X



Ring strainer
for balcony floors

Art.-No. 16193.070X



LX992-12X

with supporting edge,
Series G
Drain Art.-No.
for downpipe length from:
250 mm: No. 16111.070X
3000 mm: No. 16131.070X



Strainer support

Art.-No. 16195.070X



LX992-12X

with supporting edge,
Series GF
Drain Art.-No. 16110.070X



Attachment
for height adjustment
30 mm - 60 mm
Art.-No. 16192.070X



Accessories

Sliding formwork dome

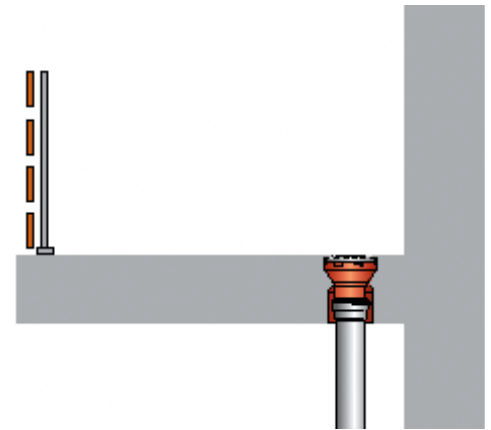
Art.-No. 18100.070X



Specification sheet LX 993

Balcony drainage Series I, G, GF, GS, for upper balconies

Main drainage	
Gravity flow	
Silent	
Discharge rate:	2.9 l/s
Water height:	35 mm
Roof penetration:	120 to 350 mm
Diameter:	DN 100
LX-Number:	LX 993
Weir height:	-
Drain:	ventilated
Downpipe:	ventilated
Downpipe height:	-
Drainage:	-
Flange:	-



LX 993 Piece list

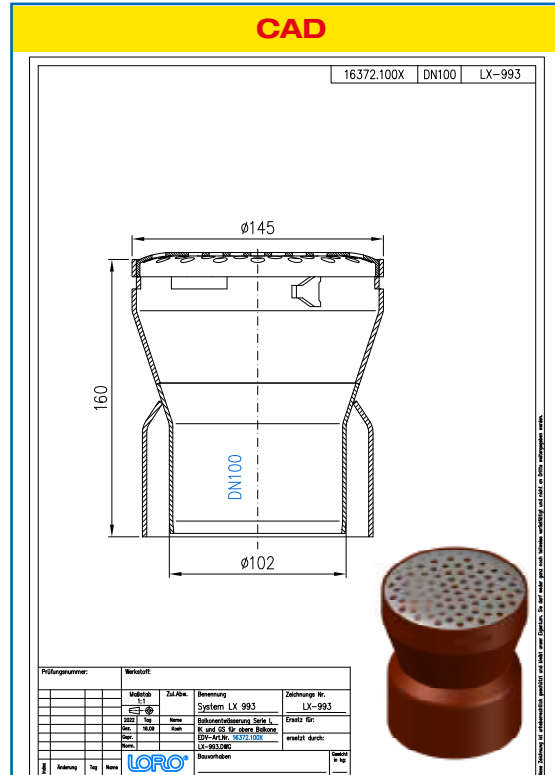
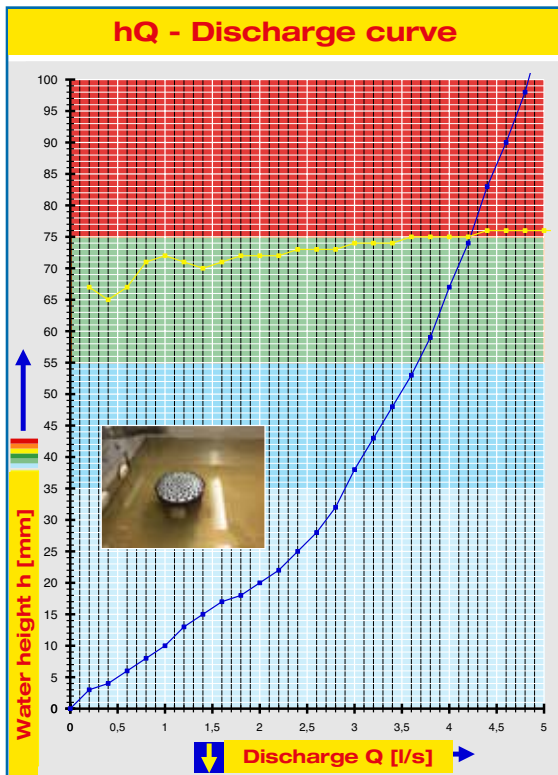
1 x Art.-No. Choose drain on page 2!

1 X Art.-No. 16191.100X, Strainer for upper balconies

1 x Art.-No. 01005.100X, LORO-X Pipe with one socket

1 x Art.-No. 00911.100X, LORO-X Sealing elements

1 x Art.-No. 00986.000X, LORO-X Lubricant



Water height	mm	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80
Discharge	l/s	0,5	1,0	1,4	2,0	2,4	2,7	2,9	3,08	3,28	3,49	3,67	3,82	3,95	4,1	4,21	4,33
Silent																	

LORO Balcony Drainage, Series I, IK, G, GF and GS

DN 100

with strainer for upper balconies

LX993-12X

with dome,
Series I
 Drain Art.-No.
 for plate thickness from:
 120 mm: No. 16370.100X
 140 mm: No. 16371.100X
 160 mm: No. 16372.100X
 180 mm: No. 16373.100X
 200 mm: No. 16374.100X
 220 mm: No. 16376.100X



Accessories

Strainer
 for upper balconies
 Art.-No. 16191.100X



Strainer support
 Art.-No. 16195.100X



Attachment
 for height adjustment
 30 mm - 60 mm
 Art.-No. 16192.100X



with ring strainer for upper balconies

LX993-12X

without supporting edge,
Series GS
 Drain Art.-No.
 for plate thickness:
 up to 350 mm: No. 16115.100X



LX993-12X

with supporting edge,
Series G
 Drain Art.-No.
 for downpipe length from:
 250 mm: No. 16111.100X
 3000 mm: No. 16131.100X



LX993-12X

with supporting edge,
Series GF
 Drain Art.-No. 16110.100X



Accessories

Strainer
 for upper balconies
 Art.-No. 16191.100X



**Sliding
 formwork dome**
 Art.-No. 18100.100X



Strainer support
 Art.-No. 16195.100X

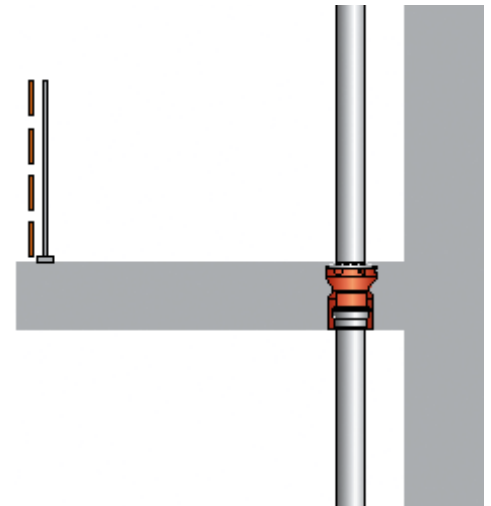


Attachment
 for height adjustment
 30 mm - 60 mm
 Art.-No. 16192.100X



Specification sheet LX 994

Balcony drainage Series I, G, GF, GS, for balcony floors



Main drainage

Gravity flow

Silent

Discharge rate:	1.45 l/s
Water height:	35 mm
Roof penetration:	120 to 350 mm
Diameter:	DN 100
LX-Number:	LX 994
Weir height:	-
Drain:	ventilated
Downpipe:	ventilated
Downpipe height:	-
Drainage:	-
Flange:	-

LX 994 Piece list

1 x Art.-No. Choose drain on page 2!

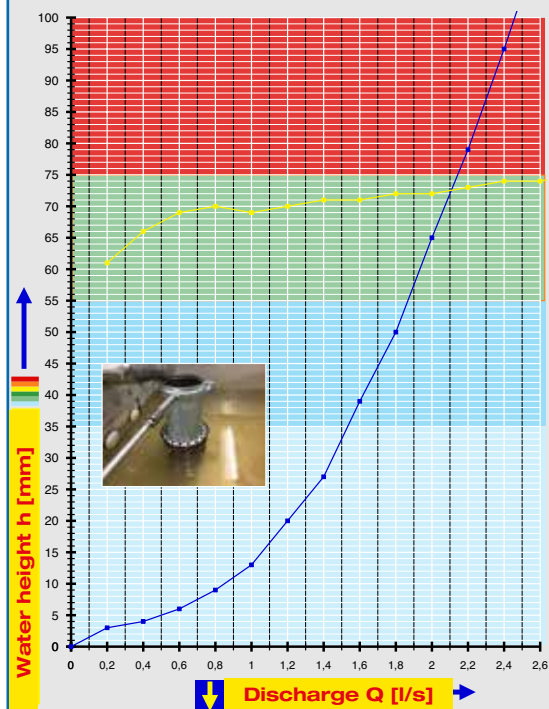
1 x Art.-No. 16193.100X, Ring strainer for balcony floors

1 x Art.-No. 01005.100X, LORO-X Pipe with one socket

1 x Art.-No. 00911.100X, LORO-X Sealing elements

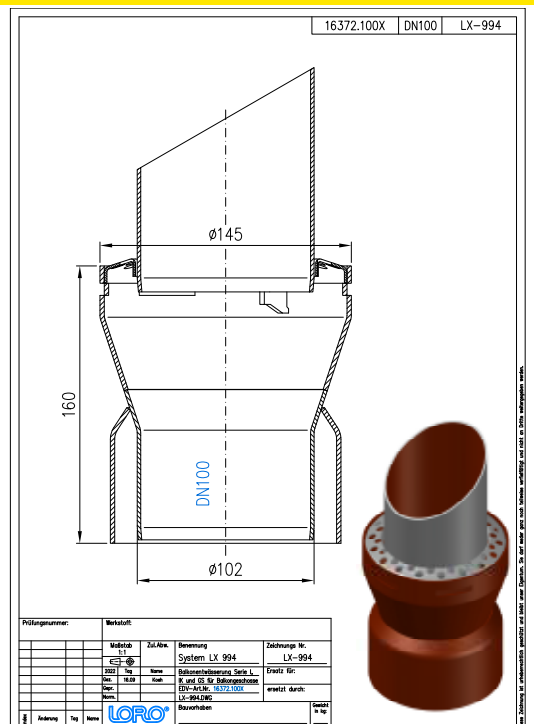
1 x Art.-No. 00986.000X, LORO-X Lubricant

hQ - Discharge curve



System power

CAD



System shape

Water height	mm	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80
Discharge	l/s	0,5	0,85	1,05	1,2	1,33	1,33	1,45	1,62	1,7	1,8	1,87	1,73	2,0	2,07	2,14	2,21
Silent																	

LORO Balcony Drainage, Series I, IK, G, GF and GS

DN 100

with ring strainer for balcony floors

LX994-12X

with dome,
Series I
Drain Art.-No.
for plate thickness from:

120 mm: No. 16370.100X
140 mm: No. 16371.100X
160 mm: No. 16372.100X
180 mm: No. 16373.100X
200 mm: No. 16374.100X
220 mm: No. 16376.100X



Accessories

Ring strainer
for balcony floors

Art.-No. 16193.100X



Strainer support

Art.-No. 16195.100X



Attachment
for height adjustment
30 mm - 60 mm
Art.-No. 16192.100X



with ring strainer for balcony floors

LX994-12X

without supporting edge,
Series GS
Drain Art.-No.
for plate thickness:
up to 350 mm: No. 16115.100X



LX994-12X

with supporting edge,
Series G
Drain Art.-No.
for downpipe length from:
250 mm: No. 16111.100X
3000 mm: No. 16131.100X



LX994-12X

with supporting edge,
Series GF
Drain Art.-No. 16110.100X



Accessories

Ring strainer
for balcony floors

Art.-No. 16193.100X



**Sliding
formwork dome**

Art.-No. 18100.100X



Strainer support

Art.-No. 16195.100X



Attachment
for height adjustment
30 mm - 60 mm
Art.-No. 16192.100X



Specification sheet LX 1019

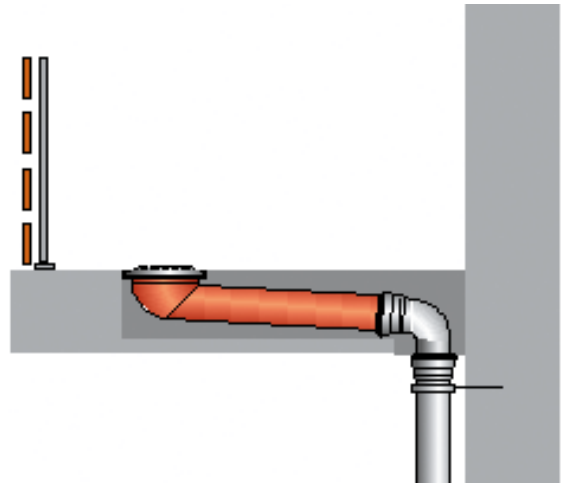
Balcony drainage Series I und GF for upper balconies

Main drainage

Gravity flow

Silent

Discharge rate:	1.39 l/s
Water height:	35 mm
Roof penetration:	120 mm
Diameter:	DN 50
LX-Number:	LX 1019
Weir height:	-
Drain:	ventilated
Downpipe:	ventilated
Downpipe height:	-
Drainage:	-
Flange:	-



LX 1019 Piece list

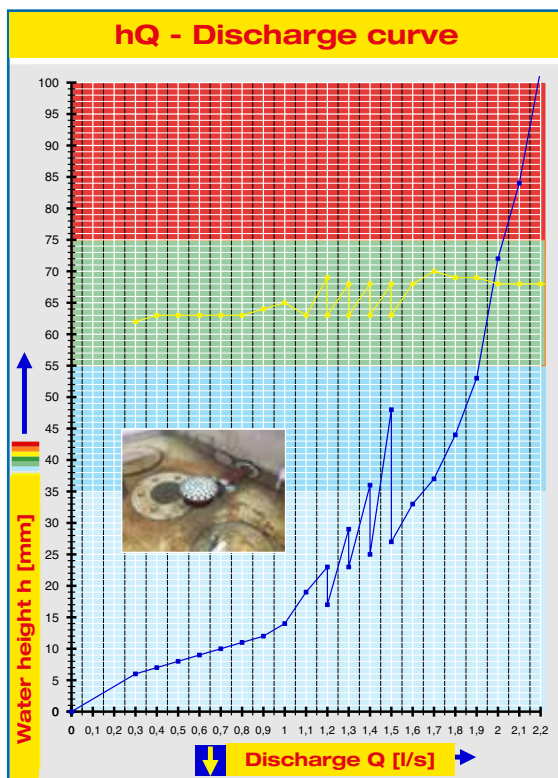
1 x Art.-No. Choose drain on page 2!

1 X Art.-No. 16191.070X, Strainer for upper balconies

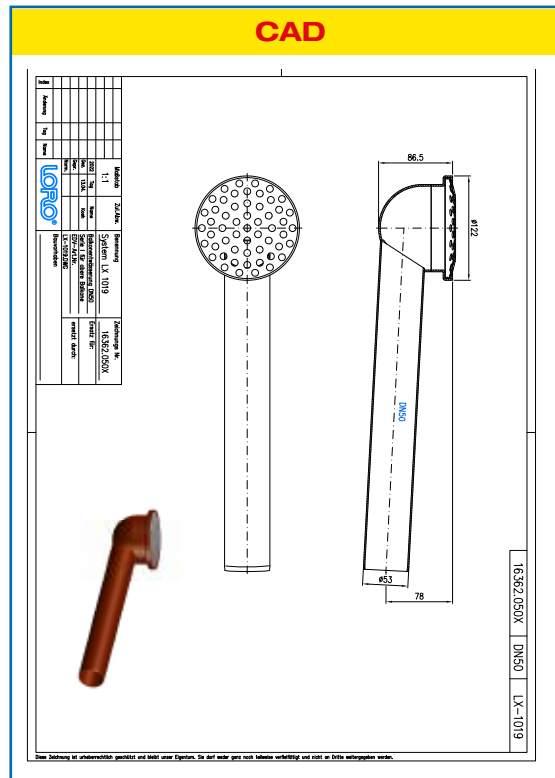
1 x Art.-No. 01005.050X, LORO-X Pipe with one socket

1 x Art.-No. 00911.050X, LORO-X Sealing elements

1 x Art.-No. 00986.000X, LORO-X Lubricant



System power



System shape

Water height	mm	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80
Discharge	l/s	-	0,7	1,2	1,12	1,27	1,35	1,39	1,46	1,48	1,87	1,92	1,94	1,96	1,99	2,02	2,06
Silent																	

LORO Balcony Drainage, Series I, and GF

DN 50

with strainer for upper balconies

LX1019-12X

with dome,
Series I
Drain Art.-No.
for plate thickness from:
120 mm: No. 16362.050X



LX1019-12X

with supporting edge,
Series GF

Drain Art.-No. 16112.050X



Accessories

Strainer

for upper balconies

Art.-No. 16191.050X



Sliding formwork dome

Art.-No. 18100.070X



Strainer support

Art.-No. 16195.050X



Attachment

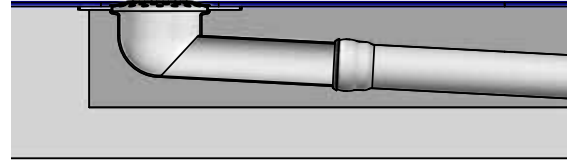
for height adjustment
30 mm - 60 mm
Art.-No. 16192.050X



Specification sheet LX 2077

Balcony drainage Series I and GF, for upper balconies

Main drainage	
Gravity flow	
Silent	
Discharge rate:	1.95 l/s
Water height:	35 mm
Roof penetration:	120 mm
Diameter:	DN 70
LX-Number:	LX 2077
Weir height:	-
Drain:	ventilated
Downpipe:	ventilated
Downpipe height:	-
Drainage:	-
Flange:	-



LX 2077 Piece list

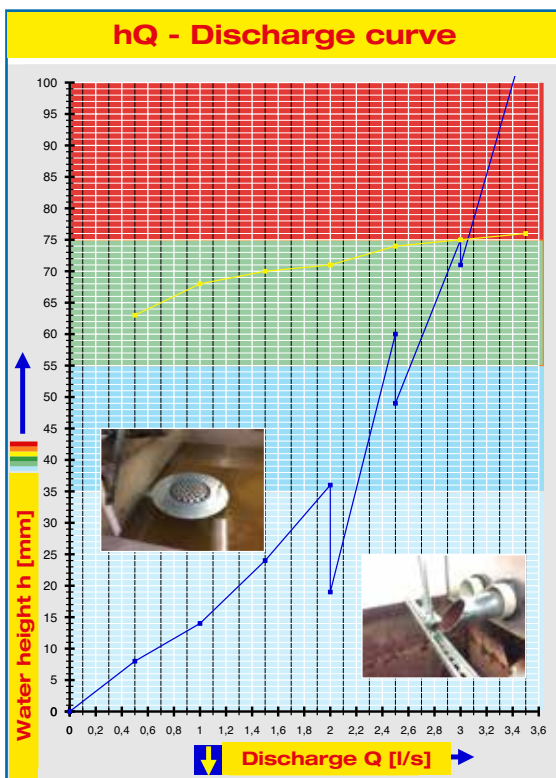
1 x Art.-No. Choose drain on page 2!

1 X Art.-No. 16191.070X, Strainer for upper balconies

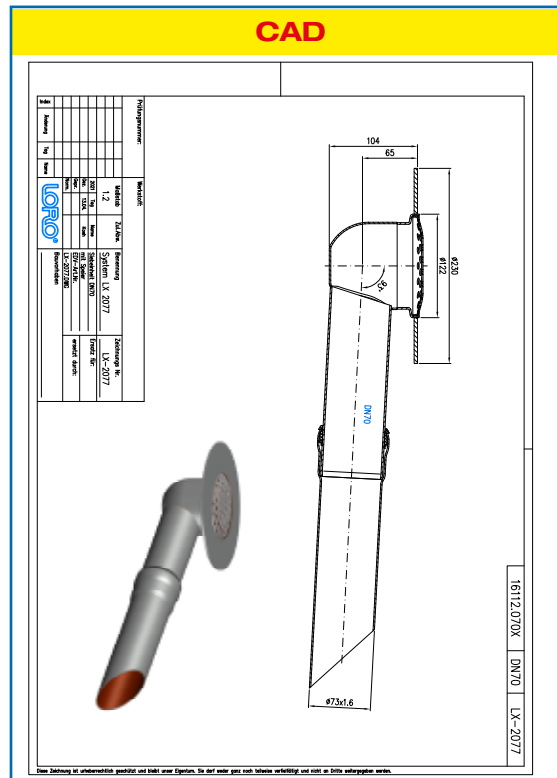
1 x Art.-No. 01005.070X, LORO-X Pipe with one socket

1 x Art.-No. 00911.070X, LORO-X Sealing elements

1 x Art.-No. 00986.000X, LORO-X Lubricant



System power



System shape

Water height	mm	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80
Discharge	l/s	-	0,65	1,05	1,3	1,53	1,75	1,95	2,25	2,31	2,39	2,43	2,5	2,8	2,9	3,05	3,13
Silent																	

LORO Balcony Drainage, Series I and GF

DN 70

with strainer for upper balconies

LX2077-12X

with dome,
Series I
Drain Art.-No.
for plate thickness from:
120 mm: No. 16362.070X



LX2077-12X

with supporting edge,
Series GF



Accessories

Strainer

for upper balconies

Art.-No. 16191.070X



**Sliding
formwork dome**

Art.-No. 18100.070X



Strainer support

Art.-No. 16195.070X



Attachment

for height adjustment
30 mm - 60 mm
Art.-No. 16192.070X



LOROWERK K.H. Vahlbrauk GmbH & Co. KG

Kriegerweg 1 • 37581 Bad Gandersheim, Postfach 13 80 • 37577 Bad Gandersheim
Tel. +49 5382 71 0 • Telefax +49 5382 71 203 • Internet: www.loro.de • e-mail: infocenter@lorowerk.de