



SECANT®/SERVOKAT®-SEC

General Information on the SECANT®/SERVOKAT®-SEC Range

SECANT® Manhole covers

**Classes B 125, M 125, D 400,
SLW 60-25 km/h
in varying lengths**

The system

With this cover system, covers and frames respectively frame elements and - where necessary - removable beams can be combined. The essential advantage is that openings covered remain accessible as a whole.

The flexible system, the design and the materials used make an extraordinary wide field of application possible. For example in the field of supply and disposal of energy head offices, material shafts in operational premises and pumping stations, transformer plants, control shafts and rain water retention basins.

Extensive programme

The covers are optionally available as single duct, multiple duct or beam multiple cover units. The single duct and multiple duct covers span clear shaft widths of up to 1050 mm.

In the case of W-covers, any surfaces can be applied in-situ. The in-situ filling of the covers must correspond to the relevant traffic loads. At the point of installation, concrete with and without ink addition as well as other fillings are possible, e. g. mastic asphalt, asphalt concrete or industrial tiles.

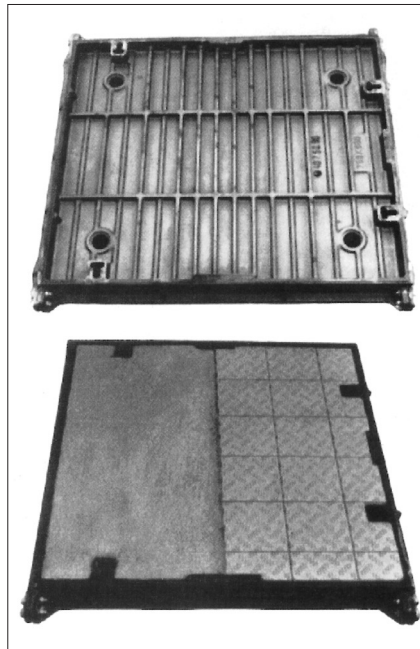
In the case of installation into public carriageways, min. concrete quality grade B 45 (according to DIN 4281) must be used.

The cover test load required as per DIN EN 124 / DIN 1229 is achieved without concrete filling.

When required, the single covers can be provided with ventilation holes on site.

Single duct and multiple duct covers are available as SECANT® manhole covers with concrete filling (BEGU® covers).

To prevent unauthorised removal and as buoyancy safety against backflow, SECANT® single duct and multiple duct cover units are available with locking.



SERVOKAT®-SEC Manhole covers

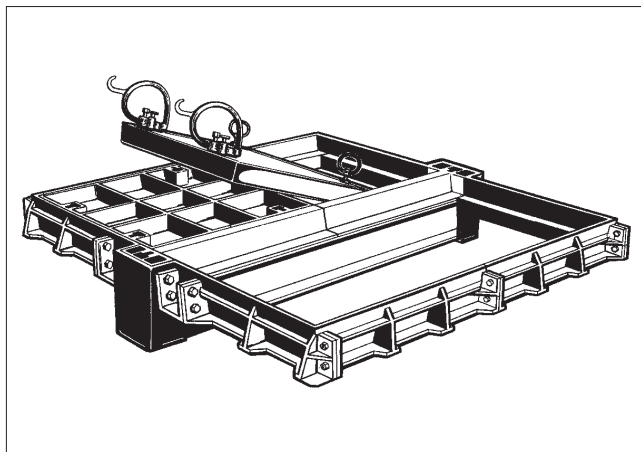
**Classes B 125, M 125, D 400, F 900
with opening aid**

are the correct solution if manhole covers have to be operated frequently for maintenance and revision purposes. The covers with opening aid can be opened without problems by one person - without additional lifting aid.

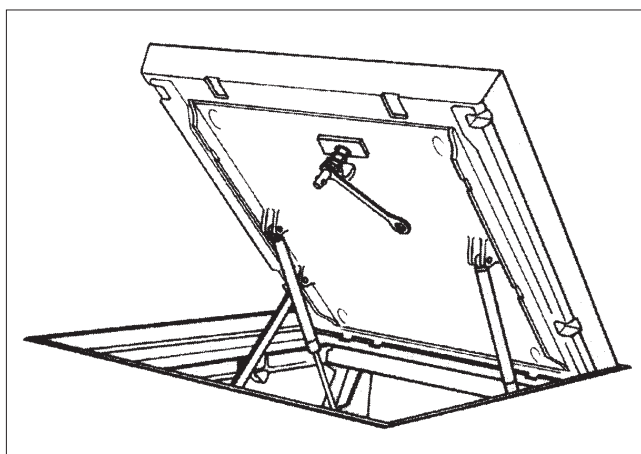
SECANT® covers with hinge and gas spring, with safety latch, optionally as BEGU® covers or for optional surface.

SERVOKAT®-SEC covers can be integrated in certain SECANT® multiple duct or beam multiple cover units - see page 140.

Please let us have your relevant enquiry.



SECANT® beam multiple cover unit with removable beam



SERVOKAT®-SEC manhole cover with opening aid

Special Notes on SECANT® Covers

Design features of SECANT® covers

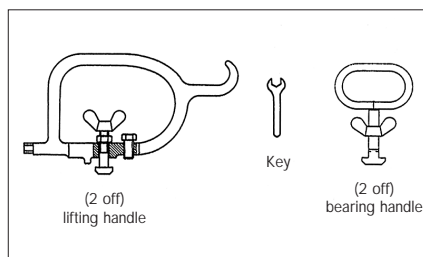
SECANT® covers consist of cast iron frames and BEGU® covers, in the case of W-covers of cast iron covers for optional surface.

The beams of the beam multiple cover units are made of hot-galvanised steel. All bearing and side surfaces of frame and covers are machined. The covers fit perfectly in the frame. All contact surfaces between frame and covers have metal contact.

In conjunction with the lifting handles, the conical shape of the side surfaces ensures an easy opening of the covers.

In the case of exact installation and thorough greasing of all cover contact surfaces, SECANT® single duct and multiple duct cover units (up to three covers) can be made surface-watertight in-situ thanks to the high-grade mechanical machining of all frames and cover elements.

This ensures a permanent stable position of the cover; wear is minimised.



Operating

Opening and closing the cover with operating handles art. no. 1000.41.45 (= five-part set)

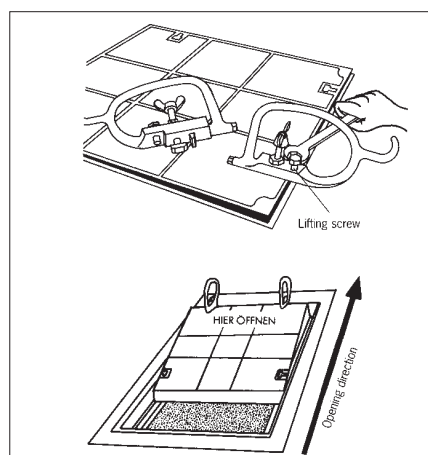
Operating handles

Insert the T-head bolt vertically to the cover edge in the lifting hole. Turn the wing nut by 90° (parallel to the cover edge) and tighten the hexagonal nut. Undo the cover with the aid of the lifting screw.

Lift the cover on one side by the measurement of the frame height and pull out of the opening by sliding it.

The cover can be raised with the aid of the carrying handles which are inserted in the lateral lifting holes. Insert the carrying handle, turn by 90° (handle parallel to the cover edge). Tighten the wing nut. When lifting the cover with the aid of a crane, only the lifting handles may be used.

They must be screwed down tightly. Clean contact surfaces at frame and covers following each opening.



Every cover can be opened individually, but only on one side and only in this direction. This is why the words "HIER ÖFFNEN" (= OPEN HERE) are cast in at the edge of the cover, between the lifting holes.

Weights, covers with concrete

Nominal size	Class B 125/ M 126 kgs	Class D 400 kgs
450 x 600	95	95
450 x 900	120	120
600 x 600	104	149
600 x 750	123	183
600 x 900	151	196
750 x 750	140	233
750 x 900	174	249
900 x 900	226	330
1050 x 600	205	326
1050 x 1050	311	527

Filling of covers and surface coverings of W-covers must meet high requirements both in design and in passability, safety and durability. Non-skid properties and evenness are particularly demanded for. Cover fillings, applied in situ, must always comply with traffic load requirements. Please therefore observe our installation-, operating and maintenance notes, attached to our products.

Special Notes on SERVOKAT® Covers

SERVOKAT® Manhole covers with opening aid class B 125 to class F 900

Manhole covers with opening aid are called SERVOKAT®.

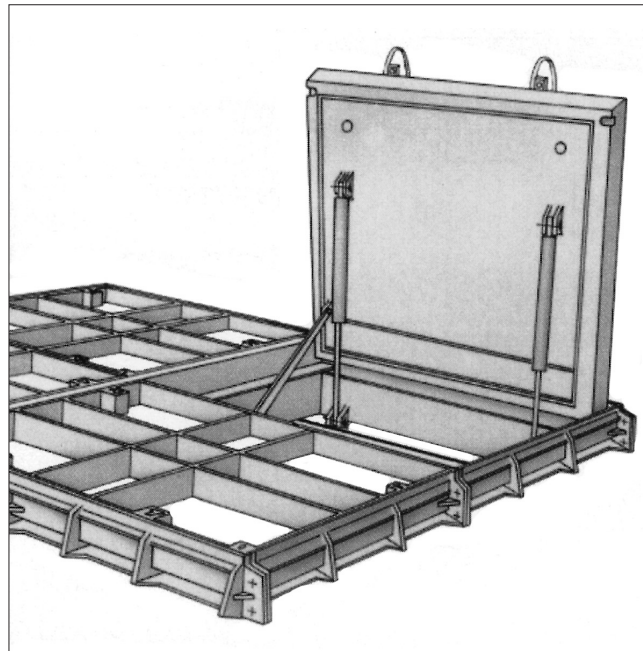
SERVOKAT®-SEC:

Manhole covers of cast iron with covers of cast iron and concrete or covers of cast iron for optional surface with gas springs as opening aid.

They are the correct solution if manhole covers have to be operated frequently for maintenance and revision purposes. The covers with opening aid can be opened without problems by one person - without additional lifting aid.

In relation to the cover weight, gas springs or hydraulic devices are used as opening aid. Because of the opening aid installed, only a little expenditure of forces is required.

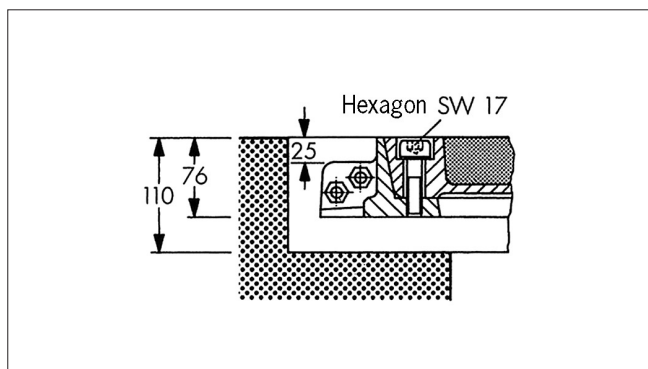
According to the field of application, manhole covers for emergency exit are equipped with reinforced opening aids. This results in easy operating of covers from below. The locking devices of these designs can be operated from above and below.



SERVOKAT®-SEC with gas springs
can also be integrated in SECANT® multiple duct and beam multiple cover units

**Frame of cast iron,
covers of cast iron with concrete, with/without locking**

Single duct cover units with 1 cover
Multiple duct cover units with 2 covers



Design with bolt locking

SECANT® Manhole cover

class B 125 according to DIN EN 124/DIN 1229
class M 125 according to DIN EN 1253
with/without locking

Clear surface: see table

Frame of cast iron, BEGU® covers of cast iron with concrete
Bearing and side surfaces of frame and covers machined

Weight } : see table
Art. no. }

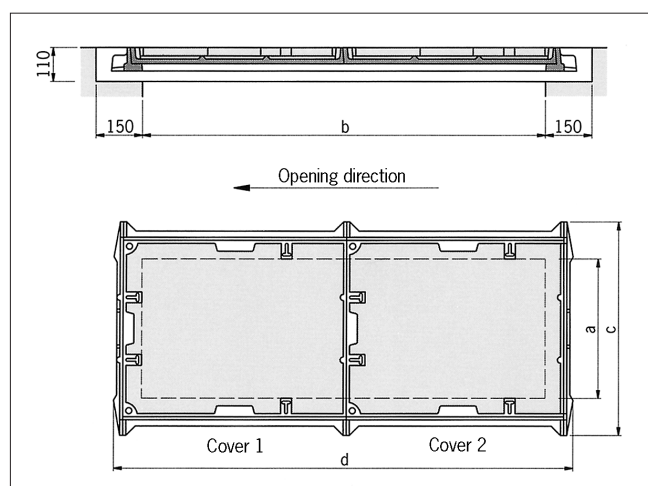
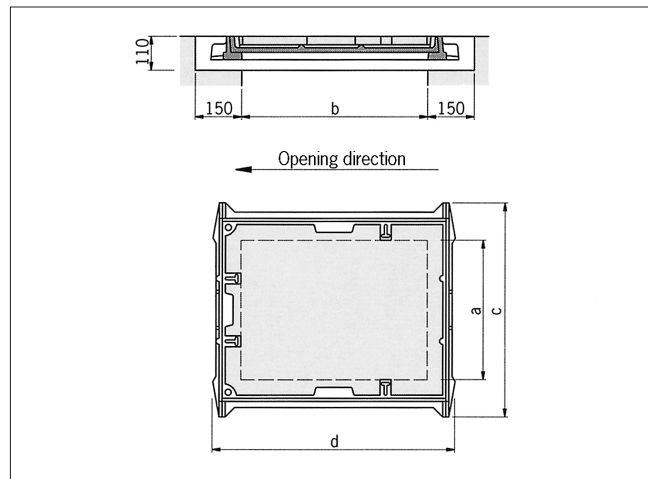
One set lifting and operating handles art. no. 1000.41.45

SECANT® Single duct cover unit with BEGU® cover

▲ Art. no.		Clear surface a x b	c x d	Weight kgs
without bolt locking	with bolt locking			
1404.06.01	1404.06.02	450 x 600	690 x 780	128
1406.06.01	1406.06.02	600 x 600	840 x 780	141
1410.06.01	1410.06.02	1050 x 600	1290 x 840	253
1406.07.51	1406.07.52	600 x 750	840 x 930	163
1407.07.51	1407.07.52	750 x 750	990 x 930	185
1404.09.01	1404.09.02	450 x 900	690 x 1080	164
1406.09.01	1406.09.02	600 x 900	840 x 1080	199
1407.09.01	1407.09.02	750 x 900	990 x 1080	226
1409.09.01	1409.09.02	900 x 900	1140 x 1140	282
1410.10.51	1410.10.52	1050 x 1050	1290 x 1290	371

SECANT® Multiple duct cover unit, with 2 BEGU® covers

▲ Art. no.		Clear surface a x b	c x d	Weight kgs
without bolt locking	with bolt locking			
1404.13.01	1404.13.02	450 x 1300	690 x 1480	241
1406.13.01	1406.13.02	600 x 1300	840 x 1480	263
1407.13.01	1407.13.02	750 x 1300	990 x 1480	304
1409.13.01	1409.13.02	900 x 1300	1140 x 1540	380
1410.13.01	1410.13.02	1050 x 1300	1290 x 1540	476
1406.14.51	1406.14.52	600 x 1450	840 x 1630	286
1407.14.51	1407.14.52	750 x 1450	990 x 1630	325
1409.14.51	1409.14.52	900 x 1450	1140 x 1690	412
1404.16.01	1404.16.02	450 x 1600	690 x 1780	277
1406.16.01	1406.16.02	600 x 1600	840 x 1780	308
1407.16.01	1407.16.02	750 x 1600	990 x 1780	347
1409.16.01	1409.16.02	900 x 1600	1140 x 1840	444
1406.17.51	1406.17.52	600 x 1750	840 x 1930	344
1407.17.51	1407.17.52	750 x 1750	990 x 1930	388
1409.17.51	1409.17.52	900 x 1750	1140 x 1990	491
1410.17.51	1410.17.52	1050 x 1750	1290 x 1990	609
1404.19.01	1404.19.02	450 x 1900	690 x 2080	313
1406.19.01	1406.19.02	600 x 1900	840 x 2080	379
1407.19.01	1407.19.02	750 x 1900	990 x 2080	429
1409.19.01	1409.19.02	900 x 1900	1140 x 2140	538



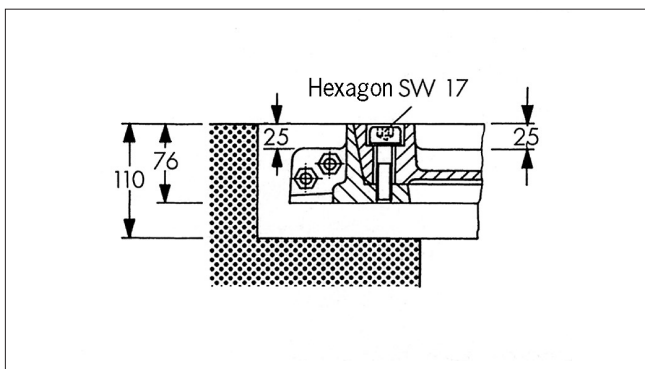
In the case of proper installation and thorough greasing of cover contact surfaces, SECANT® single duct and multiple duct cover units (up to 3 covers) can be made surface-watertight on site thanks to their high-quality mechanical machining of all frame and cover elements.

Note:

Embedding of frame with inserted/bolted covers only!

Frame of cast iron, covers of cast iron for optional surface, with/without locking

Single duct cover units with 1 cover
Multiple duct cover units with 2 covers



Design with bolt locking

SECANT® Manhole cover

class B 125 according to DIN EN 124/DIN 1229

class M 125 according to DIN EN 1253

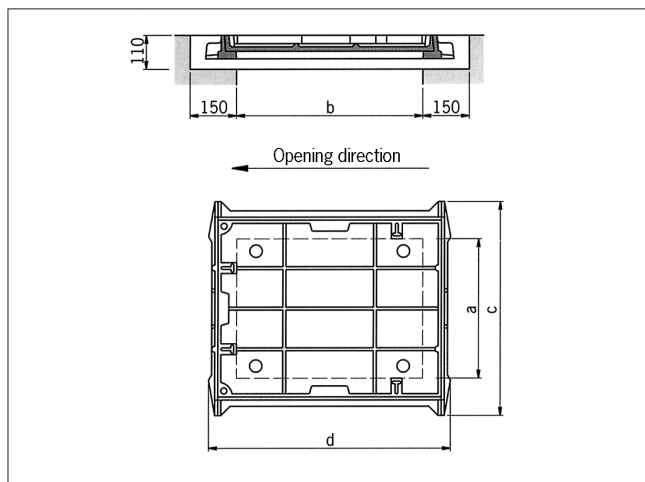
for optional surface, with/without locking

Clear surface: see table

Frame of cast iron, covers of cast iron for in-situ filling
Bearing and side surfaces of frame and covers machined

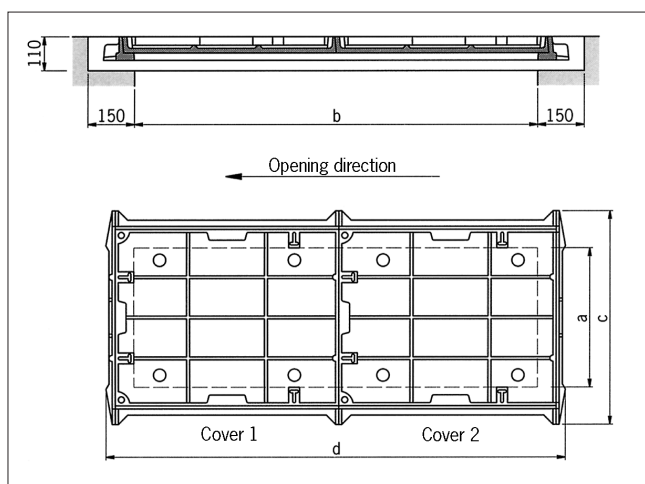
Weight }
Art. no. } : see table

One set lifting and operating handles art. no. 1000.41.45



SECANT® Single duct cover unit

▲ Art. no.		Clear surface a x b	c x d	Weight kgs
without bolt locking	with bolt locking			
1404.06.00	1404.06.03	450 x 600	690 x 780	89
1406.06.00	1406.06.03	600 x 600	840 x 780	93
1410.06.00	1410.06.03	1050 x 600	1290 x 840	158
1406.07.50	1406.07.53	600 x 750	840 x 930	103
1407.07.50	1407.07.53	750 x 750	990 x 930	115
1404.09.00	1404.09.03	450 x 900	690 x 1080	105
1406.09.00	1406.09.03	600 x 900	840 x 1080	127
1407.09.00	1407.09.03	750 x 900	990 x 1080	149
1409.09.00	1409.09.03	900 x 900	1140 x 1140	156
1410.10.50	1410.10.53	1050 x 1050	1290 x 1290	236



SECANT® Multiple duct cover unit, with 2 covers

▲ Art. no.		Clear surface a x b	c x d	Weight kgs
without bolt locking	with bolt locking			
1404.13.00	1404.13.03	450 x 1300	690 x 1480	163
1406.13.00	1406.13.03	600 x 1300	840 x 1480	168
1407.13.00	1407.13.03	750 x 1300	990 x 1480	185
1409.13.00	1409.13.03	900 x 1300	1140 x 1540	217
1410.13.00	1410.13.03	1050 x 1300	1290 x 1540	287
1406.14.50	1406.14.53	600 x 1450	840 x 1630	179
1407.14.50	1407.14.53	750 x 1450	990 x 1630	196
1409.14.50	1409.14.53	900 x 1450	1140 x 1690	229
1404.16.00	1404.16.03	450 x 1600	690 x 1780	179
1406.16.00	1406.16.03	600 x 1600	840 x 1780	189
1407.16.00	1407.16.03	750 x 1600	990 x 1780	208
1409.16.00	1409.16.03	900 x 1600	1140 x 1840	240
1406.17.50	1406.17.53	600 x 1750	840 x 1930	213
1407.17.50	1407.17.53	750 x 1750	990 x 1930	242
1409.17.50	1409.17.53	900 x 1750	1140 x 1990	263
1410.17.50	1410.17.53	1050 x 1750	1290 x 1990	365
1404.19.00	1404.19.03	450 x 1900	690 x 2080	194
1406.19.00	1406.19.03	600 x 1900	840 x 2080	236
1407.19.00	1407.19.03	750 x 1900	990 x 2080	276
1409.19.00	1409.19.03	900 x 1900	1140 x 2140	287

In the case of proper installation and thorough greasing of cover contact surfaces, SECANT® single duct and multiple duct cover units (up to 3 covers) can be made surface-watertight on site thanks to their high-quality mechanical machining of all frame and cover elements.

Note:

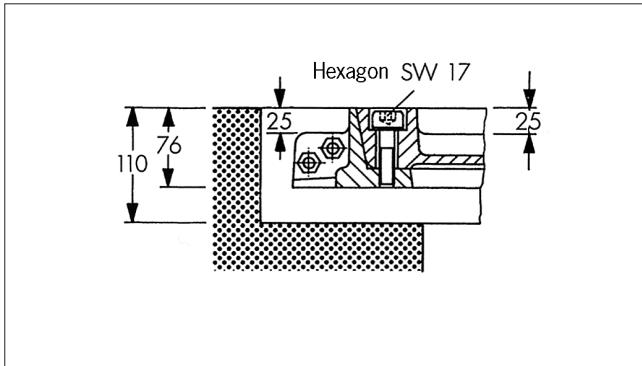
Embedding of frame with inserted/bolted covers only!

The in-situ filling of covers for optional surface must comply with the traffic requirements.

Frame of cast iron, covers of cast iron with concrete or covers of cast iron for optional surface, without locking

Multiple duct cover units with 3 covers

Multiple duct cover units with 4 covers



Design for optional surface

SECANT® Manhole cover

class B 125 according to DIN EN 124/DIN 1229

class M 125 according to DIN EN 1253

Clear surface: see table

Frame of cast iron, BEGU® covers of cast iron with concrete or covers of cast iron for in-situ filling

Bearing and side surfaces of frame and covers machined

Weight } : see table
Art. no. }

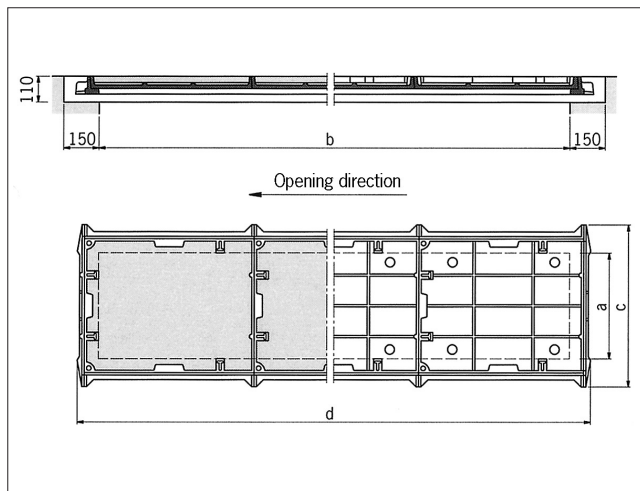
One set lifting and operating handles art. no. 1000.41.45

SECANT® Multiple duct cover unit, with 3 covers

▲ Art. no.	Clear surface	c x d	Weight kgs	
Cover with concrete	Cover for optional surface a x b		with concr.	w/o concr.
1404.20.01	1404.20.00	450 x 2000	690 x 2180	354 237
1406.20.01	1406.20.00	600 x 2000	840 x 2180	386 243
1407.20.01	1407.20.00	750 x 2000	990 x 2180	444 265
1409.20.01	1409.20.00	900 x 2000	1140 x 2240	557 312
1410.20.01	1410.20.00	1050 x 2000	1290 x 2240	699 415
1406.21.51	1406.21.50	600 x 2150	840 x 2330	410 253
1407.21.51	1407.21.50	750 x 2150	990 x 2330	466 277
1409.21.51	1409.21.50	900 x 2150	1140 x 2390	589 323
1404.23.01	1404.23.00	450 x 2300	690 x 2480	390 253
1406.23.01	1406.23.00	600 x 2300	840 x 2480	435 268
1407.23.01	1407.23.00	750 x 2300	990 x 2480	493 294
1409.23.01	1409.23.00	900 x 2300	1140 x 2540	631 344
1406.24.51	1406.24.50	600 x 2450	840 x 2630	457 278
1407.24.51	1407.24.50	750 x 2450	990 x 2630	514 305
1409.24.51	1409.24.50	900 x 2450	1140 x 2690	664 356
1410.24.51	1410.24.50	1050 x 2450	1290 x 2690	816 494
1404.26.01	1404.26.00	450 x 2600	690 x 2780	426 268
1406.26.01	1406.26.00	600 x 2600	840 x 2780	493 302
1407.26.01	1407.26.00	750 x 2600	990 x 2780	555 339
1409.26.01	1409.26.00	900 x 2600	1140 x 2840	710 379

SECANT® Multiple duct cover unit, with 4 covers

▲ Art. no.	Clear surface	c x d	Weight kgs	
Cover with concrete	Cover for optional surface a x b		with concr.	w/o concr.
1404.27.01	1404.27.00	450 x 2700	690 x 2880	467 311
1406.27.01	1406.27.00	600 x 2700	840 x 2880	512 323
1407.27.01	1407.27.00	750 x 2700	990 x 2880	590 352
1409.27.01	1409.27.00	900 x 2700	1140 x 2940	743 418
1410.27.01	1410.27.00	1050 x 2700	1290 x 2940	933 556
1406.28.51	1406.28.50	600 x 2850	840 x 3030	535 333
1407.28.51	1407.28.50	750 x 2850	990 x 3030	611 364
1409.28.51	1409.28.50	900 x 2850	1140 x 3090	776 429
1404.30.01	1404.30.00	450 x 3000	690 x 3180	503 326
1406.30.01	1406.30.00	600 x 3000	840 x 3180	557 343
1407.30.01	1407.30.00	750 x 3000	990 x 3180	633 375
1409.30.01	1409.30.00	900 x 3000	1140 x 3240	808 440
1406.31.51	1406.31.50	600 x 3150	840 x 3330	580 354
1407.31.51	1407.31.50	750 x 3150	990 x 3330	654 386
1409.31.51	1409.31.50	900 x 3150	1140 x 3390	840 451
1410.31.51	1410.31.50	1050 x 3150	1290 x 3390	1051 635
1404.33.01	1404.33.00	450 x 3300	690 x 3480	539 342
1406.33.01	1406.33.00	600 x 3300	840 x 3480	602 364
1407.33.01	1407.33.00	750 x 3300	990 x 3480	676 398
1409.33.01	1409.33.00	900 x 3300	1140 x 3540	872 462



In the case of proper installation and thorough greasing of cover contact surfaces, SECANT® single duct and multiple duct cover units (up to 3 covers) can be made surface-watertight on site thanks to their high-quality mechanical machining of all frame and cover elements.

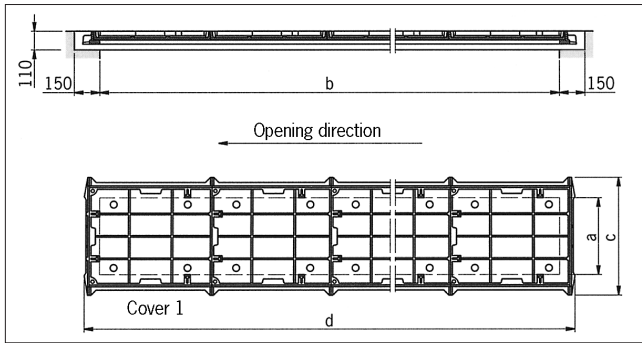
Note:

Embedding of frame with inserted/bolted covers only!

The in-situ filling of covers for optional surface must comply with the traffic requirements.

**Frame of cast iron,
covers of cast iron for optional surface, without locking**

Multiple duct cover units with more than 4 covers



SECANT® Manhole cover

class B 125 according to DIN EN 124/DIN 1229

class M 125 according to DIN EN 1253

for optional surface

Frame of cast iron, covers of cast iron for in-situ filling
Bearing and side surfaces of frame and covers machined

Weight } : see table
Art. no. }

One set lifting and operating handles art. no. 1000.41.45

▲ Art. no. Cover without concrete	Clear surface a x b	c x d
1404.34.00	450 x 3400	690 x 3580
1406.34.00	600 x 3400	840 x 3580
1407.34.00	750 x 3400	990 x 3580
1409.34.00	900 x 3400	1140 x 3640
1410.34.00	1050 x 3400	1290 x 3640
1406.35.50	600 x 3550	840 x 3730
1407.35.50	750 x 3550	990 x 3730
1409.35.50	900 x 3550	1140 x 3790
1404.37.00	450 x 3700	690 x 3880
1406.37.00	600 x 3700	840 x 3880
1407.37.00	750 x 3700	990 x 3880
1409.37.00	900 x 3700	1140 x 3940
1406.38.50	600 x 3850	840 x 4030
1407.38.50	750 x 3850	990 x 4030
1409.38.50	900 x 3850	1140 x 4090
1410.38.50	1050 x 3850	1290 x 4090
1404.40.00	450 x 4000	690 x 4180
1406.40.00	600 x 4000	840 x 4180
1407.40.00	750 x 4000	990 x 4180
1409.40.00	900 x 4000	1140 x 4240
1404.41.00	450 x 4100	690 x 4280
1406.41.00	600 x 4100	840 x 4280
1407.41.00	750 x 4100	990 x 4280
1409.41.00	900 x 4100	1140 x 4340
1410.41.00	1050 x 4100	1290 x 4340
1406.42.50	600 x 4250	840 x 4430
1407.42.50	750 x 4250	990 x 4430
1409.42.50	900 x 4250	1140 x 4490
1404.44.00	450 x 4400	690 x 4580
1406.44.00	600 x 4400	840 x 4580
1407.44.00	750 x 4400	990 x 4580
1409.44.00	900 x 4400	1140 x 4640
1406.45.50	600 x 4550	840 x 4730
1407.45.50	750 x 4550	990 x 4730
1409.45.50	900 x 4550	1140 x 4790
1410.45.50	1050 x 4550	1290 x 4790
1404.47.00	450 x 4700	690 x 4880
1406.47.00	600 x 4700	840 x 4880
1407.47.00	750 x 4700	990 x 4880
1409.47.00	900 x 4700	1140 x 4940
1404.48.00	450 x 4800	690 x 4980
1406.48.00	600 x 4800	840 x 4980
1407.48.00	750 x 4800	990 x 4980
1409.48.00	900 x 4800	1140 x 5040
1410.48.00	1050 x 4800	1290 x 5040

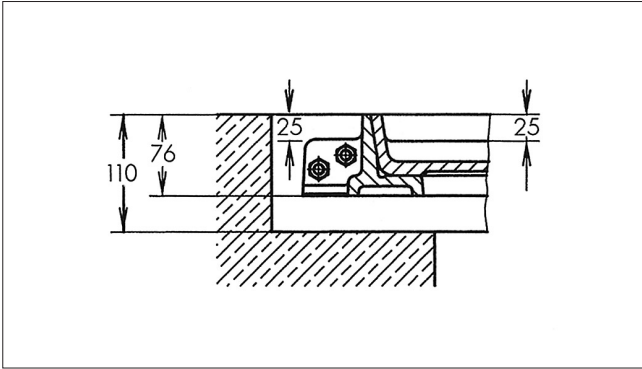
▲ Art. no. Cover without concrete	Clear surface a x b	c x d
1406.49.50	600 x 4950	840 x 5130
1407.49.50	750 x 4950	990 x 5130
1409.49.50	900 x 4950	1140 x 5190
1404.51.00	450 x 5100	690 x 5280
1406.51.00	600 x 5100	840 x 5280
1407.51.00	750 x 5100	990 x 5280
1409.51.00	900 x 5100	1140 x 5340
1406.52.50	600 x 5250	840 x 5430
1407.52.50	750 x 5250	990 x 5430
1409.52.50	900 x 5250	1140 x 5490
1410.52.50	1050 x 5250	1290 x 5490
1404.54.00	450 x 5400	690 x 5580
1406.54.00	600 x 5400	840 x 5580
1407.54.00	750 x 5400	990 x 5580
1409.54.00	900 x 5400	1140 x 5640
1404.55.00	450 x 5500	690 x 5680
1406.55.00	600 x 5500	840 x 5680
1407.55.00	750 x 5500	990 x 5680
1409.55.00	900 x 5500	1140 x 5740
1410.55.00	1050 x 5500	1290x 5740
1406.56.50	600 x 5650	840 x 5830
1407.56.50	750 x 5650	990 x 5830
1409.56.50	900 x 5650	1140 x 5890
1406.58.00	600 x 5800	840 x 5980
1407.58.00	750 x 5800	990 x 5980
1409.58.00	900 x 5800	1140 x 6040
1406.59.50	600 x 5950	840 x 6130
1407.59.50	750 x 5950	990 x 6130
1409.59.50	900 x 5950	1140 x 6190
1410.59.50	1050 x 5950	1290 x 6190
1406.61.00	600 x 6100	840 x 6280
1407.61.00	750 x 6100	990 x 6280
1409.61.00	900 x 6100	1140 x 6340
1404.62.00	450 x 6200	690 x 6380
1406.62.00	600 x 6200	840 x 6380
1407.62.00	750 x 6200	990 x 6380
1409.62.00	900 x 6200	1140 x 6440
1410.62.00	1050 x 6200	1290 x 6440

Note:

Individual covers can be equipped with opening aid as SERVOKAT®-SEC. In case of need, please let us have your enquiry.

Multiple duct covers with intermediate lengths as well as longer lengths upon request.

**Frame of cast iron,
covers of cast iron for optional surface, without locking**



**SECANT® Multiple duct cover unit
with removable beams**

class B 125 according to DIN EN 124/DIN 1229
class M 125 according to DIN EN 1253
for optional surface

Frame of cast iron, covers of cast iron for in-situ filling
Bearing and side surfaces of frame and covers machined
Beams of galvanised steel

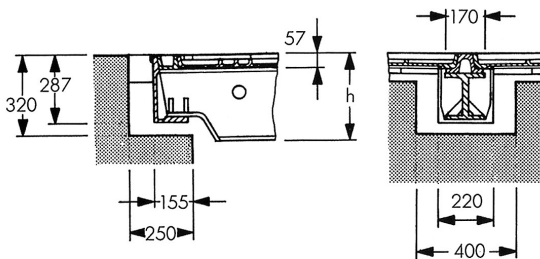
Weight } : see table
Art. no. }

One set lifting and operating handles art. no. 1000.41.45

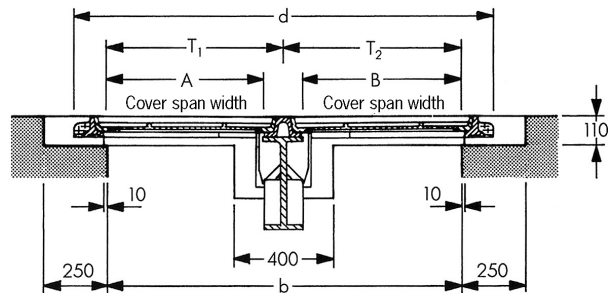
The in-situ filling of covers for optional surface must meet the traffic load requirements.

Rebates for beam pockets

The rebates are the same for all beam supports.
Frame and beams must have a safe seating.

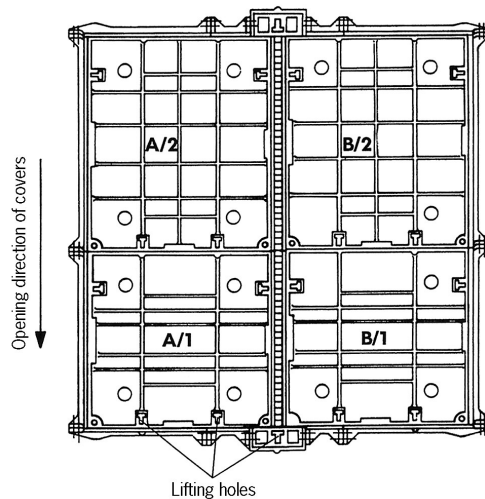
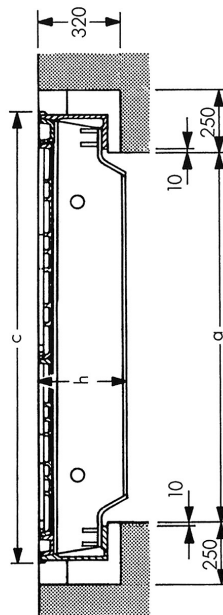


Beam fitting as per layout



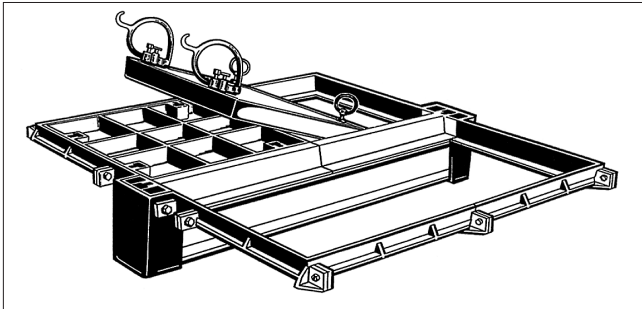
**Installation dimensions
(T₁ and T₂ ... refer to page 154)**

a	b	c	d	h
1300	1370	1610	1610	236
1450	1520	1760	1760	236
1600	1670	1910	1910	236
1750	1820	2060	2060	236
1900	1970	2210	2210	236
2000	2140	2310	2380	236
2150	2290	2460	2530	236
2300	2440	2610	2680	376
2450	2590	2760	2830	376
2600	2740	2910	2980	376
2750	2890	3060	3130	376
2900	3040	3210	3280	376
2900	3210	3210	3450	376
2900	3360	3210	3600	376
2900	3510	3210	3750	376
2900	3660	3210	3900	376
2900	3810	3210	4050	376



**Frame of cast iron,
covers of cast iron for optional surface, without locking**

Beam multiple cover units with 4 covers and 1 beam
 Beam multiple cover units with 6 covers and 2 beams
 Beam multiple cover units with 8 covers and 3 beams



Standard covers

All dimensions **a** can be combined with all dimensions **b**.

**SECANT® Beam multiple cover unit
with removable beams**

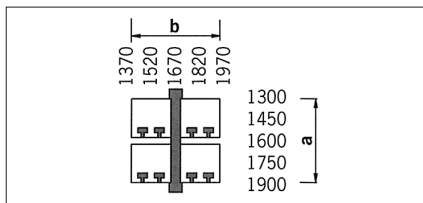
class B 125 according to DIN EN 124/DIN 1229
 class M 125 according to DIN EN 1253
 for optional surface

Clear surface: see table

Frame of cast iron, covers of cast iron for in-situ filling
 Bearing and side surfaces of frame and covers machined
 Beams of galvanised steel

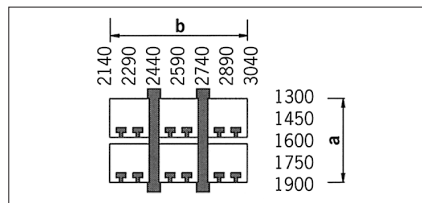
Weight & art. no.: see table

One set lifting and operating handles art. no. 1000.41.45



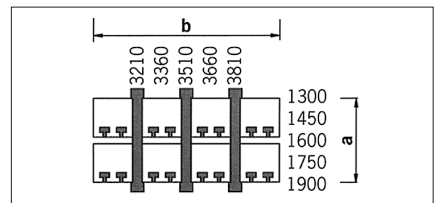
Manhole covers with 1 beam, 4 covers,
drawing: 0106.30.24

▲ Art. no.	Clear opening a x b	Weight kgs
1106.30.24	1300 x 1370	466
1106.30.25	1300 x 1520	482
1106.30.26	1300 x 1670	497
1106.30.27	1300 x 1820	529
1106.30.28	1300 x 1970	561
1106.30.29	1450 x 1370	493
1106.30.30	1450 x 1520	510
1106.30.31	1450 x 1670	526
1106.30.32	1450 x 1820	558
1106.30.33	1450 x 1970	589
1106.30.34	1600 x 1370	520
1106.30.35	1600 x 1520	537
1106.30.36	1600 x 1670	555
1106.30.37	1600 x 1820	586
1106.30.38	1600 x 1970	618
1106.30.39	1750 x 1370	571
1106.30.40	1750 x 1520	599
1106.30.41	1750 x 1670	627
1106.30.42	1750 x 1820	648
1106.30.43	1750 x 1970	669
1106.30.44	1900 x 1370	623
1106.30.45	1900 x 1520	661
1106.30.46	1900 x 1670	700
1106.30.47	1900 x 1820	710
1106.30.48	1900 x 1970	721



Manhole covers with 2 beams, 6 covers,
drawing: 0106.31.33

▲ Art. no.	Clear opening a x b	Weight kgs
1106.31.33	1300 x 2140	760
1106.31.34	1300 x 2290	778
1106.31.35	1300 x 2440	791
1106.31.36	1300 x 2590	808
1106.31.37	1300 x 2740	840
1106.31.38	1300 x 2890	872
1106.31.39	1300 x 3040	904
1106.31.40	1450 x 2140	804
1106.31.41	1450 x 2290	822
1106.31.42	1450 x 2440	836
1106.31.43	1450 x 2590	855
1106.31.44	1450 x 2740	886
1106.31.45	1450 x 2890	918
1106.31.46	1450 x 3040	950
1106.31.47	1600 x 2140	847
1106.31.48	1600 x 2290	866
1106.31.49	1600 x 2440	881
1106.31.50	1600 x 2590	901
1106.31.51	1600 x 2740	932
1106.31.52	1600 x 2890	964
1106.31.53	1600 x 3040	995
1106.31.54	1750 x 2140	926
1106.31.55	1750 x 2290	956
1106.31.56	1750 x 2440	982
1106.31.57	1750 x 2590	1011
1106.31.58	1750 x 2740	1032
1106.31.59	1750 x 2890	1053
1106.31.60	1750 x 3040	1074
1106.31.61	1900 x 2140	1006
1106.31.62	1900 x 2290	1046
1106.31.63	1900 x 2440	1082
1106.31.64	1900 x 2590	1122
1106.31.65	1900 x 2740	1133
1106.31.66	1900 x 2890	1143
1106.31.67	1900 x 3040	1154



Manhole covers with 3 beams, 8 covers,
drawing: 0106.31.68

▲ Art. no.	Clear opening a x b	Weight kgs
1106.31.70	1300 x 3210	1085
1106.31.71	1300 x 3360	1104
1106.31.72	1300 x 3510	1120
1106.31.73	1300 x 3660	1151
1106.31.74	1300 x 3810	1183
1106.31.79	1450 x 3210	1147
1106.31.80	1450 x 3360	1167
1106.31.81	1450 x 3510	1183
1106.31.82	1450 x 3660	1215
1106.31.83	1450 x 3810	1246
1106.31.88	1600 x 3210	1208
1106.31.89	1600 x 3360	1229
1106.31.90	1600 x 3510	1246
1106.31.91	1600 x 3660	1278
1106.31.92	1600 x 3810	1310
1106.31.97	1750 x 3210	1336
1106.31.98	1750 x 3360	1368
1106.31.99	1750 x 3510	1396
1106.32.00	1750 x 3660	1417
1106.32.01	1750 x 3810	1438
1106.32.06	1900 x 3210	1465
1106.32.07	1900 x 3360	1509
1106.32.08	1900 x 3510	1545
1106.32.09	1900 x 3660	1558
1106.32.10	1900 x 3810	1568

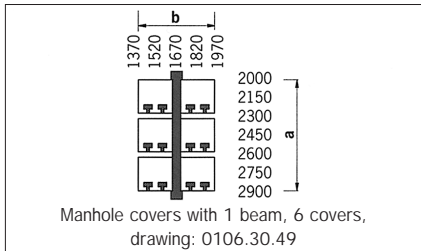
Covers with edge beams or with individual covers with opening aid - as SERVOKAT®.SEC - available upon request.

Frame of cast iron, covers of cast iron for optional surface, without locking

Beam multiple cover units with 6 covers and 1 beam

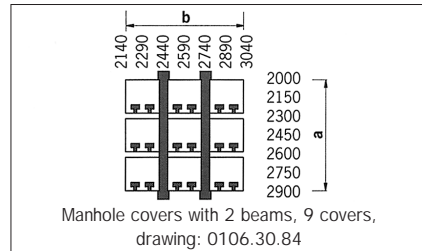
Beam multiple cover units with 9 covers and 2 beams

Beam multiple cover units with 12 covers and 3 beams



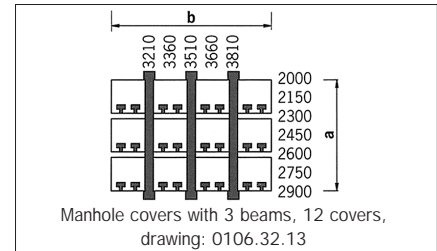
▲ Art. no.	Clear surface a x b	Weight kgs
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1106.30.49	2000 x 1370	651
1106.30.50	2000 x 1520	672
1106.30.51	2000 x 1670	694
1106.30.52	2000 x 1820	740
1106.30.53	2000 x 1970	786
1106.30.54	2150 x 1370	678
1106.30.55	2150 x 1520	700
1106.30.56	2150 x 1670	723
1106.30.57	2150 x 1820	768
1106.30.58	2150 x 1970	814
1106.30.59	2300 x 1370	718
1106.30.60	2300 x 1520	742
1106.30.61	2300 x 1670	765
1106.30.62	2300 x 1820	811
1106.30.63	2300 x 1970	856
1106.30.64	2450 x 1370	745
1106.30.65	2450 x 1520	769
1106.30.66	2450 x 1670	794
1106.30.67	2450 x 1820	839
1106.30.68	2450 x 1970	885
1106.30.69	2600 x 1370	796
1106.30.70	2600 x 1520	831
1106.30.71	2600 x 1670	866
1106.30.72	2600 x 1820	901
1106.30.73	2600 x 1970	936
1106.30.74	2750 x 1370	848
1106.30.75	2750 x 1520	893
1106.30.76	2750 x 1670	938
1106.30.77	2750 x 1820	963
1106.30.78	2750 x 1970	987
1106.30.79	2900 x 1370	899
1106.30.80	2900 x 1520	955
1106.30.81	2900 x 1670	1011
1106.30.82	2900 x 1820	1025
1106.30.83	2900 x 1970	1039
1106.30.84	2000 x 2140	1054



▲ Art. no.	Clear surface a x b	Weight kgs
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1106.30.85	2000 x 2290	1077
1106.30.86	2000 x 2440	1096
1106.30.87	2000 x 2590	1120
1106.30.88	2000 x 2740	1166
1106.30.89	2000 x 2890	1212
1106.30.90	2000 x 3040	1258
1106.30.91	2150 x 2140	1097
1106.30.92	2150 x 2290	1121
1106.30.93	2150 x 2440	1142
1106.30.94	2150 x 2590	1166
1106.30.95	2150 x 2740	1212
1106.30.96	2150 x 2890	1258
1106.30.97	2150 x 3040	1303
1106.30.98	2300 x 2140	1167
1106.30.99	2300 x 2290	1193
1106.31.00	2300 x 2440	1214
1106.31.01	2300 x 2590	1239
1106.31.02	2300 x 2740	1285
1106.31.03	2300 x 2890	1331
1106.31.04	2300 x 3040	1376
1106.31.05	2450 x 2140	1210
1106.31.06	2450 x 2290	1237
1106.31.07	2450 x 2440	1259
1106.31.08	2450 x 2590	1285
1106.31.09	2450 x 2740	1331
1106.31.10	2450 x 2890	1376
1106.31.11	2450 x 3040	1422
1106.31.12	2600 x 2140	1290
1106.31.13	2600 x 2290	1326
1106.31.14	2600 x 2440	1359
1106.31.15	2600 x 2590	1396
1106.31.16	2600 x 2740	1431
1106.31.17	2600 x 2890	1466
1106.31.18	2600 x 3040	1501
1106.31.19	2750 x 2140	1369
1106.31.20	2750 x 2290	1416
1106.31.21	2750 x 2440	1459
1106.31.22	2750 x 2590	1507
1106.31.23	2750 x 2740	1531
1106.31.24	2750 x 2890	1556
1106.31.25	2750 x 3040	1580
1106.31.26	2900 x 2140	1448
1106.31.27	2900 x 2290	1506
1106.31.28	2900 x 2440	1560
1106.31.29	2900 x 2590	1617
1106.31.30	2900 x 2740	1631
1106.31.31	2900 x 2890	1645
1106.31.32	2900 x 3040	1659

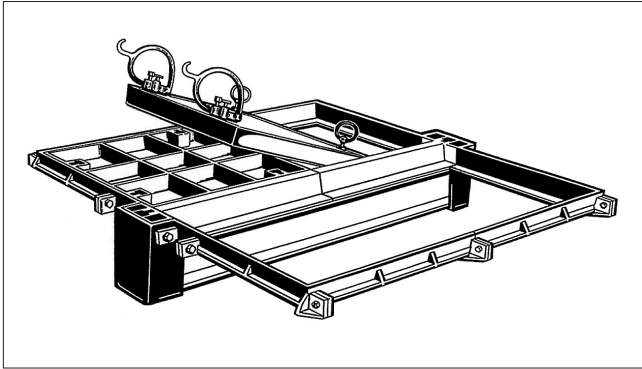


▲ Art. no.	Clear surface a x b	Weight kgs
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1106.32.15	2000 x 3210	1499
1106.32.16	2000 x 3360	1524
1106.32.17	2000 x 3510	1545
1106.32.18	2000 x 3660	1596
1106.32.19	2000 x 3810	1638
1106.32.24	2150 x 3210	1561
1106.32.25	2150 x 3360	1587
1106.32.26	2150 x 3510	1609
1106.32.27	2150 x 3660	1659
1106.32.28	2150 x 3810	1701
1106.32.33	2300 x 3210	1663
1106.32.34	2300 x 3360	1690
1106.32.35	2300 x 3510	1713
1106.32.36	2300 x 3660	1763
1106.32.37	2300 x 3810	1805
1106.32.42	2450 x 3210	1724
1106.32.43	2450 x 3360	1752
1106.32.44	2450 x 3510	1777
1106.32.45	2450 x 3660	1826
1106.32.46	2450 x 3810	1868
1106.32.51	2600 x 3210	1852
1106.32.52	2600 x 3360	1891
1106.32.53	2600 x 3510	1926
1106.32.54	2600 x 3660	1965
1106.32.55	2600 x 3810	1996
1106.32.60	2750 x 3210	1980
1106.32.61	2750 x 3360	2030
1106.32.62	2750 x 3510	2075
1106.32.63	2750 x 3660	2103
1106.32.64	2750 x 3810	2124
1106.32.69	2900 x 3210	2109
1106.32.70	2900 x 3360	2168
1106.32.71	2900 x 3510	2224
1106.32.72	2900 x 3660	2242
1106.32.73	2900 x 3810	2252

Larger manhole cover units upon request.

Frame of cast iron, covers of cast iron for optional surface, without locking



SECANT® Beam multiple cover unit with removable beams W-cover, class B 125, M 125

Example

Assumed shaft width: 1600 x 2400 mm

Complying with beam positioning, following solutions are possible for clear surface a x b

Solution 1: a x b = 1600 x 2440 mm with 2 beams a = 1600 mm and 6 covers

Solution 2: a x b = 2450 x 1670 mm with 1 beam a = 2450 mm and 6 covers

Standard covers

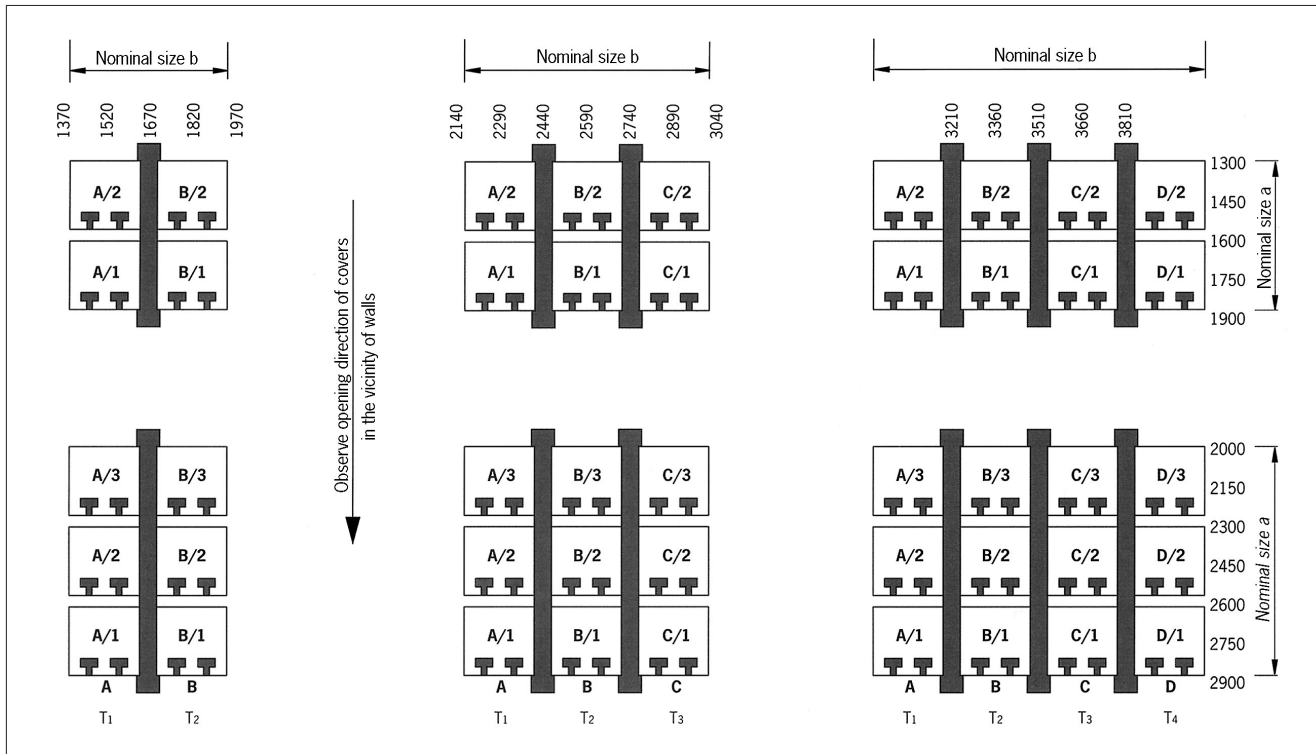
All dimensions **a** can be combined with all dimensions **b**. Beam span direction: dimension a (see table on page 146)

Distance between beams

In the case of standard covers, the distance between beams is specified (see table below).

In the case of shafts or access openings with in-between sizes, the next larger dimension should be used and the rebates increased accordingly.

Covers with edge beams or with individual covers with opening aid - as SERVOKAT®. SEC - available upon request.



Manhole covers with 1 beam

b	T ₁	T ₂
1370	685	685
1520	835	685
1670	835	835
1820	985	835
1970	985	985

Manhole covers with 2 beams

b	T ₁	T ₂	T ₃
2140	685	770	685
2290	685	920	685
2440	835	770	835
2590	835	920	835
2740	835	1070	835
2890	985	920	985
3040	985	1070	985

Manhole covers with 3 beams

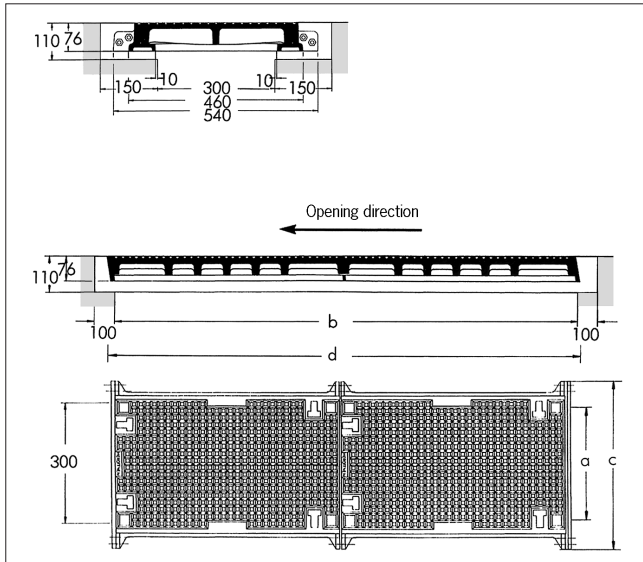
b	T ₁	T ₂	T ₃	T ₄
3210	835	770	770	835
3360	835	920	920	685
3510	835	920	920	835
3660	985	920	920	835
3810	985	920	920	985

Larger manhole cover units upon request.

SECANT® Manhole Covers Class D 400 with Corrugated Cover of Cast Iron

Frame of cast iron with steel end plates, corrugated covers of cast iron

Single duct and multiple duct cover units



Manhole cover

Class D 400 according to DIN EN 124/DIN 1229

Clear surface: see table

Frame of cast iron with steel end plates
corrugated cover of cast iron
without vent holes
bearing and side surfaces machined

For fields of application with high traffic loads and high traffic frequency we recommend the installation of screwed designs

In case of need, please let us have your relevant enquiry.

Weight }
Art. no. } : see table

One set lifting and operating handles art. no. 1000.41.45

▲ Art. no.	Clear surface a x b	c x d	Number of covers	Weight kgs
1503.07.00	300 x 700	540 x 733	1	92
1503.14.00	300 x 1400	540 x 1433	2	175
1503.21.00	300 x 2100	540 x 2133	3	258
1503.28.00	300 x 2800	540 x 2833	4	341
1503.35.00	300 x 3500	540 x 3533	5	424
1503.42.00	300 x 4200	540 x 4233	6	508
1503.49.00	300 x 4900	540 x 4933	7	591
1503.56.00	300 x 5600	540 x 5633	8	674
1503.63.00	300 x 6300	540 x 6333	9	758
1503.70.00	300 x 7033	540 x 7033	10	841
1503.77.00	300 x 7700	540 x 7733	11	924
1503.84.00	300 x 8400	540 x 8433	12	1007
1503.91.00	300 x 9100	540 x 9133	13	1091
1503.98.00	300 x 9800	540 x 9833	14	1174

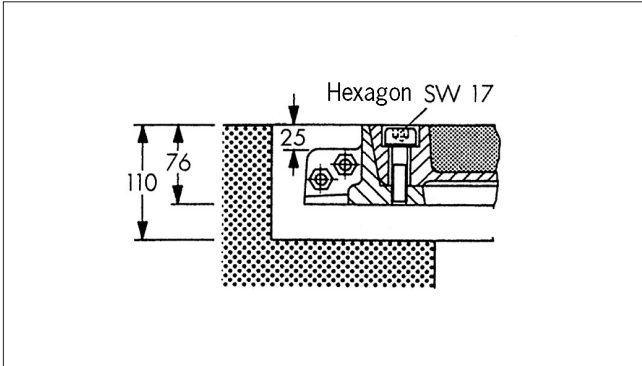
Note:

Embedding of frame with inserted covers only!

Larger manhole cover units upon request.

**Frame of cast iron,
covers of cast iron with concrete, with locking**

Single duct and multiple duct cover units



Design with bolt locking

SECANT® Manhole cover

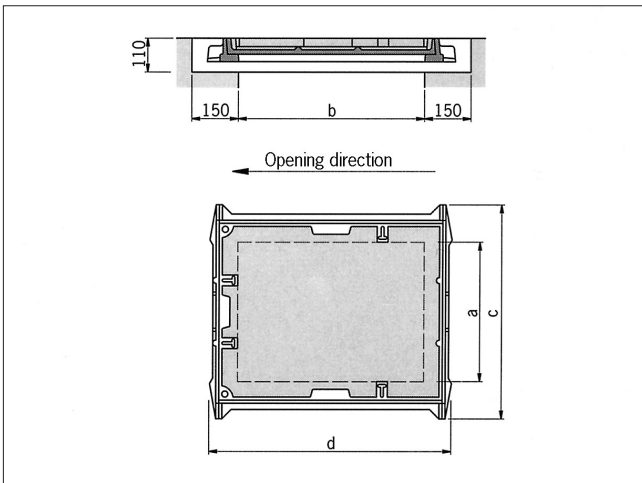
Class D 400 according to DIN EN 124/DIN 1229
with locking

Clear surface: see table

Frame of cast iron, BEGU® covers of cast iron with concrete
Bearing and side surfaces of frame and covers machined
Field of application: e.g. cable ducts in tunnel constructions

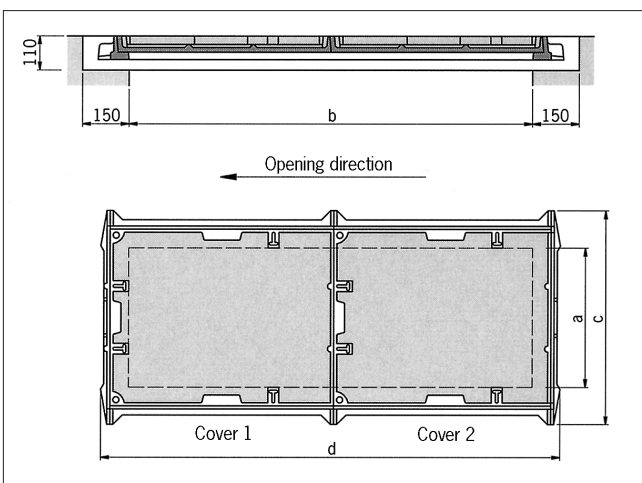
Weight } : see table
Art. no. }

One set lifting and operating handles art. no. 1000.41.45



III. shows 1-cover design

▲ Art. no.	Clear surface a x b	c x d	Number of covers	Weight kgs
1504.06.02	450 x 600	690 x 780	1	129
1504.09.02	450 x 900	690 x 1080	1	164
1504.13.02	450 x 1300	690 x 1480	2	241
1504.16.02	450 x 1600	690 x 1780	2	277
1504.19.02	450 x 1900	690 x 2080	2	313
1504.20.02	450 x 2000	690 x 2180	3	354
1504.23.02	450 x 2300	690 x 2480	3	390
1504.26.02	450 x 2600	690 x 2780	3	426
1504.27.02	450 x 2700	690 x 2880	4	467
1504.30.02	450 x 3000	690 x 3180	4	503
1504.33.02	450 x 3300	690 x 3480	4	539
1504.34.02	450 x 3400	690 x 3580	5	580



III. shows 2-cover design

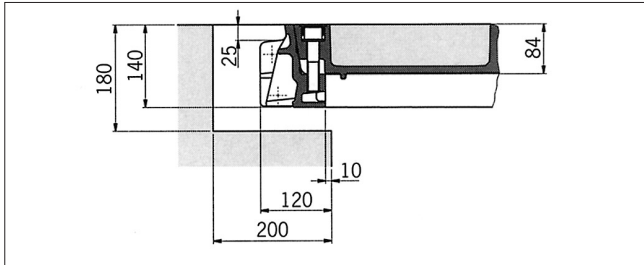
In the case of proper installation and thorough greasing of cover contact surfaces, SECANT® single duct and multiple duct cover units (up to 3 covers) can be made surface-watertight on site thanks to their high-quality mechanical machining of all frame and cover elements.

Note:

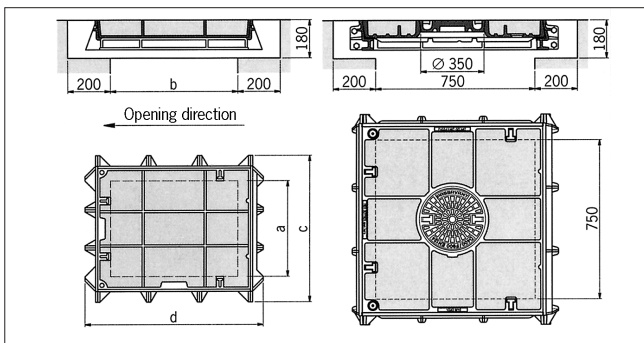
Embedding of frame with inserted/bolted covers only!

Frame of cast iron, covers of cast iron with concrete or frame of cast iron with concrete, covers of cast iron with concrete with/without locking

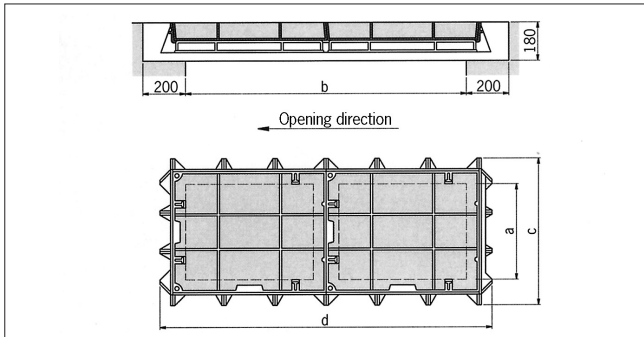
Single duct cover units with 1 cover
Multiple duct cover units with 2 covers



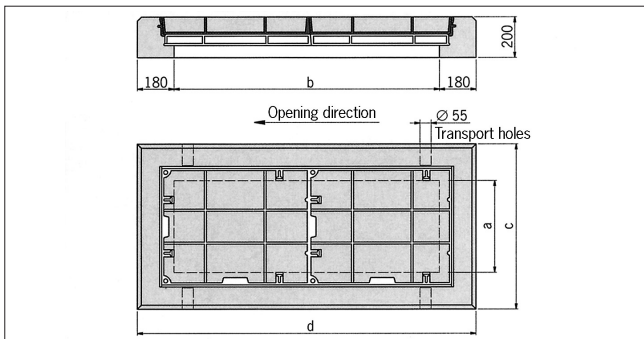
Design with bolt locking



Design with central cover Ø 300 mm



Design with frame of cast iron



Design with frame of cast iron with concrete

In the case of proper installation and thorough greasing of cover contact surfaces, SECANT® single duct and multiple duct cover units (up to 3 covers) can be made surface-watertight on site thanks to their high-quality mechanical machining of all frame and cover elements.

Note:

Embedding of frame with inserted/bolted covers only!

SECANT® Manhole cover

Class D 400 according to DIN EN 124/DIN 1229 with/without locking

Clear surface: see table

Frame of cast iron, BEGU® covers of cast iron with concrete
Bearing and side surfaces of frame and covers machined with central cover Ø 300 mm (with art. no. 1507.07.54 only)

Weight } : see table
Art. no. }

One set lifting and operating handles art. no. 1000.41.45

SECANT® Single duct cover unit with BEGU® cover

▲ Art. no.		Clear surface a x b	c x d	Weight kgs
without bolt locking	with bolt locking			
1506.06.01	1506.06.02	600 x 600	840 x 820	222
1510.06.01	1510.06.02	1050 x 600	1290 x 830	425
1506.07.51	1506.07.52	600 x 750	840 x 970	262
1507.07.51	1507.07.52	750 x 750	990 x 970	320
1506.09.01	1506.09.02	600 x 900	840 x 1120	281
1507.09.01	1507.09.02	750 x 900	990 x 1120	341
1509.09.01	1509.09.02	900 x 900	1140 x 1130	432
1510.10.51	1510.10.52	1050 x 1050	1290 x 1280	648

Design with central cover Ø 300 mm

1507.07.54	—	750 x 750	990 x 970	304
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SECANT® Multiple duct cover unit, with 2 BEGU® covers

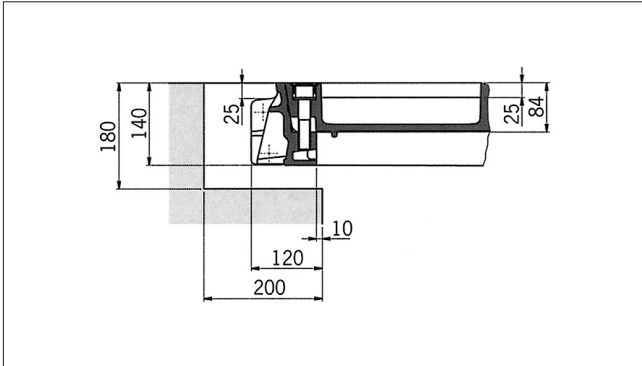
1506.13.01	1506.13.02	600 x 1300	840 x 1520	407
1507.13.01	1507.13.02	750 x 1300	990 x 1520	487
1509.13.01	1509.13.02	900 x 1300	1140 x 1530	586
1510.13.01	1510.13.02	1050 x 1300	1290 x 1530	788
1506.14.51	1506.14.52	600 x 1450	840 x 1670	448
1507.14.51	1507.14.52	750 x 1450	990 x 1670	541
1509.14.51	1509.14.52	900 x 1450	1140 x 1680	626
1506.16.01	1506.16.02	600 x 1600	840 x 1820	488
1507.16.01	1507.16.02	750 x 1600	990 x 1820	596
1509.16.01	1509.16.02	900 x 1600	1140 x 1830	665
1506.17.51	1506.17.52	600 x 1750	840 x 1970	507
1507.17.51	1507.17.52	750 x 1750	990 x 1970	617
1509.17.51	1509.17.52	900 x 1750	1140 x 1980	738
1510.17.51	1510.17.52	1050 x 1750	1290 x 1980	910
1506.19.01	1506.19.02	600 x 1900	840 x 2120	526
1507.19.01	1507.19.02	750 x 1900	990 x 2120	638
1509.19.01	1509.19.02	900 x 1900	1140 x 2130	811

Design with BEGU® frame, with 1 or 2 BEGU® covers resp.

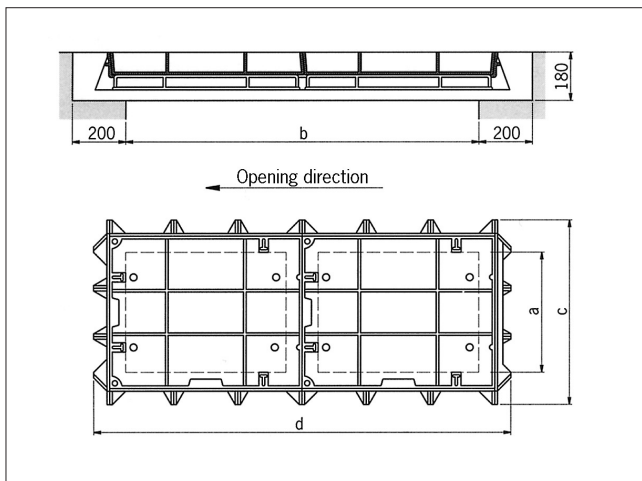
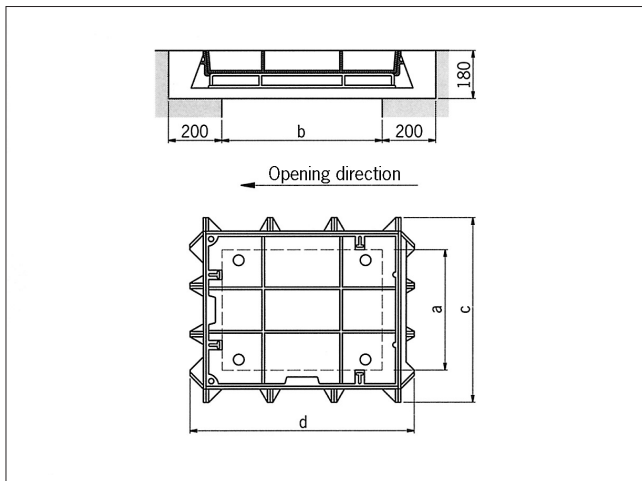
—	1507.07.56	750 x 750	1130 x 1130	575
—	1507.14.56	750 x 1450	1130 x 1830	914
—	1509.09.06	900 x 900	1280 x 1280	735
—	1509.14.56	900 x 1450	1280 x 1830	1066
—	1509.16.06	900 x 1600	1280 x 1980	1107

**Frame of cast iron,
covers of cast iron for optional surface, with/without locking**

Single duct cover units with 1 cover
Multiple duct cover units with 2 covers



Design with bolt locking



In the case of proper installation and thorough greasing of cover contact surfaces, SECANT® single duct and multiple duct cover units (up to 3 covers) can be made surface-watertight on site thanks to their high-quality mechanical machining of all frame and cover elements.

Note:

Embedding of frame with inserted/bolted covers only!
The in-situ filling of covers for optional surface must comply with the traffic requirements.

SECANT® Manhole cover

class D 400 according to DIN EN 124/DIN 1229
for optional surface, with/without locking

Clear surface: see table

Frame of cast iron, cover of cast iron for in-situ filling
Bearing and side surfaces of frame and covers machined

Weight } : see table
Art. no. }

Ein Satz Aushebe- und Bedienungsriffe Artikel-Nr. 1000.41.45

SECANT® Single duct cover unit, for optional surface

▲ Art. no.		Clear surface a x b	c x d	Weight kgs
without bolt locking	with bolt locking			
1506.06.00	1506.06.03	600 x 600	840 x 820	155
1510.06.00	1510.06.03	1050 x 600	1290 x 830	283
1506.07.50	1506.07.53	600 x 750	840 x 970	176
1507.07.50	1507.07.53	750 x 750	990 x 970	220
1506.09.00	1506.09.03	600 x 900	840 x 1120	184
1507.09.00	1507.09.03	750 x 900	990 x 1120	218
1509.09.00	1509.09.03	900 x 900	1140 x 1130	302
1510.10.50	1510.10.53	1050 x 1050	1290 x 1280	383

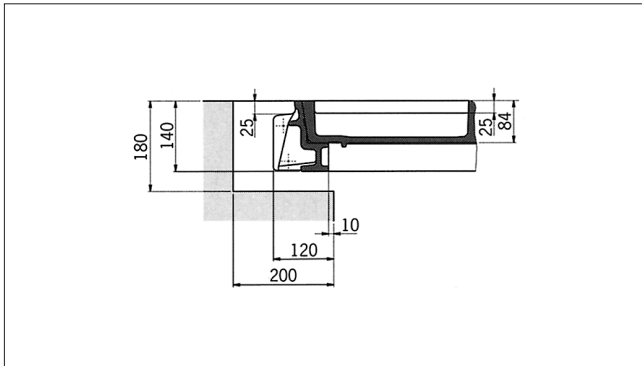
**SECANT® Multiple duct cover unit,
with 2 covers, for optional surface**

▲ Art. no.		Clear surface a x b	c x d	Weight kgs
without bolt locking	with bolt locking			
1506.13.00	1506.13.03	600 x 1300	840 x 1520	274
1507.13.00	1507.13.03	750 x 1300	990 x 1520	324
1509.13.00	1509.13.03	900 x 1300	1140 x 1530	403
1510.13.00	1510.13.03	1050 x 1300	1290 x 1530	504
1506.14.50	1506.14.53	600 x 1450	840 x 1670	296
1507.14.50	1507.14.53	750 x 1450	990 x 1670	361
1509.14.50	1509.14.53	900 x 1450	1140 x 1680	425
1506.16.00	1506.16.03	600 x 1600	840 x 1820	317
1507.16.00	1507.16.03	750 x 1600	990 x 1820	397
1509.16.00	1509.16.03	900 x 1600	1140 x 1830	446
1506.17.50	1506.17.53	600 x 1750	840 x 1970	325
1507.17.50	1507.17.53	750 x 1750	990 x 1970	395
1509.17.50	1509.17.53	900 x 1750	1140 x 1980	499
1510.17.50	1510.17.53	1050 x 1750	1290 x 1980	604
1506.19.00	1506.19.03	600 x 1900	840 x 2120	333
1507.19.00	1507.19.03	750 x 1900	990 x 2120	393
1509.19.00	1509.19.03	900 x 1900	1140 x 2130	552

Frame of cast iron, covers of cast iron with concrete or frame of cast iron, covers of cast iron for optional surface, without locking

Multiple duct cover units with 3 covers

Multiple duct cover units with 4 covers



Design for optional surface

SECANT® Manhole cover

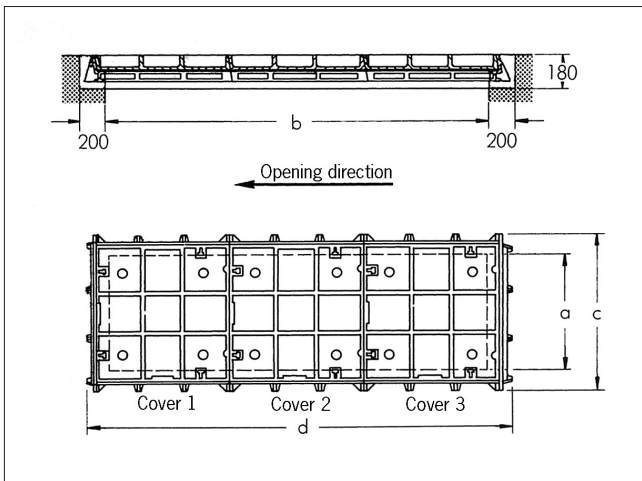
class D 400 according to DIN EN 124/DIN 1229 for optional surface

Clear surface: see table

Frame of cast iron, BEGU® covers of cast iron with concrete or covers of cast iron for in-situ filling
Bearing and side surfaces of frame and covers machined

Weight } : see table
Art. no. }

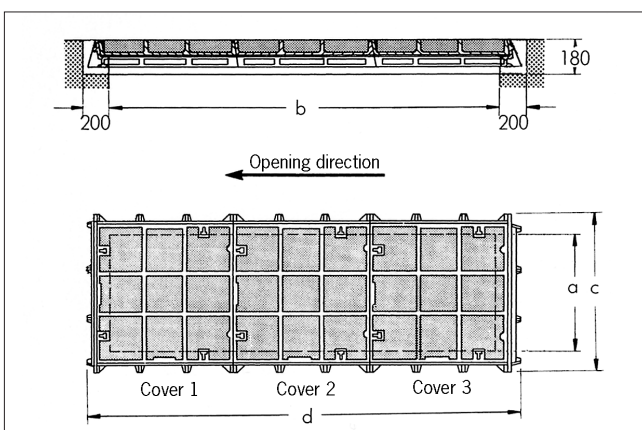
One set lifting and operating handles art. no. 1000.41.45



Frame and covers of cast iron for optional surface

SECANT® Multiple duct cover unit, with 3 covers

▲ Art. no.	Clear surface	c x d	Weight kgs
Cover with concrete	Cover for optional surface a x b		with w/o concr. concr.
1506.20.01 1506.20.00	600 x 2000	840 x 2180	593 393
1507.20.01 1507.20.00	750 x 2000	990 x 2220	709 464
1509.20.01 1509.20.00	900 x 2000	1140 x 2230	852 577
1510.20.01 1510.20.00	1050 x 2000	1290 x 2230	1180 725
1506.21.51 1506.21.50	600 x 2150	840 x 2370	646 427
1507.21.51 1507.21.50	750 x 2150	990 x 2370	778 515
1509.21.51 1509.21.50	900 x 2150	1140 x 2380	892 599
1506.23.01 1506.23.00	600 x 2300	840 x 2520	686 448
1507.23.01 1507.23.00	750 x 2300	990 x 2520	832 551
1509.23.01 1509.23.00	900 x 2300	1140 x 2530	948 638
1506.24.51 1506.24.50	600 x 2450	840 x 2670	726 470
1507.24.51 1507.24.50	750 x 2450	990 x 2670	887 588
1509.24.51 1509.24.50	900 x 2450	1140 x 2680	988 659
1510.24.51 1510.24.50	1050 x 2450	1290 x 2680	1372 825
1506.26.01 1506.26.00	600 x 2600	840 x 2820	745 477
1507.26.01 1507.26.00	750 x 2600	990 x 2820	909 586
1509.26.01 1509.26.00	900 x 2600	1140 x 2830	1061 712



Frame of cast iron, covers of cast iron with concrete

SECANT® Multiple duct cover unit, with 4 covers

▲ Art. no.	Clear surface	c x d	Weight kgs
Cover with concrete	Cover for optional surface a x b		with w/o concr. concr.
1506.27.01 1506.27.00	600 x 2700	840 x 2920	791 525
1507.27.01 1507.27.00	750 x 2700	990 x 2920	945 619
1509.27.01 1509.27.00	900 x 2700	1140 x 2930	1135 769
1510.27.01 1510.27.00	1050 x 2700	1290 x 2930	1530 964
1506.28.51 1506.28.50	600 x 2850	840 x 3070	881 546
1507.28.51 1507.28.50	750 x 2850	990 x 3070	999 656
1509.28.51 1509.28.50	900 x 2850	1140 x 3080	1175 791
1506.30.01 1506.30.00	600 x 3000	840 x 3220	871 568
1507.30.01 1507.30.00	750 x 3000	990 x 3220	1054 692
1509.30.01 1509.30.00	900 x 3000	1140 x 3230	1214 813
1506.31.51 1506.31.50	600 x 3150	840 x 3370	912 589
1507.31.51 1507.31.50	750 x 3150	990 x 3370	1108 728
1509.31.51 1509.31.50	900 x 3150	1140 x 3380	1254 834
1510.31.51 1510.31.50	1050 x 3150	1290 x 3380	1753 1066
1506.33.01 1506.33.00	600 x 3300	840 x 3520	952 611
1507.33.01 1507.33.00	750 x 3300	990 x 3520	1163 765
1509.33.01 1509.33.00	900 x 3300	1140 x 3530	1294 856

In the case of proper installation and thorough greasing of cover contact surfaces, SECANT® single duct and multiple duct cover units (up to 3 covers) can be made surface-watertight on site thanks to their high-quality mechanical machining of all frame and cover elements.

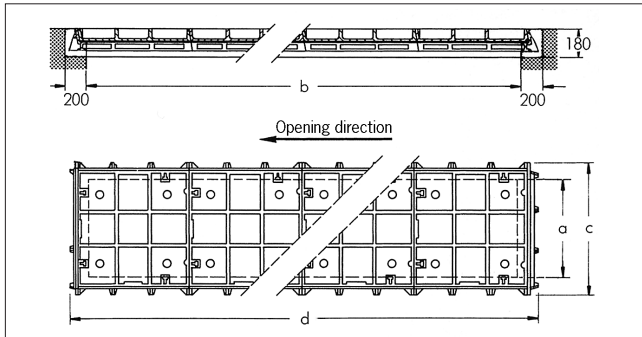
Note:

Embedding of frame with inserted/bolted covers only!

The in-situ filling of covers for optional surface must comply with the traffic requirements.

**Frame of cast iron,
covers of cast iron for optional surface, without locking**

Multiple duct cover units with more than 4 covers



SECANT® Multiple duct cover
class D 400 according to DIN EN 124/DIN 1229
for optional surface

Frame of cast iron, covers of cast iron for in-situ filling
Bearing and side surfaces of frame and covers machined

Art. no. } : see table
Clear surface }

One set lifting and operating handles art. no. 1000.41.45

▲ Art. no.	Clear surface a x b	c x d
1506.34.00	600 x 3400	840 x 3620
1507.34.00	750 x 3400	990 x 3620
1509.34.00	900 x 3400	1140 x 3630
1510.34.00	1050 x 3400	1290 x 3630
1506.35.50	600 x 3550	840 x 3770
1507.35.50	750 x 3550	990 x 3770
1509.35.50	900 x 3550	1140 x 3780
1506.37.00	600 x 3700	840 x 3920
1507.37.00	750 x 3700	990 x 3920
1509.37.00	900 x 3700	1140 x 3930
1506.38.50	600 x 3850	840 x 4070
1507.38.50	750 x 3850	990 x 4070
1509.38.50	900 x 3850	1140 x 4080
1510.38.50	1050 x 3850	1290 x 4080
1506.40.00	600 x 4000	840 x 4220
1507.40.00	750 x 4000	990 x 4220
1509.40.00	900 x 4000	1140 x 4230
1506.41.00	600 x 4100	840 x 4320
1507.41.00	750 x 4100	990 x 4320
1509.41.00	900 x 4100	1140 x 4330
1510.41.00	1050 x 4100	1290 x 4330
1506.42.50	600 x 4250	840 x 4470
1507.42.50	750 x 4250	990 x 4470
1509.42.50	900 x 4250	1140 x 4480
1506.44.00	600 x 4400	840 x 4620
1507.44.00	750 x 4400	990 x 4620
1509.44.00	900 x 4400	1140 x 4630
1506.45.50	600 x 4550	840 x 4770
1507.45.50	750 x 4550	990 x 4770
1509.45.50	900 x 4550	1140 x 4780
1510.45.50	1050 x 4550	1290 x 4780
1506.47.00	600 x 4700	840 x 4920
1507.47.00	750 x 4700	990 x 4920
1509.47.00	900 x 4700	1140 x 4930
1506.48.00	600 x 4800	840 x 5020
1507.48.00	750 x 4800	990 x 5020
1509.48.00	900 x 4800	1140 x 5030
1510.48.00	1050 x 4800	1290 x 5030

▲ Art. no.	Clear surface a x b	c x d
1506.49.50	600 x 4950	840 x 5170
1507.49.50	750 x 4950	990 x 5170
1509.49.50	900 x 4950	1140 x 5180
1506.51.00	600 x 5100	840 x 5320
1507.51.00	750 x 5100	990 x 5320
1509.51.00	900 x 5100	1140 x 5330
1506.52.50	600 x 5250	840 x 5470
1507.52.50	750 x 5250	990 x 5470
1509.52.50	900 x 5250	1140 x 5480
1510.52.50	1050 x 5250	1290 x 5480
1506.54.00	600 x 5400	840 x 5620
1507.54.00	750 x 5400	990 x 5620
1509.54.00	900 x 5400	1140 x 5630
1506.55.00	600 x 5500	840 x 5720
1507.55.00	750 x 5500	990 x 5720
1509.55.00	900 x 5500	1140 x 5730
1510.55.00	1050 x 5500	1290 x 5730
1506.56.50	600 x 5650	840 x 5870
1507.56.50	750 x 5650	990 x 5870
1509.56.50	900 x 5650	1140 x 5880
1506.58.00	600 x 5800	840 x 6020
1507.58.00	750 x 5800	990 x 6020
1509.58.00	900 x 5800	1140 x 6030
1506.59.50	600 x 5950	840 x 6170
1507.59.50	750 x 5950	990 x 6170
1509.59.50	900 x 5950	1140 x 6180
1510.59.50	1050 x 5950	1290 x 6180
1506.61.00	600 x 6100	840 x 6320
1507.61.00	750 x 6100	990 x 6320
1509.61.00	900 x 6100	1140 x 6330
1506.62.00	600 x 6200	840 x 6420
1507.62.00	750 x 6200	990 x 6420
1509.62.00	900 x 6200	1140 x 6430
1510.62.00	1050 x 6200	1290 x 6430

Note:

Individual covers can be equipped with opening aid as SERVOKAT®-SEC. In case of need, please let us have your enquiry.

Multiple duct covers with intermediate lengths as well as longer lengths upon request.

Frame of cast iron, covers of cast iron for optional surface, without locking

- Beam multiple cover units with 4 covers and 1 beam
- Beam multiple cover units with 6 covers and 2 beams
- Beam multiple cover units with 8 covers and 3 beams

SECANT® Beam multiple cover unit with removable beams

Class D 400¹⁾ according to DIN EN 124/DIN 1229 for optional surface

Clear surface a x b, refer to page 156

Frame of cast iron, 4 covers of cast iron for in-situ filling
1 beam of galvanised steel, bearing and side surfaces of frame and covers machined

Weight and art. no.: see tables on pages 156

One set lifting and operating handles art. no. 1000.41.45

The in-situ filling of covers for optional surface must meet the traffic load requirements.

1) Installation in carriageway of public roads - class D 400 - is limited to the max. clear shaft widths of a x b = 1900 x 1970 (1 beam and 4 covers).

SECANT® Beam multiple cover unit with removable beams

SLW 60-25 km/h²⁾ for optional surface

Clear surface a x b, refer to pages 156 and 157

Frame of cast iron, covers of cast iron for in-situ filling
Beams of galvanised steel, bearing and side surfaces of frame and covers machined

Weight and art. no.: see tables on pages 156 and 157

2) The covers of the manhole covers are in accordance with class D 400 as per DIN EN 124 / DIN 1229. The traffic control loads of bridge class 60/30 as per DIN 1072 - road and path bridges, load assumptions - are the basis of the dimensioning of the beams. The manhole covers are suitable for installation areas which are driven along by vehicles admitted for speeds up to 25 km/h according to traffic regulations, e.g.: factory halls - sewage treatment plants - power stations - pumping stations - flood and rain water retention basins outside public roads - inner courtyards of administrative buildings.

For further planning notes, please refer to page 158.

Rebates for beam pockets

The rebates are the same for all beam supports.
Frame and beams must have a safe seating.

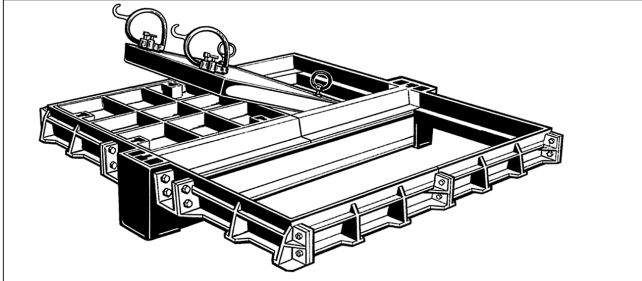
Beam fitting as per layout

Installation dimensions (T₁ and T₂ ... refer to page 164)

a	b	c	d	h
1300	1370	1610	1610	260
1450	1520	1760	1760	260
1600	1670	1910	1910	400
1750	1820	2060	2060	400
1900	1970	2210	2210	400
2000	2140	2310	2380	400
2150	2290	2460	2530	400
2300	2440	2610	2680	460
2450	2590	2760	2830	460
2600	2740	2910	2980	460
2750	2890	3060	3130	460
2900	3040	3210	3280	460
2900	3210	3210	3450	460
2900	3360	3210	3600	460
2900	3510	3210	3750	460
2900	3660	3210	3900	460
2900	3810	3210	4050	460

**Frame of cast iron,
covers of cast iron for optional surface, without locking**

- Beam multiple cover units with 4 covers and 1 beam
- Beam multiple cover units with 6 covers and 2 beams
- Beam multiple cover units with 8 covers and 3 beams



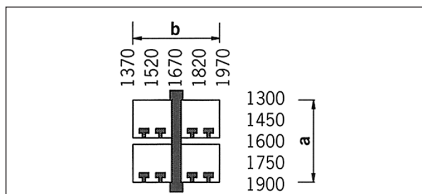
**SECANT® Beam multiple cover unit
with removable beams**

class D 400¹⁾ according to DIN EN 124/DIN 1229 or SLW 60-25 km/h
for optional surface

For article description, refer to page 155!

*) Installation in carriageway of public roads - class D 400 - is limited to the max. clear shaft widths of a x b = 1900 x 1970 (1 beam and 4 covers).

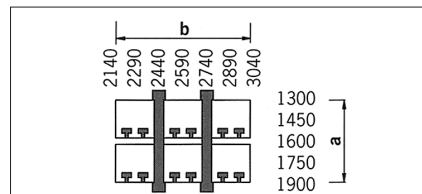
All dimensions **a** can be combined with all dimensions **b**.



Manhole covers with 1 beam, 4 covers
class D 400*, drawing: 0106.12.64

▲ Art. no.	Clear surface a x b	Weight kgs
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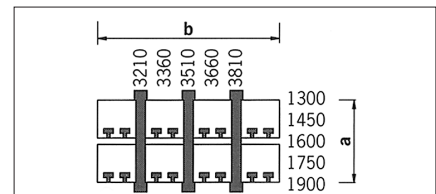
1106.12.64	1300 x 1370	671
1106.12.65	1300 x 1520	721
1106.12.66	1300 x 1670	773
1106.12.67	1300 x 1820	851
1106.12.68	1300 x 1970	929



Manhole covers with 2 beams, 6 covers
SLW 60-25 km/h, drawing: 0106.13.73

▲ Art. no.	Clear surface a x b	Weight kgs
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1106.13.73	1300 x 2140	1067
1106.13.74	1300 x 2290	1109
1106.13.75	1300 x 2440	1168
1106.13.76	1300 x 2590	1211
1106.13.77	1300 x 2740	1289
1106.13.78	1300 x 2890	1398
1106.13.79	1300 x 3040	1446



Manhole covers with 3 beams, 8 covers
SLW 60-25 km/h, drawing: 0106.15.32

▲ Art. no.	Clear surface a x b	Weight kgs
------------	------------------------	---------------

1106.15.34	1300 x 3210	1564
1106.15.35	1300 x 3360	1598
1106.15.36	1300 x 3510	1649
1106.15.37	1300 x 3660	1727
1106.15.38	1300 x 3810	1806

1106.12.69	1450 x 1370	721
1106.12.70	1450 x 1520	786
1106.12.71	1450 x 1670	853
1106.12.72	1450 x 1820	916
1106.12.73	1450 x 1970	980

1106.13.80	1450 x 2140	1145
1106.13.81	1450 x 2290	1203
1106.13.82	1450 x 2440	1277
1106.13.83	1450 x 2590	1334
1106.13.84	1450 x 2740	1398
1106.13.85	1450 x 2890	1462
1106.13.86	1450 x 3040	1525

1106.15.43	1450 x 3210	1701
1106.15.44	1450 x 3360	1749
1106.15.45	1450 x 3510	1816
1106.15.46	1450 x 3660	1880
1106.15.47	1450 x 3810	1943

1106.12.74	1600 x 1370	752
1106.12.75	1600 x 1520	831
1106.12.76	1600 x 1670	913
1106.12.77	1600 x 1820	962
1106.12.78	1600 x 1970	1011

1106.13.87	1600 x 2140	1185
1106.13.88	1600 x 2290	1257
1106.13.89	1600 x 2440	1346
1106.13.90	1600 x 2590	1418
1106.13.91	1600 x 2740	1467
1106.13.92	1600 x 2890	1516
1106.13.93	1600 x 3040	1565

1106.15.52	1600 x 3210	1779
1106.15.53	1600 x 3360	1843
1106.15.54	1600 x 3510	1924
1106.15.55	1600 x 3660	1973
1106.15.56	1600 x 3810	2022

1106.12.79	1750 x 1370	773
1106.12.80	1750 x 1520	843
1106.12.81	1750 x 1670	915
1106.12.82	1750 x 1820	1018
1106.12.83	1750 x 1970	1122

1106.13.94	1750 x 2140	1219
1106.13.95	1750 x 2290	1282
1106.13.96	1750 x 2440	1361
1106.13.97	1750 x 2590	1424
1106.13.98	1750 x 2740	1527
1106.13.99	1750 x 2890	1631
1106.14.00	1750 x 3040	1735

1106.15.61	1750 x 3210	1807
1106.15.62	1750 x 3360	1850
1106.15.63	1750 x 3510	1933
1106.15.64	1750 x 3660	2037
1106.15.65	1750 x 3810	2140

1106.12.84	1900 x 1370	794
1106.12.85	1900 x 1520	854
1106.12.86	1900 x 1670	916
1106.12.87	1900 x 1820	1075
1106.12.88	1900 x 1970	1233

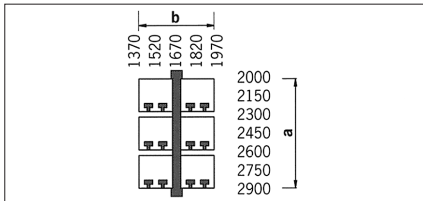
1106.14.01	1900 x 2140	1253
1106.14.02	1900 x 2290	1307
1106.14.03	1900 x 2440	1376
1106.14.04	1900 x 2590	1428
1106.14.05	1900 x 2740	1588
1106.14.06	1900 x 2890	1746
1106.14.07	1900 x 3040	1904

1106.15.70	1900 x 3210	1836
1106.15.71	1900 x 3360	1880
1106.15.72	1900 x 3510	1942
1106.15.73	1900 x 3660	2100
1106.15.74	1900 x 3810	2259

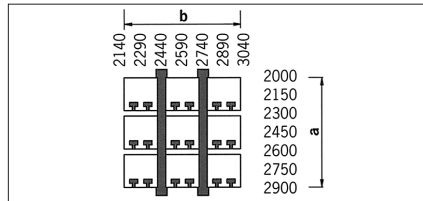
Covers with edge beams or with individual covers with opening aid - as SERVOKAT®-SEC - available upon request.

**Frame of cast iron,
covers of cast iron for optional surface, without locking**

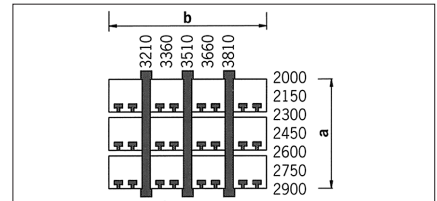
Beam multiple cover units with 6 covers and 1 beam
 Beam multiple cover units with 9 covers and 2 beams
 Beam multiple cover units with 12 covers and 3 beams



Manhole covers with 1 beam, 6 covers
 SLW 60-25 km/h, drawing: 0106.12.89



Manhole covers with 2 beams, 9 covers
 SLW 60-25 km/h, drawing: 0106.13.24



Manhole covers with 3 beams, 12 covers
 SLW 60-25 km/h, drawing: 0106.15.77

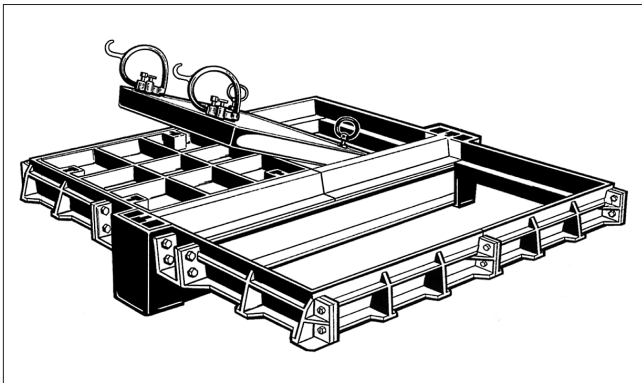
▲ Art. no.	Clear surface a x b	Weight kgs
1106.12.89	2000 x 1370	914
1106.12.90	2000 x 1520	985
1106.12.91	2000 x 1670	1058
1106.12.92	2000 x 1820	1171
1106.12.93	2000 x 1970	1284
1106.12.94	2150 x 1370	961
1106.12.95	2150 x 1520	1047
1106.12.96	2150 x 1670	1135
1106.12.97	2150 x 1820	1233
1106.12.98	2150 x 1970	1331
1106.12.99	2300 x 1370	1045
1106.13.00	2300 x 1520	1045
1106.13.01	2300 x 1670	1249
1106.13.02	2300 x 1820	1333
1106.13.03	2300 x 1970	1416
1106.13.04	2450 x 1370	1094
1106.13.05	2450 x 1520	1210
1106.13.06	2450 x 1670	1328
1106.13.07	2450 x 1820	1397
1106.13.08	2450 x 1970	1466
1106.13.09	2600 x 1370	1118
1106.13.10	2600 x 1520	1224
1106.13.11	2600 x 1670	1332
1106.13.12	2600 x 1820	1455
1106.13.13	2600 x 1970	1597
1106.13.14	2750 x 1370	1141
1106.13.15	2750 x 1520	1238
1106.13.16	2750 x 1670	1336
1106.13.17	2750 x 1820	1514
1106.13.18	2750 x 1970	1692
1106.13.19	2900 x 1370	1164
1106.13.20	2900 x 1520	1251
1106.13.21	2900 x 1670	1340
1106.13.22	2900 x 1820	1573
1106.13.23	2900 x 1970	1806

▲ Art. no.	Clear surface a x b	Weight kgs
1106.13.24	2000 x 2140	1432
1106.13.25	2000 x 2290	1496
1106.13.26	2000 x 2440	1576
1106.13.27	2000 x 2590	1640
1106.13.28	2000 x 2740	1753
1106.13.29	2000 x 2890	1866
1106.13.30	2000 x 3040	1979
1106.13.31	2150 x 2140	1504
1106.13.32	2150 x 2290	1583
1106.13.33	2150 x 2440	1678
1106.13.34	2150 x 2590	1757
1106.13.35	2150 x 2740	1844
1106.13.36	2150 x 2890	1953
1106.13.37	2150 x 3040	2052
1106.13.38	2300 x 2140	1652
1106.13.39	2300 x 2290	1746
1106.13.40	2300 x 2440	1856
1106.13.41	2300 x 2590	1950
1106.13.42	2300 x 2740	2033
1106.13.43	2300 x 2890	2117
1106.13.44	2300 x 3040	2193
1106.13.45	2450 x 2140	1729
1106.13.46	2450 x 2290	1837
1106.13.47	2450 x 2440	1962
1106.13.48	2450 x 2590	2071
1106.13.49	2450 x 2740	2140
1106.13.50	2450 x 2890	2209
1106.13.51	2450 x 3040	2277
1106.13.52	2600 x 2140	1768
1106.13.53	2600 x 2290	1867
1106.13.54	2600 x 2440	1982
1106.13.55	2600 x 2590	2081
1106.13.56	2600 x 2740	2204
1106.13.57	2600 x 2890	2328
1106.13.58	2600 x 3040	2451
1106.13.59	2750 x 2140	1806
1106.13.60	2750 x 2290	1896
1106.13.61	2750 x 2440	2001
1106.13.62	2750 x 2590	2091
1106.13.63	2750 x 2740	2269
1106.13.64	2750 x 2890	2447
1106.13.65	2750 x 3040	2625
1106.13.66	2900 x 2140	1849
1106.13.67	2900 x 2290	1925
1106.13.68	2900 x 2440	2021
1106.13.69	2900 x 2590	2101
1106.13.70	2900 x 2740	2333
1106.13.71	2900 x 2890	2566
1106.13.72	2900 x 3040	2799
1106.15.79	2000 x 3210	2095

▲ Art. no.	Clear surface a x b	Weight kgs
1106.15.80	2000 x 3360	2149
1106.15.81	2000 x 3510	2222
1106.15.82	2000 x 3660	2335
1106.15.83	2000 x 3810	2448
1106.15.88	2150 x 3210	2222
1106.15.89	2150 x 3360	2292
1106.15.90	2150 x 3510	2379
1106.15.91	2150 x 3660	2477
1106.15.92	2150 x 3810	2576
1106.15.97	2300 x 3210	2463
1106.15.98	2300 x 3360	2547
1106.15.99	2300 x 3510	2650
1106.16.00	2300 x 3660	2734
1106.16.01	2300 x 3810	2817
1106.16.06	2450 x 3210	2597
1106.16.07	2450 x 3360	2696
1106.16.08	2450 x 3510	2814
1106.16.09	2450 x 3660	2883
1106.16.10	2450 x 3810	2952
1106.16.15	2600 x 3210	2632
1106.16.16	2600 x 3360	2722
1106.16.17	2600 x 3510	2830
1106.16.18	2600 x 3660	2953
1106.16.19	2600 x 3810	3077
1106.16.24	2750 x 3210	2667
1106.16.25	2750 x 3360	2747
1106.16.26	2750 x 3510	2846
1106.16.27	2750 x 3660	3024
1106.16.28	2750 x 3810	3197
1106.16.33	2900 x 3210	2702
1106.16.34	2900 x 3360	2773
1106.16.35	2900 x 3510	2861
1106.16.36	2900 x 3660	3094
1106.16.37	2900 x 3810	3327

Larger manhole cover units upon request.

Frame of cast iron, covers of cast iron for optional surface, without locking



SECANT® Beam multiple cover unit with removable beams class D 400/SLW 60-25 km/h

Example

Assumed shaft width: 1600 x 2400 mm

Complying with beam positioning, following solutions are possible for clear opening a x b

Solution 1: a x b = 1600 x 2440 mm with 2 beams a = 1600 mm and 6 covers

Solution 2: a x b = 2450 x 1670 mm with 1 beam a = 2450 mm and 6 covers

Standard covers

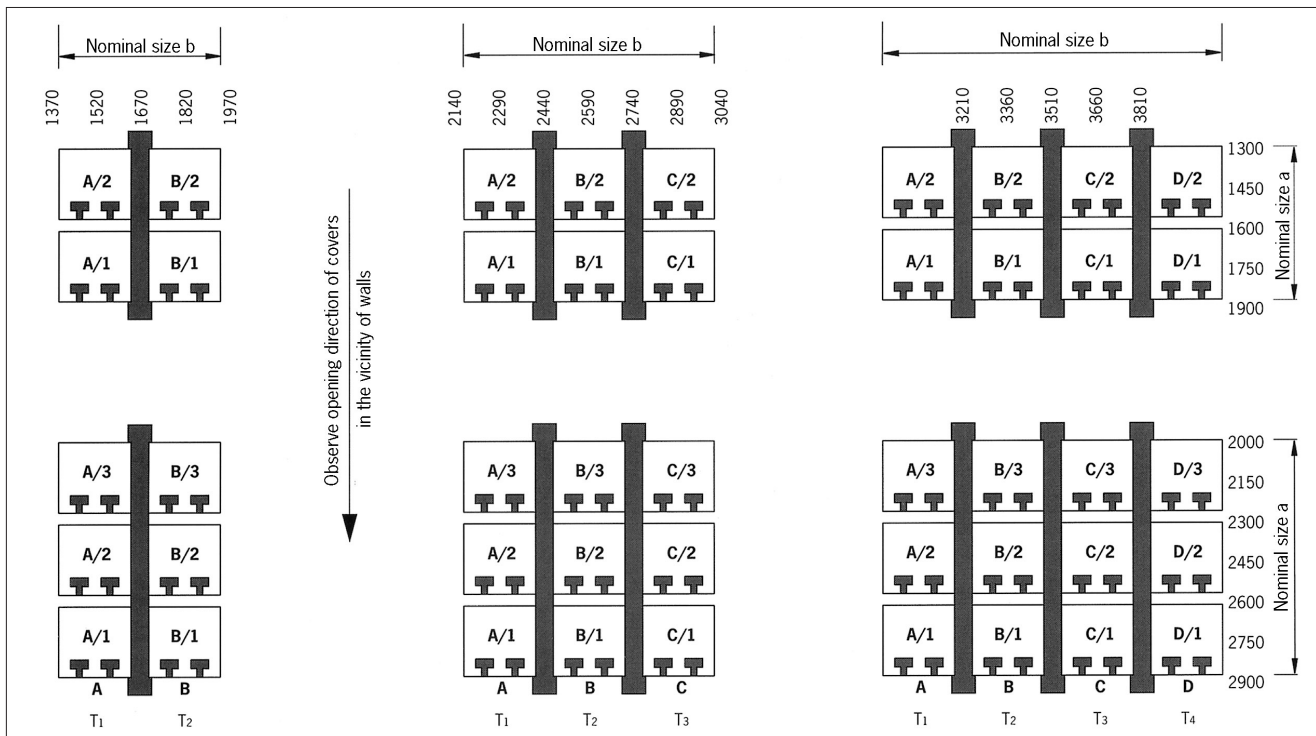
All dimensions **a** can be combined with all dimensions **b**.
Beam span direction: dimension a (see table on page 156-158)

Distance between beams

In the case of standard covers, the distance between beams is specified (see table below).

In the case of shafts or access openings with in-between sizes, the next larger dimension should be used and the rebates increased accordingly.

Covers with edge beams or with individual covers with opening aid - as SERVOKAT® - SEC - available upon request.



Manhole covers with 1 beam

b	T ₁	T ₂
1370	685	685
1520	835	685
1670	835	835
1820	985	835
1970	985	985

Manhole covers with 2 beams

b	T ₁	T ₂	T ₃
2140	685	770	685
2290	685	920	685
2440	835	770	835
2590	835	920	835
2740	835	1070	835
2890	985	920	985
3040	985	1070	985

Manhole covers with 3 beams

b	T ₁	T ₂	T ₃	T ₄
3210	835	770	770	835
3360	835	920	920	685
3510	835	920	920	835
3660	985	920	920	835
3810	985	920	920	985

Larger manhole cover units upon request.

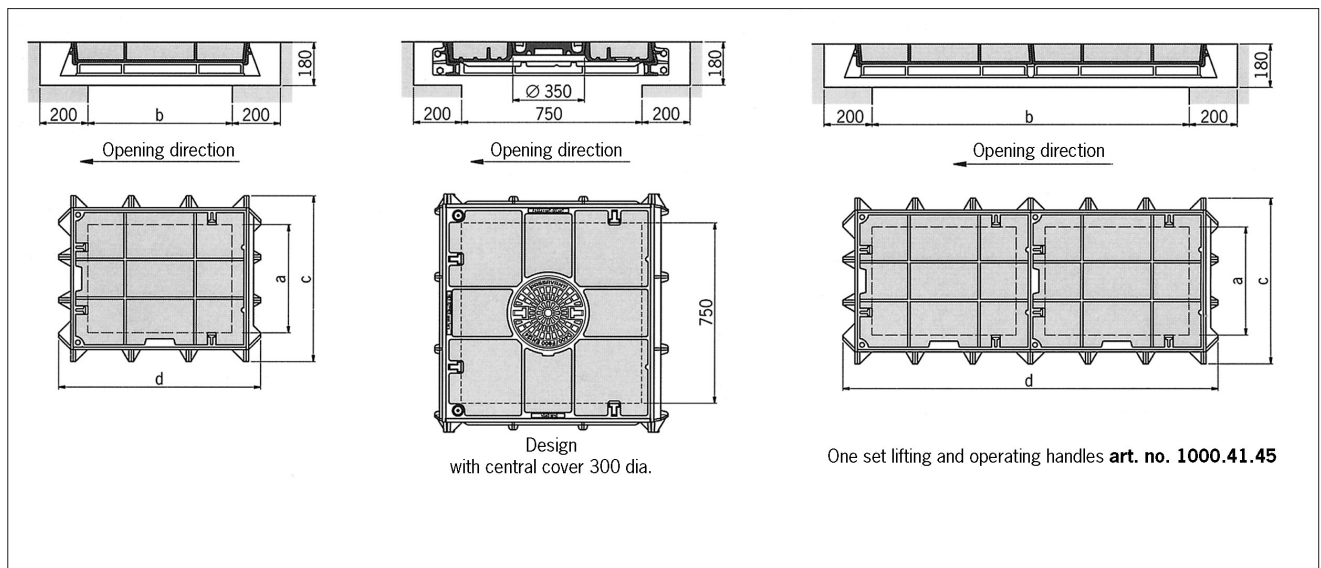
**Frame of cast iron,
covers of cast iron with concrete, with/without locking**

Single duct and multiple duct cover units

SECANT® manhole covers as single duct and multiple duct cover units, with/without bolt locking, cover concrete-filled in our works, are also available for classes E 600/F 900, according to DIN EN 124 / DIN 1229.

In case of need, please let us have your enquiry.

One set lifting and operating handles art. no. 1000.41.45



Technical information on pages 138 and 139.
Dimensions on pages 151 and 153.

In the case of proper installation and thorough greasing of cover contact surfaces, SECANT® single duct and multiple duct cover units (up to 3 covers) can be made surface-watertight on site thanks to their high-quality mechanical machining of all frame and cover elements.

Supplementary components for SECANT® manhole covers

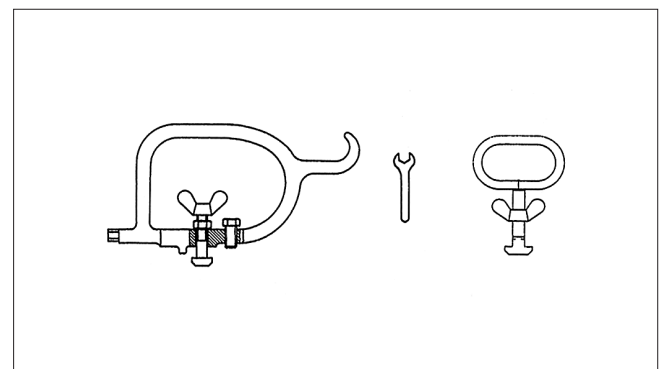
One set lifting and operating handles art. no. 1000.41.45

for SECANT® manhole covers

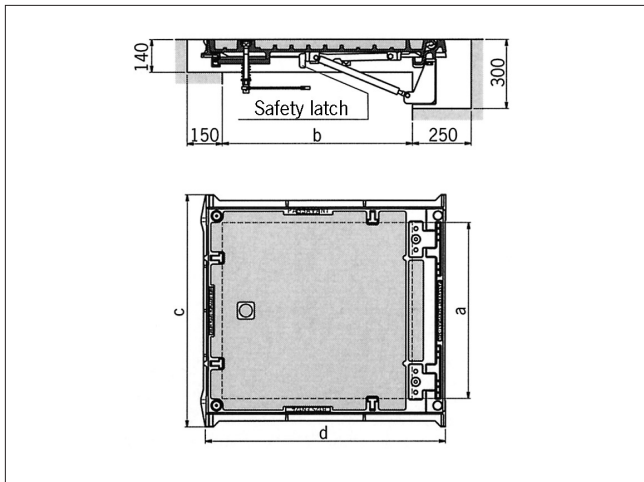
Weight approx. 7 kgs

consisting of:

- 2 lifting handles art. no. 1000.41.47
- 1 key art. no. 1000.41.48
- 2 carrying handles art. no. 1000.41.49



**Frame of cast iron,
cover of cast iron with concrete, with locking, with opening aid**



SERVOKAT®-SEC Manhole cover EUPAT

class B 125 according to DIN EN 124/DIN 1229
class M 125 according to DIN EN 1253
with opening aid

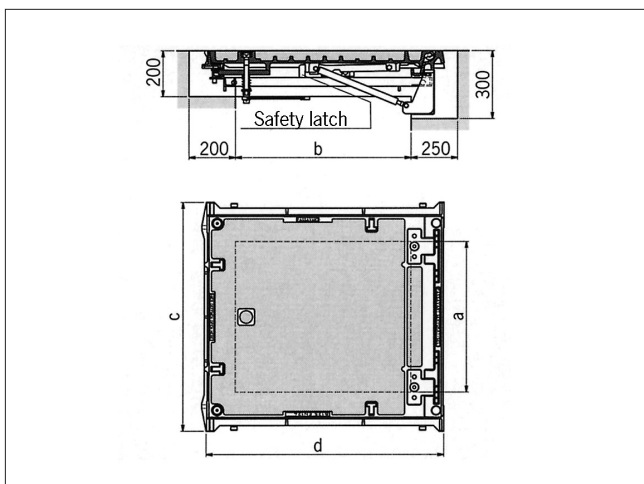
Clear surface: see table

Frame of cast iron
cover of cast iron with concrete
with hinge and gas spring
with safety latch
with locking, to be opened and closed
from above and from below

Weight } : see table
Art. no. }

Operating keys art. no. 1000.41.47 and 1000.41.48
are included in scope of supply.

▲ Art. no.	Clear surface a x b	c x d	Weight kgs
4386.10.00	750 x 800	990 x 1030	291
4386.11.00	900 x 800	1140 x 1060	350
4386.11.05	1050 x 950	1290 x 1210	509



SERVOKAT®-SEC Manhole cover EUPAT

Surface-watertight

Design: as described above, however
with intermediate frame and channel of steel¹⁾

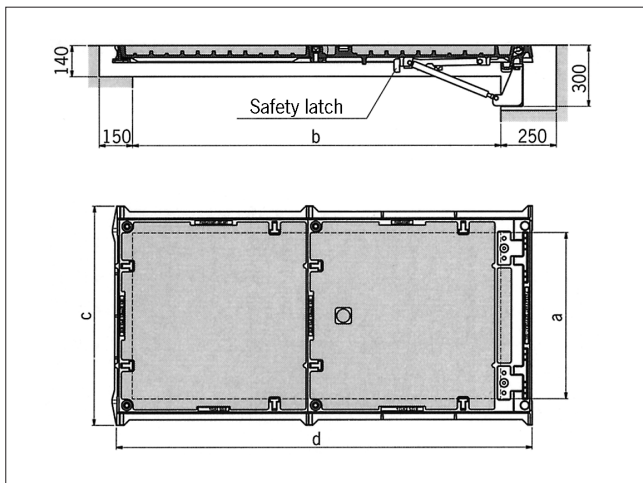
Weight } : see table
Art. no. }

Operating keys art. no. 1000.41.47 and 1000.41.48
are included in scope of supply.

▲ Art. no.	Clear surface a x b	c x d	Weight kgs
4386.20.00	650 x 750	990 x 1030	325
4386.21.00	800 x 750	1140 x 1060	386
4386.21.05	950 x 900	1290 x 1210	550

¹⁾ The head pieces of the intermediate frame are fitted with connecting nipples R 3/4. To these, drain pipes have to be connected on site for draining the water penetrating the top cover.

**Frame of cast iron,
covers of cast iron with concrete, with locking, with opening aid**



SERVOKAT®-SEC Manhole cover EUPAT

class B 125 according to DIN EN 124/DIN 1229
class M 125 according to DIN EN 1253
with opening aid

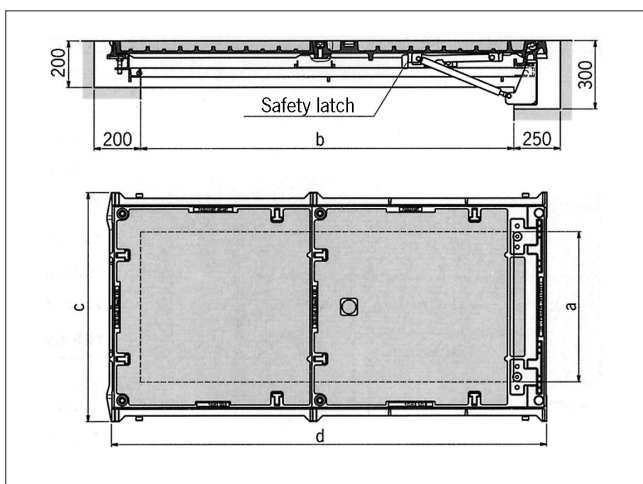
Clear surface: see table

Frame of cast iron
2 covers of cast iron with concrete
1 cover thereof with hinge, gas spring and safety latch
with bolt locking, to be opened and closed from above

Weight } : see table
Art. no. }

One set lifting and operating handles art. no. 1000.41.45
has to be ordered separately.

▲ Art. no.	Clear surface a x b	c x d	Weight kgs
4386.12.00	750 x 1500	990 x 1730	424
4386.13.00	750 x 1650	990 x 1880	445
4386.14.00	750 x 1800	990 x 2030	486
4386.15.00	900 x 1500	1140 x 1760	519
4386.16.00	900 x 1650	1140 x 1910	551
4386.17.00	900 x 1800	1140 x 2060	598
4386.18.00	1050 x 1650	1290 x 1910	723
4386.19.00	1050 x 2100	1290 x 2360	841



SERVOKAT®-SEC Manhole cover EUPAT

Surface-watertight

Design: as described above, however
with intermediate frame and channel of steel¹⁾

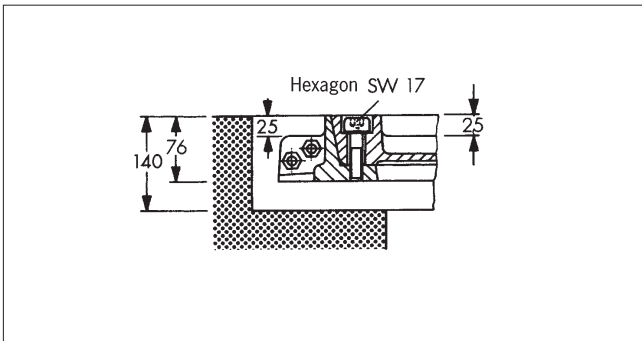
Weight } : see table
Art. no. }

One set lifting and operating handles art. no. 1000.41.45
has to be ordered separately.

▲ Art. no.	Clear surface a x b	c x d	Weight kgs
4386.22.00	650 x 1450	990 x 1730	476
4386.23.00	650 x 1600	990 x 1880	501
4386.24.00	650 x 1750	990 x 2030	545
4386.25.00	800 x 1450	1140 x 1760	573
4386.26.00	800 x 1600	1140 x 1910	609
4386.27.00	800 x 1750	1140 x 2060	659
4386.28.00	950 x 1600	1290 x 1910	784
4386.29.00	950 x 2050	1290 x 2360	913

¹⁾ The head pieces of the intermediate frame are fitted with connecting nipples R 3/4. To these, drain pipes have to be connected on site for draining the water penetrating the top cover.

**Frame of cast iron,
cover of cast iron for optional surface, with locking, with opening aid**



Design with optional surface for in-situ filling

SERVOKAT®-SEC Manhole cover EUPAT

class B 125 according to DIN EN 124/DIN 1229
class M 125 according to DIN EN 1253
for optional surface, with opening aid

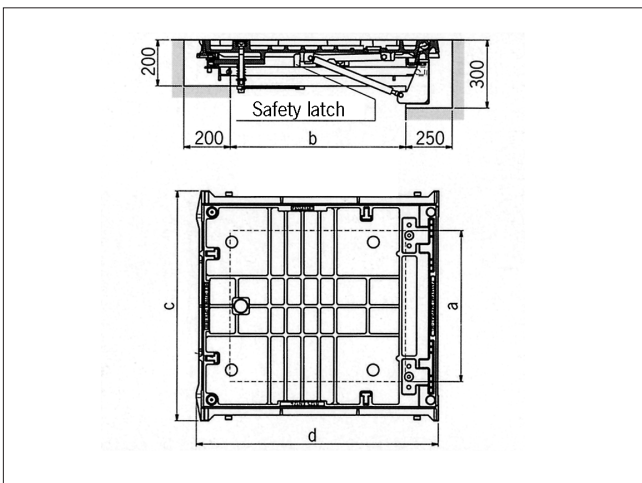
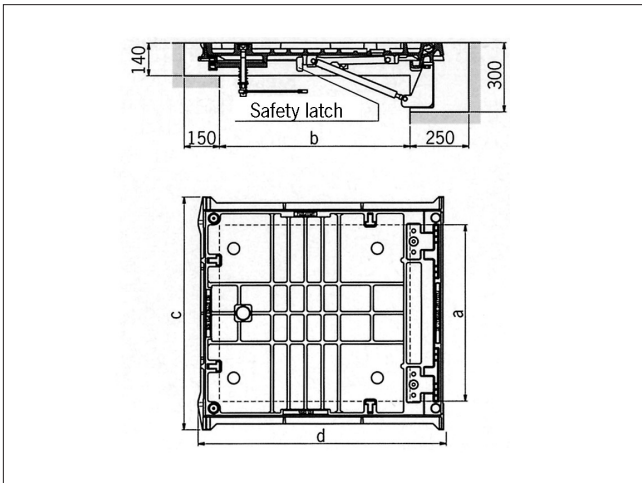
Clear surface: see table

Frame of cast iron
cover of cast iron for in-situ filling
with hinge and gas spring
with safety latch
with locking, to be opened and closed
from above and from below

Weight } : see table
Art. no. }

Operating keys art. no. 1000.41.47 and 1000.41.48
are included in scope of supply.

▲ Art. no.	Clear surface a x b	c x d	Weight kgs
4386.30.00	750 x 800	990 x 1030	208
4386.31.00	900 x 800	1140 x 1060	230
4386.31.05	1050 x 950	1290 x 1210	326



SERVOKAT®-SEC Manhole cover EUPAT

Surface-watertight

Design: as described above, however
with intermediate frame and channel of steel¹⁾

Weight } : see table
Art. no. }

Operating keys art. no. 1000.41.47 and 1000.41.48
are included in scope of supply.

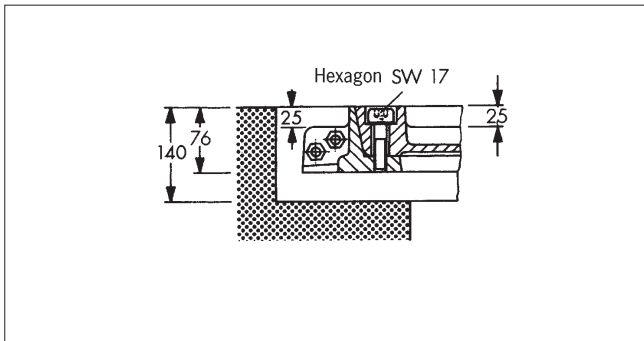
▲ Art. no.	Clear surface a x b	c x d	Weight kgs
4386.40.00	650 x 750	990 x 1030	242
4386.41.00	800 x 750	1140 x 1060	266
4386.41.05	950 x 900	1290 x 1210	367

Note:

The in-situ filling of covers for optional surface must comply with the traffic requirements.

¹⁾ The head pieces of the intermediate frame are fitted with connecting nipples R 3/4. To these, drain pipes have to be connected on site for draining the water penetrating the top cover.

**Frame of cast iron,
covers of cast iron for optional surface, with locking, with opening aid**



Design with optional surface for in-situ filling

SERVOKAT®-SEC Manhole cover EUPAT

class B 125 according to DIN EN 124/DIN 1229
class M 125 according to DIN EN 1253
for optional surface, with opening aid

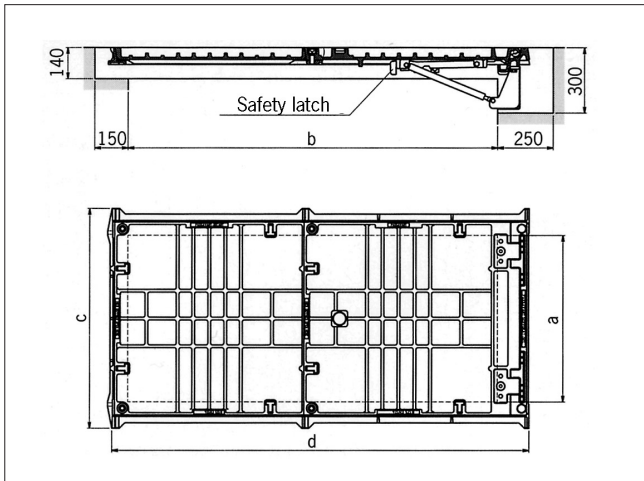
Clear surface: see table

Frame of cast iron
2 covers of cast iron for in-situ filling
1 cover thereof with hinge, gas spring and safety latch
with bolt locking, to be opened and closed from above

Weight } : see table
Art. no. }

One set lifting and operating handles art. no. 1000.41.45
has to be ordered separately.

▲ Art. no.	Clear surface a x b	c x d	Weight kgs
4386.32.00	750 x 1500	990 x 1730	281
4386.33.00	750 x 1650	990 x 1880	292
4386.34.00	750 x 1800	990 x 2030	326
4386.35.00	900 x 1500	1140 x 1760	317
4386.36.00	900 x 1650	1140 x 1910	328
4386.37.00	900 x 1800	1140 x 2060	352
4386.38.00	1050 x 1650	1290 x 1910	445
4386.39.00	1050 x 2100	1290 x 2360	523



SERVOKAT®-SEC Manhole cover EUPAT

Surface-watertight

Design: as described above, however
with intermediate frame and channel of steel¹⁾

Weight } : see table
Art. no. }

One set lifting and operating handles art. no. 1000.41.45
has to be ordered separately.

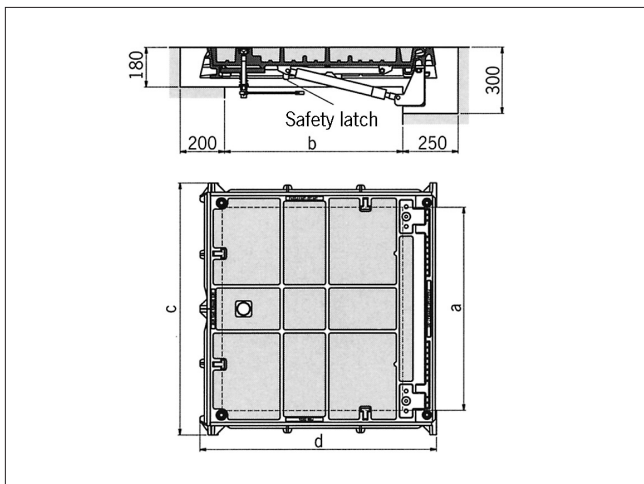
▲ Art. no.	Clear surface a x b	c x d	Weight kgs
4386.42.00	650 x 1450	990 x 1730	333
4386.43.00	650 x 1600	990 x 1880	348
4386.44.00	650 x 1750	990 x 2030	385
4386.45.00	800 x 1450	1140 x 1760	372
4386.46.00	800 x 1600	1140 x 1910	386
4386.47.00	800 x 1750	1140 x 2060	413
4386.48.00	950 x 1600	1290 x 1910	506
4386.49.00	950 x 2050	1290 x 2360	595

Note:

The in-situ filling of covers for optional surface must comply with the traffic requirements.

¹⁾ The head pieces of the intermediate frame are fitted with connecting nipples R 3/4. To these, drain pipes have to be connected on site for draining the water penetrating the top cover.

**Frame of cast iron,
cover of cast iron with concrete, with locking, with opening aid**



SERVOKAT®-SEC Manhole cover EUPAT

class D 400 according to DIN EN 124/DIN 1229
with opening aid

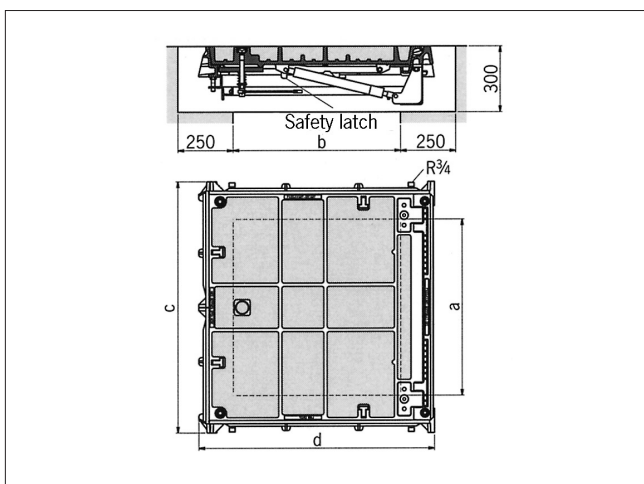
Clear surface: see table

Frame of cast iron
cover of cast iron with concrete
with hinge and gas spring
with safety latch
with locking, to be opened and closed
from above and from below

Weight } : see table
Art. no. }

Operating keys art. no. 1000.41.47 and 1000.41.48
are included in scope of supply.

▲ Art. no.	Clear surface a x b	c x d	Weight kgs
4389.10.00	750 x 800	990 x 1070	390
4389.11.00	900 x 800	1140 x 1070	474
4389.11.05	1050 x 950	1290 x 1230	682



SERVOKAT®-SEC Manhole cover EUPAT

Surface-watertight

Design: as described above, however
with intermediate frame and channel of steel¹⁾

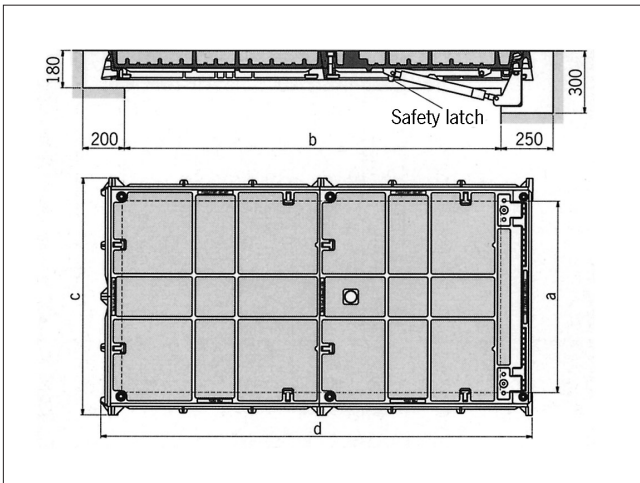
Weight } : see table
Art. no. }

Operating keys art. no. 1000.41.47 and 1000.41.48
are included in scope of supply.

▲ Art. no.	Clear surface a x b	c x d	Weight kgs
4389.20.00	650 x 750	990 x 1070	424
4389.21.00	800 x 750	1140 x 1070	510
4389.21.05	950 x 900	1290 x 1230	723

¹⁾ The head pieces of the intermediate frame are fitted with connecting nipples R 3/4. To these, drain pipes have to be connected on site for draining the water penetrating the top cover.

**Frame of cast iron,
covers of cast iron with concrete, with locking, with opening aid**



SERVOKAT®-SEC Manhole cover EUPAT

class D 400 according to DIN EN 124/DIN 1229
with opening aid

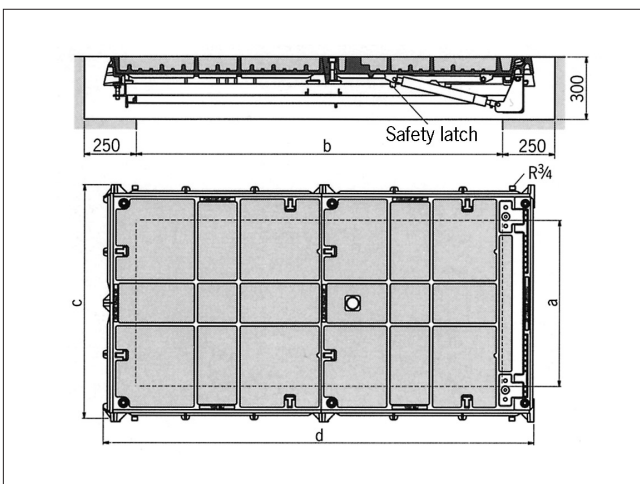
Clear surface: see table

Frame of cast iron
2 covers of cast iron with concrete
1 cover thereof with hinge, gas spring and safety latch
with bolt locking, to be opened and closed from above

Weight } : see table
Art. no. }

One set lifting and operating handles art. no. 1000.41.45
has to be ordered separately.

▲ Art. no.	Clear surface a x b	c x d	Weight kgs
4389.12.00	750 x 1500	990 x 1770	607
4389.13.00	750 x 1650	990 x 1920	662
4389.14.00	750 x 1800	990 x 2070	683
4389.15.00	900 x 1500	1140 x 1770	733
4389.16.00	900 x 1650	1140 x 1920	773
4389.17.00	900 x 1800	1140 x 2070	846
4389.18.00	1050 x 1650	1290 x 1930	1035
4389.19.00	1050 x 2100	1290 x 2380	1258



SERVOKAT®-SEC Manhole cover EUPAT

Surface-watertight

Design: as described above, however
with intermediate frame and channel of steel¹⁾

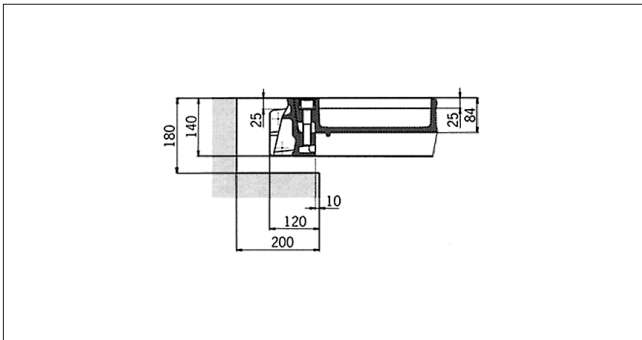
Weight } : see table
Art. no. }

One set lifting and operating handles art. no. 1000.41.45
has to be ordered separately.

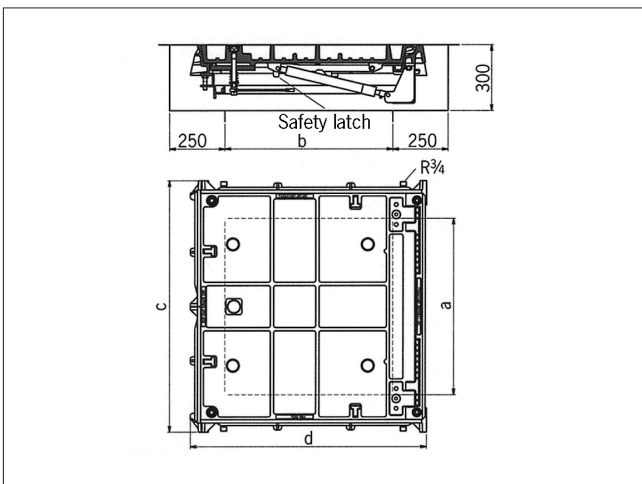
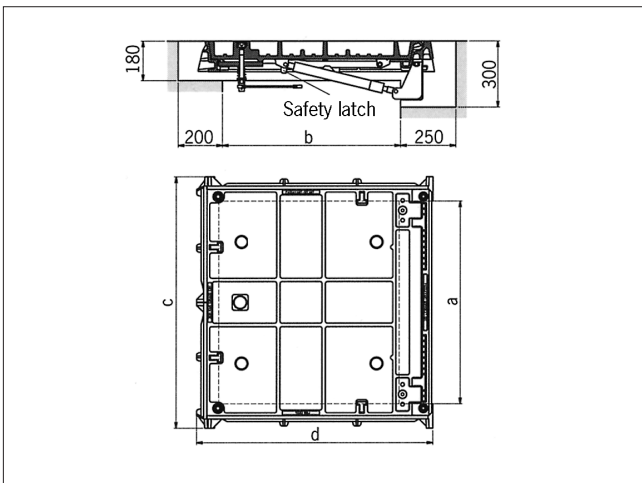
▲ Art. no.	Clear surface a x b	c x d	Weight kgs
4389.22.00	650 x 1450	990 x 1770	660
4389.23.00	650 x 1600	990 x 1920	717
4389.24.00	650 x 1750	990 x 2070	742
4389.25.00	800 x 1450	1140 x 1770	788
4389.26.00	800 x 1600	1140 x 1920	831
4389.27.00	800 x 1750	1140 x 2070	907
4389.28.00	950 x 1600	1290 x 1930	1097
4389.29.00	950 x 2050	1290 x 2380	1330

¹⁾ The head pieces of the intermediate frame are fitted with connecting nipples R 3/4. To these, drain pipes have to be connected on site for draining the water penetrating the top cover.

**Frame of cast iron,
cover of cast iron for optional surface, with locking, with opening aid**



Design with optional surface for in-situ filling



Note:

The in-situ filling of covers for optional surface must comply with the traffic requirements.

SERVOKAT®-SEC Manhole cover EUPAT

class D 400 according to DIN EN 124/DIN 1229
for optional surface, with opening aid

Clear surface: see table

Frame of cast iron
cover of cast iron for in-situ filling
with hinge and gas spring
with safety latch
with locking, to be opened and closed
from above and from below

Weight } : see table
Art. no. }

Operating keys art. no. 1000.41.47 and 1000.41.48
are included in scope of supply.

▲ Art. no.	Clear surface a x b	c x d	Weight kgs
4389.30.00	750 x 800	990 x 1070	276
4389.31.00	900 x 800	1140 x 1070	338
4389.31.05	1050 x 950	1290 x 1230	443

SERVOKAT®-SEC Manhole cover EUPAT

Surface-watertight

Design: as described above, however
with intermediate frame and channel of steel¹⁾

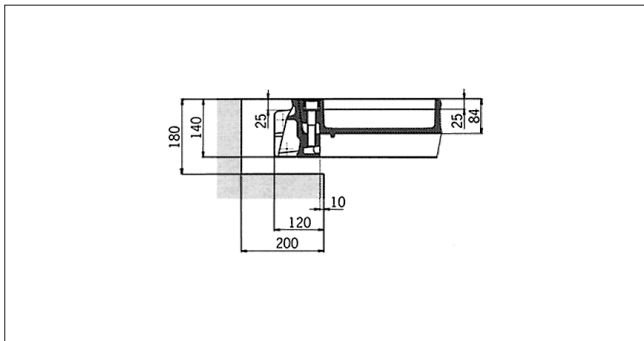
Weight } : see table
Art. no. }

Operating keys art. no. 1000.41.47 and 1000.41.48
are included in scope of supply.

▲ Art. no.	Clear surface a x b	c x d	Weight kgs
4389.40.00	650 x 750	990 x 1070	310
4389.41.00	800 x 750	1140 x 1070	374
4389.41.05	950 x 900	1290 x 1230	484

¹⁾ The head pieces of the intermediate frame are fitted with connecting nipples R 3/4. To these, drain pipes have to be connected on site for draining the water penetrating the top cover.

**Frame of cast iron,
covers of cast iron for optional surface, with locking, with opening aid**



Design with optional surface for in-situ filling

SERVOKAT®-SEC Manhole cover EUPAT

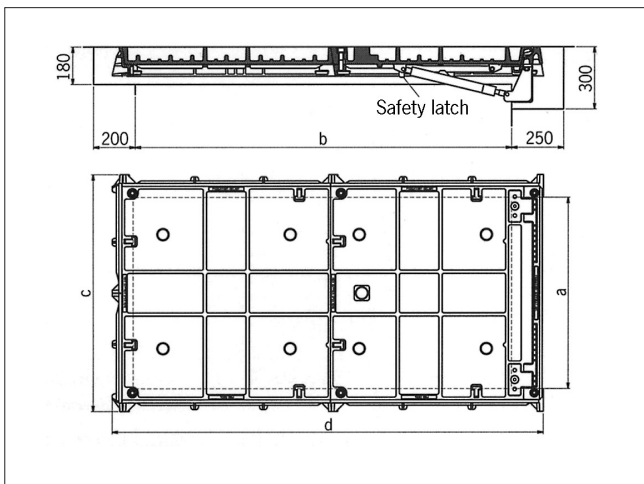
class D 400 according to DIN EN 124/DIN 1229
for optional surface, with opening aid

Clear surface: see table

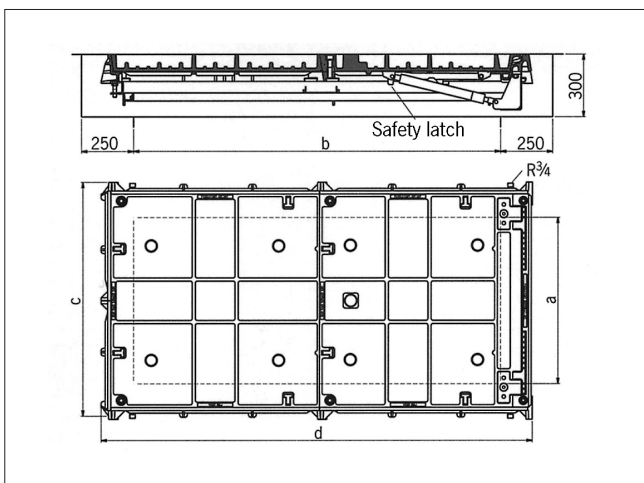
Frame of cast iron
2 covers of cast iron for in-situ filling
1 cover thereof with hinge, gas spring and safety latch
with bolt locking, to be opened and closed from above

Weight } : see table
Art. no. }

One set lifting and operating handles art. no. 1000.41.45
has to be ordered separately.



▲ Art. no.	Clear surface a x b	c x d	Weight kgs
4389.32.00	750 x 1500	990 x 1770	411
4389.33.00	750 x 1650	990 x 1920	448
4389.34.00	750 x 1800	990 x 2070	456
4389.35.00	900 x 1500	1140 x 1770	505
4389.36.00	900 x 1650	1140 x 1920	527
4389.37.00	900 x 1800	1140 x 2070	580
4389.38.00	1050 x 1650	1290 x 1930	654
4389.39.00	1050 x 2100	1290 x 2380	754



SERVOKAT®-SEC Manhole cover EUPAT

Surface-watertight

Design: as described above, however
with intermediate frame and channel of steel¹⁾

Weight } : see table
Art. no. }

One set lifting and operating handles art. no. 1000.41.45
has to be ordered separately.

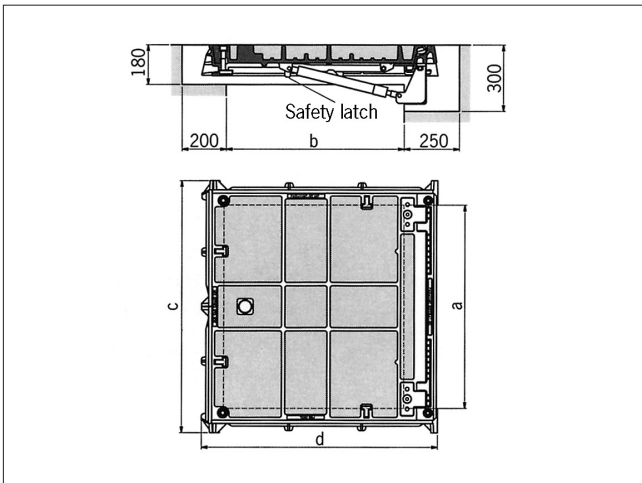
▲ Art. no.	Clear surface a x b	c x d	Weight kgs
4389.42.00	650 x 1450	990 x 1770	464
4389.43.00	650 x 1600	990 x 1920	503
4389.44.00	650 x 1750	990 x 2070	515
4389.45.00	800 x 1450	1140 x 1770	560
4389.46.00	800 x 1600	1140 x 1920	585
4389.47.00	800 x 1750	1140 x 2070	641
4389.48.00	950 x 1600	1290 x 1930	716
4389.49.00	950 x 2050	1290 x 2380	826

Note:

The in-situ filling of covers for optional surface must comply with the traffic requirements.

¹⁾ The head pieces of the intermediate frame are fitted with connecting nipples R 3/4. To these, drain pipes have to be connected on site for draining the water penetrating the top cover.

**Frame of cast iron,
cover of cast iron with concrete, with locking, with opening aid**



SERVOKAT®-SEC Manhole cover EUPAT

class F 900 according to DIN EN 124/DIN 1229
with opening aid

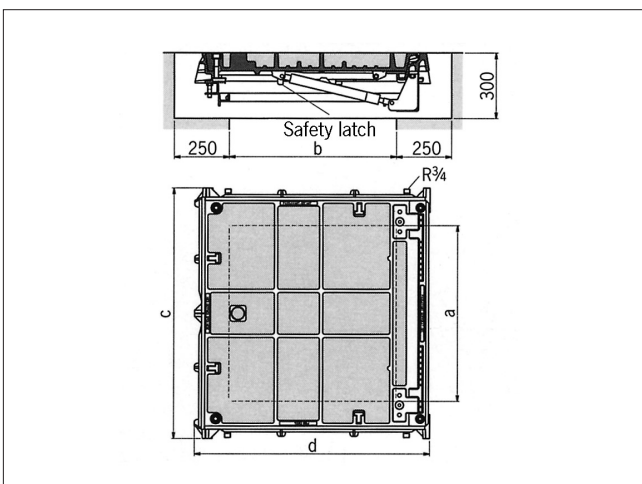
Clear surface: see table

Frame of cast iron
cover of cast iron with concrete
with hinge and gas spring
with safety latch
with locking, to be opened and closed
from above and from below

Weight } : see table
Art. no. }

Operating keys art. no. 1000.41.47 and 1000.41.48
are included in scope of supply.

▲ Art. no.	Clear surface a x b	c x d	Weight kgs
4392.10.00	750 x 800	990 x 1070	390
4392.11.00	900 x 800	1140 x 1070	474
4392.11.05	1050 x 950	1290 x 1230	682



SERVOKAT®-SEC Manhole cover EUPAT

Surface-watertight

Design: as described above, however
with intermediate frame and channel of steel¹⁾

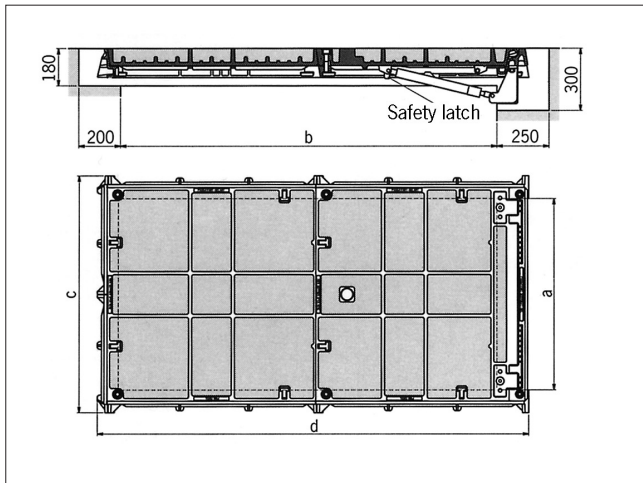
Weight } : see table
Art. no. }

Operating keys art. no. 1000.41.47 and 1000.41.48
are included in scope of supply.

▲ Art. no.	Clear surface a x b	c x d	Weight kgs
4392.20.00	650 x 750	990 x 1070	424
4392.21.00	800 x 750	1140 x 1070	510
4392.21.05	950 x 900	1290 x 1230	723

¹⁾ The head pieces of the intermediate frame are fitted with connecting nipples R 3/4. To these, drain pipes have to be connected on site for draining the water penetrating the top cover.

**Frame of cast iron,
covers of cast iron with concrete, with locking, with opening aid**



SERVOKAT®-SEC Manhole cover EUPAT

class F 900 according to DIN EN 124/DIN 1229
with opening aid

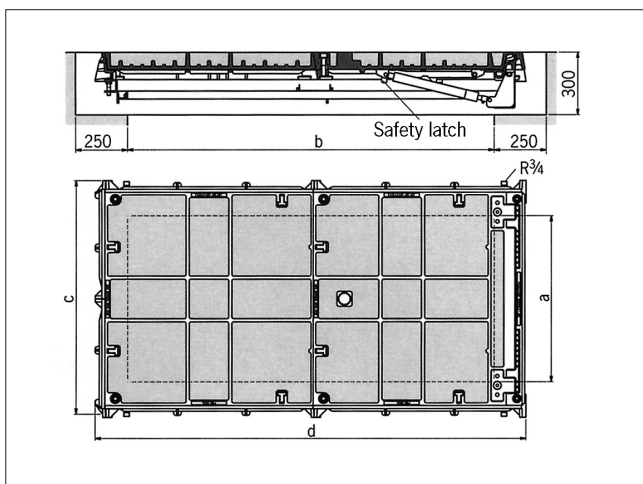
Clear surface: see table

Frame of cast iron
2 covers of cast iron with concrete
1 cover thereof with hinge, gas spring and safety latch
with bolt locking, to be opened and closed from above

Weight } : see table
Art. no. }

One set lifting and operating handles art. no. 1000.41.45
has to be ordered separately.

▲ Art. no.	Clear surface a x b	c x d	Weight kgs
4392.12.00	750 x 1500	990 x 1770	607
4392.13.00	750 x 1650	990 x 1920	662
4392.14.00	750 x 1800	990 x 2070	683
4392.15.00	900 x 1500	1140 x 1770	733
4392.16.00	900 x 1650	1140 x 1920	773
4392.17.00	900 x 1800	1140 x 2070	846
4392.18.00	1050 x 1650	1290 x 1930	1035
4392.19.00	1050 x 2100	1290 x 2380	1258



SERVOKAT®-SEC Manhole cover EUPAT

Surface-watertight

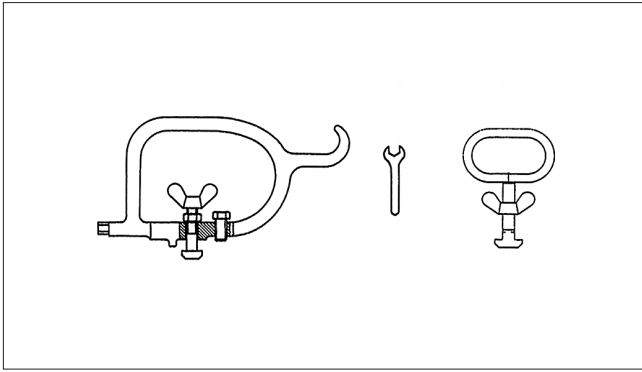
Design: as described above, however
with intermediate frame and channel of steel¹⁾

Weight } : see table
Art. no. }

One set lifting and operating handles art. no. 1000.41.45
has to be ordered separately.

▲ Art. no.	Clear surface a x b	c x d	Weight kgs
4392.22.00	650 x 1450	990 x 1770	660
4392.23.00	650 x 1600	990 x 1920	717
4392.24.00	650 x 1750	990 x 2070	742
4392.25.00	800 x 1450	1140 x 1770	788
4392.26.00	800 x 1600	1140 x 1920	831
4392.27.00	800 x 1750	1140 x 2070	907
4392.28.00	950 x 1600	1290 x 1930	1097
4392.29.00	950 x 2050	1290 x 2380	1330

¹⁾ The head pieces of the intermediate frame are fitted with connecting nipples R 3/4. To these, drain pipes have to be connected on site for draining the water penetrating the top cover.



One set lifting and operating handles art. no. 1000.41.45

for SERVOKAT®-SEC manhole covers

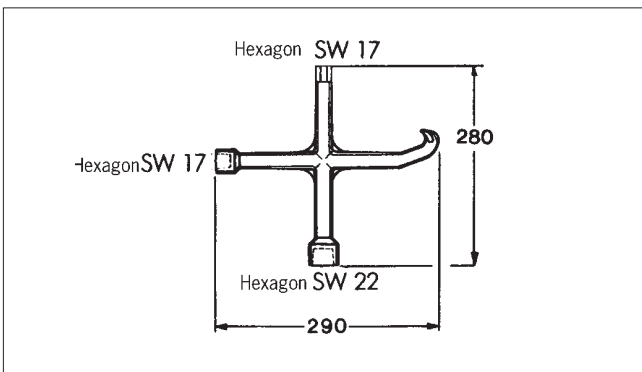
Weight approx. 7 kgs

consisting of:

2 lifting handles art. no. 1000.41.47

1 key art. no. 1000.41.48

2 carrying handles art. no. 1000.41.49



Lifting and operating key art. no. 4143.00.00

Weight approx. 1.3 kgs