Separators







The new rotomoulded tank system

ACO Grease and light liquid separators for below ground installation





### **ACO Grease and light liquid separators**

### for below ground installation

Commercial operations generating wastewater must implement appropriate measures, by using suitable pre-treatment installations like separators, to ensure that solids and liquids which can give off toxic and unpleasant vapours and odours are prevented from damaging construction materials and drainage facilities, harming operations, and are held back so that they do not enter sewage pipes.

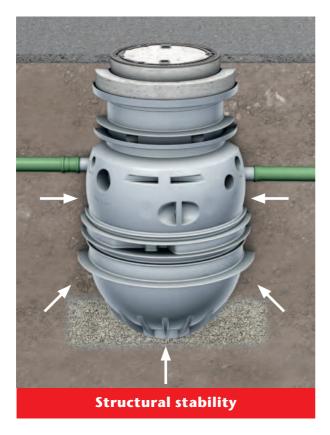
### **Quality standards and tests**

All ACO Grease separators are manufactured in accordance with EN 1825, all ACO Light liquid separators are manufactured in accordance with EN 858. All the separators in the range are hydraulically tested and have General Building Supervisory Authority Authorisation and/or the new application authorisation from DIBT Berlin.





### The new rotomoulded tank system



### Product stability guaranteed for 50 years

- Certified statics have been calculated for the tank system
- The new tank system supplies structural stability for 50 years



### Protection against maximum ground water level

- Depending on the maximum allowed inlet invert, the separators can be installed in areas with maximum ground water until the ground level surface
- It is not necessary to cast an extensive upwelling protection on site



### Contents

	Grease separators										
Lipumax P-B	disposal and cleaning via cover	8									
Lipumax P-D	disposal via direct suction connection, cleaning via cover	10									
Lipumax P-DM	disposal via direct suction connection, cleaning via high-pressure cleaning	12									
Lipumax P-DA	disposal via direct suction connection, automated cleaning via high-pressure, cleaning with remote control	14									
Accessories		16									
	Light liquid separators										
Oleopator P	Light liquid separator Class I	18									
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	Sludge trap										
Pitumax P	Separation of sediments according to dimensioning of light liquid separators	22									
Accessories		24									

### Flexible application

- Load class A: walkable courtyards, open space
- Load class B: drivable for cars driveways, parking areas
- Load class D: drivable for lorries petrol stations, service entrances

### Selecting the correct separator





# When do grease separators have to be used?

Operations generating greasy wastewater have a mandatory obligation to install EN 1825 type grease separators to ensure that grease and organic oil is effectively removed from the wastewater. This applies for instance to kitchens and meat-processing operations. It is mandatory for every grease separator installed below the backflow level (usually corresponding to street level) to have a downstream twin lifting plant or complete pumping station. Each industry and commercial operation places individual demands on the capacity of grease separators, lifting plant and complete piping stations. Customisation therefore requires adaptable products in a wide range of sizes and materials. ACO has many decades of experience in supplying the most diverse range of grease separators, lifting plants and complete pumping stations for ground installation and freestanding installation.

# When do light liquid separators have to be used?

The use of light liquid separators is stipulated by the regulations in DIN 1986-100, Section 6.2.3: "If petroleum or light oils, especially those that are combustible or can form explosive atmospheres, enter the sewers, separator systems for light oils must be used downstream of the discharge points." Discharging petroleum and light oils into public sewers can cause groundwater and drinking water contamination, and in serious cases, cause extensive environmental damage to flora and fauna. The solution to this problem is a light oil separator. Any light oil in the wastewater is collected in a separator tank and prevented from being discharged from the separator. The discharge outlet closes automatically when the maximum storage capacity has been reached. The light oil which collects in the separator is disposed of by certified recycling companies at regular intervals.

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## ACO Light liquid separator series Oleopator P and Oleopass P from polyethylene



### Oleopator P - Class I

Oleopator P Class I light liquids separators are designed for ground installation outside of buildings, to treat waste water from industrial processes or oil contaminated rainwater from impervious areas or to retain any spillage of light liquid and to protect surrounding areas.

Depending on the load class and nominal size, the inlet invert varies between 450-2000 mm.

Light liquid separators can be equipped with top sections for the load classes A 15, B 125 or D 400 according EN 124.



### Oleopass P - Class I with bypass

Oleopass P Class I light liquid separators with bypass are designed for ground installation outside of buildings, to treat oil contaminated rainwater from impervious areas or to retain any spillage of light liquid and to protect surrounding areas.

It is not possible to use the separators with bypass to treat waste water from industrial processes, vehicle washing, cleansing of oil covered parts or other sources, e.g. petrol stations.

Depending on the load class and nominal size, the inlet invert varies between 450-2000 mm.

Llight liquid separators can be equipped with top sections for the load classes A 15, B 125 or D 400 according EN 124.

# **ACO Sludge trap series Pitumax P**

### from polyethylene



### Pitumax P

Sedimentation tanks are designed for ground installation outside of buildings, to treat polluted wastewater with huge contents of solids before the light liquid separator.

Depending on the load class and total volume, the inlet invert varies between 415-2000 mm.



### ACO Light liquid separator Oleopator P - Class I

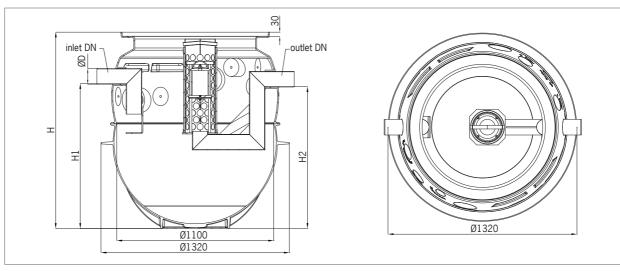


# Light liquid separator of polyethylene for below ground installation

- according to EN 858
- certificate7310434-01 (NS 3)7310434-02 (NS 6)7310434-03 (NS 8)7310434-03 (NS 10)
- inlet and outlet connection according to outside diameter D depending on nominal size of separator
- inlet and outlet parts of polyethylene
- with integrated removable coalescing filter
- automatic closure device with float switch, density of float switch:
   0.9 g/cm<sup>3</sup>

Installation example shows ACO Oleopator P NS 3 with a top section unit for load class B  $125\,$ 

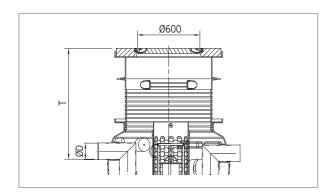
### Oleopator P - Order data



### Accessories

- sampling pots and extension elements, page 24
- alarm device, page 24

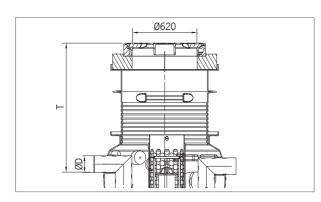
Nominal size	Nominal width	Volume sludge trap	Volume oil storage	Total capacity	D	Н	H1	H2	Weight	Article No.
3126	width	[1]	[1]	[1]	[mm]	[mm]	[mm]	[mm]	[kg]	
NS 3	DN 100	450	240	775	110	1377	1020	1000	67	3903.80.00
NS 3	DN 100	670	240	995	110	1594	1230	1210	83	3913.80.00
NS 3	DN 100	950	240	1280	110	1865	1500	1480	84	3923.80.00
NS 6	DN 150	660	235	970	160	1594	1210	1190	91	3906.80.00
NS 6	DN 150	1210	235	1525	160	2129	1740	1720	101	3916.80.00
NS 8	DN 150	820	260	1250	250	1865	1480	1460	94	3908.80.00
NS 10	DN 150	1080	260	1615	160	2129	1740	1720	105	3910.80.00



- load class A 15 according to EN 124
- frame from concrete, cover from cast iron
- clear opening Ø 600 mm
- cover loosely applied
- raising tube from polyethylene (only included with top section 3301.14.01 and 3301.14.02)

	NS 3 ST 300	NS 3 ST 600	NS 3 ST 900	NS 6 ST 600	NS 6 ST 1200	NS 8 ST 800	NS 10 ST 1000	Weight [kg]	Article No.
т	420	420	420	440	440	440	440	145	3301.14.00
[]	730–1030	730–1030	730–1030	750–1050	750–1050	750–1050	750-1050	170	3301.14.01
[mm]	730–1990	730–1780	730–1510	750–1800	750–1870	750-1530	750–1870	193	3301.14.02

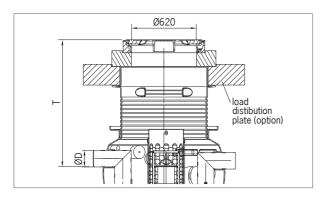
### Top section load class B 125 - Order data



- load class B 125 according to EN 124
- frame from concrete, cover from cast iron
- clear opening Ø 600 mm
- cover loosely applied
- adapter plate from concrete Ø 1000 mm x 150 mm
- raising tube from polyethylene (only included with top section 3301.15.01 and 3301.15.02)

	NS 3 ST 300	NS 3 ST 600	NS 3 ST 900	NS 6 ST 600	NS 6 ST 1200	NS 8 ST 800	NS 10 ST 1000	Weight [kg]	Article No.
	585	585	585	605	605	605	605	237	3301.15.00
[]	885-1185	885–1185	885-1185	905-1205	905-1205	905-1220	905-1205	262	3301.15.01
[mm]	885-1980	885-1770	885-1500	905-1790	905-1860	905-1530	905-1860	285	3301.15.02

### Top section load class D 400 - Order data



- load class D 400 according to EN 124
- frame from concrete, cover from cast iron
- clear opening Ø 600 mm
- cover loosely applied
- adapter plate from concrete Ø 1000 mm x 150 mm
- raising tube from polyethylene
- selectively with load distribution plate from concrete Ø 1500 mm x 200 mm

	NS 3 ST 300	NS 3 ST 600	NS 3 ST 900	NS 6 ST 600	NS 6 ST 1200	NS 8 ST 800	NS 10 ST 1000	Weight [kg]	Article No.
T [mm] without load distribution plate	865–1980	865–1770	865–1500	885–1790	885–1860	885–1530	885–1860	285	3301.17.00
T [mm] with load distribution plate	865–1980	865–1770	865–1500	885–1790	885–1860	885–1530	885–1860	985	3301.16.00



### ACO Light liquid separator Oleopass P - Class I with bypass

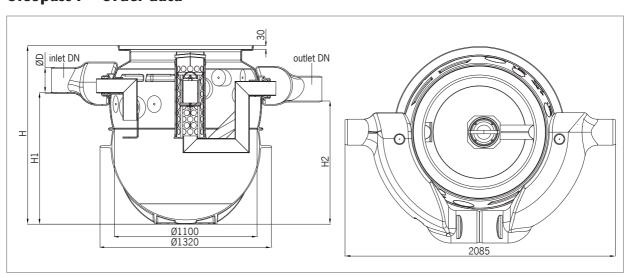


# Light liquid separator of polyethylene for below ground installation

- according to EN 858
- certificate
  7310434-01 (NS 3)
  7310434-02 (NS 6)
  7310434-03 (NS 8)
  7310434-03 (NS 10)
- inlet and outlet connection according to outside diameter D depending on nominal size of separator
- inlet and outlet parts of polyethylene
- with integrated removable coalescing filter
- automatic closure device with float switch, density of float switch:
   0.9 g/cm<sup>3</sup>
- with bypass of polyethylene

Installation example shows ACO Oleopass P NS 3 with a top section unit for load class B 125  $\,$ 

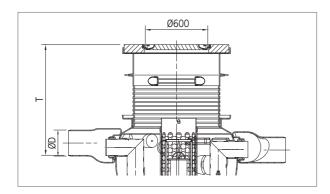
### Oleopass P - Order data



### Accessories

- sampling pots and extension elements, page 24
- alarm device, page 24

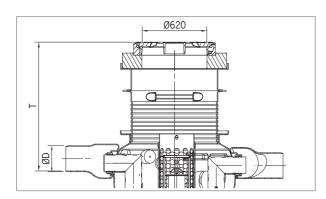
Nominal size	Nominal width	Total flow rate	Volume sludge trap	Volume oil storage	Total capacity	D	Н	H1	H2	Weight	Article No.
3126	width	[l/s]	[1]	[1]	[1]	[mm]	[mm]	[mm]	[mm]	[kg]	
NS 3	DN 200	15	450	240	775	200	1377	1020	950	90	3903.81.00
NS 3	DN 200	15	670	240	995	200	1594	1230	1160	106	3913.81.00
NS 3	DN 200	15	950	240	1280	200	1865	1500	1430	107	3923.81.00
NS 6	DN 250	30	660	235	970	250	1594	1210	1140	114	3906.81.00
NS 6	DN 250	30	1210	235	1525	250	2129	1740	1670	124	3916.81.00
NS 8	DN 250	50	820	260	1250	250	1865	1480	1460	104	3908.81.00
NS 10	DN 250	50	1080	260	1615	250	2129	1740	1670	130	3910.81.00



- load class A 15 according to EN 124
- frame from concrete, cover from cast iron
- clear opening Ø 600 mm
- cover loosely applied
- raising tube from polyethylene (only included with top section 3301.14.01 and 3301.14.02)

	NS 3 ST 300	NS 3 ST 600	NS 3 ST 900	NS 6 ST 600	NS 6 ST 1200	NS 8 ST 800	NS 10 ST 1000	Weight [kg]	Article No.
т	420	420	420	440	440	440	440	145	3301.14.00
[]	730–1030	730–1030	730–1030	750–1050	750–1050	750–1050	750-1050	170	3301.14.01
[mm]	730–1990	730–1780	730–1510	750–1800	750–1870	750-1530	750–1870	193	3301.14.02

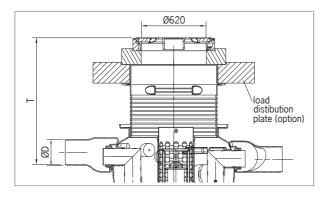
### Top section load class B 125 - Order data



- load class B 125 according to EN 124
- frame from concrete, cover from cast iron
- clear opening Ø 600 mm
- cover loosely applied
- adapter plate from concrete Ø 1000 mm x 150 mm
- raising tube from polyethylene (only included with top section 3301.15.01 and 3301.15.02)

	NS 3 ST 300	NS 3 ST 600	NS 3 ST 900	NS 6 ST 600	NS 6 ST 1200	NS 8 ST 800	NS 10 ST 1000	Weight [kg]	Article No.
-	585	585	585	605	605	605	605	237	3301.15.00
[]	885-1185	885-1185	885-1185	905-1205	905-1205	905–1220	905-1205	262	3301.15.01
[mm]	885-1980	885-1770	885-1500	905-1790	905-1860	905-1530	905-1860	285	3301.15.02

### Top section load class D 400 - Order data



- load class D 400 according to EN 124
- frame from concrete, cover from cast iron
- clear opening Ø 600 mm
- cover loosely applied
- adapter plate from concrete Ø 1000 mm x 150 mm
- raising tube from polyethylene
- selectively with load distribution plate from concrete Ø 1500 mm x 200 mm

	NS 3 ST 300	NS 3 ST 600	NS 3 ST 900	NS 6 ST 600	NS 6 ST 1200	NS 8 ST 800	NS 10 ST 1000	Weight [kg]	Article No.
T [mm] without load distribution plan	865-1980	865–1770	865–1500	885–1790	885–1860	885–1530	885–1860	285	3301.17.00
T [mm] with load distribution pla	865–1980	865–1770	865–1500	885–1790	885–1860	885–1530	885–1860	985	3301.16.00



## **ACO Sludge trap Pitumax P**



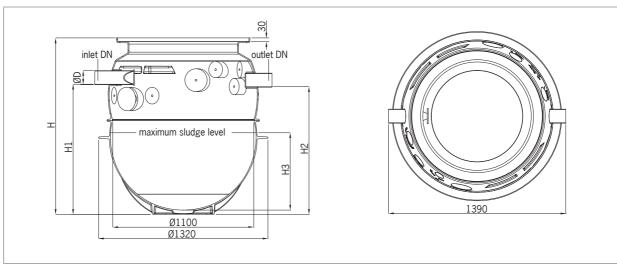
### Sludge trap of polyethylene

### for below ground installation

- inlet and outlet connection according to outside diameter D depending on nominal size of separator
- inlet and outlet parts of polyethylene
- different volumes/capacities available

Installation example shows ACO Pitumax P 750 with a top section unit for load class B 125  $\,$ 

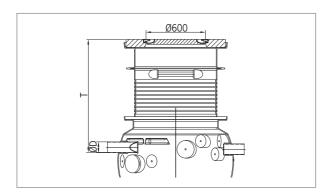
### Pitumax P - Order data



### Accessories

- extension elements, page 24
- alarm device, page 24

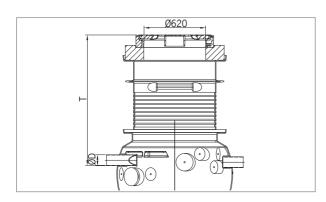
Туре	Nominal width	Total capacity	D	H	H1	H2	H3	Article No.
		[1]	[mm]	[mm]	[mm]	[mm]	[mm]	
P 750	DN 150	750	160	1377	990	970	540	3900.00.01
P 750	DN 100	780	110	1377	1020	1000	560	3900.00.11
P 1000	DN 150	975	160	1594	1210	1190	680	3900.00.02
P 1000	DN 100	1000	110	1594	1230	1210	700	3900.00.12
P 1250	DN 150	1255	160	1865	1480	1460	830	3900.00.03
P 1250	DN 100	1280	110	1865	1500	1480	850	3900.00.13
P 1500	DN 150	1530	160	2129	1740	1720	930	3900.00.04
P 1500	DN 100	1550	110	2129	1770	1750	950	3900.00.14



- load class A 15 according to EN 124
- frame from concrete, cover from cast iron
- clear opening Ø 600 mm
- cover loosely applied
- raising tube from polyethylene (only included with top section 3301.14.01 and 3301.14.02)

		750 DN 150	750 DN 100	1000 DN 150	1000 DN 100	1250 DN 150	1250 DN 100	1500 DN 150	1500 DN 100	Article No.
	т	440	415	440	415	440	415	440	415	3301.14.00
1	[]	745-1050	720-1020	745-1050	720-1025	745-1050	720-1025	745-1050	720-1025	3301.14.01
1	[mm]	745-2010	720-1985	745-1790	720-1765	745-1520	720-1495	745-1860	720–1830	3301.14.02

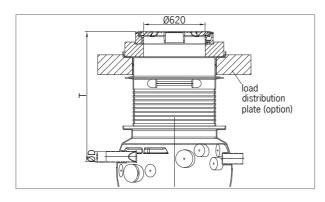
### Pitumax P top section load class B 125 - Order data



- load class B 125 according to EN 124
- frame from concrete, cover from cast iron
- clear opening Ø 600 mm
- cover loosely applied
- adapter plate from concrete Ø 1000 mm x 150 mm
- raising tube from polyethylene (only included with top section 3301.15.01 and 3301.15.02)

	750 DN 150	750 DN 100	1000 DN 150	1000 DN 100	1250 DN 150	1250 DN 100	1500 DN 150	1500 DN 100	Article No.
_	615	590	615	590	615	590	615	590	3301.15.00
[ []	920-1220	895-1200	920-1220	895-1200	920-1220	895-1200	920-1220	895-1200	3301.15.01
[mm]	920-2010	895-1985	920-1790	895-1765	920-1520	895-1495	920-1860	895-1830	3301.15.02

### Pitumax P top section load class D 400 - Order data



- load class D 400 according to EN 124
- frame from concrete, cover from cast iron
- clear opening Ø 600 mm
- cover loosely applied
- adapter plate from concrete Ø 1000 mm x 150 mm
- raising tube from polyethylene
- selectively with load distribution plate from concrete Ø 1500 mm x 200 mm

	750 DN 150	750 DN 100	1000 DN 150	1000 DN 100	1250 DN 150	1250 DN 100	1500 DN 150	1500 DN 100	Article No.
T [mm] without load distribution plate	920–2010	890–1985	920–1790	890–1765	890–1520	890–1495	890–1860	890–1830	3301.17.00
T [mm] with load distribution plate	920–2010	890–1985	920–1790	890–1765	890–1520	890–1495	890–1860	890–1830	3301.16.00

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## **Accessories for**

## ACO Light liquid separators Oleopator P/Oleopass P and Sludge trap Pitumax P

Product description	Model	Article No.
Concrete supporting rings for increasing inlet invert with Oleopator/Oleopass P light liquid separators load class B or D between cover plate and extension	ARV 625 x 60 ARV 625 x 80 ARV 625 x 100	8700.20.00 8700.20.10 8700.20.20
Sampling pot from polyethylene diameter 450 mm for below ground installations downstream light liquid separators, with cast iron/concrete cover for load class D odour proof	DN 100, with 160 mm gradient DN 100, with 30 mm gradient DN 150, with 160 mm gradient DN 150, with 75 mm gradient	3300.13.10 3300.13.11 3300.13.20 3300.13.21
Extension element from polyethylene for install aforementioned sampling shaft at a deeper position, extension height 100 to 650 mm, can be shortened at 45 mm intervals by cutting at the cutting marks		3300.13.00
Sampling equipment for grease separators/light liquid separators for below ground instal- lation  Sampling equipment consisting of manual pump and suction coupling, connecting hose and suction coupling and bolt connection  Suitable for inlet invert maximum T = 3,000 mm		8800.00.10
Alarm device for light liquid separators, enables combined or separated control of oil, sludge and liquid level electrical connection: 230 V/50–60 Hz, IP 67, cable connection: 5 m	oil, sludge and liquid level control oil and liquid level control oil control liquid level control sludge control cable extensions: 3 cables, 1 m 2 cables, 1 m 1 cable, 1 m	6751.65.00 6751.65.01 6751.65.02 6751.65.03 6751.65.04 6752.00.00 6752.00.01 6752.00.02
Sealing ring for ventilation connection		0150.34.32

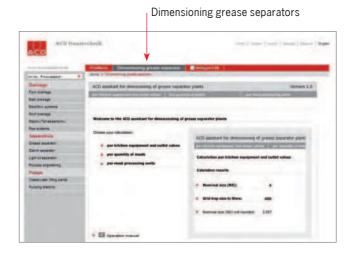
### Planning and dimensioning separators - profit from ACO expertise

# Dimensioning grease separators via the internet

Calculate nominal sizes of grease separators you require for your application on **www.aco-haustechnik.de/catalogue**Dimensioning is carried out pursuant to
DIN EN 1825-2 regulations. Three dimensioning variants are possible:

- kitchen appliances
- food portions
- slaughter units

After selecting the calculation method, input the requested data into the masks for further processing in compliance with the latest DIN EN 1825 regulations. The calculation sheet can then be printed out and filled in with project data, or there is a direct link to the selection assistant for product selection.



### Online catalogue

Easy download of scale drawings and article descriptions with the Online catalogue on our website. Product selection made easy with the relevant selection criteria.

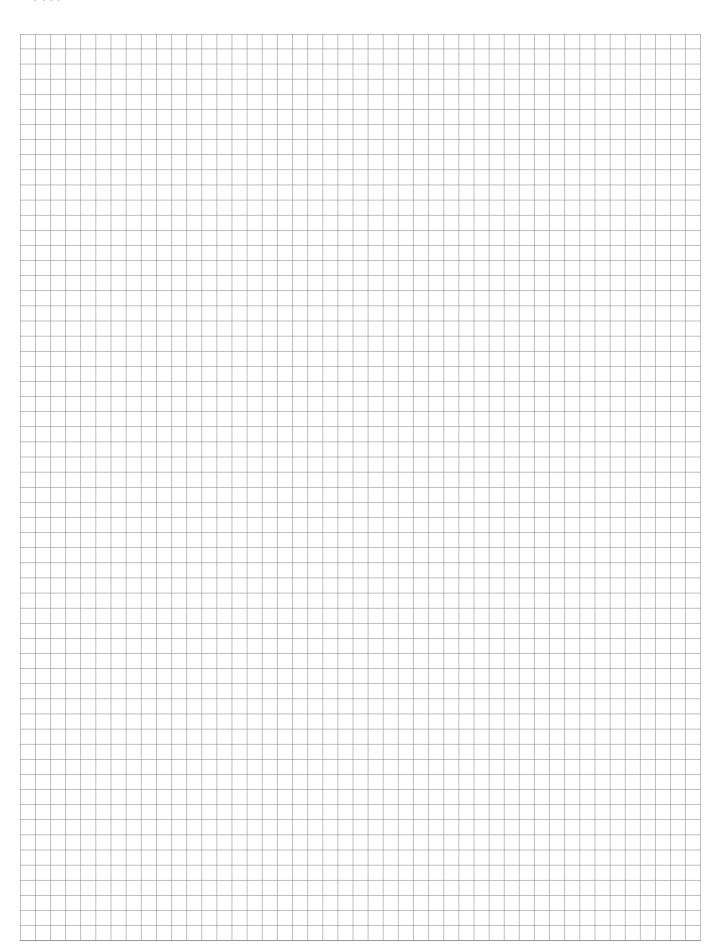
- selection assistant
- easy keyword and article searches
- article descriptions (TXT, Datanorm and GAEB)
- scale drawings (DXF)
- product visuals Installation and assembly instructions

www.aco-haustechnik.de/catalogue



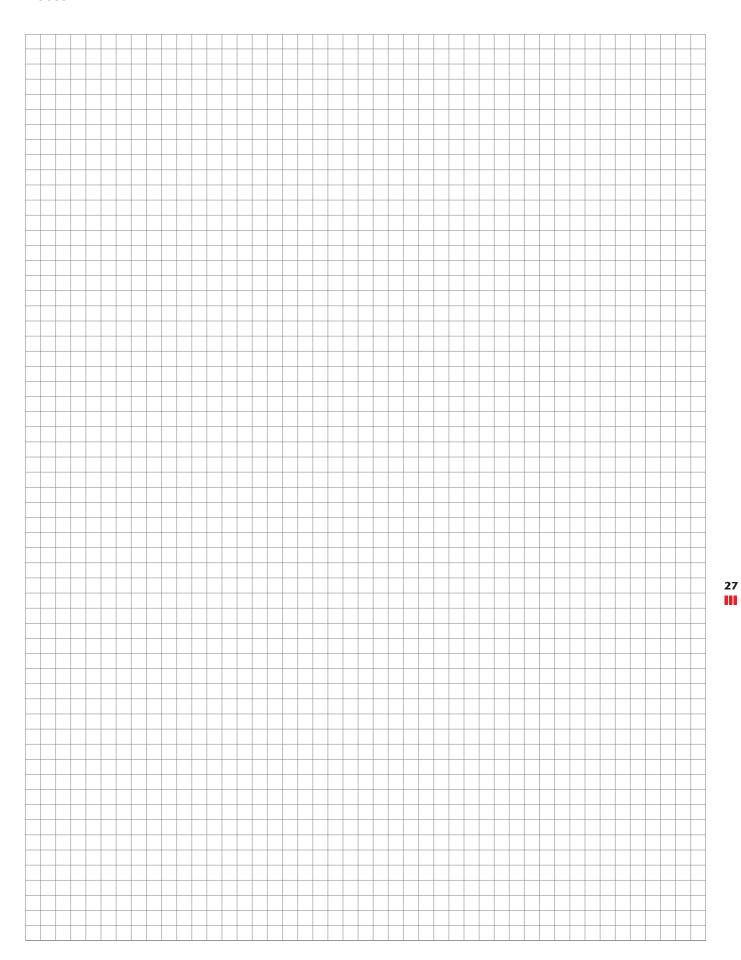


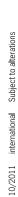
## Notes



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## Notes







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