

Extraction systems

Their optimum planning and build





Only if you have the correct components you can plan and set up an optimum extraction plant. This components programme from Schuko is a result of our many years of experience in the construction of practice-oriented extraction and filtering systems.

The illustrations and short descriptions are intended to assist you in taking your correct choice of components.

It goes without saying that you can also ask our technical field service team for advice and planning.

Schuko system components

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pipes and pipe segments

Pipes from Schuko are made of sendzimir galvanized sheet steel with an overall length of approx. 1,000 mm. The longitudinal seam is seamed. As with all Schuko components, there is a flange at both ends for easy further connection with other parts using pipe clamps or flange rings.

Pipes		
Diameter	Mat. thickness	Art.-No.
100 mm Ø	0.63 mm	210 000
120 mm Ø	0.63 mm	212 000
140 mm Ø	0.63 mm	214 000
160 mm Ø	0.63 mm	216 000
180 mm Ø	0.63 mm	218 000
200 mm Ø	0.8 mm	220 000
250 mm Ø	0.8 mm	225 000
300 mm Ø	0.8 mm	230 000
350 mm Ø	0.8 mm	235 000
400 mm Ø	1.0 mm	240 000
450 mm Ø	1.0 mm	245 000
500 mm Ø	1.0 mm	250 000
560 mm Ø	1.0 mm	256 000
630 mm Ø	1.0 mm	263 000
710 mm Ø	1.0 mm	271 000
800 mm Ø	1.0 mm	280 000

Folded spiral-seam pipes with external rebate are made of sendzimir galvanized sheet steel. The pipes have good static values and are pressure-tight. For the laying of long pipe sections and where unsupported longer distances have to be bridged, this high-quality and nevertheless very inexpensive pipe form is highly recommended (standard lengths: up to 6 m; special lengths on request).

Folded spiral-seam pipes		
Diameter	Material thickness	Art.-No.
160 mm Ø	0.9 mm	301 600
180 mm Ø	0.9 mm	301 900
200 mm Ø	0.9 mm	302 000
250 mm Ø	0.9 mm	302 500
300 mm Ø	0.9 mm	303 000
350 mm Ø	0.9 mm	303 500
400 mm Ø	0.9 mm	304 000
450 mm Ø	0.9 mm	304 500
500 mm Ø	0.9 mm	305 000
560 mm Ø	0.9 mm	305 600
630 mm Ø	0.9 mm	306 300
710 mm Ø	0.9 mm	307 000
800 mm Ø	0.9 mm	308 000
900 mm Ø	0.9 mm	309 000
1.000 mm Ø	0.9 mm	310 000

Pipe segments are made of sendzimir galvanized sheet steel and enable space-saving laying of pipelines and machine connections. Please note the different angle sizes of the individual segments.

Pipe segments			
Angle	Diameter	Mat. thickness	Art.-No.
15.0 deg.	100 mm Ø	1.0 mm	151 000
22.5 deg.	120 mm Ø	0.8 mm	151 200
22.5 deg.	140 mm Ø	0.8 mm	151 400
22.5 deg.	160 mm Ø	0.8 mm	151 600
22.5 deg.	180 mm Ø	0.8 mm	151 800
22.5 deg.	200 mm Ø	0.8 mm	152 000
15.0 deg.	250 mm Ø	1.0 mm	152 500
15.0 deg.	300 mm Ø	1.0 mm	153 000
15.0 deg.	350 mm Ø	1.0 mm	153 500
15.0 deg.	400 mm Ø	1.0 mm	154 000
15.0 deg.	450 mm Ø	1.0 mm	154 500
15.0 deg.	500 mm Ø	1.0 mm	155 000
15.0 deg.	560 mm Ø	1.0 mm	155 600
15.0 deg.	630 mm Ø	1.0 mm	156 300
22.5 deg.	710 mm Ø	1.0 mm	157 100
22.5 deg.	800 mm Ø	1.0 mm	158 000



pipe bends

Pipe bends Pipe bends with radii matched to the diameter enable space-saving laying of pipelines and machine connections. The bends are manufactured in segments and made of sendzimir galvanized steel sheet. Please note the different angle sizes of the bends. Reinforced pipe bends are available on request.

Pipe bends 45 °

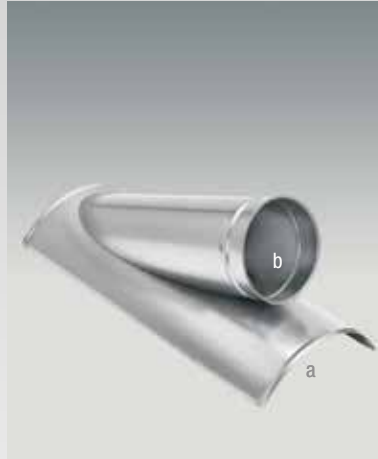
Angle	Diameter	Thickness	Art.-No.
45 deg.	100 mm Ø	0.8 mm	451 000
45 deg.	120 mm Ø	0.8 mm	451 200
45 deg.	140 mm Ø	0.8 mm	451 400
45 deg.	160 mm Ø	0.8 mm	451 600
45 deg.	180 mm Ø	0.8 mm	451 800
45 deg.	200 mm Ø	0.8 mm	452 000
45 deg.	250 mm Ø	1.0 mm	452 500
45 deg.	300 mm Ø	1.0 mm	453 000
45 deg.	350 mm Ø	1.0 mm	453 500
45 deg.	400 mm Ø	1.0 mm	454 000
45 deg.	450 mm Ø	1.0 mm	454 500
45 deg.	500 mm Ø	1.0 mm	455 000
45 deg.	560 mm Ø	1.0 mm	455 600
45 deg.	630 mm Ø	1.0 mm	456 300
45 deg.	710 mm Ø	1.0 mm	457 600
45 deg.	800 mm Ø	1.0 mm	458 000

Pipe bends 60 ° and 67.5 °

Angle	Diameter	Thickness	Art.-No.
60 deg.	100 mm Ø	0.8 mm	671 000
67.5 deg.	120 mm Ø	0.8 mm	671 200
67.5 deg.	140 mm Ø	0.8 mm	671 400
67.5 deg.	160 mm Ø	0.8 mm	671 600
67.5 deg.	180 mm Ø	0.8 mm	671 800
67.5 deg.	200 mm Ø	0.8 mm	672 000
60 deg.	250 mm Ø	1.0 mm	672 500
60 deg.	300 mm Ø	1.0 mm	673 000

Pipe bends 90 °

Angle	Diameter	Thickness	Art.-No.
90 deg.	100 mm Ø	0.8 mm	901 000
90 deg.	120 mm Ø	0.8 mm	901 200
90 deg.	140 mm Ø	0.8 mm	901 400
90 deg.	160 mm Ø	0.8 mm	901 600
90 deg.	180 mm Ø	0.8 mm	901 800
90 deg.	200 mm Ø	0.8 mm	902 000
90 deg.	250 mm Ø	1.0 mm	902 500
90 deg.	300 mm Ø	1.0 mm	903 000
90 deg.	350 mm Ø	1.0 mm	903 500
90 deg.	400 mm Ø	1.0 mm	904 000
90 deg.	450 mm Ø	1.0 mm	904 500
90 deg.	500 mm Ø	1.0 mm	905 000
90 deg.	560 mm Ø	1.0 mm	905 600
90 deg.	630 mm Ø	1.0 mm	906 300
90 deg.	710 mm Ø	1.0 mm	907 100
90 deg.	800 mm Ø	1.0 mm	908 000



branches, rivet-on connections, y-branches

Branches are installed when the suction line is branched, i.e. when two or more suction points are to be connected. A branch consists of the fuselage section and the branches incorporated in it. Attention: For branches with a diameter of 200 mm and smaller, the connection branches off below 22.5 degrees to the centre axis of the fuselage. For branches with a diameter of 250 mm and larger, the connection branches off below 30.0 degrees to the centre axis. of the fuselage.

When ordering please enter to display the data in this order:

- a) large diameter fuselage section
- b) fuselage section of small diameter
- c) the diameter of the branch pipe or pipes, e.g. 140/120/100 mm

The length of the branches is not fixed as it depends on the design.

Branches

Diameter main pipe	Outlets	Thickness branch	Art.-No.
up to 160 mm	1 outlet	0.8 mm	200 100
up to 200 mm	1 outlet	0.8 mm	200 140
up to 250 mm	1 outlet	1.0 mm	200 150
up to 300 mm	1 outlet	1.0 mm	200 400
up to 400 mm	1 outlet	1.0 mm	200 600
up to 500 mm	1 outlet	1.0 mm	200 800
up to 630 mm	1 outlet	1.0 mm	201 000
up to 710 mm	1 outlet	1.0 mm	201 900
up to 800 mm	1 outlet	1.0 mm	202 000

Rivet-on connections are often the simplest way to connect a branch pipe to existing piping.

A rivet socket consists of the saddle piece (to be placed on the existing main pipe) and the branch incorporated therein.

It is important to ensure that the pipe cross-sections are matched to each other and that sufficient air velocities remain in all pipes.

Tip: Installation of gate valves helps here!

With the order you give the data in that order, please:

- a) Main pipe diameter
- b) Branch diameter

Rivet-on connections

Diameter main pipe	Thickness branch	Art.-No.
up to 200 mm Ø	0.8 mm	201 200
up to 300 mm Ø	1.0 mm	201 300
up to 400 mm Ø	1.0 mm	201 400
up to 630 mm Ø	1.0 mm	201 500

up to 200 mm	2 outlets	0.8 mm	200 200
up to 300 mm	2 outlets	1.0 mm	200 500
up to 400 mm	2 outlets	1.0 mm	200 700
up to 500 mm	2 outlets	1.0 mm	200 900
up to 630 mm	2 outlets	1.0 mm	201 100

Y-branches are used when a main pipe ends in two equally sized connections.

Each connection branches off below 30 degrees (22.5 degrees) to the center axis of the main pipe.

Y-branches

Diameter main pipe	Mat. thickness	Art.-No.
up to 160 mm	0.8 mm	201 600
up to 200 mm	0.8 mm	201 700
up to 300 mm	1.0 mm	201 800

up to 200 mm	3 outlets	0.8 mm	200 300
up to 300 mm	3 outlets	1.0 mm	200 530
up to 400 mm	3 outlets	1.0 mm	200 730



suction manifolds, machine connection pieces, reducers

Suction manifolds are a type of branch where a main pipe ends in several machine connections in a very small space. The connections can be of different diameters.

Make sure that the sum of the area of the outgoing connections is not larger than the main pipe.

When ordering, please specify the sequence of the connection diameters on the suction side. Please attach a drawing of the arrangement of the nozzle diameters to the order.

Suction manifold	
quantity connections	Art.-No.
2 connections	330 200
3 connections	330 300
4 connections	330 400
5 connections	330 500
6 connections	330 600

Machine connection pieces, that have the flanging for Schuko pipe clamps on one side and are smooth and round on the other side can be attached to existing machine extraction hoods. Their material thickness is 1.0 mm.

Machine connection piece	
Diameter	Art.-No.
102/100 mm Ø	402 200
122/120 mm Ø	402 300
142/140 mm Ø	402 400
162/160 mm Ø	402 500
182/180 mm Ø	402 600
202/200 mm Ø	402 700
252/250 mm Ø	402 800
302/300 mm Ø	402 900

Reducers help to reduce the larger diameter to a smaller one. It makes sense to keep the large diameter as long as possible. The larger the diameter, the lower the frictional resistance and thus the suction loss [Pa]. Reducers have a material thickness of 1.0 mm.

Reducer	
Diameter	Art.-No.
up to 120 mm Ø	401 200
up to 160 mm Ø	401 400
up to 200 mm Ø	401 600
up to 300 mm Ø	401 700
up to 400 mm Ø	401 800
up to 500 mm Ø	401 900
up to 630 mm Ø	402 000
up to 710 mm Ø	403 100
up to 800 mm Ø	403 000



hoses

Polyurethane spiral hoses, flame retardant according to DIN 4102 B1, for the mobile connection of machines.

Please note that with small diameters (100 mm and smaller) the resistance [Pa] becomes very high. The narrower the line cross-section, the lower the suction power.

According to the recommendations of the BGHM*, flexible connecting cables should not be longer than 500 mm. Exceptions here are the connections of CNC machines. Special hose materials are used for these suction connections. The PUR hose is also available in a highly flexible version.

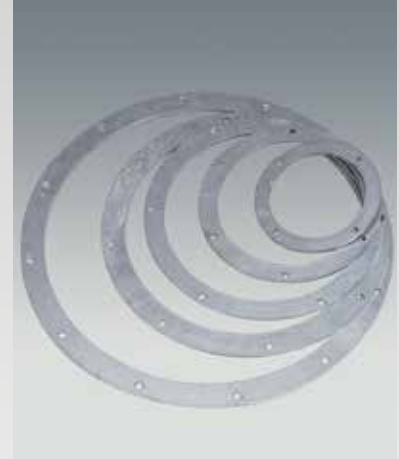
PUR hose	
Diameter	Art.-No.
60 mm Ø	310 060
80 mm Ø	310 080
100 mm Ø	310 100
120 mm Ø	310 120
140 mm Ø	310 140
160 mm Ø	310 160
180 mm Ø	310 180
200 mm Ø	310 200
250 mm Ø	310 250
300 mm Ø	310 300
350 mm Ø	310 350

PUR hose – highly flexible	
Diameter	Art.-No.
80 mm Ø	310 081
100 mm Ø	310 101
120 mm Ø	310 121
140 mm Ø	310 141
160 mm Ø	310 161
180 mm Ø	310 181
200 mm Ø	310 201
250 mm Ø	310 251
300 mm Ø	310 301
350 mm Ø	310 351

Flexible metal hoses with integrated seals are used when higher wear is to be expected. They are less flexible and have a higher weight than PUR hoses.

Flexible metal hose	
Diameter	Art.-No.
100 mm Ø	321 000
120 mm Ø	321 200
140 mm Ø	321 400
160 mm Ø	321 600
180 mm Ø	321 800
200 mm Ø	322 000
250 mm Ø	322 500
300 mm Ø	323 000
350 mm Ø	323 500

* BGHM (Employer's liability insurance association for wood and metal, Germany)



hose boots, quick-acting or bayonet locks, flange rings

Hose boots are placed on the ends of the hoses. They have a flanging, which makes the further connection of components with a pipe clamp easily possible.

The hose boot is conductively connected to the suction hoses in order to prevent static charges.

Its material thickness is 1.0 mm.

Hose boot incl. screws

Diameter	Art.-No.
80 mm Ø	230 800
100 mm Ø	231 000
120 mm Ø	231 200
140 mm Ø	231 400
160 mm Ø	231 600
180 mm Ø	231 800
200 mm Ø	232 000
250 mm Ø	232 500
300 mm Ø	233 000
350 mm Ø	233 500

CNC-Hose boot

Diameter	Art.-No.
200 mm Ø	232 100
250 mm Ø	232 200
300 mm Ø	232 300
350 mm Ø	232 400

Bayonet locks are useful where suction connections need to be made or removed quickly. In connection with flexible hoses they are ideal for e.g. machine connections for dust collectors, which are connected alternately to different machines.

Its material thickness is 1.0 mm.

Bayonet lock

Diameter	Art.-No.
80 mm Ø	650 800
100 mm Ø	651 000
120 mm Ø	651 200
140 mm Ø	651 400
160 mm Ø	651 600
180 mm Ø	651 800
200 mm Ø	652 000

Flange rings are the strongest connection type for extreme loads. We connect overhead lines, cyclone components, deflector hoods and components heavily affected by weight or wind with flange rings. All rings are hot-dip galvanized.

The flange ring dimensions and pitch circles correspond to the "Schuko factory standard".

Flange ring

Diameter	Art.-No.
180 mm Ø	701 800
200 mm Ø	702 000
250 mm Ø	702 500
300 mm Ø	703 000
350 mm Ø	703 500
400 mm Ø	704 000
450 mm Ø	704 500
500 mm Ø	705 000
560 mm Ø	705 600
630 mm Ø	706 300
710 mm Ø	707 000
800 mm Ø	708 000
1000 mm Ø	709 900



pipe clamps

Pipe clamps are the connecting element of Schuko components. This allows you to assemble your own extraction system without special tools and in a short time. The connection can be released again at any time. Pipe clamps from Schuko have an inserted sealing tape.

Pipe clamp incl. sealing tape

Diameter	Art.-No.
80 mm Ø	600 810
100 mm Ø	601 010
120 mm Ø	601 210
140 mm Ø	601 410
160 mm Ø	601 610
180 mm Ø	601 810
200 mm Ø	602 010
250 mm Ø	602 510
300 mm Ø	603 010
350 mm Ø	603 510

Wide type pipe clamps with inserted sealing tape can replace the flange rings in normal pipelines as they can withstand extreme loads. The connection can be loosened as quickly as possible due to their closure.

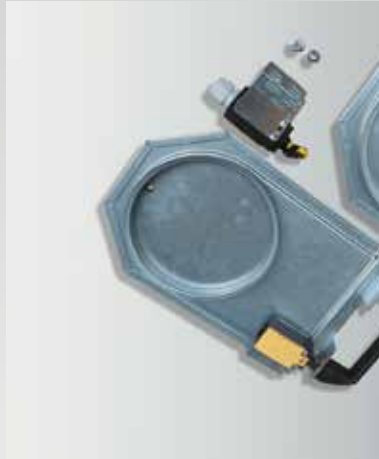
Wide type pipe clamp incl. sealing tape

Diameter	Art.-No.
300 mm Ø	603 020
350 mm Ø	603 520
400 mm Ø	604 020
450 mm Ø	604 520
500 mm Ø	605 020
560 mm Ø	605 620

Stainless steel pipe clamps should preferably be installed for outdoor installation. They have the same dimensions as normal pipe clamps.

Stainless steel pipe clamp incl. sealing tape

Diameter	Art.-No.
120 mm Ø	650 120
140 mm Ø	650 140
160 mm Ø	650 160
180 mm Ø	650 180
200 mm Ø	650 200
250 mm Ø	650 250
300 mm Ø	650 300
350 mm Ø	650 350
400 mm Ø	650 400
450 mm Ø	650 450
500 mm Ø	650 500



blind cover and gate valves

Blind cover seal unused pipe ends. Fastened with a pipe clamp, they can be removed at any time if required.

Blind cover

Diameter	Art.-No.
100 – 200 mm Ø	457 000
250 – 400 mm Ø	457 100
450 – 630 mm Ø	457 200

Manual gate valves made of sendzimir galvanised sheet steel with fixing screw must be installed if several extraction points are connected to one fan and an unused connection is to be shut off.

Manual gate valves

Diameter	Art.-No.
100 mm Ø	411 050
120 mm Ø	411 250
140 mm Ø	411 450
160 mm Ø	411 650
180 mm Ø	411 850
200 mm Ø	412 050
250 mm Ø	412 500
300 mm Ø	413 000
350 mm Ø	413 500
400 mm Ø	414 000

Mounting kit for Schuko manual gate-off valve, consisting of retaining plate with limit switch, clamping screw and handle with Stop plate for D= 100 - 200 mm (Diameter of the Hand gate valve: ... mm).

Mounting kit for manual gate-off valve

Art.-No.	414 100
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Chain-actuated gate valves are manually operated gate valves. They are installed when the pipes to be shut off are mounted under the ceiling and the gate valves cannot be reached without a ladder. In these cases, the respective gate valve can be closed or opened via a chain.

When ordering, the installation height or the desired chain length must be specified.

Material thickness: 1.0 mm.

Chain-actuated gate valves

Diameter	Art.-No.
120 mm Ø	421 200
140 mm Ø	421 400
160 mm Ø	421 600
180 mm Ø	421 800
200 mm Ø	422 000
250 mm Ø	422 500
300 mm Ø	423 000
350 mm Ø	423 500
400 mm Ø	424 000
450 mm Ø	424 500
500 mm Ø	425 000



Energy saving gate valves and accessories

Motor driven gate valves,

230 Volt, 50 Hz, can be controlled automatically via the processing machine. The motorized energy-saving gate valve has a flap blade that moves out of the cross section.

The range of application is universal: For dust and short-fibre chips, but also for coarse chips.

The opening and closing time is approx. 6 - 12 seconds.

Motor driven gate valves

Diameter	opening period	Art.-No.
100 mm Ø	6 seconds	431 100
120 mm Ø	7 seconds	431 120
140 mm Ø	8 seconds	431 140
160 mm Ø	9 seconds	431 160
180 mm Ø	10 seconds	431 180
200 mm Ø	11 seconds	431 200
250 mm Ø	10 seconds	431 250
300 mm Ø	12 seconds	431 300

Pneumatic gate valves from Schuko are made of die-cast aluminium and close tightly. The high quality ensures a long service life at maximum stress.

Opening and closing times of max. 2 seconds (100 - 250 mm Ø) allow the use in clock-controlled processes. The suction cross section is released over the entire surface. The compressed air must be dry and cleaned (max. 6 bar).

The motor power is 220 V, 50-60 Hz. All pneumatically operated devices are delivered including plug and solenoid coil. The solenoid coils are available in 230 Volt or in 24 Volt as AC (alternating current) or DC (direct current) at no extra charge. They are suitable for use in ATEX zones 2 (G) or 22 (D). From 350 mm Ø incl. adjustable throttle valve.

Pneumatic gate valves

Diameter	opening period	Art.-No.
100 mm Ø	2 seconds	430 100
120 mm Ø	2 seconds	430 120
140 mm Ø	2 seconds	430 140
160 mm Ø	2 seconds	430 160
180 mm Ø	2 seconds	430 180
200 mm Ø	2 seconds	430 200
250 mm Ø	2 seconds	430 250
300 mm Ø	3-5 seconds	430 300
350 mm Ø	3-5 seconds	430 350
400 mm Ø	3-5 seconds	430 400
450 mm Ø	3-5 seconds	430 450
500 mm Ø	3-5 seconds	430 500

Control elements. The pneumatically or electrically actuated gate valves "OPEN-CLOSED" can be controlled via a potential-free contact, if present in the processing machine.

For extraction systems with several gate valves, we recommend control via a programmable logic controller (PLC). Individual actuation of gate valves is carried out sensibly via a separate control element in conjunction with a current collector coil.

Control elements

Typ	Art.-No.
suitable for motor driven or pneumatic gate valves	987 000
Pick-up coil for control element	882 600

Pneumatic gate valves in galvanized sheet steel construction

Diameter	opening period	Art.-No.
560 mm Ø	5-7 seconds	430 560
630 mm Ø	5-7 seconds	430 630
710 mm Ø	5-7 seconds	430 710
800 mm Ø	5-7 seconds	430 800
900 mm Ø	5-7 seconds	430 000



Flaps

Checkvalves Typ SARK according to EN 16447 type-tested suitable for explosion decoupling in the raw gas line.

The installation distance to the filter must not be less than 2-5 m, depending on the size.

Checkvalves (ATEX tested)

Diameter	Art.-No.
250 mm Ø	504 035
300 mm Ø	504 045
350 mm Ø	504 055
400 mm Ø	504 065
450 mm Ø	504 075
500 mm Ø	504 085
560 mm Ø	504 095
630 mm Ø	504 105

Non return flaps according to VDMA 24179 are installed at the end of a pressure line and largely prevent a backflow of over-pressure from the filter or chip storage chamber. If several fans are blown into the same room, non-return flaps are essential.

Material thickness of pipe socket: 1.0 mm,
Material thickness damper blade: 2.0 mm.

Non return flaps

Diameter	Art.-No.
120 mm Ø	501 200
140 mm Ø	501 400
160 mm Ø	501 600
180 mm Ø	501 800
200 mm Ø	502 000
250 mm Ø	502 500
300 mm Ø	503 000
350 mm Ø	503 500
400 mm Ø	504 000
450 mm Ø	504 500
500 mm Ø	505 000
560 mm Ø	505 600
630 mm Ø	506 300
710 mm Ø	507 100
800 mm Ø	508 000

Cleaning flaps ensure easy accessibility for servicing. They must be installed in pipes if fibrous cuttings or veneer residues get into the extraction system at the processing machines. Especially behind circular saws it makes sense to have a cleaning facility.

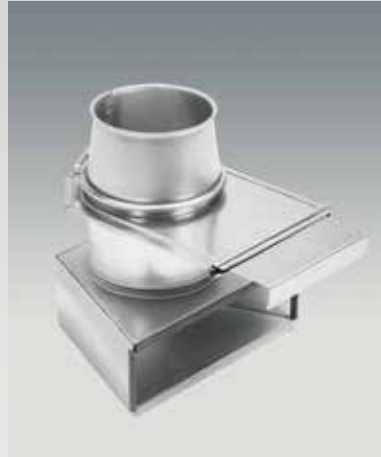
The installation must be checked on a case-by-case basis.

We deliver the flaps completely installed in a galvanized pipe with a length of 500 mm.

Cleaning flaps

Diameter	Mat. thickness	Art.-No.
100 mm Ø	0.8 mm	481 000
120 mm Ø	0.8 mm	481 200
140 mm Ø	0.8 mm	481 400
160 mm Ø	1.0 mm	481 600
180 mm Ø	1.0 mm	481 800
200 mm Ø	1.0 mm	482 000
250 mm Ø	1.0 mm	482 500
300 mm Ø	1.0 mm	483 000
350 mm Ø	1.0 mm	483 500
400 mm Ø	1.0 mm	484 000





pipe silencers, sweeping holes, container connections

Pipe silencers are preferably connected downstream of the fan on the pressure side. Airborne noise in this component is reduced by up to 5 dB(A).

The duct silencers have an outer shell of sendzimir galvanised sheet steel and are equipped with sound-absorbing materials and inserts on the inside.

The overall length is approx. 1000 mm.

Pipe silencers

Diameter	Art.-No.
140 mm Ø	111 000
160 mm Ø	111 100
180 mm Ø	111 110
200 mm Ø	111 200
250 mm Ø	111 300
300 mm Ø	111 400
350 mm Ø	111 500
400 mm Ø	111 600
450 mm Ø	111 700
500 mm Ø	111 800
560 mm Ø	111 900
630 mm Ø	111 910
710 mm Ø	111 920
800 mm Ø	111 930

Sweeping holes or sweeping holes in general are useful when chips cannot be extracted directly at the point of origin. On drilling or mortising machines and in the bench room, for example, sweeping holes are a good disposal option.

Special care is required, however, if the chip storage room has an automatic discharge or a briquetting press is connected. Foreign objects and logs must not get into the sweeping holes! Sweeping hole with manual gate valve incl. locking screw.

Sweeping hole

Diameter	Art.-No.
140 mm Ø	442 400

Container connections. Schuko offers a quick-release coupling system for loading chip containers.

A pair of couplings consists of a screw-on piece (with flange ring for secure attachment to the chip container) and the counterpart (for connection to the feed line [flexible metal hose]).

Both parts fit into each other and are firmly connected to each other via quick-release fasteners. The connection is easily detached for container replacement.

Container connection

Diameter	Art.-No.
200 mm Ø	585 500
250 mm Ø	585 600
300 mm Ø	585 700
350 mm Ø	585 800



magnetic separator, lump traps, compensators

Magnetic separators. The entry of metal parts into extraction systems can often not be effectively prevented. Metal parts such as screws and nails must be expected especially behind shredding machines.

The separator, equipped with strong permanent magnets, can extract some of these metal parts from the chip flow. However, 100 % material separation is excluded. The efficiency of the separator depends on the material density, the part size and the air velocity.

Magnetic separator

Diameter	Art.-No.
straight 160 mm Ø	462 000
straight 180 mm Ø	462 100
straight 200 mm Ø	462 200
straight 250 mm Ø	462 300
straight 300 mm Ø	462 400
straight 350 mm Ø	462 500

Lump trap (standard)

Diameter	Art.-No.
up to 200 mm Ø	112 000
up to 250 mm Ø	112 050
up to 300 mm Ø	112 060
up to 350 mm Ø	112 100
up to 400 mm Ø	112 200
up to 450 mm Ø	112 250
up to 500 mm Ø	112 300

Lump traps are equipped with **manually closable flap blade (standard)** or with a **pneumatic closing flap**.

Piece parts in extraction systems have annoying side effects. If these parts get into the fan or into the automatic silo discharge, malfunctions and/or greater wear are the result.

Lump traps are integrated into the suction system on the suction side and separate lumpy waste from the chip flow.

However, 100% separation cannot be guaranteed. Technical advice is essential before installing a log catcher.

Lump traps with pneumatic closing flap

are delivered with plug and solenoid coil. The solenoid coils are available in 230 Volt or in 24 Volt as AC (alternating current) or DC (direct current) without extra charge.

They are suitable for use in ATEX zones 2 (G) or 22 (D) (compressed air connection required).

Lump traps with pneumatic closing flap

Diameter	Art.-No.
up to 200 mm Ø	112 600
up to 250 mm Ø	112 610
up to 300 mm Ø	112 620
up to 350 mm Ø	112 700
up to 400 mm Ø	112 800
up to 450 mm Ø	112 810
up to 500 mm Ø	112 900
> 500 mm Ø	on request

Compensators are elastic connecting pieces in fixed pipelines. These „interruptions“ reduce the transmission of vibrations and structure-borne noise in the pipe system.

Sound waves, which are transported over long distances by the metallic pipelines, find an interruption in the compensator and are only transmitted in a reduced form.

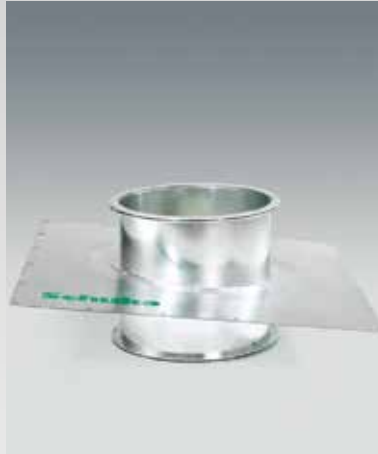
Overall length: 250 mm
Material thickness: 1.0 mm

Vibration compensator

Diameter	Art.-No.
160 mm Ø	952 000
180 mm Ø	952 100
200 mm Ø	952 200
250 mm Ø	952 300
300 mm Ø	952 400
350 mm Ø	952 500
400 mm Ø	952 600
450 mm Ø	952 700
500 mm Ø	952 800
560 mm Ø	952 900
630 mm Ø	953 000
710 mm Ø	953 100
800 mm Ø	953 200



Manual control



two-way valves, roof lead-throughs, torsion absorber

Two-way valves are used in material-carrying lines when they branch (e.g. during silo feeding). Adjustment can be carried out manually, by motor or pneumatically.

The standard design is symmetrical as shown in the illustration, with two branches each under 22.5° to the central axis. The adjustment of the motorized diverter valves is carried out by a powerful three-phase geared motor with 400 Volt, 50 Hz with limit switches.

All pneumatically operated devices are supplied with plugs and solenoid coils.

The solenoid coils are available in 230 Volt or Available in 24 Volt as AC (alternating current) or DC (three-phase current) at no extra charge.

They are suitable for use in ATEX zones 2 (G) or 22 (D).

Two-way valves

Control	Diameter	Art.-No.
manual	160 mm Ø	113 100
manual	180 mm Ø	113 200
manual	200 mm Ø	113 300
manual	250 mm Ø	113 400
manual	300 mm Ø	113 500
manual	350 mm Ø	113 600
manual	400 mm Ø	113 700
manual	450 mm Ø	113 800

Roof lead-throughs. The passage of pipes through roof surfaces is possible cleanly and tightly with the Schuko roof lead-throughs.

Many years of experience have also been incorporated into the design.

The sealing of the large-area roof support can easily be carried out by a roofer.

The roof pitch [°] must be specified when ordering.

Dachdurchführung

Diameter	Art.-No.
up to 300 mm Ø	586 700
up to 400 mm Ø	586 800
up to 500 mm Ø	586 900
up to 630 mm Ø	587 000
up to 710 mm Ø	587 100
up to 800 mm Ø	587 200
up to 1000 mm Ø	587 300

motorized	160 mm Ø	118 000
motorized	180 mm Ø	118 100
motorized	200 mm Ø	118 200
motorized	250 mm Ø	118 300
motorized	300 mm Ø	118 400
motorized	350 mm Ø	118 500
motorized	400 mm Ø	118 600
motorized	450 mm Ø	118 700
motorized	500 mm Ø	118 800
motorized	560 mm Ø	118 900
motorized	630 mm Ø	118 910

The **torsion absorber** captures rotary movements (e.g. on CNC machine tools).

The machine connection, often a flexible suction hose, is not twisted, which greatly increases the service life of the hoses.

In addition, the load on the machine unit is greatly reduced.

The height is 200 mm.

Torsion absorber

Diameter	Art.-No.
200 mm Ø	586 400
250 mm Ø	586 410
300 mm Ø	586 420
350 mm Ø	586 430
400 mm Ø	586 440



Typ A



Typ B



mounting material

Pipe hangers. The safe installation of pipelines is closely linked to the respective fastening option on the building. Galvanized half shells in connection with threaded rods ensure a good hold and a clean pipe installation. The delivery includes rubber coating incl. pipe half shell and 1.0 m threaded rod M 10.

Typ A: for trapezoidal sheet fixing

Pipe hangers Typ A		
Typ	Diameter	Art.-No.
A	100 mm Ø	690 110
A	120 mm Ø	690 210
A	140 mm Ø	690 310
A	160 mm Ø	690 410
A	180 mm Ø	690 510
A	200 mm Ø	690 610
A	250 mm Ø	690 710
A	300 mm Ø	690 810
A	350 mm Ø	690 910
A	400 mm Ø	691 010
A	450 mm Ø	691 110
A	500 mm Ø	691 210
A	560 mm Ø	691 310
A	630 mm Ø	691 410
A	710 mm Ø	691 510
A	800 mm Ø	691 610

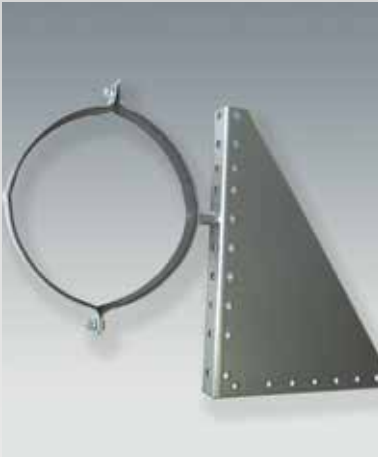
Typ B: for swivel mounting

Pipe hangers Typ B		
Typ	Diameter	Art.-No.
B	100 mm Ø	690 120
B	120 mm Ø	690 220
B	140 mm Ø	690 320
B	160 mm Ø	690 420
B	180 mm Ø	690 520
B	200 mm Ø	690 620
B	250 mm Ø	690 720
B	300 mm Ø	690 820
B	350 mm Ø	690 920
B	400 mm Ø	691 020
B	450 mm Ø	691 120
B	500 mm Ø	691 220
B	560 mm Ø	691 320
B	630 mm Ø	691 420
B	710 mm Ø	691 520
B	800 mm Ø	691 620

Split pipes with rubber coating and threaded sleeve M 10.

Schuko split pipes guarantee simple and safe fastening of all suction pipelines. The vibration-damping rubber coating ensures a non-slip connection.

Split pipes	
Diameter	Art.-No.
100 mm Ø	680 100
120 mm Ø	680 200
140 mm Ø	680 300
160 mm Ø	680 400
180 mm Ø	680 500
200 mm Ø	680 600
250 mm Ø	680 700
300 mm Ø	680 800
350 mm Ø	680 900
400 mm Ø	681 000
450 mm Ø	681 100
500 mm Ø	681 200
560 mm Ø	681 300
630 mm Ø	681 400
710 mm Ø	on request
800 mm Ø	on request



mounting material

Pipe holders are ideally suited for the safe installation of pipelines on walls.

Exhaust air ducts attached to external walls can be installed at the correct distance from the wall using the pipe brackets. Roof projections can easily be bypassed.

The distance between pipe and masonry must be specified when ordering.

Pipe holders	
Diameter	Art.-No.
100 mm Ø	529 100
120 mm Ø	521 200
140 mm Ø	521 400
160 mm Ø	521 600
180 mm Ø	521 800
200 mm Ø	522 000
250 mm Ø	522 500
300 mm Ø	523 000
350 mm Ø	523 500
400 mm Ø	524 000
450 mm Ø	524 500
500 mm Ø	525 000
560 mm Ø	525 600
630 mm Ø	526 300
710 mm Ø	527 000
800 mm Ø	528 000
1000 mm Ø	529 000

Pipe holder for pipe rests are used where increased demands are placed on the load-bearing capacity of the fastening point. The pipe support can be used for fixing horizontal or vertical pipes.

Pipe holder for pipe rests	
Diameter	Art.-No.
100 mm Ø	683 000
120 mm Ø	683 100
140 mm Ø	683 200
160 mm Ø	683 300
180 mm Ø	683 400
200 mm Ø	683 500
250 mm Ø	683 600
300 mm Ø	683 700
350 mm Ø	683 800
400 mm Ø	683 900
450 mm Ø	684 000
500 mm Ø	684 100
560 mm Ø	684 200
630 mm Ø	684 300
710 mm Ø	on request
800 mm Ø	on request

Wall brackets are used to safely support the load of fans, pipes or ducts when correctly selected, arranged and installed.

The Schuko bracket system is versatile and variable. Made of hot-dip galvanised sheet steel, it is suitable for indoor and outdoor installation.

Pivoting bracket for pipe suspensions especially for silo mounting.

Wall brackets (pair)	
for	Art.-No.
S-Fan	950 200
L-Fan	950 300
L EX-Fax	960 400
K-Fan	950 400
Supply air system WZLF-com	518 800



U-profile fixed to steel girder with fixing clamps.



Typ 1



Typ 2

mounting material

U-Profiles in a stable and galvanized design with a material thickness of 2.5 mm in combination with the pipe supports, the foot sections and the mounting brackets can be used in a variety of ways.

They are often used for duct supports, pipe supports and for fixing blow-in boxes.

U-Profil	
Length	Art.-No.
1,200 mm	693 300
2,460 mm	693 350

Mounting clamps are used for mounting U-profiles on e.g. steel girders. Drilling or welding is thus completely superfluous.

Mounting clamps for U-Profiles	
Quantity	Art.-No.
Piece	693 360

Pipe rests. Vertical pipelines, laid over greater heights, must be securely fastened. Schuko pipe rests can be swivelled and pulled out and are made of thick-walled and hot-dip galvanized material. Screwed to the floor, they offer the possibility of providing the pipes with a secure hold. Their length is 1,200 mm.

Pipe rests are divided into two types:

Type 1: Horizontal, with one pipe holder

Pipe rest Type 1		
Type	Diameter	Art.-No.
1	100 mm Ø	695 000
1	120 mm Ø	695 100
1	140 mm Ø	695 200
1	160 mm Ø	695 300
1	180 mm Ø	695 400
1	200 mm Ø	695 500
1	250 mm Ø	695 600
1	300 mm Ø	695 700
1	350 mm Ø	695 800
1	400 mm Ø	695 900
1	450 mm Ø	696 000
1	500 mm Ø	696 100
1	560 mm Ø	696 200
1	630 mm Ø	696 300

Type 2: Vertical, with two pipe holders

Pipe rest Type 2		
Type	Diameter	Art.-No.
2	100 mm Ø	697 000
2	120 mm Ø	697 100
2	140 mm Ø	697 200
2	160 mm Ø	697 300
2	180 mm Ø	697 400
2	200 mm Ø	697 500
2	250 mm Ø	697 600
2	300 mm Ø	697 700
2	350 mm Ø	697 800
2	400 mm Ø	697 900
2	450 mm Ø	698 000
2	500 mm Ø	698 100
2	560 mm Ø	698 200
2	630 mm Ø	698 300



mounting material

Swivel mounting. This Schuko pipe mounting is universally applicable where standard accessories reach their limits. Example: If pipes are to be mounted at an angle from a vertical wall.

Swivel mounting	
Art.-No.	693 150

Trapeze holder. On trapezoidal roofs these brackets form the professional connection for the suspension of pipes and components. The pipe suspensions can be securely fastened with a threaded rod.

Trapeze holder (without threaded rod)	
Art.-No.	693 100

Fixing with **perforated steel tape** is often the cheapest way to install pipelines. If this type of installation is carried out professionally, it is safe and stable up to certain pipe dimensions.

Perforated steel tape	
Type	Art.-No.
LB 17 roll	585 000



Beam clamps are used for the secure attachment of pipe suspensions to existing steel beams. They are suitable for threaded rods of size M 10. The clamp is also equipped with a screw with a cup point to prevent it from slipping on the beam. Suitable for a clamping range up to 20 mm maximum stat. Load: 2,500 N (approx. 250 kg).

Threaded rod	
Size	Art.-No.
M10 x 1,000 mm, DIN 975	693 400

Beam clamps	
Type	Art.-No.
TKM 10	693 110



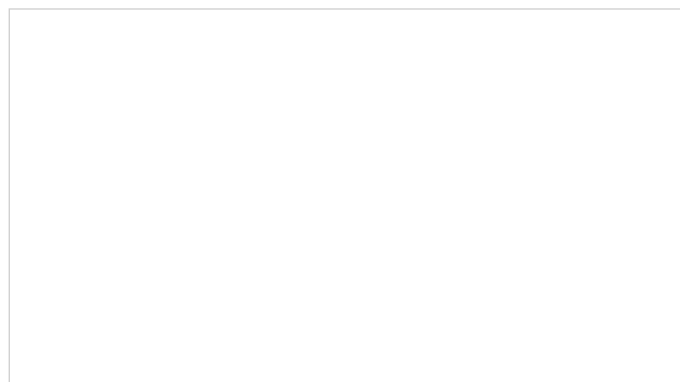
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