

SAFETY FIRST - WHY COMPROMISE

Health and Safety vacuum cleaners for every application



ALTO[®]
Why
Compromise[™]

**Wap
KEW**

TECHNOLOGIES



Sophistication in engineering

Sophistication in engineering

As particle sizes of hazardous dusts are measured in less than 0,1 µm, it goes without saying, that sophisticated technology combined with years of experience and expertise are crucial factors when choosing your health and safety vacuum cleaner.

Approved for professionals

Hazardous dust demands the highest level of safety to ensure the maximum health protection. ALTO health and safety vacuum cleaners span all dust classes - **L** (light), **M** (medium), **H** (high), **Asbestos** and explosive dusts **Type 22**. Furthermore, all ALTO **Type 22** safety vacuums are **ATEX** compliant. All our solutions meet the new pan-European standards and bear all the necessary statutory test symbols. The range is designed for the professionals that also demand low noise operation, ergonomics, long-life and reliable performance e.g. maintaining a filter permeability of only 0.005% on health and safety vacuum cleaners approved for use in hospitals.

A solution for any need

The handling of hazardous dust is a complex matter that continuously calls for new, innovative product development and competent engineering. As a specialist, ALTO offers state-of-the-art solutions in a full range, dedicated to solve any demanding task of picking up health-endangering dusts.

Why compromise



XtremeClean
Automatic filter cleaning system without interruption of work while vacuuming.



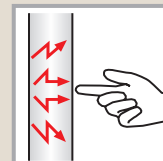
Push&Clean
Filter cleaning system that uses powerful air pulses for a quick cleaning of the filter cartridge.



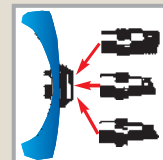
EC-Drive
A brushless, ignition source free single phase drive that is electronically commuted.



FlowSensor
This patented technique measures the air flow electronically and precise.



AntiStatic
A conductive discharger link between inlet fitting and earth. Sparks, shocks and dirt don't stand a chance.



MultiFit
A universal inlet fitting which makes it possible to connect every accessory to any of our vacuum cleaners without any problems.



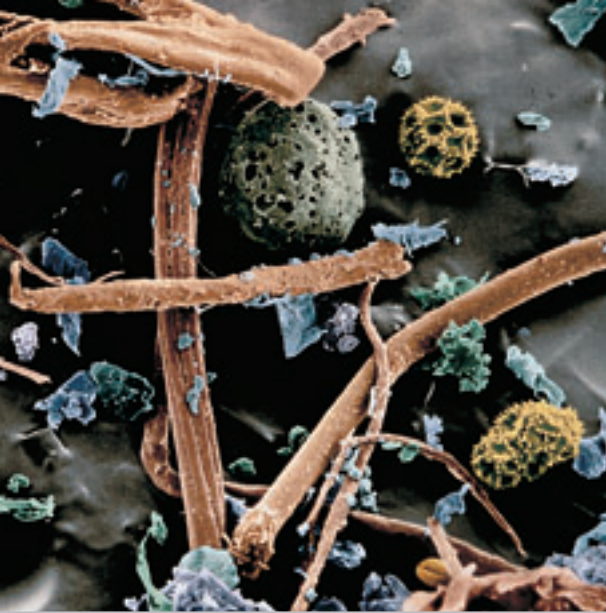
HighFiltration
Already the ALTO standard vacs offer a high filtration level. But it can even be improved by working with M- or H-class health and safety vacuum cleaners.



AutoOnOff
The vacuum cleaner switches automatically on and off with electric or pneumatic tools - for a clean and healthy dust extraction work.



2 Motors
Double the power against the toughest dirt. The 2 Motor concept guarantees maximum suction power and huge performance reserves for specific applications.



Hazardous dust - in - how to handle the

Dust class **L**

Dust class **M**

Obstructive respiratory system diseases result in very high costs

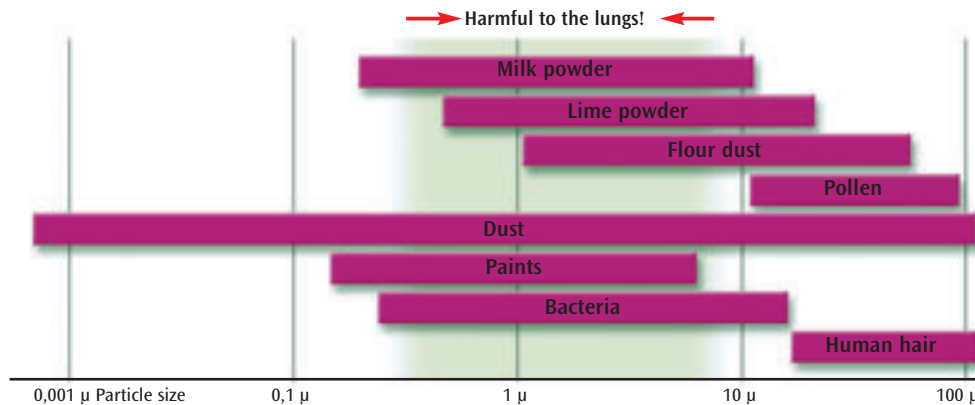
Focus on the unseen...

ALTO joined the battle against hazardous dust many years ago. Our reason to embark on this mission and go into this demanding business segment was partly because of the high level of quality in our standard vacuum cleaner range, but more significantly because of our skilled engineers ambition to achieve even higher performance. The satisfaction of developing equipment, that will contribute to solve some of the problems related to respiratory system diseases in a cost effective way is the foundation of our business.

Prevention is the best cure

The diseases of the nasal mucous membranes, larynx, trachea, bronchial systems and lungs are generally caused by a large number of dust, which are inhaled as we breathe, and some types cause skin irritations, eczema, dermatitis or allergies simply by direct contact with the skin. As these miniature particles are normally invisible to the naked eye, the threat quite often is underestimated so attention must be paid to prevention - because some diseases are incurable.

A comparison of dust sizes



Be aware of explosive dust

Diseases are not the only danger. It is well-known that cotton or paper can burn but also other materials, such as flour or even metals can ignite!

The presence of oxygen and an ignition source with sufficient energy and an inflammable substance (gaseous, liquid or solid) are factors which can provoke an explosion. The finer the dust, the higher the risk for an explosion! ALTO safety vacuum cleaners pick up the dust, and separate them from the surrounding air. Up to 99.995% is filtered out and isolated in the container.

In a class of its own! The invisible opponent



Dust class **H**

Asbestos

Dust class **Type 22**

M These vacuum cleaners permit picking up dusts from dust classes L and M. These include all health-endangering, non-carcinogenic dusts with OEL values > 0.1 mg/m³ and wood dusts.

H These vacuum cleaners permit picking up dusts from dust classes L, M and H. These include all health-endangering dusts with OEL values, all carcinogenic dusts and dusts contaminated with germs and bacteria.

Asbestos Asbestos dusts are only permitted to be picked up with vacuum cleaners conforming to dust class H. In Germany they furthermore have to meet the additional requirements for asbestos.

Type 22 These vacuum cleaners are allowed to pick up explosive dusts as well as dusts from dust classes L and M. These include wood dust, all non-carcinogenic dusts with OEL values > 0.1 mg/m³ and/or inflammable dusts in zone 22.

ALTO complies with the new pan-European standard

The national ordinances to date - the EN 60335-2-69 for Europe and the worldwide IEC 60335-3-69 have been incorporated into the new European standard and streamlined for the sake of

clarity - and in practice it means a split into the above mentioned classes. You will find the relevant classes listed with each health and safety vacuum cleaner in the brochure.

Since 1997 EN 60335-2-69, IEC 60335-2-69		Dust types
Dust classes	Max. permeability	
L	1%	<ul style="list-style-type: none"> Dusts with OEL values > 1 mg/m³
M	0,1%	<ul style="list-style-type: none"> Dusts with OEL values > 0.1 mg/m³ Wood dusts (up to 1200 W/50 l)
H	0,005%	<ul style="list-style-type: none"> Dusts with OEL values Carcinogenic dusts Dusts with germs/bacteria
Additional requirement asbestos*	as H	<ul style="list-style-type: none"> Asbestos dusts
Type 22**	As basic cleaners (for type 22 with test L, M or H)	<ul style="list-style-type: none"> Dusts of dust explosion classes St1, St2 and St3 in zone 22 (previously zone 11)

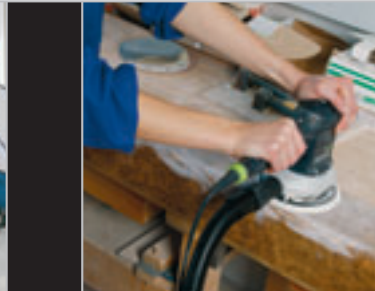
All ALTO Type 22 - SafetyVacs are ATEX compliant!

*Binding for Germany

**Up to now: B1

OEL = Occupational Exposure Limit

Safety Vacuum Cleaners



ALTO SQ 650-1M

- Large tank volume
- Stainless steel container
- Appliance plug socket
- AntiStatic System

ALTO SQ 650-3M additionally:

- Automatic on/off for pneumatic and electric tools
- Speed Governor

▶ ALTO SQ 650-1M
ALTO SQ 650-3M



ALTO ATTIX 560-2M XC

- XtremeClean – automatic filter cleaning system
- Automatic on/off for electric tools
- Speed governor
- SoftStart
- AntiStatic System
- Accessory holder
- Tool deposit



▶ ALTO ATTIX 560-2M XC
ALTO ATTIX 550-2M

XtremeClean filter cleaning technology

With XtremeClean ALTO now offers an impressive filter cleaning system. The name is characteristic for the cleaning level of this system: Extremely efficient and simple to activate. The best filter cleaning system that the market has ever seen. The filter is cleaned automatically, so there is no need to interrupt your work to do filter cleaning. Concentrate on your main job, e.g. drilling, machining or sanding and let the vacuum assist you in achieving a dustfree workplace - wherever you are.

Powerful air pulses clean the filter gently and:

- Keep the suction performance constantly high
- Extend the life of the filter and reduce your costs
- Save you working time without interruptions
- Improve the reliability of the machine

		ALTO SQ 650-3M	ALTO SQ 650-1M	ALTO ATTIX 560-2M XC
Air flow rate	l/min.	3400	3400	3600
Vacuum	mbar	230	230	230
Power Pmax	W	1500	1500	1500
Piec	W	1200	1200	1200
Mains connection	V/~/Hz	230/1~/50-60	230/1~/50-60	230/1~/50-60
Working noise	dB(A)	59	59	57
Container volume	l	64	64	45
L x W x H	mm	560 x 615 x 945	560 x 615 x 945	506 x 476 x 655
Weight	kg	30	29	16
Standard accessories	No.			
Suction hose, 36 mm dia., 3 m	46948		•	
Suction hose, 27 mm dia., 3,5 m, AS	15325	•		•
Curved hand tube, stainless steel	46691		•	
Diagonal tube nozzle, rubber	5067		•	
Tool adapter	18195	•		•
Tube holder		•	•	
Filter bag/Disposal bag		• 47429 /-	• 47429 /-	• / •

All units come with a filter element, cable holder and a 7,5 m rubber mains cable



Dust class **L**

Dust class **M**

Dusts from dust classes L and M may be picked up using OEL-values > 0.1 mg/m³ and wood dusts. Application: in craftsmen including carpenters, joiners and painters.



AIRBOX

Converts an electric automatic dust extractor, with auto start/stop, to a machine that is suitable for use with air powered tools as well. Simply connect the air hoses to the AIRBOX, plug the AIRBOX into the electric socket of the vacuum cleaner and switch the vacuum cleaner to Auto-mode.



Cooling Air Filter

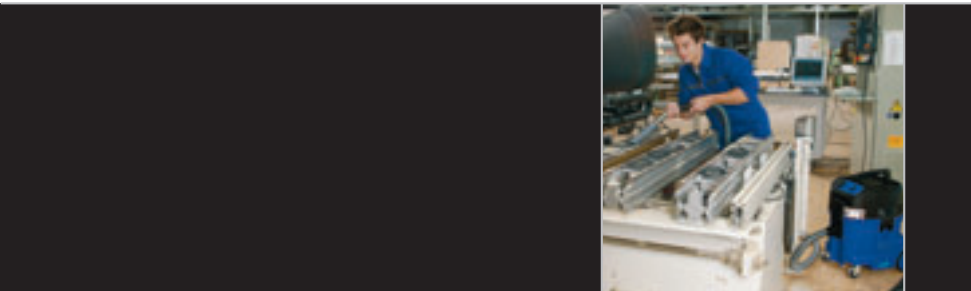
Filtrating the cooling air means less wear and a longer life. When working in very dusty areas ALTO recommends to use the cooling air filter.



Handle, collapsible

Offers extremely comfortable and ergonomic handling when transporting the vac. The sturdy handle is collapsible and allows you to transport the vacuum cleaner also in a normal boot of a car.

vacuum cleaners for dust class M



ALTO ATTIX 550-2M

- Automatic on/off for electric tools
- Speed governor
- SoftStart
- AntiStatic System
- Accessory holder
- Tool deposit



▶ ALTO ATTIX 360-2M

ALTO ATTIX 360-2M

- Push&Clean - manual filter cleaning system
- Automatic on/off for electric tools
- Speed governor
- SoftStart
- AntiStatic System
- Accessory holder
- Tool deposit

		ALTO ATTIX 550-2M	ALTO ATTIX 360-2M
Air flow rate	l/min.	3600	3600
Vacuum	mbar	230	230
Power Pmax	W	1500	1500
Piec	W	1200	1200
Mains connection	V~/Hz	230/1~/50-60	230/1~/50-60
Working noise	dB(A)	57	59
Container volume	l	45	27
L x W x H	mm	506 x 476 x 655	390 x 380 x 570
Weight	kg	14	10
Standard accessories	No.		
Suction hose, 27 mm dia., 3,5 m, AS 15325	•	•	
Tool adapter 18195	•	•	
Filter bag/Disposal bag	• / - 302000527	• / - 302000449	
Filter element	• 302000462	• 302000462	
Cable holder	•	•	
Mains cable, 7,5 m, rubber	•	•	

Push&Clean

Filter Cleaning System

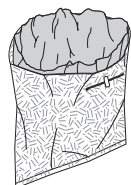
Push&Clean filter cleaning technology

The name of this effective filter cleaning system already tells what to do: Close the fitting or the hose, push a button and the filter is clean. Powerful air pulses will blast the dust off the filter. The Push&Clean filter cleaning system:

- Keeps suction performance constantly high
- Extends the life of the filter and reduces your costs
- Saves you working time
- Improves the reliability of the machine

Push&Clean is a comfortable and powerful but gentle way of cleaning the filter.

g these vacuum cleaners. These include all health-endangering, non-carcinogenic dusts with industry sectors as chemicals, wood, plastics, metal, pharmaceuticals, paper and textiles; for



Disposal bag

The easy, pleasant and clean way to dispose your dust. Instead of standing in a dust cloud while emptying the container, simply close the disposal bag and it's inlet fitting before you dispose.



Exhaust Air Collector

Get rid of the vacuumed air by using the exhaust air collector. Ideal for absolute healthy and clean rooms. Can also be used to blow dirt out of hard-to-reach places.



Accessory net

For transportation of even more tools an accessory net is available and can be mounted on the vac. Content is visible.

Safety Vacuum Cleaners for



ALTO SQ 650-1H

- Stainless steel container, with large volume
- Appliance plug socket
- AntiStatic System

ALTO SQ 650-3H additionally:

- Automatic on/off for electric tools

▶ ALTO SQ 650-1H



ALTO ATTIX 550-2H

- Automatic on/off for electric tools
- Speed Governor
- SoftStart
- AntiStatic System
- Accessory holder
- Tool deposit

ALTO ATTIX 560-2H XC additionally:

- XtremeClean – automatic filter cleaning system



▶ ALTO ATTIX 560-2H XC
ALTO ATTIX 550-2H
ALTO ATTIX 550-0H

Be on the safe side:

Working with a H class ALTO health and safety vacuum cleaner means you are working to the safest limit. These machines fulfil the strictest safety requirements and can not only be used for dealing with extremely hazardous H class dust, but also with less problematic M and L class dust. The filter system is tested under realistic conditions:

- Tested with high air speed
- Filter cake build up is considered
- Realistic dust is used
- Destructive dust is used

		ALTO SQ 650-3H	ALTO ATTIX 560-2H XC	ALTO ATTIX 550-2H	ALTO ATTIX 360-2H
Air flow rate	l/min.	3400	3600	3600	3600
Vacuum	mbar	230	230	230	230
Power Pmax	W	1500	1500	1500	1500
Piec	W	1200	1200	1200	1200
Mains connection	V/~ /Hz	230/1~/50-60	230/1~/50-60	230/1~/50-60	230/1~/50-60
Working noise	dB(A)	59	57	57	59
Container volume	l	64	45	45	27
L x W x H	mm	560 x 615 x 945	506 x 476 x 655	506 x 476 x 655	390 x 380 x 570
Weight	kg	30	16	16	10

Standard accessories	No.				
Suction hose, 27 mm dia., 3,5 m, AS 15325		•	•	•	•
Tool adapter 18195		•	•	•	•
Tube holder		•			
Filter bag/Disposal bag		• / - 60570	• / •	• / - 302001141	• / - 302001040

All units come with a filter element, cable holder and a 7,5 m rubber mains cable

Dust class **L**

Dust class **M**

Dust class **H**

Asbestos

Dusts from dust classes L, M and H including Asbestos may be carcinogenic dusts and dusts contaminated with germs and bacteria; for craftsmen such as roofers and painters.

Workshop-Set

Robust accessory set with stainless steel tubes and a long hose.



Workshop-Set, System 36	302000927
4 m suction hose, universal	25537
Curved hand tube, stainless steel	46691
2 suction tubes, stainless steel	15546
Professional floor nozzle, 360mm	60356
Crevice nozzle, plastic	6084
Diagonal tube nozzle, rubber	5067

Industrial floor set

The wide nozzle of this accessory set is perfect for cleaning large areas.



Industrial/floor set, System 36	63214
4 m suction hose, oil-resistant	61779
Curved hand tube, stainless steel	46691
2 Suction tubes, stainless steel	15546
Large capacity floor nozzle with rubber lips	15349

Hose set

Small set as addition to the accessories you already have.



Hose set, System 36	63210
4 m suction hose	25537
Curved hand tube, stainless steel	46691
Adapter	29457

or dust class H & Asbestos

a

**ACHTUNG
ENTHÄLT
ASBEST**

Gesundheits-
gefährdung bei
Einatmen von
Asbestfasern
Sicherheitsvorschriften
beachten
behälter
geschlossen halten



ALTO ATTIX 550-0H

- SoftStart
- AntiStatic System
- Accessory holder
- Tool deposit

ALTO ATTIX 360-2H

- Push&Clean – manual filter cleaning system
- Automatic on/off for electric tools
- Speed Governor
- SoftStart
- AntiStatic System
- Accessory holder
- Tool deposit



▶ ALTO ATTIX 360-2H
ALTO ATTIX 350-0H

ALTO ATTIX 350-0H

- SoftStart
- AntiStatic System
- Accessory holder
- Tool deposit
- Compact design

Suitable for vacuuming ASBESTOS in germany		ALTO SQ 650-1H	ALTO ATTIX 550-0H	ALTO ATTIX 350-0H
Air flow rate	l/min.	3100	3100	3100
Vacuum	mbar	230	230	230
Power Pmax	W	1200	1200	1200
Piec	W	1000	1000	1000
Mains connection	V~/Hz	230/1~/50-60	230/1~/50-60	230/1~/50-60
Working noise	dB(A)	67	65	67
Container volume	l	64	45	27
L x W x H	mm	560 x 615 x 945	506 x 476 x 655	390 x 380 x 570
Weight	kg	29	16	10

Standard accessories	No.			
Suction hose, 36 mm dia., 3 m	46948	•	•	•
Curved hand tube, stainless steel	46691	•	•	•
Diagonal tube nozzle, rubber	5067	•	•	•
Tube holder		•		

All units come with one filter bag, a filter element, cable holder and 7,5 m rubber mains cable.

Asbestos

Asbestos is a group of naturally occurring inorganic crystalline silicates which are found in the form of fibres. When subjected to mechanical loads these fibres can split, producing ever thinner fibres, which can consequently be deposited in the lungs.

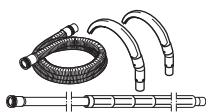
Today asbestos is not used any more, but a lot of materials and buildings that contain asbestos have to be disposed or renovated. By breaking, beating, drilling, sawing, grinding and milling the asbestos fibres are released. This dust has to be vacuumed directly at the source! Vacuuming asbestos requires the use of an approved H-class safety vacuum cleaner.

Further on in Germany, asbestos dusts may only be picked up with cleaners of dust class H, which meet the additional requirements for asbestos.

picked up using these vacuum cleaners. These include all health-endangering dusts with OEL-values, all bacteria. Application: industry and trade sectors as chemicals, plastics, pharmaceuticals, mining, paper and

Pipe cleaning set

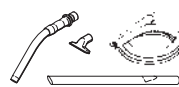
For cleaning the pipes at the wall or under the ceiling.



Pipe cleaning set, System 38	63215
2.5 m anodised aluminium extension tube	15340
Tube cleaning nozzles for 70-120 mm dia.	7964
for 120-220 mm dia.	8054
4 m suction hose	15365

Heating boiler set

A set for special applications to get the dust out of deep slits.



Heating boiler cleaning set, System 36	60430
Hand tube, stainless steel	46691
Universal nozzle, aluminum	5145
Crevice nozzle, long metal	17836
3 m suction hose	46948

Industrial set

Accessory set for plenty of dust and debris.



Industrial set, System 50	63216
Anodised aluminium extension tube	15335
Industrial floor nozzle, aluminum	15343
Replacement rubber lips	15346
Crevice nozzle, special plastic	7102
Coarse dirt nozzle, aluminum	41100
4 m suction hose	15358

Safety Vacuum Cleaner



ALTO DYNAMICS 440M/B1

- Automatic filter cleaning system for constant suction power
- Interface for remote control
- Side channel compressor
- Microprocessor control
- Container emptying with set-down mechanism

ALTO DYNAMICS 840 M/B1 additionally:

- Two side channel compressor



▶ ALTO DYNAMICS 840 M/B1
ALTO DYNAMICS 440 M/B1



▶ ALTO TURBO D-X/B1
ALTO TURBO D-B1

ALTO TURBO D-B1

- Durable three-phase motor
- Stainless steel container, removable
- Sturdy chassis
- Mobile and quiet

ALTO TURBO D-X/B1 additionally:

- ATEX compliant in zone 2



The ATEX directive

ATEX is a directive of the EC (94/9/EC) and it determines the general tasks of protection that has to be secured by the manufacturer or the user of a machine. All products that are designated to be used in explosive areas are affected by the ATEX directive. It is in force since July 1, 2003. The ATEX-approval always relates to the zone in which the machine is intended to be used.

Three-phase		ALTO DYNAMICS 840 M/B1	ALTO DYNAMICS 440 M/B1	ALTO TURBO D-X-B1	ALTO TURBO D-B1
Air flow rate	l/min.	12900	7200	5200	5500
Vacuum	mbar	230	230	200	220
Power Pmax	W	8000	4000	2000	2400
Piec	W	5600	3300	1800	2200
Mains connection	V/~/Hz	400/3~/50	400/3~/50	400/3~/50	400/3~/50
Working noise	dB(A)	67	64	61	61
Container volume	l	100	100	85	85
L x W x H	mm	1240 x 735 x 1370	1240 x 735 x 1370	630 x 860 x 980	630 x 860 x 980
Weight	kg	245	195	80	76
Standard accessories		No.			
Filter bag/Disposal bag		- / • 29727	- / • 29727	• / - 33209	• / - 33209
Filter element		• 34931	• 34931	• 41164	• 41164
Cable holder				•	•
Mains cable, rubber		• 5 m	• 5 m	• 5,5 m	• 5,5 m

Dust class **L**

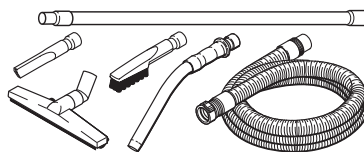
Dust class **M**

Dust class **Type 22**

Dusts from dust classes L and M as well as explosive dusts may be picked up and/or inflammable dusts in zone 22 (previously zone 11) and wood dust. Application: industry and trade sectors as chemicals, wood, plastics, metal.

The ATEX directive

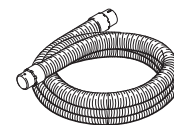
For safety vacuum cleaners tested to application category BIA B1, the law requires that only approved special conductive accessories, that are unique to the machine, are used. (Further B1 accessories can be found in our main catalogue or at www.alto-online.com).



B1-Set

A complete accessory kit.
B1 set for Type 22 vacuum cleaners
4 m suction hose 36 mm, anti-static, curved hand tube, extension tube, large capacity floor nozzle, crevice nozzle, brush nozzle

48907



B1-Hose

Swallows lots of dust and debris.
50 mm suction hose

43245

s for dust class Type 22



ALTO SQ 890-3M/B1

- Two motors
- Long life EC-drive
- Automatic on/off for pneumatic and electric tools
- Speed governor
- Microprocessor control
- Filter cleaning system
- Self-check system
- Drain hose

▶ ALTO SQ 890-3M/B1

ALTO SQ 690-3M/B1

- Long life EC-drive
- Automatic on/off for pneumatic and electric tools
- Speed governor
- SoftStart
- Stainless steel container



▶ ALTO SQ 690-3M/B1

ALTO SQ 691-9M/B1

- Approved for handling gun powder
- Patented wet filtration system
- Long life EC-drive
- Speed governor
- SoftStart
- Stainless steel container, tilting



▶ ALTO SQ 691-9M/B1

Single-phase		ALTO SQ 890-3M/B1	ALTO SQ 690-3M/B1	ALTO SQ 691-9M/B1
Air flow rate	l/min.	2 x 3150	3400	3400
Vacuum	mbar	230	250	250
Power Pmax	W	2 x 1500	1500	1500
Piec	W	2 x 1200	1200	1200
Mains connection	V/~ /Hz	400/3N~/50-60	230/1~/50-60	230/1~/50-60
Working noise	dB(A)	67	59	59
Container volume	l	80	64	64
L x W x H	mm	700 x 615 x 950	560 x 615 x 945	560 x 615 x 945
Weight	kg	32	25	27

Standard accessories	No.			
Suction hose, 36 mm dia., 4 m	44193			•
Suction hose, 27 mm dia., 3,5 m	48132		•	
Hand- & Extension tubes, stainless steel				•
Large capacity floor nozzle	302000369			•
Tool adapter	18195		•	
Filter bag		• 61603	• 60570	
Filter support bag	60676	•		
Mains cable, rubber		• 6,5 m	• 7,5 m	• 7,5 m

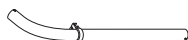


The EC-drive combines the benefits of a universal motor with the advantages of the three-phase drive:

- Compact construction
 - 230 V Single-phase drive
 - Very long life time
 - High safety due to the fact that it creates no sparks
- As the three-phase drive, it also works without carbon brushes. This in combination with the long-life bearings, means there is nearly no wear and tear. Further on, it produces no sparks offering high safety when dealing with explosive dusts. The efficiency is also much better compared to a universal drive.

ed up with these vacuum cleaners. These include all non-carcinogenic dusts with OEL values > 0.1 mg/m³

metal, pharmaceuticals, paper and textiles; for craftsmen such as carpenter, bakers and floor layers.

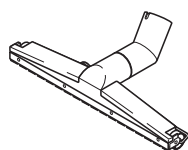


B1-Tube

Sturdy extension tube for the 50 mm dia hose. Made of galvanised stainless steel.

Extension tube 1100 mm long

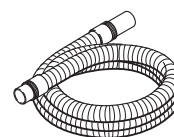
33609



B1-Floor nozzle

Wide tool – perfect for cleaning large areas. Industrial roller nozzle, 50 mm dia.

42834



B1-Hose

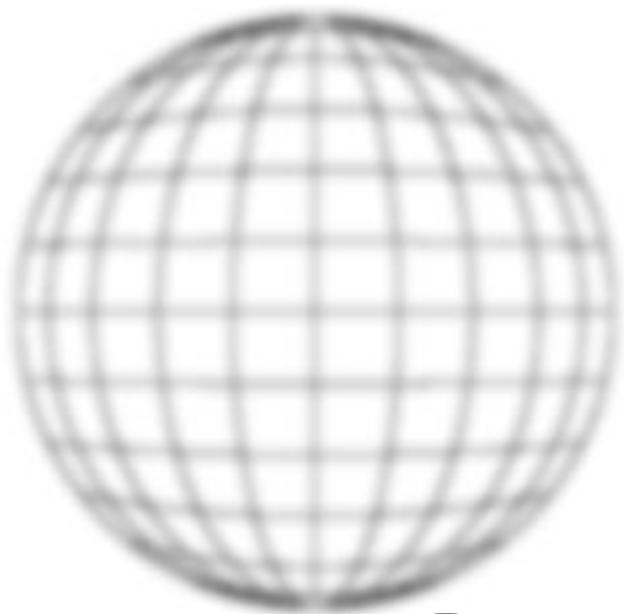
Long hoses that increase your flexibility and your mobility.

Chip suction hose, 50mm dia.

4 m	42825	16 m	63712
8 m	63710	20 m	63713
12 m	63711		



Health & Safety Vacuum Cleaners Taking advantage



- Health & Safety vacuum cleaners for all dust classes
- Reliable and durable
- Economical use
- Qualified safety
- EC Longlife drive



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ALTO is one of the world's biggest suppliers of powered cleaning equipment with a turnover of app. 330 million € and 1800 employees. We are located in all main European countries, US and Asia with our headquarters in Denmark and production facilities in Germany, Denmark, Hungary, Singapore, China and the US.

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We supply quality high pressure washers, vacuum cleaners and floor care equipment to agriculture, automotive and industrial companies, cleaning contractors and private consumers. ALTO is a market and customer driven company with focus on innovation and growth. We believe in long lasting and developing relationships with our customers, suppliers and employees.

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