

DUST COMMANDER

by Sulaco A.I.R Works

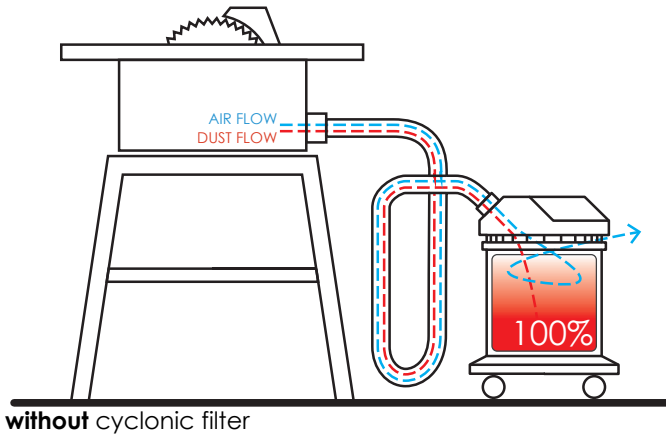


DUST COMMANDER Filter installation, operation and maintenance manual



We thank you for putting your trust in us by buying the DUST COMMANDER cyclonic filter.

Caution: Read this manual and the safety instructions in their entirety before installing and using the filter. This manual contains important information for using and maintaining your DUST COMMANDER filter safely.



The DUST COMMANDER CLC, DLX & HD are cyclonic filters which may be used in combination with a vacuum cleaner in the home or in industry.

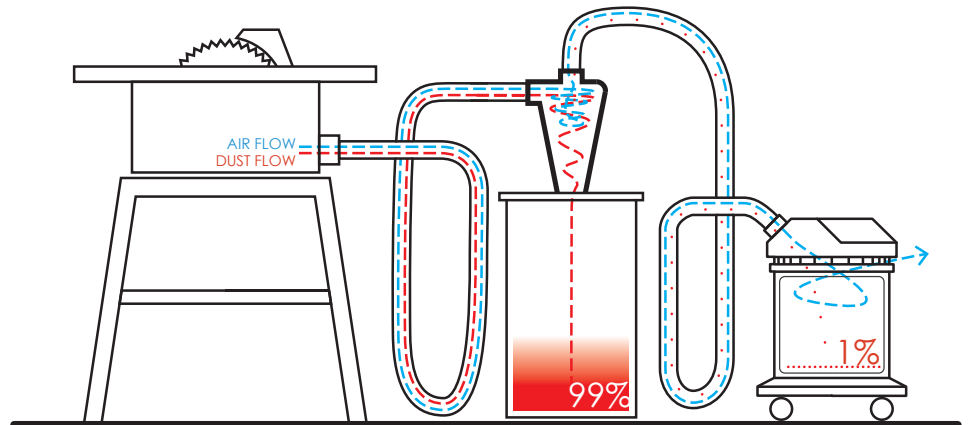
When installed upstream of your vacuum cleaner, the cyclonic filter separates wet and dry dust particles, so limiting the clogging of your vacuum cleaner's filters and increasing their service life. DUST COMMANDER CLC, DLX & HD contain no moving parts or consumables requiring regular replacement.

Once installed in a sealed container, 99% of the vacuumed particles will be removed before reaching your vacuum cleaner's filter.

The DUST COMMANDER CLC & DLX are made of injected plastic, and are ideal for working with wood, plastics and aluminium, and for use in interior renovation, industrial cleaning, etc.

The DUST COMMANDER HD, is made of carbon steel, and will meet the requirements for industrial use.

without cyclonic filter

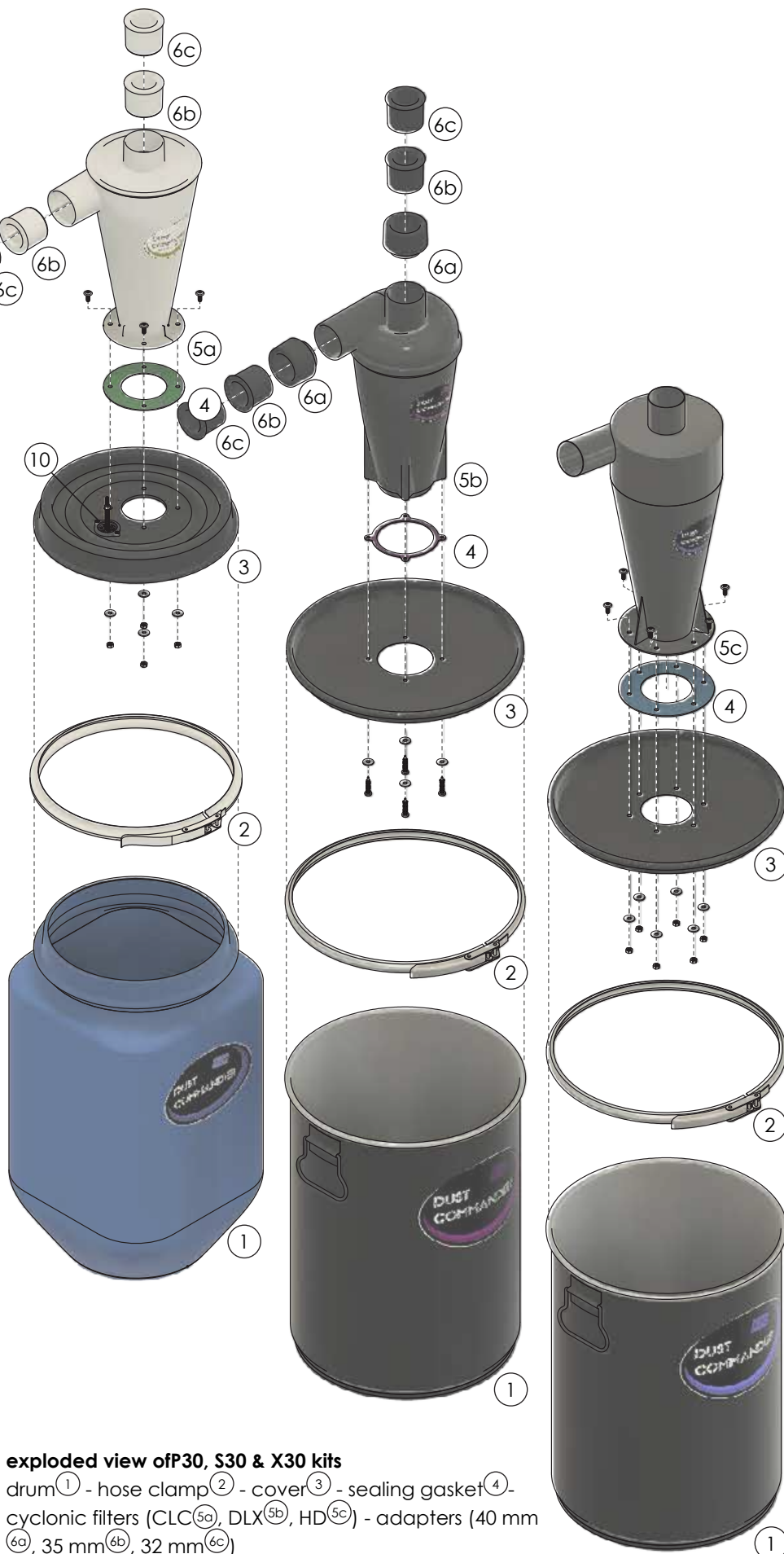


with cyclonic filter

How it works:

A mixture of air and dust passes through the filter via the tangential inlet. The shape of the filter is designed to generate a vortex which makes it possible to evacuate particles heavier than air through the lower discharge port through gravity and so allow air to pass through the upper outlet.

Installation:



exploded view of P30, S30 & X30 kits

drum (1) - hose clamp (2) - cover (3) - sealing gasket (4) - cyclonic filters (CLC (5a), DLX (5b), HD (5c)) - adapters (40 mm (6a), 35 mm (6b), 32 mm (6c))

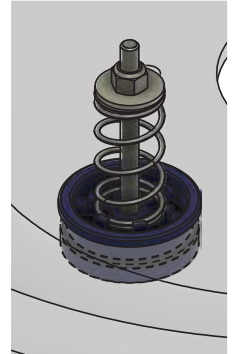
A / Selecting the receptacle

The DUST COMMANDER must be attached to an airtight receptacle that will collect the filtered particles. This receptacle must be 100% sealed. The slightest leakage of air will cause a pressure loss that will affect the efficiency of the filter.

Sulaco A.I.R Works can only guarantee the efficiency of the filter if it is installed on a plastic or metal container.

If you choose to construct a wooden container (or use any other porous material) this must be sealed with several layers of varnish or paint.

If you are using a plastic bucket or barrel, this will need to be reinforced to avoid excessive deformation if the suction pipe becomes obstructed. It is also possible to install a safety valve on the cover of the plastic barrel (ref. DUST-SP) to limit any contraction of the container.

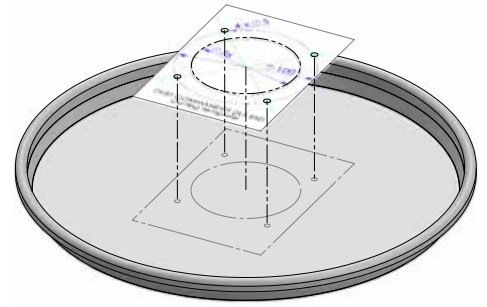


Sulaco A.I.R Works supplies complete kits (cyclonic filter + drum) ready for use under references DUST P30, DUST S30 & DUST X30 as shown here:



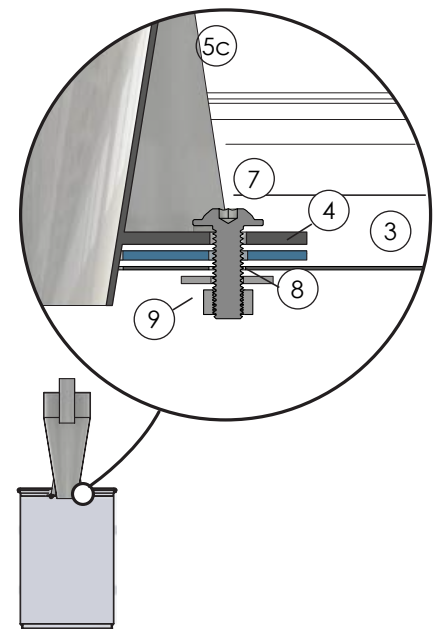
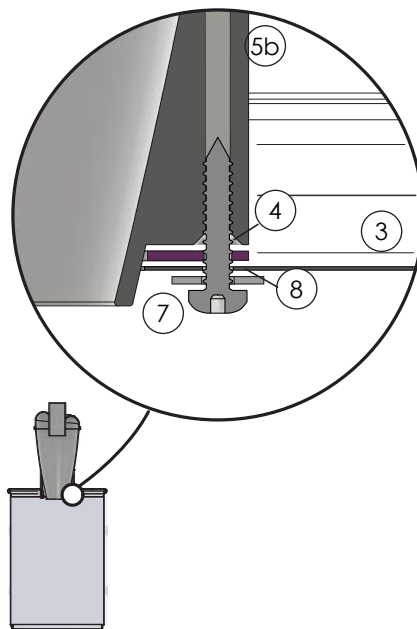
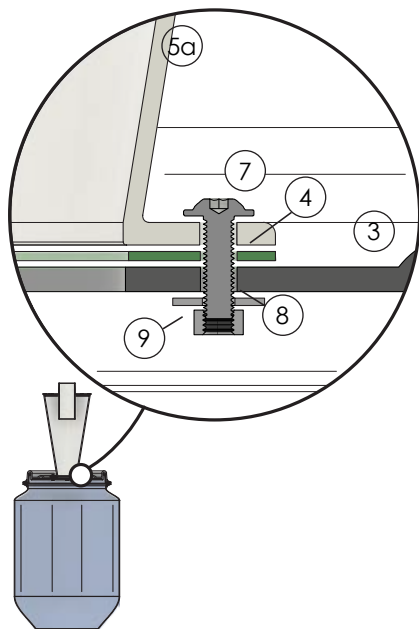
B / Drilling the container for filter / cover assembly.

You will need to drill holes in the cover to assemble the filter. An adhesive cutting guide (Cutting Template) is provided for this purpose. Peel the adhesive paper from the cutting guide and attach it to the cover as shown in the diagram opposite:



The holes for the screws are of a standard diameter of 5mm to 6mm depending on the model, easily made with a drill. On the other hand, the circular central hole of a larger diameter, should be made using a jigsaw, nibbler or a standard or digitally controlled milling machine.

A rubber gasket⁽⁴⁾ is provided as part of the assembly kit to provide a perfect seal between the filter and the receptacle.

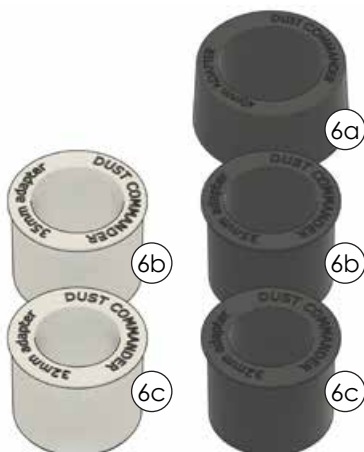


detailed view of the filter / cover assembly of P30, S30 & X30 kits

cover⁽³⁾ - sealing gasket⁽⁴⁾ - cyclonic filters (CLC^(5a), DLX^(5b), HD^(5c)) - screws⁽⁷⁾ - washers⁽⁸⁾ - nut⁽⁹⁾

C / Connection of suction hoses

Your vacuum cleaner should be connected to the top outlet of the filter while the suction hose should be connected to the tangential inlet.



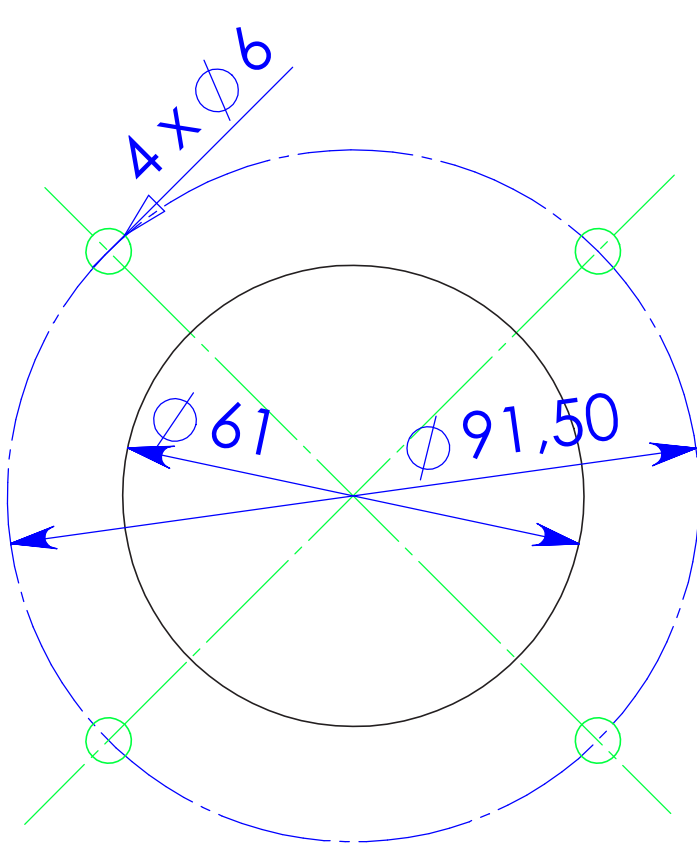
		dimensions in millimeters		
		CLC	DLX	HD
tangential inlet duct	internal diameter	50	50	45
	external diameter	55	55	50
top outlet duct	internal diameter	50	50	45
	external diameter	56	55	50
supplied adapters	32mm ^(6c)	2	2	-
	35mm ^(6b)	2	2	-
	40mm ^(6a)	-	2	-

Safety instructions

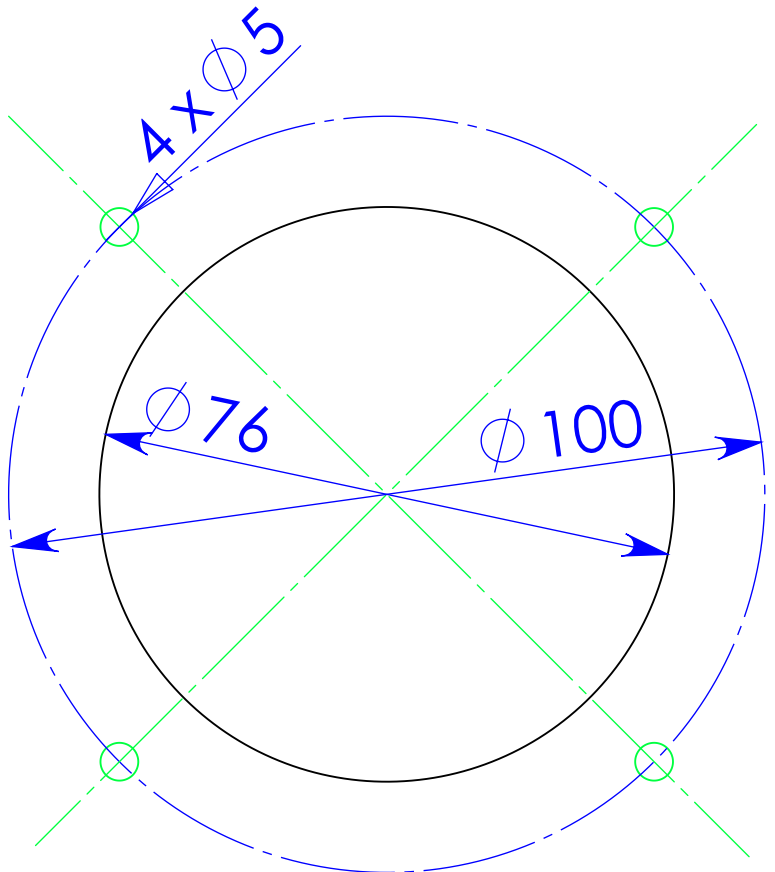
- No smoking or burning materials such as cigarettes, matches or ashes should be vacuumed when using the cyclone separator filter.
- No liquid or combustible gas should be vacuumed with the cyclonic separator filter.
- Do not use this cyclonic filter near any flammable material (gasoline, alcohol, solvents, paints, natural gas, hydrogen, coal dust, magnesium dust, grain dust, aluminium dust, sugar / flour dust or gunpowder).
- To avoid any risk to health no toxic material should be vacuumed without the use of a HEPA filter.
- Wood dust is highly flammable. Never introduce sparks or other sources of ignition into the dust receptacle.
- Always keep a fire extinguisher nearby when using the filter.
- This filter can be used for the extraction of non-flammable liquids.

Troubleshooting instructions

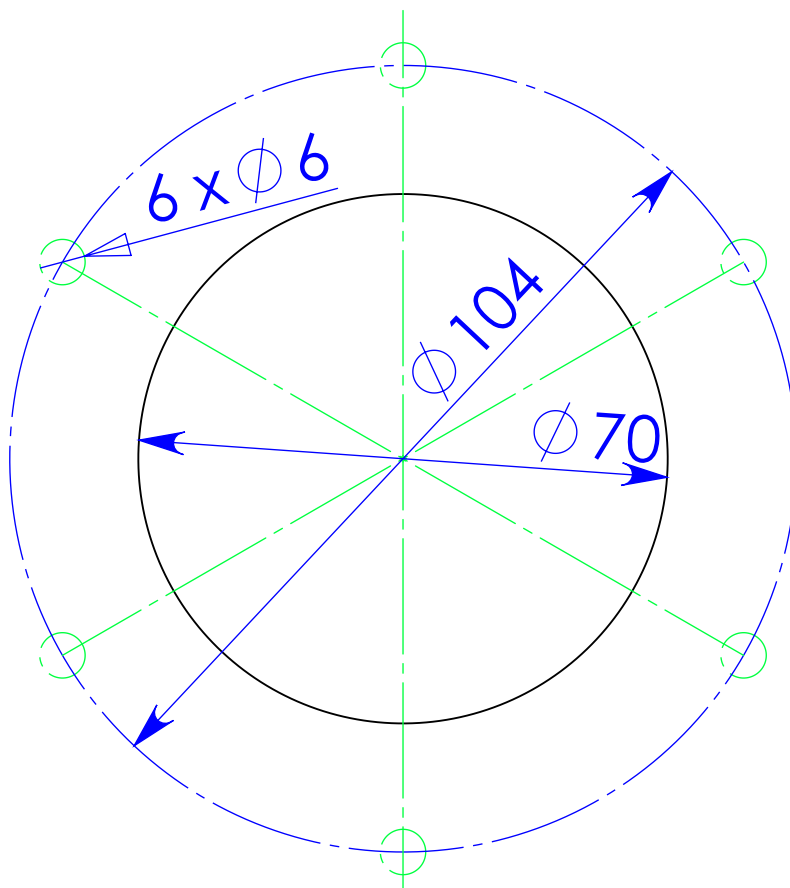
- Low suction air volume: the internal filter of your vacuum cleaner is blocked or the suction hose is blocked.
- Low filtration efficiency / only a small amount of particles / dust is deposited in the receptacle: air leakage. Check your system for leaks. The filter / container / suction hose assembly must be 100% sealed. Even a very slight leak will affect the efficiency of the filter. Avoid the use of porous wooden containers.



DUST COMMANDER CLC
Cutting template



DUST COMMANDER DLX ESD
Cutting template

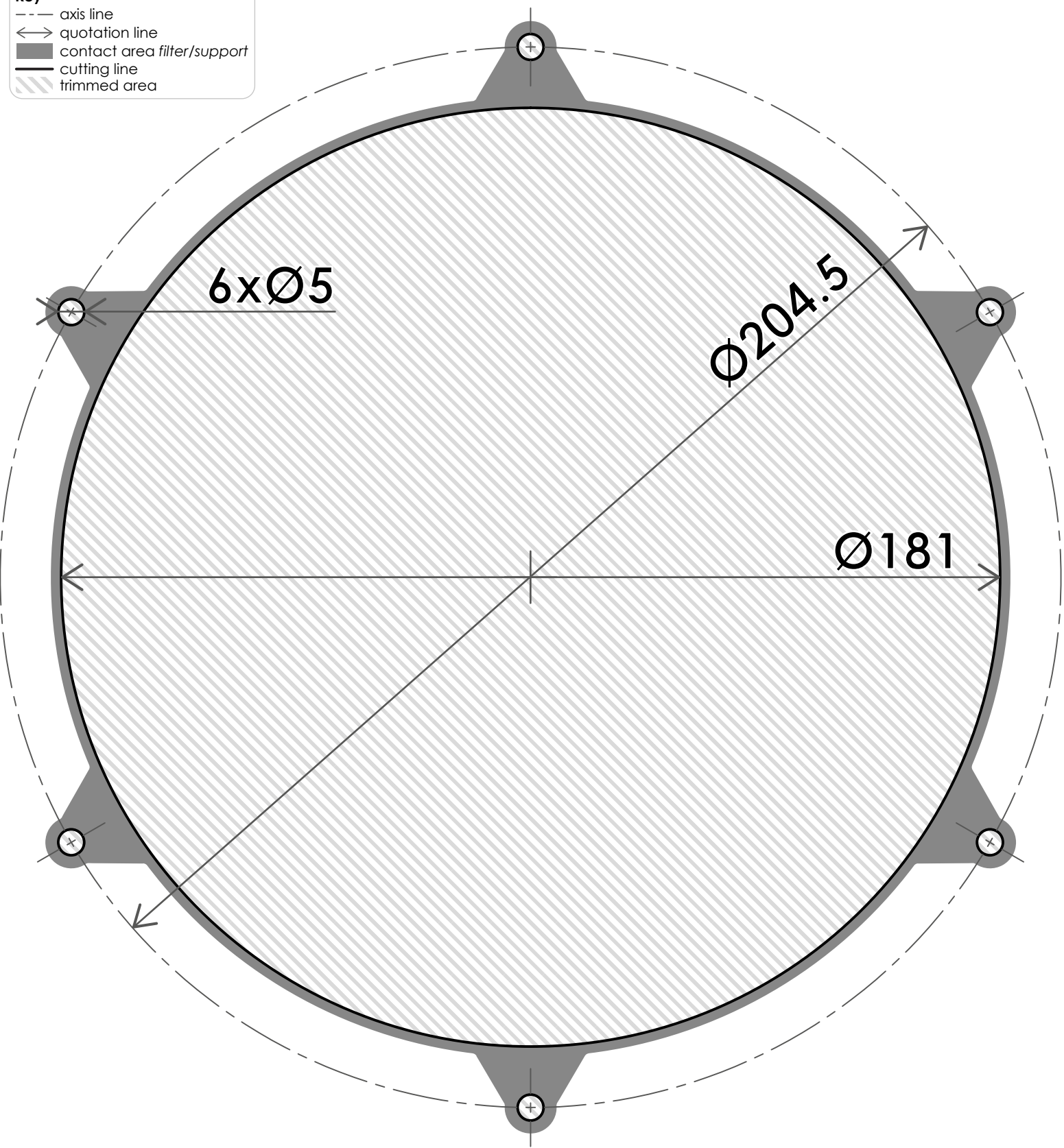


DUST COMMANDER HD
Cutting template

PRINT TO SCALE
0 1 2 3 4 5cm

Key

- axis line
- ↔ quotation line
- contact area *filter/support*
- cutting line
- ▨ trimmed area

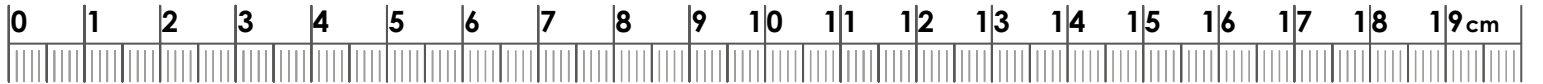


DUST COMMANDER® XL

Cutting template

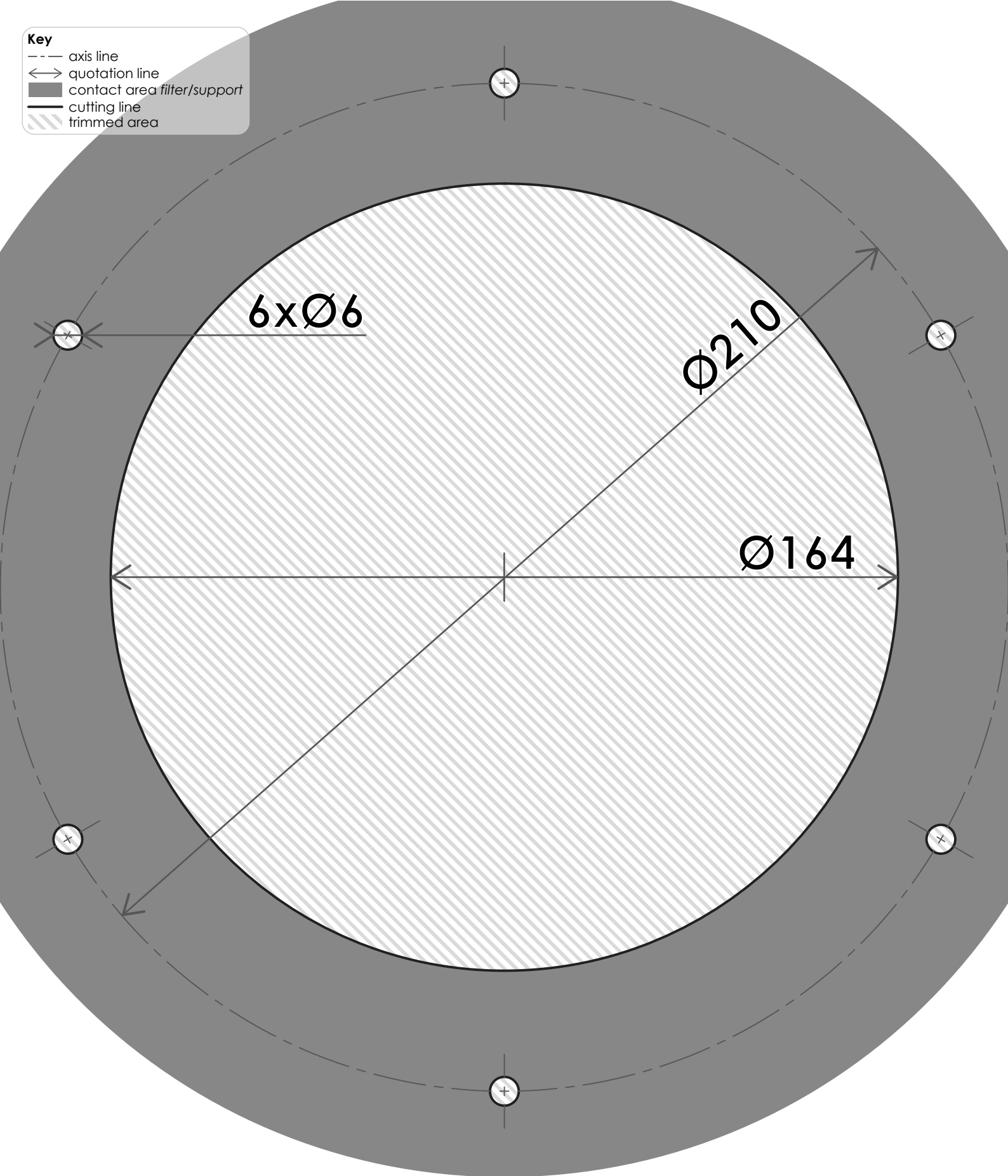
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for more informations visit our website : www.dust-commander.com



Key

- axis line
- ↔ quotation line
- contact area filter/support
- cutting line
- ▨ trimmed area



DUST COMMANDER[®]



Cutting template

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