

# Oil free air compressor

## Description



**Scroll compressor** – Ultra silent technology: 45 dB(A)

**Oil free** – No impurities, compatible with high purity gas generators

**No maintenance** - up to 8000 hours without parts replacement

**Smooth running** – No vibration, can be located on the lab

**Compact** – Compatible with lab environment

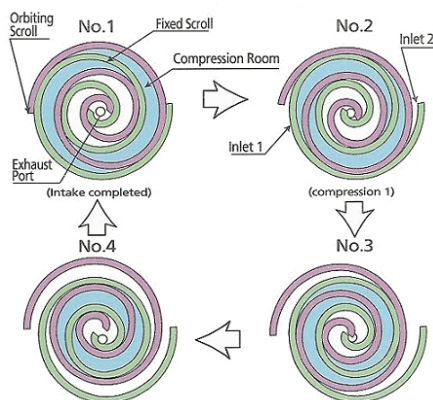
**Wheels** – Can be easily located where it has to go

**Reliable** - Less moving parts than reciprocating compressors (about 70%)

**Efficient** - less power consumption

A scroll compressor uses two interleaving scrolls to compress air. Devices using this technology are known for operating more smoothly, quietly, and reliably than conventional compressors. Unlike pistons, the orbiting scroll's mass can be perfectly counterbalanced, with simple masses, to minimize vibration. The scroll's gas processes are also more continuous. Additionally, a lack of dead space gives an increased volumetric efficiency.

## Scroll compressor principle



Rotating the orbiting scroll within the stationary scroll causes a crescent shaped compression cavity. This crescent shaped compression cavity moves around the point of symmetry reducing the cavities size and exhausting the compressed air out the center of the stationary scroll.

The compression process occurs over approximately 2 to 2½ rotations of the crankshaft, compared to one rotation for rotary compressors, and one-half rotation for reciprocating compressors. The scroll discharge and suction processes occur for a full rotation, compared to less than a half-rotation for the reciprocating suction process, and less than a quarter-rotation for the reciprocating discharge process. Reciprocating compressor have multiple cylinders (typically, anywhere from two to six), while scroll compressors only have one compression element. The more steady flow yields lower gas pulsations, lower sound and lower vibration of attached piping, while having no influence on the compressor operating efficiency.

## Specifications

Motor rated output [kW] (HP)	0.75 (1)
Operation control	Pressure switch (automatic start-stop)
Working pressure [MPa] (bar)	0.6 - 0.8 (6-8)
Free air delivery [L/min] (cfm)	74 (2.6)
Air receiver capacity [L]	5
Noise level at 1.5m from front [dB] (A)	45
Installation	Indoor
Outlet gas connection	G1/4 [ball valve]
Operating temperature	2 to 40° C
Operating altitude	From sea level to 4000m
Power consumption :	750 Watt
Power requirements :	230V/50Hz
Dimensions [cm] :	33 x 59 x 69(WxDxH)
Shipping Dim [cm] :	50 x 70 x 80(WxDxH)
Net weight [kg] :	50
Shipping weight [kg]:	70

## Options – Accessories – Spare parts

Intake filter set (cartridge filter) to be replaced after 4000 hours



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