



# **FORZA**

## **Compressor Z**

***Technical Sheet***

***V1 12024***

***Model Z30P16***



# FORZA

## Compressor Z

**High pressure compressor designed to work with laser machinery.**

### COMPRESSED AIR

FORZA Compressor Z 30 is a complete equipment 4-in-1 air compressor: Tank, compressor, dryer, and filters. Ensures clean compressed air output at constant pressure and flow thanks to its Variable Speed Control (VSC) motor technology.

It is ideal for working with laser machinery since compressed air is required at a constant pressure and flow to prevent damage and obtain clean cuts, eliminating any burrs produced.

Specific characteristics

FEATURE	DETAIL
Application	Compressed air
Maximum outlet pressure	16 bar   232 psi
Output air flow/quantity	2.4 m³/min   84.8 cfm
Main engine power	22 kW   30 HP
Air tank volume	480 L   126.8 gal
Working voltage	220V 3ph 50/60 Hz
Ideal laser machine to supply	Greater than 3000W



## Special Features

### Ultra High Pressure Technology



All components and connections are designed to work at high pressures without any difficulty.

### Variable Speed Driver (VSD)



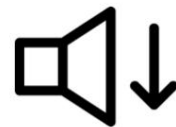
Variable Speed Control technology maintains constant output pressure through varying engine speeds.

### 4 in 1



It includes a complete 4-in-1 air compression station: Tank, Compressor, Dryer and Filters.

### Quiet operation



Air compression is generated by a screw-driven motor, which guarantees quiet operation compared to other types of compressors.

### Multi-stage filtration



It features several stages of filtration to ensure clean, pure compressed air at the outlet, which is necessary for working with laser cutting machines.

### HMI Touch Screen

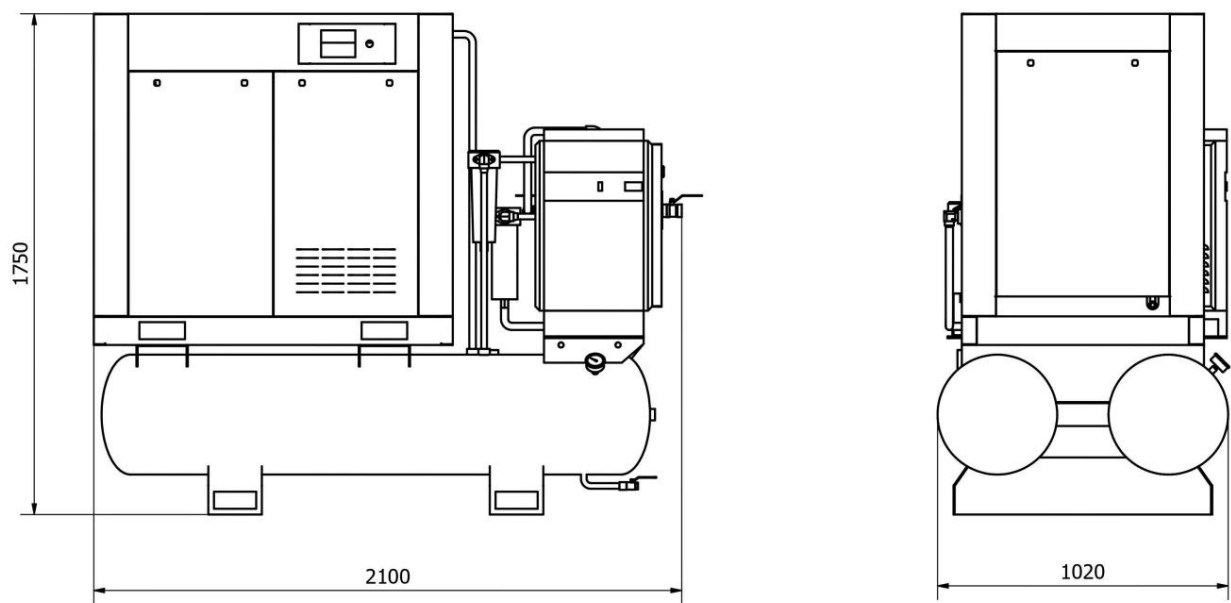


It features a built-in touchscreen as a control interface between the user and the machine. The controls are intuitive and operator-friendly.

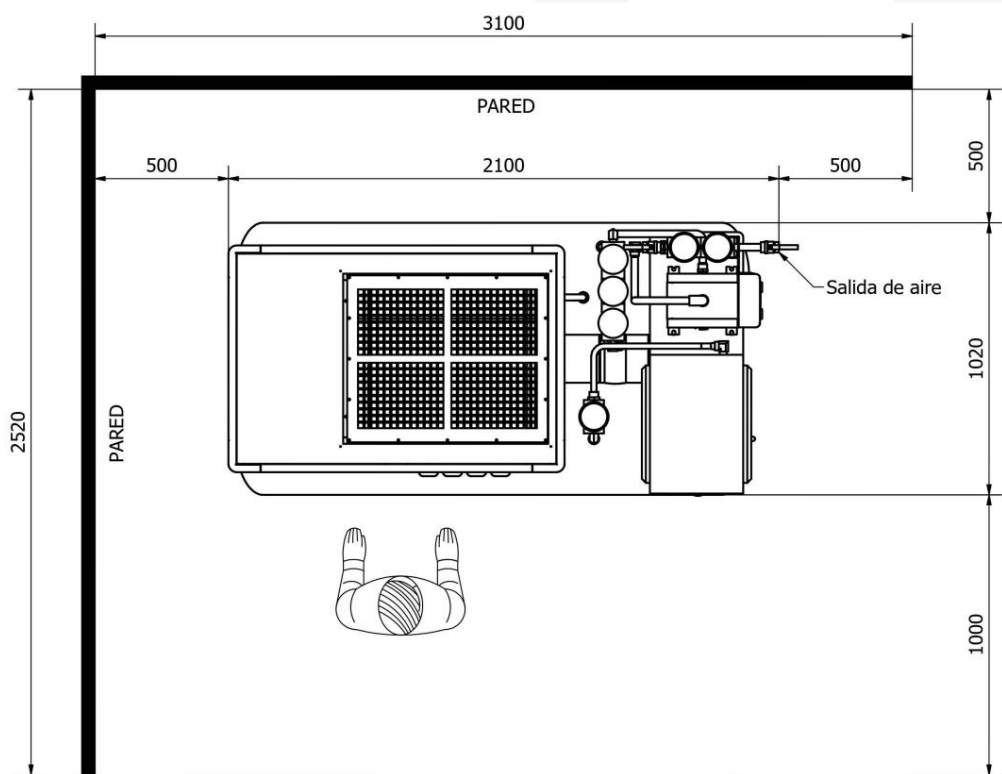
General Specifications

SPECIFICATION	DETAIL
Model	FORZA COMPRESSOR Z - Z30P16
Compressor technology type	Screw thrust
Means of supply	Air
4-in-1 set	Compressor, tank, dryer, filters
Refrigeration system	By air
Output air flow/quantity	2.4 m3 /min   84.8 cfm
Maximum outlet pressure	16 bar   232 psi
Output pressure accuracy	±0.1 MPa
Maximum air humidity in supply	< 60%
Nominal atmospheric pressure	0.1 MPa   14.5 psi
Working temperature	2 – 45 °C
Noise level	ÿ69 dB
Vibration level	ÿ7 mm/s
Male outlet thread diameter	R1”
Outlet air purity level	ÿ3 ppm
Main engine power	22 kW   30 hp
Rated speed of the main engine	3000 rpm
Main engine start mode	Variable speed drive (VSD)
Motor insulation class	F
Main engine weight	60 kg
Air tank volume	480 L   126.8 gal
Working voltage	220V 3ph 50Hz-60Hz
Maximum current per line	65A @ 220VAC 3ph
Required wire gauge of the box breaker	3 x 4AWG @ 220VAC 3ph
	+1 x 10AWG Ground
Recommended breaker for the machine	80 A @ 220VAC 3ph
Weight of the complete equipment	600 kg
Complete equipment measurements	2100 x 900 x 1750mm   2.0x3x1.7m
IP protection	IP55
Certifications	CE, RoHS

Machine measurements

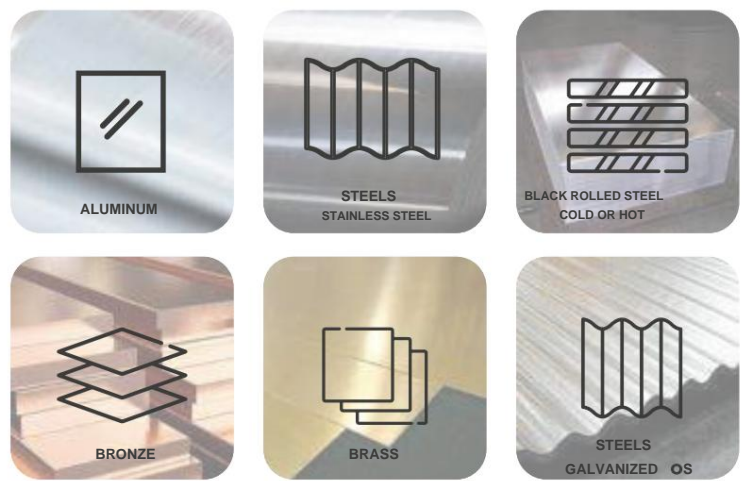


Space required



## Applicable materials

All materials that can be cut with air are described; cutting thicknesses depend on the power of the laser equipment.



Black steel should be cut with oxygen, however thin thicknesses can be worked with air.

## Cutting thicknesses by material



Thicknesses depend on the power of the machine's laser; the following table corresponds to work with a 6000W machine.

MATERIAL	NOMINAL THICKNESS WITH AIR
ASTM A36 ("Black or Mild") Steel	3mm   1/8in
ASTM 304 STAINLESS STEEL	12mm   15/32in
STRUCTURAL ALUMINUM ASTM 6061	9mm   23/64in
BRASS C27200	7mm   9/32in
Galvanized Steel ASTM A653	3mm   1/8in















**Packing List:**

- ☐
- 1 x Compressor Z 30 (Tank, Compressor, Dryer, Filters)
-  (1)

**-POWER CABLES AND HOSE-**

- ☐
- 7m x 3x4AWG + 1x10AWG (T:Eye-Tip) @220VAC 3ph
- 
- ☐
- 1 x PU hose 10m x 8mm
- 

**-INSTALLATION KIT-**

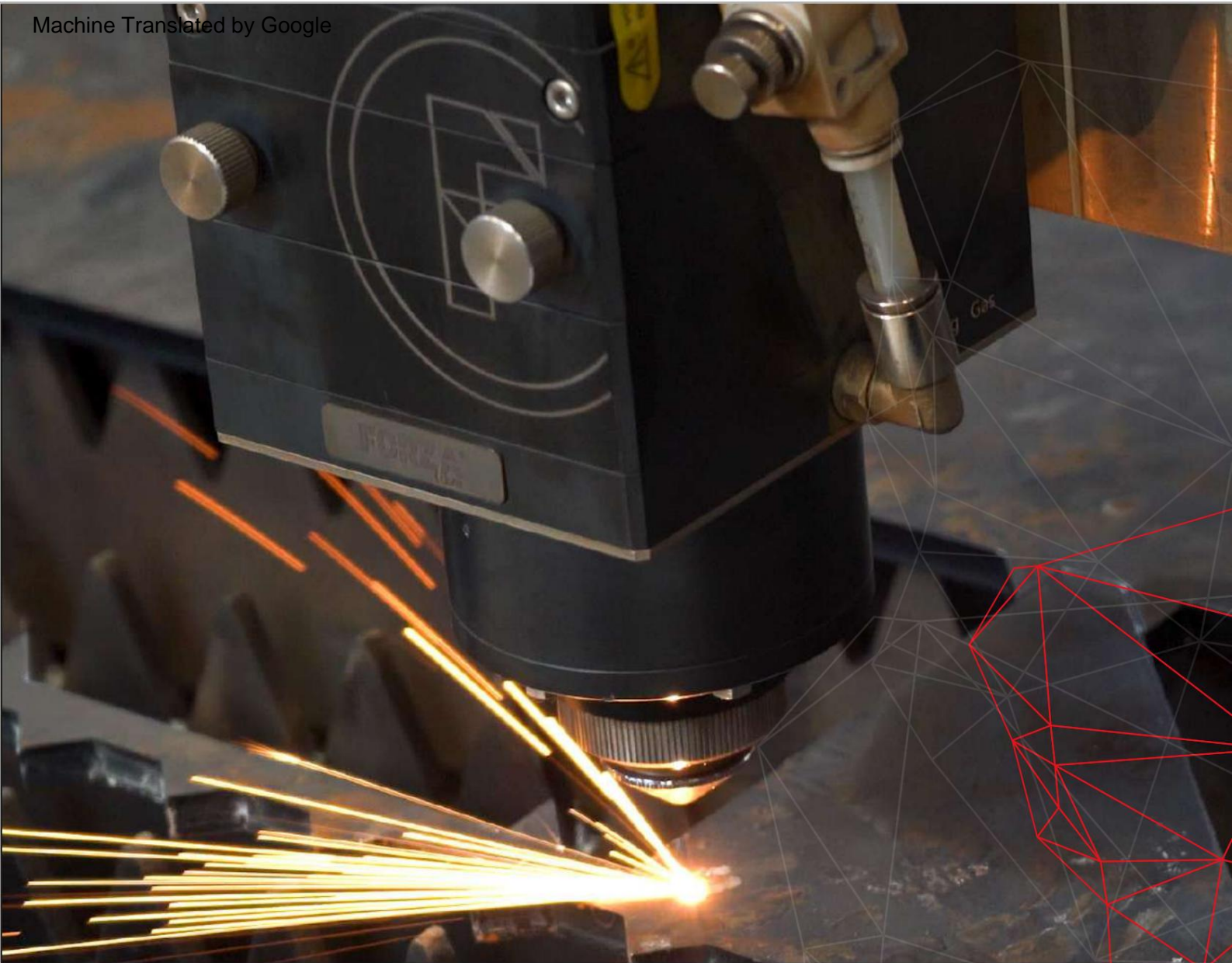
- ☐
- 1 x 1in - 1/2in Reduction
- 
- ☐
- 1 x Reduction 1/2 in - 1/4 in
- 
- ☐
- 2 x 1/4 in. Steel Hex Nipple
- 
- ☐
- 1 x 1/2 in steel tee
- 
- ☐
- 1 x 1/4 in union tee
- 
- ☐
- 1 x 1/2 in Ball Valve
- 
- ☐
- 1 x Reducing valve
- 
- ☐
- 1 x Pressure gauge
- 
- ☐
- 3 x Quick coupling 8mm x 1/2 in thread
- 
- ☐
- 3 x Quick coupling 8mm x 1/4 in thread
- 
- ☐
- 1 x Parrot beak key
- 
- ☐
- 1 x Blow Gun
- 
- ☐
- 1 x Roll of 8mm PU spiral hose
- 
- ☐
- 1 x Set of terminals
- 

Item	Measures	Net Weight	Gross Weight	CBM
 (1)	W: 2100mm L: 900mm H: 1750mm	600kg	650kg	3.3



## Manufactured Parts:





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