

## Portable Drilling Unit For Aerospace Industry

**SUGINO**  
SUPER! TECHNOLOGY

# PNEUCON FEEDER

A drilling unit specifically engineered for the Aerospace Industry, powered with a durable, high torque air motor. Designed for compact and lightweight, The drilling unit is equipped with years of SUGINO's drilling technology applied for easy utilization.



### Features

#### 1. All Air – Driven

On board adjustments for the air feed and rotation enables laminated materials to be drilled efficiently.

#### 2. High Precision Spindle Construction

Consistent drilling results are delivered with the use of high precision bearings.

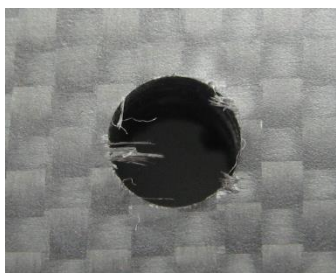
#### 3. Control Delaminating and Burr Generation.

A two-step speed control can provide low feed drill mode during the exit of the drill to minimize the occurrence of burrs at break through and material delamination.

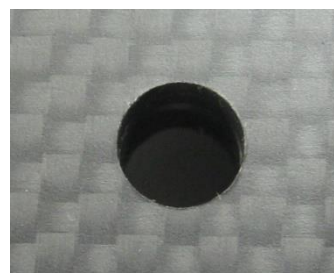


### Case of drilling to CFRP

Without Pre-exit Low Feed

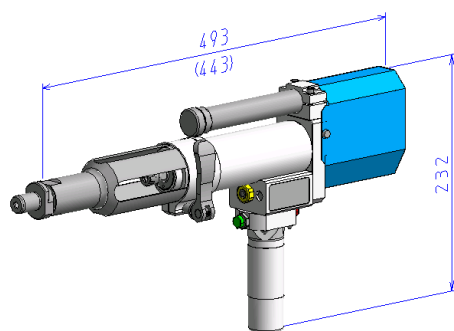


With Pre-exit Low Feed

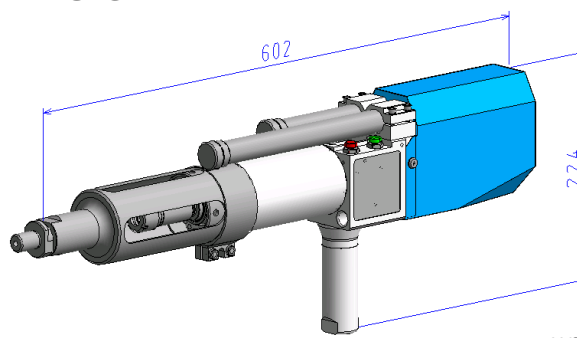


## Dimensions

### CF2P



### CF3P



unit:mm

- Note. 1. The figures in parentheses are size of "CF2P-1030C" and "CF2P-1022C".  
 2. The figures are reference size. The size is different according to the spindle model and length of drill.

## Specifications

Specs. Model	Spindle speed (no load) min <sup>-1</sup>	Chuck type (Collet Chuck)	Chucking capacity mm	Max. Drilling size			Operating air pressure MPa	Air consumption		Stroke mm	Air motor output kW	Thrust N (kgf)	Weight kg
				Ti*	Al*	CFRP*		No load m <sup>3</sup> /min(ANR)	Max. load m <sup>3</sup> /min(ANR)				
CF2P-1030C	3,000~4,200	Collet Spindle ER-16	Max. φ 10	—	φ 8	φ 8	0.6 <sup>+0.1</sup> <sub>0</sub>	0.6	0.6	Max.50	0.5	590 (60)	3.5
CF2P-1022C	2,200~3,080			—	φ 10	φ 10							
CF2P-1316	1,600~2,240	Collet holder ER-20	Max. φ 13	—	φ 11.5	φ 11.5		0.5	0.5	Max.50 Option Max.70	0.4		4
CF2P-1305	550~770	Collet holder ER-25	Max. φ 16	φ 6.5	φ 13	φ 13							
CF3P-1316	1,600~2,240	Collet holder ER-20	Max. φ 13	φ 8	φ 13	φ 13	0.6 <sup>+0.1</sup> <sub>0</sub>	0.25	0.6	Max.80	0.4	880 (90)	6
CF3P-1305	550~770	Collet holder ER-25	Max. φ 16	φ 8	φ 13	φ 13							
CF3-1302	150~210			φ 13	φ 16	φ 16		0.4	0.4				

- Note1. Maximum capacity drill size will depending on input operating air pressure. (Operating air pressure: 0.6MPa)  
 2. To achieve the maximum power, it is necessary for the spindle to progress forward 10mm or more.  
 3. Nose piece and mist tank are option. Nose piece and mist tank are not contained in the weight.  
 4. The drilling capacity shown above is for a depth equivalent to the drill diameter times two.  
 5. To select your model, refer to the work piece configuration, material, cutting properties, diameter of the hole and rotation speed. (cutting speed)  
 6. The no load rotational speed is a range as shown above by the property of air motor.  
 The spindle speed decreases by the situation of the drilling load.  
 7. Ti \* : Titanium (Ti-6Al-4V), Al \* : Aluminum, CFRP\* : Carbon Fiber Reinforced Plastic

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