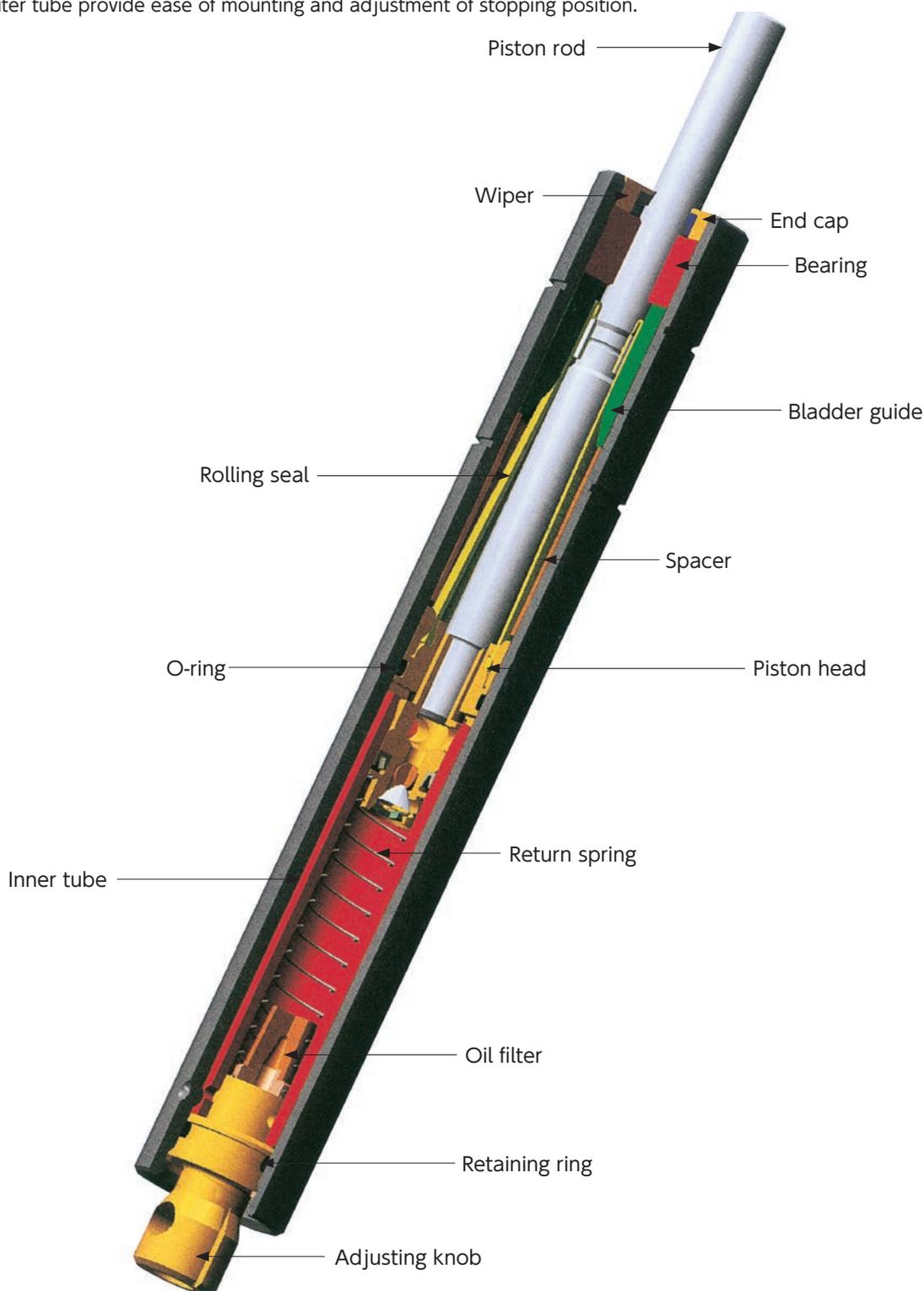


# Structure/Outlines

## FVC Series

RoHS Compliant

FVC provides the precise speed adjustment, making use of high precision flow controlling mechanism. The hydraulic oil squeezed out when the piston rod is compressed will go through the high precision adjustable orifice to allow constant and precise speed control. The wide range of adjustment of controlled speed is available by turning the adjusting knob at the backside. The added screws on the outer tube provide ease of mounting and adjustment of stopping position.



This series will precisely control the machine motion. In addition, it is maintenance free, has no oil leakage, has no stick slip, and is not influenced by a change in temperature. In addition, FVC2515 ~2555 seals the piston rod and absorbs the volume variation of the piston rod with the adoption of Bellofram Seal. The high precision flow control valve has made it possible to precisely control the speed from 13mm/min under small thrusting force. This series can be used in the fields of plastics, metal, wood, glass, etc. for the feeding of cutting, turning, drilling, grinding, and boring works.

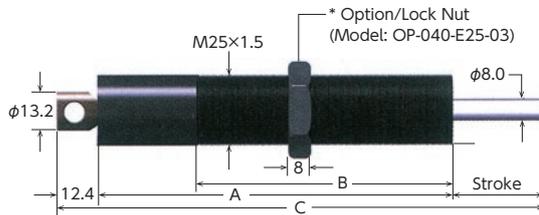
# Speed Controller

FVC Series

RoHS Compliant

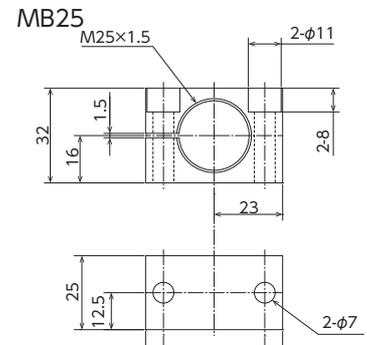
●Products specification might be changed without notice.

FVC Series



\* The main unit does not come with nuts.

Model
MB25

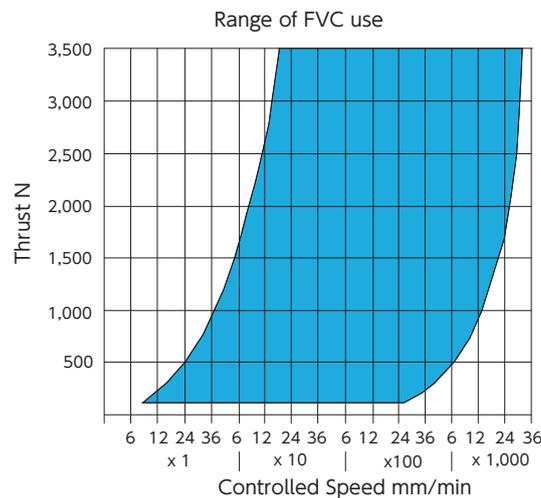


## Dimensions/Specifications

Model	Stroke mm	A mm	B mm	C mm	Thrust N Minimum - Maximum	Recovering power N Minimum - Maximum	Returning time S	Allowable eccentric angle °	Weight kg
FVC2515-FT	15	128	80	156	30-3,500	5-10	0.2	3	0.4
FVC2530-FT	30	161	110	204	30-3,500	5-15	0.4	2	0.5
FVC2555-FT	55	209	130	277	35-3,500	5-20	1.2	2	0.6
FVC2575-FT	75	283	150	371	50-3,500	33-51	1.7	2	0.8
FVC25100-FT	100	308	150	421	60-3,500	27-51	2.3	1	0.9
FVC25125-FT	125	333.5	150	471.5	70-3,500	23-50	2.8	1	1.0

## Range of FVC use

FVC2575 to 25125 cannot be used in an environment of spattering liquid, such as cutting oil, water, or cleansing liquid, etc. Use in place of the AE Series for applications where higher precision is needed.



## Characteristics

Range of Speed Control : Minimum 0.013m/min  
 at Thrusting Force 400N  
 Maximum 38.1m/min  
 at Thrusting Force 3500N

Do not rotate the piston rod of FVC2515 ~ 2555  
 The Bellofram Seal will be broken.  
 Do not damage the adjusting knob at mounting, etc.  
 Operating temperature : 0 ~ 60°C

Surface treatment :

Outer tube Black oxide coating  
 Piston rod Hard chromium plated

Example of installation



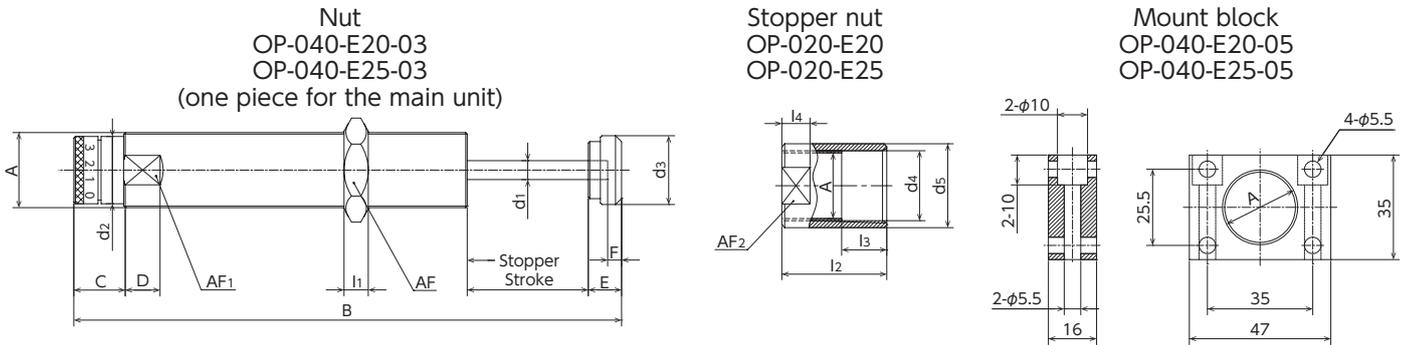
Mounting using Mount Block MB25

# Speed Controller

## AE Series

RoHS Compliant

●Products specification might be changed without notice.



## Dimensions

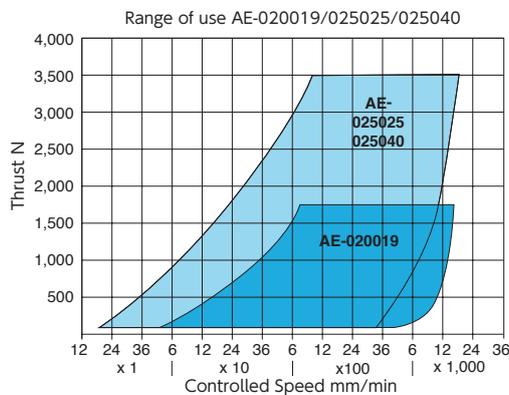
Model	Stroke mm	A	B	C	D	E	F	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	d <sub>4</sub>	d <sub>5</sub>	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	l <sub>4</sub>	AF	AF <sub>1</sub>	AF <sub>2</sub>
AE-020019ASP	19.1	M20×1.5	118.6	13.2	12	11	4.6	4.8	16.8	16.8	20.5	25	6	25	12	8	24	18	22
AE-025025ASP	25.4	M25×1.5	142.6	16.5	12	11	4.6	6.3	22.4	22.9	25	30	8	32	16	10	30	23	27
AE-025040ASP	40.0	M25×1.5	189	16.5	12	11	4.6	6.3	22.4	22.9	25	30	8	32	16	10	30	23	27

## Specifications

Model	Stroke mm	Thrust N Minimum - Maximum	Recovering power N Minimum - Maximum	Returning time S	Allowable eccentric angle °	Weight kg
AE-020019ASP	19.1	22-1779	4.69-9.56	0.65	2	0.13
AE-025025ASP	25.4	62-3559	10.67-30.56	0.85	2	0.30
AE-025040ASP	40	67-3559	10.67-32.92	0.95	2	0.39

Model	Remarks
OP-040-E20-05	020
OP-040-E25-05	025
OP-040-E20-03	020
OP-040-E25-03	025
OP-020-E20	020
OP-020-E25	025

## Range of use/Range of Control



## Characteristics

Operating temperature : 0 ~60°C

Material/Surface Treatment : Outer tube Carbon Steel/Black Oxide Coating

Piston rod Stainless steel

The product cannot be used in an environment where spattering liquid such as cutting oil, water, or cleansing liquid, etc. are present.

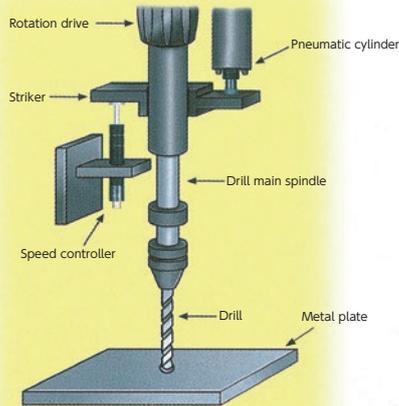
# Speed Controller

FVC/AE Series

RoHS Compliant

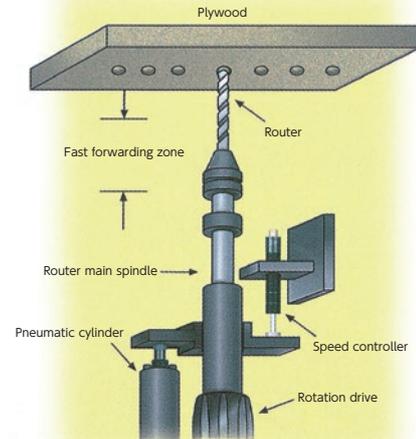
## Application

### Drilling the metal plate



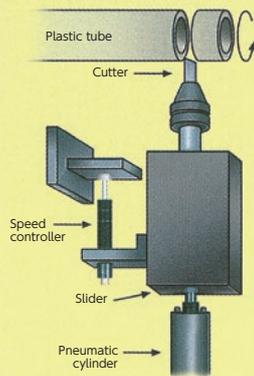
If the control of feeding speed is not possible at drilling, the excessive force will be applied to the drill, and the drill will bite into the work to generate a sharp projection and break the drill. By mounting a speed controller, the feeding speed of the drill can be precisely controlled to reduce burrs and remarkably reduce the breakage of drill.

### Drilling of the panels for furniture.



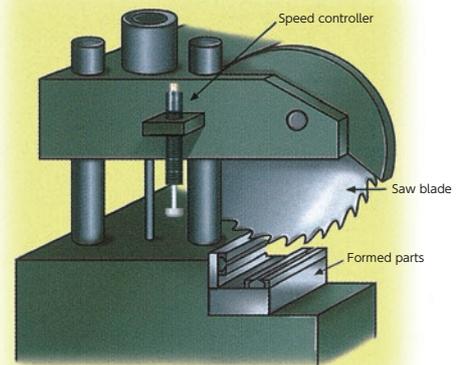
A custom-made tandem type pneumatic cylinder can provide the control of the fast forward and the low speed feeding at cutting. However, the mechanism becomes sophisticated, and the adjustment and the controllability do not perform optimally. By mounting a speed controller, the feeding speed can be precisely controlled; therefore, the equipment using a high cost custom-made tandem pneumatic cylinder can be replaced by a standard product.

### Cutting and Chamfering of Plastic tube



Precisely adjusting the cutting and feeding speeds in accordance with the materials and works is required. The speed controller can easily control the different feeding speed in accordance with the materials. Due to this, a standard pneumatic cylinder can be applied for structuring an inexpensive system in accordance with the materials.

### Cutting the Formed Parts of Aluminum/Plastics



The saw blade will wear with the high cutting resistance of materials, such as aluminum and plastics. If the cutting is continued with this feeding speed, the saw blade or the material will be damaged. The attached speed controller on the tool head will provide the ease of feeding speed control to prevent the breakage, and the ease of mounting, which offers a low cost solution.