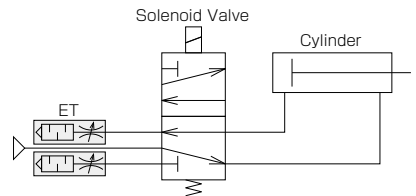


## Speed Control Muffler Exhaust Throttle (Needle) Valve **ET**

- *Exhaust Adjusting Needle Valve with Silencer.*
- *Directly installed to Solenoid Valve exhaust port and Adjust Cylinder Speed.*



- *Lower Price than Regular Flow Controllers.*

# Controller Series

## Exhaust Throttle (Needle) Valve ET

### Model Designation (Example)



Exhaust Throttle (Needle) Valve

① Thread size Valve

#### ① Thread size

##### NPT or Unified thread

Thread size	Unified thread	National Pipe Taper			
Code	<b>U10U</b>	<b>N1U</b>	<b>N2U</b>	<b>N3U</b>	<b>N4U</b>
Size	10-32UNF	1/8NPT	1/4NPT	3/8NPT	1/2NPT

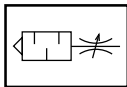
##### R (BSPT) or Metric thread

Thread size	Metric thread (mm)	Taper pipe thread			
Code	<b>M5</b>	<b>01</b>	<b>02</b>	<b>03</b>	<b>04</b>
Size	M5 × 0.8	R1/8	R1/4	R3/8	R1/2

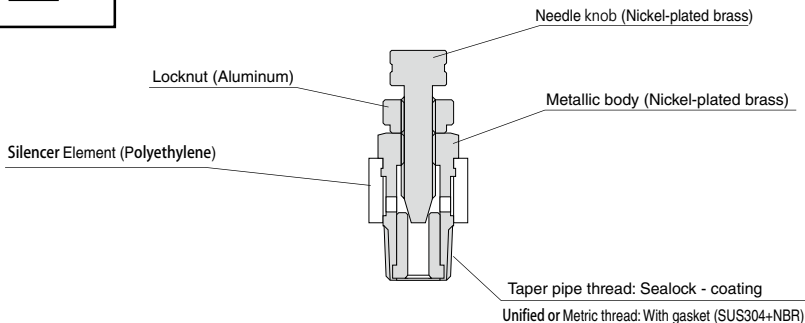
### Specifications

Fluid medium	Air
Operating pressure range	0~ 130psi (0~0.9MPa)
Operating temp. range	32 ~ 140°F (0 ~ 60°C) (no freezing)

### Construction



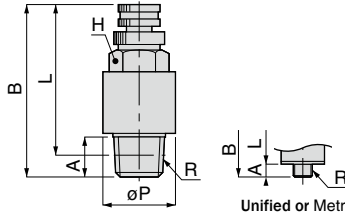
Symbol



**ET**

# Exhaust Throttle (Needle) Valve ET

RoHS compliant



Unified or Metric thread type

Unit : inch

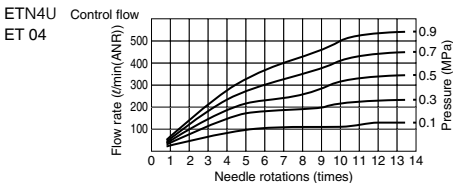
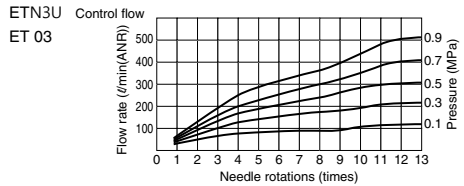
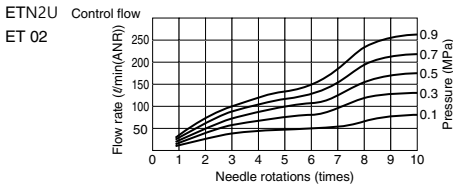
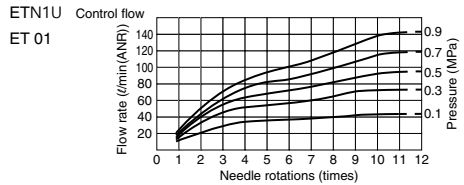
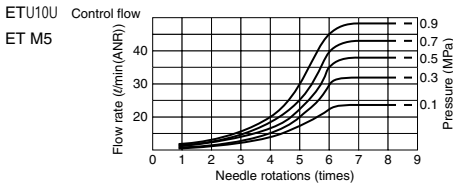
Model code	R	A	B		L		øP	Hex. H
			max.	min.	max.	min.		
ETU10U	10-32UNF	.14	.98	.87	.85	.73	.39	5/16
ETN1U	1/8NPT	.31	1.40	1.14	1.24	.98	.55	7/16
ETN2U	1/4NPT	.43	1.54	1.26	1.30	1.02	.71	9/16
ETN3U	3/8NPT	.47	1.67	1.38	1.42	1.12	.87	11/16
ETN4U	1/2NPT	.59	1.67	1.42	1.36	1.10	1.06	7/8

Unit : mm

Model code	R	A	B		L		øP	Hex. H	Weight (g)	CAD file name
			max.	min.	max.	min.				
ETM5	M5 × 0.8	3	25.4	21.9	22.4	18.9	10	8	4.6	ETM5
ET01	R1/8	8	35.5	29.3	31.5	25.4	14	10	14	ET01
ET02	R1/4	11	37.4	31.6	31.4	25.6	18	14	26	ET02
ET03	R3/8	12.5	41.3	35.2	35	28.9	22	17	47	ET03
ET04	R1/2	14.5	42.8	37.4	34.6	29.2	27	21	68	ET04

※. "L" is a reference value for height dimension after tightening taper thread.

## Flow characteristic



## △ Detailed Safety Instructions

Before using PISCO products, be sure to read "Safety Instructions" and "Safety Instruction Manual" and "Common Safety Instructions for Controllers".

### Warning

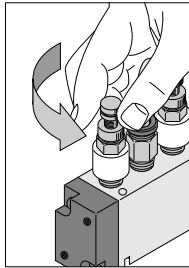
1. When controlling the speed of actuators, slowly release the air by adjusting the needle from a fully closed state. In case the needle is opened, actuator can move suddenly. Turn needle in the clockwise direction to close, and in the counterclockwise to open.
2. The clogging of silencer element increases exhaust-resistance. There is a possibility that it causes the system performance decline.
3. In case of function problem due to the clogging of element, replace Exhaust Throttle (Needle) Valve ET to a new one. The element of Exhaust Throttle (Needle) Valve ET is not replaceable.

## ■ How to adjust the speed

### 1. Speed adjustment of actuators

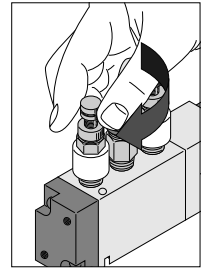
#### ① Increasing speed

Turn the needle the a counterclockwise direction from a fully closed state. The more the needle is opened, the faster the actuator moves. Make sure to tighten the locknut at the desired speed. The speed setting can be changed without tightening the locknut.



#### ② Reducing speed

Turn the needle in the clockwise direction when the speed is too fast. Make sure to tighten the locknut at the desired speed. The speed setting can be changed without tightening the locknut.



## ■ How to tighten thread

### 1. How to tighten thread

#### ① Tightening thread

Use a spanner to tighten a hexagonal-column. When tightening thread, refer to "Table: Recommended tightening torque" of "2. Instructions for installing controllers" in "Common Safety Instructions for Controllers".

