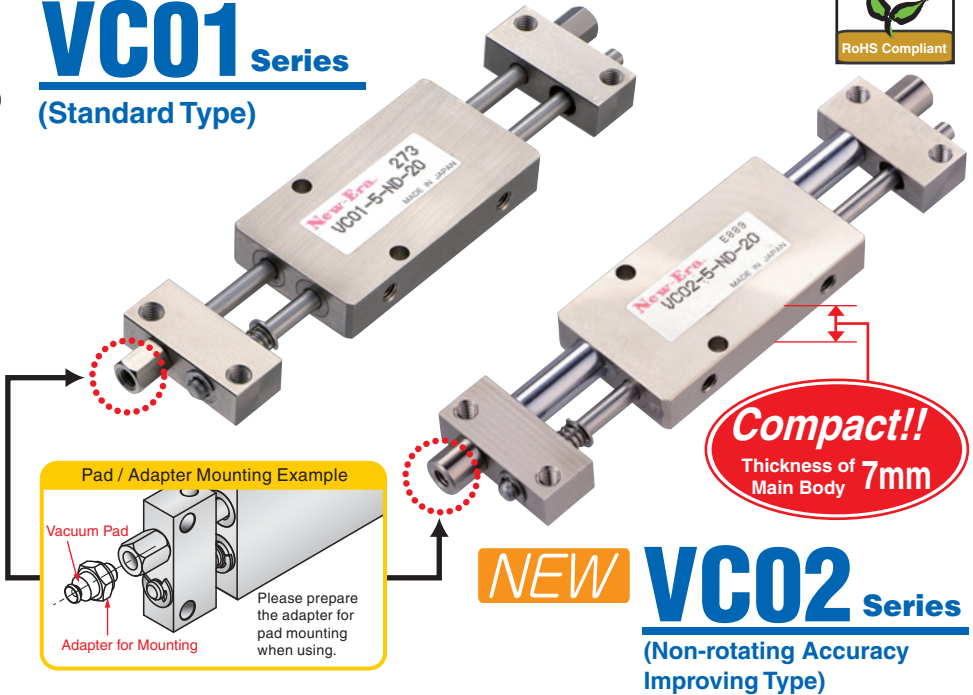


Compact Vacuum Cylinder

VC01 Series (Standard Type)



NEW VC02 Series (Non-rotating Accuracy Improving Type)

Main Features

Thickness of Main Body 7mm

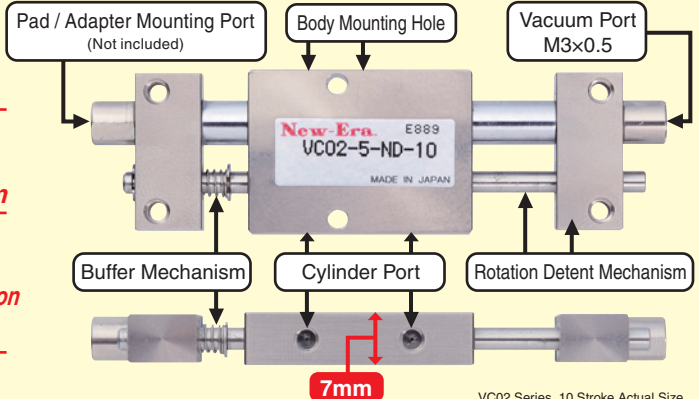
Thin and compact vacuum cylinder

Buffer Mechanism

Protects workpiece from shock

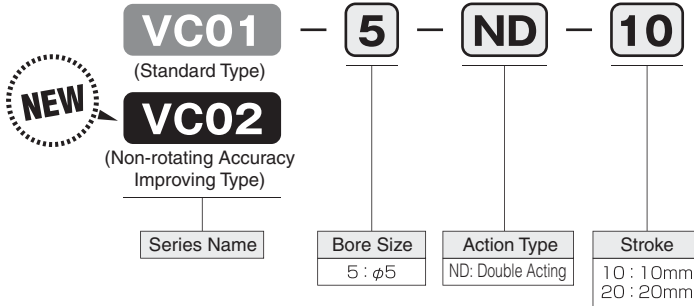
Standard Specification of NCU (Non-ion)

※Some components are nickel plated



VC02 Series 10 Stroke Actual Size

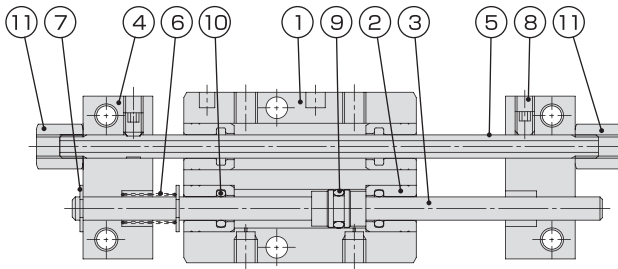
Model Code No.



Note: Position detection switch can not be mounted.

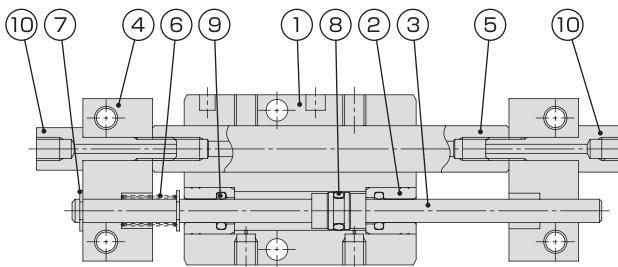
Internal Structure Drawing

VC01



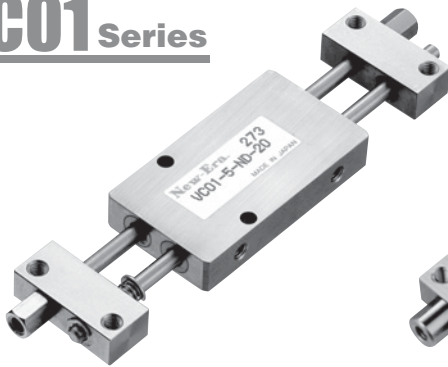
No.	Name	Material
1	Body	Aluminum Alloy
2	Rod Cover	Aluminum Alloy
3	Piston Rod	Stainless Steel
4	Plate	Aluminum Alloy
5	Guide Rod	Stainless Steel
6	Spring	Stainless Steel
7	E-ring	Stainless Steel
8	Hexagon Socket Head Set Screw	Stainless Steel
9	O-ring	NBR
10	O-ring	NBR
11	Socket	Copper Alloy (Nickel Plating)

VC02

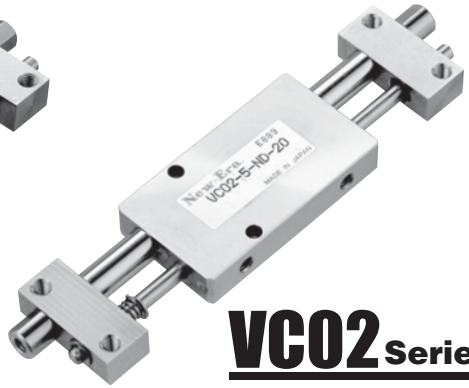


No.	Name	Material
1	Body	Aluminum Alloy
2	Rod Cover	Aluminum Alloy
3	Piston Rod	Stainless Steel
4	Plate	Aluminum Alloy
5	Guide Rod	Stainless Steel
6	Spring	Stainless Steel
7	E-ring	Stainless Steel
8	O-ring	NBR
9	O-ring	NBR
10	Socket	Copper Alloy (Nickel Plating)

VC01 Series



VC02 Series



Specifications

Model	VC01-5-ND-St		VC02-5-ND-St	
Action Type	Double Acting			
Bore Size	[mm]	φ5		
Stroke	[mm]	10、20		
Fluid	Air			
Operating Pressure Range	[MPa]	0.3~0.7	0.35~0.7	
Proof Pressure	[MPa]	1.05		
Operating Temperature Range ^{Note 1)}	[°C]	0~60 (No Freezing)		
Operating Speed Range ^{Note 2)}	[mm/sec]	50~300	100~300	
Non-rotating Accuracy	[°]	±2.5	±0.9	
Maximum Buffer Stroke	[mm]	3 ^{Note 3)}		
Buffer Spring Force	At Not Operating [N]	0.9		
	At Stroke End [N]	1.8		
Pipe Bore		M3×0.5		
Cushioning		None		
Lubrication Not required		Not required		
Product Mass	[g]	10St : 22	10St : 30	
		20St : 27	20St : 38	

Note 1) Please control the speed at lower than 300 [mm/sec]. Otherwise it may cause damage.

Note 2) When piston rod is pulled.

Note 3) Buffer stroke must be operated at less than 3mm. Otherwise it may cause damage.

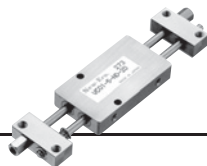
Note) Do not apply rotational torque to both of the piston rods. In unavoidable circumstances, the torque should be 0.02 [N·m] or less.

Note) When screwing the joint to the vacuum port and female thread part at the rod end, fix the socket and tighten with the recommended tightening torque of 0.7 [N·m].

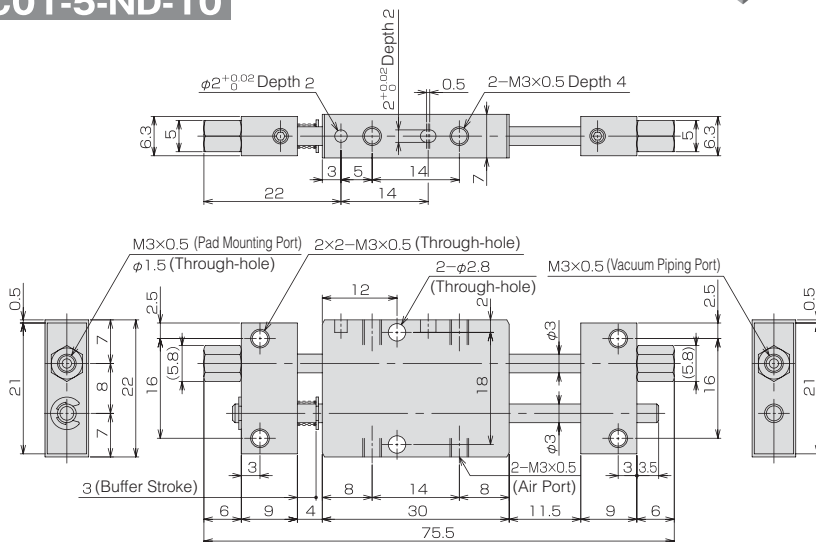
Note) When fixing the main body with M3 screw hole, use the recommended tightening torque 0.7 [N·m]. At this time, the screwing amount of the bolt shall be less than 4 [mm]. Otherwise it may cause trouble in operation.

Dimensions

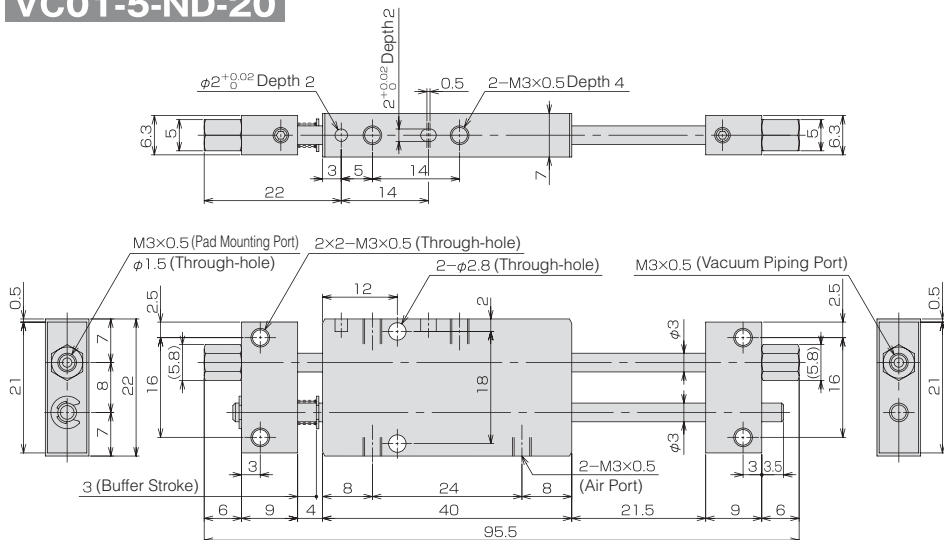
VC01 Series



VC01-5-ND-10



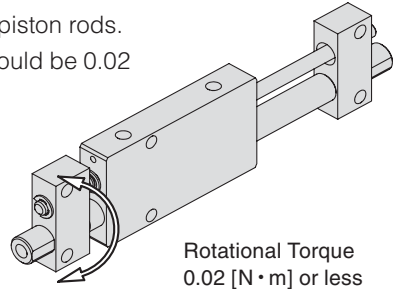
VC01-5-ND-20



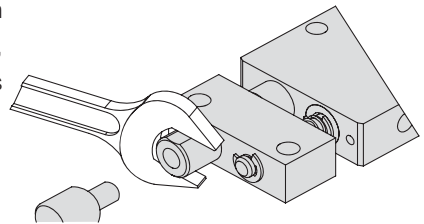
Precautions for Use

- Be sure to control the speed at 300 [mm/sec] or less with the speed controller. Otherwise it may cause damage.

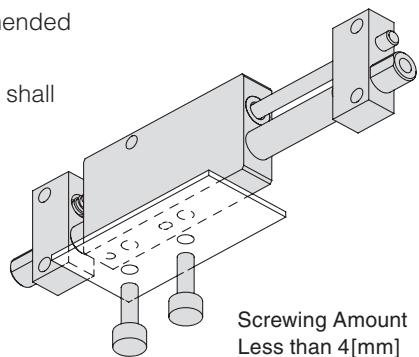
- Do not apply rotational torque to both of the piston rods. In unavoidable circumstances, the torque should be 0.02 [N·m] or less.



- When screwing a joint etc. into the vacuum port and the female thread part at the rod end, fix the socket so that no excessive force is applied to the rod. Recommended tightening torque : 0.7 [N·m]



- When fixing the main body, use the recommended tightening torque 0.7 [N·m]. At this time, the screwing amount of the bolt shall be less than 4 [mm]. Otherwise it may cause trouble in operation.



Guide to Our Website

<http://www.newera.co.jp/en/pneumatic/index.html>

- Check latest New-Era information including new products.
- Download CAD data.
- Request catalogues and information materials.

Cylinder Theoretical Thrust Table

※When the product is $\phi 5$

Air Pressure [MPa]	0.3	0.4	0.5	0.6	0.7
Cylinder Thrust [N]	3.77	5.03	6.28	7.54	8.80

※Because the product adopts double piston rods, the same cylinder thrust is generated during pushing and pulling.



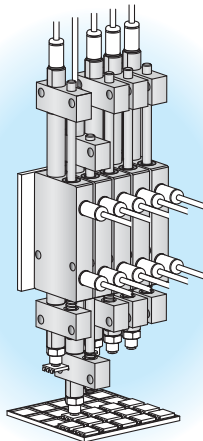
Safety Precautions

Please read the following instructions before use.

See also the precautions in the general catalog.

- Do not put your fingers in the gap between the main body and the plate. Be careful never to put your fingers because your fingers may be pinched between the main body and the plate during operation.
- If a dangerous situation may occur in case that a workpiece (sucked object) sucked by the system with vacuum generator falls off, be sure to take mechanical anti-falling measures for safety.

Application Example



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● Electric catalogue is also available. In case of need, please contact us.



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