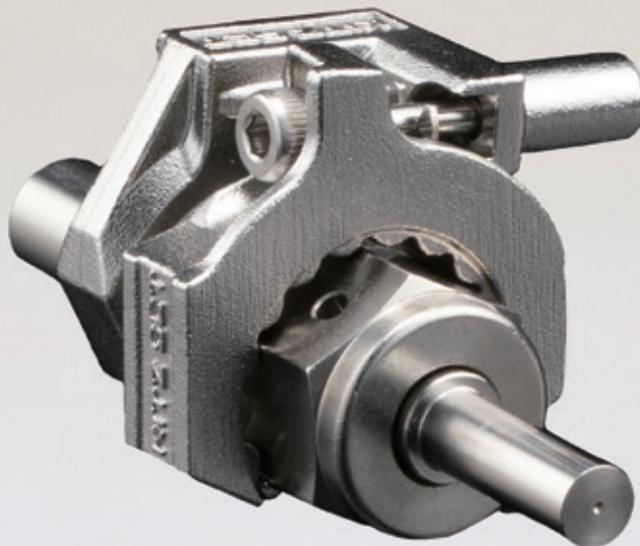


UHP Valves, Fittings & System Integration

**KITZ SCT**

# CVC-LC Series

CVC Fitting Lock Assist®



# Lock Assist<sup>®</sup> CVC-LC Series Debut

\*Lock Assist<sup>®</sup> is a registered trademark of KITZ SCT Corporation.

- As a measure to prevent loosening due to vibration during transportation of semiconductor material containers
- As a measure to help prevent disasters due to earthquakes affecting factory piping facilities
- As a measure to prevent gas leakage from occurring due to operational mistakes

## Features

### Ease of use

Due to Lock Assist's structure of tightening with one bolt, detaching/attaching is possible even after installation.

Also, since there is no interference with the leak test port, leak tests are easily conducted even after mounting.

### Reliable tightening force

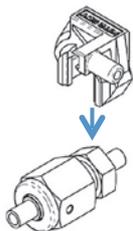
Due to our unique structure by which the bolt, when tightened, turns in the direction that tightens the fitting, thus, there is no loosening of the fitting due to the mounting method.

## Assembly Procedure

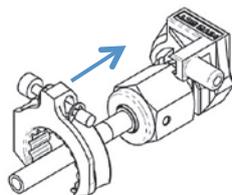
This product is designed for compatible types of our CVC fittings and our valve series.

During Lock Assist installation make sure to have read the instruction manual for correct and safe use.

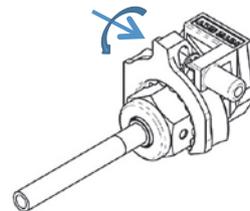
### For fitting Size: 1/4", 1/2"



1) Mount the male Lock Assist component.



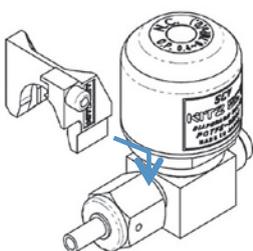
2) Mount the female Lock Assist component.



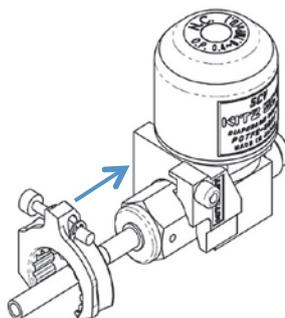
3) After checking the clearance A dimensions\*1, tighten the bolt at the specified torque\*2.

- \*1 Clearance A dimension
- Recommended value before tightening
  - 1/4": 4 - 11 mm
  - 1/2": 5 - 13 mm
  - After tightening
  - 1/4", 1/2": Minimum of 1.5mm

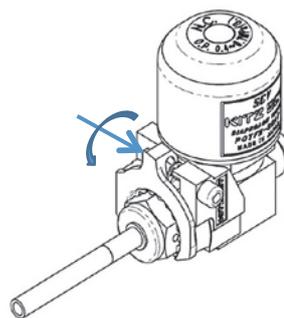
### For valve Size: 1/4"



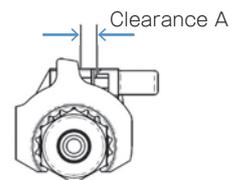
1) Mount the valve Lock Assist component.



2) Mount the female Lock Assist component.

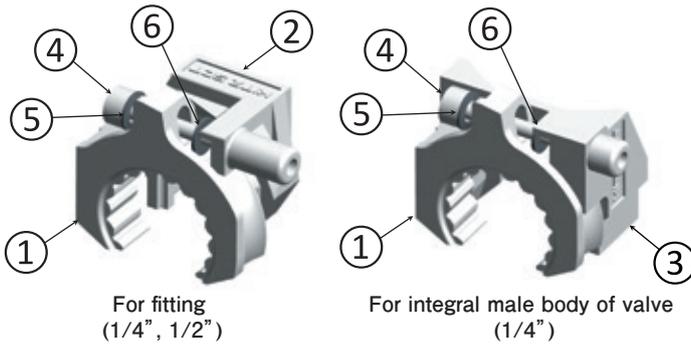


3) After checking the clearance A dimensions\*1, tighten the bolt at the specified torque\*1.



- \*2 Specified torque
- 1/4": 0.75 N·m
  - 1/2": 1.0 N·m

## Specifications



	Component name	Material
1	Female Lock Assist component	SCS13
2	Male Lock Assist component	SCS13
3	Valve Lock Assist component	SCS13
4	Anti-drop bolt*	SUSXM7
5	Rosette washer	SUS304-CSP
6	E-ring	SUS304-CSP

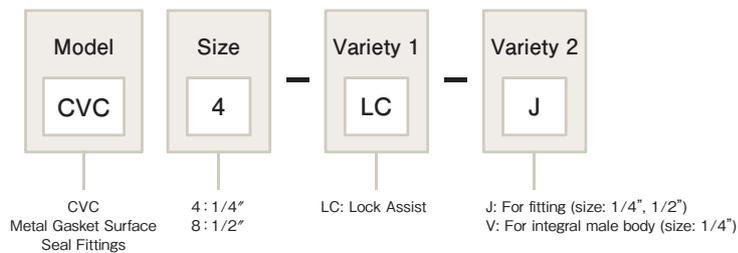
\* Bolt size and hexagon wrench size to be used  
 1/4" : M4, hexagon socket size 3mm  
 1/2" : M5, hexagon socket size 4mm

Maximum operating temperature	For fitting	For machined male body of valve
1/4"	200 °C *	
1/2"		

\* Note that heating at the maximum operating temperature or more may cause galling of the bolt and Lock Assist component.

Item	Specification
Surface spec	Electropolishing
Cleaning	Degreasing
Environment after cleaning	General environment
Packaging bag	Single

## Type



\*Compatible sizes of Lock Assist are 1/4" and 1/2" for fittings. For valves, Lock Assist can be used for 1/4" integral male body, and can be used for 1/4 and 1/2 valves with female end connections.

## Dimensions and compatible types

Unit:inch(mm)

Product category	Model	Type	A	B	C	Compatible types of our CVC series nuts and valves	
For fitting		CVC4-LC-J	1.303 (33.1)	1.626 (41.3)	0.906 (23)	Male side nut	4-NM、4-NMH、4-NSM、4-NBM
						Female side nut	4-NF、4-NFH、4-NBF
		CVC8-LC-J	1.740 (44.2)	1.953 (49.6)	0.945 (24)	Male side nut	8-NM、8-NSM、8-NBM
						Female side nut	8-NF、8-NBF
For machined male body of valve		CVC4-LC-V	1.303 (33.1)	1.591 (40.4)	0.945 (24)	KD4□S-V□-, KD4A□S-V□-, KD4S□S-V□- VLD4□S-V□-, RD4□S□-V□-, IB4□S-V□□- WD4□S-V□-	

### Precautions

- 1) This product is designed for Kitz SCT CVC fittings and our valves series. It cannot be used for other companies' products.
- 2) To use the product for our valve series other than the compatible types, contact our sales representative.
- 3) For details of compatible types of our CVC series nuts and valves, see the General Product Catalog separately.

■ **Global Network**

**Tokyo Head Office**

Omorieki Higashiguchi Bldg. 3F, 1-5-1 Omorikita, Ota-Ku,  
Tokyo 143-0016, Japan  
TEL. 81-3-6404-2171 FAX. 81-3-6404-2172

**Osaka Sales Office**

202 MG Amagasaki Ekimae Bldg., 21 Misono-Cho, Amagasaki-shi,  
Hyogo 660-0861, Japan  
TEL. 81-6-6413-4177 FAX. 81-6-6413-4188

**Chukyo Branch Office**

Ozeki-Heights 1F, 1-12-13 Unomori, Yokkaichi-shi,  
Mie 510-0074, Japan  
TEL. 81-59-350-8121 FAX. 81-59-350-8122

**Kyushu Sales Office**

Z·S Fukuoka Bldg. 4F, 3-4-2 Higashihie, Hakata-Ku, Fukuoka-shi,  
Fukuoka 812-0007, Japan  
TEL. 81-92-483-0185 FAX. 81-92-483-0186

**Nitta SC Factory**

150-2 Nittakane-Cho, Ota-shi, Gunma 370-0352, Japan  
TEL. 81-276-60-9600 FAX. 81-276-60-9330

**KITZ SCT AMERICA CORPORATION**

5201 Great America Parkway, Suite 238,  
Santa Clara, CA 95054, USA  
TEL. 1-408-747-5546 FAX. 1-408-747-5726

**KITZ SCT CORPORATION TAIWAN REPRESENTATIVE OFFICE**

3F-1, No. 38, Beida Rd., East Dist.,  
Hsinchu City 30044, Taiwan (R.O.C.)  
TEL. 886-3-542-0110 FAX. 886-3-542-0551

**KITZ CORPORATION OF SHANGHAI**

Rm. 1701-1704, No.3000, North Zhongshan Rd., Putuo Dist.,  
Shanghai 20063, China  
TEL. 86-21-5243-5025 FAX. 86-21-6439-1257

**KITZ SCT CORPORATION OF KUNSHAN**

8-3, No. 3 Road, Export Processing A Zone,  
Kunshan Jiangsu 215300, China  
TEL. 86-512-5735-0700 FAX. 86-512-5735-7500

**KITZ SCT CORPORATION OF KUNSHAN BRANCH FACTORY**

Bldg. 9, No. 68, Taoyuen Rd., Export Processing B Zone,  
Kunshan Jiangsu 215300, China



**Caution**

Product specifications and performance values described in this catalog are based on our design calculations, in-house testing, product usage performance, and public standards and specifications, and are posted as a user's guide under general usage conditions of the product. If the product is used outside of the described usage conditions or under special usage conditions, you should receive our technical advice in advance or it will be necessary to first conduct research and evaluation for performance verification at the users' own responsibility. Even if physical or personal damage occurs without use of this procedure, we shall assume no responsibility. Although this catalog has been edited with the utmost care possible, contact us if there are any unclear points or if you come across any questionable matter. In addition, information described in this catalog will be revised without notice due to reasons that include correction of errors, supplementation/improvement of insufficient content, improvement in product performance, design change, and discontinuation of production of products, etc., when deemed necessary. This invalidates the product catalog of the previous version. The issue code is described on the back of your catalog. For product selection, contact us to confirm whether your catalog is the latest version.

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