

Minimal Fitting

Ultra-small barb fitting for general pneumatic piping

⚠ Safety instructions for this product
Safety instructions, Common safety instructions for each product category and Detailed safety instructions for each product are in the end of this catalog and our website.

Model Designation (Example)



(1) Minimal Fitting

(2) Type

(3)-a. Tube dia. (øD)

Code	mm size (mm)				inch size (inch)	
	0320	0425	0535	0640	5/32	1/4
Tube O.D.	ø3	ø4	ø5	ø6	ø5/32	ø1/4
Tube I.D.	ø2	ø2.5	ø3	ø4	ø0.098	Polyurethane Tube : ø0.163 Nylon Tube: ø0.180

(3)-b. Tube dia. (M, FM)

Code	Male thread		Female thread	
	M3	M5	FM3	FM5
Size	M3×0.5	M5×0.8	M3×0.5	M5×0.8

(4) Thread size (M)

Code	Metric thread			UNF thread	Taper pipe thread
	M3	M5	M6	U10U	O1
Size	M3×0.5	M5×0.8	M6×1	10-32UNF	R1/8

(5) Specifications (Optional)

Code	No code	-C
Spec.	Standard	Clean-room pkg.

Characteristics

Barb type fitting suitable for space-saving piping.

Best suited for piping of small device or in narrow space.

Suitable for vacuum piping.

Vacuum tube (UD) is recommended to be used with.

Compression types can be tightened only by hand and easy insertion of tubes.

● Clean-room pkg. spec. (Optional)

Best suited for space-saving piping in clean environment.

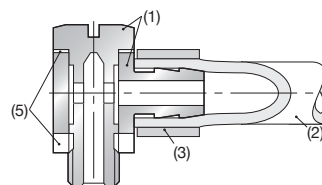
The products are washed by clean air, then packed in ISO class 6 equivalent clean-room.

Specifications

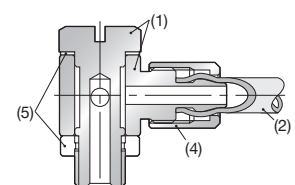
Type	Barb type	Compression & Female thread type
Fluid medium		Air
Max. operating pressure	0.5 MPa (with Vacuum tube: 0.4MPa)	1.0 MPa (with Vacuum tube: 0.4MPa)
Max. vacuum	-100 kPa	
Operating temp. range	0 to 50°C (no freezing)	

Sectional drawing

Barb Single Banjo
: LH



Compression Single Banjo
: LHN




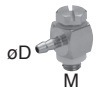
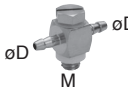



No.	Parts	Material
(1)	Metallic body	Nickel-plated brass*1
(2)	Tube	Vacuum tube or Clean-room pkg. tube
(3)	Tube clamp sleeve	Fluororesin (Order separately)
(4)	Cap nut	Nickel-plated brass
(5)	Gasket	POM, SUS304 + NBR (LC, LCN, LN, LP, LLC) *2



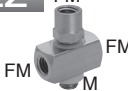








*1. For M3 male threads, its material is SUS303 or special stainless steel (SUS303 Equivalent Corrosivity, Austenite or Ferritic).


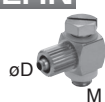
*2. For clean-room pkg. spec., gasket material is POM.




RoHS2 (2011/65/EU+EU2015/863) compliant


Barb Type					
Type	Model code LC- ϕ D-M(U) ⁵	Type	Model code LH- ϕ D-M(U) ⁵	Type	Model code LB- ϕ D-M(U) ⁵
Barb Straight LC 	LC-0320-M3 ⁵	Barb Single Banjo LH 	LH-0320-M3 ⁵	Barb Branch Tee LB 	LB-0320-M3 ⁵
	LC-0320-M5 ⁵		LH-0320-M5 ⁵		LB-0320-M5 ⁵
	LC-0320-01 ⁵		LH-0425-M3 ⁵		LB-0425-M3 ⁵
	LC-0425-M3 ⁵		LH-0425-M5 ⁵		LB-0425-M5 ⁵
	LC-0425-M5 ⁵		LH-0640-M5 ⁵		LB-0640-M5 ⁵
	LC-0425-M6 ⁵		LH-5/32-U10U		LB-0640-U10U
	LC-0425-01 ⁵		LH-0640-U10U		
	LC-0535-M5 ⁵				
	LC-0640-M3 ⁵				
	LC-0640-M5 ⁵				
LC-0640-M6 ⁵					
LC-0640-01 ⁵					
LC-5/32-U10U					
LC-1/4-U10U					
Type	Model code LU- ϕ D ⁵	Type	Model code LG- ϕ D ₁ - ϕ D ₂ ⁵	Type	Model code LG- ϕ D ₁ - ϕ D ₂ ⁵
		Barb Union Straight LU 	LU-0320 ⁵	Unequal Barb Union Straight LG 	LG-0425-0320 ⁵
			LU-0425 ⁵		LG-0640-0320 ⁵
			LU-0640 ⁵		LG-0640-0425 ⁵
Type	Model code LS- ϕ D-M ⁵				
Tube Clamp Sleeve LS 	LS-0425 ⁵				
	LS-0640 ⁵				

Thread Type					
Type	Model code LH-FM-M ⁵	Type	Model code LB-FM-M ⁵	Type	Model code LZ-FM-M ⁵
Female Screw Banjo LH-F 	LH-FM3-M3 ⁵	Female Screw Branch Tee LB-F 	LB-FM3-M3 ⁵	Female Screw Cross LZ 	LZ-FM5-M5 ⁵
	LH-FM5-M5 ⁵		LB-FM5-M5 ⁵		
Type	Model code LL-FM ⁵	Type	Model code LE-FM ⁵	Type	Model code LU-FM ⁵
Female Screw Elbow LL 	LL-FM5 ⁵	Female Screw Tee LE 	LE-FM5 ⁵	Female Screw Union LU-F 	LU-FM3 ⁵ LU-FM5 ⁵
Type	Model code LM-FM ⁵	Type	Model code LD-FM-M ⁵	Type	Model code LLC-FM-M ⁵
Bulkhead Union LM 	LM-FM5 ⁵	Female Screw Run Tee LD 	LD-FM5-M5 ⁵	Extension Screw Adapter LLC 	LLC-FM3-M3 ⁵ LLC-FM5-M5 ⁵
Type	Model code LN-M-M ⁵	Type	Model code LP-M ⁵		
Male Screw Union LN 	LN-M3-M3 ⁵ LN-M5-M5 ⁵	Plug LP 	LP-M3 ⁵ LP-M5 ⁵		

Compression type			
Type	Model code LCN- ϕ D-M ⁵	Type	Model code LHN- ϕ D-M ⁵
Compression Straight LCN 	LCN-0320-M3 ⁵	Compression Single Banjo LHN 	LHN-0320-M5 ⁵
	LCN-0320-M5 ⁵		LHN-0425-M5 ⁵
	LCN-0320-01 ⁵		LHN-0640-M5 ⁵
	LCN-0425-M5 ⁵		
	LCN-0425-01 ⁵		
	LCN-0640-M5 ⁵		
	LCN-0640-01 ⁵		

 CAD data is available at PISCO website.

 Packaging specifications 10 pcs. /bag

 Optional
⁵: -C ⇒ Clean-room pkg. (Fill in ⁵ with "-C".)

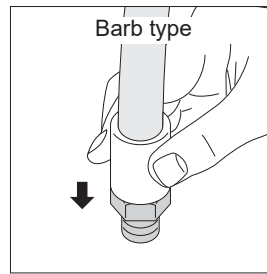
■ How to install and remove

How to insert and disconnect tubes

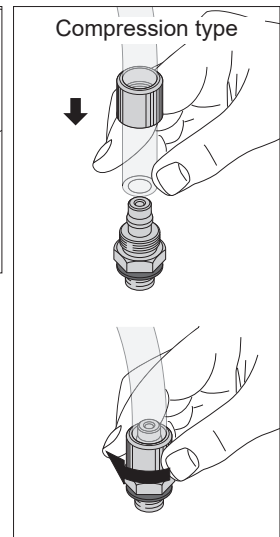
(1) Tube insertion

[Barb type]

Fix the tube simply by inserting it up to the barb end. The barb shape seals the tube inner periphery. Since the tube fixing force varies with the tube material and hardness, use Tube Clamp Sleeve as needed in order to prevent disconnection.



[Compression type]



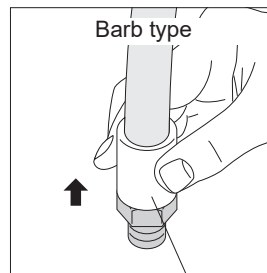
[Compression type]

Pass the tube through the cap nut and insert it up to the barb end. Then, manually tighten the cap nut through which the tube has been passed, until it hits the metal body.

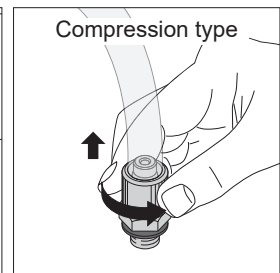
(2) Tube disconnection

[Barb type]

Remove Tube Clamp Sleeve and then disconnect the tube.



[Compression type]



[Compression type]

Manually remove the cap nut. Then, disconnect the tube. In both cases, make sure to stop air supply before the disconnection.

Tube Clamp Sleeve

For thread tightening, refer to “10. Precautions for installing product” of the “Common Safety Instructions for Fittings” on PISCO website. (<https://www.pisco.co.jp/en/product/a/cautions/>)