

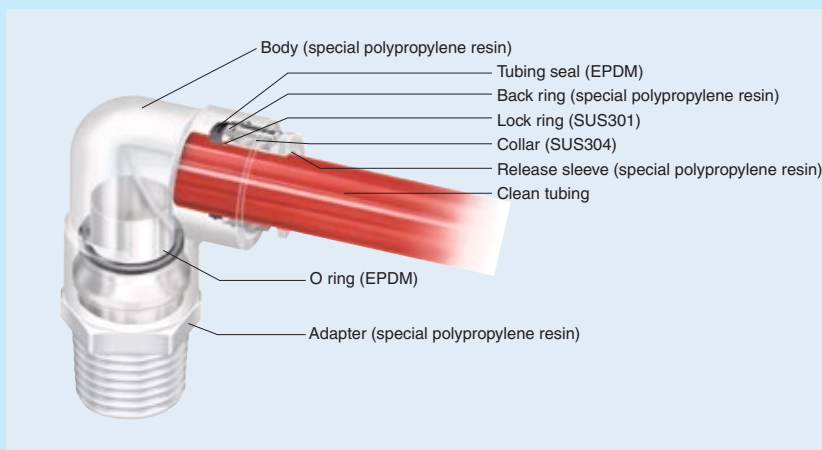
Chemifit™ C1 Series

PushOne™ fitting for clean air, pure water and chemical liquids

Features

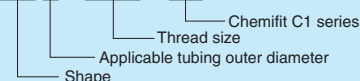
- **Made in oil-free process**
Assembled after cleaning each part in a clean room. No oil or fat is used in the sealing materials.
- **PushOne connection of tubing**
The tubes can be connected without using a jig or tools.
- **Nonmetal liquid-contact surface**
No contact of liquid and metal, preventing the metal ions from dissolving.
- **High performance, free of dust and contamination**
Made of special polypropylene resin.
- **Highly smooth inner surface**
Smooth inner surface due to ejection forming.
- **Double clean package**
Each fitting is packed in a clean room and put in a zipper sealed bag.
- **Easy directional setting of tubing**
The body can rotate freely even after tightening up the thread part. Good for piping of Elbow and Tee.
- **Compliant with the MHLW Ministerial Notification No.201(2006), MHW Ministerial Notification No.370(1959), Japan**

Cross-sectional structure diagram



Product number example

EL 6 - R1/8 - C1



Distinction of millimeter/inch sizes

- The tubing size is shown on the release sleeve.



Operating fluid, working temperature range

Operating fluid	Working temperature range
Air (clean air)	-20°C~+80°C
Water (pure water)	0°C~+80°C

☞ Contact us for various chemical liquids.

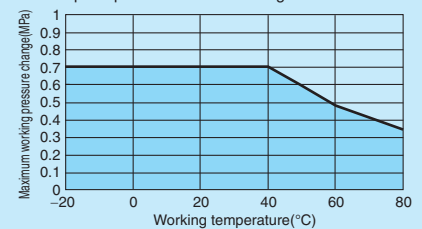
☞ See "Combination List of Tubing and Fitting" on page 8.

Pressure condition

Maximum working pressure: 0.7MPa(at20°C)
Negative pressure performance: -99.975kPa

Relation between the working temperature and the maximum working pressure

The maximum working pressure varies with the working temperature (environmental temperature). For use at an abnormal temperature, always check the maximum working pressure change in the graph below and keep the pressure within the range.

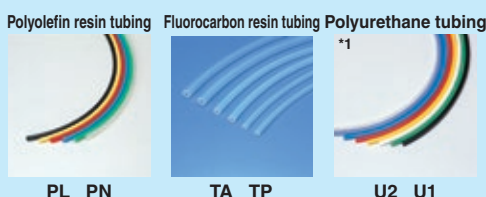


Handling instructions

- ⚠ **Caution:** When the working conditions of tubes and fittings differ, use them under the lower specified conditions.
- ⚠ **Caution:** Stress relaxation occurs more readily with resin thread than with metal thread. The relaxation is prominent at a high temperature. Tighten the thread periodically.
- ⚠ **Caution:** When water is used as the operating fluid, confirm that there is no water leakage damage to equipment and instruments due to construction failure.
- ⚠ **Caution:** When water is used as the operating fluid, do not allow it to freeze.
- ⚠ **Caution:** Do not bend the pipe sharply near the tubing insertion port (sleeve end) of the fitting. Keep the tubing straight for twice as long as the tubing diameter from the insertion port.

☞ See page 34 for the common handling instructions for fittings.

Applicable tubing



Related products and product introduction

Chemifit C1
speed controller



Off tool



Reference

Instruction manualP.174
Chemical resistance
specification tableP.198
Effective sectional area ..P.168
Negative-pressure
performance listP.169

(*1) Combinatory use of U2 or U1 tubing and Chemifit C1 series mixes general and clean type performances. When using them together in a clean environment, be aware of how this could lower the cleanliness level.

Chemifit™ C1 Series

Shape list



Tubing

Clean tubing

Processed tubing

PushOne fitting

QuickSeal fitting

Clean fitting/
Chemifit

Bamboo-shoot fitting

Control switch/
Detachable series

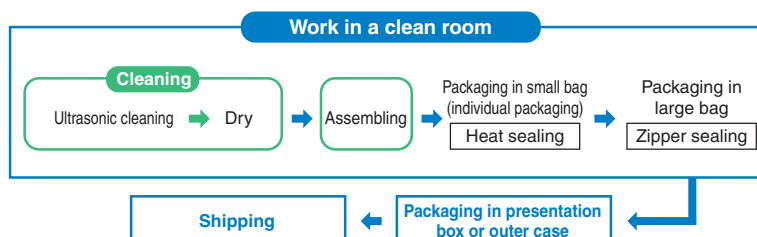
Jig/Tool/
Accessory

Technical information

Reference

Oil-free processing, Clean wrapping and packaging

● Ultrasonic cleaning with no oil or fat used for assembling in a clean room.



● High-barrier sheet packaging available

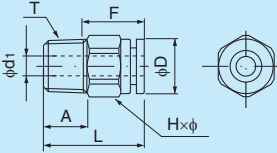
What is high-barrier sheet packaging?

In order to maintain the cleanliness of our products, no space for oxygen, water, or corrosive gas is allowed inside the package so a packaging bag with a high gas barrier is needed for protecting the content from these gases. To meet this requirement, Nitta provides high-barrier bags with a high gas barrier performance also for nitrogen sealing or atmospheric sealing.



- The packaging bags that Nitta uses have the highest gas barrier performance among clear bags.
- The bags do not contain halogen, etc., for safe burning.

Connector



●Millimeter size type

Product number	Applicable tubing outer diameter (mm)	T Thread size (R)	L (mm)	A (mm)	F Tubing insertion length (mm)	H×φ Width across flat (mm)	D (mm)	d ₁ (mm)	Effective sectional area (mm ²)	Weight (g)
EC4-R1/8-C1	4	R1/8	21.9	9.0	14	12.0×13.0	10.0	2.5	4.0	2.0
EC4-R1/4-C1	4	R1/4	24.9	12.0	14	14.0×15.4	10.0	2.5	4.0	2.0
EC6-R1/8-C1	6	R1/8	23.6	9.0	15	14.0×15.4	13.0	4.0	10.5	2.0
EC6-R1/4-C1	6	R1/4	26.6	12.0	15	14.0×15.4	13.0	4.0	10.5	3.0
EC8-R1/8-C1	8	R1/8	28.6	9.0	16	17.0×18.5	15.0	6.0	20.0	4.0
EC8-R1/4-C1	8	R1/4	27.6	12.0	16	17.0×18.5	15.0	6.0	25.0	4.0
EC10-R1/4-C1	10	R1/4	33.2	12.0	19	19.0×21.0	18.0	8.0	40.0	7.0
EC10-R3/8-C1	10	R3/8	32.4	14.0	19	19.0×21.0	18.0	8.0	40.0	7.0
EC10-R1/2-C1	10	R1/2	35.4	16.0	19	22.0×24.5	18.0	10.0	—	—
EC12-R3/8-C1	12	R3/8	33.4	14.0	20	22.0×24.5	21.0	10.0	50.0	9.0
EC12-R1/2-C1	12	R1/2	35.4	16.0	20	22.0×24.5	21.0	10.0	50.0	11.0

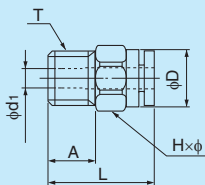
EC6-N1/8-C1	6	NPT1/8	23.6	9.0	15	14.0×15.4	13.0	4.0	10.5	2.0
EC6-N1/4-C1	6	NPT1/4	26.6	12.0	15	14.0×15.4	13.0	4.0	10.5	3.0
EC10-N1/4-C1	10	NPT1/4	33.2	12.0	19	19.0×21.0	18.0	8.0	40.0	7.0

●Inch size type

Product number	Applicable tubing outer diameter (inch)	T Thread size (R)	L (mm)	A (mm)	F Tubing insertion length (mm)	H×φ Width across flat (mm)	D (mm)	d ₁ (mm)	Effective sectional area (mm ²)	Weight (g)
EC1/4-R1/8-C1	1/4	R1/8	24.6	9.0	16	14.0×15.4	13.0	4.0	12.0	2.0
EC1/4-R1/4-C1	1/4	R1/4	27.6	12.0	16	14.0×15.4	13.0	4.0	12.0	3.0
EC3/8-R1/4-C1	3/8	R1/4	34.0	12.0	20	19.0×21.0	18.0	8.0	35.0	7.0
EC3/8-R3/8-C1	3/8	R3/8	33.2	14.0	20	19.0×21.0	18.0	8.0	35.0	7.0
EC1/2-R3/8-C1	1/2	R3/8	35.4	14.0	23	22.0×24.5	21.5	10.0	66.5	9.0
EC1/2-R1/2-C1	1/2	R1/2	37.4	16.0	23	22.0×24.5	21.5	10.0	66.5	10.0

Through connector  A tubing can be inserted completely through the connector.

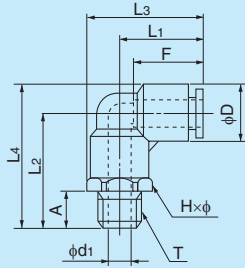
●Millimeter size type



Product number	Applicable tubing outer diameter (mm)	T Thread size (R)	L (mm)	A (mm)	H×φ Width across flat (mm)	D (mm)	d ₁ (mm)	Weight (g)
ETC4-R1/8-C1	4	R1/8	21.9	9.0	12.0×13.0	10.0	4.2	2.0
ETC4-R1/4-C1	4	R1/4	24.9	12.0	14.0×15.4	10.0	4.2	2.0
ETC6-R1/4-C1	6	R1/4	26.6	12.0	14.0×15.4	13.0	6.5	3.0
ETC8-R1/4-C1	8	R1/4	27.6	12.0	17.0×18.5	15.0	8.2	4.0
ETC10-R3/8-C1	10	R3/8	32.4	14.0	19.0×21.0	18.0	10.2	7.0
ETC12-R1/2-C1	12	R1/2	35.4	16.0	22.0×24.5	21.0	12.3	10.0

Tubing
Clean tubing
Processed tubing
PushOne fitting
QuickSeal fitting
Clean fitting/ Chemifit
Bamboo-shoot fitting
Control switch/ Detachable series
Jig/Tool/ Accessory
Technical information
Reference

90 degree elbow



●Millimeter size type

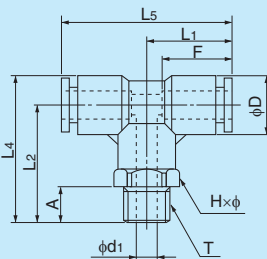
Product number	Applicable tubing outer diameter (mm)	T Thread size (R)	L ₁ (mm)	L ₂ (mm)	L ₃ (mm)	L ₄ (mm)	A (mm)	F Tubing insertion length (mm)	H×φ Width across flat (mm)	D (mm)	d ₁ (mm)	Min. inner diameter (mm)	Effective sectional area (mm ²)	Weight (g)
EL4-R1/8-C1	4	R1/8	17.7	23.7	23.2	28.7	9.0	14	10.0×11.0	10.0	5.0	3.0	4.0	2.0
EL4-R1/4-C1	4	R1/4	17.7	27.7	25.4	32.7	12.0	14	14.0×15.4	10.0	7.0	3.0	4.0	3.0
EL6-R1/8-C1	6	R1/8	18.9	26.2	25.4	32.7	9.0	15	12.0×13.0	13.0	4.5	4.5	12.0	4.0
EL6-R1/4-C1	6	R1/4	18.9	30.2	26.6	36.7	12.0	15	14.0×15.4	13.0	7.0	4.5	12.0	4.0
EL8-R1/8-C1	8	R1/8	21.1	29.2	28.8	36.7	9.0	16	14.0×15.4	15.0	6.0	6.0	18.5	5.0
EL8-R1/4-C1	8	R1/4	21.1	31.2	28.8	38.9	12.0	16	14.0×15.4	15.0	6.5	6.5	23.0	6.0
EL10-R1/4-C1	10	R1/4	25.0	37.2	34.3	46.2	12.0	19	17.0×18.5	18.0	8.0	8.0	34.5	9.0
EL10-R3/8-C1	10	R3/8	25.0	37.2	34.3	46.2	14.0	19	17.0×18.5	18.0	9.0	8.0	37.0	11.0
EL12-R3/8-C1	12	R3/8	26.7	38.7	37.2	49.0	14.0	20	19.0×21.0	20.5	10.0	10.0	43.0	13.0
EL12-R1/2-C1	12	R1/2	26.7	41.7	38.7	52.0	16.0	20	22.0×24.0	20.5	12.0	9.5	43.0	15.0

EL6-N1/8-C1	6	NPT1/8	18.9	26.2	25.4	32.7	9.0	15	12.0×13.0	13.0	4.5	4.5	12.0	4.0
EL6-N1/4-C1	6	NPT1/4	18.9	30.2	26.6	36.7	12.0	15	14.0×15.4	13.0	7.0	4.5	12.0	4.0

●Inch size type

Product number	Applicable tubing outer diameter (inch)	T Thread size (R)	L ₁ (mm)	L ₂ (mm)	L ₃ (mm)	L ₄ (mm)	A (mm)	F Tubing insertion length (mm)	H×φ Width across flat (mm)	D (mm)	d ₁ (mm)	Min. inner diameter (mm)	Effective sectional area (mm ²)	Weight (g)
EL1/4-R1/8-C1	1/4	R1/8	19.9	26.2	26.4	32.7	9.0	16	12.0×13.0	13.0	4.5	4.5	13.0	4.0
EL1/4-R1/4-C1	1/4	R1/4	19.9	30.2	27.6	36.7	12.0	16	14.0×15.4	13.0	7.0	4.5	13.0	4.0
EL3/8-R1/4-C1	3/8	R1/4	25.8	37.2	35.1	46.2	12.0	20	17.0×18.5	18.0	8.0	8.0	30.0	9.0
EL3/8-R3/8-C1	3/8	R3/8	25.8	37.2	35.1	46.2	14.0	20	17.0×18.5	18.0	9.0	8.0	32.0	11.0
EL1/2-R3/8-C1	1/2	R3/8	28.7	38.7	39.2	49.5	14.0	23	19.0×21.0	21.5	10.0	10.0	53.0	13.0
EL1/2-R1/2-C1	1/2	R1/2	28.7	41.7	40.7	52.5	16.0	23	22.0×24.0	21.5	12.0	9.5	55.5	15.0

Tee



●Millimeter size type

Product number	Applicable tubing outer diameter (mm)	T Thread size (R)	L ₁ (mm)	L ₂ (mm)	L ₄ (mm)	L ₅ (mm)	A (mm)	F Tubing insertion length (mm)	H×φ Width across flat (mm)	D (mm)	d ₁ (mm)	Min. inner diameter (mm)	Effective sectional area (mm ²)	Weight (g)
ET4-R1/8-C1	4	R1/8	17.7	23.7	28.7	35.3	9.0	14	10.0×11.0	10.0	5.0	3.0	4.0	3.0
ET4-R1/4-C1	4	R1/4	17.7	27.7	32.7	35.3	12.0	14	14.0×15.4	10.0	7.0	3.0	4.0	4.0
ET6-R1/8-C1	6	R1/8	18.9	26.2	32.7	37.9	9.0	15	12.0×13.0	13.0	4.5	4.5	12.0	5.0
ET6-R1/4-C1	6	R1/4	18.9	30.2	36.7	37.9	12.0	15	14.0×15.4	13.0	7.0	4.5	12.0	6.0
ET8-R1/8-C1	8	R1/8	21.1	29.2	36.7	42.2	9.0	16	14.0×15.4	15.0	6.0	6.0	18.5	7.0
ET8-R1/4-C1	8	R1/4	21.1	31.2	38.7	42.2	12.0	16	14.0×15.4	15.0	6.5	6.5	23.0	8.0
ET10-R1/4-C1	10	R1/4	25.0	37.2	46.2	50.0	12.0	19	17.0×18.5	18.0	8.0	8.0	34.5	14.0
ET10-R3/8-C1	10	R3/8	25.0	37.2	46.2	50.0	14.0	19	17.0×18.5	18.0	9.0	8.0	37.0	16.0
ET12-R3/8-C1	12	R3/8	26.7	38.7	49.0	53.4	14.0	20	19.0×21.0	20.5	10.0	10.0	43.0	19.0
ET12-R1/2-C1	12	R1/2	26.7	41.7	52.0	53.4	16.0	20	22.0×24.0	20.5	12.0	9.5	43.0	21.0

ET6-N1/8-C1	6	NPT1/8	18.9	26.2	32.7	37.9	9.0	15	12.0×13.0	13.0	4.5	4.5	12.0	5.0
ET6-N1/4-C1	6	NPT1/4	18.9	30.2	36.7	37.9	12.0	15	14.0×15.4	13.0	7.0	4.5	12.0	6.0

●Inch size type

Product number	Applicable tubing outer diameter (inch)	T Thread size (R)	L ₁ (mm)	L ₂ (mm)	L ₄ (mm)	L ₅ (mm)	A (mm)	F Tubing insertion length (mm)	H×φ Width across flat (mm)	D (mm)	d ₁ (mm)	Min. inner diameter (mm)	Effective sectional area (mm ²)	Weight (g)
ET1/4-R1/8-C1	1/4	R1/8	19.9	26.2	32.7	39.8	9.0	16	12.0×13.0	13.0	4.5	4.5	13.0	5.0
ET1/4-R1/4-C1	1/4	R1/4	19.9	30.2	36.7	39.8	12.0	16	14.0×15.4	13.0	7.0	4.5	13.0	6.0
ET3/8-R1/4-C1	3/8	R1/4	25.8	37.2	46.2	51.6	12.0	20	17.0×18.5	18.0	8.0	8.0	30.0	14.0
ET3/8-R3/8-C1	3/8	R3/8	25.8	37.2	46.2	51.6	14.0	20	17.0×18.5	18.0	9.0	8.0	32.0	16.0
ET1/2-R3/8-C1	1/2	R3/8	29.7	39.0	49.8	59.5	14.0	23	19.0×21.0	21.5	10.0	10.0	53.0	19.0
ET1/2-R1/2-C1	1/2	R1/2	29.7	42.0	52.8	59.5	16.0	23	22.0×24.0	21.5	12.0	9.5	55.5	21.0

Tubing

Clean tubing

Processed tubing

PushOne fitting

QuickSeal fitting

Clean fitting/ Chemifit

Bamboo-shoot fitting

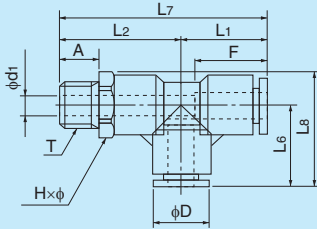
Control switch/ Detachable series

Jig/Tool/ Accessory

Technical information

Reference

Service tee



●Millimeter size type

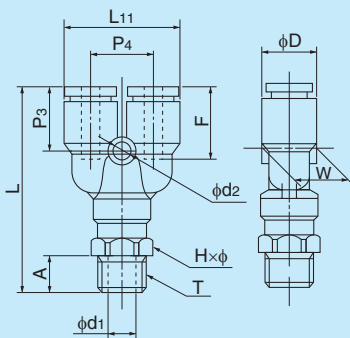
Product number	Applicable tubing outer diameter (mm)	T Thread size (R)	L ₁ (mm)	L ₂ (mm)	L ₆ (mm)	L ₇ (mm)	L ₈ (mm)	A (mm)	F Tubing insertion length (mm)	H×φ Width across flat (mm)	D (mm)	d ₁ (mm)	Min. inner diameter (mm)	Effective sectional area (mm ²)	Weight (g)
EST4-R1/8-C1	4	R1/8	17.7	23.7	17.7	41.4	23.2	9.0	14	10.0×11.0	10.0	5.0	3.0	4.0	3.0
EST4-R1/4-C1	4	R1/4	17.7	27.7	17.7	45.4	25.4	12.0	14	14.0×15.4	10.0	7.0	3.0	4.0	4.0
EST6-R1/8-C1	6	R1/8	18.9	26.2	18.9	45.1	25.4	9.0	15	12.0×13.0	13.0	4.5	4.5	12.0	5.0
EST6-R1/4-C1	6	R1/4	18.9	30.2	18.9	49.1	26.6	12.0	15	14.0×15.4	13.0	7.0	4.5	12.0	6.0
EST8-R1/8-C1	8	R1/8	21.1	29.2	21.1	50.3	28.8	9.0	16	14.0×15.4	15.0	6.0	6.0	18.5	7.0
EST8-R1/4-C1	8	R1/4	21.1	31.2	21.1	52.3	28.8	12.0	16	14.0×15.4	15.0	6.5	6.5	23.0	8.0
EST10-R1/4-C1	10	R1/4	25.0	37.2	25.0	62.2	34.3	12.0	19	17.0×18.5	18.0	8.0	8.0	34.5	14.0
EST10-R3/8-C1	10	R3/8	25.0	37.2	25.0	62.2	34.3	14.0	19	17.0×18.5	18.0	9.0	8.0	37.0	16.0
EST12-R3/8-C1	12	R3/8	26.7	38.7	26.7	65.4	37.2	14.0	20	19.0×21.0	20.5	10.0	10.0	43.0	19.0
EST12-R1/2-C1	12	R1/2	26.7	41.7	26.7	68.4	38.7	16.0	20	22.0×24.0	20.5	12.0	9.5	43.0	21.0

EST6-N1/8-C1	6	NPT1/8	18.9	26.2	18.9	45.1	25.4	9.0	15	12.0×13.0	13.0	4.5	4.5	12.0	5.0
EST6-N1/4-C1	6	NPT1/4	18.9	30.2	18.9	49.1	26.6	12.0	15	14.0×15.4	13.0	7.0	4.5	12.0	6.0

●Inch size type

Product number	Applicable tubing outer diameter (inch)	T Thread size (R)	L ₁ (mm)	L ₂ (mm)	L ₆ (mm)	L ₇ (mm)	L ₈ (mm)	A (mm)	F Tubing insertion length (mm)	H×φ Width across flat (mm)	D (mm)	d ₁ (mm)	Min. inner diameter (mm)	Effective sectional area (mm ²)	Weight (g)
EST1/4-R1/8-C1	1/4	R1/8	19.9	26.2	19.9	46.1	26.4	9.0	16	12.0×13.0	13.0	4.5	4.5	13.0	5.0
EST1/4-R1/4-C1	1/4	R1/4	19.9	30.2	19.9	50.1	27.6	12.0	16	14.0×15.4	13.0	7.0	4.5	13.0	6.0
EST3/8-R1/4-C1	3/8	R1/4	25.8	37.2	25.8	63.0	35.1	12.0	20	17.0×18.5	18.0	8.0	8.0	30.0	14.0
EST3/8-R3/8-C1	3/8	R3/8	25.8	37.2	25.8	63.0	35.1	14.0	20	17.0×18.5	18.0	9.0	8.0	32.0	16.0
EST1/2-R3/8-C1	1/2	R3/8	29.7	39.0	29.7	68.7	40.2	14.0	23	19.0×21.0	21.5	10.0	10.0	53.0	19.0
EST1/2-R1/2-C1	1/2	R1/2	29.7	42.0	29.7	71.7	41.7	16.0	23	22.0×24.0	21.5	12.0	9.5	55.5	21.0

Y joint



●Millimeter size type

Product number	Applicable tubing outer diameter (mm)	T Thread size (R)	L (mm)	L ₁₁ (mm)	A (mm)	F Tubing insertion length (mm)	H×φ Width across flat (mm)	P ₃ (mm)	P ₄ (mm)	W (mm)	D (mm)	d ₁ (mm)	d ₂ (mm)	Min. inner diameter (mm)	Effective sectional area (mm ²)	Weight (g)
EY4-R1/8-C1	4	R1/8	41.9	21.0	9.0	14	10.0×11.0	13.9	11.0	9.7	10.0	5.0	3.2	3.0	3.5	4.0
EY4-R1/4-C1	4	R1/4	45.9	21.0	12.0	14	14.0×15.4	13.9	11.0	9.7	10.0	7.0	3.2	3.0	3.5	5.0
EY6-R1/8-C1	6	R1/8	45.2	25.2	9.0	15	12.0×13.0	15.2	12.2	12.5	13.0	4.5	4.2	4.5	9.0	6.0
EY6-R1/4-C1	6	R1/4	49.2	25.2	12.0	15	14.0×15.4	15.2	12.2	12.5	13.0	7.0	4.2	4.5	9.0	7.0
EY8-R1/8-C1	8	R1/8	50.3	29.2	9.0	16	14.0×15.4	16.8	14.2	14.5	15.0	6.0	4.2	6.0	17.5	8.0
EY8-R1/4-C1	8	R1/4	52.3	29.2	12.0	16	14.0×15.4	16.8	14.2	14.5	15.0	6.5	4.2	6.5	20.0	9.0
EY10-R1/4-C1	10	R1/4	60.2	35.5	12.0	19	17.0×18.5	18.7	17.5	17.5	18.0	8.0	4.2	8.0	27.5	15.0
EY10-R3/8-C1	10	R3/8	60.2	35.5	14.0	19	17.0×18.5	18.7	17.5	17.5	18.0	9.0	4.2	8.0	28.0	16.0
EY12-R3/8-C1	12	R3/8	64.2	40.5	14.0	20	19.0×21.0	20.7	20.0	20.0	20.5	10.0	4.2	10.0	40.0	22.0
EY12-R1/2-C1	12	R1/2	67.2	40.5	16.0	20	22.0×24.0	20.7	20.0	20.0	20.5	12.0	4.2	9.5	40.0	23.0

EY6-N1/8-C1	6	NPT1/8	45.2	25.2	9.0	15	12.0×13.0	15.2	12.2	12.5	13.0	4.5	4.2	4.5	9.0	6.0
EY6-N1/4-C1	6	NPT1/4	49.2	25.2	12.0	15	14.0×15.4	15.2	12.2	12.5	13.0	7.0	4.2	4.5	9.0	7.0

●Inch size type

Product number	Applicable tubing outer diameter (inch)	T Thread size (R)	L (mm)	L ₁₁ (mm)	A (mm)	F Tubing insertion length (mm)	H×φ Width across flat (mm)	P ₃ (mm)	P ₄ (mm)	W (mm)	D (mm)	d ₁ (mm)	d ₂ (mm)	Min. inner diameter (mm)	Effective sectional area (mm ²)	Weight (g)
EY1/4-R1/8-C1	1/4	R1/8	46.2	25.2	9.0	16	12.0×13.0	16.2	12.2	12.5	13.0	4.5	4.2	4.5	10.5	6.0
EY1/4-R1/4-C1	1/4	R1/4	50.2	25.2	12.0	16	14.0×15.4	16.2	12.2	12.5	13.0	7.0	4.2	4.5	10.5	7.0
EY3/8-R1/4-C1	3/8	R1/4	61.0	35.5	12.0	20	17.0×18.5	19.5	17.5	17.5	18.0	8.0	4.2	8.0	26.0	15.0
EY3/8-R3/8-C1	3/8	R3/8	61.0	35.5	14.0	20	17.0×18.5	19.5	17.5	17.5	18.0	9.0	4.2	8.0	26.0	16.0
EY1/2-R3/8-C1	1/2	R3/8	67.7	42.5	14.0	23	19.0×21.0	22.7	21.0	21.0	21.5	10.0	4.2	10.0	48.0	22.0
EY1/2-R1/2-C1	1/2	R1/2	70.7	42.5	16.0	23	22.0×24.0	22.7	21.0	21.0	21.5	12.0	4.2	9.5	48.0	23.0

Union connector



●Millimeter size type

Product number	d1 Applicable tubing outer diameter (mm)	d2 Applicable tubing outer diameter (mm)	L	L1	P1	F1 Tubing insertion length (mm)	F2 Tubing insertion length (mm)	d3	D1	D2	W	Min. inner diameter (mm)	Effective sectional area (mm ²)	Weight (g)
EUC3-C1	3	3	23.2	11.6	3.6	11	11	3.2	6.3	6.3	6.0	2.0	2.5	—
EUC4-C1	4	4	32.7	16.4	5.0	14	14	4.2	10.0	10.0	9.7	3.0	3.5	2.0
EUC6-C1	6	6	34.5	17.2	6.0	15	15	4.2	13.0	13.0	12.5	5.0	12.5	4.0
EUC8-C1	8	8	36.6	18.3	7.0	16	16	4.2	15.0	15.0	14.5	7.0	28.0	5.0
EUC10-C1	10	10	42.4	21.2	8.5	19	19	4.2	18.0	18.0	17.5	9.0	45.0	10.0
EUC12-C1	12	12	44.4	22.2	9.8	20	20	4.2	20.5	20.5	20.0	11.0	67.0	14.0

●Inch size type

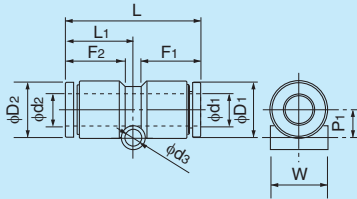
Product number	d1 Applicable tubing outer diameter (inch)	d2 Applicable tubing outer diameter (inch)	L	L1	P1	F1 Tubing insertion length (mm)	F2 Tubing insertion length (mm)	d3	D1	D2	W	Min. inner diameter (mm)	Effective sectional area (mm ²)	Weight (g)
EUC1/8-C1	1/8	1/8	25.9	13.0	4.5	12	12	3.2	8.0	8.0	8.0	2.5	—	—
EUC1/4-C1	1/4	1/4	36.4	18.2	6.0	16	16	4.2	13.0	13.0	12.5	5.0	12.5	4.0
EUC3/8-C1	3/8	3/8	44.0	22.0	8.5	20	20	4.2	18.0	18.0	17.5	9.0	28.0	10.0
EUC1/2-C1	1/2	1/2	48.5	24.2	10.3	23	23	4.2	21.5	21.5	20.0	11.0	35.0	19.0

●Inch size type (different diameter connection)

Product number	d1 Applicable tubing outer diameter (inch)	d2 Applicable tubing outer diameter (inch)	L	L1	P1	F1 Tubing insertion length (mm)	F2 Tubing insertion length (mm)	d3	D1	D2	W	Min. inner diameter (mm)	Effective sectional area (mm ²)	Weight (g)
EUC1/8-1/4-C1	1/8	1/4	34.4	18.2	6.0	12	16	4.2	10.0	13.0	12.5	2.5	—	—
EUC1/4-3/8-C1	1/4	3/8	40.7	22.0	8.5	16	20	4.2	15.0	18.0	17.5	5.0	—	—
EUC3/8-1/2-C1	3/8	1/2	46.2	24.2	9.8	20	23	4.2	18.0	21.5	20.0	9.0	—	—

●Inch size — millimeter size connection

Product number	d1 Applicable tubing outer diameter (inch)	d2 Applicable tubing outer diameter (mm)	L	L1	P1	F1 Tubing insertion length (mm)	F2 Tubing insertion length (mm)	d3	D1	D2	W	Min. inner diameter (mm)	Effective sectional area (mm ²)	Weight (g)
EUC1/4-6-C1	1/4	6	35.4	17.2	6.0	16	15	4.2	13.0	13.0	12.5	5.0	12.5	4.0
EUC3/8-10-C1	3/8	10	43.2	21.2	8.5	20	19	4.2	18.0	18.0	17.5	9.0	45.0	10.0



90 degree union elbow

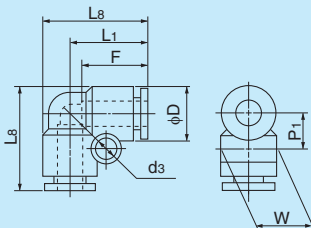


●Millimeter size type

Product number	Applicable tubing outer diameter (mm)	L1	L8	P1	F Tubing insertion length (mm)	d3	D	W	Min. inner diameter (mm)	Effective sectional area (mm ²)	Weight (g)
EUL3-C1	3	12.6	15.7	4.1	11	3.2	6.3	6	2.0	2.0	—
EUL4-C1	4	17.7	22.7	6.9	14	4.2	10.0	9.7	3.0	3.5	3.0
EUL6-C1	6	18.9	25.4	8.3	15	4.2	13.0	12.5	5.0	9.5	4.0
EUL8-C1	8	21.1	28.6	9.3	16	4.2	15.0	14.5	7.0	19.5	6.0
EUL10-C1	10	25.0	34.0	10.8	19	4.2	18.0	17.5	9.0	32.5	12.0
EUL12-C1	12	26.7	37.0	12.1	20	4.2	20.5	20.0	11.0	45.5	16.0

●Inch size type

Product number	Applicable tubing outer diameter (mm)	L1	L8	P1	F Tubing insertion length (mm)	d3	D	W	Min. inner diameter (mm)	Effective sectional area (mm ²)	Weight (g)
EUL1/8-C1	1/8	15.2	19.2	5.0	12	3.2	8.0	8.0	3.0	—	—
EUL1/4-C1	1/4	19.9	26.4	8.3	16	4.2	13.0	12.5	5.0	12.0	4.0
EUL3/8-C1	3/8	25.8	34.8	10.8	20	4.2	18.0	17.5	9.0	27.0	12.0
EUL1/2-C1	1/2	29.7	40.5	12.6	23	4.2	21.5	21.0	11.0	54.5	20.0

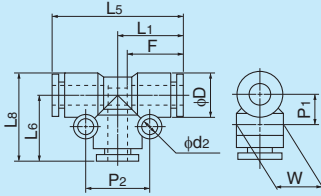


Union tee

●Millimeter size type



Product number	Applicable tubing outer diameter (mm)	L ₁ (mm)	L ₅ (mm)	L ₆ (mm)	L ₈ (mm)	P ₁ (mm)	P ₂ (mm)	F Tubing insertion length (mm)	D (mm)	d ₂ (mm)	W (mm)	Min. inner diameter (mm)	Effective sectional area (mm ²)	Weight (g)
EUT3-C1	3	12.6	25.1	12.6	15.7	4.1	8.2	11	6.3	3.2	6	2.0	2.0	1.5
EUT4-C1	4	17.7	35.3	17.7	22.7	6.9	14.0	14	10.0	4.2	9.7	3.0	3.5	4.0
EUT6-C1	6	18.9	37.9	18.9	25.4	8.3	17.0	15	13.0	4.2	12.5	5.0	9.5	7.0
EUT8-C1	8	21.1	42.2	21.1	28.6	9.3	19.0	16	15.0	4.2	14.5	7.0	19.5	9.0
EUT10-C1	10	25.0	50.0	25.0	34.0	10.8	22.0	19	18.0	4.2	17.5	9.0	32.5	17.0
EUT12-C1	12	26.7	53.4	26.7	37.0	12.1	24.0	20	20.5	4.2	20.0	11.0	45.5	23.0



●Inch size type

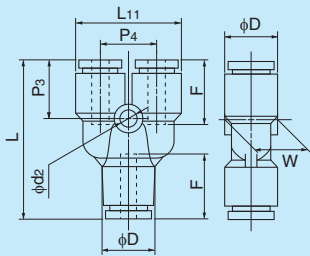
Product number	Applicable tubing outer diameter (inch)	L ₁ (mm)	L ₅ (mm)	L ₆ (mm)	L ₈ (mm)	P ₁ (mm)	P ₂ (mm)	F Tubing insertion length (mm)	D (mm)	d ₂ (mm)	W (mm)	Min. inner diameter (mm)	Effective sectional area (mm ²)	Weight (g)
EUT1/8-C1	1/8	15.2	30.4	15.2	19.2	5.0	10.0	12	8.0	3.2	8.0	3.0	—	—
EUT1/4-C1	1/4	19.9	39.8	19.9	26.4	8.3	17.0	16	13.0	4.2	12.5	5.0	12.0	7.0
EUT3/8-C1	3/8	25.8	51.6	25.8	34.8	10.8	22.0	20	18.0	4.2	17.5	9.0	27.0	17.0
EUT1/2-C1	1/2	29.7	59.5	29.7	40.5	12.6	25.0	23	21.5	4.2	21.0	11.0	54.5	29.0

Y union

●Millimeter size type



Product number	Applicable tubing outer diameter (mm)	L (mm)	L ₁₁ (mm)	F Tubing insertion length (mm)	P ₃ (mm)	P ₄ (mm)	W (mm)	D (mm)	d ₂ (mm)	Min. inner diameter (mm)	Effective sectional area (mm ²)	Weight (g)
EYB3-C1	3	25.7	13.3	11	10.9	7.0	6.0	6.3	2.0	2.0	2	—
EYB4-C1	4	34.7	21.0	14	13.9	11.0	9.7	10.0	3.2	3.0	3.0	4.0
EYB6-C1	6	38.4	25.2	15	15.2	12.2	12.5	13.0	4.2	5.0	8.0	6.0
EYB8-C1	8	43.7	29.2	16	16.8	14.2	14.5	15.0	4.2	7.0	18.0	9.0
EYB10-C1	10	49.0	35.5	19	18.7	17.5	17.5	18.0	4.2	9.0	27.0	17.0
EYB12-C1	12	54.8	40.5	20	20.7	20.0	20.0	20.5	4.2	11.0	38.5	24.0



●Inch size type

Product number	Applicable tubing outer diameter (inch)	L (mm)	L ₁₁ (mm)	F Tubing insertion length (mm)	P ₃ (mm)	P ₄ (mm)	W (mm)	D (mm)	d ₂ (mm)	Min. inner diameter (mm)	Effective sectional area (mm ²)	Weight (g)
EYB1/8-C1	1/8	29.4	17.0	12	11.7	9.0	8.0	8.0	3.2	3.0	—	—
EYB1/4-C1	1/4	40.3	25.2	16	16.2	12.2	12.5	13.0	4.2	5.0	10.5	10.0
EYB3/8-C1	3/8	50.6	35.5	20	19.5	17.5	17.5	18.0	4.2	9.0	24.0	24.0
EYB1/2-C1	1/2	60.4	42.5	23	22.7	21.0	21.0	21.5	4.2	11.0	46.5	33.0

Panel touch connector

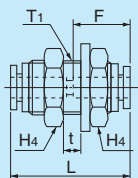
●Millimeter size type



Product number	Applicable tubing outer diameter (mm)	L (mm)	F Tubing insertion length (mm)	H ₄ (mm)	t Max. panel thickness (mm)	T ₁ Recommended panel hole diameter (mm)	Washer outer diameter (mm)	Washer thickness (mm)	Min. inner diameter (mm)	Effective sectional area (mm ²)	Weight (g)
EPC4-C1	4	32.7	14	17.0	7.5	13	24.0	2.5	3.0	3.5	5.0
EPC6-C1	6	34.5	15	19.0	9.5	15	28.0	2.5	5.0	12.5	7.0
EPC8-C1	8	36.6	16	22.0	10.0	17	30.0	3.0	7.0	28.0	9.0
EPC10-C1	10	42.4	19	27.0	14.0	21	37.0	3.0	9.0	45.0	16.0
EPC12-C1	12	44.4	20	30.0	16.0	23	39.0	3.0	11.0	67.0	67.0

●Inch size type

Product number	Applicable tubing outer diameter (inch)	L (mm)	F Tubing insertion length (mm)	H ₄ (mm)	t Max. panel thickness (mm)	T ₁ Recommended panel hole diameter (mm)	Washer outer diameter (mm)	Washer thickness (mm)	Min. inner diameter (mm)	Effective sectional area (mm ²)	Weight (g)
EPC1/4-C1	1/4	36.4	16	19.0	9.5	15	28.0	2.5	5.0	12.5	7.0
EPC3/8-C1	3/8	44.0	20	27.0	14.0	21	37.0	3.0	9.0	45.0	16.0
EPC1/2-C1	1/2	48.5	23	30.0	16.0	23	39.0	3.0	10.0	67.0	67.0



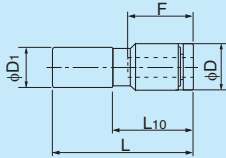
*Made to order

Reducer



●Millimeter size type

Product number	Applicable tubing outer diameter (mm)	D1 Insertion part diameter (mm)	L (mm)	L ₁₀ (mm)	F Tubing insertion length (mm)	D (mm)	Min. inner diameter (mm)	Effective sectional area (mm ²)	Weight (g)
ER4-6-C1	4	6	34.5	18.0	14	10.0	3.0	3.5	2.0
ER4-8-C1	4	8	32.0	18.8	14	10.0	3.0	3.5	2.0
ER6-8-C1	6	8	34.7	17.7	15	13.0	5.0	10.5	2.0
ER6-10-C1	6	10	35.6	20.6	15	13.0	5.0	10.5	3.0
ER8-10-C1	8	10	39.4	18.9	16	15.0	7.0	28.0	3.0
ER8-12-C1	8	12	38.3	16.3	16	15.0	7.0	28.0	4.0
ER10-12-C1	10	12	42.8	20.8	19	18.0	9.0	45.0	8.0



●Inch size type

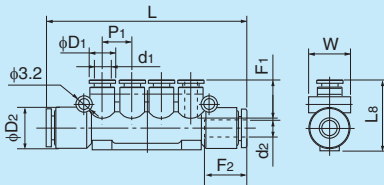
Product number	Applicable tubing outer diameter (inch)	D1 Insertion part diameter (inch)	L (mm)	L ₁₀ (mm)	F Tubing insertion length (mm)	D (mm)	Min. inner diameter (mm)	Effective sectional area (mm ²)	Weight (g)
ER1/4-3/8-C1	1/4	3/8	35.2	16.4	16	13.0	5.0	12.0	3.0

Manifold



●Inch size type

Product number	d ₁ Applicable tubing outer diameter (inch)	d ₂ Applicable tubing outer diameter (inch)	L (mm)	P ₁ (mm)	L _s (mm)	F ₁ Tubing insertion length (mm)	F ₂ Tubing insertion length (mm)	D ₁ (mm)	D ₂ (mm)	W (mm)	Weight (g)
EMA1/8-1/4-4S-C1	1/8	1/4	65.7	9.0	21.7	12	16	8.0	13.0	12.6	—

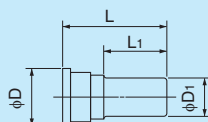


Blank plug



●Millimeter size type

Product number	D1 Insertion part diameter (mm)	L (mm)	L ₁ (mm)	D (mm)	Weight (g)
BC3-C1	3	23.5	13.0	5.0	0.5
BC4-C1	4	28.0	15.5	7.7	0.5
BC6-C1	6	28.0	16.0	9.7	0.8
BC8-C1	8	29.0	16.0	11.7	1.1
BC10-C1	10	32.0	17.7	14.0	1.6
BC12-C1	12	34.0	20.4	16.0	2.4



●Inch size type

Product number	D1 Insertion part diameter (inch)	L (mm)	L ₁ (mm)	D (mm)	Weight (g)
BC1/8-C1	1/8	26.0	13.5	7.7	—
BC1/4-C1	1/4	28.0	16.0	9.7	1.2
BC3/8-C1	3/8	32.0	17.7	14.0	2.5
BC1/2-C1	1/2	34.0	20.4	16.0	3.8

Tubing

Clean tubing

Processed tubing

PushOne fitting

QuickSeal fitting

Clean fitting/ Chemifit

Bamboo-shoot fitting

Control switch/ Detachable series

Jig/Tool/ Accessory

Technical information

Reference