

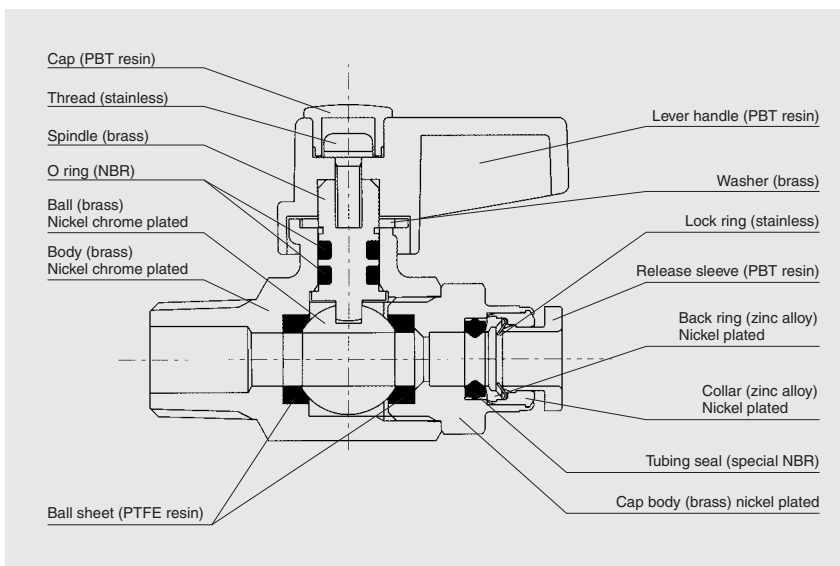
Ball Valve

PushOne™ Type

Features

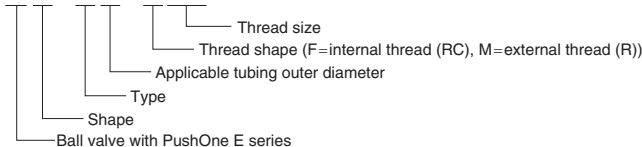
- **Enables compacting piping**
Integrated space-saving ball valve and PushOne fitting enables compact piping.
- **PushOne connection of tubing**
Jig and tool not required for connecting the tubes.
- **Position of handle can be changed**
Handle can be re-attached in different position if it hits something when opened or closed.
- **Nickel plated**
Prevents degradation of surface and dissolution of copper ions into fluid.

Cross-sectional structure diagram

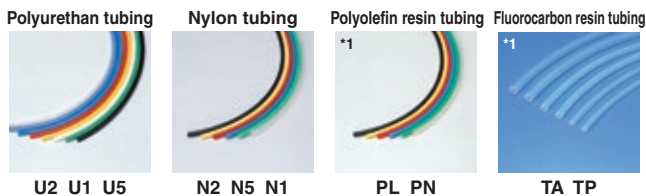


Product number example

VS-E6-F1/4



Applicable tubing



(*1) Combinatory use of PL, PN, TA or TP tubing and ball valve mixes general and clean type performances.
When using them together in a clean environment, be aware of how this could lower the cleanliness level.



Operating fluid, working temperature range

Operating fluid	Working temperature range
Air	-20°C~+80°C
Water	-0°C~+40°C

Pressure condition

Maximum working pressure: 1.0MPa

Change of open/close position of handle

Position of the lever handle can be changed when the handle could be interfered with by any objects that would prevent it from opening or closing a full 90 degrees.

- ① Detach the cap and the thread inside.
- ② Detach the lever handle.
- ③ Attach the lever handle in new position at user's discretion, then confirm that the handle can be opened or closed smoothly a full 90 degrees before tightening up the thread.
- ④ Attach the cap again.

Handling instructions

- ⚠ **Caution:** When the working conditions of tubes and fittings differ, use them under the lower specified conditions.
- ⚠ **Caution:** When water is used as the operating fluid, do not allow it to freeze.
- ⚠ **Caution:** Use the valve at fully open or closed position, not at an intermediate position.
- ⚠ **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.
- ⚠ **Caution:** Cannot be used at a negative pressure.

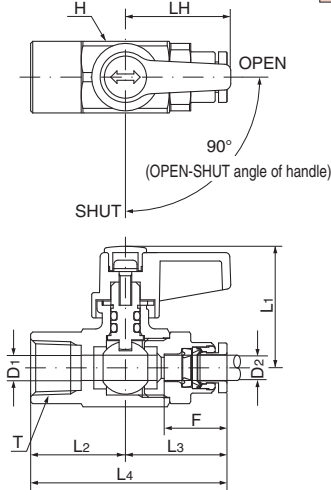
📖 See page 134 for the common handling instructions for control, switch and detachable series products.

Straight type



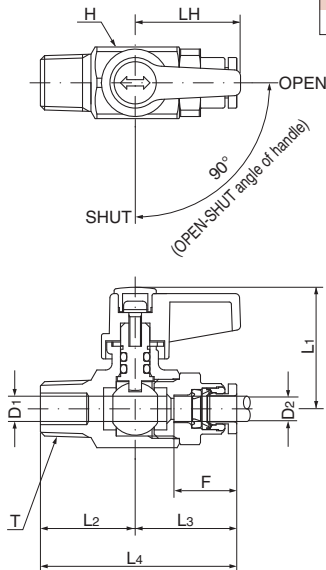
●Internal thread

Product number	Applicable tubing outer diameter (mm)	T Thread size (RC)	L ₁ (mm)	L ₂ (mm)	L ₃ (mm)	L ₄ (mm)	LH (mm)	F Tubing insertion length (mm)	D ₁ (mm)	D ₂ (mm)	H (mm)	Effective sectional area (mm ²)	Weight (g)
VS-E6-F1/8	6	RC1/8	29.0	20.5	24.5	45.0	25.0	15	6.0	5.0	17	—	62.0
VS-E6-F1/4	6	RC1/4	29.0	22.5	24.5	47.0	25.0	15	6.0	5.0	17	—	66.0
VS-E8-F1/8	8	RC1/8	29.0	20.5	25.7	46.2	25.0	16	6.0	6.0	17	—	62.0
VS-E8-F1/4	8	RC1/4	29.0	22.5	25.7	48.2	25.0	16	6.0	6.0	17	—	66.0
VS-E8-F3/8	8	RC3/8	30.5	23.0	27.4	50.4	25.0	16	7.5	6.0	22	—	106.0
VS-E10-F1/4	10	RC1/4	29.0	22.5	28.5	51.0	25.0	19	6.0	6.0	17	—	70.0
VS-E10-F3/8	10	RC3/8	30.5	23.0	30.0	53.0	25.0	19	7.5	7.5	22	—	108.0
VS-E12-F3/8	12	RC3/8	30.5	23.0	32.3	55.3	25.0	20	7.5	7.5	22	—	110.0



●External thread

Product number	Applicable tubing outer diameter (mm)	T Thread size (R)	L ₁ (mm)	L ₂ (mm)	L ₃ (mm)	L ₄ (mm)	LH (mm)	F Tubing insertion length (mm)	D ₁ (mm)	D ₂ (mm)	H (mm)	Effective sectional area (mm ²)	Weight (g)
VS-E6-M1/8	6	R1/8	29.0	20.5	24.5	45.0	25.0	15	6.0	5.0	17	—	58.0
VS-E6-M1/4	6	R1/4	29.0	22.5	24.5	47.0	25.0	15	6.0	5.0	17	—	61.0
VS-E8-M1/8	8	R1/8	29.0	20.5	25.7	46.2	25.0	16	6.0	6.0	17	—	58.0
VS-E8-M1/4	8	R1/4	29.0	22.5	25.7	48.2	25.0	16	6.0	6.0	17	—	61.0
VS-E8-M3/8	8	R3/8	30.5	23.0	27.4	50.4	25.0	16	7.5	6.0	22	—	100.0
VS-E8-M1/2	8	R1/2	30.5	24.0	27.4	51.4	25.0	16	7.5	6.0	22	—	108.0
VS-E10-M1/4	10	R1/4	29.0	22.5	28.5	51.0	25.0	19	6.0	6.0	17	—	65.0
VS-E10-M3/8	10	R3/8	30.5	23.0	30.0	53.0	25.0	19	7.5	7.5	22	—	102.0
VS-E10-M1/2	10	R1/2	30.5	24.0	30.0	54.0	25.0	19	7.5	7.5	22	—	110.0
VS-E12-M3/8	12	R3/8	30.5	23.0	32.3	55.3	25.0	20	7.5	7.5	22	—	104.0
VS-E12-M1/2	12	R1/2	30.5	24.0	32.3	56.3	25.0	20	7.5	7.5	22	—	112.0



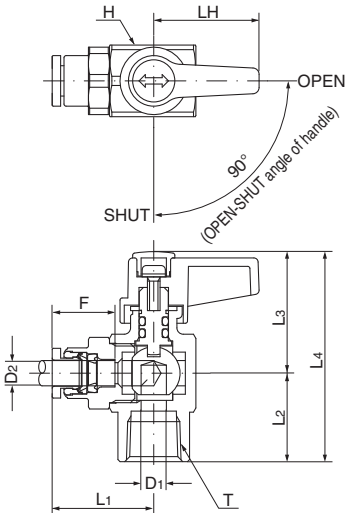
- Tubing
- Clean tubing
- Processed tubing
- PushOne fitting
- QuickSeal fitting
- Clean fitting/ Chemifit
- Bamboo-shoot fitting
- Control switch/ Detachable series
- Jig/Tool/ Accessory
- Technical information
- Reference

Angled type



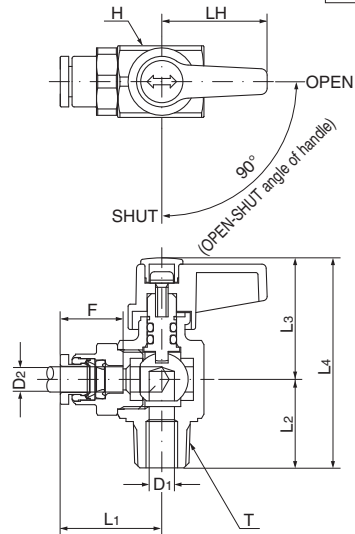
●Internal thread

Product number	Applicable tubing outer diameter (mm)	T Thread size (RC)	L ₁ (mm)	L ₂ (mm)	L ₃ (mm)	L ₄ (mm)	LH (mm)	F Tubing insertion length (mm)	D ₁ (mm)	D ₂ (mm)	H (mm)	Effective sectional area (mm ²)	Weight (g)
VA-E6-F1/8	6	RC1/8	24.5	19.0	29.0	48.0	25.0	15	6.0	5.0	17	—	68.0
VA-E6-F1/4	6	RC1/4	24.5	21.0	29.0	50.0	25.0	15	6.0	5.0	17	—	65.0
VA-E8-F1/8	8	RC1/8	25.7	19.0	29.0	48.0	25.0	16	6.0	6.0	17	—	68.0
VA-E8-F1/4	8	RC1/4	25.7	21.0	29.0	50.0	25.0	16	6.0	6.0	17	—	65.0
VA-E8-F3/8	8	RC3/8	27.4	24.0	31.0	55.0	25.0	16	7.5	6.0	22	—	114.0
VA-E10-F1/4	10	RC1/4	28.5	21.0	29.0	50.0	25.0	19	6.0	6.0	17	—	69.0
VA-E10-F3/8	10	RC3/8	30.0	24.0	31.0	55.0	25.0	19	7.5	7.5	22	—	103.0
VA-E12-F3/8	12	RC3/8	32.3	24.0	31.0	55.0	25.0	20	7.5	7.5	22	—	118.0



●External thread

Product number	Applicable tubing outer diameter (mm)	T Thread size (R)	L ₁ (mm)	L ₂ (mm)	L ₃ (mm)	L ₄ (mm)	LH (mm)	F Tubing insertion length (mm)	D ₁ (mm)	D ₂ (mm)	H (mm)	Effective sectional area (mm ²)	Weight (g)
VA-E6-M1/8	6	R1/8	24.5	20.0	29.0	49.0	25.0	15	6.0	5.0	17	—	61.0
VA-E6-M1/4	6	R1/4	24.5	21.0	29.0	50.0	25.0	15	6.0	5.0	17	—	64.0
VA-E8-M1/8	8	R1/8	25.7	20.0	29.0	49.0	25.0	16	6.0	6.0	17	—	61.0
VA-E8-M1/4	8	R1/4	25.7	21.0	29.0	50.0	25.0	16	6.0	6.0	17	—	64.0
VA-E8-M3/8	8	R3/8	27.4	25.0	31.0	56.0	25.0	16	7.5	6.0	22	—	110.0
VA-E10-M1/4	10	R1/4	28.5	21.0	29.0	50.0	25.0	19	6.0	6.0	17	—	68.0
VA-E10-M3/8	10	R3/8	30.0	25.0	31.0	56.0	25.0	19	7.5	7.5	22	—	112.0
VA-E12-M3/8	12	R3/8	32.3	25.0	31.0	56.0	25.0	20	7.5	7.5	22	—	106.0
VA-E12-M1/2	12	R1/2	32.3	27.0	31.0	57.0	25.0	20	9.0	7.5	22	—	113.0



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