



Outer diameter: 3.2mm, 4mm, 6mm, 8mm, 10mm, 12mm



Features

- Resistant to static electricity and dust build-up
- Variety of colors

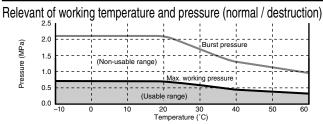
Tubing is available in black, white, clear, clear blue, or clear green.

Colors can be used for the application.

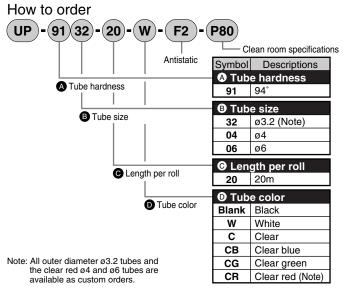
UP-F2 Series(ø3.2 to ø6)

Specifications

Descriptions	UP-91**-F2-P80		
O.D. \times I.D. $mm \times mm$	ø3.2 × ø1.8 (Note)	ø4×ø2.5	ø6×ø4
Working fluid	Compressed air		
Max. working pressure MPa	0.7 (20°C)		
Ambient temperature range °C	0 to 60 (no freezing)		
Durometer hardness (JIS K 7215)	HDA94 (reference)		
Mini. bending radius (JIS B 8381) mm	4	6	12
Min. installation radius mm	8	11	18
Burst pressure MPa	2.1 (20°C)		
Volume resistance ratio (JIS K 6911) Ω·cm	Black: 10 ⁴ to 10 ⁵ , other colors: 10 ¹⁰ to 10 ¹¹ (referential value)		
Material	Antistatic urethane		
Color	Black, white, clear, clear blue, clear green, clear red (Note)		



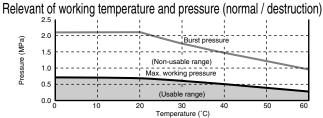
- Standard clean specifications (F2 Series)
- Diverse lineup
 - Six diameters are available: 3.2, 4, 6, 8, 10, and 12.

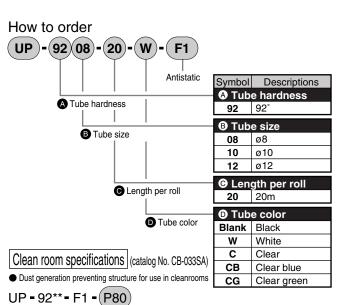


UP-F1 Series (ø8 to ø12)

Specifications

Opcomoationo			
Descriptions		UP-92**-F1	
O.D. × I.D. mm×mm	ø8×ø5	ø10×ø6.5	ø12×ø8
Working fluid	Compressed air		
Max. working pressure MPa	0.7 (20°C)		
Ambient temperature range °C	0 to 60 (no freezing)		
Durometer hardness (JIS K 7215)	HDA92 (reference)		
Mini. bending radius (JIS B 8381) mm	10	13	16.5
Min. installation radius mm	25	30	36
Burst pressure MPa	2.1(20°C)		
Volume resistance ratio (JIS K 6911) Ω·cm	Black: 10 ⁴ to 10 ⁸ , other colors: 10 ⁸ to 10 ¹² (referential value)		
Material	Antistatic urethane		
Color	Black, white, clear, clear blue, clear green		





Refrigerating type dryer

Desiccant type dryer

High polymer membrane type dryer

Auto. drain / others

(Module unit)

Compact

Compact F.R.

Precise regulator F.R.L. (Related products)

Clean F.R. Electro pneumatic regulator

Air booster

Speed control valve

control valve

Silencer

Check valve / others

Joint / tube
Vacuum filter

Vacuum regulator
Suction

Magnetic spring buffer

Mechanical pressure SW Electronic pressure SW

Air sensor

Pressure SW for coolant

Small flow sensor

flow controller

Flow sensor for air Flow sensor for water

Total air system Total air system (Gamma)

Ending

Antistatic tube Joint / tube

Antistatic tube

Refrigerating type dryer

Desiccant type dryer High polymer

type dryer Air filter

Auto. drain / others

F.R.L. (Module unit)

Compact F.R.

Precise regulator F.R.L. (Related products) Clean F.R.

pneumatic regulator Air booster

Speed control valve Silencer

Check valve / others

Vacuum filter

regulator Suction plate

Magnetic spring buffer

Mechanical pressure SW

Electronic pressure SW Contact / close contact conf.

Air sensor

for coolant Small

Small flow controlle

Flow sensor for air Flow sensor for water

Total air system Total air

(Gamma) Ending

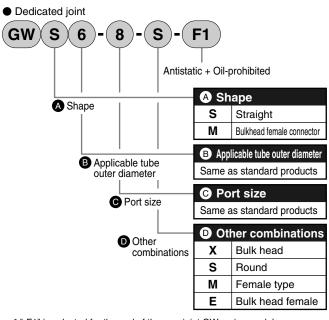
Dedicated joint / speed control valve (Custom order)

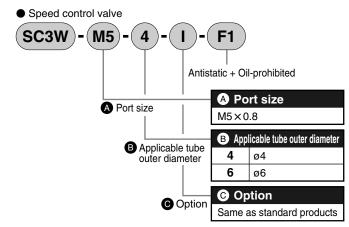
Specifications

Descriptions	Descriptions
Volume resistance ratio Ω·cm	10 ⁴ to 10 ⁶ or less (reference value)
Resin	Antistatic PBT (black)
Lubricant	Oil-prohibited

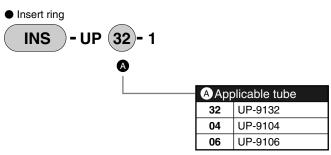
Note: Other specifications are the same as the standard products. Refer to the specifications of joint GW Series or speed control valve SC3W Series.

How to order





- * "-F1" is selected for the end of the speed control valve SC3W series model. Refer to How to order for speed control valve SC3W Series for model details.
 - * Consult with CKD for models other than above.
- * "-F1" is selected for the end of the new joint GW series model.
- Refer to How to order for joint GW Series for model details.
- * Consult with CKD for models other than above.

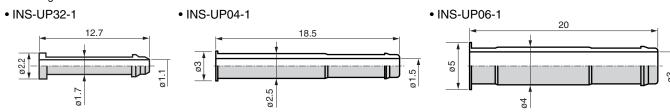


Sales unit is 10 pieces/1 bag.

Dimensions

Dedicated joint / speed control valve
 Refer to the dimensions for joint GW Series (pages 930 to 943) and speed control valve SC3W Series (pages 842 to 845).

Insert ring <custom order>



Material: Brass + electroless nickeling

Antistatic tube

Safety precautions



A CAUTION

■ Design & Selection

- Be sure to ground the member connected to the joint. Otherwise electrostatic discharge could build up in tubing.
- When using tubing where electrostatic discharge must be prevented, select "black" tubing.
- Use the same size of urethane tubing, pushin joint, and insertion ring.
- When using with vacuum pressure with a push-in joint, use the insert ring.
- Use CKD brand joints and tubes.
- Do not apply a pulling force exceeding the values given on the right onto the joint or tube.

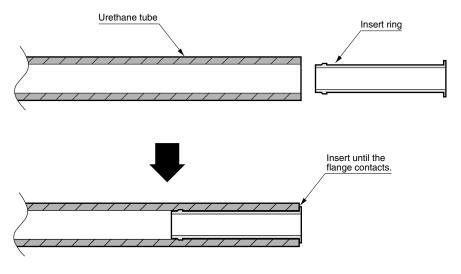
	(N)
Tube outer diameter	Pulling force
ø3.2	30
ø4	30
ø6	55
ø8	110
ø10	150
ø12	180

■ Installation & Adjustment

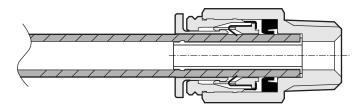
The insertion ring is pulled out of urethane tubing with a finger when changing or modifying after piping is connected. The insertion ring need not be discarded.

■ During Use & Maintenance

- Insert the insertion ring by hand. Otherwise it could deform or break and cause vacuum leakage if inserted with a tool.
- How to install the product
 - 1. Insert the insertion ring into urethane tubing with a finger.



2. Insert into the pushin joint (GW Series).



Desiccant type dryer High polymer membrane type dryer Air filter Auto. drain / others F.R.L. (Module unit) F.R.L.

> Compact F.R. Precise regulator F.R.L. (Related products

Clean F.R. Electro pneumatic regulator

Air booster Speed control valve

Silencer

Vacuum filter

Magnetic spring buffer

Mechanical pressure SW Electronic pressure SW

Air sensor

Small flow senso

Small flow controlle

Flow sensor for water Total air

system Total air (Gamma)

Ending

Antistatic tube Joint / tube