



Tube

# F.U.NU.KX.SR Series

Wide port size available according to purposes/applications.  
High reliable piping tubes

- O.D.: 3. 2 / 4 / 6 / 8 / 10 / 12 / 15mm

## Soft nylon tube

Soft nylon tube is very flexible comparing to conventional nylon tube, and optimum for piping in the limited space. This tube also has sufficient characteristics such as cold resistance, weatherability, oil resistance and chemical resistance, etc.

### How to order

**FH-3224 - W**

Soft nylon tube  
Tube size  
3.2 dia. X 2.4 dia.

For miniature joint (F)  
(Page 678).

A Color of tube	
Blank	Black
W	White

## Specifications

This table shows the value at 20 °C.

Descriptions	FH-3224	F-1532	F-1504	F-1506	F-1508	F-1510	F-1512	F-1515
Working fluid	Compressed air							
O.D. X I.D. mm X mm	3.2 X 2.4	3.2 X 2.0	4 X 2.5	6 X 4	8 X 5.7	10 X 7.2	12 X 8.9	15 X 11.5
Ambient temperature range °C	-10 to 60							
Burst pressure MPa	5.39		4.9		3.9		3.43	
Max. working pressure MPa	1.76		1.67		1.27		1.18	
Min. bending radius mm	Approx. 10		Approx. 20		Approx. 30		Approx. 40	
Standard color	White / black		White (20m only) / black / red / Blue / yellow / green / orange			White / black		
Standard-volume length m	20		20 / 100			20 (white only) / 100 (black only)		

\*External dimensions tolerance may vary within ± 0.1mm.

**F-15** **04** - **20** - **W**

Soft nylon tube

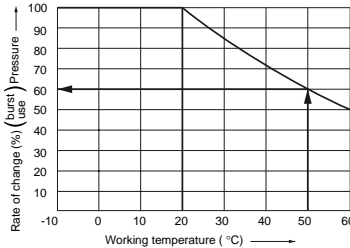
A Tube size (O.D.)	B One volume length	C Color of tube
32 3.2 dia. 10	10 dia. 20 20m	Blank/Black (standard)
04 4 dia. 12	12 dia. 100 100m	w White color (standard)
06 6 dia. 15	15 dia.	
08 8 dia.		

Note: If tube color is white "W", length per roll 100m is not available.

Note: Indicate tube color other than above in remarks on the order slip.

Note: Use FH-3224 for miniature joint. F-1532 can not be used.

## Relations between working temperature and pressure (use / burst)



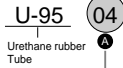
Working pressure = burst pressure  $\times \frac{1}{3}$   
(E.g.) For tube U-1504(4 dia. X 2.5 dia.), if temperature is 50 °C, working pressure is 60% of working pressure of 20 °C.

$$1.76 \times \frac{60}{100} \approx 1.06 \text{ (MPa)}$$

## Urethane tube

Since urethane tube has high mechanical strength, the tube strongly endures external force, and also has flexibility. This is widely used in general pneumatics lines, etc.

### How to order



Urethane rubber Tube

A Tube size (O.D.)	
32	3.2 dia.
04	4 dia.
06	6 dia.
08	8 dia.
10	10 dia.
12	12 dia.

Note: Indicate tube color in remarks on the order slip.

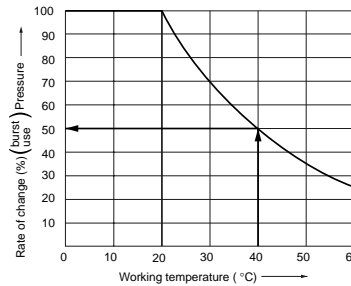
## Specifications

This table shows the value at 20 °C.

Descriptions	U-9532	U-9504	U-9506	U-9508	U-9510	U-9512
Working fluid	Compressed air					
O.D. X I.D. mm X mm	3.2 X 1.8	4 X 2	6 X 4	8 X 5	10 X 6.5	12 X 8
Ambient temperature range °C	0 to 60					
Burst pressure MPa	3.14	3.63	2.45		2.35	
Max. working pressure MPa	1	1.18	0.81		0.78	
Min. bending radius mm	7	10	20	30	40	50
Standard color	Transparent / black					
Standard-volume length m	20	20 / 40			20	

\*If U-9506 or less, tolerance of outer diameter may vary within  $+0.1$ / $-0.15$  mm, while if U-9508 over, may vary within  $+0.1$ / $-0.2$  mm.

## Relations between working temperature and pressure (use / burst)



Working pressure = burst pressure  $\times \frac{1}{3}$   
 (E.g.) For tube U-9504, if temperature is 40 °C, working pressure is 50% of working pressure of 20 °C.

$$1.18 \times \frac{50}{100} \approx 0.59 \text{ (MPa)}$$

## Urethane tube

Realizing magnified inner diameter and strength increase but still same outer diameter due to new manufacturing process. Meeting needs of large flow rate. Also economical.

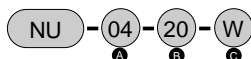
### Common specifications

Descriptions	Descriptions
Working fluid	Air
Ambient temperature range °C	0 to 60
Burst pressure MPa	4 (20 °C)
Working pressure MPa	1.0 (20 °C)
Use vacuum kPa	-100

## Specifications

Descriptions	NU-04	NU-06	NU-08	NU-10	NU-12
O.D. X I.D. mm X mm	4 X 2.5	6 X 4.5	8 X 6	10 X 7.5	12 X 9
Burst pressure MPa	4 to 2.4				
Ambient temperature range °C	0 to 60				
Min. bending radius mm	8	15	24	30	36
O.D. accuracy mm	+0.1 -0.1			+0.1 -0.15	
Mass g/m	10	15	28	42	62
Color of tube	Black / white				
Volume length m	20 / 100 (black only)				

### How to order

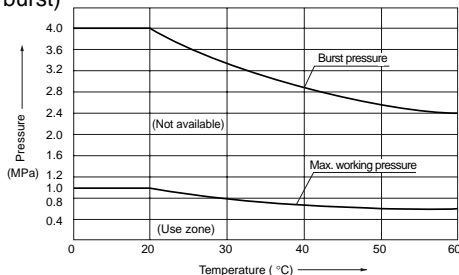


A Tube size (O.D.)	B Length per roll	C Color of tube
04 4 dia.	20 20m	Blank (Black (standard))
06 6 dia.	100 100m	W (White color (standard))
08 8 dia.		
10 10 dia.		
12 12 dia.		

Note: For "W" white color type, length per roll 100m is not selected.

Note: Consult with CKD on other tube color.

## Relations between working temperature and pressure (use / burst)



Refrigerating type dryer

Desiccant type dryer  
High polymer membrane dryer

Air filter

Automatic drain other

F.R.L (Module)

F.R.L (Separate)

Small F.R.

Precise R.

Electro pneumatic R.

Auxiliary

Flow control valve

Silencer

Check valve / others

Joint / tube

Vacuum F.

Vacuum R.

Vacuum generator

Vacuum auxiliary / pad

Mechanical pressure SW

Electronic pressure SW

Electronic dif. pres. SW

Sealing / close contact conf. SW

Pressure SW for coolant

Flow sensor for air

Total air system

Water cooling refrigerator

Flow sensor for water

Joint / tube

Tube

## Coiling tube

A coiling tube is a coil-like manufactured extensible tube. Differing from the conventional way, a joint is easily installed, since a straight section is provided with the specified length to the extensible direction from end of the coil, and the coil shrinks and extends very smoothly. Durability of coil end is also excellent.

### How to order

KX-12 06

Coiling tube

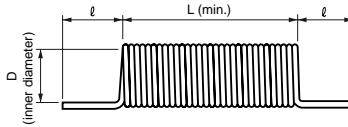
A Outer diameter	
06	6 dia.
08	8 dia.
10	10 dia.
12	12 dia.

## Specifications

Descriptions	KX-1206	KX-1208	KX-1210	KX-1212
O.D. X I.D. mm X mm	6 X 4	8 X 6	10 X 7.5	12 X 9.2
Ambient temperature range °C	-10 to 60			
Use extension m	Approximate 2.5			
D mm	50	70	90	
L mm	250	240	290	275
ℓ	100			
Color	Orange			

\*Each tube length 7.5m \*Tolerance of outer diameter may vary within  $\pm 0.07$  mm.

\*Tube material is hard nylon. Please consult with CKD on urethane rubber.



## Flame resistant tube

Flame retardant material used epoch-making tube. If welding spatters, etc. contact, the tube is not burning. (Equivalent to UL standards 94V-0: Self extinguish)

### How to order

SR - 04

Flame resistant tube

A Tube size (O.D.)	
04	4 dia.
06	6 dia.
08	8 dia.
10	10 dia.
12	12 dia.

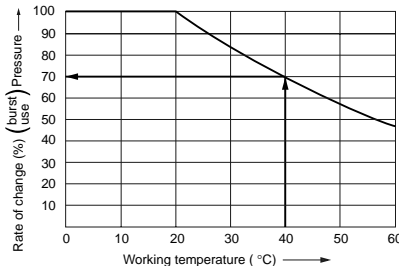
Note: Indicate color of tube in the remarks on the order slip.

## Specifications

Descriptions	SR-04	SR-06	SR-08	SR-10	SR-12
O.D. X I.D. mm X mm	4 X 2.3	6 X 3.8	8 X 5.5	10 X 7	12 X 8.5
Ambient temperature range °C	0 to 60				
Burst pressure MPa	5.88		5.39	4.9	
Max. working pressure MPa	1.96		1.76	1.57	
Min. bending radius mm	10	15	20	25	30
Standard color	Black / red / blue / green				
Standard-volume length m	100				

This table shows the value at 20 °C.

## Relations between working temperature and pressure (use / burst)



Working pressure = burst pressure  $\times \frac{1}{3}$   
 (E.g.) For tube SR-04, if temperature is 40 °C, working pressure is 70% of working pressure of 20 °C.  
 $1.96 \times \frac{70}{100} \approx 1.37$  (MPa)