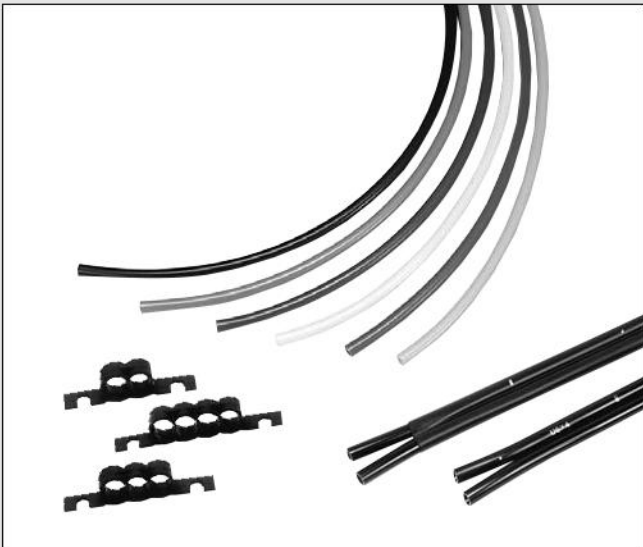


KOGANEI

ACCESSORIES GENERAL CATALOG

AIR TREATMENT, AUXILIARY, VACUUM,
AND FLUORORESIN PRODUCTS

TUBES CONTENTS



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 **Caution** Before use, be sure to read the "Safety Precautions" on p. 49.

FLAT TUBES

Nylon Tubes, Urethane Tubes



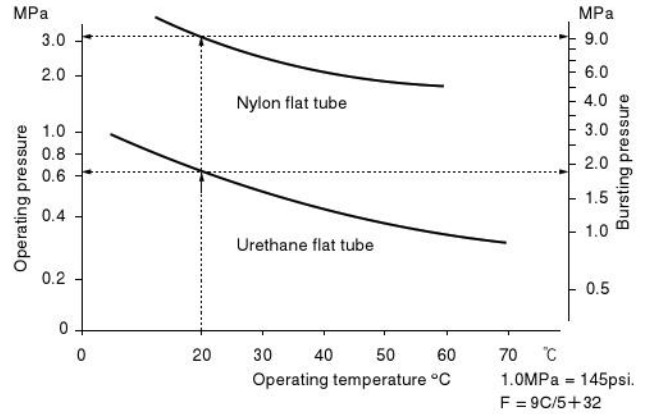
- Dual-conduit tube supports ease of use for ports collected at one surface type actuators and control valves.
- Optimum use in tight piping spaces. Clean profile piping also improves maintainability.

- Tube has markings for easy identification when making tubing connections. Even long tubing portions can be identified at a glance.
- Emphasis on ease of use ensures fingertip separation of tubings. Matches up with quick fittings and all other kinds of fittings.

Specifications

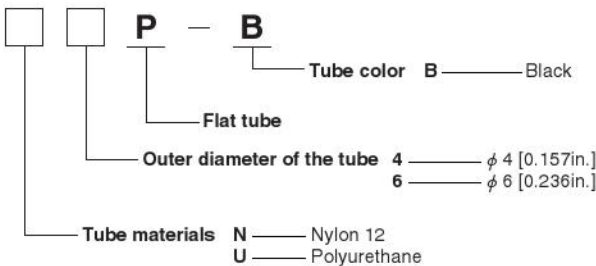
Operating Temperature, Pressure, and Bursting Pressure

Item	Type Model	Nylon flat tube		Urethane flat tube	
		N4P-B	N6P-B	U4P-B	U6P-B
Nominal dimensions (O.D.×I.D.)	mm [in.]	4×2.5 [0.157×0.098]	6×4 [0.236×0.157]	4×2.5 [0.157×0.098]	6×4 [0.236×0.157]
Media		Air, vacuum ^{Note 1}		Air, vacuum ^{Note 1}	
Operating temperature range	°C [°F]	-20~60 [-4~140]		-15~70 [5~158]	
Materials		Nylon 12		Polyurethane	
Minimum bending radius ^{Note 2}	mm [in.]	24 [0.94]	36 [1.42]	10 [0.39]	15 [0.59]
Color		Black		Black	
Unit mass	g/m [oz./ft.]	28 [0.30]	49 [0.53]	19 [0.20]	38 [0.41]
Outer dimensions	mm [in.]	4.4×8.8 [0.173×0.346]	6.6×12.7 [0.26×0.50]	4×8 [0.16×0.31]	6×12 [0.24×0.47]
Standard length	m [ft.]	20 [66]		20 [66]	
Sales unit		1 roll (20m [66ft.])		1 roll (20m [66ft.])	



Notes: 1. The vacuum is -99.99~0KPa [-29.54~0in.Hg].
 2. The operating temperature range shows values for when the tube is in a stationary state. For the operating temperature range in applications where the tube is forced to swing, consult us.

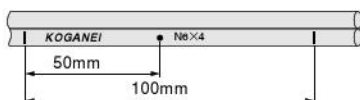
Order Codes



Handling Instructions and Precautions

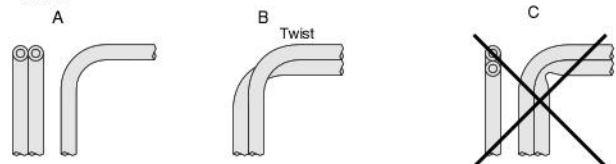
Piping

1. There are markings at 50mm, 100mm, 400mm intervals on one side of the nylon flat tube insulation. These markings are also found on one of the two tubes in the urethane flat tube. Use the markings as guides for cutting tube lengths.



2. When cutting the tube, cut so that the cut surface is perpendicular to the tube's center of axis.
3. The nylon flat tube is insulated with a PVC sheath. To separate it off, break off as much of the sheath as is needed, and then peel it off in the circumferential direction.
4. The urethane flat tube consists of two tubes welded together. To separate the two tubes, grasp them on left and right with fingertips, pull them apart until separated. If difficult to separate with fingertips, separation can be made easier by cutting a small section at the front edge with a cutter.

5. If bending the flat tube for a piping, bend only in the directions shown in Figure A or B for not crushing the flat tube.



Atmosphere

1. Do not use in atmospheres where the operating temperature range will exceed the values in the specifications. In addition, do not use in locations where sparks could occur, because the PVC sheath used on the nylon flat tube is not fire resistant.
2. The product cannot be used when the media or the ambient atmosphere contains any of the substances listed below. Organic solvents, phosphate ester type hydraulic oil, sulphur dioxide, chlorine gas, or acids, etc.

Caution: As the depth of cut section made with the cutter, etc., could damage the tube's roundness, always discard that section afterward.



General precautions

1. Always thoroughly blow off (use compressed air) the tubing before piping. Entering chips, sealing tape, rust, etc., generated during piping work could result in air leaks or other defective operation.
2. Use air for the media. For the use of any other media, consult us.
3. Do not use in atmospheres where the temperature will exceed the operating temperature range.
Do not use in locations where sparks could occur, because the tube is not fire resistant.
4. The product cannot be used when the media or the ambient atmosphere contains any of the substances listed below.
Organic solvents, phosphate ester type hydraulic oil, sulphur dioxide, chlorine gas, or acids, etc.