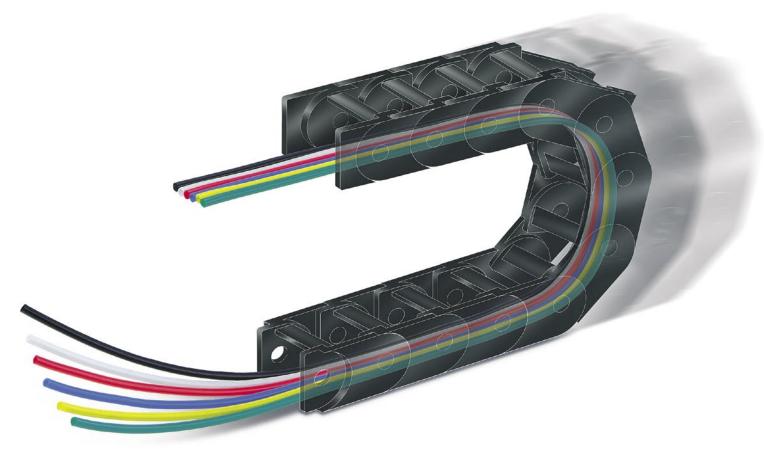
# **Wear Resistant Tubing**

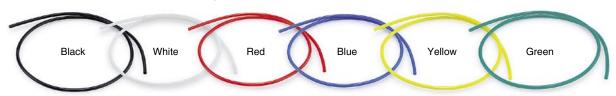


Description	Maximum abrasion (mm)		
Description	After 10 million cycles		
Wear resistant tubing TUZ series	0.16		
Polyurethane tubing TU series	0.46		

Note) Comparison based on the SMC's specific testing condition



### 6-colour variations



### 5-size variations







## **Wear Resistant Tubing**

# Series TUZ



Model					•-	- 20 m roll □ — 100 m ro	
Model		TUZ0425	TUZ0604	TUZ0805	TUZ1065	TUZ1208	
Tubing O.D. (mm)		4	6	8	10	12	
Tubing I.D. (mm)		2.5	4	5	6.5	8	
Black (B)			•				
White (W)		•	•	•	•	•	
Red (R)		•	•	•	•	•	
Blue (BU)		•	•	•	•	•	
Yellow (Y)		•	•	•	•	•	
Green (G)		•	•	•	•	•	
Specifications	3						
Fluid		Air					
Applicable fittings	One-touch fittings KQ/KJ series,  cable fittings  Insert fittings KF series, Stainless steel 316 insert fittings KFG series,  Miniature fittings M/MS series (hose nipple type)						
Max. operating pressure	20°C	0.8 MPa					
	60°C	0.4 MPa					
Burst pressure		Refer to the burst pressure characteristics curve.					
Min. bending radius (mm)		10	15	20	27	35	
Operating tempera	ature	−20 to +60°C					

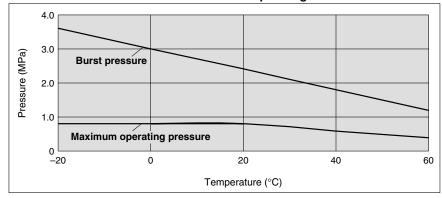
Note 1) The minimum bending radius means the value measured by the method shown in the figure at the right at the temperature of 20°C when the tube is bent. The minimum bending radius assumes static piping. If the tube is used in a moving part, provide extra length to the tube. Check the bending radius recommended by the flexible protection tube manufacturer to assure that the tube is used in the flexible protection tube.

Special polyurethane

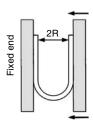
Note 2) Not clear, but opaque due to material.

Material

#### **Burst Pressure Characteristics Curve and Operating Pressure**

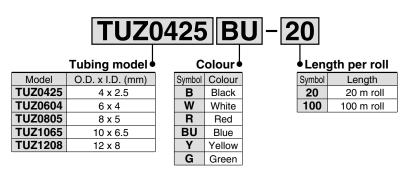


#### **How to Calculate Minimum Bending Radius**



Bend the tube into U-form at the temperature of 20°C. Fix one end and close loop gradually. Measure 2R when the tube breaks or is crushed.

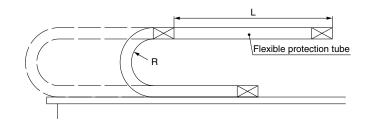
#### **How to Order**



#### Reference Data: Abrasion due to Flexible Protection Tube

#### **Test Conditions**

Test tube	TUZ0604, TU0604
Quantity of tube tested	5 pcs. for each
Operating speed	1500 mm/sec
Operating frequency	90 c.p.m
Stroke L	500 mm
Bending radius R	28 mm
Material of flexible protection tube	Special engineering plastic
Tube tie	Not used



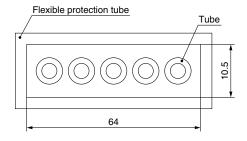
#### **Test Results**

Model	Maximum abrasion after 10 million cycles (mm)
TUZ0604	0.16
TU0604	0.46

As this test was an acceleration test, the tube bending radius was out of the flexible protection tube manufacturer's allowable range.

When the flexible protection tube is used in the actual application, check the manufacturer's catalogue specifications.

The values in the table above are representative values, and not guaranteed.



Tube dimensions inside the flexible protection tube

#### **Made to Order TFU-X73**

#### Flat type of the TUZ series

The identification line is not shown. Colour combinations are also available. Please contact SMC for detailed specifications, dimensions, and delivery.

#### **How to Order**

