

● Basic Properties

★ RoHS Compliant

- (1) Materials : Cross-linked, flexible, flame-retardant polyolefin resin
- (2) Continuous operating temperature : -45 to 120°C

● Features & Benefits

- (1) Flame-retardant
- (2) Opaque colors

● Specifications & Approvals

SFP standard (R1-0380)

● Applications

- (1) Insulation and heat protection of wire harnesses and parts for automobile
- (2) Protection of wiring inside an airplane where flame-retardant is required
- (3) Protection of lead wires and parts which are subject to high temperature

● Colors

Standard colors : Black, Brown, Red, Orange, Yellow, Green, Blue, Violet and White

● Properties

Properties	Items	Requirements	Typical values
Mechanical	Tensile Strength	10.4MPa min.	18.6MPa
	Ultimate Elongation	200%min	450%
	Specific Gravity	-	1.03
	Hardness (Shore-D)	-	42
Electrical	Dielectric Voltage Withstand (before aging)	A.C.2.5kV×60 sec., No breakdown	Pass
	Volume Resistivity	$1.0 \times 10^{14} \Omega \cdot \text{cm}$ min.	$1.1 \times 10^{17} \Omega \cdot \text{cm}$
Chemical	Water Absorption	23°C×24 hours, 0.30% max.	0.15%
	Flammability	Flame-retardant (according to FMVSS Law*)	Pass

* FMVSS stands for Federal Motor Vehicle Safety Standard, which is US Automobile standard.

● Sizes

Nominal Size	Inside Diameter (mm)	Wall Thickness (mm)	Unit Length (m)
0.7×0.35	0.70±0.10	0.35±0.05	1,000 min.
1×0.35	1.00±0.10	0.35±0.05	500 min.
1.5×0.35	1.50±0.10	0.35±0.05	400 min.
2×0.35	2.00±0.20	0.35±0.05	200 min.
3×0.35	3.00±0.20	0.35±0.05	400 min.
4×0.35	4.00±0.30	0.35±0.05	400 min.
5×0.35	5.00±0.30	0.35±0.05	200 min.
6×0.35	6.0±0.5	0.35±0.05	200 min.
8×0.4	8.0±0.5	0.40±0.05	100 min.
10×0.4	10.0±0.5	0.40±0.05	100 min.
12×0.4	12.0±0.5	0.40±0.05	100 min.
14×0.5	14.0±0.5	0.50±0.05	100 min.

Longitudinal change: -20% min. (125°C×1 minute)

● Disclaimer

All statements and technical information contained herein are based on tests we believe to be reliable and only general properties are described. Therefore, safety of each specific application by the users is not guaranteed. The users themselves should determine product conformance to your specific applications and assume all responsibility for all damages that may be caused directly or indirectly when using the products.