

**Basic Properties**

- (1) Materials : Irradiated cross-linked flexible flame-retardant polyolefin
- (2) Shrink temperature : min. 115°C
- (3) Shrink Ratio : Radial change: approx. 40%  
Longitudinal change: min. -15%
- (4) Continuous Operating Temperature : -45 to 120°C

**Features**

- (1) Flame-retardant

**Specification/Approvals**

SFP standard (R4-0380)

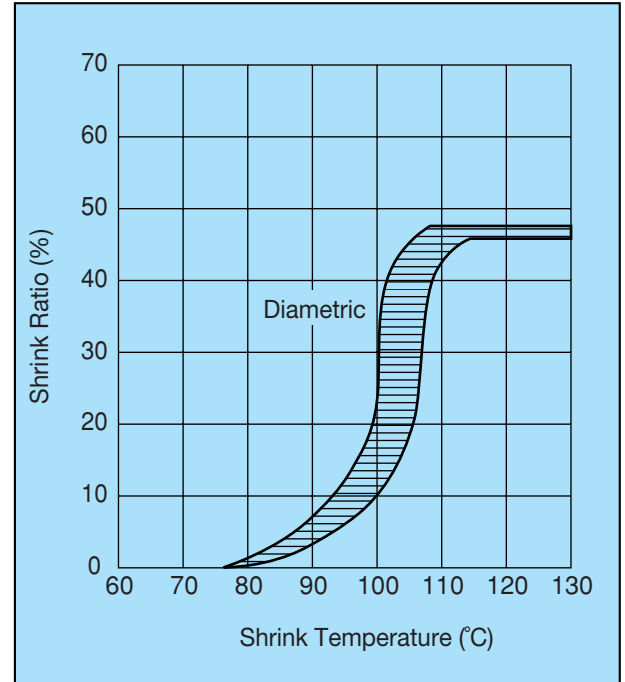
**Application**

- (1) Insulation and protection for automobile parts and harnesses
- (2) Insulation, protection and reinforcement for termination and joints of electric wire
- (3) Anticorrosion for pipes

**Colours**

Black, Brown, Red, Orange, Yellow, Green, Blue, Purple, White  
(all colours are in pastel tone)

**Shrink Property**



**Properties**

Properties	Items	Requirements	Typical values*1
Mechanical	Tensile strength	min. 10.4MPa	18.6MPa
	Elongation	min. 200%	454%
	Gravity	—	1.03
	Hardness (shore-D)	—	42
Electrical	Voltage resistance	AC2.5kV x 60 sec. no breakdown	pass
	Volume resistivity	min. 1.0 x 10 <sup>14</sup> Ω·cm	1.1 x 10 <sup>17</sup> Ω·cm
Chemical	Water absorption	23°C x 24 hours, max. 0.30%	0.15%
	Flammability	Flame-retardant (by FMVSS method*2)	pass

\*1: For reference use only

\*2: FMVSS = Federal Motor Vehicle Safety Standard (regulation in the U.S.A)

**Sizes**

Nominal size (mm)	Supplied ID(mm)		Recovered ID (mm)		Unit length (min.) (m)	
	Inside diameter	Wall thickness (nom.)	Inside diameter (max.)	Wall thickness	Cut	Spool
2 x 0.3	2.40 ± 0.30	0.30	1.20	0.40	1	200
2.5 x 0.3	2.90 ± 0.30	0.30	1.50	0.50	1	200
3 x 0.3	3.40 ± 0.30	0.30	1.80	0.50	1	200
3.5 x 0.3	3.90 ± 0.30	0.30	2.00	0.50	1	100
4 x 0.3	4.40 ± 0.30	0.30	2.30	0.50	1	100
5 x 0.3	5.40 ± 0.30	0.30	2.90	0.50	1	100
6 x 0.3	6.4 ± 0.3	0.30	3.50	0.50	1	50
7 x 0.3	7.4 ± 0.3	0.30	4.20	0.50	1	50
8 x 0.3	8.4 ± 0.3	0.30	4.70	0.50	1	50
10 x 0.3	10.6 ± 0.4	0.30	6.0	0.50	1	50
11 x 0.4	11.6 ± 0.4	0.40	7.0	0.65	1	50
12 x 0.4	12.6 ± 0.4	0.40	8.0	0.65	1	50
13 x 0.4	13.6 ± 0.4	0.40	8.5	0.65	1	50
14 x 0.4	14.6 ± 0.5	0.40	9.0	0.65	1	50
15 x 0.4	15.6 ± 0.5	0.40	10.0	0.65	1	50
16 x 0.4	16.6 ± 0.5	0.40	11.0	0.65	1	50
18 x 0.4	18.6 ± 0.5	0.40	12.0	0.65	1	50
20 x 0.4	20.5 ± 0.5	0.40	13.0	0.70	1	50
22 x 0.4	22.5 ± 0.5	0.40	14.0	0.70	1	50
25 x 0.4	25.5 ± 0.5	0.40	15.0	0.70	1	50