

Cross Reference	
BSTSFR, SSTFR, FCSM	Raychem/Tyco
FCFW	DSG-Canusa
HDT, ITCSF	3M



UPHWFR

UNION POLYMER HEAVY WALL FLAME RETARDANT POLYOLEFIN



Heat shrink ratio: 3 to 1

MIL-DTL-23053/15, Class 1

Flame retardant meets UL-224 VW-1 standards

FEATURES AND APPLICATIONS

- Heavy wall cross linked polyolefin excellent for insulation and abrasion protection
- No adhesive - can be removed easily
- Flame retardant meets UL-224 VW-1 standards
- RoHS compliant
- Standard color: Black, Red is available on request
- Operating temperature: -55°C to 105°C;
- Shrink temperature: 135°C

DIMENSIONS (HEAT SHRINK RATIO 3:1)

Product Order Number	Internal Diameter As Supplied		Internal Diameter Recovered		Wall Thickness (Nominal) Recovered	
	inch	mm	inch	mm	inch	mm
0300	0.300	7.62	0.100	2.54	0.050	1.30
0400	0.400	10.16	0.150	3.81	0.060	1.52
0750	0.750	19.05	0.220	5.59	0.110	2.70
1100	1.100	27.94	0.375	9.52	0.120	3.10
1300	1.300	33.02	0.375	9.52	0.120	3.10
1500	1.500	38.10	0.500	12.70	0.140	3.56
1700	1.700	43.18	0.500	12.70	0.140	3.56
2000	2.000	50.80	0.750	19.05	0.160	3.94
2700	2.700	65.58	0.900	22.86	0.160	3.94
3000	3.000	76.20	1.250	31.75	0.160	3.94
3500	3.500	88.90	1.250	31.75	0.160	3.94
4000	4.000	101.60	1.750	44.45	0.160	3.94
4500	4.500	114.30	1.750	44.45	0.160	3.94

Standard length: 4 FT (1.22 meter). Customized lengths are available on request.

TECHNICAL DATA

	Property	Test method	Values
Physical	Tensile strength	ASTM D2671	≥10.4 MPa
	Breakdown elongation	ASTM D2671	≥350%
Aging (158°C/168hrs)	Tensile strength	ASTM D2671	≥10.4 MPa
	Breakdown elongation	ASTM D2671	≥300%
	Water absorption (23°C/336h)	ASTM D570	≤0.5%
	Density	ASTM D2671	1.2~1.3
	Low temperature flexibility(-40°C/4hrs)	ASTM D2671	No cracking
	Heat shock (250°C/4hrs)	ASTM D2671	No drop, No flow
	Hardness (Shore D)	ASTM D2671	≥42 HD
	Peel strength to XLPE	ASTM D2671	110 N/25cm
	Peel strength to steel	ASTM D2671	80 N/25cm
Electrical	Volume resistivity	ASTM D2671	≥10 ¹⁴ Ω.cm
	Dielectric strength	ASTM D2671	≥15 KV/mm
Chemical	Flammability	UL224	VW-1

ORDERING

Please specify: (1) Product Name

(2) Order number

(3) Color

(4) Length

(5) Quantity in pieces, and

(6) Printing options (Standard Union Polymer mark, Customized mark, or Unprinted)

Order Example: UPHWFR, 1500, Black, 4 FT, 200 pieces, Unprinted

Once a purchase order is received

Order confirmation will be sent from Union Polymer within 12 hours

All in-stock products will be shipped from our Ohio warehouse within 48 hours