

# Thin-Wall Tubing

## 3M™ Thin-Wall Tubing FP-301

Shrink Ratio 2:1

3M Thin-Wall Tubing FP-301 is a heat shrinkable flexible polyolefin tubing that offers an outstanding balance of electrical, physical and chemical properties for a wide variety of industrial and military applications. Rated for 275°F (135°C) continuous operation. 3M tubing FP-301 is typically used as a shrink-fit electrical insulation over cable splices and terminations. It is also used for lightweight wire harness covering, wire marking, wire bundling, component packaging and fire resistant covering.

3M Clear Tubing FP-301 provides excellent visibility for component packing. All 3M Tubing FP-301 is split resistant, mechanically tough, easily marked and resists cold flow.

FP-301 is available in black, white, red, blue, yellow and clear in the standard lengths of 6-inch (15,2 cm) cut pieces, 48-inch (1,21 m) and small (8.5-inch core diameter) spools of 50 (15,24 m) and 100 (30,48 m) feet. Four-foot lengths of green tubing are available in sizes 1/16 inch to 1/2 inch. The Assorted Color Kit has a total of 133 pieces and contains seven colors: black, red, white, yellow, blue,



green and clear (see chart below). The Black Kit contains 102 pieces, all 6" (512,4 mm) lengths (see chart below). Additional sizes, colors and put-ups are available—please contact your 3M Electrical Products Sales Representative.

Application Specifications: UL Recognized and CSA Certified at 600 volts at 257°F(125°C); UL File No. E-39100 and CSA No. 38227. MIL-I-23053/5, Class 1,2. AMS 3636 (Type I) and AMS 3637 (Type II).

To Order: Reference specific product size, color and description on the following pages. Example: FP-301-1/4, white 6" (15,2 cm) pieces.

## Specifications and Ordering Information for 3M Thin-Wall Tubing FP-301 Assortment Kits

Description	UPC (051135-)	Case Qty.
<b>ASSORTED COLORS KIT</b>	<b>37677</b>	<b>5 kits</b>
Kit Contents:	Kit Quantity:	
3/32" (2,35 mm)	35	—
1/8" (3,18 mm)	28	—
3/16" (4,75 mm)	21	—
1/4" (6,35 mm)	21	—
3/8" (9,53 mm)	14	—
1/2" (12,70 mm)	14	—
<b>ASSORTED BLACK KIT</b>	<b>38139</b>	<b>5 kits</b>
Kit Contents:	Kit Quantity:	
3/16" (4,8 mm)	30	—
1/4" (6,5 mm)	28	—
3/8" (9,6 mm)	20	—
1/2" (12,7 mm)	14	—
3/4" (19,1 mm)	6	—
1" (25,4 mm)	4	—

## Specifications and Ordering Information for 3M™ Thin-Wall Tubing FP-301 Four-Foot Sticks (Small Box)

Product Number	Size	Color	UPC (051135-)	Description	Expanded/Recovered I.D.	Box Qty.
FP-301	3/64" (1,17 mm)	Black	36644	48" Sticks (1,22 m)	0.046/0.023" (1,17/0,58 mm)	25
		Clear	36645			
		White	36646			
		Red	36647			
		Blue	36649			
		Yellow	36648			
FP-301	1/16" (1,58 mm)	Black	36650	48" Sticks (1,22 m)	0.063/0.031" (1,6/0,79 mm)	25
		Clear	36651			
		White	36652			
		Red	36653			
		Blue	36655			
		Yellow	36654			
FP-301	3/32" (2,38 mm)	Black	36673	48" Sticks (1,22 m)	0.093/0.046" (2,36/1,17 mm)	25
		Clear	36674			
		White	36675			
		Red	36676			
		Blue	36678			
		Yellow	36677			
FP-301	1/8" (3,18 mm)	Black	36680	48" Sticks (1,22 m)	0.125/0.062" (3,18/1,57 mm)	25
		Clear	36681			
		White	36682			
		Red	36683			
		Blue	36685			
		Yellow	36684			
FP-301	3/16" (4,75 mm)	Black	36687	48" Sticks (1,22 m)	0.187/0.093" (4,75/2,36 mm)	25
		Clear	36688			
		White	36689			
		Red	36690			
		Blue	36692			
		Yellow	36691			
FP-301	1/4" (6,35 mm)	Black	36694	48" Sticks (1,22 m)	0.250/0.125" (6,35/3,18 mm)	12
		Clear	36695			
		White	36696			
		Red	36697			
		Blue	36699			
		Yellow	36698			
FP-301	3/8" (9,5 mm)	Black	36701	48" Sticks (1,22 m)	0.375/0.187" (9,53/4,75 mm)	12
		Clear	36702			
		White	36703			
		Red	36704			
		Blue	36706			
		Yellow	36705			
FP-301	1/2" (12,7 mm)	Black	36709	48" Sticks (1,22 m)	0.500/0.250" (12,7/6,35 mm)	12
		Clear	36710			
		White	36711			
		Red	36712			
		Blue	36714			
		Yellow	36713			
		Green	36715			

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Product Number	Size	Color	UPC (051135-)	Description	Expanded/Recovered I.D.	Box Qty.
FP-301	3/4" (19,05 mm)	Black	36716	48" Sticks (1,22 m)	0.750/0.375" (19,01/9,53 mm)	12
		Clear	36720			
		White	36721			
		Red	36722			
		Blue	36724			
		Yellow	36723			
		Green	37764			
FP-301	1" (25,4 mm)	Black	36725	48" Sticks (1,22 m)	1.000/0.500" (25,4/12,7 mm)	5
		Clear	36726			
		White	36727			
		Red	36728			
		Blue	36730			
		Yellow	36729			
		Green	37767			
FP-301	1-1/2" (38,1 mm)	Black	36731	48" Sticks (1,22 m)	1.500/0.750" (38,1/19,05 mm)	5
		Clear	36732			
		White	36733			
		Red	36734			
		Blue	36736			
		Yellow	36735			
FP-301	2" (50,8 mm)	Black	36737	48" Sticks (1,22 m)	2.000/1.000" (50,8/25,4 mm)	5
		Clear	36738			
		White	36739			
		Red	36740			
		Blue	36742			
		Yellow	36741			
FP-301	3" (76,2 mm)	Black	36743	48" Sticks (1,22 m)	3.000/1.500" (76,2/38,1 mm)	2
		Clear	36744			
FP-301	4" (101,6 mm)	Black	36745	48" Sticks (1,22 m)	4.000/2.000" (101,6/50,8 mm)	2
		Clear	36746			

## Specifications and Ordering Information for 3M™ FP-301 Four-Foot Sticks (Bulk)

Product Number	Size	Expanded/Recovered I.D.	Color	UPC (054007-)	Case Qty. Feet (sticks)
FP-301	3/64" (1,17 mm)	0.046/0.023" (1,17/0,58 mm)	Black	08432	1,000
			Clear	08438	
			White	08433	
			Red	08738	
			Blue	08734	
			Yellow	58680	
FP-301	1/16" (1,60 mm)	0.063/0.031" (1,6/0,79 mm)	Black	08434	1,000
			Clear	08439	
			White	08435	
			Red	08764	
			Blue	08761	
			Yellow	08770	
FP-301	3/32" (2,36 mm)	0.093/0.046" (2,36/1,17 mm)	Black	08436	1,000
			Clear	08440	
			White	08437	
			Red	08788	
			Blue	08787	
			Yellow	08791	
		Green	37654*		

\* UPC prefix 051135-

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Product Number	Size	Expanded/Recovered I.D.	Color	UPC (054007-)	Case Qty. Feet (sticks)
FP-301	1/8" (3,18 mm)	0.125/0.062" (3,18/1,57 mm)	Black	08562	1,000' (250-48" sticks)
			Clear	08587	
			White	36682	
			Red	08864	
			Blue	08820	
			Yellow	08825	
			Green	58788	
FP-301	3/16" (4,75 mm)	0.187/0.093" (4,75/2,36 mm)	Black	08566	1,000' (250-48" sticks)
			Clear	08588	
			White	08568	
			Red	08854	
			Blue	08852	
			Yellow	08569	
			Green	58726	
FP-301	1/4" (6,35 mm)	0.250/0.125" (6,35/3,18 mm)	Black	08570	800' (200-48" sticks)
			Clear	08589	
			White	08572	
			Red	38755	
			Blue	58792	
			Yellow	38760	
			Green	58577	
FP-301	3/8" (9,53 mm)	0.375/0.187" (9,53/4,75 mm)	Black	08573	500' (125-48" sticks)
			Clear	08590	
			White	08576	
			Red	08575	
			Blue	38767	
			Yellow	08577	
			Green	58725	
FP-301	1/2" (12,7 mm)	0.500/0.250" (12,7/6,35 mm)	Black	08604	400' (100-48" sticks)
			Clear	08591	
			White	08608	
			Red	08607	
			Blue	08606	
			Yellow	08609	
			Green	58789	
FP-301	3/4" (19,05 mm)	0.750/0.375" (19,01/9,53 mm)	Black	08610	200' (50-48" sticks)
			Clear	08592	
			White	08614	
			Red	08613	
			Blue	08612	
			Yellow	08615	
			Green	58790	
FP-301	1" (25,4 mm)	1.000/0.500" (25,4/12,7 mm)	Black	08578	96' (24-48" sticks)
			Clear	08593	
			White	08580	
			Red	38902	
			Blue	38900	
			Yellow	08581	
			Green	35725*	
FP-301	1-1/2" (38,1 mm)	1.500/0.750" (38,1/19,05 mm)	Black	08582	96' (24-48" sticks)
			Clear	08594	
			White	38916	
			Red	38914	
			Blue	38912	
			Yellow	08583	

\* UPC prefix 051135-

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Product Number	Size	Expanded/Recovered I.D.	Color	UPC (054007-)	Case Qty. Feet (sticks)
FP-301	2" (50,8 mm)	2.000/1.000" (50,8/25,4 mm)	Black	08584	96' (24-48" sticks)
			Clear	08595	
			White	38923	
			Red	56829	
			Blue	38921	
			Yellow	38926	
FP-301	3" (76,2 mm)	3.000/1.500" (76,2/38,1 mm)	Black	08585	48' (12-48" sticks)
			Clear	39030	
			White	08586	
			Red	38932	
			Blue	38931	
			Yellow	57035	
FP-301	4" (101,6 mm)	4.000/2.000" (101,6/50,8 mm)	Black	38934	48' (12-48" sticks)
			Clear	39032	
			White	38939	
			Red	38938	
			Blue	38936	
			Yellow	59028	

## Specifications and Ordering Information for 3M™ Thin-Wall Tubing FP-301 Small Spools

Product Number	Size	Color	UPC (051135-)	Description	Expanded/Recovered I.D.	Case Qty.
FP-301	3/64" (1,19 mm)	Black	36027**	100' Spool (30,5 m)	0.046/0.023" (1,17/0,58 mm)	300'
		Clear	36028**			
FP-301	1/16" (1,6 mm)	Black	35550	100' Spool (30,5 m)	0.063/0.031" (1,6/0,79 mm)	300'
		Clear	35555			
		White	35551			
		Red	35552			
		Blue	35553			
		Yellow	35554			
FP-301	3/32" (2,4 mm)	Black	35556	100' Spool (30,5 m)	0.093/0.046" (2,36/1,17 mm)	300'
		Clear	35548			
		White	35557			
		Red	35558			
		Blue	35559			
		Yellow	35560			
FP-301	1/8" (3,2 mm)	Black	35562	100' Spool (30,5 m)	0.125/0.062" (3,18/1,57 mm)	300'
		Clear	35567			
		White	35563			
		Red	35564			
		Blue	35565			
		Yellow	35566			
FP-301	3/16" (4,77 mm)	Black	35568	100' Spool (30,5 m)	0.187/0.093" (4,75/2,36 mm)	300'
		Clear	35573			
		White	35569			
		Red	35570			
		Blue	35571			
		Yellow	35572			
		Green	37594			

\*\* UPC prefix 051138-