

# Nylon

## Specifications

**Temperature Range**  
-60° F to +200° F

**Vacuum Rating**  
To 28" Hg

**Diameter Tolerance**  
<1/2"± .004"  
>1/2"± .005"

**Hardness**  
78 Rockwell R

**Tube Markings**  
FW Specifications

**Working Pressure**  
4:1 Safety Factor

**UV Stabilized**  
Yes

**Resin Compliance**  
Meets UL94HB  
Testing Requirements

**Suggested Fittings**  
Push-In, Compression

**N**ylon tubing (also referred to as polyamide) can withstand higher temperatures, making it an ideal choice for a wide variety of applications. When compared to other Nylon resins, Freelin-Wade's tubing allows for a lighter weight wall, greater flexibility and smaller bend radius. It is also more corrosion resistant than other types of Nylon tubing because of its resistance moisture absorption. Its heat and UV stabilization makes it resistant to stress-cracking, so it works well in sunny areas. It is chemical resistant which makes it a good choice in areas where exposure to certain chemicals is a possibility.

Freelin-Wade manufactures nylon tubing from a variety of resins and there are any number of variations possible. We are happy to match any color you need, configure a coil, bond two tubes, print and cut to length. Freelin-Wade can make a nylon tube to meet your needs.

## Features

- Strong, lightweight and flexible.
- Dimensionally stable.
- Heat and light stabilized.
- Resistant to corrosion and stress-cracking.



## Nylon Colors

**A**ny of our nylon tubing products listed on page 15 are available in the colors shown below. If not shown as a standard item, please allow 3 weeks to fulfill your order.



## Nylon

Part Number & Color Code	Packaging Unit Size	OD	ID	Wall	Standard Colors	Working Pressure		lbs./100'	Bend Radius	Fitting
						75°F/25°C	150°F/65°C			
1J-247- 1A-247-	100' Bag 2500' Reel	1/8"	.079"	.023"	01 10	420 PSI	250 PSI	.35	3/8"	PI, C
1J-200- 1C-200- 1B-200- 1A-200-	100' Bag 500' Reel 1000' Reel 2500' Reel	1/8"	.093"	.016"	01 05 06 07 08 10	270 PSI	160 PSI	.25	1/2"	PI, C
1J-201- 1C-201- 1B-201- 1A-201-	100' Bag 500' Reel 1000' Reel 2500' Reel	5/32"	.106"	.025"	01 03 05 06 07 08 09 10 12	350 PSI	210 PSI	.51	1/2"	PI, C
1J-202- 1B-202- 1A-202-	100' Bag 500' Reel 2000' Reel	3/16"	.138"	.025"	01 05 06 07 10	260 PSI	160 PSI	.55	5/8"	PI, C
1J-214- 1A-214-	100' Bag 1000' Reel	1/4"	.125"	.062"	01 10	590 PSI	350 PSI	1.77	3/8"	PI, C
1J-203- 1B-203- 1A-203-	100' Bag 500' Reel 1000' Reel	1/4"	.170"	.040"	01 03 05 06 07 08 09 10	330 PSI	200 PSI	1.27	3/4"	PI, C
1J-204- 1B-204- 1A-204-	100' Bag 500' Reel 1000' Reel	1/4"	.180"	.035"	01 05 06 07 08 09 10	290 PSI	170 PSI	1.13	1"	PI, C
1J-205- 1A-205-	100' Bag 500' Reel	5/16"	.232"	.040"	01 05 06 07 08 10	240 PSI	140 PSI	1.64	1-1/2"	PI, C
1J-206- 1A-206-	100' Bag 500' Reel	3/8"	.275"	.050"	01 05 06 07 08 09 10	250 PSI	150 PSI	2.45	1-1/2"	PI, C
1J-207- 1A-207- 1AA-207-	100' Bag 250' Reel 500' Reel	1/2"	.375"	.062"	01 05 06 07 08 10	240 PSI	140 PSI	4.12	2-1/4"	PI, C
1J-213- 1AA-213-	50' Bag 250' Reel	5/8"	1/2"	.062"	01 10	170 PSI	100 PSI	5.30	3-1/4"	PI, C

### Metric Sizes

Part Number & Color Code	Packaging Unit Size	OD mm	ID mm	Wall mm	Standard Colors	Working Pressure		lbs./100'	Bend Radius	Fitting
						75°F/25°C	150°F/65°C			
1J-246- 1C-246- 1B-246- 1A-246-	100' Bag 500' Reel 1000' Reel 2500' Reel	3	1.8	.6	10	410 PSI	240 PSI	.33	6.3 mm	PI, C
1J-201- 1C-201- 1B-201- 1A-201-	100' Bag 500' Reel 1000' Reel 2500' Reel	4	2.7	.65	01 03 05 06 07 08 09 10 12	350 PSI	210 PSI	.51	12.7 mm	PI, C
1J-241- 1A-241-	100' Bag 1000' Reel	5	3	1	01 05 06 07 08 10	420 PSI	250 PSI	.94	9.5 mm	PI, C
1J-242- 1B-242- 1A-242-	100' Bag 500' Reel 1000' Reel	6	4	1	01 05 06 07 08 09 10	340 PSI	200 PSI	1.17	17 mm	PI, C
1J-243- 1A-243-	100' Bag 500' Reel	8	6	1	01 05 06 07 08 10	250 PSI	150 PSI	1.64	38 mm	PI, C
1J-244- 1A-244-	100' Bag 500' Reel	10	8	1	01 03 10	190 PSI	110 PSI	2.11	51 mm	PI, C
1J-245- 1A-245- 1AA-245-	100' Bag 250' Reel 500' Reel	12	10	1	01 10	150 PSI	90 PSI	2.55	76 mm	PI, C

Variations Available:

Coiling • Colors • Cutting • Bonding • Printing • Packaging • Sizes

# Nylon: D.O.T., High Pressure, & Super Soft

## Specifications

**Temperature Range**  
 HP: -60°F to +200°F  
 SS: -40°F to +180°F  
 DOT: -60°F to +200°F

**Vacuum Rating**  
 All: To 28" Hg.

**Diameter Tolerances**  
 HP: < OD .5": ±.004"  
 > OD .5": ±.005"  
 SS: ±.004"  
 DOT: 1/8" - 1/4": ±.003"  
 5/16": ±.004"

**Hardness**  
 HP: 108 Rockwell R  
 SS: 57 Shore D  
 DOT: 78 Rockwell R

**Tube Markings**  
 HP & SS: FW Specs  
 DOT: DOT Specs

**Working Pressure**  
 4:1 Safety Factor

**UV Stabilized**  
 All: Yes

**Resin Compliance**  
 Meets UL94HB Testing Requirements

**Suggested Fittings**  
 Push-In, Compression

## D.O.T. Nylon 11

D.O.T. tubing is made using our standard Nylon. Type "A" Air Brake tubing is ideal for use on vehicles for instrumentation and pneumatic accessories connected to the air brake system. Type "A" Air Brake tubing is non-reinforced and meets SAE J844 specifications and is available in a variety of colors.



D.O.T. Nylon

## High Pressure Nylon 11

Freelin-Wade's High Pressure Nylon tubing is made from a semi-rigid compound that has outstanding tensile strength and chemical resistance, making it the ideal choice for chemical and oil processing lines, tool lubricating systems and other applications that require a high quality Nylon material with much higher burst ratings.

## Super Soft Nylon 11

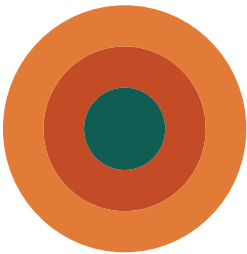
Freelin-Wade's Super Soft Nylon 11 tubing is formulated with a special compound to significantly increase flexibility while retaining the outstanding qualities of our standard Nylon tubing. This advantage makes our Super Soft Nylon 11 the ideal choice where media and environmental conditions make polyurethane impractical.

- More flexible than standard Nylon tubing
- Heat and light stabilized.

## D.O.T. Tubing

Part Number & Color Code	Packaging Unit Size	OD	Wall	Standard Colors	Burst Pressure 75°F/25°C	lbs./100'	Bend Radius	Fitting
1J-220- ___	100' Bag	1/8"	.023	01 05 07 08 09	1000 PSI	.34	3/8"	PI, C
1C-220- ___	500' Reel							
1B-220- ___	1000' Reel							
1A-220- ___	2000' Reel							
1J-221- ___	100' Reel	5/32"	.032	01 05 06 07 09	1200 PSI	.57	1/2"	PI, C
1C-221- ___	500' Reel							
1B-221- ___	1000' Reel							
1A-221- ___	2000' Reel							
1J-222- ___	100' Bag	3/16"	.036	01 05 06 08 09	1200 PSI	.77	3/4"	PI, C
1B-222- ___	500' Reel							
1A-222- ___	2000' Reel							
1J-223- ___	100' Bag	1/4"	.040	01 05 06 07 08 09	1200 PSI	1.21	1"	PI, C
1B-223- ___	500' Reel							
1A-223- ___	1000' Reel							
1J-225- ___	100' Bag	5/16"	.040	01 05 07 09	1000 PSI	1.57	1-1/4"	PI, C
1A-225- ___	500' Reel							

Variations Available: Coiling • Colors • Cutting • Bonding • Printing • Packaging • Sizes



## High Pressure Nylon 11

Part Number & Color Code	Packaging Unit Size	OD	ID	Wall	Standard Colors	Working Pressure		lbs./100'	Bend Radius	Fitting
						75°F/25°C	150°F/65°C			
1J-280- ___ 100' Bag	1B-280- ___ 500' Reel	1/8"	.073"	.026"	10	800 PSI		.39	5/16"	PI, C
1A-280- ___ 2500' Reel										
1J-281- ___ 100' Bag										
1B-281- ___ 500' Reel	3/16"	.109"	.039"	10	800 PSI		.88	7/16"	PI, C	
1A-281- ___ 2000' Reel										
1J-282- ___ 100' Bag										
1B-282- ___ 500' Reel	1/4"	.150"	.050"	01 10	800 PSI		1.51	9/16"	PI, C	
1A-282- ___ 1000' Reel										
1J-283- ___ 100' Bag										
1A-283- ___ 500' Reel	3/8"	.225"	.075"	10	800 PSI		3.39	1"	PI, C	
1A-284- ___ 250' Reel										
1AA-284- ___ 500' Reel										

Variations Available:

Coiling • Colors • Cutting • Printing • Packaging • Sizes

Super Soft Nylon

## Super Soft Nylon 11

Part Number & Color Code	Packaging Unit Size	OD	ID	Wall	Standard Colors	Working Pressure		lbs./100'	Bend Radius	Fitting
						75°F/25°C	150°F/65°C			
1J-260- ___ 100' Bag	1C-260- ___ 500' Reel	1/8"	.093"	.016"	01 10	200 PSI	120 PSI	.25	9/16"	PI, C
1B-260- ___ 1000' Reel										
1A-260- ___ 2500' Reel										
1J-261- ___ 100' Bag	1C-261- ___ 500' Reel	5/32"	.106"	.025"	01 10	220 PSI	130 PSI	.45	9/16"	PI, C
1B-261- ___ 1000' Reel										
1A-261- ___ 2500' Reel										
1J-264- ___ 100' Bag	1B-264- ___ 500' Reel	1/4"	.180"	.035"	01 10	180 PSI	110 PSI	1.04	1"	PI, C
1A-264- ___ 1000' Reel										
1J-265- ___ 100' Bag										
1A-265- ___ 500' Reel	5/16"	.232"	.040"	01 10	170 PSI	100 PSI	1.52	1-1/4"	PI, C	
1J-266- ___ 100' Bag										
1A-266- ___ 500' Reel										
1J-267- ___ 100' Bag	1/2"	3/8"	.062"	01 10	140 PSI	80 PSI	3.80	2-1/2"	PI, C	
1AA-267- ___ 500' Reel										

Metric Sizes

Part Number & Color Code	Packaging Unit Size	OD mm	ID mm	Wall mm	Standard Colors	Working Pressure		lbs./100'	Bend Radius	Fitting
						75°F/25°C	150°F/65°C			
1J-271- ___ 100' Bag	1B-271- ___ 500' Reel	5	3	1	10	310 PSI	180 PSI	.95	12.7	PI, C
1A-271- ___ 1000' Reel										
1J-272- ___ 100' Bag										
1B-272- ___ 500' Reel	6	4	1	01 10	240 PSI	140 PSI	1.10	19.0	PI, C	
1A-272- ___ 1000' Reel										
1J-273- ___ 100' Bag										
1A-273- ___ 500' Reel	8	6	1	01 10	160 PSI	100 PSI	1.70	23.8	PI, C	
1J-274- ___ 100' Bag										
1A-274- ___ 500' Reel										
1J-275- ___ 100' Bag	10	8	1	01 10	120 PSI	70 PSI	2.20	28.6	PI, C	
1A-275- ___ 500' Reel										
1J-275- ___ 100' Bag										
1AA-275- ___ 500' Reel	12	10	1	01 10	90 PSI	50 PSI	2.80	38.0	PI, C	
1A-275- ___ 500' Reel										
1J-275- ___ 100' Bag										

Variations Available:

Coiling • Colors • Cutting • Bonding • Printing • Packaging • Sizes

# Nylon Coiled Hose

**F**reelin-Wade's Nylon coiled tubing is tough and abrasion resistant. The hoses are fitted with durable brass male swivel compression fittings and spring guards that are preassembled on each hose end. Bulk hoses are offered in 100 foot lengths for users wanting to assemble their own hoses.

Our Nylon Twin Hose (pictured below) has all of the same features but with the added benefit of two hoses bonded together. An intermittent bond allows for easy fitting installation and eliminates taping or tie wrapping hoses together in twin line applications. One line is yellow and the second is a natural translucent color which allows for visual flow verification. Contact Customer Service for more information.

The difference between the Self-Storing Hose and the Mini Coils is that the Self-Storing Hose includes fittings.



## Features

- Economical and lightweight.
- Self retracting.
- Resists oil, grease and corrosion.
- Pre-sealed threads on swivel fittings.



## Specifications

**Temperature Range**  
-60°F to +180°F

**Vacuum Rating**  
To 28" Hg.

**Diameter Tolerances**  
±.004"

**Working Pressure**  
4:1 Safety Factor

**Tube Markings**  
FW Specifications

**Resin Compliance**  
Meets UL94HB  
Testing Requirements



## Nylon Self-Storing Hose

Part Number & Color Code	OD	ID	Working Pressure		Material Length	Working Length	Retracted Length	Coil OD	MPT Fitting	Approx. Weight
			75°F/25°C	150°F/65°C						
N14-12B					12'	9'	5-1/4"		1/4"	.375 lbs.
N14-25B					25'	19'	10"		1/4"	.62 lbs.
N14-50B	.309"	1/4"	185 PSI	110 PSI	50'	37.5'	19-3/4"	3-1/2"	1/4"	.937 lbs.
N14-100					100'	75'	39-1/2"		none	1.37 lbs.
N38-12B					12'	9'	4-1/2"		3/8"	.687 lbs.
N38-25B					25'	19'	9"		3/8"	1.62 lbs.
N38-50B	.470"	3/8"	165 PSI	100 PSI	50'	37.5'	18-1/4"	5-5/8"	3/8"	1.75 lbs.
N38-100					100'	75'	36-3/4"		none	4 lbs.
N12-12B					12'	9'	4-1/4"		1/2"	.375 lbs.
N12-25B					25'	19'	8-1/2"		1/2"	.562 lbs.
N12-50B	.625"	1/2"	170 PSI	110 PSI	50'	37.5'	15-1/2"	9"	1/2"	.937 lbs.
N12-100					100'	75'	31-1/2"		none	1.37 lbs.

Variation Available:

Packaging



# Nylon Mini Coils

## Specifications

**Temperature Range**  
-60°F to +180°F

**Vacuum Rating**  
To 28" Hg.

**Tube Diameter Tolerances**  
±.004

**Tube Markings**  
FW Specifications

**Standard Tail Lengths**  
2" on each end

**F**reelin-Wade's Nylon Mini Coils have two inch integral pigtailed on each end. This allows for instant push-to-connect or standard compression fittings to be used. These small diameter coils are flexible and easy to handle. They are ideal for small pneumatic tools and robotic applications. Our Mini Coils are made from tough abrasion resistant Nylon.

Variations are easy. If you don't see the color or length that you want, just ask us. We can configure Nylon Mini Coils to perfectly match your requirements.



## Nylon Mini Coils

Part Number & Color Code	OD	ID	Standard Colors	Working Pressure		Material Length	Working Length	Retracted Length	Coil OD
				75°F/25°C	150°F/65°C				
N1063-___						4.4'	3-1/2'	3"	
N1066-___	5/32"	.106"	01 03 05 06 07 08 09 10	298 PSI	179 PSI	8.8'	7'	6"	1.312"
N10612-___						17.5'	14'	12"	
N10624-___						35'	28'	24"	
N1706-___						5'	4'	6"	
N1709-___	1/4"	.170"	01 03 05 06 07 08 09 10	280 PSI	170 PSI	6.9'	5-1/2'	9"	1.750"
N17012-___						9.4'	7-1/2'	12"	
N17024-___						19.4'	15-1/2'	25"	
N17036-___						28'	22-1/2'	36"	

Variations Available:

Colors • Printing • Packaging • Sizes

## Coil Terminology

**C**oil Diameter plays a very significant role in retractability. The smaller and tighter the coil diameter, the snappier and more retractable the coil becomes.

**Working Length** is based on how far a coil can be stretched and used comfortably. Tail length is factored into working length.

**Retracted Length** is the length of the coiled section of the body of the coil. It does not include the length of tails.

**Tails (or Pigtailed)** make it easier to use a coil. Our standard tail lengths are 8" and 16". Coils with longer or shorter tails are available.

