SHPI



Nylon 12 Tubing

N12 series

Nylon 12 (PA12) is polyamide tubing for general industrial use, suitable for industrial pneumatic and fluid transfer systems.

Nylon 12 has low moisture absorption and good dimensional stability, with material properties less affected by changes in ambient humidity. It also provides good chemical resistance, impact resistance at low temperatures, and abrasion resistance.

Selected sizes are available in multiple colors for circuit identification.

Key Features

- Low moisture absorption
- Dimensional stability
- Chemical resistance
- Impact resistance at low temperatures
- Abrasion resistance
- Multiple color options

Applications

- General industrial pneumatic systems
- Pneumatic piping for automation equipment and industrial machinery
- Fluid transfer lines for industrial machinery and control systems
- Industrial piping in environments with significant humidity variations

Regulatory Compliance

- RoHS compliant
- REACH compliant

Technical Specifications

Material	Polyamide 12 (PA12)
Operating Temp. Range	-50°C to 93°C (-60°F to 200°F)
Safety Factor	3 : 1

Tube Tolerance

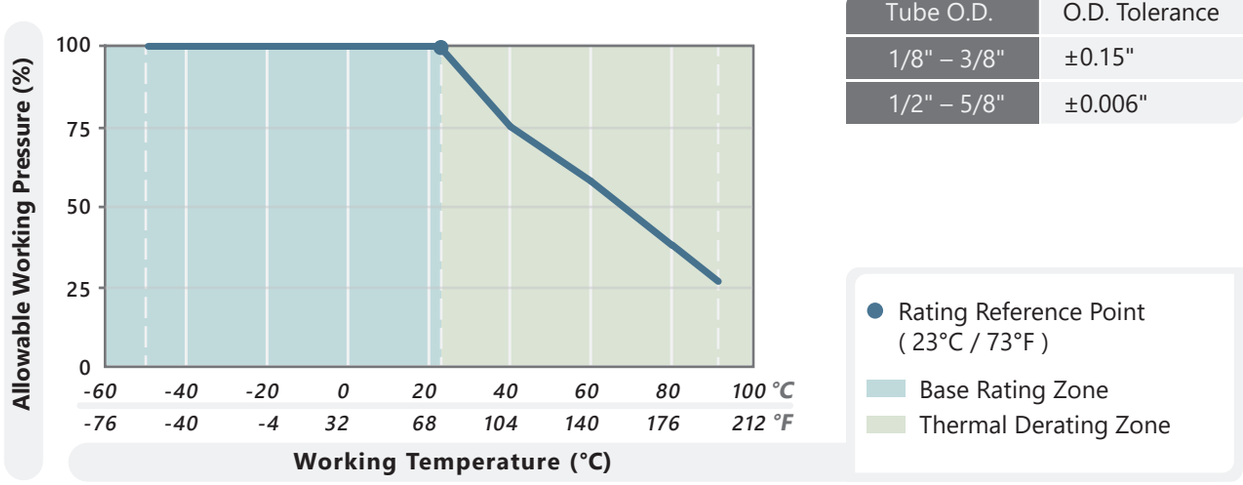
- Metric Sizes

Tube O.D.	O.D. Tolerance
4 – 10 mm	±0.10 mm
12 – 20 mm	±0.004 mm

- Imperial Sizes

Tube O.D.	O.D. Tolerance
1/8" – 3/8"	±0.15"
1/2" – 5/8"	±0.006"

Maximum Working Pressure Derating Curve



Specifications

- Metric Sizes - mm

Model Number	Tube OD	Tube ID	Wall Thickness	Weight	Max. Working Pressure 23℃ (73℉)	Min. Burst Pressure 23℃ (73℉)	Min. Bend Radius	Packing Length	Color					
+Color	mm	mm	mm	g/m	bar	bar	mm	m	NA	BK	BU	G	R	Y
N12402025M_								25						
N12402050M_	4	2	1.00	9.7	44	132	15	50	☐	■	■	■	■	■
N124020100M_								100						
N12402525M_								25						
N12402550M_	4	2.5	0.75	7.8	31	93	20	50	☐	■	■			
N124025100M_								100						
N12402725M_								25						
N12402750M_	4	2.7	0.65	7.0	26	78	25	50	☐	■	■			
N124027100M_								100						
N12503025M_								25						
N12503050M_	5	3	1.00	12.9	33	99	30	50	☐	■				
N125030100M_								100						
N12604025M_								25						
N12604050M_	6	4	1.00	16.1	27	81	35	50	☐	■	■	■	■	■
N126040100M_								100						
N12806025M_								25						
N12806050M_	8	6	1.00	22.5	19	57	40	50	☐	■	■	■	■	■
N128060100M_								100						
N12107025M_								25						
N12107050M_	10	7	1.50	41.0	24	72	45	50	☐	■				
N121070100M_								100						
N12107525M_								25						
N12107550M_	10	7.5	1.25	35.2	19	57	50	50	☐	■				
N121075100M_								100						
N12108025M_								25						
N12108050M_	10	8	1.00	29.0	15	45	60	50	☐	■	■	■	■	■
N121080100M_								100						
N12129025M_								25						
N12129050M_	12	9	1.50	50.7	19	57	70	50	☐	■				
N121290100M_								100						
N12121025M_								25						
N12121050M_	12	10	1.00	35.4	12	36	85	50	☐	■				
N121210100M_								100						
N12141025M_								25						
N12141050M_	14	10	2.00	77.2	22	66	90	50	☐	■				
N121410100M_								100						
N12141125M_								25						
N12141150M_	14	11	1.50	60.3	16	48	88	50	☐	■				
N121411100M_								100						
N12141225M_								25						
N12141250M_	14	12	1.00	41.8	10	30	85	50	☐	■				
N121412100M_								100						
N12151225M_								25						
N12151250M_	15	12	1.50	65.2	15	45	100	50	☐	■				
N121512100M_								100						
N12161225M_								25						
N12161250M_	16	12	2.00	90.1	19	57	150	50	☐	■				
N121612100M_								100						
N12181425M_								25						
N12181450M_	18	14	2.00	103.0	17	51	190	50	☐	■				
N121814100M_								100						
N12201625M_								25						
N12201650M_	20	16	2.00	115.9	15	45	180	50	☐	■				
N122016100M_								100						

- Imperial Sizes - inch

Model Number	Tube OD	Tube ID	Wall Thickness	Weight	Max. Working Pressure 73°F (23°C)	Min. Burst Pressure 73°F (23°C)	Min. Bend Radius	Packing Length	Color					
+Color	inch	inch	inch	lbs/ft	psi	psi	inch	ft	NA	BK	BU	G	R	Y
N1218079100FT_	1/8	0.079	0.02	0.003	420	1680	0.375	100	☐	■				
N1218079500FT_								500						
N12180791000FT_								1,000						
N1218093100FT_	1/8	0.093	0.02	0.002	250	1000	0.500	100	☐	■				
N1218093500FT_								500						
N12180931000FT_								1,000						
N12532106100FT_	5/32	0.106	0.03	0.005	300	1200	0.500	100	☐	■	■	■	■	■
N12532106500FT_								500						
N125321061000FT_								1,000						
N12316138100FT_	3/16	0.138	0.02	0.006	250	1000	0.625	100	☐	■				
N12316138500FT_								500						
N123161381000FT_								1,000						
N1214150100FT_	1/4	0.150	0.05	0.014	500	2000	0.750	100	☐	■				
N1214150500FT_								500						
N12141501000FT_								1,000						
N1214170100FT_	1/4	0.170	0.04	0.012	310	1240	0.875	100	☐	■	■	■	■	■
N1214170500FT_								500						
N12141701000FT_								1,000						
N1214180100FT_	1/4	0.180	0.04	0.010	250	1000	0.875	100	☐	■	■	■	■	■
N1214180500FT_								500						
N12141801000FT_								1,000						
N12516232100FT_	5/16	0.232	0.04	0.015	250	1000	1.125	100	☐	■				
N12516232500FT_								500						
N125162321000FT_								1,000						
N1238250100FT_	3/8	0.250	0.06	0.027	400	1600	1.000	100	☐	■				
N1238250500FT_								500						
N12382501000FT_								1,000						
N1238275100FT_	3/8	0.275	0.05	0.023	250	1000	1.125	100	☐	■	■	■	■	■
N1238275500FT_								500						
N12382751000FT_								1,000						
N1212375100FT_	1/2	0.375	0.06	0.038	250	1000	3.500	100	☐	■				
N1212375500FT_								500						
N1258500100FT_	5/8	0.500	0.06	0.049	210	840	4.250	100	☐	■				
N1258500500FT_								500						

Selected hardness levels, sizes, and colors may be available upon request. Please contact SHPI for availability.

Ordering Information

- Metric Sizes - mm

N12 40 20 25M NA

Material	
N12	Nylon PA 12

Outside Diameter	
40	4 mm
50	5 mm
60	6 mm
80	8 mm
10	10 mm
12	12 mm
14	14 mm
15	15 mm
16	16 mm
18	18 mm
20	20 mm

Inside Diameter	
20	2 mm
25	2.5 mm
27	2.7 mm
30	3 mm
40	4 mm
60	6 mm
70	7 mm
75	7.5 mm
80	8 mm
90	9 mm
10	10 mm
11	11 mm
12	12 mm
14	14 mm
16	16 mm

Package Length	
25M	25 Meters
50M	50 Meters
100M	100 Meters

Color Code	
NA	Natural
BK	Black
BU	Blue
G	Green
R	Red
Y	Yellow

- Imperial Sizes - inch

N12 18 079 100FT NA

Material	
N12	Nylon PA 12

Outside Diameter	
18	1/8"
532	5/32"
316	3/16"
14	1/4"
516	5/16"
38	3/8"
12	1/2"
58	5/8"

Inside Diameter	
079	0.079"
093	0.093"
106	0.106"
138	0.138"
150	0.150"
170	0.170"
180	0.180"
232	0.232"
250	0.250"
275	0.275"
375	0.375"
500	0.500"

Package Length	
100FT	100 Feet
500FT	500 Feet
1000FT	1000 Feet

Color Code	
NA	Natural
BK	Black
BU	Blue
G	Green
R	Red
Y	Yellow

Contact Info

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