



Parker Lubrication Products

For Remote Lubrication Systems



ENGINEERING YOUR SUCCESS.

Parker Lubrication Products

The Importance of Lubrication

Lubrication is more than simply an additive to a machine; it is an **integral component** of that machine and therefore should be closely monitored to ensure it maintains its quality.



Bearing problems caused by inadequate lubrication have many forms, including roller end scoring from metal-to-metal contact and excessive wear on rollers and raceways. Excessive heat can cause cone large rib face scoring or "welding" damage, and/or deformation. In extreme cases, inadequate lubrication causes rollers to skew or slide sideways, leading to bearing lockup.

There are signs that indicate when bearing lubrication is inadequate or in excess. If these signs are detected soon enough, conditions can be corrected before catastrophic damage occurs.

With inadequate lubrication, gauges and operating temperatures will show the bearing is running hot, and it will become noisy from metal-to-metal contact. With excess lubrication, the lubricant can break down due to increased operating temperatures, as indicated by a dark brownish-black color.

With proper lubricant application and a regular maintenance schedule, bearing damage from lubrication problems can be avoided. Here are some tips to ensure proper bearing lubrication:

- Follow lubrication guidelines established by the equipment builder.
- When grease packing a bearing, force the grease between the rollers and cage to ensure the bearing is packed completely full.
- Watch equipment gauges for early indications of a problem, such as unusually high temperatures.
- Listen for noise or unusual vibration.
- Watch for lubricant leaks.

Lubrication is **essential** to all the moving parts, especially bearings, and it also serves to carry away heat and **protect bearing** surfaces from corrosion and wear.



The products in this brochure are designed to handle the harsh environment associated with lubrication. Parker engineers have designed these hoses, fittings and accessories based on safety and ease of use.



HLB Remote Grease & Lubrication Hose

Don't let 5¢ of grease shut down a \$75,000 piece of equipment.

Plant Services magazine estimates that 90% of all bearings are lubricated with grease, and 80% of bearing failures are lubrication related. Proper lubrication is essential to extending the life of a bearing. Grease serves three main purposes: providing lubrication, preventing wear (or damage) from contaminants and inhibiting corrosion.



Excessive Downtime

Grease zerk nipples are often inaccessible on today's crowded equipment. As a result, preventive maintenance takes too long to complete or is not completed at all. A maintenance person can easily spend 5 to 7 minutes reaching an inaccessible grease zerk and still not inject enough grease into the bearing. Poor lubrication and bearing selection account for approximately 34% of premature bearing failures and contamination accounts for another 16% of premature bearing failures. This results in excessive downtime, costly replacement of damaged components and lost productivity. Awkward positioning of grease fittings also creates the dynamics to induce a high-pressure grease injection injury.

Parker's Solution

Parker's HLB remote grease hose makes it easy to properly perform quick & effective preventive maintenance on all types of industrial, mobile, and transportation equipment. These lines connect grease port locations to a convenient service access panel where grease can be manually distributed throughout the machine. HLB hose utilizes a panel mounted hose fitting with integral zerk fitting port. Locknuts, zerk nipples, and caps can also be sub-assembled.

Compact 1/8" hoses **save hundreds** of dollars in operation waste by eliminating gallons of **unnecessary 'in-line' grease** versus larger bore rubber hose



Rule of thumb:

If a grease fitting is not visible, it is likely not being properly lubricated!

HLB Lubrication System vs. 1/4" Rubber Hose

- reduced component / labor costs.....save \$10 to \$20 per line
- unnecessary adapter costs.....save \$5 to \$10 per zerk connection
- light weight reduces freight cost.....up to 60% lighter
- general lubrication issues.....50% - 80% potential reduction
- properly lubricate multiple points in less time.....up to 80% time reduction

HLB – Remote Lubrication Hose



Features

- Ultra small bend radius reduces the need for hose elbow fittings or adapters.
- Unique GK bulkhead hose fittings with integrated nipple can save money per zerk connection in unnecessary adapter costs.
- Compact 1/8" hoses save hundreds of dollars of waste in your operation by eliminating gallons of unnecessary "in-line" grease versus larger bore rubber hoses.

Certifications

- MSHA Accepted

Applications/Markets



- Grease and lubrication lines
- Agriculture
- Construction
- Industrial
- Material Handling
- Mobile Equipment
- Transportation
- General purpose hydraulic systems

Part Number	Nominal I.D.		Maximum O.D.		Maximum Working Pressure		Minimum Bend Radius		Weight		Permanent Fitting Series	Field Attachable Series
#												
	inch	mm	inch	mm	psi	MPa	inch	mm	lbs./ft.	kg./mtr.		
HLB02	1/8	3.2	.32	8	3,000	20.7	.50	13	.03	.04	CY	BU
HLB03	3/16	4.8	.41	10	3,000	20.7	.75	19	.06	.08	CY	BU

Construction

Tube: Copolyester
Reinforcement: Fiber
Cover: Polyurethane

Operating Parameters

Temperature Range:

- -40°F (-40°C) to +212°F (100°C)
- Synthetic, synthetic blend, water, and water/oil emulsion hydraulic fluids limited to +135°F (+57°C)
- BU Series Field Attachable Fitting limited to 120°F (53°C)

Vacuum Rating: 28 inch Hg
Change in length at Max. Working Pressure: +/-3%
Min. Burst Pressure is 4x Max. Working Pressure at 73°F (23°C)

Fittings

CY Series BU Series
For most Parker products, Crimp Die Selection charts can be found online at www.parker.com/crimpsource

Colors

● Black

Notes

Not for use as a whip hose on hand-operated grease guns

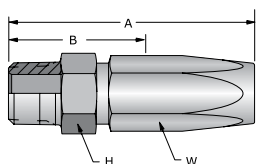
Accessories	
Part Number	Description
NA-6520	Grease Zerk Fitting
2GK-Nut	Bulkhead Nut
CY02-652317	HLB02 Spring Guard
3PSG-4	HLB03 Spring Guard

See these parts on page 9.



BU Series Fittings

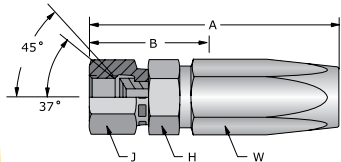
201BU Male Taper Pipe Rigid



Construction: Steel.

Part Number	Thread Size	Hose I.D.		A		Cutoff Allow. B		H Hex	W Hex
#		inch	mm	inch	mm	inch	mm	inch	inch
201BU-2-2	1/8-27	1/8	3	1.50	38	1	25	7/16	7/16

206BU Female SAE (JIC) 37° Swivel

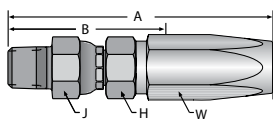


Construction: Steel.

Part Number	Thread Size	Hose I.D.		A		Cutoff Allow. B		H Hex	J Hex	W Hex
#		inch	mm	inch	mm	inch	mm	inch	inch	inch
206BU-3-2	3/8-24	1/8	3	1.72	44	1-3/16	30	1/2	9/16	7/16
206BU-4-2	7/16-20	1/8	3	1.77	45	1-3/16	30	9/16	9/16	7/16
206BU-4-3	7/16-20	3/16	5	1.89	48	1-1/16	27	9/16	9/16	7/16

NOTE: Size -4 incorporates a dual seat.

213BU Male Taper Pipe Swivel



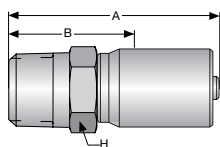
Construction: Steel.

Part Number	Thread Size	Hose I.D.		A		Cutoff Allow. B		H Hex	J Hex	W Hex
#		inch	mm	inch	mm	inch	mm	inch	inch	inch
213BU-2-2	1/8-27	1/8	3	2.07	53	1-1/2	38	1/2	1/2	7/16

WARNING: Fittings allow minor movement to relieve stress on hose but are not recommended for continued or extensive swiveling.

CY Series Fittings

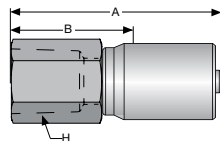
101CY Male Taper Pipe Rigid



Construction: Steel.
Add "C" for Stainless Steel.

Part Number	Thread Size	Hose I.D.		A		Cutoff Allow. B		H Hex
#								
		inch	mm	inch	mm	inch	mm	inch
101CY-2-2	1/8-27	1/8	3	1.31	33	13/16	21	7/16
101CY-2-3	1/8-27	3/16	5	1.74	44	7/8	22	1/2
101CY-4-2	1/4-18	1/8	3	1.51	38	1	25	9/16
101CY-4-3	1/4-18	3/16	5	1.97	50	1-1/8	28	9/16

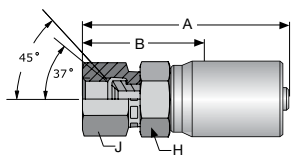
102CY Female Pipe Thread



Construction: Steel.
Add "C" for Stainless Steel.

Part Number	Thread Size	Hose I.D.		A		Cutoff Allow. B		H Hex
#								
		inch	mm	inch	mm	inch	mm	inch
102CY-2-3	1/8-27	3/16	5	1.97	50	1-1/16	27	1/2

106CY Female SAE (JIC) 37° Swivel

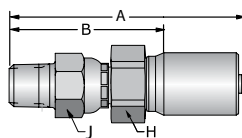


Construction: Steel.
Add "C" for Stainless Steel.

Part Number	Thread Size	Hose I.D.		A		Cutoff Allow. B		H Hex	J Hex
#									
		inch	mm	inch	mm	inch	mm	inch	inch
106CY-2-2	Flare 5/16-24	1/8	3	1.52	39	15/16	24	7/16	7/16
106CY-3-2	Flare 3/8-24	1/8	3	1.55	39	1	25	1/2	1/2
106CY-4-2	Flare 7/16-20	1/8	3	1.58	40	1	25	7/16	9/16
106CY-4-3	Flare 7/16-20	3/16	5	1.98	50	1-1/16	27	9/16	9/16

NOTE: Size -4 incorporates a dual seat.

113CY Male Pipe Swivel*



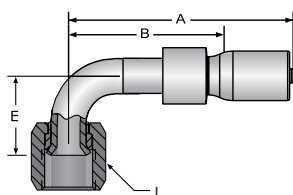
Construction: Steel.
Add "C" for Stainless Steel.

Part Number	Thread Size	Hose I.D.		A		Cutoff Allow. B		H Hex	J Hex
#									
		inch	mm	inch	mm	inch	mm	inch	inch
113CY-2-2	1/8-27	1/8	3	1.89	48	1-5/16	33	1/2	1/2
113CY-2-3	1/8-27	3/16	5	2.29	58	1-7/16	36	1/2	1/2

*NOTE: Nitrile O-ring. See O-ring Material Selection section, Catalog 4660, pg. G-48.

WARNING: Fittings allow minor movement to relieve stress on hose but are not recommended for continued or extensive swiveling.

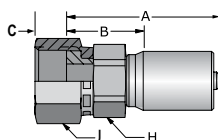
139CY Female JIC 37° Swivel 90° Elbow Short Drop



Construction: Steel.
Add "C" for Stainless Steel.

Part Number	Thread Size	Hose I.D.		A		Cutoff Allow. B		E		J Hex
#										
		inch	mm	inch	mm	inch	mm	inch	mm	inch
139CY-4-2	7/16-20	1/8	3	1.61	41	1-1/8	29	0.83	21	9/16
139CY-4-3	7/16-20	3/16	5	1.90	48	1	25	0.83	21	9/16

1JCCY Female Seal-Lok™ Swivel Straight Short

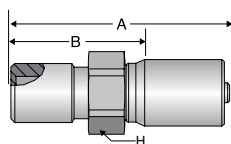


Construction: Steel.
Add "C" for Stainless Steel.

Part Number	Thread Size	Hose I.D.		A		Cutoff Allow. B		C		H Hex	J Hex
#											
		inch	mm	inch	mm	inch	mm	inch	mm	inch	inch
1JCCY-4-2	9/16-18	1/8	3	1.29	33	3/4	19	.32	8	9/16	11/16

NOTE: When measuring overall length to the end of the nut, B+C dimensions must be used to calculate cut-off allowance.

1GKCY Bulkhead with Integrated Zerk Port Bulkhead Nut and Grease Zerk

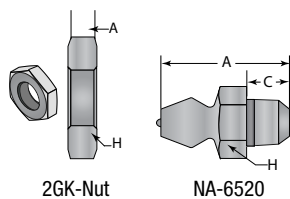


Construction: Steel.
Add "C" for Stainless Steel.

Part Number	Thread Size	Hose I.D.		A		Cutoff Allow. B		H Hex
#								
		inch	mm	inch	mm	inch	mm	inch
1GKCY-2-2*	1/8-27 NPSM Male with 1/4-28 UNF Female	1/8	3	1.45	37	7/8	22	1/2
1GKCY-2-3*	1/8-27 NPSM Male with 1/4-28 UNF Female	3/16	5	1.86	47	1	25	1/2
1GKCY-2-2-L77**	1/8-27 NPSM Male with 1/4-28 UNF Female	1/8	3	1.71	43	1-1/4	32	1/2

NOTE: *Standard bulkhead for use with plates up to 1/4" thick. Uses 2GK-NUT, sold separately.

**Long bulkhead for use with plates under 3/4" thick. Uses 2GK-NUT, sold separately.

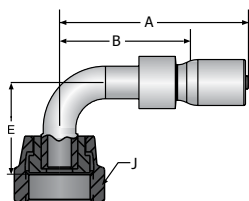


2GK-Nut

NA-6520

Part Number	Description	Thread Size	A		C		H Hex
2GK-Nut	Bulkhead Nut	1/8-27 NPSM	0.188	4.8	na	na	11/16
NA-6520	Grease Zerk Fitting	1/4-28 UNF	0.540	13.7	0.18	4.6	5/16
CY02-652317	HLB02 Spring Guard	-	-	-	-	-	-
3PSG-4	HLB03 Spring Guard	-	-	-	-	-	-

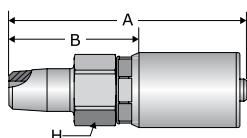
1J9CY Female Seal-Lok™ 90° Elbow Short Drop



Construction: Steel.
Add "C" for Stainless Steel.

Part Number	Thread Size	Hose I.D.		A		Cutoff Allow. B		E		J Hex
#										
		inch	mm	inch	mm	inch	mm	inch	mm	inch
1J9CY-4-2	9/16-18	1/8	3	1.81	46	1-1/4	32	.83	21	11/16

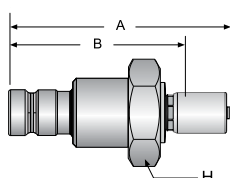
1LMCY Male Grease End (connects directly to bearing ports)



Construction: Steel.
Add "C" for Stainless Steel.

Part Number	Thread Size	Hose I.D.		A		Cutoff Allow. B		H Hex
#								
		inch	mm	inch	mm	inch	mm	inch
1LMCY-2-2	1/4-28	1/8	3	1.26	32	11/16	17	3/8

1PDCY Integrated Bulkhead Diagnostic Nipple



Construction: Steel.
Add "C" for Stainless Steel.

Part Number	Thread Size	Hose I.D.		A		Cutoff Allow. B		H Hex
#								
		inch	mm	inch	mm	inch	mm	inch
1PDCY-2-2	3/4"-16 UNF	1/8	3	2.40	61	1.875	48	1

NOTE: Bulkhead nut sold with fitting

High Temperature Lubrication Hose

919/919B – PTFE Hose



Features

- Excellent chemical compatibility
- Handles extreme temperatures to +450°F
- Environmentally safe
- Resists moisture
- Low friction minimizes pressure drops and deposits

Certifications

- Meets/Exceeds SAE 100R14A - 919
- Meets/Exceeds SAE 100R14B - 919B
- FDA CFR 177.1550 (Natural tube)

Applications/Markets



- Paving Equipment
- High Temp Lubrication Lines
- Chemical Transfer Lines
- General Hydraulics
- Compressed Air/Gases
- Adhesive Dispensing
- Coolant Lines

Part Number		Nominal I.D.		Maximum O.D.		Maximum Working Pressure		Minimum Bend Radius		Vac. Rating Hg./73°F	Weight		Permanent Fitting Series	Field Attachable Series
#	#													
Natural	Conductive	inch	mm	inch	mm	psi	MPa	inch	mm	inch	lbs./ft.	kg./mtr.		
919-4	919B-4	3/16	5	.32	8	3,000	20.7	2.00	51	28	.06	.09	91N	90

Construction

Tube: 919 - Natural FDA Compliant PTFE
 919B - Black Static-Dissipative PTFE
 Reinforcement: 304 Stainless Steel braid

Operating Parameters

Temperature Range:

- -100°F (-73°C) to +450°F (232°C)

Change in length at Max. Working Pressure: +2% to -4%

Min. Burst Pressure is 4x Max. Working Pressure at 73°F (23°C)

Fittings

90 Series 91/91N Series

For most Parker products, Crimp Die Selection charts can be found online at www.parker.com/crimpsource

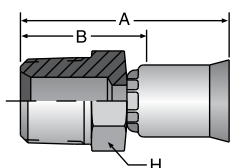
Notes

Use hose type 919B with static-dissipative core tube when conveying non-conducting fluids such as oils, paints, fuels, steam, etc.



High Temperature Fittings - 91N Series

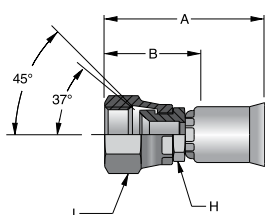
10191N Male Taper Pipe Rigid



Construction: Brass nipple, steel shell.
Add "C" for Stainless Steel.

Part Number	Thread Size	Hose Size	A		Cutoff Allow. B		H Hex
#							
		inch	inch	mm	inch	mm	inch
10191N-2-4	1/8-27	-4	1.27	32	3/4	19	7/16
10191N-4-4	1/4-18	-4	1.50	38	15/16	24	9/16

10691N Female SAE (JIC) 37° Swivel

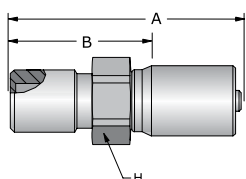


Construction: Brass nipple, steel nut and shell. Add "S" for Steel nipple, nut and shell. Add "C" for Stainless Steel.

Part Number	Thread Size	Hose Size	A		Cutoff Allow. B		H Hex	J Hex
#								
		inch	inch	mm	inch	mm	inch	inch
10691N-4-4	7/16-20	-4	1.43	36	7/8	22	3/8	9/16

NOTE: Incorporates a dual seat.

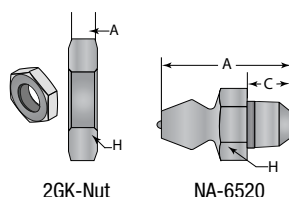
1GK91N Bulkhead with Integrated Zerk Port -Bulkhead Nut and Grease Zerk



Construction: Steel nipple, nut and shell. Add "C" for Stainless Steel.

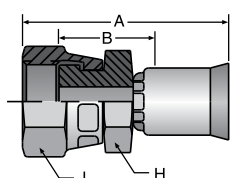
Part Number	Thread Size	Hose Size	A		Cutoff Allow. B		H Hex
#							
		inch	mm	inch	mm	inch	mm
1GK91N-2-4*	1/8-27 NPSM Male with 1/4-28 UNF Female	3/16	5	1.46	37	15/16	24

NOTE: *Bulkhead for use with plates under 1/4" thick.
Uses 2GK-NUT, sold separately.



Part Number	Description	Thread Size	A		C		H Hex
2GK-Nut	Bulkhead Nut	1/8-27 NPSM	0.188	4.8	na	na	11/16
NA-6520	Grease Zerk Fitting	1/4-28 UNF	0.540	13.7	0.18	4.6	5/16
CY02-652317	HLB02 Spring Guard	-	-	-	-	-	-
3PSG-4	HLB03 Spring Guard	-	-	-	-	-	-

1JC91N Female Seal-Lok™ Swivel Straight



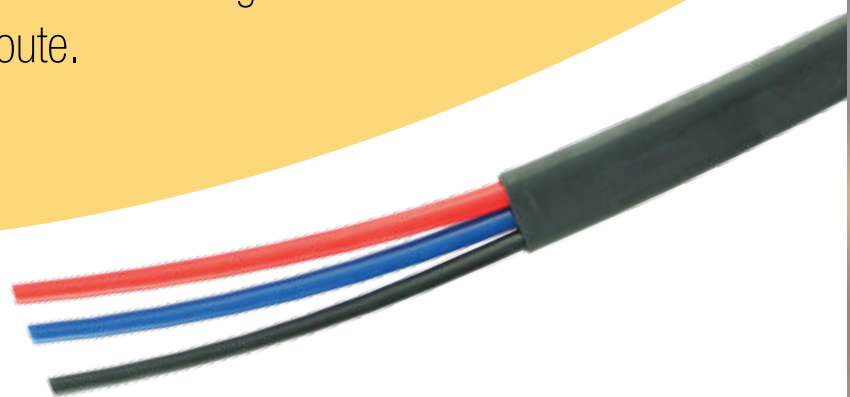
Construction: Steel nipple, steel nut and shell. Add "C" for Stainless Steel.

Part Number	Thread Size	Hose Size	A		Cutoff Allow. B		C		H Hex	J Hex
#										
		inch	mm	inch	mm	inch	mm	inch	mm	inch
1JC91N-4-4	9/16-18	-4	1.46	37	5/8	16	.32	8	9/16	11/16

Multitube® Pre-Assembled Bundles

Tube Lines for Automatic Lubricators

Customers are looking for their equipment to be designed to provide a relatively simple and inexpensive method to automate the lubrication process. It is key to be able to reduce the installation time and material costs. Installing lubrication lines on a piece of equipment can be a time consuming and tedious task. The technician working on the installation will have various lubrication lines to route.



Parker's Solution

Tubing provides the ability to meter small amounts of grease on systems. By utilizing the jacketed tube design, end customers and users will be able to simplify routings and reduce start time. There are opportunities to lower the amount of scrap and order quantities, as well as the advantage of inventorying only one part number.

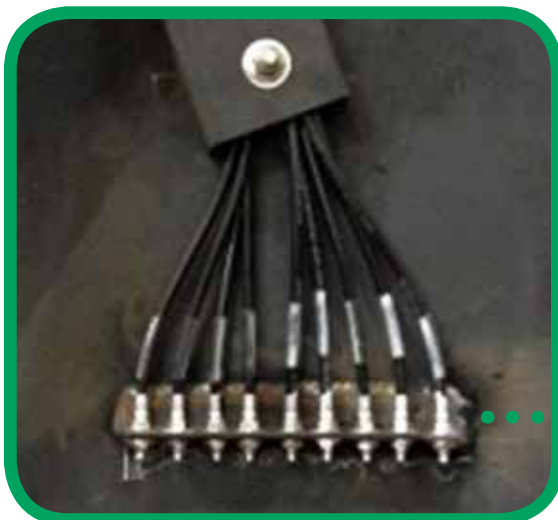
Bundled Tubing vs. Single Tubing

- installation simplicity.....up to 33% quicker to install
- low profile bundled tubing.....quicker routing
- jacketing tubing.....additional abrasion protection
- general lubrication issues.....less grease is required for lube fill



Let Parker help
you reduce costs
\$\$\$

Employing **tube bundles** to meet specific application requirements **ensures consistency**, improves productivity, and time installation.



More Savings
Bulkhead Zerk
Fitting

Remote Lubrication

Nylon Tubing

Series NR: Semi-rigid High Strength



Features

- High grade nylon resins without the addition of plasticizers for higher pressure tubing applications
- Chemical resistant, good resistance to high ambient temperature and low moisture absorption
- High tensile strength and excellent coupling retention in high pressure, temperature and vibration environments
- Better dimensional stability at elevated temperatures than N Series

Applications/Markets



▪ High-pressure pneumatics Process lines for chemicals and oils

▪ Lubrication systems

▪ Marine control systems



Part Number	Part Number	Tube O.D.		Tube I.D.		Average Wall Thickness		Working Pressure at 73°F / 23°C		Minimum Burst at 73°F / 23°C		Reel Length	Minimum Bend Radius		Weight	
#	#															
Natural	Black	inch	mm	inch	mm	inch	mm	psi	bar	psi	bar	feet	inch	mm	lbs./ft.	kg./mtr.
NNR-2-017	NBR-2-017	1/8	3.2	.091	2.3	.017	0.43	425	29.3	1700	117.2	0100, 0500	.50	12.7	.003	.005
NNR-2-026	NBR-2-026	1/8	3.2	.073	1.9	.026	0.66	625	43.1	2500	172.4	0100, 0500	.38	9.7	.004	.006
NNR-3-024	NBR-3-024	3/16	4.8	.140	3.6	.024	0.61	425	29.3	1700	117.2	0100, 0500	.75	19.0	.006	.009
NNR-3-039	NBR-3-039	3/16	4.8	.110	2.8	.039	0.99	625	43.1	2500	172.4	0100, 0500	.63	16.0	.008	.012
NNR-4-035	NBR-4-035	1/4	6.4	.180	4.6	.035	0.89	425	29.3	1700	117.2	0100, 0250	1.00	25.4	.011	.016
NNR-4-050	NBR-4-050	1/4	6.4	.150	3.9	.050	1.3	625	43.1	2500	172.4	0100, 0250	.88	22.3	.014	.021
NNR-5-040	NBR-5-040	5/16	7.9	.233	5.9	.040	1.0	425	29.3	1700	117.2	0100, 0250	1.50	38.1	.015	.022
NNR-6-048	NBR-6-048	3/8	9.5	.279	7.1	.048	1.2	425	29.3	1700	117.2	0100, 0250	1.75	44.5	.022	.033
NNR-6-075	NBR-6-075	3/8	9.5	.225	5.7	.075	1.9	625	43.1	2500	172.4	0100, 0250	1.50	38.1	.032	.048
NNR-8-062	NBR-8-062	1/2	12.7	.375	9.5	.062	1.6	375	26	1500	103.4	0100, 0250	2.38	60.5	.038	.057
NNR-8-075	NBR-8-075	1/2	12.7	.350	8.9	.075	1.9	625	43.1	2500	172.4	0100, 0250	2.50	63.5	.045	.067

Order Information

Example: NBR-2-017-0100

NBR-2-017-0100 – Nylon

NBR-2-017-0100 – Color (Black)

NBR-2-017-0100 – Rigid

NBR-2-017-0100 – Tube O.D. in sixteenths of an inch (**1/8"**)

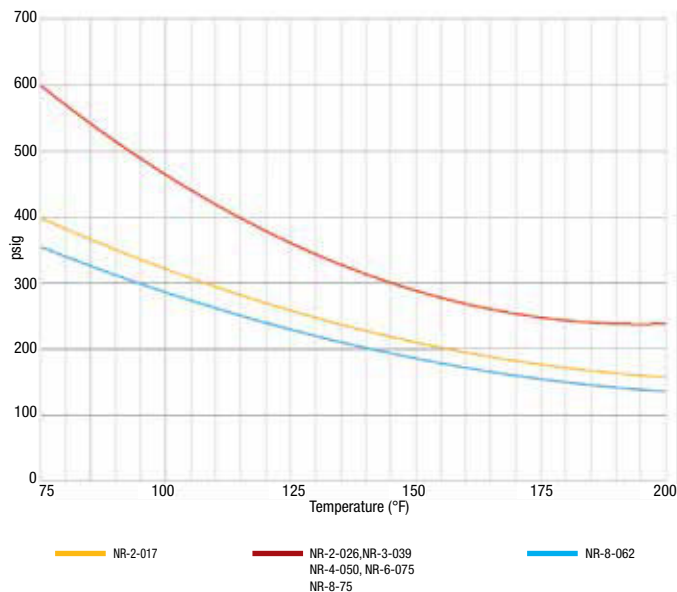
NBR-2-017-0100 – Wall Thickness in inches (**.017"**)

NBR-2-017-0100 – Package Quantity in feet (**100'**)

(Omit for other package quantities)

Semi-rigid Nylon Tubing (Series NR)

Maximum Working Pressure (psig)



Fittings

Parker fittings available from:
Fluid System Connectors Division
Otsego, MI
(269) 692-6555
(269) 694-4614 FAX

FSC Product Families:

- Compress-Align®
- Compression
- Fast & Tite®
- Flow Controls
- Hi-Duty
- Prestolok® All-Metal
- Prestolok® Brass
- Prestolok® Composite
- Prestolok® Stainless
- TrueSeal™

For tube support use, contact Fluid System Connectors Division (269) 692-6555

Notes

- The operating temperature range for service at rated pressures with compatible fluids is -60°F (-51°C) to +200°F (93°C)

Colors

○ Natural

● Black



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