-Parker



INDUSTRIAL HOSE

Catalog 4800

♠ WARNING

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NOTES:



Parker Hannifin Corporation

Your Partner for Motion Control Solutions

Parker Hannifin is a global, Fortune 300 Company and the world's leading supplier of motion control products, systems and solutions. The corporation posts over \$8 billion in sales annually and delivers hydraulic, pneumatic, electromechanical, fluid-connector and filtration technology to over 400,000 customers worldwide.

Parker's extensive product lines encourage single sourcing of motion control applications. From state-of-the-art components to complete systems, you can get the products and systems you need from Parker. All Parker solutions are backed up by superior application engineering and technical support.

With global headquarters in Cleveland Ohio, and manufacturing and distribution facilities located strategically throughout North America, Europe, Asia and South America, Parker is truly a global partner. Parker is listed on the NYSE as PH.





Safety Matters

Industrial hose litigation costs businesses in the U.S. over \$100 million per year, in part because there are no industrial-hose safety standards similar to those for mobile and automotive applications.

In addition, most manufacturers in our industry make only components – hoses, fittings or clamps. They don't provide the expertise necessary to design and manufacture a safe hose system.

Parker is experienced in all aspects of industrial hose selection and assembly. Only Parker has the Circle of Safety™ program, an end-to-end service created to help our customers choose the right hose, assembly components, and proper fabrication methods to provide the safest hose assembly for their application.



Unmatched Design EXPERTISE

Unrivalled Selection

Parker Industrial Hose Products Division (IHP) offers unmatched expertise in designing and assembling efficient and cost-effective industrial hose systems. IHP's broad selection of hoses, fittings, clamps and assembly expertise is unparalleled in the industry, offering unrivaled quality, performance and reliability. All in all, Parker IHP is the perfect single source for hose assembly solutions in a wide range of markets.



- Construction
- Agriculture
- Transportation
- Marine
- Forestry
- Petroleum
- Chemical

Why Choose Parker?

Parker's hose products are the smart choice for transferring steam, petroleum, aircraft fuel, gasoline, chemicals, acid, welding fluids, water and other liquids. We make a variety of hoses that are resistant to chemicals, oils, abrasives, weather and flame. What's more. all Parker hose components meet the requirements of our Circle of Safety program, which ensures that hose assemblies stay safely locked together and meet or exceed the rated design factor of the hose.

Parker hose products are available through a network of distributors trained to fabricate systems to exacting specifications. Assemblies made by Parker and its distributors offer guaranteed end-to-end quality.





Orders Shipped in 24 to 48 Hours

Dedication to fast delivery of industrial hose products is a hallmark of Parker IHP. To facilitate its commitment, Parker has consolidated IHP's inventory, a move that allows all orders to ship within 24 to 48 hours. In fact, 95 % of all IHP orders are now shipped on receipt or by the next day. In addition, consolidated inventory ensures that orders are shipped complete, without missing components.



Crimping Takes on High Pressures

Crimping may make more sense than using bands or clamps to connect fittings when hose assemblies must operate under high pressures. With our Circle of Safety program, crimping is a value-added service that provides assemblies validated by IHP to operate at the maximum working pressure of the hose.

Parker offers a complete range of crimpers to fabricate hose assemblies. In addition, we provide CrimpSource, an online software application that supplies customers with the necessary crimp specifications and assembly procedures to mate a hose and coupling, and ensure that the resulting hose assembly adheres to Parker's strictest safety standards.

Commitment to Testing

For more than 20 years, Parker has used a variety of tests to validate performance of its hoses assemblies, including:

- Coupling pull off
- Impulse
- Cold bend
- Electrical conductivity
- Tensile
- Flex
- Flex impulse with temperature



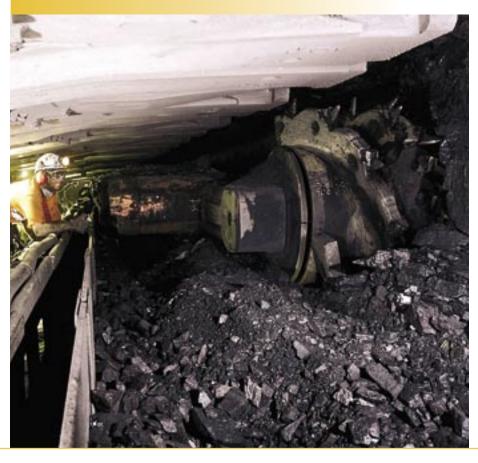
Sure-Fire Selection and Expertise

Parker provides a broad spectrum of industrial hoses products, as well as engineering and manufacturing expertise that is second to none.

Proven industrial hose systems from Parker are powerful, high-quality solutions designed to meet the assorted demands of the marketplace. By choosing Parker, you are ensured of an individual hose assembly that will deliver maximum life, safe handling on the job and productivity.

Our hose systems efficiently and cost-effectively handle any application, conveying materials as diverse as water and hazardous chemicals. No matter how strenuous your hose requirements, Parker will go above and beyond the call of duty to meet them.

For more information about IHP products, call 866-810-HOSE (4673), or visit www.safehose.com.







READ THIS PAGE BEFORE USING ANY OF THE INFORMATION IN THIS CATALOG

This catalog is a guide in selecting the proper hose for the applications listed herein. It contains many cautions, warnings, guidelines and directions for the safe and proper use of Parker Hose. All of these guidelines should be clearly understood before specifying or using any hoses.

! WARNING - SAFETY NOTE

Failure to follow recommended application information and recommended procedures for selection, installation, care, maintenance and storage of hose, couplings or hose assemblies may result in failure to perform properly and may result in damage to property and serious bodily injury. Make sure that hose selected for any application is recommended for that service. Application information is given with each hose or coupling listing in the Parker catalog. Refer to the Safety and Technical Data section of this catalog for information regarding safety, care, maintenance and storage. Contact Parker or your local Parker Distributor for assistance.

In any application, there may be inherent risk of bodily injury or property damage and the user is responsible for implementation of adequate safety precautions. It is the responsibility of the person supplying the hose to advise the user of proper instructions for the safe use and/or precautions and to warn the user of consequences of failure to heed such instruction. Should a hose assembly fail during use because of excessive pressure, injurious and/or damaging chemicals, elevated temperature materials, explosives or flammable materials, then serious bodily injury or destruction of property could result from impelled couplings, whipping hose, high pressure or high velocity discharge, chemical contact, high temperature materials, explosion or fire.

Coupled Assemblies: In this catalog Parker lists the recommended working pressures and safety factors for each type and size of Parker Industrial Hose. The choice of coupling style and the attachment method must be capable of achieving the rated burst pressure of the hose. If the burst capability of the coupled assembly is less than that of the hose, the recommended working pressure of the assembly must be reduced proportionately to maintain the safety factor recommended for the hose.

For example:

Hose A: Catalog rating = 250 PSI WP, 4:1 Safety Design Factor = 1000 PSI Minimum burst. Assembly using Hose A: <u>Capable</u> of 800 PSI burst. Divide by 4 (safety factor) = 200 PSI WP rating for the assembly.

All design and dimensional data shown in this publication is subject to change without notice. Working pressures, corrosion data and other technical information have been prepared from actual test results and other data considered to be reliable. However, no responsibility can be assumed for the accuracy of this information under varied field conditions and it should be considered as a recommendation only and not a guarantee.

CHEMICAL HOSE

WARNING! A failure of chemical hose in service can result in injury to personnel or damage to property. All chemical hose manufacturers recommend specific hose constructions to handle various chemicals. THE MANUFACTURER SHALL BE CONSULTED TO DETERMINE THAT PARTICULAR HOSE MAY BE USED TO HANDLE A SPECIFIC CHEMICAL.

Do not use chemical hose at temperatures or pressures above those recommended by the manufacturer. All operators must be thoroughly trained in the care and use of this hose and must, at all times, wear protective clothing. A hose or system failure could cause the release of a poisonous, corrosive or flammable material.

Detailed information concerning storage, care and maintenance may be found in the Hose Handbook published by the Rubber Manufacturer's Association, 1400 K Street, NW, Washington, DC 20005 and in SAE Recommended Practices J1273.

IMPORTANT

Parker recommends only those applications of products specified in Parker product literature. Parker disclaims any liability for use of its products in applications other than those for which they were designed.



Industrial Hose Service Life

All rubber products, including Industrial Hose, have a limited life on a given application. Assuming the correct hose has been selected for the application, this service life can be adversely affected by many variable conditions. The major ones are:

- Exposure to severe external abuse, such as kinking, bending, high end pull, crushing or abrasion.
- Exposure to higher-than-rated working pressures or to high surge pressures.
- Exposure to higher-than-rated temperatures.
- Misapplication or exposure to corrosive fluids or gases outside the range of suitable applications.
- External abuse Hoses should be placed where they will not be run over by equipment or subjected to high end pull. Hoses should not be bent below recommended minimum bend radius. This could result in kinking the hose or reducing its pressure resistance. Large diameter hoses also may require additional support to reduce external abuse.
- Hose & System Pressures In establishing and determining pressures related to hose and the systems to which they are applied, it is necessary to consider separately the characteristics of the hose and the system.

The system (or device or application) can have several pressures depending on pressure sources and surges imposed by the operator or mechanical components.

A given hose has a fixed characteristic with respect to the pressure it can withstand (and how it is applied) and still give satisfactory life.

- High Temperatures High temperatures can degrade rubber stocks very quickly, resulting in short service life.
 - Where external temperatures are higher than normal ambient, contact Parker for recommendations.
- 4. Misapplication All Industrial Hoses are designed for a specific or related application. They should not be used for any other application without first contacting Parker for recommendations.
- 5. Internal Abrasion For applications of a highly abrasive nature where the hose makes one or more bends, hose should be rotated 90° periodically to lengthen service life.

The hose manufacturer established, through design and testing, the recommended rated working pressure for the hose. It is the responsibility of the user to accurately determine the system pressure. Steady state pressure can be measured readily by gauges. Surges are difficult to measure and may require the use of electronic pressure sensing devices. Also, surge values depend on so many variables that a series of tests are usually required to obtain a valid set of readings. However, if there are extreme surges in the normal operation, or if there is the likelihood of abnormal operation of the system, the magnitude of these pressures must be determined.

Considering the recommended rated working pressure of the HOSE ASSEMBLY and the various pressures of the SYSTEM, the hose is matched to the system using proper application engineering principles.

WARRANTY LIMITED WARRANTY FOR THE LIFE OF THE MERCHANDISE

Merchandise is warranted to be free from defects in material or workmanship for the life of the merchandise. Parker will, at its option, replace or repair any merchandise proved defective in material or workmanship, or both, during the warranty period. This is the exclusive remedy. For warranty service, please contact Parker Industrial Hose Division, 17295 Foltz Industrial Parkway, Cleveland, OH 44149.

THERE IS NO OTHER EXPRESS WARRANTY. IMPLIED WARRANTIES, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED TO THE EXPRESS WARRANTY PERIOD. LIABILITY FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES UNDER ANY AND ALL WARRANTIES ARE EXCLUDED TO THE EXTENT EXCLUSION PERMITTED BY LAW. Some states do not allow the exclusion or limitation of incidental or consequential damages, and some states do not allow limitation on how long an implied warranty lasts, so the above limitation and exclusion may not apply to you. The warranty gives you specific legal rights and you may also have other rights which vary from state to state.



Catalog Selection

To find the Parker Hose to fit the requirements:

A. If you know the Parker series number, find the page number in the "Index by Series" on page IV.

- B. If Parker series number is unknown, see the "Index by Name" on pages V-VI. It is, like the catalog, divided into various application categories.
- C. If you can't find the right hose or, have special requirements, call Parker's Customer Satisfaction Center at 866-810-HOSE.

The hose listings in this catalog give the detailed information necessary to select the correct hose for most applications. You will also find the general reference information in the Safety and Technical Data section. The hose listings include recommended coupling styles. Couplings are listed in a separate section beginning on page 184.

WARNING \triangle Competitive comparisons are provided as a tool to identify parts similar in form, fit, or function and are not intended as direct cross-references to Parker part numbers. Care must be taken by the user to compare any variances in materials and construction between manufacturers, and to ensure the selected hose does not constitute a saftey risk or change in required performance.

For a more complete cross-reference, refer to www.safehose.com

Glossary of Abbreviated Terms Used in Hose Listings:

I.D. — Inside Diameter of hose tube opening.

Ply, Spirals, or Braid - Layers of reinforcement.

O.D. — Outside Diameter of hose.

Approx. Wt. Per 100 ft. — Weight of hose, normally listed as pounds per 100 foot length.

Min. Bend Radius (in) — Minimum Radius to which hose can be bent before sustaining damage or reduced life.

Max. Rec. WP (PSI) — Maximum Recommended Working Pressure expressed in Pounds per Square Inch.

Min. Burst (PSI) — Minimum Burst Pressure expressed in Pounds per Square Inch, which is the lowest pressure at which the hose is designed to burst under prescribed conditions. Not to be used as working pressure.





How To Select a Hose

Several things must be known before the proper hose can be selected for any hose application. The acronym STAMPED can be the key to having the required information in most cases.

- SIZE The appropriate inside and outside diameters and length of the hose should be determined.
- **TEMPERATURE** The maximum temperature of the material being conveyed, and external temperature.
- APPLICATION External conditions including abrasion, climate, heat, flexing, crushing, kinking and degrees of bending.
- MATERIAL The composition of the substance being conveyed and compatibility with the hose.
- PRESSURE The maximum pressure of the system, including pressure spikes.
- **ENDS** The appropriate end connections and attachment method for the application.
- **DELIVERY** Testing, quality, packaging and delivery requirements.

Complicated applications or an application requiring special made-to-order hose may require more detailed information.

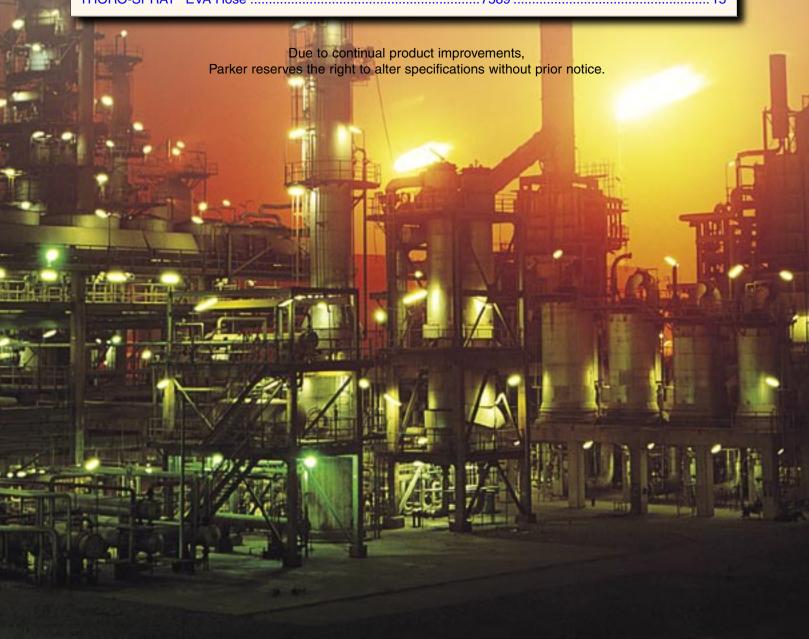


NOTES:		



ACID & CHEMICAL

	Series	Page
POLY-CHEM® Corrugated Hose	7274	2
POLY-CHEM® Hose		
BLUE THUNDER™ UHMW Hose	7373T	4
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THORO-SPRAY® High Pressure Spray Hose – 800 PSI	7180	8
THORO-SPRAY® 600 PSI Yellow PVC Hose – 2-Spiral	7580	9
THORO-SPRAY® 600 PSI Yellow PVC Hose – 4-Spiral	7584	10
THORO-SPRAY® 300 PSI Green PU/PVC Hose	7585	11
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THORO-SPRAY® 800 PSI Blue PU/PVC Hose	7588	14
THORO-SPRAY® EVA Hose	7589	15





POLY-CHEM®Corrugated Hose

Series 7274

The Poly-Chem hose is designed to handle many types of chemicals and solvents in both **full suction and discharge applications**. This series has a corrugated cover that provides maximum flexibility for easy handling. The clear cross-linked polyethylene tube will handle many types of chemicals, acids and solvents without leaching and contaminating the product conveyed. Refer to the chemical guide in the Safety and Technical Data section of this catalog, or contact Parker to determine compatibility with specific chemicals and applications. Validated permanent crimp specs are available.

4:1 Design factor

>> Compatible with 96% of chemicals and solvents

Tube	Cross-Linked Polyethylene (XLPE)	
Cover	Corrugated green EPDM with yellow stripe	
Reinforcement	Textile Plies with Helix Wire	
Temperature Range	-20° F to +160° F (-29°C to +71°C) WARNING! Check chemical resistance guide beginning on page 222	
Branding	PARKER SERIES 7274 CORRUGATED POLY-CHEM® XXX PSI MAX WP MADE IN USA 001	
Brand Description	Tape Brand - Yellow stripe with green letters	
Compare to	Goodyear Blue Flexwing; Gates Mustang 45HW; Titan Exact-Chem; Boston Panther Chemical Transfer	

LENGTHS: 100 ft., lengths up to 200 ft. available on quotation.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. Other available coupling options: Series 7670. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Plies	OD (in.)	OD (mm)	Approx. Wt. Per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7274-1002	1	25.4	2	1.475	38.6	64	3.0	200
7274-1252	11/4	31.8	2	1.710	43.4	63	4.0	200
7274-1502	1½	38.0	2	2.000	50.8	81	5.0	200
7274-2002	2	50.8	2	2.545	64.6	111	6.0	200
7274-2502	2½	63.5	4	3.169	80.5	168	7.0	150
7274-3002	3	76.2	4	3.685	93.6	213	7.0	150
7274-4002	4	101.6	4	4.710	119.6	286	8.0	150



WARNING! Elevated temperatures can change chemical resistance ratings. Most chemical resistance guides are based on testing performed at ambient 70°F (21°C) and higher temperatures are likely to change these ratings. Many chemicals will become more aggressive as temperatures increase, reducing the ability of materials to withstand them. It is the users responsibility to determine if the hose is compatible with the application. Compatibility information can be requested from Parker for chemicals at elevated temperatures, it will be necessary for users to perform compatibility testing if no data exists for the chemical at the temperature desired.



WARNING! Combination nipple and bands reduce the working pressure of the assembly to less than the hose's maximum working pressure. Refer to NAHAD Assembly Guidelines for working pressure.



- Chemical Transport
- Storage Tank Transfer





POLY-CHEM® Hose

Series 7276

POLY-CHEM® is a versatile hose handling many types of chemicals and solvents in both full suction and discharge applications. Clear, cross-linked polyethylene tube will not leach and contaminate product conveyed. Refer to the chemical guide in the Safety and Technical Data section of this catalog, or contact Parker to determine compatibility with specific chemicals and applications. Validated permanent crimp specs are available.

4:1 Design factor

>> Compatible with 96% of chemicals and solvents.

Tube	Cross-Linked Polyethylene (XLPE)		
Cover	Green EPDM with yellow stripe		
Reinforcement	Textile Plies with Helix Wire		
Temperature Range	-20° F to +160° F (-29°C to +71°C) WARNING! Check chemical resistance guide beginning on page 222		
Branding	PARKER SERIES 7276 POLY-CHEM® HOSE XXX PSI MAX WP MADE IN USA 001		
Brand Description	Tape Brand - Yellow stripe with green letters		
Compare to	Goodyear Green XLPE; Titan Exact-Chem; Boston Panther Chemical Transfer		

LENGTHS: 100 ft., lengths up to 200 ft. available on quotation.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. Other available coupling options: Series 7670. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

7276

Applications

- Chemical Transport
- Storage Tank Transfer

Part No.	ID (in.)	ID (mm)	Reinf. Plies	OD (in.)	OD (mm)	Approx. Wt. Per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7276-752	3/4	19.1	2	1.250	31.8	48	3.0	200
7276-1002	1	25.4	2	1.475	37.5	60	4.0	200
7276-1252	11/4	31.8	2	1.715	43.6	69	5.0	200
7276-1502	1½	38.0	2	2.000	50.8	97	6.0	200
7276-2002	2	50.8	2	2.545	64.6	133	8.0	200
7276-3002	3	76.2	4	3.675	93.3	259	12.0	150
7276-4002	4	101.6	4	4.720	119.9	357	16.0	150



WARNING! Elevated temperatures can change chemical resistance ratings. Most chemical resistance guides are based on testing performed at ambient 70°F (21°C) and higher temperatures are likely to change these ratings. Many chemicals will become more aggressive as temperatures increase, reducing the ability of materials to withstand them. It is the users responsibility to determine if the hose is compatible with the application. Compatibility information can be requested from Parker for chemicals at elevated temperatures, it will be necessary for users to perform compatibility testing if no data exists for the chemical at the temperature desired.



WARNING! Combination nipple and bands reduce the working pressure of the assembly to less than the hose's maximum working pressure. Refer to NAHAD Assembly Guidelines for working pressure.





BLUE THUNDER™ UHMW Hose

Series 7373T

This corrugated hose provides flexibility and durability in chemical **full suction and discharge applications.** The clear Ultra High Molecular Weight (UHMW) polyethylene tube will handle 98% of the most common chemicals without leaching and contaminating the product being conveyed. Refer to the chemical guide in the Safety and Technical Data section of this catalog, or contact Parker to determine compatibility with chemicals and applications.

4:1 Design factor

>> Compatible with 98% of chemicals and solvents

Tube	Clear Ultra High Molecular Weight Polyethylene (UHMW)
Cover	Corrugated Blue EPDM
Reinforcement	Textile Plies with Helix Wire
Temperature Range	-40° F to +250° F (-40°C to +121°C) WARNING! Check chemical resistance guide beginning on page 222
Branding	PARKER SERIES 7373T BLUE THUNDER™ UHMW TUBE MAX WP XXX PSI MADE IN USA 001
Brand Description	Tape Brand - Yellow ink lettering
Compare to	Goodyear Fabchem; Gates Renegade; Boston Chemcat; Titan Chem-Lite

LENGTHS: 100 ft., lengths up to 200 ft. on quotation.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. Other available coupling options: Series 7670. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Plies	OD (in.)	OD (mm)	Approx. Wt. Per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7373T-750	3/4	19.1	2	1.250	31.8	47	2.5	200
7373T-1000	1	25.4	2	1.475	37.5	61	3.0	200
7373T-1250	1¼	31.8	2	1.700	43.2	65	4.0	200
7373T-1500	1½	38.0	2	1.965	49.9	83	5.0	200
7373T-2000	2	50.8	2	2.600	66.0	139	6.0	200
7373T-2500	2½	63.5	4	3.154	80.1	175	6.5	200
7373T-3000	3	76.2	4	3.645	92.6	218	7.0	200
7373T-4000	4	101.6	4	4.675	118.7	309	8.0	200

7373T

Applications

- Chemical Transport
- Storage Tank Transfer



WARNING! Elevated temperatures can change chemical resistance ratings. Most chemical resistance guides are based on testing performed at ambient 70°F (21°C) and higher temperatures are likely to change these ratings. Many chemicals will become more aggressive as temperatures increase, reducing the ability of materials to withstand them. It is the users responsibility to determine if the hose is compatible with the application. Compatibility information can be requested from Parker for chemicals at elevated temperatures, it will be necessary for users to perform compatibility testing if no data exists for the chemical at the temperature desired.

Also, coupling attachment becomes even more critical at elevated temperatures. Only permanent crimp, internal expanded or swage style fittings should be installed for applications with temperatures above 125°F. The working pressure of banded assemblies below 125°F should be reduced to maintain a 4:1 design factor based on the assembly burst capability.



WARNING! Combination nipple and bands reduce the working pressure of the assembly to less than the hose's maximum working pressure. Refer to NAHAD Assembly Guidelines for working pressure.





Paint Fluid Hose Nylon Tube

Series 7108

Designed to handle both water and oil-based paints in medium pressure applications. The Nylon 6 tube will handle ketone solvents, lacquers, thinners and paints with high aromatics, as well as many chemicals. Very flexible for ease of handling.

4:1 Design factor

>> Non-leaching tube will not discolor fluids

Tube	Nylon 6/6.6
Cover	Black Neoprene
Reinforcement	Multiple textile spirals
Temperature Range	0° F to +200° F (-18°C to +93°C)
Branding	PARKER SERIES 7108 PAINT FLUID HOSE 3/8 ID (9.5MM) XXX PSI MAX WP MADE IN USA (DATE CODE)
Brand Description	Ink Brand - White letter color
Compare to	Goodyear NR Spray; Gates 77B; Boston Nyall

LENGTHS: Random lengths on nominal 500 ft. reels, 3 piece max., 50 ft. minimum length.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. Other available coupling options: Series 7615, 7692. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Spirals	OD (in.)	OD (mm)	Approx. Wt. Per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7108-251	1/4	6.4	2	0.488	12.4	9	3.0	500
7108-381	3/8	9.5	2	0.680	17.3	16	4.0	500
7108-501	1/2	12.7	2	0.875	22.2	25	5.0	750



Applications

- Transfer of Low Pressure Paint
- Mild Chemical Transfer



WARNING! Do not use in high pressure paint spray applications requiring a statically conductive hose.





Anhydrous Ammonia Hose

Series 7261-Stainless Steel Reinforced

Designed to handle anhydrous ammonia up to 350 PSI working pressure. Corrosion resistant high tensile stainless steel braid provides strong and flexible reinforcement. Meets or exceeds RMA specifications. Made to order only. 5:1 Design factor

>> Stainless steel reinforcement for added safety

Tube		Black EPDM	
Cover		Perforated Black EPDM w/silver stripe	
Reinforcement		One or multiple stainless steel braids, 1 textile braid	
Temperature Range		-40° F to +180° F (-40°C to +82°C)	
Branding (Side 1)		PARKER USA 7261 SS ANHYDROUS AMMONIA - XXXX-REMOVE NO LATER THAN XXXX - 350 PSI MAX WP RMA(BATCH CODE) - CAUTION ANHYDROUS AMMONIA USE ONLY - XXXX-REMOVE NO LATER THAN XXXX	
	(Side 2)	Solid silver stripe	
Brand Description		Side 1 - embossed, Side 2 - tape	
Compare to		Goodall N2595	

LENGTHS: 1 in., 200 ft. nom. \pm 10%; 3 pcs. max., 45 ft. min. \pm 11½ in., random 45 through 100 ft., 1 pc. per carton \pm 1½ in. and 2 in. random lengths, 150 ft. pack, max. 3 pieces, 40 ft. min. length \pm in cartons.

COUPLINGS: Only Parker permanent crimped couplings (refer to Parker Industrial Hose Crimp Specifications). See CrimpSource for coupling details.

Part No.	ID (in.)	ID (mm)	Reinf. Braids	OD (in.)	OD (mm)	Approx. Wt. Per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7261-1001	1	25.4	1	1.500	38.1	78	12.0	350
7261-1251	11/4	31.8	1	1.781	45.2	105	16.5	350
7261-1501K	11/2	38.1	1	2.032	51.6	114	20.0	350
7261-2002K	2	50.8	2	2.625	66.7	177	25.0	350

AVAILABILITY: Made-to-order and subject to minimum runs. **Sold to authorized couplers only.**



WARNING! For Anhydrous Ammonia use ONLY. Do not use in LP Gas, Natural Gas or refrigeration applications. Do not use male swivel couplings. Use Parker recommended couplings ONLY!



WARNING! Contact with Anhydrous Ammonia will burn skin and is especially damaging to the eyes and lungs. This is true for its liquid and gaseous (vapor) state. Many accidents involving NH3 have occurred by using the wrong hose. NH3 hose must be specially compounded and constructed to handle the material. NEVER use a hose that is not designed for NH3 because it may fail very quickly and cause bodily injury. It is, therefore, especially important to make sure that only Anhydrous Ammonia hose is recommended and used for this service. Refer to RMA Publications IP-14 "Anhydrous Ammonia Hose, specifications" and IP-11-2 "Anhydrous Ammonia Hose, Manual for Maintenance, Testing and Inspection".



- Agriculture
- Fertilizers





Anhydrous Ammonia Hose

Series 7262-Nylon Reinforced

Designed to handle anhydrous ammonia up to 350 PSI working pressure. Degradation resistant tensile braids provide strong and flexible reinforcement. Meets or exceeds RMA and TFI (The Fertilizer Institute) specifications. Made to order only.

5:1 Design factor

>> Validated permanent crimp specs are available

Tube	Black EPDM
Cover	Perforated Black EPDM w/green stripe
Reinforcement	Multiple nylon braids.
Temperature Range	-40°F to + 180°F (-40°C to +82°C)
Branding (Side 1)	PARKER USA 7262 NYLON ANHYDROUS AMMONIA - 2003-REMOVE NO LATER THAN 2009 - 350 PSI MAX WP RMA (BATCH CODE) CAUTION ANHYDROUS AMMONIA USE ONLY - 2003-REMOVE NO LATER THAN 2009
(Side 2)	Solid Green Stripe
Brand Description	Side 1 - Embossed, Side 2 - tape
Compare to	Goodall N2000

LENGTHS: ½ in. through 1 in., random lengths on reels, 5 pc. max., 50 ft. min. – 11/4 in., random 45 through 100 ft., 11/2 in. and 2 in. random lengths in 150 ft. pack, max. 3 pieces, 40 ft. min. length – in cartons.

COUPLINGS: Only Parker permanent crimped couplings (refer to Parker Industrial Hose Crimp Specifications). See CrimpSource for coupling details.

Part No.	ID (in.)	ID (mm)	Reinf. Braids	OD (in.)	OD (mm)	Approx. Wt. Per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7262-502	1/2	12.7	2	0.937	23.8	29	5.0	350
7262-752	3/4	19.1	2	1.250	31.8	47	8.0	350
7262-1002	1	25.4	2	1.500	38.1	57	10.0	350
7262-1252	11/4	31.8	2	1.750	44.5	68	12.0	350
7262-1502K	1½	38.1	2	2.000	50.8	81	14.0	350
7262-2003K	2	50.8	3	2.750	69.9	166	16.0	350

AVAILABILITY: Made-to-order and subject to minimum runs. Sold to authorized couplers only.



WARNING! For Anhydrous Ammonia use ONLY. Do not use in LP Gas, Natural Gas or refrigeration applications. Do not use male swivel couplings. Use Parker recommended couplings ONLY!



WARNING! Contact with Anhydrous Ammonia will burn skin and is especially damaging to the eyes and lungs. This is true for its liquid and gaseous (vapor) state. Many accidents involving NH3 have occurred by using the wrong hose. NH3 hose must be specially compounded and constructed to handle the material. NEVER use a hose that is not designed for NH3 because it may fail very quickly and cause bodily injury. It is, therefore, especially important to make sure that only Anhydrous Ammonia hose is recommended and used for this service. Refer to RMA Publications IP-14 "Anhydrous Ammonia Hose, specifications" and IP-11-2 "Anhydrous Ammonia Hose, Manual for Maintenance, Testing and Inspection".



- Agriculture
- Fertilizers



THORO-SPRAY® High Pressure Spray Hose – 800 PSI

Series 7180

Designed for agricultural and residential high pressure spray applications. The tube will handle most pesticides as well as liquid fertilizers. The cover is non-marking for safe use in residential areas.

4:1 Design factor

>> Non-marking cover

Tube	Black Nitrile
Cover	Green Nitrile/PVC
Reinforcement	Multiple textile braids
Temperature Range	-20° F to +180° F (-29°C to +82°C)
Branding	PARKER USA 7180 THORO-SPRAY® HOSE - 800 PSI MAX WP
Brand Description	Ink Brand - Black letter color
Compare to	Goodyear Pliovic Ag Spray; Gates Thermo AG800

LENGTHS: Random lengths on nominal 500 ft. reels, 5 piece maximum with 50 ft. minimum length.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. Other available coupling options: Series 7615, 7692. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Braids	OD (in.)	OD (mm)	Approx. Wt. Per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7180-252	1/4	6.4	2	0.625	15.9	15	3.0	800
7180-382	3/8	9.5	2	0.750	19.1	20	4.0	800
7180-502	1/2	12.7	2	0.938	23.8	29	5.0	800
7180-752	3/4	19.1	2	1.250	31.8	48	6.5	800

7180

- Fertilizers
- Pesticide Sprayers





THORO-SPRAY® 600 PSI Yellow **PVC Spray Hose – 2 Spiral**

Series 7580

This superior quality spray hose is produced with premium grade PVC compounds for agricultural spraying of insecticides and fertilizers. Can also be used for air, water and many light chemical solutions. High adhesion between the layers provide for a long service life. Lightweight and non-marking. Ribbed cover for easy coiling and greater abrasion resistance.

Not for use with Aromatic Hydrocarbons such as Xylene.

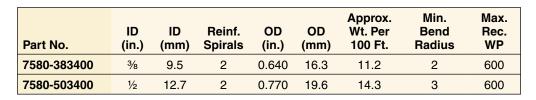
3:1 Design factor

>> Abrasion resistant for long service life

Tube	Light Green PVC
Cover	Yellow Ribbed PVC
Reinforcement	Two-Spiral Polyester Yarn
Temperature Range	+25°F to +150°F (-4°C to +66°C)
Branding	PARKER 7580 PVC AG SPRAY - (SIZE)" - 600 PSI WP - MADE IN USA
Brand Description	Ink Brand - Black letter color
Compare to	Gates AG 570, Goodyear Pliovic 1800, Kuriyama K4131, Pacific Echo 310

LENGTHS: 400 ft. coils

COUPLINGS: For permanent crimp specifications, refer to CrimpSource, For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.





- Weed and Lawn Spraying
- Nurseries
- Agricultural and Orchards
- Wettable powders







Applications

- Lawn Care
- Golf Courses
- Boom Trucks
- Agricultural
- Nursery
- Pest Control
- Wettable Powder Chemicals

THORO-SPRAY® 600 PSI Yellow PVC Spray Hose – 4 Spiral

Series 7584

This superior quality spray hose is produced with premium grade PVC compounds for agricultural spraying of insecticides and fertilizers. Can also be used for air, water and many light chemical solutions. High adhesion between the layers provide for a long service life. Lightweight and non-marking. Ribbed cover for easy coiling and greater abrasion resistance.

Not for use with Aromatic Hydrocarbons such as Xylene.

4:1 Design factor

>> Ribbed cover for easy coiling and handling

Tube	Black PVC					
Cover	Yellow Ribbed PVC					
Reinforcement	Four-Spiral Polyester Yarn					
Temperature Range	+25°F to +150°F (-4°C to +66°C)					
Branding	PARKER 7584 PVC AG SPRAY - (SIZE)" - 600 PSI WP - MADE IN USA					
Branding Description	Ink Brand - Black letter color					
Compare to	Kuriyama A1251; Pacific Echo 320					

LENGTHS: 300 ft. coils

COUPLINGS: For assembly guidelines and coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Spirals	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7584-383	3/8	9.5	4	0.650	16.5	13.4	2	600
7584-503	1/2	12.7	4	0.790	20.1	17.6	3	600





THORO-SPRAY® 300 PSI Green PU/PVC Spray Hose

Series 7585

Tube is made of a special Polyurethane/PVC blended compound for the agricultural spraying of insecticides, pesticides and fertilizers. Can also be used for air, water and many light chemical solutions. High adhesion between the layers provide for a long service life. Lightweight and non-marking. Ribbed cover for easy coiling and greater abrasion resistance. Approved for use with Aromatic Hydrocarbon based chemical spraying (including Xylene). 3.3:1 Design factor

>> Long service life

Tube	Blended Polyurethane/PVC - Black					
Cover	Green Ribbed PVC					
Reinforcement	Two-Spiral Polyester Yarn					
Temperature Range	+15°F to +160°F (-9°C to +71°C)					
Branding	PARKER 7585 PU/PVC AG SPRAY - (SIZE)" - 300 PSI WP - MADE IN USA					
Brand Description	Ink Brand - Black letter color					
Compare to	Kuriyama A1628					

LENGTHS: 300 ft. coils

COUPLINGS: For assembly guidelines and coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Spirals	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7585-375	3/8	9.5	2	0.625	15.9	12	21/4	300
7585-500	1/2	12.7	2	0.770	19.6	17	3	300
7585-750	3/4	19.1	2	1.060	26.9	29	4	300

7585

- Weed and Lawn Spraying
- Nurseries
- · Agricultural and Orchards







Series 7586

This superior quality spray hose is produced with premium grade PVC compounds for agricultural spraying of insecticides and fertilizers. Can also be used for air, water and many light chemical solutions. High adhesion between the layers provide for a long service life. Lightweight and non-marking. Ribbed cover for easy coiling and greater abrasion resistance. Approved for use with Aromatic Hydrocarbon based chemical spraying (including Xylene).

3:1 Design factor

>> Non-marking for use in residential areas

Tube	Blended Polyurethane/PVC - White					
Cover	Yellow Ribbed Blended PVC					
Reinforcement	Two-Spiral Polyester Yarn					
Temperature Range	+15°F to +160°F (-9°C to +71°C)					
Branding	PARKER 7586 PU/PVC AG SPRAY - (SIZE)" - 600 PSI WP - MADE IN USA					
Brand Description	Ink Brand - Black letter color					
Compare to	Jason 4192					

LENGTHS: 300 ft. coils

COUPLINGS: For assembly guidelines and coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf.	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7586-375	3/8	9.5	2	0.650	16.5	11.2	2	600
7586-500	1/2	12.7	2	0.770	19.6	14.3	3	600

7586

- Lawn Care
- Golf Courses
- Boom Trucks
- Agricultural
- Nurserv
- Pest Control
- Wettable Powder Chemicals





THORO-SPRAY® 600 PSI Yellow PU/PVC Spray Hose - 4 Spiral

Series 7587

This superior quality spray hose is produced with premium grade PVC compounds for agricultural spraying of insecticides and fertilizers. Can also be used for air, water and many light chemical solutions. High adhesion between the layers provide for a long service life. Lightweight and non-marking. Ribbed cover for easy coiling and greater abrasion resistance. Approved for use with Aromatic Hydrocarbon based chemical spraying (including Xylene).

4:1 Design factor

>> Lightweight and ribbed for easy coiling

Tube	Blended Polyurethane/PVC - Black					
Cover	Yellow Ribbed Blended PVC					
Reinforcement	Four-Spiral Polyester Yarn					
Temperature Range	+15°F to +160°F (-9°C to +71°C)					
Branding	PARKER 7587 PU/PVC AG SPRAY - (SIZE)" - 600 PSI WP - MADE IN USA					
Brand Description	Ink Brand - Black letter color					
Compare to	Kuriyama A1661					

LENGTHS: 300 ft. coils

COUPLINGS: For assembly guidelines and coupling options, refer to NAHAD Industrial

Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Spirals	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7587-375	3/8	9.5	4	0.650	16.5	13.2	21/4	600
7587-500	1/2	12.7	4	0.705	17.9	17.3	3½	600
7587-750	3/4	19.1	4	1.020	25.9	34.5	4	600



- Lawn Care
- Golf Courses
- Boom Trucks
- Agricultural
- Nursery
- Pest Control
- Wettable Powder Chemicals





THORO-SPRAY® 800 PSI Blue PU/PVC Spray Hose

Series 7588

This superior quality spray hose is produced with premium grade PVC compounds for agricultural spraying of insecticides and fertilizers. Can also be used for air, water and many light chemical solutions. High adhesion between the layers provide for a long service life. Lightweight and non-marking. Ribbed cover for easy coiling and greater abrasion resistance. *Approved for use with Aromatic Hydrocarbon based chemical spraying (including Xylene).*

4:1 Design factor

>> Lightweight and ribbed for easy handling

Tube	Blended Polyurethane/PVC - Black
Cover	Blue Ribbed PVC
Reinforcement	Four-Spiral Polyester Yarn
Temperature Range	+15°F to +160°F (-9°C to +71°C)
Branding	PARKER 7588 PU/PVC AG SPRAY - (SIZE)" - 800 PSI WP - MADE IN USA
Brand Description	Ink Brand - White letter color
Compare to	Kuriyama A1687

LENGTHS: 300 ft. coils

COUPLINGS: For assembly guidelines and coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Spirals	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7588-375	3/8	9.5	4	0.660	16.8	13.4	2.3	800
7588-500	1/2	12.7	4	0.840	21.3	21.4	3.5	800
7588-750	3/4	19.1	4	1.140	29.0	35.9	4.0	800

7588

- Lawn Care
- Golf Courses
- Boom Trucks
- Agricultural
- Nursery
- Pest Control





THORO-SPRAY® EVA Spray Hose

Series 7589

EVA tube and cover hose provides good chemical and weather resistance. 4:1 Design factor

>> Weather resistant for exposure to the elements

Tube	Natural EVA					
Cover	Natural EVA					
Reinforcement	Polyester Yarn					
Temperature Range	-50°F to +125°F (-46°C to +52°C)					
Branding	PARKER 7589 EVA SPRAY - (SIZE)" – (SIZE) MM - (PRESSURE) PSI WP - MADE IN USA					
Brand Description	Ink Brand - Black letter color					
Compare to	Kentak EVA; Kuriyama K4350					

LENGTHS: 90% of reels contain one continuous length. If two pieces, lengths will be in multiples of 50 ft.

COUPLINGS: For assembly guidelines and coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf.	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7589-375	3/8	9.5	4	0.595	15.1	3.2	5	250
7589-500	1/2	12.7	4	0.720	18.3	3.9	5½	250
7589-750	3/4	19.1	4	1.000	25.4	6.5	7	150
7589-1000	1	25.4	4	1.305	33.1	10.5	10	150

NOTE: Also available in black. Contact IHP Customer Service for more details.

7589

- Anhydrous Ammonia
- Agricultural
- Lawn
- Chemical Transfer
- Seeder Tubing
- Air and Water Transfer
- Conduit Paint Fluid
- Light Vacuum



NOTES:

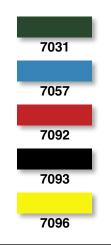


AIR & MULTI-PURPOSE HOSE

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Applications

 Oil Mist Lubricating Air Lines

GST® IIGeneral Service Air & Water Hose

Series 7031 (Green) / 7057 (Blue) / 7092 (Red) 7093 (Black) / 7096 (Yellow)

An economical and versatile general purpose hose, which is excellent for air and water service as well as many agricultural chemicals including LASSO® herbicide. The EPDM tube and cover resists heat, sunlight, ozone and weathering. The GST II hose exceeds RMA class C medium oil resistance requirements. Suitable for applications such as oil mist lubricating air lines, but NOT suitable for the transfer of petroleum products. Closely plied reinforcement of high tensile textile cord provides excellent coupling retention and kink resistance.

4:1 Design factor

>> Available in several colors for application coding. Excellent weathering resistance withstands exposure to the elements.

Tube	Black EPDM		
Cover	EPDM - colors referenced above		
Reinforcement	Multiple textile spirals		
Temperature Range	-40°F to +212°F (-40°C to +100°C)		
Branding Example	PARKER SERIES 7031 GST® II I.D. (IN & MM) XXX PSI MAX WP MADE IN USA		
Brand Description	Ink Brand - White letter color		
Compare to	Goodyear Horizon General Purpose; Gates Adapta Flex; Boston Bosflex A/W; Thermoid Valuflex GS		

LENGTHS: Reels are 90% 1 piece, 10% 2 pieces, 50 ft. min. length (total footage on reel is +50 ft./-0 ft. of length indicated). All 50 ft. lengths are coiled, tied and secured in cartons per order.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. Other available coupling options: Series 7611, 7615, 7692, 7628, 7670. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.





7031 7057 7092 7093 7096

GST® II General Service Air & Water Hose

Series 7031 (Green) / 7057 (Blue) / 7092 (Red) 7093 (Black) / 7096 (Yellow)

Part No.	ID (in.)	ID (mm)	Reinf. Spirals	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
-19200	³ ⁄ ₁₆	4.8	2	0.437	11.1	6	2.0	200
-19300	³ ⁄ ₁₆	4.8	2	0.437	11.1	8	2.0	300
-25200	1/4	6.4	2	0.500	12.7	9	2.5	200
-2520050	1/4	6.4	2	0.500	12.7	9	2.5	200
-25300	1/4	6.4	2	0.550	14.0	12	3.3	300
-2530050	1/4	6.4	2	0.550	14.0	12	3.3	300
-31200	5/16	7.9	2	0.594	15.1	13	3.3	200
-3120050	5/16	7.9	2	0.594	15.1	13	3.3	200
-31300	5/16	7.9	2	0.625	15.9	13	3.5	300
-3130050	5/16	7.9	2	0.625	15.9	13	3.5	300
-38200	3/8	9.5	2	0.656	16.7	14	3.5	200
-3820050	3/8	9.5	2	0.656	16.7	14	3.5	200
-38300	3/8	9.5	2	0.688	17.5	17	4.0	300
-3830050	3/8	9.5	2	0.688	17.5	17	4.0	300
-50200	1/2	12.7	2	0.813	20.7	21	4.5	200
-5020050	1/2	12.7	2	0.813	20.7	21	4.5	200
-50250*	1/2	12.7	2	0.844	21.4	23	4.5	250
-5025050	1/2	12.7	2	0.844	21.4	23	4.5	250
-50304	1/2	12.7	4	0.875	22.2	25	5.0	300
-5030450	1/2	12.7	4	0.875	22.2	25	5.0	300
-63200	5/8	15.9	2	0.969	24.6	24	5.5	200
-6320050	5/8	15.9	2	0.969	24.6	24	5.5	200
-63304	5/8	15.9	4	1.062	27.0	30	5.5	300
-6330450	5/8	15.9	4	1.062	27.0	30	5.5	300
-75200	3/4	19.1	2	1.109	28.2	32	6.0	200
-7520050	3/4	19.1	2	1.109	28.2	32	6.0	200
-75304*†	3/4	19.1	4	1.156	29.4	37	6.0	300
-7530450*†	3/4	19.1	4	1.156	29.4	37	6.0	300
-100200	1	25.4	2	1.406	35.7	44	7.0	200
-10020050	1	25.4	2	1.406	35.7	44	7.0	200
-100304	1	25.4	4	1.438	36.5	53	8.0	300
-10030450	1	25.4	4	1.438	36.5	53	8.0	300
-125204 -150204 -15020450 -150204100	1½ 1½ 1½ 1½ 1½	31.75 38.1 38.1 38.1	4 4 4 4	1.781 2.031 2.031 2.031	45.2 51.6 51.6 51.6	77 86 86 86	9.0 10.0 10.0 10.0	200 200 200 200

^{*}Sizes stocked in green and blue †Sizes stocked in yellow







Series 7094 (Red) / 7095 (Black)

MPT® II is a premium high quality, economical, multi-purpose hose that is oil resistant, excellent for air and water service and many chemicals. Closely plied reinforcement of high tensile textile cord provides excellent coupling retention and kink resistance. The hose is electrically non-conductive with a minimum resistance of one megohm per inch at 1000 volts DC. MPT II hose exceeds RMA Class A-High Oil Resistance requirements. **NOTE: Do not use for hot, dry air applications.** 4:1 Design factor

>> Highly oil resistant and non-conductive

Tube	Black Nitrile		
Cover	Red or Black Neoprene		
Reinforcement	Multiple textile spirals		
Temperature Range	-20°F to +212°F (-29°C to +100°C)		
Branding	PARKER SERIES 7094 MPT® II 3/16 ID (4.8 MM) XXX PSI MAX WP MADE IN USA - ELECTRICALLY NON-CONDUCTIVE		
Brand Description	Ink Brand - White letter color		
Compare to	Boston Shock Safe; Goodyear Ortac/Wingfoot; Gates PremoFlex/19B		

LENGTHS: All reels are 90% 1 piece, 10% 2 pieces, 50 ft. min. length (total footage on reel is +50 ft./-0 ft. of length indicated). All 50 ft. lengths are coiled, tied and secured in cartons per order.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. Other available coupling options: Series 7611, 7615, 7692, 7628, 7670. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.



- Electric **Furnaces**
- Pot Lines





MPT® II Multi-Purpose-Oil Resistant Air & Water Hose - Non-Conductive

Series 7094 (Red) / 7095 (Black)

Part No.	ID (in.)	ID (mm)	Reinf. Spirals	OD (in.)	OD (mm)	Approx Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
-19200	3/16	4.8	2	0.437	11.1	5	1.8	200
-19300	3/16	4.8	2	0.437	11.1	5	1.8	300
-25200	1/4	6.4	2	0.500	12.7	9	2.0	200
-2520050	1/4	6.4	2	0.500	12.7	9	2.0	200
-25300	1/4	6.4	2	0.550	14.0	12	2.5	300
-2530050	1/4	6.4	2	0.550	14.0	12	2.5	300
-31200	5/16	7.9	2	0.594	15.1	13	3.0	200
-3120050	5/16	7.9	2	0.594	15.1	13	3.0	200
-31300	5/16	7.9	2	0.594	15.1	13	3.3	300
-3130050	5/16	7.9	2	0.594	15.1	13	3.3	300
-38200	3/8	9.5	2	0.656	16.7	15	3.8	200
-3820050	3/8	9.5	2	0.656	16.7	15	3.8	200
-38300	3/8	9.5	2	0.688	17.5	17	3.8	300
-3830050	3/8	9.5	2	0.688	17.5	17	3.8	300
-50200	1/2	12.7	2	0.813	20.7	21	5.0	200
-5020050	1/2	12.7	2	0.813	20.7	21	5.0	200
-50250	1/2	12.7	2	0.844	21.4	22	5.0	250
-5025050	1/2	12.7	2	0.844	21.4	22	5.0	250
-50304	1/2	12.7	4	0.875	22.2	26	5.0	300
-5030450	1/2	12.7	4	0.875	22.2	26	5.0	300
-63200	5/8	15.9	2	0.969	24.6	36	5.5	200
-6320050	5/8	15.9	2	0.969	24.6	36	5.5	200
-63304	5/8	15.9	4	1.062	27.0	37	6.1	300
-6330450	5/8	15.9	4	1.062	27.0	37	6.1	300
-75200	3/4	19.1	2	1.109	28.2	34	7.5	200
-7520050	3/4	19.1	2	1.109	28.2	34	7.5	200
-75304	3/4	19.1	4	1.156	29.4	39	6.0	300
-7530450	3/4	19.1	4	1.156	29.4	39	6.0	300
-100200	1	25.4	4	1.406	35.7	50	10.0	200
-10020050	1	25.4	4	1.406	35.7	50	10.0	200
-100304	1	25.4	4	1.438	36.5	54	8.0	300
-10030450	1	25.4	4	1.438	36.5	54	8.0	300
-125204 -125304 -150204 -150304	1¼ 1¼ 1½ 1½ 1½	31.75 31.75 38.1 38.1	4 4 4 4	1.781 1.781 2.031 2.031	45.2 45.2 51.6 51.6	77 90 86 91	9.0 9.0 10.0 10.0	200 300 200 300







SUPER-FLEX® GSGeneral Service Air & Water Hose

Series 7322 (Red) / 7323 (Black)

A superior quality general service air and water hose that is a rigid mandrel construction, which produces a TRUE round, concentric hose. Superior adhesion of the hose layers provides endurance in tough applications. All of this added with SUPER flexibility for easier handling. Rated for medium oil resistance for oil mist lubricated air lines; meets RMA class C medium oil resistance, per ASTM D-471. 4:1 Design factor

>> Long lasting and durable

Tube	Black EPDM
Cover	Black or Red EPDM
Reinforcement	Textile plies
Temperature Range	-40°F to +212°F (-40°C to +100°C)
Branding	PARKER SERIES 7322 SUPER-FLEX® GS 1¼ ID 200 PSI MAX WP GENERAL SERVICE MADE IN USA
Brand Description	Tape Brand - White letters
Compare to	Goodyear Horizon; Gates AdaptaFlex

LENGTHS: 50 ft., 100 ft., 200 ft. coils, tied and plastic "tire" wrapped. Reels are 2 pieces, 200 ft. each. No cutting of stock hose. Contact Customer Service for quotation on special hose from factory.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. Other available coupling options: Series 7615, 7692, 7670. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No	Pkg	ID (in.)	ID (mm)	Reinf Plies	OD (in.)	OD (mm)	Approx. Wt. Per 100 Ft.	Min. Bend Radius	Max. Rec. WP
-125200	200'	1¼	31.8	2	1.741	44.2	71	7.5	200
-12520050	50'	1¼	31.8	2	1.741	44.2	71	7.5	200
-125200100	100'	1¼	31.8	2	1.741	44.2	71	7.5	200
-125200A	reel	1¼	31.8		1.741	44.2	71	7.5	200
-150200 -15020050 -150200100 -150200A	200' 50' 100' reel	1½ 1½ 1½ 1½ 1½	38.1 38.1 38.1 38.1	2 2 2 2	1.985 1.985 1.985 1.985	50.4 50.4 50.4 50.4	82 82 82 82	8.5 8.5 8.5 8.5	200 200 200 200
-200200	200'	2	50.8	4	2.568	65.2	123	12.0	200
-20020050	50'	2	50.8	4	2.568	65.2	123	12.0	200
-200200100	100'	2	50.8	4	2.568	65.2	123	12.0	200



WARNING: Combination nipple and bands reduce the working pressure of the assembly to less than the hose's maximum working pressure. Refer to NAHAD Assembly Guidelines for working pressures.



Applications

 Air and Water Transfer





SUPER MPT Hose

Series 7396 (Red) / 7397 (Black)

A premium oil resistant multi-purpose hose that is a rigid mandrel construction, which produces a TRUE round, concentric hose. Superior adhesion of the hose layers provides endurance in tough applications. All of this added with SUPER flexibility for easier handling. The tube is rated for RMA Class A-High Oil Resistance. The hose is electrically non-conductive with a minimum resistance of one megohm per inch at 1000 volts DC. NOTE: Do not use for hot, dry air applications. 4:1 Design factor

>> Class A oil resistance, extremely flexible

Tube	Black Nitrile Rubber
Cover	Black or Red Neoprene
Reinforcement	Multiple textile plies
Temperature Range	-20°F to +212°F (-29°C to +100°C)
Branding	PARKER SERIES 7396 SUPER MPT MULTI-PURPOSE HOSE XXX PSI MAX WP ELECTRICALLY NON-CONDUCTIVE MADE IN USA
Brand Description	Tape Brand - White letters
Compare to	Gates Duroflex; Goodyear Ortac 250

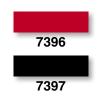
LENGTHS: 50 ft. and 200 ft. coils. Reels are 2 pieces, 200 ft. per length/400 ft. per reel. Tied and plastic tire wrapped.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. Other available coupling options: Series 7615, 7692, 7670. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	Pkg.	ID (in.)	ID (mm)	Reinf. Plies	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
-125200200	200'	11/4	31.8	2	1.741	44.2	70	7.5	200
-12520050	50'	11/4	31.8	2	1.741	44.2	70	7.5	200
-125200100	100'	11/4	31.8	2	1.741	44.2	70	7.5	200
-125200A	reel	11/4	31.8	2	1.741	44.2	70	7.5	200
-150200200	200'	1½	38.1	2	1.985	50.4	80	8.5	200
-15020050	50'	11/2	38.1	2	1.985	50.4	80	8.5	200
-150200100	100'	11/2	38.1	2	1.985	50.4	80	8.5	200
-150200A	reel	11/2	38.1	2	1.985	50.4	80	8.5	200
-200200200	200'	2	50.8	4	2.568	65.2	122	12.0	200
-20020050	50'	2	50.8	4	2.568	65.2	122	12.0	200
-200200100	100'	2	50.8	4	2.568	65.2	122	12.0	200
-125300200	200'	11/4	31.8	4	1.798	45.7	79	7.5	300
-12530050	50'	11/4	31.8	4	1.798	45.7	79	7.5	300
-125300100	100'	11/4	31.8	4	1.798	45.7	79	7.5	300
-125300A	reel	11/4	31.8	4	1.798	45.7	79	7.5	300
-150300200	200'	11/2	38.1	4	2.025	51.4	87	8.5	300
-15030050	50'	1½	38.1	4	2.025	51.4	87	8.5	300
-150300100	100'	1½	38.1	4	2.025	51.4	87	8.5	300
-150300A	reel	1½	38.1	4	2.025	51.4	87	8.5	300
-200300200	200'	2	50.8	4	2.600	66.0	129	12.0	300
-20030050	50'	2	50.8	4	2.600	66.0	129	12.0	300
-200300100	100'	2	50.8	4	2.600	66.0	129	12.0	300



WARNING! Combination nipple and bands reduce the working pressure of the assembly to less than the hose's maximum working pressure. Refer to NAHAD Assembly Guidelines for working pressure.



Applications

 Transfer of Air. Oil and Water



7212-*BK 7212-*BL 7212-*GY

7212-*GN

7212-*RD

7212-*YL

Applications

- Air Tools
- Petroleum Products
- Automotive Plants

JIFFY® HOSE Push-on Air Hose – MSHA – Silicone Free Series 7212

This oil resistant hose is excellent for use with air tools, to convey water, mild chemicals and various petroleum products. Light, flexible and couples in a jiffy - no clamps or special tools needed. Special braid angle for quick and secure push-on coupling retention. Available in various colors for color coding line. Flame resistant cover is branded with MSHA approval number. NOTE: Not recommended for impulsing applications. NOTE: Do not use for hot, dry air applications. 4:1 Design factor

>> Braided reinforcement for superior fitting retention

Tube	Black Nitrile
Cover	Black, blue, gray, green or red Neoprene
Reinforcement	One textile braid
Temperature Range	-40°F to +212°F (-40°C to +100°C)
Branding	PARKER 7212 JIFFY® HOSE PUSH-ON 1/4 in. ID 300 PSI MAX WP MSHA# MADE IN USA B2 (DATE CODE)
Brand Description	Ink Brand - White or black letter color
Compare to	Goodyear Autogrip; Thermoid Flex-Loc 300

LENGTHS: Random lengths on reels. Max 725 ft. min. 400 ft., 5 pieces max. per reel with 50 ft. min. length.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Braid	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Vac. Rating (in. Hg)	Max. Rec. WP
7212-251*	1/4	6.4	1	0.500	12.7	9	3.0	28	300
7212-381*	3/8	9.5	1	0.625	15.9	12	3.0	28	300
7212-501*	1/2	12.7	1	0.750	19.1	15	5.0	28	300
7212-631*	5/8	15.9	1	0.906	23.0	20	6.0	28	300
7212-751*	3/4	19.1	1	1.031	26.2	26	7.0	15	300

^{*}To complete part number, add BK (black), BL (blue), GY (gray), GN (green) or RD (red).



WARNING! Do not use clamps with push-on inserts.





7161-*BK

7161-*BL

7161-*GY

7161-*GN

7161-*RD

Applications

- Air Tools
- Petroleum **Products**
- Automotive **Plants**

JIFFY FLEX™ 250 250 PSI Push-On Hose - Spiral

Series 7161

A non-conductive spiral construction combined with oil-resistant materials make JIFFY FLEX an excellent choice in applications for air tools and petroleum products, as well as other applications requiring conveyance of mild chemicals or water where a light, flexible hose is needed. Push-On couplings insert easily and hold tightly. No clamps or special tools are needed. Available in various colors for easy identification in color-coded applications. Flame resistant cover is MSHA approved and branded with an MSHA approval number. NOTE: Not recommended for impulsing applications. NOTE: Do not use for hot, dry air applications. 4:1 Design factor

>> Silicone free, non-conductive

Tube	Black Nitrile
Cover	Neoprene
Reinforcement	Multiple Textile Spirals
Temperature Range	-20°F to +180°F (-29°C to +82°C)
Electrical Properties	Non-conductive with a minimum resistance one megohm per inch at 1000 volts DC.
Branding Example	PARKER 7161 JIFFY FLEX™ 250 PUSH-ON HOSE 1/4 in. ID 250 PSI MAX WP MSHA# ELECTRICALLY NON-CONDUCTIVE MADE IN USA B2 (DATE CODE)
Brand Description	Ink Brand - Various letter colors
Compare to	Goodyear InstaGrip 250; Boston Easy Couple; Thermoid Flex-Loc Push On

LENGTHS: 500 ft. reel - Random lengths on reels (±50 ft.) 85% 1 piece, 15% 2 pieces, Max. 2 pieces, 50 ft. min. length.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. For assembly quidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.*	ID (in.)	ID (mm)	Reinf. Spirals	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7161-25250	1/4	6.35	2	0.520	13.21	10	3.0	250
7161-38250	3/8	9.53	2	0.650	16.38	14	3.0	250
7161-50250	1/2	12.70	2	0.781	19.81	17	5.0	250

^{*} Add BK (black), BL (blue), GY (gray), GN (green) or RD (red) to complete part number.



WARNING! Do not use clamps with push-on inserts.







Series 7101 (Red) / 7119 (Black)

A tough, versatile, multi-purpose hose designed to handle many jobs. The tube is compounded to provide maximum oil resistance. THORO-FLO® hose may be used to transmit air, water, oil and many chemicals in service up to 300 PSI. Exceeds RMA - Class A Oil resistance. NOTE: Do not use for hot, dry air applications. 4:1 Design factor

>> Superior kink and stretch resistance

Tube	Black Nitrile			
Cover	Black or Red Neoprene			
Reinforcement	One or multiple textile braids			
Temperature Range	-20°F to +212°F (-29°C to +100°C)			
Branding	PARKER SERIES 7101 THORO-FLO® 1/4 ID (6.4 MM) XXX PSI MADE IN USA			
Brand Description	Ink Brand - White letter color			
Compare to	Thermold Maxecon/GP			

LENGTHS: Random lengths on 650 ft. reels, 725 ft. max., 400 ft. min., with 50 ft. min. length, max 3 pieces.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. Other available coupling options: Series 7611, 7615, 7692, 7628. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Layers	ID (in.)	ID (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
-251	1/4	6.4	1	0.500	12.7	9	2.5	250
-252	1/4	6.4	2	0.594	15.1	15	3.3	300
-311	⁵ ⁄ ₁₆	7.9	1	0.625	15.9	14	3.3	250
-312	⁵ ⁄ ₁₆	7.9	2	0.656	16.7	17	3.5	300
-381	3/8	9.5	1	0.687	17.4	17	3.5	250
-382	3/8	9.5	2	0.719	18.3	19	4.0	300
-501	½	12.7	1	0.812	20.6	21	4.5	250
-502	½	12.7	2	0.875	22.2	26	4.8	300



- · Transfer of Air. Oil and Water
- Hose Reels





DAY-FLO® Special Purpose Hose

Series 7134 (Red) / 7187 (Black)

A tough, versatile, multi-purpose hose designed to handle many jobs. The tube is compounded to provide maximum oil resistance. DAY-FLO® hose may be used to transfer air, water, oil and many chemicals in service up to 300 PSI. Tube exceeds RMA - Class A Oil resistance. Braided reinforcement for maximum kink resistance. NOTE: Do not use for hot, dry air applications.

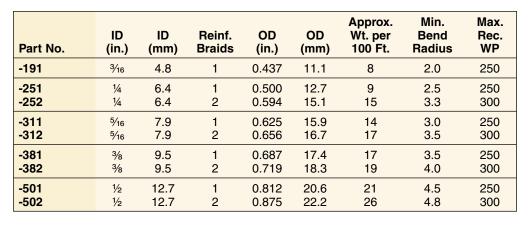
4:1 Design factor

>> Superior kink and stretch resistance

Tube	Black Nitrile
Cover	Black or Red Neoprene
Reinforcement	One or multiple textile braids
Temperature Range	-20°F to +212°F (-29°C to +100°C)
Branding	PARKER SERIES 7134 DAY-FLO® 3/16 ID (4.8 MM) XXX PSI MAX WP MADE IN USA
Brand Description	Ink Brand - White letter color
Compare to	Gates 19B Plantmaster; Boston Perfection 300

LENGTHS: Random lengths on 500 ft. nominal reels, 725 ft. max, 400 ft. min. 3 pieces max., with 50 ft. min. length.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. Other available coupling options: Series 7611, 7615, 7692, 7628. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.





- · Transfer of Air. Oil and Water
- Hose Reels





Applications

- Agricultural
- Foundry
- Factories
- Mines
- Jackhammers
- Heavy-duty Air Service

GRIZZLY[™] **500** Multi-Purpose Hose

Series 7107

The GRIZZLY™ 500 Hose is a premium hose designed for multiple uses. With its modified NBR/PVC cover compound, abrasion and oil resistance has been significantly improved. GRIZZLY 500 Hose is the answer for numerous applications where a heavy duty hose construction is required. It has the toughness of a braided hose in a flexible spiral construction. GRIZZLY 500 Hose meets MSHA Flame Resistance requirements and is electronically non-conductive with a minimum resistance of one megohm per inch at 1000 volts DC. The tube of the GRIZZLY™ hose exceeds RMA Class A Oil Resistance. *NOTE: Do not use for hot dry air applications.* 4:1 Design factor

>> Toughness of a braided hose with the flexibility of a spiral hose

Tube	Black Nitrile						
Cover	Yellow NBR/PVC blend						
Reinforcement	Multiple aramid plies						
Temperature Range	-40°F to +212°F (-40°C to +100°C)						
Branding	Side 1: PARKER SERIES 7107 GRIZZLY™ 1/4 ID (6.4 MM) 500 PSI MAX WP Side 2: ELECTRICALLY NON-CONDUCTIVE MSHA IC-123/20 MADE IN USA (DATE CODE)						
Brand Description	Ink Brand - Black letter color						
Compare to	Gates Terminator; Goodyear Gorilla; Boston Mineforce						

LENGTHS: Reel quantities: $\frac{1}{4}$ in. = 750 ft., $\frac{3}{8}$ in. = 650 ft., $\frac{1}{2}$ in. = 500 ft., $\frac{3}{4}$ in. = 400 ft., $\frac{1}{10}$ in. = 300 ft., $\frac{1}{4}$ " = 250 ft., max. 2 pieces, 50 ft. min. length.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. Other available coupling options: Series 7611, 7615, 7692, 7628. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Plies	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec.WP
7107-25500	1⁄4	6.4	4	0.625	15.9	15	2.0	500
7107-38500	3/8	9.5	4	0.750	19.1	19	2.5	500
7107-50500	1/2	12.7	4	0.906	22.2	26	3.0	500
7107-75500	3/4	19.1	4	1.187	30.1	39	4.5	500
7107-100500	1	25.4	4	1.500	38.1	56	6.0	500
7107-125500	11⁄4	31.8	4	1.800	45.7	81	9.0	500





WHIPPET® 200 Air Hose

Series 7137

Designed for light duty air lines and air hose whip ends. It is lightweight, flexible and oil resistant - ideal for industrial bench work. 4:1 Design factor

>> Lightweight and kink resistant

Tube	Black Nitrile
Cover	Black Neoprene
Reinforcement:	One textile braid
Temperature Range	-40°F to +180°F (-40°C to +82°C)
Branding	AIR SERVICE 200 PSI WP (DATE CODE)
Brand Description	Ink Brand - White letter color
Compare to	Goodyear Horizon 200; Boston Easy Couple

LENGTHS: ¼ in. = 400 ft. - 725 ft. 5 pieces max, with 50 ft. min. length; 5/16 in. & 3/8 in. = 400 ft. - 725 ft. 3 pieces max, with 50 ft. min. length.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. Other available coupling options: Series 7611, 7692, 7628. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Braids	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7137-251	1/4	6.4	1	0.437	11.1	7	2.0	200
7137-311	5⁄16	7.9	1	0.531	13.5	9	2.5	200
7137-381	3/8	9.5	1	0.625	15.9	11	3.5	200

7137

- Hose Whips
- Air Tools
- Light-duty Air Service





MAXIFLEX® Air Hose

Series 7308

MAXIFLEX® hose is light and flexible, yet sufficiently rugged to withstand the abuse and hard service found in mining and construction. It has excellent resistance to abrasion, gouging and weathering. 3:1 Design factor

>> Abrasion resistant for tough environments

Tube	Black SBR
Cover	Yellow SBR
Reinforcement	Multiple textile plies
Temperature Range	-20°F to +200°F (-29°C to +93°C)
Branding	PARKER SERIES 7308 MAXIFLEX AIR HOSE 250 PSI WP MADE IN USA
Brand Description	Embossed Brand
Compare to	Goodyear Plicord Air 300

LENGTHS: 100 ft. lengths up to 200 ft. on quotation.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. Other available coupling options: Series 7615, 7692. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Plies	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7308-1004	1	25.4	2	1.488	37.8	59	6.0	250
7308-1254	11/4	31.8	2	1.740	44.2	71	7.5	250
7308-1504	1½	38.1	2	2.031	51.6	95	8.5	250
7308-2004	2	50.8	4	2.598	66.0	134	14.0	250
7308-2504	2½	63.5	4	3.098	78.7	163	24.0	250
7308-3004	3	76.2	4	3.598	91.4	193	36.0	250

7308

- Mining
- Construction
- Water and Air Transfer





MAXIMAIRE® Heavy Duty Non-Conductive Air Hose

Series 7201

This hose is designed for air drills and pneumatic service in mines, quarries, general construction and industrial jobs where a heavy duty braided hose is needed. Built with an oil resistant tube and an oil and abrasive resistant cover. Hose is electrically non-conductive with a minimum resistance of one megohm per inch at 1000 volts, DC. 4:1 Design factor

>> Non-conductive and rugged for industrial jobs

Tube	White Neoprene
Cover	Green Hypalon
Reinforcement	Multiple textile braids
Temperature Range	-20°F to +180°F (-29°C to +82°C)
Branding	PARKER USA 7201 MAXIMAIRE HEAVY DUTY AIR HOSE 2 1/2 ID XXX PSI MAX WP (DATE CODE)
Brand Description	Embossed Brand
Compare to	Goodyear Ortac 400; Boston Shock Safe, Mineforce

LENGTHS: Random lengths on reels. ½" and ¾" reels are 450 ft. – 550 ft. each and 1" reels are 400 ft. - 600 ft. All reels have a max. of 5 pieces, shortest piece 50 ft; 11/4" thru 2" 150 ft. in cartons max. of 3 pieces, 50 ft. min. length.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. Other available coupling options: Series 7615, 7692. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.



- Air Drills
- High Pressure Air Service
- Slurries

Part No.	ID (in.)	ID (mm)	Reinf. Braids	OD (in.)	OD (mm)	Approx. Wt. of 100 Ft.	Min. Bend Radius	Max. Rec. WP
7201-502A 7201-502050 7201-502100	½ ½ ½ ½	12.7 12.7 12.7	2 2 2	0.938 0.938 0.938	23.8 23.8 23.8	31 31 31	5.0 5.0 5.0	500 500 500
7201-752A 7201-752050 7201-752100	3/4 3/4 3/4	19.1 19.1 19.1	2 2 2	1.250 1.250 1.250	31.8 31.8 31.8	48 48 48	6.5 6.5 6.5	500 500 500
7201-1002A 7201-1002050 7201-1002100	1 1 1	25.4 25.4 25.4	2 2 2	1.562 1.562 1.562	39.7 39.7 39.7	70 70 70	8.0 8.0 8.0	500 500 500
7201-1252K	1¼	31.8	2	1.813	46.1	81	9.0	350
7201-1503K	1½	38.1	3	2.125	54.0	106	13.0	350
7201-2003K	2	50.8	3	2.656	67.5	153	15.0	350
7201-2503K	2½	63.5	3	3.250	82.6	210	22.0	300





DRAGON BREATH® **Hot Air Hose**

Series 7281

This hose is specifically designed to convey hot air at +300° F continuous and +350° F intermittent from the compressor or blower on dry material unloading systems. The EPDM tube and cover offer excellent resistance to heat as well as to weather and ozone.

4:1 Design factor

>> Withstands high temperatures from compressors

Tube	Black EPDM
Cover	Black EPDM
Reinforcement	Multiple textile braids with helix wire
Temperature Range	-30°F to +300°/350°F (-34°C to +149°/177°C)
Branding	PARKER USA 7281 DRAGON BREATH® HOT AIR HOSE 1-1/2 ID 175 PSI MAX WP 001
Brand Description	Tape Brand - White Letters
Compare to	Gates Hot Air Blower; Goodyear Plicord Torrid Air; Titan Hot Air Blower; Boston Wildcat Hot Air

LENGTHS: 100 ft. lengths.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. Other available coupling options: Series 7615, 7692. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Plies	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7281-1500	1½	38.1	2	2.055	52.2	97	4.0	175
7281-2000	2	50.8	2	2.562	65.1	126	6.0	175
7281-3000	3	76.2	2	3.571	90.7	200	12.0	175
7281-4000	4	102.0	2	4.614	117.2	278	16.0	175



WARNING! Cam and Groove Type Fittings are not recommended for use on this product when used in high temperature applications!



- Dry Material Unloading
- Air Compressors



MPW - 1000[®] **Multi-Purpose Hose**

Series 7204

This versatile multi-purpose hose is ideal for rugged service in many industrial and high pressure steam cleaning applications. In addition to air and water service, the oil resistant tube and cover will handle a variety of acids and chemicals. Suitable for saturated steam service to 150 PSI and temperatures to 368° F. Also suitable to convey hot tar, wax and glue at 300° F continuous, 350° F intermittent. 4:1 Design factor (10:1 for 150 PSI steam applications)

>> Withstands high temperatures in multiple uses

Tube	Black Nitrile
Cover	Perforated Black Neoprene
Reinforcement	One wire braid
Temperature Range	-20°F to +300°/350°/368°F (steam) (-29°C to +149°/177°/187°C)
Branding	PARKER 7204 - MPW 1000 PSI MAX WP (DATE CODE) MADE IN USA
Brand Description	Embossed Brand
Compare to	Gates 319MB Gold Master

LENGTHS: Random lengths on 500 ft. nominal reels, 50 ft. min. length. Max. 600 ft., min. 400 ft. 5 pieces max. per reel with 50 ft. length.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. Other available coupling options; Series 7615, 7692, For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Layers	OD (in.)	OD (mm)	Approx Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP	Max. Steam WP
7204-381	3/8	9.5	1	0.781	19.8	28	5.0	1000	150
7204-501	1/2	12.7	1	0.906	23.0	34	7.0	1000	150
7204-751	3/4	19.1	1	1.187	30.1	52	9.5	1000	150
7204-1001	1	25.4	1	1.500	38.1	75	12.0	1000	150



- Steam Service
- Acid and Chemical Transfer
- · Hot Tar, Wax and Glue





THORO-BRAID® Air Hose - MSHA

Series 7251

This hose is designed for the most severe service in mines, quarries and heavy construction. Built with a tough neoprene tube to handle air, water, petroleum products and a number of acids and chemicals. The THORO-BRAID® hose cover offers excellent resistance to ozone, weather, abrasion and several acids and chemicals. The cover is also flame resistant with an embossed MSHA legend. 4:1 Design factor

>> Heavy duty construction for severe environments

Tube	Black Neoprene					
Cover	Yellow Hypalon					
Reinforcement	One or multiple wire braids					
Temperature Range	-20°F to +212°F (-29°C to +100°C)					
Branding	PARKER USA 7251 THORO-BRAID® AIR HOSE - WIRE BRAID XXX PSI MAX WP-DE4 FIRE RESISTANT-MSHA IC-123/3 - (DATE CODE) -001					
Brand Description	Embossed Brand					
Compare to	Gates 500 MP/Air Drill; Goodyear Ultrabraid Steel Air; Kuriyama T130AK					

LENGTHS: 150 ft. in cartons, max. of 3 pieces, 50 ft. min. length. 4" is coiled, tied and plastic tire wrapped.

*7251-4002K is tire wrapped and packaged in either 6/50 ft. or 3/100 ft.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. Other available coupling options: Series 7615, 7692. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Approx. Min. Max. OD OD ID ID Reinf. Wt. per **Bend** Rec. Part No. (in.) (mm) Layers (in.) (mm) 100 Ft. **Radius** WP 7251-1501K 20.0 11/2 38.1 1 2.062 52.4 122 600 7251-2002K 2 50.8 2 2.656 67.5 189 25.0 600 7251-2502K 21/2 63.5 2 3.156 80.2 230 32.0 500 7251-3002K 3 76.2 2 3.656 92.9 273 36.5 500 7251-4002K* 101.6 4.656 118.3 363 48.0 400

7251

- Bull Hose
- Drill Hose





STINGER™ II Mine Air & Water Hose

Series 7268

Stinger II hose is a very durable hose manufactured to handle the severe service requirements of underground mine spray service. The bright yellow MSHA cover is flame, oil and abrasion resistant. This hose is also an excellent choice for high pressure air and washdown service.

4:1 Design factor (2 in. - 3.5:1)

>> MSHA approved for mine service

Tube	Black Neoprene				
Cover	Yellow NBR/PVC				
Reinforcement	Wire braid				
Temperature Range	-20°F to +212°F (-29°C to +100°C)				
Branding	PARKER USA 7268 STINGER II™ 3/4 ID 1000 PSI MAX WP MSHA IC-123/17 B5 (DATE CODE)				
Brand Description	Ink Brand - Black letter color				
Compare to	Goodyear Minespray, Super Ortac; Gates 1000MP/Mine Spray; Boston Concord Yellow Jack				

LENGTHS: 3/4" and 1" on 500 ft. reels, 5 piece max., 50 ft. min. length. 50 ft., 100 ft., also available, 200 ft. available on quotation.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in)	ID (mm)	Reinf. Braids	OD (in)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7268-751	3/4	19.1	1	1.045	26.5	36	6.0	1000
7268-1001	1	25.4	1	1.339	34.0	53	8.0	1000
7268-1251	11/4	31.8	1	1.631	41.4	66	12.0	1000
7268-1501	1½	38.1	1	1.890	48.0	86	14.0	1000
7268-2001	2	50.8	1	2.440	62.0	141	18.0	1000

7268

- Mines
- Air Tools
- Dust Suppression Systems





YELLOW BIRD® Air & Water Hose - MSHA

Series 7284

YELLOW BIRD® hose is designed for high pressure water service in underground mines. The SBR tube, wire braided construction, and nitrile/PVC cover also make it an excellent high pressure air or general purpose hose. The flame resistant yellow cover is branded with the MSHA legend.

4:1 Design factor

>> MSHA approved for mine service

Tube	Black SBR					
Cover	Yellow NBR/PVC, PIN-PRICKED					
Reinforcement	One or multiple wire braids					
Temperature Range	-20°F to +212°F (-29°C to +100°C)					
Branding	PARKER USA 7284 YELLOW BIRD® HOSE (DATE CODE) DE2 XXXX PSI MAX WP MSHA IC-123/17 - FLAME RESISTANT					
Brand Description	Ink Brand - Black letter color					
Compare to	Thermoid Hercules 1000; Boston Concord Yellow Jack; Gates 1000MP/Mine Spray					

LENGTHS: Random lengths on nominal 500 ft. reels. 50ft. + 100ft. coils also available.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Braids	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7284-381	3/8	9.5	1	0.688	17.5	25	6.0	1500
7284-501	1/2	12.7	1	0.969	24.6	37	7.0	1000
7284-751	3/4	19.1	1	1.219	31.0	56	9.5	1000
7284-1001	1	25.4	1	1.469	37.3	69	12.0	1000
7284-1252	11/4	31.8	2	1.719	43.7	90	15.5	1000

7284

- Mines
- Air Tools
- Dust Suppression Systems







GPH-*GY

GPH-*RD

GPH-*YL

Applications

- · Agricultural Air and Water
- · Air & Water Service for Industrial Machinery
- Lubricated Air Systems
- Pneumatics
- Anti-freeze Solutions
- Light Chemical
- Some Acids

Parker GPH General Purpose Hose

Series GPH

Exceptionally flexible and lightweight GPH hose has a non-marking cover that has excellent abrasion and tear resistance. Hose is flame retardant and highly resistant to the effects of ozone and exposure to ultra-violet (UV) rays. The hose is electrically non-conductive with a minimum resistance of one megohm per inch at 1000 volts DC. 4:1 Design factor

>> Flexible and lightweight

Tube	PVC
Cover	PVC
Reinforcement	Two-Spiral Polyester Yarn
Temperature Range	-15°F to +150°F (-25°C to +65°C)
Branding	GPH - 8 - 1/2" - 300 PSI WP - GENERAL PURPOSE - MADE IN USA - (date code)
Brand Description	Ink Brand
Compare to	Goodyear Pliovic 300; Boston Polyforce II

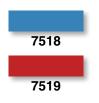
LENGTHS: 95% of bulk hose packaging is in one continuous length. If two pieces, length will be in multiples of 50 feet.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. Other available coupling options: Series 55, HY. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Spirals	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Vacuum Rating (in.)	Max. Rec. WP
GPH-3	3/16	4.8	2	0.40	10.2	6.2	5/8	25	300
GPH-4	1/4	6.4	2	0.51	13.0	8.1	3/4	23	300
GPH-5	5/16	7.9	2	0.55	14.0	8.7	3/4	23	300
GPH-6	3/8	9.5	2	0.64	16.3	12.3	1	23	300
GPH-8	1/2	12.7	2	0.80	20.3	17.6	1½	17	300
GPH-10	5⁄8	15.9	2	0.91	23.1	22.1	2½	10	300
GPH-12	3⁄4	19.1	2	1.07	27.2	25.9	2¾	10	300
GPH-16	1	25.4	2	1.33	33.8	36.0	4	5	250







Applications

- Air Tools
- Water Hose

MEGA BLUE/MEGA REDORS Air & Water Hose

Series 7518 (Blue) / 7519 (Red)

Meets or exceeds RMA Grade 1, Class A Oil Resistance Standard. Specially blended tube and cover compounds provide users with the weight and flexibility of thermoplastics combined with the feel and many physical properties of rubber. Excellent for most applications where a more rugged, durable hose is required. 4:1 Design factor

>> Lightweight yet durable

Tube	Modified PVC					
Cover	Rubber Modified Thermoplastic					
Reinforcement	Polyester Yarn					
Temperature Range	-20°F to +180°F (-29°C to +82°C)					
Branding	PARKER MEGA xxxx ORS - (PRESSURE) PSI WP - (ID)" - (ID)MM - MADE IN USA					
Brand Description	Ink Brand - White letter color					
Compare to	Boston Ultraforce, Jason 4105					

LENGTHS: 500 ft. reels. Reels are 90% one continuous length. If two pieces, lengths will be in multiples of 50 ft.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Braid	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
-250	1/4	6.4	1	0.500	12.7	9	1.0	350
-375	3/8	9.5	1	0.641	16.3	12	1.5	350
-500	1/2	12.7	1	0.781	19.8	17	2.5	300
-625	5/8	15.9	1	0.890	22.6	20	2.8	250
-750	3/4	19.1	1	1.063	27.0	26	6.0	250
-1000	1	25.4	1	1.313	33.4	35	7.0	200





THERM-O-RED®/THERM-O-BLUE® **ORS PVC Air Hose**

THERM-O-RED® ORS hoses are made for air, water and moderate chemical applications. The tube is formulated with special additives to significantly increase the amount of oil resistance over normal PVC hoses. This special tube is protected by a non-marking cover. Combined, they provide a lightweight and highly flexible hose which is ideal for many industrial applications. 4:1 Design factor

>> Non-marking cover with oil resistant tube

Tube	Orange Prime PVC with ORS additives
Cover	Prime PVC
Reinforcement	Polyester Yarn
Temperature Range	-20°F to +140°F (-29°C to +60°C)
Branding	SWAN THERM-O-RED (BLUE) ORS (PRESSURE) PSI WP MADE IN USA (ID) in (ID) MM
Brand Description	Ink Brand - White letters (1 in. embossed only)
Compare to	Gates 7746, Goodyear Pliovic Plus 300, Jason 4115, Kentak AT3, Kuriyama K113

LENGTHS: 500 ft. reels. Reels are 90% one continuous length. If two pieces, lengths will be in multiples of 50 feet.

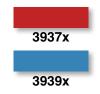
COUPLINGS: For permanent crimp specifications, refer to CrimpSource. Other available coupling options: Series 7611, 7615, 7692, 7628, 7670. For assembly quidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

THERM-O-RED

Part No.	ID (in.)	ID (mm)	Reinf. Spirals	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
39374	1/4	6.4	2	0.500	12.7	8.4	3.0	300
39375	3/8	9.5	2	0.641	16.3	12.2	4.0	300
39376	1/2	12.7	2	0.781	19.8	16.2	5.0	300
39377	3/4	19.1	2	1.031	26.2	20.8	8.0	200

THERM-O-BLUE

Part No.	ID (in.)	ID (mm)	Reinf. Spirals	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
39390	1/4	6.4	2	0.500	12.7	8.4	3.0	300
39393	3/8	9.5	2	0.641	16.3	11.9	4.0	300
39396	1/2	12.7	2	0.781	19.8	15.9	5.0	300
39397	3/4	19.1	2	1.031	26.2	21.6	8.0	200
39098	1	25.4	2	1.281	32.5	27.9	11.0	200



- Mining
- Agriculture
- Pneumatic Tools





COMMERCIAL DUTY PVC Air Hose

This professional duty PVC air hose is designed to withstand working pressures up to 300 PSI. It is flexible and lightweight. Assemblies are coupled with 3/8" NPT male brass fittings each end and are equipped with PVC strain relief sleeves and descriptive hose boards.

4:1 Design factor

>> Rugged yet lightweight

Tube	PVC
Cover	Yellow PVC
Reinforcement	Polyester Yarn
Temperature Range	0°F to +130°F (-18°C to +54°C)
Branding	(SIZE)" ID (SIZE) MM 300 PSI WP MADE IN USA
Brand Description	Ink Brand - Black letter color
Compare to	Goodyear Pliovic GS, Jason 4103, Kentak ATH, Kuriyama HS 117, Superflex AH

LENGTHS: 90% of reels contain one continuous length. If 2 pieces, minimum length is 50 ft.

COUPLINGS: NPT brass fittings.

Part No.	ID (in.)	ID (mm)	OD (in.)	OD (mm)	Coupling Size (in.)	Max. Rec. WP	Length	Package	Pkg. Wt.
33903	1/4	6.4	0.500	12.7	1/4	300	25	10/Carton	21
33904	1/4	6.4	0.500	12.7	1/4	300	50	5/Carton	21
33932	1/4	6.4	0.500	12.7	—	300	500	Reel	44
33913	3/8	9.5	0.595	15.1	1/4	300	25	10/Carton	25
33914	3/8	9.5	0.595	15.1	1/4	300	50	5/Carton	25
33935	3/8	9.5	0.595	15.1	—	300	500	Reel	53



Applications

Air Tools





HYDRO-AIRE™ PVC Air & Water Hose

Hydro-Aire is an extremely flexible and lightweight PVC hose designed for air and water applications.

4:1 Design factor

>> Lightweight makes hose ideal for on-the-job use

Tube	Black PVC
Cover	Red or Black PVC
Reinforcement	Polyester Yarn
Temperature Range	-20°F to +130°F (-29°C to +54°C)
Branding	SWAN HYDRO-AIRE (PRESSURE) PSI WP MADE IN USA (SIZE) IN - (SIZE) MM
Brand Description	Ink Brand - White letter color
Compare to	Boston H275; Goodyear Pliovic Plus 250; Kentak ATL; Kuriyama K115

LENGTHS: 500 ft. reels. Reels are 90% one continuous length. If two pieces, lengths will be in multiples of 50 feet.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. Other available coupling options: Series 7611, 7615, 7692, 7628, 7670. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Red Cover

Part No.	ID (in.)	OD (mm)	Reinf. Layers	OD (in.)	OD (mm)	Aprox. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
39362	1/4	6.4	2	0.500	12.7	10	2.5	250
39363	5/16	7.9	2	0.593	15.1	12	3.0	250
39364	3/8	9.5	2	0.641	16.3	14	3.5	250
39365	1/2	12.7	2	0.781	19.8	18	5.0	250
39366	5/8	15.9	2	0.921	23.4	22	6.5	250
39367	3/4	19.1	2	1.031	26.2	27	7.5	200
39368	1	25.4	2	1.281	32.5	36	10.0	150

Black Cover

	-							
Part No.	ID (in.)	ID (mm)	Reinf. Layers	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
39382	1/4	6.4	2	0.500	12.7	10	2.5	250
39383	5/16	7.9	2	0.593	15.1	12	3.0	250
39384	3/8	9.5	2	0.641	16.3	14	3.5	250
39385	1/2	12.7	2	0.781	19.8	18	5.0	250
39386	5/8	15.9	2	0.921	23.4	22	6.5	250
39387	3/4	19.1	2	1.031	26.2	27	7.5	200
39388	1	25.4	2	1.281	32.5	36	10.0	150



- Air Tools
- Water





THORO-BRAID® 400 PSI Mine Water Hose

Series 7527

This highly flexible, lightweight, non-marking hose is designed for use in mine air, water transfer and light chemical transfer. It has a wrapped, sure grip cover for enhanced ease of coiling and abrasion resistance. Good resistance to oil, ozone and ultraviolet (UV) rays. Available in special lengths, packaging and colors. 4:1 Design factor

>> Rugged construction for harsh environments

Tube	Black PVC Blend					
Cover	Yellow Thermoplastic Rubber					
Reinforcement	Polyester Yarn					
Temperature Range	-28°F to +150°F (-33°C to +66°C)					
Branding	PARKER 7527 MINE WATER - (SIZE)" – (SIZE) MM - 400 PSI WP - MADE IN USA -					
Brand Description	Ink Brand - Black letter color					
Compare to	Boston H1571					

LENGTHS: 100 ft. coils

COUPLINGS: For assembly guidelines and coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf.	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7527-500	1/2	12.7	2	0.940	23.9	30	3.0	400
7527-750	3/4	19.1	2	1.190	30.2	40	4.8	400
7527-1000	1	25.4	2	1.470	37.3	55	6.5	400

7527

- Mining
- High Pressure Air Tools
- Water Washdown





THORO-BRAID® Low Temp Thermoplastic ORS Push-On Hose

Series 7534

Excellent for shop air lines, water transfer, light chemical, light vacuum and general industrial applications. Non-conductive. Excellent low temperature flexibility. Available in special lengths, packaging and colors.

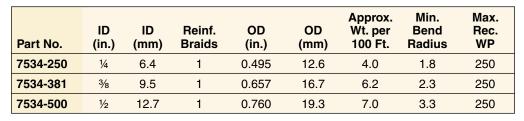
4:1 Design factor

>> Excellent for applications exposed to low temperatures

Tube	Black ORS Thermoplastic Rubber
Cover	Black ORS Thermoplastic Rubber
Reinforcement	Polyester Yarn
Temperature Range	-45°F to +180°F (-43°C to +82°C)
Branding	PARKER 7534 LOW TEMP THERMOPLASTIC ORS PUSH-ON - (SIZE)" – (SIZE) MM – 250 PSI WP - MADE IN USA -
Brand Description	None
Compare to	Goodyear Insta-Grip 250

LENGTHS: 500 ft. reels. Reels are 90% one continuous length. If two pieces, lengths will be in multiples of 50 feet.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.





- Shop Air Lines
- Light Vacuum Service
- Water





ARCTIC EDGE Low Temperature Hose

Series 7102

Parker's Arctic Edge is a low temperature multi-purpose hose that is suitable for petroleum based oils, water, and air service. By utilizing Parker's superior engineering and global rubber compounding technology, this 300 PSI working pressure hose remains extremely flexible even at the lowest service temperatures. As the name implies, this hose has the "Edge" over all other low temperature products. 4:1 Design factor

>> Designed for flexibility in low temperatures

Tube	NBR
Cover	Black Neoprene with a blue stripe
Reinforcement	Multiple Textile Spirals
Temperature Range	-70°F to +212°F (-54°C to +100°C)
Branding	PARKER SERIES 7102 ARCTIC EDGE (-70°F) LOW TEMP (SIZE) ID 300 PSI MAX WP MADE IN USA (DATE CODE)
Brand Description	Ink Brand - White letters on blue stripe
Compare to	Goodyear Arctic Ortac; Thermoid Glacier Multipurpose

LENGTHS: All reels are 90% 1 pc.,10% 2 pc., 50 ft. min. (total footage on reels is +0/- 50 ft. of length indicated)

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. Other available coupling options: Series HY, 43. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part Number	ID (in.)	ID (mm)	OD (in.)	OD (mm)	Reinf. Spirals	Pkg. Reel Length	Approx. Wt. per 100 Ft.	Max. Rec. WP
7102-75304	3/4	19.1	1.156	29.4	4	400	40	300
7102-100304	1	25.4	1.458	37.0	4	300	55	300



- Air
- Water
- Petroleum **Based Oils**



NOTES:



NOTES:	



FIRE SUPPRESSION

	Series	Page
Fire Engine Corrugated Suction Hose	7209	48
Fire Engine Suction Hose		
Booster 800 High Pressure Hose		

Due to continual product improvements, Parker reserves the right to alter specifications without prior notice.





Fire Engine Corrugated Suction Hose

Series 7209

Water suction hose for use on fire engines. Rugged, heavy duty construction for long service life. Corrugated cover reduces bend resistance providing maximum flexibility.

>> Heavy duty for long service life and dependability

Tube	Black SBR
Cover	Black SBR
Reinforcement	Multiple textile plies with helix wire
Temperature Range	-30°F to +180°F (-34°C to +82°C)
Branding	None
Compare to	Titan Corrugated Fire Engine Suction Hose

LENGTHS: 10 ft. overall length including soft cuff.

COUPLINGS: Not available from Parker. For assembly guidelines and coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Plies	Max. Cuff OD (in.)	Max. Cuff OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Test Pressure
7209-4502010	4½	114.3	2	5.354	136	272	14.0	200
7209-5002010	5	127.0	2	5.866	149	300	15.0	200
7209-6002010	6	152.4	2	6.850	174	380	28.0	200



Applications

• Fire Engines





Fire Engine Suction Hose

Series 7210

Water suction hose for use on fire engines. Rugged, heavy duty construction for long service life, yet flexible for easy handling.

>> Heavy duty for long service life and dependability

Tube	Black SBR
Cover	Black SBR
Reinforcement	Multiple textile plies with helix wire
Temperature Range	-30°F to +180°F (-34°C to +82°C)
Branding	None
Compare to	Titan HD Fire Engine Suction Hose

LENGTHS: 10 ft. overall length including soft cuff.

COUPLINGS: Not available from Parker. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Layers	Max. Cuff OD (in.)	Max. Cuff OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Test Pressure
7210-4502010	4½	114.3	2	5.354	136	393	25.0	200
7210-5002010	5	127.0	2	5.866	149	492	30.0	200
7210-6002010	6	152.4	2	6.850	174	548	40.0	200



Applications

• Fire Engines





Booster 800 High Pressure Hose

Series 7270

This is a heavy duty hose for high pressure chemical and water booster service on fire engines. Acceptable for short term use with Halon 1211. Tube and cover compounds are abrasion and weather resistant. Tough yet flexible, for resistance to flexing and surge loads. Meets NFPA 1961 requirements under current RMA specifications. Meets or exceeds UL92 requirements for 800 PSI Booster Hose. 4:1 Design factor

>> Durable and kink resistant

Tube	Black Neoprene
Cover	Red Neoprene
Reinforcements:	Multiple textile braids
Temperature Range	-40°F to +180°F (-40°C to +82°C)
Branding	PARKER USA 7270 HP BOOSTER 800 HOSE - 800 PSI MAX WP-3200 PSI BURST - B5 (DATE CODE)
Brand Description	Ink Brand - Black letter color
Compare to	Thermold Alarm Booster; Goodyear Fire Engine Booster

LENGTHS: Random lengths on reels. Also available in 50ft., 100ft., 150ft., and 200ft. lengths.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Approx. Min. Max. ID OD OD ID Reinf. Wt. per **Bend** Rec. Part No. (in.) **Braids** 100 Ft. Radius WP (mm) (in.) (mm) 7270-752 19.1 2 1.173 29.8 39 7.0 800 7270-1002 1 25.4 2 1.500 38.1 59 8.0 800



- Fire Engines
- Fire Suppression Systems



NOTES:	

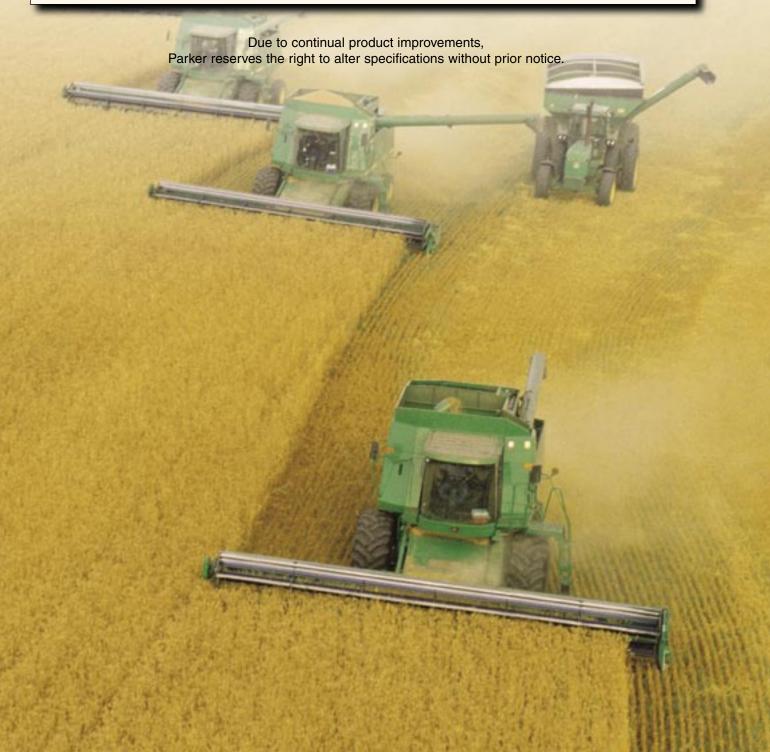


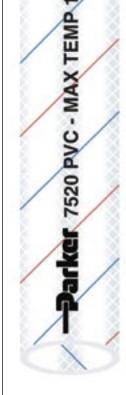
NOTES:



FOOD HANDLING

	Series	Page
THORO-BRAID® Clear Marine Water Hose – FDA & NSF	7520	54
THORO-BRAID® Clear Food Grade Hose – FDA	7581	55
THORO-BRAID® Clear Food Grade Hose - FDA & NSF	7583	56
Clear Vinyl Tubing – FDA & NSF	7558	57
DYNAFLEX® All Clear PVC Suction Hose – FDA	7563	58
DYNAFLEX® Medium Duty PVC Clear Suction Hose	7564	59
DYNAFLEX® Wire Helix Clear PVC Suction Hose - FDA	7570	60
DYNAFLEX® Med. Duty PVC Clear Suc./Discharge Hose - FDA	7582	61





THORO-BRAID® Clear Marine Water Hose - FDA & NSF

Series 7520

Drinking water safe. May be used for either cold or hot water marine systems. Not recommended for use with thru-hull connections. No taste or odor. Lightweight, nonmarking and flexible. Complies with FDA CFR Title 21 parts 170-199. Certified under NSF Standard 51.

4:1 Design Factor

>> Non-marking cover makes hose ideal for boating use

Tube	Clear PVC
Cover	Clear PVC with Blue Tint
Reinforcement	Polyester Yarn with Red/Blue Tracer
Temperature Range	-20°F to +175°F (-29°C to +79°C)
Branding	PARKER 7520 MARINE WATER - (SIZE)" – (SIZE) MM – (PRESSURE) PSI WP - NSF-51 (LOT#) (DATE CODE) – MADE IN USA
Brand Description	Ink Brand - Black letter color
Compare to	Kuriyama 136, K3175

LENGTHS: 250 ft.

COUPLINGS: For assembly guidelines and coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf.	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7520-375	3/8	9.5	2	0.563	14.3	8.0	2.0	200
7520-500	1/2	12.7	2	0.740	18.8	11.0	2.3	150
7520-625	5⁄8	15.9	2	0.880	22.4	13.5	2.8	125
7520-750	3/4	19.1	2	1.020	25.9	15.0	3.3	115
7520-1000	1	25.4	2	1.313	33.4	23.0	5.8	115



- Recreational Vehicles
- Boats





THORO-BRAID® Clear Food Grade Hose - FDA

Series 7581

Excellent for conveying liquids, air and powdered foods. Hose is transparent, allowing for easy inspections during service. Complies with FDA CFR Title 21 parts 170 - 199. Available in special lengths and packaging.

3:1 Design Factor

>> Smooth tube prevents product buildup

Tube	Clear PVC
Cover	Clear PVC with Blue Tint
Reinforcement	Polyester Yarn (Two-Spiral & One Longitudinal)
Temperature Range	-10°F to + 150°F (-23°C to +66°C)
Branding	None
Compare to	Gates 7744; Goodyear Pliovic 200; Jason 4511; Kentak 50H; Pacific Echo 410; Petzetakis 10206; Superflex BTC.

LENGTHS: ¼" to 1" ID - 300 ft.; 1¼" and above - 100 ft.

COUPLINGS: For assembly guidelines and coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Spirals	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7581-251	1/4	6.4	2	0.490	12.4	7	3.0	355
7581-381	3/8	9.5	2	0.600	15.2	10	4.0	315
7581-501	1/2	12.7	2	0.750	19.1	12	5.0	215
7581-631	5⁄8	15.9	2	0.870	22.1	17	6.0	185
7581-751	3/4	19.1	2	1.030	26.2	21	7.0	170
7581-1001	1	25.4	2	1.300	33.0	28	9.0	140
7581-1251	11/4	31.8	2	1.610	40.9	42	12.0	115
7581-1501	1½	38.1	2	1.890	48.0	58	15.0	100
7581-2001	2	50.8	2	2.400	61.0	75	18.0	85



- Bulk Food Transfer
- Poultry and Meat Processing **Plants**





Applications

- Air, Water and Food Transfer
- Light Vacuum Lines
- Wire Conduit

THORO-BRAID®Clear Food Grade Hose – FDA & NSF – 51

Series 7583

Excellent for conveying liquids, air and powdered foods. Hose is transparent, allowing for easy inspections during service. Complies with FDA CFR Title 21 parts 170 - 199. Certified under NSF standard 51. Lightweight, non-marking and flexible. 4:1 Design Factor

>> Suitable for use in commercial food equipment

Tube	Clear PVC			
Cover	Clear PVC			
Reinforcement	Polyester Yarn with Red Tracer			
Temperature Range	+25°F to +150°F (-4°C to +66°C)			
Branding	PARKER 7583 PVC - MAX TEMP 150°F - (SIZE)" - (SIZE) MM - (PRESSURE) PSI WP -NSF-51 (LOT #) (DATE CODE) - MADE IN USA			
Brand Description	Ink Brand - Black letter color			
Compare to	Boston H285; Goodyear Pliovic FG; Kentak K-9500 (Hose); Kuriyama K3150			

LENGTHS: 3/16" to 3/4" - 300 ft.; 1" - 200 ft.; 11/4" and above - 100 ft.

COUPLINGS: For assembly guidelines and coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf.	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7583-187	3/16	4.8	2	0.375	9.5	4.5	0.8	250
7583-250	1/4	6.4	2	0.451	11.5	6.5	1.0	250
7583-312	5⁄16	7.9	2	0.522	13.3	7.5	1.3	250
7583-381	3/8	9.5	2	0.598	15.2	9.0	1.5	225
7583-500	1/2	12.7	2	0.740	18.8	14.5	2.3	200
7583-625	5/8	15.9	2	0.875	22.2	16.5	2.5	200
7583-750	3/4	19.1	2	1.020	25.9	23.0	5.8	150
7583-1000	1	25.4	2	1.302	33.1	32.0	6.8	125
7583-1250	11/4	31.8	2	1.672	42.5	58.0	11.0	100
7583-1500	1½	38.1	2	1.931	49.0	69.0	12.0	100
7583-2000	2	50.8	2	2.480	63.0	100.0	15.0	75

Also available in heavy wall construction. Contact Parker IHP Customer Service.



Clear Vinyl Tubing – FDA & NSF

Series 7558

Lightweight, non-marking, flexible tubing made with tight tolerances. Will not support combustion. Materials comply with FDA Specifications. NSF Certified under Standard NSF-51.

4:1 Design Factor

>> Suitable for use in commercial food equipment

Tube	Clear Food Grade PVC
Temperature Range	+25°F to +150°F (-4°C to +66°C)
Branding	PARKER 7558 PVC - MAX TEMP 150F - (SIZE)" - (SIZE) MM - (PRESSURE) PSI WP - NSF-51 (LOT#) (DATE CODE) - MADE IN USA
Brand Description	Ink Brand - Black letter color
Compare to	Kentak K-9500 (Tubing); Kuriyama K010; New Age CLEARFLO.

LENGTHS: 100 ft.

COUPLINGS: For assembly guidelines and coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7558-125	1/8	3.2	1/4	6.4	2.0	1/4	65
7558-187	3/16	4.8	5⁄16	7.9	2.6	5/8	55
7558-250 7558-251	½ ¼	6.4 6.4	3/ ₈ 1/ ₂	9.5 12.7	3.2 7.6	3/4 1/2	55 60
7558-312	5/16	7.9	7/16	11.1	3.8	3/4	50
7558-381	3/8	9.5	1/2	12.7	4.5	1¾	45
7558-500 7558-501 7558-502	½ ½ ½ ½	12.7 12.7 12.7	⁵ / ₈ ¹¹ / ₁₆ ³ / ₄	15.9 17.5 19.1	5.7 9.0 13.0	1¼ 2 1¾	30 40 45
7558-625 7558-626	5/8 5/8	15.9 15.9	¹³ / ₁₆ ⁷ / ₈	20.6 22.2	11.0 13.0	3 3¾	35 40
7558-750	3/4	19.1	1	25.4	18.0	4	35
7558-1000	1	25.4	11/4	31.8	23.0	7½	25
7558-1250	11/4	31.8	1½	38.1	28.0	11	20
7558-1500	1½	38.1	2	50.8	72.0	12	35
7558-2000	2	50.8	2½	63.5	92.0	15	35

7558

- Food Transfer
- Drain Lines
- Light Vacuum Lines
- Sight Gauges
- Low Pressure Air and Water





DYNAFLEX® All Clear PVC Suction Hose - FDA

Series 7563

Heavy duty food grade material handling hose complies with all applicable FDA specifications. Smooth tube construction is excellent for transferring powder, pellets, or other dry materials without build-up. Clear PVC construction permits visual observation of materials being conveyed. Complies with FDA CFR Title 21 parts 170-199.

3:1 Design Factor

>> Smooth tube prevents blockage

Tube	Clear PVC - Smooth
Cover	Clear PVC - Corrugated
Reinforcement	Rigid clear PVC helix
Temperature Range	-5°F to +140°F (-21°C to +60°C)
Branding	None
Compare to	Gates 201 CR; Goodyear Nutriflex; Jason 4660; Kanaflex 200 SFG; Kuriyama WT; Pacific Echo 145; Petzetakis 12426SE; Superflex 9000

LENGTHS: 100 ft.

COUPLINGS: For assembly guidelines and coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7563-1000	1	25.4	1.22	31.0	17	2.0	55
7563-1250	11/4	31.8	1.48	37.6	21	3.0	50
7563-1500	1½	38.1	1.84	46.7	34	3.0	50
7563-2000	2	50.8	2.36	59.9	50	4.0	40
7563-2500	2½	63.5	2.87	72.9	68	5.0	40
7563-3000	3	76.2	3.50	88.9	100	6.0	40
7563-4000	4	101.6	4.64	117.9	152	8.0	35
7563-6000	6	152.4	6.50	165.1	300	12.0	30



- Transfer of Powder, Pellets or Other Dry Materials
- Food Processing





DYNAFLEX® Medium Duty PVC Clear Suction Hose – FDA

Series 7564

Rugged, medium duty general purpose PVC suction and transfer hose for the agricultural, construction, mining and general industrial markets. 3:1 Design Factor.

>> Smooth tube ensures full flow

Tube	Clear PVC - Smooth
Cover	Clear PVC - Smooth
Reinforcement	Rigid white PVC helix
Temperature Range	-5°F to +140°F (-21°C to +60°C)
Branding	None
Compare to	Gates 101 CL, 200 CL; Goodyear Nutriflow; Jason 4606; Kuriyama H; Pacific Echo 090, 115; Superflex 1000CL

LENGTHS: 100 ft.

COUPLINGS: For assembly guidelines and coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7564-500	1/2	12.7	0.75	19.0	12	2.5	120
7564-750	3/4	19.1	1.00	25.4	20	3.0	90
7564-1000	1	25.4	1.22	31.0	26	4.0	90
7564-1250	11/4	31.8	1.53	38.9	37	5.0	80
7564-1500	1½	38.1	1.81	46.0	44	6.0	75
7564-2000	2	50.8	2.34	59.4	67	8.0	75
7564-2500	2½	63.5	2.85	72.4	90	10.0	75
7564-3000	3	76.2	3.45	87.6	114	12.0	65
7564-4000	4	101.6	4.50	114.3	181	16.0	55
7564-6000	6	152.4	6.65	168.9	336	24.0	35



- Mining
- Transfer of Bulk **Food Products**
- Marine water & baitwell





DYNAFLEX® Wire Helix Clear PVC Suction Hose - FDA

Series 7570

Designed to handle a wide variety of applications where a lightweight, flexible suction/ discharge hose is required. A steel helix wire combined with thick wall construction gives the hose excellent kink, abrasion and crush resistance Transparency allows for easy inspection of product being conveyed. Flexible to -5°F. The steel helix wire provides static conductivity. Complies with FDA CFR Title 21 parts 170-199. 3:1 Design Factor.

>> Static conductivity for safety

Tube	Clear PVC Smooth
Cover	Clear PVC - Smooth
Reinforcement	Wire Helix
Temperature Range	-5°F to +140°F (-21°C to +60°C)
Branding	None
Compare to	Gates 202SW; Goodyear Nutriflex Static Wire; Kuriyama 7160; Pacific Echo W145; Petzetakis 17009

LENGTHS: 100 ft. coils

COUPLINGS: Available coupling option: Series 7670. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7570-750	3/4	19.1	1.03	26.2	21	2.0	100
7570-1000	1	25.4	1.32	33.5	34	2.5	85
7570-1250	11/4	31.8	1.58	40.1	42	3.3	72
7570-1500	1½	38.1	1.85	47.0	52	3.5	72
7570-2000	2	50.8	2.42	61.5	84	5.0	72
7570-2500	2½	63.5	2.95	74.9	121	6.5	57
7570-3000	3	76.2	3.55	90.2	148	8.0	57
7570-4000	4	101.6	4.65	118.1	235	12.0	36
7570-6000	6	152.4	6.65	168.9	429	18.0	28



Applications

 Transfer of Powders, Pellets or Granular Materials





DYNAFLEX®

Medium Duty Clear PVC Suction Hose – FDA

Series 7582

Recommended for conveying milk and other food products in full suction applications. Smooth bore tube will not impart taste or odor into product being conveyed. Meets FDA: CFR Title 21, parts 170 - 199. 3:1 Design factor

>> Clear tube and cover for visual inspections

Tube	Clear PVC - Smooth
Cover	Clear PVC - Smooth
Reinforcement	Rigid White PVC
Temperature Range	-5°F to +140°F (-21°C to +60°C)
Branding	None
Compare to	Kanaflex 212 MK, 210 HFG; Kuriyama MILK; Pacific Echo 170; Petzetakis 12526

LENGTHS: 100 ft. coils

COUPLINGS: Available coupling option: Series 7670. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7582-1500	1½	38.1	1.82	46.2	47	7.5	115
7582-2000	2	50.8	2.36	59.9	68	10.0	85
7582-2500	2½	63.5	2.90	73.7	90	12.5	75
7582-3000	3	76.2	3.44	87.4	114	15.5	65
7582-4000	4	101.6	4.52	114.8	174	20.0	50



- Conveying Food Products
- Dairy Service

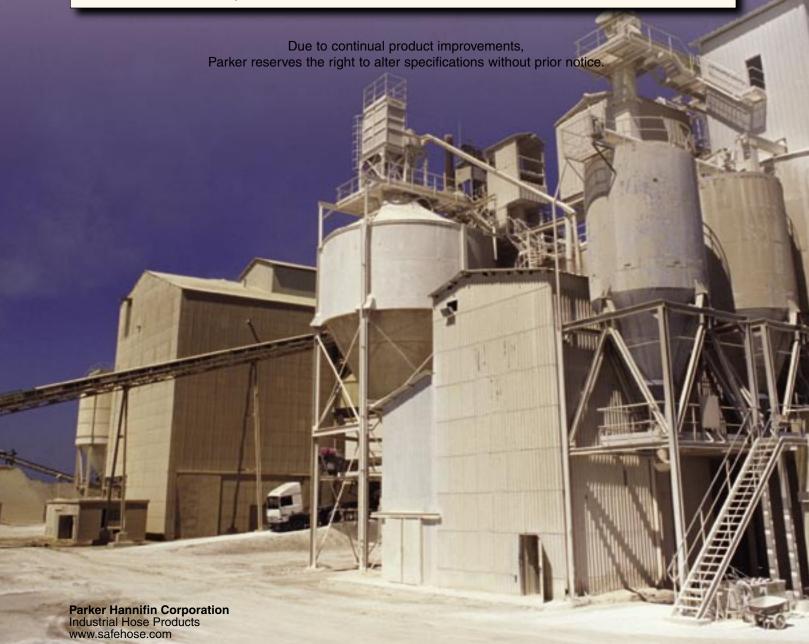


NOTES:



MATERIAL HANDLING

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DRILINE®Cement Hose

Series 7218

Recommended for use on bulk transport trucks in discharge service. Abrasion resistant tube handles dry cement, lime, silica and other abrasive materials. Static conductive tube and cover.

3:1 Design factor

>> Lightweight and abrasion resistant

Tube	Black Natural Rubber Blend - Static Conductive
Cover	Black SBR Rubber
Reinforcement	Multiple textile plies
Temperature Range	-30°F to +150°F (-34°C to +66°C)
Branding	PARKER SERIES 7218 DRILINE® CEMENT HOSE 60 PSI MAX WP MADE IN USA
Brand Description	Embossed Brand
Compare to	Gates Dry Cement Delivery; Boston Lynx HD; Goodyear Black Softwall; Titan Dry Cement Discharge; Thermoid Transporter

LENGTHS: 100 ft. through 6 in., 50 ft. lengths for 65% in.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. Other available coupling options: Series 7670. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Plies	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Tube Thickness	Max. Rec. WP
7218-3018	3	76.2	2	3.464	88.0	118	½	60
7218-30316	3	76.2	2	3.582	91.0	150	3/16	60
7218-3025	3	76.2	2	3.724	94.6	190	1/4	60
7218-3518 7218-35316 7218-3525	3½ 3½ 3½ 3½	88.9 88.9 88.9	2 2 2	3.964 4.106 4.224	100.7 104.3 107.3	137 180 218	½ 3/16 1/4	60 60 60
7218-4018	4	102.0	2	4.480	113.8	155	½	60
7218-40316	4	102.0	2	4.622	117.4	204	3/16	60
7218-4025	4	102.0	2	4.740	120.4	247	1/4	60
7218-4518 7218-45316 7218-4525	4½ 4½ 4½ 4½	114.3 114.3 114.3	2 2 2	4.964 5.106 5.224	126.1 129.7 132.7	173 228 275	½ 3/16 1/4	60 60 60
7218-5018	5	127.0	2	5.464	138.8	191	½	60
7218-50316	5	127.0	2	5.606	142.4	252	3/16	60
7218-5025	5	127.0	2	5.724	145.4	303	1/4	60
7218-6018	6	152.4	2	6.560	166.6	276	½	60
7218-60316	6	152.4	2	6.630	168.4	311	3/16	60
7218-6025	6	152.4	2	6.748	171.4	372	1/4	60
7218-6318	65%	168.3	2	7.126	181	271	½	60
7218-63316	65%	168.3	2	7.255	184.3	342	3/16	60
7218-6325	65%	168.3	2	7.362	187.0	402	1/4	60



Applications

- Dry Cement
- Silica
- Lime
- Other Abrasive Materials
- Bulk Transport Trucks



WARNING! Combination nipple and bands reduce the working pressure of the assembly to less than the hose's maximum working pressure. Refer to NAHAD Assembly Guidelines for working pressure.





Concrete Pump & Plaster Hose – 800 PSI

Series 7236

Recommended for spraying wet plaster and wet or dry cement at pressures up to 800 PSI. The specially compounded tube is highly resistant to abrasive materials. Heavy wall resists kinking. Static conductive tube and cover. 3:1 Design factor

>> Withstands high working pressures

Tube	Black Natural Rubber Blend - Static Conductive
Cover	Black SBR
Reinforcement	Multiple textile plies
Temperature Range	-30°F to +150°F (-34°C to +66°C)
Branding	PARKER SERIES 7236 PLASTER & CONCRETE HOSE 800 PSI MAX WP MADE IN USA 001
Brand Description	Tape Brand - Black letters on white stripe
Compare to	Goodyear Allcrete Textile; Titan SS123/SS120

LENGTHS: 50 ft. and 100 ft.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Plies	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min Bend Radius	Max. Rec. WP
7236-125500	11/4	31.8	4	1.882	47.8	78	9.0	800
7236-150800	1½	38.1	4	2.212	56.2	101	12.0	800
7236-200800	2	50.8	4	2.762	70.2	138	24.0	800

Additional sizes available within minimum order requirements.



- Spraying Wet Plaster
- Wet Cement





SUPER-FLEX®Material Suction Hose

Series 7363

Designed for wet or dry abrasive product transfer service. The highly abrasion resistant tube is also static conductive, eliminating the need for a static wire. The cover is corrugated for flexible handling. This hose is rated for full suction and discharge. 3:1 Design factor

>> Tube dissipates static for safety

Tube	Black Natural Rubber Blend, 3/16 in. thick, static conductive
Cover	Black Natural Rubber Blend
Reinforcement	Textile tire cord plies with helix wire
Temperature Range	-40°F to +160°F (-40°C to +71°C)
Branding	PARKER SERIES 7363 SUPER-FLEX® ABRASIVE SUCTION AND DISCHARGE 100 PSI MAX WP MADE IN USA
Brand Description	Tape Brand - White letters
Compare to	Goodyear Plicord HD Vacuum, Diversiflex; Gates 688SB; Titan SW336; Boston Sabertooth

LENGTHS: 100 ft.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. Other available coupling options: Series 7670. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Plies	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7363-2000	2	50.8	2	2.740	69.6	159	6.0	100
7363-3000	3	76.2	2	3.800	96.6	246	9.0	100
7363-4000	4	101.6	2	4.875	123.8	360	12.0	100
7363-5000	5	127.0	2	5.929	150.6	501	15.0	100
7363-6000	6	152.4	2	6.937	176.2	560	18.0	100



WARNING! Combination nipple and bands reduce the working pressure of the assembly to less than the hose's maximum working pressure. Refer to NAHAD Assembly Guidelines for working pressures.



- Transfer of Material to and from Rail Cars and Barges
- Unloading Hoppers
- · Sewer Cleaning





Rock Dust Hose - MSHA

Series 7393

This hose is for rock dust service in underground mines, it is very light, flexible and durable. The cover is flame resistant and the tube is static conductive. The hose also has a helix wire that reduces kinking at sharp bends.

4:1 Design factor

>> Durable and flexible for mine environments

Tube	Black Natural Rubber blend - Static Conductive
Cover	Black Synthetic Rubber blend
Reinforcement	Multiple textile plies with helix wire
Temperature Range	-30°F to +160°F (-34°C to +71°C)
Branding	PARKER SERIES 7393 ROCK DUST HOSE FLAME RESISTANT MSHA NO. IC-123/22 MADE IN USA (MSHA number may vary)
Brand Description	Embossed Brand
Compare to	Goodyear Flextra

LENGTHS: 100 ft. lengths, all sizes, part #'s ending in "2". 50 ft. lengths with soft cuffs, all sizes, part #s ending "050C".

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. Other available coupling options: Series 7670. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Plies	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7393-1252	1¼	31.8	2	1.602	40.7	46	2.5	90
7393-1252050C	1¼	31.8	2	1.602	40.7	46	2.5	90
7393-1502	1½	38.1	2	1.834	46.6	52	3.0	90
7393-1502050C	1½	38.1	2	1.834	46.6	52	3.0	90
7393-2002	2	50.8	2	2.362	60.0	79	4.0	75
7393-2002050C	2	50.8	2	2.362	60.0	79	4.0	75
7393-2502	2½	63.5	2	2.862	72.7	97	6.0	60
7393-2502050C	2½	63.5	2	2.862	72.7	97	6.0	60
7393-3002	3	76.2	2	3.409	86.6	132	8.0	50
7393-3002050C	3	76.2	2	3.409	86.6	132	8.0	50

7393

- Dust Suppression and Collection Systems
- Rock Dust Service





Sand Blast Hose - 4 Ply

Series 7244E

Designed for sandblasting of metal castings, steel, stone, cement or wherever abrasive materials are carried at high velocity. The high abrasion resistant, static conducting tube eliminates the need for a static wire.

3:1 Design factor

>> Highly abrasion resistant and durable

Tube	Black Natural Rubber - Static Conductive
Cover	Black Synthetic Rubber blend
Reinforcement	Multiple textile plies
Temperature Range	-20°F to +160°F (-29°C to +71°C)
Branding	PARKER SERIES 7244E SAND BLAST HOSE 150 PSI WP
Brand Description	Embossed Brand
Compare to	Goodyear Plicord Blast, XF Blast; Kuriyama Sand Blast

LENGTHS: 50 ft. special lengths up to 200 ft. available on quotation. Contact IHP Customer Service for details.

COUPLINGS: Not offered by Parker – For assembly guidelines and coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Plies	OD (in)	OD (mm)	Tube (in.)	Approx. Wt. per 100 Ft.	Max. Rec. WP
7244E-500	1/2	12.7	2	1.06	26.9	0.21	40	150
7244E-750	3/4	19.1	4	1.50	38.1	0.24	65	150
7244E-1000	1	25.4	4	1.89	48.0	0.28	100	150
7244E-1250	11/4	31.8	4	2.17	55.1	0.28	125	150
7244E-1500	1½	38.1	4	2.36	60.0	0.26	130	150
7244E-2000	2	50.8	4	2.87	72.8	0.26	175	150



Applications

Sand Blasting





MPW - 1000[®] Multi-Purpose Hose

Series 7204

This versatile multi-purpose hose is ideal for rugged service in many industrial and high pressure steam cleaning applications. In addition to air and water service, the oil resistant tube and cover will handle a variety of acids and chemicals. Suitable for saturated steam service to 150 PSI and temperatures to 368° F. Also suitable to convey hot tar, wax and glue at 300° F continuous, 350° F intermittent.

4:1 Design factor (10:1 for 150 PSI steam applications)

>> Withstands high temperatures in multiple uses

Tube	Black Nitrile
Cover	Perforated Black Neoprene
Reinforcement	One wire braid
Temperature Range	-20°F to +300°/350°/368°F (steam) -29°C to +149°/177°/187°C (steam)
Branding	PARKER 7204 - MPW 1000 PSI MAX WP (DATE CODE) MADE IN USA
Brand Description	Embossed Brand
Compare to	Gates 319MB Gold Master

LENGTHS: Random lengths on 500 ft. nominal reels. 50 ft. min. length. Max. 600 ft., min. 400 ft. 5 pieces max. per reel with 50 ft. length.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. Other available coupling options: Series 7615, 7692. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Layers	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP	Max. Steam WP
7204-381	3/8	9.5	1	0.781	19.8	28	5.0	1000	150
7204-501	1/2	12.7	1	0.906	23.0	34	7.0	1000	150
7204-751	3/4	19.1	1	1.187	30.1	52	9.5	1000	150
7204-1001	1	25.4	1	1.500	38.1	75	12.0	1000	150



- Steam Service
- Acid and Chemical Transfer
- Hot Tar, Wax and Glue





Hot Tar and Asphalt Hose

Series 7290

Designed for bulk transfer and delivery of hot petroleum products and hot wax. Will handle full suction and discharge pressures.
4:1 Design factor

>> Withstands high temperatures

Tube	Black Nitrile
Cover	Black Neoprene
Reinforcement	Multiple textile plies with helix wire
Temperature Range	-20°F to +350°/400°F (-29°C to +177°/204°C)
Branding	PARKER USA 7290 HOT TAR & ASPHALT HOSE XXX PSI MAX WP 001
Brand Description	Embossed Brand
Compare to	Goodyear Pyroflex; Thermoid Transporter; Boston Black Cat; Titan SW327

LENGTHS: 100 ft. – other lengths on quotation, contact Customer Service.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. Other available coupling options: Series 7615, 7692. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Plies	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7290-1500	1½	38.0	4	2.125	54.0	127	4.0	175
7290-2000	2	50.8	4	2.630	66.8	163	6.0	175
7290-3000	3	76.2	4	3.701	94.0	280	12.0	150
7290-4000	4	102.0	4	4.717	119.8	365	16.0	100



- Hot Tar
- Commercial Building and Roofing





DAY-LITE®Suction & Discharge Hose

Series 8341

Designed for wet or dry abrasive product transfer service. The highly abrasion resistant tube is also static conductive, eliminating the need for a static wire. The cover is corrugated for flexible handling. This hose is rated for full suction and discharge. 3:1 Design factor

>> Tube dissipates static for safety

Tube	High Abrasion-Resistant Conductive NR/SBR Blend
Cover	Corrugated Abrasion-Resistant NR/SBR
Reinforcement	Multiple Polyester Spiral Plies plus Helix Wire
Vacuum Rating	Full Suction
Temperature Range	-40°F to +180°F (-40°C to +83°C)
Branding	Parker 8341 Day-Lite Suction and Discharge Hose Made in USA
Brand Description	Tape Brand - Black Letters on Green Stripe
Compare to	Goodyear Plicord Vacuum

LENGTHS: 50 and 100 ft.; 1½ in. through 4 in. also available in 200 ft. lengths. **COUPLINGS:** For permanent crimp specifications, refer to CrimpSource. Other available coupling options: Series 7670. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part Number	ID (in)	ID (mm)	OD (in)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
8341-1500	1½	38.1	2.008	51.0	76.8	4.5	75
8341-2000	2	50.8	2.520	64.0	100.0	6.0	75
8341-3000	3	76.2	3.457	87.8	162.0	9.0	75
8341-4000	4	101.6	4.598	116.8	247.5	12.0	75
8341-6000	6	152.4	6.693	170.0	441.0	18.0	75
8341-8000	8	203.2	8.724	221.0	591.8	24.0	75

8341

Applications

Sewer Cleaning



WARNING! Combination nipple and bands reduce the working pressure of the assembly to less than the hose's maximum working pressure. Refer to NAHAD Assembly Guidelines for working pressures.





DYNAFLEX®PVC Standard Duty Suction Hose

Series 7560

This is a flexible hose that will withstand full suction and discharge pressure. It will handle a variety of liquid and solid materials such as water, slurry transfer, sewage, air, chemicals, grains and pellets. A versatile hose for agriculture, mining, construction and industry.

3:1 Design factor

>> Designed for full suction and discharge service

Tube	Green PVC - Smooth				
Cover	Green PVC – Smooth				
Reinforcement	Rigid white PVC helix				
Temperature Range	-5°F to +140°F (-21°C to +60°C)				
Branding	None				
Compare to	Gates 100 GR; Kanaflex 100 GR; Kuriyama G and J; Pacific Echo 110, 113; Petzetakis 12500; Superflex 1000 GR				

LENGTHS: 100 ft. coils $\frac{3}{4}$ in. through 6 in.; 20, 25 and 30 ft. straight lengths for 8 in. ID.

COUPLINGS: Available coupling option: Series 7670. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	OD (in.)	OD (mm)	Aprox. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7560-750	3⁄4	19.1	1.00	25.0	20	3.5	120
7560-1000	1	25.4	1.24	31.5	25	4.5	120
7560-1250	11/4	31.8	1.53	38.9	32	5.7	120
7560-1500	1½	38.1	1.78	45.2	39	6.7	100
7560-2000	2	50.8	2.32	58.9	57	9.0	95
7560-2500	2½	63.5	2.81	71.4	80	11.0	75
7560-3000	3	76.2	3.43	87.1	105	14.0	65
7560-4000	4	101.6	4.45	113.0	164	18.0	55
7560-6000	6	152.4	6.60	167.6	308	30.0	40
7560-8000	8	203.2	8.80	223.5	507	39.0	35

7560

- Mining
- Sewage
- Slurry Transfer





DYNAFLEX® PVC Multi-Purpose Suction Hose

Series 7561

Extremely lightweight and flexible for general service, low pressure applications. Will handle both full suction and discharge pressure, and smooth bore design allows unrestricted flow.

3:1 Design factor

>> Lighter weight with greater flexibility

Tube	Green PVC – Smooth				
Cover	Green PVC – Corrugated				
Reinforcement	Rigid white PVC spiral helix				
Temperature Range	-5°F to +140°F (-21°C to +60°C)				
Branding	None				
Compare to	Kanaflex 112 CL; Kuriyama WG; Pacific Echo 120; Superflex TX				

LENGTHS: 100 ft. coils.

COUPLINGS: Available coupling option: Series 7670. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP @68°F	Max. Rec. WP @140°F
7561-1500	1½	38.1	1.78	45.2	33	5	80	25
7561-2000	2	50.8	2.32	58.9	46	7	65	20
7561-2500	21/2	63.5	2.83	63.8	60	9	60	20
7561-3000	3	76.2	3.40	86.4	75	12	45	15
7561-4000	4	102.0	4.45	113.0	132	15	40	13



- Water Suction
- Slurries





DYNAFLEX®All Clear PVC Suction Hose – FDA

Series 7563

Heavy duty food grade material handling hose complies with all applicable FDA specifications. Smooth tube construction is excellent for transferring powder, pellets, or other dry materials without build-up. Clear PVC construction permits visual observation of materials being conveyed. Complies with FDA CFR Title 21 parts 170-199.

3:1 Design factor

>> Smooth tube prevents blockage

Tube	Clear PVC – Smooth
Cover	Clear PVC – Corrugated
Reinforcement	Rigid clear PVC helix
Temperature Range	-5°F to +140°F (-21°C to +60°C)
Branding	None
Compare to	Gates 201 CR; Goodyear Nutriflex; Jason 4660; Kanaflex 200 SFG; Kuriyama WT; Pacific Echo 145; Petzetakis 12426SE; Superflex 9000

LENGTHS: 100 ft. coils

COUPLINGS: For assembly guidelines and coupling options, refer to NAHAD

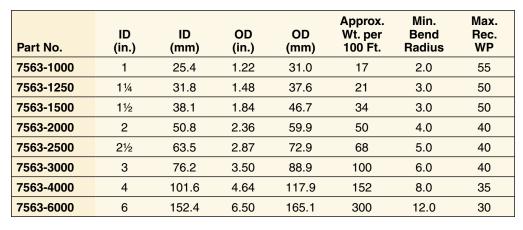
Industrial Hose Assembly Guidelines.



Applications

7563

 Bulk Food Transfer







DYNAFLEX® Medium Duty PVC Clear Suction Hose – FDA

Series 7564

Rugged, medium duty general purpose PVC suction and transfer hose for the agricultural, construction, mining and general industrial markets. 3:1 Design Factor.

>> Smooth tubes ensures full flow

Tube	Clear PVC – Smooth				
Cover	Clear PVC – Smooth				
Reinforcement	Rigid white PVC helix				
Temperature Range	-5°F to +140°F (-21°C to +60°C)				
Branding	None				
Compare to	Gates 101 CL, 200 CL; Goodyear Nutriflow; Jason 4606; Kuriyama H; Pacific Echo 090, 115; Superflex 1000CL				

LENGTHS: 100 ft. coils

COUPLINGS: For assembly guidelines and coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7564-500	1/2	12.7	0.75	19.0	12	2.5	120
7564-750	3/4	19.1	1.00	25.4	20	3.0	90
7564-1000	1	25.4	1.22	31.0	26	4.0	90
7564-1250	11/4	31.8	1.53	38.9	37	5.0	80
7564-1500	1½	38.1	1.81	46.0	44	6.0	75
7564-2000	2	50.8	2.34	59.4	67	8.0	75
7564-2500	2½	63.5	2.85	72.4	90	10.0	75
7564-3000	3	76.2	3.45	87.6	114	12.0	65
7564-4000	4	101.6	4.50	114.3	181	16.0	55
7564-6000	6	152.4	6.65	168.9	336	24.0	35



- Mining
- Transfer of Bulk **Food Products**
- · Marine water & baitwell





DYNAFLEX®Wire Helix Clear PVC Suction Hose – FDA

Series 7570

Designed to handle a wide variety of applications where a lightweight, flexible suction/ discharge hose is required. A steel helix wire combined with thick wall construction gives the hose excellent kink, abrasion and crush resistance. Transparency allows for easy inspection of product being conveyed. Flexible to -5°F. The steel helix wire provides static conductivity. Complies with FDA CFR Title 21 parts 170-199. 3:1 Design Factor.

>> Static conductive for safety

Tube	Clear PVC – Smooth
Cover	Clear PVC – Smooth
Reinforcement	Wire Helix
Temperature Range	-5°F to +140°F (-21°C to +60°C)
Branding	None
Compare to	Gates 202SW; Goodyear Nutriflex Static Wire; Kuriyama 7160; Pacific Echo W145; Petzetakis 17009

LENGTHS: 100 ft. coils

COUPLINGS: Available coupling option: Series 7670. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7570-750	3/4	19.1	1.03	26.2	21	2.0	100
7570-1000	1	25.4	1.32	33.5	34	2.5	85
7570-1250	11/4	31.8	1.58	40.1	42	3.3	72
7570-1500	1½	38.1	1.85	47.0	52	3.5	72
7570-2000	2	50.8	2.42	61.5	84	5.0	72
7570-2500	2½	63.5	2.95	74.9	121	6.5	57
7570-3000	3	76.2	3.55	90.2	148	8.0	57
7570-4000	4	101.6	4.65	118.1	235	12.0	36
7570-6000	6	152.4	6.65	168.9	429	18.0	28



Applications

 Transfer of Powders, Pellets or Granular Materials





DYNAFLEX®Medium Duty Clear PVC Suction Hose – FDA

Series 7582

For conveying milk and other food products in full suction applications. Smooth bore tube will not impart taste or odor into product being conveyed. Complies with FDA CFR Title 21 parts 170-199.

3:1 Design Factor.

>> Clear tube and cover for visual inspection

Tube	Clear PVC - Smooth			
Cover	Clear PVC - Smooth			
Reinforcement	Rigid White PVC			
Temperature Range	-5°F to +140°F (-21°C to +60°C)			
Branding	None			
Compare to	Kanaflex 212 MK, 210 HFG; Kuriyama MILK; Pacific Echo 170; Petzetakis 12526			

LENGTHS: 100 ft. coils

COUPLINGS: For assembly guidelines and coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7582-1500	1½	38.1	1.82	46.2	47	7.5	115
7582-2000	2	50.8	2.36	59.9	68	10.0	85
7582-2500	2½	63.5	2.90	73.7	90	12.5	75
7582-3000	3	76.2	3.44	87.4	114	15.5	65
7582-4000	4	101.6	4.52	114.8	174	20.0	50



- Conveying Food Products
- Dairy Service



NOTES:		



PETROLEUM – DISPENSER

	Series	Page
FLEX-EVER™ 2000 Gasoline Pump Hose – UL330/ULC	7280	80
SOFT-FLEX® 2000 Marine Refueling Hose – Green Cover		
SOFT-FLEX® 2000 Gasoline Pump Hose - UL330/ULC		
SUPER-FLEX® 2000 Gasoline Pump Hose – UL330/ULC		
Farm Pump Hose without Static Wire	7173	84
Farm Pump Hose without Static Wire	7174	85
Farm Pump Hose with Static Wire	7175	86

Due to continual product improvements, Parker reserves the right to alter specifications without prior notice.





FLEX-EVER™ 2000 **Gasoline Pump Hose - UL330/ULC**

Series 7280

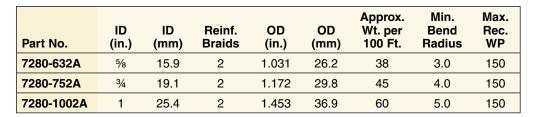
IMPORTANT: REFER TO THE SAFETY AND TECHNICAL DATA INFORMATION SECTION FOR THE PROPER USE OF THIS HOSE.

Parker's premium gasoline dispenser hose. The dual helical wires of the heavy duty hardwall construction eliminate meter creep and helps prevent kinking. The Hypalon cover provides excellent ozone and abrasion resistance, resulting in longer service life. For use with gasohol blend, diesel, leaded, unleaded and oxygenated gasoline products. All assemblies are pressure and electrical conductivity tested per UL330 specifications. Blue, Green, Red and Yellow covers available on quotation. 4:1 Design factor

>> Kink resistant and durable; offered as UL approved assemblies

Tube	Black Nitrile
Cover	Black Hypalon
Reinforcement	Multiple textile braids with dual helix wire
Vacuum Rating	Full Suction
Temperature Range	-40°F to +180°F (-40°C to +82°C)
Branding	PARKER SERIES 7280 FLEX-EVER™ 2000 GASOLINE HOSE (UL) LISTED 655N MH530 (ULC) MADE IN USA B5 (DATE CODE) PN16 TRbF131T.2
Brand Description	Ink Brand - White letter color

LENGTHS: Nominal 500 ft. reels. Max. of 5 pieces with 50 ft. min. lengths. **COUPLINGS:** Only assemblies are available from Parker – no individual coupling sales.





- · Gas Station
- Oil Transfer





SOFT-FLEX® 2000 Marine Refueling Hose - Green Cover

Series 7114GRM

IMPORTANT: REFER TO THE SAFETY AND TECHNICAL DATA INFORMATION SECTION FOR THE PROPER USE OF THIS HOSE.

Parker's UL Listed series 7114GRM marine refueling hose is a green non-marking cover, 4-ply spiral reinforced softwall hose, which includes a static grounding wire for electrical continuity. This extremely flexible hose can be used with various marina fuels such as unleaded gasoline, alcohol blended fuel and various diesel fuels. 4:1 Design factor

>> Abrasion and kink resistant

Tube	Nitrile
Cover	Green Nitrile/PVC
Reinforcement	Multiple textile plies with static wire
Temperature Range	-40°F to +180°F (-40°C to +82°C)
Branding	PARKER SERIES 7114 SOFT-FLEX 2000 MARINE REFUELING HOSE 4SP UL LISTED 655N MH530 MADE IN USE (date code)
Brand Description	Ink Brand - White letters
Compare to	Goodyear BC Marina; Thermoid Pumpflex Softwall Marina

LENGTHS: 3/4 in. – 400 ft.; 1 in. – 300 ft.; both 1-piece continuous length reels COUPLINGS: For permanent crimp specifications, refer to CrimpSource. Other available coupling options: Series 7651. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Spirals	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7114-754GRM	3/4	19.1	4	1.100	27.9	32	6.0	150
7114-1004GRM	1	25.4	4	1.360	34.5	42	8.0	150



Applications

 Marine Refueling





SOFT-FLEX® 2000 **Gasoline Pump Hose - UL330/ULC**

Series 7114

IMPORTANT: REFER TO THE SAFETY AND TECHNICAL DATA INFORMATION SECTION FOR THE PROPER USE OF THIS HOSE.

SOFT-FLEX 2000 hose is a quality softwall gasoline pump hose used in applications that do not require hardwall hose. The multiple spiral reinforcement provides increased strength over one or two-braid hose without sacrificing flexibility or ease of handling. The Hypalon cover is highly resistant to cuts, abrasion, sun and weather, and will not scratch or mark vehicle finish. SOFT-FLEX 2000 hose is for use with diesel, leaded, unleaded and oxygenated gasoline products. 4:1 Design factor

>> Lightweight and flexible for easy handling

Tube	Black Nitrile
Cover	Black Hypalon
Reinforcement	Multiple textile spirals with static wire
Temperature Range	-40°F to +180°F (-40°C to +82°C)
Branding	PARKER SERIES 7114 SOFT-FLEX® 2000 GASOLINE HOSE 4SP UL LISTED 655N MH530 MADE IN USA (DATE CODE)
Brand Description	Ink Brand - White letter color
Compare to	Goodyear Pacer; Thermoid Pumpflex I Softwall

LENGTHS: Random lengths on reels in cartons: %" = 475 ft.; %" = 350 ft.; 1" = 250 ft. 3 pieces max. and 50 ft. min. lengths.

COUPLINGS: Only assemblies are available from Parker – no individual coupling sales.

Part No.	ID (in.)	ID (mm)	Reinf. Spirals	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7114-63154A	5⁄8	15.9	4	0.960	24.4	26	5.0	150
7114-75154A	3/4	19.1	4	1.100	27.9	32	6.0	150
7114-100154A	1	25.4	4	1.360	34.5	42	8.0	150



- · Gas Station
- Oil Transfer





SUPER-FLEX® 2000 Gasoline Pump Hose - UL330/ULC

Series 7124

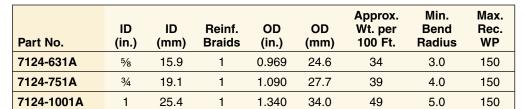
IMPORTANT: REFER TO THE SAFETY AND TECHNICAL DATA INFORMATION SECTION FOR THE PROPER USE OF THIS HOSE.

SUPER-FLEX 2000 is a high quality wire braid hose for use anywhere a hardwall hose is required. The single wire braid construction provides static conductivity, increased hose strength, resistance to crushing, and a long service life. The SUPER-FLEX 2000 is usable on reeling devices or applications where retractable cables are required to handle diesel, leaded, unleaded, and oxygenated gasoline products. The Hypalon cover is highly resistant to cuts, abrasion, sun, weather, and will not scratch or mark vehicle finish. 4:1 Design factor

>> Hardwall construction for long service life

Tube	Black Nitrile			
Cover	Black Hypalon			
Reinforcement	One wire braid			
Temperature Range	-40°F to +180°F (-40°C to +82°C)			
Branding	PARKER USA 7124 SUPER-FLEX® 2000 GASOLINE HOSE (UL) LISTED 655NMH530 (DATE CODE)			
Brand Description	Ink Brand - White letter color			
Compare to	Thermoid Pumpflex II Hardwall; Goodyear Flexsteel Hardwall			

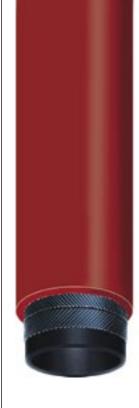
LENGTHS: Nominal 500 ft. reels. Max. of 5 pieces with 50 ft. min. lengths. **COUPLINGS:** Only assemblies are available from Parker - no individual coupling sales.





- · Gas Station
- Oil Transfer





Farm Pump/Gravity Tank Hose

Series 7173 - No Static Wire, NOT U.L. Listed

For dispensing oil, leaded and unleaded gasoline and diesel fuel from hand pump and gravity feed farm pumps, skid tanks, drums and storage tanks.

4:1 Design factor

>> Lightweight and flexible

Tube	Black Nitrile			
Cover	Red Neoprene – Smooth Cover			
Reinforcement	Multiple textile spirals			
Temperature Range	-40°F to +180°F (-40°C to +82°C)			
Branding	PARKER SERIES 7173 FARM PUMP/GRAVITY TANK FUEL HOSE 3/4 in. ID-50 PSI MAX WP, MADE IN USA B2 (month/year)			
Brand Description	White Ink			
Compare to	Goodyear Aggie Gas; Thermoid Premier Farm Tank			

LENGTHS: Random length reels (-50 ft. /+0 ft.) 80% 1 piece, 20% 2 piece. 50 ft. min. length. 1 in. = 300 ft. reels $-\frac{3}{4}$ in. = 400 ft. reels.

COUPLINGS: Externally crimped NPT couplings – no individual coupling sales, which are sold or quoted separately. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Spirals	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7173-75052	3/4	19.1	2	1.063	26.9	29	5.0	50
7173-100052	1	25.4	2	1.375	34.9	46	8.0	50

7173

Applications

- Hand Pumps
- Farm Pumps
- · Gravity Tanks



WARNING! Not for service station use! The proliferation of selfservice gas stations has created a situation where millions of consumers are daily operators of gasoline pumps. Proper hose selection must take into consideration the amount of use and abuse a hose must withstand during its service life. Only the highest quality, thoroughly tested, UL 330 listed hose must be selected for service station applications. The proper hose plus constant inspection is the best protection against user accidents.

DO NOT USE PARKER FARM PUMP/GRAVITY TANK HOSE FOR FUELING OF AIRCRAFT!





Farm Pump/Gravity Tank Hose

Series 7174 - No Static Wire, NOT U.L. Listed

For dispensing oil, leaded and unleaded gasoline and diesel fuel from hand pump and gravity feed farm pumps, skid tanks, drums and storage tanks. 4:1 Design factor

>> Lightweight and flexible

Tube	Black Nitrile				
Cover	Black Neoprene - Smooth Cover				
Reinforcement	Multiple textile spirals				
Temperature Range	-40°F to +180°F (-40°C to +82°C)				
Branding	PARKER SERIES 7174 FARM PUMP/GRAVITY TANK FUEL HOSE 3/4 in. ID-50 PSI MAX WP, MADE IN USA B2 (month/year)				
Brand Description	White Ink				
Compare to	Goodyear Aggie Gas; Thermoid Premier Farm Tank				

LENGTHS: Random length reels (-50 ft. /+0 ft.) 80% 1 piece, 20% 2 piece. 50 ft. min. length. 1 in. = 300 ft. reels $- \frac{3}{4}$ in. = 400 ft. reels.

COUPLINGS: Externally crimped NPT couplings - no individual coupling sales, which are sold or quoted separately. For other coupling recommendations refer to NAHAD Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Spirals	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7174-75052	3/4	19.1	2	1.063	26.9	29	5.0	50
7174-100052	1	25.4	2	1.375	34.9	46	8.0	50

7174

Applications

- Hand Pumps
- Farm Pumps
- · Gravity Tanks

Assemblies

(coupled male NPT x male NPT)

•			
	ID	Length	Loose Pack
Part No.	(in.)	(ft.)	Std. Pack Qty.
71743PR-120	3/4	10	10
71743PR-144	3/4	12	10
71743PR-168	3⁄4	14	10
71741PR-120	1	10	10
71741PR-144	1	12	10
71741PR-168	1	14	10



WARNING! Not for service station use! The proliferation of selfservice gas stations has created a situation where millions of consumers are daily operators of gasoline pumps. Proper hose selection must take into consideration the amount of use and abuse a hose must withstand during its service life. Only the highest quality, thoroughly tested, UL 330 listed hose must be selected for service station applications. The proper hose plus constant inspection is the best protection against user accidents.

DO NOT USE PARKER FARM PUMP/GRAVITY TANK HOSE FOR **FUELING OF AIRCRAFT!**





Farm Pump Fuel Hose

Series 7175 – With Static Wire

For gravity or electric pump dispensing of oil, gasoline, diesel fuel and petroleum based products where UL approval is not required.

4:1 Design factor

>> Suitable for use with electric pumps

Tube	Black Nitrile			
Cover	Black Neoprene			
Reinforcement	Multiple textile spirals			
Temperature Range	-40°F to +180°F (-40°C to +82°C)			
Branding	PARKER SERIES 7175 FARM PUMP HOSE W/STATIC WIRE 3/4 in. ID-50 PSI MAX WP, MADE IN USA DE 1 (month/year)			
Brand Description	White Ink			
Compare to	Thermoid Premier Farm Tank			

LENGTHS: Random length reels (-50 ft. /+0 ft.) 80% 1 piece, 20% 2 piece. 50 ft. min. length. 1 in. = 300 ft. reels $-\frac{3}{4}$ in. = 400 ft. reels.

COUPLINGS: Externally crimped NPT couplings – no individual coupling sales, which are sold or quoted separately. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Spirals	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7175-75052	3/4	19.1	2	1.120	28.4	35	5.0	50
7175-100052	1	25.4	2	1.375	34.9	47	8.0	50

7175

Applications

- Electric Pumps
- Farm Pumps
- · Gravity Tanks

Assemblies

(coupled male NPT x male NPT)

Part No.	ID (in.)	Length (ft.)	Loose Pack Std. Pack Qty.
71753PRK-120	3/4	10	10
71753PRK-144	3/4	12	10
71753PRK-168	3/4	14	10
71751PRK-120	1	10	10
71751PRK-144	1	12	10
71751PRK-168	1	14	10



WARNING! Not for service station use! The proliferation of self-service gas stations has created a situation where millions of consumers are daily operators of gasoline pumps. Proper hose selection must take into consideration the amount of use and abuse a hose must withstand during its service life. Only the highest quality, thoroughly tested, UL 330 listed hose must be selected for service station applications. The proper hose plus constant inspection is the best protection against user accidents.

DO NOT USE PARKER FARM PUMP/GRAVITY TANK HOSE FOR FUELING OF AIRCRAFT!



NOTES:	



NOTES:



PETROLEUM – LP GAS

	Series	Page
LP Gas Hose - UL 21, CSA Type I	7132	90
LP Gas Hose – UL 21, CSA Type I		
LP Gas Hose - UL 21, Stainless Steel, CSA Type 1		
LP Gas Hose – UL 569, CSA Type I		
LP Gas Vapor Hose		
LP Gas Hose – UL 21, Stainless Steel, Rubber Cover		
LP Gas Hose – UL 21, Stainless Steel, Textile Cover	7243	96

Due to continual product improvements, Parker reserves the right to alter specifications without prior notice.







Applications

- Bobtail Delivery
- Grills & Cookers
- Heaters



Series 7132

For conveyance of LP Gas products where a 3/16 in. through 1 in. ID is required. Meets or exceeds all Underwriter Laboratories (UL®) 21 requirements as well as CSA (Canadian Standards Association) Type 1, LP Gas hose requirements.

Can be used for natural gas with application specific criteria*. The molecules of natural gas are small, enhancing its ability to permeate through standard rubber or PVC hose constructions. The permeation process is more rapid as the working pressure increases, and natural gas accumulates with potentially dangerous consequences. Use pipe, non-permeable tubing or hose with barrier constructions to convey natural gas. Series 7132 LP Gas hose can be used for natural gas service, but ONLY under the following conditions:

*Maximum working pressure of the application not to exceed 50 PSI.

The application **must** be in an outside (non-enclosed) environment. Applications that are in an enclosed environment or greater than 50 PSI working pressure are not

Do not use LPG hose for fuel hose in vehicles using CNG (Compressed Natural Gas). 5:1 Design factor

>> Flexible, smooth; DOT Certified assemblies available

Tube	Black Nitrile
Cover	Perforated Black Neoprene
Reinforcement	Multiple textile spirals
Temperature Range	-40°F to +180°F (-40°C to +82°C) (The hose construction is capable of this rating, however, LP Gas should NEVER be conveyed over 140°F)
Branding	PARKER 7132 CSA CAN/ 1-8.1 CAUTION - LP GAS HOSE MH6737 UR® US (UL® Recognized component, with backwards "R") ISSUE NO. XXXX 350 PSI MAX WP MADE IN USA B2 (DATE CODE)
Brand Description	IImpression Brand
Compare to	Boston Blackline (LPG); Gates LP350

LENGTHS: Reels, 90% 1 piece, 10% 2 piece, minimum length 50 ft. with a + 50 ft./-0 ft. reel footage tolerance.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. Other available coupling options: Series 7615, 7692. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Spirals	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
Part No.	(111.)	(mm)	Spirais	(111.)	(mm)	per 100 Ft.	nauius	VVF
7132-19352	3/16	4.8	2	0.510	13.0	11	2.0	350
7132-25354	1/4	6.4	4	0.610	15.5	15	2.5	350
7132-31354	⁵ ⁄ ₁₆	7.9	4	0.690	17.5	19	3.0	350
7132-38354	3/8	9.5	4	0.760	19.1	22	3.5	350
7132-50354	1/2	12.7	4	0.937	23.8	31	4.5	350
7132-75354	3/4	19.1	4	1.250	31.8	51	6.5	350
7132-75354100	3/4	19.1	4	1.250	31.8	51	6.5	350
7132-75354125	3/4	19.1	4	1.250	31.8	51	6.5	350
7132-75354150	3⁄4	19.1	4	1.250	31.8	51	6.5	350
7132-100354	1	25.4	4	1.500	38.1	62	7.5	350
7132-100354100	1	25.4	4	1.500	38.1	62	7.5	350
7132-100354125	1	25.4	4	1.500	38.1	62	7.5	350
7132-100354150	1	25.4	4	1.500	38.1	62	7.5	350
7132-100354200	1	25.4	4	1.500	38.1	62	7.5	350



WARNING! For LP and Natural Gas* use only! Do not use in anhydrous ammonia or refrigeration applications! Do NOT use male swivel couplings or screw-together re-attachable fittings or any type of couplings that use O-Ring sealing surfaces!





LP Gas Hose - UL 21 - CSA Type I

Series 7232

For conveyance of LP Gas products where a 11/4 in. through 2 in. ID is required. Meets or exceeds all Underwriter Laboratories (UL®) 21 requirements as well as CGA (Canadian Standards Association) Type 1, LP Gas hose requirements.

Can be used for natural gas with application specific criteria*. The molecules of natural gas are small, enhancing its ability to permeate through standard rubber or PVC hose constructions. The permeation process is more rapid as the working pressure increases, and natural gas accumulates with potentially dangerous consequences. Use pipe, non-permeable tubing or hose with barrier constructions to convey natural gas. Series 7232 LP Gas hose can be used for natural gas service, but ONLY under the following conditions:

*Maximum working pressure of the application not to exceed 50 PSI. The application **must** be in an outside (non-enclosed) environment. Applications that are in an enclosed environment or greater than 50 PSI working pressure are not recommended.

Do not use LPG hose for fuel hose in vehicles using CNG (Compressed Natural Gas).

5:1 Design factor

>> Durable; validated crimp specs are available; DOT Certified assemblies are available

Tube	Black Nitrile				
Cover	Perforated Black Neoprene				
Reinforcement	Multiple textile braids				
Temperature Range	-40°F to +180°F (-40°C to +82°C) The hose construction is capable of this rating, however, LP Gas should NEVER be conveyed over 140°F (60°C).				
Branding	Side 1: PARKER 7232 CSA TYPE I CAUTION - LP GAS HOSE MH6737 UR® US (UL® Recognized component, with backwards "R") ISSUE NO. XXXX 350 PSI MAX WP MADE IN USA Type brand Side 2: PARKER LP GAS HOSE				
Brand Description	Embossed Brand and Black letter color, Yellow background				
Compare to	Boston Blackline (LPG); Gates LP350				

LENGTHS: 11/4" in 300 ft. reels or 100 ft. cartons with max. of 3 pieces, and 25 ft. min. length. 11/2" and 2" are 150 ft. lengths in cartons, max. of 3 pieces, and 40 ft. min. length.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. Other available coupling options: Series 7615, 7692. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Braids	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7232-1252 7232-1252100	1¼	31.8	2	1.815	46.1	85	12.0	350
7232-1503K	1½	38.1	3	2.156	54.8	118	14.0	350
7232-2003K	2	50.8	3	2.750	69.9	187	16.0	350



WARNING! For LP Gas use only! Do not use in anhydrous ammonia or refrigeration applications! Do NOT use male swivel couplings or screwtogether re-attachable fittings or any type of couplings that use O-Ring sealing surfaces!



- Bulk Loading and Unloading
- Delivery Trucks







Applications

- Refineries
- Bulk Loading and Unloading

LP Gas Hose - UL 21 Stainless Steel

Series 7231

Developed for connections in bulk plant or trucks where piping would be inefficient.

Can be used for natural gas with application specific criteria*. The molecules of natural gas are small, enhancing its ability to permeate through standard rubber or PVC hose constructions. The permeation process is more rapid as the working pressure increases. Use pipe, non-permeable tubing or hose with barrier constructions to convey natural gas. Series 7231 LP Gas hose can be used for natural gas service, but **ONLY** under the following conditions:

*Maximum working pressure of the application not to exceed 50 PSI. The application **must** be in an outside (non-enclosed) environment. Applications that are in an enclosed environment or greater than 50 PSI working pressure **are not recommended**.

Do not use LPG hose for fuel hose in vehicles using CNG (Compressed Natural Gas).

5:1 Design factor

>> Designed for safety; validated crimp specs and DOT assemblies are available

Tube	Black Nitrile				
Cover	Perforated Black Neoprene				
Reinforcement	One or multiple stainless steel braids				
Temperature Range	-40°F to +180°F (-40°C to +82°C) The hose construction is capable of this rating, however, LP Gas should NEVER be conveyed over 140°F (60°C).				
Branding	PARKER 7231 CSA TYPE I CAUTION - LP GAS HOSE MH6737 UR® (UL® Recognized component, with backwards "R") ISSUE NO. XXXX 350 PSI MAX WP MADE IN USA B2 (DATE CODE)				
Brand Description	Type Brand - Black letter color, Blue background				
Compare to	Titan SS106 LPG Hose				

LENGTHS: Random lengths 10 - 100 ft. 1" = 200 ft. per carton; $1\frac{1}{4}$ " = 100 ft. per carton; $1\frac{1}{2}$ " and 2" = 150 ft. per carton; max. 4 pieces, 10 ft. min. length in carton.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. Other available coupling options: Series 7615, 7692. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Braids	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7231-751	3/4	19.1	1	1.250	31.8	61	10.0	350
7231-1001	1	25.4	1	1.500	38.1	78	12.0	350
7231-1251	11/4	31.8	1	1.750	44.5	96	16.5	350
7231-1501K	1½	38.1	1	2.000	50.8	107	20.0	350
7231-2002K	2	50.8	2	2.625	66.7	177	25.0	350



WARNING! For LP Gas use only! Do not use in anhydrous ammonia or refrigeration applications! Do NOT use male swivel couplings or screwtogether re-attachable fittings or any type of couplings that use O-Ring sealing surfaces!





LP Gas Hose UL 569, CSA Type I

Series 7170

This hose is intended for use in the assembly of flexible hose connectors for conveyance of LP Gas products for use on barbecue grills, portable heaters, weed burning apparatus and similar applications. Meets or exceeds all Underwriter Laboratories (UL) 569 requirements, as well as the CSA (Canadian Standards Association) Type 1 LP Gas hose requirements.

Can be used for natural gas with application specific criteria*. The molecules of natural gas are small, enhancing its ability to permeate through standard rubber or PVC hose constructions. The permeation process is more rapid as the working pressure increases and natural gas accumulates with potentially dangerous consequences. Use pipe, non-permeable tubing or hose with barrier constructions to convey natural gas. Series 7170 LP Gas hose can be used for natural gas service, but ONLY under the following conditions:

*Maximum working pressure of the application not to exceed 50 PSI. The application **must** be in an outside (non-enclosed) environment. Applications that are in an enclosed environment or greater than 50 PSI working pressure are not recommended.

Do not use LPG hose for fuel hose in vehicles using CNG (Compressed Natural Gas).

5:1 Design factor

>> Flexible for ease of handling

Tube	Black Nitrile
Cover	Perforated Black Neoprene
Reinforcement	Multiple textile spirals
Temperature Range	-40°F to +180°F (-40°C to +82°C) The hose construction is capable of this rating; however, LP Gas should NEVER be conveyed above 140°F (60°C).
Branding	PARKER 7170 CSA TYPE 1 CAUTION - LP GAS HOSE 5 PSI / 350 PSI UR® (UL® Recognized component with backwards "R") MH11955 MADE IN USA (DATE CODE)
Brand Description	Impression Brand
Compare to	Thermoid Type 75

LENGTHS: Reels, 90% 1 piece, 10% 2 pieces, min. length 50 ft. with a +50 ft./-0 ft. reel footage tolerance.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Spirals	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP Vapor/Liquid
7170-25354	1/4	6.4	4	0.590	15.0	11	2.5	5 / 350
7170-31354	5/16	7.9	4	0.690	17.5	17	3.0	5 / 350
7170-38354	3/8	9.5	4	0.750	19.1	20	3.5	5 / 350



WARNING! For LP and Natural Gas* use only! Do not use in anhydrous ammonia or refrigeration applications! Do NOT use male swivel couplings or screw-together re-attachable fittings or any type of couplings that use O-Ring sealing surfaces!



- Weed Burning
- Heaters
- Grills & Cookers





LP Gas Vapor Hose

Series 7122

This product is designed for use as a light-duty, low pressure LP vapor transfer hose. It is recommended for applications such as space heaters used in chicken brooders and other farm and industrial applications.

Must be used in an outside or open environment.

4:1 Design factor

>> Economical; designed for light-duty service

Tube	Black Nitrile		
Cover	Red Neoprene, pin pricked		
Reinforcement	Multiple Textile Spirals		
Temperature Range	-20°F to +160°F (-29°C to +71°C)		
Branding	PARKER SERIES 7122 LPG VAPOR HOSE 125 PSI MAX WP MADE IN USA B2 (DATE CODE)		
Brand Description	Ink Brand - Black letter color		
Compare to	Gates LPG Vapor		

LENGTHS: Reels are 650 ft. (+ 50 ft./-0 ft.) 90% 1 piece., 10% 2 pieces., 50 ft. min. length.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. Other available coupling options: Series 7628. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Spirals	OD (in)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7122-38200	3/8	9.5	2	0.656	16.7	14.9	3.8	125



Applications

- Farm
- Industrial
- Heaters



WARNING! This hose should never exceed 125 PSI internal working pressure. This hose was designed for LP GAS - VAPOR ONLY type service. Not to be used for liquid LPG or barbecue grills - not UL listed. Should only be used in an outside, non-enclosed enviornment.





LP Gas Hose – UL 21 – Stainless Steel

Series 7233 - Rubber Cover

Developed for applications wherever a strong, corrosion resistant LP Gas hose is desired. The special low extract tube handles propane or butane in liquid and gas form.

Can be used for natural gas with application specific criteria*. The molecules of natural gas are small, enhancing its ability to permeate through standard rubber or PVC hose constructions. The permeation process is more rapid as the working pressure increases and natural gas accumulates with potentially dangerous consequences. Use pipe, non-permeable tubing or hose with barrier constructions to convey natural gas. Series 7233 LP Gas hose can be used for natural gas service, but ONLY under the following conditions:

*Maximum working pressure of the application not to exceed 50 PSI. The application **must** be in an outside (non-enclosed) environment. Applications that are in an enclosed environment or greater than 50 PSI working pressure are not recommended.

Do not use LPG hose for fuel hose in vehicles using CNG (Compressed Natural Gas).

5:1 Design factor

>> Compatible with permanent crimp and reusable couplings

Tube	Black Nitrile
Cover	Perforated Black Neoprene
Reinforcement:	One stainless steel braid
Temperature Range	-40°F to +180°F (-40°C to +82°C) Hose is capable of this rating. However, LPG should NEVER be elevated above 140° F during conveyance.
Branding	PARKER USA 7233 SS LP GAS HOSE MH6737 UL® ISSUE NO. XXX 350 PSI MAX WP (DATE CODE) B2- CAUTION- FOR LP GAS USE ONLY - 1750 PSI MIN BURST
Brand Description	Embossed Brand

LENGTHS: Random lengths on nominal 500 ft. reels, max. 5 pieces per reel, 25 ft. minimum

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. Other available coupling options: Parker Series 20. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Layers	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7233-311	5/16	7.9	1	0.675	17.1	19	4.0	350



WARNING! For LP and Natural Gas* use only! Do not use in anhydrous ammonia or refrigeration applications! Do NOT use male swivel couplings, or any type of couplings that use O-Ring sealing surfaces!



Applications

Fork Lifts







Applications

Fork Lifts

LP Gas Hose – UL 21 – Stainless Steel

Series 7243 - Textile Cover

Developed for applications wherever a strong, corrosion resistant LP Gas hose is desired. The special low extract tube handles propane or butane in liquid and gas form.

Can be used for natural gas with application specific criteria*. The molecules of natural gas are small, enhancing its ability to permeate through standard rubber or PVC hose constructions. The permeation process is more rapid as the working pressure increases and natural gas accumulates with potentially dangerous consequences. Use pipe, non-permeable tubing or hose with barrier constructions to convey natural gas. Series 7233 LP Gas hose can be used for natural gas service, but ONLY under the following conditions:

*Maximum working pressure of the application not to exceed 50 PSI. The application **must** be in an outside (non-enclosed) environment. Applications that are in an enclosed environment or greater than 50 PSI working pressure are not recommended.

Do not use LPG hose for fuel hose in vehicles using CNG (Compressed Natural Gas).

In Natural Gas applications, copper, brass, or other copper-containing fittings should be in accordance to the AGA rating of the particular apparatus. The hose used with Natural Gas should be subjected to the same rigorous tests and inspection as if it were being used with LPG.

5:1 Design factor

>> Compatible with permanent crimp and reusable couplings

Tube	Black Nitrile			
Cover	Rubber impregnated textile braid			
Reinforcement:	One stainless steel braid			
Temperature Range	-40°F to +180°F (-40°C to +82°C) Hose is capable of this rating. However, LPG should NEVER be elevated above 140° F during conveyance.			
Branding	PARKER USA 7243 SS LP GAS HOSE MH6737 UL® ISSUE NO. XXX 350 PSI MAX WP (DATE CODE) B2- CAUTION- FOR LP GAS USE ONLY - 1750 PSI MIN BURST			
Brand Description	Ink Brand - White letter color			
Compare to	Gates Stainless Steel LPG			

LENGTHS: Random lengths on nominal 450 ft. reels, max. 5 pieces per reel, 25 ft. minimum length.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. Other available coupling options: Parker Series 20. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Layers	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7243-251	1/4	6.4	1	0.581	14.8	15	1.7	350
7243-311	5/16	7.9	1	0.675	17.1	19	2.0	350
7243-401	13/32	10.3	1	0.766	19.5	23	2.3	350
7243-501	1/2	12.7	1	0.922	23.4	29	2.8	350



WARNING! For LP and Natural Gas* use only! Do not use in anhydrous ammonia or refrigeration applications! Do NOT use male swivel couplings, or any type of couplings that use O-Ring sealing surfaces!



NOTES:



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PETROLEUM – TRANSPORT

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Due to continual product improvements, Parker reserves the right to alter specifications without prior notice.





Gold Label® **Corrugated Lightweight Tank Truck Hose**

Series 7222 (Black) / 7223 (Red)

An extremely flexible rubber hose used for the transfer of petroleum products, this hose is lighter weight and more durable than plastic hose. The hose is designed for full suction, discharge service and Stage I vapor recovery applications. GOLD LABEL hose won't pin-hole in hot weather and won't crack in cold weather. The wide corrugation provides superior kink resistance and outstanding flexibility while eliminating the need for banding sleeves.

4:1 Design factor

>> Supports full suction and discharge service

Tube	Black Nitrile
Cover	Black or Red Neoprene
Reinforcement	Multiple textile plies with helix wires
Temperature Range	-20°F to +180°F (-29°C to +82°C)
Branding	PARKER SERIES 7222 GOLD LABEL Lightweight TANK TRUCK HOSE 150 PSI MAX WP MADE IN USA 001
Brand Description	Tape Brand - Black letters on gold stripe
Compare to	Gates Longhorn; Thermoid Transporter; Titan Petromax; Boston Bobcat; Goodyear Red Flextra

LENGTHS: 100 ft. Lengths up to 200 ft. on quotation. Contact IHP Customer Service for details.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. Other available coupling options: Series 7670. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Plies	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7222-150150	1½	38.1	2	2.008	51.0	91	3.0	150
7222-200150	2	50.8	2	2.528	64.2	123	4.0	150
7222-250150	2½	63.5	2	3.028	76.9	152	5.0	150
7222-300150	3	76.2	2	3.542	90.0	189	5.0	150
7222-400150	4	101.6	2	4.565	116.0	256	6.0	150
7223-2000	2	50.8	2	2.528	64.2	106	4.0	150
7223-2500	2½	63.5	2	3.028	76.9	139	5.0	150
7223-3000	3	76.2	2	3.542	90.0	173	5.0	150
7223-4000	4	101.6	2	4.565	116.0	228	6.0	150



Applications

• Tank Trucks



WARNING! Combination nipple and bands reduce the working pressure of the assembly to less than the hose's maximum working pressure. Refer to NAHAD Assembly Guidelines for working pressures.





TRANSLITE® Tank Truck Hose

Series 7216 (Black) / 7217 (Red)

A lightweight and flexible hose used in the transfer of gasoline, alcohol blended fuels, diesel fuels and other petroleum products. The hose is designed for full suction and discharge applications.

4:1 Design factor

>> Abrasion resistant for long service life

Tube	Black Nitrile
Cover	Black or Red Neoprene
Reinforcement	Multiple textile plies with helix wire
Temperature Range	-20°F to +180°F (-29°C to +82°C)
Branding	PARKER SERIES 7216 TRANSLITE® TANK TRUCK HOSE XXX PSI MAX WP MADE IN USA 001
Brand Description	Tape Brand: Black letters on orange stripe - 7216 Red letters on white stripe - 7217
Compare to	Goodyear Plicord Flexwing Petroleum; Gates Longhorn; Boston Puma; Titan SW303/309

LENGTHS: 100 ft.; 8", 50 ft. Lengths of up to 200 ft. available on quotation. Contact IHP Customer Service for details.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. Other available coupling options: Series 7670. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No. (in.) -1002 1	ID (mm) 25.4 31.8	Reinf. Plies	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
-1002 1		2	1 364	040			
	31.8			34.6	46	2.0	150
-1252 1¼	01.0	2	1.670	42.4	65	3.0	150
-1502 1½	38.1	2	1.960	49.8	92	4.0	150
-2002 2	50.8	2	2.512	63.8	120	6.0	150
-2502 2½	63.5	2	3.028	76.9	155	9.0	150
-3002 3	76.2	2	3.552	90.2	198	12.0	150
-4002 4	102.0	2	4.626	117.5	360	16.0	150
-5004 5	127.0	4	5.748	146.0	487	39.0	100
-6004 6	152.4	4	6.772	172.0	546	48.0	75
-8004 8	203.2	4	8.888	225.8	812	72.0	75



Applications

 Petroleum Transfer



WARNING! Combination nipple and bands reduce the working pressure of the assembly to less than the hose's maximum working pressure. Refer to NAHAD Assembly Guidelines for working pressure.



WARNING! Not to be submersed in marine applications.





TRANSLITE® Tank Truck Hose – Equalizer Version

Series 7216E

A lightweight and flexible hose used in the transfer of gasoline, alcohol blended fuels, diesel fuels and other petroleum products. The hose is designed for full suction and discharge applications.

3:1 Design factor

>> Economical

Tube	Black Nitrile			
Cover	Black Neoprene			
Reinforcement	Multiple textile plies with helix wire			
Temperature Range	-20°F to +160°F (-29°C to +71°C)			
Branding	PARKER SERIES 7216E TANK TRUCK HOSE XXX PSI MAX WP			
Brand Description	Tape Brand - orange stripe with black letters			
Compare to	Kuriyama T605AA; Goodyear Plicord Flexwing Petroleum; Gates Longhorn; Boston Puma			

LENGTHS: 100 ft. coils

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. Other available coupling options: Series 7670. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Plies	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7216E-1002	1	25.4	2	1.28	34.6	47	3.0	150
7216E-1252	1¼	31.8	2	1.69	42.4	65	4.0	150
7216E-1502	1½	38.1	2	2.00	49.8	92	5.0	150
7216E-2002	2	50.8	2	2.50	63.8	110	6.0	150
7216E-2502	2½	63.5	2	3.00	76.9	155	7.0	150
7216E-3002	3	76.2	2	362	90.2	210	8.0	150
7216E-4002	4	102.0	2	4.65	117.5	280	11.0	150

7216E

Applications

 Petroleum Transfer



WARNING! Combination nipple and bands reduce the working pressure of the assembly to less than the hose's maximum working pressure. Refer to NAHAD Assembly Guidelines for working pressure.



WARNING! Not to be submersed in marine applications.





Heavy Duty Fuel Suction and Discharge Hose Series 7330

Designed for heavy duty service in the transfer of petroleum products including gasoline, oil, and diesel fuels. The hose is designed for suction and discharge applications. 4:1 Design factor

>> Designed for durability

Tube	Black Nitrile
Cover	Black Neoprene
Reinforcement	Multiple textile plies with helix wire
Temperature Range	-20°F to +180°F (-29°C to +82°C)
Branding	PARKER SERIES 7330 HD TANK TRUCK XXX PSI MAX WP MADE IN USA 001
Brand Description	Tape Brand - Red letters on white stripe
Compare to	Titan SW353; Goodyear Plicord Super Black Flexwing

LENGTHS: 100 ft. Lengths up to 200 ft. continuous on quotation.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. Other available coupling options: Series 7615, 7692. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Plies	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7330-1250	11/4	31.8	2	1.686	42.8	71	6.0	300
7330-1500	11/2	38.0	2	1.976	50.2	100	8.0	300
7330-2000	2	50.8	4	2.622	66.6	166	8.0	300
7330-3000	3	76.2	4	3.654	92.8	241	15.0	300
7330-4000	4	101.6	4	4.812	122.2	387	20.0	300
7330-6000	6	152.4	4	6.906	175.4	665	36.0	300
7330-8000	8	203.2	6	9.118	231.6	1157	48.0	300



- Fuel Suction and Discharge
- Unloading Barges





Transport Fuel Discharge Hose – Softwall

Series 7224 (Red) / 7225 (Black)

This hose is used in truck-mounted transport service applications, which include discharge of gasoline, oil and fueling of diesel locomotives, buses and trucks. 4:1 Design factor

>> Flexible for ease of use and handling

Tube	Black Nitrile
Cover	Red or Black Neoprene
Reinforcement	Multiple textile plies with static wire
Temperature Range	-20°F to +180°F (-29°C to +82°C)
Branding	7224 PARKER SERIES 7224 FUEL DISCHARGE 200 PSI MAX WP MADE IN USA 001 7225 PARKER SERIES 7225 FUEL DISCHARGE 200 PSI MAX WP MADE IN USA 001
Brand Description	7224 - Tape Brand - Red letters on black stripe 7225 - Tape Brand - Black letters on red stripe
Compare to	Gates Steer; Titan SS242; Goodyear Plicord Fuel Discharge

LENGTHS: 100 ft. Lengths up to 200 ft. on quotation. Contact IHP Customer Service for details.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. Other available coupling options: Series 7670. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Plies	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
-1500	1½	38.1	2	2.000	50.8	84	9.0	200
-2000	2	50.8	2	2.504	63.6	108	11.0	200
-3000	3	76.2	2	3.504	89.0	161	12.0	200
-4000	4	101.6	2	4.536	115.2	209	20.0	200



Applications

· Fuel and Oil Delivery



WARNING! Combination nipple and bands reduce the working pressure of the assembly to less than the hose's maximum working pressure. Refer to NAHAD Assembly Guidelines for working pressure.





Heavy Duty Fuel Discharge Hose

Series 7351

Softwall petroleum transfer hose for heavy duty service. The high grade nitrile tube will handle gasoline, oil and diesel fuel. The high grade Neoprene cover is resistant to weather, oil and abrasion.

4:1 Design factor

>> Weather resistant to withstand the elements

Tube	Black Nitrile			
Cover	Black Neoprene			
Reinforcement	Multiple textile plies with static wire			
Temperature Range	-22°F to +180°F (-30°C to +82°C)			
Branding	PARKER SERIES 7351 FUEL DISCHARGE HOSE XXX PSI MAX WP MADE IN USA 001			
Brand Description	Tape Brand - White letters on red stripe			
Compare to	Titan SW353			

LENGTHS: 100 ft.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. Other available coupling options: Series 7615, 7692. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Plies	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7351-2000	2	50.8	4	2.716	69.0	170	24.0	200
7351-3000	3	76.2	4	3.780	96.0	262	36.0	200
7351-4000	4	102.0	4	4.772	121.2	320	48.0	200
7351-6000	6	152.4	4	6.812	173.0	501	72.0	150
7351-8000	8	203.2	4	8.646	219.6	500	96.0	150



Applications

• Fuel Transport





Hot Tar and Asphalt Hose

Series 7290

Designed for bulk transfer and delivery of hot petroleum products and hot wax. Will handle full suction and discharge pressures. 4:1 Design factor

>> Withstands high temperatures

Tube	Black Nitrile
Cover	Black Neoprene
Reinforcement	Multiple textile plies with helix wire
Temperature Range	-20°F to +350°/400°F (-29°C to +177°/204°C)
Branding	PARKER USA 7290 HOT TAR & ASPHALT HOSE XXX PSI MAX WP 001
Brand Description	Embossed Brand
Compare to	Goodyear Pyroflex; Thermoid Transporter; Boston Black Cat

LENGTHS: 100 ft. – other lengths on quotation, contact Customer Service.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. Other available coupling options: Series 7615, 7692. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Plies	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7290-1500	1½	38.0	4	2.125	54.0	127	4.0	175
7290-2000	2	50.8	4	2.630	66.8	163	6.0	175
7290-3000	3	76.2	4	3.701	94.0	280	12.0	150
7290-4000	4	102.0	4	4.717	119.8	365	16.0	100

7290

- Hot Tar
- Commercial Building and Roofing





MPW - 1000[®] **Multi-Purpose Hose**

Series 7204

This versatile multi-purpose hose is ideal for rugged service in many industrial and high pressure steam cleaning applications. In addition to air and water service, the oil resistant tube and cover will handle a variety of acids and chemicals. Suitable for saturated steam service to 150 PSI and temperatures to 368° F. Also suitable to convey hot tar, wax and glue at 300° F continuous, 350° F intermittent. 4:1 Design factor (10:1 for 150 PSI steam applications)

>> Withstands high temperatures in multiple uses

Tube	Black Nitrile
Cover	Perforated Black Neoprene
Reinforcement	One wire braid
Temperature Range	-20°F to +300°/350°/368°F (steam) -29°C to +149°/177°/187°C (steam)
Branding	PARKER 7204 - MPW 1000 PSI MAX WP (DATE CODE) MADE IN USA
Brand Description	Embossed Brand
Compare to	Gates 319MB Gold Master

LENGTHS: Random lengths on 500 ft. nominal reels, 50 ft. min. length. Max. 600 ft., min. 400 ft. 5 pieces max. per reel with 50 ft. length.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. Other available coupling options: Series 7615, 7692. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Layers	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP	Max. Steam WP
7204-381	3/8	9.5	1	0.781	19.8	28	5.0	1000	150
7204-501	1/2	12.7	1	0.906	23.0	34	7.0	1000	150
7204-751	3/4	19.1	1	1.187	30.1	52	9.5	1000	150
7204-1001	1	25.4	1	1.500	38.1	75	12.0	1000	150



- Steam Service
- Acid and Chemical Transfer
- Hot Tar, Wax and Glue





Deadman Twin Sensing Hose

Series 7138 (gray/yellow) / 7139 (red/green)

Designed for deadman systems that connect hand control to hydrant and refueling trucks. The nitrile tube resists compressor oil while the cover is oil, abrasion and weather resistant.

4:1 Design factor

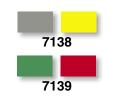
>> Designed for weather resistance

Tube	Black Nitrile
Cover	7138 - Gray and Yellow Neoprene 7139 - Green and Red Neoprene
Reinforcement	Multiple textile spirals
Temperature Range	-30°F to +200°F (-34°C to +93°C)
Branding	PARKER SERIES 7139 DEADMAN TWIN HOSE 1/4 ID (6.4 MM) 200 PSI MAX WP MADE IN USA
Brand Description	Ink Brand - White letter color
Compare to	Goodyear Deadman Aircraft Refueling

LENGTHS: Reels 750 ft., max. 3 pieces per reel, min. length 50 ft., all lengths in multiples of 50 ft.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. Other available coupling options: Series 7628. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Spirals	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Min. Rec. WP
7138-191	3/16	4.8	2	0.438	11.1	13	2.0	200
7139-251	1/4	6.4	2	0.531	13.5	19	2.0	200



Applications

 Deadman Systems





Twin Sensing Hose – Green & Yellow

Series 7140

This hose is designed for air and fuel sensing service on aircraft refueling systems. The hose consists of an oil and fuel resistant nitrile tube and an abrasion, oil and weather resistant cover.

4:1 Design factor

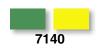
>> Weather resistant for exposure to the elements

Tube	Black Nitrile
Cover	Green and Yellow Neoprene
Reinforcement	Multiple Textile Spirals
Temperature Range	-30°F to +200°F (-34°C to +93°C)
Branding	PARKER SERIES 7140 TWIN SENSING HOSE % ID (9.5 MM) 250 PSI
Brand Description	Ink Brand - White letter color
Compare to	Goodyear Refueling Sensing

LENGTHS: 700 ft. max., 400 ft. min., 3 pieces max., 50 ft. min. length.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. Other available coupling options: Series 7628. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Spirals	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7140-381	3/8	9.5	2	0.656	16.7	29	3.0	250



Applications

 Aircraft Refueling Systems





SAE 30R7 Fuel Line and Vapor Emission Hose

Gasoline and Vapor Emission Hose manufactured to meet SAE 30R7 specifications. Durable cover resists deterioration from oil, grease, heat and ozone and gives long service life.

4:1 Design factor

>> Designed for long service life

Tube	Black NBR
Cover	Black Neoprene
Reinforcement	Textile Spirals
Temperature Range	-30°F to +250°F (-34°C to +121°C)
Branding	3/16 in. ID FUEL/VAPOR LINE SAE30R7 (DATE CODE)
Brand Description	Ink Brand - White letter color
Compare to	Thermoid Fueling, Vapor Emission and Crankcase Ventilation SAE 30R7

LENGTHS: 250 ft. per spool, max. 2 pieces. No piece shorter than 25 ft. COUPLINGS: For permanent crimp specifications, refer to CrimpSource. Other available coupling options: Series 7628. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Layers	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
39553	³ ⁄ ₁₆	4.8	2	0.406	10.3	7	2.0	75
39550	1/4	6.4	2	0.500	12.7	10	2.0	50
39551	5⁄16	7.9	2	0.563	14.3	11	3.0	50
39552	3/8	9.5	2	0.625	15.9	14	3.5	50



Applications

 Carburetor **Fuel Line**





Super-Flex FL Fuel Line Hose - CARB Approved

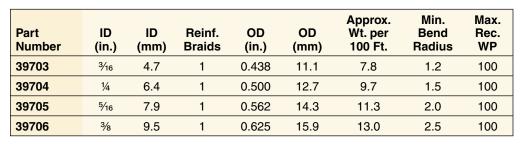
Parker's Super-Flex FL fuel line hose includes a thermoplastic barrier that helps protect the atmosphere from harmful hydrocarbons that escape through the carcass of ordinary fuel hose. This new hose surpasses all of CARB's stringent permeation requirements along with the SAE30R7 specifications. The Super-Flex FL hose also features an abrasion and weather resistant cover to help protect from external application abuse. NOTE: Approved for biodiesel fuels that meet ASTM D 6751 requirements per UL guidelines for biodiesel compatability.

4:1 Design factor

>> Low permeation levels

Tube	NBR with a thermoplastic barrier
Cover	Black Hypalon
Reinforcement	Polyester
Temperature Range	-30°F to +257°F (-34°C to +125°C)
Branding	PARKER 39704 SUPER-FLEX FL 1/4" ID LOW PERMEATION FUEL LINE – CARB 2006 APPROVED EXECUTIVE ORDER C-U-06-016
Brand Description	Ink Brand - White letter color
Compare to	Avon Greenbar, Mold-Ex, Mark IV PermaSeal

LENGTHS: Packaged 250 ft. reels, max. 3 pieces. No piece shorter than 25 ft. **COUPLINGS:** For permanent crimp specifications, refer to CrimpSource. Other available coupling options: Series HY, HBL. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.





- · Off road Engines
- Mowers, Blowers, Tillers, Grinders
- Saws
- Pressure Washers



NOTES:



OIL FIELD

	Series	Page
BS & W™ Oilfield Suction Hose – Smooth Cover	7208	114
BS & W™ Oilfield Suction Hose – Corrugated Cover, Premium	7213	115
BS & W™ Oilfield Suction Hose – Corrugated Cover, Equalizer	7213E	116
WILDCATTER® Hose	7234	117
Frac Tank Hose	7307	118
Jetting Hose – 500 PSI	7335	119
WILDCATTER® Hot Oiler Hose	7301	120
MPW - 1000® Multi-Purpose Hose	7204	121
Mud Hose	7309	122

Due to continual product improvements, Parker reserves the right to alter specifications without prior notice.





BS & W™ **Oilfield Suction Hose**

Series 7208 - Smooth Cover

CAUTION: Not to be used for refined petroleum products

An economical, lightweight, and flexible hose designed for the transfer of crude oil and brine water. Specially designed for oilfield waste pit recovery service. Smooth

4:1 Design factor

>> Rugged construction for extreme conditions

Tube	Special black synthetic rubber compound
Cover	Special black synthetic rubber compound
Reinforcement	Textile plies with helix wire
Temperature Range	-30°F to +180°F (-34°C to +82°C)
Branding	PARKER SERIES 7208 BS&W OIL FIELD SUCTION HOSE NOT FOR REFINED FUELS MADE IN USA 001
Brand Description	Tape Brand - White letters on blue stripe
Compare to	Goodyear Flexwire Oilfield

LENGTHS: 100 ft. lengths of up to 200 ft. available on quotation. Contact IHP Customer Service for details.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. Other available coupling options: Series 7670. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Plies	OD (in.)	OD (mm)	Aprox. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7208-1000	1	25.4	2	1.408	35.8	48	2.0	150
7208-1250	11/4	31.8	2	1.688	42.9	67	3.0	150
7208-1500	1½	38.1	2	2.000	50.8	98	4.0	150
7208-2000	2	50.8	2	2.512	63.8	125	6.0	150
7208-2500	21/2	63.5	2	3.000	76.2	155	9.0	150
7208-3000	3	76.2	2	3.512	89.2	195	12.0	150
7208-4000	4	102.0	2	4.552	115.6	260	16.0	150
7208-6000	6	152.4	4	6.716	170.6	515	48.0	150

7208

Applications

 Oil Field Waste Recovery



WARNING! Combination nipple and bands reduce the working pressure of the assembly which is less then the hose's maximum working pressure. Refer to NAHAD Assembly Guidelines for working pressure.





BS & W[™] Oilfield Suction Hose – Premium Version

Series 7213 - Corrugated Cover

CAUTION: Not to be used for refined petroleum products

An economical, lightweight and flexible hose designed for the transfer of crude oil and brine water. Specially designed for oilfield waste pit recovery service. Corrugated for flexibility.

4:1 Design factor

>> Corrugated cover for increased flexibility and ease of handling

Tube	Special black synthetic rubber compound
Cover	Special black synthetic rubber compound
Reinforcement	Textile plies with helix wire
Temperature Range	-30°F to +180°F (-34°C to +82°C)
Branding	PARKER SERIES 7213 BS&W OIL FIELD SUCTION HOSE NOT FOR REFINED FUELS MADE IN USA 001
Brand Description	Tape Brand - White letters on blue stripe
Compare to	Goodyear Flextra Oilfield; Kuriyama T601AA; Jason Tupelo 4677; Texcel Tex-Vac

LENGTHS: 100 ft. lengths of up to 200 ft. available on quotation. Contact IHP Customer Service for details.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. Other available coupling options: Series 7670. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Plies	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7213-1500	11/2	38.1	2	1.976	50.2	86	4.0	150
7213-2000	2	50.8	3	2.520	64.0	121	6.0	150
7213-2500	21/2	63.5	3	3.020	76.7	147	9.0	150
7213-3000	3	76.2	3	3.520	89.4	174	12.0	150
7213-4000	4	101.6	3	4.568	116.0	258	16.0	150
7213-6000	6	152.4	5	6.748	171.4	474	48.0	150



Applications

 Oil Field Waste Recovery



WARNING! Combination nipple and bands reduce the working pressure of the assembly which is less then the hose's maximum working pressure. Refer to NAHAD Assembly Guidelines for working pressure.





BS & W[™] Oilfield Suction Hose – Equalizer Version

Series 7213E - Corrugated Cover

CAUTION: Not to be used for refined petroleum products

An economical, lightweight and flexible hose designed for the transfer of crude oil and brine water. Specially designed for oilfield waste pit recovery service. Corrugated for flexibility.

3:1 Design factor

>> Lightweight and economical

Tube	Special black synthetic rubber compound
Cover	Special black synthetic rubber compound
Reinforcement	Textile plies with helix wire
Temperature Range	-30°F to +180°F (-34°C to +82°C)
Branding	PARKER SERIES 7213E BS&W OIL FIELD SUCTION HOSE (NOT FOR REFINED FUELS) 150 PSI MAX WP
Brand Description	Tape Brand - White letters on blue stripe
Compare to	Goodyear Flextra Oilfield; Kuriyama T601AA; Jason Tupelo 4677; Texcel Tex-Vac

LENGTHS: 100 ft.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. Other available coupling options: Series 7670. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Plies	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7213E-2000	2	50.8	3	2.45	62.2	105	6.0	150
7213E-2500	21/2	63.5	3	2.95	74.9	126	9.0	150
7213E-3000	3	76.2	3	3.48	88.4	198	12.0	150
7213E-4000	4	101.6	3	4.55	115.6	268	16.0	150



Applications

 Oil Field Waste Recovery



WARNING! Combination nipple and bands reduce the working pressure of the assembly which is less then the hose's maximum working pressure. Refer to NAHAD Assembly Guidelines for working pressure.





WILDCATTER® XTSlim Hole Rotary Drill Hose

Series 7234

Designed for rotary service on portable drilling units, workover rigs and seismograph equipment. This tough, flexible and versatile hose can also be used as a discharge hose for reverse circulation, acidizer and cement solution. Meets API-7 requirements. 2.5:1 Minimum design factor

>> Rugged construction eliminates down time

Tube	Black Neoprene
Cover	Black Hypalon with blue stripe
Reinforcement	Multiple wire spirals
Temperature Range	-40°F to +200°F (-40°C to +93°C)
Branding	PARKER USA WILDCATTER® 3000 PSI WP 001
Brand Description	Tape Brand - Black letter color, blue background
Compare to	Gates Powerbraid Plus Slim Rotary Hole

LENGTHS: 50 ft. and 100 ft.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Spirals	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7234-2002XT	2	50.8	4	2.590	65.8	275	18.0	3000



- Portable Drilling Units
- Workover Rigs





Frac TankSuction and Discharge Hose

Series 7307

Designed for various oilfield suction and Frac tank service applications including drilling mud, crude oil, salt and fresh water and dilute hydrocloric acid. Oil resistant tube and cover. *Not recommended for refined fuels.* 3:1 Design factor

>> Corrugated cover provides superior flexibility

Tube	Black Nitrile/SBR Blend
Cover	Black Nitrile/SBR Blend - Corrugated
Reinforcement	Multiple polyester textile plies
Temperature Range	-20°F to +180°F (-28°C to +82°C)
Branding	PARKER SERIES 7307 OILFIELD SUCTION & FRAC TANK HOSE 100 PSI NOT FOR REFINED FUELS MADE IN USA
Brand Description	Tape Brand - Yellow letters on blue stripe
Compare to	Texcel Super Frac

LENGTHS: 100 ft.

Part No.	ID (in.)	ID (mm)	Reinf. Plies	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7307-4000	4	101.6	2	4.590	116.6	251	12.0	150
7307-6000	6	152.4	3	6.713	170.5	458	18.0	150
7307-8000	8	203.2	3	8.800	223.5	658	24.0	150



Applications

 Frac Tank Loading and Unloading





Jetting Hose – 500 PSI

Series 7335

High pressure jetting hose with abrasion resistant tube and cover. This hose is designed for suction and discharge.
4:1 Design factor

>> Abrasion resistant tube and cover

Tube	Black SBR
Cover	Black SBR
Reinforcement	Multiple textile plies
Temperature Range	-40°F to +180°F (-40°C to +82°C)
Branding	PARKER SERIES 7335 HIGH PRESSURE JETTING HOSE XXX PSI MAX WP MADE IN USA 001
Brand Description	Tape Brand - Black letters on blue stripe
Compare to	Titan SS122

LENGTHS: 100 ft. lengths of up to 200 ft. available on quotation. Contact IHP Customer Service for details.

Part No.	ID (in.)	ID (mm)	Reinf. Plies	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7335-1250	11/4	31.8	2	1.750	44.4	58	7.0	500
7335-1500	1½	38.1	2	2.008	51.0	68	9.0	500
7335-2000	2	50.8	4	2.637	67.0	111	16.0	500
7335-2500	2½	63.5	4	3.165	80.4	144	20.0	500
7335-3000	3	76.2	4	3.736	94.9	184	24.0	500
7335-4000	4	102.0	6	4.898	124.4	316	32.0	300



- High Pressure Water Jetting
- Offshore
 Cable Covering





WILDCATTER® Hot Oiler Hose

Series 7301

A unique hot oiler hose specially designed for transferring hot oil at 275° F continuous, 300° F intermittent. The rugged neoprene cover is abrasion and gouge resistant. 3:1 Design factor

>> Long lasting and durable

Tube	Black Neoprene			
Cover	Black Neoprene			
Reinforcement	Multiple wire braids			
Temperature Range	-40°F to +275°/300°F (-40°C to +135°/149°C)			
Branding	PARKER USA 7301 WILDCATTER HOT OILER HOSE 1-1/2 ID 2250 PSI MAX WP TEMP RATING 275° F CONTINUOUS 300° F INTERMITTENT 001			
Brand Description	Tape Brand - Red letter color			
Compare to	Titan SW387			

LENGTHS: 50 ft. and 75 ft. available

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Braids	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7301-1502	1½	38.1	2	2.000	50.8	159	13.0	2250
7301-150275	1½	38.1	2	2.000	50.8	159	13.0	2250



Applications

Hot Oil Transfer





MPW - 1000[®] Multi-Purpose Hose

Series 7204

This versatile multi-purpose hose is ideal for rugged service in many industrial and high pressure steam cleaning applications. In addition to air and water service, the oil resistant tube and cover will handle a variety of acids and chemicals. Suitable for saturated steam service to 150 PSI and temperatures to 368° F. Also suitable to convey hot tar, wax and glue at 300° F continuous, 350° F intermittent.

4:1 Design factor (10:1 for 150 PSI steam applications)

>> Withstands high temperatures in multiple uses

Tube	Black Nitrile
Cover	Perforated Black Neoprene
Reinforcement	One wire braid
Temperature Range	-20°F to +300°/350°/368°F (steam) -29°C to +149°/177°/187°C (steam)
Branding	PARKER 7204 - MPW 1000 PSI MAX WP (DATE CODE) MADE IN USA
Brand Description	Embossed Brand
Compare to	Gates 319MB Gold Master

LENGTHS: Random lengths on 500 ft. nominal reels, 50 ft. min length. Max. 600 ft., min. 400 ft.; 5 pieces max. per reel with 50 ft. length.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. Other available coupling options: Series 7615, 7692. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Layers	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP	Max. Steam WP
7204-381	3⁄8	9.5	1	0.781	19.8	28	5.0	1000	150
7204-501	1/2	12.7	1	0.906	23.0	34	7.0	1000	150
7204-751	3/4	19.1	1	1.187	30.1	52	9.5	1000	150
7204-1001	1	25.4	1	1.500	38.1	75	12.0	1000	150



- Steam Service
- Acid and Chemical Transfer
- Hot Tar, Wax and Glue





Mud Hose - 300 PSI

Series 7309

Designed for use as a high pressure discharge hose for drilling mud, petroleum waste and water discharge applications. The tube is rated for RMA Class A-High Oil Resistance.

4:1 Design factor

>> Rugged construction with oil resistant cover

Tube	Black Nitrile
Cover	Black Neoprene
Reinforcement	Multiple polyester textile plies with static wire
Temperature Range	-20°F to +180°F (-28°C to +82°C)
Branding	PARKER SERIES 7309 MUD HOSE 300 PSI MAX WP MADE IN USA
Brand Description	Tape Brand - Black letters on yellow stripe
Compare to	Titan SS-145 Oil and Gas Hose, SS-160 Mud Hose

LENGTHS: 100 ft. standard. Lengths up to 200 ft. on quotation. Contact IHP Customer Service for details.

Part No.	ID (in.)	ID (mm)	Reinf. Layers	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7309-2000	2	50.8	4	2.764	70.2	475	24.0	300
7309-3000	3	76.2	4	3.835	97.4	267	36.0	300
7309-4000	4	101.6	4	4.898	124.4	358	48.0	300
7309-5000	5	127.0	4	5.937	150.8	461	60.0	300
7309-6000	6	152.4	6	7.087	180.0	628	72.0	300
7309-8000	8	203.2	6	9.250	233.2	884	96.0	300

7309

- Petroleum Waste
- Mud Drilling
- High Pressure Water



NOTES:	



NOTES:



SPECIAL APPLICATIONS

	Series	Page
Signal Call Tubing		126
Conduit Hose - Reinforced - US MSHA		
Conduit Hose - Non-Reinforced - US MSHA	7338	128

Due to continual product improvements, Parker reserves the right to alter specifications without prior notice.





Signal Call Tubing

Specially compounded extruded tubing allows use where grease, oil, gasoline an most acids are found. Resists puncturing from snow tire studs. Remains flexible in subzero temperatures.

>> Designed for long service life

Material	EPDM
Reinforcement	None
Temperature Range	-40°F to +180°F (-40°C to +82°C)
Branding	None
Compare to	Thermoid Driveway Signal Call Tubing; Gates Signal Call Hose

LENGTHS: 500 ft. per reel, 90% 1 piece, 10% 2 piece, 50 ft. minimum length. COUPLINGS: For permanent crimp specifications, refer to CrimpSource. Other available coupling options: Series 7628. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
39521	3/8	9.5	0.625	15.9	13	3.0	25



- Auto Repair Centers
- Highway Departments





Conduit Hose – Reinforced – US MSHA

Series 7337M (Smooth Cover) / 7337 (Wrapped Cover)

Designed for use as cable cover on underground mining equipment. Meets US MSHA standards for flame resistance and wall thickness and is embossed with US MSHA legend.

>> Rugged construction for extreme conditions

Tube	Black Synthetic Rubber
Cover	Black Synthetic Rubber 7337M Smooth Cover 7337 Mandrel-built Wrapped Cover
Reinforcement	Multiple textile plies
Temperature Range	-30°F to +180°F (-34°C to +82°C)
Branding	PARKER SERIES 7337 PREMIUM CONDUIT HOSE FLAME RESISTANT MINE CONDUIT MSHA NO. 2G-2/11 MADE IN USA (7337) MSHA NO. 18-HCA060001 MADE IN USA (7337M)
Brand Description	Embossed Brand

LENGTHS: 7337: 50 ft. 100 ft. and 200 ft. are stocked in some sizes.

7337M: Reels packaged with standard lengths as minimum, with up to one 50 ft. length max. over standard. 11/2" reel packaged with 150 ft. as minimum, up to the standard length as maximum.

Sizes $\frac{1}{2}$ " through 1": 90% 1-piece reels, 10% 2-piece with 50 ft. multiples. Sizes 11/8" through 11/2": 70% 1-piece reels, 30% 2-piece with 50 ft. multiples.

COUPLINGS: None required

Part No.	ID (in.)	ID (mm)	Reinf. Plies	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.
7337M-502	1/2	12.7	2	0.968	24.6	31
7337M-632	5/8	15.9	2	1.093	27.8	37
7337M-752	3/4	19.1	2	1.218	30.9	41
7337M-1002	1	25.4	2	1.468	37.3	52
7337M-1132	11/8	28.6	2	1.593	40.5	57
7337M-1252	11⁄4	31.8	2	1.718	43.6	63

Part No.	ID (in.)	ID (mm)	Reinf. Plies	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.
7337-1382	1%	34.9	2	1.811	46.0	69
7337M-1502	1½	38.1	2	1.929	49.0	73
7337-1752	1¾	44.5	2	2.183	55.4	85
7337-1882	17⁄8	47.6	2	2.308	58.6	90
7337-2002	2	50.8	2	2.435	61.8	96
7337-2252	21/4	57.2	2	2.687	68.2	107
7337-2382	23/8	60.3	2	2.809	71.3	112
7337-2502	2½	63.5	2	2.933	74.5	117
7337-3002	3	76.2	2	3.435	87.2	139
7337-3502	3½	90.0	2	3.976	101.0	162
7337-4002	4	102.0	2	4.449	113.0	182
7337-5002	5	127.0	2	5.433	138.0	225
7337-6002	6	152.4	2	6.437	163.5	271



Applications

 Underground Mines





Conduit Hose - Non-Reinforced - US MSHA

Series 7338

Designed for use as cable cover on underground mining equipment. Meets US MSHA standards for flame resistance and wall thickness and is embossed with US MSHA legend.

>> Economical option without reinforcement

Construction	Minimum 3/16 in. thick Black Synthetic Rubber tubing		
Temperature Range	-30°F to +180°F (-34°C to +82°C)		
Branding	PARKER SERIES 7338 PREMIUM CONDUIT HOSE FLAME RESISTANT MINE CONDUIT MSHA NO. 2G-57/4 MADE IN USA (USMSHA number may vary)		
Brand Description	Embossed Brand		
Compare to	Goodyear M&P Mine Conduit		

LENGTHS: 50 ft. Many sizes also stocked in 100 ft. and 200 ft. lengths

COUPLINGS: None required

Part No.	ID (in.)	ID (mm)	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.
7338-1750	1¾	44.5	2.175	55.2	87
7338-2000	2	50.8	2.427	61.6	98
7338-2250	21/4	57.2	2.679	68.0	110
7338-2380	23/8	60.3	2.801	71.1	115
7338-2500	2½	63.5	2.927	74.3	121
7338-3000	3	76.2	3.428	87.1	143



Applications

• Underground Mines



NOTES:		



NOTES:



STEAM

	Series	Page
STEAM-LANCE® 250 Steam Hose	7263, 7264	132
DRAGON BREATH® Butyl Steam Hose		
DRAGON BREATH® 250 Steam Hose	7288, 7289	134
STEAM-LANCE® 150 Steam Cleaner Hose		
MPW - 1000® Multi-Purpose Hose	7204	136

Due to continual product improvements, Parker reserves the right to alter specifications without prior notice.





STEAM – LANCE® 250 Steam Hose

Series 7263 (Black) / 7264 (Red)

Designed for saturated steam applications at pressures to 250 PSI and temperatures to 406° F. This hose will also handle super heated steam to 250 PSI and 450° F. The steel wire braids provide maximum strength and can be utilized as a static wire to make the hose assembly electrically conductive. Validated permanent crimp specs are available. **Not for use with detergents.**

10:1 Design factor (2500 PSI minimum burst) for steam applications.

>> Safest product in the industry

Tube	Black EPDM
Cover	Perforated Black or Red EPDM
Reinforcement	Multiple wire braids
Temperature Range	-20°F to +406°/450°F (-29°C to +208°/232°C)
Branding	PARKER 7263 STEAM LANCE® 250 PSI MAX WP MADE IN USA B2 (DATE CODE)
Brand Description	Embossed Brand
Compare to	Goodyear Flexsteel 250 CB Steam; Boston Concord 250

LENGTHS: 50 ft. lengths. Also available in $\frac{1}{2}$ " through 1" random lengths on 500 ft reels, +/- 100 ft. 5 pieces max. with 50 ft. min. length.

COUPLINGS:

WARNING! Use ONLY Parker recommended hose/coupling combinations for Steam Applications!

For permanent crimp specifications, refer to CrimpSource. Coupling options include: Series 7610, 7613, 7615, 7692. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Braids	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
-502	1/2	12.7	2	1.031	26.2	48	7.0	250
-752	3/4	19.1	2	1.343	34.1	66	9.5	250
-1002	1	25.4	2	1.593	40.5	82	12.0	250
-1252	11/4	31.8	2	1.875	47.6	115	16.5	250
-1502	1½	38.1	2	2.188	55.6	137	20.0	250
-2002	2	50.8	2	2.687	68.2	178	25.0	250



Applications

- Food Processing
- Plant Steam Service
- Refineries



WARNING! Water changes to hot water and phases of steam when subjected to heat and pressure. The greater the pressure, the higher the temperature required to achieve, maintain a steam phase. If the steam escapes, dangerous quantities of heat are released very suddenly. Hot water, low pressure steam, and high pressure steam can cause severe scalding or fatal burns.

USE ONLY STEAM HOSES DESIGNED FOR STEAM APPLICATIONS.



WARNING! Failure to properly use, maintain, test and inspect steam hose assemblies can result in injury to personnel or damage to property.





DRAGON BREATH®Butyl Steam Hose

Series 7286

A premium steam hose designed for saturated steam applications at pressures to 250 PSI and temperatures to 406° F. This hose will also handle super heated steam to 250 PSI and 450° F. The steel wire braids provide maximum strength and can be utilized as a static wire to make the hose assembly electrically conductive.

Not for use with detergents.

10:1 Design factor

>> Designed for extended service life

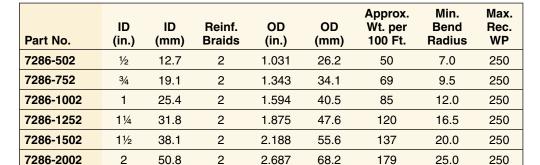
Tube	Black Butyl
Cover	Perforated Black or Red Butyl
Reinforcement	Multiple wire braids
Temperature Range	0°F to +406°/450°F (-18°C to +208°/232°C)
Branding	PARKER USA 7286 BUTYL STEAM 250 PSI MAX WP B2 (DATE CODE)
Brand Description	Embossed Brand
Compare to	Boston Concord Standard Steam

LENGTHS: 50 ft. lengths. Also available in $\frac{1}{2}$ in. through 1 in. random lengths on 500 ft. reels, 5 piece max. with 50 ft. min. length.

COUPLINGS:

WARNING! Use ONLY Parker recommended hose/coupling combinations for Steam Applications!

For permanent crimp specifications, refer to CrimpSource. Coupling options include: Series 7610, 7612, 7613, 7615, 7692. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.





Applications

- Food Processing
- Plant Steam Service
- Refineries



WARNING! Water changes to hot water and phases of steam when subjected to heat and pressure. The greater the pressure, the higher the temperature required to achieve, maintain a steam phase. If the steam escapes, dangerous quantities of heat are released very suddenly. Hot water, low pressure steam and high pressure steam can cause severe scalding or fatal burns.

USE ONLY STEAM HOSES DESIGNED FOR STEAM APPLICATIONS.



WARNING! Failure to properly use, maintain, test, and inspect steam hose assemblies can result in injury to personnel or damage to property.





DRAGON BREATH® 250 **Steam Hose**

Series 7288 (Red) / 7289 (Black, NON-STOCK)

This hose is designed for saturated steam (250 PSI at 406° F) or super heated steam service (250 PSI at 450° F). The double wire braid offers maximum strength and can be utilized as a static wire to make the hose assembly electrically conductive. The oil resistant cover (RMA Class B) makes the hose ideal for refinery service. 10:1 Design factor for steam applications

>> Oil resistant – ideal for refineries

Tube	Black EPDM
Cover	Perforated Red Neoprene or Black Hypalon
Reinforcement	One wire braid
Temperature Range	-20°F to +406°/450°F (-29°C to +208°/232°C)
Branding	PARKER USA 7288 DRAGON BREATH® (DATE CODE) B2 250 PSI MAX WP
Brand Description	Embossed Brand
Compare to	Goodyear Flexsteel 250 ORS Steam; Boston Concord 250; Gates 232MB Steam Queen

LENGTHS: 50 ft. lengths. Also available in ½ in. through 1 in. Random lengths on reels.

COUPLINGS:

WARNING! Use ONLY Parker recommended hose/coupling combinations for Steam Applications!

For permanent crimp specifications, refer to CrimpSource. Coupling options include: Series 7610, 7612, 7613, 7615, 7692. For assembly guidelines and additional

Part No.	ID (in.)	ID (mm)	Reinf. Braids	OD (in.)	OD (mm)	Aprox. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
-502	1/2	12.7	2	1.031	26.2	52	7.0	250
-752	3/4	19.1	2	1.343	34.1	73	9.5	250
-1002	1	25.4	2	1.594	40.5	90	12.0	250
-1252	11/4	31.8	2	1.875	47.6	124	16.5	250
-1502	1½	38.1	2	2.187	55.5	144	20.0	250
-2002	2	50.8	2	2.688	68.3	188	25.0	250



7288

Applications

- Food Processing
- Plant Steam Service
- Refineries



WARNING! Water changes to hot water and phases of steam when subjected to heat and pressure. The greater the pressure, the higher the temperature required to achieve, maintain a steam phase. If the steam escapes, dangerous quantities of heat are released very suddenly. Hot water, low pressure steam and high pressure steam can cause severe scalding or fatal burns.

USE ONLY STEAM HOSES DESIGNED FOR STEAM APPLICATIONS.



WARNING! Failure to properly use, maintain, test and inspect steam hose assemblies can result in injury to personnel or damage to property.





STEAM-LANCE® 150Steam Cleaner Hose

Series 7250

The hose is designed for tough, constant use in steam cleaning operations in oily environments, and for saturated steam applications. Pressures to 150 PSI and temperatures to 368°F. Validated permanent crimp specs are available.

10:1 Design factor for steam applications

>> Designed to decrease downtime

Tube	Black Nitrile
Cover	Perforated Red Neoprene
Reinforcement	One wire braid
Temperature Range	-20°F to +368°F (-29°C to 187°C)
Branding	PARKER USA 7250 STEAM LANCE® (DATE CODE) 150 PSI MAX WP - B2
Brand Description	Embossed Brand
Compare to	Boston Concord 250 O.R.

LENGTHS: Random lengths on nominal 500 ft. reels. Max. 600 ft., min. 400 ft., 5 pieces max. with 50 ft. min. length.

COUPLINGS: WARNING! Use ONLY Parker recommended hose/coupling combinations for Steam Applications!

For permanent crimp specifications, refer to CrimpSource. Coupling options include: Series 7610, 7613, 7615, 7692. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Braids	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7250-381	3/8	9.5	1	0.781	19.8	28	5.0	150
7250-501	1/2	12.7	1	0.906	23.0	34	7.0	150
7250-751	3/4	19.1	1	1.187	30.1	51	9.5	150
7250-1001	1	25.4	1	1.500	38.1	75	12.0	150



Applications

- Food Processing
- Plant Steam Service
- Refineries



WARNING! Water changes to hot water and phases of steam when subjected to heat and pressure. The greater the pressure, the higher the temperature required to achieve, maintain a steam phase. If the steam escapes, dangerous quantities of heat are released very suddenly. Hot water, low pressure steam, and high pressure steam can cause severe scalding or fatal burns.

USE ONLY STEAM HOSES DESIGNED FOR STEAM APPLICATIONS.



WARNING! Failure to properly use, maintain, test and inspect steam hose assemblies can result in injury to personnel or damage to property.





MPW - 1000[®] Multi-Purpose Hose

Series 7204

This versatile multi-purpose hose is ideal for rugged service in many industrial and high pressure steam cleaning applications. In addition to air and water service, the oil resistant tube and cover will handle a variety of acids and chemicals. Suitable for saturated steam service to 150 PSI and temperatures to 368° F. Also suitable to convey hot tar, wax and glue at 300° F continuous, 350° F intermittent.

4:1 Design factor (10:1 for 150 PSI steam applications)

>> Withstands high temperatures in multiple uses

Tube	Black Nitrile
Cover	Perforated Black Neoprene
Reinforcement	One wire braid
Temperature Range	-20°F to +300°/350°/368°F (steam) -29°C to +149°/177°/187°C (steam)
Branding	PARKER 7204 - MPW 1000 PSI MAX WP (DATE CODE) MADE IN USA
Brand Description	Embossed Brand
Compare to	Boston 200 LL Steam; Gates 319MB Gold Master

LENGTHS: Random lengths on 500 ft. nominal reels. Max. 600 ft., min. 400 ft. 5 pieces max. per reel with 50 ft. min. length.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. Other available coupling options: Series 7615, 7692. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Layers	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP	Max. Steam WP
7204-381	3/8	9.5	1	0.781	19.8	28	5.0	1000	150
7204-501	1/2	12.7	1	0.906	23.0	34	7.0	1000	150
7204-751	3/4	19.1	1	1.187	30.1	52	9.5	1000	150
7204-1001	1	25.4	1	1.500	38.1	75	12.0	1000	150



- Steam Service
- Acid and Chemical Transfer
- Hot Tar, Wax and Glue



NOTES:			



NOTES:



WATER

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Due to continual product improvements, Parker reserves the right to alter specifications without prior notice.



SUPER-FLEX®Water Suction Hose

Series 7392

This water suction hose is designed to handle a wide range of applications in industry, construction and agriculture. The tough, flexible EPDM rubber construction will resist abrasion, weathering and the effects of agricultural herbicides and other mild chemicals. Incorporates a steel wire helix in the hose wall for full suction capabilities, as well as high tensile tire cord fabric for discharge pressure.

4:1 Design factor

>> Weather resistant

Tube	Black EPDM			
Cover	Black EPDM			
Reinforcement	Multiple textile plies with helix wire			
Temperature Range	-40°F to +212°F (-40°C to +100°C)			
Branding	PARKER SERIES 7392 WATER SUCTION & DISCHARGE MADE IN USA			
Brand Description	Embossed Brand			
Compare to	Goodyear Plicord Con-Ag Water S&D Gates Barracuda; Titan SW300			

LENGTHS: 100 ft. sizes through 6 in. ID; 50 ft. sizes 8 in. - 12 in.; 20 ft. also available sizes 6 in. - 12 in.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. Other available coupling options: Series 7615, 7692, 7670. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Plies	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7392-1500	1½	38.1	2	1.904	48.36	83	6.0	150
7392-2000	2	50.8	2	2.449	62.20	117	7.0	150
7392-2500	2½	63.5	2	2.956	75.08	155	8.0	150
7392-3000	3	76.2	2	3.504	89.00	200	10.0	150
7392-4000	4	107.0	2	4.528	115.01	315	14.0	150
7392-5000	5	127.0	2	5.656	143.67	500	22.0	100
7392-6000	6	152.4	4	6.842	173.79	618	30.0	100
7392-8000	8	203.2	4	8.866	225.20	846	38.0	100
7392-10000	10	254.0	4	10.938	277.81	1119	50.0	100
7392-12000	12	304.8	4	13.080	332.23	1510	66.0	100



WARNING! Combination nipple and bands reduce the working pressure of the assembly to less than the hose's maximum working pressure. Refer to NAHAD Assembly Guidelines for working pressures.



- Construction
- Agriculture





SUPER-FLEX®Water Suction Hose – Equalizer Version

Series 7392E

This economic water suction hose is designed to handle a wide range of applications in industry, construction and agriculture. The tough, flexible EPDM rubber construction will resist abrasion, weathering and the effects of agricultural herbicides and other mild chemicals. Incorporates a steel wire helix in the hose wall for full suction capabilities, as well as high tensile tire cord fabric for discharge pressure. 3:1 Design factor

>> Economical, long lasting

Tube	Black EPDM
Cover	Black EPDM
Reinforcement	Multiple textile plies with helix wire
Temperature Range	-20°F to +180°F (-29°C to +82°C)
Branding	PARKER SERIES 7392E WATER SUCTION HOSE – XXX PSI MAX WP
Brand Description	Tape Brand - Blue stripe with white letters
Compare to	Goodyear Plicord Con-Ag Water S&D Titan SW300; Gates Barracuda

LENGTHS: 100 ft.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. Other available coupling options: Series 7615, 7692, 7670. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Plies	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7392E-1500	1½	38.1	2	1.95	49.53	85	5.0	150
7392E-2000	2	50.8	2	2.48	62.99	110	7.0	150
7392E-2500	2½	63.5	2	3.00	76.20	160	9.0	150
7392E-3000	3	76.2	2	3.50	88.90	180	10.5	150
7392E-4000	4	107.0	2	4.60	116.84	290	16.0	100
7392E-6000	6	152.4	2	6.75	171.40	560	30.0	100



Applications

- Construction
- Agriculture







SUPER-FLEX®Heavy Duty Water Suction Hose

Series 7325

This hose is designed for heavy-duty applications requiring endurance and higher pressure ratings. The hose is also designed to make tight bends without kinking. The tough, flexible EPDM synthetic rubber provides resistance to abrasion, weathering and many industrial and agricultural chemicals.

4:1 Design factor

>> Weatherproof for exposure to the elements

Tube	Black EPDM
Cover	Black EPDM
Reinforcement	Textile plies with helix wire
Temperature Range	-40°F to +212°F (-40°C to +100°C)
Branding	PARKER SERIES 7325 HD WATER SUCTION 300 PSI MAX WP MADE IN USA
Brand Description	Tape Brand - White letters on blue stripe
Compare to	Titan EW301; Goodyear Versiflo 100

LENGTHS: 100 ft. and 200 ft. lengths.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. Other available coupling options: Series 7615, 7692, 7670. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Plies	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7325-1500	1½	38.1	4	2.094	53.2	122	6.0	300
7325-2000	2	50.8	4	2.648	67.3	171	8.0	300
7325-2500	21/2	63.5	4	3.192	81.1	228	10.0	300
7325-3000	3	76.2	4	3.700	94.0	270	12.0	300

7325

Applications

- Irrigation
- Surface Mining







BS & W[™] Oilfield Suction Hose

Series 7208 - Smooth Cover

CAUTION: Not to be used for refined petroleum products

An economical, lightweight, and flexible hose designed for the transfer of crude oil and brine water. Specially designed for oilfield waste pit recovery service. Smooth cover.

4:1 Design factor

>> Rugged construction for extreme conditions

Tube	Special black synthetic rubber compound			
Cover	Special black synthetic rubber compound			
Reinforcement	Textile plies with helix wire			
Temperature Range	-30°F to +180°F			
Branding	PARKER SERIES 7208 BS&W OIL FIELD SUCTION HOSE NOT FOR REFINED FUELS MADE IN USA 001			
Brand Description	Tape Brand - White letters on blue stripe			
Compare to	Goodyear Flexwing Oilfield; Kuriyama Oilrigger			

LENGTHS: 100 ft. lengths of up to 200 ft. available on quotation. Contact IHP Customer Service for details.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. Other available coupling options: Series 7670. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Plies	OD (in.)	OD (mm)	Aprox. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7208-1000	1	25.4	2	1.408	35.8	48	2.0	150
7208-1250	1¼	31.8	2	1.688	42.9	67	3.0	150
7208-1500	1½	38.1	2	2.000	50.8	98	4.0	150
7208-2000	2	50.8	2	2.512	63.8	125	6.0	150
7208-2500	2½	63.5	2	3.000	76.2	155	9.0	150
7208-3000	3	76.2	2	3.512	89.2	195	12.0	150
7208-4000	4	102.0	2	4.552	115.6	260	16.0	150
7208-6000	6	152.4	4	6.716	170.6	515	48.0	150



Applications

 Oilfield Waste Recovery







BS & W[™] Oilfield Suction Hose – Premium Version

Series 7213 - Corrugated Cover

CAUTION: Not to be used for refined petroleum products

An economical, lightweight and flexible hose designed for the transfer of crude oil and brine water. Specially designed for oilfield waste pit recovery service. Corrugated for flexibility.

4:1 Design factor

>> Increased flexibility and ease of handling

Tube	Special black synthetic rubber compound			
Cover	Special black synthetic rubber compound			
Reinforcement	Textile plies with helix wire			
Temperature Range	-30°F to +180°F (-34°C to +82°C)			
Branding	PARKER SERIES 7213 BS&W OIL FIELD SUCTION HOSE NOT FOR REFINED FUELS MADE IN USA 001			
Brand Description	Tape Brand - White letters on blue stripe			
Compare to	Goodyear Flextra Oilfield			

LENGTHS: 100 ft. lengths of up to 200 ft. available on quotation. Contact IHP Customer Service for details.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. Other available coupling options: Series 7670. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Plies	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7213-1500	11/2	38.1	2	1.976	50.2	86	4.0	150
7213-2000	2	50.8	3	2.520	64.0	121	6.0	150
7213-2500	21/2	63.5	3	3.020	76.7	147	9.0	150
7213-3000	3	76.2	3	3.520	89.4	174	12.0	150
7213-4000	4	101.6	3	4.568	116.0	258	16.0	150
7213-6000	6	152.4	5	6.748	171.4	474	48.0	150

7213

Applications

 Oilfield Waste Recovery







BS & W[™] Oilfield Suction Hose – Equalizer Series

Series 7213E - Corrugated Cover

CAUTION: Not to be used for refined petroleum products

An economical, lightweight and flexible hose designed for the transfer of crude oil and brine water. Specially designed for oilfield waste pit recovery service. Corrugated for flexibility.

3:1 Design factor

>> Lightweight and economical

Tube	Special black synthetic rubber compound
Cover	Special black synthetic rubber compound
Reinforcement	Textile plies with helix wire
Temperature Range	-30°F to +180°F (-34°C to +82°C)
Branding	PARKER SERIES 7213E BS&W OIL FIELD SUCTION HOSE (NOT FOR REFINED FUELS) 150 PSI MAX WP
Brand Description	Tape Brand - White letters on blue stripe
Compare to	Goodyear Flextra Oilfield

LENGTHS: 100 ft.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. Other available coupling options: Series 7670. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Plies	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7213E-2000	2	50.8	2	2.45	62.2	105	6.0	150
7313E-2500	21/2	63.5	3	2.95	74.9	126	9.0	150
7213E-3000	3	76.2	3	3.48	88.4	198	12.0	150
7213E-4000	4	101.6	3	4.55	115.6	268	16.0	150



Applications

 Oilfield Waste Recovery







DYNAFLEX®PVC Standard Duty Suction Hose

Series 7560

This is a flexible hose that will withstand full suction and discharge pressure. It will handle a variety of liquid and solid materials such as water, slurry, sewage, air, chemicals, grains and pellets. A versatile hose for agriculture, mining, construction and industry.

3:1 Design factor

>> Designed for full suction and discharge service

Tube	Green PVC-Smooth
Cover	Green PVC-Smooth
Reinforcement	Rigid white PVC helix
Temperature Range	-5°F to +140°F (-21°C to +60°C)
Branding	None
Compare to	Gates 100 GR; Kanaflex 110 GR; Kuriyama G and J; Pacific Echo 110, 113; Petzetakis 12500; Superflex 1000 GR

LENGTHS: 100 ft. coils ¾ in. through 6 in.; 20, 25 and 30 ft. straight lengths for 8 in. **COUPLINGS:** Available coupling option: Series 7670. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	OD (in.)	OD (mm)	Aprox. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7560-750	3/4	19.1	1.00	25.0	20	3.5	120
7560-1000	1	25.4	1.24	31.5	25	4.5	120
7560-1250	11⁄4	31.8	1.53	38.9	32	5.7	120
7560-1500	1½	38.1	1.78	45.2	39	6.7	100
7560-2000	2	50.8	2.32	58.9	57	9.0	95
7560-2500	21/2	63.5	2.81	71.4	80	11.0	75
7560-3000	3	76.2	3.43	87.1	105	14.0	65
7560-4000	4	101.6	4.45	113.0	164	18.0	55
7560-6000	6	152.4	6.60	167.6	308	30.0	40
7560-8000	8	203.2	8.80	223.5	507	39.0	35

7560

- Agriculture
- Mining
- Construction
- Industry





DYNAFLEX®Multi-Purpose PVC Suction Hose

Series 7561

Extremely lightweight and flexible for general service, low pressure applications. Will handle both full suction and discharge pressure, and smooth bore design allows unrestricted flow.

3:1 Design factor

>> Lighter weight with greater flexibility

Tube	Green PVC – Smooth			
Cover	Green PVC – Corrugated			
Reinforcement	Rigid white PVC spiral helix			
Temperature Range	-5°F to +140°F (-21°C to +60°C)			
Branding	None			
Compare to	Kanaflex 112 CL; Kuriyama WG; Pacific Echo 120; Superflex TX			

LENGTHS: 100 ft. coils.

COUPLINGS: Available coupling option: Series 7670. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP @68°F	Max. Rec. WP @140°F
7561-1500	1½	38.1	1.78	45.2	33	5	80	25
7561-2000	2	50.8	2.32	58.9	46	7	65	20
7561-2500	2½	63.5	2.83	63.8	60	9	60	20
7561-3000	3	76.2	3.40	86.4	75	12	45	15
7561-4000	4	102.0	4.45	113.0	132	15	40	13

7561

- Water Suction
- Slurries





DYNAFLEX®All Clear PVC Suction Hose – FDA

Series 7563

Heavy duty food grade material handling hose complies with all applicable FDA specifications. Smooth tube construction is excellent for transferring powder, pellets, or other dry materials without build-up. Clear PVC construction permits visual observation of materials being conveyed. Complies with FDA CFR Title 21 parts 170-199.

3:1 Design factor

>> Smooth tube prevents blockage

Tube	Clear PVC – Smooth
Cover	Clear PVC – Corrugated
Reinforcement	Rigid clear PVC helix
Temperature Range	-5°F to +140°F (-21°C to +60°C)
Branding	None
Compare to	Gates 201 CR; Goodyear Nutriflex; Jason 4660; Kanaflex 200 SFG; Kuriyama WT; Pacific Echo 145; Petzetakis 12426SE; Superflex 9000

LENGTHS: 100 ft. coils

COUPLINGS: For assembly guidelines and coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7563-1000	1	25.4	1.22	31.0	17	2.0	55
7563-1250	11/4	31.8	1.48	37.6	21	3.0	50
7563-1500	1½	38.1	1.84	46.7	34	3.0	50
7563-2000	2	50.8	2.36	59.9	50	4.0	40
7563-2500	2½	63.5	2.87	72.9	68	5.0	40
7563-3000	3	76.2	3.50	88.9	100	6.0	40
7563-4000	4	101.6	4.64	117.9	152	8.0	35
7563-6000	6	152.4	6.50	165.1	300	12.0	30



- Transfer of Powder, Pellets or Other Dry Materials
- Food Processing





DYNAFLEX®Medium Duty PVC Clear Suction Hose – FDA Series 7564

Rugged, medium duty general purpose PVC suction and transfer hose for the agricultural, construction, mining and general industrial markets. Smooth tube ensures full flow.

3:1 Design Factor.

>> Smooth tube ensures full flow

Tube	Clear PVC – Smooth
Cover	Clear PVC – Smooth
Reinforcement	Rigid white PVC helix
Temperature Range	-5°F to +140°F (-21°C to +60°C)
Branding	None
Compare to	Gates 101 CL, 200 CL; Goodyear Nutriflow; Jason 4606; Kuriyama H; Pacific Echo 090, 115; Superflex 1000CL

LENGTHS: 100 ft. coils

COUPLINGS: For assembly guidelines and coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7564-500	1/2	12.7	0.75	19.0	12	2.5	120
7564-750	3/4	19.1	1.00	25.4	20	3.0	90
7564-1000	1	25.4	1.22	31.0	26	4.0	90
7564-1250	11/4	31.8	1.53	38.9	37	5.0	80
7564-1500	1½	38.1	1.81	46.0	44	6.0	75
7564-2000	2	50.8	2.34	59.4	67	8.0	75
7564-2500	2½	63.5	2.85	72.4	90	10.0	75
7564-3000	3	76.2	3.45	87.6	114	12.0	65
7564-4000	4	101.6	4.50	114.3	181	16.0	55
7564-6000	6	152.4	6.65	168.9	336	24.0	35



- Mining
- Transfer of Bulk Food Products
- Marine water and baitwell





DYNAFLEX®Wire Helix Clear PVC Suction Hose – FDA

Series 7570

Designed to handle a wide variety of applications where a lightweight, flexible suction/ discharge hose is required. A steel helix wire combined with thick wall construction gives the hose excellent kink, abrasion and crush resistance. Transparency allows for easy inspection of product being conveyed. Flexible to -5°F. The steel helix wire provides static conductivity. Complies with FDA CFR Title 21 parts 170-199. 3:1 Design Factor.

>> Static conductivity for safety

Tube	Clear PVC – Smooth
Cover	Clear PVC – Smooth
Reinforcement	Wire Helix
Temperature Range	-5°F to +140°F (-21°C to +60°C)
Branding	None
Compare to	Gates 202SW; Goodyear Nutriflex Static Wire; Kuriyama 7160; Pacific Echo W145; Petzetakis 17009

LENGTHS: 100 ft. coils

COUPLINGS: Available coupling option: Series 7670. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7570-750	3/4	19.1	1.03	26.2	21	2.0	100
7570-1000	1	25.4	1.32	33.5	34	2.5	85
7570-1250	11/4	31.8	1.58	40.1	42	3.3	72
7570-1500	1½	38.1	1.85	47.0	52	3.5	72
7570-2000	2	50.8	2.42	61.5	84	5.0	72
7570-2500	2½	63.5	2.95	74.9	121	6.5	57
7570-3000	3	76.2	3.55	90.2	148	8.0	57
7570-4000	4	101.6	4.65	118.1	235	12.0	36
7570-6000	6	152.4	6.65	168.9	429	18.0	28



Applications

 Transfer of Powders, Pellets or Granular Materials





DYNAFLEX®Medium Duty Clear PVC Suction Hose – FDA Series 7582

For conveying milk and other food products in full suction applications. Smooth bore tube will not impart taste or odor into product being conveyed. Complies with FDA CFR Title 21 parts 170 - 199.

3:1 Design Factor.

>> Clear tube and cover for visual inspections

Tube	Clear PVC - Smooth			
Cover	Clear PVC - Smooth			
Reinforcement	Rigid White PVC			
Temperature Range	-5°F to +140°F (-21°C to +60°C)			
Branding	None			
Compare to	Kanaflex 212 MK, 210 HFG; Kuriyama MILK; Pacific Echo 170; Petzetakis 12526			

LENGTHS: 100 ft. coils

COUPLINGS: Available coupling option: Series 7670. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7582-1500	1½	38.1	1.82	46.2	47	7.5	115
7582-2000	2	50.8	2.36	59.9	68	10.0	85
7582-2500	2½	63.5	2.90	73.7	90	12.5	75
7582-3000	3	76.2	3.44	87.4	114	15.5	65
7582-4000	4	101.6	4.52	114.8	174	20.0	50



- Conveying Food Products
- Dairy Service





Water Discharge Hose – Equalizer Series

Series 7306E

Remarkably lightweight for easy handling, with the flexibility of a rubber tube and cover. Economical for short term or one-time jobs. Particularly suitable for open-end discharge applications.

3:1 Design factor

>> Lightweight and economical

Tube	Black EPDM
Cover	Black EPDM
Reinforcement	Multiple textile plies
Temperature Range	-20°F to +180°F (-29°C to +82°C)
Branding	PARKER SERIES 7306E WATER DISCHARGE HOSE 150 PSI MAX WP
Brand Description	Tape Brand - Blue stripe with black letters
Compare to	Goodyear Versiflo 125

LENGTHS: 100 ft.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. Other available coupling options: Series 7615, 7692, 7670. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Plies	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Max. Rec. WP
7306E-1500	1½	38.1	2	1.80	45.7	45	150
7306E-2000	2	50.8	2	2.35	59.7	65	150
7306E-2500	2½	63.5	2	2.88	73.2	80	150
7306E-3000	3	76.2	2	3.45	87.6	110	150
7306E-4000	4	101.6	2	4.45	113.0	140	150



Applications

- Irrigation
- Agriculture







DAY-FLO®Heavy Duty Water Discharge Hose

Series 7306H

This is the tough one – designed for heavy-duty water discharge applications. The combination of a heavy wall and 200 PSI working pressure rating (150 PSI in 10 in. ID size) make this the right hose for applications that need extra capacity and durability.

3:1 Design factor

>> Durable to handle the toughest conditions

Tube	Black EPDM
Cover	Black EPDM
Reinforcement	Multiple textile plies
Temperature Range	-30°F to +212°F (-34°C to +100°C)
Branding	PARKER SERIES 7306H DAY-FLO H.D. WATER DISCHARGE HOSE XXX PSI MAX WP MADE IN USA 001
Brand Description	Tape Brand - White letters on blue stripe
Compare to	Goodyear Plicord HD Water Discharge; Kuriyama Heavy Water Discharge; Titan HD Water Discharge

LENGTHS: 100 ft. except 10 in., which is 50 ft.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. Other available coupling options: Series 7615, 7692, 7670. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Plies	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Max. Rec. WP
7306H-1500	1½	38.0	4	2.032	51.6	85	200
7306H-2000	2	50.8	4	2.536	64.4	114	200
7306H-2500	21/2	63.5	4	3.050	77.5	148	200
7306H-3000	3	76.2	4	3.550	90.2	175	200
7306H-4000	4	101.6	4	4.556	115.7	231	200
7306H-5000	5	127.0	4	5.582	141.8	298	200
7306H-6000	6	152.4	4	6.646	168.8	358	200
7306H-8000	8	203.2	4	8.646	219.6	472	200
7306H-10000	10	254.0	4	10.646	270.4	585	150

7306H

Applications

• Water Discharge







DAY-FLO®Medium Duty Water Discharge Hose

Series 7306M

Light, flexible and durable with 150 PSI working pressure in all sizes! This hose is the most versatile choice for many water discharge applications. The tube and cover are flexible EPDM rubber, which is resistant to weathering and to many light industrial and agricultural chemicals.

3:1 Design factor

>> Versatile hose will handle many applications

Tube	Black EPDM
Cover	Black EPDM
Reinforcement	Textile tire cord plies
Temperature Range	-30°F to +212°F (-34°C to +100°C)
Branding	PARKER SERIES 7306M DAY-FLO MEDIUM WATER DISCHARGE HOSE 150 PSI MAX WP MADE IN USA
Brand Description	Embossed Brand
Compare to	Goodyear Plicord Water Discharge150; Gates Dolphin; Thermoid WD 150

LENGTHS: 100 ft. except 10 in. and 12 in. which are 50 ft.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. Other available coupling options: Series 7615, 7692, 7670. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Plies	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Max. Rec. WP
7306M-5000	5	127.0	2	5.440	138.2	212	150
7306M-6000	6	152.4	2	6.488	164.8	284	150
7306M-8000	8	203.2	4	8.543	217.0	409	150
7306M-10000	10	254.0	4	10.535	267.6	522	150
7306M-12000	12	304.8	4	12.575	319.4	620	150

7306M

Applications

• Water Discharge







DAY-LITE®Suction and Discharge Hose

Series 8341

Designed for wet or dry abrasive product transfer service. The highly abrasion resistant tube is also static conductive, eliminating the need for a static wire. The cover is corrugated for flexible handling. This hose is rated for full suction and discharge. 3:1 Design factor

>> Highly resistant to abrasion

Tube	Natural Rubber / SBR Blend			
Cover	Natural Rubber / SBR Blend			
Reinforcement	Multiple Polyester Spiral Plies plus Helix Wire			
Vacuum Rating	Full Suction			
Temperature Range	-40°F to +180°F (-40°C to +82°C)			
Branding	Parker 8341 Day-Lite Suction and Discharge Hose Made in USA			
Brand Description	Tape Brand - Black letters on green stripe			
Compare to	Goodyear Plicord Vacuum			

LENGTHS: 50 and 100 ft.; 1½ in. through 4 in. also available in 200 ft. lengths. **COUPLINGS:** For permanent crimp specifications, refer to CrimpSource. Other available coupling option: Series 7670. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part Number	ID (in)	ID (mm)	OD (in)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
8341-1500	1½	38.1	2.008	51.0	76.8	4.5	75
8341-2000	2	50.8	2.520	64.0	100.0	6.0	75
8341-3000	3	76.2	3.457	87.8	162.0	9.0	75
8341-4000	4	101.6	4.598	116.8	247.5	12.0	75
8341-6000	6	152.4	6.693	170.0	441.0	18.0	75
8341-8000	8	203.2	8.724	221.0	591.8	24.0	75

8341

Applications

Sewer Cleaning







Jetting Hose – 500 PSI

Series 7335

High pressure jetting hose with abrasion resistant tube and cover. This hose is designed for suction and discharge.

4:1 Design factor

>> Abrasion resistant tube and cover

Tube	Black SBR
Cover	Black SBR
Reinforcement	Multiple textile plies
Temperature Range	-40°F to +180°F (-40°C to +82°C)
Branding	PARKER SERIES 7335 HIGH PRESSURE JETTING HOSE 500 PSI MAX WP MADE IN USA 001
Brand Description	Tape Brand - Black letters on blue stripe
Compare to	Titan SS122

LENGTHS: 100 ft. Other lengths on quotation up to 200 ft. continuous.

Part No.	ID (in.)	ID (mm)	Reinf. Plies	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7335-1250	11/4	31.8	2	1.750	44.4	58	7.0	500
7335-1500	11/2	38.1	2	2.008	51.0	68	9.0	500
7335-2000	2	50.8	4	2.637	67.0	111	16.0	500
7335-2500	2½	63.5	4	3.165	80.4	144	20.0	500
7335-3000	3	76.2	4	3.736	94.9	184	24.0	500
7335-4000	4	102.0	6	4.898	124.4	290	32.0	500



- High Pressure Water Jetting
- Offshore Cable Covering





Mud Hose - 300 PSI

Series 7309

Designed for use as a high pressure discharge hose for drilling mud, petroleum waste and water discharge applications. The tube is rated for RMA Class A-High Oil Resistance.

4:1 Design factor

>> Rugged construction with oil resistant cover

Tube	Black Nitrile
Cover	Black Neoprene
Reinforcement	Multiple polyester textile braids with static wire
Temperature Range	-20°F to +180°F (-28°C to +82°C)
Branding	PARKER SERIES 7309 MUD HOSE 300 PSI MAX WP MADE IN USA
Brand Description	Tape Brand - Black letters on yellow stripe
Compare to	Titan SS-145 Oil and Gas Hose, SS-160 Mud Hose

LENGTHS: 100 ft. standard. Lengths up to 200 ft. on quotation. Contact IHP Customer Service for details.

Part No.	ID (in.)	ID (mm)	Reinf. Layers	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7309-2000	2	50.8	4	2.764	70.2	175	24.0	300
7309-3000	3	76.2	4	3.835	97.4	267	36.0	300
7309-4000	4	101.6	4	4.898	124.4	358	48.0	300
7309-5000	5	127.0	4	5.937	150.8	461	60.0	300
7309-6000	6	152.4	6	7.087	180.0	628	72.0	300
7309-8000	8	203.2	6	9.250	233.2	884	96.0	300



- Petroleum Waste
- Mud Drilling
- High Pressure Water





GULLY WASHER®Standard Duty Lay Flat PVC Discharge Hose Series 7541

A two-layer construction hose for water discharge in agriculture, mining, construction and other industrial applications. Strong, economical and lightweight hose that rolls up flat for easy storage. See Comparison Guide on page 161.

3:1 Design factor

>> Economical and lightweight

Tube	Blue Nitrile/PVC
Cover	Blue PVC
Reinforcement	Two-Spiral Polyester Plies, One Polyester Longitudinal Ply
Temperature Range	-10°F to +170°F (-23°C to +77°C)
Branding	None
Compare to	Gates Master-Flex 500; Goodyear Spiralflex Gray; Kanaflex 4501, 4502; Kuriyama NuFlo, VinylFlow; Petzetakis 11252; Sun-Flow SF-10, SF-15; Superflex DH

LENGTHS: 300 ft. bales.

COUPLINGS: Available coupling option: Series 7670. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	Nominal ID (in.)	Nominal ID (mm)	Reinf. Plies	Approx. Wall Thickness	Approx. Wt. per 100 Ft.	Max. Rec. WP
7541-1501	1½	40	3	0.051	14	65
7541-2001	2	53	3	0.051	17	60
7541-2501	2½	65	3	0.051	22	65
7541-3001	3	78	3	0.053	24	55
7541-4001	4	104	3	0.060	35	45
7541-6001	6	154	3	0.065	63	35
7541-8001	8	204	3	0.070	100	30

7541

Applications

- Construction
- Mining
- Agriculture
- Irrigation







GULLY WASHER®Medium Duty Lay Flat PVC Discharge Hose

Series 7542

For medium duty water discharge applications in construction, agriculture, general industry and mining. Abrasion resistant construction provides long service life. Rolls up flat for easy storage. See Comparison Guide on page 161. 3:1 Design factor

>> Lays straight without kinking

Tube	Brick Red PVC/Nitrile
Cover	Brick Red PVC
Reinforcement	Two-Spiral Polyester Plies, One Polyester Longitudinal Ply
Temperature Range	-10°F to +170°F (-23°C to +77°C)
Branding	FLAME RESISTANT USMSHA 2G-60/1
Brand Description	Ink Brand - White letter color
Compare to	Goodyear Spiralflex Red; Jason 4510; Kuriyama Ironsides; Petzetakis 11298; Sun-Flow SF-30, SF-50

LENGTHS: 300 ft. bales.

COUPLINGS: Available coupling option: Series 7670. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	Nominal ID (in.)	Nominal ID (mm)	Reinf. Plies	Approx. Wall Thickness	Approx. Wt. per 100 Ft.	Max. Rec. WP
7542-1501	1½	38.1	3	0.079	20	150
7542-2001	2	50.8	3	0.083	30	150
7542-2501	2½	63.5	3	0.091	40	150
7542-3001	3	76.2	3	0.091	52	150
7542-4001	4	101.6	3	0.102	74	150
7542-6001	6	152.4	3	0.114	125	120
7542-8001	8	203.2	3	0.120	189	100

7542

Applications

- Construction
- Mining
- Agriculture
- Irrigation







GULLY WASHER®Heavy Duty Lay Flat PVC Discharge Hose

Series 7545

For heavy duty water discharge service in applications such as agriculture, construction, industry and mining. Abrasion resistant PVC cover and Nitrile/PVC tube plus high adhesions between the layers provide for long service life. Rolls up flat for easy storage. MSHA brand. See Comparison Guide on page 161. 3:1 Design factor

>> Heavy duty construction for tough environments

Tube	Black PVC/Nitrile
Cover	Yellow PVC
Reinforcement	Two-Spiral Polyester Plies, One Polyester Longitudinal Ply
Temperature Range	-10°F to +170°F (-23°C to +77°C)
Branding	FLAME RESISTANT USMSHA 2G-60/1
Brand Description	Ink Brand - Black letter color
Compare to	Goodyear Spiralflex 2700, Brigade; Jason 4520; Petzetakis 11294; Sun-Flow SF-20.

LENGTHS: 300 ft. bales.

COUPLINGS: Available coupling option: Series 7670. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	Nominal ID (in.)	Nominal ID (mm)	Reinf. Plies	Approx. Wall Thickness	Approx. Wt. per 100 Ft.	Max. Rec. WP
7545-1501	1½	38.1	3	0.110	32	230
7545-2001	2	50.8	3	0.110	42	230
7545-2501	2½	63.5	3	0.122	56	230
7545-3001	3	76.2	3	0.122	68	175
7545-4001	4	101.6	3	0.134	101	160
7545-6001	6	152.4	3	0.157	185	150
7545-8001	8	203.2	3	0.157	268	150

7545

Applications

- Quarries
- Construction
- Mining
- Agriculture
- Irrigation





Lay Flat Discharge Hose Comparison Guide

			13	/2"	2	<u>"</u>	21	⁄2"	3	3"	4	ļ"	6	5"
Duty	Name	Color	WP	Wgt	WP	Wgt	WP	Wgt	WP	Wgt	WP	Wgt	WP	Wgt
Standard	Parker 7541	Blue	65	14	60	17	65	22	55	24	45	35	35	63
	Gates Master-Flex	Blue	75	17	65	21	60	28	60	39	60	53	45	88
	Goodyear SpFlx	Gray	75	19	60	24	60	36	50	39	45	65	35	107
	Jason 4501	Blue	100	24	100	27	75	33	75	44	75	63	50	120
	Jason 4502	Blue	85	21	85	25	75	29	70	39	70	60	50	115
	Kuriyama NuFlo	Blue	70	15	65	20	60	28	60	34	60	45	45	81
	Kuriyama VinylFlow	Blue	80	16	80	23	80	29	70	39	70	52	50	86
	Petzetakis 11252	Blue	75	12	75	18	62	23	53	24	45	35	45	84
	Sun-Flow SF-10	Blue	80	20	80	28	65	31	80	39	70	55	60	88
	Sun-Flow SF-15	Green	80	21	80	30	_	-	80	41	70	58	60	99
	Superflex DH	Blue	75	17	60	22	60	29	45	40	60	53	60	82
Medium	Parker 7542	Red	150	20	150	30	150	40	150	52	150	74	120	125
	Goodyear SpFlx	Red	150	23	150	36	150	41	125	46	100	73	100	118
	Jason 4510	Red	170	28	170	30	160	37	160	46	150	67	150	108
	Kuriyama Ironsides	Rust	150	23	150	32	150	41	150	52	125	76	115	121
	Petzetakis 11298	RorY	120	20	120	28	120	39	120	47	120	71	60	108
	Sun-Flow SF-30	Red	110	22	100	29	_	_	100	43	80	60	100	110
	Sun-Flow SF-50	Red	150	21	150	28	150	40	150	53	150	75	150	125
Heavy	Parker 7545	Yellow	230	32	250	42	250	56	175	68	160	101	150	185
	Goodyear SpFlx	Yellow	200	32	200	42	200	66	200	76	150	100	150	169
	Jason 4520	Yellow	250	48	250	60	250	79	250	98	200	144	160	216
	Petzetakis 11294	Red	250	30	250	40	230	56	175	65	156	94	105	168
	Sun-Flow SF-20	R or G	200	26	200	36	175	40	200	67	200	113	150	219





STINGER™ IIMine Air & Water Hose

Series 7268

Stinger II hose is a very durable hose manufactured to handle the severe service requirements of underground mine spray service. The bright yellow MSHA cover is flame, oil and abrasion resistant. This hose is also an excellent choice for high pressure air and washdown service.

4:1 Design factor (2 in. = 3.5:1)

>> MSHA approved for mine service

Tube	Black Neoprene
Cover	Yellow NBR/PVC
Reinforcement	Wire braid
Temperature Range	-20°F to +212°F (-29°C to +100°C)
Branding	PARKER USA 7268 STINGER II™ ¾ ID 1000 PSI MAX WP MSHA IC-123/17 DE2 (DATE CODE)
Brand Description	Ink Brand - Black letter color
Compare to	Goodyear Minespray/Super Ortac; Gates 1000 MP Mine Spray; Boston Concord Yellow Jack

LENGTHS: ¾" and 1" on 500 ft. reels, 5 piece max., 50 ft. min. length. Cut Lengths: 50 ft. and 100 ft., up to 200 ft. available on quotation. Contact IHP Customer Service for details.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in)	ID (mm)	Reinf. Braids	OD (in)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7268-751	3/4	19.1	1	1.045	26.5	36	6.0	1000
7268-1001	1	25.4	1	1.339	34.0	53	8.0	1000
7268-1251	11/4	31.8	1	1.631	41.4	66	12.0	1000
7268-1501	1½	38.1	1	1.890	48.0	86	14.0	1000
7268-2001	2	50.8	1	2.440	62.0	141	18.0	1000



- Mines
- Air Tools
- Dust Suppression Systems





YELLOW BIRD® Air & Water Hose – MSHA

Series 7284

YELLOW BIRD® hose is designed for high pressure water service in underground mines. The SBR tube, wire braided construction, and nitrile/PVC cover also makes it an excellent high pressure air or general purpose hose. The flame resistant yellow cover is branded with the MSHA legend.
4:1 Design factor

3

>> MSHA approved for mine service

Tube	Black SBR				
Cover	Yellow NBR/PVC, PIN-PRICKED				
Reinforcement	One or multiple wire braids				
Temperature Range	-20°F to +212°F (-29°C to +100°C)				
Branding	PARKER USA 7284 YELLOW BIRD® HOSE (DATE CODE) DE2 XXXX PSI MAX WP MSHA IC-123/17 - FLAME RESISTANT				
Brand Description	Ink Brand - Black letter color				
Compare to	Thermoid Hercules 1000; Gates 1000MP/Mine Spray; Boston Concord Yellow Jack				

LENGTHS: Random lengths on nominal 500 ft. reels.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Braids	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7284-381	3/8	9.5	1	0.688	17.5	25	6.0	1500
7284-501	1/2	12.7	1	0.969	24.6	37	7.0	1000
7284-751	3/4	19.1	1	1.219	31.0	56	9.5	1000
7284-1001	1	25.4	1	1.469	37.3	69	12.0	1000
7284-1252	11/4	31.8	2	1.719	43.7	90	15.5	1000



- Mines
- Air Tools
- Dust Suppression Systems





ECW[™] Economy White Washdown Hose

Series 7079

ECW[™] hose is primarily designed for use in food plants, breweries and any place a flexible, lightweight washdown hose is needed. Validated permanent crimp specs are available.

4:1 Design factor

>> Non-marking cover

Tube	Black EPDM
Cover	White EPDM
Reinforcement	Multiple textile spirals
Temperature Range	-40°F to +212°F (-40°C to +100°C)
Branding	PARKER SERIES 7079 ECW ECONOMY WASHDOWN ¾ ID (19.1 MM) 300 PSI MAX WP MADE IN USA
Brand Description	Ink Brand - Black letter color
Compare to	Goodyear Sani-Wash 300

LENGTHS: 350 ft. reels (+50 ft./-0 ft.) are 90% 1 piece, 10% 2 piece, 50 ft. min. length. Also, 50 ft. lengths in cartons are coiled, tied and secured in cartons per order.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. Other available coupling options: Series 7615, 7692. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Spirals	OD (in.)	OD (mm)	Approx Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7079-75304	3/4	19.1	4	1.156	29.4	37	5.0	300
7079-7530450	3/4	19.1	4	1.156	29.4	37	5.0	300

7079

Applications

- Food Plants
- Breweries
- Dairy







HDW[™] Creamery Washdown Hose

Series 7080

The HDW Heavy Duty Washdown hose is designed for general washdown and equipment cleaning requirements in food processing, dairy product processing, and industrial plants. The high quality EPDM tube compound allows this hose to be used for 212° F hot water at 300 PSI or saturated steam to +298° F / +148° C at 50 PSI maximum. 4:1 Design factor

>> Non-marking cover

Tube	Black high grade EPDM
Cover	White high grade EPDM
Reinforcement	Multiple textile spirals
Temperature Range	-40°F to +212°F @ 300 PSI and to +298°F @ 50 PSI (-40°C to +100°C @ 300 PSI and to +148°C @ 50 PSI)
Branding Example	PARKER SERIES 7080 HDW CREAMERY WASHDOWN ¾ in. ID (19.1 MM) 300 PSI MAX WP MADE IN USA
Brand Description	Ink Brand - Black letter color
Compare to	Goodyear Plicord Washdown

LENGTHS: 350 ft. reels (+50 ft./-0 ft.) are 90% 1 piece, 10% 2 piece, 50 ft. min. length. Also, 50 ft. lengths in cartons are coiled, tied and secured in cartons per order.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. Other available coupling options: Series 7615, 7692. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Spirals	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7080-75304	3/4	19.1	4	1.250	31.8	48	6.5	300
7080-7530450	3/4	19.1	4	1.250	31.8	48	6.5	300

7080

Applications

- Food Plants
- Dairy



WARNING! Combination nipple and bands reduce the working pressure of the assembly to less than the hose's maximum working pressure. Refer to NAHAD Assembly Guidelines for working pressures.





WILDCATTER® Washdown Hose

Series 7360

WILDCATTER® hose is a general purpose washdown hose, designed with a rugged yet flexible construction for ease of handling in many tough applications including breweries, dairies, food plants, paper mills and oil rigs.

4:1 Design factor

>> Rugged construction for tough applications

Tube	White SBR
Cover	White SBR
Reinforcement	Multiple textile plies
Temperature Range	-20°F to +212°F (-29°C to +100°C)
Branding	PARKER SERIES 7360 WILDCATTER WASH DOWN HOSE MADE IN USA 001
Brand Description	Tape Brand - Blue stripe with white letters
Compare to	Goodyear Plicord Washdown

LENGTHS: 50 ft. and 100 ft.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. Other available coupling options: Series 7615, 7692, 7670. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Plies	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7360-50150	1/2	12.70	2	1.008	25.60	37	4.0	150
7360-75150	3/4	19.05	2	1.250	31.75	49	6.0	150
7360-100150	1	25.40	2	1.598	40.59	75	8.0	150
7360-125150	11/4	31.75	2	1.875	47.63	93	12.0	150
7360-150150	1½	38.10	2	2.125	53.98	107	18.0	150
7360-200150	2	50.80	4	2.748	69.80	172	24.0	150

7360

Applications

- Food Plants
- Paper Mills



WARNING! Combination nipple and bands reduce the working pressure of the assembly to less than the hose's maximum working pressure. Refer to NAHAD Assembly Guidelines for working pressures.





PWDHigh Pressure Washdown Hose

Series 7143

A premium, flexible and lightweight hose for washdown service in applications such as meat and poultry plants. The specially blended cover provides excellent resistance to animal fats and oils, as well as improved abrasion resistance over similar hose products.

Design factor: 1 Braid = 4:1 2 Braid = 3.5:1

>> Fabric reinforcement for kink resistance

Tube	Black synthetic rubber						
Cover	Gray (GY) or Yellow (YL) synthetic rubber						
Reinforcement	One or two textile braids						
Temperature Range	-40°F to +250°F (-40°C to +121°C)						
Branding	PARKER SERIES 7143 PWD % ID (9.5 MM) XXXX PSI MAX WP MADE IN USA (DATE CODE)						
Brand Description	Ink Brand - Black letter color						
Compare to	Boston Washdown 1250; Gates Cyclone; Goodyear Fortress						

LENGTHS: Random lengths on 650 ft. nominal reels. 50 ft. min. length. Max. 5 pieces.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. Other available coupling options: Series 7615, 7692, 7670. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Braids	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7143-251YL	½	6.4	1	0.570	14.5	13	3.0	1000
7143-251GY	¼	6.4	1	0.570	14.5	13	3.0	1000
7143-381GY	3/8	9.5	1	0.625	15.9	13	4.0	1000
7143-381YL	3/8	9.5	1	0.625	15.9	13	4.0	1000
7143-382GY	3/8	9.5	2	0.734	18.6	19	4.0	1500
7143-382YL	3/8	9.5	2	0.734	18.6	19	4.0	1500



Applications

- Poultry Plants
- Washdown Service



WARNING! Not to be used for steam service!





Furnace Door Coolant Hose - Softwall

Series 7385

Designed for industrial cooling applications with melting furnaces at steel mills, glassworks, foundries, etc., and other work sites that require a hose to withstand high external temperatures. Withstands steel splashes and external heat radiation up to 572°F (300°C) and internal cooling water temperature to 212°F (100°C). The hose is electrically non-conductive with a minimum resistance of one megohm per inch at 1000 volts DC.

4:1 Design factor

>> Non-conductive and heat resistant

Tube	Black SBR
Cover	Off-White Nomex® Fabric
Reinforcement	Multiple textile plies
Temperature Range	-20°F to +212°F (-29°C to +100°C) internal +572°F (300°C) external
Branding	None
Compare to	Goodyear Plicord Furnace Door; Kuriyama Furnace Door Coolant

LENGTHS: 100 ft. all sizes. Lengths up to 200 ft. on quotation. Contact IHP Customer Service for details.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. Other available coupling options: Series 7615, 7692. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Plies	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7385-0500	1/2	12.70	2	0.969	24.61	30	5.0	150
7385-0750	3/4	19.05	2	1.260	32.00	45	6.0	150
7385-1000	1	25.40	2	1.442	36.63	47	8.0	150
7385-1250	11/4	31.75	2	1.718	43.64	60	9.0	150
7385-1500	1½	38.10	2	2.135	54.23	101	12.0	150
7385-2000	2	50.80	4	2.679	68.05	138	24.0	150
7385-3000	3	76.20	4	3.750	95.20	237	36.0	150
7385-4000	4	101.60	4	4.835	122.80	343	48.0	150

7385

Applications

- Melting Furnaces
- Glassworks
- Foundries





Furnace Door Coolant Hose – Hardwall

Series 7386

The construction of this hose incorporates a steel helix wire that gives the hose suction capability and extra kink resistance. The hose is designed for industrial cooling applications with melting furnaces at steel mills, glassworks, foundries, etc., and other work sites that require a hose to withstand high external temperatures. Withstands steel splashes and external heat radiation up to 572°F (300°C) and internal cooling water temperature to 212°F (100°C).

4:1 Design factor

>> Withstands high external temperatures

Tube	Black SBR
Cover	Off-White Nomex® Fabric
Reinforcement	Multiple textile plies
Temperature Range	-20°F to +212°F (-29°C to +100°C) internal +572°F (300°C) external
Branding	None
Compare to	Thermoid Furnace Door

LENGTHS: 100 ft. all sizes. Lengths up to 200 ft. on quotation. Contact IHP Customer Service for details.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. Other available coupling options: Series 7615, 7692. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Plies	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7386-0500	1/2	12.70	2	0.870	22.10	25	3.0	150
7386-0750	3/4	19.05	2	1.143	29.03	42	4.0	150
7386-1000	1	25.40	2	1.460	37.08	58	5.0	150
7386-1250	11/4	31.75	2	1.713	43.51	70	6.0	150
7386-1500	1½	38.10	2	1.938	49.21	92	7.0	150
7386-2000	2	50.80	2	2.520	64.00	129	8.0	150

7386

Applications

- Melting Furnaces
- Glassworks
- Foundries





Heater Hose

Series 7186

Lightweight hose designed for automotive coolant heater hose service. Also ideal for low pressure water discharge. Resistant to LASSO® herbicide. 4:1 Design factor

>> Heat resistant

Tube	Black EPDM
Cover	Black EPDM
Reinforcement	Multiple textile plies
Temperature Range	-40°F to +212°F (-40°C to +100°C)
Branding	PARKER SERIES 7186 HEATER HOSE ½ ID (12.7 MM) MADE IN USA
Brand Description	Ink Brand - White Letter color
Compare to	Thermoid Black Standard Heater

LENGTHS: Random lengths on reels, 550 ft. max, 400 ft. min, max. 3 pieces with min. 50 ft. length.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. Other available coupling options: Series 7628. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Plies	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7186-501	½	12.7	2	0.781	19.8	18	6.0	125
7186-501050	½	12.7	2	0.781	19.8	18	6.0	125
7186-631	5/8	15.9	2	0.906	23.0	21	8.0	90
7186-631050	5/8	15.9	2	0.906	23.0	21	8.0	90
7186-751	3/4	19.1	2	1.031	26.2	25	9.0	70
7186-751050	3/4	19.1	2	1.031	26.2	25	9.0	70

7186

Applications

 Automotive Coolant





THORO-SPRAY®High Pressure Spray Hose – 800 PSI

Series 7180

Designed for agricultural and residential high pressure spray applications. The tube will handle most pesticides, as well as liquid fertilizers. The cover is non-marking for safe use in residential areas.

4:1 Design factor

>> Non-marking cover

Tube	Black Nitrile
Cover	Green Nitrile/PVC
Reinforcement	Multiple textile braids
Temperature Range	-20° F to +180° F (-29°C to +82°C)
Branding	PARKER USA 7180 THORO-SPRAY® HOSE 800 PSI MAX WP
Brand Description	Ink Brand - Black letter color
Compare to	Goodyear Neptune 1500

LENGTHS: Random lengths on nominal 500 ft. reels, 5 piece maximum.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. Other available coupling options: Series 7615, 7692. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Braids	OD (in.)	OD (mm)	Approx. Wt. Per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7180-252	1/4	6.4	2	0.625	15.9	15	3.0	800
7180-382	3/8	9.5	2	0.750	19.1	20	4.0	800
7180-502	1/2	12.7	2	0.938	23.8	29	5.0	800
7180-752	3/4	19.1	2	1.250	31.8	48	6.5	800

7180

Applications

- Fertilizer
- Pesticide Sprayers





BLUE RIBBON®Pressure Washer Hose

Series 7247

Developed specifically for the food process industry, this blue, non-marking, oil and fat-resistant hose provides 1500 PSI working pressure for efficient in-plant wash-down service.

4:1 Design factor

>> Ideal for food processing washdown service

Tube	Black Neoprene						
Cover	Perforated blue Neoprene						
Reinforcement	One wire braid						
Temp. Range	-40°F to +250°F (-40°C to +121°C)						
Branding	PARKER USA 7247 BLUE RIBBON® PRESSURE WASHER HOSE ¼ ID 1500 MAX WP B2 (DATE CODE) NOT FOR STEAM SERVICE						
Brand Description	Ink Brand - White letter color						
Compare to	Boston Pressure Washer 3000; Gates Power Clean; Goodyear Neptune						

LENGTHS: Random lengths on 500 ft. reels. Max. 600 ft., min. 400 ft., 5 pieces max. with 50 ft. min. length.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Braid	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7247-251BL	1/4	6.4	1	0.575	14.6	18	1.7	1500
7247-381BL	3/8	9.5	1	0.700	17.8	24	2.2	1500
7247-501BL	1/2	12.7	1	0.825	21.0	30	3.2	1500

7247

Applications

 In-plant Washdown



WARNING! Not to be used for steam service! Not intended for carpet cleaning applications!





HURRICANEPressure Washer Hose

Series 7258

This "Made in the U.S.A." hose offers high pressure (3000 PSI) and temperature (250°F) capability for many industrial pressure washer applications. Hose assemblies are fabricated using Parker manufactured and validated couplings, ensuring safety and quality to the end user. Factory made assemblies are coupled rigid male pipe x male pipe swivel, with strain relievers on each end.

4:1 Design factor

>> Also available in prepackaged coupled assemblies

Tube	Black Neoprene					
Cover	Black (BK) or Blue (BL) Neoprene					
Reinforcement	One wire braid					
Temperature Range	-40° F to +250° F (-40°C to +121°C)					
Branding	HURRICANE 3000 7258 XX I.D. 3000 PSI MAX WP MADE IN THE USA (DATE CODE)					
Brand Description	Ink Brand - White letter color					
Compare to	Gates Power Clean					

LENGTHS: 500 ft. reels ±10%; 3 pieces max.; lengths in 50 ft. increments.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. Other available coupling options: Series 43, HY. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Braids	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7258-250BK	1/4	6.4	1	0.500	12.7	14	1.5	3000
7258-250BK050	1/4	6.4		0.500	12.7	14	1.5	3000
7258-250BL	1/4	6.4	1	0.500	12.7	14	1.5	3000
7258-250BL050	1/4	6.4	1	0.500	12.7	14	1.5	3000
7258-380BK	3/8	9.5	1	0.625	15.7	19	2.0	3000
7258-380BK050	3/8	9.5	1	0.625	15.7	19	2.0	3000
7258-380BL	3/8	9.5	1	0.625	15.7	19	2.0	3000
7258-380BL050	3/8	9.5		0.625	15.7	19	2.0	3000
7258-501BK	1/2	12.7	1	0.745	18.9	23	3.0	3000



Applications

 Pressure Washers



WARNING! Not recommended for steam service. Not intended for carpet cleaning applications.



NOTES:



WELDING

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Due to continual product improvements,

Parker reserves the right to alter specifications without prior notice. Parker Hannifin Corporation Industrial Hose Products www.safehose.com/



SIAMEEZ®Twin Welding Hose Grade T

Series 7109

OIL AND FLAME RESISTANT TUBE AND COVER

This hose is designed for portable or production line welding in factories, ships, construction work, etc. This hose is used with oxygen and most current fuel gases, including acetylene, hydrogen, propylene, propane, natural gas and MAPP® gas. The tube is non-blooming. Meets or exceeds RMA/CGA IP-7-99 standards for grade T, Type VD (vulcanized double) welding hose.

Minimum 4:1 Design factor

>> Compatible with all fuel gases

Tube	Black Neoprene
Cover	Green (oxygen), Red (fuel gas) Neoprene
Reinforcement	Multiple Textile Spirals
Temperature Range	-40°F to +200°F (-40°C to +93°C)
Branding	PARKER 7109 WELDING WARNING! FUEL GAS %6 ID MAX WP 200 PSI RMA/CGA IP-7-99 STD DUTY GRADE T COUPLE WITH ONE INCH FERRULES MADE IN USA (DATE CODE)
Brand Description	Ink Brand - White letter color
Compare to	Thermoid Tuline Grade T; Goodyear Gemini Twinline Grade T

LENGTHS: $\%_{16}$ " on 750 ft. reel, $\%_{16}$ " on 700 ft reel, and $\%_{1}$ " on 650 ft. reel. All reels \pm 50 ft.; 90% 1 piece, 10% 2 pieces with 50 ft. min. length. Coupled assemblies also available.

COUPLINGS: Special right-hand or left-hand threaded brass inserts and crimp ferrules – not available from Parker. Couplings not sold or quoted separately.

Part No.	ID (in.)	ID (mm)	Reinf. Spirals	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7109-191	3/16	4.8	2	0.438	11.1	15	2.0	200
7109-251	1/4	6.4	2	0.531	13.5	21	2.5	200
7109-311	5/16	7.9	2	0.594	15.1	28	3.0	200
7109-381	3/8	9.5	2	0.656	16.7	32	4.0	200

NOTE: Coupled assemblies also available.



WARNING! Care should be taken to avoid gouging, dragging, abrading or otherwise damaging the hose cover, which may also lead to premature hose failure. Do not attempt to repair or re-couple hose assemblies; replace all assemblies that show signs of age or abuse. Refer to RMA IP-11-5, "Welding Hose, Precautions for the Selection and Use of".



WARNING! Bleed hoses when not in use for 30 minutes or longer. Couple with one inch ferrules only.



Applications

 Welding and Cutting Operations





SIAMEEZ®Twin Welding Hose Grade RM

Series 7110 (Red – Acetylene Line Only) TUBE NOT OIL AND FLAME RESISTANT COVER OIL AND FLAME RESISTANT

This hose is designed for portable or production line welding in factories, ships, construction work, etc. Meets or exceeds RMA and CGA (Compressed Gas Association) specifications for type VD (vulcanized double), Grade RM welding hose. The cover is oil and flame resistant with a tube that is non-blooming. Minimum 4:1 Design factor

>> Designed to withstand rough environments

Tube	Black SBR
Cover	Green (oxygen), Red (acetylene) Neoprene
Reinforcement	Multiple textile spirals
Temperature Range	-40°F to +200°F (-40°C to +93°C)
Branding	PARKER 7110 WELDING WARNING! ACETYLENE ONLY 3/16 ID MAX WP 200 PSI RMA/CGA IP-7-99 STD DUTY GRADE RM COUPLE WITH ONE INCH FERRULES MADE IN USA
Brand Description	Ink Brand - White letter color
Compare to	Goodyear Gemini Twinline Grade RM; Thermoid Tuline Grade RM

LENGTHS: $\frac{3}{16}$ " – $\frac{1}{4}$ " on 750 ft. reel, $\frac{5}{16}$ " on 700 ft reel, and $\frac{3}{8}$ " on 650 ft. reel. All reels \pm 50 ft.; 90% 1 piece, 10% 2 pieces with 50 ft. min. length. Coupled assemblies also available.

COUPLINGS: Special right hand or left hand threaded brass inserts and crimp ferrules – not available from Parker. Couplings not sold or quoted separately.

Part No.	ID (in.)	ID (mm)	Reinf. Spirals	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7110-191	3/16	4.8	2	0.438	11.1	15	2.0	200
7110-251	1/4	6.4	2	0.531	13.5	20	2.5	200
7110-311	5⁄16	7.9	2	0.594	15.1	25	3.0	200
7110-381	3/8	9.5	2	0.656	16.7	31	4.0	200



Applications

- Welding and Cutting Operations
- Factories, Shipyards, Construction Sites



WARNING! Care should be taken to avoid gouging, dragging, abrading or otherwise damaging the hose cover, which may also lead to premature hose failure. Do not attempt to repair or re-couple hose assemblies; replace all assemblies that show signs of age or abuse. Refer to RMA IP-11-5, "Welding Hose, Precautions for the Selection and Use of".



WARNING! Grade R & RM for use with ACETYLENE GAS ONLY! DO NOT use with any other fuel gas. Bleed hoses when not in use for 30 minutes or longer. Couple with one inch ferrules only.





SIAMEEZ®

Twin Welding Hose - Grade R

Series 7126 (Red – Acetylene Line Only) TUBE AND COVER NOT OIL AND FLAME RESISTANT

This hose is recommended for portable or production line welding in factories, ships, construction work, etc. Meets or exceeds RMA and CGA (Compressed Gas Association) specifications for Type VD, Grade R welding hose. The tube is non-blooming. Minimum 4:1 Design factor

>> Rugged to withstand rough environments

Tube	Black EPDM						
Cover	Vulcanized twin - Green (oxygen), Red (acetylene) EPDM						
Reinforcement	Multiple textile spirals						
Temp. Range	-20°F to +200°F (-29°C to +93°C)						
Branding	PARKER 7126 WELDING WARNING! ACETYLENE ONLY 3/6 ID MAX WP 200 PSI RMA/CGA IP-7-99 STD DUTY GRADE R COUPLE WITH ONE INCH FERRULES MADE IN USA						
Brand Description	Ink Brand - White letter color						
Compare to	Goodyear Gemini Twinline Grade R; Thermoid Tuline Grade R						

LENGTHS: $\%_{16}$ " on 800 ft reel, $5\%_{16}$ " on 750 ft. reel, and %" on 650 ft. reel. All reels are 90% 1 piece, 10% 2 pieces, 50 ft. min length (total footage is +0/-50 ft. of length indicated). Coupled assemblies also available.

COUPLINGS: Special right-hand or left-hand threaded brass inserts and crimp ferrules – not available from Parker. Couplings not sold or quoted separately.

Part No.	ID (in.)	ID (mm)	Reinf. Spirals	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7126-191	3/16	4.8	2	0.438	11.1	13	2.0	200
7126-251	1/4	6.4	2	0.531	13.5	20	2.5	200
7126-311	5/16	7.9	2	0.594	15.1	25	3.0	200
7126-381	3/8	9.5	2	0.656	16.7	28	4.0	200



7126

 Factories, Shipyards, Construction Sites



WARNING! Care should be taken to avoid gouging, dragging, abrading or otherwise damaging the hose cover, which may also lead to premature hose failure. Do not attempt to repair or re-couple hose assemblies; replace all assemblies that show signs of age or abuse. Refer to RMA IP-11-5, "Welding Hose, Precautions for the Selection and Use of".



WARNING! Grade R & RM for use with ACETYLENE GAS ONLY! DO NOT use with any other fuel gas. Bleed hoses when not in use for 30 minutes or longer. Couple with one inch ferrules only.





Welding and Scarfing Hose - GRADE T

Series 7228T (Red – Fuel Gas Line) Series 7229T (Green Oxygen Line)

Designed for heavy-duty welding and scarfing service; resists punishment from heat, sharp edges and rough treatment encountered in mills, industrial plants and mine sites. Oil and flame resistant tube and cover. Tub and cover meet grade T requirements for use with all fuel gases.

>> Designed to withstand rough environments

Tube	Black SBR						
Cover	Red or Green Neoprene						
Reinforcement	Multiple textile braids						
Temperature Range	-40°F to +200°F (-40°C to +93°C)						
Branding	PARKER USA 7228T WELDING – SCARFING HOSE WARNING! FUEL GAS % ID 250 PSI MAX WP B2 (DATE CODE)						
Brand Description	Ink Brand - Black letter color						
Compare to	Thermoid Green GP/Oxygen						

LENGTHS: Random lengths on nominal 500 ft. reels. Also available in specified cut lengths, 50 ft., & 100 ft. - on quotation.

COUPLINGS: Special right-hand or left-hand threaded brass inserts and crimp ferrules not available from Parker. Couplings not sold or quoted separately.

Part No.	ID (in.)	ID (mm)	Reinf. Braids	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
-382	3/8	9.5	2	0.812	20.6	27	4.5	250
-502	1/2	12.7	2	0.937	23.8	33	6.0	250



Applications

- Welding
- Scarfing



WARNING! Bleed hoses when not in use for 30 minutes or longer. Couple with one inch ferrules only.



WARNING! Care should be taken to avoid gouging, dragging, abrading or otherwise damaging the hose cover, which may also lead to premature hose failure. Do not attempt to repair or re-couple hose assemblies; replace all assemblies that show signs of age or abuse. Refer to RMA IP-11-5, "Welding Hose, Precautions for the Selection and Use of".







Applications

- Welding
- Cutting

Single Line Welding Hose – Grade T

Series 7141 (Red – Fuel Gas Line)
Series 7142 (Green – Oxygen Line)
OIL AND FLAME RESISTANT TUBE AND COVER

For all welding and cutting operations with oxygen and most current fuel gases, including acetylene, hydrogen, natural gas, propane, propylene and MAPP® gas, where separate lines are preferable. The tube is non-blooming. Meets or exceeds RMA/CGA IP-7-99 standards for Grade T, Type S welding hose. Minimum 4:1 Design factor

>> Compatible with all fuel gases

Tube	Black Neoprene						
Cover	Ribbed Red or Green Neoprene						
Reinforcement	Multiple textile spirals						
Temperature Range	-40°F to +200°F (-40°C to +93°C)						
Branding	PARKER 7141 WELDING WARNING! FUEL GAS 3/16 ID MAX WP 200 PSI RMA/CGA IP-7-99 STD DUTY GRADE T COUPLE WITH ONE INCH FERRULES MADE IN USA (DATE CODE)						
Brand Description	Ink Brand - White letter color						
Compare to	Thermoid Single Line Corrugated Grade T Welding; Goodyear Wingfoot Single Line Grade T						

LENGTHS: 750 ft. - 500 ft. Reels \pm 50 ft.; 90% 1 piece, 10% 2 pieces, with 50 ft. min. length.

COUPLINGS: Special right-hand or left-hand threaded brass inserts and crimp ferrules not available from Parker. Couplings not sold or quoted separately.

Part No.	ID (in.)	ID (mm)	Reinf. Spirals	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
-19200	3/16	4.8	2	0.438	11.1	8	2.0	200
-25200	1/4	6.4	2	0.531	13.5	10	2.5	200
-31200	5/16	7.9	2	0.594	15.1	14	3.0	200
-38200	3/8	9.5	2	0.656	16.7	16	4.0	200
-50200	1/2	12.7	4	0.875	22.2	28	5.0	200



WARNING! Care should be taken to avoid gouging, dragging, abrading or otherwise damaging the hose cover, which may also lead to premature hose failure. Do not attempt to repair or re-couple hose assemblies; replace all assemblies that show signs of age or abuse. Refer to RMA IP-11-5, "Welding Hose, Precautions for the Selection and Use of".



WARNING! Bleed hoses when not in use for 30 minutes or longer. Couple with one inch ferrules only.





Single Line Welding Hose – Grade R

Series 7120 (Red – Acetylene Line Only)
Series 7121 (Green Oxygen Line)
TUBE AND COVER NOT OIL AND FLAME RESISTANT

This hose is for welding and cutting operations with oxygen and acetylene gas (only) where separate lines are preferable. Meets or exceeds RMA and CGA (Compressed Gas Association) standards for Grade R, Type S welding hose. The tube is non-blooming and wax-free.

4:1 Design factor

>> Non-blooming tube prevents assembly blockage

Tube	Black EPDM						
Cover	Ribbed Red or Green EPDM						
Reinforcement	Multiple Textile Spirals						
Temp. Range	-40°F to +200°F (-40°C to +93°C)						
Branding	PARKER 7120 WELDING WARNING! ACETYLENE ONLY %6 ID (4.8 MM) MAX WP 200 PSI RMA/CGA IP-7-99 STD DUTY GRADE R COUPLE WITH ONE INCH FERRULES MADE IN USA (DATE CODE)						
Brand Description	Ink Brand - White letter color						
Compare to	Goodyear Wingfoot Single Line Grade R; Thermoid Single Line Corrugated Grade R						

LENGTHS: 750 ft. - 500 ft. Reels \pm 50 ft.; 90% 1 piece, 10% 2 pieces, with 50 ft. min. length.

COUPLINGS: Special right-hand or left-hand threaded brass inserts and crimp ferrules not available from Parker. Couplings not sold or quoted separately.

Part No.	ID (in.)	ID (mm)	Reinf. Spirals	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
-19200	3/16	4.8	2	0.438	11.1	7	2.0	200
-25200	1/4	6.4	2	0.531	13.5	10	2.5	200
-31200	5/16	7.9	2	0.594	15.1	13	3.0	200
-38200	3/8	9.5	2	0.656	16.7	14	4.0	200
-50200	1/2	12.7	4	0.875	22.2	25	5.0	200



Applications

- Welding
- Cutting
- Factories, Shipyards, Construction Sites



WARNING! Care should be taken to avoid gouging, dragging, abrading or otherwise damaging the hose cover, which may also lead to premature hose failure. Do not attempt to repair or re-couple hose assemblies; replace all assemblies that show signs of age or abuse. Refer to RMA IP-11-5, "Welding Hose, Precautions for the Selection and Use of".



WARNING! Grade R & RM for use with ACETYLENE GAS ONLY! DO NOT use with any other fuel gas. Bleed hoses when not in use for 30 minutes or longer. Couple with one inch ferrules only.





Non-Conductive Cable Cover – Spiral

Series 7172

This hose has been designed for use as cable covering on water cooled welding systems. The specially blended non-conductive Nitrile tube and EPDM cover provide a minimum of 1 megohm resistance per inch at 1000 volts DC. The synthetic textile spiral reinforcement provides a lightweight product that can be used in many applications that require a non-conductive construction and 200 PSI working pressures.

4:1 Design factor

>> Lightweight, non-conductive

Tube	Black NBR Blend
Cover	Black EPDM
Reinforcement	Textile spirals
Temperature Range	-20°F to +212°F (-29°C to +100°C)
Branding	None

LENGTHS: 750 ft. and 650 ft. reels + 50 ft. / - 0 ft., 3 pieces maximum.

COUPLINGS: Not supplied.

Part No.	ID (in.)	ID (mm)	Reinf. Spirals	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7172-19200	3⁄16	4.8	2	0.405	10.3	6	1.5	200
7172-25200	1/4	6.4	2	0.477	12.1	7	2.0	200
7172-31200	5⁄16	7.9	2	0.500	12.7	8	2.5	200
7172-38200	3/8	9.5	2	0.601	15.3	10	3.0	200



Applications

 Water Cooled Welding Systems





Oxygen Charging Hose

Series 7293

Designed for lancing and scarfing applications in steel mills and foundries. This hose is made with high quality, flame resistant Neoprene rubber compounds that stand up to tough, oily environments. The green Neoprene cover is used to indicate color coding for oxygen. The tube is cleaned and the ends are capped at the factory.

4:1 Design factor

>> Designed to withstand tough environments

Tube	Black Neoprene					
Cover	Green Neoprene					
Reinforcement	Multiple textile plies					
Temperature Range	-22°F to +176°F (-30°C to +80°C)					
Branding	PARKER SERIES 7293 OXYGEN CHARGING 500 PSI MAX WP MADE IN USA 001					
Brand Description	Embossed Brand					
Compare to	Titan SS141 Oxygen Charging Hose					

LENGTHS: 100 ft. all sizes. Lengths up to 200 ft. on quotation. Contact IHP Customer Service for details.

COUPLINGS: For permanent crimp specifications, refer to CrimpSource. Other available coupling options: Series 7615, 7692. For assembly guidelines and additional coupling options, refer to NAHAD Industrial Hose Assembly Guidelines.

Part No.	ID (in.)	ID (mm)	Reinf. Plies	OD (in.)	OD (mm)	Approx. Wt. per 100 Ft.	Min. Bend Radius	Max. Rec. WP
7293-0500	1/2	12.7	2	0.992	25.2	38	3.5	500
7293-0750	3/4	19.1	2	1.276	32.4	54	3.5	500
7293-1000	1	25.4	2	1.528	38.8	68	4.5	500
7293-1250	11/4	31.8	2	1.930	49.0	108	5.0	500
7293-1500	1½	38.1	2	2.174	55.2	124	7.0	500
7293-2000	2	50.8	4	2.764	70.2	180	14.0	500

7293

Applications

- Lancing
- Scarfing



NOTES:



COUPLINGS

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DRAGON BREATH®

Steam Couplings

Series 7610 73 Style **FEMALE WING NUT**



Service	High pressure air, water and steam.
Description	One piece ferrule and stem with machined ductile iron female wing nut. NPSM thread with Ground Joint EPDM O-Ring Seal.
Attachment	Permanent Crimp, refer to CrimpSource. Refer to Parker Industrial Hose Crimp Specifications for 73 coupling crimp specifications.

Hose ID	Thread Female	Part No.
3/4	1½" NPSM	7610-1273GJF
1	1½" NPSM	7610-1673GJF

DRAGON BREATH®

Steam Couplings

Series 7613 BW Style FEMALE GRIP NUT f8]gWebh]bi YX 7 cbgi `hZJWrcfmiZcf`XYhJ]`gŁ



DRAGON BREATH®Steam Coupling Adapters

Series 7612 FEMALE SPUD – STEEL



Service Medium to high pressure steam	
Description	Adapter between female ground joint coupling and NPT male pipe.

NPT Thread	NPSM Thread	Part Number
Female ½"	Male 1"	7612-500GFS2
Female ¾"	Male 11/2"	7612-750GFS3
Female ½"	Male 11/2"	7612-100GFS4

Series 7612 MALE SPUD - STEEL



Service	Medium to high pressure steam
Description	Adapter between female ground joint coupling and female NPT.

NPT Thread	NPSM Thread	Part Number
Male ½"	Male 1"	7612-500GMS2
Male ¾"	Male 11/2"	7612-750GMS3
Male ½"	Male 11/2"	7612-100GMS4

Series 7612 DOUBLE SPUD - STEEL



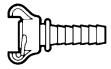
Service Medium to high pressure steam	
Description	Adapter between two female ground joint couplings.

Male Thread	Male Thread	Part Number
Male 1½"	Male 11/2"	7612-100GDS3
Male 1"	Male 1"	7612-500GDS2



Universal Type Couplings

Series 7611 PLATED MALLEABLE IRON



Hose End (E)



Male End (M)



Female End (F)



Blank End (BE)



Triple Connection (TC)

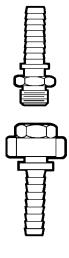
Service	For low pressure air, water, and other service requiring quick or frequent connections. WARNING! Not For Steam Service! WARNING! Not recommended for applications above 150 PSI working pressure!
Description	Plated malleable iron. Several type ends available for connection to hose, NPT male and female connections, blanks for sealing and triple connectors.
Attachment	Interlocking clamp series 7692
Manufacturer	Dixon Valve & Coupling

Hose ID (in.)	Hose End	Female End	Male End	Blank End	Triple Connection	Extra Neoprene Gaskets
1/4	N/A	-250F	-250M	-250BE	-250TC	
3/8	-380E	-380F	-380M	-380BE	-380TC	
1/2	-500E	-500F	-500M	-500BE	-500TC	
3/4	-750E	-750F	-750M	-750BE	-750TC	
1	-1000E	-1000F	-1000M	-1000BE	N/A	-1000NG

Interlocking Clamp Type Couplings

Series 7615 PLATED MALLEABLE IRON/STEEL

Service	High pressure air, water, steam, petroleum products, and chemicals
Description	Plated malleable iron wing nut with either malleable iron or steel stem and spud. NPT male and NPT female spud. Female wing nut-to-spud connection is NPSM ground joint or washer seal.
Attachment	Interlocking clamp series 7692
Manufacturer	Dixon Value & Coupling



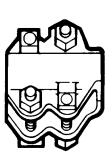
Hose ID (in.)	NPT Thread Size (in.)	Female Ground Joint	Female Washer Type	Male for Either Female
1/4	1/4	-250FGJ	-250FW	-250M
3/8	3/8	-380FGJ	-380FW	-380M
1/2	1/2	-500FGJ	-500FW	-500M
3/4	3⁄4	-750FGJ	-750FW	-750M
1	1	-1000FGJ	-1000FW	-1000M
11/4	11/4	-1250FGJ	-1250FW	-1250M
1½	1½	-1500FGJ	-1500FW	-1500M
2	2	-2000FGJ	-2000FW	-2000M
2½	2½	-2500FGJ	-2500FW	-2500M
3	3	-3000FGJ	-3000FW	-3000M
4	4	-4000FGJ	-4000FW	-4000M



Interlocking Clamps

Series 7692 PLATED MALLEABLE IRON

Service	For attaching high pressure coupling series 7611, 7615	
Description	Plated malleable iron; 2, 4 and 6 bolt configuration	
Manufacturer	Dixon Valve & Coupling	
Torque Specifications	Contact Dixon Valve & Coupling	



Hose ID (in.)	From Hose OD (in.)	From Hose OD (mm)	To Hose OD (in.)	To Hose OD (mm)	Bolts	Part Number
1/2	9/16	14.3	21/32	16.7	2	-251
3/8	21/32	16.7	13/16	20.6	2	-381
1/2	13/16	20.6	1 15/16	23.8	2	-501
1/2	¹⁵ / ₁₆	23.8	11/16	27.0	2	-502
1/2	1 ½16	27.0	1 ¾16	30.2	2	-503
3/4	13/16	30.2	1 5⁄16	33.3	2	-751
3/4	1 5⁄16	33.3	1½	38.1	2	-752
3/4	1½	38.1	1 ¹¹ / ₁₆	42.9	2	-753
1	117/32	38.9	123/32	43.7	4	-1001
1	1 ¹¹ / ₁₆	42.9	1 ²⁷ / ₃₂	46.8	4	-1002
1	11//8	47.6	21/16	52.4	4	-1003
11/4	21/16	52.4	21/4	57.2	4	-1251
11/4	1 ²⁵ / ₃₂	45.2	23/32	53.2	4	-1252
1½	23/32	53.2	23/32	57.9	4	-1501
1½	21/4	57.2	27/16	61.9	4	-1502
1½	215/32	62.7	223/32	69.1	4	-1503
2	21/2	63.5	2 ²⁵ / ₃₂	70.6	4	-2001
2 2	23/4	69.9	31/16	77.8	4	-2002
2	33/32	78.6	37/16	87.3	4	-2003
2½	31/2	88.9	315/16	100.0	4	-2501
3	313/16	96.8	43/16	106.4	4	-3001
3	41/16	103.2	47/16	112.7	4	-3002
4	47/8	123.8	55/16	134.9	6	-4001
4	51/8	130.2	63/16	157.2	6	-4002



Barbed Inserts

Series 7628 MACHINED BRASS

Service	Low to medium pressure, air, water and general purpose.
Description	Machined brass, serrated shank. NPTF dryseat male.
Attachment	Ferrule, band or clamp.



Part Number	Hose ID (in.)	Thread Size (in.)
7628-191M	3/16	1/4
7628-192M	3/16	1/8
7628-251M	1/4	1/8
7628-252M	1/4	1/4
7628-253M	1/4	3/8
7628-311M	5/16	1/4
7628-381M	3/8	1/8
7628-382M	3/8	1/4
7628-383M	3/8	3/8
7628-501M	1/2	1/4
7628-502M	1/2	3/8
7628-503M	1/2	1/2
7628-751M	3/4	3/4
7628-1001M	1	1



Combination Nipples

Series 7670 PLATED STEEL

Service	Low to medium pressure suction and discharge of water, fluids and material handling.
Description	Plated steel, serrated shank, NPT male threads.
Attachment	Clamps or bands.

Hose ID (in.)	Thread Size (in)	Part Number
1/2	1/2	-501
3/4	3/4	-751
1	1	-1001
11/4	11/4	-1251
1½	1½	-1501
2	2	-2001
2½	21/2	-2501
3	3	-3001
4	4	-4001
5	5	-5001
6	6	-6001
8	8	-8001
10	10	-10001





NOTES:



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Parker Safety Guide for Selecting and Using Hose, Tubing, Fittings and Related Accessories

Parker Publication No. 4400-B.1 Revised: May, 2002

WARNING: Failure or improper selection or improper use of hose, tubing, fittings, assemblies or related accessories ("Products") can cause death, personal injury and property damage. Possible consequences of failure or improper selection or improper use of these Products include but are not limited to:

- Fittings thrown off at high speed.
- High velocity fluid discharge.
- Explosion or burning of the conveyed fluid.
- Electrocution from high voltage electric powerlines.
- Contact with suddenly moving or falling objects that are controlled by the conveyed fluid.
- Injections by high-pressure fluid discharge.
- · Dangerously whipping Hose.
- Contact with conveyed fluids that may be hot, cold, toxic or otherwise injurious.
- · Sparking or explosion caused by static electricity buildup or other sources of electricity.
- Sparking or explosion while spraying paint or flammable liquids.
- Injuries resulting from inhalation, ingestion or exposure to fluids.

Before selecting or using any of these Products, it is important that you read and follow the instructions below. Only Hose from Parker's Stratoflex Products Division is approved for in flight aerospace applications, and no other Hose can be used for such in flight applications.

GENERAL INSTRUCTIONS 1.0

- 1.1 Scope: This safety guide provides instructions for selecting and using (including assembling, installing, and maintaining) these Products. For convenience, all rubber and/ or thermoplastic products commonly called "hose" or "tubing" are called "Hose" in this safety guide. All assemblies made with Hose are called "Hose Assemblies". All products commonly called "fittings" or "couplings" are called "Fittings". All related accessories (including crimping and swaging machines and tooling) are called "Related Accessories". This safety guide is a supplement to and is to be used with, the specific Parker publications for the specific Hose, Fittings and Related Accessories that are being considered for use.
- Fail-Safe: Hose, and Hose Assemblies and Fittings can and do fail without warning for many reasons. Design all systems and equipment in a fail-safe mode, so that failure of the Hose or Hose Assembly or Fitting will not endanger persons or property.
- Distribution: Provide a copy of this safety guide to each person that is responsible for selecting or using Hose and Fitting products. Do not select or use Parker Hose or Fittings without thoroughly reading and understanding this safety guide as well as the specific Parker publications for the products considered or selected.
- **1.4 User Responsibility:** Due to the wide variety of operating conditions and applications for Hose and Fittings, Parker and its distributors do not represent or warrant that any particular Hose or Fitting is suitable for any specific end use system. This safety guide does not analyze all technical parameters that must be considered in selecting a product. The user, through its own analysis and testing, is solely responsible for:
- Making the final selection of the Hose and Fitting.
- · Assuring that the user's requirements are met and that the application presents no health or safety hazards.
- Providing all appropriate health and safety warnings on the equipment on which the Hose and Fittings are used.
- Assuring compliance with all applicable government and industry standards.
- 1.5 **Additional Questions:** Call the appropriate Parker technical service department if you have any questions or require any additional information. the Parker publication for the product being considered

or used, or call 1-800-CPARKER, or go to www.parker. com, for telephone numbers of the appropriate technical service department.

HOSE AND FITTING SELECTION INSTRUCTIONS

Electrical Conductivity: Certain applications require that the Hose be nonconductive to prevent electrical current flow. Other applications require the Hose and the Fitting and the Hose/Fitting interface to be sufficiently conductive to drain off static electricity. Extreme care must be exercised when selecting Hose and Fittings for these or any other applications in which electrical conductivity or nonconductivity is a factor.

The electrical conductivity or nonconductivity of Hose and Fittings is dependent upon many factors and may be susceptible to change. These factors include but are not limited to the various materials used to make the Hose and the Fittings, Fitting finish (some Fitting finishes are electrically conductive while others are nonconductive), manufacturing methods (including moisture control), how the Fittings contact the Hose, age and amount of deterioration or damage or other changes, moisture content of the Hose at any particular time, and other factors.

The following are considerations for electrically nonconductive and conductive Hose. For other applications consult the individual catalog pages and the appropriate industry or regulatory standards for proper selection.

2.1.1 Electrically Nonconductive Hose: Certain applications require that the Hose be nonconductive to prevent electrical current flow or to maintain electrical isolation. For these applications that require Hose to be electrically nonconductive, including but not limited to applications near high voltage electric lines, only special nonconductive Hose can be used. The manufacturer of the equipment in which the nonconductive Hose is to be used must be consulted to be certain that the Hose and Fittings that are selected are proper for the application. Do not use any Parker Hose or Fitting for any such application requiring nonconductive Hose, including but not limited to applications near high voltage electric lines, unless (i) the application is expressly approved in the Parker technical publication for the product, (ii) the Hose is marked "nonconductive", and (iii) the manufacturer of the equipment on which the Hose is to be used specifically approves the particular Parker Hose and Fitting for such use.



2.1.2 Electrically Conductive Hose: Parker manufacturers special Hose for certain applications that require electrically conductive Hose.

Parker manufactures special Hose for conveying paint in This Hose is labeled airless paint spraying applications. "Electrically Conductive Airless Paint Spray Hose" on its layline and packaging. This Hose must be properly connected to the appropriate Parker Fittings and properly grounded in order to dissipate dangerous static charge buildup, which occurs in all airless paint spraying applications. Do not use any other Hose for airless paint spraying, even if electrically conductive. Use of any other Hose or failure to properly connect the Hose can cause a fire or an explosion resulting in death, personal injury, and property damage.

Parker manufactures a special Hose for certain compressed natural gas ("CNG") applications where static electricity buildup may occur. Parker CNG Hose assemblies comply with AGA Requirements 1-93, "Hoses for Natural Gas Vehicles and Fuel Dispensers". This Hose is labeled "Electrically Conductive for CNG Use" on its layline and packaging. This Hose must be properly connected to the appropriate Parker Fittings and properly grounded in order to dissipate dangerous static charge buildup, which occurs in, for example, high velocity CNG dispensing or transfer. Do not use any other Hose for CNG applications where static charge buildup may occur, even if electrically conductive. Use of other Hoses in CNG applications or failure to properly connect or ground this Hose can cause a fire or an explosion resulting in death, personal injury, and property damage. Care must also be taken to protect against CNG permeation through the Hose wall. See section 2.6, Permeation, for more information. Parker CNG Hose is intended for dispenser and vehicle use at a maximum temperature of 180°F. Parker CNG Hose should not be used in confined spaces or unventilated areas or areas exceeding 180°F. Final assemblies must be tested for leaks. CNG Hose Assemblies should be tested on a monthly basis for conductivity per AGA 1-93.

Parker manufacturers special Hose for aerospace in flight applications. Aerospace in flight applications employing Hose to transmit fuel, lubricating fluids and hydraulic fluids require a special Hose with a conductive inner tube. This Hose for in flight applications is available only from Parker's Stratoflex Products Division. Do not use any other Parker Hose for in flight applications, even if electrically conductive. Use of other Hoses for in flight applications or failure to properly connect or ground this Hose can cause a fire or an explosion resulting in death, personal injury, and property damage. These Hose assemblies for in flight applications must meet all applicable aerospace industry, aircraft engine, and aircraft requirements.

- Pressure: Hose selection must be made so that the published maximum recommended working pressure of the Hose is equal to or greater than the maximum system pressure. Surge pressures or peak transient pressures in the system must be below the published maximum working pressure for the Hose. Surge pressures and peak pressures can usually only be determined by sensitive electrical instrumentation that measures and indicates pressures at millisecond intervals. Mechanical pressure gauges indicate only average pressures and cannot be used to determine surge pressures or peak transient pressures. Published burst pressure ratings for Hose is for manufacturing test purposes only and is no indication that the Product can be used in applications at the burst pressure or otherwise above the published maximum recommended working pressure.
- **Suction:** Hoses used for suction applications must be selected to insure that the Hose will withstand the vacuum and pressure of the system. Improperly selected Hose may collapse in suction application.
- Temperature: Be certain that fluid and ambient temperatures, both steady and transient, do not exceed the limi-

tations of the Hose. Temperatures below and above the recommended limit can degrade Hose to a point where a failure may occur and release fluid. Properly insulate and protect the Hose Assembly when routing near hot objects (e.g. manifolds). Do not use any Hose in any application where failure of the Hose could result in the conveyed fluids (or vapors or mist from the conveyed fluids) contacting any open flame. molten metal, or other potential fire ignition source that could cause burning or explosion of the conveyed fluids or vapors.

- Fluid Compatibility: Hose Assembly selection must assure compatibility of the Hose tube, cover, reinforcement, and Fittings with the fluid media used. See the fluid compatibility chart in the Parker publication for the product being considered or used. This information is offered only as a guide. Actual service life can only be determined by the end user by testing under all extreme conditions and other analysis. Hose that is chemically compatible with a particular fluid must
- be assembled using Fittings and adapters containing likewise compatible seals.
- **Permeation:** Permeation (that is, seepage through the Hose) will occur from inside the Hose to outside when Hose is used with gases, liquid and gas fuels, and refrigerants (including but not limited to such materials as helium, diesel fuel, gasoline, natural gas, or LPG). This permeation may result in high concentrations of vapors which are potentially flammable, explosive, or toxic, and in loss of fluid. Dangerous explosions, fires, and other hazards can result when using the wrong Hose for such applications. The system designer must take into account the fact that this permeation will take place and must not use Hose if this permeation could be hazardous. The system designer must take into account all legal, government, insurance, or any other special regulations which govern the use of fuels and refrigerants. Never use a Hose even though the fluid compatibility is acceptable without considering the potential hazardous effects that can result from permeation through the Hose Assembly.

Permeation of moisture from outside the Hose to inside the Hose will also occur in Hose assemblies, regardless of internal pressure. If this moisture permeation would have detrimental effects (particularly, but not limited to refrigeration and air conditioning systems), incorporation of sufficient drying capacity in the system or other appropriate system safeguards should be selected and used.

- Transmission of power by means of pres-Size: surized fluid varies with pressure and rate of flow. The size of the components must be adequate to keep pressure losses to a minimum and avoid damage due to heat generation or excessive fluid velocity.
- Routing: Attention must be given to optimum routing to minimize inherent problems (kinking or flow restriction due to Hose collapse, twisting of the Hose, proximity to hot objects or heat sources).
- **Environment:** Care must be taken to insure that the Hose and Fittings are either compatible with or protected from the environment (that is, surrounding conditions) to which they are exposed. Environmental conditions including but not limited to ultraviolet radiation, sunlight, heat, ozone, moisture, water, salt water, chemicals, and air pollutants can cause degradation and premature failure.
- 2.10 Mechanical Loads: External forces can significantly reduce Hose life or cause failure. Mechanical loads which must be considered include excessive flexing, twist, kinking, tensile or side loads, bend radius, and vibration. Use of swivel type Fittings or adapters may be required to insure no twist is put into the Hose. Unusual applications may require special testing prior to Hose selection.
- 2.11 Physical Damage: Care must be taken to protect Hose from wear, snagging, kinking, bending smaller that minimum bend radius, and cutting, any of which can cause



premature Hose failure. Any Hose that has been kinked or bent to a radius smaller than the minimum bend radius, and any Hose that has been cut or is cracked or is otherwise damaged, should be removed and discarded.

- **2.12 Proper End Fitting:** See instructions 3.2 through 3.5. These recommendations may be substantiated by testing to industry standards such as SAE J517 for hydraulic applications, or MIL-A-5070, AS1339, or AS3517 for Hoses from Parker's Stratoflex Products Division for aerospace applications.
- **2.13 Length:** When establishing a proper Hose length, motion absorption, Hose length changes due to pressure, and Hose and machine tolerances and movement must be considered.
- **2.14 Specifications and Standards:** When selecting Hose and Fittings, government, industry, and Parker specifications and recommendations must be reviewed and followed as applicable.
- **2.15** Hose Cleanliness: Hose components may vary in cleanliness levels. Care must be taken to insure that the Hose Assembly selected has an adequate level of cleanliness for the application.
- **2.16 Fire Resistant Fluids:** Some fire resistant fluids that are to be conveyed by Hose require use of the same type of Hose as used with petroleum base fluids. Some such fluids require a special Hose, while a few fluids will not work with any Hose at all. See instructions 2.5 and 1.5. The wrong Hose may fail after a very short service. In addition, all liquids but pure water may burn fiercely under certain conditions, and even pure water leakage may be hazardous.
- **2.17 Radiant Heat:** Hose can be heated to destruction without contact by such nearby items as hot manifolds or molten metal. The same heat source may then initiate a fire. This can occur despite the presence of cool air around the Hose.
- **2.18 Welding or Brazing:** When using a torch or arcwelder in close proximity to hydraulic lines, the hydraulic lines should be removed or shielded with appropriate fire resistant materials. Flame or weld spatter could burn through the Hose and possibly ignite escaping fluid resulting in a catastrophic failure. Heating of plated parts, including Hose Fittings and adapters, above 450°F (232°C) such as during welding, brazing, or soldering may emit deadly gases.
- **2.19 Atomic Radiation:** Atomic radiation affects all materials used in Hose assemblies. Since the long-term effects may be unknown, do not expose Hose assemblies to atomic radiation.
- **2.20 Aerospace Applications:** The only Hose and Fittings that may be used for in flight aerospace applications are those available from Parker's Stratoflex Products Division. Do not use any other Hose or Fittings for in flight applications. Do not use any Hose or Fittings from Parker's Stratoflex Products Division with any other Hose or Fittings, unless expressly approved in writing by the engineering manager or chief engineer of Stratoflex Products Division and verified by the user's own testing and inspection to aerospace industry standards.
- **2.21 Unlocking Couplings:** Ball locking couplings or other couplings with disconnect sleeves can unintentionally disconnect if they are dragged over obstructions or if the sleeve is bumped or moved enough to cause disconnect. Threaded couplings should be considered where there is a potential for accidental uncoupling.

3.0 HOSE AND FITTING ASSEMBLY AND INSTALLATION INSTRUCTIONS

3.1 Component Inspection: Prior to assembly, a careful examination of the Hose and Fittings must be performed. All components must be checked for correct style,

- size, catalog number, and length. The Hose must be examined for cleanliness, obstructions, blisters, cover looseness, kinks, cracks, cuts or any other visible defects. Inspect the Fitting and sealing surfaces for burrs, nicks, corrosion or other imperfections. Do NOT use any component that displays any signs of nonconformance.
- **3.2** Hose and Fitting Assembly: Do not assemble a Parker Fitting on a Parker Hose that is not specifically listed by Parker for that Fitting, unless authorized in writing by the engineering manager or chief engineer of the appropriate Parker division. Do not assemble a Parker Fitting on another manufacturers Hose or a Parker Hose on another manufacturers Fitting unless (i) the engineering manager or chief engineer of the appropriate Parker division approves the Assembly in writing or that combination is expressly approved in the appropriate Parker literature for the specific Parker product, and (ii) the user verifies the Assembly and the application through analysis and testing. For Parker Hose that does not specify a Parker Fitting, the user is solely responsible for the selection of the proper Fitting and Hose Assembly procedures. See instruction 1.4.
- The Parker published instructions must be followed for assembling the Fittings on the Hose. These instructions are provided in the Parker Fitting catalog for the specific Parker Fitting being used, or by calling 1-800-CPARKER, or at www.parker.com.
- **3.3** Related Accessories: Do not crimp or swage any Parker Hose or Fitting with anything but the listed swage or crimp machine and dies in accordance with Parker published instructions. Do not crimp or swage another manufacturers Fitting with a Parker crimp or swage die unless authorized in writing by the engineering manager of chief engineer of the appropriate Parker division.
- **3.4** Parts: Do not use any Parker Fitting part (including but not limited to socket, shell, nipple, or insert) except with the correct Parker mating parts, in accordance with Parker published instructions, unless authorized in writing by the engineering manager or chief engineer of the appropriate Parker division.
- **3.5** Reusable/Permanent: Do not reuse any field attachable (reusable) Hose Fitting that has blown or pulled off a Hose. Do not reuse a Parker permanent Hose Fitting (crimped or swaged) or any part thereof. Complete Hose Assemblies may only be reused after proper inspection under section 4.0. Do not assemble Fittings to any previously used hydraulic Hose that was in service, for use in a fluid power application.
- **3.6 Pre-Installation Inspection:** Prior to installation, a careful examination of the Hose Assembly must be performed. Inspect the Hose Assembly for any damage or defects. Do NOT use any Hose Assembly that displays any signs of nonconformance.
- **3.7 Minimum Bend Radius:** Installation of a Hose at less than the minimum listed bend radius may significantly reduce the Hose life. Particular attention must be given to preclude sharp bending at the Hose to Fitting juncture. Any bending during installation at less than the minimum bend radius must be avoided. If any Hose is kinked during installation, the Hose must be discarded.
- **3.8 Twist Angle and Orientation:** Hose Assembly installation must be such that relative motion of machine components does not produce twisting.
- **3.9 Securement:** In many applications, it may be necessary to restrain, protect, or guide the Hose to protect it from damage by unnecessary flexing, pressure surges, and contact with other mechanical components. Care must be taken to insure such restraints do not introduce additional stress or wear points.



- 3.10 Proper Connection of Ports: Proper physical installation of the Hose Assembly requires a correctly installed port connection insuring that no twist or torque is transferred to the Hose when the Fittings are being tightened or otherwise during use.
- 3.11 External Damage: Proper installation is not complete without insuring that tensile loads, side loads, kinking, flattening, potential abrasion, thread damage, or damage to sealing surfaces are corrected or eliminated. See instruction 2.10.
- 3.12 System Checkout: All air entrapment must be eliminated and the system pressurized to the maximum system pressure (at or below the Hose maximum working pressure) and checked for proper function and freedom from leaks. Personnel must stay out of potential hazardous areas while testing and using.
- 3.13 Routing: The Hose Assembly should be routed in such a manner so if a failure does occur, the escaping media will not cause personal injury or property damage. In addition, if fluid media comes in contact with hot surfaces, open flame, or sparks, a fire or explosion may occur. See section 2.4.

HOSE AND FITTING MAINTENANCE AND REPLACEMENT INSTRUCTIONS

- Even with proper selection and installation, Hose life may be significantly reduced without a continuing maintenance program. The severity of the application, risk potential from a possible Hose failure, and experience with any Hose failures in the application or in similar applications should determine the frequency of the inspection and the replacement for the Products so that Products are replaced before any failure occurs. A maintenance program must be established and followed by the user and, at minimum, must include instructions 4.2 through 4.7.
- Visual Inspection Hose/Fitting: Any of the following conditions require immediate shut down and replacement of the Hose Assembly:
- · Fitting slippage on Hose,
- Damaged, cracked, cut or abraded cover (any reinforcement exposed);
- · Hard, stiff, heat cracked, or charred Hose;
- · Cracked, damaged, or badly corroded Fittings;
- · Leaks at Fitting or in Hose;
- Kinked, crushed, flattened or twisted Hose; and
- Blistered, soft, degraded, or loose cover.
- Visual Inspection All Other: The following items must be tightened, repaired, corrected or replaced as required:
- Leaking port conditions;
- · Excess dirt buildup;
- · Worn clamps, guards or shields; and
- · System fluid level, fluid type, and any air entrapment.
- Functional Test: Operate the system at maximum operating pressure and check for possible malfunctions and leaks. Personnel must avoid potential hazardous areas while testing and using the system. See section 2.2.
- Replacement Intervals: Hose assemblies and elastomeric seals used on Hose Fittings and adapters will eventually age, harden, wear and deteriorate under thermal cycling and compression set. Hose Assemblies and elastomeric seals should be inspected and replaced at specific replacement intervals, based on previous service life, government or industry recommendations, or when failures could result in unacceptable downtime, damage, or injury risk. See section 1.2.
- Hose Inspection and Failure: Hydraulic power is accomplished by utilizing high-pressure fluids to transfer energy and do work. Hoses, Fittings, and Hose Assemblies all contribute to this by transmitting fluids at high pressures. Fluids under pressure can be dangerous and potentially lethal

and, therefore, extreme caution must be exercised when working with fluids under pressure and handling the Hoses transporting the fluids. From time to time, Hose Assemblies will fail if they are not replaced at proper time intervals. Usually these failures are the result of some form of misapplication, abuse, wear, or failure to perform proper maintenance. When Hoses fail, generally the high-pressure fluids inside escape in a stream which may or may not be visible to the user. Under no circumstances should the user attempt to locate the leak by "feeling" with their hands or any other part of their body. High-pressure fluids can and will penetrate the skin and cause severe tissue damage and possibly loss of limb. Even seemingly minor hydraulic fluid injection injuries must be treated immediately by a physician with knowledge of the tissue damaging properties of hydraulic fluid.

If a Hose failure occurs, immediately shut down the equipment and leave the area until pressure has been completely released from the Hose Assembly. Simply shutting down the hydraulic pump may or may not eliminate the pressure in the Hose Assembly. Many times check valves, etc., are employed in a system and can cause pressure to remain in a Hose Assembly even when pumps or equipment are not operating. Tiny holes in the Hose, commonly known as pinholes, can eject small, dangerously powerful but hard to see streams of hydraulic fluid. It may take several minutes or even hours for the pressure to be relieved so that the Hose Assembly may be examined safely.

Once the pressure has been reduced to zero, the Hose Assembly may be taken off the equipment and examined. It must always be replaced if a failure has occurred. Never attempt to patch or repair a Hose Assembly that has failed. Consult the nearest Parker distributor or the appropriate Parker division for Hose Assembly replacement information. Never touch or examine a failed Hose Assembly unless it is

obvious that the Hose no longer contains fluid under pressure. The high-pressure fluid is extremely dangerous and can cause serious and potentially fatal injury.

- Elastomeric seals: Elastomeric seals will eventually age, harden, wear and deteriorate under thermal cycling and compression set. Elastomeric seals should be inspected and replaced.
- 4.8 Refrigerant gases: Special care should be taken when working with refrigeration systems. Sudden escape of refrigerant gases can cause blindness if the escaping gases contact the eye and can cause freezing or other severe injuries if it contacts any other portion of the body.
- Compressed natural gas (CNG): Parker CNG Hose Assemblies should be tested after installation and before use, and at least on a monthly basis per AGA 1-93 Section 4.2 "Visual Inspection Hose/Fitting". The recommended procedure is to pressurize the Hose and check for leaks and to visually inspect the Hose for damage.

Caution: Matches, candles, open flame or other sources of ignition shall not be used for Hose inspection. Leak check solutions should be rinsed off after use.



Safety

General: Safety in the application and use of industrial hose is a major concern because of the many potentially dangerous products conveyed, and because so many people are involved. Handling these products can be accomplished safely if a few simple precautions are strictly observed. Some of the most important of these are:

- All operators must be thoroughly trained.
- The correct hose must be selected to handle the application.
- The couplings must be correct for the application and also must be securely attached.
- Both hose and couplings should be well maintained and inspected regularly (pages 188 through 192).

<u>Critical Items:</u> While many industrial hose applications are potentially dangerous, a few are of particular concern because their danger is not always so obvious or generally understood. This is particularly true for non-industrial applications where there is greater potential for operation by untrained personnel. A discussion of some of the more common of these follows. (ordering information for RMA publications is on page 223).

Gasoline Pump Hose: The proliferation of self-service gasoline stations has created a situation where millions of consumers are daily operators of gasoline pumps. This has greatly increased the concern of station operators and suppliers for equipment safety. Gasoline pump hoses in particular are subject to frequent abuse by daily wear and accidents. Hose selection must include consideration of the amount of use and abuse it must withstand during its service life. Only the highest quality, thoroughly tested, UL listed hose must be selected for that service. The proper hose plus constant inspection is the best protection against user accidents. DO NOT USE GASOLINE PUMP HOSE FOR FUELING OF AIRCRAFT.

LP Gas Hose: This discussion again emphasizes the importance of hose selection. LP Gas has volatile characteristics that require special hose construction. The rubber compounds must be designed to handle LP Gas, and the cover must be perforated to prevent gas build-up among the various layers of the hose. Use of the wrong hose may lead to early and sudden failure. In particular, anhydrous ammonia hose is not recommended for LP Gas service. This is important to emphasize because both types of hose are often used in the same area and care must be taken they do not become accidentally switched. DO NOT USE LP GAS HOSE FOR ANHYDROUS AMMONIA. Couplings are also a concern in this service; permanent crimp steel couplings are recommended, as well as high pressure steel inserts attached with interlocking, bolt-on clamps. Couplings with

male swivel end styles are not recommended. DO NOT USE WITH SCREW-TOGETHER REATTACHABLE COUPLINGS. Parker LP Gas Hose is listed in the LP Gas section of this catalog. (Refer to RMA Publication IP-10 "Liquid Petroleum Gas, Specifications for").

WARNING
 For LP Gas use ONLY. Do not use for anhydrous ammonia. Do not use with male swivel couplings. Do not use with screw-together reattachable couplings.

Anhydrous Ammonia (NH₂) Hose: Contact with Anhydrous Ammonia will burn skin, and is especially damaging to the eyes and lungs. This is true for its liquid and gaseous (vapor) state. Many accidents involving NH3 have occurred by using the wrong hose. NH, hose must be specially compounded and constructed to handle the material, and other hoses may fail very quickly and suddenly. It is, therefore, especially important to make sure that only Anhydrous Ammonia hose is recommended and used for this service. In particular, LP Gas hose is not recommended for anhydrous ammonia Λ service. This is important to emphasize because both types of hose are often used in the same area and care must be taken they do not become accidentally switched. DO NOT USE ANHYDROUS AMMONIA HOSE FOR LP GAS OR REFRIGERATION SERVICE. Couplings are also a concern in this application; permanent steel crimp couplings are recommended. Couplings with male swivel end styles are not recommended. Parker Anhydrous Ammonia hose is listed in the Acid & Chemical section of this catalog. (Refer to RMA Publications IP-14 "Anhydrous Ammonia Hose, specifications for and IP-11-2 "Anhydrous Ammonia Hose, Manual for Maintenance, Testing and Inspection").

WARNING \triangle For anhydrous ammonia use ONLY. Do not use in LPG or refrigeration applications. Do not use with male swivel couplings. Do not use with screwtogether reattachable couplings.

Natural Gas: The molecules of natural gas are small, enhancing its ability to permeate through standard rubber or PVC hose constructions. The permeation process is more rapid as the working pressure increases, and natural gas accumulates with potentially dangerous consequences. Use pipe, non-permeable tubing or hose with barrier constructions to convey natural gas. Series 7132/7232 L.P. Gas Hose can be used for natural gas service, but only under the following conditions:

- Maximum working pressure of the application not to exceed 50 PSI.
- The application must be in an outside or open environment.
- Applications that are in an enclosed environment or greater than 50 PSI working pressure are not





recommended.

- · Do not use LPG hose for fuel hose in vehicles using CNG (Compressed Natural Gas).
- The hose used with Natural Gas should be subjected to the same rigorous tests and inspection as if it were being used with LPG.

Contact Parker for specific hose recommendations.

Welding Hose: Due to the extreme volatility of gases and the rough environment of many welding applications, selection of an appropriate welding hose is critical. The hose must be compatible with the fuel gas used to avoid hose degradation and eventual failure. SPECIFICALLY, USE GRADE R & RM WITH ACETYLENE FUEL GAS ONLY. Grade T can be used with most fuel gases, including propane. Care should be taken to avoid gouging, dragging, abrading or otherwise damaging the hose cover, which may also lead to premature hose failure. Do not attempt to repair or re-couple hose assemblies; replace all assemblies which show signs of age or abuse. (Refer to RMA Publications IP-7. Rubber Welding Hose, specifications for"; IP-11-5, "Welding Hose, Precautions for the Selection and Use of": Compressed Gas Association publication CGA E-1, "Welding and Cutting Equipment, Standard Connections for Regulator Outlets, Torches, and Fitted Hose"; Parker/Dayco publication 103973, "Welding Hose, Applications".

WARNING A Grade R & RM for use with acetylene gas ONLY. Do not use with any other fuel gases. Grade T for use with most fuel gases, including propane. Bleed hoses when not in use for 30 minutes or longer. Couple with one inch ferrules only.

Steam Hose: The potential danger from steam in industrial hose applications is due to the great heat and pressures involved. Water changes to steam at higher temperatures when under pressure. The greater the pressure the higher the temperature required. If the steam escapes, tremendous quantities of heat are released. This, combined with high pressure, provides the potential danger to operators. Use only hose specifically recommended for steam service. (Refer to RMA publication IP-11-1 "Steam Hose, Guide for Maintenance, Testing and Inspection).

WARNING \triangle Water changes to hot water and phases of steam when subjected to heat and pressure. The greater the pressure, the higher temperature required to achieve, maintain a steam phase. If the steam escapes, dangerous quantities of heat are released very suddenly. Use only steam hoses designed for the application.

WARNING A Thermoplastic Hose: Failure to consider how temperature and other conditions affect hose performance could result in death, personal injury or property damage. As temperature increases or decreases, burst pressure, safe working pressure, coupling retention properties, and other safety characteristics of the hose can significantly decrease. The rated maximum working pressures listed in this catalog for thermoplastic hoses are based upon a pressure test temperature of 68°F unless stated otherwise. Deterioration due to wear, impulse, and other environmental conditions should also be considered. The user, through its own analysis and testing, is solely responsible for making the final selection of the hose and assuring that all performance, endurance, maintenance, safety and warning requirements of the application are met.



Other Publications

Listed below are the titles of other publications issued by the General Products Group, of the RMA. Information concerning the latest edition, prices, etc., may be obtained on written request to:

RMA - General Products Group The Mail Room P.O. Box 3147 Medina, Ohio 44258-3147 1-800-325-5095 or 330-723-2978

Fax: 330-725-0576

Publication:

No.	Title
IP-7	Rubber Welding Hose, Specifications for
IP-8	Rubber Hose for Oil Suction and Discharge, Specifications for
IP-14	Anhydrous Ammonia Hose, Specifications for
IP-11	HOSE TECHNICAL INFORMATION BULLETINS
IP-11-1	Steam Hose: Guide for Maintenance, Testing and Inspection
IP-11-2	Anhydrous Ammonia Hose: Manual for Maintenance, Testing and Inspection
IP-11-4	Oil Suction and Discharge Hose: Manual for Maintenance, Testing and Inspection
IP-11-5	Welding Hose: Precautions for the Selection and Use of
IP-11-7	Chemical Hose: Manual for Maintenance, Testing and Inspection
IP-11-8	Fuel Dispensing Hose: Manual for Maintenance, Testing and Inspection



Basic Parker Hose Constructions



Construction Elements

A hose is generally composed of three elements, each with an important role in the overall performance of that hose. The three elements are:

The Tube (usually rubber) must be compatible with and able to contain the material being conveyed. As shown on page 212, many rubber compounds are used for tube construction, depending upon the material the hose is designed to transmit.

The Reinforcement is the strength member of the hose. It enables the hose to withstand internal and external pressure and abuse. The reinforcement may be applied by several methods, and consists of cotton yarns, synthetic yarns, wire or a combination of these. If a suction or vacuum capability is a requirement, a helix wire may be part of the reinforcement.

The Hose Cover protects the reinforcement from abuse or damage. The cover is usually a rubber compound selected for its resistance to the environment, although, in some cases (fire hose) the reinforcement will also act as the cover. Typical considerations in selecting a cover stock are the need to resist abrasion, ozone, weather and sunlight, chemical or oil spillage, etc.

Construction Methods

Several methods are used to manufacture Parker hose. Factors such as size, pressure requirements, cost range required and the application determine the selection of any particular hose style. Following is a description of the various construction methods employed by Parker.



Non-Mandrel

Non-mandrel hose is constructed by passing long lengths of extruded tube material through a machine which adds the reinforcement in braided, spiraled or knitted layers. In this method, the hose is not built on a mandrel, therefore lengths are not restricted to the length of the mandrels.

Size Range: 3/16 in. through 1-1/2 in. ID

Typical Uses: Air, Water or general purpose service where operating conditions are not severe.

Advantages: Economy and long lengths.

Disadvantages: Requires wider ID and OD tolerance range than mandrel made hose, limited pressure capabilities.



Rigid Mandrel - Braided

Hose produced by this method is supported on a rigid metal mandrel and is handled horizontally during production. While a rigid mandrel limits the hose length, it ensures good control of the inside diameter. It also offers sufficient support to the tube that either wire or textile reinforcement may be applied at high tensions, which is necessary in high pressure constructions. After the cover is applied, the hose may be wrapped tightly with nylon tape for curing, giving the familiar "wrapped" appearance to the cover.

Size Range: 1/2 in. through 4 in. ID

Typical Uses: Heavy Duty air, steam, and petroleum transfer.

Advantages: Close tolerances on inside diameter, high pressure ratings, good length stability.

Disadvantages: Higher cost than non-mandrel. Lengths restricted to length of mandrels.



Flexible Mandrel

The flexible mandrel method combines the long length advantage of non-mandrel hose with the close inside diameter tolerances and high pressure ratings of rigid mandrel hose. This is achieved by building the hose on a long length mandrel made of flexible plastic or rubber.

Size Range: 1/4 in. through 1 in. ID

Typical Uses: High pressure, air, water, LPG and steam hoses.

Advantages: Long lengths, close tolerances on I.D., higher pressure ratings than non-mandrel produced hose.

Disadvantages: Higher cost than non-mandrel hose, not available in ID sizes as large as rigid mandrel hose.



Basic Parker Hose Constructions



Wrapped Ply-Machine Built

The wrapped ply construction is the oldest method of making hose. After a tube is in place on the mandrel, layers or plies of bias cut fabric are wrapped around the tube. The plies are applied by a building machine which is unable to insert a helix wire. The cover is applied and the hose wrapped in nylon tape for curing.

Size Range: 3/16 in. through 4 in. ID

Typical Uses: Water discharge, sand blast, conduit.

Advantages: Good control of inside diameter tolerances, many special constructions available without large minimum production runs.

Disadvantages: Wire cannot be used in a machine built version of wrapped ply hose; plied hoses are not capable of the high pressure ratings of braided hose.



Spiral Ply

This method involves applying all hose components (tube, reinforcement and cover) in spiral strips on a rigid mandrel. The layers are applied in a process capable of producing a wide range of ID's with helix wire and built-in ends.

Size Range: 1/2 in. through 30 in. ID

Typical Uses: Suction and discharge service including oils, acids and other fluids, dry materials and air.

Advantages: Special ends, helix wire, wide size range, ID tolerances, flexibility, cost.

Disadvantages: Higher cost than non-mandrel. Lengths restricted to lengths of mandrels.



Wrapped Ply-Hand Built

Wrapped ply hose may be hand built when the diameter is too large for the building machine, where helix wires are required, or where special build-in ends are desired. The plies are laid on by hand rather than by machine, and this allows for the hand-forming of builtin ends.

Size Range: 1/2 in. through 30 in. ID

Typical Uses: Oil suction and discharge, sand suction, acid suction and discharge.

Advantages: Special ends can be built into the hose, wide size range, special constructions available in small quantities.

Disadvantages: Relatively expensive due to high labor content.



Temperature Conversion

Look up reading in middle column. If in degrees Centigrade, read Fahrenheit equivalent in right-hand column; if in Fahrenheit degrees, read Centigrade equivalent in left-hand column.

 $^{\circ}F = (^{\circ}C \times 1.8) + 32$

 $^{\circ}$ C = ($^{\circ}$ F - 32) x 0.556

С	F C	F
-53.9	-65	-85.0
-51.1	-60	-76.0
-48.3	-55	-67.0
-45.6	-50	-58.0
-42.8	-45	-49.0
-40.0	-40	-40.0
-37.2	-35	-31.0
-34.4	-30	-22.0
-31.7	-25	-13.0
-28.9	-20	-4.0
-26.1	-15	5.0
-23.3	-10	14.0
-20.6	-5	23.0
-17.8	0	32.0
-17.2	1	33.8
-16.7	2	35.6
-16.1	3	37.4
-15.6	4	39.2
-15.0	5	41.0
-14.4	6	42.8
-13.9	7	44.6
-13.3	8	46.4
-12.8	9	48.2
-12.2	10	50.0
-11.7	11	51.8
-11.1	12	53.6
-10.6	13	55.4
-10.0	14	57.2
-9.4	15	59.0
-8.9	16	60.8
-8.3	17	62.6
-7.8	18	64.4
-7.2	19	66.2
-6.7	20	68.0
-6.1	21	69.8
-5.6	22	71.6
-5.0	23	73.4
-4.4	24	75.2
-3.9	25	77.0
-3.3	26	78.8
-2.8	27	80.6
-2.2	28	82.4
-1.7	29	84.2
-2.2	28	82.4
-1.7	29	84.2

С	F C	F
-1.1	30	86.0
-0.6	31	87.8
0.0	32	89.6
0.6	33	91.4
1.1	34	93.2
1.7	35	95.0
2.2	36	96.8
2.8	37	98.6
3.3	38	100.4
3.9	39	102.2
4.4	40	104.0
5.0	41	105.8
5.6	42	107.6
6.1	43	109.4
6.7	44	111.2
7.2	45	113.0
7.8	46	114.8
8.3	47	116.6
8.9	48	118.4
9.4	49	120.2
10.0	50	122.0
10.6	51	123.8
11.1	52	125.6
11.7	53	127.4
12.2	54	129.2
12.8	55	131.0
13.3	56	132.8
13.9	57	134.6
14.4	58	136.4
15.0	59	138.2
15.6	60	140.0
16.1	61	141.8
16.7	62	143.6
17.2	63	145.4
17.8	64	147.2
18.3	65	149.0
18.9	66	150.8
19.4	67	152.6
20.0	68	154.4
20.6	69	156.2
21.1	70	158.0
21.7	71	159.8
22.2	72	161.6
21.7	71	159.8
22.2	72	161.6

С	F C	F
22.8	73	163.4
23.3	74	165.2
23.9	75	167.0
24.4	76	168.8
25.0	77	170.6
25.6	78	172.4
26.1	79	174.2
26.7	80	176.0
27.2	81	177.8
27.8	82	179.6
28.3	83	181.4
28.9	84	183.2
29.4	85	185.0
30.0	86	186.8
30.6	87	188.6
31.1	88	190.4
31.7	89	192.2
32.2	90	194.0
32.8	91	195.8
33.3	92	197.6
33.9	93	199.4
34.4	94	201.2
35.0	95	203.0
35.6	96	204.8
36.1	97	206.6
36.7	98	208.4
37.2	99	210.2
37.8	100	212.0
43.3	110	230.0
48.9	120	248.0
54.4	130	266.0
60.0	140	284.0
65.6	150	302.0
71.1	160	320.0
76.7	170	338.0
82.2	180	356.0
87.8	190	374.0
93.3	200	392.0
98.9	210	410.0
104.4	220	428.0
110.0	230	446.0
115.6	240	464.0
121.1	250	482.0
115.6	240	464.0
121.1	250	482.0



Flexibility and Bend Radius

(REPRINTED FROM RMA HOSE HANDBOOK IP-2 SIXTH EDITION 1996)

Flexibility and minimum bend radius are important factors in hose design and selection if it is known that the hose will be subjected to sharp curvatures in normal use. When bent at an angle too sharp, hose may kink or flatten in the cross-section. The reinforcement may also be unduly stressed or distorted and the hose life shortened.

Adequate flexibility means the hose should be able to conform to the smallest anticipated bend radius without overstress. The minimum bend radius is generally specified for each hose in this catalog. This is the radius to which the hose can be bent in service without damage or appreciably shortening its life. The radius is measured to the inside of the curvature.

Formula to determine minimum hose length given hose bend radius and degree of bend required:

$$\frac{A}{360^{\circ}} \times 2\pi B = L$$

where:

A = Angle of bend

B = Given bend radius of hose

L = Minimum length of hose to make bend (Bend must be made equally along this portion of hose length).

 $\pi = (Pi) 3.14$

Example: To make a 60° bend at a hoses' rated minimum bend radius of 6.25". . .

Thus, the bend must be made over approximately 6½ inches of hose length. The bend radius used must be equal to or greater than the rated minimum bend radius. Bending the hose to a smaller bend radius than minimum may kink the hose and result in damage and early failure.

Oil and Gas Resistance

Rubber hose is used to convey petroleum products both in the crude and refined stages. The aromatic content of refined gasoline is often adjusted to control the octane rating. The presence of aromatic hydrocarbons in this fuel generally has a greater effect on rubber components than do aliphatic hydrocarbons. Aromatic materials in contact with rubber tend to soften it and reduce its physical properties. For long lasting service, the buyer of gasoline hose should inform the hose manufacturer of the aromatic content of the fuel to be handled so that the proper tube compound can be recommended for the specific application.

The effect of oil on rubber depends on a number of factors that include the type of rubber compound, the composition of the oil, the temperature and time of exposure. Rubber compounds can be classified as to their degree of oil resistance based on their physical properties after exposure to a standard test fluid. In this RMA classification, the rubber samples are immersed in IRM 903 oil at 100°C for 70 hours. (See ASTM Method D-471 for a detailed description of the oil and the testing procedure.) As a guide to user of hose in contact with oil, the oil resistance classes and a corresponding description are listed.

Physical Properties After Exposure to Oil

Class	Volume Change Maximum	Tensile Strength Retained
Class A (High Oil Resistance)	+25%	80%
Class B (Medium/High Oil Resistance)	+65%	50%
Class C (Medium Oil Resistance)	+100%	40%



Fractional/Decimal/Millimeter

	Fraction	nal Inch	1	Decimal Part	
1/64	1/32 1/16 1/8		of an Inch	Millimeters	
1				0.016	0.40
2	1			0.031	0.79
3				0.047	1.19
4	2	1		0.063	1.59
5				0.078	1.98
6	3			0.094	2.38
7				0.109	2.78
8	4	2	1	0.125	3.18
9				0.141	3.57
10	5			0.156	4.0
11				0.172	4.4
12	6	3		0.188	4.8
13				0.203	5.2
14	7			0.219	5.6
15				0.234	6.0
16	8	4	2	0.250	6.4
17				0.266	6.7
18	9			0.281	7.1
19				0.297	7.5
20	10	5		0.313	7.9
21				0.328	8.3
22	11			0.344	8.7
23				0.359	9.1
24	12	6	3	0.375	9.5
25				0.391	9.9
26	13			0.406	10.3
27				0.422	10.7
28	14	7		0.438	11.1
29				0.453	11.5
30	15			0.469	11.9
31				0.484	12.3
32	16	8	4	0.500	12.7

Fractional Inch				Decimal Part	
1/64	1/32	1/16	1/8	of an Inch	Millimeters
33				0.516	13.1
34	17			0.513	13.5
35				0.547	13.9
36	18	9		0.563	14.3
37				0.578	14.7
38	19			0.594	15.1
39				0.609	15.5
40	20	10	5	0.625	15.9
41				0.641	16.3
42	21			0.656	16.7
43				0.672	17.1
44	22	11		0.688	17.5
45				0.703	17.9
46	23			0.719	18.3
47				0.734	18.7
48	24	12	6	0.750	19.1
49				0.766	19.5
50	25			0.781	19.8
51				0.797	20.2
52	26	13		0.813	20.6
53				0.828	21.0
54	27			0.844	21.4
55				0.859	21.8
56	28	14	7	0.875	22.2
57				0.891	22.6
58	29			0.906	23.0
59				0.922	23.4
60	30	15		0.938	23.8
61				0.953	24.2
62	31			0.969	24.6
63				0.984	25.0
64	32	16	8	1.000	25.4

1 inch = 25.40 Millimeters

1 Millimeter = 0.03937 Inches

Linear Measurement Units

Feet	Inches	Millimeters	Meters
1/12	1	25.4	0.0254
1	12	304.8	0.3048
2		609.6	0.6096
3	36	914.4	0.9144
3.28	39.36	1000.0	1.0000
4			1.2192
5			1.5240
6			1.8288
7			2.1336
8			2.4384
9			2.7432
10			3.0480

Feet	Miles	Meters	Kilometers
25	_	7.62	-
50	_	15.24	-
75	_	22.86	-
100	_	30.48	-
125	_	38.10	-
150	_	45.72	-
300	_	91.44	-
500	_	152.40	0.15240
1000	_	304.80	0.30480
3280.84	0.6214	1000.00	1.00000
5280	1.000	1609.35	1.60935

¹ Foot = 304.80 Millimeters 1 Mile = 1609.35 Meters 1 Meter = 3.28084 Feet 1 Kilometer = 0.62137 Miles



Measures of Pressure

- 1 pound per square inch = 144 pounds per square foot = 0.068 atmosphere = 2.042 inches of mercury at 62° F = 27.7 inches of water at 62°F = 2.31 feet of water at 62°
- 1 atmosphere = 30 inches of mercury at 62°F = 14.7 pounds per square inch = 2116.3 pounds per square foot = 33.95 feet of water at 62°F.
- 1 foot of water at $62^{\circ}F = 62.355$ pounds per square foot = 0.433 pounds per square inch.
- 1 inch of mercury at 62°F = 1.132 feet of water = 13.58 inches of water = 0.491 pound per square inch.

Column of water 12 inches high, 1 inch diameter = 0.341 pound.

Metric Pressure Conversion Table

		kgf/					kgf/					kgf/							
PSI	MPa	cm ²	Bar	ATM	PSI	MPa	cm ²	Bar	ATM	PSI	MPa	cm ²	Bar	ATM	PSI	MPa	kgf/cm ²	Bar	ATM
25	0.17	1.76	1.72	1.70	2500	17.24	175.77	172.50	170.00	5200	35.85	365.60	358.80	353.60	7900	54.47	555.42	545.10	537.20
50	0.34	3.52	3.45	3.40	2600	17.93	182.80	179.40	176.80	5300	36.54	372.63	365.70	340.40	8000	55.16	562.46	552.00	544.00
75	0.52	5.27	5.18	5.10	2700	18.62	189.83	186.30	183.60	5400	37.23	379.66	372.60	367.20	8100	55.85	569.49	558.90	550.80
100	0.69	7.03	6.90	6.80	2800	19.30	196.86	193.20	190.40	5500	37.92	386.69	379.50	374.00	8200	56.54	576.52	565.80	557.60
200	1.38	14.06	13.80	13.60	2900	19.99	203.89	200.10	197.20	5600	38.61	393.72	386.40	380.80	8300	57.23	583.55	572.70	564.40
300	2.07	21.09	20.70	20.40	3000	20.68	210.92	207.00	204.00	5700	39.30	400.75	393.30	387.60	8400	57.92	590.58	579.60	571.20
400	2.76	28.12	27.60	27.20	3100	21.37	217.95	213.90	210.80	5800	39.99	407.78	400.20	394.40	8500	58.61	597.61	586.50	578.00
500	3.45	35.15	34.50	34.00	3200	22.06	224.98	220.80	217.60	5900	40.68	414.81	407.10	401.20	8600	59.30	604.64	593.40	584.80
600	4.14	42.18	41.40	40.80	3300	22.75	232.01	227.70	224.40	6000	41.37	421.84	414.00	408.00	8700	59.98	611.67	600.30	591.60
700	4.83	49.21	48.30	47.60	3400	23.44	239.04	234.60	231.20	6100	42.06	428.87	420.90	414.80	8800	60.67	618.70	607.20	598.40
800	5.52	56.24	55.20	54.40	3500	24.13	246.07	241.50	238.00	6200	42.75	435.90	427.80	421.60	8900	61.36	625.73	614.10	605.20
900	6.20	63.218	62.10	61.20	3600	24.82	253.10	248.40	244.80	6300	43.44	442.93	434.70	428.40	9000	62.05	632.76	621.00	612.00
1000	6.90	70.31	69.00	68.00	3700	25.51	260.14	255.30	251.60	6400	44.13	449.96	441.60	435.20	9100	62.74	639.79	627.90	618.80
1100	7.58	77.34	75.90	74.80	3800	26.20	267.17	262.20	258.40	6500	44.82	457.00	448.50	442.00	9200	63.43	646.82	634.80	625.60
1200	8.27	84.37	82.80	81.60	3900	25.89	274.20	269.10	265.20	6600	45.51	464.03	455.40	448.80	9300	64.12	653.86	641.70	632.40
1300	8.96	91.40	89.70	88.40	4000	27.58	281.23	276.00	272.00	6700	46.20	471.06	462.30	455.60	9400	64.81	660.89	648.60	639.20
1400	9.65	98.43	96.60	95.20	4100	28.27	288.26	282.90	278.80	6800	46.88	478.09	469.20	462.40	9500	65.50	667.92	655.50	646.00
1500	10.34	105.46	103.50	102.00	4200	28.96	295.29	289.80	285.60	6900	47.57	485.12	476.10	469.20	9700	66.88	681.98	669.30	659.60
1600	11.03	112.49	110.40	108.80	4300	29.65	302.32	296.70	292.40	7000	48.26	492.15	483.00	476.00	9700	66.88	681.98	669.30	659.60
1700	11.72	119.52	117.30	115.60	4400	30.34	309.35	303.60	299.20	7100	48.95	499.18	489.90	482.80	9800	67.57	689.01	676.20	666.40
1800	12.41	126.55	124.20	122.40	4500	31.03	316.38	310.50	306.00	7200	49.64	506.21	496.80	489.60	9900	68.26	696.04	683.10	673.20
1900	13.10	133.58	131.10	129.20	4600	31.72	323.41	317.40	312.80	7300	50.33	513.24	503.70	496.40	10000	68.95	703.07	690.00	680.00
2000	13.79	140.61	138.00	136.00	4700	32.41	330.44	324.30	319.60	7400	51.02	420.27	510.60	503.20	11000	75.84	773.38	759.00	748.00
2100	14.48	147.64	144.90	142.80	4800	33.10	337.47	331.20	326.40	7500	51.71	527.30	517.50	510.00	12000	82.74	843.68	828.00	816.00
2200	15.17	154.68	151.80	149.60	4900	33.78	344.50	338.10	333.20	7600	52.40	534.33	524.40	516.80	13000	89.63	913.99	897.00	884.00
2300	15.86	161.71	158.70	156.40	5000	34.47	351.54	345.00	340.00	7700	53.09	541.36	531.30	523.60	14000	96.53	984.30	966.00	952.00
2400	16.55	168.74	165.60	163.20	5100	35.16	358.57	351.90	346.80	7800	53.78	548.39	538.20	530.40	15000	103.42	1054.60	1035.00	1020.00

PSI × 0.0068948 = megapascals (MPa) = meganewton/meter²

PSI × 0.070307 = kilogram-force per square centimeter

 $PSI \times 0.0690 = Bars$

 $PSI \times 0.0680 = Atmospheres$

1MPa = 10 Bars

1Bar = 14.5 PSI

1 kgf/cm² = 14.22 PSI

1 PSI = 0.00689 MPa

Pressure Conversion

Feet of water to inches of mercury

Feet of Water	In. Hg	Feet of Water	In. Hg
1	0.9	18	15.9
2	1.8	20	17.7
4	3.5	22	19.4
6	5.3	24	21.2
8	7.1	26	23.0
10	8.8	28	24.8
12	10.6	30	26.5
14	12.4	32	28.3
16	14.1	34	30.0

Vacuum Conversion Table

ATM	PSI	Meter	Feet	mm	Hg inches	%
0.1	1.4	1	3' 3%"	73.6	2.9	10
0.2	2.8	2	6' 6¾"	147.1	5.8	20
0.3	4.2	3	9' 101/8"	220.7	8.7	30
0.4	5.7	4	13' 1½"	294.2	11.6	40
0.5	7.1	5	16' 4 ¹³ / ₁₆ "	367.8	14.5	50
0.6	8.5	6	19' 8¾16"	441.3	17.4	60
0.7	10.0	7	22' 11%16"	514.9	20.3	70
0.8	11.4	8	26' 215/16"	588.4	23.2	80
0.9	12.8	9	29' 6%"	662.0	26.0	90
1.0	14.2	10	32' 911/16"	735.5	29.0	100



Conversion Factors

TO CONVERT	INTO	MULTIPLY BY	TO CONVERT	INTO	MULTIPLY BY
Atmospheres atmospheres atmospheres atmospheres atmospheres atmospheres	cms of mercury ft. of water (at 4°C) in of mercury (at 0° C) kgs/sq cm kgs/sq meter pound/sq in	76.0 33.90 29.92 1.0333 10.332 14.70	Cubic Feet cu ft	cubic cm cu inches cu meters cu yds gals liters pints (liq) quarts (liq)	2.832 x 10 ⁴ 1728 0.02832 0.03704 7.48052 28.32 59.84 29.92
Bar bar bar bar	newtons/sq m atmospheres at (tech.) psi	10 ⁵ 0.9869 1.0197 14.504	Cu Ft/min cu ft/min cu ft/min cu ft/min cu ft/sec	cu cm/sec gals/sec liters/sec lbs water/min gals/min	472.0 0.1247 0.4720 62.43 448.831
Barrels-Oil	gals/oil	42			
BT Units BTUs BTUs BTUs BTUs	kg–calories ft–lbs hp–hrs kgs–meters kw–hrs	0.2520 777.9 3.927 x 10 ⁻⁴ 107.5 2.928 x 10 ⁻⁴	Cu Inches cu in cu in cu in cu in cu in cu in	cc cu ft cu meters cu yds gals liters	16.39 5.787 x 10 ⁻⁴ 1.639 x 10 ⁻⁵ 2.143 x 10 ⁻⁵ 4.329 x 10 ⁻³ 1.639 x 10 ⁻²
BTU/Min BTU/min BTU/min BTU/min	ft-lb/sec hp kw watts	12.96 0.02356 0.01757 17.57	cu in cu in Cu Meters	pints (liq) quarts (liq) cc	0.03463 0.01732 10 ⁴
Centimeters cm cm	inches meters mm	0.3937 0.01 10	cu M cu M cu M cu M cu M	cu ft cu in cu yds gals liters	35.31 61,023 1.308 264.2 10 ³
Cm mercury cm mercury cm mercury cm mercury cm mercury	atm ft water kgs/sq meter lbs/sq ft lbs/sq in	0.01316 0.4461 136.0 27.85 0.1934	cu M cu M Cu Yards cu yds	pints (liq) quarts (liq) cu cm cu ft	2113 1057 7.646 x 10 ⁵ 27
Cm/second cm/sec cm/sec cm/sec	ft/min ft/sec km/hr meter/min	1.969 0.03281 0.036 0.6	cu yds cu yds cu yds Decimeters	cu in cu meters gals meters	46,656 0.7646 202.0 0.1
cm/sec cm/sec	miles/hr miles/min	0.02237 3.728 x 10 ⁻⁴	Degrees (Angle)	minutes	60
Cm/Sec/Sec	ft/sec/sec	0.03281	degs (angle) degs (angle)	radians secs	0.01745 3600
Cubic Cm cu cm	cu ft cu in cu meters cu yds gals liters pints (liq) quarts (liq)	3.531 x 10 ⁻⁵ 6.102 x 10 ⁻² 10 ⁶ 1.308 x 10 ⁻⁶ 2.642 x 10 ⁻⁴ 10 ⁻³ 2.113 x 10 ⁻³ 1.057 x 10 ⁻³			



Conversion Factors

TO CONVERT	INTO	MULTIPLY BY	TO CONVERT	INTO	MULTIPLY BY
Degrees/Sec	radians/sec	0.01745	Horse-Power	BTUs/min	42.44
degs/sec	revs/min	0.1667	hp	ft-lbs/min	33,000
degs/sec	revs/sec	0.002778	hp	ft-lbs/sec	550
			hp	hp (metric)	1.014
Feet	cms	30.48	hp	kg-calories/min	10.70
ft	ins	12	hp	kws	0.7457
ft	meters	0.3048	hp	watts	745.7
ft	yds	1/3	·		
	•		Hp-Hours	BTUs	2547
Ft of Water	atms	0.02950	hp–hrs	ft-lbs	1.98 x 10 ⁶
ft of w	ins mercury	0.8826	hp-hrs	kg-calories	641.7
ft of w	kgs/sq cm	0.03048	hp-hrs	kg-meters	2.737 x 10⁵
ft of w	lbs/sq ft	62.32	hp-hrs	kw-hrs	0.7457
ft of w	lbs/sq in	0.4328	TIP TITO	KW 1110	0.7 107
it or w	103/34 111	0.4020	Inches	cms	2.540
Feet/Min	cm/sec	0.5080	IIIOIIG3	CITIS	2.540
ft/min	ft/sec	0.01667	Ins Mercury	atme	0.002458
ft/min	kms/hr	0.01829		atms ft water	1.133
	meters/min		ins mercury		
ft/min		0.3048	ins mercury	kgs/sq cm	0.03453
ft/min	miles/hr	0.01136	ins mercury	lbs/sq ft	70.73
F1/0 /0	1 1	00.40	ins mercury	lbs/sq in	0.4912
Ft/Sec/Sec	cms/sec/sec	30.48			0.000450
ft/sec/sec	Meters/sec/sec	0.3048	Ins of Water	atms	0.002458
			ins of w	ins mercury	0.07355
Ft-Pounds	BTUs	1.286 x 10 ⁻³	ins of w	kgs/sq cm	0.002540
ft lbs	hp-hrs	5.050 x 10 ⁻⁷	ins of w	lbs/sq ft	5.202
ft lbs	kg-calories	3.241 x 10 ⁻⁴	ins of w	lbs/sq in	0.03613
ft lbs	kg-meters	0.1383			
ft lbs	kw-hrs	3.766 x 10 ⁻⁷	Kilograms	dynes	980,665
			kgs	lbs	2.205
Ft-lbs/Min	BTUs/min	7.717 x 10 ⁻²	kgs	tons (short)	1.102 x 10 ⁻³
ft-lbs/min	ft-lbs/sec	0.01667	kgs	grams	1000
ft lbs/min	hp	3.030 x 10 ⁻⁵			
ft-lbs/min	kg-calories/min	3.241 x 10 ⁻³	Kgs/Sq Cm	atms	0.9678
ft-lbs/min	kws	2.260 x 10 ⁻⁵	kgs/sq cm	ft water	32.81
			kgs/sq cm	ins mercury	28.96
Ft-lbs/Sec	BTUs/min	7.717 x 10 ⁻²	kgs/sq cm	lbs/sq ft	2048
ft-lbs/sec	hp	1.818 x 10 ⁻³	kgs/sq cm	lbs/sq in	14.22
ft-lbs/sec	kg-calories/min	1.945 x 10 ⁻²	0 1	•	
ft-lbs/sec	kws	1.356 x 10 ⁻³	Kilometers	cms	10 ⁵
			kms	ft	3281
Gallons	ccs	3785	kms	meters	10 ³
gals	cu ft	0.1337	kms	miles	0.6214
gals	cu ins	231			0.02
gals	cu meters	3.785 x 10 ⁻³	Kms/Hr	cms/sec	27.78
gals	liters	3.785	kms/hr	ft/min	54.68
gals	pints (liq)	8	kms/hr	ft/sec	0.9113
		4	kms/hr	meters/min	16.67
gals	quarts (liq)	4			
Collona Ima	LIC golo	1 20005	kms/hr	miles/hr	0.6214
Gallons, Imp	US gals	1.20095	Kma/Uz/C	omologola = =	07.70
gallons, US	imp gals	0.83267	Kms/Hr/Sec	cms/sec/sec	27.78
Caller - /A All	a., #1	0.000 40.0	kms/hr/sec	ft/sec/sec	0.9113
Gallons/Min	cu ft/sec	2.228 x 10 ⁻³	kms/hr/sec	Meters/sec/sec	0.2778
gal/min	liters/sec	0.06308			
gal/min	cu ft/hr	8.0208			



Conversion Factors

TO CONVERT	INTO	MULTIPLY BY	TO CONVERT	INTO	MULTIPLY BY
Kilowatts kws	BTUs/min ft-lbs/min	56.92 4.425 x 10⁴	Newton	kgs	0.1020
kws	ft-lbs/sec	737.6	Ounces	lbs	1.805
kws	hp	1.341	ozs	gram	28.349527
kws	kg-calories/min	14.34			
kws	watts	10 ³	Ounces (Fluid) ozs (fluid)	cu in liters	1.805 0.02957
Kilowatt-Hrs	BTUs	3415	, ,		
kw-hrs	ft-lbs	2.655 x 10 ⁶	Pounds	ozs	16
kw-hrs	hp-hours	1.341	lbs	tons (short)	0.005
kw-hrs	kg-calories	860.5	lbs	newtons (N)	4.44
kw-hrs	kg-meters	3.671 x 10⁵	lbs	gram	453.5924
Liters	ccs	103	Lbs of Water	cu ft	0.01605
liters	cu ft	0.03531	lbs of water	cu in	27.73
liters	cu ins	61.02	lbs of water	gals	0.1204
liters	cu meters	10 ⁻²			
liters	gals	0.2642	Lbs of Water/Min	cu ft/sec	2.679 x 10 ⁻⁴
liters	quarts (liq)	1.057			
			Pounds/Cu Ft	lbs/cu in	5.787 x 10 ⁻⁴
Liters/Min	gals/sec	4.403 x 10 ⁻³			
			Pounds/Cu In	lbs/cu ft	1728
Meters	cms	100			
meters	ft	3.281	Pounds/Sq In	atms	0.06804
meters	ins	39.37	lbs/sq in	ft water	2.311
meters	kms	10 ³	lbs/sq in	in mercury	2.036
meters	mms	10 ³	lbs/sq in	kgs/sq cm	0.07031
meters/min meters/min	cms/sec ft/min	1.667 3.281	Radians	doaroo	57.29578
meters/min	ft/sec	0.05468	naularis	degrees	37.29376
meters/min	kms/hr	0.06	Tons (Long)	kgs	1016
meters/min	miles/hr	0.03728	tons (long)	lbs	2240
			tons (long)	tons (short)	1.12000
Meters/Sec	ft/min	196.8			
meters/sec	ft/sec	3.281	Tons (Short)	kgs	2000
meters/sec	kms/hr	3.6	tons (short)	kps	907.18486
meters/sec	kms/min	0.06	tons (short)	tons (long)	0.89287
meters/sec	miles/hr	2.237	tons (short)	tons (metric)	0.90718
meters/sec	miles/min	0.03728	Watts	DTI la /rai la	0.05000
Micron	meters	10-6	watts	BTUs/min ft-lbs/min	0.05692 44.26
microns		39 x 10 ⁻⁶	watts	ft-lbs/sec	0.7376
IIIICIOIIS	in	39 X 10	watts	hp	1.341 x 10 ⁻³
Miles/Hr	cms/sec	44.70	watts	kg-calories/min	0.01434
miles/hr	ft/min	88	watts	kws	10
miles/hr	ft/sec	1.467	watts	KWS	10
miles/hr	kms/hr	1.609	Watts/Hours	BTUs	3.415
miles/hr	meters/min	26.82	watts/hrs	ft-lbs	2655
55/111			watts/hrs	hp-hrs	1.341 x 10 ⁻³
Millimeters	cms	0.1	watts/hrs	kg-calories	0.8605
mms	ins	0.0397	watts/hrs	kg-meters	367.1
			watts/hrs	kw-hrs	10 ⁻³
Minutes (Angle)	radians	2.909 x 10 ⁻⁴			



Coupling Thread Compatibility

Industrial hose couplings have threads which are usually one of the various "pipe" threads. All pipe threads are commonly referred to by the generic name of Iron Pipe Thread or IPT. There are several different types of IPT threads and you must know specifically what they are to ensure compatibility with mating threads.

IPT Thread Compatibility Chart

Description	Seal	Thread (Female)	Compatible Threads (Male)
American Standard Tapered Pipe Thread	Thread Seal (with Sealing Compound)	NPT	NPT NPTF
American Standard Tapered Dryseal Pipe Thread	Thread Seal (Dryseal)*	NPTF	NPTF NPT
American Standard Straight Pipe Thread for mechanical joints (includes 2 female types, depending on sealing method, and one male type compatible with both females)	Washer or Mechanical Ground Joint	NPSM	NPSM NPT NPTF
American Standard Straight Pipe Threads for hose couplings and nipples	Washer	NPSH	NPSH NPT NPTF

^{*}When NPTF Threads are once used, they require sealing compound for future use.

In addition, there are various other thread types that may be found on industrial hose couplings. These types are generally not compatible with any other thread types:

Туре	Description	Seal
GHT	Garden Hose Thread	Washer seal
API	American Petroleum Institute Thread	Thread seal
JIC (37°)	Joint Industry Conference	O-ring or mechanical seal
SAE (45°)	Society of Automotive Engineers	Mechanical seal
NF	Welding Hose Threads-Left Hand and Right Hand	Mechanical seal
CHT	Chemical Hose Thread (for booster hoses)	Gasket seal



Dimensions of Seamless and Welded Steel Pipe

ASA-B36.10 and B36.19

Nominal Pipe Size (in.)	Outside Diameter (in.)	10	20	30	Standard	40	60	Extra Strong	80	100	120	140	150	XX Strong
1/8	0.405	_	_	_	0.068	0.068	_	0.095	0.095	_		_	_	-
1/4	0.540	_	_	_	0.088	0.088	_	0.119	0.119	_	_	_	_	_
7/8	0.675	_	_	_	0.091	0.091	_	0.126	0.126	_	_	_	_	_
1/2	0.840	_	_	_	0.109	0.109	_	0.147	0.147	_	_	_	0.188	0.294
3/4	1.050	_	_	_	0.113	0.113	_	0.154	0.154	_	_	_	0.219	0.308
1	1.315	_	_	_	0.133	0.133	_	0.179	0.179	_	_	_	0.250	0.358
11/4	1.660	_	_	_	0.140	0.140	_	0.191	0.191	_	_	_	0.250	0.382
1½	1.900	_	-	_	0.145	0.145	_	0.200	0.200	-	_	-	0.281	0.400
2	2.375	_	_	_	0.154	0.154	_	0.218	0.218	_	_	_	0.344	0.436
2½	2.875	_	_	_	0.203	0.203	_	0.276	0.276	_	_	_	0.375	0.552
3	3.50	_	-	_	0.216	0.216	_	0.300	0.300	-	_	_	0.438	0.600
3½	4.00	_	_	_	0.226	0.226	_	0.318	0.318	-	_	_	-	_
4	4.50	_	-	_	0.237	0.237	_	0.337	0.337	-	0.438	_	0.531	0.674
5	5.563	_	_	_	0.258	0.258	_	0.375	0.375	_	0.500	_	0.625	0.750
6	6.625	_	_	_	0.280	0.280	_	0.432	0.432	-	0.562	_	0.719	0.864
8	8.625	_	0.250	0.277	0.322	0.322	0.406	0.500	0.500	0.594	0.719	0.812	0.906	0.873
14 O.D.	14.00	0.250	0.312	0.375	0.375	0.438	0.594	0.500	0.750	0.938	1.094	1.250	1.406	_
16 O.D.	16.00	0.250	0.312	0.375	0.375	0.500	0.656	0.500	0.844	1.031	1.219	1.438	1.594	_
18 O.D.	18.00	0.250	0.312	0.438	0.375	0.562	0.750	0.500	0.938	1.156	1.375	1.562	1.781	_
20 O.D.	20.00	0.250	0.375	0.500	0.375	0.594	0.812	0.500	1.031	1.281	1.500	1.750	1.969	-
22 O.D.	22.00	0.250	0.375	0.500	0.375	-	0.875	0.500	1.125	1.375	1.625	1.875	2.125	-
24 O.D.	24.00	0.250	0.375	0.562	0.375	0.688	0.969	0.500	1.218	1.531	1.812	2.062	2.344	-
26 O.D.	26.00	0.312	0.500	-	0.375	-	-	0.500	-	-	-	-	-	-
28 O.D.	28.00	0.312	0.500	0.625	.0375	-	-	0.500	-	-	-	-	-	-
30 O.D.	30.00	0.312	0.500	0.625	0.375	-	-	0.500	-	-	-	_	-	-
32 O.D.	32.00	0.312	0.500	0.625	0.375	0.688	-	0.500	-	-	-	-	-	-
34 O.D.	34.00	0.312	0.500	0.625	0.375	0.688	-	0.500	-	-	-	-	-	-
36 O.D.	36.00	0.312	0.500	0.625	0.375	0.750	-	0.500	-	-	-	-	-	-
42 O.D.	42.00	-	-	-	0.375	-	-	0.500	-	-	-	-	-	-



Dimensions of 150-Lb. Steel Flanges ASA

Nominal Pipe Size (in.)	Diameter of Bolt Circle (in.)	Number of Bolts	Diameter of Bolts (in.)	Diameter of Bolt Holes (in.)	Flange O.D. (in.)	*Weight (Lbs.)
1	31/8	4	1/8	5/8	4½	2
1½	37/8	4	1/2	5/9	5	3
2	4¾	4	5/8	3/4	6	5
2½	5½	4	5/8	3/4	7	8
3	6	4	5/8	3/4	7½	10
3½	7	8	5/8	3/4	8½	12
4	7½	8	5/8	3/4	9	13
5	8½	8	3/4	7/8	10	15
6	9½	8	3/4	7/8	11	19½
8	11¾	8	3/4	7/8	13½	30
10	141⁄4	12	7/8	1	16	41
12	17	12	7/8	1	19	65
14	18¾	12	1	1 1⁄8	21	85
16	211/4	16	1	1 1⁄8	23½	93
18	22¾	16	1 1/s	11/4	25	120
20	25	20	11/8	11/4	27½	155
24	29½	20	1¼	1 ³ ⁄8	32	210

^{*}Weights shown for sizes up through 24" are for threaded flanges.

Note: 125-Lb. flange dimensions are same as dimensions of 150-Lb. flanges except thickness and weight.

Dimensions of 300-Lb. Steel Flanges ASA

Nominal Pipe Size (in.)	Diameter of Bolt Circle (in.)	Number of Bolts	Diameter of Bolts (in.)	Diameter of Bolt Holes (in.)	Flange O.D. (in.)	*Weight (Lbs.)
1	3½	4	5/8	3/4	47/8	3
1½	41/2	4	3/4	7/8	6-1/8	6½
2	5	8	5/8	3/4	6½	7
2½	5 ⁷ / ₈	8	3/4	7/8	7½	10
3	65/8	8	3/4	7/8	81⁄4	14
3½	71/4	8	3/4	7/8	9	16
4	77//8	8	3/4	7/8	10	24
5	91/4	8	3/4	7/8	11	31
6	10 ⁵ ⁄/ ₈	12	3/4	7/8	12½	36
8	13	12	7/8	1	15	56
10	151/4	16	1	11/8	17½	80
12	17¾	16	11//8	11⁄4	20½	110
14	201/4	20	11//8	11⁄4	23	164
16	22½	20	11/4	13⁄8	25½	220
18	24¾	24	11/4	13/8	28	280
20	27	24	11/4	13/8	30½	325
24	32	24	1½	1%	36	490

^{*}Weights shown for sizes up through 24" are for threaded flanges.



NOTES:		



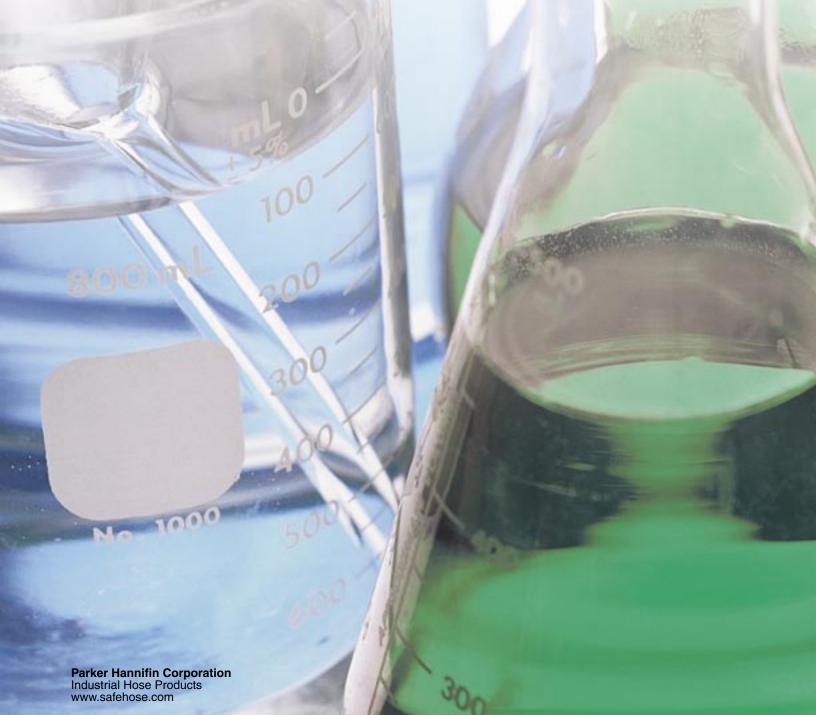
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Due to continual product improvements, Parker reserves the right to alter specifications without prior notice.



Corrosion Resistance of Coupling Materials

CAUTION: AThe following data has been compiled from generally available sources and should not be relied upon without consulting and following the specific recommendations of the manufacturer regarding particular coupling materials.

Chemical or Material Conveyed	Mall. from Steel	Brass	Bronze	Aluminum	Glass	Stainless 410, 416, 430	Stainless 302, 202 304, 308	Stainless 316	Monel
Acetate, Solvents, Crude Acetate, Solvents, Pure Acetic Acid Acetic Acid Vapors Acetic Anhydride	X X X	3 1 X X X	1 X	1 2 3 2	1	2 1 X X X	1 1 2 2 2	1 1 2 2 2	2 1 2 2 2
Acetone Acetylene Alcohols Aluminum Sulfate Alums	1 1 1 X X	1 2 2 3 3	1 3 2	1 1 1 3 3	1 1 1	1 1 1 X X	1 1 1 3 3	1 1 1 2 2	1 2 1 2 2
Ammonia Gas Ammonium Chloride Ammonium Hydroxide Ammonium Nitrate Ammonium Phosphate (Ammoniacal)	1 1 2 1	X 3 X X X	3	1 1* 2 2	3	1 3 1 1	1 3 1 1	1 1 1 1	X 1 3 3
Ammonium Phosphate (Neutral) Ammonium Phosphate (Acid) Ammonium Sulfate Asphalt Beer	1 1 2	3 3 2 2	1	1		1 3 2 2 X	1 2 1 1	1 1 1 1	2 2 2 1 1
Beet Sugar Liquors Benzene, Benzol Benzine (petroleum – naphtha) Borax Boric Acid	1 1 1 2 X	2 1 1 2 3	1	1 1 1	1	2 1 1 1 3	1 1 1 1 2	1 1 1 1	1 1 1 1
Butane, Butylene Butadiene Calcium Bisulfate Calcium Hypochlorite Cane Sugar Liquors	1 3 1	1 1 X 3 2	1 3	1 X 1	3	1 1 X X 2	1 1 2 3 1	1 1 1 2 1	1 1 X 3 1
Carbon Dioxide (Dry) Carbon Dioxide (Wet & Aqueous Sol) Carbon Disulfide Carbon Tetrachloride Chlorine (Dry)	1 2 2 3 2	1 3 3 1 2	2 2	1 2 2 3 1	1 2	1 2 2 1 2	1 1 1 1 2	1 1 1 1 2	1 2 3 1 1
Chlorine (Wet) Chromic Acid Citric Acid Coke Oven Gas Copper Sulfate	X X 1 X	X X 3 3 X	3 X	X X 1 2 X	2 1	X 3 3 1	X 2 X 1 1	3 2 1 1	3 3 2 2 3
Core Oils Cottonseed Oil Creosote Ethers Ethylene Glycol	1 2 2 2	1 1 3 1 2	1	1 1 1		1 1 1 1	1 1 1 1	1 1 1 1	1 1 1 1
Ferric Chloride Ferric Sulfate Formaldehyde Formic Acid Freon	X X 2 X 3	X X 2 2 1	X 1	X X 2 X 1	1	X 1 1 X 1	X 1 1 2 1	X 1 1 1	X 3 1 2 1

3 = Fair or Conditional KEY: 1 = Excellent 2 = GoodX = Not Satisfactory

*3 to X at high temperatures

NOTE: No rating indicates no data available.

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Corrosion Resistance of Coupling Materials

Chemical or Material Conveyed	Mall. from Steel	Brass	Bronze	Aluminum	Glass	Stainless 410, 416, 430	Stainless 302, 202 304, 308	Stainless 316	Monel
Furfural Gasoline (Sour) Gasoline (Refined) Gelatin Glucose Glue Glycerine or Glycerol Hydrochloric Acid Hydrocyanic Acid	1 3 1 1 1 1 1 X 3	2 3 1 3 1 3 2 X	1 X	1 3 1 1 1 1 1 X	1	1 3 1 1 1 1 1 X 3	1 1 1 1 1 1 1 X	1 1 1 1 1 1 1 X	1 X 1 1 1 1 X 2
Hydrofluoric Acid Hydrogen Fluoride Hydrogen Hydrogen Peroxide Hydrogen Sulfide (Dry)	X 1 X 3	3 3 1 X 3	3	X 1 1 2	Х	X X 1 1 3	X X 1 2 2	X 3 1 1	1 1 1 2 3
Hydrogen Sulfide (Wet) Lacquers and Lacquer Solvents Lactic Acid Lime - Sulfur Linseed Oil	3 3 X 2 1	3 2 X 1		2 1 3 2 1		3 1 1	2 1 3 1 1	1 1 2 2 1	3 1 1
Magnesium Chloride Magnesium Hydroxide Magnesium Sulfate Mercuric Chloride Mercury	3 1 2 3 1	3 2 2 X X		X X 3 X X		3 1 1 X 1	2 1 1 X 1	1 1 1 3	1 1 1 X 2
Milk Molasses Natural Gas Nickel Chloride Nickel Sulfate	3 2 1	3 X 2 X 3		1 2 1 X X		2 2 1 X 3	1 1 1 3 2	1 1 1 2 1	3 1 1 2 1
Nitric Acid Oleic Acid Oxalic Acid Oxygen Palmitic Acid	X 2 3 1 1	X 3 3 1 3	X 1	3 1 2 1	1	2 2 3 1 2	2 2 2 1 2	2 1 1 1 1	X 1 1 1
Petroleum Oils (Sour) Petroleum Oils (Refined) Phosphoric Acid — 25% Phosphoric Acid — 25%–50% Phosphoric Acid — 50%–85%	1 3 X X	3 1 X X X	1	1 3 X X	3 3 X	3 1 X X X	1 1 3 X X	1 1 1 2 2	X 1 2 2 2
Picric Acid Potassium Chloride Potassium Hydroxide Potassium Sulfate Propane	3 2 3 2 1	X 3 X 2 1		3 3 X 1		2 3 1 1 1	1 2 1 1	1 1 1 1	X 1 1 1
Rosin (Dark) Rosin (Light) Shellac Sludge Acid Soda Ash (Sodium Carbonate)	1	2 X 2 X 2		1 2 X	1	1 1 1 X 1	1 1 1 X 1	1 1 1 3 1	1 2 1 2 1
Sodium Bicarbonate Sodium Bisulfate Sodium Chloride Sodium Cyanide Sodium Hydroxide	3 X 2 2 3	1 3 3 X X	2 3	X 3 X X X	1 X	1 X 3 1 2	1 1 2 1 2	1 1 1 1 2	1 1 1 2 1
Sodium Hypochlorite Sodium Metaphosphate Sodium Nitrate Sodium Perborate Sodium Peroxide	X X 1 3 3	X 3 3 3		X 1 1 1		X 2 1 1 1	3 1 1 1 1	2 1 1 1 1	3 1 1 1

KEY: 1 = Excellent 3 = Fair or Conditional

2 = GoodX = Not Satisfactory **NOTE:** No rating indicates no data available.

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Corrosion Resistance of Coupling Materials

Chemical or Material Conveyed	Mall. from Steel	Brass	Bronze	Aluminum	Glass	Stainless 410, 416, 430	Stainless 302, 202 304, 308	Stainless 316	Monel
Sodium Phosphate – Alkaline Sodium Phosphate – Neutral Sodium Phosphate – Acid Sodium Silicate Sodium Sulfate	1 1	3 2 2 3 2		X 3		1 1 X 1 1	1 1 2 1 1	1 1 1 1 1	1 1 1 1
Sodium Sulfide Sodium Thiosulfate (Hypo) Stearic Acid Sulfate Liquors Sulfur Sulfur Chloride Sulfur Dioxide (Dry) Sulfur Dioxide (Wet) Sulfuric Acid — 10%	1 3 3 2 X 2 X	X X 3 X X X X X	3	X 3 2 1		1 1 2 1 2 X 1 X	1 1 2 1 2 3 1 2 X	1 1 1 1 2 1 1 2	2 1 2 3 2 1 X 2
Sulfuric Acid — 10% – 75% Sulfuric Acid — 75% – 95% Sulfuric Acid — 95% Sulfurous Acid Tannic Acid	X 3 2 X 3	X X X X 3	X X X	X X X		X 3 2 X 1	X 3 2 3 1	X 2 2 2 1	2 3 X X
Tar Toluene, Toluol Trichlorethylene Turpentine Varnish	1 1 3 2	2 1 1 3 2		1 1 3 1		2 1 1 3 1	1 1 1 1	1 1 1 1	1 1 1 1
Vegetable Oils Vinegar Water (Acid Mine Water) Water (Fresh) Water (Salt)	1 3 3 3 3	2 3 X 1 3	2	1 3 3 1 X		1 3 2 1 3	1 2 1 1 2	1 1 1 1 2	1 2 3 1
Whiskey Wines Xylene, Xylol Zinc Chloride Zinc Sulfate	X X 2 X 3	2 2 1 X 3		1 X 3		3 3 1 3 3	1 1 1 2 2	1 1 1 1	2 2 1 1

KEY: 1 = Excellent 3 = Fair or Conditional **NOTE:** No rating indicates 2 = GoodX = Not Satisfactory no data available.

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Chemical Guide

The Chemical Guides in this section are offered as a general indication of the compatibility of the various materials used in Parker/Dayco hose with the chemicals and fluids listed. The basis for the ratings in this guide include actual service experience, the advice of various polymer suppliers, and the considered opinion of our rubber chemists. When in doubt, a sample of the compound should always be tested with the particular chemical it is to handle. Some of the variables that come into play in the resistance of a compound to a chemical attack are:

1. Temperature of the Material Transmitted: Higher temperatures increase the effect of chemicals on rubber compounds. The increase varies with the polymer and the chemical. A compound quite suitable at room temperature might fail very quickly at higher temperatures.

- 2. Service Conditions: A rubber compound usually swells when exposed to a chemical. With a given percent of swell, a hose tube may function satisfactorily if the hose is in a static condition, but may fail quickly if the hose is subject to flexing.
- 3. The Grade or Blend of the Rubber Compound: Basic rubber polymers are sometimes mixed or blended together to enhance a particular property for a specific service. As an example, the NBR used as the tube material for Parker/Dayco aircraft refueling hose may vary slightly in its makeup from the NBR used in the tube of Thoro-Flo Multi-Purpose hose. The reaction to a particular chemical may, therefore, be somewhat different.

When in doubt, a sample of the compound should always be tested with the particular chemical it is going to handle.

General Chemical Resistance of Parker Hose Compounds

See the following pages for specific applications.

	Common Name	ASTM Designation D1418-64	Composition	General Properties	Hose Element
Ī	Buna-N or Nitrile	NBR	Nitrile-Butadiene	Excellent oil resistance. Good physical properties.	Tube/Cover
	Cross Linked Polyethylene	XPE	Cross Linked Polyethylene	Excellent resistance to most solvents, oils and Tube Polyethylene chemicals. Do not confuse with chemical properties of standard polyethylene.	Tube
	EPT or EPDM	EPDM	Ethylene-propylene- dieneterpolymer	Good general purpose polymer. Excellent heat ozone, and and weather resistance. Not oil resistant.	Tube/Cover
	Flourocarbon resin (Teflon)	TFE	Polytetra- flouroethylene	Excellent chemical and solvent resistance, inert to most materials. Smooth anti-adhesive surface – easily cleaned.	Tube
	GRS or SBR	SBR	Styrene-Butadiene	Good physical properties, including abrasion resistance. Not oil resistant. Poor weathering and ozone resistance.	Tube/Cover
	Hypalon	CSM	Chloro-sulfonated polyethylene	Excellent ozone, weathering and acid resistance. Good abrasion Good abrasion and heat resistance. Can be compounded for good oil resistance.	Tube/Cover
	Natural	NR	Isoprene Rubber (Natural)	Excellent physical properties, including abrasion resistance. Not oil resistant.	Tube
	Neoprene	CR	Chloroprene	Excellent weathering resistance. Flame retarding. Good oil resistance. Good physical properties.	Tube/Cover
	Chlorinated polyethylene	СМ	Chloropolyethylene	Good long term resistance to UV and weathering. Good oil and and chemical resistance. Excellent flame resistance. Good low temperature impact resistance.	Tube
	Viton	FKM	Fluorocarbon rubber	Excellent high temperature resistance, particularly in air or oil. Very good chemical resistance.	Tube/Cover
	Epichlorohydrin	ECO	Ethylene oxide Chloromethyl	Excellent oil and ozone resistance. Fair flame resistance and low permeability to gases. Good low temperature properties.	Tube/Cover
	Butyl	IIR	Isobutene-isoprene	Very good weathering resistance, low permeability to air. Good physical properties. Poor resistance to petroleum based fluids.	Tube/Cover
	Ultra-High Molecula Weight Polyethylene		Ultra-High Molecular Weight Polyethylene	Excellent chemical resistance.	Tube



WARNING The following data is based on tests and believed to be reliable; however, the tabulation should be used as a guide ONLY, since it does not take into consideration all variables, such as elevated temperatures, fluid contamination, concentration, etc. that may be encountered in actual use. All critical applications should be tested. Contact Parker for recommendation and assistance. Note: All data based on 70°F unless otherwise noted.

KEY:

E = Excellent

G = Good

C = Conditional

Blank = No Data

X = Not Satisfactory

Trade Name	Description	ASTM Codes	Parker Codes	Trade Name	Description	ASTM Codes	Parker Codes
Butyl CPE EPDM	Isobutylene-Isoprene Chlorinated Polyethylene Ethylene Propylene-Diene	IIR CM EPDM	BU CP EP	Nylon SBR Santoprene	Nylon Polymer Styrene-Butadiene Ethylene- Propylene-Diene	— SBR EPDM	NL SB SP
Hypalon Hytrel	Chlorosultonyl Polyethylene Thermoplastic Polyester	CSM	CS HY	Teflon UHMW Urethane	Fluorocarbon Resin Ultra-High Molecular Weight Polyethylene Urethane	TFE — AU	TF UHMW AU
Natural Neoprene Nitrile	Natural Rubber Polychloropren Acrylonitrile	NR CR NBR	NR CR NI	Viton XLPE	Floroelastomer Cross-Linked Polyethylene	FKM XPE	VI XP

Chemical or Material Conveyed	Buty,	CPE	EPDIM	Hypalon	Hytre,	Natural	Neoprene	Nitrile	Mylon	ЗВР	Santoprene	Teflon	UHMW	Urethane	Viton	KIPE
1 UNDECANOL 1,4-DIOXANE 1-AMINO-2-PROPANOL 1-AMINOBUTANE 1-AMINOPENTANE	E G E X G		G C X	E X C G		E X G X G	X X	E X G C C	Е	x x		E E E E		x x	G X X X	E E
1-BROMO-2 METHYL PROPANE 1-BROMO-3 METHYL BUTANE 1-BROMOBUTANE 1-CHLORO-2-METHYL PROPANE 1-CHLORO-3-METHYL BUTANE	X X X C		x x	X X X X		X X X X	X X	X X X X	E			E E E E			GGGGE	
1-DECANOL 1-HENDACONAL 2 (2AMINOETHYLAMINO) ETHANOL 2 (2ETHOXYETHOXY) ETHANOL 2 (2ETHOXYETHOXY) ETHYL ACETATE	C E E G	Е	G X	E G G G		o gox	X C X	E GGC	E	G X		E E E		X	G G G	E
2,4-DI-SEC-PENTYLPHENOL 2-AMINOETHANOL 2-CHLORO-1-HYDROXY-BENZENE 2-CHLOROPHENOL 2-CHLOROPROPANE	E G X	E C G	G X X	G C X	x	G X X	G X X	G X X	X X	X X	х	E E E		C X X	X E E	G E
2-ETHOXYETHANOL 2-ETHOXYETHYL ACETATE 2-ETHYL (BUTYRALDEHYDE) 2-ETHYL-1-HEXANOL 2-ETHYLHEXANOIC ACID	GGGEC	х	G G E	C X X E G	х	CXXEC	C X E	G X X E C	G	X X E	E	E E E E		X X	C X X E	E E
2-ETHYLHEXYL ACETATE 2-OCTANONE 3-BROMOPROPENE 3-CHLORO-2-METHYL PROPANE 3-CHLOROPROPENE	E G X C	G	х	E X X		X X X	x x	X X X G		E		E E E			X X G	
4-HYDROXY-4-METHYL-2-PENTANONE ACETALDEHYDE ACETIC ACID, GLACIAL ACETIC ACID-10% ACETIC ACID-50%	E E G E E	EEE	E E G E E	CCCEE	C G E X C	C X B X	C X X B C	X X G X C	G E X E C	C X C F X	E G B	E E E G	G E E	X X X X	X X E G	E E G
ACETIC ANHYDRIDE ACETIC OXIDE ACETONE ACETONE ACETONE CYANOHYDRIN ACETONITRILE	G G Ш Ш Ш	E G	G В Е Е	EEXCG	СС	ОХООВ	G XBE	X X C	X E	С	GBEEE	EEEE	G E G	X G X X	X X X	E E E



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Chemical or Material Conveyed	Buty	ag Og	EPDIM	Hypalon	Hytrel	Natural	Neoprene	Nitrile	Mylon	SBA	Santoprene	Teflon	UHMW	Urethane	Viton	KLPE
ACETOPHENONE ACETYL ACETONE ACETYL CHLORIDE ACETYL OXIDE ACETYLENE	G E X E	G E G	E E C G E	X X C	X G	X X C G	X X X	X X X X E	X E	X X C	E E C G E	F E E E	X E G E	X X X G	X X G X E	X E G E
ACETYLENE DICHLORIDE ACETYLENE TETRACHLORIDE ACROLEIN ACRYLIC ACID ACRYLONITRILE	C X E	E	C X E	X X G		X X G C	X X	X X	E	C C		E E E	x c	x x	G E	E C
ADIPIC ACID AIR, +300F ALK-TRI ALLYL ALCOHOL ALLYL BROMIDE	G X E X		E G E	G X E X		E X X E X	E G E	E G X E		х	E	E E E	X E G	E C	E E G	E E G
ALLYL CHLORIDE ALUM ALUMINUM ACETATE (AQ) ALUMINUM CHLORIDE (AQ)–40% ALUMINUM FLUORIDE	E G G E	G E E C	E E	X E		X E E E	E G E E	G E G G E	G X G	G X E		E E E	G E E E	x c	G E X E	G E E E
ALUMINUM FORMATE ALUMINUM HYDROXIDE ALUMINUM NITRATE (AQ) ALUMINUM SULFATE (AQ) ALUMS-NH3-CR-K	G E E E	E E	E E E	X G E E	G	X E E E	E E E	E E E	G E C	G E G E	E	E E E E	E E E E	G C G	E E E	E E E
AMINES-MIXED AMINO XYLENE AMINOBENZENE AMINODIMETHYLBENZENE AMINOETHANE	G G G	G C	G C	X C	G	G C	x	X	С	G C		E E		×	X C	
AMMONIUM CARBONATE (AQ) AMMONIUM CHLORIDE (AQ) AMMONIUM HYDROXIDE AMMONIUM NITRATE (AQ) AMMONIUM PHOSPHATE, DIBASIC	E E E	G E G E	E E E E	G G E E E	E G		E E E	G G E E	G G E	E E E	E	E E E E	E E E	E G X E	E E E E	E E E
AMMONIUM SULPHATE (AQ) AMMONIUM SULPHITE AMMONIUM THIOSULPHATE AMYL ACETATE AMYL ACETONE	E E G G	Е	E E E	E E X X	G C	E E X X	E E X	E E X	G G	G E X	x	E E E E	E E	E X	E E E	E E E E
AMYL ALCOHOL AMYL AMINE AMYL BROMIDE AMYL CHLORIDE AMYL ETHER	E G X	E C	E X	E C X C	Е	E C X	E X	G C	E	E X	E	E E E E	E E	X C	E G E	E G
ANETHOL ANILINE ANILINE DYES ANILINE OIL ANIMAL FATS	X E G G	X G G	G G C E	X X G	X G	X X G	X C G	X X E	G C X E	X G X	E	E E E E	G E E	X X X C	G C C C E	G E E
ANTIMONY CHLORIDES AQUA REGIA ARGON ARSENIC ACID ASPHALT	E X G E X	E	E G E X	G X X E X	E C	X X G X	X X X E X	G X E E X	E G E	X X E X	E	E E E G E	X E E X	X E C G	E E E E	E X E E X
ASTM FUEL A ASTM FUEL B ASTM FUEL C ASTM OIL NO. 2 ASTM OIL NO. 3	X X X X	E G C E	X X X X	G X X X G	E E E E	X X X X	G X X G C	E X E E	E E E E	X X X X	X X X X	E E E E	G G E E	G G G E	E E E	G G G E E
ASTM OIL NO. 4 ASTM OIL NO. 1 AUTOMATIC TRANSMISSION FLUID BANANA OIL BARIUM CHLORIDE (AQ)	X X X	E G	X X X G E	X G C C E	E E G	X X X	X E G	G E E X E	E G G	X X X X E	X X	E E E	E E E E	X E G	E E E	E E E E
BARIUM HYDROXIDE (AQ) BARIUM SULFIDE (AQ) BEER BEET SUGAR LIQUORS BENZAL CHLORIDE	E E E G	G G	E E E	E E E	G G	EEE	E E G G	E E E	G E	E G E		E E E	E E E E	E E X	E E E	E E E E



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Chemical or Material Conveyed	Butyı	S _P E	EPDIN	Hypalon	Hytre,	Natural	Neoprene	Nitrile	Mylon	SBR	Santoprene	_{leflon}	UHIMM	Urethane	Viton	KIPE
BENZALDEHYDE BENZENE BENZENE CARBOXYLIC ACID BENZINE BENZOIC ACID	G X E X	С	E X X	X X X	G C	X X X	X E C E	X X C	E G G E	X X X	X X		E G	X X	X G E E	E E E
BENZOL BENZOTRICHLORIDE BENZYL ACETATE BENZYL ALCOHOL BENZYL CHLORIDE	E G X	C	X G X	G G X	C C	X X X	X	X	G C	X	х		G G E E	x	G X E	G E E
BENZYL ETHER BIS (2-CLOROETHYL) ETHER BLACK SULFATE LIQUOR BLEACH (2-15%) BORAX SOLUTION	G X G G E	C G	C G E	X X G E	G G E	X X G X G	X G X E	X X G X G	CCG	X X G X G		EEEE	E E E	G X X E	X E E E	G E
BORIC ACID BRAKE FLUID (HD-557) 12 DAYS BRINE BROMACIL	E G E	E G	E E E	E G E	E G	E	E G G	E C E	G E G	E E	E	E E	E	E	E X E	E E
BROMOBENZENE BROMOCHLOROMETHANE BROMOETHANE BROMOTOLUENE BUGDIOXANE	X X X	X X X	G X	X X X		X C X	X X	X G		X		E E E	С	X	E C E G	C F E
BUTADIENE BUTANOIC ACID BUTANOIC ACID BUTANOL (BUTYL ALCOHOL) BUTANONE	X X X G E	G G	X X G G	X X C E X	E G E	X X X E	X X C	X E E	E G G	X X X	G X	шшшш	E E E	X X X	G E G E	E E E
BUTOXYETHANOL BUTYL ACETATE BUTYL ACRYLATE BUTYL ALCOHOL BUTYL ALDEHYDE	E X G G	C G	E X G G	X X E C	C G	X X X E	X X E C	C X X E	G G	X E	G	E X E E	E G E	E X C	X X E X	E G E
BUTYL BENZYL PHTHALATE BUTYL CARBITOL BUTYL CELLOSOLVE BUTYL CHLORIDE BUTYL ETHER	E E C X		E G X	X X X X		X X X X	C X X	X C X		X X X	E	EEEE	E E E C E	G	C C X E X	ECEGE
BUTYL ETHER ACETALDEHYDE BUTYL ETHYL ETHER BUTYL OLEATE BUTYL PHTHALATE BUTYL STEARATE	G X G G X		G E X	X X X X		X X X X	x x	G X G	X	X X X		EEEE	E E	G	X E C E	E E E
BUTYLENE BUTYRALDEHYDE BUTYRIC ACID BUTYRIC ANHYDRIDE CADMIUM ACETATE	X G G C E		X C G	X C G E	G	X X C X	C X X	E X C	G	X X X		E E E	E E	C X	E X G	E E E
CALCIUM ACETATE CALCIUM ALUMINATE CALCIUM BICHROMATE CALCIUM BISULFIDE CALCIUM CHLORIDE	E E E	G	X	C E C	G E	E E	G C E	G E E	G E	X G E		EEEE	E	X C E	X E E	E E G
CALCIUM HYDROXIDE CALCIUM HYPOCHLORITE CALCIUM NITRATE CALCIUM SULFIDE CAPRILIC ACID	EEEC	G G X	E E E	G E E E G	E C	E X E X C	E C E E	E X E C	E X E E	E X E X		E E E E	E C E E	E X X E	E E E	E C E E
CARBAMIDE CARBITOL CARBOLIC ACID (PHENOL) CARBON DIOXIDE CARBON DISULFIDE	G E G X	G	G X G X	E G X G X		E X X G X	G C X G X	G X E X	E X E X	G X G X	х	E E E E	E E E	X X E X	G E G X	E E C
CARBON MONOXIDE CARBON TETRACHLORIDE CARBONIC ACID CASTOR OIL CAUSTIC SODA (SEE SODIUM HYDROXIDE)	E X E G E	G C X G	E X E G E	E X E E	E X C C	C X E E	E X G E E	E C G E	E X G G	G X G E	E X C E	E E E E	E G E	G X E G	шшбшб	E E E E



Chemical or Material Conveyed	Butyı	Co _F	EPDIN	Hypalon	Hytre,	Natural	Neoprene	Nitrile	uo _{MW}	SBA	Santoprene	Teflon	UHIMW	Urethane	Viton	KIPE
CELLOSOLVE ACETATE CELLUGUARD CETYLIC ACID CHINA WOOD OIL (TUNG OIL) CHLORDANE	G E G X	G C	G E G X	X X C E C	шдс	X E E X	X E G E C	X E E G	G G C G G	X E B X	E	E E E	E	X E E C C	X E E E	E
CHLORINATED SOLVENTS CHLORO-2-PROPANONE CHLOROACETIC ACID CHLOROACETONE CHLOROBENZENE, MONO, DI, TRI	X X G X	х	X E G E X	X X G X X	x x	X X X X	X C X C	X X X X	X X E	X X X X	x x	E E E E	E E G	X X X X	E X G X E	G E E A
CHLOROBUTANE CHLOROETHYLBENZENE CHLOROFORM CHLOROPENTANE CHLOROSULFONIC ACID	C X X C X	X X X	X X X	X X X X	x x	X X X X	x x	x x x	x x	X X X	x x	E E E E	G E E X	C G X	E G E X	G E G E X
CHLOROTOLUENE CHLOROX CHROME PLATING SOLUTIONS CHROMIC ACID CHROMIUM TRIOXIDE	X G X G	X X	X G X X	X G X X	X X	X X X X	X G X X	X G X X	X X	X X X X	X	E E E E	G G	X X X X	E E E E	G G
CINNAMENE CIS-9-OCTADECENOIC ACID CITRIC ACID COAL OIL COAL TAR	X X E X	X X	X C E X	X G E C X	X E G X	X X E X X	X C E G C	X E E G	E G E	X X E	E X X	E E E E	E E E	CGECC	G E C E	E E E
COAL TAR NAPHTHA COCONUT OIL COKE OVEN GAS COOLANOL (MONSANTO) COPPER CHLORIDE	X G X E	x	X G X E	X C X G G	X E	X X X X G	C X G G	X E X E	E C	X X X X E		E C E	E	X C X X G	E E E E	E E E
COPPER CYANIDE COPPER HYDRATE COPPER HYDROXIDE COPPER SULFATE CORN OIL	E E E G	x	E E X	GGGEG	ЕЕ	E C C G X	E E C	EGGEE	G G G	E G G X	E	E E E E	E E E	E G E	E C C E E	E E E
COTTONSEED OIL CREOSOTE CRESOLS CRESYLIC ACID CROTONALDEHYDE	C X X E	G	C X X E	G X X X	E X	X X X X	C X X X	G X X X	E X X	X X X C	x	E E E E	E E E E	E C X X	E E G X	
CRUDE OIL CUMENE CUPRIC CARBONATE CUPRIC HYDROXIDE CUPRIC NITRATE	X E E E		X X E	X E G E		X C C G	X X E	G X E G E	E	X X		E E E E	E E E	G X	E E C E	Е Е
CUPRIC SULFATE CUTTING OIL CYCLOHEXANE CYCLOHEXANOL CYCLOHEXANONE	E X X X		E X X C	E G X B X	E	G X X X	E G X G X	E E G G X	G G G	E X X X	X X X	E E E E	E E E	X E G	E E E X	E G E
CYCLOPENTANE CYCLOPENTANOL CYCLOPENTANONE CYCLOPENTYL ALCOHOL DDT IN DEIONIZED KEROSENE	X X X X		x x	X X X X		X X X X	E C	G G X G E	E	X X X		E E E	E E	G	E G X G E	
DECAHYDRONAPTHALENE DECAHYDROXYNAPTHALENE DECALIN DECYL ALCOHOL DECYL ALDEHYDE	X X C	С	x x	X X E X		X X X	X X X	X X E	G G	x x	x x	E E E	X E E	x x	E G X	E
DECYL BUTYL PHTHALATE DECYL CARBINOL "DETERGENT, WATER SOLUTION" DEVELOPING FLUID (PHOTO) DEXTRON	E E G X		E G X	X E E	G X	X E E	G E G	X E E E		G G X		E E E	E	G G	C G E E	E
DI(2ETHYLHEXYL) ADIPATE DI(2ETHYLHEXYL) PHTHALATE DIACETONE ALCOHOL DIACETYLMETHANE DIALLYLPHTHALATE	E G E E	G G	G G E E	X X X	E C	X X X X	X X X	X X X X	Е	X X X	E	E E E	E	X X X	C G X X	С



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Chemical or Material Conveyed	Butyı	ς _β ε	EPDM	Hypalon	Hytre,	Natural	Neoprene	Nitrile	Mylon	SBR	Santoprene	reflon	пним	Urethane	Viton	KIPE
DIAMMONIUM PHOSPHATE DIAMYL NAPTHALENE DIAMYL PHENOL DIAMYLAMINE DIAMYLAMINE	E X E X	E	E E	E X C X		E X X G X	E X	E X G C	G	E X X		E E E E		x	E C E X E	E E
DIBENZYL ETHER DIBROMOBENZENE DIBROMOMETHANE DIBUTYL ETHER DIBUTYL PHTHALATE	G X X X C		C C X E	X X X X	G	X X X X	X X X	X X X	E	X X X	x	E E E E	E G E E	G X X	X E G X C	E E E
DIBUTYL SEBACATE DIBUTYLAMINE DICALCIUM PHOSPHATE DICHLORO DIFLUORO METHANE DICHLORO ETHYLENE	G X E X C	С	G X C X	X X E E X	G E X	X X E X	X X G X	X X E C	G C	X X E	X	E E E E	E	X X E C	E X E G	E
DICHLOROACETIC ACID DICHLOROBUTANE DICHLOROETHANE DICHLOROETHYL ETHER DICHLOROHEXANE	C X C X	x	C X	X X X X	х	G X X X	X X	G X X	С	X X X	x	E E E E	E E	C X X	X E G	EGEEE
DICHLOROMETHANE DICHLOROPENTANE DICHLOROPROPANE DICHLOROPROPENE DICHLOROTOLUENE	X X X	x	С	X X X	Х	X X X	G X X	X X X	С	X X	Х	E E E	E E E	x	G E E	E E E
DIESEL OIL DIETHANOLAMINE DIETHYL ETHER DIETHYL KETONE DIETHYL OXALATE	X E X G X	Е	X E X E X	C X X X	G X C	X G X X	C X X	E X X	E G E	X X X	X E	E E E E	E E	C E	E X X	C E E
DIETHYL PHTHALATE DIETHYL SEBACATE DIETHYL SULFATE DIETHYL TRIAMINE DIETHYLAMINE	E G G E G		G E G	xcxcc	Е	X X X G	X E G	X X G C		X E G	Е	E E E E	E	X X C	C G X	E C
DIETHYLBENZENE DIETHYLENE GLYCOL DIETHYLENE OXIDE DIETHYLENE TRIAMINE DIHYDROXY DIETHYL ETHER	X E X E		X E E E	X E C E	Е	X E G E	X E	X E		X E X	E	E E E E	E E	X X	E E	E C
DIHYDROXY SUCCINIC ACID DIISOBUTYL KETONE DIISOBUTYLENE DIISODECTYL PHTHALATE DIISODECYL PHTHALATE	G G X E E		G E X E	E X X X		E X X X	C X C	G X E		X X X		E E E E	E E	E X X	E X E C	E E E
DIISOOCTYL ADIPATE DIISOOCTYL PHTHALATE DIISOPROPANOLAMINE DIISOPROPYL ETHER DIISOPROPYL KETONE	E E X E		G X E	X C C X		X X G X	X X	X G G X		X X X		E E E E	E E	G X	C C X	E E E
DIMETHYL PHTHALATE DIMETHYL SULFATE DIMETHYL SULFIDE DIMETHYLAMINE DIMETHYLANILINE	G G C G X	С	G X G	X X X	E	X	X	X X X X		X	G	E E E	E E G	X	E X X	E E G
DIMETHYLANICINE DIMETHYLBUTANE DIMETHYLCARBINOL DIMETHYLKETONE DIOCTYL ADIPATE	XEEE	C G	X G E G	X E X	X C	E	X E X	X G X	G E	x C	X	X E E	E	×	E E X C	u u
DIOCTYL ADIPATE DIOCTYL PHTHALATE DIOXALANES DIOXANE DIPENTENE DIPENTYLAMINE	G X G X E		G G G X E	X X X C	E	X X X X G	X X X X	X X X G G	E E	X X X X		E E E E	E E E	X X X X	G X X E X	E E E
DI-P-MENTHA-1,8-DIENE DIPROPYLAMINE DIPROPYLENE GLYCOL DISODIUM PHOSPHATE DIVINYL BENZENE	X E E X		X	X C E E X		XGEEX	Х	GGEE		X			E E	X	E E E E	E E



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Chemical or Material Conveyed	Butyı	<i>y</i> 60	EPDIM	Hypalon	Hytre,	Natural	Neoprene	Nitrile	4011/W	SBA	Santoprene	Teflon	UHIMIM	Urethane	Viton	KIPE
DOWELL INHIBITOR DOWFAX 2A1 SOLVENT DOWFAX 2A1 TA DOWFAX 6A1 SOLVENT DOWFAX 6A1 TA		G E E G E														
"DOWTHERM, A AND E" DRY CLEANING FLUIDS DUCGKIRIOEBAANE DURO AW16, 31 DURO FR-HD	X X X	х	X X X	X X	G	X	X	X C E E	X E E	X		C E E	E	X	E E	E
EHTYL BUTYL ACETATE EHTYL DICHLORIDE EHTYLENE DIBROMIDE ETHANOIC ACID ETHANOL (GRAIN ALCOHOL)	E C X G E	E G	C C E E	G X X C E	CE	X X X X E	X X G E	X X C E	C	X X G E	C	E E E E	E G E	X X X	X G G X C	E G G
ETHANOLAMINE ETHERS ETHYL ACETATE ETHYL ACETOACETATE ETHYL ACETONE	G X G G	G G	G C E G G	X X X X	X C	G X C X	G X X X	G X X X	E E	X X C X	E	E E E E	E E E	C X X	X X X X	E C E
ETHYL ACRYLATE ETHYL ALCOHOL ETHYL ALDEHYDE ETHYL ALUMINUM DICHLORIDE ETHYL BENZENE	G E G X	G	G E E	X E C X	Е	X E X X	X E X	X E X X	X	X E X	Е	E E E E	E E E	X X C	X E X G E	G E G E
ETHYL BROMIDE ETHYL BUTANOL ETHYL BUTYL KETONE ETHYL CELLULOSE ETHYL CHLORIDE	X E G E	x	X G E	X E X G C	G X	OEXGO	X G X	G E X G E	CE	X G G	x	E E E E	E E G	X G C	E G X E	E E G
ETHYL DIISOBUTYLTHIO-CARBAMATE ETHYL ETHER ETHYL FORMATE ETHYL IODIDE ETHYL OXALATE	X G C	G	X G C	X G X X		E X X C	X G X X	X X X	Е	E X X		E E E	E E G E	C	X E G E	E E E E
ETHYL PHTHALATE ETHYL SILICATE ETHYLAMINE ETHYLENE CHLOROHYDRIN ETHYLENE DIAMINE	E E G G E		E E G E	X G C C G		x g c c g	E X G E	X E X G		G C G		E E E E	E E E E	X X	E X E X	E E E
ETHYLENE DICHLORIDE ETHYLENE G MONOETHYL E ACETATE ETHYLENE G. MONOBUTYL ETHER ETHYLENE G. MONOHEXYL ETHER ETHYLENE G. MONOMETHYL ETHER	C E E	х	X E E	C X C	Х	X C X	X C E	x c c	С	x x	х	E E E	G	X X X	G E X	G E E
ETHYLENE GLYCOL ETHYLENE OXIDE FATTY ACIDS FERRIC BROMIDE FERRIC CHLORIDE	E X X E	G X X	E C X E	E X C E E	E G G	E X E E	E X G	E X E E	E G E C	E X X	E X	E E E E	E E E	G X C	E X E E	C E E
FERRIC NITRATE FERRIC SULFATE FERROUS ACETATE FERROUS CHLORIDE FERROUS SULFATE	E E G E	х	E E E	E E G E	E E	E E X E E	E E G E	E X E	E E E	E E		E E E E	E E E	E G G E	E E X E	E E E
FLOUROSILIC ACID FLUOBORIC ACID FLUORINE FORMALDEHYDE FORMALIN	E G X E	G G	E E E E	E E X G	x c c	E E X	E E X G	E E X C	X E E	G E C	C E E	E E G E	C C X E	X X X	C E E E	G C X E
FORMIC ACID FREON 113 FREON 12 FREON 22 FREON 502	E X C X E	X C C	E X C E	E E E	C E X	CXCCE	E E E E	C E E X G	X X G G E	E G E E	E X X	E E E	Е	X G E X	X G G C G	С
FUEL A (ASTM) FUEL B (ASTM) FUEL OIL FURALDEHYDE FURAN	X X X E X	E G E E	X X X G X	G X C C X	E E G G	X X X X	G X G C X	E X E X	E E G C	X X X X	X X E	E E E E	G G E	G G C X X	E E X C	G G E



											۾					
Chemical or Material Conveyed	Butyı	Sp.	EPDIM	Hypalon	Hytre!	Natural	Neoprene	Nitrile	u _{O/N/V}	SBR	Santoprene	Teflon	UHIMW	Urethane	Viton	KLPE
FURFURAL FURFURAN FURFURYL ALCOHOL GALLIC ACID GALLOTANNIC ACID	E X G G	E	G X G G	C X X G E	G G X	X X X E E	C X X G E	X X X G E	C G G	X X X G	E E	E E E E	E E E	X X X E	X C E E	E E C
GAS, 100 OCTANE GAS, COAL GASOLINE GLACIAL ACRYLIC ACID GLUCONIC ACID	X X	Е	X E X	X X G	E G E	X X X	C E X	E X E C	G E G	X X	Х	E E	C G E	C G C	E E G	G E
GLUCOSE GLYCERINE GLYCEROL GLYCOGENIC ACID GLYCOLS	EEECE	E E	E E E	E E G E	G E E C	E E X E	G E E	EEECE	0 0 0	E E E	X X G	Е Е Е Е	E A E	C C C	E E E	E C E
GLYCONIC ACID GLYCYL ALCOHOL GREASE, PETROLEUM BASE GREEN SULFATE LIQUOR HALON 1211	C E X E	E E	E X E	G E X G	E E X	X E X G	E C G E	CEEGE	G E X	E X G	X X	E E E	E E E	C E E	E E E	G E
HELIUM HEPTALDEHYDE HEPTANAL HEPTANE HEPTANE CARBOXYLIC ACID	E X X C	E	E X	E X G G	G	E X X X	E G	EEEC	E	E X			E E	E G	E X X E	E G
HEPTANOIC ACID HEPTANONE HEXADECANOIC ACID HEXALDEHYDE HEXANE	G G X	E C G	G E X	C C E	E	E X X	G E E	E X E	C E	B X X	E E	E E E	E G	E G G	E X E	E G
HEXANOL HEXENE HEXYL ALCOHOL HEXYL METHYL KETONE HEXYLAMINE	C X C G G		G X G	G G G X C		E X E X C	G G G	E G G X C		E X E		E E E E	E E	X G X	E G X X	E E E
HEXYLENE GLYCOL HISTOWAX HYDRAULIC OIL, PETROLEUM HYDRAZINE HYDROBROMIC ACID	E E E	E E X	C X E E	E G G E	E X	E X X E	E G G X	E G X	E X X	G X	х	E E E	E G	x	E E E	E C
HYDROCHLORIC ACID HYDROCYANIC ACID HYDROFLUORIC ACID HYDROFLUOSILICIC ACID HYDROGEN CHLORIDE ANHYDROUS	E G G E	X X X X E	C E C E	C E E	C X X G	C G C E	C G C G	C G C G	C X X X	X G C G	E E X	E E E	E E G	C X C	G E G E	E C C
HYDROGEN DIOXIDE (10%) HYDROGEN GAS HYDROGEN PEROXIDE 10% HYDROGEN PEROXIDE OVER 10% HYDROGEN SULFIDE (WET)	C E G X E	C X X	G E G C E	G E E G E	E X X E	G G X X	X E X X E	C E C X C	E G X X	G C X		EEEE	E G E	E G C C	E E E C	EGCE
HYDROXY BENZENE HYDROXYISOBUTYRONITRILE HYDROXYTOLUENE HYVAR XL IMINODI-2-PROPANOL	G	E E	C E	С		Х	х	Х				E		С	E	
IMINODIETHANOL IODINE IODINE PENTAFLUORIDE IODOFORM ISOBUTANAL	G X	E G	G X X	G X		X X X	X X X	G X E	E	G X X		E E	G C	X X	E X	CC
ISOBUTYLAMINE ISOBUTYLBROMIDE ISOBUTYLCARBINOL ISOCYANATES ISOOCTANE	E X E X	E	E X	C X E G	G E	C X E X	E G	X X E G E	G E	x	x	E E E	E E	C G G	X G E G E	E E
ISOPROPYL ACETATE ISOPROPYL ALCOHOL ISOPROPYL ETHER JET FUELS JP-4 OIL	G E X X		G E X X	X E C X	СЕЕ	X E X X	X G X X	X E G E E	GE CC	X E X X	X X	шшшшш	E E E	X G C C	X E X E	E E E



Chemical or Material Conveyed	Butyı	Co _F	EPDIN	Hypalon	Hytre,	Natural	Neoprene	Nitrile	Nylon	SBA	Santoprene	Teflon	UHIMM	Urethane	Viton	XLPE
KEROSENE KETONES LACQUER SOLVENTS LACTIC ACID – COLD LACTIC ACID – HOT	X G X E	G G C X	X E X E X	X C X E C	E X C X C	X C X E X	C X X E X	E X X E X	E E E X	X G X E X	X	E E E E	E G E	G X X G	E X X E	E G E
LARD LAVENDER OIL LEAD ACETATE LEAD NITRATE LEAD SULFATE	C X E E		G X E E E	G X C C E	G G	X X E E E	G X G E G	E G E E	E G	X X X E	E	E E E E	G G E	C X C	E E E E	C G E
LIME LIME BLEACH LIME SULFUR, WET LIMONENE LINOLEIC ACID	E E X X		E C X X	E G X X	G	E C X X	E G E X C	E E X G	G	E		E E E E	E	G	E E E G	E
LINSEED OIL LUBRICATING OILS, SAE LYE SOLUTIONS M E X MAGNESIUM ACETATE	G X E G E	G G C C	C X E E	G X E X E	G E C C	X X E X X	E C E X X	E C X X	E E G E	X X G X X	X C X	E E E E	E E	G E G X X	E G X X	E E E
MAGNESIUM CHLORIDE MAGNESIUM HYDRATE MAGNESIUM HYDROXIDE MAGNESIUM SULFATE MAGNESIUM SULFITE	E E E E	G G G	E E E E	E E E E	G C G	шшшбб	E G E E E	E G E E	E E E	E G G		E E E	E E E	EECC	E G E E	E E E
MALEIC ACID MALEIC ANHYDRIDE MALIC ACID MANGANESE SULFATE MAPP	X X X G		E X X E G	X X G E		X X E G	X X G E	C X E E	E	X X G		E E E	E E E	C E	E E E	G E
MERCURY MERCURY VAPORS MESITYL OXIDE METHALLYL ALCOHOL METHALLYL CHLORIDE	E E C E	G C	E E G	E E X E	Е	E C X E	E C X	E E X E	E	E E X		E E E	E	E X	E E X G	E E E
METHANE CARBOXYLIC ACID METHANOIC ACID METHANOL (METHYL ALCOHOL) METHANOL (WOOD ALCOHOL) METHOXY ETHANOL	E E E	X G G E	E E E	E E E	СЕЕ	CEE	SEI E E	E ACE C E E	TIC AC X G G	ID E E E	E E E	E E E	E E	X X X	X C	CC
METHOXYETHOXY ETHANOL METHYL 1-2,4-PENTANEDIOL METHYL ACETATE METHYL ACETOACETATE METHYL ACETONE	G G G	E E	G G E	C X X	С	X X C	C X X	X X X	E	x		E E E	E	X X	X X X	E E
METHYL ACETYLENE PROPADIENE METHYL ALCOHOL METHYL ALLYL ALCOHOL METHYL ALLYL CHLORIDE METHYL AMYL CARBINOL	E E F E	G C	G E	E E X E	Е	E E X E	E	E E E	G	G E X	E	E E	E	x	C G F G	E G E
METHYL BENZENE METHYL BROMIDE METHYL BUTANE METHYL BUTANOL METHYL BUTYL KETONE	X C X E	C E	X C X E	X X X E X	C X E	X X E X	X X X E X	X G E E X	E G E	X X G X	X X E	E E E E	G E	X X G X	E E E X	E G
METHYL CARBITOL METHYL CELLOSOLVE METHYL CHLORIDE METHYL CYANIDE METHYL ETHYL KETONE	E G X E	C G	G X E E	E C X G X	X E	X X X G X	G X E X	C X C X	C G	X X X	x c	E E E E	E E	X X	X E X	E G E
METHYL HEXANOL METHYL ISOAMYL KETONE METHYL METHACRYLATE METHYL NORMAL AMYL KETONE METHYL PROPYL ETHER	E C G X	С	x	E X X G		E X X X	x	E X X X	С	х	С	E E E	E G	x	G X X	E G E
METHYL SALICYLATE METHYL STYRENE METHYL SULFIDE METHYL TERTIARY BUTYL ETHER METHYL-1-PROPANOL	G C G E	C X	C E	X E		X X E	X X E	X X X G		X E		E E G E	G	x	G X E	



Chemical or Material Conveyed	Butyı	$c_{oldsymbol{ ho}_{oldsymbol{\mathcal{E}}}}$	EPDM	^{uo} led/iH	Hytrel	Natural	Neoprene	Nitrile	Mylon	SBR	Santoprene	_{Teflon}	MWHO	Urethane	Viton	KIPE
METHYL-2-BUTANOL METHYL-2-BUTANONE METHYL-2-HEXANONE METHYL-2-PENTANOL METHYL-2-PENTANONE	ЕООЕС	E X C	C E G	E X X E X	x x	E X X G X	X E X	X G X	E G	E X X	х	E E E		x	F X X C	E E
METHYL-2-PROPEN-1-OL METHYL-3-PENTEN-1-ONE METHYL-4-ISOPROPYL BENZENE METHYLALLYL ACETATE METHYLAMYL ALCOHOL	E E E	СС	E	E G E		G X G	E E	G X G				E E E			C X C	E
METHYLCYCLOHEXANE METHYLENE BROMIDE METHYLENE CHLORIDE METHYLETHYL KETONE METHYLHEXYL KETONE	X X X E G	G	X C E	X X X X	X E	X X X X	X X X	X X X X	C G	X X	X C	ЕЕЕЕ	G E E	X X	G C G X	G C E E
METHYLISOBUTYL CARBINOL METHYLISOBUTYL KETONE METHYLISOPROPYL KETONE METHYLLACTONITRILE METHYLPHENOL	E G E X	X X	E G C	E X C C	X X	G X X C X	E X X B X	G X X X	G E	X X	X E		Е	X X X	C X X X E	C E E
METHYLPROPYL CARBINOL METHYLPROPYL KETONE MIL-A-6091 MIL-E-9500 MIL-F-16884	E G E E X		G E E X	E X E C		E X E X	X E C	E X G E E		X E E X		E E		X X C	G X E E	E
MIL-F-17111 MIL-F-25558B MIL-F-25576C MIL-F-7024A MIL-G-10924B	X X X X		X X X X	X G C X G		X X X X	G G C X X	E E E E		X X X X				CGCGG	E E E E	
MIL-G-25013D MIL-G-25537A MIL-G-4343B MIL-G-5572 MIL-G-7711A	X C X		X C X	G G G X X		X C X	G G G X X	E G E E		X C X				C G E G E	E E E E	
MIL-H-13910B MIL-H-19457B MIL-H-22251 MIL-H-27601A MIL-H-5606B	G E E X X		E E X C	G X G C G		G X X	G X G G	G X G G E		E X G X				X X C G	ECEEE	
MIL-H-6083C MIL-H-8446B MIL-J-5161F MIL-J-5624G (JP-3, JP-4, JP-5) MIL-L-15016	X X X X		X X X X	G C X X G		C X X X	G G X G	E G G E E		X X X X				GCCCE	E E E E	
MIL-L-17331D MIL-L-2104B MIL-L-21260 MIL-L-23699A MIL-L-25681C	X X X E		X X X E	GOGOG		X X X G	G G G C G	E E G G		X X X G				EEECC	E E E E	
MIL-L-3150A MIL-L-3545B MIL-L-4339C MIL-L-6082C MIL-L-6085A	X X X X		X X X X	G C X G X		X C X X	G G X G X	E G E E G		X X X X				GCXEC	EEEE	
MIL-L-7870A MIL-L-9000F MIL-L-9236B MIL-O-5606 MIL-O-7808	X X X		X X X	X C X		X X X	G G X	E E G E G		X X X		E		X C X	E E E E	
MIL-P-27402 MIL-S-3136B TYPE 1 FUEL MIL-S-3136B TYPE 2 FUEL MIL-S-3136B TYPE 3 FUEL MIL-S-3136B TYPE 4 OIL, LOWSWELL	E X X X		E X X X	G G X E		X X X	G G X E	GECCE		G X X X				G G E	E E E	
MIL-S-3136B TYPE 5 OIL, MEDSWELL MIL-S-3136B TYPE 6 OIL, HI SWELL MIL-S-81087 MINERAL OIL MINERAL SPIRITS	X X E X	G	X X E X	G X E G	E	X X E X	G X E X	E E E E	E	X X E X	x	E	E E	G G E G	E E E E	E E



Chemical or Material Conveyed	Butyı	Sp.	EPDIN	Hypalon	Hytre,	Natural	Neoprene	Nitrile	Nylon	SBA	Santoprene	^{Teflon}	UHIMM	Urethane	Viton	KIPE
MOBILE HFA MOLTEN SULFUR MONOBUTYL ETHER MONO-CHLOROACETIC ACID MONOCHLOROBENZENE	G X G X	х	X E X C	E X X	X	G X C X	E C E X	E G C X	E X G	X X X	×	E E E E	X G	G X X	E X G E	X E E G
MONOCHLORODIFLUOROMETHANE MONOETHANOL AMINE MONOETHYL AMINE MONOMETHYLAMINE MORPHOLINE	X G G C	С	E G E E X	ECCC	X	C G C C	E G X C X	X G X G X	x	E G C	Х	E E E E	E	X X	X X X	C E C E
MOTOR OIL MTBE MURIATIC ACID NA-K NAPHTHA	G C	X X E	X C X	G C X	G C E	C X	G X C	E X C X E	G X E	X X G	E	E G E X E	E G E	G C	E X C	E E
NAPHTHALENE NAPHHENIC ACIDS N-BUTANAL N-BUTYLAMINE N-BUTYLBENZENE	X G X	CE	X X G C	X X X X	С	X X X X	X X C X	X G X X	G	X X X	C	EEEE	E	G C X	E E X X E	E
N-BUTYLBROMIDE N-BUTYLBUTYRATE N-BUTYLCARBINOL NEOHEXANE NEON GAS	X E E X E	Е	E E	X X E X E	E	X X E X E	X E E	X X G E	E E	X E E	E E	E E E E		X E	G E E E	G G E
NEU-TRI NICKEL ACETATE NICKEL CHLORIDE NICKEL NITRATE NICKEL SULFATE	X E E E	x x	E E E	X E E E	C C	X E E G	G G E E	X G E E	C C	X E G		E E E E	E E E	X C	E X E E	E E E E
NIETYLENE NITRIC ACID, 10% NITRIC ACID, 13N NITRIC ACID, 13N + 5% NITRIC ACID, UP TO 25%	E X X G	X X X	E X X E	G X X G	C X X	E X X X	G X X X	X X X	C X X	X X X	E	E E E	E	X X X	X	C E
NITRIC ACID, 25% TO 40% NITRIC ACID, 40% - 60% NITRIC ACID, CONC (16N) NITRIC ACID, RED FUMING NITRILOTRIETHANOL	C X X C G	X X X	G X X X E	C X X E	X X X X	X X X G	X X X X	X X X C	X X X	X X X G	X X	E E E E	G C E X	X X X X	C C E C X	G C G X
NITROBENZENE NITROETHANE NITROGEN NITROMETHANE NITROUS OXIDE GAS	G G E G E	С	X G E G E	X C E C E	X C	X G E G E	X C E X G	X X E X E	C C	X G E C	E	E E E E	E E E E	X X E X G	C X E X E	EEE
N-NONYL ALCOHOL N-OCTANE NONANOIC ACID NONANOL N-SERV (75% XYLENE)	E X E E		x	E X X E		E X X E	С	E E E	E	х		E E E E	G	x	G E G E	G C
NUTO H NYVAC LIGHT O-AMINOTOLUENE OCTANOIC ACID	C	G	X E	G		C G	G	E X C G	E E	G		E E E	E	x	E	E
OCTANOL OCTYL ACETATE OCTYL ALCOHOL OCTYL ALDEHYDE OCTYL AMINE OCTYL CARBINOL	EGCEE		G	E G X C E		X G X C E	G	X G X C E		G		E E E E	E E	×	X G X X G	EECE
OCTYLENE GLYCOL OIL-PETROLEUM OLEIC ACID OLEUM (FUMING SULFURIC ACID) OLIVE OIL	E X X X G	G X X	X C X G	E G G X G	E E X	E X X X	G C X G	E E X E	G E X E	X X X	С	E E E E	E E X G	G G X E	E E G E	CEEXC
ORTHO-DICHLOROBENZENE ORTHO-DICHLOROBENZOL ORTHOXYLENE OXALIC ACID OXYDIETHANOL	X X X E	C X E	X X C E	X X X E	X X C X	X X C	X X X G	X X X G	E E G G	X X X G	X X X E	E E E	E	X X C	E E E	G E C



	1		1							1			1	1		
Chemical or Material Conveyed	Butyı	C₽ _E	EPDIM	Hypalon	Hytrel	Natural	Neoprene	Nitrile	Nylon	SBA	Santoprene	_{Teflon}	UHMM	Urethane	Viton	XI.PE
OZONE PAINT THINNER PALMITIC ACID PAPERMAKERS ALUM PARA METHOXYPROPENYL BENZENE	G X G E X	G X	E X G	E X C E X	C E	X X E E X	C X G E	X X E E	C G C	X X B	E	E E E E	C E E G	E X E	E G E G	C E G
PARA-DICHLOROBENZENE PARAFFIN WAX PARALDEHYDE PARAXYLENE PCB	X X E X		X X E X	X X X		X X C X	X G C X	XECC		X E		E E E E	Е	X G C	E E X E	G X E E
P-CYMENE PELARGONIC ALCOHOL PENTACHLOROETHANE PENTADIONE PENTAMETHYLENE	X E X	X G	x	X E X		X E X	X X E	X E X G		х		E E E	Е	Х	E G E	E E E
PENTANE PENTANOL PENTANONE PENTASOL PENTYL ACETATE	X E G E G		X E G E	C E X E X	G C	X E X E X	C E X E X	E E X G X	G G	X G X	x	EEEE	G	C C X	E G X G	G E E
PENTYL ALCOHOL PENTYL BROMIDE PENTYL CHLORIDE PENTYL ETHER PENTYLAMINE	E X G	E C	E X X	E X C C	E	E X C	E X X	G CC	E E	E X	E			x c	E G E	G
PERCHLORIC ACID-2N PERCHLOROETHYLENE PERCHLOROMETHANE PETROLEUM CRUDE PETROLEUM ETHER	G X X X	С	G X X	G X G X	X X C	X X X X	G X X G C	X C X E E	X C G E	X X X	X	E E E E	G E	X X E G	E E E	E G E
PETROLEUM OILS PHENBO PHENOL PHENOLSULFONIC ACID PHENYLAMINE	X G C E	G	X G	G X X	E X	X X X	G X X	E X X	G X	x x	C X	E E E	E E G	G X X G C	E E X E	E G
PHENYLBROMIDE PHENYLBUTANE PHENYLCHLORIDE PHENYLETHYLENE PHENYLMETHANE	X X X	С	X X X	X X X	х	X X X	X X X	X X X		x		E E E		X X C X	G E G E	E
PHENYLMETHANOL PHENYLMETHYL ACETATE PHOSPAHTE ESTERS PHOSPHORIC ACID 10% PHOSPHORIC ACID 10% - 85%	G E G G	G X X	G E E	G G X E	C C X	X X X G	X X E E	X X E X	C E E C	X X G	X E E	EEEE	E E E	X X E C	E X C E	E E E
PHOSPHORUS TRICHLORIDE ACID PICRIC ACID, H2O SOLUTION PINE OIL PINENE POLY CHLORINATED BIPHENOL	E C X X	х	E C X X	X E X X	х	X C X X	X X X	X C G G	х	X G X X	х	ЕСШШШ	E E	G E G	E E E E	E E
POLYETHYLENE GLYCOL E-400 POLYOL ESTER POLYPROPYLENE GLYCOL POTASSIUM ACETATE POTASSIUM BISULFATE	E E E	Е	E	E E C E	х	ЕЕЕ	G G E	E G E	G G G	E X G		E E E	E E E	x x	E E C E	E E
POTASSIUM BISULFITE POTASSIUM CARBONATE POTASSIUM CHLORIDE POTASSIUM CHROMATE POTASSIUM CYANIDE	E E G E	G G	E E E E	EEECE	X G G	EEEGE	E E E G	EEEE	G C E G E	G E E G E		EEEE	E E E G E	E C E G E	E E E E	E G E
POTASSIUM DICHROMATE POTASSIUM HYDRATE POTASSIUM HYDROXIDE POTASSIUM NITRATE POTASSIUM PERMANGANATE, 5%	E E G E	x x	E G E E	E E E G	C G X	CGGEE	E G G E E	ЕООЕС	G G G X	G G E G	G	EEEE	G G E	G G C E X	E C G E E	G E E E
POTASSIUM SILICATE POTASSIUM SULFATE POTASSIUM SULFIDE POTASSIUM SULFITE PRESTONE ANTIFREEZE	E E E E	G	E E E E	EEEE	G G	EEGGE	EEEC	ЕЕЕЕ	G E E G	E G G E	E	EEEE	E E	E E E X	E E E E	E E



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Chemical or Material Conveyed	Butyı	CPE	EPDIN	^H ypalo _n	Hytre,	Natural	Neoprene	Nitrile	Nylon	SBA	Santoprene	_{Teflon}	UHIMM	Urethane	Viton	KIPE
PRODUCER GAS PROPANEDIOL PROPANETRIOL PROPANOL PROPANOLAMINE	X C E E	E E	X E E E	G E E	E	X E E E	G C E E	E E E	G	X E E E	X E	E E E		E G C X	E E E	E
PROPANONE PROPEN-1-OL PROPENEDIAMENE PROPENENITRILE	E E X	G E	E E	X E	С	C E	X E X	X E X	Е	С	E	E E	Е	Х	X G	E
PROPENYL ALCOHOL PROPENYLANISOLE PROPIONIC ACID PROPIONITRILE PROPYL ACETATE PROPYL ALCOHOL	X E G E		E E E	E X G X E		X E X E	E C G X E	E X C X X E		X X E	X	E E E E E E	E E E	X X X	G X X X E	E E E
PROPYL ALDEHYDE PROPYL BENZENE PROPYL CHLORIDE PROPYL ETHER PROPYL NITRATE	G C G	C E	G	X X		C X	X	X X		X		E E	E	×	X G X	E
PROPYLENE PROPYLENE DIAMINE PROPYLENE GLYCOL PYDRAUL, 'E' SERIES PYDRAULIC 'C'	X E C G X		X E G X	X C E X	GC	X G E X X	X C X	X G E X	G E	X E X	E	EEEE	E E	X G X	E E E	E
QUINTOLUBRIC 822 SERIES RED OIL REFRIGERANT 11 REFRIGERANT 12 REFRIGERANT 22	X X C X	X C C	X C X C E	G E E	E E E X	XXXCC	X C X E	G E G E X	E G G	X X E E	X X	E E E		G C E X	G E C G C	CC
RESORCINOL SAE NO. 10 OIL SAL AMMONIAC SEA WATER SEWAGE	X E E G	G G	G X E E	X E E	X E E E G	X E E G	X C E G G	E E E	X E C E	G X E E G	X X E G	E E E E	E E	X E G C X	E E E E	E E
SILICATE ESTERS SILICATE OF SODA SILICONE GREASE SILICONE OIL SILVER NITRATE	CEEE		X E E E	G E E E E	C E G	XEECE	E E E E	GEEEG	G E E	X E E E		E E E E	E E	E E E	E E E E	E E
SKYDROL 500 TYPE 2 SKYDROL 500B SKYDROL 500C SKYDROL 7000 TYPE 2 SOAP SOLUTIONS	G G E G	G G G G	E E E	X X X X E	G E E X E	X X G	X X X G	X X E	G E E E	X X G	E E	E E E E	E	X C X E	X X X G E	E
SODA ASH SODA LIME SODA NITER SODA, CAUSTIC SODIUM ACETATE		G G C		E G E E C	G G C	шшддш	E G G E G	E G G C G	G E G	E G E X	С	E E E E	E E E	G C G G X	E G E X	
SODIUM ALUMINATE SODIUM BICARBONATE SODIUM BISULFATE SODIUM BISULFITE SODIUM BORATE		х			GCGG	G E E E E		E G E E	GECEE	G E G G E		E E E E	E E E E	E E G	E E E E	ЕЕЕСЕ
SODIUM CARBONATE 10% - 15% SODIUM CHLORIDE SODIUM CYANIDE SODIUM DICHROMATE SODIUM HYDRATE	G G E E	G G G	E E C E	ЕЕЕGG	G E G	E E E X E	E E C G	E E E G	G G E G G	E E G G	С	E E E E	E E E	GEGGC	E E C G	ЕЕЕGЕ
SODIUM HYDROCHLORITE SODIUM HYDROXIDE (CAUSTIC SODA) SODIUM HYPOCHLORITE SODIUM METAPHOSPHATE SODIUM NITRATE	G E G G E	C X G	G E G E E	E E G G E	C C G	CEXEG	C G C G G	C C X E G	G G X E	G G C E G	СС	EEEE	E E E	CCCGG	E C C E E	G E G E E
SODIUM PERBORATE SODIUM PEROXIDE SODIUM PHOSPHATE SODIUM SILICATE SODIUM SULFATE	E E E E	X X G G	E E E E	G	G G G G	GGEEG	G G C E E	G G E E E	E X C E	G G E G		E E E E	E E E E	G X E G E	E E E E	E E E



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Chemical or Material Conveyed	Butyı	$C_{D_{\vec{E}}}$	EPDIN	Hypalon	Hytre,	Natural	Neoprene	Nitrile	Mylon	SBA	Santoprene	Teflon	пним	Urethane	Viton	KIPE
SODIUM SULFIDE SODIUM SULFITE SODIUM THIOSULFATE SOYBEAN OIL STANNIC CHLORIDE	EEECG	G G X	E E X E	E E E C	G G G	G G E X G	E E E C	E E E	E E G E C	G G X E		E E E E	E E E	E E E G G	E E E	E E E E
STANNIC SULFIDE STANNOUS CHLORIDE STANNOUS SULFIDE STEARIC ACID STODDARD SOLVENT	EGEGX	G G	C G X	E E C X	о ош	E E C X	E G C	E E E E	C E E	E G X	E X	E E E E	E E E	C E G	E E E	E E E
STYRENE MONOMER SULFAMIC ACID SULFUR SULFUR CHLORIDE SULFUR DIOXIDE	X E F X G	G	X X F X E	X E F C C	X C X	X G X X C	X G X C X	X C X C	C X	X X X C		E E E E	G E E G	C X C	G E G E	G C X E C
SULFUR TRIOXIDE, DRY SULFURIC ACID 60% (200F) SULFURIC ACID, 25% SULFURIC ACID, 25% - 50% SULFURIC ACID, 50% - 96%	G X G X	X X X	G X E G	C E G C	X X E G X	C G G X	X X E C	X X E C	X X X	X X G X	E	E E E	X X E E	G X X X	E C E E	G X E E E
SULFURIC ACID, CONC. 96% TO 98% SULFURIC ACID, FUMING SULFUROUS ACID, 10% SULFUROUS ACID, 10% - 85% SUTAN	X X E E	X X X	X X E G	X X E E	X C C	X X G G	X X G C	X C C	X C X	X X G C		E E E E	E X E E	X X X	G G E G F	C X E E
TALL OIL TALLOW TANNIC ACID TAR, BITUMINOUS TAR, CAMPHOR	X G E X X	X G C	X E E X X	C C E C X	GGC	X C E C X	C G E C X	E E G X	G G G	X X G X X	E C	E E E E	E E E	E E G G	E E E E	C C E
TARTARIC ACID T-BUTYL AMINE TELONE 2 TERPINOL TERTIARY BUTYL ALCOHOL	G C G	X E	CG CG	E X X G	G	E X G	E X G	E G G	E	G X G	E	E E E	E G E	E G X	E E E	E E G E
TERTIARY BUTYL AMINE TERTIARY BUTYL MERCAPTAN TETRACHLOROBENZENE TETRACHLOROETHANE TETRACHLOROETHYLENE	X X X		G X X	X X X X		X X X	X X X	X X C	С	X X X	С	E E E	C G	X G X	E G E	G E
TETRACHLOROMETHANE TETRACHLORONAPHTHALENE TETRAETHYLENE GLYCOL TETRAETHYLORTHOSILICATE TETRAHYDROFURAN	X X E G		x x	X X E	С	X X E X	X X X	X X E X	G	x	x	E E E E	G	C	E G E	E G X
THF TIN CHLORIDES TITANIUM TETRACHLORIDE TOLUENE TOLUIDINE	G G X X	С	X E X X	X E X X	C C	X E X X	X C X X	X E C X	G E	X X X	x	E E E E	G E G E	X G X X	X E E G	X E E
TOLUOL TRANSFORMER OIL TRANSMISSION 'A' OIL TRI (2-HYDROXYETHYL) AMINE TRIBUTYL AMINE	X X X G E	С	X X X E	X C G E C	C G X	X X X G	X G G X	X E E C G	E G	X X X G	х	E E E E	Е	X E E X	E E X	F
TRIBUTYL PHOSPHATE TRICHLOROACETIC ACID TRICHLOROBENZENE TRICHLOROETHANE TRICHLOROETHYLENE	G X X X	С	E G X X	X C X X	C X	C X X X	X X X X	X C X X	G X X C	X X X X	x	E E E E	E E G	X X X X	X X G E	E E G
TRICHLOROMETHANE TRICHLOROTOLUENE TRICRESYL PHOSPHATE TRIETHANOLAMINE TRIETHYLAMINE	X E G C	Х	X E E E	X X E	X C X	X C G G	X C X G	X X C E	C G	X X G X	х	E E E E	E E	X X X	E X E	E E
TRIETHYLENE GLYCOL TRIHYDROXYBENZOIC ACID TRIMETHYL PENTANES (MIXED) TRIMETHYL PENTENE TRIMETHYLAMINE	E G X	шшш	G X	E G C	ΧE	E E X	G C	E G E	G E	G X	x	E E E	E	X G	E E E	E



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Chemical or Material Conveyed	Buty	\mathcal{F}_{d}	EPDM	Hypalon	Hytrel	Natural	Neoprene	Nitrile	Wylon	SBA	Santoprene	uo _{ljeĮ}	ПНИМ	Urethane	Viton	$^{3}d\chi$
TRISODIUM PHOSPHATE TRITOYL PHOSPHATE TUNG OIL TUNG OIL (CHINA OIL) TURPENTINEX	EEXCX	000	E X X	E X E E X	шовв	E X X X	E X E E X	E X E E X	EGGGE	E X X X	x	шшшшш	E E G	EXCCE		ш шшб
UDMH UNDECYL ALCOHOL UREA URETHANE FORMULATIONS URIC ACID	E E		E E	E E E	G X	E E E	G G	G E G E	E E G	х	E	EEEE	E	X G X	X G E	E
VARNISH VEGETABLE OILS VERSILUBE F44 VERSILUBE F55 VINEGAR	X C E E E	С	X C E X E	X G E E E	С	XXEEG	X C E E G	G E E E G	E G E E	X X E E G		E	E	CEEEC	E E E E	E
VINEGAR ACID VINYL ACETATE VINYL BENZENE VINYL CHLORIDE (GAS) VINYL CYANIDE	E X X	G E	G X G X	C X C	x	X X G C	X X C	X X X	E	X X C	x	X E E	E E E	X C X	E G C	E G E
VINYL ETHER VINYL STYRENE VINYL TOLUENE VINYL TRICHLORIDE VITAL, 4300, 5310	X X X		×	G X X X		X X X	x	G X X X	E	х		E E E E	E E E		X E E E	E E E
VM&P NAPHTHA WATER WATER, BOILING WATER, SODA WEMCO C	X E E	G	X E E	X E E	ECE	X E X	C G G	C E G	E X E	G G X	E G E	E G E	E X	E G E	E G E	X E X
WHISKEY WHITE OIL WHITE PINE OIL WINES WOOD ALCOHOL	E X X E		E X X E E	E X X E	G G	E X X E E	E G X E	E G E E	E	E X X E		E E E	X E X E	X E X X	E E E C	X X X E
WOOD OIL XENON XYLENE, XYLOL XYLIDINE ZEOLITES	C E X G E	С	X E X C E	C E X X E	G C	X E X E	G E X X E	E X C E	G G	X E X X E	х	E E E	E C G	C E C	E E C E	E C G
ZINC ACETATE ZINC CARBONATE ZINC CHLORIDE ZINC CHROMATE ZINC SULFATE		x x	E E E	CEECE	E C		G E E	G E E	E X	X E G		EEEE	E E	X E G	C E E	ЕЕБЕ



 \triangle Warning! The following data is based on test and believed to be reliable. However, tabulations should be used as a guide only since it does not take into consideration all possible variables. All critical applications should be tested.

G = Good • C = Conditional E = Excellent U = Unsatisfactory

Key. E = Excen		vc		PU end				VA		PU	lional • 0 = 0		/C	PVC	PU end	Ble	ber end eture (Ε\ • Ε\	/A	TPU
Material Handled	68	150	68	125		150		150	68	150	Material Handled	68	150	68	125		150		150	68 150
Acetaldehyde Acetate Solvents-Pure Acetic Acid - Glacial Acetic Acid 0-10% Acetic Acid 10-20%	UUCEG	U U U G C	U U C G G	UUUGG	C G U E G	UCUGC	G C U E E	U U U E G	UCUUU	U U U U	Barium Chloride Barium Hydroxide Barium Sulfate Barium Sulfide Beer	E E E E	E E E C	E E E -	E E E -	E E E	E E E -	E E E E	- - - -	E E E E E
Acetic Acid 20-30 Pct Acetic Acid 30-60% Acetic Acid 80% Acetic Acid Vapors Acetic Anhydride	G G C G U	C C G U	G G C G U	CCCGU	G C U G U	CCUCU	E C C G C	C U U C C	U U U U	U U U U	Beet-Sugar Liquor Benzaldehyde Benzene Benzoic Acid Benzol	E U U G U	E U C U	U C G C	_ U C U	E U U G U	E U G U	E C U G U	_ U U _ U	 U U C U U U C U
Acetone Acetylene Acrylonitrile Adipic Acid Alcohol (see type)	U C C G -	U C U C -	U C C G -	0000-	C U - G	U U - C -	C U - E -	U U - G	C C - U -	U C - U -	Bismuth Carbonate Black Liquor (paper industry) Bleach-12.5% Active CL Borax	E E G E	E C E	E G E	E C E	E G E	E C E	E G E	- - - -	E E C U E E
Allyl Alcohol 96% Allyl Chloride Alum Aluminum Chloride Aluminum Fluoride	UUEEG	U U E E G	U U E E G	U U E E G	E G E G G	G C E G G	E C E G G	G U G C C	U U E G G	U U E G C	Boric Acid Boron Trifluoride Brake Fluid Brine Bromic Acid	E E U E E	E U E C	E U E E	E U E C	E E G	E E E G	E E E G	_ _ _ _ _	G U E E U U G U U U
Aluminum Hydroxide Aluminum Nitrate Aluminum Oxychloride Aluminum Sulfate Ammonia - Aqueous	EEEEC	E E E U	E E E C	E E E E U	G E G E G	G E G E G	G E G E	G - -	G C - G U	C C - G U	Bromine - Liquid Bromine - Water Butadiene Butane Butanol - Primary	UUCCU	U U C U	UUCCU	UUCCU	U U U E	U U U G	U U U G	U U U U	U U U C C C U
Ammonia - Dry Gas Ammonia - Liquid Ammonium Carbonate Ammonium Chloride Ammonium Fluoride 25%	C U E E %U	U U E E U	C U E U	U U E U	E G E G	E C E E G	E E E G	– U – –	U U E G C	U E C U	Butanol - Secondary Butter Butyl Acetate Butyl Alcohol Butyl Cellosolve	U C U C U	U C U U U	U - C U	U - U C U	E U E G	G - U G C	G - U E -	- U -	C U C U C U
Ammonium Hydroxide 28% Ammonium Metaphosphate Ammonium Nitrate	C E E	U E E	C E E	U E E	G G E	G G E	E E E	E E	C G G	U G G	Butyl Phenol Butylene Butyric Acid 20% Calcium Bisulfite Calcium Carbonate	CCCEE	U C U E E	CCCEE	U C U E E	U U E E	U U E E	U - U E E	U - U -	 C C C U E E E E
Ammonium Persulfate Ammonium Phosphate Ammonium Phosphate Neutral Ammonium Sulfate	E G E E	E G E E	E G E	E G E E	E G G E	E G G E	E E E	- - -	G G G E	G G G E	Calcium Chlorate Calcium Chloride Calcium Hydroxide Calcium Hypochlorite Calcium Nitrate	EEEE	E E E E	E E E E	E E E E	E E E E	E E E E	E E E G E	- - - -	G C E G G C U U E E
Ammonium Sulfide Ammonium Thiocyanate Amyl Acetate Amyl Alcohol Amyl Chloride	E U C U	E U U U	E U C U	E U U U	E U G U	E U C U	E E U G U	- - C -	E G U U -	E G U U	Calcium Sulfate Cane Sugar Liquors Carbon Bisulfide Carbon Dioxide (Aqueous Solution)	E U E	E U E	E - U	E - U	E G U	E G U	E G U	- U	E E
Aniline Aniline Chlorohydrate Aniline Hydrochloride Animal Oils Anthraquinone	UUUCE	U U U U E	U U C E	U U U E	U U U E	U U U E	U U C E	U U U U	U U G -	U U C -	Carbon Dioxide Gas (wet) Carbon Monoxide Carbon Tetrachloride Carbonic Acid	E U C	E E U	E E C G	E E U G	E G U G	E G U G	E G U G	– U G	E E E C U U
Anthraqunonesulfonic Acid Antimony Trichloride Apple (sauce or juice) Aqua Regia	E E C	E E E U	E E - C	E E - U	E E - U	E E - U	E E - U	– – – U	U E - U	U E - U	Casein Casto Oil Catsup Caustic Potash Caustic Soda	E E E E	C E G E E	E E E E	E E - E E	E U - C G	E U - C C	E C C G	– U – –	E E E E C U
Aromatic Hydrocarbons Arsenic Acid 80% Arylsulfonic Acid Asphalt ASTM # 1 Oil	UECCC	U G U U U	– Е С С	- G U U U	– E – C –	– E – U –	- G - U -	- - U -	- U U G G	- U U C G	Cellosolve Chloracetic Acid Chloral Hydrate Chloric Acid 20% Chlorinated	CEEE	U U E E	G E E	C U E E	G U U -	C U -	C U -	U U U -	G C U U G C U U
ASTM # 3 Oil ASTM Fuel A ASTM Fuel B ASTM Fuel C Barium Carbonate	CCUUE	U U U U E	C C U U E	U U U U E	- - - E	- - - E	- - - E	- - - -	G G G E	G G C C E	Hydrocarbons Chlorine Gas (dry) Chlorine Gas (moist) Chlorine Water 2% Chlorine Water Saturate	U G C dC	G U C U	G C G C	G C C U	U U C -	U U U U	U U G E	UUCC	U U U C U



	P	vc		PU end		ober end		VA.	TI	PU		P۱	/C	PVC	nd	Rub Ble		°F)	/A	TPU
Material Handled	68	150	68	125		150		150	68	150	Material Handled	68	150	68			150	68	150	68 150
Chlorobenzene Chloroform Chlorsulfonic Acid Chrome Alum Chromic Acid 10%	U U C E G	U U E C	U C E G	U U E C	U U G G	U U U G C	U U E G	U U G -	U U U E U	U U E U	Formic Acid 3% Formic Acid 10% Formic Acid 25% Formic Acid 50% Formic Acid 100%	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	E E E U	E E E U	
Chromic Acid 25% Chromic Acid 30% Chromic Acid 40% Chromic Acid 50% Chromic Acid Plating Solution	G C C C	C U U U	G C C	C U U U	G C C C	C U U U -	G C C E	- U U U	U U U U	U U U U	Freon-12 Fructose Fruit Pulps & Juices Fuel Oil Furfural Furfuryl Alcohol	CEEGU-	U E E C U -	G - G U -	C - C U -	G E U U	C E E U U -	G E U U U	- - U U U	E E E E G U U
Cider Citric Acid Coal Tar Coconut Oil	E U G	C E U C	– E U E	– E U G	– Е U G	– Е U С	E U C	C E U U	– U U E	– U U E	Gallic Acid Gas - Coke Oven Gas - Natural (dry) Gas - Natural (wet)	E G C C	E G C C	E G C C	E G C C	E - U U	E - U U	E - U U	– U U	 G G C C
Copper Chloride Copper Cyanide Copper Fluoride 2% Copper Nitrate Copper Sulfate	E E E E	E E G G	E E E E	E E E E	E E E E	E E G E	E E E E	- - - -	E - E E	E - E E	Gasoline Gasoline - Refined Gasoline - Sour Gelatine Glucose	UCCEE	U U E E	U G E E	U U E E	U C U E E	U U E E	– U U E E	– U U –	E G E G E E E E
Corn Oils Cottonseed Oil Cresote Cresol Cresylic Acid 50%	E G U U U	G C U U U	– E U – C	– E U – C	– E U U U	- G U U	– E U U U	- U U U	– E – C U	– E – U U	Glycerine (glycerol) Glycol Glycolic Acid 30% Grease Green Liquor	E E E E	E E C	E E E	E E G	E E -	E E -	E E E	- - -	E E G G U U E G
Crude Oil - Sour Crude Oil - Sweet Cyclohexane Cyclohexanol Cyclohexanone	CCUUU	U U U U	C C U U U	U U U U	UUCCU	U U U U	U U E E	U U C C	E G C U	E C U U	(paper industry) Heptane Hexadecanol Hexane Hexanol, Tertiary	C - C C	U - U U	G - C C	E U - U U	U - G G	U - C C	U U - C	_ U U _ U	E - G -
Demineralized Water Dextrin Dextrose Di-acetone Alcohol Diazo Salts	E E E	E E G - E	E E - E	E E - E	E E - E	E E E G	E E - E	E - - -	E E - -	C E E -	Hydrobromic Acid 20% Hydrochloric Acid 10% Hydrochloric Acid 48% Hydrofluoric Acid 4% Hydrofluoric Acid 10%	E E E G G	G G G G C	E E G G	G G G C	G E G G	G E G G	G E G E	– E – E	U U U U U U U U
Dichlorobenzene Diesel Oils Diethyl Ether Diethylene Glycol Diglycolic Acid	U C U G E	U U C G	U C U G E	U U C E	- - E E	- - C G	U - U G E	U - U -	– G U –	- C C U -	Hydrofluoric Acid 48% Hydrofluoric Acid 60% Hydrofluorosilic Acid Hydrogen Hydrogen Bromide (dry)	GGGC-	U U C C -	G G C -	C U C -	G - C -	C	E E - C E	E E - E	U U U U C C
Di-isodecyl Phthalate Dimethylamine Dioctyl Phthalate Disodium Phosphate Distilled Water	UUUEE	U U E E	– U U E E	- U U E E	_ U _ E E	_ U _ E E	- U G E E	– U U – E	– U – E E	_ U _ E C	Hydrogen Chloride (dry) Hydrogen Cyanide Hydrogen Peroxide 3 - 12% Hydrogen Peroxide 30%	C E	– C G	– C E E	– C G	- C G	- C C	E C G	E C C	 U U G C G C
Ethers Ethyl Acetate Ethyl Acrylate Ethyl Alcohol 0 - 50%	U U G	U U C	C C U E G	UUUGC	U C - G C	U U - C U	U C - G C	U U - C U	G C - G	C U - C G	Hydrogen Peroxide 50% Hydrogen Peroxide 90% Hydrogen Phosphide Hydrogen Sulfide	E U E	C U C	E U E	C U C	C U G	U U G	U U E	U U E	C U U U
Ethyl Alcohol 50%-98% Ethyl Chloride Ethyl Ether Ethylene Bromide Ethylene Dichloride Ethylene Glycol	U U E U E	U U U U E	U U U U E	UUUUE	UUUUE	UUUUG	UUUE	U U U G	U G U G	UCUUC	(aqueous solution) Hydrogen Sulfide - Dry Hydrombromic Acid 20% Hydroquinone Hypochlorous Acid Inks	E E E E E	E G E E	E E E E	E G E E	E G E E	G G E G	E G E C E	- - - U E	 U U E E C U
Ethylene Oxide Fatty Acids Ferric Chloride Ferric Nitrate Ferric Sulfate	UEEEE	U E E E	U E E E	U E E E	U G E E	U C E E	U C E E E	U U - -	U G E E	U C E E	lodine (in alcohol) Iso-octane Isopropyl Acetate Isopropyl Alcohol Jelly	UCUEE	U U U G E	U C - E -	U U - G -	U - E -	U - - E -	U - E -	U - - -	U U
Ferrous Chloride Ferrous Sulfate Fish Solubles Fluorine Gas - Dry Fluorine Gas - Wet	E E U U	E E U U	E E U U	E U U U	E E U U	E E U U	E E U U	- - U U	E E U U	E g U U	Jet Fuels JP 3,4,5 Kerosene Ketones Kraft Liquor (paper industry)	U U U E	U U U	U C U E	U U U E	U C E	U U U	U C G	– U U	G C E G C
Fluoroboric Acid Fluorosilicic Acid Foric Acid Fomaldehyde	E E E	E C	E E E	E E C	E G E	E C G	E G E	- E	E U U	E U U	Lacquer Thinners Lactic Acid 28% Lard Oil Lauric Acid	UEEE	U E G E	U E E	U E E	G E G	C E C	C E G	U - C -	G - C U E U
(40% aqueouse)	U	U	G	G	G	С	Е	G	_	_	Lauryl Chloride	Ε	Е	Е	E	С	U	С	-	E G



	P	vc		C/PU end Te		ber end eture		VA	TI	PU		P	vc		C/PU end Tei	Rub Ble mpera	nd	E\ °F)	/A	TPU
Material Handled	68	150	68	125	68	150	` <u>6</u> 8	150	68	150	Material Handled	68	150	68	125		150 `		150	68 150
Lauryl Sulfate Lead Acetate Lead Arsenate Lead Nitrate Lead Tetra-ethyl	E E E E	E E E E	E E E E	E E E E	U E - -	U E - -	U E E E	U - E E E	– E – –	- E - -	Pentane Peracetic Acid 40% Perchlorethylene Perchloric Acid 10% Perchloric Acid 70%	CUUGC	U U C U	C U U G C	U U C U	– U G G	- U G C	– – G G	- - G -	 U U U U U U
Lemon Juice Lime Sulfur Linoleic Acid Linseed Oil Liquors (chemical)	EEEE	G E E E G	– E E E	E E E G	– G – U –	– G – U –	G - C E	- - U G	– C E	– U E –	Petrol Petroleum Ether Phenol Phenylhydrazine Phenylhydrazine	UCUU	U C U	U C U U	U C U U	U - U C	U - U U	U U U	U U U -	 U U
Lubricating Oils Magnesium Carbonate Magnesium Chloride Magnesium Hydroxide Magnesium Nitrate	G E E E	C E E E E	G E E E E	G E E E E	U E E E	U E E E E	U E E E	U - - -	E E G E	E E C E	Hydrochloride Phosgene (gas) Phosgene (liquid) Phosphoric Acid 0 - 25% Phosphoric Acid 25 - 50		C U G G	C	C - G	- - E E	U - G G	C - E E	U - G G	 U U U U
Magnesium Sulfate Maleic Acid 25% Aqueot Maleic Acid 50% Maleic Acid Concentrate Malic Acid	-	E E - E	E E - E	E E - E	E G - G	E G - G	E E E G	– E E G	E C - C	E U - U	Phosphoric Acid 50 - 90 Phosphorus (yellow) Phosphorus Pentoxide Phosphorus Trichloride Photographic Develope	G C U	G C U U U	E G C U C	G C U U U	G C C C -	C C C U -	E U G C E	C U C U E	U U C -
Mayonnaise Mercuric Chloride Mercuric Cyanide Mercurous Nitrate Mercury	E G U G G	E C U G	- G U G	- G U G	- G G G	- G G G	- G G G	– G G – C	– G – G	- C - G -	Photographic Emulsions Photographic Fixers Picric Acid Pitch	S C C U G	U U U	C C U G	U U U	– G –	- U -	E E G -	E C -	 U U
Methyl Acetate Methyl Alcohol Methyl Bromide Methyl Chloride Methyl Ethyl Ketone	U C U U	U U U U	U C U U	U U U U U	- G - U C	- G - U U	U E U C	U - U U U	- C - U C	_ U _ U U	PLATING SOLUTIONS Brass Cadmium Chromium	E E G	E E G	E E G	E E G	G G U	G G U	C C U	- - U	E E E E G G
Methyl Isobutyl Ketone Methyl Sulfate Methyl Sulfuric Acid Methylated Spirit Methylene Chloride	U E - U	U G E - U	U E E - C	U G E - U	C - G - U	U - G - U	C - E U	U - E G U	– E U – U	- G U - U	Copper Gold Judium Lead Nickel	E E E E	E E E E	E E E E	E E E E	G G G G	G G G G G	00000	- - - -	E E E E E E E E
Milk Mineral Oils Mineral Spirits Molasses Monochlorobenzene	E G E U	E C E U	– E – E U	– E – E U	– C – E	– U – E	G C – E	C U - -	– E – E	– E – E	Rhodium Silver Tin Zinc Potable Water	E E E E	E E G G	E E E	E E E -	G G G -	G G G -	CCCCE	- - - G	E E E E E E
Naphtha Napthalene Nickel Acetate Nickel Chloride Nickel Nitrate	U U E E E	U U E E E	C U E E E	U U E E E	U C E E	U U E E E	U U E E E	U U - -	G - E E E	U - E E E	Potassium Acid Sulfate Potassium Antimonate Potassium Bicarbonate Potassium Bichromate Potassium Bisulfite	E E E E	E E E E	E E E E	E E E E	E E E E	G E E E E	G E E E	- - - -	E E E E E E E E
Nickel Sulphate Nicotine Nicotine Acid Nitric Acid (anhydrous) Nitric Acid 10%	E E E U E	E E G U G	E E U G	E E U C	E E U G	E E U C	E E U G	– – U G	E C C U U	E C U U	Potassium Bisulphate Potassium Borate 1% Potassium Bromate 10% Potassium Bromide Potassium Carbonate	G E E E	C E E E	- E E E	– E E E	– E E E	– E G G E	E E E E	- - - -	 E E E E E E
Nitric Acid 25% Nitric Acid 35% Nitric Acid 40% Nitric Acid 50% Nitric Acid 60%	G G G G	CCCUU	G G G G	CCCUU	G C C U	C U U U	G C C U	C U U U U	U U U U	U U U U	Potassium Chlorate Potassium Chloride Potassium Chromate 40 Potassium Cuprocyanid Potassium Cyanide		E E E C	E E E C	E E E C	E E E C	E E E C	E E E C	- - - C	G G E G C C
Nitric Acid 68% Nitric Acid 70% Nitrobenzene Nitrous Oxide Oils & Fats	C U U E E	U U E G	C U U E E	U U E E	U U - G	U U - C	U U U - G	U U U – U	U U E E	U U U E E	Potassium Dichromate 40% Potassium Ferricyanide Potassium Fluoride Potassium Hydroxide	Ε	E E E	E E E	E E E	E E E	E E E	E E E	- - -	G G E E E G
Oils, Petroleum Oleic Acid Oleum Orange Juice Oxalic Acid	EGUEE	G C U E G	E G U - E	E C U - G	G C U - G	C U U - G	G U U - G	U U U - G	E U U - U	E U U - U	10% Potassium Hydroxide 20% Potassium Hydroxide 35%	E E E	E E E	E E E	E E E	E E G	E E C	E E G	_ _ _	U U
Oxygen Ozone Palmitic Acid 10% Palmitic Acid 70% Paraffin	ECECE	G U E U G	E C E C E	G U E U G	G U G G	- U C U	G U E C C	C U G U	E - U U E	E - U U G	Potassium Hydroxide Conc. Potassium Hypochlorite Potassium Nitrate Potassium Perborate	_	_ C E E	- G E E	_ C E E	- G G	- G G C	E E E	C E E	 U U E E E E



	P	vc		;/PU end Te	Rub Ble mpera	end		VA	TI	PU		P	vc		C/PU end Ter	Ble	ber end eture (E\ °F)	/A	TP	טי
Material Handled	68	150	68	125		150		150	68	150	Material Handled	68	150	68	125		150		150	68	150
Potassium Perchlorite Potassium Permanganate 10% Potassium Persulfate Potassium Phosphate	E G E	E G E	E E E	E E E	G E E	G E E	G U E E	– U – E	G G E	C C E	Sulfuric Acid 70% Sulfuric Acid 95% Sulfuric Acid 95% Fumir Sulfurous Acid Sulphur Dioxide - Liquid	Ĕ	G U C E U	EUCEC	G U C E U	CUUGU	UUUCU	CUUCU	U U U U	U U U –	U U U U
Potassium Sulfate Potassium Sulfide Potassium Thiosulfate Power Steering Fluid	EEEE	E E C	E E E	E E C	E E -	E E E	E E E	- - -	E E E	E E E	Sulphur Dioxide Gas - Dry Sulphur Dioxide Gas - Wet	E C	E	E	E	G G	G C	E	G C	-	-
Propane Propargyl Alcohol Propyl Alcohol Propylene Dichloride Propylene Glycol Prune Juice	C EEU-E	C E C U E	E E U -	E E U -	U G E U -	U G E U -	U E U E	U E - U E -	- G U -	- - - - - - -	Sulphur Trioxide Sulphurous Acid 10% Sulphurous Acid 30% Tallow Tannic Acid Tanning Extracts	- - E -	- - E -	- - E -	G - - E -	U - - E -	U - - E -	U E U E E	E U U E E	- - C	- - - U
Ritchfield "A" Weed Killer Salicylic Acid Salt Water Selenic Acid Shortening	E E G	C E G C	E - E E	G - E G -	– E G	– E C	E E G E	– E E C E	– E U	- C U	Tanning Liquors Tartaric Acid Tea (brewed) Tetraethyl Lead Tetrahydrofurane	E E G U	E G C U	E E - G U	E E - G U	G E - U	C E - U	C E G - U	- C - U	- C - G U	– U – G U
Silicic Acid Silicone Fluids Silver Cyanide Silver Nitrate Silver Plating Solutions	E - E E E -	E E E G	E E E	E E E G	E - E E	E E E G	E E E E	E - -	U - E E E	U - E E	Thionyl Chloride Tin Chloride Titanium Tertachloride Titanium Trichloride Toluol or Toluene	U E - U	U E U - U	U E - C	U E U - U	U - - U	U - - U	U - U U	U - - U U	U E C - C	U E U - U
Soap Solution Sodium Acetate Sodium Acid Sulfate Sodium Antimonate Sodium Arsenite	E E E E	G E E E E	E E E E	G E E E E	E E E E	G E E E E	G E E E	C - - -	G E E E	U E E E	Tomato Juice Transformer Oil Transmission Fluid Tributyl Phosphate Trichlorobenzene	E E U U	E - C U U	– E U U	- C U	- - - -	- - - -	C U - U	U U - U	- E - -	_ E _ _
Sodium Benzoate Sodium Bicarbonate Sodium Bisulfate Sodium Bisulfite Sodium Bromide	EEEE	G E E E	E E E E	E E E E	E E E E	E E E E	E E E E	- - - -	E E E E	E E E G	Trichloroethylene Tricresyl Phosphate Triethanolamine Triethylamine Triemethyl Propane	UUCGC	U U C U	CUGGC	U U C U	U C G -	U C - -	U C - -	U U - -	C U - -	U - - -
Sodium Carbonate (soda ash) Sodium Chlorate Sodium Chloride Sodium Cyanide	E G E E	E C E E	E G E	E C E E	E E E	E E E	E E E	- - - -	E G E	E G G E	Trisodium Phosphate Turpentine Urea Urine Varnish	ECEEU	E U E U	E G E U	E C E U	E C E E G	E U E E C	E U E U	– – – U	E E E E	E G E G
Sodium Dichromate Sodium Ferricyanide Sodium Ferrocyanide Sodium Fluoride Sodium Hydroxide 10%	EEEE	G E E E E	E E E E	G E E E	E E E E	E E E E	E E E E	- - - -	E E E G	G E E G C	Varsol Vegetable Oils Vinegar Vinyl Acetate Vinyl Chloride	– G E U U	- C E U U	- G - U U	- C - U	– E C	– G U –	– U E U –	_ U _ U _	– G U –	- C U -
Sodium Hydroxide 35% Sodium Hydroxide 50% Sodium Hypochlorite Sodium Nitrate Sodium Nitrite		G C E E E	E E E E	E E E E	E = E E	E E E	E E E E	- - - -	C U E E	U - U E E	Water-Acid Mine Water Water-Distilled Water-Fresh Water-Salt Whey	EEEE	E E E G	E E E E	E E E E	E E E	E E E E	E E E G	_ _ _ C	G	U U U U
Sodium Phosphate-Acid Sodium Silicate Sodium Sulfate Sodium Sulfide Sodium Sulfite	GEEEE	G E E E	G E E E	G E E E	E E E E	E E E E	E E E E	- - - -	U E E E	U E E E E	Whiskey White Gasoline White Liquor (paper industry) Wines	C E E G	U E C	E E	E E	_ U _ _	_ U _ -	_ U _ _	_ U _ _	_ E _ _	- G - -
Sodium Thisulfate (hypo) Soft Drinks Soya Oil Soybean Oil Stannic Chloride	E E G E	E G G C E	E - - E	E - - E	E - - E	E - - E	E G - E	E - -	E - - E	G - - - G	Xylene or Xylol Zinc Chloride Zinc Chromate Zinc Cyanide Zinc Nitrate	UEEE	U E E E	C E E E	U E E E	U E E E	U E E E	U E E E	U - - -	G E E E	CEEEE
Stannous Chloride Starch Stearic Acid Stoddard Solvent Styrene	E - C C U	G - C U	E - C G U	G - C C U	E - E G -	E - E C -	E E C -	– E – U	E - C G	G - U U -	Zinc Sulfate MIXTURES OF ACIDS	E	E	E	E	E	E	E	-	E	E
Sucrose Sulfur Sulfuric Acid 0 - 10% Sulfuric Acid 10 - 40% Sulfuric Acid 50 - 60%	- G E E E	- G G G	- G E E	- G G G	– E E G	- E G G C	E - G G	E - G C	- U U U	- U U U	Nitric 15%, Hydrofluoric 4% Sodium Dichromate 13% Nictric Acid 16%, Water	E 6,	G G	E	G G	- Е	- E	- Е	- E	U E	U



Offer of Sale

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- 1. Terms and Conditions of Sale: All descriptions, quotations, proposals, offers, acknowledgments, acceptances and sales of Seller's products are subject to and shall be governed exclusively by the terms and conditions stated herein. Buyer's acceptance of any offer to sell is limited to these terms and conditions. Any terms or conditions in addition to, or inconsistent with those stated herein, proposed by Buyer in any acceptance of an offer by Seller, are hereby objected to. No such additional, different or inconsistent terms and conditions shall become part of the contract between Buyer and Seller unless expressly accepted in writing by Seller. Seller's acceptance of any offer to purchase by Buyer is expressly conditional upon Buyer's assent to all the terms and conditions stated herein, including any terms in addition to, or inconsistent with those contained in Buyer's offer. Acceptance of Seller's products shall in all events constitute such assent.
- 2. Payment: Payment shall be made by Buyer net 30 days from the date of delivery of the items purchased hereunder. Any claims by Buyer for omissions or shortages in a shipment shall be waived unless Seller receives notice thereof within 30 days after Buyer's receipt of the shipment.
- 3. Delivery: Unless otherwise provided on the face hereof, delivery shall be made F.O.B. Seller's plant. Regardless of the method of delivery, however, risk of loss shall pass to Buyer upon Seller's delivery to a carrier. Any delivery dates shown are approximate only and Seller shall have no liability for any delays in delivery.
- 4. Warranty: Seller warrants that the items sold thereunder shall be free from defects in material or workmanship for a period of 365 days from the date of shipment to Buyer, or 2,000 hours of use, whichever expires first. THIS WARRANTY COMPRISES THE SOLE AND ENTIRE WARRANTY PERTAINING TO ITEMS PROVIDED HEREUNDER. SELLER MAKES NO OTHER WARRANTY, GAURANTEE, OR REPRESENTATION OF ANY KIND WHATSOEVER. ALL OTHER WARRANTIES, INCLUDING BUT NOT LIMITED TO, MERCHANTIBILITY AND FITNESS FOR PURPOSE, WHETHER EXPRESS, IMPLIED, OR ARISING BY OPERATION OF LAW, TRADE USAGE, OR COURSE OF DEALING ARE HEREBY DISCLAIMED. NOTWITHSTANDING THE FOREGOING, THERE ARE NO WARRANTIES WHATSOEVER ON ITEMS BUILT OR ACQUIRED WHOLELY OR PARTIALLY, TO BUYER'S DESIGNS OR SPECIFICATIONS.
- 5. Limitation Of Remedy: SELLER'S LIABILITY ARISING FROM OR IN ANY WAY CONNECTED WITH THE ITEMS SOLD OR THIS CONTRACT SHALL BE LIMITED EXCLUSIVELY TO REPAIR OR REPLACEMENT OF THE ITEMS SOLD OR REFUND OF THE PURCHASE PRICE PAID BY BUYER, AT SELLER'S SOLE OPTION. IN NO EVENT SHALL SELLER BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES OF ANY KIND OR NATURE WHATSOEVER, INCLUDING BUT NOT LIMITED TO LOST PROFITS ARISING FROM OR IN ANY WAY CONNECTED WITH THIS AGREEMENT OR ITEMS SOLD HEREUNDER, WHETHER ALLEGED TO ARISE FROM BREACH OF CONTRACT, EXPRESS OR IMPLIED WARRANTY, OR IN TORT, INCLUDING WITHOUT LIMITATION, NEGLIGENCE, FAILURE TO WARN OR STRICT LIABILITY.
- 6. Changes, Reschedules and Cancellations: Buyer may request to modify the designs or specifications for the items sold herunder as well as the quantities and delivery dates thereof, or may request to cancel all or part of this order, however, no such requested modification or cancellation shall become part of the contract between Buyer and Seller unless accepted by Seller in a written amendment to this Agreement. Acceptance of any such requested modification or cancellation shall be at Seller's discretion, and shall be upon such terms and conditions as Seller may require.
- 7. Special Tooling: A tooling charge may be imposed for any special tooling, including without limitation, dies, fixtures, molds and patterns, acquired to manufacture items sold pursuant to this contract. Such special tooling shall be and remain Seller's property notwithstanding payment of any charges by Buyer. In no event will Buyer acquire any interest in apparatus belonging to Seller which is utilized in the manufacture of the items sold hereunder, even if such apparatus has been specially converted or adapted for such manufacture and notwithstanding any charges paid by Buyer. Unless otherwise agreed, Seller shall have the right to alter, discard or otherwise dispose of any special tooling or other property in its sole discretion at any time.

- 8. Buyer's Property: Any designs, tools, patterns, materials, drawings, confidential information or equipment furnished by Buyer or any other items which become Buyer's property, may be considered obsolete and may be destroved by Seller after two (2) consecutive years have elapsed without Buyer placing an order for the items which are manufactured using such property. Seller shall not be responsible for any loss or damage to such property while it is in Seller's possession or control.
- 9. Taxes: Unless otherwise indicated on the face hereof, all prices and charges are exclusive of excise, sales, use, property, occupational or like taxes which may be imposed by any taxing authority upon the manufacture, sale or delivery of the items sold hereunder. If any such taxes must be paid by Seller of if Seller is liable for the collection of such tax, the amount thereof shall be in addition to the amounts for the items sold. Buyer agrees to pay all such taxes or to reimburse Seller therefore upon receipt of its invoice. If Buyer claims exemption from any sales, use or other tax imposed by any taxing authority, Buyer shall save Seller harmless from and against any such tax, together with any interest or penalties thereon which may be assessed if the items are held to be taxable.
- 10. Indemnity For Infringement of Intellectual Property Rights: Seller shall have no liability for infringement of any patents, trademarks, copyrights, trade dress, trade secrets or similar rights except as provided in this Part 10. Seller will defend and indemnify Buyer against allegations of infringement of U.S. patents, U.S. trademarks, copyrights, trade dress and trade secrets (hereinafter "Intellectual Property Rights"). Seller will defend at its expense and will pay the cost of any settlement or damages awarded in an action brought against Buyer based on an allegation that an item sold pursuant to this contract infringes in the Intellectual Property Rights of a third party. Seller's obligation to defend and indemnify Buyer is contingent on Buyer notifying Seller within ten (10) days after Buyer becomes aware of such allegations of infringement, and Seller having sole control over the defense of any allegations or actions including all negotiations for settlement or compromise. If an item sold hereunder is subject to a claim that it infringes the Intellectual Property Rights of a third party, Seller may, at its sole expense and options, procure for Buyer the right to continue using said item, replace or modify said item so as to make it noninfringing, or offer to accept return of said item and return the purchase price less a reasonable allowance for depreciation. Notwithstanding the foregoing, Seller shall have no liability for claims of infringement based on information provided by Buyer, or directed to items delivered hereunder for which the designs are specified in whole or part by Buyer, or infringements resulting from the modification, combination or use in a system of any item sold hereunder. The foregoing provisions of this Part 10 shall constitute Seller's sole and exclusive liability and Buyer's sole and exclusive remedy for infringement of Intellectual Property Rights.

If a claim is based on information provided by Buyer or if the design for an item delivered hereunder is specified in whole or in part by Buyer, Buyer shall defend and indemnify Seller for all costs, expenses or judgments resulting from any claim that such item infriges any patent, trademark, copyright, trade dress, trade secret or any similiar right.

- 11. Force Majeure: Seller does not assume the risk of and shall not be liable for delay or failure to perform any of Seller's obligations by reason of circumstances beyond the reasonable control of Seller (hereinafter "Events of Force Majeure"). Events of Force Majeure shall include without limitation, accidents, acts of God, strikes or labor disputes, acts, laws, rules or regulations of any government or government agency, fires, floods, delays or failures in delivery of carriers or suppliers, shortages of materials and any other cause beyond Seller's control.
- 12. Entire Agreement/Governing Law: The terms and conditions set forth herein, together with any amendments, modifications and any different terms or conditions expressly accepted by Seller in writing, shall constitute the entire Agreement concerning the items sold, and there are no oral or other representations or agreements which pertain thereto. This Agreement shall be governed in all respects by the law of the State of Ohio. No actions arising out of the sale of the items sold hereunder or this Agreement may be brought by either party more than two (2) years after the cause of action accrues.

9/91-P



