



# QUALITY INDUSTRIAL HOSE



**N.R.P.**  
**ISO9001 Certified**  
**Quality System**





PAGE INDEX

- 1** Air Hose
- 4** Material Handling Hose
- 8** Chemical Hose
- 9** Pressure Wash Hose
- 10** Special Application Hose
- 11** Versa-Flow Marine Hose
- 12** Versa-Flex Marine Hose
- 13** Water Hose
- 15** Plaster/Concrete Hose
- 17** Petroleum Transfer Hose
- 21** Oil Suction & Discharge Hose
- 22** Suction & Discharge Hose
- 23** Oil Field Hose
- 29** Decoking Hose
- 30** Armored Hose Assemblies
- 32** Technical Data
- 40** Warranty Statement



# Air Hose



## 1031

### THUNDERBIRD 1-WIRE BRAID AIR HOSE

NRP Part Number	Hose I.D. (in.)	Hose O.D. (in.)	Rated W.P. (psi)	Wire Braid	Wt. Per Foot (lbs)
1031-08	1/2	1.03	1,250	1	0.49
1031-12	3/4	1.28	1,125	1	0.64
1031-16	1	1.53	800	1	0.71
1031-20	1-1/4	1.81	750	1	1.02
1031-24	1-1/2	2.06	625	1	1.25
1031-32	2	2.54	500	1	1.39

**Application:** Heavy duty, high pressure pneumatic service in mines, quarries, construction and industry. The ideal "bull hose" to withstand severe external abuse and internal surge pressures.

**Tube:** Black, oil resistant, heat resistant neoprene (CR).

**Reinforcement:** Steel wire braid.

**Cover:** Bright yellow, heavy guage perforated, oil resistant, abrasion resistant neoprene (CR) wrap finish.

**Temperature:** -40 to 212° F.

**Branding:** NRP 1031 THUNDERBIRD AIR HOSE (size) SINGLE WIRE BRAID, MADE IN USA.

**Lengths:** Standard 50 ft. Other lengths available on request.

**Premium Feature:** Premium grade "Bull Hose" abrasion, oil and weather resistant. Good oil resistance, easy identification.

## 1032

### THUNDERBIRD 2-WIRE BRAID AIR HOSE

NRP Part Number	Hose I.D. (in.)	Hose O.D. (in.)	Rated W.P. (psi)	Wire Braid	Wt. Per Foot (lbs)
1032-32	2	2.62	875	2	1.90
1032-40	2-1/2	3.23	800	2	2.72
1032-48	3	3.65	625	2	2.98
1032-64	4	4.75	500	2	4.14

**Application:** Heavy duty, high pressure pneumatic service in mines, quarries, construction and industry. To withstand severe external abuse and internal surge pressures.

**Tube:** Black, oil resistant, heat resistant neoprene (CR).

**Reinforcement:** Steel wire braid.

**Cover:** Bright yellow, heavy guage perforated, oil resistant, abrasion resistant neoprene (CR) wrap finish.

**Temperature:** -40 to 212° F.

**Branding:** NRP 1032 THUNDERBIRD AIR HOSE (size) DOUBLE WIRE BRAID, MADE IN USA.

**Lengths:** Standard 50 ft. Other lengths available on request.

**Premium Feature:** Higher working pressure, premium grade "Bull Hose" to withstand severe external abuse and internal surge pressures. Abrasion, oil and weather resistant. Good oil resistance, easy identification.

## 1061

### GEN-AIR 1-WIRE BRAID AIR HOSE

NRP Part Number	Hose I.D. (in.)	Hose O.D. (in.)	Rated W.P. (psi)	Wire Braid	Wt. Per Foot (lbs)
1061-08	1/2	1.00	1250		0.46
1061-12	3/4	1.25	1125		0.60
1061-16	1	1.47	800		0.69
1061-20	1-1/4	1.81	750		0.97
1061-24	1-1/2	2.06	625		1.17

**Application:** High pressure pneumatic service in mines, quarries, construction and industry. This hose is designed to withstand severe external abuse and internal surge pressures.

**Tube:** Black, polymer blend.

**Reinforcement:** High tensile steel, single wire braid.

**Cover:** Bright yellow SBR, perforated heavy gauge abrasion resistant, wrap finish.

**Temperature:** -40 to 180° F.

**Branding:** (White Ink) NRP 1061 GEN AIR WIRE BRAID 800 PSI WP MADE IN USA.

**Lengths:** Standard 50 ft.

**Premium Feature:** Age, heat and ozone resistant, medium oil resistance, easy identification.



## 1061

### GEN-AIR 2-WIRE BRAID AIR HOSE

NRP Part Number	Hose I.D. (in.)	Hose O.D. (in.)	Rated W.P. (psi)	Wt. Per Foot (lbs)
1061-32	2	2.62	500	1.65
1061-40	2-1/2	3.23	500	2.52
1061-48	3	3.65	500	2.73
1061-64	4	4.75	500	4.14

**Application:** High pressure pneumatic service in mines, quarries, construction and industry. The ideal "bull hose" to withstand severe external abuse and internal surge pressures.

**Tube:** Black, polymer blend, oil resistant.

**Reinforcement:** High tensile steel, double wire braid.

**Cover:** Bright yellow SBR, perforated heavy gauge abrasion resistant, wrap finish.

**Temperature:** -40 to 180° F.

**Branding:** (Embossed) NRP 1061 GEN AIR DOUBLE WIRE BRAID AIR HOSE 500 PSI WP MADE IN USA.

**Lengths:** Standard 50 ft.

**Premium Feature:** Age, heat and ozone resistant, medium oil resistance, easy identification.

## 1843

### HIGH TEMPERATURE AIR HOSE

NRP Part Number	Hose I.D. (in.)	Hose O.D. (in.)	Rated W.P. (psi)	Wire Braid	Wt. Per Foot (lbs)
1843-32	2	2.62	875	2	1.90
1843-40	2½	3.23	800	2	2.72
1843-48	3	3.65	625	2	2.98
1843-64	4	4.75	500	2	4.14

**Application:** Heavy duty, high temperature pneumatic service in mines, quarries, construction and industry. To withstand severe external abuse and internal surge pressures.

**Tube:** Black, (CPE) oil and heat resistant. Maximum Operating Temperature is 350° F.

**Reinforcement:** Multiple braids of high tensile steel wire.

**Cover:** Black, oil, weather and abrasion resistant Neoprene CR.

**Temperature:** -40 to 350° F.

**Branding:** NRP-Jones 1843 hi-temp air double wire braid MADE IN USA.

**Lengths:** Standard 50 ft.

**Premium Feature:** High temperature, premium grade air hose to withstand severe external abuse and internal surge pressures.

## 2074

### HOT AIR BLOWER HOSE

NRP Part Number	Hose I.D. (in.)	Hose O.D. (in.)	Rated W.P. (psi)	Wt. Per Foot (lbs)
2074-48	3	3.63	150	1.75
2074-64	4	4.68	150	2.55

**Application:** Transfer hot air from tank truck compressor to dry bulk tank. The EPDM tube and cover offers excellent resistance to extreme heat and ozone.

**Tube:** Black, heat resistant EPDM (up to 350 degrees F).

**Reinforcement:** Two braids of lightweight, high strength heat resistant tire cord fabric. Dual spiralled steel wire helix between the braids to resist kinking.

**Cover:** Black, EPDM. Pin pricked.

**Temperature:** -40 to 350° F.

**Branding:** NRP 2074 HOT AIR BLOWER HOSE 150 PSI WP MADE IN USA.

**Lengths:** Standard 60 ft.

**Premium Feature:** Resistant to high temperatures, flexible, resists kinking.

# Air Hose



## 2409 OXYGEN SUPPLY HOSE

NRP Part Number	Hose I.D. (in.)	Hose O.D. (in.)	Rated W.P. (psi)	Textile Braid	Wt. Per Foot (lbs.)
2409-16	1	1.67	500	3	1.03
2409-20	1-1/4	2.06	500	3	1.16
2409-24	1-1/2	2.38	500	3	1.48
2409-32	2	2.95	500	3	1.81

**Application:** For use in steel mills to manually charge the furnace with hand held lance. Also used on automatic scarfing machines. Cleaned and capped for oxygen service.

**Tube:** Seamless neoprene.

**Reinforcement:** XHT Heavy Textile yarn.

**Cover:** Green, tough, high grade neoprene. Abrasion and weather resistant. Pin pricked.

**Temperature:** -40 to 212° F.

**Branding:** NRP 2409 OXYGEN SUPPLY 500 PSI WP MADE IN USA.

**Lengths:** Standard 50 ft., maximum 60 ft.

**Premium Feature:** Lightweight, flexible, designed to withstand extreme working conditions found in steel mills.

## 2428 MULTI-PURPOSE AIR - OIL - WATER HOSE

NRP Part Number	Hose I.D. (in.)	Hose O.D. (in.)	Textile Braid	WP/PSI (air)	WP/PSI (water)	Wt. Per Foot (lbs.)
2428-24	1-1/2	1.98	2	400	1000	0.92
2428-32	2	2.48	2	400	1000	1.24
2428-40	2-1/2	3.34	3	300	750	1.81
2428-48	3	3.72	3	200	500	2.29
2428-64	4	4.88	3	200	500	3.12

**Application:** A top quality discharge hose suitable for high pressure air, water, oil and mild chemicals. Larger sizes are available especially suited for bull line service.

**Tube:** High quality neoprene. Resistant to oil, heat and mild chemicals.

**Reinforcement:** XHT Textile yarn horizontally braided at correct angle to provide maximum flexibility with excellent kink resistance. Double static wires for extra safety.

**Cover:** Tough, high grade black neoprene; oil, abrasion and weather resistant.

**Temperature:** -40 to 212° F.

**Branding:** 2428 NRP/EMPEX B269 MULTI-PURPOSE MADE IN USA.

**Lengths:** Standard 50 ft., maximum 60 ft.

**Premium Feature:** Abrasion, oil and weather resistant. Easy identification, wide variety of applications.



# Material Handling Hose

## 2808

### REVERSE CIRCULATION HOSE

NRP Part Number	Hose I.D. (in.)	Hose O.D. (in.)	Rated W.P. (psi)	No. Plies	Min. Bend Radius	Wt. Per Foot (lbs.)
2808-32	2	2.96	500	4	20	1.90
2808-48	3	3.96	500	4	30	2.69
2808-64	4	5.12	500	6	40	3.52

**Application:** Transfer geological materials on reverse drilling rigs used in mining, quarrying, soil samples, bed rock testing, dock pilings, etc.

**Tube:** Black, special polymer compound for age and abrasion resistance.

**Reinforcement:** Multiple plies of lightweight high strength tire cord.

**Cover:** High grade black rubber compounded to resist abrasion and weathering.

**Temperature:** -40 to 200° F.

**Branding:** NRP 2808 REVERSE CIRCULATION 500 PSI WP MADE IN USA

**Lengths:** Standard 60 ft.

**Premium Feature:** Abrasion, ozone and age resistant. Continuous brand for easy identification.

## 4007

### LIGHTWEIGHT VACUUM HOSE

NRP Part Number	Hose I.D. (in.)	Str. End O.D. (in.)	Rated W.P. (psi)	Rated Suction (in.)	Min. Bend Radius (in.)	Wt. Per Foot (lbs.)
4007-32	2	2.36	65	15	8	0.57
4007-38	2-3/8	2.73	65	15	9	0.67
4007-40	2-1/2	2.86	60	15	9	0.70
4007-48	3	3.37	50	12	10	0.91
4007-56	3-1/2	3.87	40	12	12	1.05
4007-64	4	4.37	40	12	15	1.12
4007-72	4	4.87	35	12	18	2.29
4007-80	5	5.37	30	10	20	2.57
4007-96	6	6.37	30	8	24	3.05

**Application:** Industrial and maintenance uses for conveying air, dust collection systems, grass and leaves, and many other light duty vacuum applications.

**Tube:** Black, abrasion resistant, static conductive, Styrene-Butadiene (SBR).

**Reinforcement:** Two plies of bias laid nylon tire cord gives hose carcass strength with light weight. Helix wire is located between the plies to resist collapse under vacuum and bending.

**Cover:** Black, weather and abrasion resistant, Styrene-Butadiene (SBR). The cover is corrugated for extra flexibility.

**Temperature:** -40 to 180° F.

**Branding:** NRP 4007 LIGHTWEIGHT VACUUM MADE IN USA.

**Lengths:** Standard 50 ft. Also available in specified cut lengths with plain, straight, or enlarged ends on special order.

**Premium Feature:** Abrasion and weather resistant. Lightweight and flexible, easy to handle.

# Material Handling Hose



## 4015 SAND SUCTION HOSE

NRP Part Number	Hose I.D. (in.)	Hose O.D. (in.)	Tube Gauge (in.)	Bend Radius (in.)	Suction Rating (in.)	Wt. Per Foot (lbs.)
4015-96	6	8-5/8	3/8	48	30	17.30
4015-AD	6-5/8	9-1/4	3/8	54	30	19.20
4015-08	8	10-5/8	3/8	60	30	24.30
4015-AC	8-5/8	11-3/8	3/8	68	30	27.80
4015-10	10	12-3/4	3/8	76	30	33.70
4015-AE	10-3/4	13-1/2	3/8	82	30	34.80
4015-12	12	15-1/16	3/8	92	30	37.40
4015-AF	12-3/4	15-9/16	3/8	96	30	40.80
4015-14	14	16	3/8	112	30	48.00

**Application:** For extra severe service for handling sand and gravel and general dredging work in fresh or salt water.

**Tube:** Highest grade, compounded for maximum resistance to abrasion and cutting. 3/8" tube-Natural Rubber. Also available in tube thicknesses of 1/2", 3/4" and 1".

**Reinforcement:** Multiple plies of unidirectional cord fabric supported with heavy gauge spring steel wire helix.

**Cover:** Tough synthetic resistant to oil, weather and abrasion.

**Temperature:** -40 to 180° F.

**Branding:** NRP 4015 SAND SUCTION MADE IN USA.

**Lengths:** As specified, maximum 60 ft.

**Premium Feature:** A flexible member on suction side of dredge to ease movement of dredge ladder. Abrasion and weather resistant. Heavy duty construction.

## 4105 DRY BULK TRANSFER HOSE

NRP Part Number	Hose I.D. (in.)	Hose O.D. (in.)	Rated W.P. (psi)	Wt. Per Foot (lbs.)
4105-48	3	3.49	70	1.17
4105-64	4	4.49	60	1.54
4105-72	4-1/2	4.99	50	1.72
4105-80	5	5.49	40	1.89

**Application:** The transfer of bulk cement and other dry bulk materials pneumatically.

**Tube:** Black, static conductive highly abrasion resistant, 1/8 inch thick, Natural Rubber (NR).

**Reinforcement:** Multiple plies of square woven, synthetic fabric bias laid to combine strength and flexibility.

**Cover:** Black, abrasion and weather resistant, 1/16 inch thick. Styrene-Butadiene (SBR).

**Temperature:** -40 to 180° F.

**Branding:** NRP 4105 DRY BULK TRANSFER MADE IN USA.

**Lengths:** 50 ft. and 60 ft. standard. Other lengths available on request.

**Premium Feature:** Abrasion resistant, static conductive natural rubber tube. Abrasion, age and weather resistant cover. Fold flat for easy storage.

## 4177 DREDGE SLEEVES

NRP Part Number	Hose I.D. (in.)	Hose O.D. (in.)	Rated W.P. (psi)	No. Plies	Tube Gauge	Wt. Per Foot (lbs.)
4177-AD	6-5/8	8-1/8	150	7	3/8"	9.20
4177-AC	8-5/8	10-1/4	125	9	3/8"	12.15
4177-AE	10-3/4	12-3/8	120	9	3/8"	16.50
4177-AF	12-3/4	14-3/4	120	9	3/8"	22.00
4177-14	14	15-1/4	120	9	3/8"	26.00

**Application:** For discharge lines in dredging work, also used in short lengths as flexible coupling to connect steel pipe mounted on pontoons.

**Tube:** High grade, compounded for maximum resistance to abrasion and cutting. Also available in tube thicknesses of 1/2", 3/4" and 1".

**Reinforcement:** Multiple plies of square woven polyester fabric, heavily skimmed between plies for maximum adhesion and flex life.

**Temperature:** -40 to 180° F.

**Branding:** NRP 4177 DREDGE SLEEVE MADE IN USA.

**Lengths:** As specified, maximum 60 ft.

**Premium Feature:** A flexible connection between pipes in dredging operations. Abrasion and weather resistant. Heavy duty construction.





# Material Handling Hose

## 4221

### LIGHTWEIGHT MATERIAL HANDLING HOSE

NRP Part Number	Hose I.D. (in.)	Hose O.D. (in.)	Rated W.P. (psi)	Rated Suction	Min. Bend Radius	Wt. Per Foot (lbs.)
4221-40	2-1/2	3.13	25	Full	15	1.72
4221-48	3	3.63	25	Full	18	2.02
4221-56	3-1/2	4.16	25	Full	21	2.31
4221-64	4	4.66	25	Full	24	2.61
4221-72	4-1/2	5.16	25	Full	27	2.92
4221-80	5	5.66	25	Full	30	3.22
4221-96	6	6.66	25	Full	36	3.81
4221-08	8	8.73	25	Full	48	5.90

**Application:** Discharge and vacuum service handling dust, grit and chips from rock, marble, granite, grinding machines, wood planes, and sanders. May also be used as a vent for some acid fumes.

**Tube:** Tan, pure gum, 1/8" thick, Natural Rubber (NR).

**Reinforcement:** Two plies of synthetic fabric. Helically wound with heavy gauge galvanized wire to resist collapse under vacuum and bend conditions.

**Cover:** Black, abrasion resistant Styrene-Butadiene (SBR).

**Temperature:** -40 to 180° F.

**Branding:** NRP 4221 LIGHTWEIGHT MATERIAL HANDLING MADE IN USA.

**Lengths:** As specified, maximum 60 ft.

**Premium Feature:** High abrasion resistant 1/8" gum rubber tube. Abrasion and weather resistant cover. Lightweight and flexible, easy to handle.

## 4222

### LIGHTWEIGHT MATERIAL HANDLING HOSE

NRP Part Number	Hose I.D. (in.)	Hose O.D. (in.)	Rated W.P. (psi)	Rated Suction	Min. Bend Radius	Wt. Per Foot (lbs.)
4222-64	4	4.91	25	Full	24	3.35
4222-80	5	5.91	25	Full	30	3.98
4222-96	6	6.91	25	Full	36	5.31
4222-95	6-5/8	7.53	25	Full	42	5.80
4222-08	8	8.98	25	Full	48	7.26
4222-10	10	11.03	25	Full	60	10.36
4222-12	12	13.09	25	Full	72	14.16

**Application:** Discharge and vacuum service handling dust, grit and chips from rock, marble, granite, grinding machines, wood planes, and sanders. May also be used as a vent for some acid fumes.

**Tube:** Tan, pure gum 1/4 inch thick, Natural rubber (NR).

**Reinforcement:** Two plies of synthetic fabric. Helically wound with heavy gauge wire to resist collapse under vacuum and bend conditions.

**Cover:** Black, abrasive resistant. Styrene-Butadiene (SBR).

**Temperature:** -40 to 180° F.

**Branding:** NRP 4222 LIGHTWEIGHT MATERIAL HANDLING MADE IN USA.

**Lengths:** As specified, maximum 60 ft.

**Premium Feature:** High abrasion resistant, full 1/4" gum rubber tube. Abrasion and weather resistant cover lightweight and flexible, easy to handle.

## 4302

### DRY MATERIAL HANDLING HOSE

NRP Part Number	Hose I.D. (in.)	Hose O.D. (in.)	Rated W.P. (psi)	Min. Bend Radius (in.)	Wt. Per Foot (lbs.)
4302-48	3	4	60	8	2.47
4302-56	3-1/2	4-1/2	60	10	2.80
4302-64	4	5	50	12	3.12
4302-72	4-1/2	5-5/8	50	18	4.44
4302-80	5	6-1/8	50	20	4.88
4302-96	6	7-1/8	40	36	6.09
4302-95	6-5/8	7-13/16	40	42	6.94
4302-08	8	9-1/4	30	48	8.22
4302-10	10	11-1/4	30	60	10.15
4302-12	12	13-1/4	30	72	13.40

**Application:** For handling extremely abrasive dry, non-oily materials such as rock salt, crushed limestone, borax, sugar and flour, PVC Pellets.

**Tube:** 3/16" thick tan pure gum, (Food Grade)

**Reinforcement:** Multiple plies of light weight high strength nylon fabric with spring wire helix.

**Cover:** Black-corrugated, weather and abrasion resistant.

**Temperature:** -40 to 180° F.

**Branding:** NRP 4302 DRY MATERIAL TRANSFER MADE IN USA.

**Lengths:** As specified, maximum 60 ft.

**Premium Feature:** Abrasion, age and weather resistant. Ideal flour handling, meets FDA requirements.



# Material Handling Hose



## 4610

### BULK-FLEX MATERIAL HANDLING HOSE

NRP Part Number	Hose I.D. (in.)	Hose O.D. (in.)	Rated W.P. (psi)	Tube Wall	Min. Bend Radius	Wt. Per Foot (lbs.)
4610-32	2	3.00	150	.25	15	1.91
4610-48	3	4.63	150	.50	18	4.26
4610-64	4	5.38	150	.38	21	5.03
4610-96	6	7.50	150	.31	30	7.57
4610-08	8	9.63	150	.31	58	11.31
4610-10	10	11.50	150	.25	79	13.30
4610-12	12	13.88	150	.31	98	18.97
4610-14	14	15.88	150	.31	105	21.79

**Application:** Replacement of steel pipe where conditions require flexibility and increased resistances to tube corrosion and abrasion. Technically controlled corrugated cover, increased flexibility of hose, and provides the mechanical "grip" to the field attachable couplings.

**Tube:** Abrasion resistant natural gum rubber.

**Reinforcement:** Multiple plies of high strength tire cord. Spiraled steel wire helix located between plies to resist collapse under vacuum or bending.

**Cover:** Special synthetic rubber to resist abrasion and weathering. Corrugations designed for compatibility with externally attached reusable couplings.

**Temperature:** -40 to 180° F.

**Branding:** NRP 4610 BULK-FLEX MATERIAL HANDLING 150 PSI WP MADE IN USA.

**Lengths:** As specified, up to 60 ft.

**Premium Feature:** High abrasion resistant gum rubber tube. Corrugated cover for increased flexibility. Designed for field attachable coupling compatibility. See page 36 for coupling information.

## 4670

### TUFF-FLEX 150 MATERIAL HANDLING HOSE

NRP Part Number	Hose I.D. (in.)	Hose O.D. (in.)	Rated W.P. (psi)	Tube Wall	Min. Bend Radius	Wt. Per Foot (lbs.)
4670-32	2	3.00	150	.25	15	1.91
4670-48	3	4.63	150	.50	18	4.26
4670-64	4	5.38	150	.38	21	5.03
4670-96	6	7.50	150	.31	30	7.57
4670-08	8	9.63	150	.31	58	11.31
4670-10	10	11.50	150	.25	79	13.30
4670-12	12	13.88	150	.31	98	18.97
4670-14	14	15.88	150	.31	105	21.79

**Application:** Replacement of steel pipe where conditions require flexibility and increased resistance to tube corrosion and abrasion. Technically controlled corrugated cover provides the mechanical "grip" to the field attachable couplings. Couplings can also be built-in metal, soft cuff, built-in duck and rubber flanges, or Beadlok beaded ends.

**Tube:** Ultra high abrasion resistant 1/4" thick red natural gum rubber.

**Reinforcement:** Multiple plies of high strength tire cord. Spiraled steel wire helix located between plies to resist collapse under vacuum or bending.

**Cover:** Special synthetic rubber to resist abrasion and weathering. Corrugations designed for compatibility with externally attached reusable couplings.

**Temperature:** -40 to 180° F.

**Branding:** NRP 4670 TUFF-FLEX 150 BULK MATERIAL HANDLING MADE IN USA.

**Lengths:** As specified, up to 60 ft.

**Premium Feature:** Ultra high abrasion resistant red gum rubber tube. High tensile spring steel helix wire for increased flexibility. Abrasion and weather resistant cover.



# Chemical Hose

## 2424

### HYPALON CHEMICAL TRANSFER HOSE

NRP Part Number	Hose I.D. (in.)	Hose O.D. (in.)	Rated W.P. (psi)	Min. Bend Radius	Wt. Per Foot (lbs.)
2424-32	2	2.58	150	12	1.58
2424-48	3	3.69	150	18	2.90
2424-64	4	4.69	150	24	3.90

**Application:** Pressure, gravity or suction service when transferring acids, solvents and corrosive chemicals. Designed to provide extreme flexibility and easier handling in plant areas and bulk transfer.

**Tube:** Black Hypalon suitable for a wide range of chemicals.

**Reinforcement:** Two braids of high strength textile yarn. Spiral wire helix located between braids to resist collapse under vacuum or bending.

**Cover:** Black NBR/PVC resists chemical acids and weather.

**Temperature:** -40 to 200 ° F.

**Branding:** NRP 2424 HYPALON CHEMICAL TRANSFER 150 PSI WP MADE IN USA.

**Lengths:** Standard 50 ft., maximum 60 ft.

**Premium Feature:** Acid and chemical resistant. Full suction rated. Abrasion, age and ozone resistant. Easy identification.

## 2461

### VITON\* CHEMICAL TRANSFER HOSE

NRP Part Number	Hose I.D. (in.)	Hose O.D. (in.)	Rated W.P. (psi)	Min. Bend Radius	Wt. Per Foot (lbs.)
2461-32	2	2.58	200	12	1.90
2461-48	3	3.69	200	18	2.50
2461-64	4	4.69	200	24	3.80

**Application:** Pressure, gravity or suction service when transferring aromatic solvents, such as benzene, toluene and chlorinated hydrocarbons. Designed to provide extreme flexibility and easier handling in plant areas and bulk transfer.

**Tube:** Viton\* suitable for a wide range of chemicals and solvents.

**Reinforcement:** Two braids of high strength textile yarn. Spiral wire helix located between braids to resist collapse under vacuum or bending.

**Cover:** Black Neoprene (CR) compounded for maximum resistance to chemicals, oil, ozone and abrasion.

**Temperature:** -40 to 300 ° F.

**Branding:** NRP 2461 VITON\* CHEMICAL TRANSFER 200 PSI WP MADE IN USA.

**Lengths:** Standard 50 ft., maximum 60 ft.

**Premium Feature:** Suitable for high aromatic solvents. Acid and chemical resistant. Full suction rated. Abrasion, age and ozone resistant. Easy identification.

\* DuPont Trademark

## 4640

### ACID SUCTION & DISCHARGE HOSE

NRP Part Number	Hose I.D. (in.)	Hose O.D. (in.)	Rated W.P. (psi)	Wt. Per Foot (lbs.)
4640-32	2	2.70	150	2.30
4640-40	2-1/2	3.25	150	2.94
4640-48	3	3.95	150	3.44
4640-56	3-1/2	4.77	150	3.92
4640-64	4	5.10	150	4.40
4640-80	5	6.20	150	5.48
4640-96	6	7.25	150	6.80
4640-08	8	9.30	150	9.96
4640-10	10	11.45	150	12.16

**Application:** Most acid solutions, acid slurries and caustic solutions at rated discharge pressures.

**Tube:** Black, EPDM.

**Reinforcement:** Multiple plies of high strength nylon tire cord, with wire helix to combine strength and flexibility.

**Cover:** Black, acid, caustic abrasion and weather resistant, EPDM.

**Temperature:** -40 to 200 ° F.

**Branding:** NRP 4640 ACID SUCTION & DISCHARGE 150 PSI WP MADE IN USA.

**Lengths:** Maximum 60 ft.

**Fittings:** Plain or capped. Also available with enlarged ends, built-in rubber flanges or beaded ends with split-ring flanges on special order.

**Premium Feature:** Acid and chemical resistant, ozone resistant, continuous brand for easy identification. Flexible and kink resistant.

# Pressure Wash Hose



## A096

### YELLOW FLEX WASH DOWN HOSE

NRP Part Number	Hose I.D. (in.)	Hose O.D. (in.)	Max. W.P.	Min. Bend Radius	Wt. Per Foot (lbs.)
A096-06	3/8	0.69	3,000	5.0	.19
A096-08	1/2	0.82	3,000	7.0	.26
A096-12	3/4	1.10	2,000	9.5	.35

**Application:** Applications requiring resistance to animal fats such as poultry processing, meat packing, hotel, restaurant, agriculture and industrial maintenance. Both tube and cover FDA approved. Also, non-marking cover excellent for car wash applications. Recommended for service requiring resistance to petroleum based products.

**NOT RECOMMENDED FOR STEAM SERVICE.**

**Tube:** Black, special polymer compounded for heat and detergent resistance. Resistant to petroleum based products.

**Reinforcement:** One braid high tensile steel wire with open pattern for extra flexibility and resistance to mechanical damage.

**Cover:** Yellow, special polymer compounded for resistance to animal fat, detergent, abrasion and weathering.

**Temperature:** -40 to 300 ° F.

**Fittings:** NRP A096 Hose uses the same fittings as those for SAE 100R1AT.

**Branding:** YELLOW FLEX WASH DOWN HOSE 3000 PSI WP MADE IN USA.

**Lengths:** Random lengths on reels or cut to specification.

**Premium Feature:** Abrasion, age and ozone resistant. Heat resistant, easy identification, economical.

## A098

### BLUE PRESSURE WASHER HOSE

NRP Part Number	Hose I.D. (in.)	Hose O.D. (in.)	Max. W.P.	Min. Bend Radius	Wt. Per Foot (lbs.)
A098-04	1/4	.53	3,000	4.0	.17
A098-06	3/8	.69	3,000	5.0	.24
A098-08	1/2	.82	3,000	7.0	.28

**Application:** Extra high pressure hot water cleaning systems (portable and fixed installation units) in general use in agriculture, restaurant, hotel and industrial maintenance. This hose can also be used for service requiring resistance to petroleum based products or detergents.

**NOT RECOMMENDED FOR STEAM SERVICE.**

**Tube:** Black, oil resistant nitrile (NBR).

**Reinforcement:** One braid High Tensile Steel Wire.

**Cover:** Blue oil and abrasion resistant NBR/PVC.

**Temperature:** -45 to 300° F.

**Fittings:** NRP A098 hose uses same fittings as those for SAE 100R1AT.

**Branding:** NRP A098 PRESSURE WASH 3000 PSI WP MADE IN USA.

**Lengths:** Random lengths on reels or cut to specification.

**Premium Feature:** Abrasion, age and ozone resistant. Heat resistant, easy identification, economical.

## A184

### DUAL-LITE PRESSURE WASHER/HYDRAULIC HOSE

NRP Part Number	Hose I.D. (in.)	Hose O.D. (in.)	Max. PSI	Min. Bend Radius	Wt. Per Foot (lbs.)
A184-04	1/4	.53	3,000	4.0	.17
A184-06	3/8	.69	3,000	5.0	.24
A184-08	1/2	.82	3,000	7.0	.28

**Application:** Portable or fixed extra high pressure hot water cleaning systems for commercial and industrial maintenance. Also, hydraulic oil line applications which exceed SAE 100R1 temperature ratings and working pressures.

**NOT RECOMMENDED FOR STEAM SERVICE.**

**Tube:** Black, oil and high temperature resistant Nitrile (NBR).

**Reinforcement:** One braid of high tensile steel wire. The design burst is a 4 to 1 ratio of the maximum rated working pressure.

**Cover:** Black, oil and abrasion resistant NBR/PVC blend.

**Temperature:** Hot Water Pressure Systems -40 to +300° F. Hydraulic systems -40 to +300° F intermittent; or +250° F continuous.

**Fittings:** NRP A184 Hose uses the same fittings as those for SAE 100R1AT.

**Branding:** NRP A184 DUAL-LITE PRESSURE WASHER EXCEEDS SAE 100R1 3000 PSI WP MADE IN USA.

**Lengths:** Random lengths on reels or cut to specification.

**Premium Feature:** Dual purpose- Hydraulic systems and pressure washer. Heat resistant; abrasion, age and ozone resistant.





# Special Application Hose

## A040

### EDIBLE OIL HOSE

NRP Part Number	Hose I.D. (in.)	Hose O.D. (in.)	Rated W.P. (psi)	Min. Bend Radius	Wt. Per Foot (lbs.)
A040-08	1/2	1.020	250	6	0.48
A040-10	5/8	1.140	250	7	0.53
A040-12	3/4	1.265	250	8	0.60

**Application:** Edible liquids, vegetable oils, salad dressings, vinegar, mustard and meat products requiring a sanitary hose which will not impair taste. Excellent for service with hot oil fat filters and fryers.

**Tube:** Sanitary, white (NBR), compounded from material which meets FDA requirements.

**Reinforcement:** Single wire braid for additional safety from mechanical damage and kinking. Also aids in heat transfer for prolonged service life.

**Cover:** Grey (NBR). Meets FDA requirements.

**Temperature:** Up to 275° F Constant; 350° F Intermittent.

**Branding:** NRP A040 EDIBLE OIL MADE IN USA (Blue Ink).

**Lengths:** Random lengths on reels.

**Premium Feature:** Abrasion, animal fat, oil and weather resistant. Meets FDA requirements, easy identification. Animal and vegetable oil resistant.

## 1063

### PILE DRIVER HOSE

NRP Part Number	Hose I.D. (in.)	Hose O.D. (in.)	Rated W.P. (psi)	Test Pres.	Min. Bend Radius	Wt. Per Foot (lbs.)
1063-24	1-1/2	2.34	200	1,000	15	2.66
1063-32	2	2.84	200	900	20	3.29
1063-40	2-1/2	3.34	200	600	25	4.03
1063-48	3	3.84	200	500	30	4.40
1063-64	4	4.84	200	400	40	5.48

**Application:** Pile driver service, especially designed to withstand severe pulsations, and lubricating oils, for working pressures up to 200 PSI and temperatures up to 388 F.

**Tube:** Black, heat and oil resistant, compounded to resist hardening, flaking or cracking under service conditions, Neoprene (CR).

**Reinforcement:** Three braids of heavy gauge, high tensile steel wire. The braid pattern is open to give greater flexibility and improved tube and cover adhesion. Textile overbraid provides improved cover adhesion.

**Cover:** Black, heat, oil and weather resistant, compounded to resist hardening or cracking under service conditions, Neoprene (CR). Cover is perforated to eliminate blistering.

**Temperature:** -40 to 388° F.

**Branding:** NRP 1063 PILE DRIVER STEAM. TIGHTEN CLAMPS BEFORE USING. MADE IN USA.

**Lengths:** Standard 50 ft.

**Premium Feature:** Heat, oil and weather resistant. Rugged-long life; braided for better coupling retention for impulse applications.

## 1080

### YELLOW MINE SPRAY HOSE

NRP Part Number	Hose I.D. (in.)	Hose O.D. (in.)	Rated W.P. (psi)	Min. Bend Radius	Wt. Per Foot (lbs.)
1080-08	1/2	0.91	1,000	7	0.38
1080-12	3/4	1.16	1,000	9	0.52
1080-16	1	1.41	1,000	12	0.63
1080-20	1-1/4	1.69	1,000	16	0.82
1080-24	1-1/2	2.03	1,000	20	1.15
1080-32	2	2.28	1,000	25	1.68

**Application:** Underground water spray service to control dust throughout the mine.

**Tube:** Black, synthetic Rubber.

**Reinforcement:** One braid High Tensile Steel Wire.

**Cover:** Special Fire Resistant blend of synthetic polymers to resist abrasion and aging and to retain bright yellow color.

**Temperature:** -40 to 180° F.

**Branding:** NRP 1080 MINE SPRAY 1000 PSI WP MSHA/IC-2G-31C/3 MADE IN USA.

**Lengths:** 1/2" packaged on 350' reels with a maximum of 3 random lengths with shortest length of 25'. All our sizes are standard 50 ft. lengths.

**Premium Feature:** Abrasion, age and ozone resistant. Easy identification, MSHA approved cover, economical.

# Special Application Hose



## 4304

### ARMOR WIRE OXYGEN LANCE HOSE (G-2004)

NRP Part Number	Hose I.D. (in.)	Hose O.D. (in.)	Rated W.P. (psi)	Vacuum Rating	Wt. Per Foot (lbs.)
4304-64	4	5.25	250	Full	11.8
4304-96	6	7.38	250	Full	17.3
4304-08	8	9.75	250	Full	24.1

**Application:** Supplying oxygen or cooling water to the oxygen charging lance. The smooth bore Neoprene inner liner is grease free, cleaned and capped. The dual wire armor provides protection from mechanical damage, flame and molten metal splash. A ply of woven fiberglass fabric under the armor wire provides additional insulation.

**Tube:** Black high grade neoprene (CR).

**Reinforcement:** Multiple plies of wire tire cord with spring steel helix wire.

**Cover:** Dual half round armor wire provides protection from external damage, heat, flame, and molten metal splash.

**Temperature:** -40 to 200° F.

**Fittings:** Supplied with built-in nipples and flanges, as required.

**Branding:** Serial numbers welded to flange.

**Lengths:** As specified, up to 64 feet.

**Premium Feature:** Heat, flame and abrasion resistant. Ideal hose for lance furnace in steel mills. Flexible and kink resistant.

## 2101

### VERSA-FLOW MARINE COOLANT HOSE HEAVY WALL SAE 20R1

NRP Part Number	Hose I.D. (in.)	Hose O.D. (in.)	Rated W.P. (psi)	Wt. Per Foot (lbs)
2101-12	3/4	1-1/4	125	.43
2101-14	7/8	1-3/8	125	.48
2101-16	1	1-1/2	125	.51
2101-18	1-1/8	1-5/8	125	.55
2101-20	1-1/4	1-3/4	125	.60
2101-22	1-3/8	1-7/8	112	.63
2101-24	1-1/2	2	113	.67
2101-26	1-5/8	2-1/8	100	.72
2101-28	1-3/4	2-1/4	100	.77
2101-30	1-7/8	2-3/8	94	.81
2101-32	2	2-1/2	88	.85
2101-34	2-1/8	2-5/8	87	.90
2101-36	2-1/4	2-3/4	88	.95
2101-38	2-3/8	2-7/8	75	.99
2101-40	2-1/2	3	75	1.03
2101-42	2-5/8	3-1/8	62	1.08
2101-44	2-3/4	3-1/4	63	1.13
2101-46	2-7/8	3-3/8	62	1.18
2101-48	3	3-1/2	63	1.24
2101-50	3-1/8	3-5/8	50	1.30
2101-52	3-1/4	3-3/4	50	1.36
2101-56	3-1/2	4	50	1.42
2101-60	3-3/4	4-1/4	45	1.48
2101-64	4	4-1/2	40	1.55

**Application:** Versa-Flow is a versatile hose designed for multiple application use in engine cooling systems.

**Tube:** Black, Nitrile (NBR) fuel and oil resistant.

**Reinforcement:** High tensile textile synthetic yarn.

**Cover:** Black, Neoprene (CR) oil, heat and ozone resistant.

**Temperature:** -40 to 212° F.

**Lengths:** Standard 50 foot.



# Special Application Hose

## 2114

### VERSA-FLEX MARINE HOSE SAE J1527 TYPE B2

NRP Part Number	Hose I.D. (in.)	Hose O.D. (in.)	Rated W.P. (psi)	Min. Bend Radius (in.)	Wt. Per Foot (lbs.)
2114-12	3/4	1-3/8	125	3	.40
2114-14	7/8	1-1/2	125	3	.45
2114-16	1	1-5/8	125	3	.50
2114-18	1-1/8	1-3/4	125	3	.55
2114-20	1-1/4	1-7/8	125	3	.59
2114-22	1-3/8	2	112	4	.64
2114-24	1-1/2	2-1/8	113	4	.71
2114-26	1-5/8	2-1/4	100	5	.79
2114-28	1-3/4	2-1/2	100	5	.86
2114-30	1-7/8	2-5/8	94	5	.97
2114-32	2	2-3/4	88	6	1.08
2114-34	2-1/8	2-7/8	87	6	1.19
2114-36	2-1/4	3	88	6	1.30
2114-38	2-3/8	3-1/8	75	7	1.41
2114-40	2-1/2	3-1/4	75	8	1.52
2114-42	2-5/8	3-3/8	62	10	1.63
2114-44	2-3/4	3-1/2	63	10	1.75
2114-46	2-7/8	3-5/8	62	11	1.87
2114-48	3	3-3/4	63	13	1.99
2114-50	3-1/8	3-7/8	50	13	2.11
2114-52	3-1/4	4	50	14	2.23
2114-56	3-1/2	4-1/4	50	14	2.36
2114-60	3-3/4	4-1/2	45	14	2.48
2114-64	4	4-3/4	40	15	2.60

**Application:** Versa-Flex is a wire reinforced, multi-purpose versatile hose that is resistant to vacuum and kinking used in marine coolant, fuel line, and exhaust applications.

**Tube:** Black, Nitrile (NBR) fuel and oil resistant.

**Reinforcement:** High tensile synthetic textile yarn with spring steel helix wire.

**Cover:** Black, Neoprene (CR) oil, heat and ozone resistant.

**Temperature:** -40 to 212° F.

**Lengths:** Standard -50 foot.

## A822

### FIRE FLEX HOSE

NRP Part Number	Hose I.D. (in.)	Hose O.D. (in.)	Rated W.P. (psi)	Min. Bend Radius (in.)	Wt. Per Foot (lbs.)
A822-06	3/8	.91	3,000	5.0	.43
A822-08	1/2	1.02	3,000	7.0	.56
A822-12	3/4	1.32	3,000	10.0	1.19
A822-16	1	1.61	3,000	14.0	1.60

**Application:** Flame resistant hose for use in water and oil applications where hose is exposed to fire or flame.

**Tube:** Black, oil resistant Nitrile (NBR).

**Reinforcement:** Multiple plies of high tensile steel wire.

**Cover:** Red, specially compounded, fiber glass impregnated, flame resistant rubber.



# Water Hose



## 2059

### WATER SUCTION HOSE

NRP Part Number	Hose I.D. (in.)	Hose O.D. (in.)	Rated W.P. (psi)	Textile Braids	Rated Suction	Min. Bend Radius (in.)	Wt. Per Foot (lbs.)
2059-20	1-1/4	1.75	150	2	Full	12	0.73
2059-24	1-1/2	2.00	150	2	Full	15	0.86
2059-32	2	2.50	150	2	Full	20	0.94
2059-40	2-1/2	3.15	150	2	Full	25	1.36
2059-48	3	3.65	150	2	Full	30	1.60
2059-56	3-1/2	4.15	150	2	Full	35	2.11
2059-64	4	4.65	150	2	Full	40	2.62

**Application:** Water at full suction or discharge where a hard wall construction is required.

**Tube:** Black, static conductive, Styrene-Butadiene, (SBR).

**Reinforcement:** Two braids of high tensile yarn pre-treated for adhesion to tube and cover. Dual helix wires are located between the braids to resist collapse under vacuum or bending.

**Cover:** Black, abrasion resistant, Styrene-Butadiene, (SBR).

**Temperature:** -40 to 180° F.

**Branding:** NRP 2059 WATER SUCTION & DISCHARGE 150 PSI WP MADE IN USA.

**Lengths:** Standard 50 ft., maximum 60 ft.

**Premium Feature:** High quality, hard wall design ideal for heavy duty applications. Excellent flow rate, no swelling.

## 2412

### HIGH PRESSURE JETTING HOSE (B-275)

NRP Part Number	Hose I.D. (in.)	Hose O.D. (in.)	Rated W.P. (psi)	Textile Braid	Wt. Per Foot (lbs.)
2412-24	1-1/2	1.94	500	1	0.90
2412-32	2	2.50	500	1	0.97
2412-40	2-1/2	3.00	300	1	1.30
2412-48	3	3.50	250	1	1.43
2412-64	4	4.50	200	1	1.90

**Application:** An extremely light weight hose, especially suited for flushing, wet-downs, and jetting service.

**Tube:** Black, synthetic resistant to water and mild chemicals.

**Reinforcement:** XHT textile yarn horizontally braided for high strength.

**Cover:** Extra tough black neoprene for excellent oil, weather and abrasion resistance.

**Temperature:** -40 to 180° F.

**Branding:** NRP 2412 HIGH PRESSURE WATER JETTING MADE IN USA.

**Lengths:** Standard 50 ft., maximum 60 ft.

**Premium Feature:** Lightweight, flexible, designed for high pressure water jetting applications. Water and mild chemical resistant.

## 4009

### LIGHTWEIGHT WATER SUCTION HOSE

NRP Part Number	Hose I.D. (in.)	Hose O.D. (in.)	Rated W.P. (psi)	Rated Suction	Min. Bend Radius (in.)	Wt. Per Foot (lbs.)
4009-96	6	6.93	75	Full	40	4.85
4009-08	8	8.98	60	Full	60	7.03
4009-10	10	10.98	50	Full	90	8.93
4009-12	12	12.98	40	Full	120	9.83

**Application:** Water at full suction or discharge or gravity flow where a lightweight, hard wall construction is required.

**Tube:** Black Styrene-Butadiene (SBR).

**Cover:** Black, abrasion resistant. Styrene-Butadiene (SBR). The cover is corrugated for extra flexibility.

**Reinforcement:** Multiple plies of tire cord, bias laid for strength and flexibility. A helix wire is located between the plies to resist collapse under vacuum or bending.

**Temperature:** -40 to 180° F.

**Branding:** Solid Blue Stripe. MADE IN USA.

**Lengths:** Maximum 60 ft. with plain, capped or enlarged ends.

**Premium Feature:** Durable, full suction construction grade. Flexible, excellent flow rate, no swelling.



# Water Hose

## 4103

### WATER AND OIL DISCHARGE HOSE 200 LB. PSI

NRP Part Number	Hose I.D. (in.)	Hose O.D. (in.)	Rated W.P. (psi)	No. Plies	Wt. Per Foot (lbs.)
4103-32	2	2.50	200	2	1.15
4103-48	3	3.65	200	4	2.02
4103-56	3-1/2	4.15	200	4	2.27
4103-64	4	4.65	200	4	2.59
4103-72	4-1/2	5.28	200	6	3.52
4103-96	6	6.78	200	6	4.52
4103-08	8	8.91	200	8	6.91
4103-10	10	11.04	200	10	9.73
4103-12	12	13.17	200	12	12.95

**Application:** High pressure water discharge applications, and marine wet exhaust and floating discharge lines, mud return lines for offshore oil drilling rigs. May also be used for air supply lines for dry bulk materials, or many other applications requiring a lightweight oil resistant hose for working pressures up to 200 PSI.

**Tube:** Black, oil, water and abrasion resistant Nitrile (NBR).

**Reinforcement:** Multiple plies of high tensile nylon tire cord, bias laid to combine strength and flexibility. Static wire included.

**Cover:** Black Neoprene (CR) specifically compounded to resist abrasion, oil and gasoline. Also has excellent resistance to weathering and aging.

**Temperature:** -40 to 200° F.

**Branding:** (Blue stripe) NRP 4103 OIL AND WATER DISCHARGE 200 PSI WP MADE IN USA.

**Lengths:** Maximum 60 ft. with ends as specified.

**Premium Feature:** Abrasion, oil and weather resistant. Heavy duty construction, excellent flow rate, no swelling.

## 4104

### WATER AND OIL DISCHARGE HOSE 150 LB. PSI

NRP Part Number	Hose I.D. (in.)	Hose O.D. (in.)	Rated W.P. (psi)	No. Plies	Wt. Per Foot (lbs.)
4104-32	2	2.50	150	2	1.15
4104-48	3	3.50	150	2	1.61
4104-56	3-1/2	4.00	150	2	1.94
4104-64	4	4.53	150	2	2.18
4104-72	4-1/2	5.20	150	4	3.03
4104-96	6	6.63	150	4	3.91
4104-08	8	8.76	150	6	6.08
4104-10	10	10.89	150	8	8.71
4104-12	12	13.02	150	10	11.77

**Application:** High pressure water discharge applications, and marine wet exhaust and floating discharge lines, mud return lines for offshore oil drilling rigs. May also be used for air supply lines for dry bulk materials, or many other applications requiring a lightweight oil resistant hose for working pressures up to 150 PSI.

**Tube:** Black, oil, water and abrasion resistant Nitrile (NBR).

**Reinforcement:** Multiple plies of high tensile nylon tire cord, bias laid to combine strength and flexibility. Static wire included.

**Cover:** Black Neoprene (CR) specifically compounded to resist abrasion, oil and gasoline. Also has excellent resistance to weathering and aging.

**Temperature:** -40 to 200° F.

**Branding:** (Blue Stripe) NRP 4104 OIL AND WATER DISCHARGE 150 PSI WP MADE IN USA.

**Lengths:** Maximum 60 ft. with ends as specified.

**Premium Feature:** Abrasion, oil and weather resistant. Medium duty construction, excellent flow rate, no swelling.

## 4117

### LIGHTWEIGHT WATER DISCHARGE HOSE

NRP Part Number	Hose I.D. (in.)	Hose O.D. (in.)	Rated W.P. (psi)	No. Plies	Min. Bend Radius (in.)	Wt. Per Foot (lbs.)
4117-48	3	3.38	150	2	60	.89
4117-64	4	4.38	150	2	60	1.13
4117-80	5	5.50	150	4	72	1.78
4117-96	6	6.50	150	4	96	2.18
4117-08	8	8.50	150	4	120	2.82

**Application:** Irrigation water service connectors for wheeled units and other related service where a lightweight high pressure discharge hose is required. Not suitable for suction service or water slurry with heavy concentrations of abrasive particles. Hose is fully collapsible and may be reeled when required.

**Tube and Cover:** Natural Rubber and SBR blend ideal for irrigation water service. Cover is of same material, providing resistance to weathering and mild abrasion.

**Reinforcement:** Multiple plies of high strength Nylon Tire Cord.

**Temperature:** -40 to 200° F.

**Branding:** NRP 4117 WATER DISCHARGE 150 PSI WP MADE IN USA.

**Lengths:** Available in standard lengths of 50 and 60 feet; optional lengths available up to 1,000 feet on special order.

**Premium Feature:** Lightweight, flexible and abrasion; age and ozone resistant, economical.

# Plaster/Concrete Hose



## 1023

### CONCRETE PUMPING HOSE

NRP Part Number	Hose I.D. (in.)	Hose O.D. (in.)	Rated W.P. (psi)	Min. Bend Radius (in.)	Wt. Per Foot (lbs.)
1023-24	1-1/2	2.06	800	15	1.12
1023-32	2	2.68	800	20	1.70
1023-40	2-1/2	3.19	800	25	2.39
1023-48	3	3.75	800	30	3.03
1023-64	4	4.81	500	40	4.30

**Application:** Pumping concrete with large particle aggregate.

**Tube:** High abrasion resistant black rubber.

**Reinforcement:** Extra high tensile steel wire braid.

**Cover:** Black, abrasion and weather resistant.

**Temperature:** -40 to 180° F.

**Fittings:** Full flow internally expanded; factory applied available.

**Branding:** NRP 1023 CONCRETE PUMP 800 PSI WP MADE IN USA.

**Lengths:** Standard 50 ft.

**Premium Feature:** High quality, abrasion resistant tube. Abrasion, age and weather resistant cover. Wire braid for heavy duty service.

## 1823

### HIGH PRESSURE CONCRETE PUMP HOSE

NRP Part Number	Hose I.D. (in.)	Hose O.D. (in.)	Rated W.P. (psi)	Burst Pressure (psi)	Min. Bend Radius (in.)	Wt. Per Foot (lbs.)
1823-32	2	2.78	1,200	4,800	24	1.92
1823-40	2-1/2	3.29	1,200	4,800	30	2.71
1823-48	3	3.85	1,200	4,800	36	3.43

**Application:** Pumping concrete with large particle aggregate at high pressures.

**Tube:** High abrasion resistant black rubber.

**Reinforcement:** Extra high tensile steel wire braid.

**Cover:** Black, abrasion and weather resistant.

**Temperature:** -40 to 180° F.

**Fittings:** Long style full flow internally expanded for high pressure applications.

## 2403

### EMPEX REFRACTORY GUNNING HOSE (B-139)

NRP Part Number	Hose I.D. (in.)	Hose O.D. (in.)	Rated W.P. (psi)	Wt. Per Foot (lbs.)
2403-12	3/4	1.50	150	0.59
2403-16	1	1.90	150	0.93
2403-20	1-1/4	2.19	150	1.17
2403-24	1-1/2	2.40	150	1.37
2403-32	2	2.90	150	1.66

**Application:** Handling of refractory type sand and dry cement used in lining high temperature furnaces and chimneys. Water is added at the nozzle.

**Tube:** Highest quality static conducting black natural rubber.

**Reinforcement:** High strength textile, horizontally braided at the correct angle to provide extreme flexibility with excellent resistance to kinking.

**Cover:** Special compounding of top quality synthetic rubber provides outstanding resistance to sun aging and abrasion.

**Temperature:** -40 to 180° F.

**Branding:** NRP 2403 REFRACTORY/GUNNING 150 PSI WP MADE IN USA.

**Lengths:** Standard 50 ft., maximum 60 ft.

**Premium Feature:** High quality full 1/4" abrasion resistant tube. Horizontally braided for added flexibility.





# Plaster/Concrete Hose

## 2406

### EMPEX PLASTER & GROUT HOSE (B-120)

NRP Part Number	Hose I.D. (in.)	Hose O.D. (in.)	Rated W.P. (psi)	Textile Braid	Wt. Per Foot (lbs.)
2406-20	1-1/4	1.79	500	1	0.60
2406-24	1-1/2	2.18	800	2	0.87
2406-32	2	2.74	800	2	1.28
2406-40	2-1/2	3.49	800	3	1.89

**Application:** High pressure placement of concrete, plaster or grout mixtures, gunning or shotcrete applications.

**Tube:** Top quality, age and abrasion resistant rubber.

**Reinforcement:** Horizontally braided XHT textile, properly balanced for light weight and outstanding kink resistance.

**Cover:** High grade black rubber, compounded to resist abrasion and weathering.

**Temperature:** -40 to 180° F.

**Fittings:** Full flow internally expanded; factory applied available.

**Branding:** NRP 2406 PLASTER & GROUT 800 PSI WP MADE IN USA.

**Lengths:** Standard 50 ft., maximum 60 ft.

**Premium Feature:** High quality, abrasion resistant tube. Cover is abrasion, age and weather resistant. Horizontally braided to improve kink resistance.

## 2408

### EMPEX SAND CEMENT GUNITE HOSE (B-131)

NRP Part Number	Hose I.D. (in.)	Hose O.D. (in.)	Rated W.P. (psi)	Textile Braid	Wt. Per Foot (lbs.)
2408-16	1	2.00	150	2	1.04
2408-20	1-1/4	2.25	150	2	1.28
2408-24	1-1/2	2.50	150	2	1.44
2408-32	2	3.00	150	2	1.81

**Application:** For conveying dry cement and sand, under pressure, to be mixed with water at the gun nozzle.

**Tube:** 1/4 inch thick tan pure gum for maximum resistance to abrasion.

**Reinforcement:** High strength textile yarn, horizontally braided for extreme flexibility.

**Cover:** Top quality tan cover compounded for resistance to aging, weather and abrasion.

**Temperature:** -40 to 180° F.

**Branding:** NRP 2408 SAND CEMENT GUNITE 150 PSI WP MADE IN USA.

**Lengths:** Standard 50 ft., maximum 60 ft.

**Premium Feature:** High quality full 1/4" abrasion resistant tube. Horizontally braided for added flexibility.

## 2807

### EMPEX CEMENT PLACEMENT HOSE (B-126)

NRP Part Number	Hose I.D. (in.)	Hose O.D. (in.)	Rated W.P. (psi)	Wt. Per Foot (lbs.)
2807-48	3	3.92	500	2.25
2807-64	4	5.13	500	3.50

**Application:** High pressure placement of concrete mixtures. To handle aggregate up to 1-1/2".

**Tube:** Top quality, age and abrasion resistant rubber.

**Reinforcement:** Multiple plies of lightweight high strength tire cord.

**Cover:** High grade black rubber, compounded to resist abrasion and weathering.

**Temperature:** -40 to 180° F.

**Fittings:** Full flow internally expanded; factory applied is available.

**Branding:** NRP 2807 CEMENT PLACEMENT 500 PSI WP MADE IN USA.

**Lengths:** Standard 50 ft., maximum 60 ft.

**Premium Feature:** Cover is abrasion, age and weather resistant. High quality, abrasion resistant tube. Textile reinforcement for superior service life.

# Petroleum Transfer Hose



## 1856

### HOT ASPHALT APPLICATOR HOSE

NRP Part Number	Hose I.D. (in.)	Hose O.D. (in.)	Rated W.P. (psi)	Wire Braids	Wt. Per Foot (lbs.)
1856-16	1	1.53	250	2	0.89

**Application:** Applying hot asphalt at nozzle with pressures up to 250 PSI at 350° F constant and up to 400° F intermittent temperatures.

**Tube:** Black, blend of high temperature polymers especially compounded to resist swelling and embrittlement in hot asphalt service.

**Reinforcement:** Two braids of high tensile steel wire.

**Cover:** Black, heat, oil, abrasion and weather resistant Neoprene (CR).

**Temperature:** -40 to 350° F.

**Branding:** NRP 1856 HOT ASPHALT HOSE 250 PSI WP MADE IN USA.

**Lengths:** Maximum 50 ft.

**Premium Feature:** Abrasion, oil and weather resistant. Heat and oil resistant. Handles intermittent temperatures of hot tar up to 400 F. Lightweight for easy handling at application.

## 2022

### LOW TEMPERATURE TANK TRUCK TRANSFER HOSE

NRP Part Number	Hose I.D. (in.)	Hose O.D. (in.)	Rated W.P. (psi)	No. Plies	Min. Bend Radius	Rated Suction	Wt. Per Foot (lbs.)
2022-16	1	1.50	150	2	10	Full	0.59
2022-20	1-1/4	1.75	150	2	12	Full	0.73
2022-24	1-1/2	2.06	150	2	15	Full	1.05
2022-32	2	2.50	150	2	20	Full	1.27
2022-40	2-1/2	3.12	150	2	25	Full	1.87
2022-48	3	3.62	150	2	30	Full	2.45
2022-64	4	4.62	150	2	40	Full	2.90

**Application:** Low temperature service for petroleum products such as aromatic gasolines, diesel fuel, and fuel oils at 150 PSI rated discharge pressure or full suction where a hard wall construction is required. Hose remains flexible at low temperatures where ordinary tank truck hoses become stiff and crack. Will not crack as low as -65° F.

**Tube:** Black, oil and fuel resistant Nitrile (NBR).

**Reinforcement:** Two braids of high tensile yarn pre-treated for adhesion to tube and cover. Dual helix wires are located between the braids to resist collapse under vacuum or bending.

**Cover:** Black, oil, weather and abrasion resistant, Neoprene (CR), especially compounded for low temperature service.

**Temperature:** -65 to 200° F.

**Branding:** NRP 2022 LOW TEMPERATURE TANK TRUCK 150 PSI WP MADE IN USA.

**Lengths:** Standard 50 ft., maximum 60 ft.

**Premium Feature:** Good low temperature properties. Abrasion, oil and weather resistant. Long life in Arctic conditions.



# Petroleum Transfer Hose

## 2054

### TANK TRUCK TRANSFER HOSE

NRP Part Number	Hose I.D. (in.)	Hose O.D. (in.)	Rated W.P. (psi)	Textile Braids	Min. Bend Radius (in.)	Rated Suction	Wt. Per Foot (lbs.)
2054-24	1-1/2	2.06	150	2	15	Full	0.86
2054-32	2	2.50	150	2	20	Full	1.02
2054-40	2-1/2	3.12	150	2	25	Full	1.55
2054-48	3	3.62	150	2	30	Full	1.66
2054-64	4	4.62	150	2	40	Full	2.54

**Application:** Petroleum products such as aromatic gasolines, diesel fuel, and fuel oils at 150 PSI rated discharge pressure or full suction where a hard wall construction is required.

**Tube:** Black, oil and fuel resistant Nitrile (NBR).

**Reinforcement:** Two braids of high tensile textile yarn pre-treated for adhesion to tube and cover. Dual helix wires are located between the braids to resist collapse under vacuum or bending.

**Cover:** Black, oil, weather and abrasion resistant Neoprene (CR), embossed layline.

**Temperature:** -40 to 200° F.

**Branding:** NRP 2054 TANK TRUCK TRANSFER 150 PSI WP MADE IN USA.

**Lengths:** Standard 50 ft., maximum 60 ft.

**Premium Feature:** Oil, weather and abrasion resistant. Handles both pressure and suction applications. Oil resistant; economical; less waste.

## 2072

### HOT ASPHALT HOSE

NRP Part Number	Hose I.D. (in.)	Hose O.D. (in.)	Rated W.P. (psi)	Rated Suction	Min. Bend Radius (in.)	Wt. Per Foot (lbs.)
2072-32	2	2.78	150	Full	20	1.72
2072-48	3	3.78	150	Full	30	2.43
2072-64	4	4.81	150	Full	40	3.30

**Application:** Hot asphalt service at full vacuum, or up to 150 PSI discharge at intermittent temperatures up to 400° F.

**Tube:** Black, blend of high temperature polymers especially compounded to resist swelling and embrittlement in hot asphalt service.

**Reinforcement:** Two braids of lightweight high strength synthetic fabric to resist heat and surge pressures. Helix wire is located between the braids to resist collapse under vacuum or bending.

**Cover:** Black, heat, oil abrasion and weather resistant neoprene (CR).

**Temperature:** -40 to 350° F.

**Branding:** NRP 2072 HOT ASPHALT 150 PSI WP MADE IN USA.

**Lengths:** Standard 50 ft., maximum 60 ft.

**Premium Feature:** Abrasion, oil and weather resistant. Handles intermittent temperatures of hot tar up to 400 F. Heat and oil resistant; easy identification.

## 4013

### VAPOR RECOVERY HOSE

NRP Part Number	Hose I.D. (in.)	Hose O.D. (in.)	Rated W.P. (psi)	Rated Suction	Min. Bend Radius (in.)	Wt. Per Foot (lbs.)
4013-48	3	3.43	20	15	3	1.45

**Application:** Use in conjunction with gasoline tank truck transfer hose in the vapor recovery system as the lightweight, flexible, easily handled, vapor recovery hose.

**Tube:** Black, oil and gasoline (both liquid and vapor) resistant Nitrile (NBR).

**Reinforcement:** Two plies of treated nylon fabric gives hose carcass strength combined with flexibility. A helix wire is located between the plies to resist collapse under vacuum or bending.

**Cover:** Black, oil, weather, and abrasion resistant Neoprene (CR).

**Temperature:** -40 to 200° F.

**Branding:** NRP 4013 VAPOR RECOVERY MADE IN USA.

**Lengths:** Standard 50 ft., maximum 60 ft.

**Premium Feature:** Abrasion, oil and weather resistant. Corrugated cover for extra flexibility. Lightweight, easy to use.

# Petroleum Transfer Hose



## 4113/4114

### PETROLEUM DISCHARGE FLOATER HOSE

NRP Part Number	Hose I.D. (in.)	Hose O.D. (in.)	Min. Bend Radius (in.)	Rated W.P. (psi)	Wt. Per Foot (lbs.)
4113-48	3	3.66	30	150	1.95
4113-64	4	4.72	40	150	2.53
4113-96	6	6.82	60	150	5.07
4114-48	3	3.81	30	250	2.20
4114-64	4	4.94	40	250	3.53

**Application:** Discharging petroleum products on marine terminals where dock facilities are not available. Lightweight and extremely flexible for storage on metal reel in continuous lengths up to 1000 feet without intermediate couplings.

**Tube:** High grade neoprene suitable for petroleum products.

**Reinforcement:** Multiple plies of lightweight high strength Nylon tire cord.

**Cover:** Black neoprene, resistant to abrasion, oil, weather and water penetration.

**Temperature:** -40 to 200° F.

**Fittings:** Swaged-on couplings with flanges or connectors as required.

**Branding:** NRP (PART NUMBER) PETROLEUM DISCHARGE (RATED WP) MADE IN USA.

**Lengths:** Standard 500 ft., maximum 1000 ft.

**Premium Feature:** Abrasion, oil and weather resistant. Available in lengths of 1,000 feet. Flexible and collapsible for storage on metal reels; lightweight.

## 4204

### TANK TRUCK DROP HOSE

NRP Part Number	Hose I.D. (in.)	Hose O.D. (in.)	Rated W.P. (psi)	No. Plies	Min. Bend Radius	Rated Suction	Wt. Per Foot (lbs.)
4204-24	1-1/2	1.94	75	2	15.0	Full	0.84
4204-32	2	2.44	75	2	20.0	Full	1.11
4204-40	2-1/2	2.94	75	2	25.0	Full	1.34
4204-48	3	3.44	60	2	30.0	Full	1.83
4204-56	3-1/2	3.94	60	2	35.0	Full	2.25
4204-64	4	4.44	60	2	40.0	Full	2.42
4204-96	6	6.81	90	3	40.0	Full	5.21

**Application:** Petroleum products such as aromatic gasolines, diesel fuel, and fuel oils at rated discharge pressures shown; gravity flow or full suction where a lightweight hard wall construction is required.

**Tube:** Black, oil and fuel resistant, Nitrile (NBR).

**Reinforcement:** Two plies of synthetic, square woven, bias laid fabric for strength and flexibility. Dual helix wires are located between the fabric plies to resist collapse under vacuum or bending.

**Cover:** Black, oil, weather and abrasion resistant, synthetic neoprene rubber (CR).

**Temperature:** -40 to 200° F.

**Branding:** NRP 4204 TANK TRUCK DROP MADE IN USA.

**Lengths:** Standard 60 ft.

**Premium Feature:** Abrasion, oil and weather resistant. Corrugated for extra flexibility. Full suction rated; easy identification.



# Petroleum Transfer Hose

## 4295

### ULTRA-LITE PETROLEUM DROP HOSE

NRP Part Number	Hose I.D. (in.)	Hose O.D. (in.)	Rated W.P. (psi)	Rated Suction	Min. Bend Radius (in.)	Wt. Per Foot (lbs.)
4295-32	2	2.33	80	Full	10	0.63
4295-48	3	3.38	80	Full	15	0.99
4295-64	4	4.45	80	Full	20	0.99

**Application:** Transfer of liquid petroleum such as aromatic gasolines, diesel fuels, and fuel oils at gravity or rated discharge pressures or full suction. This hose is extremely flexible and virtually kink proof.

**Tube:** Black oil and fuel resistant Nitrile (NBR).

**Reinforcement:** Two plies of high strength nylon tire cord for extra service life and flexibility with dual helix wires between plies to resist collapse under vacuum or bending.

**Cover:** Black, corrugated, oil, weather and abrasion resistant NBR/PVC blend.

**Temperature:** -40 to 200° F.

**Branding:** NRP 4295 ULTRA-LITE PETROLEUM DROP 80 PSI WP MADE IN USA.

**Lengths:** Standard 60 ft.

**Premium Feature:** Abrasion, oil and weather resistant. Lightweight and flexible. Easy identification and handle.

## P/N 5038

### ROUGH NECK HOSE

Hose I.D. (in.)	Rated W.P. (psi)	Test Pressure (psi.)	Min. Bend Radius (in.)	Fitting Size (in.)	Wt. Per Foot (lbs.)
2	3,000	4,500	28	2	2.8

**Application:** NRP-Jones rough neck hose was specially designed for applications requiring high pressure fluids such as; portable drilling rigs, work-over rigs, slim hole and seismograph rigs. Meets API 7K requirements with a minimum 2-1/2:1 safety factor.

**Tube:** Black, neoprene (CR) which is suitable for oil based fluids. Maximum operating temperature 200° F.

**Reinforcement:** Multiple braids of high tensile steel wire.

**Cover:** Black, oil, weather and abrasion resistant neoprene (CR).

**Temperature:** -40° to 200° F.

**Fittings:** Jones Hydraulic crimp type male with extra wide wrench flat.



# Suction & Discharge Hose



## 4341 LP GAS HOSE

NRP Part Number	Hose I.D. (in.)	Hose O.D. (in.)	Rated W.P. (psi)	Design Burst	Min. Bend Radius (in.)	Wt. Per Foot (lbs.)
4341-32	2	3.45	350	1750	16	4.51
4341-48	3	4.52	350	1750	20	6.25
4341-64	4	5.52	350	1750	26	7.98
4341-96	6	7.62	350	1750	32	12.41
4341-08	8	10.17	350	1750	38	25.14
4341-10	10	12.22	350	1750	46	31.42

**Application:** Used for loading and unloading LP Gas products. Heavy duty construction provides excellent working pressures and increased safety factor. Meets RMA standards.

**Tube:** Black, oil resistant nitrile.

**Reinforcement:** Multiple plies of high tensile textile or wire tire cord with dual spring steel helix wires.

**Cover:** Black, neoprene, pin pricked for permeation. Abrasion, oil and ozone resistant.

**Temperature:** -40 to 180° F.

**Fittings:** Low temperature, built-in nipples or swaged-on couplings with ASA 300 lb. flanges as required.

**Branding:** NRP 4341 LP GAS 350 PSI WP MADE IN USA.

**Lengths:** As specified, maximum 60 ft.

**Premium Feature:** Abrasion, oil and weather resistant; good low temperature properties; 5:1 safety factor.

## 4326 PETROLEUM CARGO 300 HOSE (G-2001)

NRP Part Number	Hose I.D. (in.)	Hose O.D. (in.)	Rated W.P. (psi)	Rated Suction	Min. Bend Radius (in.)	Wt. Per Foot (lbs.)
4326-64	4	5.50	300	Full	12	7.75
4326-96	6	7.67	300	Full	18	12.25
4326-08	8	9.92	300	Full	30	19.15
4326-10	10	12.00	300	Full	40	23.30

**Application:** Dockside loading and unloading of gasolines, oils and other petroleum base products from tankers where heavy duty large diameter hose is required. Meets U.S. Coast Guard requirements.

**Tube:** Nitrile is standard, suitable for crude oil service and received products with aromatic content up to 50%. Also available with Viton\* liner (P/N 4311), suitable for refined products with aromatic content up to 100%.

**Reinforcement:** Multiple plies of wire tire cord with dual spring steel helix wires.

**Cover:** Black neoprene, corrugated for maximum flexibility.

**Temperature:** -40 to 200° F.

**Fittings:** Built-in nipples or swaged-on couplings with flanges as required.

**Branding:** Orange stripe and per U.S. Coast Guard Requirements MADE IN USA.

**Lengths:** Maximum 60 ft.

**Premium Feature:** Abrasion, oil and ozone resistant. O.C.I.M.F. conformance. Meets U.S. Coast Guard requirements. Corrugated for maximum flexibility. Available with Viton\* or X-linked liner.

## 2054 TANK TRUCK TRANSFER HOSE

NRP Part Number	Hose I.D. (in.)	Hose O.D. (in.)	Rated W.P. (psi)	Textile Braids	Min. Bend Radius (in.)	Rated Suction	Wt. Per Foot (lbs.)
2054-24	1-1/2	2.06	150	2	15	Full	0.86
2054-32	2	2.50	150	2	20	Full	1.02
2054-40	2-1/2	3.12	150	2	25	Full	1.55
2054-48	3	3.62	150	2	30	Full	1.66
2054-64	4	4.62	150	2	40	Full	2.54

**Application:** Petroleum products such as aromatic gasolines, diesel fuel, and fuel oils at 150 PSI rated discharge pressure or full suction where a hard wall construction is required.

**Tube:** Black, oil and fuel resistant Nitrile (NBR).

**Reinforcement:** Two braids of high tensile textile yarn pre-treated for adhesion to tube and cover. Dual helix wires are located between the braids to resist collapse under vacuum or bending.

**Cover:** Black, oil, weather and abrasion resistant Neoprene (CR), embossed layline.

**Temperature:** -40 to 200° F.

**Branding:** NRP 2054 TANK TRUCK TRANSFER 150 PSI WP MADE IN USA.

**Lengths:** Standard 50 ft., maximum 60 ft.

**Premium Feature:** Oil, weather and abrasion resistant. Handles both pressure and suction applications. Oil resistant; economical; less waste.



# Suction & Discharge Hose

## 4605

### DOCK-LITE 200

### OIL SUCTION AND DISCHARGE HOSE

NRP Part Number	Hose I.D. (in.)	Hose O.D. (in.)	Rated W.P. (psi)	Rated Suction	Min. Bend Radius	Wt. Per Foot (lbs.)
4605-64	4	5.10	200	Full	24	5.10
4605-96	6	7.25	200	Full	36	9.20
4605-08	8	9.30	200	Full	48	13.30
4605-10	10	11.45	200	Full	60	16.90
4605-12	12	13.60	200	Full	72	22.40

**Application:** Dockside loading and unloading of gasoline, oils and other petroleum based products from tankers where heavy duty large diameter hose is required. Meets U.S. Coast Guard requirements.

\* DuPont Trademark

**Tube:** Black, nitrile (NBR) suitable for crude oil service and received products with aromatic content up to 50%. Also available with Viton\* liner, suitable for refined products with aromatic content up to 100%.

**Reinforcement:** Multiple plies of high tensile tire cord with spring steel helix wire.

**Cover:** Black, neoprene, smooth surface, compounded to resist abrasion, oil, and weather.

**Temperature:** -40 to 200° F.

**Fittings:** Built-in nipples or swaged-on couplings with flanges as required.

**Branding:** NRP 4605 DOCK-LITE 200 PSI WP MADE IN USA.

**Lengths:** As specified, up to maximum 60 ft.

**Premium Feature:** Abrasion, oil and weather resistant. Meets U.S. Coast Guard requirements. Available with Viton\* liner. Full suction rated; lightweight for easy handling.

## 4633

### HOT ASPHALT SUCTION AND DISCHARGE HOSE

NRP Part Number	Hose I.D. (in.)	Hose O.D. (in.)	Rated W.P. (psi)	Rated Suction	Min. Bend Radius	Wt. Per Foot (lbs.)
4633-64	4	5.22	200	Full	24	8.04
4633-96	6	7.35	200	Full	36	13.40
4633-08	8	9.96	200	Full	48	19.75

**Application:** Dockside loading and unloading of hot asphalt and other petroleum base products from tankers where heavy duty large diameter hose is required.

**Tube:** Black, nitrile (NBR) suitable for transfer of hot tar or asphalt in temperatures of 350° F.

**Reinforcement:** Multiple plies of high tensile tire cord with spring steel helix wire.

**Cover:** Black neoprene, smooth surface, compounded to resist abrasion, oil and weather.

**Temperature:** -40 to 350° F.

**Fittings:** Built-in nipples or swaged-on couplings with flanges as required.

**Branding:** NRP 4633 HOT ASPHALT SUCTION & DISCHARGE 200 PSI WP 350° F MAX. MADE IN USA.

**Lengths:** As specified, up to maximum 60 ft.

**Premium Feature:** Heat and oil resistant tube, abrasion and oil resistant cover. Manufactured to U.S.C.G. requirements. Kink resistant construction.

# Oil Field Hose



## 5001/5002

### POWERFLEX GOLD STRIPE 8,000 - Grade C ROTARY HOSE

Rotary Hose Part No.	Hose I.D. (in.)	Hose O.D. (in.)	Rated W.P. (psi)	Test Pressure (psi)	Min. Bend Radius	Cplg. Wt. (2)	API Thread (in.)	Wt. Per Foot (lbs.)
5001-40	2-1/2	4.45	4,000	8,000	48	74	3	12.9
5001-48	3	4.95	4,000	8,000	48	94	4	14.9
5001-56	3-1/2	5.45	4,000	8,000	54	100	4	16.6
5001-64	4	6.15	4,000	8,000	60	121	5	19.5
5001-80	5	8.90	4,000	8,000	72	175	6	43.6

**Application:** High pressure rotary service in drilling and exploration work.

**Lengths:** 30', 35', 40', 45', 50', 55', 60', 65', 70', 75'. Also available in any length from 30 ft to 90 ft.

### VIBRATOR HOSE

Rotary Hose Part No.	Hose I.D. (in.)	Hose O.D. (in.)	Rated W.P. (psi)	Test Pressure (psi)	Min. Bend Radius	Cplg. Wt. (2)	API Thread (in.)	Wt. Per Foot (lbs.)
5002-40	2-1/2	4.45	4,000	8,000	48	74	3	12.9
5002-48	3	4.95	4,000	8,000	48	94	4	14.9
5002-56	3-1/2	5.45	4,000	8,000	54	100	4	16.6
5002-64	4	6.15	4,000	8,000	60	121	5	19.5
5002-80	5	8.90	4,000	8,000	72	175	6	43.6

**Application:** High pressure vibration dampener between mud pump and stand pipe.

**Lengths:** 6', 8', 10', 12', 15', 20', 25', 30'. Also available in any length from 5 ft to 30 ft.

## 5003/5004

### POWERFLEX GOLD STRIPE 10,000 - Grade D ROTARY HOSE

Rotary Hose Part No.	Hose I.D. (in.)	Hose O.D. (in.)	Rated W.P. (psi)	Test Pressure (psi)	Min. Bend Radius	Cplg. Wt. (2)	API Thread (in.)	Wt. Per Foot (lbs.)
5003-40	2-1/2	4.60	5,000	10,000	48	76	3	13.6
5003-48	3	5.10	5,000	10,000	48	97	4	15.5
5003-56	3-1/2	5.75	5,000	10,000	54	110	4	18.6
5003-64	4	6.25	5,000	10,000	60	121	5	19.8
5003-80	5	8.90	5,000	10,000	72	175	6	43.6

**Application:** High pressure rotary service in drilling and exploration work.

**Lengths:** 30', 35', 40', 45', 50', 55', 60', 65', 70', 75'. Also available in any length from 30 ft to 90 ft.

### VIBRATOR HOSE

Vibrator Hose Part No.	Hose I.D. (in.)	Hose O.D. (in.)	Rated W.P. (psi)	Test Pressure (psi)	Min. Bend Radius	Cplg. Wt. (2)	API Thread (in.)	Wt. Per Foot (lbs.)
5004-40	2-1/2	4.60	5,000	10,000	48	76	3	13.6
5004-48	3	5.10	5,000	10,000	48	97	4	15.5
5004-56	3-1/2	5.75	5,000	10,000	54	110	4	18.6
5004-64	4	6.25	5,000	10,000	60	121	5	19.8
5004-80	5	8.90	5,000	10,000	72	175	6	43.6

**Application:** High pressure vibration dampener between mud pump and standard pipe.

**Lengths:** 6', 8', 10', 12', 15', 20', 25', 30'. Also available in any length from 5 ft to 30 ft.

**Tube:** Black, oil and abrasion resistant Nitrile (NBR). Suitable for oil or water based muds.

**Reinforcement:** Multiple plies of bias laid nylon cord for extra strength and flexibility. Two spirally wound, high tensile, multiple strand cables, mechanically secured to built-in nipples provide unsurpassed ruggedness and reliability under severe service conditions.

**Cover:** Black, oil, weather and abrasion resistant Neoprene (CR).

**Temperature:** -40 to 200° F.

**Fitting:** Full-flow leakproof couplings that are integrally secured to hose reinforcement. Supplied with male API threaded ends. Can be supplied with flanges, unions, swivels and other types of couplings on request.

**Branding:** NRP POWERFLEX GOLD STRIPE VIBRATOR 4,000 PSI WP 8,000 PSI TEST GRADE C MADE IN USA.

**Premium Feature:** Abrasion, oil and weather resistant tube and cover. Spirally wound steel cables for high strength and flexibility. Mechanically attached built-in API fittings.

**Tube:** Black, oil and abrasion resistant Nitrile (NBR). Suitable for oil or water based muds.

**Reinforcement:** Multiple plies of bias laid nylon cord for extra strength and flexibility. Two spirally wound, high tensile, multiple strand cables, mechanically secured to built-in nipples provide unsurpassed ruggedness and reliability under severe service conditions.

**Cover:** Black, oil, weather and abrasion resistant Neoprene (CR).

**Temperature:** -40 to 200° F.

**Fitting:** Full-flow leakproof couplings that are integrally secured to hose reinforcement. Supplied with male API threaded ends. Can be supplied with flanges, unions, swivels and other types of couplings on request.

**Branding:** NRP POWERFLEX GOLD STRIPE ROTARY 5,000 PSI WP 10,000 PSI TEST GRADE D MADE IN USA.

**Premium Feature:** For over 40 years the preferred oilfield drilling hose. Abrasion, oil and weather resistant tube and cover. Spirally wound steel cables for high strength and flexibility. Mechanically attached built-in API fittings.



# Oil Field Hose

## 5015/5016

### POWERFLEX GOLD STRIPE 15,000 - Grade E ROTARY HOSE

Rotary Part Number	Hose I.D. (in.)	Hose O.D. (in.)	Rated W.P. (psi)	Test Press. (psi)	Min. Bend Radius	Cplg. Wt. (2)	API Thread (in.)	Wt. Per Foot (lbs.)
5015-40	2-1/2	4.85	7,500	15,000	48	117	3	14.5
5015-48	3	5.35	7,500	15,000	48	149	4	16.7
5015-56	3-1/2	6.30	7,500	15,000	60	184	4	29.1
5015-64	4	6.80	7,500	15,000	72	215	5	31.8

**Application:** Extra high pressure rotary service in drilling and exploration work.

**Lengths:** 30', 35', 40', 45', 50', 55', 60', 65', 70', 75'. Also available in any length from 5 ft to 100 ft.

## VIBRATOR HOSE

Vibrator Part Number	Hose I.D. (in.)	Hose O.D. (in.)	Rated W.P. (psi)	Test Press. (psi)	Min. Bend Radius	Cplg. Wt. (2)	API Thread (in.)	Wt. Per Foot (lbs.)
5016-40	2-1/2	4.85	7,500	15,000	48	117	3	14.5
5016-48	3	5.35	7,500	15,000	48	149	4	16.7
5016-56	3-1/2	6.30	7,500	15,000	60	184	4	29.1
5016-64	4	6.80	7,500	15,000	72	215	5	31.8

**Application:** Extra high pressure vibration dampener between mud pump and stand pipe.

**Lengths:** 6', 8', 10', 12', 15', 20', 25', 30'. Also available in any length from 5 ft to 65 ft.

## 5501/5502

### POWERFLEX SILVER STRIPE 8,000 - Grade C ROTARY HOSE

Rotary Part Number	Hose I.D. (in.)	Hose O.D. (in.)	Rated W.P. (psi)	Test Press. (psi)	Min. Bend Radius	Cplg. Wt. (2)	API Thread (in.)	Wt. Per Foot (lbs.)
5501-40	2-1/2	4.32	4,000	8,000	48	54	3	12.9
5501-48	3	4.82	4,000	8,000	48	74	4	14.9
5501-56	3-1/2	5.32	4,000	8,000	54	94	4	16.6

**Application:** Oil field drilling and exploration at API Grade "C" working pressures; where a heavy duty long service life hose is required.

**Lengths:** 30 ft. to 90 ft.

## VIBRATOR HOSE

Vibrator Part Number	Hose I.D. (in.)	Hose O.D. (in.)	Rated W.P. (psi)	Test Press. (psi)	Min. Bend Radius	Cplg. Wt. (2)	API Thread (in.)	Wt. Per Foot (lbs.)
5502-40	2-1/2	4.32	4,000	8,000	48	54	3	12.9
5502-48	3	4.82	4,000	8,000	48	74	4	14.9
5502-56	3-1/2	5.32	4,000	8,000	54	94	4	16.6

**Application:** Oil field drilling and exploration at API Grade "C" working pressures; where a heavy duty long service life hose is required.

**Lengths:** 3 ft. to 30 ft.

**Tube:** Black, oil resistant, abrasion resistant Nitrile (NBR). Suitable for oil or water based muds. Nylon breaker fabric over tube improves adhesion to body piles.

**Reinforcement:** Multiple plies of bias laid tire cord for extra support and flexibility. Four spirally wound, high tensile bead wires and four spirally wound, high tensile multiple strand cables mechanically secured and bonded to built-in nipples provide unsurpassed ruggedness and reliability under extreme service conditions.

**Cover:** Black, oil, weather and abrasion resistant Neoprene (CR), breaker fabric reinforced.

**Temperature:** -40 to 200° F.

**Fittings:** Full-flow, leakproof couplings that are integrally secured to hose reinforcement. Supplied with male API threaded ends. Can be supplied with flanges, unions, swivels and other types of couplings by special order.

**Tube:** Black, oil and abrasion resistant Nitrile (NBR). Suitable for oil or water based muds.

**Reinforcement:** Multiple plies of bias laid nylon cord for extra strength and flexibility. Two spirally wound, high tensile, multiple strand cables.

**Cover:** Black, oil, weather and abrasion resistant Neoprene (CR).

**Temperature:** -40 to 200° F.

**Fittings:** Swaged on with API threaded ends as standard, but many optional configurations are available upon request.

**Branding:** NRP POWERFLEX SILVER STRIPE ROTARY 3 INCH I.D. GRADE C 8,000 PSI TEST 4,000 MAX. WP MADE IN USA.

**Premium Feature:** Abrasion, oil and weather resistant. Swaged on fittings for longer service life. Continuous brand for easy identification.

# Oil Field Hose



## 5603/5604

### POWERFLEX SILVER STRIPE 10,000 - Grade D ROTARY HOSE

Rotary Part Number	Hose I.D. (in.)	Hose O.D. (in.)	Rated W.P. (psi)	Test Press. (psi)	Min. Bend Radius	Cplg. Wt. (2)	API Thread (in.)	Wt. Per Foot (lbs.)
5603-40	2-1/2	4.45	5,000	10,000	48	54	3	13.6
5603-48	3	4.95	5,000	10,000	48	74	4	15.5
5603-56	3-1/2	5.63	5,000	10,000	54	94	4	18.6

**Application:** Oil field drilling and exploration at API Grade "D" working pressures; where a heavy duty long service life hose is required.

**Lengths:** 30 ft. to 90 ft.

## VIBRATOR HOSE

Vibrator Part Number	Hose I.D. (in.)	Hose O.D. (in.)	Rated W.P. (psi)	Test Press. (psi)	Min. Bend Radius	Cplg. Wt. (2)	API Thread (in.)	Wt. Per Foot (lbs.)
5604-40	2-1/2	4.45	5,000	10,000	48	54	3	13.6
5604-48	3	4.95	5,000	10,000	48	74	4	15.5
5604-56	3-1/2	5.63	5,000	10,000	54	94	4	18.6

**Application:** Oil field drilling and exploration at API Grade "D" working pressures; where a heavy duty long service life hose is required.

**Lengths:** 3 ft. to 30 ft.

## 5013/5014

### TRIOFLEX HOSE SLIM HOLE ROTARY HOSE

NRP Part Number	Hose I.D. (in.)	Hose O.D. (in.)	Wire Braids	Working Pressure (psi)	Design Burst Pressure	Min. Bend Radius	Cplg. Wt. (2)	NPT Thread (in.)	Wt. Per Foot (lbs.)
5013-32	2	3.06	3	2,500	7,000	18.0	35	2	3.9
5014-40	2-1/2	3.65	4	2,500	6,000	24.0	44	2-1/2	5.3
5014-48	3	4.13	4	2,000	5,000	30.0	51	3	5.8

**Application:** NRP TrioFlex Hose was specially designed for applications on portable drilling rigs, work-over rigs, slim hole and seismograph rigs. It is an extremely flexible and durable hose.

**Tube:** Black, oil and abrasion resistant Nitrile (NBR). Suitable for oil or water based muds.

**Reinforcement:** Multiple plies of bias laid nylon cord for extra strength and flexibility. Two spirally wound, high tensile, multiple strand cables.

**Cover:** Black, oil, weather and abrasion resistant Neoprene (CR).

**Temperature:** -40 to 200° F.

**Fittings:** Swaged on with API threaded ends as standard, but many optional configurations are available upon request.

**Branding:** NRP POWERFLEX SILVER STRIPE ROTARY 3 INCH I.D. GRADE D 10,000 PSI TEST 5,000 MAX. WP MADE IN USA.

**Premium Feature:** Abrasion, oil and weather resistant. Swaged on fittings for longer service life. Continuous brand for easy identification.

**Tube:** Black, oil and abrasion resistant Neoprene (CR). Suitable for oil and water based muds.

**Reinforcement:** Three or four braids of high tensile, heavy gauge steel wire. A textile overbraid provides improved cover adhesion.

**Cover:** Black, oil, abrasion and weather resistant Neoprene (CR).

**Temperature:** -40 to 200° F.

**Fittings:** Hose is supplied with swaged-on couplings. Hose may also be supplied without couplings.

**Branding:** NRP TRIOFLEX SLIM HOLE ROTARY MADE IN USA.

**Lengths:** 50 ft. standard.

**Premium Feature:** Abrasion, oil and weather resistant. Extremely flexible and durable. Easy identification branding.





# Oil Field Hose

## 4005

### MUD SUCTION HOSE

NRP Part Number	Hose I.D. (in.)	Wt. of 2 Fittings (lbs.)	Nipple Extension (Each end)	Wt. Per Foot (lbs.)
4005-64	4.0	14.0	4.0	6.9
4005-80	5.0	19.5	4.0	8.8
4005-96	6.0	30.7	6.0	11.1
4005-08	8.0	40.9	7.0	15.3
4005-10	10.0	53.0	7.0	21.0
4005-12	12.0	117.2	7.0	33.3

**Application:** NRP Mud Suction Hose is used as a flexible connection between the slush pump and mud pit to absorb muds.

**Tube:** Black, heavy gauge, extremely abrasion resistant Neoprene (CR) for use with oil and water based muds.

**Reinforcement:** Five plies of bias laid, extra strong square woven polyester fabric gives hose strength with flexibility. Helically wound with heavy gauge wire to resist collapse under maximum vacuum and bend conditions.

**Cover:** Black, oil, abrasion and weather resistant Neoprene (CR). Cover has capped ends to keep out moisture.

**Temperature:** -40 to 200° F.

**Fittings:** Fittings are integrally built-in type with grooved, full-flow nipples, and NPT threads.

**Branding:** Gold Stripe 3/4" entire length of hose. MADE IN USA.

**Lengths:** Supplied in any overall specified length (including fittings) from 5 ft. to 60 ft.

**Premium Feature:** Abrasion, oil and weather resistant. Heavy duty for rugged use. Full suction service.

## 5024

### CORE DRILL HOSE

NRP Part Number	Hose I.D. (in.)	Hose O.D. (in.)	Rated W.P. (psi)	Test Pressure (psi)	Min. Bend Radius	Wt. Per Foot (lbs.)
5024-32	2	3.06	1,500	3,000	24	4.3
5024-40	2-1/2	3.65	1,500	3,000	30	5.8
5024-48	3	4.13	1,500	3,000	36	6.5

**Application:** NRP Core Drill Hose is a strong, flexible, four wire braid hose built specially for core drilling, work-over, blast or shot hole and seismograph applications on portable drilling rigs.

**Tube:** Black, oil and abrasion resistant Neoprene (CR). Suitable for oil and water based muds.

**Reinforcement:** Four braids of high tensile, heavy gauge steel wire providing the extra ruggedness required in core drilling service. Textile overbraid provides improved cover adhesion.

**Cover:** Black, oil, abrasion and weather resistant Neoprene (CR).

**Temperature:** -40 to 200° F.

**Branding:** Gold stripe 3/4" entire length of hose. MADE IN USA.

**Lengths:** Standard 50 ft., maximum 60 ft.

**Premium Feature:** Abrasion, oil and weather resistant. Extremely flexible and durable. Easy identification branding.

# Oil Field Hose



## 5019

### MOTION COMPENSATOR HOSE

NRP Part Number	Hose I.D. (in.)	Hose O.D. (in.)	Rated W.P. (psi)	Test Pressure (psi)	Min. Bend Radius	Wt. Per Foot (lbs.)
5019-40	2.50	4.48	2,500	5,000	48	12.7
5019-48	3.00	4.98	2,500	5,000	48	14.7
5019-56	3.50	5.48	2,500	5,000	56	16.1

**Tube:** Black, oil and abrasion resistant Nitrile (NBR). Suitable for water glycol, air and oil.

**Reinforcement:** Multiple plies of bias laid textile cord for extra strength and flexibility. Spirally wound, high tensile, multiple strand cables to provide unsurpassed ruggedness and reliability under severe service conditions.

**Cover:** Black, oil weather and abrasion resistant Neoprene (CR).

**Temperature:** -40 to 200° F.

**Fittings:** Swaged on male NPT.

## 5035

### CHOKER & KILL HOSE

NRP Part Number	Hose I.D. (in.)	Hose O.D. (in.)	Rated W.P. (psi)	Test Pressure (psi)	Min. Bend Radius	Wt. Per Foot (lbs.)
5035-40	2.50	4.60	5,000	10,000	48	13.9
5035-48	3.00	5.10	5,000	10,000	52	16.1

**Tube:** Black, oil and abrasion resistant HNBR.

**Reinforcement:** Multiple plies of bias laid textile cord for extra strength and flexibility. Spirally wound, high tensile, multiple strand cables to provide unsurpassed ruggedness and reliability to withstand sudden high pressure.

**Cover:** Black, oil weather and abrasion resistant Neoprene (CR).

**Temperature:** -40 to 200° F.

**Fittings:** Integral connection flanged or hubbed.

**Branding:** NRP Choke & Kill Hose. MADE IN USA.

## 5036

### HIGH PRESSURE CEMENT HOSE

NRP Part Number	Hose I.D. (in.)	Rated W.P. (psi.)	Test Pressure (psi.)	Min. Bend Radius (in.)	Wt. Per Foot (lbs.)
5036-32	2	5,000	10,000	48	13.6
5036-48	3	5,000	10,000	52	15.5
5036-64	4	5,000	10,000	72	31.8

**Application:** High pressure cementing fluids for heavy duty cementing applications.

**Tube:** Black, HNBR which is suitable for abrasive mild chemical materials. Maximum operating temperature 200° F.

**Reinforcement:** Multiple plies of spiraled nylon cord and two plies of spirally wound high tensile, multiple strand cables.

**Cover:** Black, oil, weather and abrasion resistant neoprene (CR).

**Temperature:** -40° to 200° F.

**Fittings:** Integral API flanges or hammer unions as required.

## 5040

### CHOKER & KILL HOSE

NRP Part Number	Hose I.D. (in.)	Hose O.D. (in.)	Rated W.P. (psi)	Test Pressure (psi)	Min. Bend Radius	Wt. Per Foot (lbs.)
5040-32	2.00	4.68	10,000	15,000	48	22.4
5040-40	2.50	5.34	10,000	15,000	52	27.4
5040-48	3.00	5.84	10,000	15,000	56	28.8

**Tube:** Black, oil and abrasion resistant HNBR.

**Reinforcement:** Multiple plies of bias laid textile cord for extra strength and flexibility. Spirally wound, high tensile, multiple strand cables to provide unsurpassed ruggedness and reliability to withstand sudden high pressure.

**Cover:** Black, oil weather and abrasion resistant Neoprene (CR).

**Temperature:** -40 to 200° F.

**Fittings:** Integral connection flanged or hubbed.

**Branding:** NRP Choke & Kill Hose. MADE IN USA.



# Oil Field Hose

## 1801

### BLOWOUT PREVENTER HOSE

NRP Part Number	Hose I.D. (in.)	Hose O.D. (in.)	Rated W.P. (psi)	Test Pressure (psi)	Min. Bend Radius	Wt. Per Foot (lbs.)
1801-12	.75	1.54	5,000	7,500	18	1.61
1801-16	1	1.79	5,000	7,500	24	2.21

**Application:** Flexible piping used to control BOP's (Blowout Preventers) and associated valves that control well pressure during drilling operations.

**Inner Hose:** Black, oil resistant, Nitrile (NBR) tube; reinforced with multiple plies of spirally wrapped high tensile steel wire.

**Insulation:** Composed of various layers to protect the inner hose from external heat.

**Metal Cover:** Galvanized or stainless steel offers resistance to external abuse, kinking and reflects radiant heat.

**Fittings:** Male threaded or as required.

## A825/1825

### BLOWOUT PREVENTER HOSE

NRP Part Number	Hose I.D. (in.)	Hose O.D. (in.)	Rated W.P. (psi.)	Min. Bend Radius (in.)	Wt. Per Foot (lbs.)
A825-06	3/8	.90	5,000	6	.51
A825-08	1/2	1.04	5,000	9	.64
A825-12	3/4	1.54	5,000	12	1.50
A825-16	1	1.79	5,000	15	1.97
1825-20	1 - 1/4	2.21	5,000	18	3.06
1825-24	1 - 1/2	2.54	5,000	22	3.98
1825-32	2	3.05	5,000	27	5.83

**Application:** Flexible piping used to control BOP's (Blowout Preventers) and associated valves that control well pressure during drilling operations.

**Tube:** Black, oil resistant Nitrile (NBR).

**Reinforcement:** Multiple plies of high tensile steel wire.

**Cover:** Red, specially compounded, fiber glass impregnated, flame resistant rubber.

**Temperature:** -40° to 212° F.

## A822/1822

### BLOWOUT PREVENTER HOSE

NRP Part Number	Hose I.D. (in.)	Hose O.D. (in.)	Rated W.P. (psi.)	Min. Bend Radius (in.)	Wt. Per Foot (lbs.)
A822-06	3/8	.90	3,000	6	.51
A822-08	1/2	1.04	3,000	9	.62
A822-12	3/4	1.32	3,000	12	.88
A822-16	1	1.61	3,000	15	1.30
1822-20	1-1/4	2.10	3,000	18	2.30
1822-24	1-1/2	2.41	3,000	22	2.95
1822-32	2	2.90	3,000	27	3.69

**Application:** Flexible piping used to control BOP's (Blowout Preventers) and associated valves that control well pressure during drilling operations.

**Tube:** Black, oil resistant Nitrile (NBR).

**Reinforcement:** Multiple plies of high tensile steel wire.

**Cover:** Red, specially compounded, fiber glass impregnated, flame resistant rubber.

**Temperature:** -40° to 212° F.

## P/N 1804

### ROUGH NECK HOT OILER HOSE

Hose I.D. (in.)	Rated W.P. (psi)	Test Pressure (psi.)	Min. Bend Radius (in.)	Fitting Size (in.)	Wt. Per Foot (lbs.)
1 - 1/2	2,250	3,375	20	1 - 1/2	1.9

**Application:** NRP-Jones rough neck hot oil hose was specially designed for transferring hot oil at 275° F. intermittent, 3:1 safety factor.

**Tube:** Black, nitrile.

**Reinforcement:** Two braids of high tensile steel wire.

**Cover:** Black, heat, oil, weather and abrasion resistant Neoprene (CR).

**Temperature:** -40° to 300° F.

**Fittings:** Jones hydraulic crimp type.

# Decoking Hose



## 5029

### DECOKING HOSE

NRP Part Number	Hose I.D. (in)	Hose O.D. (in)	Working Pres. (psi)	Test Pres. (psi)	Min. Bend Radius	Cplg. Wt. (2)	Wt. Per Ft.
5029-48	3	5.25	4,000	8,000	48	94	13.1
5029-56	3-1/2	5.75	4,000	8,000	54	100	16.9

**Application:** Built for high pressures and the rugged service needed for decoking applications.

**Tube:** Oil resistant, abrasion resistant Neoprene (CR) and ideally suited for high pressure flushing of coke drums. Breaker fabric over tube improves adhesion to body plies.

**Reinforcement:** Consists of multiple plies of bias laid nylon cord for extra support and flexibility and spirally wound heavy duty, high tensile, multiple strand cables mechanically secured to built-in nipples providing unsurpassed reliability.

**Cover:** Black, oil, weather and abrasion resistant Neoprene (CR).

**Temperature:** -40 to 200° F.

**Fittings:** Decoking hoses are furnished with 1500 Series Ring Joint threaded flanges (backwelded) as standard in 3" , 4", or 5" nominal pipe sizes, or male 4" threaded ends. Other specified lengths available on special order.

**Branding:** NRP POWERFLEX GOLD STRIPE DECOKING 4,000 PSI WP 8,000 PSI TEST MADE IN USA.

**Lengths:** Supplied in lengths of 30' to 75' in 5' increments of 5' as standard. Other specified lengths available on special request.

**Premium Feature:** Worldwide usage for over 40 years. Hose fittings are full-flow, leakproof couplings that are integrally secured to hose reinforcement. Each cable end is permanently held in a cable head groove by two threaded Allen Head screws torqued to exact foot-pound pressure. Hose retains longitudinal axis under pressure; no twisting. Elongation less than 2%.

## 5039

### DECOKING HOSE

NRP Part Number	Hose I.D. (in)	Hose O.D. (in)	Working Pres. (psi)	Test Pres. (psi)	Min. Bend Radius	Cplg. Wt. (2)	Wt. Per Ft.
5039-48	3	5.25	5,000	10,000	48	94	13.1
5039-56	3-1/2	6.00	5,000	10,000	54	100	19.7

**Application:** Built for high pressures and the rugged service needed for decoking applications.

**Tube:** Oil resistant, abrasion resistant Neoprene (CR) and ideally suited for high pressure flushing of coke drums. Breaker fabric over tube improves adhesion to body plies.

**Reinforcement:** Consists of multiple plies of bias laid nylon cord for extra support and flexibility and spirally wound heavy duty, high tensile, multiple strand cables mechanically secured to built-in nipples providing unsurpassed reliability.

**Cover:** Black, oil, weather and abrasion resistant Neoprene (CR).

**Temperature:** -40 to 200° F.

**Fittings:** Decoking hoses are furnished with 1500 Series Ring Joint threaded flanges (backwelded) as standard in 3" , 4", or 5" nominal pipe sizes, or male 4" threaded ends. Other specified lengths available on special order.

**Branding:** NRP POWERFLEX GOLD STRIPE DECOKING 5,000 PSI WP 10,000 PSI TEST MADE IN USA.

**Lengths:** Supplied in lengths of 30' to 75' in 5' increments of 5' as standard. Other specified lengths available on special request.

**Premium Feature:** Worldwide usage for over 40 years. Hose fittings are full-flow, leakproof couplings that are integrally secured to hose reinforcement. Each cable end is permanently held in a cable head groove by two threaded Allen Head screws torqued to exact foot-pound pressure. Hose retains longitudinal axis under pressure; no twisting. Elongation less than 2%.



# Armored Hose Assemblies

## G017 ARMOR-FLEX AIR SERVICE

NRP Part Number	Inside Diameter	Working Bend Radius	Working Pressure	Approx. Wt. Per Ft. (lbs.)
G017	3/8"	2.5"	500	1
G017	1/2"	3"	500	1.1
G017	3/4"	4"	500	1.4
G017	1"	5"	500	1.8
G017	1-1/4"	7.5"	500	2.4
G017	1-1/2"	9"	500	3
G017	2"	12"	500	3.8
G017	3"	20"	500	6.3

**Hose:** Braided wire reinforcement.  
**Insulation:** Wrapped 1000° F fiberglass.  
**Armor:** Half round ball joint.  
**Color Code:** Yellow

## G001 ARMOR-FLEX WATER SERVICE

NRP Part Number	Inside Diameter	Working Bend Radius	Working Pressure	Vacuum	Approx. Wt. Per Ft. (lbs.)
G001	1/2"	3"	200	0	1.1
G001	3/4"	4"	200	0	1.4
G001	1"	5"	200	0	1.8
G001	1 1/4"	7.5"	200	0	2.4
G001	1 1/2"	9"	200	0	2.9
G001	2"	12"	200	0	3.6
G001	3"	20"	200	0	6
G001	4"	36"	150	28"	11
G001	6"	52"	150	28"	20
G001	8"	64"	150	28"	28
G001	10"	88"	150	28"	28

**Hose:** Wire or textile reinforcement.  
**Insulation:** Wrapped 1000° F fiberglass.  
**Armor:** Half round ball joint.  
**Color Code:** Blue

## G201 ARMOR-FLEX OXYGEN SERVICE

NRP Part Number	Inside Diameter	Working Bend Radius	Working Pressure	Approx. Wt. Per Ft. (lbs.)
G201	3/8"	3"	500	1.2
G201	1/2"	3.5"	500	1.5
G201	3/4"	4.5"	500	2.1
G201	1"	6"	500	3
G201	1-1/4"	8.5"	500	3.4
G201	1-1/2"	10"	500	4
G201	2"	13"	500	4.4
G201	2-1/2"	16"	250	5.3
G201	3"	18"	250	6.4
G201	4"	36"	250	9.2

**Hose:** Wire or textile reinforcement.  
**Insulation:** Wrapped 1000° F fiberglass.  
**Armor:** Half round ball joint.  
**Color Code:** Green



# Armored Hose Assemblies



## G501 ARMOR-FLEX HYDRAULIC SERVICE

I.D.	Working Bend Radius			Working Pressure			Approx. wt. per ft. (lbs.)		
	100R1	100R2	100R12	100R1	100R2	100R12	100R1	100R2	100R12
1/4"	3"	3"	N/A	2750	5000	N/A	.6	.78	N/A
3/8"	4"	4"	1250	2250	4000	1.4	1.7	1.8	
1"	10"	10"	12"	1000	2000	4000	2.2	2.6	3.1
1-1/4"	14.5"	14.5"	16.5"	625	1625	3000	2.7	3.6	3.8
1-1/2"	18"	18"	20"	500	1250	2500	3.2	4.1	4.3
2"	22"	22"	25"	375	1125	2500	4.3	5	5.6

**Hose:** SAE spec wire reinforcement.

**Insulation:** Wrapped 1000° F fiberglass.

**Armor:** Half round ball joint.

**Color Code:** Black

## G475 ARMOR-FLEX PETROLEUM SERVICE

NRP Part Number	Inside Diameter	Working Bend Radius	Working Pressure	Approx. Wt. Per Ft. (lbs.)
G475	1-1/2"	3"	150	2.9
G475	2"	4"	150	3.6
G475	3"	6"	150	6
G475	4"	8"	150	11

**Hose:** Textile reinforcement.

**Insulation:** Wrapped 1000° F fiberglass.

**Armor:** Half round ball joint.

**Color Code:** White

## G850 ARMOR-FLEX FLAMMABLE GAS SERVICE

NRP Part Number	Inside Diameter	Working Bend Radius	Working Pressure	Approx. Wt. Per Ft. (lbs.)
G850	1/2"	3.5"	350	1.4
G850	3/4"	4.5"	350	2.3
G850	1"	6"	350	3.2
G850	1-1/4"	8.5"	350	3.7
G850	1-1/2"	10.5"	350	4.3
G850	2"	13.5"	350	4.8

**Hose:** Wire braid reinforcement.

**Insulation:** Wrapped 1000° F fiberglass.

**Armor:** Half round ball joint.

**Color Code:** Orange

### General Product Information for Armor-Flex Assemblies:

- Armor cover available in carbon or stainless steel.
- Color-coded and tagged to identify assembly for specific application.
- Assemblies with non-standard fittings available on request.
- Armored hose assemblies available for most critical applications.



# Table of Chemical, Oil, and Solvent Resistance of Hose

The following table lists the more commonly used materials, chemicals, solvents, oils, etc. The recommendations are based on room temperature and pressure conditions normally recommended for the particular type of hose being used. Where conditions beyond this can be met readily, they have been so indicated; where conditions are not normal and cannot be readily met, NRP-Jones should always be consulted. The table does not imply conformance to the Food & Drug Administration requirements or Federal or State Laws when handling food products.

## ELASTOMERS/PLASTICS

- NR** Natural Rubber
- IR** Isoprene, synthetic
- SBR** Styrene-butadiene
- CR** Chloroprene (Neoprene)
- NBR** Nitrile-butadiene
- NR** Isobutene-isoprene (Butyl)
- CSM** Chloro-sulfonyl-polyethylene (Hypalon)
- EPDM** Ethylene-propylene-diene terpolymer
- FKM** Fluorocarbon rubber (Viton)
- UHMW** Ultra High Molecular Weight Polyethylene
- XLPE** Cross-linked polyethylene

**WARNING:** The following data has been compiled from generally available sources and should not be relied upon without consulting and following the hose manufacturer's specific chemical recommendations. Neglecting to do so might result in failure of the hose to fulfill its intended purpose, and may result in possible damage to property and serious bodily injury.

Material	Most Commonly Used Elastomers							Special Elastomers		
	NR/IR	SBR	CR	NBR	NR	CSM	EPDM	FKM	UHMW	XLPE
<i>Maximum Temperature 100°F (38°C) Unless Otherwise Specified</i>										
Acetic Acid, Dilute, 10%	F	C	C	C	A	C	A	X	A	A
Glacial	C	X	X	X	F	C	F	X	A	A
Anhydride	C	C	F	F	F	A	I	X	A	A
Acetone	A	A	F	X	A	F	A	X	A	A
Acetylene	A	A	F	A	A	F	A	A	A	A
Air	150°F (65°C)	A	A	A	A	A	A		A	A
Aluminum Chloride	150°F (65°C)	A	A	A	A	A	A	A	A	A
Aluminum Fluoride	150°F (65°C)	A	A	A	A	A	A		A	A
Aluminum Sulfate	150°F (65°C)	A	A	A	A	A	A	A	A	A
Alums	150°F (65°C)	A	A	A	A	A	A		A	A
Ammonia Gas		A	A	A	A	A	A	X	A	A
Ammonia Chloride		A	A	A	A	A	A	A	A	A
Ammonium Hydroxide		C	F	F	F	A	A	A	A	A
Ammonium Nitrate		A	A	A	A	A	A		A	A
Ammonium Phosphate, monobasic		A	A	A	A	A	A		A	A
dibasic		A	A	A	A	A	A		A	A
tribasic		A	A	A	A	A	A		A	A
Ammonium Sulfate		A	A	A	A	A	A	A	A	A
Amyl Acetate		F	X	X	X	F	X	A	X	A
Amyl Alcohol		A	A	A	A	A	A	A	A	A
Aniline, Aniline Oil		X	X	C	X	A	X	C	A	A
Aniline Dyes		F	F	F	F	A	F	C		I
Asphalt		X	X	F	F	X	F	X	A	X
Barium Chloride	150°F (65°C)	A	A	A	A	A	A	A	A	A
Barium Hydroxide	150°F (65°C)	A	A	A	A	A	A	A	A	A
Barium Sulfide	150°F (65°C)	A	A	A	A	A	A	A	A	A
Beer		A	A	A	A	A	A	A	A	A
Beet Sugar Liquors		A	A	A	A	A	A	A	A	A
Benzene, Benzol		X	X	X	C	X	X	X	A	F
Benzine, petroleum ether and										
Benzine petroleum naphtha		X	X	C	F	X	F	X	A	A
Black Sulfate Liquor		A	A	A	A	A	A		A	A
Blast Furnace Gas		C	C	A	C	C	C		A	A
Borax		A	A	A	A	A	A		A	A
Boric Acid		A	A	A	A	A	A		A	A
Bromine		X	X	X	X	X	C	X	A	X
Butane		X	X	F	A	X	A	X	A	A
Butyl Acetate		C	A	A	A	F	X	F	X	A
Butyl alcohol, butanol		A	A	A	A	A	A	A	A	A

## Resistance Ratings

<b>A</b>	<b>F</b>	<b>C</b>	<b>X</b>	<b>I</b>
<b>Good Resistance</b>	<b>Fair Resistance</b>	<b>Conditional</b>	<b>Not Recommended</b>	<b>Insufficient Info</b>
usually suitable for service	the chemical has some deteriorative effects, but the elastomer is still adequate for moderate service	Depends on condition, moderate service may be possible if chemical exposure is limited or infrequent	unsuitable for service	not enough data available at time of publication to determine rating



Material	Most Commonly Used Elastomers							Special Elastomers		
	NR/IR	SBR	CR	NBR	NR	CSM	EPDM	FKM	UHMW	XLPE
<i>Maximum Temperature 100°F (38°C) Unless Otherwise Specified</i>										
Calcium bisulfate .....	C	C	A	A	F	A	F	A	A	A
Calcium chloride .....	A	A	A	A	A	A	A	A	A	A
Calcium hydroxide .....	A	A	A	A	A	A	A	A	A	A
Calcium hypochlorite .....	X	X	X	X	A	F	A	A	F	F
Caliche liquors .....	A	A	A	A	A	A	A		I	A
Cane sugar liquors .....	A	A	A	A	A	A	A	A	A	A
Carbolic acid phenol .....	C	C	C	C	C	C	A	A	A	A
Carbon dioxide, dry/wet .....	A	A	A	A	A	A	A	A	A	A
Carbon disulfide .....	X	X	X	X	X	X	X	A		C
Carbon monoxide ..... 150°F (65°C)	C	C	C	C	C	F	C	A	A	A
Carbon tetrachloride .....	X	X	X	C	X	X	X	A	F	A
Castor oil .....	A	A	A	A	A	A	A	A	A	A
Cellosolve acetate .....	F	F	X	X	A		A	C	A	A
China wood oil, tung oil .....	X	X	F	A	A	F	A	C	A	A
Chlorine, dry/wet .....	X	X	X	X	X	X	X	C	X	F
Chlorinated solvents .....	X	X	X	X	X	X	X	C	I	A
Chloroacetic acid .....	X	C	C	C	X	A	I	X	A	A
Chlorosulfonic acid .....	X	X	C	C	X	X	X	X	X	F
Chromic acid .....	X	X	X	X	C	A	I	C	A	F
Citric acid .....	A	A	A	F	A	A	A	A	A	A
Coke oven gas .....	C	C	C	C	C	A		X	I	C
Copper chloride ..... 150°F (65°C)	C	A	F	A	A	F	A	A	A	A
Copper sulfate ..... 150°F (65°C)	C	A	A	A	F	A	A	A	A	A
Corn oil .....	X	C	F	A	A	F	C	A	A	A
Cottonseed oil .....	X	C	F	A	A	F	C	A	A	A
Creosote, coal tar .....	X	X	F	A	X	F	X	F	A	A
wood .....	X	X	F	A	X		X	A	A	A
Creosols, cresylic acid .....	C	X	X	C	C	F	X		A	A
Ethers .....	C	C	C	C	C	F	X	X	A	A
Ethyl acetate .....	F	X	X	X	F	X	F	X	A	A
Ethyl alcohol .....	A	A	A	A	A	A	A	A	A	A
Ethyl cellulose .....	F	F	F	F	F		F	X	A	A
Ethyl chloride .....	A	F	F	X	A	F	A	F	F	F
Ethylene glycol .....	A	A	A	A	A	A	A	A	A	A
Ferric chloride ..... 150°F (65°C)	A	A	A	A	A	A	A	I	A	A
Ferric sulfate ..... 150°F (65°C)	A	A	A	A	A	A	A	A	A	A
Formaldehyde .....	A	A	C	A	A	A	A	A	A	A
Formic acid .....	A	A	C	F	A	A	A	X	A	F
Freon #12 (Liquid) .....	X	X	A	A	F		F	A	A	A
Fuel oil .....	X	X	A	A	X	F	X	A	A	A
Furfural .....	X	C	C	X	A	F	C	X	A	A
Gasoline, Non Leaded .....	X	X	X	A	X	X	X	A	F	F
Gasoline, Reg Leaded .....	X	X	X	A	X	X	X	A	F	F
Hi Test-Leaded .....	X	X	X	A	X	X	X	A	F	F
Gelatin .....	A	A	A	A	A	A	A	A	A	A
Glucose .....	A	A	A	A	A	A	A	A	A	A
Glue .....	F	F	A	A	F	A	A	C	A	A
Glycerine glycerol .....	A	A	A	A	A	A	A	A	A	A
Green sulfate liquor .....	A	A	A	A	A	A	A	A	A	A

### Resistance Ratings

**A**

**Good Resistance**  
usually suitable for service

**F**

**Fair Resistance**  
the chemical has some deteriorative effects, but the elastomer is still adequate for moderate service

**C**

**Conditional**  
Depends on condition, moderate service may be possible if chemical exposure is limited or infrequent

**X**

**Not Recommended**  
unsuitable for service

**I**

**Insufficient Info**  
not enough data available at time of publication to determine rating



Most Commonly Used Elastomers

Special Elastomers

Material

NR/IR

SBR

CR

NBR

NR

CSM

EPDM

FKM

UHMW

XLPE

Maximum Temperature 100°F (38°C) Unless Otherwise Specified

Material	NR/IR	SBR	CR	NBR	NR	CSM	EPDM	FKM	UHMW	XLPE
Hydraulic fluids										
Petroleum .....	X	X	A	A	X	F	X			
Phosphate ester alkyl .....	X	X	C	X	A	X	A			
Phosphate ester aryl .....	X	X	X	X	C	X	C			
Phosphate ester blends .....	X	X	X	X	X	X	C			
Silicate ester .....	X	X	C	C	X	C	X			
Water-Glycol .....	A	A	A	A	A	A	A	A		
Hydrobromic acid .....	C	X	C	C	A	A	A	A	F	I
Hydrochloric acid .....	A	X	X	X	C	C	C	A	A	A
Hydrocyanic acid .....	F	F	C	F	C	A	C	A	A	A
Hydrofluoric acid .....	X	X	X	X	C	A	C	A	A	A
Hydrofluosilicic acid .....	A	F	F	F	A		A	A	F	I
Hydrogen Gas .....	F	F	A	A	A		A	A	A	A
Hydrogen peroxide .....	X	X	C	C	C	C	C	A	A	F
Hydrogen sulfide, dry .....	C	C	F	C	A	A	A	G	A	A
wet .....	C	C	F	C	A	A	A	C	A	A
Kerosene .....	X	X	F	A	X	C	X	A	A	A
Lacquers .....	X	X	X	X	C	X	X	X	F	F
Lacquer solvents .....	X	X	X	X	C	X	X	X	F	F
Lactic acid .....	C	C	C	C	C	A	C	A	A	A
Linseed oil .....	C	X	F	A	A	A	A	A	A	A
Lubricating oil, crude .....	X	X	F	A	X	C	X	A	A	A
refined .....	X	X	F	A	X	C	X	A	A	A
Magnesium chloride ..... 150°F (65°C)	A	A	A	A	A	A	A	A	A	A
Magnesium hydroxide ..... 150°F (65°C)	A	F	F	F	A	A	A	A	A	A
Magnesium sulfate ..... 150°F (65°C)	A	A	A	A	A	A	A	A	A	A
Mercuric chloride .....	F	F	C	F	A	A	A	A	A	A
Mercury .....	A	A	A	A	A	A	A	A	A	A
Methyl alcohol methanol .....	A	A	A	A	A	A	A	C	A	A
Methyl chloride .....	C	C	C	C	C	X	C	A	A	F
Methyl ethyl detone .....	X	X	X	X	F	C	A	X	A	A
Methyl isopropyl ketone .....	X	X	X	X	F	C	C	X	A	A
Milk .....	C	C	F	F	A	A	A	A	A	A
Mineral oils .....	X	C	F	A	X	F	X	A	A	A
Natural gas .....	C	C	A	A	C	A	X	A	I	A
Nickel chloride ..... 150°F (65°C)	A	A	A	A	A	A	A	A	A	A
Nickel sulfate ..... 150°F (65°C)	A	A	A	A	A	A	A	A	A	A
Nitric acid, crude .....	X	X	X	X	C	C	X	C	A	F
Diluted 10% .....	X	X	C	X	C	A	C	C	A	I
Concentrated 70% .....	X	X	X	X	C	C	X	C	A	F
Nitrobenzene .....	X	X	X	X	X	X	X	F	A	A
Oleic acid .....	X	F	C	F	F	F	F	C	A	A
Oleum spirits .....	X	C	C	C			I	C	X	I
Oxalic acid .....	F	C	F	F	A	A	A	A	A	A
Oxygen .....	F	C	A	C	A		A	A	A	A
Palmitic acid .....	X	F	A	A	F	F	F	A	A	A
Perchloroethylene .....	X	X	X	C	X	X	X	A	F	A
Petroleum oils and crude 200°F (95°C) .	X	X	F	A	X	C	X	A	A	A
Phosphoric acid, crude .....	A	C	C	C	C	A	C	A	A	A
pure 45% .....	A	C	C	C	C	A	C	A	A	A
Picric acid, molten .....	C	C	C	C	C		I		I	I
water solution .....	A	C	F	F	A	A	I	A	I	I

Resistance Ratings

**A**

**Good Resistance**  
usually suitable for service

**F**

**Fair Resistance**  
the chemical has some deteriorative effects, but the elastomer is still adequate for moderate service

**C**

**Conditional**  
Depends on condition, moderate service may be possible if chemical exposure is limited or infrequent

**X**

**Not Recommended**  
unsuitable for service

**I**

**Insufficient Info**  
not enough data available at time of publication to determine rating

Material	Most Commonly Used Elastomers							Special Elastomers		
	NR/IR	SBR	CR	NBR	NR	CSM	EPDM	FKM	UHMW	XLPE
	Maximum Temperature 100°F (38°C) Unless Otherwise Specified									
Potassium chloride	A	A	A	A	A	A	A	A	A	A
Potassium cyanide	A	A	A	A	A	A	A	A	A	A
Potassium hydroxide	F	F	C	C	A	A	A	C	F	A
Potassium sulfate	A	A	A	A	A	A	A	A	A	A
Propane	X	X	F	A	X	F	X	A	A	A
Sewage	C	C	F	A	C	A	C	A	A	A
Soap solutions	A	A	F	A	A	A	A	A	A	A
Soda ash sodium carbonate	A	A	A	A	A	A	A	A	A	A
Sodium bicarbonate, baking soda	A	A	A	A	A	A	A	A	A	A
Sodium bisulfate	A	A	A	A	A	A	A	A	A	A
Sodium chloride	A	A	A	A	A	A	A	A	A	A
Sodium cyanide	A	A	A	A	A	A	A	A	A	A
Sodium hydroxide	F	F	C	C	A	C	A	C	A	A
Sodium hypochlorite	X	X	X	X	A	F	A	A	A	F
Sodium metaphosphate	A	A	C	A	A	F	A	A	A	A
Sodium nitrate	C	C	C	C	A	A	A		A	A
Sodium perborate	C	C	C	C	A	A	A	A	A	A
Sodium peroxide	C	C	C	C	A	A	A	A	A	A
Sodium phosphate, monobasic	A	F	C	F	A	A	A	A	A	A
dibasic	A	F	C	F	A	A	A		A	A
tribasic	A	F	C	F	A	A	A		A	A
Sodium silicate	A	A	A	A	A	A	A	A	A	A
Sodium sulfate	A	A	A	A	A	A	A	A	A	A
Sodium sulfide	A	A	A	A	A	A	A	A	A	A
Sodium thiosulfate, "hypo"	A	A	A	A	A	A	A	A	A	A
Soybean oil	X	C	F	A	A	A	A	A	A	A
Stannic chloride	A	A	A	A	F	A	F	A	A	A
Steam ..... 450°F (230°C)	C	C	C	C	C	C	F	X	X	X
Stearic acid	X	X	C	F	F	C	F	I	A	A
Sulfur	F	F	A	F	A	A	A	A	A	C
Sulfur chloride	X	X	C	C	X	A	X	A	A	A
Sulfur dioxide dry	C	C	C	C	C	A	C	A	F	I
Sulfur trioxide dry	X	C	C	C	C	F	C	A	C	I
Sulfuric acid 10%	A	A	A	A	A	A	A	A	A	A
11% - 75%	C	C	C	C	F	A	C	A	A	A
76% - 95%	X	X	X	X	C	A	X	A	A	A
fuming	X	X	X	X	X	X	X	A	X	X
Sulfurous acid	C	C	C	C	C	A	C	A	A	A
Tannic acid	A	C	A	C	A	A	A	A	A	A
Tar	X	X	C	C	X	C	X	F	X	X
Tartaric acid	A	C	C	C	F	A	F	A	A	A
Toluene toluol	X	X	X	C	X	X	X	A		A
Trichloethylene	X	X	X	X	X	X	X	A	F	A
Turpentine	X	X	X	F	X	X	X	A	F	A
Vinegar	C	C	C	C	A	A	A	A	X	A
Water, acid mine	A	A	C	A	A	A	A	A	A	A
Water, fresh	A	A	C	A	A	A	A	A	A	A
distilled	A	A	C	A	A	A	A	A	A	A
Whiskey and wines	A	A	A	C	A	A	A	A	X	A
Xylene, xyol	X	X	X	C	X	X	X	A		A
Zinc chloride	C	C	C	C	A	A	A	A	A	A
Zinc sulfate	A	A	A	A	A	A	A	A	A	A

SOURCE: Rubber, Manufacturers Association, Hose Handbook, Fifth Edition.

### Resistance Ratings

**A**

**Good Resistance**  
usually suitable for service

**F**

**Fair Resistance**  
the chemical has some deteriorative effects, but the elastomer is still adequate for moderate service

**C**

**Conditional**  
Depends on condition, moderate service may be possible if chemical exposure is limited or infrequent

**X**

**Not Recommended**  
unsuitable for service

**I**

**Insufficient Info**  
not enough data available at time of publication to determine rating

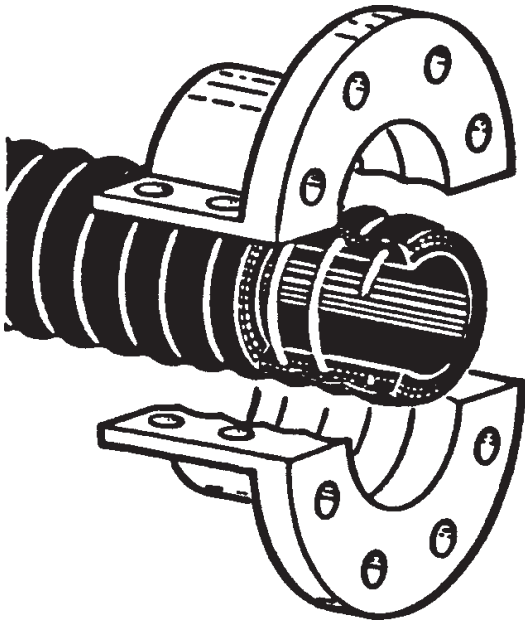




## 4610-C

### Couplings for Bulk-Flex Material Handling Hose

---



The Bulk-Flex coupling is made of the highest quality cast aluminum. The coupling consists of two halves with internal threads designed to be mechanically attached over the outside of the hose (see illustration below). The Bulk-Flex coupling is designed for a working pressure of 150 PSI. Flange drilling conforms to ANSI 16.5. See page 7 for hose information.

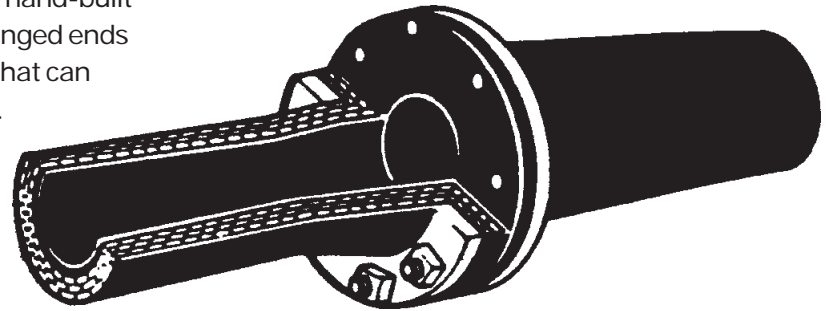
Coupling No.	Size
C20	2"
C30	3"
C40	4"
C60	6"
C80	8"
C100	10"
C120	12"
C140	14"

## DUCK AND RUBBER FLANGES

---

Duck and Rubber Flanges are available on most hand-built hose in sizes 2 inch through 18 inch I.D. The flanged ends provide full flow, with no metallic nipple insert that can cause material turbulence and premature wear.

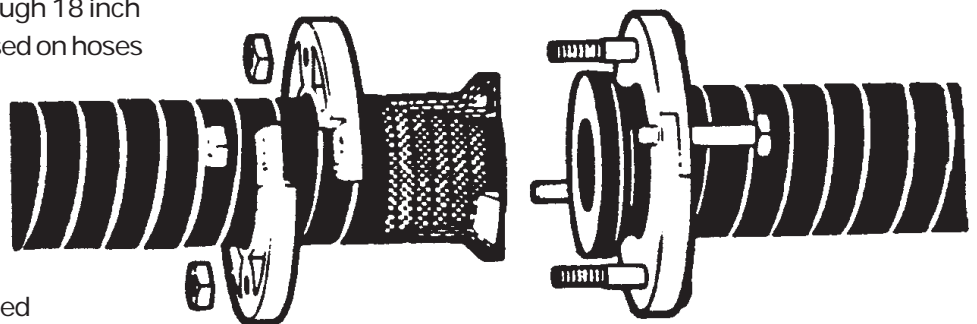
The 150 PSI flange drilling is standard, but the Duck and Rubber Flange is also available in 300 PSI drilling.



## BEADLOK BEADED ENDS

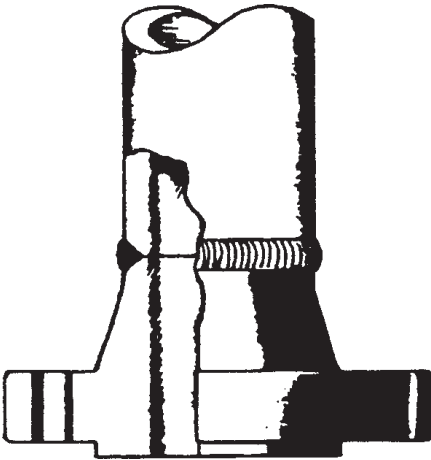
---

BEADLOK (Beaded) Ends are available on most hand-built hose in sizes 2 inch through 18 inch I.D. BEADLOK ends are normally used on hoses handling chemicals and abrasive materials. The split rings can be quickly aligned for installation and permit convenient hose rotation for longer service life in transmitting abrasive materials. BEADLOK ends are not recommended for service over 150 PSI.



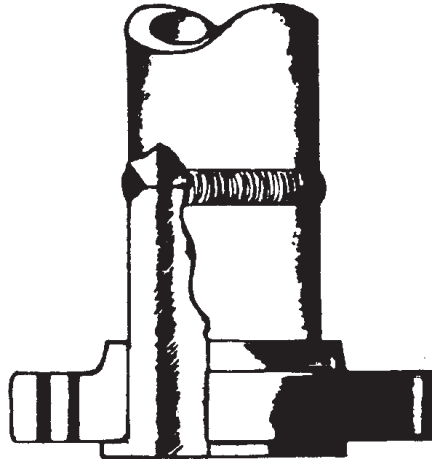
## Attachment Methods for American National Standards Institute, Inc. Types of Flanges

---



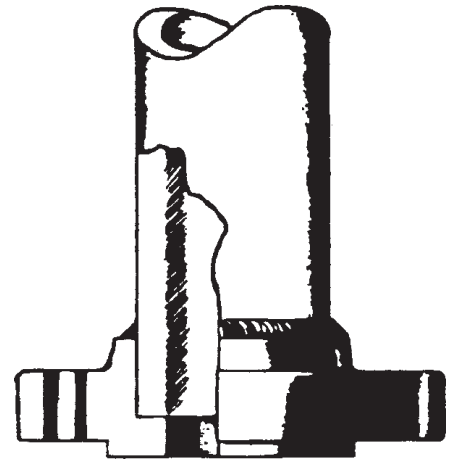
### WELDING NECK FLANGES

Welding Neck Flanges are designed to be butt welded to the pipe. The long tapered hub reinforces the flange, permits stress-relieving, magnafluxing or x-raying the weld, when required, and removes the flange face from the heat affected zone. These advantages make Welding Neck Flanges particularly suitable for severe service involving high pressures, extreme temperatures, or hazardous fluids.



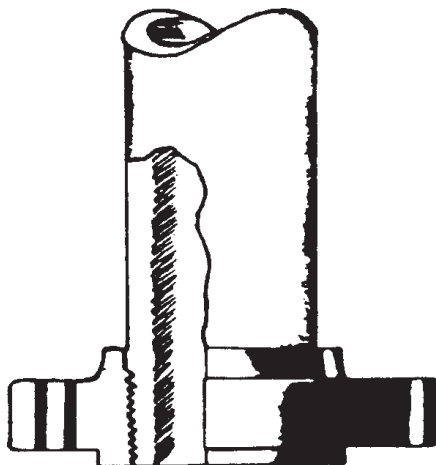
### LAP JOINT FLANGES

Lap Joint Flanges, while requiring a separate end connector, provide a joint in which the product does not come in contact with the flange. In addition, the ability of the flange to rotate simplifies assembly and alignment of bolting on systems requiring frequent dismantling.



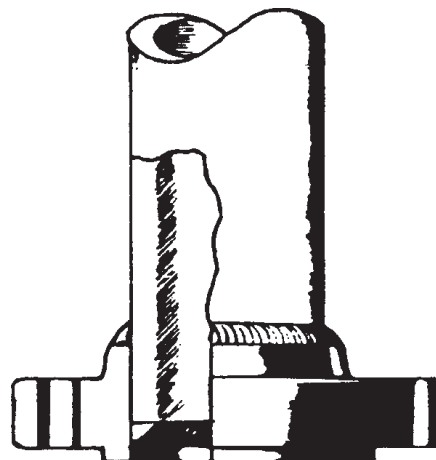
### SOCKET WELDING FLANGES

Socket Welding Flanges are widely used for moderate services, particularly in the smaller sizes, because of the ease of fit up and alignment. Although usually welded at the flange hub only, the pipe end may also be welded without having to reface the flange. The pipe end weld can be ground to provide a smooth bore.



### THREADED FLANGES

Threaded Flanges are widely used because no welding equipment is required for assembly and both the pipe and flange can be completely salvaged upon dismantling. Accurately cut, clean, tapered pipe threads dimensioned to ANSI A2.1 Pipe Threads, assure strong, tight joints.



### SLIP-ON WELDING FLANGES

Slip-On Welding Flanges are popular for normal service conditions because of the ease of fit up and alignment and the greater tolerance permissible in cutting the pipe to length. Recommended fabrication practice is to weld at both the flange hub and the pipe end.



## PIPE FLANGE DIMENSIONS

**125 LB.** USA. Standard Cast Iron — ANSI B16.1

**150 LB.** USA. Standard Steel — ANSI B16.5

*Steel is generally used.*

Designed Pipe Size Inches	O.D. of Flange Inches	Thickness of Flange Inches	Bolt Circle Inches	No. of Bolts	Size of Bolt Inches	Approx. Wt.-Lbs. Forged Steel (Slip-on*** or Threaded)
1	4.250	0.563*	3.125	4	1/2	2
1-1/4	4.625	0.625*	3.500	4	1/2	3
1-1/2	5.000	0.688*	3.875	4	1/2	3
2	6.000	0.750*	4.750	4	5/8	5
2-1/2	7.000	0.875*	5.500	4	5/8	8
3	7.500	0.938*	6.000	4	5/8	9
3-1/2	8.500	0.938*	7.000	8	5/8	12
4	9.000	0.938	7.500	8	5/8	13
5	10.000	0.938	8.500	8	3/4	14
6	11.00	1.000	9.500	8	3/4	18
8	13.50	1.125	11.75	8	3/4	27
10	16.00	1.188	14.25	12	7/8	37
12	19.00	1.250	17.00	12	7/8	59
14	21.00	1.375	18.75	12	1	79
16	23.50	1.438	21.25	16	1	101
18	25.00	1.563	22.75	16	1-1/8	112
20	27.50	1.688	25.00	20	1-1/8	146
24	32.00	1.875	29.50	20	1-1/4	210

\* Cast Iron are 0.125" thinner. Figures above apply to Forged Steel.

\*\* Cast Iron are 0.188" thinner. Figures above apply to Forged Steel.

\*\*\* Cast Iron flanges are not available in slip-on style.

## PIPE FLANGE DIMENSIONS

**250 LB.** USA. Standard Cast Iron — ANSI B16.1

**300 LB.** USA. Standard Steel — ANSI B16.5

*Steel is generally used.*

Designed Pipe Size Inches	O.D. of Flange Inches	Thickness of Flange Inches	Bolt Circle Inches	No. of Bolts	Size of Bolt Inches	Approx. Wt.-Lbs. Forged Steel (Slip-on*** or Threaded)
1	4.875	0.688	3.500	4	5/8	3
1-1/4	5.250	0.750	3.875	4	5/8	4
1-1/2	6.125	0.813	4.500	4	3/4	6
2	6.50	0.875	5.000	8	5/8	7
2-1/2	7.50	1.000	5.875	8	3/4	10
3	8.25	1.125	6.625	8	3/4	13
3-1/2	9.00	1.188	7.250	8	3/4	17
4	10.00	1.250	7.875	8	3/4	22
5	11.00	1.375	9.250	8	3/4	28
6	12.50	1.438	10.625	12	3/4	37
8	15.00	1.625	13.000	12	3/4	58
10	17.50	1.875	15.250	16	7/8	76
12	20.50	2.000	17.750	16	1	115
14	23.00	2.125	20.250	20	1-1/8	163
16	25.50	2.250	22.500	20	1-1/8	220
18	28.00	2.375	24.750	24	1-1/4	280
20	30.50	2.500	27.000	24	1-1/4	325
24	36.00	2.750	32.000	24	1-1/2	492

\*\*\* Cast Iron flanges are not available in slip-on style.



# Warranty Statement

NRP-JONES warrants that its products shall be free from defects in materials and workmanship when properly used and applied under normal conditions. Our liability on proven defective material is expressly limited to the original net purchase price, less service received on a pro-rated basis, or at the option of NRP-JONES the replacement of such item, upon its authorized return.

All claims for defective goods must be received in writing within a maximum of 12 months from date of sale by NRP-JONES to be considered. Seller's advance written authorization is required for the return of any product.

Merchandise damaged as a result of carelessness, mishandling, or misapplication is specifically excluded from the above warranty, as are all implied warranties, on any consequential injury, property damage and/or loss of profit which may be claimed to have been incurred through the sale or use of any such products or parts thereof which might be defective.

Except as otherwise expressly provided above, seller makes no representation or warranty of any kind, express or implied, with respect to the goods sold as to merchantability, fitness for a particular purpose, or any other matter with respect to the goods, whether used alone or in combination with other products.

***Product specifications are subject to change without prior notice.***



# Hose and Fitting Products for Every Need

- Industrial Hose and Assemblies
- Hydraulic Hose and Fittings
- Hydraulic Assemblies
- Military Specifications
- Private Branding
- Products for Special Applications

## **Corporate Office & Manufacturing:**

711 Daytona Street ..... Office: 219-362-9908  
LaPorte, Indiana 46350 ..... Fax: 219-324-0815  
**Customer Service Toll-Free Number ..... 1-800-348-8868**  
**Order Entry Toll-Free Fax Number ..... 1-800-207-2221**  
Website ..... [www.nrpjones.com](http://www.nrpjones.com)  
Email ..... [nrpjones@nrpjones.com](mailto:nrpjones@nrpjones.com)

## **Manufacturing Facility:**

255 West 11th North ..... Office: 435-623-1740  
Nephi, Utah 84648 ..... Fax: 435-623-2638  
**Customer Service Toll-Free Number ..... 1-800-453-1480**  
**Order Entry Toll-Free Fax Number ..... 1-800-207-2221**  
Email ..... [sales@nrp-jones.com](mailto:sales@nrp-jones.com)





M A D E I N T H E  
**U.S.A.** ©

**212**

Distributed by:

