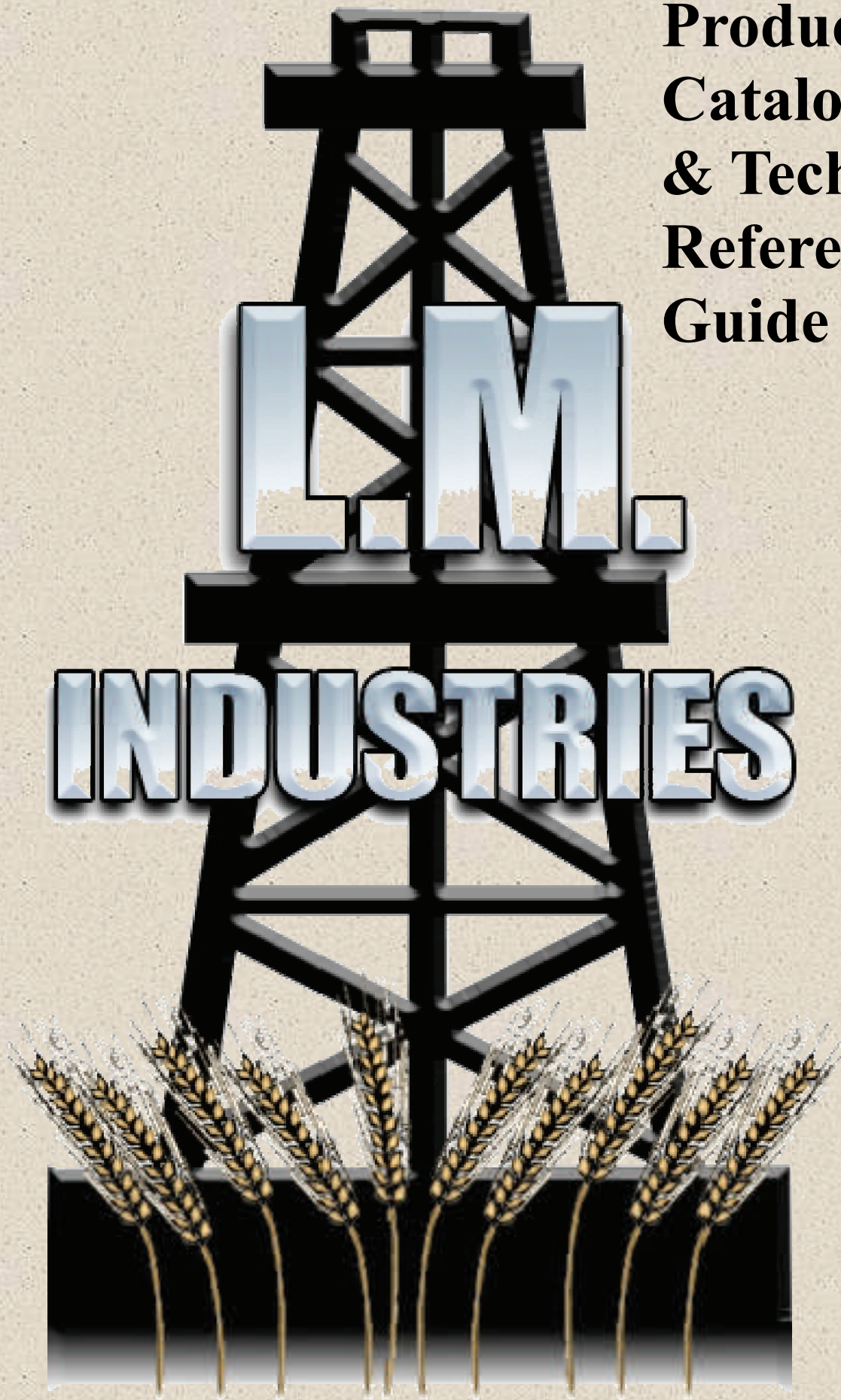


**Product
Catalogue
& Technical
Reference
Guide**

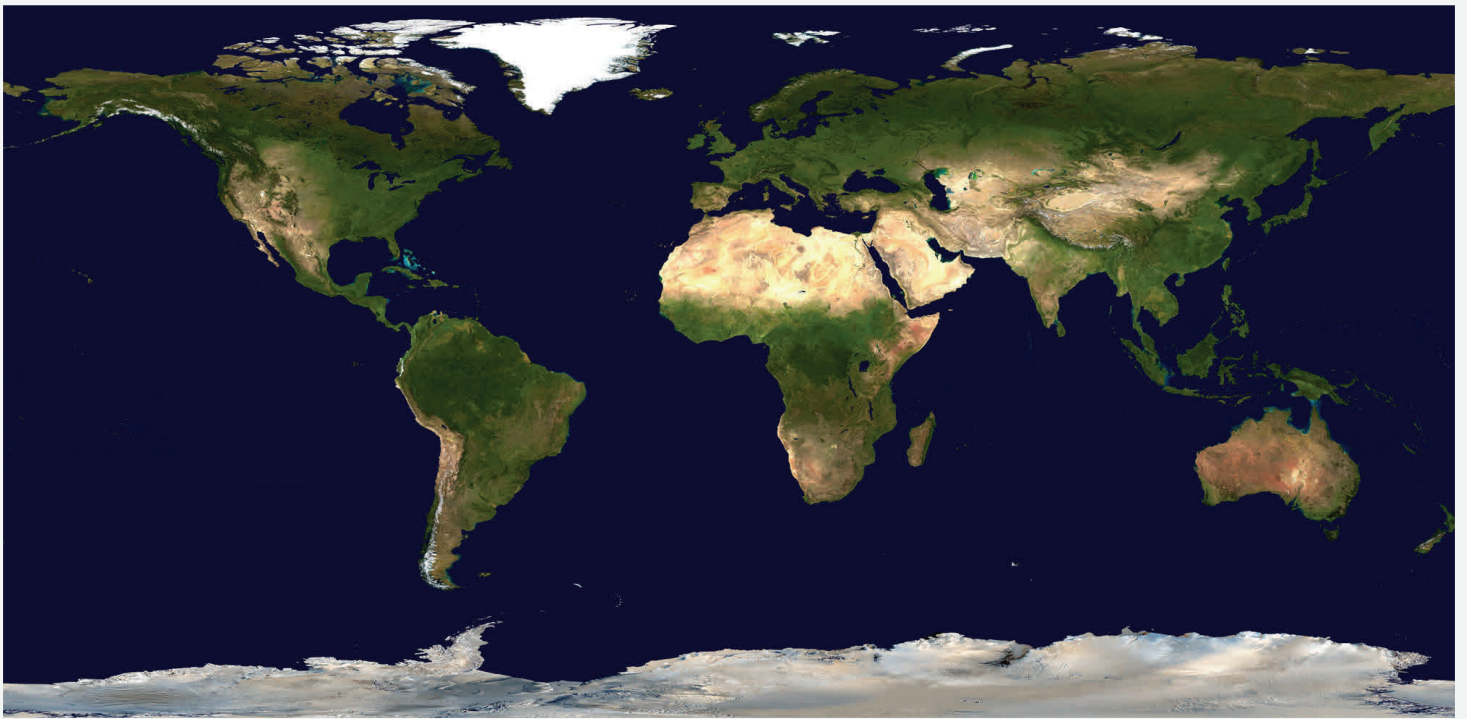


Note: All information & specifications within this catalogue are for information purposes only. Data & capacities herein are dependant on numerous variables; are not binding, & are for information purposes only.

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Leduc Mechanical Industries has specialized in the vacuum & water truck industry since 1996. These trucks are made up of components from the world over. We have set up a supply chain that brings these components into our inventory from Italy, France, Eurasia, United States; ready for you in Western Canada when you need them. Throughout this catalogue you will see a sampling of the over 5200 different parts in our inventory. With available inventory & a staff of industry trained journeymen personnel, we can provide you with any part you need on your truck, or have our service department install it.

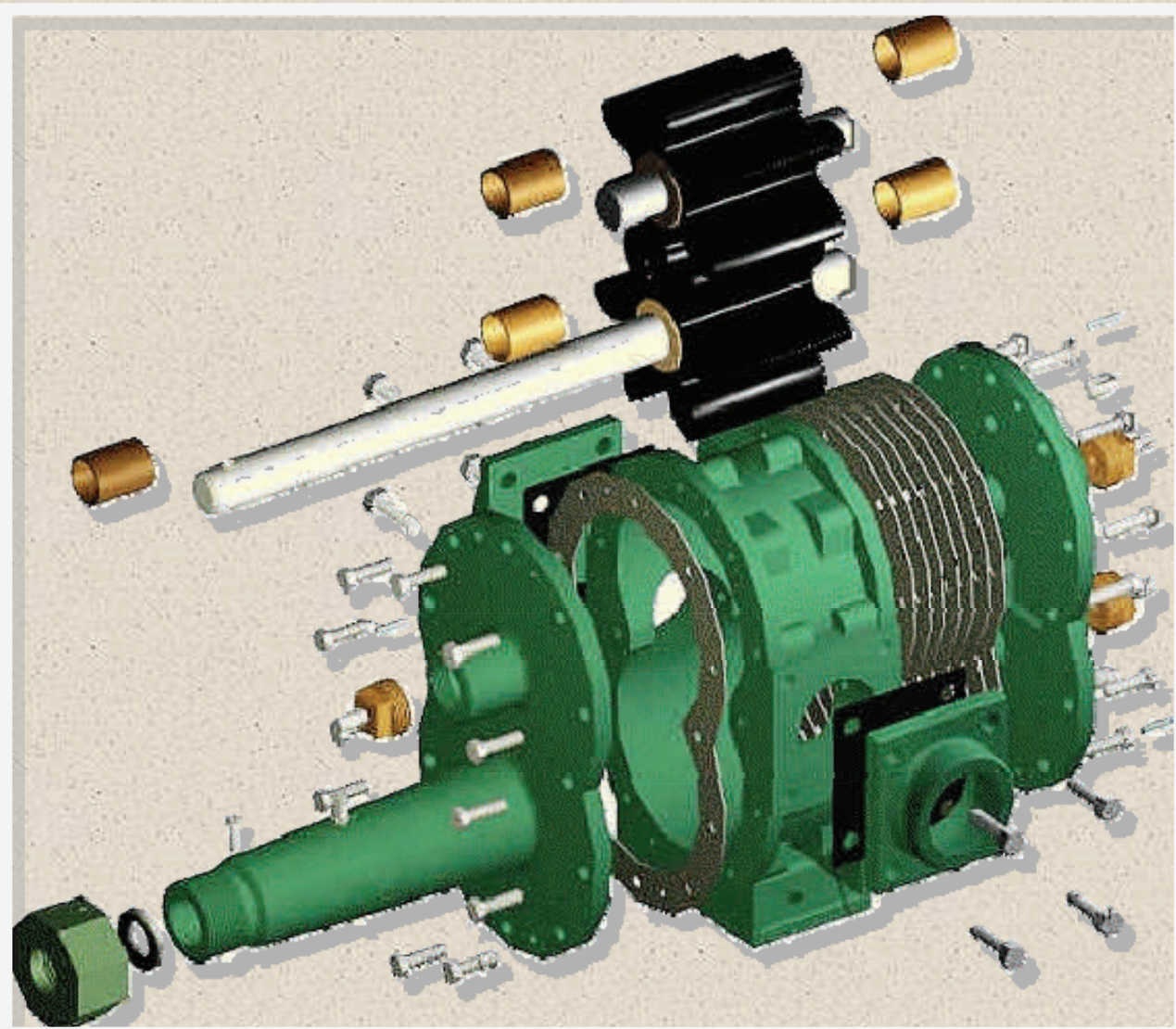


L.M. Industries
4412-50 Avenue
Box 1029 (Mailing)
Calmar, AB T0C-0V0
Ph. (780)985-8591
Fax (780)985-2547
www.lmindustries.ca

Images used in this catalogue originate from a variety of sources. All products shown are sold and/or serviced by Leduc Mechanical Industries.



The next page shows the performance curves for the 1-1/2", 2", 3", and 4" Bowie Pumps. Included on the charts is each pumps brake horsepower, the output in gallons per minute, and the R.P.M. (maximum recommended R.P.M. for the 2", 3", and 4" is 400, and for the 1-1/2" is 780). The maximum discharge pressure of each pump is 100 P.S.I. With different gears, bushings or bearings, pump sizes & shaft sizes; there is a Bowie for every application.

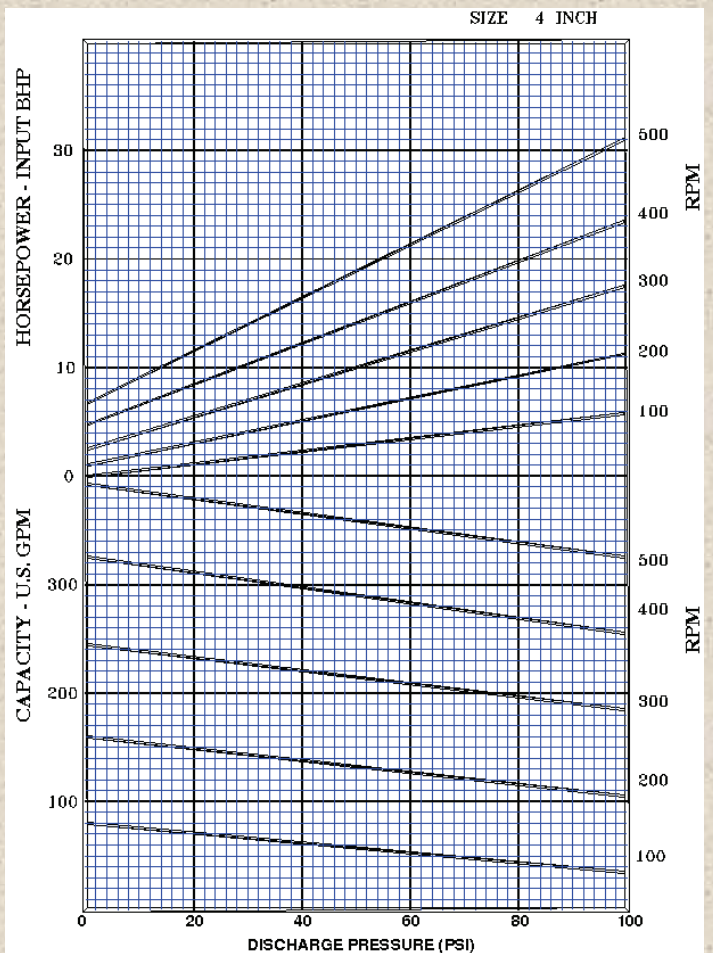
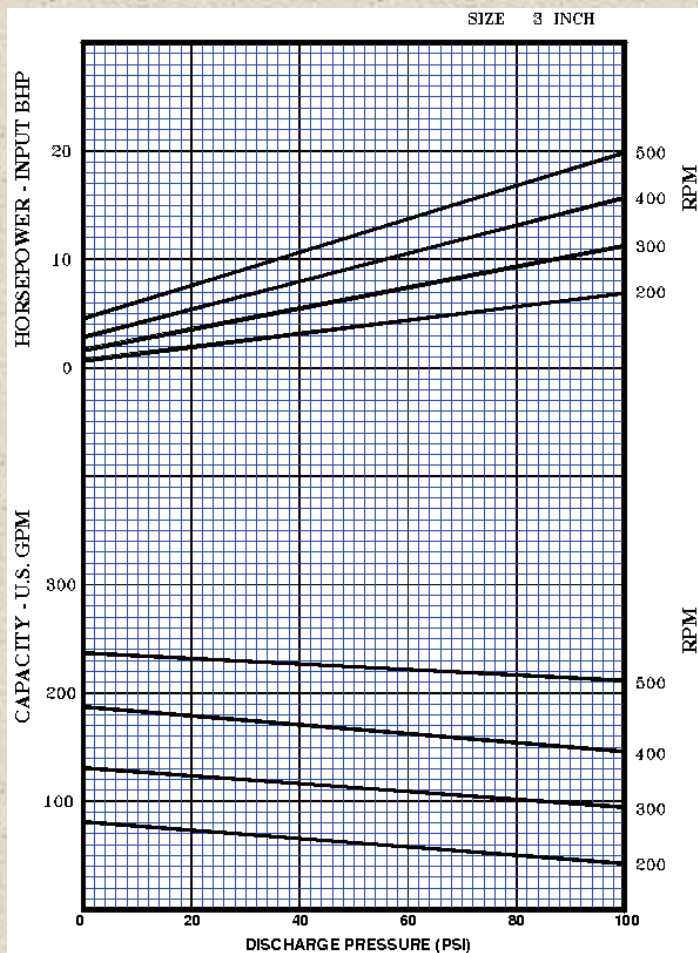
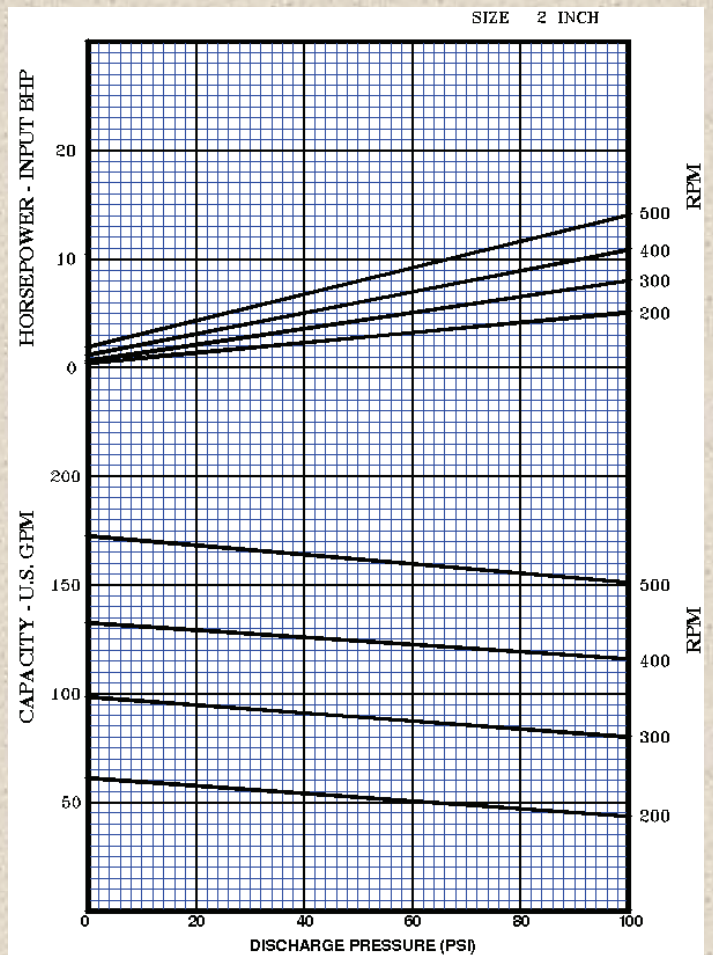
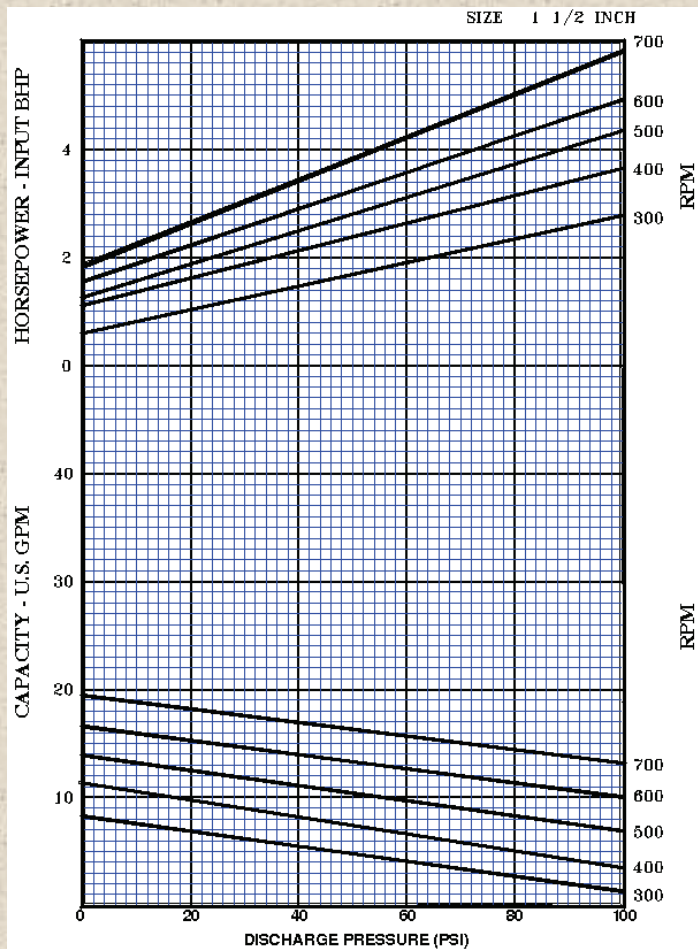


Size Series

2"	300
3"	300ED
4"	400
	600
	9100

3" Bowie Product Pump Schematic

Use size as a prefix, then series number as a suffix to come up with the model number, except for the 9100, which only comes in 1-1/2"





Pumps & Blowers

<u>Model #</u>	<u>C.F.M.</u> (Free Air Capacity)	<u>R.P.M.</u> (Max.)	<u>H.P. required @</u> <u>Max. Pressure</u> (B.H.P.)	<u>Weight</u> (LBS.)	<u>Drive Shaft Size</u> <u>for Coupling</u> (Bore x Key)
H1V	30	1750	2.2		25mm x 7mm x8mm Key
HXL2V	75	1750	5.4	96	25mm x 7mm x8mm Key
HXL3V	112	1750	9	110	25mm x 7mm x8mm Key
HXL4V	156	1400	15.8	167	1-1/4" x 1/4" Key
HXL75V	230	1250	24.6	229	1-3/8" x 5/16" Key
HXL75WV	230	1275	31.3	260	1-3/8" x 5/16" Key
HXL15V	350	1250	40.2	313	1-3/8" x 5/16" Key
HXL15WV	350	1275	40.2	349	1-3/8" x 5/16" Key
HXL400WV	400	1275	50	450	1-3/8" x 5/16" Key



Manufacturers

Recommended Oil Type:

Summer: Masport Summer Blend

Winter: Masport Winter Blend

Masport Vacuum Pumps are a high quality pump delivering exceptional performance. There are many models to choose from, each with different benefits. One feature includes tangential rotor design which allows for higher airflow and less vane and housing wear. A double ended shaft allows for clockwise or counter-clockwise drive systems.

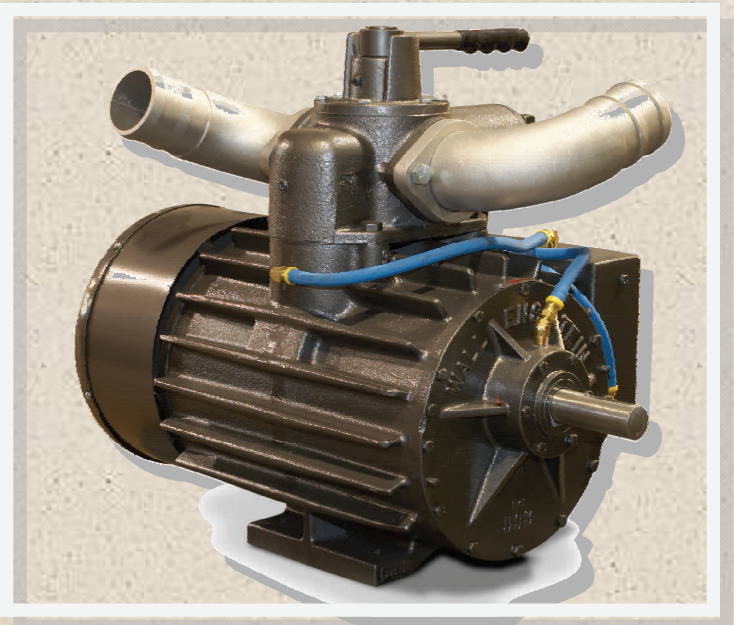


Pumps & Blowers

<u>Model #</u>	<u>C.F.M.</u> (Free Air Capacity)	<u>R.P.M.</u> (Max.)	<u>H.P. required @</u> <u>Max. Pressure</u> (B.H.P.)	<u>Weight</u> (LBS.)	<u>Drive Shaft Size</u> <u>for Coupling</u> (Bore x Key)
302	165	1150	13	185	1-1/4" x 1/4" Key
403	220	1150	18	245	1-1/4" x 1/4" Key
553	300	1150	25	295	1-1/4" x 1/4" Key
753	385	1150	32	340	1-1/4" x 1/4" Key
1053	550	1000	47	700	1-3/4" x 3/8" Key
1504	770	1150	64	750	1-3/4" x 3/8" Key



Vane wear allowance is a primary benefit of Wallenstein vacuum pumps. No other pump allows 1" of vane wear. Today's performance orientated market calls for increasingly specialized vacuum truck pumps. Wallenstein vacuum pumps are manufactured in many sizes and versions to suit the specific application. The choice of displacement, vane design, and cooling system all come together in the right pump for the job. Let us help you decide which model is best for your application.



**Manufacturers
Recommended Oil Type:
Petro Canada R&O 46**



Pumps & Blowers

Model

#	C.F.M. (Free Air Capacity)	R.P.M. (Max.)	H.P. required @ Max. Pressure (B.H.P.)	Weight (LBS.)	Drive Shaft Size for Coupling (Bore x Key)
400	400	1150	35	485	1-1/4" x 1/4" Key
600	600	1150	50	700	1-1/4" x 1/4" Key



Oil Injection Pump
Metered delivery of oil.
No adjustment needed.



Cooling Fan
High performance
cooling fan. No extra
moving parts.



2 Gall. Oil Tank



Dual Ports
Allows for unrestricted, higher air flow
resulting in higher performance at
cooler temperatures.



Check Valve/Filter
With Flush Port



Note: All positive displacement rotary vane pumps have the inherent benefit of spark-proof vanes, allowing the operation of the pump within environments where intrinsically safe equipment must be used.



Pumps & Blowers

<u>Model #</u>	<u>C.F.M.</u> (Free Air Capacity)	<u>R.P.M.</u> (Max.)	<u>H.P. required @</u> <u>Max. Pressure</u> (B.H.P.)	<u>Weight</u> (LBS.)	<u>Drive Shaft Size</u> <u>for Coupling</u> (Bore x Key)
RCF 250	180	1400	18	255	42mm x 1/2" Key
RCF 370	275	1400	36	385	42mm x 1/2" Key
RCF 500	350	1400	44	450	42mm x 1/2" Key
RCF 800	430	1000	55	1100	58mm x 5/8" Key
RCF 1200	645	1000	85	1400	58mm x 5/8" Key

FRUITLAND

Fruitland Vacuum Pumps have been designed & engineered for outstanding performance, high pressure offloading (up to 35 P.S.I.), durability, & simple maintenance. Each pump comes equipped with a positive displacement, high-pressure lubrication system, delivering the correct amount of oil to each location without the need for adjustment. Fruitland pumps have gained a solid reputation not only on the vacuum trucks & skid mounted units in the oil & gas industry, but also in hazardous waste, septic/grease hauling, waste water, utilities, and agricultural industries as well.



Manufacturers

Recommended Oil Type:

Summer: ISO 150 Compressor oil

Winter: ISO 100 Compressor oil



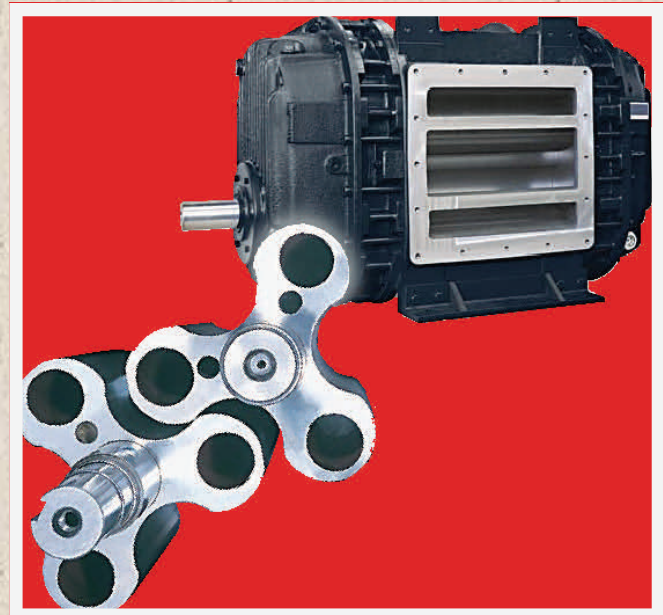
Pumps & Blowers

<u>Model #</u>	<u>C.F.M.</u> (Free Air Capacity)	<u>R.P.M.</u> (Max.)	<u>H.P. required @</u> <u>Max. Pressure</u> (B.H.P.)	<u>Weight</u> (LBS.)	<u>Drive Shaft Size</u> <u>for Coupling</u> (Bore x Key)
VTB 810	900	3300	55	440	42mm x 12mm Key
VTB 820	1500	3600	88	484	42mm x 12mm Key
SIAV 822	2750	3000	150	858	50mm x 14mm Key
SIAV 840	3720	2600	225	1276	65mm x 18mm Key
SIAV 8702	5250	2000	300	2220	70mm x 20mm Key

hibon®

IR **Ingersoll Rand**
Industrial Technologies

**Manufacturers
Recommended Oil Type:
Mobil SHC 630**



With over 100 years of experience, there is no question why the Hibon blower has been the primary choice for powering vacuum trucks in Western Canada for over a decade. All are equipped with tri-lobe rotors for smoother operation with less vibration & pulsating noise. The helical gears located on the drive side allow more input torque capability. Certified Hibon mechanics on staff to keep your truck operating.

**Ask us for our blower
rebuild & exchange
program brochure, which
outlines our traditional
rebuild program & our new
exchange program, and the
benefits of each.**



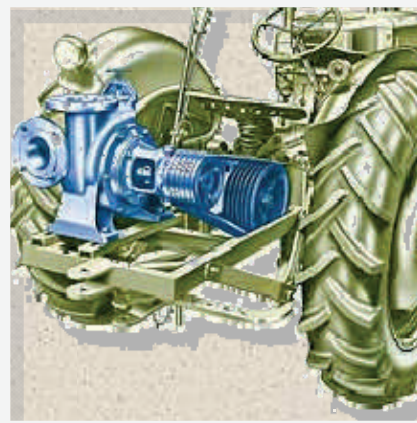
Pumps & Blowers



<u>Model #</u>	<u>C.F.M.</u> (Free Air Capacity)	<u>R.P.M.</u> (Max.)	<u>H.P. required @</u> <u>Max. Pressure</u> (B.H.P.)	<u>Weight</u> (LBS.)	<u>Drive Shaft Size</u> <u>for Coupling</u> (Bore x Key)
RB-DV-45	494	5000	31.5	213.8	38mm x 10mm Key
RB-DV-65	950	4800	58	352	48mm x 14mm Key
RB-DV-85	1650	3800	99	550	55mm x 16mm Key
RB-DV-105	2700	3250	135	880	60mm x 18mm Key
RB-DV-125	3800	2600	214	1331	70mm x 20mm Key
RB-DV-145	6400	2000	325	2288	85mm x 22mm Key

Robuschi is a highly innovative & leading edge company, evident in their products. With their patented volumetric lobe compressor & pre-injection devices, the decibel level of this blower and operating temperature is significantly reduced. We have certified Robuschi mechanics on staff to install and service this product.

Manufacturers Recommended Oil Type:
Summer: EP 220
Winter: EP 150



Starting as a mechanical workshop in Viale Piacenza in Parma, Italy, in 1941, Robuschi Spa soon acquired its own foundry. This foundry was used for the production of centrifugal pumps and accessories primarily used for agriculture. The 1960's saw tremendous growth for Robuschi, leading to the first production of positive displacement lobe blowers by the mid 1970's. Today, the company covers more than 96,400 square meters where through continuous improvements and patented innovations, Robuschi produces the exemplary tri-lobe blowers used on your vacuum truck today.



Acoustically Enclosed Blower Units

<u>Part #</u>	<u>Description</u>
BL-RB-DV-45	RB-DV-45 Blower Package with Acoustical Enclosure
BL-RB-DV-65	RB-DV-65 Blower Package with Acoustical Enclosure
BL-RB-DV-85	RB-DV-85 Blower Package with Acoustical Enclosure



These Robuschi units are enclosed in a sound dampening box with two built in silencers, a final filter, all accessories, and are ready to be attached to 6" piping on your vacuum truck. These units have been engineered to significantly reduce the DBA level of the environment your truck is working in, which will allow your truck to meet the most stringent noise specifications. Units come in various configurations including the RB-DV-45, RB-DV-65, or the RB-DV-85 positive displacement blowers.

Liquid Ring Pumps



Chemical processing, food processing & packaging, pharmaceutical production, oil exploration & refining, power generation, waste collection, & soil remediation industries all use liquid ring pumps as their vacuum needs solution. These pumps are popular in such industries because of low maintenance requirements, low vibration and noise levels, and unique capabilities when handling wet gases.





Brass Air Fittings-Brass Hose Barb Fittings

Size Suffix Legend

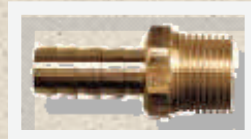
Outside Diameter Tube Sizes

Number Suffix	O.D.
2	1/8"
25	5/32"
3	3/16"
4	1/4"
5	5/16"
6	3/8"
7	7/16"
8	1/2"
10	5/8"
12	3/4"
14	7/8"
16	1"

Pipe Thread Sizes

Letter Suffix	O.D.
A	1/8"
B	1/4"
C	3/8"
D	1/2"
E	3/4"
H	1"

Fairview Fittings numbering system uses the charts to the left to identify the proper fitting. Choosing 125-6B as pictured below as an example, we can identify it as Hose Barb to Male Pipe (125), used with 3/8" Tubing (6), and 1/4" Pipe (B).



Hose Splicer

Part #	Hose I.D.
129-3	3/16"
129-4	1/4"
129-5	5/16"
129-6	3/8"
129-8	1/2"
129-10	5/8"
129-12	3/4"

Hose Barb to Male Pipe Coupler

Part #	Hose I.D. x Pipe
125-2A	1/8" X 1/8"
125-2B	1/8" X 1/4"
125-3A	3/16" X 1/8"
125-3B	3/16" X 1/4"
125-4A	1/4" X 1/8"
125-4B	1/4" X 1/4"
125-4C	1/4" X 3/8"
125-5A	5/16" X 1/8"
125-5B	5/16" X 1/4"
125-5C	5/16" X 3/8"
125-6A	3/8" X 1/8"
125-6B	3/8" X 1/4"
125-6C	3/8" X 3/8"
125-6D	3/8" X 1/2"
125-8B	1/2" X 1/4"
125-8C	1/2" X 3/8"
125-8D	1/2" X 1/2"
125-8E	1/2" X 3/4"
125-10C	5/8" X 3/8"
125-10D	5/8" X 1/2"
125-10E	5/8" X 3/4"
125-12D	3/4" X 1/2"
125-12E	3/4" X 3/4"
125-16E	1" X 3/4"
125-16H	1" X 1"

Hose Barb to Male Pipe Coupler

Part #	Hose I.D. x Pipe
139-3A	3/16" X 1/8"
139-4A	1/4" X 1/8"
139-4B	1/4" X 1/4"
139-4C	1/4" X 3/8"
139-5A	5/16" X 1/8"
139-5B	5/16" X 1/4"
139-5C	5/16" X 3/8"
139-6A	3/8" X 1/8"
139-6B	3/8" X 1/4"
139-6C	3/8" X 3/8"
139-6D	3/8" X 1/2"
139-8B	1/2" X 1/4"
139-8C	1/2" X 3/8"
139-10C	5/8" X 3/8"
139-10D	5/8" X 1/2"

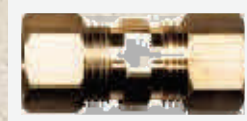
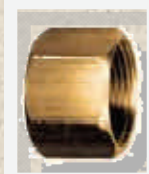
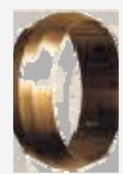


Nylon Air Tube



Part #	Description
1485-2	1/8" Nylon Air Brake Tubing
1485-2-1/2	5/32" Nylon Air Brake Tubing
1485-3	3/16" Nylon Air Brake Tubing
1485-4	1/4" Nylon Air Brake Tubing
1485-5	5/16" Nylon Air Brake Tubing
1485-6	3/8" Nylon Air Brake Tubing
1485-8	1/2" Nylon Air Brake Tubing

Brass Air Fittings-Air Brake Compression Fittings



Sleeve

Part #	Tube Size
1460-4	1/4"
1460-6	3/8"
1460-8	1/2"
1460-10	5/8"
1460-12	3/4"

Nut

Part #	Tube Size
1461-4	1/4"
1461-6	3/8"
1461-8	1/2"
1461-10	5/8"
1461-12	3/4"

Union Coupling

Part #	Tube Size
1462-4	1/4"
1462-6	3/8"
1462-8	1/2"
1462-10	5/8"
1462-12	3/4"



Tee Tube Three Ends

Part #	Tube Size
1464-4	1/4"
1464-6	3/8"
1464R-64	3/8"x3/8"x1/4"
1464-8	1/2"
1464-10	5/8"
1464-12	3/4"

Male Pipe Connector

Part #	Tube Size	Pipe Size
1468-4A	1/4"	1/8"
1468-4B	1/4"	1/4"
1468-4C	1/4"	3/8"
1468-6A	3/8"	1/8"
1468-6B	3/8"	1/4"
1468-6C	3/8"	3/8"
1468-6D	3/8"	1/2"
1468-8B	1/2"	1/4"
1468-8C	1/2"	3/8"
1468-8D	1/2"	1/2"
1468-8E	1/2"	3/4"
1468-10C	5/8"	3/8"
1468-10D	5/8"	1/2"
1468-10E	5/8"	3/4"
1468-12D	3/4"	1/2"
1468-12E	3/4"	3/4"

90 Degree Male Pipe Elbow

Part #	Tube Size	Pipe Size
1469-4A	1/4"	1/8"
1469-4B	1/4"	1/4"
1469-4C	1/4"	3/8"
1469-6A	3/8"	1/8"
1469-6B	3/8"	1/4"
1469-6C	3/8"	3/8"
1469-6D	3/8"	1/2"
1469-8B	1/2"	1/4"
1469-8C	1/2"	3/8"
1469-8D	1/2"	1/2"
1469-10C	5/8"	3/8"
1469-10D	5/8"	1/2"
1469-10E	5/8"	3/4"
1469-12D	3/4"	1/2"
1469-12E	3/4"	3/4"



Brass Air Fittings- S.A.E. 45 Degree Flare Tube Fittings



Union Coupling

Part

42-2
42-3
42-4
42-5
42-6
42-8
42-10
42-12



Male Pipe Connector

Part # Part

48-2A	48-6D
48-3A	48-6E
48-4A	48-8B
48-4B	48-8C
48-4C	48-8D
48-4D	48-8E
48-5A	48-10C
48-5B	48-10D
48-5C	48-10E
48-6A	48-12D
48-6B	48-12E
48-6C	

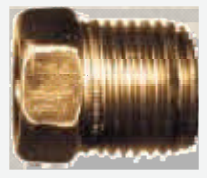


90 Degree Male Pipe Elbow

Part # Part

49-2A	49-6D
49-3A	49-6E
49-4A	49-8B
49-4B	49-8C
49-4C	49-8D
49-4D	49-8E
49-5A	49-10C
49-5B	49-10D
49-5C	49-10E
49-6A	49-12D
49-6B	49-12E
49-6C	

Brass Air Fittings- Inverted Flare Tube Fittings



Brass Nut

Part

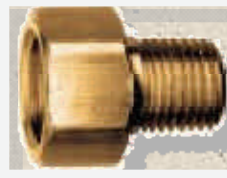
141-2
141-3
141-4
141-5
141-6
141-7
141-8
141-10
141-12



Union Coupling

Part

142-2
142-3
142-4
142-5
142-6
142-8



Male Pipe Connector

Part

148-2A
148-3A
148-4A
148-4B
148-5A
148-5B
148-6A
148-6B
148-6C
148-8B
148-8C
148-8D
148-10D
148-12E



90 Degree Male Pipe Elbow

Part

149-2A
149-3A
149-4A
149-4B
149-5A
149-5B
149-6A
149-6B
149-6C
149-8B
149-8C
149-8D
149-10D
149-12E



Brass Air Fittings-Brass Pipe Fittings



90 Degree Street Elbow

Part

115-A
115-B
115-C
115-D
115-E



Coupling Part

103-A
103-B
103-C
103-D
103-E



Bushing Part

110-BA
110-CA
110-CB
110-DA
110-DB
110-DC
110-EA
110-EB
110-EC
110-ED



Hexagon Nipple

Part

122-A
122-B
122-C
122-D
122-E



Adapter Reducer

Part

120-BA
120-CB
120-DC
120-ED



Hexagon Head Plug

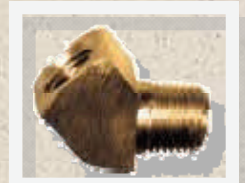
Part

121-A
121-B
121-C
121-D
121-E



Adapter Part

120-AA
120-BB
120-CC
120-DD



45 Degree Street Elbow

Part

124-A
124-B
124-C
124-D



**Fairview Fittings
& Manufacturing**



Valves

Kunkle



High capacity ASME Section VIII Air/Gas safety valve with 'pull-ring' lift device for manual testing.



Heat Collars

Part #	Description
337-H01AKE-15	2" Kunkle Valve (15 PSI)
337-H01AKE-20	2" Kunkle Valve (20 PSI)

Four-Way Valve



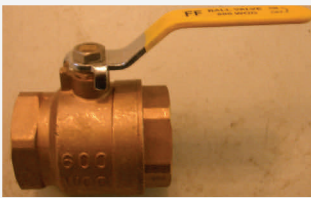
Part #	Description
LM-2-Heat	2" Heat Collar Assembly
LM-3-Heat	3" Heat Collar Assembly
LM-4-Heat	4" Heat Collar Assembly
LM-6-Heat	6" Heat Collar Assembly

Part #	Description
2160-0000-NF	6" Four Way Valve W/O Flanges
1622002300	Four Way Valve Stop Pin
1680708000	6" Four-Way Valve Flange Gasket
1505000100	Handle for Four-Way Valve
4025505008	Plastic Grip for Handle



Wafer Spring Check Valves

Part #	Description
CD152IS	4" One Way Wafer Spring Check Valve
CD125K	6" One Way Wafer Spring Check Valve



Ball Valves

Part #	Description
BV4103-B	1/4" Ball Valve (600 WOG)
BV4103-C	3/8" Ball Valve (600 WOG)
BV4103-D	1/2" Ball Valve (600 WOG)
BV4103-E	3/4" Ball Valve (600 WOG)
BV4103-H	1" Ball Valve (600 WOG)
BV4103-K	1-1/2" Ball Valve (600 WOG)
BV4103-M	2" Ball Valve (600 WOG)
BV4103-P	3" Ball Valve (400 WOG)
BV4103-S	4" Ball Valve (400 WOG)

Butterfly Valves

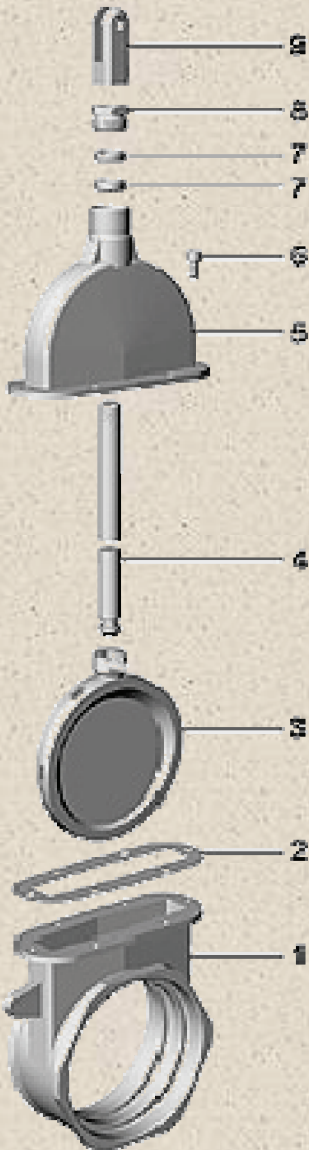
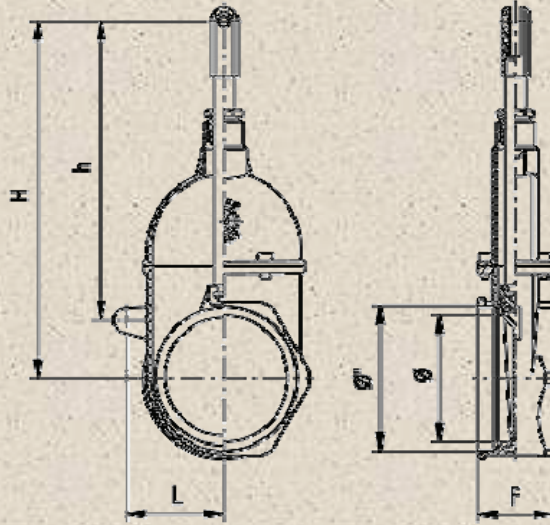
Call for the specific size, make, and configuration of the butterfly valve you require.





Brass Piston Gate Valve

PART #	DESCRIPTION	WEIGHT
ARZO 004 100 NPT 4" Brass Piston Valve (60PSI)		9 LBS.
ARZO 004 150 NPT 6" Brass Piston Valve (60PSI)		24 LBS.



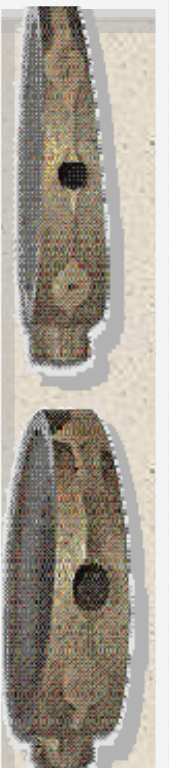
DIMENSIONS

4" 6"

H	11.7"	15.5"
h	8.75"	11.26"
L	3.5"	4"
F	4"	4.16"

New Style Discs

The new style piston valves are designed with thicker discs to last longer and eliminate leaks. For replacement discs, the old style 4" valve will take the thicker disc, but the old style 6" valve requires the old disc.



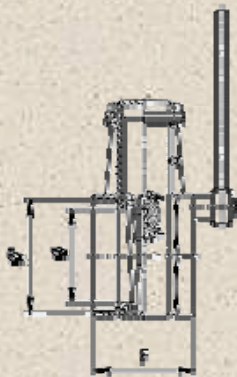
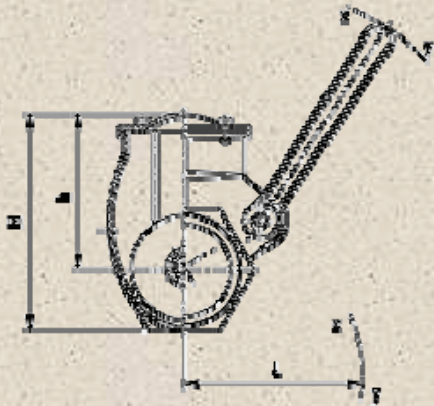
EXPLODED VIEW

#	DESCRIPTION	4" PART #	6" PART #
1	BODY	FOZO 004 100 001	FOZO 004 100 001
2	GASKET	GGUA 004 100 004	GGUA 004 150 004
3	DISC	FOZO 006 100 002	FOZO 005 150 002
3(O/S)	DISC	(O/S SAME AS NEW)	FOZO 006 150 002
4	STEM	TOZO 005 100 003	TOZO 005 150 003
5	HEAD	FOZO 004 100 005	FOZO 004 150 005
6	SCREW	VTAC 006 100 009	VTAC 006 100 009
7	GASKET X 2	SPZO 005 100 006	SPZO 005 100 006
8	NUT	TOZO 005 100 007	TOZO 005 100 007
9	CLEVIS	FOZO 005 100 008	FOZO 005 100 008



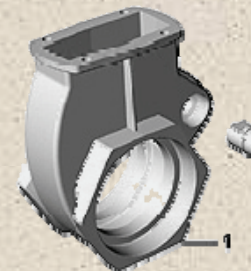
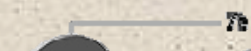
Brass Lever Gate Valve

PART #	DESCRIPTION	WEIGHT
ARZO 003 050 NPT 2" Brass Lever Valve (45 PSI)		4 LBS.
ARZO 003 080 NPT 3" Brass Lever Valve (45 PSI)		9 LBS.
ARZO 003 100 NPT 4" Brass Lever Valve (45 PSI)		15 LBS.
ARZO 003 150 NPT 6" Brass Lever Valve (45 PSI)		27 LBS.
ARZO 03F 100 NPT 4" Brass Lever Valve (Flange to NPT) (45 PSI)		15 LBS.
ARZO 03F 150 NPT 6" Brass Lever Valve (Flange to NPT) (45 PSI)		27 LBS.



DIMENSIONS

	2"	3"	4"	6"
H	4.6"	6.7"	8.6"	12.75"
h	3.2"	4.76"	6.2"	9.13"
L	10.4"	12.6"	15.2"	21.8"
F	3.15"	3.54"	4.02"	4.02"



EXPLODED VIEW

#	DESCRIPTION	2" PART #	3" PART #	4" PART #	6" PART #
1	BODY	FOZO 003 050 001	FOZO 003 080 001	FOZO 003 100 001	FOZO 003 150 001
2	LEVER BOLT	VTAC 028 045 008	VTAC 003 100 008	VTAC 003 100 008	VTAC 003 100 008
3	HANDLE	FOZO 003 050 012	FOZO 003 080 012	FOZO 003 100 012	FOZO 003 150 012
4	NUT	TOZO 003 050 007	TOZO 005 100 007	TOZO 003 100 007	TOZO 003 100 007
5	GASKET	SPZO 003 050 006	SPZO 005 100 006	SPZO 003 100 006	SPZO 003 100 006
6	PIN	SOZO 003 050 010	SOZO 003 080 010	SOZO 003 100 010	SOZO 003 100 010
7	DISC	FOZO 003 050 002	FOZO 003 080 002	FOZO 003 100 002	FOZO 003 150 002
8	INNER LEVER	SOZO 003 050 003	SOZO 003 080 003	SOZO 003 100 003	SOZO 003 150 003
9	GASKET	GGUA 003 050 004	GGUA 003 080 004	GGUA 003 100 004	GGUA 003 150 004
10	HEAD	FOZO 003 050 005	FOZO 003 080 005	FOZO 003 100 005	FOZO 003 150 005
11	SCREW	VTAC 288 006 009	VTAC 006 100 009	VTAC 006 100 009	VTAC 006 100 009



Brass Piston Gate Valve (Flange to NPT)

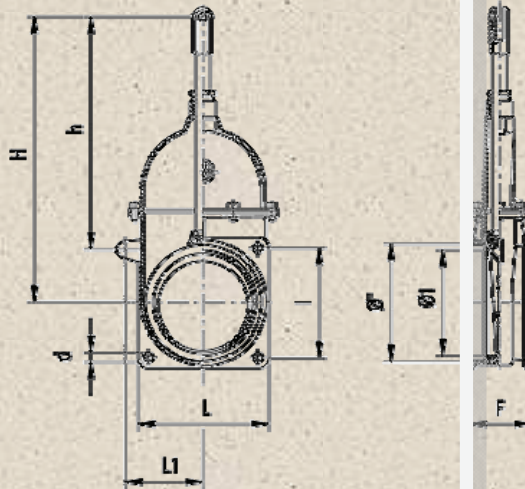
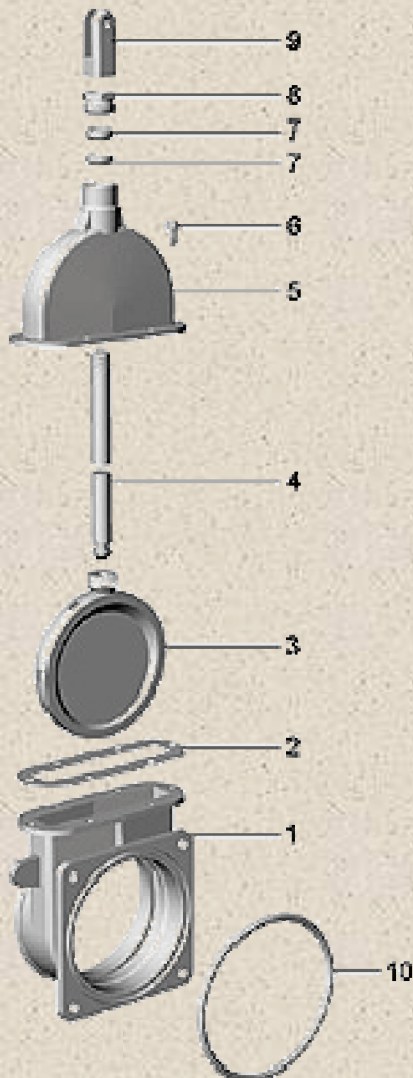
PART # DESCRIPTION WEIGHT

ARZO 07F 100 NPT 4" Brass Piston Valve (Flange to NPT) (60 PSI) 13 LBS.

ARZO 07F 150 NPT 6" Brass Piston Valve (Flange to NPT) (60 PSI) 17 LBS.

DIMENSIONS

	4"	6"
H	11.4"	15.7"
h	9.1"	12.9"
L	7"	7"
F	3.1"	3.5"
L1	3"	4.25"
d	0.51"	0.51"
I	6"	6"



EXPLODED VIEW

#	DESCRIPTION	4" PART #	6" PART #
1	BODY	FOZO 07F 100 01N	FOZO 07F 100 01N
2	GASKET	GGUA 007 100 004	GGUA 007 150 004
3	DISC	FOZO 007 100 002	FOZO 007 150 002
4	STEM	TOZO 005 100 003	TOZO 005 150 003
5	HEAD	FOZO 007 100 005	FOZO 007 150 005
6	SCREW	VTAC 006 100 009	VTAC 006 100 009
7	GASKET X 2	SPZO 005 100 006	SPZO 005 100 006
8	NUT	TOZO 005 100 007	TOZO 005 100 007
9	CLEVIS	FOZO 005 100 008	FOZO 005 100 008
10	O-RING	OR 001 100 010	OR 001 100 010



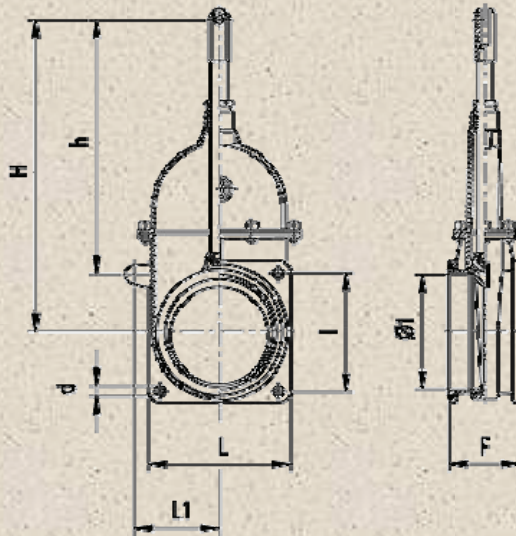
Brass Piston Gate Valve (Flange to Flange)

PART # DESCRIPTION WEIGHT

ARZO 8F2 100 000 4"	Piston Steel Gate Valve c/w Two Flanges (60 PSI)	15 LBS.
ARZO 8F2 150 000 6"	Piston Steel Gate Valve c/w Two Flanges (60 PSI)	23 LBS.
ARZO 8F2 200 000 8"	Piston Steel Gate Valve c/w Two Flanges (60 PSI)	35 LBS.

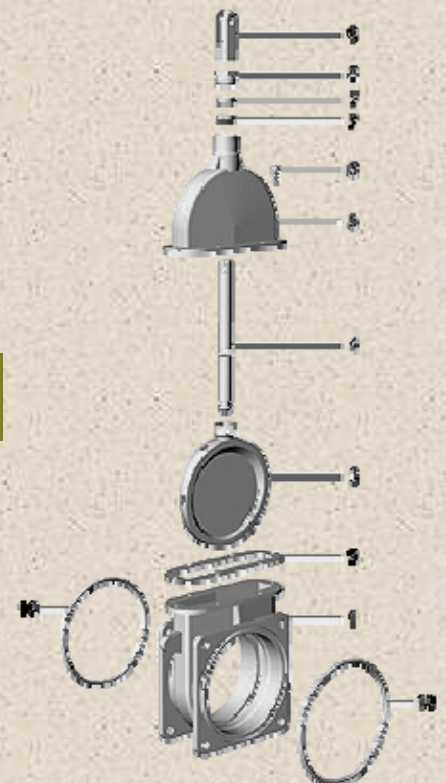
DIMENSIONS

	4"	6"	8"
H	15"	17.1"	23"
h	9.3"	11.4"	14.2"
L	7.1"	7.1"	9"
F	3.5"	3.5"	4.5"
L1	3.8"	3.9"	5.4"
d	0.51"	0.51"	0.51"
l	5.9"	5.9"	7.1"



EXPLODED VIEW

#	DESCRIPTION	4" PART #	6" PART #	8" PART #
1	BODY	FOZO 7F2 100 001	FOZO 7F2 150 001	FOZO 7F2 200 001
2	GASKET	GGUA 007 100 004	GGUA 007 150 004	GGUA 007 200 004
3	DISC	FOZO 007 100 002	FOZO 007 150 002	FOZO 007 200 002
4	STEM	TOZO 005 100 003	TOZO 005 150 003	TOZO 005 200 003
5	HEAD	FOZO 007 100 005	FOZO 007 150 005	FOZO 007 200 005
6	SCREW	VTAC 006 100 009	VTAC 006 100 009	VTAC 006 100 009
7	GASKET X 2	SPZO 005 100 006	SPZO 005 100 006	SPZO 003 100 006
8	NUT	TOZO 005 100 007	TOZO 005 100 007	TOZO 006 200 007
9	CLEVIS	FOZO 005 100 008	FOZO 005 100 008	FOZO 005 100 008
10	O-RING	OR 001 100 010	OR 001 100 010	OR 7F2 200 010





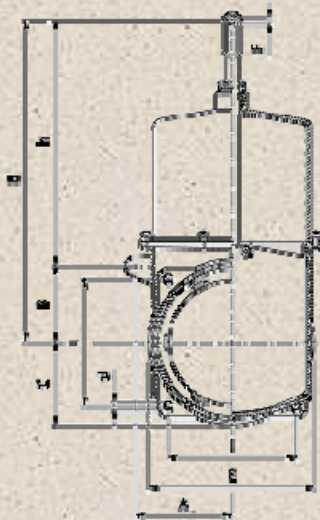
Brass Piston Steel Gate Valve

PART # DESCRIPTION WEIGHT

ARZO 8F2 100 000 4" Piston Steel Gate Valve c/w Two Flanges (60 PSI) 15 LBS.

ARZO 8F2 150 000 6" Piston Steel Gate Valve c/w Two Flanges (60 PSI) 23 LBS.

ARZO 8F2 200 000 8" Piston Steel Gate Valve c/w Two Flanges (60 PSI) 35 LBS.



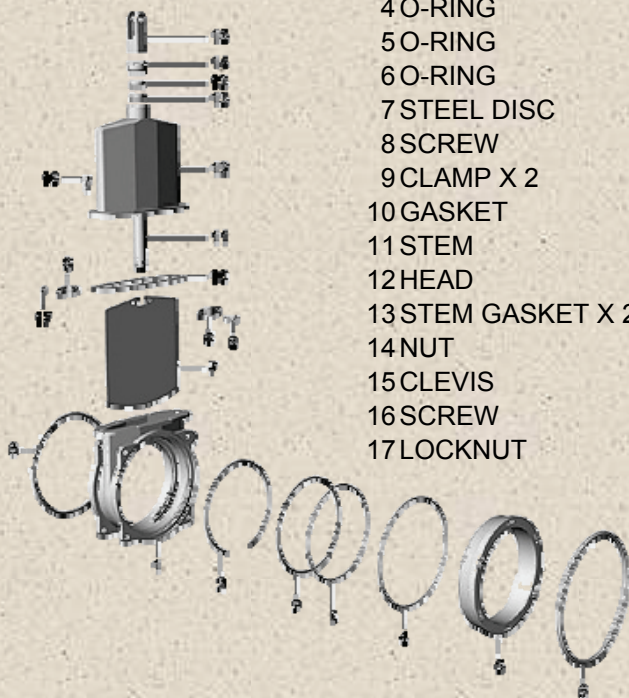
DIMENSIONS

	4"	6"
A	3.5"	4.5"
B	1.8"	2.4"
C	3.2"	4.2"
H	11.7"	17.3"
h	9.8"	14.9"
I	4.7"	5.9"
L	2.7"	2.7"



EXPLODED VIEW

#	DESCRIPTION	4" PART #	6" PART #	8" PART #
1	BODY	FOZO 008 100 001	FOZO 8F2 150 001	FOZO 8F2 200 001
2	SEAT RING	GUNY 008 100 015	GUNY 008 150 015	GUNY 008 200 015
3	SLEEVE	OR 008 100 010	OR 002 125 002	OR 8F2 200 010
4	O-RING	OR 002 100 002	OR 002 125 011	OR 8F2 200 010
5	O-RING	SOZO 08F 100 011	FOZO 08F 150 011	FOZO 08F 200 011
6	O-RING	OR 024 045 015	OR 8F2 150 010	OR 070 200 015
7	STEEL DISC	SAZO 008 100 002	SAZO 008 150 002	SAZO 008 200 002
8	SCREW	SOZO 008 150 018	SOZO 008 150 018	FOZO 008 200 018
9	CLAMP X 2	VTAC 008 150 020	VTAC 008 150 020	VTAC 008 200 020
10	GASKET	GGUA 008 100 004	GGUA 008 150 004	GGUA 008 200 004
11	STEM	TOZO 005 100 003	TOZO 005 150 003	TOZO 005 200 003
12	HEAD	FOZO 008 100 005	FOZO 008 150 005	FOZO 008 200 005
13	STEM GASKET X 2	SPZO 005 100 006	SPZO 005 100 006	SPZO 003 100 006
14	NUT	TOZO 005 100 007	TOZO 005 100 007	TOZO 006 200 007
15	CLEVIS	FOZO 005 100 008	FOZO 005 100 008	FOZO 005 100 008
16	SCREW	VTAC 006 100 009	VTAC 006 100 009	VTAC 006 100 009
17	LOCKNUT	DAAC 008 150 021	DAAC 008 150 021	DAAC 008 200 021



NVE

National Vacuum Equipment, Inc.



To meet DOT regulations, spring closed actuators must be used if hauling dangerous goods. Use these valves or the aluminum actuator with a brass valve as listed on Page 27.

Pictured is the 6" carbon steel side mount, top mount also available.

Part #	Description
180-4C1	4" Carbon Steel Pneumatic Open Spring-Close
180-4S1	4" Stainless Steel Pneumatic Open Spring-Close
180-6C1	6" Carbon Steel Pneumatic Open Spring-Close
180-6S1	6" Stainless Steel Pneumatic Open Spring-Close
180-4CTM	4" Top Mount Carbon Steel Pneumatic Open Spring-Close
180-6CTM	6" Top Mount Carbon Steel Pneumatic Open Spring-Close
180-6STM	6" Top Mount Stainless Steel Pneumatic Open Spring-Close

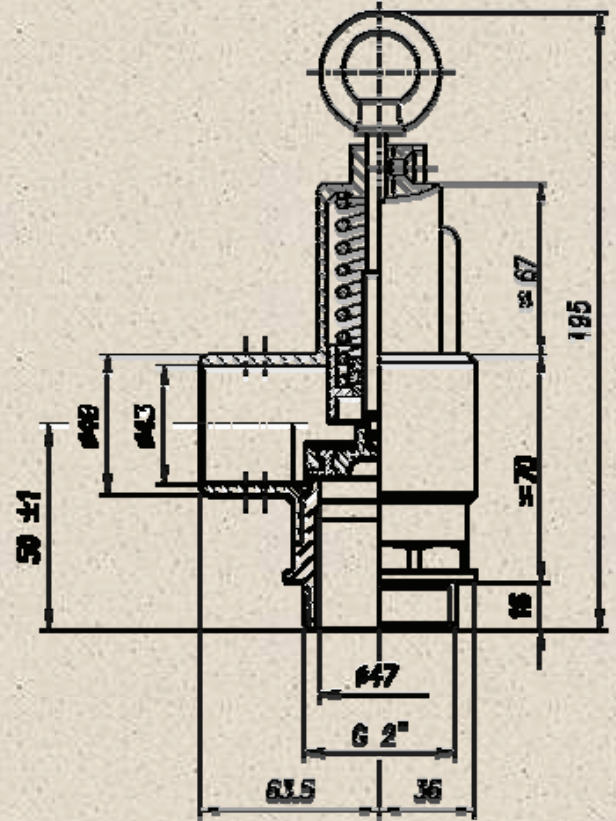


Pressure Relief Valves

PART #	DESCRIPTION
ARZO 087 050 000	2" Pressure Relief Valve



300 CFM



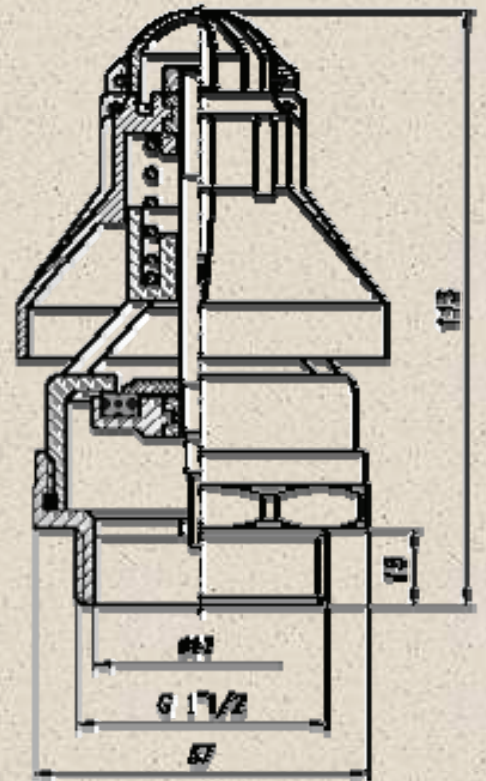
Vacuum Relief

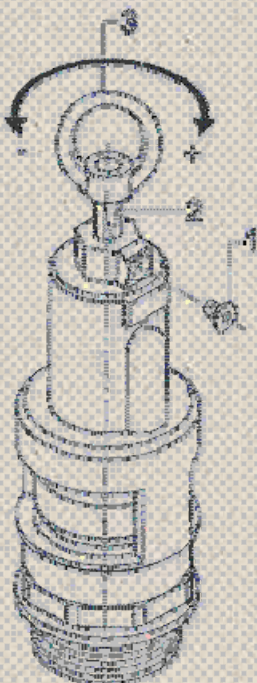
PART #	DESCRIPTION
ARZO 081 040 000	1-1/2" Vacuum Relief Valve



370 CFM

Note: Dimensions on this page measured in millimeters.

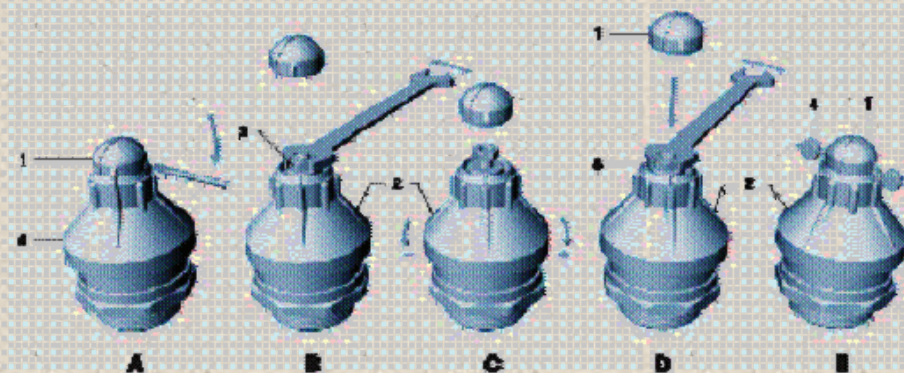




AFTER HAVING RELEASED THE ANTI-ROTATION SCREW (POS. 1) IS SUFFICIENT TO WHEEL THE UPPER RING (POS.3) TO INCREASE (CLOCKWISE ROTATION) OR DECREASE (ANTI-CLOCKWISE ROTATION) THE SETTING PRESSURE.

WHEN YOU HAVE REACHED THE DESIRED PRESSURE, YOU MUST VERIFY THAT THE ARROW ON THE STEM (POS. 2) LINES UP TO ANTI-ROTATION SCREW (POS.1). ON THE CONTRARY IT IS NECESSARY TO WHEEL LIGHTLY THE UPPER RING UNTLL YOU REACH THE EXACT CORRESPONDANCE. AT LAST YOU HAVE TO SCREW COMPLETELY THE ANTI-ROTATION SCREW (POS. 1) AND THE SETTING IS COMPLETED.

ATTENTION: WHEN SETTING IS OVER, PLEASE VERIFY THAT THE STEM CAN WHEEL, BUT CAN ONLY SLIDE VERTICALLY. DO NOT REPLACE FOR NO MOTIVATIONS, THE STANDARD ANTI-ROTATION SCREW WITH OTHER TYPES OR BLOCKING SYSTEMS, USE EXCLUSIVELY METALCNICA SPARE PARTS.



Vacuum Relief Valve

- A) TAKE OFF COVER (1) FROM THE ADJUSTING BELL (2) BY USING THE POINT OF A SCREW-DRIVER IN THE SPECIAL INCISION.
- B) LOOSEN THE STOP SET NUT (3) BY FIRMLY HOLDING THE ADJUSTING BELL (2).
- C) REGULATE THE PRESSURE ON THE SPRING BY TURNING THE ADJUSTING BELL (2). TURN CLOCKWISE TO INCREASE THE PRESSURE AND TURN ANTI-CLOCKWISE TO REDUCE IT. DURING THIS OPERATION IT IS NECESSARY TO AVOID THE ROTATION OF THE STEM ACTING WITH A SCREWDRIVER IN THE SPECIAL INCISION THAT YOU FIND IN THE STEM.
- D) AS SOON AS THE REGULATION IS COMPLETED, SCREW THE STOP SET NUT AGAIN (3) BY FIRMLY HOLDING THE ADJUSTING BELL (2). THE SET NUT MUST BE SCREWED WITH A SCREWING TORQUE OF 10nm (AT LAST). INSERT THE COVER (1) WITH PRESSURE ON THE ADJUSTING BELL (2).
- E) PUT THE SETTING-SEAL BY TIEING WITH A WIRE (4) THE COVER (1) AND THE ADJUSTING BELL (2), AND APPLY FINALLY THE PLUMBING.

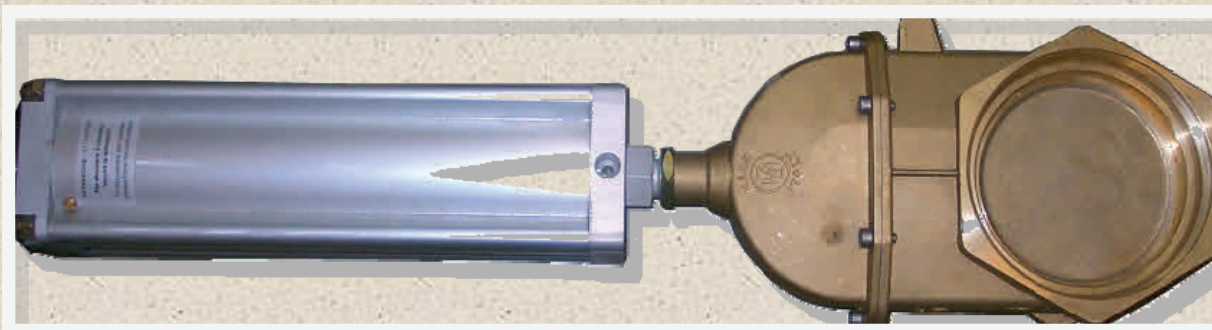


Part #	Description
MC 307 BT3	3" Girard Pressure Relief Valve (DOT 307) (15 PSI)
DOT 407 LAF	4" 25 PSI ANSI Flange PRV (Girard Low-Profile)
DOT 407 LT	4" 25 PSI NPT Thread PRV (Girard Low-Profile)

*****Girard Valve
Exchange Program*****



Pneumatic Cylinders



Part #	Description
ARZO 057 100 000	4" Double Acting Pneumatic Actuator
ARZO 057 150 000	6" Double Acting Pneumatic Actuator
ARZO 058 100 000	4" Spring-Close Pneumatic Actuator
ARZO 058 150 000	6" Spring-Close Pneumatic Actuator

Aluminum Spring Close Actuators



Pipe Fittings & Flanges

Size Suffix Legend

Add the appropriate suffix(es) to complete your part number

02=1/8" 08=1/2" 20=1-1/4" 40=2-1/2" 96=6"
 04=1/4" 12=3/4" 24=1-1/2" 48=3"
 06=3/8" 16=1" 32=2" 64=4"



Cross

Malleable:

Cross-_____

Forged Steel:

Cross-FS-_____



Coupling

Malleable:

Coupling-_____

Forged Steel:

Coupling-FS-_____



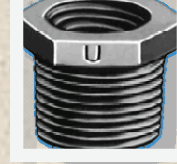
Cap

Malleable:

Cap-_____

Forged Steel:

Cap-FS-_____



Bushing

Malleable:

Bushing-_____

Forged Steel:

Bushing-FS-_____



Plug

Malleable:

Plug-_____

Forged Steel:

Plug-FS-_____



90 Deg. Elbow

Malleable:

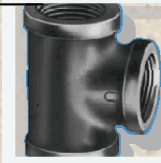
90-Ell-_____

2000 LB. Forged Steel:

2M-90-Ell-_____

3000 LB. Forged Steel:

3M-90-Ell-_____



Tee

Malleable:

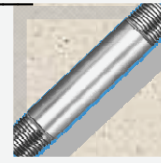
Tee-_____

2000 LB. Forged Steel:

2M-Tee-_____

3000 LB. Forged Steel:

3M-Tee-_____



Steel Pipe Nipples

Schedule 40:

Nip-_____(Rec'd Length)

Schedule 80:

Nipxh-_____(Rec'd Length)

Schedule 80 Seamless:

Nipxhs-_____(Rec'd Length)

King Combination Nipples:

CN-_____-S

Swage Nipple Sched. 40:

Swage-Sch40-_____(Rec'd Length)

Swage Nipple Sched. 80:

Swage-Sch80-_____(Rec'd Length)



Flanges

150 LB. ANSI:

ANSI-150-RF-(Rec'd Size)

TTMA:

TTMA-Flange-(Rec'd Size)

Add **SO** to end of part # for a slip on flange, add **B** to end of part # for a blind flange

45 Deg. Elbow

Malleable:

2000 LB. Forged Steel:

2M-45-Ell-_____

3000 LB. Forged Steel:

3M-45-Ell-_____





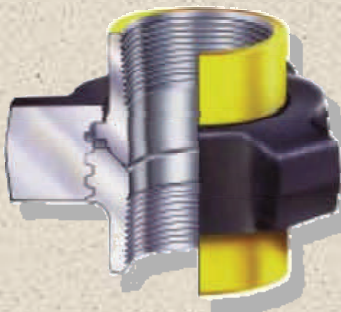
Hammer Unions



Figure 100

1000 PSI CWP, 1500 PSI TEST

Components: Black Nut, Yellow Male Sub, Yellow Female Sub & Seal Ring

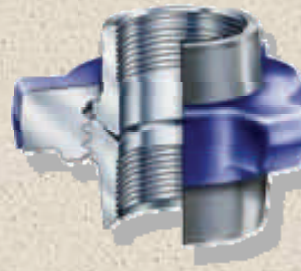


Part #	Size
100-200	2"
100-250	2-1/2"
100-300	3"
100-400	4"
100-600	6"
100-800	8"

Figure 200

2000 PSI CWP, 3000 PSI TEST

Components: Blue Nut, Gray Male Sub, Gray Female Sub & Seal Ring

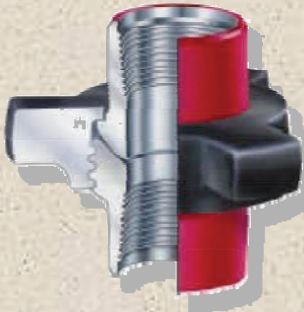


Part #	Size
200-100	1"
200-125	1-1/4"
200-150	1-1/2"
200-200	2"
200-300	3"
200-400	4"

Figure 400

4000 PSI CWP, 6000 PSI TEST

Components: Black Nut, Red Male Sub, Red Female Sub & Seal Ring

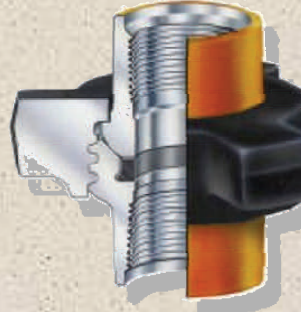


Part #	Size
400-200	2"
400-300	3"
400-400	4"

Figure 602

6000 PSI CWP, 9000 PSI TEST

Components: Black Nut, Orange Male Sub, Orange Female Sub & Seal Ring

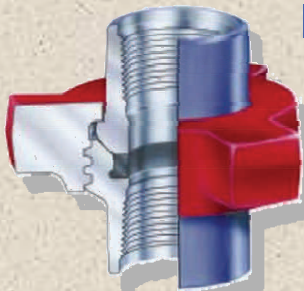


Part #	Size
602-100	1"
602-150	1-1/2"
602-200	2"
602-300	3"
602-400	4"

Figure 1002

10,000 PSI CWP, 15,000 PSI TEST

Components: Red Nut, Blue Male Sub, Blue Female Sub & Seal Ring

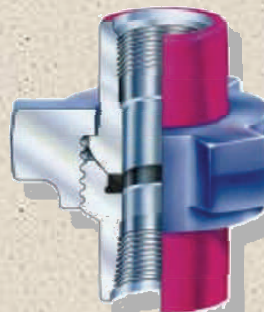


Part #	Size
1002-300	3"
1002-400	4"

Figure 1502

15,000 PSI CWP, 22,500 PSI TEST

Components: Blue Nut, Red Male Sub, Red Female Sub & Seal Ring



Part #	Size
1502-200	2"
1502-300	3"

Permabond®

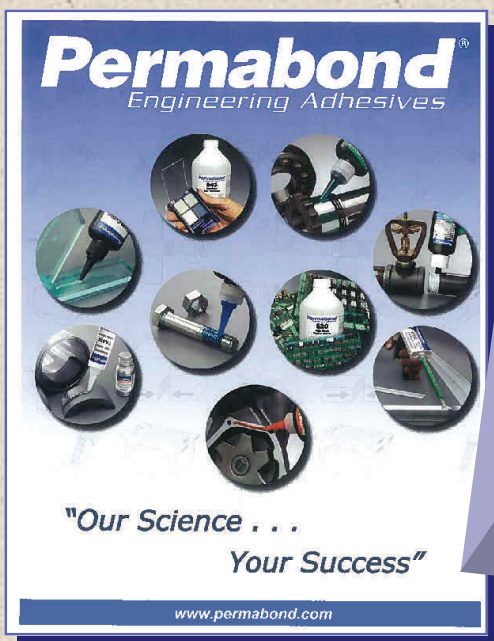
Engineering Adhesives

Part # Description

MM115-50	Med. Strength/Med. Viscosity Thread Locker (50ml)
MM115-250	Med. Strength/Med. Viscosity Thread Locker (250ml)
MM115-1	Med. Strength/Med. Viscosity Thread Locker (1L.)
HM118-50	High Strength/Med. Viscosity Thread Locker (50ml)
HM118-250	High Strength/Med. Viscosity Thread Locker (250ml)
HM118-1	High Strength/Med. Viscosity Thread Locker (1L.)
MH199-75	High Temperature Gasket Maker (75 ML)
MH199-300	High Temperature Gasket Maker (300 ML)
LH050-50	Pipe Sealant (50ml)
LH050-250	Pipe Sealant (250ml)
LH050-350	Pipe Sealant (350ml)
HM161-250	Gap Fill Slip Fit Retaining Compound (250 ML)
HM161-1	Gap Fill Slip Fit Retaining Compound (1L)
PERM-AC-1	Antiseize Compound (1lb.)



Permabond products are formulated to be a high quality line of industrial chemicals., meeting rigid standards. Their line of products have solved manufacturing challenges the world over, so you can be confident this select grade of industrial products will meet your need, or they will formulate a new product that will. Ask for the Permabond Catalogue shown to the left for the entire line of products and more technical details





Grooved Piping Products

Fast and easy installation. Produces a secure, rigid pipe joint connection.



Part #	Description
3GE-7611-1	3" Gruvlok Butterfly Valve
4GE-7611-1	4" Gruvlok Butterfly Valve
6GE-7611-1	6" Gruvlok Butterfly Valve
7000-T-Gasket-48	3" Buna-Nitrile 7000 Series Gasket
7000-T-Gasket-64	4" Buna-Nitrile 7000 Series Gasket
7000-T-Gasket-96	6" Buna-Nitrile 7000 Series Gasket
7000-Coupling-48	3" Flexible Gruvlok Coupling
7000-Coupling-64	4" Flexible Gruvlok Coupling
7000-Coupling-96	6" Flexible Gruvlok Coupling

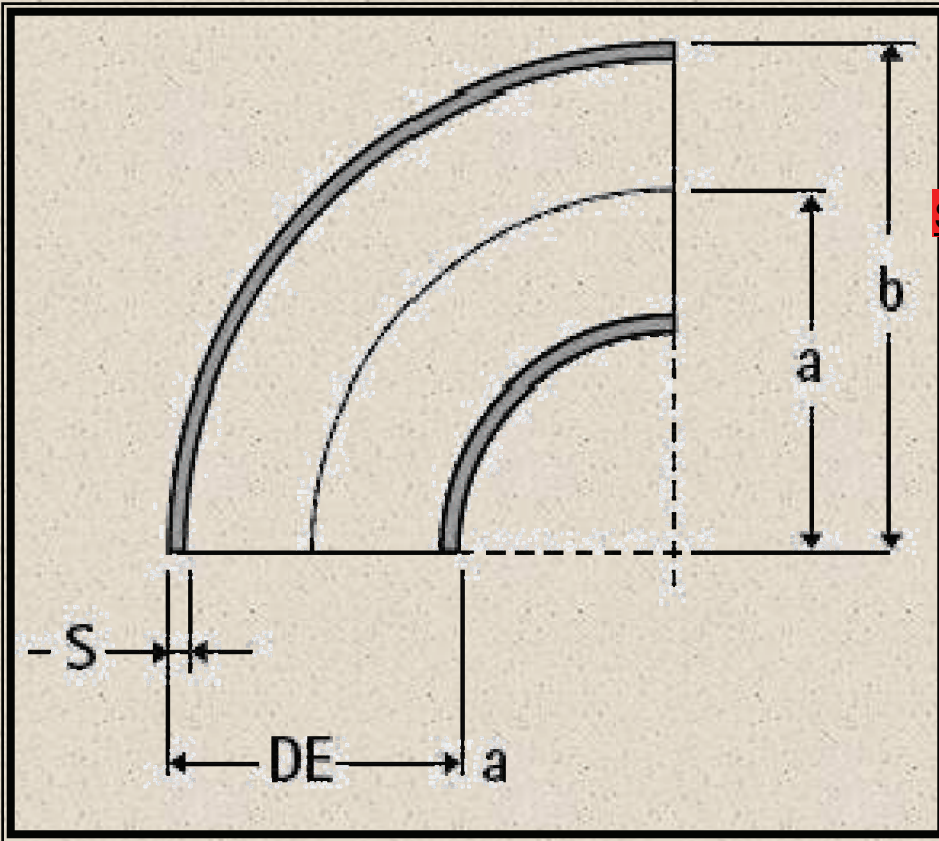
Part #	Description
VIC-BFV-700-48	3" Victaulic Butterfly Valve
VIC-BFV-700-64	4" Victaulic Butterfly Valve
VIC-BFV-700-96	6" Victaulic Butterfly Valve
VIC-Gasket-T-48	3" Victaulic Buna-Nitrile Gasket
VIC-Gasket-T-64	4" Victaulic Buna-Nitrile Gasket
VIC-Gasket-T-96	6" Victaulic Buna-Nitrile Gasket
77-Coupling-48	3" Flexible Victaulic Coupling
77-Coupling-64	4" Flexible Victaulic Coupling
77-Coupling-96	6" Flexible Victaulic Coupling
78-Coupling-48	3" Snap-Joint Victaulic Coupling
78-Coupling-64	4" Snap-Joint Victaulic Coupling
78-Coupling-96	6" Snap-Joint Victaulic Coupling



Part #	Description
ADN-GG-3x4	3"x4" Groove to Groove Victaulic Nipple
ADN-GG-4x6	4"x6" Groove to Groove Victaulic Nipple
ADN-GG-6x6	6"x6" Groove to Groove Victaulic Nipple
ADN-GB-3x4	3"x4" Groove to Bevel Victaulic Nipple
ADN-GB-4x4	4"x4" Groove to Bevel Victaulic Nipple
ADN-GB-4x6	4"x6" Groove to Bevel Victaulic Nipple
ADN-GB-6x6	6"x6" Groove to Bevel Victaulic Nipple



Thin Wall Elbows



Size	DE	S	a	b
3"	76.1 mm	2.9 mm	95 mm	133 mm
4"	101.6 mm	3.6 mm	134 mm	184 mm
6"	159 mm	4.5 mm	216 mm	294 mm
8"	219.1 mm	6.3 mm	305 mm	414 mm

*****Now available is the thin-wall weld elbows specific to the vacuum truck industry*****



Part #	Description
90-ELL-76-SW	3" 90 Deg Thin Wall Seamless Weld Elbow
90-ELL-101-SW	4" 90 Deg Thin Wall Seamless Weld Elbow
90-ELL-159-SW	6" 90 Deg Thin Wall Seamless Weld Elbow
90-ELL-219-SW	8" 90 Deg Thin Wall Seamless Weld Elbow



Camlocks

Grizzly camlocks are made to strict tolerances, meet MIL SPEC 27487, and will interchange with other camlocks that meet this specification. Both durability & cost effectiveness in one. For chemical hauling, use PT Couplings for their locking arms.

GRIZZLY



Size	Brand	Part A	Part B	Part C	Part D	Part E	Part F	Part DC	Part DP
3" PT		30A-Alum-PT	30B-Alum-PT	30C-Alum-PT	30D-Alum-PT	30E-Alum-PT	30F-Alum-PT	30DC-Alum-PT	30DP-Alum-PT
3" Grizzly		30A-Alum-G	30B-Alum-G	30C-Alum-G	30D-Alum-G	30E-Alum-G	30F-Alum-G	30DC-Alum-G	30DP-Alum-G
4" PT		40A-Alum-PT	40B-Alum-PT	40C-Alum-PT	40D-Alum-PT	40E-Alum-PT	40F-Alum-PT	40DC-Alum-PT	40DP-Alum-PT
4" Grizzly		40A-Alum-G	40B-Alum-G	40C-Alum-G	40D-Alum-G	40E-Alum-G	40F-Alum-G	40DC-Alum-G	40DP-Alum-G
6" PT		60A-Alum-PT	60B-Alum-PT	60C-Alum-PT	60D-Alum-PT	60E-Alum-PT	60F-Alum-PT	60DC-Alum-PT	60DP-Alum-PT
6" Grizzly		60A-Alum-G	60B-Alum-G	60C-Alum-G	60D-Alum-G	60E-Alum-G	60F-Alum-G	60DC-Alum-G	60DP-Alum-G
		Male Adapter to Female NPT	Female Coupler to Male NPT	Female Coupler to Hose Shank	Female Coupler to Female NPT	Male Adapter to Hose Shank	Male Adapter to Male NPT	Dust Cap for Male Adapter	Dust Plug for Female Coupler

Size Brand Reducing Couplers to Adapters

3" to 2"	PT	3020DA-Alum-PT
3" to 2"	Grizzly	3020DA-Alum-G
4" to 3"	PT	4030DA-Alum-PT
4" to 3"	Grizzly	4030DA-Alum-G
6" to 4"	PT	6040DA-Alum-PT
6" to 4"	Grizzly	6040DA-Alum-G
		Female Coupler to Male Adapter



Size	Brand	Arm, Ring, & Pin	Gasket
3"	PT	300-HRP-BR	300-PT
3"	Grizzly	300-HRP-SS	300-G
4"	PT	300-HRP-BR	400-PT
4"	Grizzly	300-HRP-SS	400-G
6"	PT	600-HRP-BR	600-PT
6"	Grizzly	600-HRP-SS	600-G



Clamps

Part #	Clamp I.D.	Band Width
CP 10	2-1/2"	5/8"
CP 16	4"	5/8"
CP 20	5"	5/8"
CP 24	6"	5/8"
CP 28	7"	5/8"

Part #	Min. Diameter	Max. Diameter
TBC 150	1-24/64"	1-36/64"
TBC 175	1-40/64"	1-52/64"
TBC 200	1-56/64"	2-4/64"
TBC 225	2-8/64"	2-20/64"
TBC 250	2-24/64"	2-36/64"
TBC 275	2-34/64"	2-52/64"
TBC 300	2-50/64"	3-4/64"
TBC 350	3-18/64"	3-36/64"
TBC 375	3-34/64"	3-52/64"
TBC 450	4-18/64"	4-36/64"
TBC 475	4-34/64"	4-52/64"
TBC 600	5-50/64"	6-4/64"
TBC 625	6-2/64"	6-20/64"
TBC 650	6-18/64"	6-36/64"
TBC 675	6-34/64"	6-52/64"
TBC 700	6-50/64"	7-4/64"



Part # Description

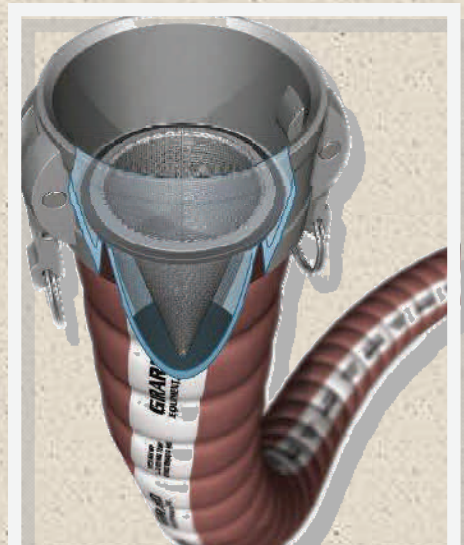
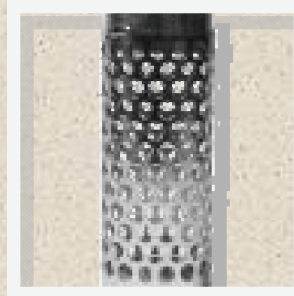
S03869 Strap Binder Tool (Light Duty)
T-30069 Strap Binder Tool (Heavy Duty)



Strainer Valves

Part # Description

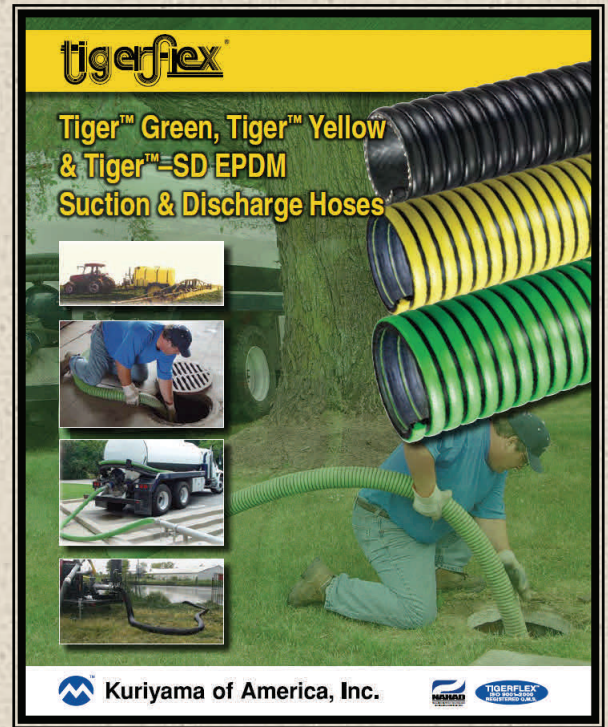
RHS35 3" Female NPT Strainer
RHS40 4" Female NPT Strainer
RHS60 6" Female NPT Strainer
RSS35 3" Thin Female NPT Strainer
RSS40 4" Thin Female NPT Strainer
GE3C6 3" Stainless Steel Cone Strainer



Even when loaded up to 75%,
Girard cone strainers will not
impede flow.

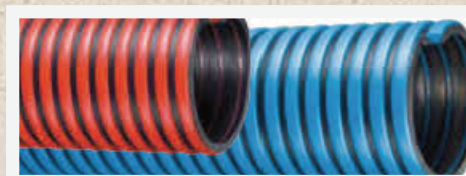
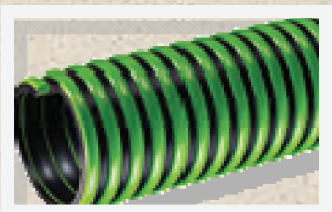


Superior EPDM compounds used, resulting in 22% more flexibility than the competition. Specifications chart on next page. For more information on tigerflex liquid suction hose, including a complete chemical resistance guide, ask us for a copy of the Tigerflex catalog shown to the right.

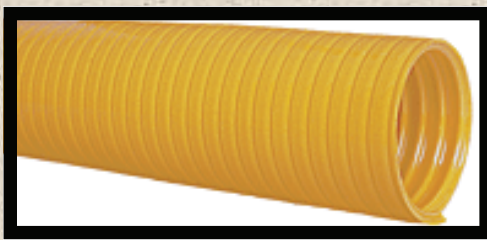


Part #	Description
TG100X100	1" Tigerflex Liquid Suction Hose
TG125X100	1-1/4" Tigerflex Liquid Suction Hose
TG150X100	1-1/2" Tigerflex Liquid Suction Hose
TG200X100	2" Tigerflex Liquid Suction Hose
TG250X100	2-1/2" Tigerflex Liquid Suction Hose
TG300X100	3" Tigerflex Liquid Suction Hose
TG400X100	4" Tigerflex Liquid Suction Hose
TG600X100	6" Tigerflex Liquid Suction Hose

Part #	Description
TY100X100	1" Tigerflex Liquid Suction Hose
TY125X100	1-1/4" Tigerflex Liquid Suction Hose
TY150X100	1-1/2" Tigerflex Liquid Suction Hose
TY200X100	2" Tigerflex Liquid Suction Hose
TY300X100	3" Tigerflex Liquid Suction Hose
TY400X100	4" Tigerflex Liquid Suction Hose
SLV-YL3X3	3" Banding Sleeve (3ft.) (3.7 lbs.)
SLV-YL4X3	4" Banding Sleeve (3ft.) (5.3 lbs.)



Also available in red or blue to match your truck!

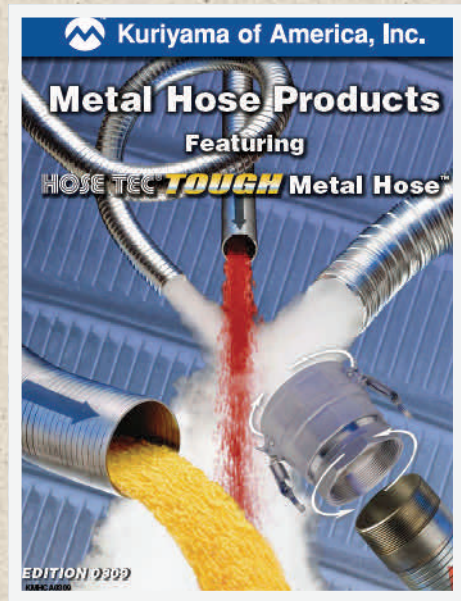


Rigid Banding Sleeve threads onto ends of hose to prevent breakage.

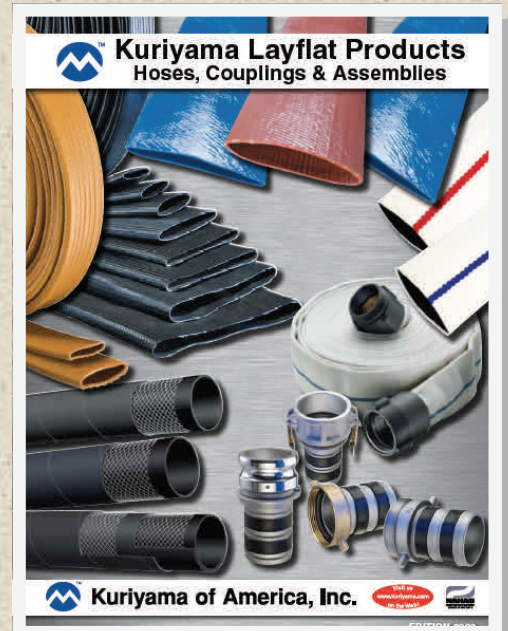
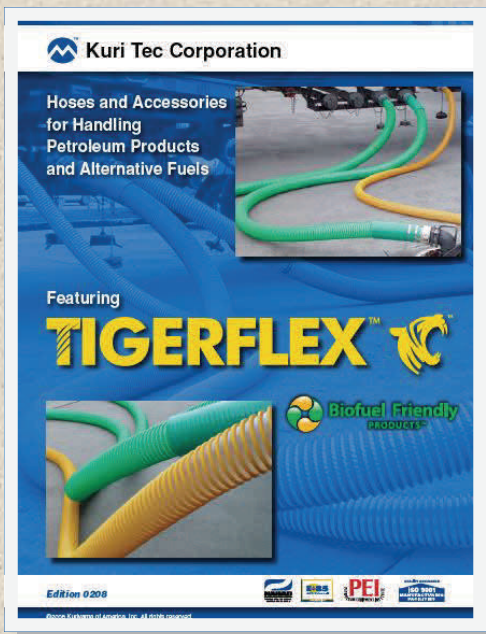


Nominal Specifications of Tigerflex Liquid Suction Hose

Series	I.D.	O.D.	Working Pressure (PSI)		Vacuum Rating		Min. Bend	Weight (lbs./ft.)
			68 Deg. F	104 Deg. F	68 Deg. F	104 Deg. F	Radius in. @ 68 Deg. F	
TG100X100	1"	1.4"	65	45	Full	28	2"	0.28
TG125X100	1-1/4"	1.63"	60	40	Full	28	3"	0.33
TG150X100	1-1/2"	1.93"	50	35	Full	28	3"	0.44
TG200X100	2"	2.51"	50	35	Full	28	5"	0.67
TG250X100	2-1/2"	3.07"	45	30	Full	28	5.5"	0.95
TG300X100	3"	3.60"	45	30	Full	26	7"	1.14
TG400X100	4"	4.70"	40	25	Full	26	11.5"	1.84
TG600X100	6"	6.85"	30	20	28	24	20"	3.07



Kuriyama of America is a leading domestic manufacturer of quality industrial hose. On this page are four more catalogs of hose that may be found on your truck in addition to Tigerflex liquid suction. Ask for these catatlogs if interested in any of Kuriyama's other products.





Kuriyama of America, Inc.
Quality Industrial Hose & Accessories

Blue Water

Use Kuriyama of Americas spiral double bolt tigerclamp on the blue water hose.



<u>Series</u>	<u>I.D.</u>	<u>O.D.</u>	<u>Working Pressure (PSI)</u>		<u>Vacuum Rating</u>	<u>Min. Bend Radius</u>	<u>Weight (lbs./ft.)</u>
-	-	-	<u>68 Deg. F</u>	<u>104 Deg. F</u>	<u>68 Deg. F</u>	<u>in. @ 68 Deg. F</u>	-
BW100X100	1"	1.26"	90	65	Full	3"	0.22
BW125X100	1-1/4"	1.56"	90	65	Full	4"	0.36
BW150X100	1-1/2"	1.79"	90	65	Full	5"	0.48
BW200X100	2"	2.35"	90	65	Full	7"	0.62
BW250X100	2-1/2"	2.87"	70	48	Full	8"	0.87
BW300X100	3"	3.43"	65	45	Full	10"	1.23
BW400X100	4"	4.49"	55	40	Full	15"	1.83
BW600X100	6"	6.69"	40	25	28	30"	3.36

The HMW PVC clear construction on the blue water hose allows for visual confirmation that the material is flowing. The HMW PVC body — provides sub-zero flexibility.



Kuriyama of America, Inc.
Quality Industrial Hose & Accessories

Ureflex-1

Kuriyama's Ureflex 1 hose has Smooth polyurethane lining — provides resistance to abrasion, and eliminates material build-up.



Series	I.D.	O.D.	Working Pressure (PSI)		Vacuum Rating	Min. Bend Radius	Weight (lbs./ft.)
			68 Deg. F	104 Deg. F			
UF1-125	1-1/4"	1.53	50	25	Full	2"	0.22
UF1-200	2"	2.4"	40	20	Full	3"	0.59
UF1-300	3"	3.64"	40	20	Full	4"	1.18
UF1-400	4"	4.76"	35	18	Full	6"	1.95
UF1-600	6"	6.81"	30	15	28	12"	3.5
UF1-800	8"	9.18"	30	15	28	18"	5.91

Composite Hose

Superior bend-radius is one benefit of our composite hose. With optional test certificates and individualized serial numbers for each hose; (dependant on quantity), you can be assured of quality.



Part #	Description
1052GG-96-8.5-VIC-VIC	6"x8.5' Composite Hose (Vic End x Vic Ends)
1052GG-96-9-VIC-VIC	6"x9' Composite Hose (Vic End x Vic Ends)
1052GG-96-12-MP-VIC	6"x12' Composite Hose (Male Pipe x Vic Ends)

Door & Dumpgate Seals

Part #	Description
MP-365	Large "D" Door Seal (21')
MP-329	Small "D" Dumpgate Seal
SBR-16	1"x7/8" Dumpgate Seal
NE60-16	1"x1-1/4" Dumpgate Seal
SBR-12	3/4"x7/8" Dumpgate Seal
NE60-10	1-1/4"x5/8" Dumpgate Seal
737-1oz.	Ethyl Cyanoacrylate (Black Magic) (1 oz.)
737-1lb.	Ethyl Cyanoacrylate (Black Magic) (1 lb.)
105-1	Elastomer Bonding Cyanoacrylate (1 oz.)



Use Permabond 737 Black Magic for these seals, as it is specifically formulated to fasten rubber to metal, and Permabond 105 to glue the rubber ends together.



Manways

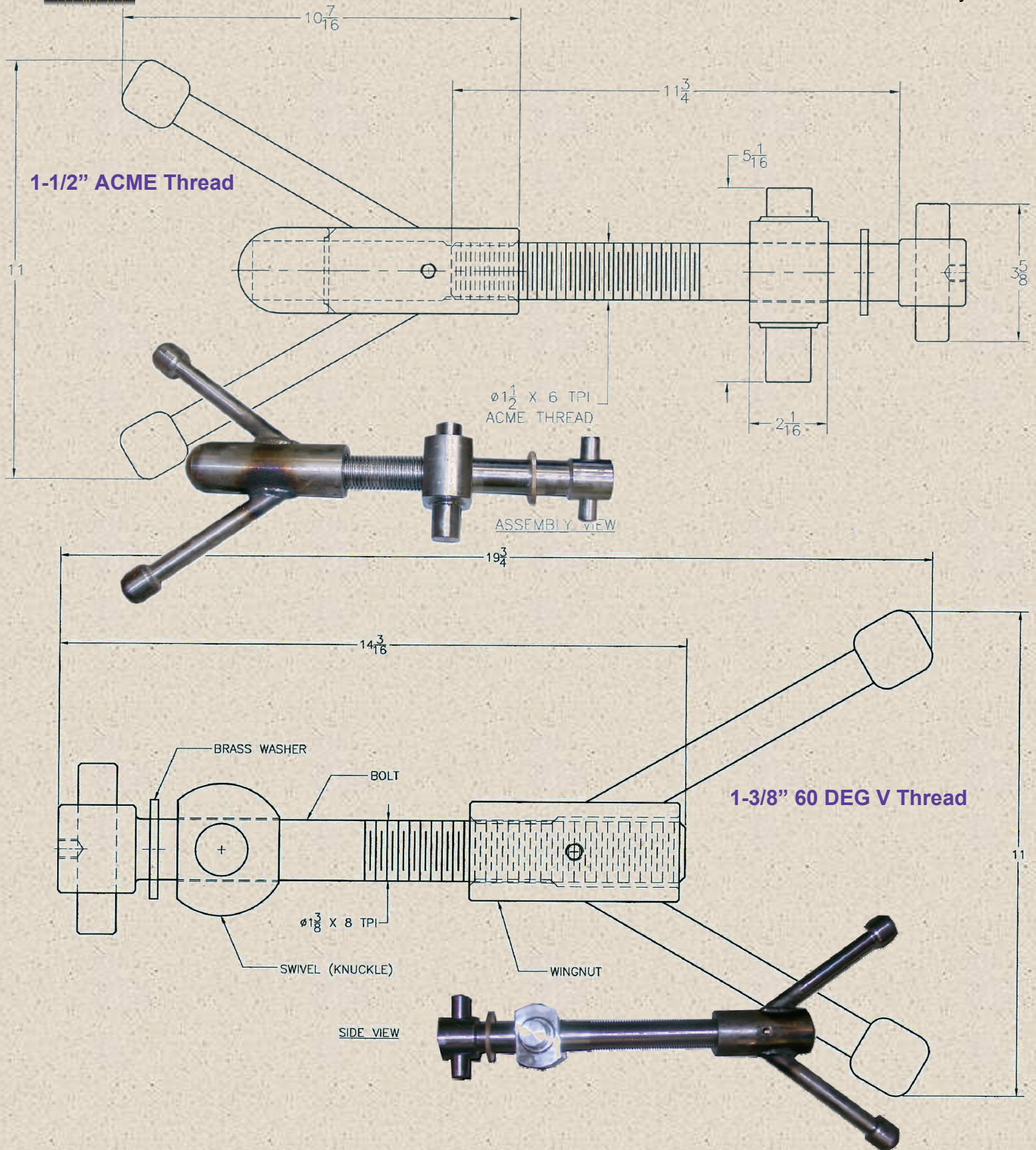


Part #	Description
Manway-12-6-Hinge	12" Manway Hatch with 6" Neck & Hinge
Manway-12-6-Alum	12" Manway Hatch with 6" Aluminum Neck
Manway-18-12	18" Manway Hatch with 12" Neck
Manway-21-6	21" Manway Hatch with 6" Neck



Pin Wheels

Part #	Description
LM-Rear-Door-Lock-ACME-1-1/2	1-1/2" ACME Thread Rear Door Lock Assembly
LM-Rear-Door-Lock-60V-1-3/8	1-3/8" 60 DEG V Thread Rear Door Lock Assembly





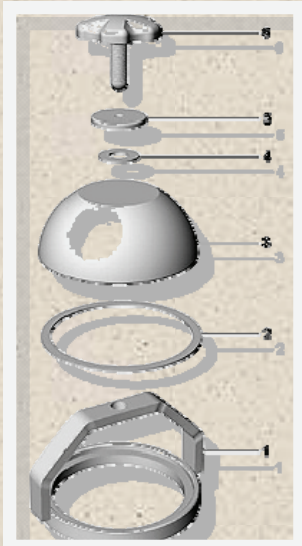
Level Indicators & Accessories

Float Arm Assembly & Accessories

Part #	Description
LM-FA-1/2-6	1/2" Float Arm for 6" Ball with Tube
LM-FA-1/2-6-SS	1/2" Stainless Steel Float Arm for 6" Ball with Tube
LM-FA-1/2-8	1/2" Float Arm for 8" Ball with Tube
LM-FA-Bush	Float Bushing with Male End for Float Arm Assembly
LM-FA-TP	Teflon Packing for Float Arm Assembly
LM-FA-Nut	Float Arm Assembly Nut
LM-FA-Ind-Bush	Indicator Bushing for Float Arm Assembly
LM-FA-Ind-Point	Indicator Pointer for Float Arm Assembly
LM-6-SS-Ball-Tube	6" Stainless Steel Ball c/w 5/8" Tube
LM-8-SS-Ball-Tube	8" Stainless Steel Ball c/w 5/8" Tube
LM-9-SS-Ball-Tube	9" Stainless Steel Ball c/w 5/8" Tube



Sight Eyes



Either with a float arm assembly, sight eyes, or both, keep a close watch on the level of waste in your tank with these products.

EXPLODED VIEW

#	DESCRIPTION	PART #
	4" SIGHT EYE ASSEMBLY	ARZO 041 100 000
1	BODY	GHAC 041 100 001
2	O-RING	GGOM 041 100 002
3	SIGHT BOWL	VEZO 041 100 003
4&5	SIGHT EYE PRESSURE PLATE	TOZO 041 100 004
	64" SIGHT GLASS KNOB	SPZO 042 100 005



Shutoffs

Float Balls/Ball Seats



<u>Part #</u>	<u>Description</u>
LM-4-SS-Ball	4" Stainless Steel Ball
LM-6-SS-Ball	6" Stainless Steel Ball
LM-8-SS-Ball	8" Stainless Steel Ball
LM-9-SS-Ball	9" Stainless Steel Ball
LM-4-Rubber-Ballseat-4-Pipe	4" Rubber Ball Seat for 4" Piping
LM-6-Rubber-Ballseat-4-Pipe	6" Rubber Ball Seat for 4" Piping
LM-6-Rubber-Ballseat-6-Pipe	6" Rubber Ball Seat for 6" Piping
LM-8-Rubber-Ballseat-6-Pipe	8" Rubber Ball Seat for 6" Piping

Primay Shutoffs



<u>Part #</u>	<u>Description</u>
LM-Prim-Shut-3	3" Primary Shutoff
LM-Primary-Shut-4	4" Primary Shutoff
1014-0012	4" Primary Shutoff Mounted in a 12" Hatch-6" Neck
1014-0015	6" Primary Shutoff Mounted in a 12" Hatch-6" Neck



Secondary Shutoffs



<u>Part #</u>	<u>Description</u>
ARZO 024 075 00R	3" Moist-Trap c/w Discharge Cock (Straight Connect)
TC4SMT	4" Secondary Moisture Trap
LM-Sec-Shut-Hor-4	4" Secondary Shutoff (Horizontal)



Cyclones

<u>Part #</u>	<u>Description</u>
LM-Cyclone-4	Cyclone with 4" Ports and 6" Shut Off
LM-Cyclone-6	Cyclone with 6" Ports

Some materials get by your shutoff systems easier than others, and to keep them from entering your vacuum pump, a cyclone can be added to your truck for added protection.



Vacuum System Final Filters

These filters are your pump or blower's last defense from contamination. They come in a variety of sizes & materials. 10 micron mesh will stop the smallest of particles, yet 100+ micron steel is washable. Housings for each filter can also be custom made.



<u>Part #</u>	<u>I.D.</u>	<u>O.D.</u>	<u>O.A.H.</u>	<u>Filter Specifications</u>
1714	6.5"	12"	12.75"	Felt-10 Micron
1720	9"	14.625"	14.5"	Felt-10 Micron
1724	12.5"	16"	11.5"	Felt-10 Micron
1735	14"	19.5"	24.5"	Felt-10 Micron
1770	20"	12"	17.75"	Felt-10 Micron
1780	15.81"	22"	20.75"	Felt-10 Micron
1786-1SS	20.5"	25.5"	24.75"	Steel Mesh-50 Micron
1724-M	12.5"	16"	11.5"	Steel Mesh-100+ Micron
AF080039	5.75"	8.125"	8.5"	Steel Mesh-100+ Micron



Oil-Catch Mufflers



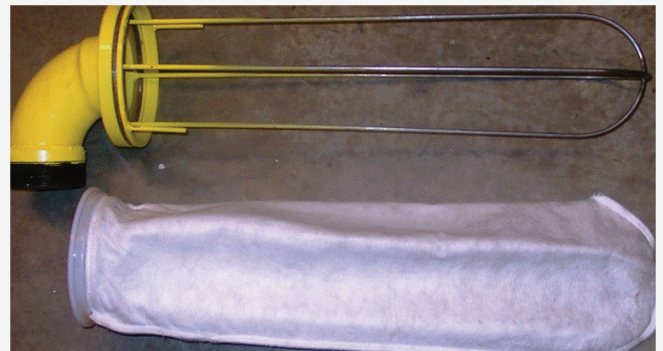
The oil catch muffler is specific for vane pump equipped trucks. They keep the oil which is lubricating your pump from contaminating the environment.

<u>Part #</u>	<u>Description</u>
LM-Oil-Muff-3	3" Oil Catch Muffler
LM-Oil-Muff-4	4" Oil Catch Muffler

Designed & developed specifically for environments where even the mist of oil getting by your oil catch muffler must be stopped. These enviro-socks attach to your oil catch muffler directly & come in 3", 4" & 6" sizes.

<u>Part #</u>	<u>Description</u>
LM-3-Sock-Holder	3" Enviro-Sock Holder
LM-4-Sock-Holder	4" Enviro-Sock Holder
LM-6-Sock-Holder	6" Enviro-Sock Holder
LM-Sock	Enviro Sock

Enviro-Socks



Silencers



<u>Part #</u>	<u>Description</u>
RB-DV-65/85-AI-S	Air Injection Silencer for RB-DV-85 (Gray)
RB-DV-65/85-D-S	Discharge Silencer for RB-DV-85 (Blue)
RB-DV-105-AI-S	Air Injection Silencer for RB-DV-105
RB-DV-105-D-S	Discharge Silencer for RB-DV-105
RB-DV-145-AI-S	Air Injection Silencer for RB-DV-145
RB-DV-145-D-S	Discharge Silencer for RB-DV-145



Hydraulics

Part # Description

SF-6720 Spin-On Hydraulic Filter (Stauff)
SF-6721 Spin On Hydraulic Filter (Stauff)

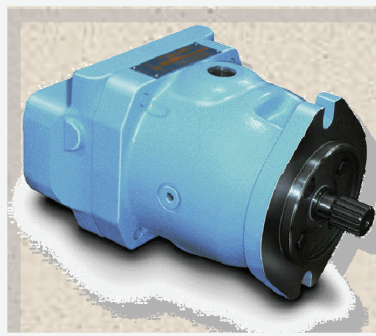


Part # Description

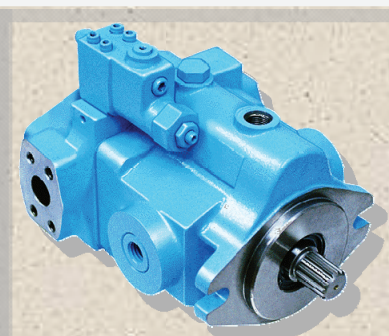
MFR-30-1-4A-60 Single Fan Heat Exchanger (60 PSI)
MFR-60-1-4A-60 Double Fan Heat Exchanger (60PSI)

**HYDRAULIC PUMPS & MOTORS
NEED TO BE MATCHED UP TO THE
HORSEPOWER REQUIREMENTS OF
YOUR VACUUM PUMP AND G.P.M.
REQUIREMENTS OF THE REST OF
THE HYDRAULIC SYSTEM.**

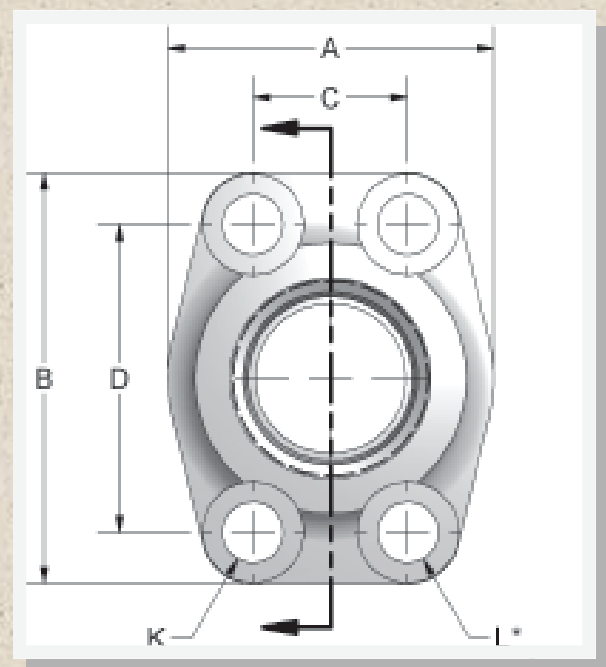
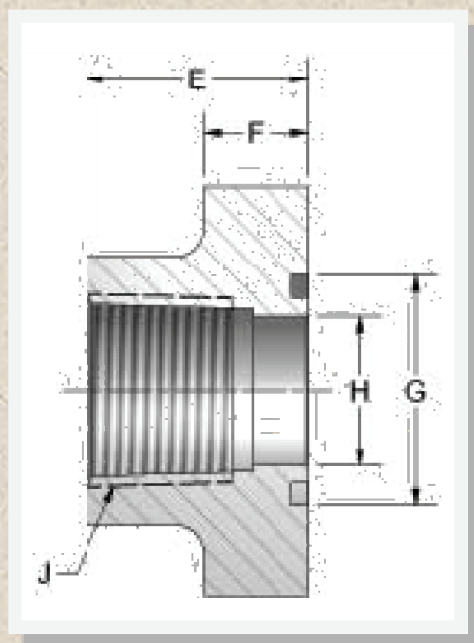
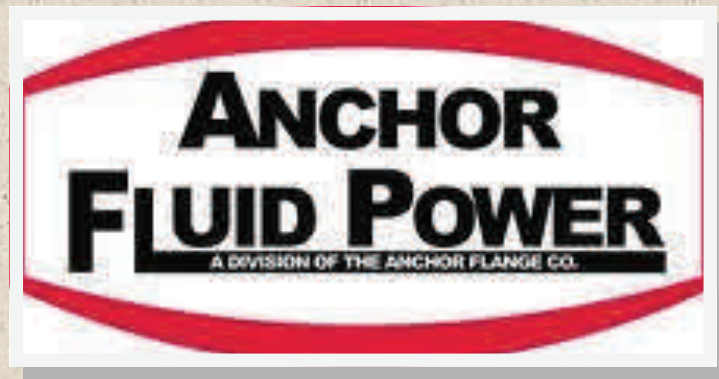
Hydraulic Pumps



Hydraulic Motors



The hydraulics on your truck power your entire vacuum system. These systems can be intricate and customized to your truck. Our commitment to quality hydraulic products and their manufacturers along with our

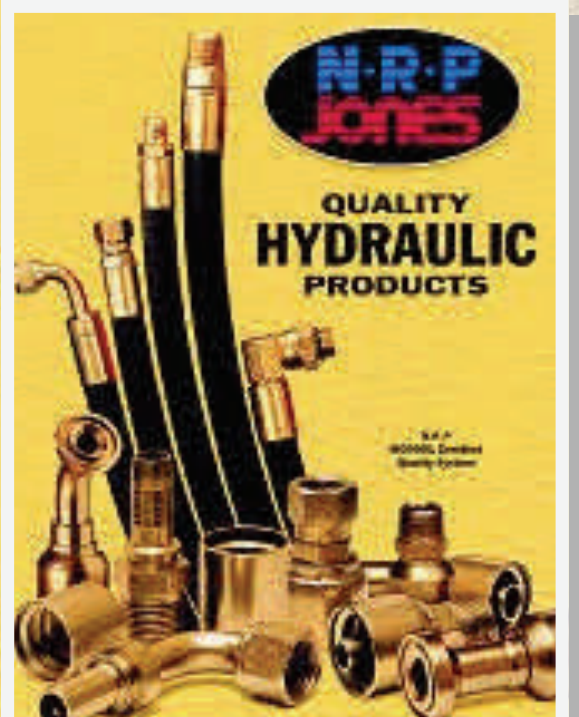
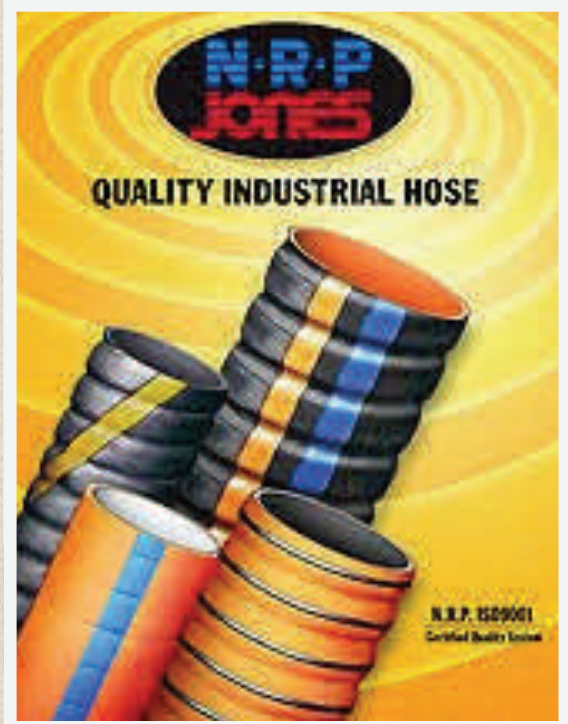


PART NO.	PORT	PAD	A	B	C	D	E	F	G	H	J	K	<u>Mounting Hardware:</u>	
O-RING	SIZE	SIZE									NPTF	O-Ring	O-Ring	SHCS
W43-8-8	0.5	0.5	1.81	2.13	0.688	1.5	1.42	0.63	1	0.502	0.50	0.344	210	5/16-18X1.25
W43-12-12	0.75	0.75	1.97	2.56	0.875	1.875	1.42	0.71	1.25	0.752	0.75	0.406	214	3/8-16X1.50
W43-16-16	1	1	2.17	2.75	1.031	2.062	1.5	0.71	1.56	1.002	1.00	0.406	219	3/8-16X1.50
W43-20-20	1.25	1.25	2.68	3.12	1.188	2.312	1.61	0.83	1.75	1.252	1.25	0.469	222	7/16-14X1.75
W43-24-24	1.5	1.5	3.07	3.66	1.406	2.75	1.77	0.98	2.115	1.502	1.50	0.531	225	1/2-13X1.75
W43-32-32	2	2	3.54	4	1.688	3.062	1.77	0.98	2.49	2.002	2.00	0.531	228	1/2-13X1.75
W43-40-40	2.5	2.5	4.09	4.49	2	3.5	1.97	0.98	2.995	2.502	2.50	0.531	232	1/2-13X1.75
W43-48-48	3	3	4.88	5.28	2.438	4.188	1.97	1.06	3.615	3.002	3.00	0.656	237	5/8-11X2.00
W43-56-56	3.5	3.5	5.35	5.98	2.75	4.75	2.19	1.06	4.095	3.5	3.50	0.656	241	5/8-11X2.00
W43-64-64	4	4	5.75	6.38	3.062	5.125	2.19	1.06	4.595	3.94	4.00	0.656	245	5/8-11X2.00



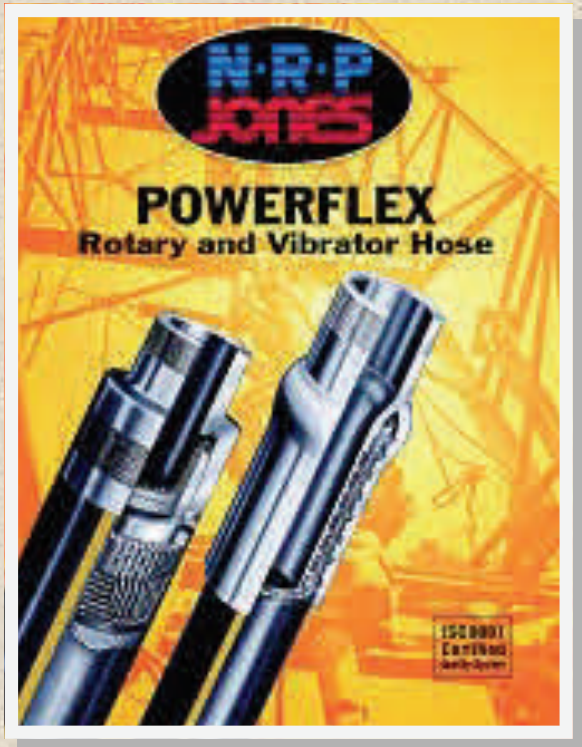
Our crimp machine allows us to crimp ends on a wide selection of hydraulic and industrial hose.

We carry a full line of quality NRP Jones industrial hose, hydraulic hose, crimp fittings, and adapters. Like NRP's oilfield hose lines on the following page, their line of hydraulic products match their world class reputation of high end products with competitive prices. Ask for either catalogue pictured for more information on these products.





<u>Rotary</u> <u>Hose</u> <u>Part No.</u>	<u>Vibrator</u> <u>Hose</u> <u>Part No.</u>	<u>Hose I.D.</u> <u>(in)</u>	<u>Hose O.D.</u> <u>(in)</u>	<u>Rated W.P.</u> <u>(psi)</u>	<u>Test Press.</u> <u>(psi)</u>	<u>Min. Bend</u> <u>Radius</u>	<u>Wt. Per</u> <u>Foot (lbs)</u>
5501-40	5502-40	2.5	4.32	4000	8000	36	12.9
5501-48	5502-48	3	4.82	4000	8000	48	14.9
5501-56	5502-56	3.5	5.32	4000	8000	54	16.6
5603-40	5604-40	2.5	4.45	5000	10000	48	13.6
5603-48	5604-48	3	4.95	5000	10000	48	15.5
5603-56	5604-56	3.5	5.63	5000	10000	54	18.6
5603-64	5604-64	4	6.25	5000	10000	54	19.8



Powerflex Rotary and Vibrator Hose from NRP-Jones is built of premium materials throughout, and assembled to yield the longest possible service life. The NRP-Jones construction method of mechanically attaching the couplings to the steel reinforcement cables is the most reliable method today. NRP-Jones manufactures Rotary Hose for those whose primary concern is quality, while maintaining competitive pricing.

Ask for the above catalogue for a full resource of specifications on NRP-Jones Rotary, Vibrator, Choke & Kill, Motion Compensator, B.O.P., & Core Drill Hose.



Ventilators



Used by municipal vacuum truck operators for ventilating manholes and oil and gas vacuum truck operators when ventilating storage tanks, Pelsue ventilators have a strong reputation for high quality equipment which improves personnel efficiency and working conditions. These ventilators, along with the Pelsue gas detectors below, help reduce risks involved in entering confined space. Ask for a complete Pelsue catalogue including manhole tools and rescue and retrieval equipment if your work involves confined space entry.

Part #	Description
1325P	Axial Ventilator
1000E	Hazardous Location Ventilator
1590	Axial Propane Heater/Ventilator

Gas Detection

Air quality within confined spaces is often a complex mix of toxic and flammable substances. For this, the four sensor multi gas detector is your ideal detector. At other times, you may only be concerned with one particular gas. The single gas detector is right for this application. Also, you can ask us about renting these units.



Part #	Description
Max400	4-Gas no Internal Pump
Max401	4-Gas with Internal Pump
MCAS01	Single-Gas Detector



Power Transmission Products



Part #	Description
QF25x35mm	QF25 Half Coupling (35mm Bore)
QF25x42mm	QF25 Half Coupling (42mm Bore)
QF25x48mm	QF25 Half Coupling (48mm Bore)
QF25x55mm	QF25 Half Coupling (55mm Bore)
QF25x7/8	QF25 Half Drive Coupling (7/8" Bore)
QF25x1	QF25 Half Drive Coupling (1" Bore)
QF25x1-1/4	QF25 Half Drive Coupling (1-1/4" Bore)
QF25x1-3/8	QF25 Half Drive Coupling (1-3/8" Bore)
QF25x1-1/2	QF25 Half Drive Coupling (1-1/2" Bore)
QF25x1-5/8	QF25 Half Coupling (1-5/8 " Bore)
QF25x1-3/4	QF25 Half Drive Coupling (1-3/4" Bore)
QF25x1-7/8	QF25 Half Coupling (1-7/8 " Bore)
QF25T Insert	Quick-Flex Insert (Black)
QF25 Cover	Quick Flex 25 Coupling Half Cover

P.T.O.'s



Truck R.P.M. X P.T.O. Percentage= Output Shaft R.P.M. Contact us for your specific application requirements.



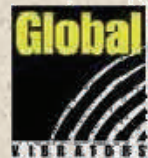
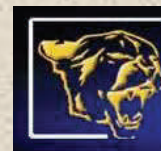
CHELSEA®

Vibrators



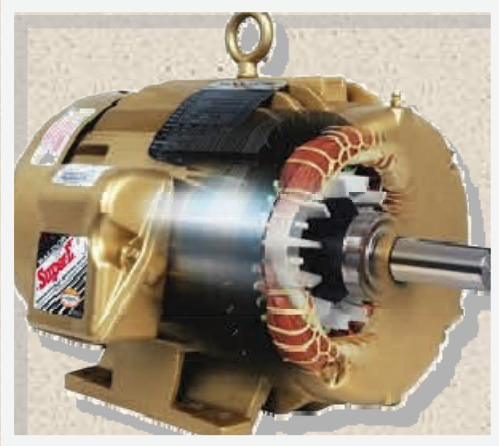
Part #	Description
NHD-110-4	Northern Hydraulic Vibrator (4-Bolt Housing Mount)
205663-02	Cougar Hydraulic Vibrator (2-Bolt Mount)
MGG20010BA1B3	Northern Vibrator Hydraulic Motor
C3-6.0-2HC	Global Hydraulic Vibrator (2-Bolt Mount)
1220032	Global Vibrator Hydraulic Motor

These vibrators use an external hydraulic motor to produce rotary vibration, producing substantial force with moderate frequency. This displaces the wet or sticky material from the tank wall.





Motors, generators, inverters, and grinders. Baldor offers a variety of industrial equipment.



Part # Description

M7054T-I 15 H.P. Three Phase Explosion Proof Baldor Motor
M7056T-I 20 H.P. Three Phase Explosion Proof Baldor Motor
M7058T-I 25 H.P. Three Phase Explosion Proof Baldor Motor
M7060T-I 30 H.P. Three Phase Explosion Proof Baldor Motor

Gauges

Gauge Face Size	2-1/2"	2-1/2"	4"	4"
Gauge Thread Size	1/4" NPT	1/4" NPT	1/4" NPT	1/4" NPT
Gauge Mounting Type	Bottom	Back	Bottom	Back
Compound 30 HG x 30 PSI	WJ7612P	WJ7212P	WH10712P	WH10812P
Vacuum 30 HG	WJ7605P	WJ7205P	WH10705P	WH10805P
Pressure 30 PSI	WJ7642P	WJ7242P	WH10742P	WH10842P
Pressure 100 PSI	WJ7648P	WJ7248P	WH10748P	WH10848P
Pressure 300 PSI	WJ7658P	WJ7258P	WH10758P	WH10858P
Pressure 600 PSI	WJ7664P	WJ7264P	WH10764P	WH10864P
Pressure 1000 PSI	WJ7672P	WJ7272P	WH10772P	WH10872P
Pressure 3000 PSI	WJ7678P	WJ7278P	WH10778P	WH10878P
Pressure 5000 PSI	WJ7682P	WJ7282P	WH10782P	WH10882P

Note: Gauges all come liquid filled. All 2-1/2" gauges in above chart are stainless steel case, brass internals. Can be special ordered in all stainless steel. All 4" gauges are all stainless steel.





Acoustically Enclosed Blower Rig Vac Units

Ask us for the skid mounted vacuum unit brochure if interested in these units.



Putting the newest idea on vacuum trucks (acoustically enclosed blowers) onto our skid units, we've come up with the best skid mounted vacuum unit available. These units are more powerful, more efficient, and less noisy than skid units built in the past with vane pumps. One important advantage of these new units is that they have zero oil discharge. The first generation of vacuum skid units, with vane pumps, had a significant amount of oil misting from the exhaust discharge. With oil contamination onto the ground or out into the atmosphere no longer being a concern,



Test Bench

All rebuilds test
bench certified.



By testing your pump on our test bench after rebuilding it, we can ensure peak performance of all rebuilds . Custom designed to accommodate vane pumps or blowers, we can test any of the pumps we are distributors for.



Vacuum Pump Troubleshooting

Problem: Pump is Overheating

Cause:

- Faulty Lubrication
- Low oil level
- RPM's too high
- Operating time too long at too high of vacuum rate
- Clogged filters on the air injection system
- Exhaust port/check valve partly clogged
- Insufficient diameter of hoses
- Cooling fans not working

Remedy:

- Check that the oil pump is working
- Fill up oil tank
- Reduce the pump speed
- Decrease the vacuum rate
- Clean the filters
- Remove crusts and scales
- Use recommended hose size
- Replace or repair cooling fans

Problem: Pump is Seized

Cause:

- Broken vanes;
 due to foreign contamination
 due to faulty lubrication
- Frozen up pump
- Damaged drive system
- Foreign contamination

Remedy:

- Change the vanes;
 & clean filters/elements on the line
 & check the lubrication pump
- Warm up the pump
- Change the damaged parts
- Needs rebuild

Problem: Reduced Performance

Cause:

- Four-way valve in neutral
- Worn vanes/or rotor tips
- Leaking check valve
- Reduced hydraulic system performance
- Leaking gaskets or valves
- Clogged connecting pipeline
- Obstructed float ball or air filter
- Contamination build up in exhaust manifold
- Undersized hoses
- Coupling between motor & pump damaged or obstructed
- Collapsed vacuum hose

Remedy:

- Move handle to proper position (Vac/Pressure)
- Change the vanes/build up rotor tips
- Clean/change the check valve
- Inspect/Replace worn hydraulic component
- Change damaged parts
- Change damaged hoses/pipes
- Dismantle and clean
- Dismantle and clean
- Use recommended size hose
- Change the connections
- Replace vacuum hose

Problem: Irregular Oil Consumption

Cause:

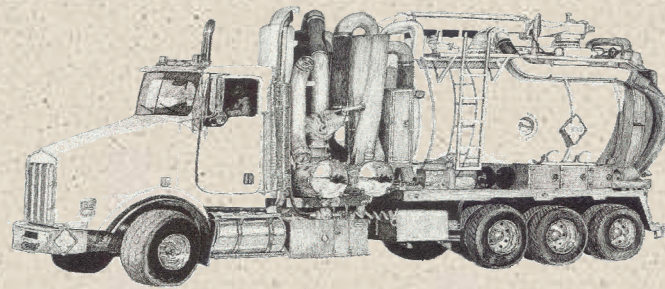
- Low oil due to insufficient lubrication
- Excessive oil consumption due to old seals

Remedy:

- Adjust the oil pump flow
- Replace oil seals



Thank-you for choosing L.M.
Industries; where we *service*
everything we sell.



Notes: