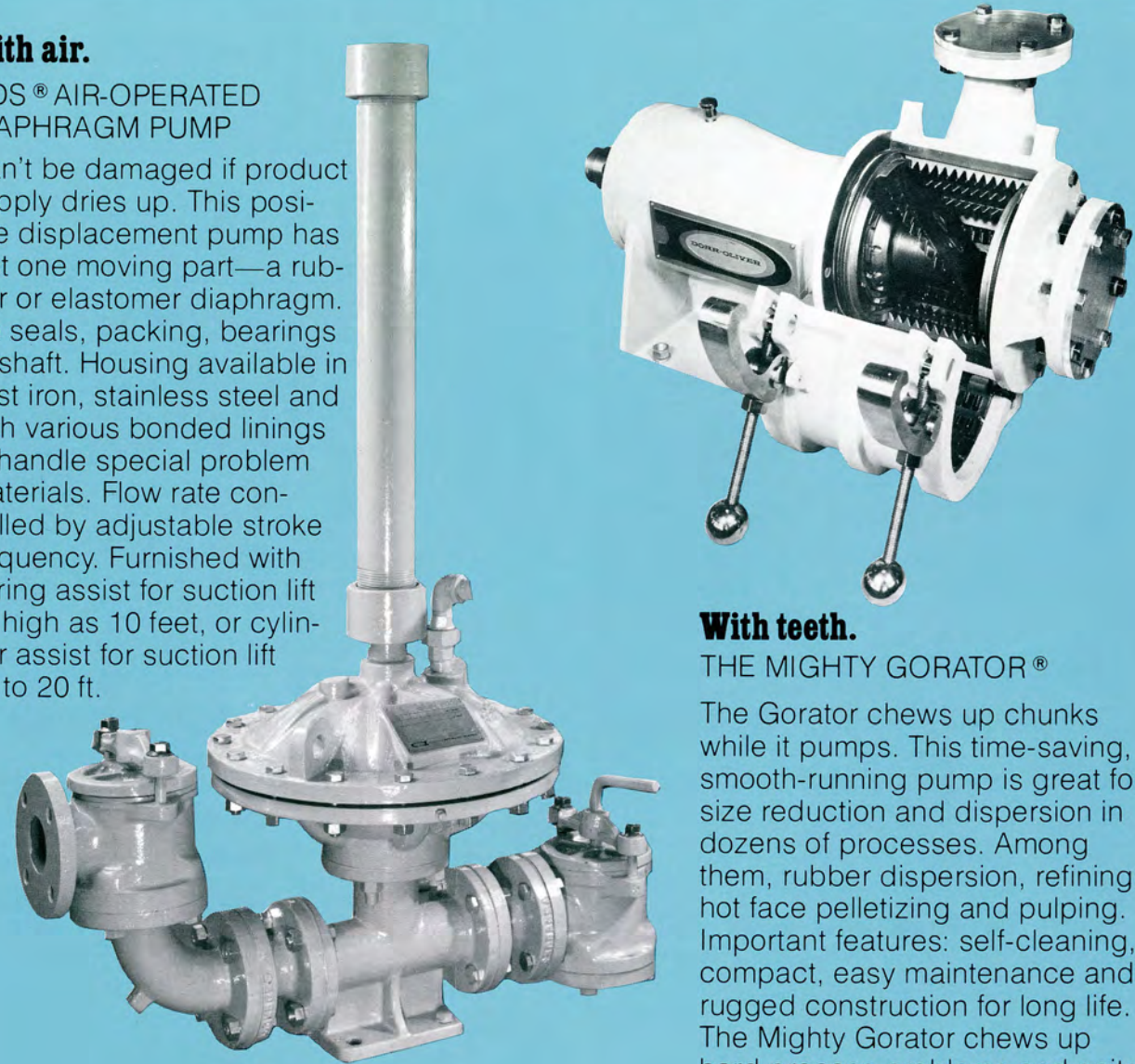


Dorr-Oliver offers two other hard-workers for difficult pumping problems.

With air.

ODS® AIR-OPERATED DIAPHRAGM PUMP

Can't be damaged if product supply dries up. This positive displacement pump has just one moving part—a rubber or elastomer diaphragm. No seals, packing, bearings or shaft. Housing available in cast iron, stainless steel and with various bonded linings to handle special problem materials. Flow rate controlled by adjustable stroke frequency. Furnished with spring assist for suction lift as high as 10 feet, or cylinder assist for suction lift up to 20 ft.



With teeth.

THE MIGHTY GORATOR®

The Gorator chews up chunks while it pumps. This time-saving, smooth-running pump is great for size reduction and dispersion in dozens of processes. Among them, rubber dispersion, refining, hot face pelletizing and pulping. Important features: self-cleaning, compact, easy maintenance and rugged construction for long life. The Mighty Gorator chews up hard process problems and spits out more profits.

DORR-OLIVER 

DORR-OLIVER INCORPORATED
INTERNATIONAL HEADQUARTERS
77 HAVEMEYER LANE
STAMFORD, CONN. 06904

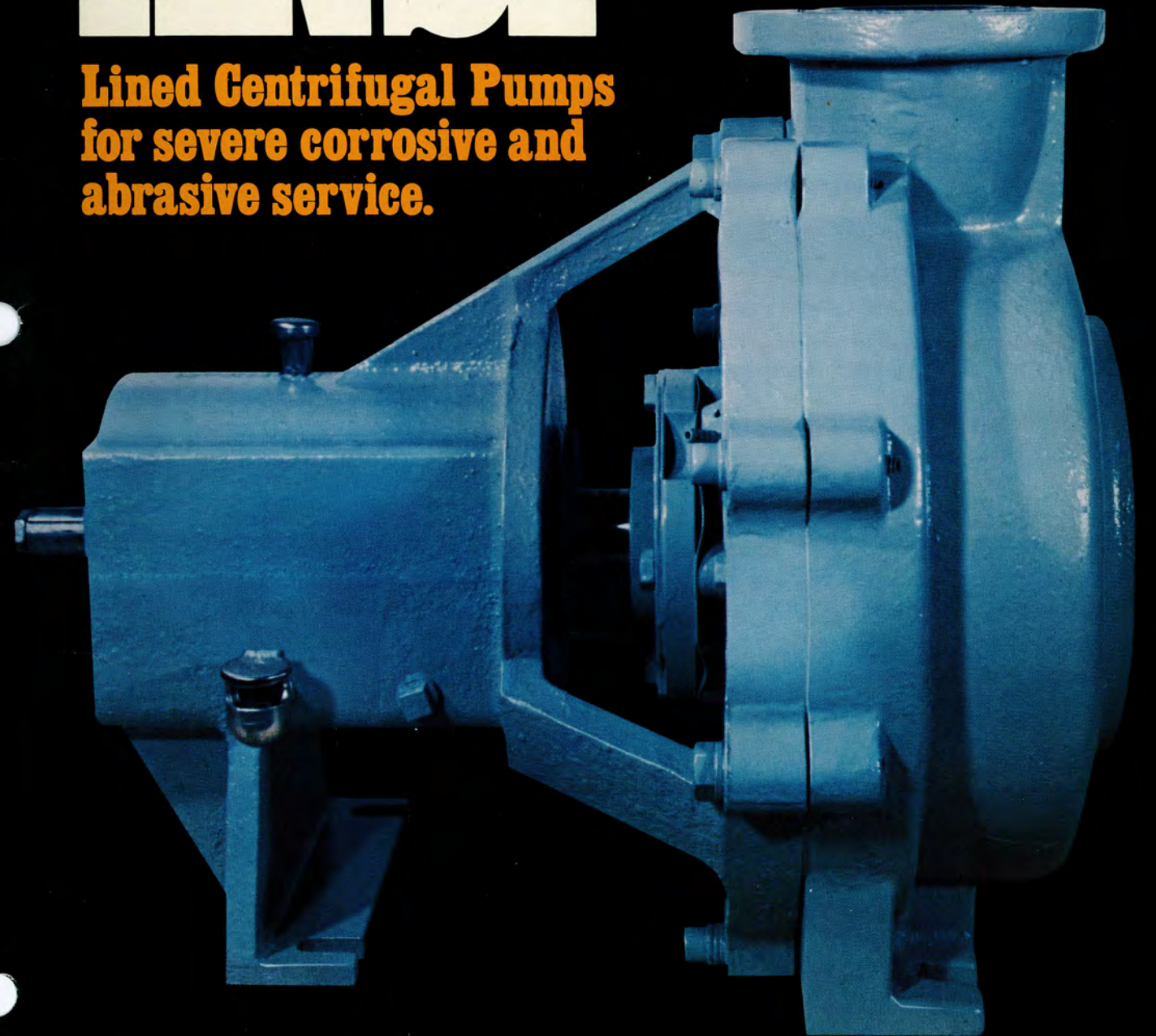
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BULLETIN AVS-3

DORR-OLIVER 

Olivite® ANSI

**Lined Centrifugal Pumps
for severe corrosive and
abrasive service.**



Since 1930 Dorr-Oliver has been a leader in the development and manufacture of lined centrifugal pumps. Alert to the ever-expanding needs of the chemical process industry, the company has developed a new line of corrosion and abrasion resistant ANSI centrifugal pumps. The Olivite pump possesses unique structural strength, a product of its rugged ductile iron construction. Without exception, the pumps meet, and in many instances exceed, the requirements of the ANSI. This standard provides for dimensionally interchangeable pumps and for specific design features that minimize maintenance and replacement costs. The Dorr-Oliver Super ANSI Pump follows a tradition of leadership in its superiority in the chemical process industry.

Highlights of the Olivite ANSI pumps.

Lining & Lining Material The lining material is vulcanized and mechanically locked into the metal casing. A minimum thickness of 1/4" resists wear even under the most abrasive conditions. Available in Kynar® and Hypalon® elastomer, which have superior corrosion and abrasion resistance. Parts are molded under high pressure to conform to close tolerance fits.

Casing The casing is cast ductile iron and affords the full strength normally associated with metal pumps. It is arranged for back pullout disassembly and has a top centerline discharge, meeting all ANSI requirements. Drain, gauge or vent connections can be provided at top and bottom of casing. Foot support affords maximum resistance to axial misalignment and distortion from pipe loads and eliminates the need for centerline supports.

Impeller Design The impeller is precision molded Kynar with a metallic insert to insure efficient power transmission. Vane design has been optimized to give high efficiency and very low NPSH. Solid Kynar vanes and shroud provide long life despite abrasion.

Impeller Adjustment This is the first truly external impeller adjustment. There are no jack screws, shims or feeler gauges required for adjustment, and no need to readjust mechanical seals. This makes the Olivite ANSI Pump the quickest and most economically maintained pump available.

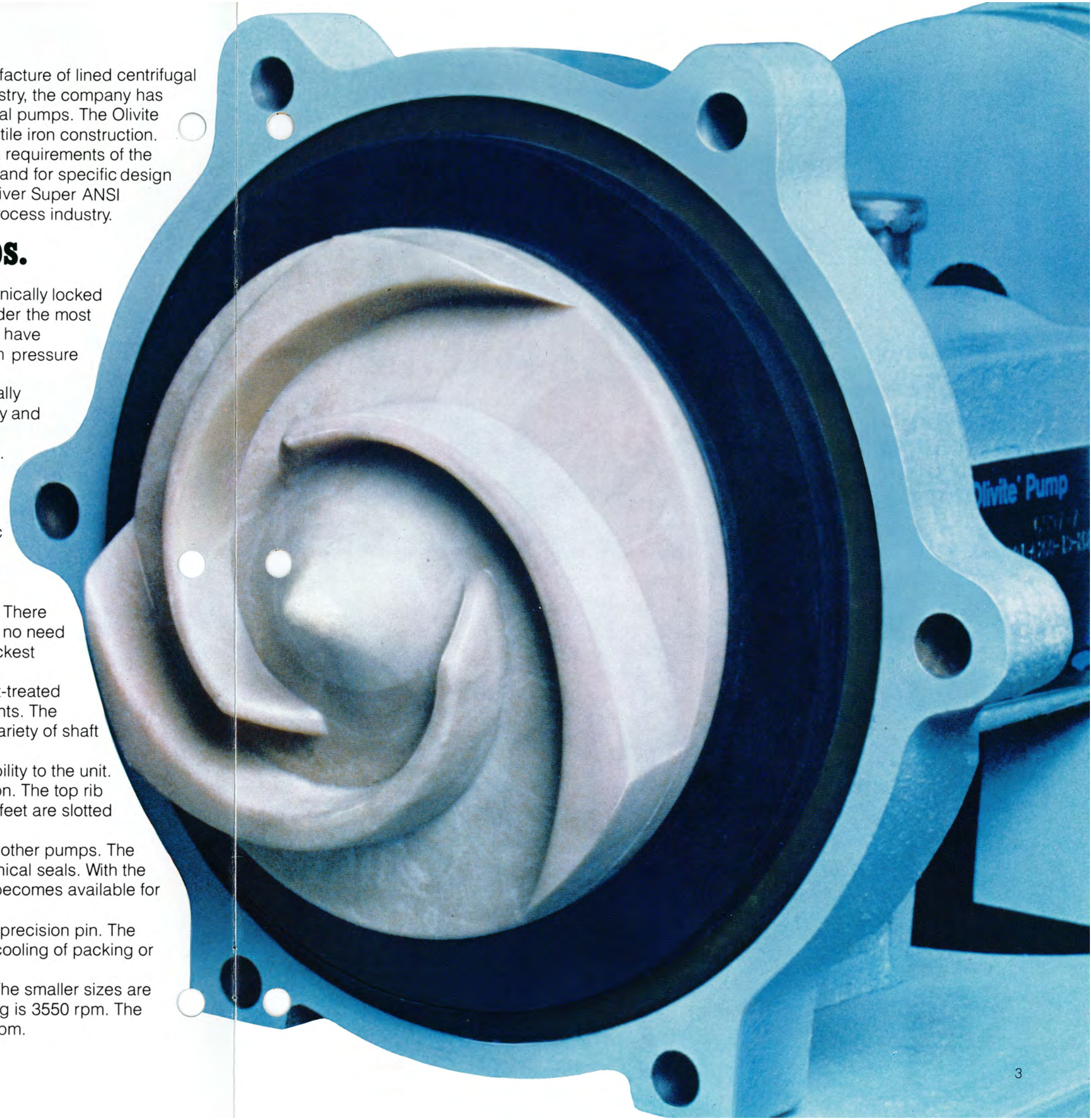
Shaft & Shaft Sleeve The shaft is manufactured from high strength heat-treated chromium-molybdenum steel which exceeds ANSI deflection requirements. The hollow shaft provides for an external adjustment of the impeller gap. A variety of shaft sleeve materials are available.

Frame The rugged cast iron frame provides maximum support and stability to the unit. It features a unique oil distribution system that assures bearing lubrication. The top rib is designed to provide a substantial and convenient lift point. The frame feet are slotted for easier back pullout.

Stuffing Box & Seals The Olivite ANSI pumps offer more flexibility than other pumps. The oversized, completely lined stuffing box has room for a variety of mechanical seals. With the exclusive solid Kynar resilient sleeve, a corrosion resistant packed box becomes available for less critical applications.

Adapter The adapter is kept in a positive alignment with the frame by a precision pin. The adapter casing contains pipe tap connections for water circulation and cooling of packing or mechanical seals.

Complete Line Dorr-Oliver makes sizes AA, AB, and A-50, A-60, A-70. The smaller sizes are available with either Kynar or Hypalon lining. Their maximum speed rating is 3550 rpm. The larger sizes are only available with Hypalon lined casings and for 1750 rpm.



Heavy duty shaft

4140 SAE for pump model A 50, 60 & 70
4340 SAE for pump model AA & AB
Made on latest computer controlled machines to exact tolerances.

Bearing frame

Rugged cast iron construction. Provides maximum support and stability. Does not warp, withstands shocks. Frame feet are slotted for back pull out.

Impeller adjustment

By turning the tierod, the impeller clearance can be externally adjusted. No readjustment of mechanical seals, no shims or feeler gage required.

Bearings

Double row ball bearings. High thrust capability with minimum end play.

Bearing seal

Prevents contamination of lubrication oil.

Drip pan

(Not Shown) Plastic construction, corrosion-resistant. Connects to drain.

Steel sub-base

(Not shown) Available for direct connected drive.

Resilient sleeve (Floating stuffing box)

Contains braided packing. Adjusts itself to shaft movements. Shock loads and "shaft whip" are absorbed. Leakage is reduced to a minimum. Made of Kynar.

Lantern ring

Permits circulation of water or clear solution between shaft sleeve and packing.

Shaft sleeve

Corrosion resistant metal or non-metallic construction available. (Hastelloy B and C, ceramic, tantalum and Kynar coated).

Mechanical seal

Wide choice of mechanical seals to match your application.

Casing

The casing is cast ductile iron and affords the strength normally associated with metal pumps while having the corrosion resistance of non-metallics. Design complies with ANSI back pull out requirements. Top centerline discharge, self venting.

Adapter

The back half of the wet end. (Contains flush water connections for packing or mechanical seal). Frame and adapter are removed as one unit when wet end requires servicing.

Lining & lining material

The lining material is bonded and mechanically locked to the metal base. A minimum thickness of 1/4" allows for wear even under the most abrasive conditions. Available in either Hypalon® or Kynar®, which have superior corrosion and abrasion resistance. All parts are precision molded.

Kynar impeller

Precision molded Kynar impeller with metal insert for efficient power transmission. Solid Kynar vanes to optimize low NPSH & high efficiency as well as provide greater wear life.

Olivite ANSI pump performance curves.

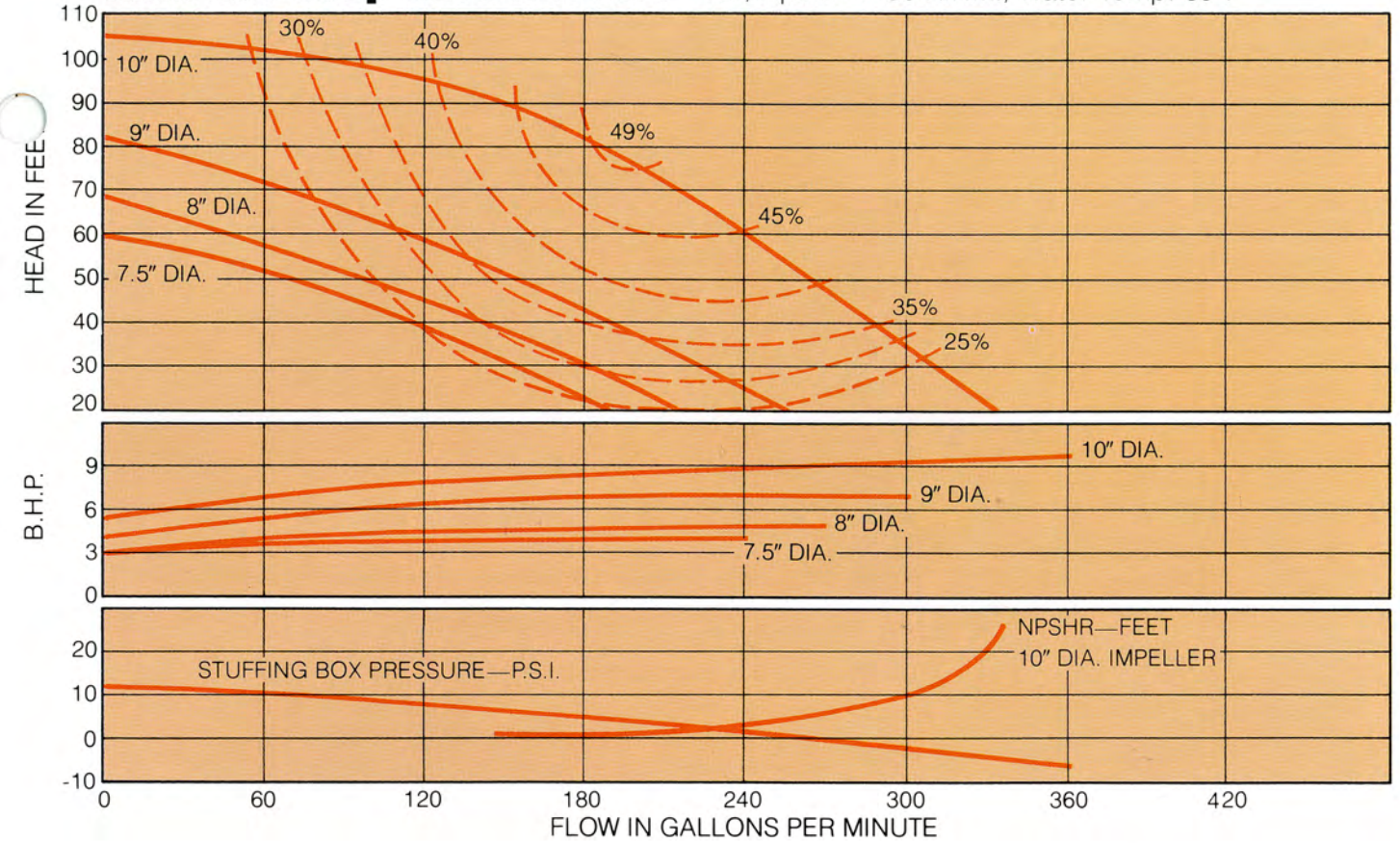
We have provided the following performance curves to help you select the correct motor, rotating speed and impeller diameter. The curves are based on computer analyzed data collected on a hydraulic test stand meeting the Hydraulic Institute Standards.

All tests are conducted under controlled conditions with clean water at temperatures between 50° and 70° with minimum impeller clearance. The pressure readings are taken adjacent to the pump inlet and outlet.

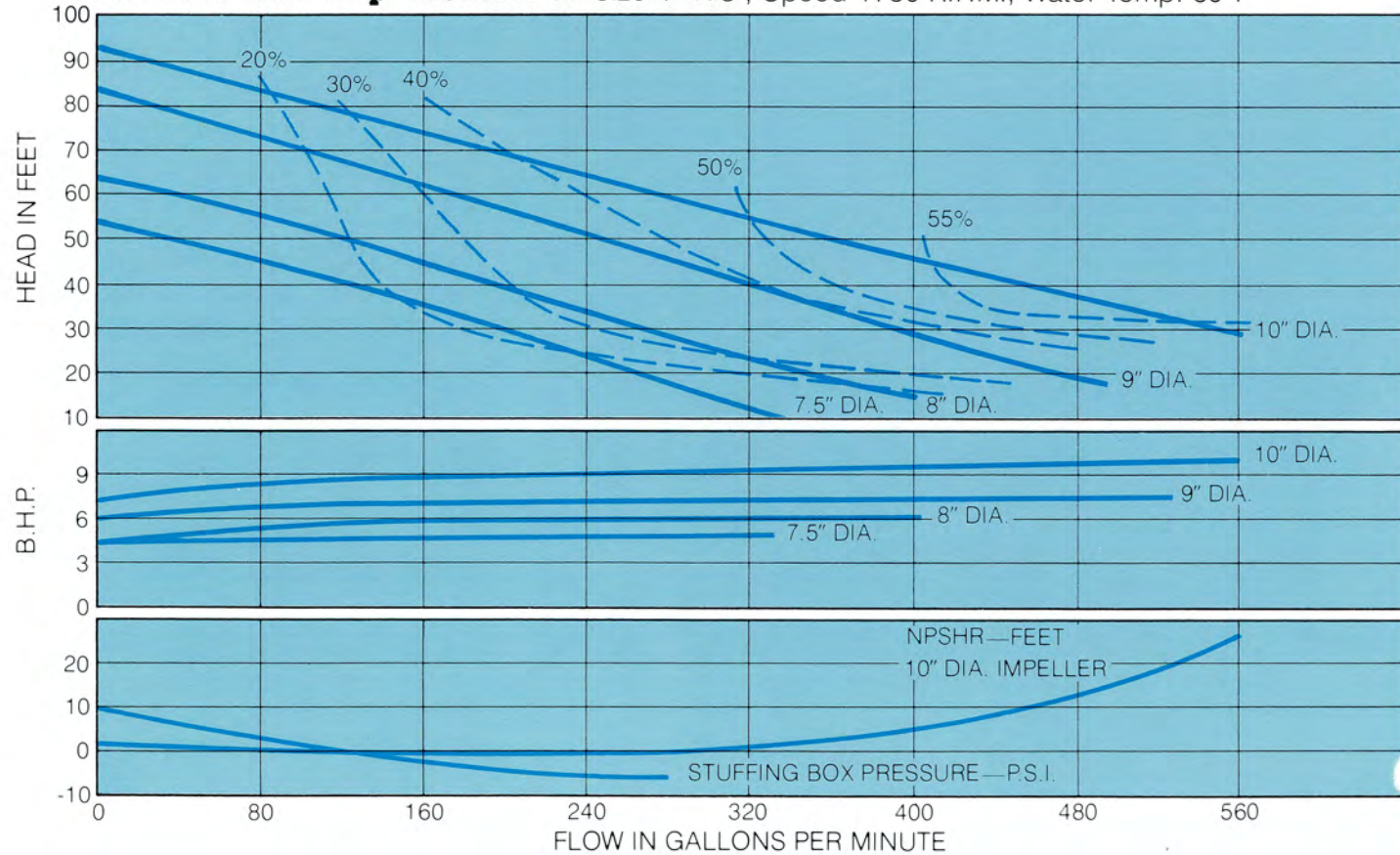
Because your applications will most likely differ from these ideal test conditions, we offer the following guidelines:

For liquids other than water:	Correct the brake horsepower for the specific gravity difference.
For liquids other than water:	Correct the total dynamic head for the viscosity difference.
For liquids containing air:	Provide additional NPSH.
For liquids which foam easily:	Provide additional NPSH.
For hot liquids or those with low vaporizing temperatures:	Provide additional NPSH.
If suction line is long:	Check NPSH.
If service is intermittent and pump is started often:	Increase motor size to compensate for heat build-up.
NOTE: Always look at the whole fluid handling system when determining the performance parameters.	

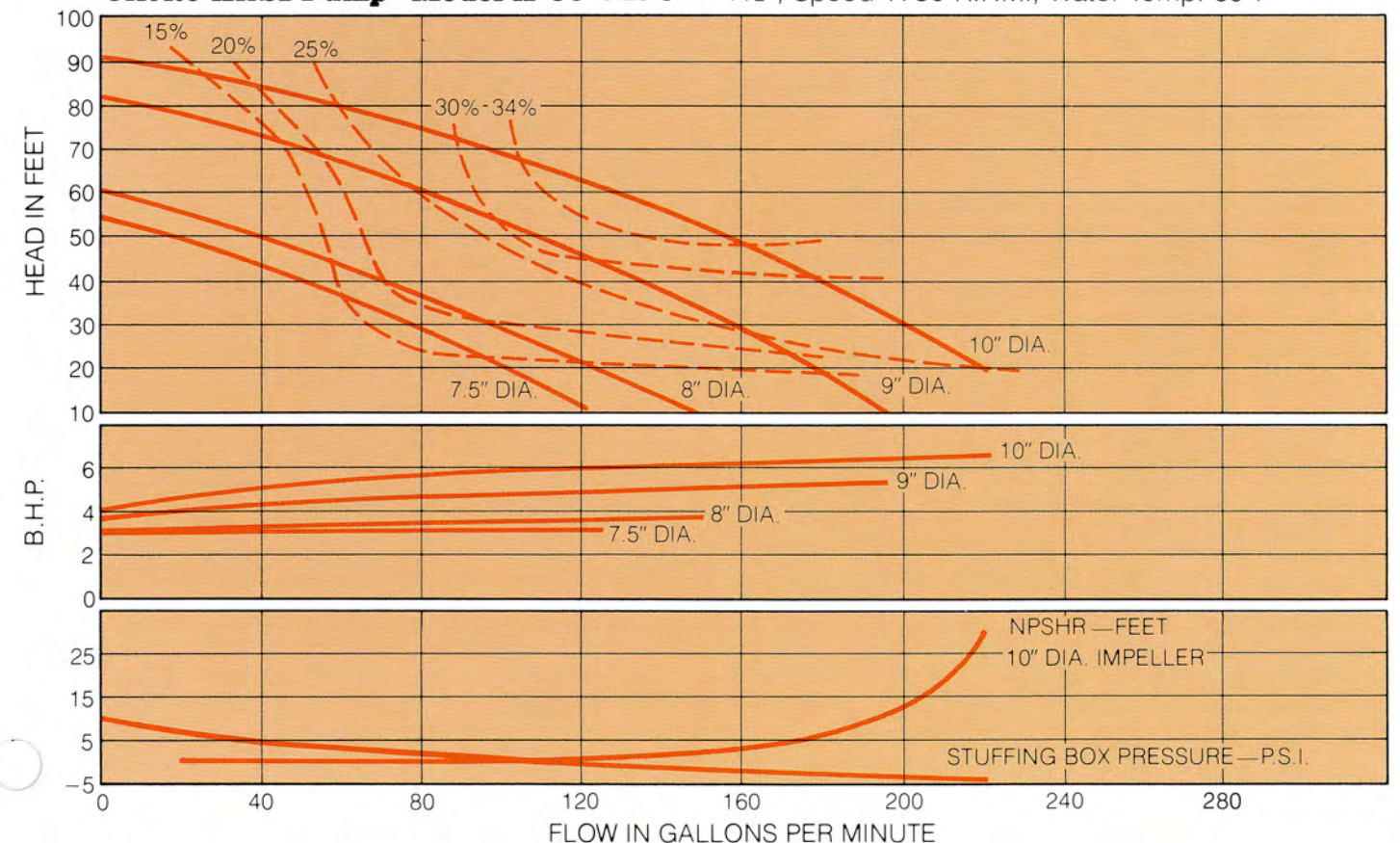
Olivite ANSI Pump - Model A-60 Size 3" x 2", Speed 1750 R.P.M., Water Temp. 60°F



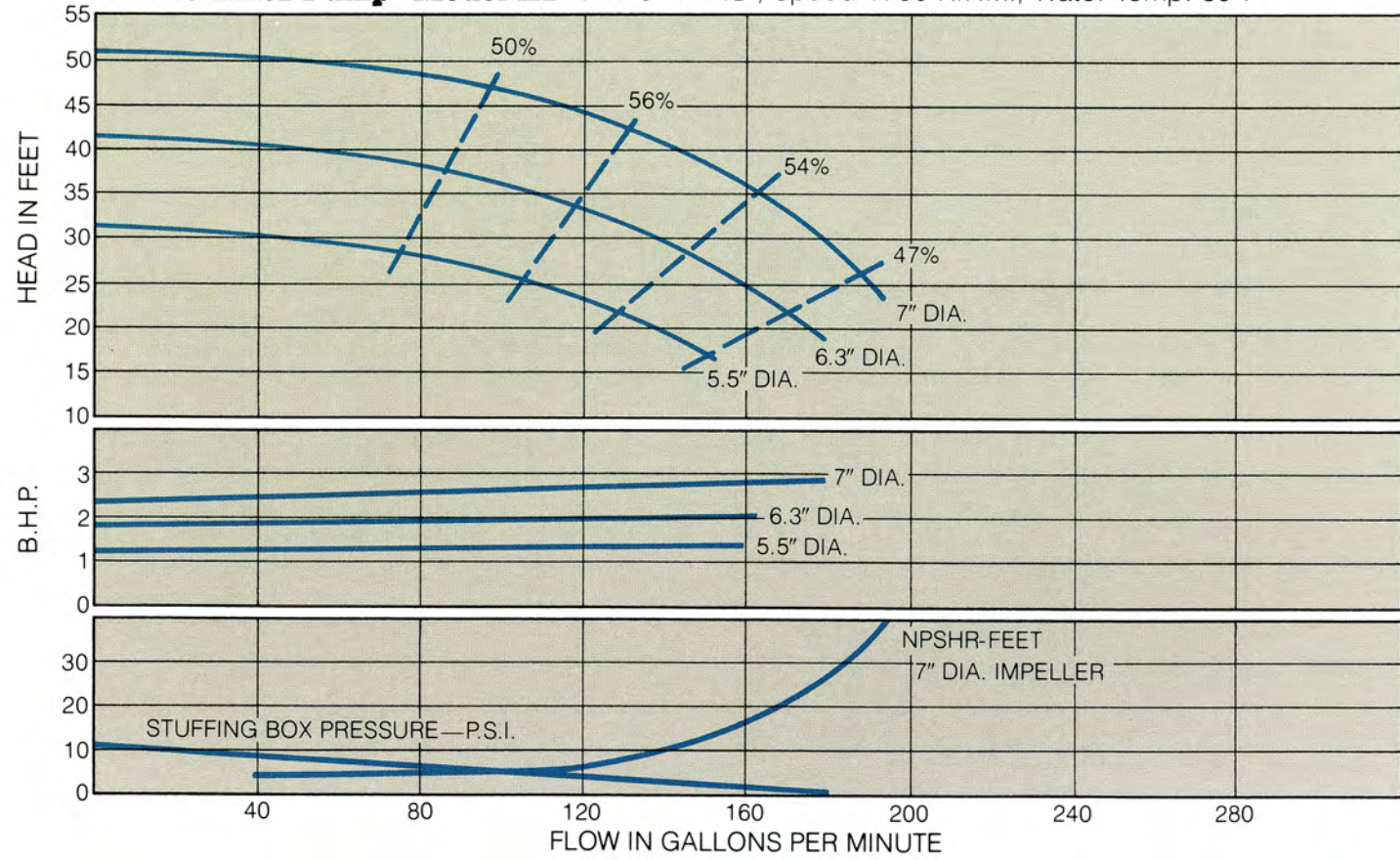
Olivite ANSI Pump - Model A-70 Size 4" x 3", Speed 1750 R.P.M., Water Temp. 60°F



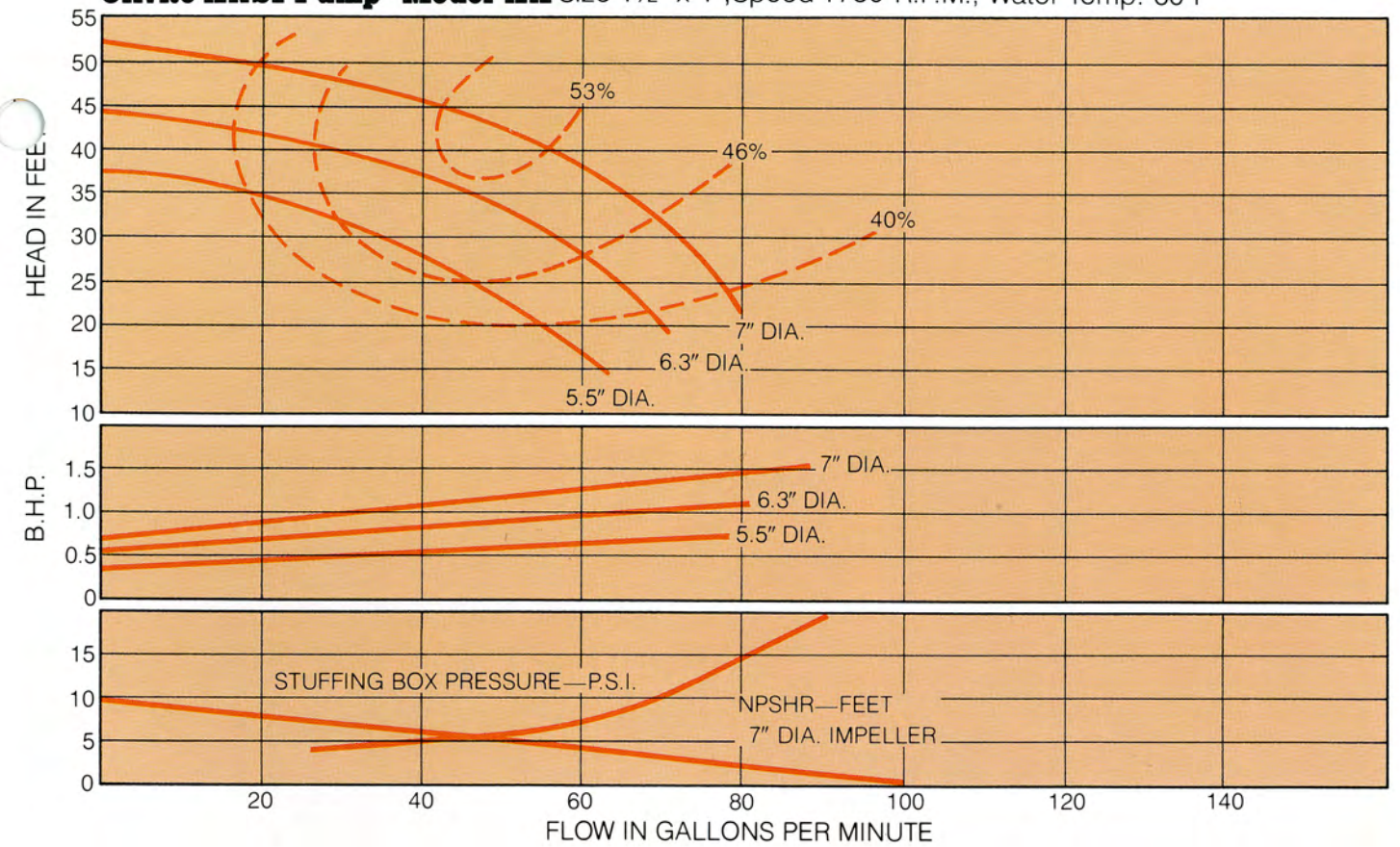
Olivite ANSI Pump - Model A-50 Size 3" x 1 1/2", Speed 1750 R.P.M., Water Temp. 60°F



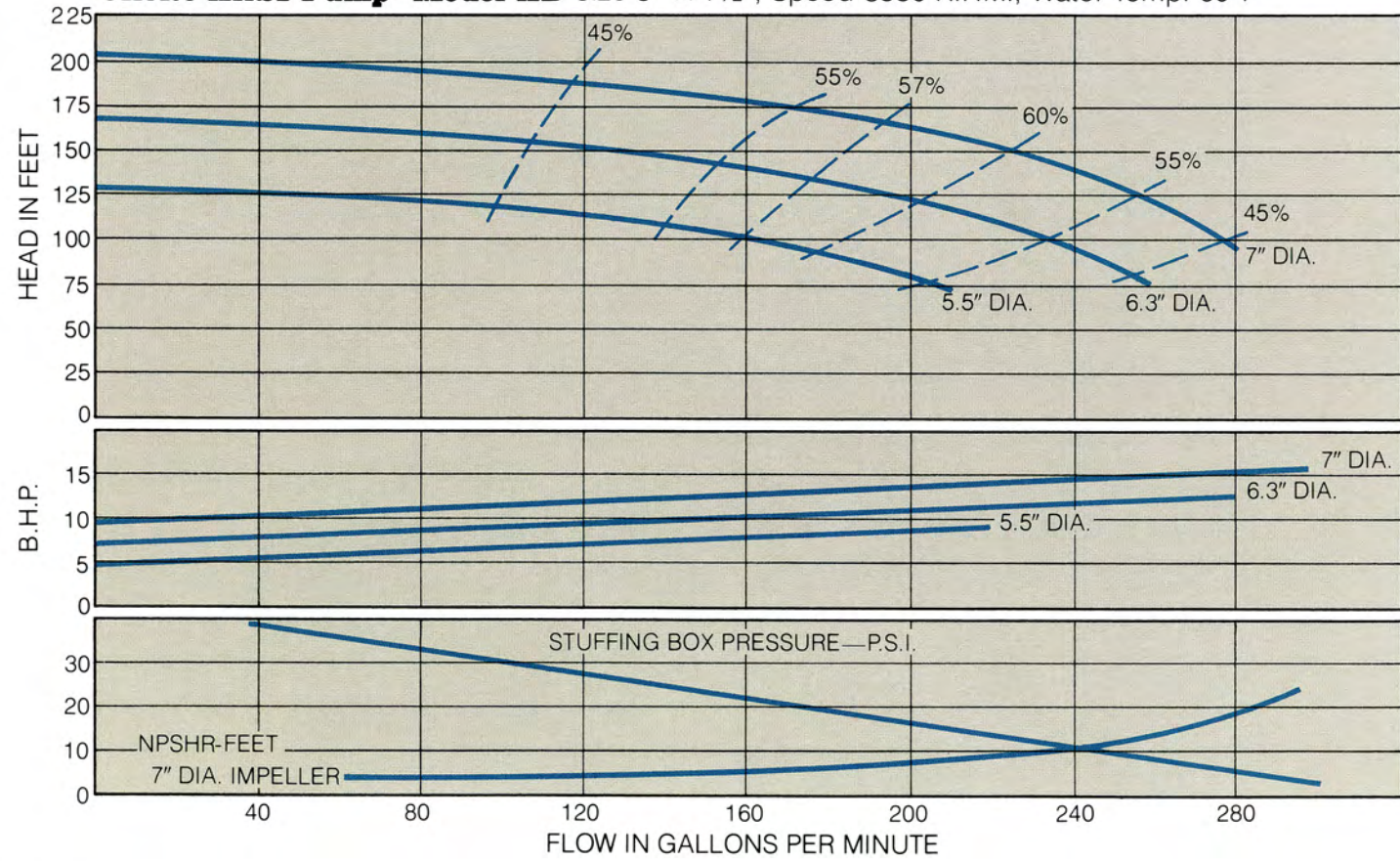
Olivite ANSI Pump - Model AB Size 3" x 1½", Speed 1750 R.P.M., Water Temp. 60°F



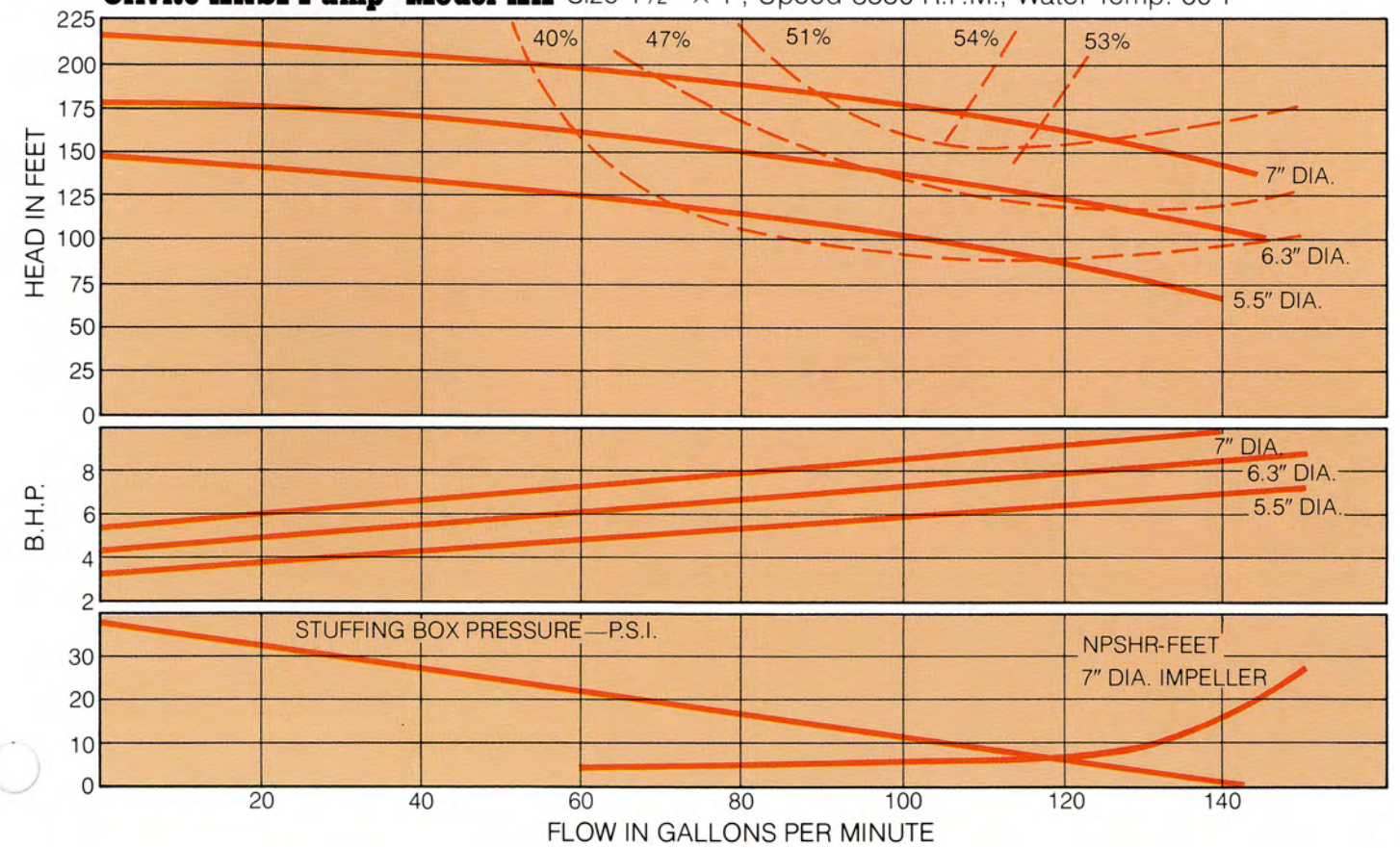
Olivite ANSI Pump - Model AA Size 1½" x 1", Speed 1750 R.P.M., Water Temp. 60°F



Olivite ANSI Pump - Model AB Size 3" x 1½", Speed 3550 R.P.M., Water Temp. 60°F



Olivite ANSI Pump - Model AA Size 1½" x 1", Speed 3550 R.P.M., Water Temp. 60°F



Olivite ANSI Installation recommendations.

Location

Pumps should be placed with short suction and discharge lines in order to hold pipe friction losses to a minimum. Ample space should be allowed on all sides of the pump so that it can be easily inspected while operating and quickly serviced when necessary.

Valves

Provide isolating valves near pump to allow maintenance on equipment.

Pressure gauges

Install pressure gauges in discharge and seal water line in order to monitor pump performance. In chemical service, use diaphragm to safeguard gauge.

Piping support

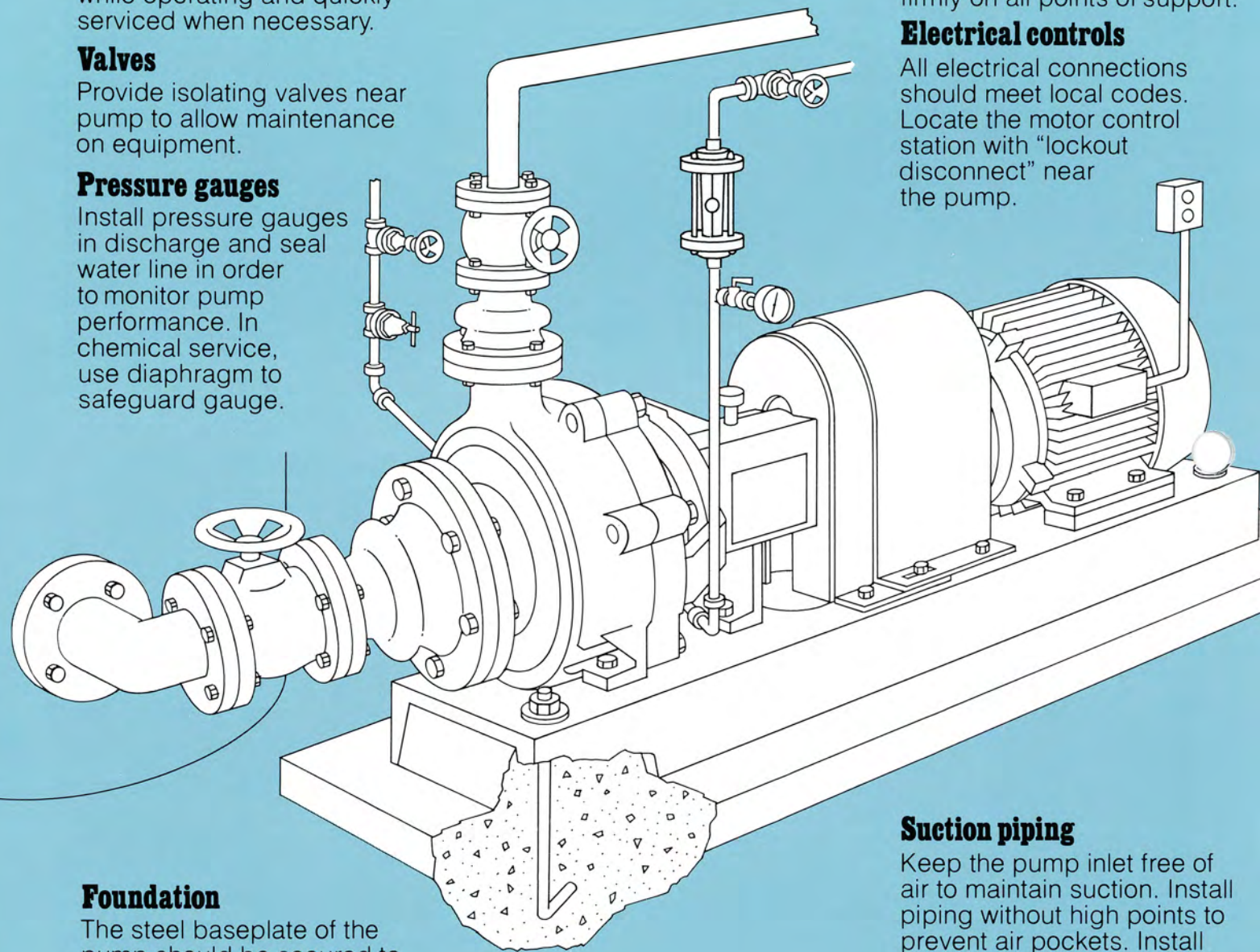
All piping should be independently supported. Pipe weight should not be carried by the pump. By installing short flexible hoses in the suction and discharge lines, piping vibration and noise is not transmitted and alignment is assured.

Alignment

Accurate alignment should be maintained during operation. Misalignment will cause excess wear on coupling, packing and shaft sleeve and will result in bearing overheating. The pump must be level and sit firmly on all points of support.

Electrical controls

All electrical connections should meet local codes. Locate the motor control station with "lockout disconnect" near the pump.



Foundation

The steel baseplate of the pump should be secured to a concrete foundation (over a solid support) with the foundation bolts embedded in the concrete. It is important to size the foundation adequately to absorb vibration and maintain alignment.

Seal water

Assure ample supply of clean seal water. Seal water pressure should be 10 psi above 40% of discharge pressure.

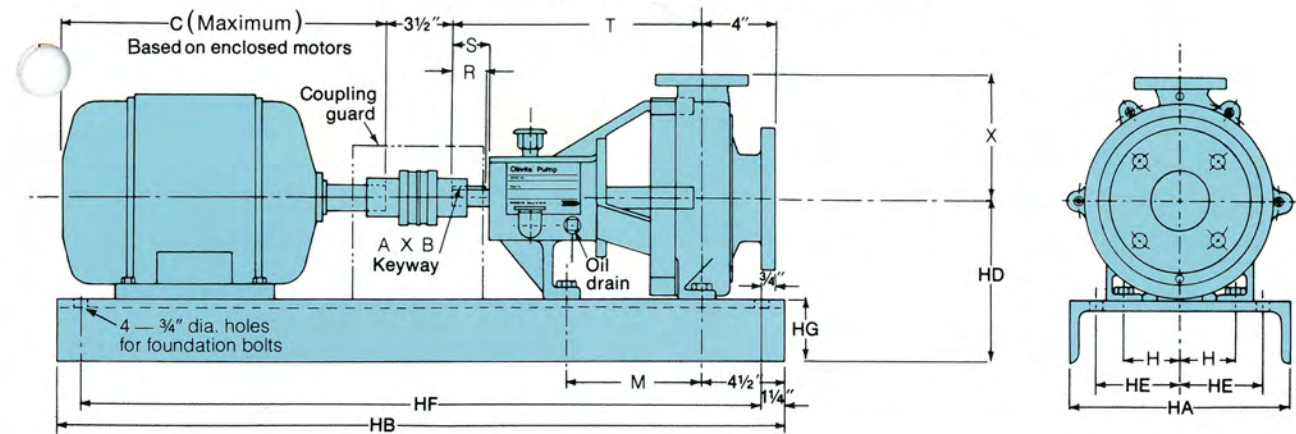
Suction piping

Keep the pump inlet free of air to maintain suction. Install piping without high points to prevent air pockets. Install piping with a slight gradual slope upwards toward pump. This will assure elimination.

NPSH

Calculate available NPSH and compare it with the curve. Available head has to exceed curve value.

Dimensions and specifications.



PUMP TYPE	MOTOR FRAME	HA	HB	HD	HE	HF	HG	C
AB	254T	15	52	10 1/2	6	49 1/2	4 1/8	27 5/8
	256T			11 3/8				
	284T							
	286T							
AB	215T	12	39	8 1/2	4 1/2	36 1/2	3 1/4	18 7/8
AA	184T	10	35	8 1/4	4	32 1/2	3	15 9/16
A50	284T	15	52	12	6	49 1/2	3 3/4	26 1/8
	256T							25 1/2
A60	215T							20
A70	213T	12	45	4 1/2	42 1/2			18 1/2
	184T							15 15/16
	182T							

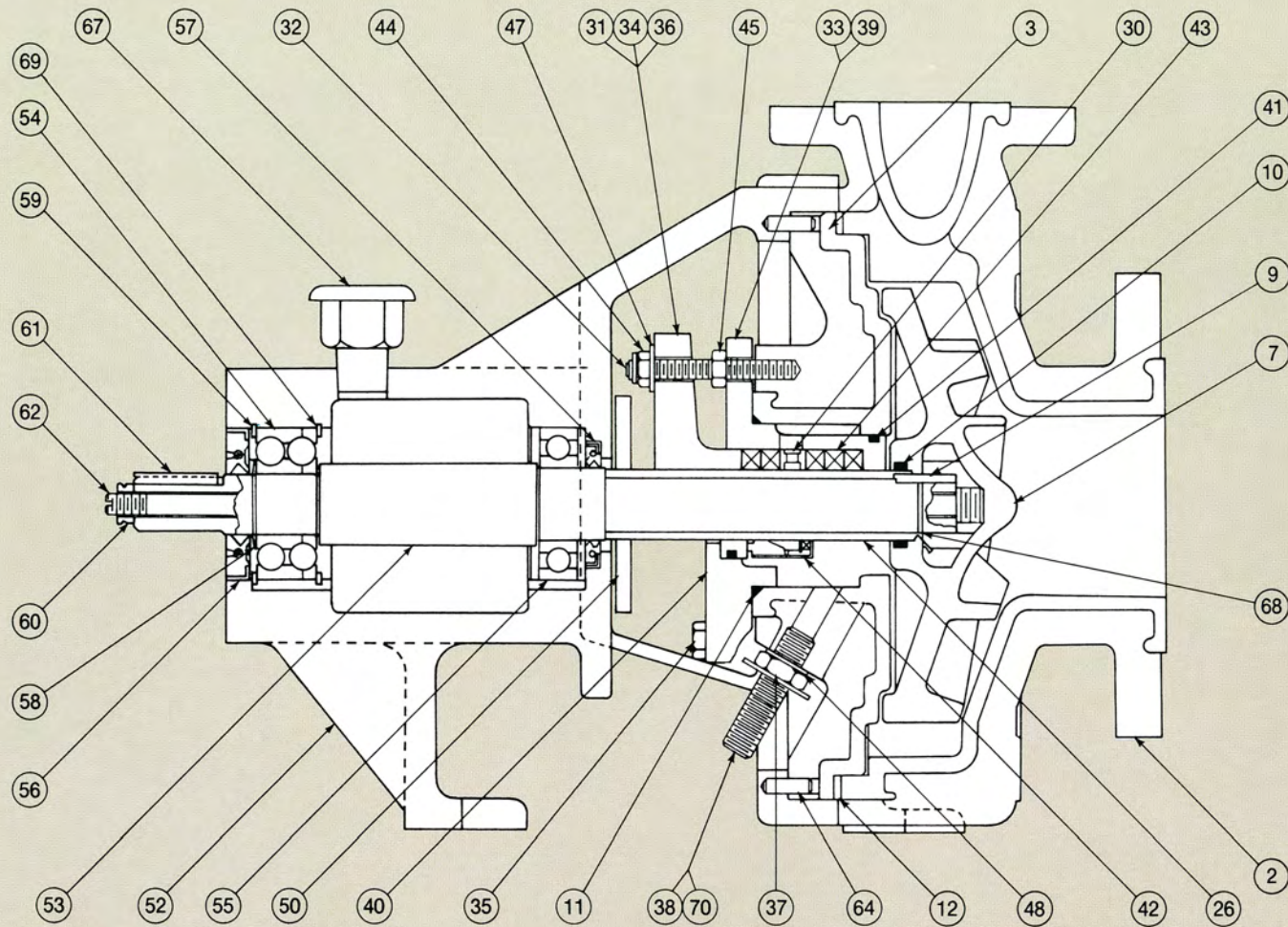
PUMP TYPE	SUCTION FLANGE				DISCHARGE FLANGE			
	SIZE	NO. HOLES	BOLT DIA.	B.C.	SIZE	NO. HOLES	BOLT DIA.	B.C.
AB	3	4	5/8	6	1 1/2	4	1/2	3 7/8
AA	1 1/2	4	1/2	3 7/8	1	4	1/2	3 1/8
A50	3	4		6	1 1/2		1/2	3 7/8
A60	3	4	5/8	6	2	4	5/8	4 3/4
A70	4	8		7 1/2	3		5/8	6

PUMP TYPE	KEYWAY AxB	R	S	T	X	H	M
AA AB	3/16 X 3/32	17/8	2	13 1/2	6 1/2	3	7 1/4
A50					8 1/2		
A60	1/4 X 1/8	2	2 5/8	19 1/2	9 1/2	4 7/8	12 1/2
A70					11		

CONSTRUCTION DETAILS		
	AA AB	A50 A60, A70
Weight of bare pump	105 lbs	325 lbs
Maximum wear allowance	1/4"	1/4"
Impeller maximum diameter	7"	10"
Impeller eye diameter	AB 2 7/8"	A50 2 1/2"
	AA 1 1/2"	A60 3 1/4"
		A70 4"
Maximum solids diameter	5/8"	5/8"
Impeller front gap	0.036"	0.036"
Maximum impeller Adjustment	1/4"	1/4"
Housing minimum casing thickness	13/16"	13/16"
Cast ductile iron thickness	9/16"	9/16"
Lining thickness	1/4"	1/4"
SHAFT DIAMETERS		
At impeller	7/8"	1 1/16"
At radial bearing	1 1/16"	1 3/32"
At thrust bearing	1"	1 1/32"
Between bearings	1 3/8"	2 3/8"
Sleeve diameter	1 1/8"	1 7/8"
At coupling	7/8"	1 1/8"
SHAFT LENGTHS		
Overhang	5 1/8"	7 3/16"
Between bearing	4 3/4"	6 3/64"
STUFFING BOX		
Bore	2 5/8"	3 5/8"
Depth	2 1/4"	2 9/64"
Resilient sleeve ID	1 3/4"	2 5/8"
Packing size	5/16" X 5/16"	3/8" X 3/8"
Number of rings	5	5
Arrangement of packing	2-3 or 3-2	2-3 or 3-2
Lantern ring width	7/16"	3/4"
Shaft sleeve diameter	1 1/8"	1 7/8"
Flush connections	1/4" NPT	1/4" NPT
BEARING SIZE		
Radial	206	5310
Thrust	5305	310 S
LUBRICATION		
	OIL	OIL
STANDARD BOLTS		
Max. working pressure	150 lbs	150 lbs
Max. hydro test	225 lbs	225 lbs
HIGH STRENGTH BOLTS		
Max. working pressure	225 lbs	225 lbs
Max. hydro test	300 lbs	330 lbs

All dimensions in inches.

Olivite ANSI pump parts list.



Item No.	Description	Item No.	Description	Item No.	Description
2	Casing—ductile iron and Kynar	35	Bolt—steel	47	Flat washer—steel
2	Casing—ductile iron and Hypalon	36	Hex nut—steel	48	O-Ring—Viton
3	Adapter—ductile iron and Kynar	37	Pipe locknut—stainless steel	49	Cap screw—steel
3	Adapter—ductile iron and Hypalon	38	Pipe nipple—stainless steel	50	Slinger—Neoprene
7	Impeller—Kynar	39	Resilient sleeve—Kynar	51	Backup plate—stainless steel
9	Drive pin—steel	40	Gland—stainless steel	52	Frame—cast iron
10	Radial seal—TFE	40	Gland—Ryton	53	Shaft—steel
10	Radial seal—Viton	41	O-Ring—Viton**	54	Bearing—steel
11	O-Ring—Viton	42	Crane type 9 (shown)	55	Bearing—steel
12	Gasket—TFE	42	Crane double type 9	56	Oil seal—Buna-N
12	Gasket—Hypalon	42	Crane type 8RTD	57	Oil seal—Buna-N
26	Sleeve—Hastelloy B	42	Crane type 20R	58	Snap ring—steel
26	Sleeve—Hastelloy C	42	Chempro 650	59	Snap ring—steel
26	Sleeve—ceramic—coated	42	Dura RO	60	Locknut—steel
26	Sleeve—Tantalum—coated	42	Dura CRO	61	Key—steel
26	Sleeve—Kynar—coated	42	Dura RX-O	62	Tie rod—steel
30	Lantern ring—TFE	43	Packing—TFE—asbestos	64	Dowel pin—stainless steel
31	Split gland—Noryl*	43	Packing—TFE	67	Air vent—brass
32	Gland stud—steel	44	Locknut—steel	68	Snap ring—steel
33	Bolt—steel	45	Jam nut—steel	69	Snap ring—steel
34	Shoulder screw—steel	46	Lockwasher—steel	70	Pipe plug—TFE

Olivite ANSI Pump selection check list.

This check list is to assist you in making a proper pump selection. Please provide this information:

Liquid/Slurry characteristic

- Name of liquid/composition
- pH
- Viscosity
- Vapor pressure
- Name of solids
- Particle size
- % solids concentration by weight
- Min./norm./max. operating temperature

Drive

- Direct V-belt (R.H. or L.H.)
- Variable H.P. Volts
- Phases Cycles
- Motor specifications

Pumping condition and type of duty

- Min./norm./max. discharge head
- Min./norm./max. flow capacity
- NPSH available*
- Flooded suction
- Suction lift
- Elevation above sea level
- Continuous or intermittent service

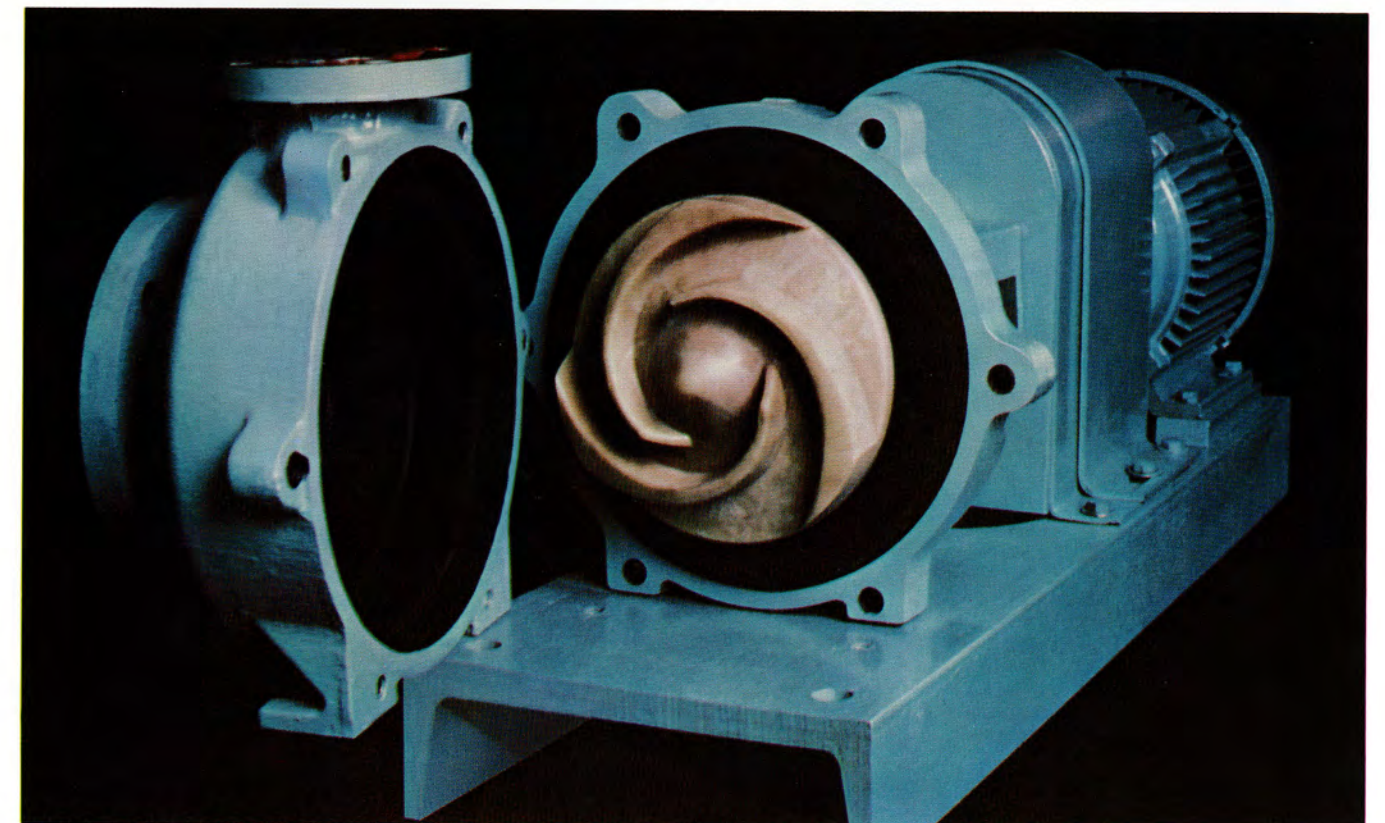
Seal

- Mechanical seal Braided packing

Installation and service

- Indoors Outdoors Portable
- Filtrate Transfer

*Net positive suction head. Available NPSH, referred to the pump suction nozzle, is very important for successful operation. Many field problems result from insufficient NPSH, caused by the user's miscalculation or misunderstanding. If the buyer does not calculate NPSH, he should give the vendor static liquid suction height or lift (to pump centerline), suction line friction loss, vapor pressure of liquid at maximum temperature, pressure at the pump nozzle and pump elevation.



ANSI AB pump with casing removed and impeller exposed.

Guide to chemical resistance.

This table is a general indication of serviceability of materials, and should be used as a guide only. Specific applications should be reviewed with Dorr-Oliver.

A—Fluid has little or no effect
 B—Fluid has minor to moderate effect
 C—Fluid has severe effect
 T—No data—likely to be compatible
 X—No data—not likely to be compatible
 —No data

Chemical	Hypalon®	Kynar®
Acetic acid, 20%	A	A
Acetic acid, 30%	A	A
Acetic acid, glacial	B	A(120°F)
Acetic anhydride	A	A(70°F)
Acetone	B	B
Acetylene	B	T
Aluminum chloride solutions	A	A(275°F)
Aluminum sulfate solutions	A(250°F)	A
Ammonia, anhydrous	B	A(275°F)
Ammonium hydroxide solutions	A(200°F)	A(275°F)
Ammonium chloride solutions	A	A(275°F)
Ammonium sulfate solutions	A(200°F)	A(275°F)
Amyl acetate	C	A(120°F)
Amyl alcohol	A(200°F)	A(275°F)
Aniline	B	A(70°F)
Aniline	C(100°F)	A(150°F)
Aniline	—	A(150°F)
Asphalt	B	T
Barium hydroxide solutions	A(200°F)	A(275°F)
Benzaldehyde	C	A(70°F)
Benzene	C	A(70°F)
Benzoyl chloride	C	A
Borax solutions	A(200°F)	A(275°F)
Boric acid solutions	A(200°F)	A(275°F)
Bromide anhydrous liquid	B	A(212°F)
Butane	A	T
Butyl acetate	C	A(70°F)
Butyraldehyde	B-C	T
Butyric acid	B-C	A(230°F)
Calcium bisulfite solutions	A(200°F)	A(275°F)
Calcium chloride solutions	A	A(275°F)
Calcium hydroxide solutions	A(200°F)	A(275°F)
Calcium hypochlorite, 5%	A	A(275°F)
Calcium hypochlorite, 20%	A(200°F)	A(275°F)
Carbon bisulfide	C	A(70°F)
Carbon dioxide	A(200°F)	A(275°F)
Carbon monoxide	A(200°F)	A
Carbon tetrachloride	C	A(275°F)
Castor oil	A(158°F)	A(275°F)
Chlorine gas, dry	B	A(212°F)

Chemical	Hypalon®	Kynar®
Chlorine gas, wet	B	A(212°F)
Chloroacetic acid	A	A(212°F)
Chlorobenzene	X	A(150°F)
Chloroform	C	A(212°F)
Chlorosulfonic acid	C	B(70°F)
Chromic acid, 10-50%	A(158°F)	A(120°F)
Citric acid solutions	A	A(250°F)
Copper chloride solutions	A	A(275°F)
Copper sulfate solutions	A	A(275°F)
Cottonseed oil	A	A(275°F)
Creosote oil	C	A(150°F)
Cyclohexane	C	A(275°F)
Dibutyl phthalate	C	A(70°F)
Diethyl sebacate	B	A(120°F)
Diocetyl phthalate	B	A(120°F)
Epichlorohydrin	T	B(70°F)
Ethyl acetate	C	A(70°F)
Ethyl alcohol	A(200°F)	A(275°F)
Ethyl chloride	B-C	A(275°F)
Ethylene dichloride	C	A(70°F)
Ethyl ether	C	A(120°F)
Ethylene glycol	A(200°F)	A(275°F)
Ethylene oxide	X	A(212°F)
Ferric chloride solutions	A(200°F)	A(275°F)
Fluosilicic acid	A(250°F)	A
Formaldehyde, 37%	A	A(120°F)
Formaldehyde, 37%	C(158°F)	A(120°F)
Formic acid	A	A(250°F)
Fuel oil	A	A(275°F)
Furfural	B	A
Gasoline	B	A(275°F)
Glue	A(200°F)	A
Glycerin	A(200°F)	A
n-Hexane	A	A
Hydrochloric acid, 20%	A	A(275°F)
Hydrochloric acid, 20%	A(158°F)	A
Hydrochloric acid, 37%	A(122°F)	A(275°F)
Hydrochloric acid, 37%	B(158°F)	A
Hydrochloric acid, 37%	C(200°F)	A
Hydrocyanic acid	A	A(275°F)

Chemical	Hypalon®	Kynar®
Hydrofluoric acid, 48%	A(158°F)	A(230°F)
Hydrofluoric acid, 75%	T	A(212°F)
Hydrofluoric acid, anhy.	A	A
Hydrogen	A	A(275°F)
Hydrogen peroxide, 88½%	A	A(120°F)
Hydrogen peroxide, 90%	T	A(70°F)
Hydrogen sulfide	A	A(275°F)
Isooctane	A	A
Isopropyl alcohol	A(200°F)	A
Isopropyl ether	B	B
Kerosene	B	A(275°F)
Kerosene	—	A
Lacquer solvents	C	A(70°F)
Lactic acid	A	A(70°F)
Linseed oil	A	A(275°F)
Lubricating oils	B(158°F)	A(275°F)
Magnesium chloride solutions	A(220°F)	A(275°F)
Magnesium hydroxide solutions	A(220°F)	A(275°F)
Mercuric chloride solutions	A	A(250°F)
Mercury	A	A(275°F)
Methyl Alcohol	—	A(275°F)
Methyl ethyl ketone	X	C
Methylene chloride	C	A
Mineral oil	A	A(275°F)
Mixed acids	T	T
Naphtha	C	A(275°F)
Naphthalene	—	A(275°F)
Nitric acid, 10%	A	A
Nitric acid, 30%	A	A
Nitric acid, 30%	C(158°F)	A(120°F)
Nitric acid, 60%	B	A
Nitric acid, 70%	B	A(120°F)
Nitric acid, red fuming	C	A
Nitrobenzene	C	A
Oleic acid	B	A(250°F)
Oleum, 20%	C	C
Oleum, 25%	C	C
Palmitic acid	B	A(250°F)
Perchloroethylene	C	A(275°F)
Phenol	B-C	A(150°F)
Phosphoric acid, 20%	A(200°F)	A(275°F)
Phosphoric acid, 60%	A	A(230°F)
Phosphoric acid, 70%	A(200°F)	A(212°F)
Phosphoric acid, 85%	A(200°F)	A(230°F)
Pickling solution (20% nitric acid, 4% HF)	A	A
Pickling solution (17% nitric acid, 4% HF)	T	A
Sulfuric Acid	A	A(70°F)

Chemical	Hypalon®	Kynar®
Potassium dichromate solutions	A(200°F)	A(275°F)
Potassium hydroxide solutions	A(200°F)	A(212°F)
Pyridine	X	C(70°F)
SAE #10 oil	C	T
SKYDROL 500	C	T
Soap solutions	A(200°F)	A
Sodium chloride solutions	A	A(275°F)
Sodium dichromate, 20%	A(200°F)	A
Sodium hydroxide, 20%	A(200°F)	A(212°F)
Sodium hydroxide, 46½%	T	A(212°F)
Sodium hydroxide, 50%	A(285°F)	A(212°F)
Sodium hydroxide, 73%	A(280°F)	A(212°F)
Sodium hypochlorite, 5%	A	A(275°F)
Sodium hypochlorite, 20%	A(158°F)	A
Sodium peroxide solutions	A(200°F)	A(275°F)
Soybean oil	A	A
Stannic chloride	B	A
Stannous chloride, 15%	A(200°F)	A(275°F)
Steam (see water)	—	A(275°F)
Stearic acid	B(158°F)	A(275°F)
Sulfur, molten	A	A(250°F)
Sulfur dioxide, liquid	A	A(212°F)
Sulfur dioxide, gas	A	—
Sulfur trioxide	C	C(70°F)
Sulfuric acid, up to 50%	A(250°F)	A(230°F)
Sulfuric acid, 50 to 80%	A(158°F)	A(212°F)
Sulfuric acid, 60%	A	A(230°F)
Sulfuric acid, 90%	T	A(150°F)
Sulfuric acid, 95%	A	A(212°F)
Sulfuric acid, 95%	B(122°F)	A(120°F)
Sulfuric acid, fuming (20% oleum)	C	C
Sulfurous acid	A(158°F)	A(212°F)
Tannic acid, 10%	A	A(230°F)
Tartaric acid	A(200°F)	A(250°F)
Toluene	C	A(212°F)
Tributyl phosphate	C	A(70°F)
Trichloroethylene	C	A(275°F)
Trichloroethylene	—	A
Tricresyl phosphate	C	—
Triethanolamine	A(158°F)	A(120°F)
Trisodium phosphate solutions	T	A(275°F)
Tung oil	A	—
Turpentine	C	A(275°F)
Water	A(212°F)	A(275°F)
Xylene	C	—
Xylene	—	—
Zinc chloride solutions	A(200°F)	A(275°F)