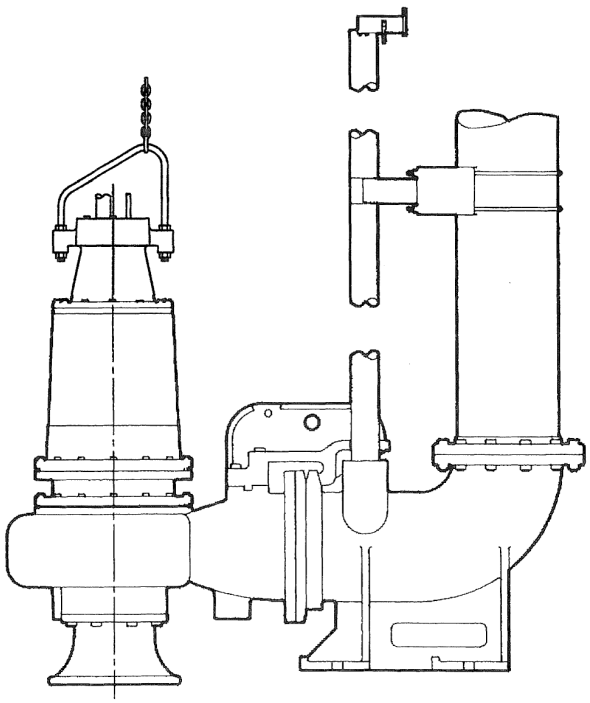
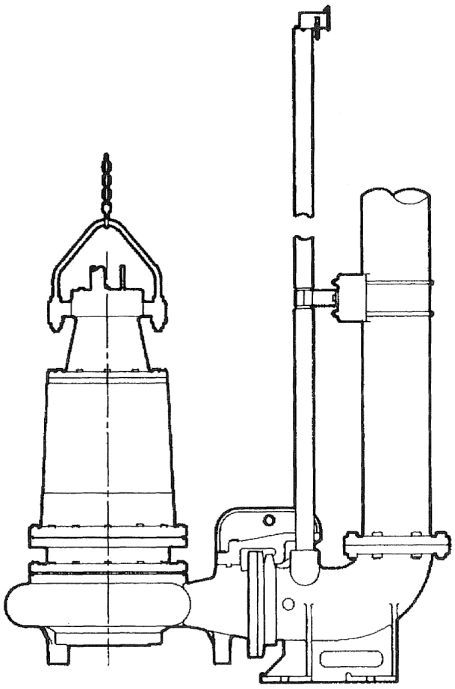
PENTAIR

MYERS®



SRA1212-SRAX1212



SRA88-SRAX88

MODELS SRA88-SRAX88 and SRA1212-SRAX1212

8" AND 12" LIFT-OUT

INSTALLATION MANUAL WITH REPAIR PARTS LIST

NOTE! To the installer: Please make sure you provide this manual to the owner of the equipment or to the responsible party who maintains the system.

Part # 23833A363 | © 2012 Pentair Ltd. | 11/27/12

CAUTION! READ THESE SAFETY WARNINGS FIRST BEFORE INSTALLATION, SERVICING OR OPERATING ANY PUMP. THESE INSTRUCTIONS ARE WRITTEN WITH THE UNDERSTANDING THAT THE INDIVIDUAL(S) HAVE EXPERIENCE IN BUILDING WET WELLS AND INSTALLING WASTE WATER PUMPS AND PUMPING EQUIPMENT.

IN THE INITIAL INSTALLATION, BEFORE SEWAGE IS ADMITTED TO THE WET WELL, THERE IS NO DANGER ON ENTERING THE SUMP, BUT AFTER SEWAGE HAS BEEN IN THE SUMP THERE IS DANGER. SEWAGE WATER GIVES OFF METHANE AND HYDROGEN SULFIDE GASSES, BOTH OF WHICH ARE HIGHLY POISONOUS. A BREATHING DEVICE MAY BE REQUIRED. NEVER ENTER WET WELL UNLESS COVER IS OPEN AND AN OUTSIDE BLOWER IS USED TO FORCE FRESH AIR INTO THE WET WELL. ALSO, THE WORKER IN THE WET WELL SHOULD WEAR A HARNESS ATTACHED TO THE SURFACE SO THAT HE CAN BE PULLED OUT IN CASE OF ASPHYXIATION. NEVER WORK ALONE! IT IS FOR THIS REASON THAT MYERS RECOMMENDS USING THE RAIL LIFT-OUT SYSTEM SO THAT NO SERVICE IS REQUIRED INSIDE THE BASIN.

CALIFORNIA PROPOSITION 65 WARNING:

⚠WARNING This product and related accessories contain chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

WARNING

DO NOT EXCEED WORKING LOAD LIMIT OF LIFTING CHAINS. DO NOT USE CHAINS WHERE FAILURE COULD RESULT IN LOSS OF LIFE.

EXAMINE CHAINS, SLINGS AND ALL LIFTING DEVICES FOR DEFORMATION OR DAMAGE BEFORE AND AFTER EACH LIFT.

DO NOT USE ANY LIFTING DEVICES THAT ARE NOT RATED FOR AND DESIGNED TO LIFT THE WEIGHTS INVOLVED WITH THESE PUMPS.

LIFTING DEVICES: If using other than factory supplied lifting devices, they must be **equal to** or **exceed** factory specifications. Contact factory for minimum lift ratings. See section on lift-out chains in these instructions.

DO NOT INSTALL OR REMOVE PUMP WITH PERSON(S) IN WET WELLS OR BASINS.

GENERAL

1. Most accidents can be avoided by using ***COMMON SENSE.***
2. Read the operation and maintenance instruction manual supplied with the pump.
3. **DO NOT** wear loose clothing that can become entangled in the impeller or other moving parts.
4. This pump is designed to handle materials which could cause illness or disease through direct exposure. Wear and use protective clothing when working on the pump or piping.

ELECTRICAL

5. To reduce the risk of electrical shock, pump must be properly grounded in accordance with the National Electric Code and all applicable state and local codes and ordinances.
6. To reduce risk of electrical shock, disconnect the pump from the power source before handling or servicing.
7. Any wiring to be done on pumps should be done by a qualified electrician.
8. **NEVER** operate a pump with a power cord that has frayed or brittle insulation.
9. **NEVER** let cords or plugs lay in water.
10. **NEVER** handle connected power cords with wet hands.

PUMPS

11. Pump builds up heat and pressure during operation, allow time for pump to cool before handling or servicing.
12. Only qualified personnel should install, operate or repair pump.
13. Keep clear of suction and discharge openings. ***DO NOT*** insert fingers in pump with power connected.
14. ***DO NOT*** pump hazardous material not recommended for pump (flammable, caustic, etc.).
15. Make sure lifting devices are securely fastened each time before lifting pump.
16. ***DO NOT*** LIFT PUMP BY THE POWER CORD.
17. ***DO NOT*** exceed manufacturers recommendation for maximum performance, as this could cause the motor to overheat.
18. Secure the pump in its operation position so it cannot tip over, fall or slide.
19. Keep hands and feet away from impeller when power is connected.
20. Submersible Non-Clog pumps are not approved for use in swimming pools, recreational water installation, decorative fountains or any installation where human contact with the pumped fluid is common.
21. ***DO NOT*** pump without safety devices in place.
22. For hazardous locations, use pumps that are listed and classified for such locations.

IMPORTANT! F.E. Myers is not responsible for losses, injury or death resulting from failure to observe these safety precautions, misuse or abuse of pumps or equipment.

GENERAL INFORMATION

Lift-Out Models: These instructions cover the SRA88, SRAX88, SRA1212 and SRAX1212 guide rail systems. The SRAX88 and SRAX1212 are Factory Mutual approved and listed explosion proof to hazardous sewage locations Class 1, Division 1, Groups C and D. The SRA88 and SRAX88 are designed for the Myers 8" discharge 8VL and 8VLX non-clog sewage pumps. The SRA1212 and SRAX1212 are designed for the Myers 12" discharge 12VL or 12VLX non-clog sewage pumps.

General Construction: The Base/Elbows on all the models are made of ASTM A48 Class 30 cast iron. The Guide Brackets are made of ASTM A536 ductile iron. All the brass parts of the explosion proof models are made of yellow brass to meet the non-sparking requirement. All the fasteners are made of 300 series stainless steel. Seal Ring Gasket is made of polyurethane material.

Lift-Out Chains: Myers offers an alloy steel and a stainless steel chain package for these models of pumps. Each lift-out chain package is designed to mount to the top of the pump and allow the pump to be safely hoisted up the guide rail. The alloy steel chain is 9/32" chain with a working load limit of 3250 lbs. and a minimum safety factory of 4:1. The stainless steel chain is 1/2" chain with a working load limit of 2500 lbs. and a minimum safety factor of 4:1. The chain assemblies are proof tested and tagged.

WARNING

DO NOT EXCEED WORKING LOAD LIMIT OF LIFTING CHAINS. DO NOT USE CHAINS WHERE FAILURE COULD RESULT IN LOSS OF LIFE.

EXAMINE CHAINS AND SLINGS FOR DEFORMATION BEFORE AND AFTER EACH LIFT.

Lifting Devices: If using other than factory supplied lifting devices they must be **equal to** or **exceed** factory specifications. Contact factory for minimum lift ratings. See "WARNINGS" on page two in these instructions.

Rail Support Brackets: The SRA88/SRAX88 are designed to use 2" standard pipe for guide rails. The SRA1212/SRAX1212 are designed to use 3" standard pipe for guide rails. A top rail support bracket is available for each and is to be mounted to the hatch frame. Intermediate brackets are available for deep basins. It is recommended that if the rail length is over 21 feet, that an intermediate bracket be installed. After every additional 20 feet of rail, another intermediate bracket should be used for proper rail support.

Basin Covers: Pumps of this size and weight should only be used with reinforced concrete covers, with heavy duty hatches cemented in place.

Basin Bottom: All concrete pipe basins must have a smooth troweled bottom for level mounting of discharge casting. Note that the 12VL/12VLX pumps require a "step" to clear the inlet bell.

Junction Boxes: If a junction box is used in a hazardous location, it must be explosion proof approved type with explosion proof cord connectors. Wires from the junction box must pass through an explosion proof seal connector.

Level Sensing Controls: Intrinsically-safe type float controls are recommended for all applications and required for explosion proof service. An intrinsically-safe control panel relay will limit the current and voltage to the level controls. A Myers control panel can be supplied with this type circuitry.

The float level controls maintain the basin sewage water level by controlling pump turn-on and turn-off level.

1. The lower turn-off control should be set so that the pump stops at approximately the top of the pump.
2. The upper turn-on control should be set above the lower turn-off control. The exact height between the two controls is determined by the number of pump starts desired and the depth of the basin. A maximum of 10 starts per hour should not be exceeded.
3. The override control is set at a specified height above the upper turn-on control.
4. The alarm control is set about 6" to 12" above the override control.
5. No control should be set above the inlet invert.

Valves: It is recommended that all check valves and shut-off valves be mounted outside the sump in a valve box. See typical installation drawings. Shut-off valves should be of the water works approved type with resilient rubber disk seat.

INSTALLING RAIL SYSTEM PARTS

STUDY THE DRAWINGS PROVIDED. MAKE CERTAIN THE INSTALLER HAS A CLEAR UNDERSTANDING OF THE DRAWINGS FOR THE LIFT-OUT SYSTEM BEFORE PROCEEDING WITH PUMP AND LIFT-OUT RAIL INSTALLATION. LOCATIONS OF STUDS FOR MOUNTING BASE/ELBOW ARE SHOWN FOR SIMPLEX, DUPLEX AND TRIPLEX INSTALLATIONS.

Mounting Cover, Discharge Base and Rails

1. Set concrete cover with hatch opening in position.
2. Bolt top rail support plate to hatch frame using 1/2" diameter stainless steel bolts.
3. Lower the base/elbow into the basin.
4. Position the base/elbow by dropping a plumb line from center of pipe supports, located on top rail support plate, to center of rail "holes" in the top of base/elbow. Level the base/elbow flange face in two directions, 90° to each other. Shims may be required under the base/elbow in order to obtain this level condition.
5. Cut the pipe guide rails to the proper length and install them between the pipe supports at the top of the basin and the base/elbow. Guide rails are schedule 40 galvanized or stainless steel pipe.
6. Install discharge piping as required by the particular job specifications. If a larger size discharge pipe is required, an increaser can be provided.

IMPORTANT: Discharge pipe and guide rails must be parallel if an intermediate guide bracket is used.

INSTALLING INTERMEDIATE GUIDE BRACKET

GUIDE RAIL LENGTH	IGB REQUIRED
21 ft. or less	0
21 ft to 40 ft.	1
Over 40 ft.	2

It is assumed that the proper intermediate guide bracket has been selected from catalog.

1. Remove guide rails and cut a piece from each one. These pipes must be exactly the same length and of a length that will permit installing the intermediate guide bracket in the desired location.
2. Place the cut pieces of pipe into the rail holes in the base/elbow.
3. Set the selected intermediate guide bracket in position with the pins in the bracket into the rails. Put "U" bolts around discharge pipe and tighten lightly.
4. Measure from joint on intermediate guide bracket to rubber on top rail support and cut two rails to this length. Put rails in place and tighten screws in top rail support.
5. Recheck rails; they must be straight and plumb. Move intermediate guide bracket, if necessary, to perfectly align rails. Spacers may be added or removed from the intermediate guide bracket to obtain alignment. After alignment is secured, tighten nuts on U-bolts.
6. If a second intermediate guide bracket is used, the procedure is followed for installation.

Attaching Seal Ring and Lifting Bracket to Pump

1. Ring and gasket must be installed to the pump discharge flange with bolts provided. Be sure gasket is properly attached to ring before tightening bolts.
2. A brass ring is supplied for the explosion models and a cast iron ring is supplied for the standard pumps.
3. Attach lifting bracket to pump with bolts provided.
4. Should the bolts for the lifting bracket be lost during shipment, contact factory for proper replacements.

Installing Pump

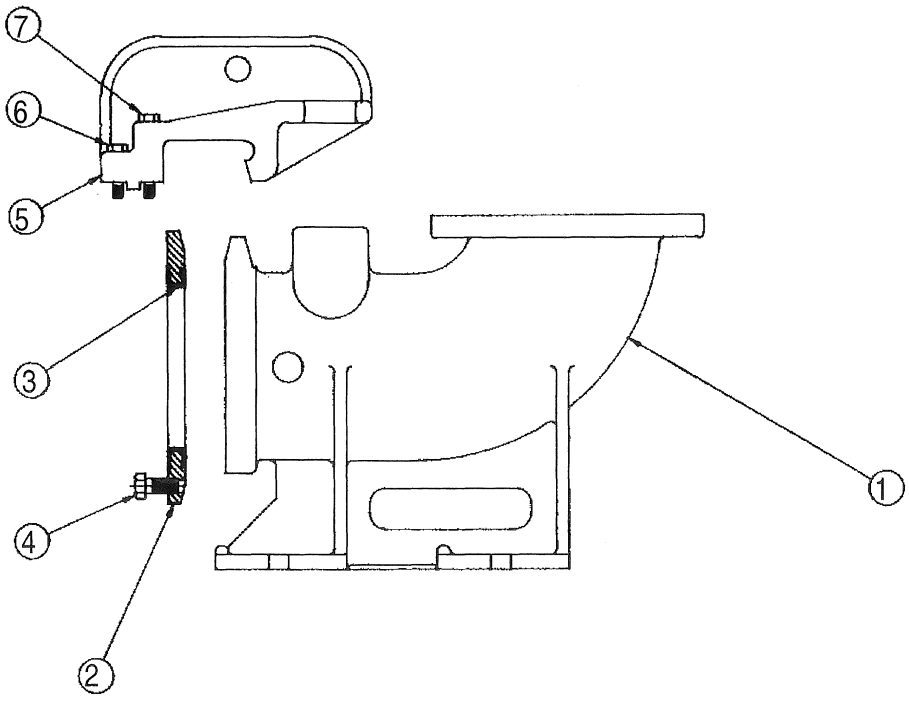
1. Attach the Myers lifting chain to "bail" on pump. The Myers chains and bail are rated for weights involved. Myers can not be responsible for any other lifting hardware or devices. **Lifting Devices:** If using other than factory supplied lifting devices they must be **equal to** or **exceed** factory specifications. Contact factory for minimum lift ratings. See "WARNINGS" on page two and section on lift-out chains in these instructions.
2. A hook is located on the top rail support to hold the upper end of the chain when not in use.
3. Position pump so the guide rails are located in the slots of the guide plate. Slowly lower the pump down the guide rails to the base/elbow. The guide bracket should "seat" against base/elbow allowing the gasket to seal on the face of the pump flange and base/elbow.

CAUTION: No persons should be in the sump basin when pump is lowered into position! DO NOT lift pump in a manner where any failure could result in loss of life.

Air Venting: Air tends to trap in the pump volute when water raises in the sump or when the pump is lowered into water after service. To vent off this air, a small hole is drilled into the pump volute. **Be sure this vent hole is clean after any service work on pump.**

BASE/ELBOW

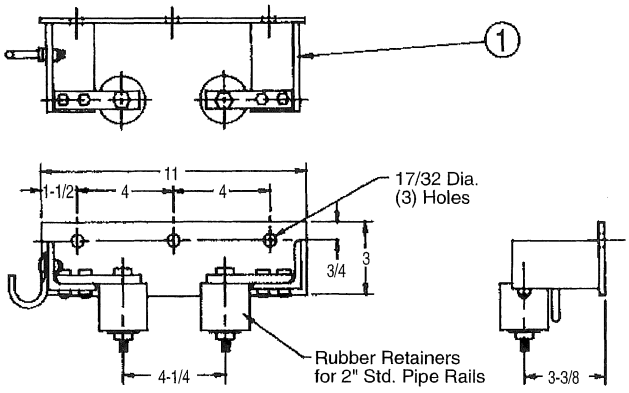
No.	Description	Part Number	Number Required			
			SRA88 25266D000	SRA1212 25466E000	SRAX88 25266D010	SRAX1212 25466E010
1	Elbow, discharge, 8"	25267D000	1		1	
1	Elbow, discharge, 12"	25460E000		1		1
2	Ring, seal, 8"	25269D002	1			
2	Ring, seal, 8" explosion-proof	25269D001			1	
2	Ring, seal, 12"	25468D002		1		
2	Ring, seal, 12" explosion-proof	25468D000				1
3	Gasket, ring seal, 8"	25265C000	1		1	
3	Gasket, ring seal, 12"	25467D000		1		1
4	Screw, cap, 3/4-16 UNF x 1-3/4" long, SST	19106A019	8		8	
4	Screw, cap, 7/8-9 UNC x 2-1/4" long, SST	19107A003		12		12
5	Bracket & Lift-Out Guide, 8"	25268D000	1			
5	Bracket & Lift-Out Guide, explosion-proof, 8"	25268D010			1	
5	Bracket & Lift-Out Guide, 12"	25461D000		1		
5	Bracket & Lift-Out Guide, explosion-proof, 12"	25461D010				1
6	Screw, cap, 1/2-13 UNC x 2-1/4" long, SST	19103A049	2		2	
6	Screw, cap, 3/4-10 UNC x 3" long, SST	19106A021		2		2
7	Screw, cap, 1/2-13 UNC x 3-3/4" long, SST	19103A059	2		2	
7	Screw, cap, 3/4-10 UNC x 5-1/2" long, SST	19106A020		4		4



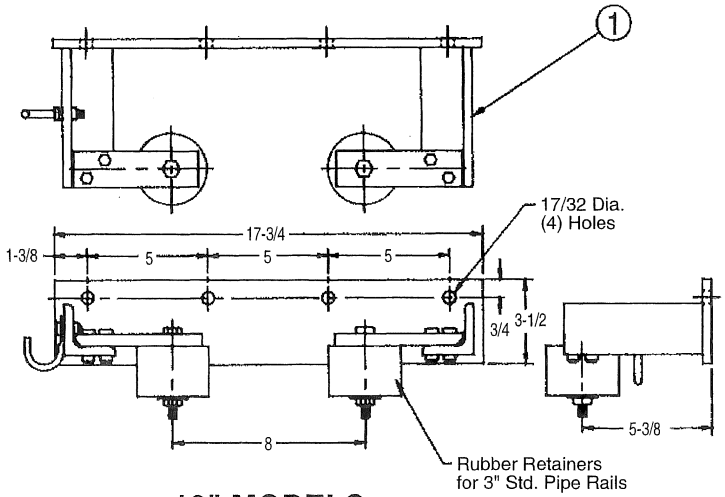
CHAIN ASSEMBLY

No.	Description	Part Number	Number Required						
			Top Rail Support						
			TRS2-8 25472D000 Alum.	TRS2-8SST 25472D010 SST	TRS3-12 25473D000 Alum.	TRS3-12SST 25473D010 SST	CP-40 25193A040	CP-40SST 25193A041	LB4 25371A040
1	Complete Assembly, Contact factory for repair parts	—	*						
1	Complete Assembly, Contact factory for repair parts	—		*					
1	Complete Assembly, Contact factory for repair parts	—			*				
1	Complete Assembly, Contact factory for repair parts	—				*			
1	Chain, galv., 9/32" x 21 ft., 3250 lb. working load, 8VL/12VL	25479A000					1		
1	Chain, SST, 1/2" x 21 ft., 2500 lb. working load, 8VL/12VL	25479A010						1	
2	Bail, lifting, 8VL/12VL	25476D000					1	1	1
3	Nut, hex, 3/4-10 UNC SST	19109A080					4	4	4

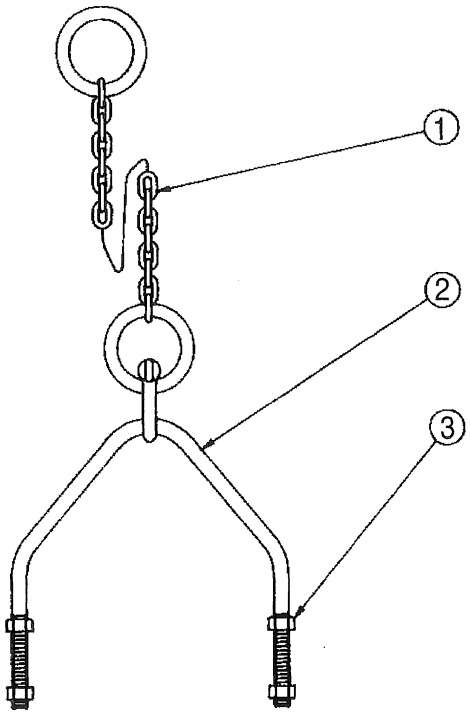
NOTE: All fasteners and hooks in top rail supports are stainless steel.



8" MODELS



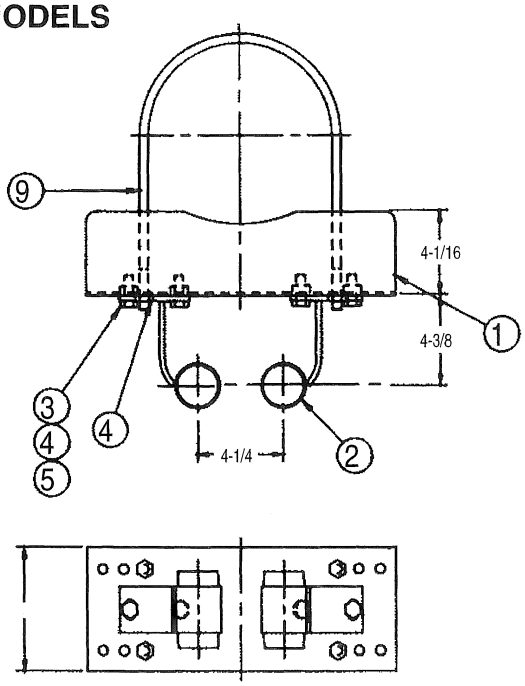
12" MODELS



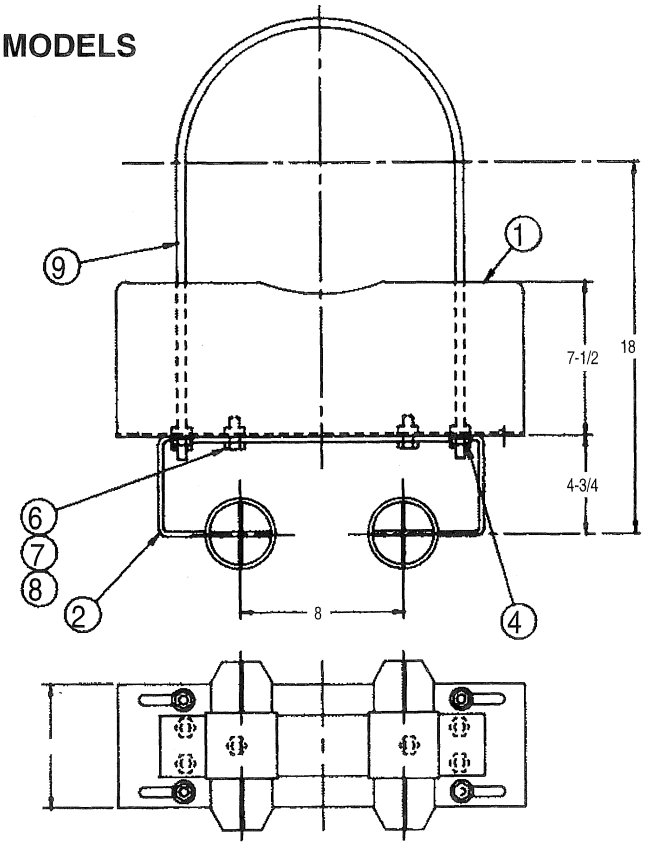
MOUNTING BRACKET

No.	Description	Part Number	Number Required					
			Stainless Steel Intermediate Guide Bracket					
			IGB-2-8 25474D000	IGB-2-10 25474D001	IGB-2-12 25474D002	IGB-3-12 25475D000	IGB-3-14 25475D001	IGB-3-16 25475D002
1	Mounting Bracket	26037D000	1	1	1			
1	Mounting Bracket	26037D010				1	1	1
2	Support 2" Rails	24968C100	2	2	2			
2	Support 3" Rails	26039D000				1	1	1
3	Screw, cap, 7/16-14 UNC x 1-1/4" long, SST	19102A020	4	4	4			
4	Nut, hex, 7/16-13 UNC SST	19019A081	8	8	8	4	4	4
5	Washer, lock, 7/16 SST	05454A024	8	8	8			
6	Screw, cap, 1/2-13 UNC x 1-1/4" long, SST	19103A052				6	6	6
7	Washer, flat, 1/2" SST	05030A199				4	4	4
8	Nut, hex, 1/2-13 UNC SST	19019A084				6	6	6
9	Bolt, "U", 7/16-14 UNC, 2" rails, 8" pipe	16731A024	2					
9	Bolt, "U", 7/16-14 UNC, 2" rails, 10" pipe	16731A025		2				
9	Bolt, "U", 7/16-14 UNC, 2" rails, 12" pipe	16731A026			2			
9	Bolt, "U", 7/16-14 UNC, 3" rails, 12" pipe	16731A027				2		
9	Bolt, "U", 7/16-14 UNC, 3" rails, 14" pipe	16731A028					2	
9	Bolt, "U", 7/16-14 UNC, 3" rails, 16" pipe	16731A029						2

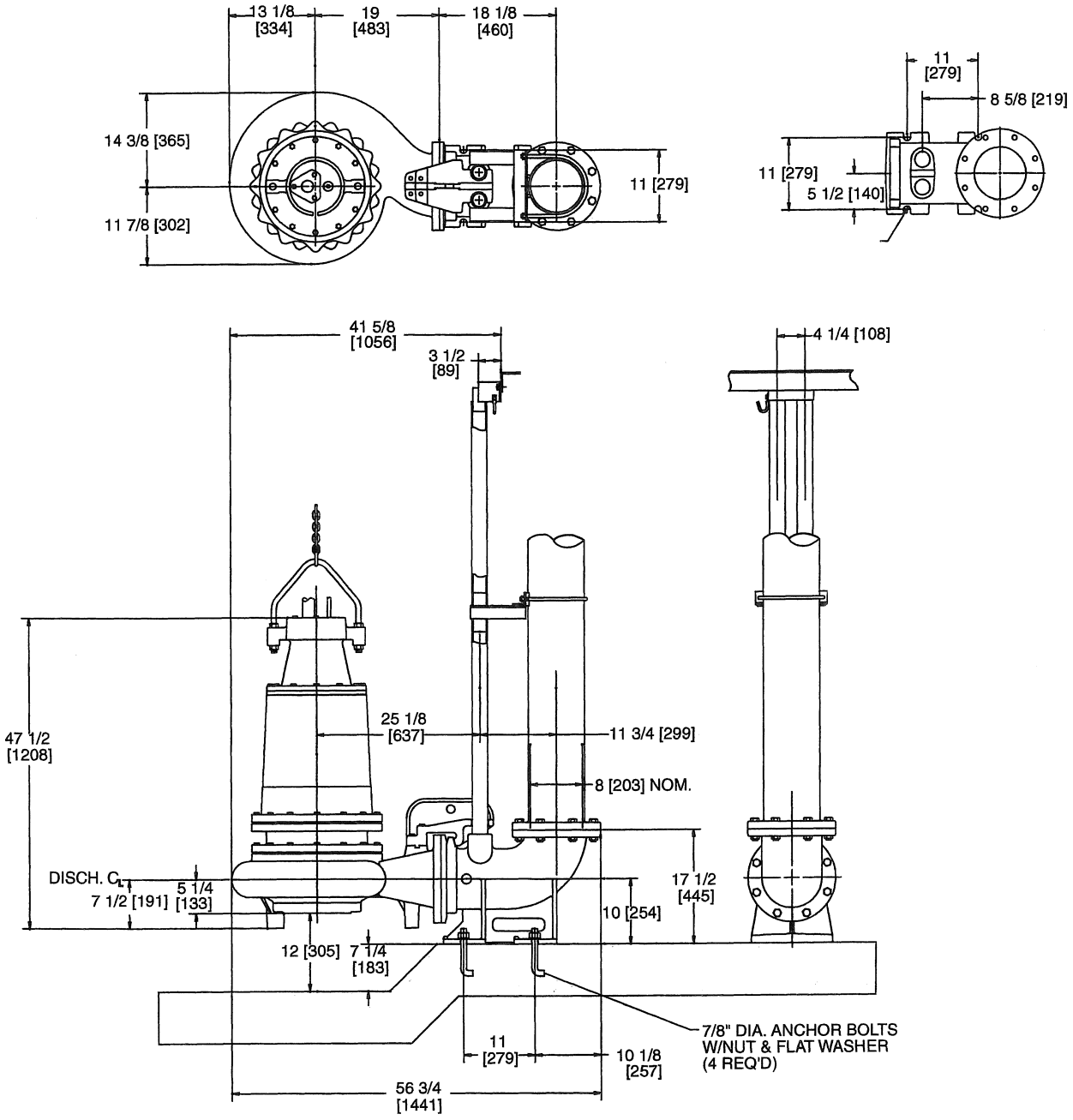
8" MODELS



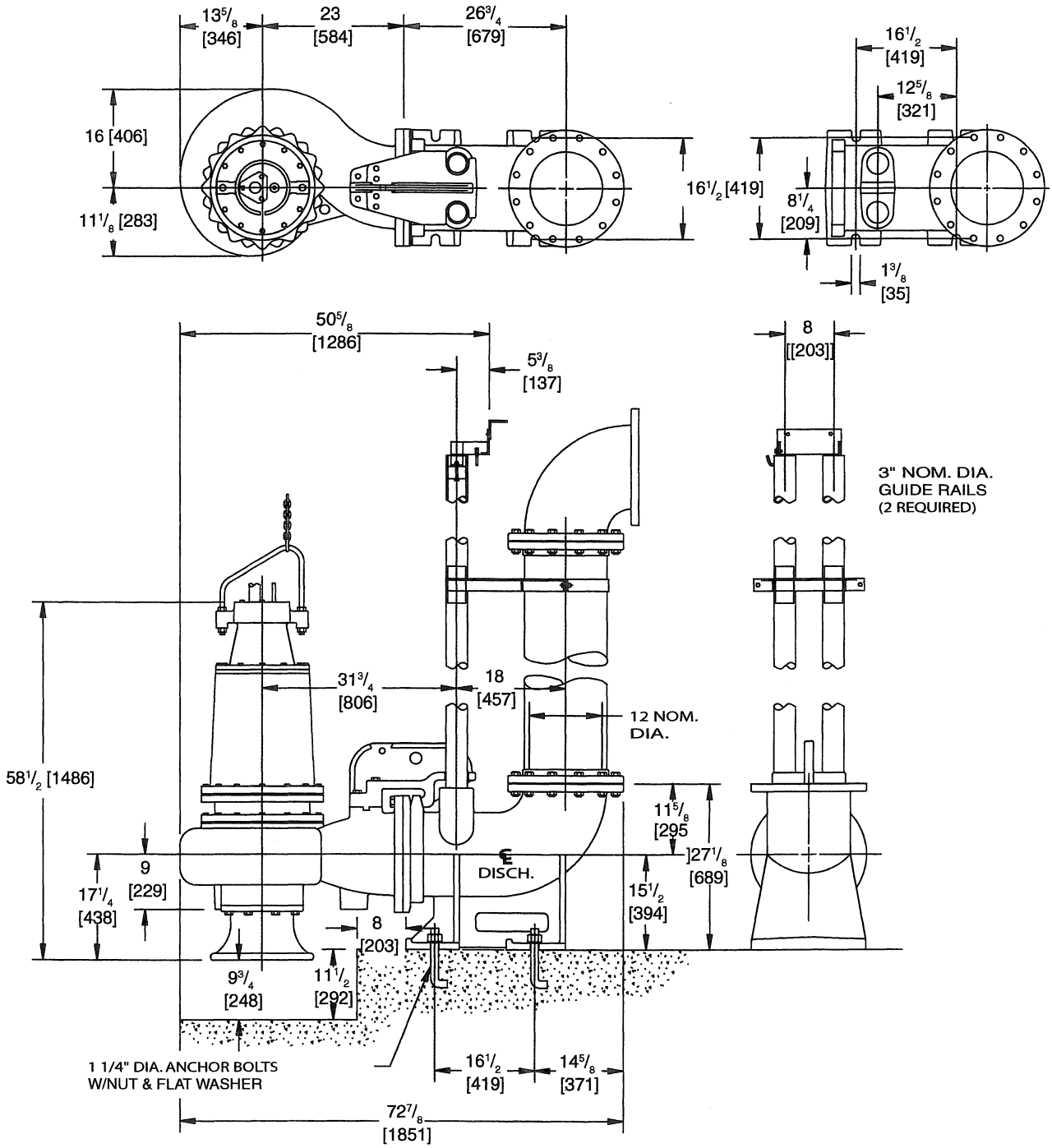
12" MODELS



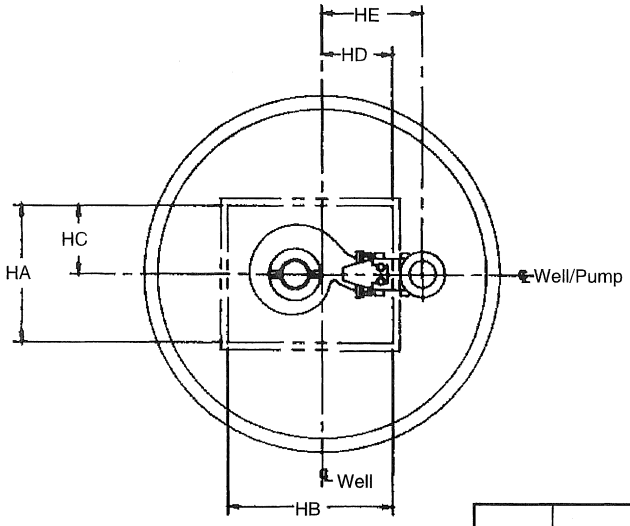
8VL INSTALLATION DIMENSIONS

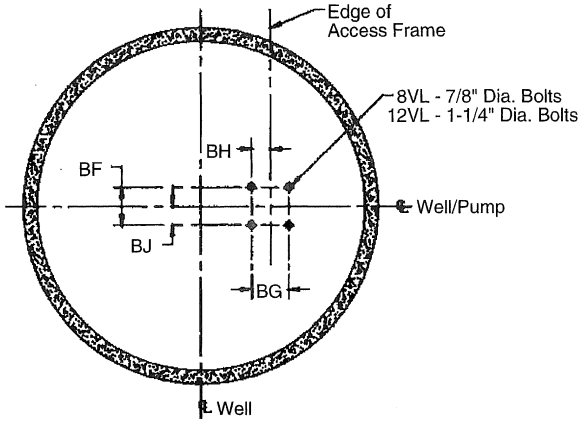


12VL INSTALLATION DIMENSIONS



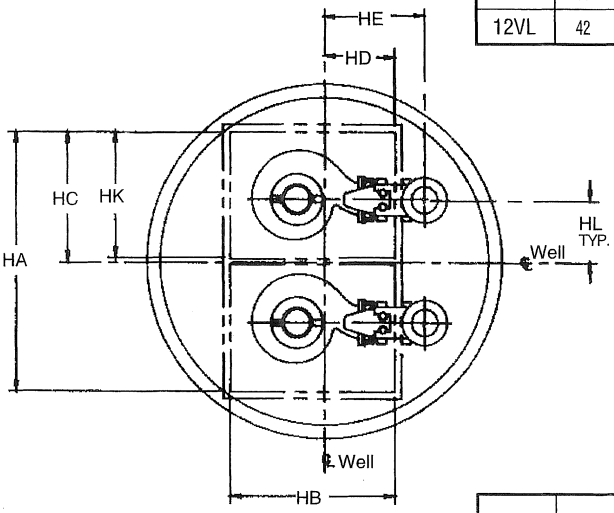
HATCH/BASE STUD LOCATIONS, 8VL & 12VL LIFT-OUT

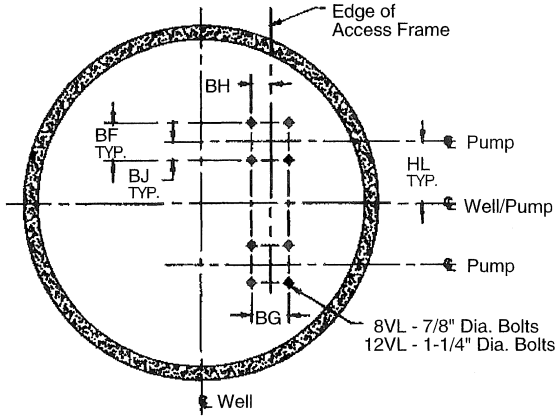




SIMPLEX 8VL - 96" DIA.
12VL - 96" DIA.

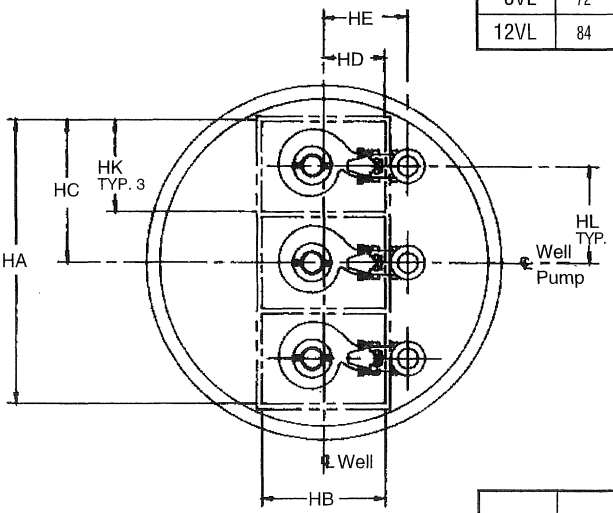
Pump	Hatch Dimensions							Bolt Locations			
	HA	HB	HC	HD	HE	HL	HK	BF	BG	BH	BJ
8VL	36	48	18	19-1/2	28-3/16	—	—	11	11	5-3/4	5-1/2
12VL	42	56	21	16-1/2	29-1/8	—	—	16-1/2	16-1/2	8-15/16	8-1/4

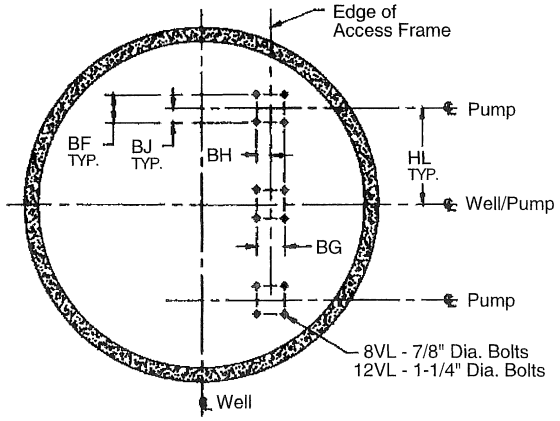




DUPLEX 8VL - 96" DIA.
12VL - 120" DIA.

Pump	Hatch Dimensions							Bolt Locations			
	HA	HB	HC	HD	HE	HL	HK	BF	BG	BH	BJ
8VL	72	48	36	19-1/2	28-3/16	18	—	11	11	5-3/4	5-1/2
12VL	84	56	42	18-1/2	31-1/8	24	—	16-1/2	16-1/2	8-15/16	8-1/4

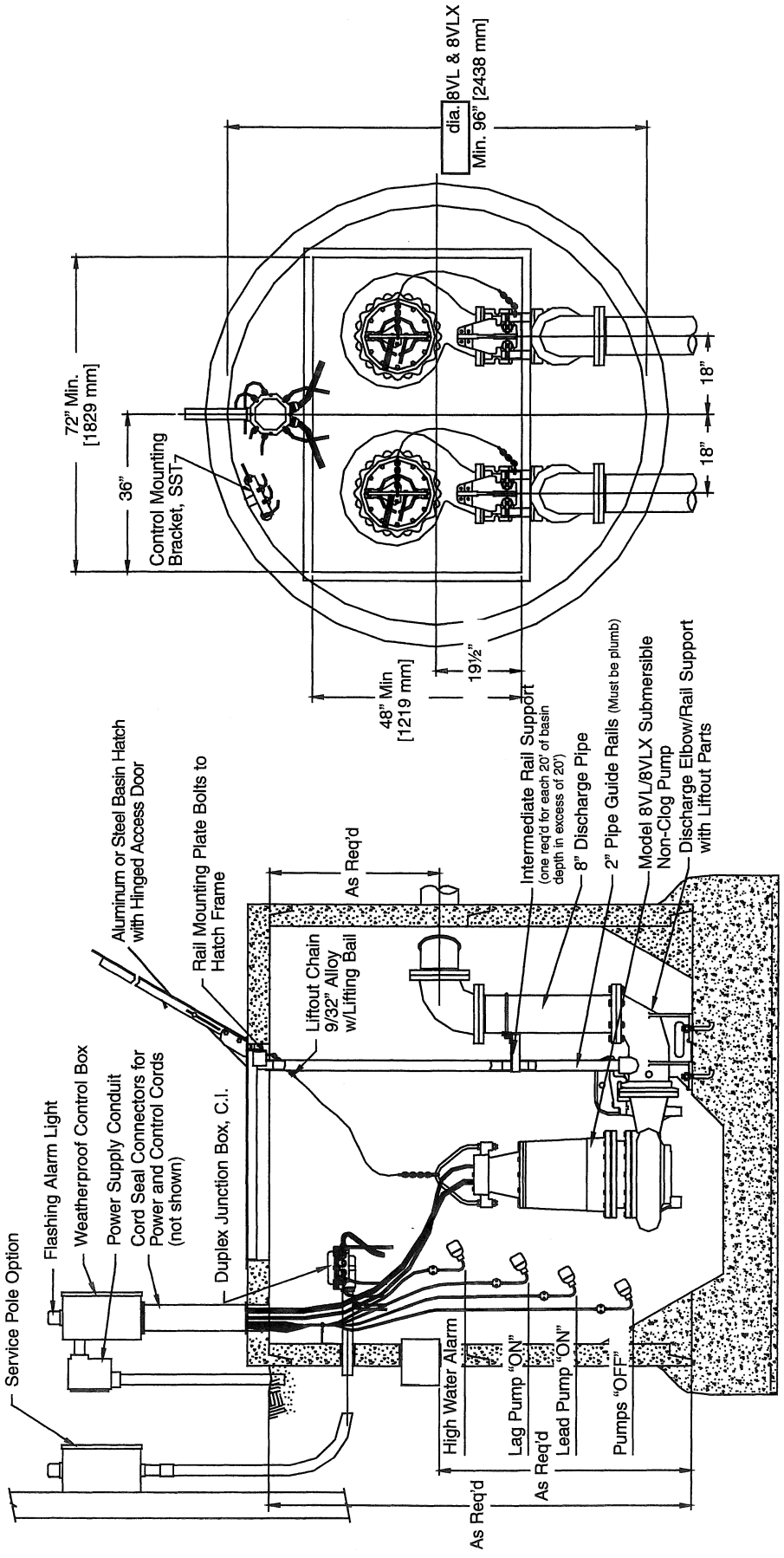




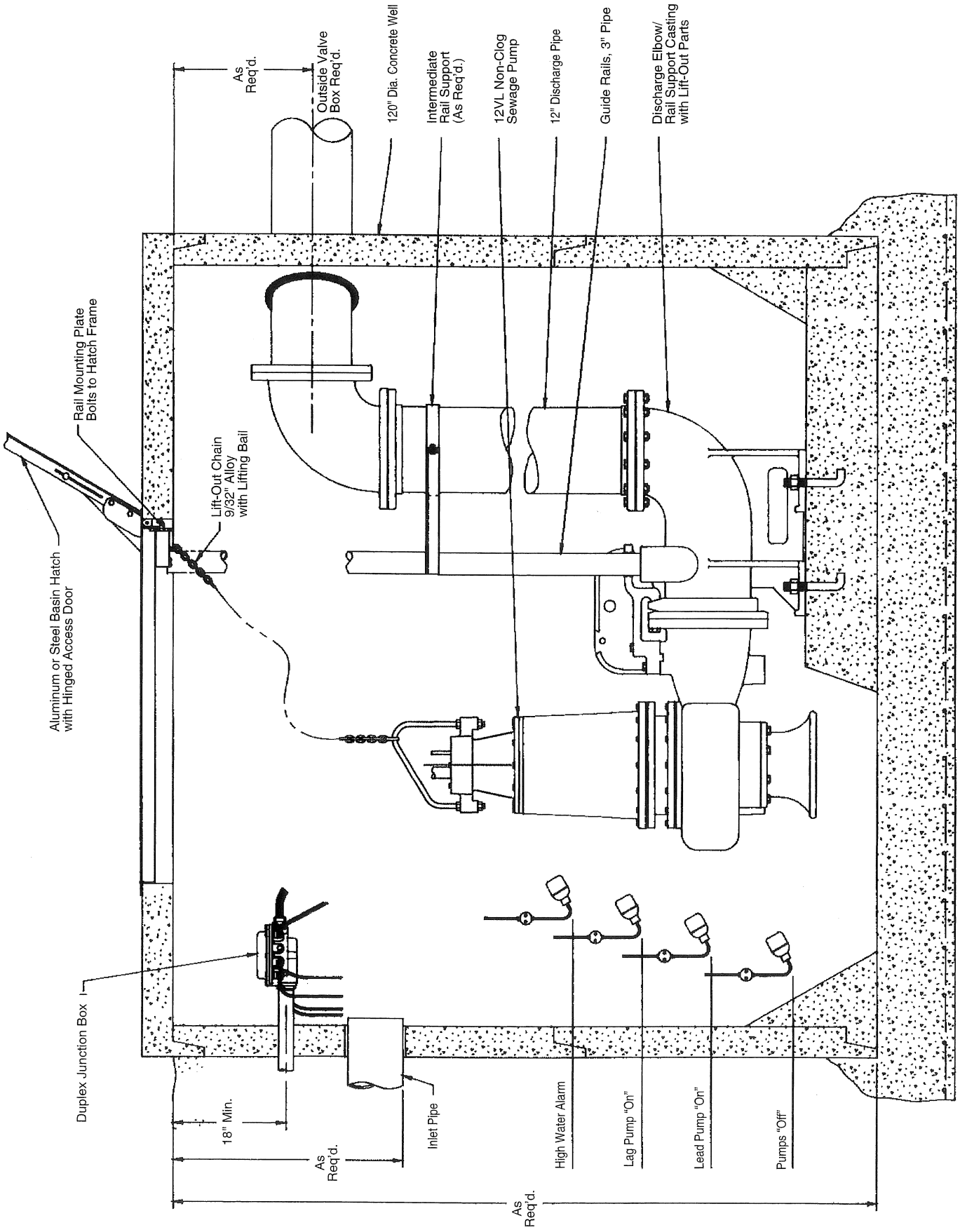
TRIPLEX 8VL - 144" DIA.
12VL - 156" DIA.

Pump	Hatch Dimensions							Bolt Locations			
	HA	HB	HC	HD	HE	HL	HK	BF	BG	BH	BJ
8VL	108	48	54	24	32-5/8	36	—	11	11	5-3/4	5-1/2
12VL	138	56	69	18-1/2	31-1/8	48	—	16-1/2	16-1/2	8-15/16	8-1/4

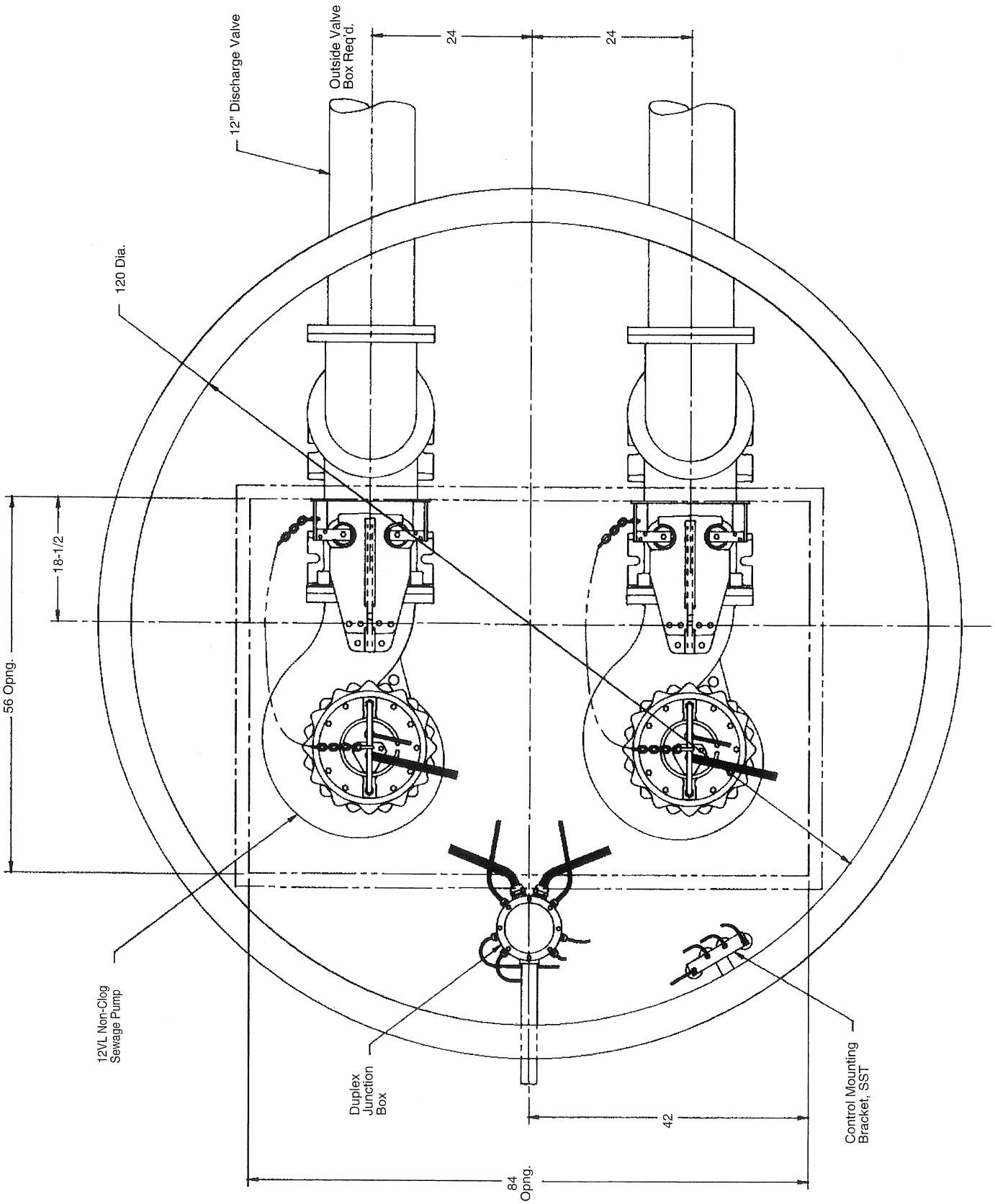
INSTALLATION, 8VL DUPLEX, 96" DIAMETER WELL, REMOTE

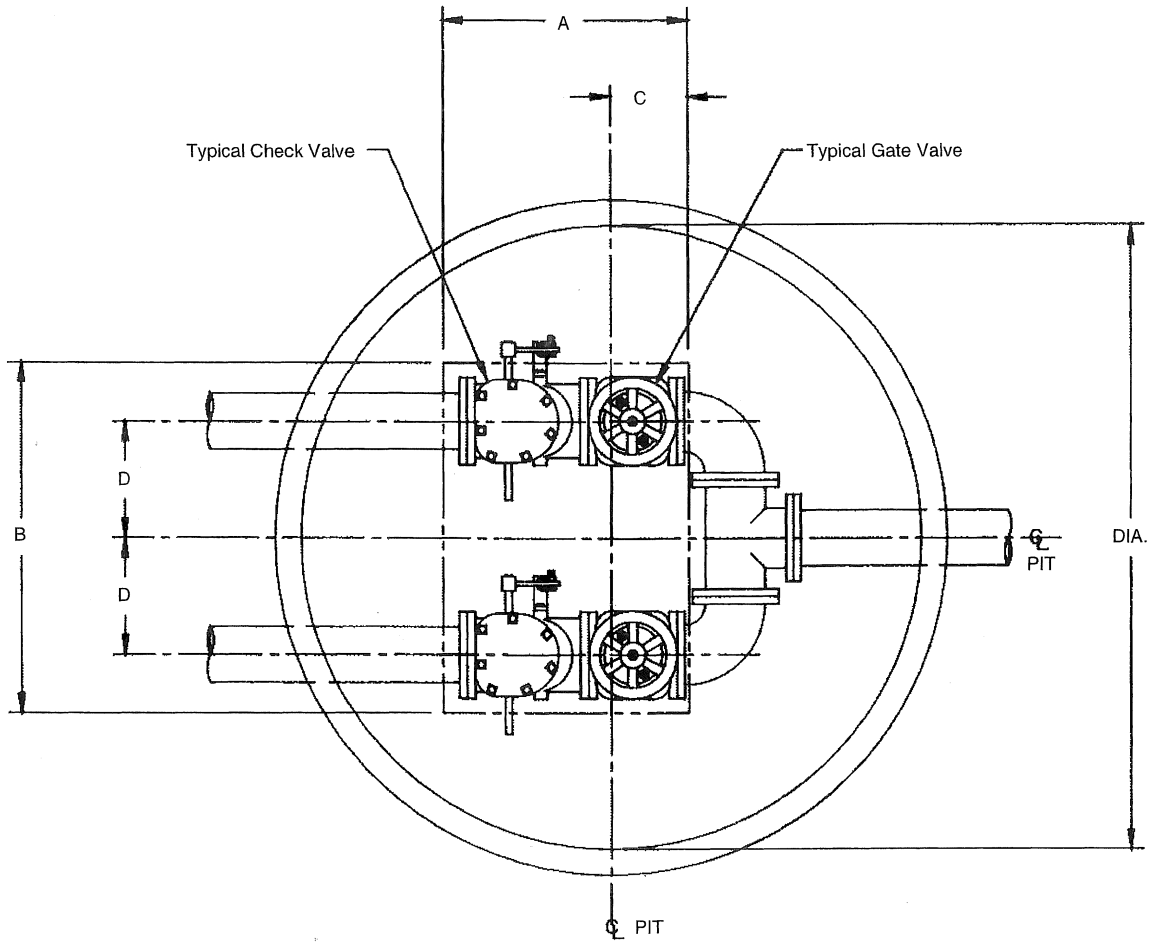


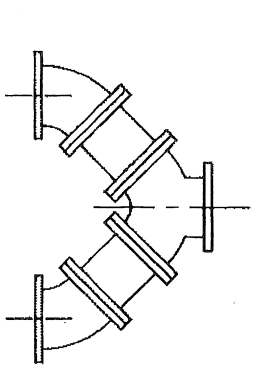
INSTALLATION, 12VL DUPLEX, 120" DIAMETER WELL, REMOTE



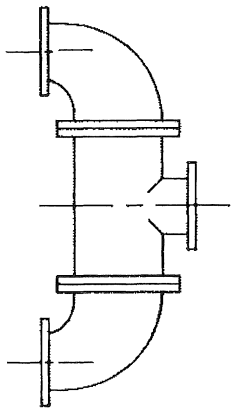
INSTALLATION, 12VL DUPLEX, 120" DIAMETER WELL, REMOTE







"Y" Configuration



Reducing Elbow Configuration

DIMENSIONS (INCHES)

Valve Box Dia.	D	Valve Size	90° Elbow 2 req'd.	Tee 1 req'd.	45° Elbow 2 req'd.	True "Y" 1 req'd.	Spool PC. Lgth. 2 req'd.	A & B Hatch	C Hatch Offset
96	18	8	8 x 8	8 x 8 x 8	—	—	—	36 x 54	12
96	22	8	10 x 8	10 x 10 x 10	—	—	—	36 x 66	12
96	22	10	10 x 10	10 x 10 x 10	—	—	—	42 x 66	16
96	16	8	—	—	8	8	7-7/8	30 x 48	6
120	24	10	12 x 10	12 x 12 x 12	—	—	—	42 x 72	16
120	24	12	12 x 12	12 x 12 x 12	—	—	—	48 x 72	18

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STANDARD LIMITED WARRANTY

Pentair Myers® warrants its products against defects in material and workmanship for a period of 12 months from the date of shipment from Pentair Myers or 18 months from the manufacturing date, whichever occurs first – provided that such products are used in compliance with the requirements of the Pentair Myers catalog and technical manuals for use in pumping raw sewage, municipal wastewater or similar, abrasive-free, noncorrosive liquids.

During the warranty period and subject to the conditions set forth, Pentair Myers, at its discretion, will repair or replace to the original user, the parts that prove defective in materials and workmanship. Pentair Myers reserves the right to change or improve its products or any portions thereof without being obligated to provide such a change or improvement for prior sold and/or shipped units.

Start-up reports and electrical schematics may be required to support warranty claims. Submit at the time of start-up through the Pentair Myers website: http://forms.pentairliterature.com/startupform/startupform.asp?type=m. Warranty is effective only if Pentair Myers authorized control panels are used. All seal fail and heat sensing devices must be hooked up, functional and monitored or this warranty will be void. Pentair Myers will cover only the lower seal and labor thereof for all dual seal pumps. Under no circumstance will Pentair Myers be responsible for the cost of field labor, travel expenses, rented equipment, removal/reinstallation costs or freight expenses to and from the factory or an authorized Pentair Myers service facility.

This limited warranty will not apply: (a) to defects or malfunctions resulting from failure to properly install, operate or maintain the unit in accordance with the printed instructions provided; (b) to failures resulting from abuse, accident or negligence; (c) to normal maintenance services and parts used in connection with such service; (d) to units that are not installed in accordance with applicable local codes, ordinances and good trade practices; (e) if the unit is moved from its original installation location; (f) if unit is used for purposes other than for what it is designed and manufactured; (g) to any unit that has been repaired or altered by anyone other than Pentair Myers or an authorized Pentair Myers service provider; (h) to any unit that has been repaired using non factory specified/OEM parts.

Warranty Exclusions: PENTAIR MYERS MAKES NO EXPRESS OR IMPLIED WARRANTIES THAT EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF. PENTAIR MYERS SPECIFICALLY DISCLAIMS THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR ANY PARTICULAR PURPOSE.

Liability Limitation: IN NO EVENT SHALL PENTAIR MYERS BE LIABLE OR RESPONSIBLE FOR CONSEQUENTIAL, INCIDENTAL OR SPECIAL DAMAGES RESULTING FROM OR RELATED IN ANY MANNER TO ANY PENTAIR MYERS PRODUCT OR PARTS THEREOF. PERSONAL INJURY AND/OR PROPERTY DAMAGE MAY RESULT FROM IMPROPER INSTALLATION. PENTAIR MYERS DISCLAIMS ALL LIABILITY, INCLUDING LIABILITY UNDER THIS WARRANTY, FOR IMPROPER INSTALLATION. PENTAIR MYERS RECOMMENDS INSTALLATION BY PROFESSIONALS.

Some states do not permit some or all of the above warranty limitations or the exclusion or limitation of incidental or consequential damages and therefore such limitations may not apply to you. No warranties or representations at any time made by any representatives of Pentair Myers shall vary or expand the provision hereof.

PENTAIR

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Warranty Rev. 12/13