

Slide Rail Systems Installation & Operation Instructions

Series A10 & APD

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OWNER'S INFORMATION

Model Number: _____

Dealer: _____

Dealer Telephone #: _____

Purchase Date: _____ Installation Date: _____

SAFETY INSTRUCTIONS

TO AVOID SERIOUS OR FATAL PERSONAL INJURY OR MAJOR PROPERTY DAMAGE, READ AND FOLLOW ALL SAFETY INSTRUCTIONS IN MANUAL AND ON SYSTEM.

THIS MANUAL IS INTENDED TO ASSIST IN THE INSTALLATION AND OPERATION OF THIS UNIT AND MUST BE KEPT WITH THE SLIDE RAIL.

THOROUGHLY REVIEW ALL INSTRUCTIONS AND WARNINGS PRIOR TO PERFORMING ANY WORK ON THIS UNIT.

MAINTAIN ALL SAFETY DECALS.

NOTICE: INSPECT UNIT FOR DAMAGE AND REPORT ALL DAMAGE TO THE CARRIER OR DEALER IMMEDIATELY.



This is a **SAFETY ALERT SYMBOL**. When you see this symbol on the pump or in the manual, look for one of the following signal words and be alert to the potential for personal injury or property damage.

▲ DANGER Warns of hazards that **WILL** cause serious personal injury, death or major property damage.

▲ WARNING Warns of hazards that **CAN** cause serious personal injury, death or major property damage.

▲ CAUTION Warns of hazards that **CAN** cause personal injury or property damage.

NOTICE: Indicates special instructions which are very important and must be followed.



HAZARDOUS LIQUIDS OR FLAMMABLE GASES CAN CAUSE FIRE, BURNS OR DEATH.

DESCRIPTION and SPECIFICATIONS

Goulds Series A10 and APD corrosion resistant slide rail systems provide easy wet well pump removal, utilize a self cleaning quick disconnect and guide assembly, and eliminate the need to enter the wet well.

Model	Discharge Size
A10-12 & APD12	1¼" NPT
APD15	1½" NPT
A10-20 & APD20	2" NPT
APD30	3" NPT
A10-30 & A10-40	4" 125# ANSI Flange
A10-60	6" 125# ANSI Flange

Goulds Pumps



PIPING

- System piping **MUST** conform to all local and national plumbing codes and practices.
- To maximize the discharge flow, discharge piping should be at least as large as the pump discharge. Keep the discharge pipe as short as possible and avoid unnecessary fittings.

SLIDE RAIL INSTALLATION



FAILURE TO DISCONNECT AND LOCKOUT ELECTRICAL POWER BEFORE ATTEMPTING ANY MAINTENANCE CAN CAUSE SHOCK, BURNS OR DEATH.

NOTICE: ALL DIMENSIONS ARE IN INCHES. DO NOT USE DIMENSIONAL DATA FOR CONSTRUCTION PURPOSES.

- Installation of the slide rail system should locate the pump opposite the influent opening, preventing stagnate areas where solids can settle.

NOTICE: GUIDE RAILS MUST BE PLUMB TO FACILITATE PUMP(S) INSTALLATION OR REMOVAL.

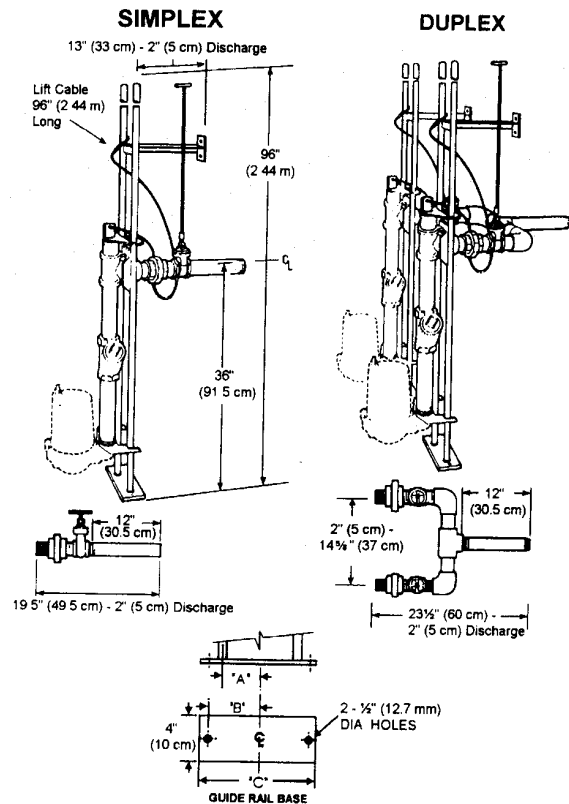
- The containment area floor **MUST** be flat under the slide rail base and have sufficient loading capacity to support the entire weight of the assembly, including the slide rail base, slide rail guide, pump and all assorted piping.

- Prior to anchoring the slide rail base to the containment area floor, ensure adequate clearance for pump(s) installation or removal **AND** for access doors.

NOTICE: MATERIAL SELECTION FOR CONTAINMENT AREA EQUIPMENT MUST BE COMPATIBLE WITH ANTICIPATED FLUIDS AND SERVICE.

Slide Rail Systems - A10-12, APD12, APD15, A10-20, APD20 and APD30

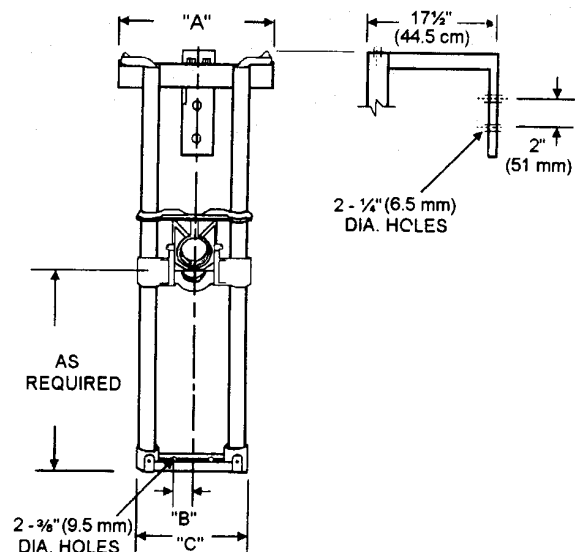
Typical hardware specifications, piping arrangements, and basin attachment dimensions are provided in Figure 1 and 2 and Table 1 and 2.



**A10-12 & A10-20
Figure 1**

SIZE	A" (mm)	B" (mm)	C" (mm)
A10-12	3 (76)	4½ (114)	10 (254)
A10-20	3¾ (95)	5½ (140)	12 (305)

Table 1



**APD12, APD15, APD20 & APD30
Figure 2**

SIZE	A" (mm)	B" (mm)	C" (mm)
APD12,15 &20	2½ (66)	1¼ (32)	6¼ (172)
APD30	4 (102)	2½ (54)	10¼ (260)

Table 2

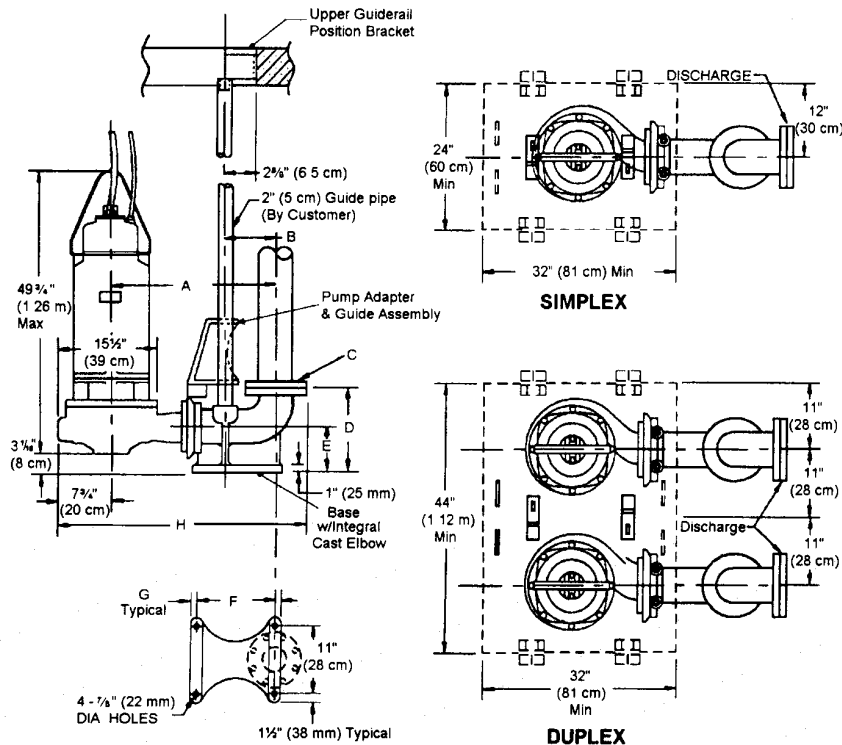
A10-30 and A10-40 Slide Rail Systems

The A10-30 system is designed for Goulds' models 3SD and 3888D3 with a 3" 125# ANSI flanged discharge. The A10-40 system is designed for Goulds' models 3888D4, 4SD and 4ND with a 4", 125# ANSI flanged discharge. Both 3" and 4" flanged pumps bolt directly to their respective slide rail cast iron pump

adapters. The adapter, which slides up and down on the rails, mates with the slide rail base and the integrally cast elbow to provide a 4", 125# ANSI flanged discharge connection. See Figure 3 and Table 3 for the typical hardware specifications, piping arrangements, and basin attachment dimensions.

A10-60 Slide Rail System

The A10-60 system is designed for pumps with a 4", 125# ANSI flanged discharge. The pump bolts directly to the slide rail cast iron pump adapter, mating with the slide rail base and integrally cast elbow to provide a 6", 125# ANSI flanged discharge connection. See Figure 3 and Table 3 for the typical hardware specifications, piping arrangements, and basin attachment dimensions.



A10-30, A10-40 & A10-60
Figure 3

SIZE	A" (cm)	B" (mm)	C	D" (cm)	E" (mm)	F" (cm)	G" (mm)	H" (cm)
A10-30	23 (58)	7¼ (185)	4" ANSI 125# Flange	12 (31)	7 (178)	13 (33)	1 (25)	35¾ (91)
A10-40	25½ (65)	7 ⁹ / ₁₆ (186)	4" ANSI 125# Flange	12 (31)	7 (178)	13 (33)	1 (25)	37¾ (96)
A10-60	26½ (67)	8 ⁹ / ₁₆ (211)	6" ANSI 125# Flange	17 (43)	10 (254)	15 (38.1)	2 (50)	39¾ (101)

Table 3

ACCESS DOORS

- Access doors can be single or double leaf design. Doors should include a lifting handle and a lock provision for tamper resistant operation. Standard and heavy duty steel or aluminum doors are available.
- The pit access door must be of sufficient size to allow for inspection, maintenance and crane or hoist service.

LIQUID LEVEL CONTROLS

- The recommended float operation sequence requires a three or four float system. In the three float system, floats are designated SW-1 for the bottom float, SW-2 for the middle float and SW-3 for the top float. In a four float system the fourth float is designated SW-4.

- Simplex Control - The rising liquid level raises float SW-2, turning on the pump. When the liquid level falls sufficiently, SW-1 will turn the pump off. If the influent is excessive, or if the pump fails to operate correctly, SW-3 will activate an alarm, which will remain on until manually reset.

- Duplex Control - The duplex control will alternate the two pumps, causing the lead pump to change at each system cycle. When equipped with three floats, the system will cycle the same as the simplex control, described above, except that the SW-1 will cause the lead pump to alternate.

- If the influent is excessive, or if the lead pump fails to operate correctly, the rising level will activate SW-3, turning on the lag pump and the alarm. As before, the alarm must be manually reset.

- Four Float Control - The four float system operates the same as the duplex control system, except that float SW-3 will not turn on the alarm. In this system SW-4 turns on the alarm, which again must be manually reset.

- The OPTIONAL Goulds A2-3 series float switches have been designed to close on a 8" (20.3 cm) rise in liquid level from the bottom of the float bulb with a 6" tethered length. A weight on the float's electrical cable, keeps the float suspended and allows the float to rise correctly. Floats may be suspended from their cables. See Figure 4.

NOTICE: POSITION THE FLOATS SO THAT THEY DO NOT SNAG OR TANGLE ON THE PUMP, DISCHARGE PIPING, OR OTHER EQUIPMENT.

- The lower most float turns the unit off and should be set

approximately 6" (15.3 cm) down from the top of the pump motor in its lowest slide rail position.

- Increasing the distance between the SW-1 and SW-2 floats lengthens the running time. Six (6) minutes is the minimum recommended pump cycle time.

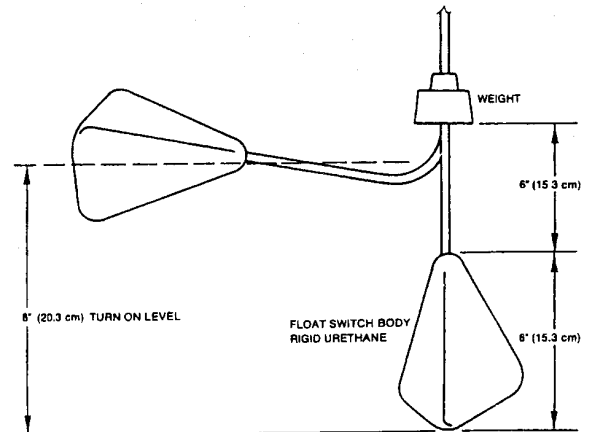


Figure 4

NOTICE: DURING PUMP OPERATION, ENSURE THAT THE LIQUID LEVEL DOES NOT DROP BELOW THE PUMP MOTOR FOR EXTENDED PERIODS. THIS CAN CAUSE THE PUMP MOTOR TO OVERHEAT, CAUSING MOTOR DAMAGE AND VOIDING THE WARRANTY.

OPERATION



DO NOT LIFT, CARRY OR HANG PUMP BY THE ELECTRICAL CABLE. DAMAGE TO THE ELECTRICAL CABLE CAN CAUSE SHOCK, BURNS OR DEATH.

- Raise and lower the pump in the containment area using the lifting cable attached to the system's quick disconnect for the A10-12 and A10-20, and to the pump's lifting eye/strap for the A10-30 thru A10-60. DO NOT use electrical cable and DO NOT damage the electrical cables while raising and lowering unit.

- To ensure full prime, lower the pump(s) on the slide rails until fully submerged. Do not engage pump discharge to the rail discharge connection. Jog the pump motor, one to two seconds, to purge air from pump casing. Lower the pump and engage with base.

- While the slide rail system mating surfaces are self cleaning, and contain no sealing devices, a check for leaks at the initial installation and after each pump removal or installation is recommended.

- While manually controlling the pump and the containment area inflow, using each pump

independently, pump down the containment area.

· Observe the pump, piping and slide rail base discharge connections for leaks.

· If leaks are present, reset the pump and slide rail mating surfaces and recheck. If this fails to stop the

leak, the pump should be removed and the necessary adjustments made to correct the leak. Leakage will cause longer operation time, higher costs and may lead to premature failure of slide rail base discharge connection.

GOULDS LIMITED WARRANTY

This warranty applies to all water systems pumps manufactured by Goulds.

Any part or parts found to be defective within the warranty period shall be replaced at no charge to the dealer during the warranty period. The warranty period shall exist for a period of twelve (12) months from date of installation or eighteen (18) months from date of manufacture, whichever period is shorter.

A dealer who believes that a warranty claim exists must contact the authorized Goulds distributor from whom the pump was purchased and furnish complete details regarding the claim. The distributor is authorized to adjust any warranty claims utilizing the Goulds Customer Service Department.

The warranty excludes:

- (a) Labor, transportation and related costs incurred by the dealer;
- (b) Reinstallation costs of repaired equipment;
- (c) Reinstallation costs of replacement equipment;
- (d) Consequential damages of any kind; and,
- (e) Reimbursement for loss caused by interruption of service.

For purposes of this warranty, the following terms have these definitions:

- (1) "Distributor" means any individual, partnership, corporation, association, or other legal relationship that stands between Goulds and the dealer in purchases, consignments or contracts for sale of the subject pumps.
- (2) "Dealer" means any individual, partnership, corporation, association, or other legal relationship which engages in the business of selling or leasing pumps to customers.
- (3) "Customer" means any entity who buys or leases the subject pumps from a dealer. The "customer" may mean an individual, partnership, corporation, limited liability company, association or other legal entity which may engage in any type of business.

THIS WARRANTY EXTENDS TO THE DEALER ONLY.

