

**BERS-0125** (INCLUSIVE OF CV & EX OPTIONS)

**BERS-0150** (INCLUSIVE OF CV & EX OPTIONS)

**BERS-0200** (INCLUSIVE OF CV & EX OPTIONS)

## GENERAL DESCRIPTION

The freeflo base elbow rail system is designed to allow for easy installation and removal of submersible or similar type pumps from collection basins or tanks. The system will have a stationary or fixed component (base elbow), a removable component (pull-out flange assembly), and a series of guide rails brackets or supports. Complete system shall be rated for 200 lb maximum weight allowance.

## BASE ELBOW

Shall be constructed of cast ductile iron (65-45-12) and be powder coated to prevent corrosion. Base elbows constructed of other materials shall not be considered equal. The base elbow shall have four (4) mounting slots cast integral with the base elbow for mounting to the tank or basin floor and provide multiple sized pins to allow for the use of various sizes of guide rails or pipes. Base elbows without slotted mounting holes or with single size pins for guide rails shall not be considered equal. The base elbow shall have a 90 degree elbow cast integral with it, which will be threaded with a 2" NPT pipe thread to allow for connection to pump system and pass a full spherical solid thru it (1¼" for BERS-0125, 1½" for BERS-0150, 2" for BERS-0200). When assembled with the pull-out flange, the base elbow shall provide a sealed junction between the pump and the pump system and support the weight of the pump.

## PULL-OUT FLANGE ASSEMBLY

Shall consist of a pull-out flange, pump adapter flange, clamp plate, sealing rings, and lower guide bracket. The pull-out flange assembly shall provide a means for attaching to the pump discharge and be removable from the pump system without disturbing the system piping. The pull-out flange assembly shall be available with or without a check valve, as well as a non-sparking version per the job specifications.

## PULL-OUT FLANGE

The pull-out flange shall be constructed of cast ductile iron (65-45-12) and be powder coated to prevent corrosion. Pull-out flanges constructed of other materials shall not be considered equal. The pull-out flange shall be provided with grooves for the O-rings to provide a sealed junction between the pump and the pump system when assembled with the base elbow.

## PUMP ADAPTER FLANGE

Shall be constructed of 300 series stainless steel and be threaded to allow for connection to the pump discharge (1¼" NPT on BERS-0125, 1½" on BERS-0150, 2" NPT on BERS-0200). The pump adapter flange shall rotate freely to allow for connection to the pump discharge while assembled to the pull-out flange.

## CLAMP PLATE

Shall be constructed of 300 series stainless steel and be used to secure the pump adapter flange to the pull-out flange. The clamp plate will be secured to the pull-out flange with two (2) 300 series stainless steel fasteners.

## LOWER GUIDE RAIL PLATE

Shall be constructed of 300 series stainless steel and be secured to the pull-out flange with two (2) 300 series stainless steel fasteners. Lower guide rail plates constructed of other materials shall not be considered equal.

## INTERMEDIATE & UPPER GUIDE RAIL BRACKETS

Shall be constructed of 300 series stainless steel and have pins sized to fit into the inside diameter of the guide rails or pipes being used. Intermediate or upper guide brackets constructed of other materials shall not be considered equal. The upper guide bracket shall have compressible elastomer type pins to limit vibration. The intermediate guide bracket shall have 300 series stainless steel guide pins and be used for every 10 foot of tank or basin depth.

## FASTENERS

All fasteners shall be 300 series stainless steel. Fastener constructed of other materials shall not be considered equal.