



SPECIFICATIONS

Liftouts **KL8 , KL10, KL10, KL12, KL14**

GENERAL – The KL__ lift-out assembly facilitates the ease of installing and removing a submersible sewage pump from the hard piping in a pump station.

DIMENSIONS – The KL__ lift-out assembly is designed to attach a __” ANSI Class 125 horizontally flanged pump to vertical __” ANSI Class 125 flanged pipe connection.

CONFIGURATION – The lift-out base elbow assembly shall consist of a base elbow, lift-out flange and upper guide bracket.

BASE ELBOW – A one-piece, cast iron (ASTM A48-30) machined casting. The discharge shall be vertical, __” ANSI 150# connection, located at an elevation of __” from the floor of the station. The inlet side shall have a horizontal configuration for mating to the lift-out flange portion of the assembly. At the top of the inlet side, cast material shall be positioned to hold the lift-out flange. There shall be (2) machined bosses located on the top surface for (2) guide rail attachment. The base shall have minimum (4) mounting holes, dimensions of (see layout drawing), for securing to the floor of the station. The base shall be held in place with anchored threaded rod, nuts and lockwashers.

LIFT-OUT FLANGE – The lift-out flange assembly shall consist of (2) cast iron (ASTM A48-30) components. The pieces shall be bolted together with stainless steel bolts. The upper component shall provide for a means of guiding and gripping the lift-out assembly around the (2) guide rails. The surfaces around the guide rails shall be convex, preventing the lift-out flange from catching any corners or edges in the removal or installation of the pump. There shall be a cast opening in the upper component for attaching the lift-out chain. The upper component shall positively position the lift-out assembly over the top inlet of the base elbow. The lower component shall bolt to the pump discharge flange, providing the means for removing and installing the pump. The lower component shall have (2) o-rings, one positioned between the pump discharge face and the other between the base elbow inlet. The o-rings shall provide a positive sealing surface and assist in the prevention of the mating surfaces from rusting together.

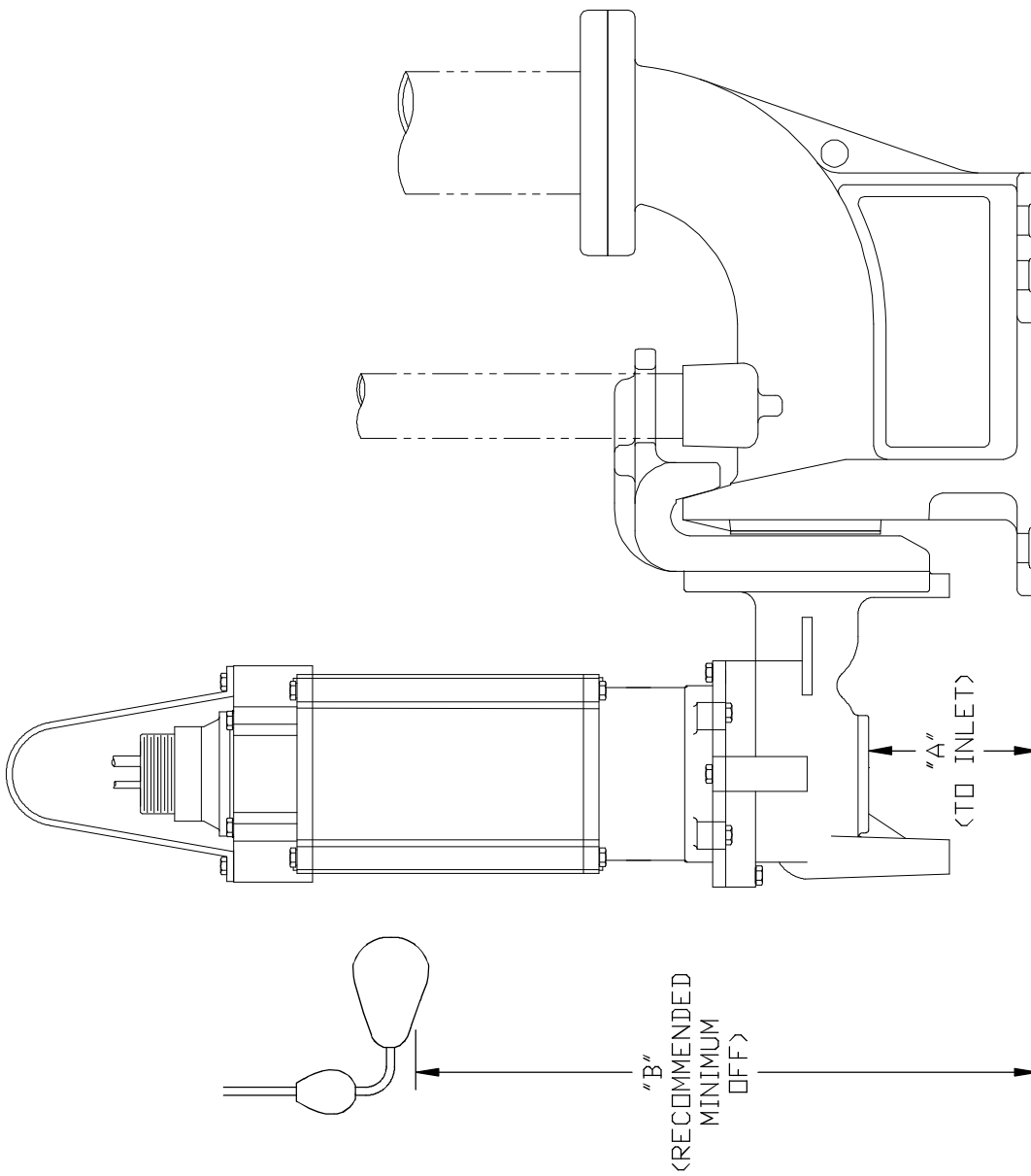
UPPER GUIDE BRACKET – The bracket shall be stainless steel, Type 304. The upper guide bracket shall securely position the (2) guide rails, maintaining the exact location for proper use of the lift-out flange and pump assembly. The upper guide bracket shall be secured to the wall or bracket provided in the station by means of bolts, nuts and lockwashers.

GUIDE RAILS – (2) 2” or 3” guide rails shall be required for proper operation of the KL base elbow assembly. The guide rails are either provided by the installer or factory, depending upon each project. The length of the guide rails are dependant upon the depth of the station or installation.

COATINGS – Carboline & Tnemac products are available. Coal-Tar epoxies, chemically resistant epoxies & marine coatings.

SUBMERGENCE LEVELS - RAIL MOUNTED PUMPS

PUMP	LIFTOUT MODEL	A BOTTOM OF WELL TO INLET	B "KEEN" RECOMMENDED MINIMUM SUBMERGENCE LEVEL
KE102/103	KL2	3-1/2"	15"
KF/H>G2	KL1(CV)	3-1/2"	15"
KPCG	KL1(CV)	3-3/4"	19"
K(H)GS2	KL1(CV)	3-3/8"	15"
KHHG2	KL1(CV)	3-1/2"	21"
KHHG2H	KL1(CV)	3-1/2"	21"
KG3,5,7,103	KL3H	4-3/4"	22"
KHG3,5,7	KL3H	5-3/4"	22"
KGP75-150	KL3H	4-3/4"	28"
K3RN	KL3H	5-3/4"	28"
K3VN	KL3H	4-1/2"	27"
K3RH	KL3H	5-3/4"	23"
K4RH	KL4	6-1/4"	24"
K4RN (3450)	KL4	6-1/4"	28"
K4RN (1150/1750)	KL4	5-1/8"	28"
K4VN	KL4	5-1/8"	27"
K4RP (3450)	KL4	5-1/2"	28"
K4RP (1150/1750)	KL4	7-1/2"	32"
K4VP	KL4	7-1/2"	30"
K4RB (3450)	KL4	9-1/8"	36"
K4RB (1750)	KL4	8-1/2"	36"
K4VB	KL4	7-1/2"	35"
K4VK	KL4	6-1/2"	42"
K6VB	KL6	8-3/8"	38"
K8VK	KL8	16"	52"
K12VK	KL12	15-1/2"	61"
K14VK	KL14	15-1/2"	61"



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TITLE SUBMERGENCE LEVELS - WASTEWATER PUMPS		REV.
SCALE NTS	DWG. # KN-903	B
DWG. BY SE	DATE 9/24/2014	

NOTE: ALL DIMENSIONS FOR REFERENCE ONLY		
B	SE	10/09/2015
A	SE	03/16/2015
REV	INITIALS	DATE