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INSTALLATION AND OPERATING INSTRUCTIONS

Flex Flange

TYPICAL APPLICATIONS:

Armstrong Flex Flanges are used in pairs to connect circulating pumps in hydronic systems. These flanges feature di-electric sleeves to prevent possible galvanic corrosion from the contact of dissimilar metals. The rotating flange design allows maximum installation flexibility regardless of pump flange orientation. The larger one of the two units includes the spring check to prevent gravity circulation or the heating medium flowing in a wrong direction. These devices rapidly isolate a circulator to be serviced, and eliminate the need to drain and refill the entire system. The Flex Flange integrates a 2-bolt flange connection (common to small circulating pumps) with a full-port ball valve. This practical "all-in-one" design reduces the number of plumbing connections and results in a more reliable, economical and easily serviced hydronic system.

INSTALLATION:

1. Install the Flex Flange with spring check on the discharge side of the pump with the arrow pointing away from the pump. Install the smaller rotating di-electric flange on the suction side of the pump. Refer to Table 1 to determine the appropriate gasket for the model of pump being used.

2. Use the supplied hardware kit to install the Flex Flanges on the suction and discharge sides of the circulating pump (as shown in Fig. 1). Make certain that the supplied pump gaskets are used between the pump and the isolation flanges.

3. Ensure correct Flex Flange spacing according to the circulator installation instructions.

4. Ensure Flex Flanges align with circulator flanges for proper circulator orientation.

5. Fasten Flex Flanges to system piping per NPT or Sweat instructions as appropriate.

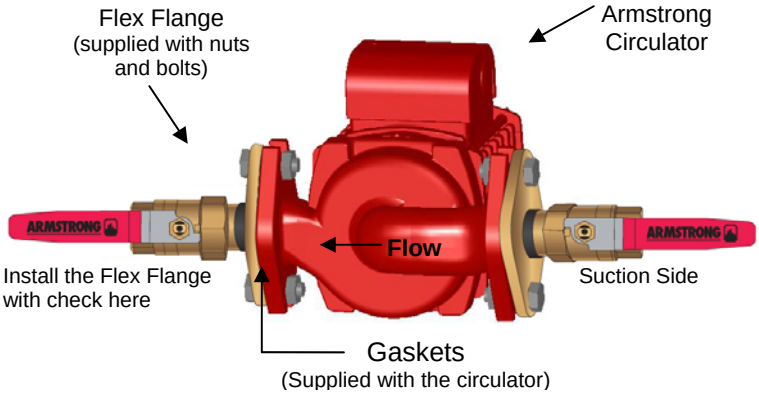


Fig. 1 Typical installation of the Flex Flanges

NPT CONNECTIONS:

a. Prior to installation of the Flex Flange, provisions should be made to ensure that the mating pipe threads are free from burrs, grit or any other foreign materials.
b. Apply Teflon tape sealer or a high quality thread sealant to the male connecting fittings.

SWEAT CONNECTIONS:

a. Prior to installation of the Flex Flange, provisions should be made to ensure that the mating sweat connections are clean and free from burrs, grit or any other foreign materials.

b. Solder the Flex Flange using 95/5 (95% tin, 5% antimony) type solder or equal. When making the sweat connections, direct the flame away from the valve body to prevent valve damage.

CAUTION: Exposure to excessive heat can damage the valve seals. Extreme caution should be used when making sweat connections to prevent valve damage.

1. Tighten bolts holding the Flex Flange and circulator flanges together by applying torque in equal amounts to both flange bolts. Check pumps I&O for appropriate torque values.

> **WARNING:** Ensure that Flex Flanges are installed with pump gaskets and that flange bolts are properly tightened. Failure to follow these instructions will result in pump leakage, which may cause property damage and/or personal injury.

2. Inspect connections for leaks after completing the installation.

OPERATION

1. In the open position, the lever handle of the Flex Flange is perpendicular to the flange (as shown in Fig. 2).

2. To close the valve and isolate the pump from the system, turn the lever handle clockwise 90º. In the closed position, the lever handle of the Flex Flange is parallel to the flange (as shown in Fig. 3).

Fig. 2 Flex Flange in OPEN position

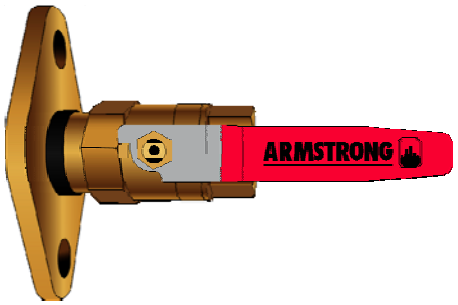


Fig. 3 Flex Flange in CLOSED position

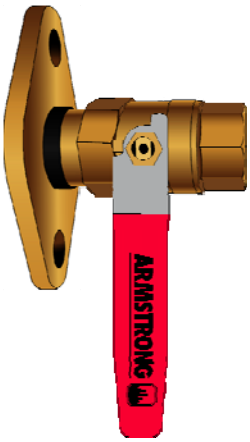
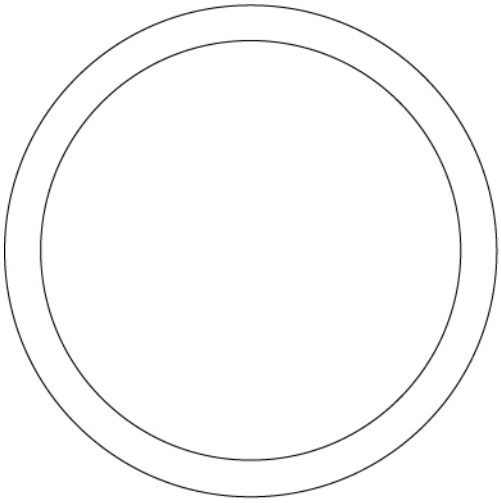


Table 1.

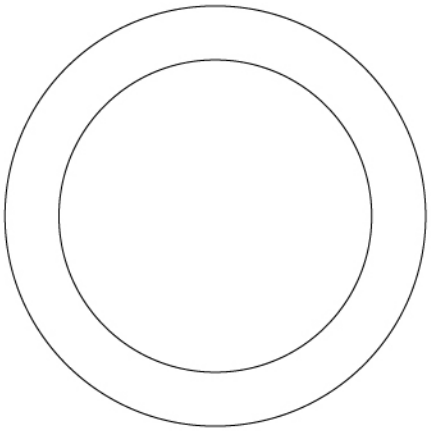
Gasket information				
Size	1.390 ID x 2.203 OD x .250 thk	1.828 ID x 2.187 OD x .250 thk	1.625 ID x 2.187 OD x .250 thk	2.187 ID x 2.562 OD x .218 thk
Use With	Astro Flanged Circulators: 20, 25, 30, 50, 70 / S25	E Series: E7, E8, E9, E12, E14, E15, E17, H41	H51 , H52, H53,	E Series: E10, E11, E13, E19, E21, E22, E23, E24, H63, H 64, H65
Included on Flex Flange sizes				
0.5	Yes	Yes	NR	NR
0.75	Yes	Yes	NR	NR
1	Yes	Yes	Yes	Yes
1.25	NR	Yes	Yes	Yes
1.5	NR	NR	Yes	Yes

Fig. 4 Gaskets (to size)

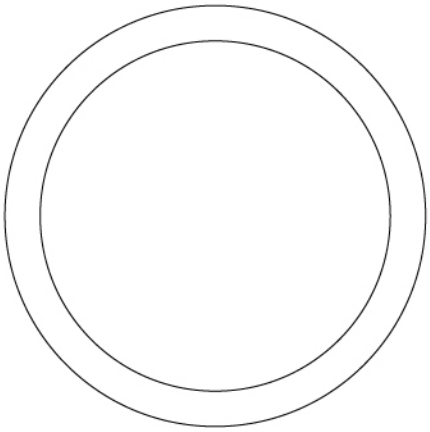
Astro Flanged Circulators:
20, 25, 30, 50, 70 / S25



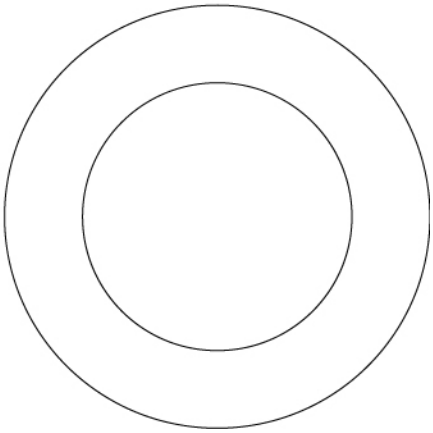
E Series: E7, E8, E9, E12,
E14, E15, E17, H41



H51 , H52, H53,



E Series: E10, E11, E13, E19, E21,
E22, E23, E24, H63, H 64, H65



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