



SUCTION DIFFUSER REAR STRAINER PULLOUT (RSP) WITH INTEGRAL CAST STRAIGHTENING VANES

Instruction
Sheet

LOCATION & INSTALLATION:

1. Locate and install pump per pump manufacturer's instructions.
NOTE: When selecting pump location, ensure there is sufficient space available to remove the Suction Diffuser straightening vane assembly and strainer for routine maintenance. Clearance requirements are shown as dimension "C" in Table 1.
2. Mount suction diffuser directly to pump suction flange. Pump and suction diffuser flanges should be aligned before connections are made. Piping should NEVER be drawn into place by force. Inlet connection is labeled with the word "SYSTEM" on the flange and outlet flange is labeled "PUMP".
3. Both suction and discharge piping should be suspended or supported close to the pump so that no pipe weight rests on pump. To support the Suction Diffuser, cut a piece of 1 1/4" pipe without threads to the approximate length required from one of the bosses provided on the pump connection to the adjustable foot nut. See Figure 1: Piping Diagram.
4. Place pipe on nut and under the boss and turn the nut counter-clockwise until sufficient load is supplied to give maximum support.

MOUNTING:

1. Suction Diffusers can be mounted in a vertical or horizontal position. Bosses are cast into the Suction Diffuser body to accommodate pipe supports for each position.



2. If used in a horizontal position, the pump should be positioned at right angles to the piping.
3. A blow down valve may be installed on the drain connection of the Suction Diffuser. **NOTE:** Blow down is MOST effective when system connection of the Suction Diffuser is in the 12 o'clock position.
4. When insulating the Suction Diffuser, allowances need to be made for removal of the straightening vane assembly and cleaning of the strainer.

VALVE TABLE 1: STRAIGHTENING VANE AND STRAINER CLEARANCE DIMENSION

Model No.	System	Pump	C
SD020015-6	2 Flanged	1 1/2 Flanged	8.49 (216)
SD020020-6	2 Flanged	2 Flanged	8.24 (209)
SD025020-6	2 1/2 Flanged	2 Flanged	
SD030020-6	3 Flanged	2 1/2 Flanged	8.97 (228)
SD025025-8	2 1/2 Flanged	2 1/2 Flanged	
SD030025-6	3 Flanged	2 1/2 Flanged	10.47 (266)
SD040025-6	4 Flanged	3 Flanged	
SD030030-6	3 Flanged	3 Flanged	12.86 (327)
SD040030-6	4 Flanged	3 Flanged	
SD050030-6	5 Flanged	3 Flanged	15.36 (390)
SD040040-6	4 Flanged	4 Flanged	
SD050040-6	5 Flanged	4 Flanged	34.00 (864)
SD060040-6	6 Flanged	4 Flanged	
SD050050-6	5 Flanged	5 Flanged	33.72 (856)
SD060050-6	6 Flanged	5 Flanged	
SD080050-6	8 Flanged	5 Flanged	

Model No.	System	Pump	C
SD060060-5	6 Flanged	6 Flanged	19.02 (483)
SD080060-5	8 Flanged	6 Flanged	
SD100060-5	10 Flanged	6 Flanged	23.79 (604)
SD080080-5	8 Flanged	8 Flanged	
SD100080-5	10 Flanged	8 Flanged	29.40 (747)
SD120080-5	12 Flanged	8 Flanged	
SD100100-5	10 Flanged	10 Flanged	33.72 (856)
SD120100-5	12 Flanged	10 Flanged	
SD140100-5	14 Flanged	10 Flanged	34.00 (864)
SD120120-5	12 Flanged	12 Flanged	
SD140120-5	14 Flanged	12 Flanged	
SD160120-5	16 Flanged	12 Flanged	
SD140140-5	14 Flanged	14 Flanged	
SD160140-5	16 Flanged	14 Flanged	

DIMENSION NOTE: Dimensions are in inches. Metric dimensions are in millimeters and are in parentheses ().

FIGURE 1: PIPING DIAGRAM

