



# Submittal Data Information

## Suction Diffuser – Grooved BAA/ARRA/PSA

301-303

SUPERSEDES: November 1, 2010

EFFECTIVE: May 1, 2011

JOB \_\_\_\_\_ ENGINEER \_\_\_\_\_ CONTRACTOR \_\_\_\_\_ REP. \_\_\_\_\_

ITEM	QUANTITY	MODEL NO.	SIZE
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### Taco PSDG Specialty Suction Diffusers Sizes 2" x 1 1/4" – 12" x 12" (50 x 32 – 300 x 300 mm)

Pressure/Temperature – Non-Shock	
Model	CWP
PSDG	300psi @ 100°F 165psi @ 300°F

Maximum temperature can be limited by O-ring material.



PSDG

Taco PSDG Specialty Suction Diffusers provide economical and compact pump protection by straining foreign particles and providing proper flow conditions to the pump.

#### TYPICAL SERVICE

- Mount directly to the suction side of a pump, in either horizontal or vertical position.

#### FEATURES

- Compact design enables this one unit to act as an elbow, strainer, and entry pipe to the suction side of the pump. This reduces installation time, overall cost, and reduces joint leak paths.
- Equal size flanges or reduced outlet flange sizes available. Reduced outlet design eliminates the need for a reducing base elbow.
- Quick opening knobs allow for quick maintenance.
- O-ring seal eliminates the need to clean the sealing area and install a new flat gasket in competitive models.
- Straightening vanes on the Suction Diffuser's outlet side reduces turbulence into the pump. These minimize stress and erosion within the pump, and eliminate the need for a length of straight pipe to diminish turbulence.
- Robust 5 to 1 Open Area Ratio and blow off feature extend the time between servicing and allows for ease of draining and flushing
- A separate removable fine mesh screen liner is installed in each Diffuser for start-up. After the start-up period, simply remove and discard, leaving the primary screen for operation.
- Special pads fit the I.D. of standard pipe, eliminating the need for pipe saddles and relieving stress on hanger systems.
- Gauge tapping is available as specified with the order.

#### SCREENS

MODEL	SIZES	STANDARD (WATER)	
		MATERIAL	OPENING
PSDG	Up to 6"	304SS	0.156 perf
	8" and Up	304SS	0.125 perf
Sleeve		304SS	20 mesh

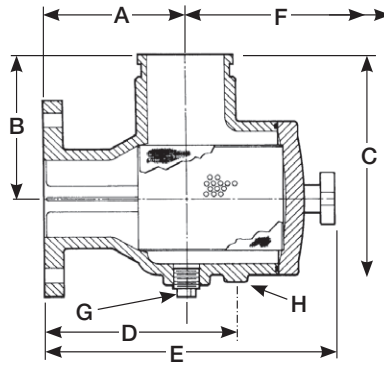
#### MATERIALS

PSDG	
Body and Cover	Cast Iron ASTM A126B
Knobs	(2" x 1 1/4" – 8" x 8") – Ductile Iron ASTM A536
Nuts	(10" x 10" and larger) – Carbon Steel ASTM A194-4
Sleeve	20 mesh Stainless Steel
O-Ring	EPDM

Special metals and alloys on request.

Models with flanged inlet available in Cast Iron for Class 125 and Ductile Iron for Class 300 service.

**DIMENSIONS AND WEIGHTS**



**PSDG**

SIZE		DIMENSIONS														WEIGHT					
in.	mm	A		B		C		D		E		F Screen Removal		G		H Pipe Support I.D.		lbs.	kgs.		
		in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm				
2 x 1¼	51 x 32	On Application																		—	—
2 x 1½	51 x 38	On Application																		—	—
2 x 2	51 x 51	4½	114	4½	114	6 <sup>1</sup> / <sub>16</sub>	170	6 <sup>1</sup> / <sub>8</sub>	156	10 <sup>1</sup> / <sub>16</sub>	259	8 <sup>3</sup> / <sub>16</sub>	224	¾ NPT	20	.824	21	19	42		
2½ x 2	64 x 51	5	127	5	127	7½	191	6 <sup>9</sup> / <sub>16</sub>	167	10 <sup>7</sup> / <sub>8</sub>	276	9 <sup>1</sup> / <sub>8</sub>	232	¾ NPT	20	1.380	35	20	44		
2½ x 2½	64 x 64	5	127	5	127	7½	191	6 <sup>9</sup> / <sub>16</sub>	167	10 <sup>7</sup> / <sub>8</sub>	276	9 <sup>1</sup> / <sub>8</sub>	232	¾ NPT	20	1.380	35	22	49		
3 x 2	76 x 51	5½	140	5½	140	8 <sup>1</sup> / <sub>16</sub>	189	7 <sup>7</sup> / <sub>8</sub>	187	11 <sup>1</sup> / <sub>16</sub>	294	9 <sup>7</sup> / <sub>8</sub>	244	¾ NPT	20	1.380	35	38	84		
3 x 2½	76 x 64	5½	140	5½	140	8 <sup>1</sup> / <sub>16</sub>	189	7 <sup>7</sup> / <sub>8</sub>	187	11 <sup>1</sup> / <sub>16</sub>	294	9 <sup>7</sup> / <sub>8</sub>	244	¾ NPT	20	1.380	35	39	86		
3 x 3	76 x 76	5½	140	5½	140	8 <sup>1</sup> / <sub>16</sub>	189	7 <sup>7</sup> / <sub>8</sub>	187	11 <sup>1</sup> / <sub>16</sub>	294	9 <sup>7</sup> / <sub>8</sub>	244	¾ NPT	20	1.380	35	40	88		
4 x 3	102 x 76	6½	165	6 <sup>13</sup> / <sub>16</sub>	173	10 <sup>1</sup> / <sub>16</sub>	265	8 <sup>3</sup> / <sub>4</sub>	223	13 <sup>3</sup> / <sub>8</sub>	333	11½	292	1 NPT	25	1.380	35	50	110		
4 x 4	102 x 102	6½	165	6 <sup>13</sup> / <sub>16</sub>	173	10 <sup>1</sup> / <sub>16</sub>	265	8 <sup>3</sup> / <sub>4</sub>	223	13 <sup>3</sup> / <sub>8</sub>	333	11½	292	1 NPT	25	1.380	35	52	115		
6 x 4	152 x 102	8	203	8	203	13 <sup>3</sup> / <sub>16</sub>	338	10½	267	16 <sup>7</sup> / <sub>8</sub>	429	16 <sup>6</sup> / <sub>16</sub>	421	1 NPT	25	1.380	35	106	234		
6 x 5	152 x 127	8	203	8	203	13 <sup>3</sup> / <sub>16</sub>	338	10½	267	16 <sup>7</sup> / <sub>8</sub>	429	16 <sup>6</sup> / <sub>16</sub>	421	1 NPT	25	1.380	35	110	242		
6 x 6	152 x 152	8	203	8	203	13 <sup>3</sup> / <sub>16</sub>	338	10½	267	16 <sup>7</sup> / <sub>8</sub>	429	16 <sup>6</sup> / <sub>16</sub>	421	1 NPT	25	1.380	35	113	249		
8 x 6	203 x 152	9	229	10	254	15 <sup>1</sup> / <sub>16</sub>	389	11½	292	17 <sup>7</sup> / <sub>8</sub>	454	16 <sup>7</sup> / <sub>8</sub>	429	1 NPT	25	1.380	35	137	302		
8 x 8	203 x 203	9	229	10	254	16 <sup>1</sup> / <sub>16</sub>	414	11¾	298	20 <sup>3</sup> / <sub>4</sub>	527	22 <sup>7</sup> / <sub>8</sub>	581	1¼ NPT	32	1.380	35	222	490		
10 x 8	254 x 203	9	229	11¾	298	18 <sup>1</sup> / <sub>16</sub>	468	11¾	298	20 <sup>3</sup> / <sub>4</sub>	527	22 <sup>7</sup> / <sub>8</sub>	581	1¼ NPT	32	1.380	35	236	520		
10 x 10	254 x 254	11	280	11¾	298	20	508	14	356	26 <sup>7</sup> / <sub>8</sub>	670	30 <sup>3</sup> / <sub>4</sub>	781	1¼ NPT	32	1.380	35	343	756		
12 x 8	305 x 203	On Application																		—	—
12 x 10	305 x 254	11	280	12 <sup>7</sup> / <sub>8</sub>	327	21	533	14	356	26 <sup>7</sup> / <sub>8</sub>	670	30 <sup>3</sup> / <sub>4</sub>	—	1¼ NPT	32	1.380	35	357	787		
12 x 12	305 x 305	On Application																		—	—

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