



# Submittal Data Information

## Suction Diffuser – Flanged

### BAA/ARRA/PSA

301-302

SUPERSEDES: November 22, 2013

EFFECTIVE: June 17, 2014

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

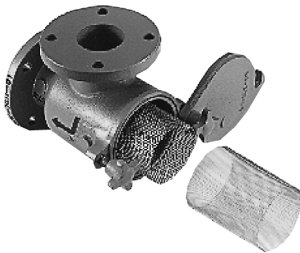
ITEM	QUANTITY	MODEL NO.	SIZE
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### Taco PSD Specialty Suction Diffusers

Sizes 2" x 1 1/4" – 18" x 14" (50 x 32 – 457 x 356 mm)

Pressure/Temperature – Non-Shock		
Model	Sizes	Rating CWP
PSD Class 125	2"-12"	200psi @ 150°F (10.3 bar @ 38°C) 165psi @ 300°F EPDM
	14" and Up	110psi @ 300°F EPDM 150psi @ 150°F (10.3 bar @ 66°C)
PSD Class 300	Knob	300psi @ 100°F (21 bar @ 38°C)
	Bolted Cover	640psi @ 100°F (44 bar @ 38°C) 565psi @ 300°F EPDM – O-Rings

Maximum temperature can be limited by gasket material. Consult factory.



PSD  
Class 125  
Class 300

Taco PSD 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. Bolted cover is available on Class 300 PSD model.
- 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
PSD - Class 125 and Class 300	Up to 6"	304SS	0.156 perf
	8" and Up	304SS	0.125 perf
Sleeve		304SS	20 mesh

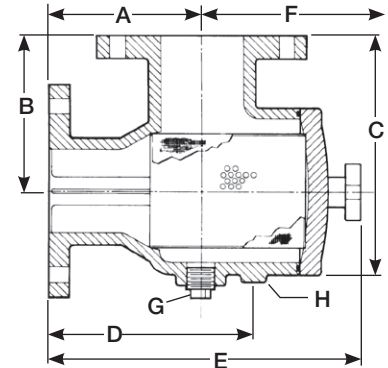
#### MATERIALS

	PSD - Class 125	PSD - Class 300
Body and Cover	Cast Iron ASTM A126B	Ductile Iron ASTM A536
Knobs	(2" x 1 1/4" – 8" x 8") Ductile Iron ASTM A536	(2" x 1 1/4" – 8" x 8") Ductile Iron ASTM A536
Nuts	(10" x 10" and larger) Carbon Steel ASTM A194-4	(10" x 10" and larger) Carbon Steel ASTM A194-4
Sleeve	20 mesh Stainless Steel	20 mesh Stainless Steel
O-Ring	EPDM	EPDM

Special metals and alloys on request.

**DIMENSIONS AND WEIGHTS**

SIZE		DIMENSIONS								WEIGHT	
Inlet x Outlet		A	B	C	D	E	F	G	H		
in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
							Screen Removal	NPT	Pipe Support LD.	lbs.	kgs.
PSD - Class 125											
2x1¼	50x32	4½ 114	4½ 114	6½ 170	6⅞ 156	10⅞ 259	8⅜ 224	¾ 20	.824 21	19	9
2x1½	50x40	4½ 114	4½ 114	6½ 170	6⅞ 156	10⅞ 259	8⅜ 224	¾ 20	.824 21	21	10
2x2	50x50	4½ 114	4½ 114	6½ 170	6⅞ 156	10⅞ 259	8⅜ 224	¾ 20	.824 21	23	10
2½x2	65x50	5 127	5 127	7½ 191	6⅞ 167	10⅞ 276	9⅞ 232	¾ 20	1.049 27	32	15
2½x2½	65x65	5 127	5 127	7½ 191	6⅞ 167	10⅞ 276	9⅞ 232	¾ 20	1.049 27	34	15
3x2	80x50	5½ 140	5½ 140	8½ 214	7⅞ 179	11⅞ 294	9⅞ 244	¾ 20	1.049 27	45	20
3x2½	80x65	5½ 140	5½ 140	8½ 214	7⅞ 179	11⅞ 294	9⅞ 244	¾ 20	1.049 27	46	21
3x3	80x80	5½ 140	5½ 140	8½ 214	7⅞ 179	11⅞ 294	9⅞ 244	¾ 20	1.049 27	47	21
4x3	100x80	6½ 165	6½ 165	10¼ 260	8¾ 222	13⅞ 333	11½ 292	1 25	1.380 35	71	44
4x4	100x100	6½ 165	6½ 165	10¼ 260	8¾ 222	13⅞ 333	11½ 292	1 25	1.380 35	73	33
5x4	125x100	7½ 191	7½ 191	11⅞ 278	10 254	15¼ 400	14⅞ 378	1 25	1.380 35	96	34
5x5	125x125	7½ 191	7½ 191	11⅞ 278	10 254	15¼ 400	14⅞ 378	1 25	1.380 35	101	46
6x4	150x100	8 203	8 203	13⅞ 346	10½ 267	16⅞ 429	16⅞ 421	1 25	1.380 35	132	60
6x5	150x125	8 203	8 203	13⅞ 346	10½ 267	16⅞ 429	16⅞ 421	1 25	1.380 35	136	62
6x6	150x150	8 203	8 203	13⅞ 346	10½ 267	16⅞ 429	16⅞ 421	1 25	1.380 35	139	63
8x6	200x150	9 229	9 229	14⅞ 372	11½ 292	17⅞ 454	16⅞ 429	1 25	1.380 35	166	75
8x8	200x200	9 229	9 229	15⅞ 402	11¾ 298	20¼ 527	22⅞ 581	1¼ 32	1.380 35	249	113
10x8	250x200	9 229	11 279	17⅞ 453	11¾ 298	20¼ 527	22⅞ 581	1¼ 32	1.380 35	276	125
10x10	250x250	11 279	11 279	19⅞ 492	14 357	26⅞ 670	30¼ 768	1¼ 32	2.067 53	422	191
12x8	300x200	9 229	12 305	18⅞ 467	11¾ 298	20¼ 527	22⅞ 581	1¼ 32	1.380 35	412	187
12x10	300x250	11 279	12 305	20⅞ 518	14 357	26⅞ 670	33 838	1¼ 32	2.067 53	491	223
12x12	300x300	12 305	12 305	21⅞ 541	15¼ 387	26⅞ 665	28¼ 730	1¼ 32	2.067 53	573	260
14x10	350x300	11 279	14 356	22½ 571	14 357	26⅞ 670	33 838	1¼ 32	2.067 53	607	230
14x12	350x300	12 305	14 356	23⅞ 594	15¼ 387	26⅞ 665	31 787	1¼ 32	2.067 53	601	273
14x14	350x350	14 356	14 356	25 635	17½ 445	28 711	33⅞ 841	2 51	2.067 53	706	320
16x12	400x300	12 305	15 305	24⅞ 619	15¼ 387	26⅞ 665	28¼ 730	1¼ 32	2.067 53	660	299
16x14	400x350	14 356	15 305	26 660	17½ 445	27⅞ 708	31 787	2 51	2.067 53	750	340
16x16	400x400	14⅞ 357	14⅞ 357	24⅞ 633	17⅞ 446	27⅞ 706	33⅞ 841	2 51	2.067 53	820	372
18x12	450x300	12 305	16½ 419	25⅞ 657	15¼ 387	25⅞ 644	28¼ 730	1¼ 32	2.067 53	—	—
PSD - Class 300											
2x2	50x50	4¾ 121	4¾ 121	6⅞ 176	6⅞ 162	10⅞ 265	8⅜ 351	¾ 20	.824 21	30	14
2½x2	65x50	5¼ 133	5⅞ 135	7⅞ 198	6⅞ 175	11⅞ 283	9⅞ 232	¾ 20	1.380 35	35	16
2½x2½	65x65	5⅞ 135	5⅞ 149	7⅞ 198	6⅞ 175	11⅞ 284	9⅞ 232	¾ 20	1.380 35	39	18
3x2	80x50	5¾ 146	5⅞ 149	8⅞ 224	7⅞ 194	11⅞ 300	9⅞ 244	¾ 20	1.380 35	57	26
3x2½	80x65	5⅞ 148	5⅞ 149	8⅞ 224	7⅞ 194	11⅞ 302	9⅞ 244	¾ 20	1.380 35	59	27
3x3	80x80	5⅞ 149	5⅞ 149	8⅞ 224	7¾ 558	11⅞ 303	9⅞ 244	¾ 20	1.380 35	63	29
4x3	100x80	6⅞ 173	6⅞ 173	10⅞ 265	8⅞ 227	13⅞ 354	11½ 292	1 25	1.380 35	79	36
4x4	100x100	6⅞ 173	6⅞ 173	10⅞ 265	9⅞ 252	13⅞ 341	11½ 292	1 25	1.380 35	86	39
6x4	150x100	8⅞ 211	8½ 216	13⅞ 351	10⅞ 275	17⅞ 437	16⅞ 421	1 25	1.380 35	161	73
6x5	150x125	8⅞ 214	8½ 216	13⅞ 351	10⅞ 278	17⅞ 440	16⅞ 421	1 25	1.380 35	165	75
6x6	150x150	8⅞ 214	8½ 216	13⅞ 351	10⅞ 278	17⅞ 440	16⅞ 421	1 25	1.380 35	168	76
8x6	200x150	9⅞ 240	10 720	15⅞ 389	11⅞ 303	18⅞ 465	16⅞ 429	1 25	1.380 35	216	98
8x8	200x200	9½ 241	10 720	16¼ 425	12⅞ 313	21⅞ 541	22⅞ 581	1¼ 32	1.380 35	317	144
10x8	250x200	9½ 241	11¾ 298	18⅞ 468	12⅞ 313	21⅞ 541	22⅞ 581	1¼ 32	1.380 35	358	163
10x10	250x250	11¾ 298	11¾ 298	20 508	14¼ 375	27⅞ 689	30¼ 768	1¼ 32	1.380 35	473	215
12x10	300x250	11¾ 298	12⅞ 327	21⅞ 537	14¼ 375	27⅞ 689	33 838	1¼ 32	1.380 35	524	237



PSD  
Class 125  
Class 300

**Do it Once. Do it Right.®**

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