

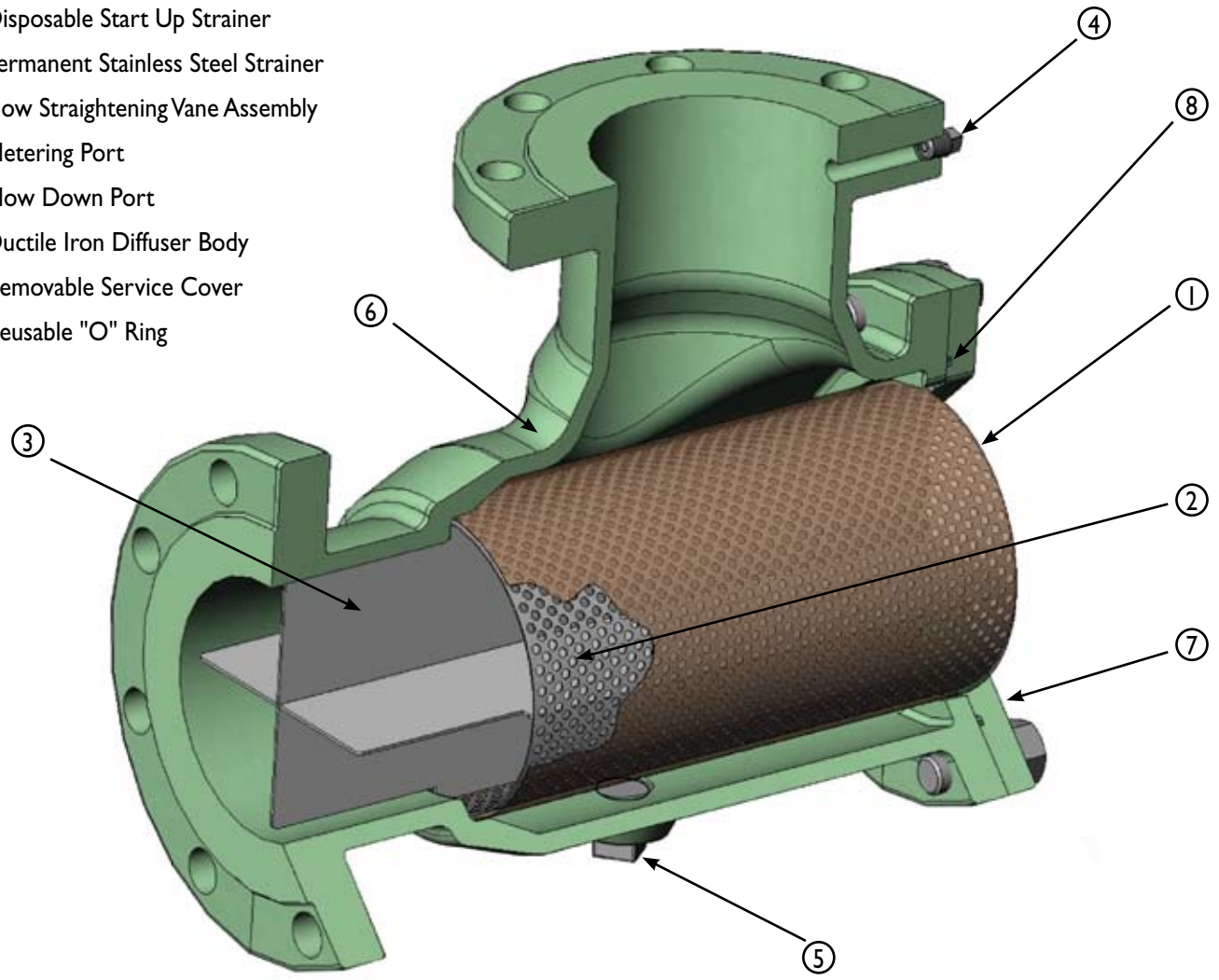
Suction Diffuser Rear Strainer Pullout (RSP)



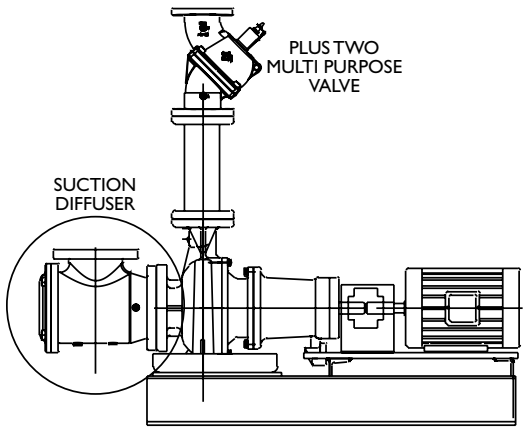
HYDRONIC COMPONENTS & SYSTEMS

Do it once.
Do it right.® 

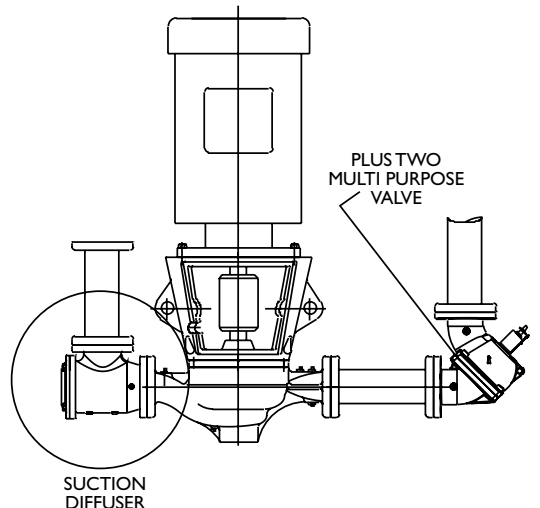
- ① Disposable Start Up Strainer
- ② Permanent Stainless Steel Strainer
- ③ Flow Straightening Vane Assembly
- ④ Metering Port
- ⑤ Blow Down Port
- ⑥ Ductile Iron Diffuser Body
- ⑦ Removable Service Cover
- ⑧ Reusable "O" Ring



Typical Installation



BASE MOUNTED SINGLE SUCTION PUMP



VERTICAL IN-LINE PUMP

Design

The Taco Suction Diffuser incorporates numerous features into one device that simplifies installations and reduces installation costs. It is a flow straightening device that provides maximum flow efficiency at the suction inlet of the pump while at the same time reducing space and fitting requirements and eliminating the need for an equivalent length of ten pipe diameters of straight run on the suction side of the pump. It is an elbow (and in some cases a reducing elbow) with a built in strainer that is easily maintained and will provide years of trouble free system performance.

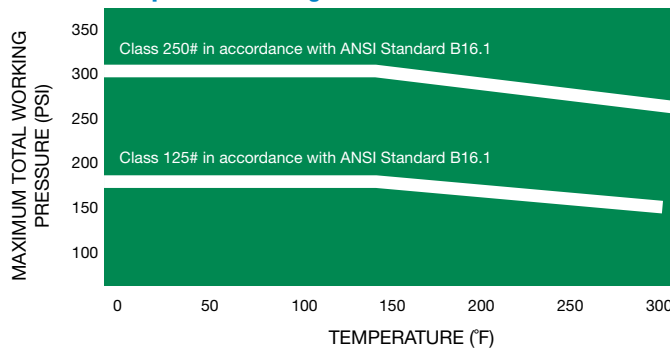
The Taco Suction Diffuser is available in a wide variety of sizes and in *125 psi or 250 psi working pressures with either flanged or grooved by flanged connections.

* See Pressure-Temperature Chart.

Features & Benefits

- Full Length Straightening Vane Assembly ensures uniform flow to the suction inlet of the pump
- Oversized Body Cylinder ensures minimal pressure drop
- Metering Port allows for the monitoring of system conditions
- Disposable Fine Mesh Start-Up Strainer promotes cleaner more trouble free system
- Removable Cover Plate and reusable "O" Ring allows for easy access and maintenance of Permanent Strainer
- Blow Down port allows for routine maintenance and removal of sediment and debris
- Ductile Iron Body on all units
- Optional Magnetic Insert to trap small metallic particles
- Available in *125 psi or 250 psi working pressures, with either Flanged by Flanged or Grooved by Flanged connections

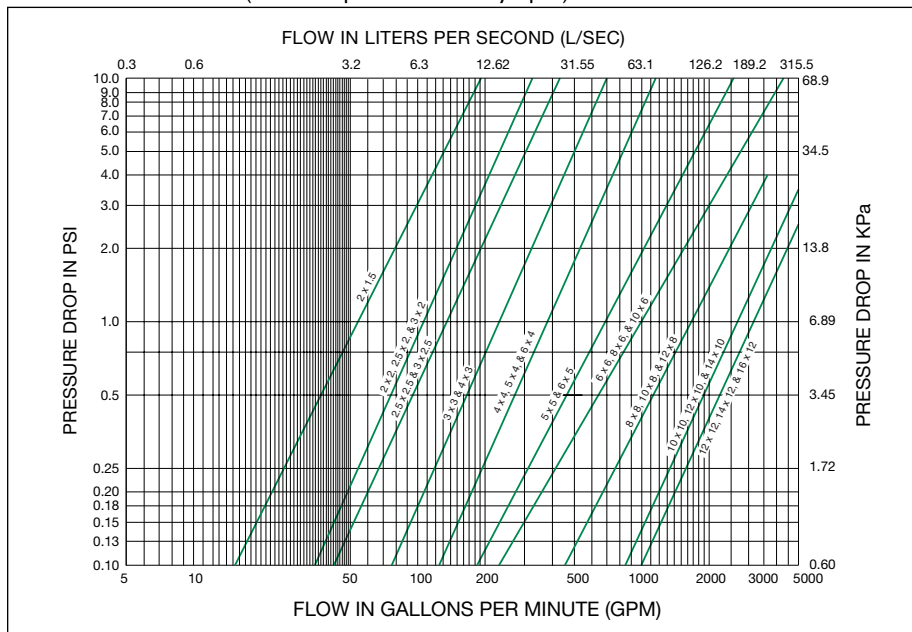
Pressure-Temperature Ratings



Materials of Construction

- Body: Ductile Iron
- Cover: Ductile Iron
- Straightening Vanes: Stainless Steel (304)
- Permanent Strainer: Stainless Steel (304)
- Disposable Start Up Strainer: Bronze (16 Mesh)
- Cover "O" Ring: EPDM

Pressure Loss Curve (Curves represent valve fully open)

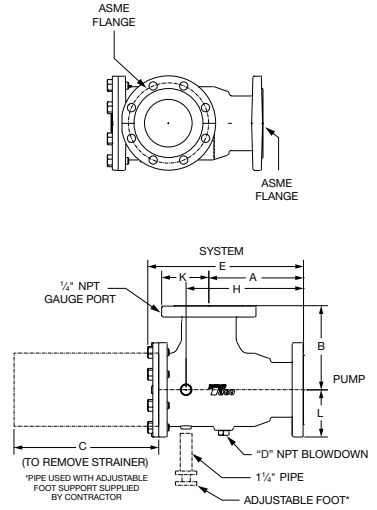


Submittal Data

Flanged – Suction Diffuser Rear Strainer Pullout (RSP)

Model Number	System	Pump	C _v	Free Area (sq. in.)	A (125#)	A (250#)	B	C	D	E	H	K (125#)	K (250#)	L (125#)	L (250#)	Weight (125#)	Weight (250#)
SD020015-4	2 Flanged	1 1/2 Flanged	54	21	5.69 (145)	6.06 (154)	5.39 (137)	8.49 (216)	3/4	9.25 (235)	6.92 (176)	3.00 (076)	3.25 (083)	2.50 (064)	3.06 (078)	22 (010)	27 (012)
SD020020-4	2 Flanged	2 Flanged	106	21	5.44 (138)	5.69 (145)	5.39 (137)	8.24 (209)	3/4	9.00 (229)	6.67 (169)	3.00 (076)	3.25 (083)	3.00 (076)	3.25 (083)	24 (011)	28 (013)
SD025020-4	2 1/2 Flanged	2 Flanged	98	21					3/4	9.00 (229)	6.67 (169)	3.00 (076)	3.25 (083)	3.00 (076)	3.25 (083)	27 (012)	35 (016)
SD030020-4	3 Flanged	2 Flanged	90	21	6.06 (154)	6.56 (167)	6.01 (153)	8.97 (228)	3/4	9.25 (235)	7.41 (188)	3.75 (095)	4.12 (105)	3.00 (076)	3.25 (083)	29 (013)	39 (018)
SD025025-4	2 1/2 Flanged	2 1/2 Flanged	135	24					3/4	9.25 (235)	7.41 (188)	3.50 (089)	3.75 (095)	3.50 (089)	3.75 (095)	38 (017)	54 (025)
SD030025-4	3 Flanged	3 Flanged	135	24	6.86 (174)	7.62 (194)	6.56 (167)	10.47 (266)	1	11.41 (290)	8.32 (211)	4.50 (114)	5.00 (127)	3.75 (095)	4.12 (105)	38 (017)	52 (024)
SD030030-4	3 Flanged	3 Flanged	220	35					1	11.41 (290)	8.32 (211)	4.50 (114)	5.00 (127)	3.75 (095)	4.12 (105)	50 (023)	66 (030)
SD040030-4	4 Flanged	3 Flanged	220	35	7.94 (202)	8.93 (227)	8.45 (215)	12.86 (327)	1	13.96 (355)	10.29 (261)	5.00 (127)	5.50 (140)	4.50 (114)	5.00 (127)	55 (025)	72 (033)
SD040040-4	4 Flanged	4 Flanged	380	64					1	13.96 (355)	10.29 (261)	5.00 (127)	5.50 (140)	4.50 (114)	5.00 (127)	73 (033)	91 (041)
SD050040-4	5 Flanged	4 Flanged	354	64	10.06 (256)	10.06 (256)	8.94 (227)	15.36 (390)	1	16.54 (420)	12.48 (317)	5.00 (127)	5.50 (140)	5.00 (127)	5.50 (140)	90 (041)	116 (053)
SD060040-4	6 Flanged	4 Flanged	345	64					1	16.54 (420)	12.48 (317)	5.00 (127)	5.50 (140)	5.00 (127)	5.50 (140)	96 (044)	127 (058)
SD050050-4	5 Flanged	5 Flanged	669	100	11.58 (294)	12.08 (307)	11.17 (284)	19.02 (483)	1	20.39 (518)	16.17 (411)	5.50 (140)	6.25 (159)	5.50 (140)	6.25 (159)	151 (069)	193 (088)
SD060050-4	6 Flanged	5 Flanged	646	100					1	20.39 (518)	16.17 (411)	5.50 (140)	6.25 (159)	5.00 (127)	5.50 (140)	170 (077)	215 (098)
SD060060-4	6 Flanged	6 Flanged	985	146	14.43 (367)	15.31 (389)	13.21 (336)	23.79 (604)	1	25.32 (643)	20.22 (514)	6.75 (171)	7.50 (191)	6.75 (171)	7.50 (191)	182 (083)	238 (108)
SD080060-4	8 Flanged	6 Flanged	950	146					1	25.32 (643)	20.22 (514)	6.75 (171)	7.50 (191)	6.75 (171)	7.50 (191)	271 (123)	319 (145)
SD100060-4	10 Flanged	8 Flanged	1567	248	18.36 (466)	19.61 (498)	14.54 (369)	29.40 (747)	1	31.10 (790)	25.64 (651)	8.00 (203)	8.75 (222)	8.00 (203)	8.75 (222)	400 (182)	482 (219)
SD120080-4	12 Flanged	8 Flanged	1542	248					1	31.10 (790)	25.64 (651)	8.00 (203)	8.75 (222)	8.00 (203)	8.75 (222)	420 (191)	518 (235)
SD100100-4	10 Flanged	10 Flanged	2650	394	20.39 (518)	22.64 (575)	16.62 (422)	33.72 (856)	1	35.50 (902)	29.83 (758)	11.50 (292)	12.75 (324)	11.50 (292)	12.75 (324)	617 (280)	786 (357)
SD120100-4	12 Flanged	10 Flanged	3000	570					1	35.50 (902)	29.83 (758)	11.50 (292)	12.75 (324)	9.50 (241)	10.25 (260)	651 (296)	802 (364)
SD140120-4	14 Flanged	12 Flanged	3000	570	11.75 (298)	12.75 (324)	9.50 (241)	10.25 (260)	1	11.75 (298)	12.75 (324)	9.50 (241)	10.25 (260)	9.50 (241)	10.25 (260)	651 (296)	802 (364)
SD160120-4	16 Flanged	12 Flanged	3000	570					1	11.75 (298)	12.75 (324)	9.50 (241)	10.25 (260)	9.50 (241)	10.25 (260)	651 (296)	802 (364)

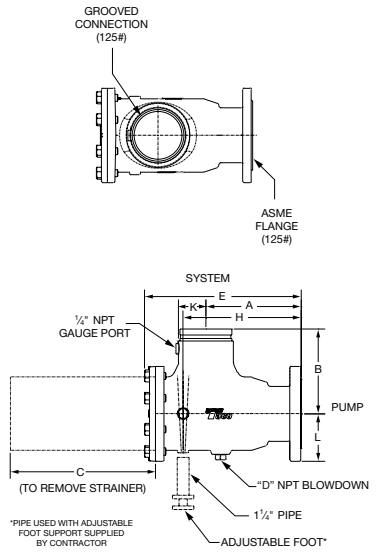
NOTE: Dimensions are in inches. Metric dimensions are in millimeters and are in parentheses (). Weights are in lb (kg).
 'C' is the distance required to replace strainer.
 Append 'A' for 250# working pressure (e.g. Model Number SD040030-4A).



Grooved – Suction Diffuser Rear Strainer Pullout (RSP)

Model Number	System	Pump	C _v	Free Area (sq. in.)	A (125#)	A (250#)	B	C	D	E	H	K (125#)	K (250#)	L (125#)	L (250#)	Weight (125#)	Weight (250#)
SDG020015-4	2 Grooved	1 1/2 Flanged	54	21	5.69 (145)	6.06 (154)	5.39 (137)	8.49 (216)	3/4	9.25 (235)	6.92 (176)	1.20 (030)	2.50 (064)	3.06 (078)	17 (008)	19 (009)	
SDG020020-4	2 Grooved	2 Flanged	106	21	5.44 (138)	5.69 (145)	5.39 (137)	8.24 (209)	3/4	9.00 (229)	6.67 (169)	1.20 (030)	3.00 (076)	3.25 (083)	19 (009)	21 (010)	
SDG025020-4	2 1/2 Grooved	2 Flanged	98	21					3/4	9.00 (229)	6.67 (169)	3.00 (076)	3.25 (083)	3.00 (076)	3.25 (083)	19 (009)	25 (011)
SDG030020-4	3 Grooved	2 Flanged	90	21	6.06 (154)	6.56 (167)	6.01 (153)	8.97 (228)	3/4	9.25 (235)	7.41 (188)	1.85 (047)	3.00 (076)	3.25 (083)	20 (009)	28 (013)	
SDG025025-4	2 1/2 Grooved	2 1/2 Flanged	135	24					3/4	9.25 (235)	7.41 (188)	1.85 (047)	3.50 (089)	3.75 (095)	29 (013)	35 (016)	
SDG030025-4	3 Grooved	2 1/2 Flanged	135	24	6.86 (174)	7.62 (194)	6.56 (167)	10.47 (266)	1	11.41 (290)	8.32 (211)	2.32 (059)	3.75 (095)	4.12 (105)	43 (020)	52 (024)	
SDG030030-4	3 Grooved	3 Flanged	220	35					1	11.41 (290)	8.32 (211)	2.32 (059)	3.75 (095)	4.12 (105)	43 (020)	52 (024)	
SDG040030-4	4 Grooved	3 Flanged	220	35	7.94 (202)	8.93 (227)	8.45 (215)	12.86 (327)	1	13.96 (355)	10.29 (261)	3.41 (087)	4.50 (114)	5.00 (127)	61 (028)	70 (032)	
SDG040040-4	4 Grooved	4 Flanged	380	64					1	13.96 (355)	10.29 (261)	3.41 (087)	4.50 (114)	5.00 (127)	61 (028)	74 (034)	
SDG050040-4	5 Grooved	4 Flanged	354	64	10.06 (256)	10.06 (256)	8.94 (227)	15.36 (390)	1	16.54 (420)	12.48 (317)	3.41 (087)	5.00 (127)	5.50 (140)	79 (036)	89 (040)	
SDG060040-4	6 Grooved	4 Flanged	345	64					1	16.54 (420)	12.48 (317)	3.41 (087)	5.00 (127)	5.50 (140)	79 (036)	97 (044)	
SDG050050-4	5 Grooved	5 Flanged	669	100	11.58 (294)	12.08 (307)	11.17 (284)	19.02 (483)	1	20.39 (518)	16.17 (411)	3.41 (087)	5.50 (140)	6.25 (159)	134 (061)	152 (069)	
SDG060050-4	6 Grooved	5 Flanged	646	100					1	20.39 (518)	16.17 (411)	3.41 (087)	5.50 (140)	6.25 (159)	144 (065)	185 (084)	
SDG060060-4	6 Grooved	6 Flanged	985	146	14.43 (367)	15.31 (389)	13.21 (336)	23.79 (604)	1	25.32 (643)	20.22 (514)	4.50 (114)	5.50 (140)	6.25 (159)	244 (111)	270 (123)	
SDG080060-4	8 Grooved	6 Flanged	950	146					1	25.32 (643)	20.22 (514)	4.50 (114)	5.50 (140)	6.25 (159)	246 (112)	287 (130)	
SDG100060-4	10 Grooved	6 Flanged	950	146	18.36 (466)	19.61 (498)	14.54 (369)	29.40 (747)	1	31.10 (790)	25.64 (651)	5.50 (140)	6.50 (165)	6.75 (171)	250 (114)	307 (139)	
SDG120080-4	12 Grooved	8 Flanged	1542	248					1	31.10 (790)	25.64 (651)	6.50 (165)	6.75 (171)	7.50 (191)	250 (114)	307 (139)	
SDG100100-4	10 Grooved	10 Flanged	2650	394	20.39 (518)	22.64 (575)	16.62 (422)	33.72 (856)	1	35.50 (902)	29.83 (758)	6.50 (165)	8.00 (203)	8.75 (222)	372 (169)	447 (203)	
SDG120100-4	12 Grooved	10 Flanged	3000	570					1	35.50 (902)	29.83 (758)	6.50 (165)	8.00 (203)	8.75 (222)	372 (169)	447 (203)	
SDG140120-4	14 Grooved	12 Flanged	3000	570	11.75 (298)	12.75 (324)	9.50 (241)	10.25 (260)	1	11.75 (298)	12.75 (324)	9.50 (241)	10.25 (260)	9.50 (241)	10.25 (260)	617 (280)	786 (357)
SDG160120-4	16 Grooved	12 Flanged	3000	570					1	11.75 (298)	12.75 (324)	9.50 (241)	10.25 (260)	9.50 (241)	10.25 (260)	651 (296)	802 (364)

NOTE: Dimensions are in inches. Metric dimensions are in millimeters and are in parentheses (). Weights are in lb (kg).
 'C' is the distance required to replace strainer.
 Append 'A' for 250# working pressure (e.g. Model Number SDG040030-4A).



HYDRONIC COMPONENTS & SYSTEMS

