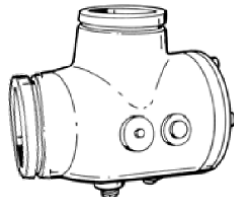
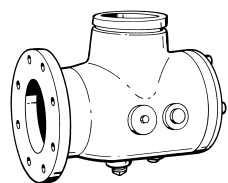


<b>JOB:</b>	<b>REPRESENTATIVE:</b>	
<b>UNIT TAG:</b>	<b>ORDER NO.:</b>	<b>DATE:</b>
<b>ENGINEER:</b>	<b>SUBMITTED BY:</b>	<b>DATE:</b>
<b>CONTRACTOR:</b>	<b>APPROVED BY:</b>	<b>DATE:</b>



## B&G Suction Diffuser

For Mechanical Coupling Systems  
Centrifugal Pump Accessories

### DESCRIPTION

The Bell & Gossett Suction Diffuser for mechanical coupling systems including grooved system connection, flanged or grooved pump connection, and disposable start-up strainer, is designed for direct application to the pump suction. It provides ideal flow conditions for the pump providing NPSH requirements are met. The integral orifice cylinder has a free area equal to five times the cross section area of the pump suction opening and serves as a strainer protecting the pump.

### MATERIALS OF CONSTRUCTION

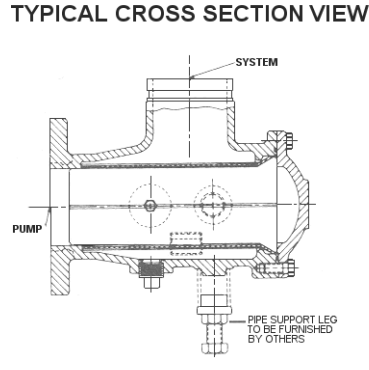
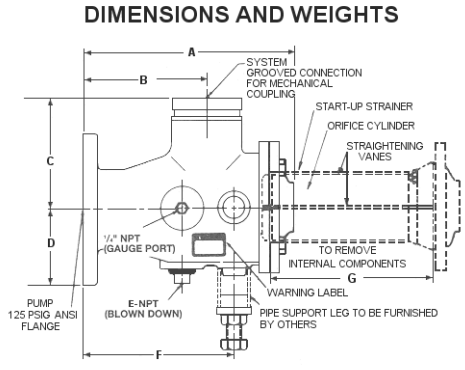
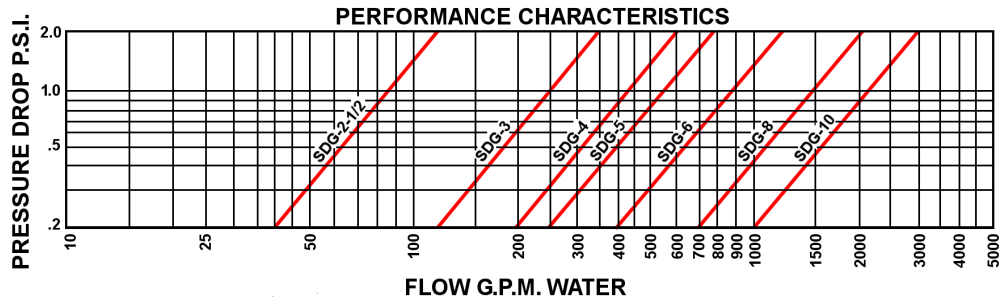
Body	Ductile Iron
Straightening Vanes	Stainless Steel
Orifice Cylinder	Stainless Steel
Start-Up Strainer	16 Mesh Bronze

### OPERATING DATA

Operating Temperature:	250°F (121°C)
Working Pressure:	Groove & Flange: 175 psi (1,207 kPa)
	Groove & Groove: 300 psi (2,068 kPa)

### SCHEDULE

MODEL NUMBER	PART #	DIMENSIONS INCHES (mm)		TAGGING INFORMATION	QUANTITY
		SYSTEM SIDE GROOVED	PUMP SIDE FLANGED		
SDG-2-1/2	115040	2-1/2 (63.5)	2-1/2 (63.5)		
SDG-3	115041	3 (76.2)	3 (76.2)		
SDG-4	115042	4 (101.6)	4 (101.6)		
SDG-5	115043	5 (127)	5 (127)		
SDG-6	115044	6 (152.4)	6 (152.4)		
SDG-8	115045	8 (203.2)	8 (203.2)		
SDG-10	115046	10 (254)	10 (254)		
SDG-3-300	115105	3 (76.2)	3 (76.2)		
SDG-4-300	115106	4 (101.6)	4 (101.6)		
SDG-5-300	115107	5 (127)	5 (127)		
SDG-6-300	115108	6 (152.4)	6 (152.4)		
SDG-8-300	115109	8 (203.2)	8 (203.2)		
SDG-10-300	115110	3 (254)	3 (254)		



**DIMENSIONS – INCHES (mm)**

Model No.	System Side	Pump Side	A	B	C	D	E	F	G	Orifice Cylinder Free Area in <sup>2</sup> (cm <sup>2</sup> )	Approx. Shpg. Wt. Lbs. (Kg)
SDG-2-1/2	2-1/2 (63.5)	2-1/2 (63.5)	9-13/16 (249)	5-9/16 (141)	4-3/4 (121)	3-1/2 (89)	3/4 (19)	6-7/16 (164)	11 (279)	26 (168)	29 (13)
SDG-3	3 (76.2)	3 (76.2)	10-13/16 (275)	6-5/16 (160)	5-1/2 (140)	3-3/4 (95)	1 (25)	7-11/16 (195)	12 (305)	37-1/2 (242)	40 (18)
SDG-4	4 (101.6)	4 (101.6)	13-1/2 (338)	7-3/8 (187)	6-1/2 (165)	4-1/2 (114)	1 (25)	8-1/2 (216)	14 (356)	65 (419)	59 (27)
SDG-5	5 (127)	5 (127)	15-1/8 (384)	8-3/8 (213)	7-1/2 (191)	5 (127)	1-1/4 (32)	9-7/8 (251)	15 (381)	90 (581)	85 (39)
SDG-6	6 (152.4)	6 (152.4)	17-3/8 (441)	9 (229)	8 (203)	5-1/2 (140)	1-1/4 (32)	11-1/8 (283)	17 (432)	127 (819)	115 (52)
SDG-8	8 (203.2)	8 (203.2)	21-3/4 (544)	10-1/4 (260)	9 (229)	6-3/4 (171)	1-1/4 (32)	12-1/4 (311)	21 (533)	218 (1406)	220 (100)
SDG-10	10 (254)	10 (254)	26-5/8 (679)	12-3/8 (314)	11 (279)	8 (203)	1-1/4 (32)	14-7/8 (378)	25 (635)	338 (2180)	372 (165)

Dimensions are subject to change. Not to be used for construction purposes unless certified.

**TYPICAL SPECIFICATIONS**

Provide at each pump a Suction Diffuser for mechanical coupling systems of the sized noted on drawings. Units shall consist of angle type body, grooved system connection, flanged pump connection, stainless steel inlet vanes and combination Diffuser-Strainer-Orifice Cylinder with 3/16 diameter openings for pump protection. The orifice cylinder shall be equipped with a disposable fine mesh strainer which shall be removed after system start-up.

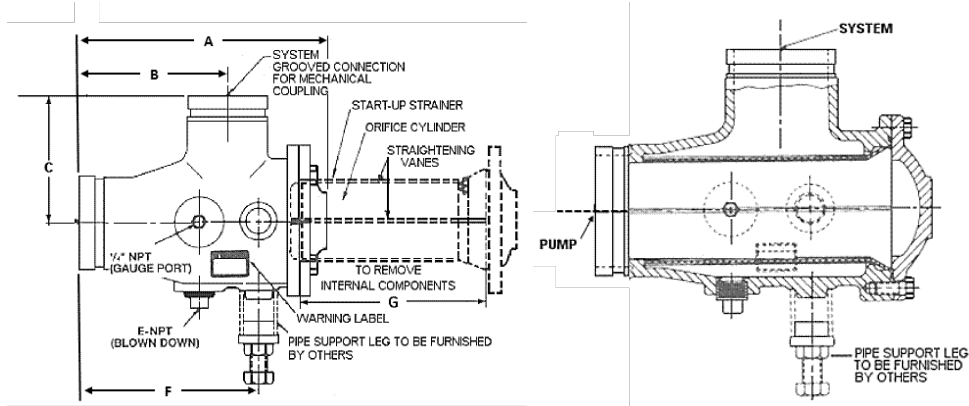
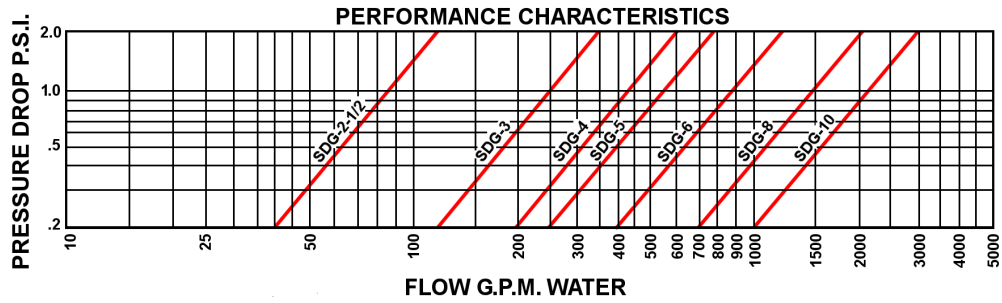
Orifice cylinder shall be designed to withstand pressure differential equal to pump shut-off head (maximum \_\_\_\_\_ PSI) and shall have a free area equal to five times cross section area of pump suction opening. Vane length shall be no less than 2-1/2 times the pump connection diameter. Unit shall be provided with adjustable support foot to carry the weight of suction piping.

Each Suction Diffuser to be Xylem Bell & Gossett Model No. SDG-\_\_\_\_\_.

Xylem Inc.  
8200 N. Austin Avenue  
Morton Grove, IL 60053  
Phone: (847)966-3700  
Fax: (847)965-8379  
www.bellgossett.com



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**DIMENSIONS – INCHES (mm)**

Model No.	System Side	Pump Side	A	B	C	E	F	G	Orifice Cylinder Free Area in <sup>2</sup> (cm <sup>2</sup> )	Approx. Shpg. Wt. Lbs. (Kg)
SDG-3-300	3 (76.2)	3 (76.2)	10-13/16 (275)	6-5/16 (160)	5-1/2 (140)	1 (25)	7-11/16 (195)	12 (305)	37-1/2 (242)	40 (18)
SDG-4-300	4 (101.6)	4 (101.6)	13-1/2 (338)	7-3/8 (187)	6-1/2 (165)	1 (25)	8-1/2 (216)	14 (356)	65 (419)	59 (27)
SDG-5-300	5 (127)	5 (127)	15-1/8 (384)	8-3/8 (213)	7-1/2 (191)	1-1/4 (32)	9-7/8 (251)	15 (381)	90 (581)	85 (39)
SDG-6-300	6 (152.4)	6 (152.4)	17-3/8 (441)	9 (229)	8 (203)	1-1/4 (32)	11-1/8 (283)	17 (432)	127 (819)	115 (52)
SDG-8-300	8 (203.2)	8 (203.2)	21-3/4 (544)	10-1/4 (260)	9 (229)	1-1/4 (32)	12-1/4 (311)	21 (533)	218 (1406)	220 (100)
SDG-10-300	10 (254)	10 (254)	26-5/8 (679)	12-3/8 (314)	11 (279)	1-1/4 (32)	14-7/8 (378)	25 (635)	338 (2180)	372 (165)

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Orifice cylinder shall be designed to withstand pressure differential equal to pump shut-off head (maximum \_\_\_\_\_ PSI) and shall have a free area equal to five times cross section area of pump suction opening. Vane length shall be no less than 2-1/2 times the pump connection diameter. Unit shall be provided with adjustable support foot to carry the weight of suction piping.

Each Suction Diffuser to be Xylem Bell & Gossett Model No. SDG-\_\_\_\_\_-300.

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