

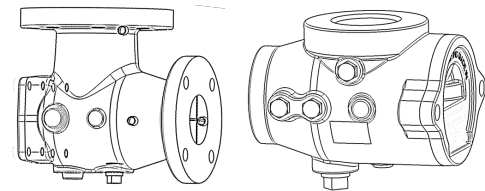
JOB: 103 Church Street - Nanuet - BUY

REPRESENTATIVE: Wallace Eannace Associates, Inc

UNIT TAG:
ENGINEER: Sage Engineering

CONTRACTOR:
ORDER NO.
SUBMITTED BY: Alex Curran

APPROVED BY:
DATE: 9/11/2023

DATE:
DATE:


B&G Suction Diffuser Plus

Centrifugal Pump Accessories

DESCRIPTION

The Bell & Gossett Suction Diffuser Plus is designed for direct application to the pump suction and provides ideal flow conditions for the pump, providing NPSH requirements are met. Its integrated Flow Cone directs flow through the unit and into the pump suction while working with the full length straightening vanes to create a more uniform flow profile. The orifice cylinder has a free area equal to five times the cross section of the pump suction opening and serves as a coarse strainer to protect the pump from large sediment. The disposable start-up strainer helps to clean the system during the first 24-48 hours of operation before it is removed. Its optional pressure temperature ports allow you to verify that the start-up strainer has been removed without the need to take the unit apart.

OPERATING DATA

Operating Temperature: 250°F (121°C)

Working Pressure: 175 psi (1,207 kPa)

SCHEDULE

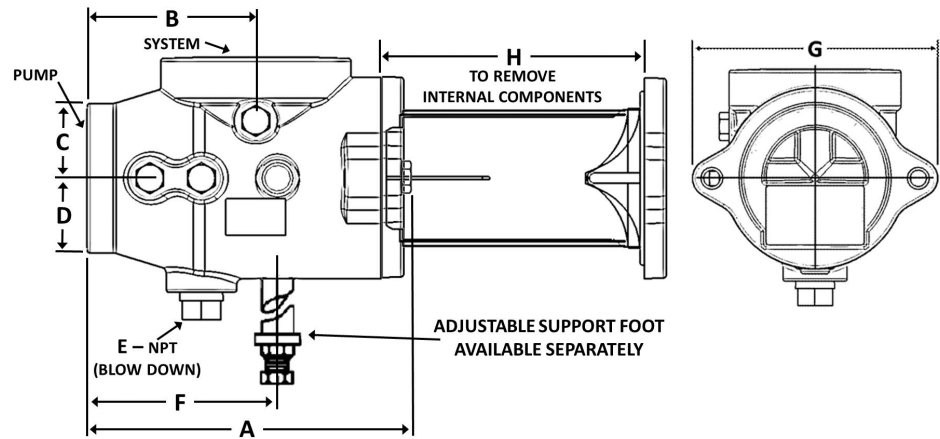
MODEL NUMBER	DIMENSIONS INCHES (mm)				TAGGING INFORMATION	X QUANTITY	Z QUANTITY
	SYSTEM SIDE		PUMP SIDE				
BA-3X/BA-3Z	2 (50.8)	FPT	1-1/2 (38.1)	FPT			
BB-3X/BB-3Z	2 (50.8)	FPT	2 (50.8)	FPT			
CB-3X/CB-3Z	2-1/2 (63.5)	FPT	2 (50.8)	FPT			
CC-3X/CC-3Z	2-1/2 (63.5)	FLG	2-1/2 (63.5)	FLG			
DA-3X/DA-3Z	3 (76.2)	FPT	1-1/2 (38.1)	FPT			
DB-3X/DB-3Z	3 (76.2)	FPT	2 (50.8)	FPT			
DC-3X/DC-3Z	3 (76.2)	FLG	2-1/2 (63.5)	FLG			
DD-3X/DD-3Z	3 (76.2)	FLG	3 (76.2)	FLG			
EC-3X/EC-3Z	4 (101.6)	FLG	2-1/2 (63.5)	FLG			
ED-3X/ED-3Z	4 (101.6)	FLG	3 (76.2)	FLG			
 EE-3X/EE-3Z	4 (101.6)	FLG	4 (101.6)	FLG	SD-P-3 & 4	2	
FE-3X/FE-3Z	5 (127)	FLG	4 (101.6)	FLG			
FF-3X/FF-3Z	5 (127)	FLG	5 (127)	FLG			
GE-3X/GE-3Z	6 (152.4)	FLG	4 (101.6)	FLG			
GF-3X/GF-3Z	6 (152.4)	FLG	5 (127)	FLG			
GG-3X/GG-3Z	6 (152.4)	FLG	6 (152.4)	FLG			
HG-3X/HG-3Z	8 (203.2)	FLG	6 (152.4)	FLG			
HH-3X/HH-3Z	8 (203.2)	FLG	8 (203.2)	FLG			
JH-3X/JH-3Z	10 (254)	FLG	8 (203.2)	FLG			
JJ-3X/JJ-3Z	10 (254)	FLG	10 (254)	FLG			

MATERIALS OF CONSTRUCTION

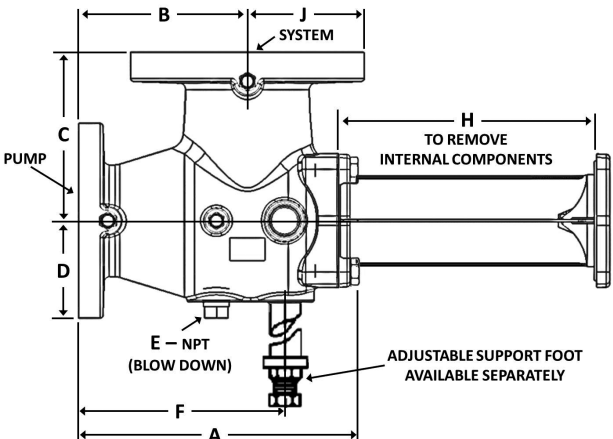
Type	Body	Inlet Vanes	Orifice Cylinder	Start-Up Strainer
X	Cast Iron	Steel		16 Mesh Bronze
Z	Cast Iron	Stainless Steel		16 Mesh Bronze

NOTES: Type X-For Closed Systems.

Type Z-For Domestic Water and Tower Systems.



Threaded x Threaded Models

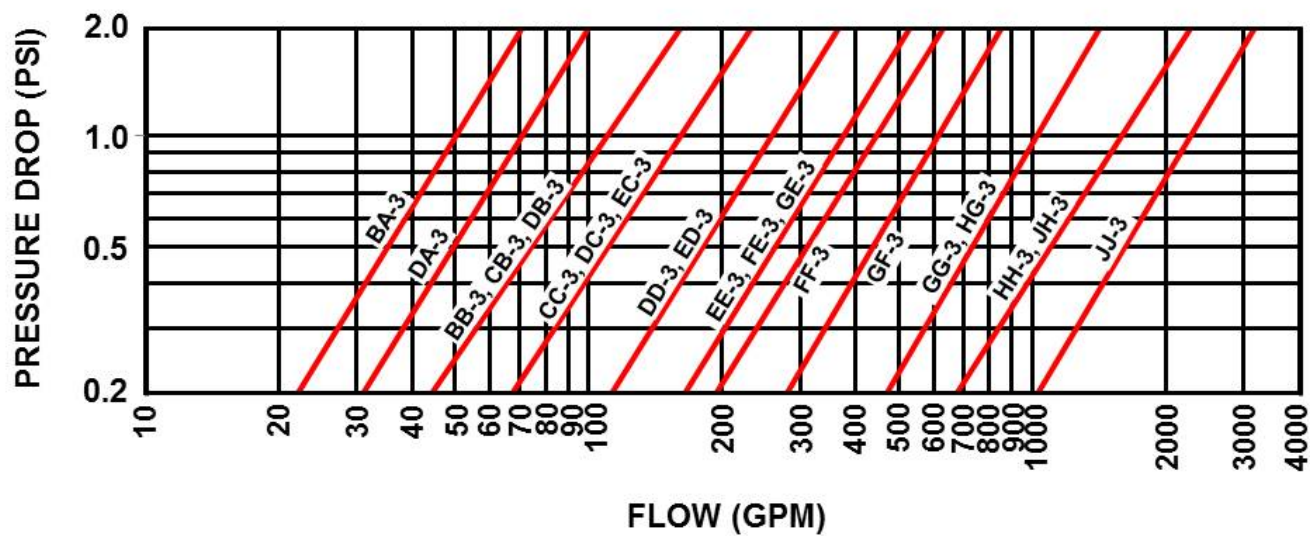


Flange x Flange Models

DIMENSIONS – INCHES (mm)

Model No.	System Side		Pump Side		A	B	C	D	E	F	G	H	J	Orifice Cylinder Free Area in ² (cm ²)	Approx. Shpg. Wt. Lbs. (Kg)
BA-3	2 (50.8)	T	1-1/2 (38.1)	T	5.96 (151)	3 (76)	2.25 (57)	2.37 (60)	3/4 (19)	3.81 (97)	5.25 (133)	5.15 (130.8)	N/A	11 (71)	13 (6)
BB-3	2 (50.8)	T	2 (50.8)	T	7.56 (192)	3.87 (98)	2.75 (70)	2.75 (70)	3/4 (19)	4.38 (111)	5.75 (146)	6.75 (171.5)	N/A	20-1/2 (132)	14 (6)
CB-3	2-1/2 (63.5)	T	2 (63.5)	T	7.56 (192)	3.87 (98)	2.75 (70)	2.75 (70)	3/4 (19)	4.38 (111)	5.75 (146)	6.75 (171.5)	N/A	20-1/2 (132)	16 (7)
CC-3	2-1/2 (63.5)	F	2-1/2 (63.5)	F	8.44 (214)	4.75 (121)	4.75 (121)	3.5 (89)	3/4 (19)	5.77 (147)	N/A	7.63 (193.7)	3.5 (89)	26 (168)	36 (16)
DA-3	3 (76.2)	T	1-1/2 (38.1)	T	7.44 (189)	3.87 (98)	2.75 (70)	2.75 (70)	3/4 (19)	4.38 (111)	5.75 (146)	6.63 (168.3)	N/A	20-1/2 (132)	17 (8)
DB-3	3 (76.2)	T	2 (50.8)	T	7.56 (192)	3.87 (98)	2.75 (70)	2.75 (70)	3/4 (19)	4.38 (111)	5.75 (146)	6.75 (171.5)	N/A	20-1/2 (132)	17 (8)
DC-3	3 (76.2)	F	2-1/2 (63.5)	F	8.75 (222)	5 (127)	5 (127)	3.50 (89)	3/4 (19)	5.77 (147)	N/A	7.63 (193.7)	3.75 (95)	26 (168)	44 (20)
DD-3	3 (76.2)	F	3 (76.2)	F	9.56 (243)	5.50 (140)	5.50 (140)	3.75 (95)	3/4 (19)	7.0 (178)	N/A	8.75 (222.3)	3.75 (95)	37-1/2 (242)	48 (22)
EC-3	4 (101.6)	F	2-1/2 (63.5)	F	11 (279)	6.50 (165)	6.50 (165)	3.50 (95)	3/4 (19)	5.77 (147)	N/A	7.63 (193.7)	4.50 (114)	26 (168)	42 (19)
ED-3	4 (101.6)	F	3 (76.2)	F	11 (279.4)	6.50 (165)	6.50 (165)	3.75 (95)	3/4 (19)	7.93 (201)	N/A	10 (254)	4.5 (114)	37-1/2 (242)	55 (25)
EE-3	4 (101.6)	F	4 (101.6)	F	11.5 (292)	6.50 (165)	6.50 (165)	4.50 (114)	3/4 (19)	7.87 (200)	N/A	10.69 (271.5)	4.50 (114)	65 (419)	72 (33)
FE-3	5 (127)	F	4 (101.6)	F	12.5 (318)	7.50 (191)	7.50 (191)	4.50 (114)	3/4 (19)	7.87 (200)	N/A	10.69 (271.5)	5 (127)	65 (419)	84 (38)
FF-3	5 (127)	F	5 (127)	F	13.67 (347)	7.50 (191)	7.50 (191)	5 (127)	3/4 (19)	10.44 (265)	N/A	12.84 (326.1)	5 (127)	90 (581)	100 (45)
GE-3	6 (152.4)	F	4 (101.6)	F	13.5 (343)	8 (203)	8 (203)	4.50 (114)	3/4 (19)	7.87 (200)	N/A	10.69 (271.5)	5.50 (140)	65 (419)	90 (41)
GF-3	6 (152.4)	F	5 (127)	F	15.67 (398)	8 (203)	8 (203)	5 (127)	3/4 (19)	10.46 (266)	N/A	13.84 (351.5)	5.50 (140)	90 (581)	105 (48)
GG-3	6 (152.4)	F	6 (152.4)	F	15.82 (402)	8 (203)	8 (203)	5.50 (140)	3/4 (19)	11 (279)	N/A	14.75 (374.7)	5.50 (140)	127 (819)	134 (61)
HG-3	8 (203.2)	F	6 (152.4)	F	15.82 (402)	9 (229)	9 (229)	5.50 (140)	3/4 (19)	11 (279)	N/A	14.75 (374.7)	6.75 (171)	127 (819)	150 (68)
HH-3	8 (203.2)	F	8 (203.2)	F	19.55 (497)	9 (229)	9 (229)	6.75 (171)	3/4 (19)	12.62 (321)	N/A	18.25 (463.6)	6.75 (171)	218 (1406)	250 (113)
JH-3	10 (254)	F	8 (203.2)	F	19.55 (497)	10 (254)	11 (279)	6.75 (171)	3/4 (19)	12.62 (321)	N/A	18.25 (463.6)	8 (203)	218 (1406)	290 (132)
JJ-3	10 (254)	F	10 (254)	F	22.80 (579)	11 (279)	11 (279)	8 (203)	3/4 (19)	15.68 (398)	N/A	21.50 (546.1)	8 (203)	338 (2180)	415 (188)

(T) Threaded - FPT (F) Flanged *Dimensions include orifice cylinder + 2-1/2 (64) inch clearance.
Dimensions are subject to change. Not to be used for construction purposes unless certified.



TYPICAL SPECIFICATIONS

Provide with each pump a Bell & Gossett Suction Diffuser Plus of the size noted on drawings. Units shall consist of angle type body, flanged system connection, integrated Flow Cone, carbon/stainless steel straightening vane and combination diffuser-strainer-orifice cylinder with 3/16" diameter openings for pump protection. The unit shall include a disposable fine mesh strainer which shall be removed after system start-up. Unit shall have pressure/temperature ports at the suction and discharge to allow for measurement of differential pressure across the unit.

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.

Unit shall be rated for 175 psi (1,207kPa) maximum working pressure and 250F (121C) maximum working temperature.