

725

725G Suction Diffuser (Groove x Groove)
725F Suction Diffuser (Fabricated)



725G

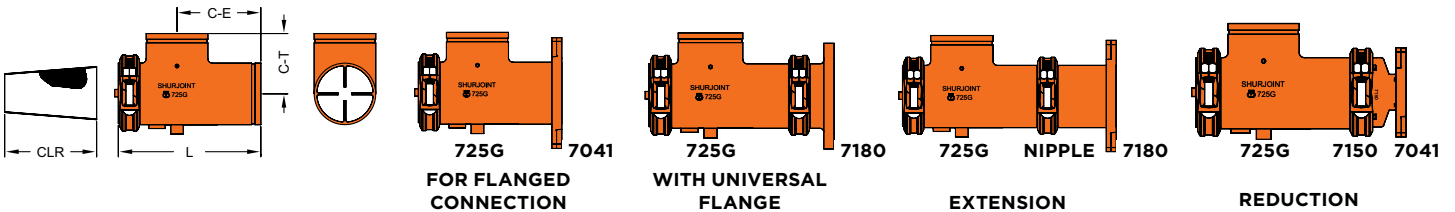
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The Model 725G Suction Diffuser features a space saving design, ductile iron body and integral vanes that effectively reduce turbulence and provide optimum flow conditions at the inlet side of the pump.

The suction diffuser's inlet is supplied with a grooved end to AWWA C606-04. The 725G can be connected directly to grooved end pump or to a flanged end pump if used in combination with a Model 7041 flange or a Model 7180 universal flange adapter.

If a distance adjustment is required a nipple adapter can be used between the pump and the suction diffuser. The 725G also allows for a reduction on the outlet when used in combination with a Model 7150 concentric reducer and a Model 7041 flange.

The Model 725G is supplied with a 304 stainless steel running strainer and a disposable fine mesh screen to protect the pump during start-up operation.



DIMENSIONS

NOMINAL SIZE		MAX. WORKING PRESSURE (CWP)*	DIMENSIONS				DRAIN	WEIGHT
SYSTEM SIDE	PUMP SIDE		L	C-E	CLR	C-T		
in	in	PSI	in	in	in	in	in	lb
mm	mm	Bar	mm	mm	mm	mm		kg
2	2	300	8.82	5.00	5.79	3.75	1/2	7.9
50	50	20	224	127	147	95	1/2	3.6
2-1/2	2-1/2	300	8.82	5.00	5.79	3.75	1/2	8.8
65	65	20	224	127	147	95	1	4.0
3	3	300	10.43	6.30	6.93	5.51	1	13.0
80	80	20	265	160	176	140	1	5.9
4	4	300	12.28	7.36	8.58	5.00	1	20.9
100	100	20	312	187	218	127	1	9.4
5	5	300	13.86	10.24	9.76	9.02	1	38.9
125	125	20	352	260	248	229	1	17.7
6	6	300	15.16	9.02	10.43	6.50	1	43.3
150	150	20	385	229	265	165	1	19.7
8	8	300	18.27	10.24	12.60	9.02	1-1/4	75.5
200	200	20	464	260	320	229	1-1/4	34.3
10	10	300	22.11	12.40	16.14	9.02	1-1/4	123.2
250	250	20	562	315	410	229	1-1/4	56.0
12	12	300	26.30	15.43	19.29	10.00	1-1/4	168.1
300	300	20	668	392	490	254	1-1/4	76.4

* Working pressure is based on connection with roll- or cut-grooved standard wall carbon steel pipe.

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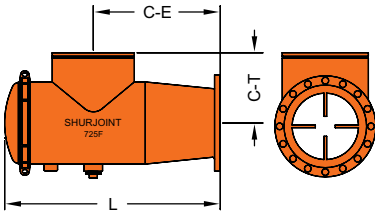
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Shurjoint offers large diameter suction diffusers with reduced outlet sizes that are made of segment welded steel. The factory standard #725F suction diffusers come with a grooved inlet and flanged outlet to ANSI Class 125 /150, PN10 or JIS 10K.

The Model 725G is supplied with a 304 stainless steel running strainer and a disposable fine mesh screen to protect the pump during start-up operation.



DIMENSIONS

SUCTION SIDE	PUMP SIDE	MAX. WORKING PRESSURE (CWP)*	DIMENSIONS				FLANGE DRILLING**	WEIGHT
			L	C-E	C-T	DRAIN		
in	in	PSI	in	in	in	in	lb	
mm	mm	bar	mm	mm	mm		kg	
14	10 12 14	300	35 35 38	24 24 26	14 14 16	1-1/2" NPT	420 444 532	
350	250 300 350	20	889 889 965	610 610 660	356 356 406		191 202 242	
16	12 14 16	300	38 38 42	26 26 28.5	16.5 16.5 17.5		2" NPT	510 532 686
400	300 350 400	20	965 965 1067	660 660 724	419 419 445	NSI Class 150 *		232 242 312
18	14 16 18	300	42 42 50	28.5 28.5 35	17.5 17.5 20	PN 10/16 *		673 686 893
450	350 400 450	20	1067 1067 1270	724 724 889	445 445 508	BS10 Table E	306 312 406	
20	16 18 20	300	50 50 53	35 35 36.5	20 20 23.5	2" NPT	862 893 1195	
500	400 450 500	20	1270 1270 1346	889 889 927	508 508 579		or JIS 10K	392 406 543
24	18 20 22	300	54 54 63	37 37 43.5	20.5 20.5 23.88		2" NPT	1217 1256 1494
600	450 500 550	20	1372 1372 1600	940 940 1105	521 521 606	2" NPT	553 571 679	

* Working pressure is based on connection with roll- or cut-grooved standard wall carbon steel pipe.

** When ordering, specify the desired flange drilling.

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FLOW DATA

Values for flow of water at +60°F (+16°C).

$$Cv = \frac{Q}{\sqrt{\Delta P}}$$

Where:

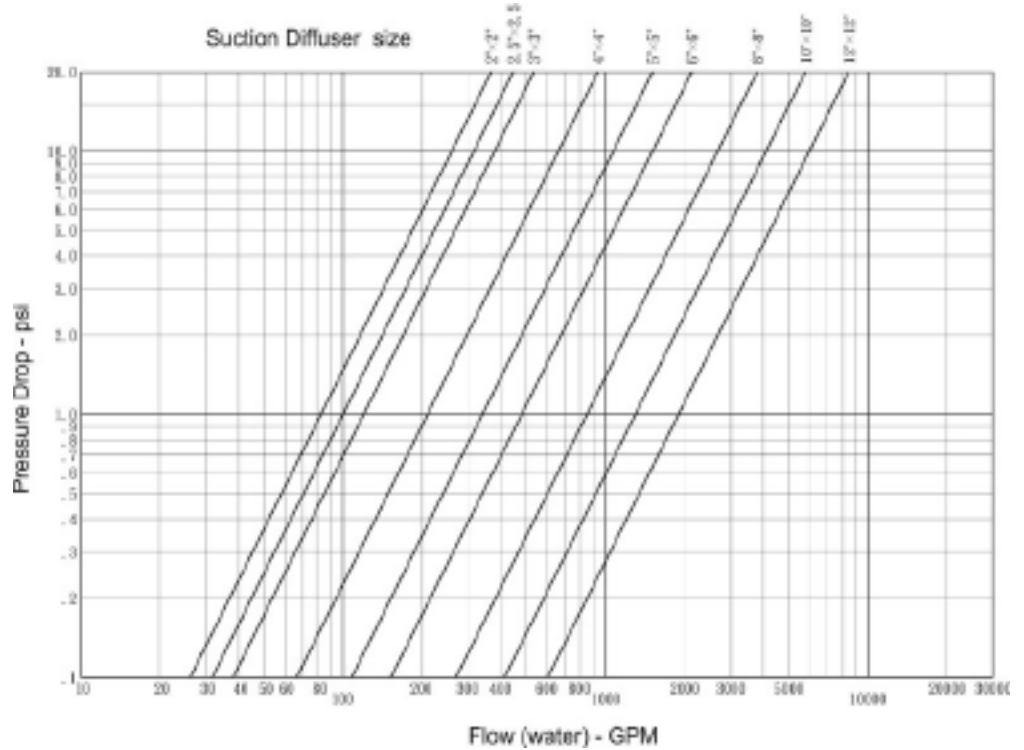
Cv = Flow coefficient

Q = Flow (GPM)

ΔP = Pressure drop (psi)

CV VALUES

VALVE SIZE	ACTUAL O.D.	CV VALUE
in	in	
mm	mm	
2 x 2	2.375	82
50 x 50	60.3	
2½ x 2½	2.875	100
65 x 65	73	
3 x 3	3.5	120
80 x 80	88.9	
4 x 4	4.5	210
100 x 100	114.3	
5 x 5	5.563	340
125 x 125	141.3	
6 x 6	6.625	480
150 x 150	168.3	
8 x 8	8.625	850
200 x 200	219.1	
10 x 10	10.75	1300
250 x 250	273	
12 x 12	12.75	1900
300 x 300	323.9	



MATERIAL SPECIFICATIONS

BODY:

- Ductile Iron to ASTM A536, Gr. 65-45-12 and or to ASTM A395, Gr. 65-45-15, or segment welded steel to ASTM A53 and/or A204.

END CAP & COUPLING SEGMENTS:

- Ductile Iron to ASTM A536, Gr. 65-45-12.

SURFACE FINISH:

- Standard painted finishes in orange
- Epoxy coatings in black (optional)

RUBBER GASKET:

Grade "E" EPDM (Color code: Green stripe)

- Good for cold & hot water up to +230°F (+110°C). Also good for services for water with acid, water with chlorine, deionized water, seawater and waste water, dilute acids, oil-free air and many chemicals.
- **Not recommended for petroleum oils, minerals oils, solvents and aromatic hydrocarbons.**
- Maximum Temperature Range: -30°F (-34°C) to +230°F (+110°C).

(Option) Grade "T" Nitrile (Color code: Orange stripe)

- Recommended for petroleum products, air with oil vapors, vegetable and mineral oils.
- Temperature range: -20°F to +180°F (-29°C to +82°C)
- **Do not use for HOT WATER above +150°F (+66°C) or HOT DRY AIR above +140°F (+60°C).**

OTHER OPTIONS

Grade "O" - Fluoroelastomer

Grade "L" - Silicone

Grade "E-pw" - Potable water use

BOLTS & NUTS:

- Heat treated carbon manganese steel track bolts to ASTM A449-83a (or A183 Gr. 2), minimum tensile strength 110,000 psi (758 MPa), Zinc electroplated, with heavy-duty hexagonal nuts to ASTM A563.

SCREEN:

- Stainless steel Type 304 to ASTM A240. Factory's standard screen perforation is 1/8" (3.2 mm). Other perforations are available upon request.

START-UP SCREEN:

- Stainless steel Type 304, 20 mesh screen.

GENERAL NOTES

- Maximum Working Pressure (CWP) listed is the maximum cold water pressure for general piping services tested to ASTM F1476 and or AWWA C606 methods. Figures listed are based on roll- or cut-grooved standard wall carbon steel pipe. For other pipe schedules or pipe materials, contact Shurjoint for additional information.
- Max. End Load is calculated based on the maximum working pressure (CWP).
- Field Joint Test: For one time only the system may be tested hydrostatically at 1.5 times the maximum working pressure listed (AWWA C606 5.2.3).
- Warning: Piping systems must always be depressurized and drained before attempting disassembly and or removal of any components.
- The 10 Year Limited Warranty applies to manufacturing defects only and does not cover severe service/temperature applications or wear parts.
- Shurjoint reserves the right to change specifications, designs and or standard without notice and without incurring any obligations.