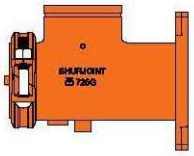
MODEL 725G SUCTION DIFFUSER (Ductile Iron Body)

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.

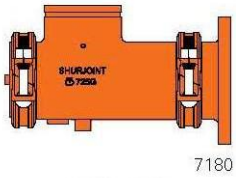
The suction diffuser's inlet is supplied with a grooved end to AWWA C606-04. The 725G can be connected directly to grooved end pump or to a flanged end pump if used in combination with a Model 7041 flange or a Model 7180 universal flange adapter.

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.

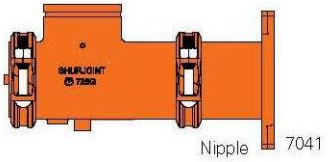
The Model 725G is supplied with a 304 stainless steel running strainer and a disposable fine mesh screen to protect the pump during start-up operation.



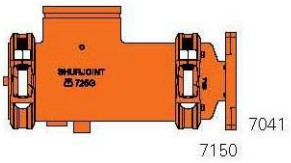
725G + 7041
For Flanged Connection



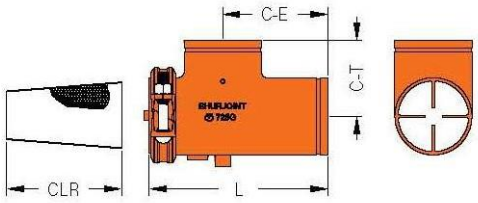
725G + 7180
With a Universal Flange



725G + Nipple + 7041
Extension



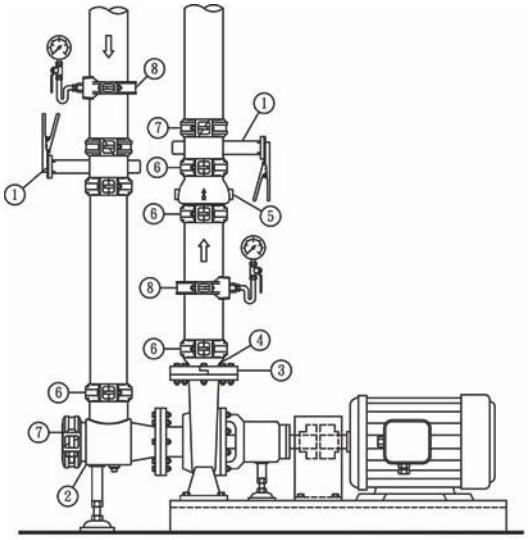
725G + 7150 + 7041
Reduction



Model 725G Suction Diffuser

Nominal Size System Side X Pump Side	Max. Working Pressure (CWP)*	Dimensions L	C-E	CLR	C-T	Drain	Weight
in *mm*	PSI *Bar*	in *mm*	in *mm*	in *mm*	in *mm*	in	Lbs *Kgs*
2 x 2 *50 x 50*	300 *20*	8.82 *224*	5.00 *127*	5.79 *147*	3.75 *95*	½	7.9 *3.6*
2½ x 2½ *65 x 65*	300 *20*	8.82 *224*	5.00 *127*	5.79 *147*	3.75 *95*	½	8.8 *4.0*
3 x 3 *80 x 80*	300 *20*	10.43 *265*	6.30 *160*	6.93 *176*	5.51 *140*	1	13.0 *5.9*
4 x 4 *100 x 100*	300 *20*	12.28 *312*	7.36 *187*	8.58 *218*	5.00 *127*	1	20.9 *9.4*
5 x 5 *125 x 125*	300 *20*	13.86 *352*	10.24 *260*	9.76 *248*	9.02 *229*	1	38.9 *17.7*
6 x 6 *150 x 150*	300 *20*	15.16 *385*	9.02 *229*	10.43 *265*	6.50 *165*	1	43.3 *19.7*
8 x 8 *200 x 200*	300 *20*	18.27 *464*	10.24 *260*	12.60 *320*	9.02 *229*	1¼	75.5 *34.3*
10 x 10 *250 x 250*	300 *20*	22.11 *562*	12.40 *315*	16.14 *410*	9.02 *229*	1¼	123.2 *56.0*
12 x 12 *300 x 300*	300 *20*	26.30 *668*	15.43 *392*	19.29 *490*	10.00 *254*	1¼	168.1 *76.4*

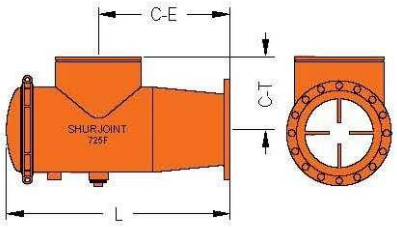
* Working pressure is based on connection with roll- or cut-grooved standard wall carbon steel pipe.



1. SJ-300N Butterfly Valve
2. 725G Suction Diffuser
3. 7041 Flange Adapter
4. 7150 Concentric Reducer
5. SJ-915 Dual Disc Check Valve
6. 7707 Flexible Coupling
7. Z07 Rigid Coupling
8. 7721 Mechanical Tee with Pressure Gage

MODEL 725F SUCTION DIFFUSER (Fabricated)

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.



Model 725F Suction Diffuser (Fabricated)

Nominal Size		Max. Working Pressure (CWP)*	Dimensions				Flange Drilling #	Weight
Suction Side	Pump Side		L	C-E	C-T	Drain		
in *mm*	in *mm*	PSI *Bar*	in *mm*	in *mm*	in *mm*	in		Lbs *Kgs*
14 *350*	10 *250*	300 *20*	35.00 *889*	24.00 *610*	14.00 *356*	1½" NPT	NSI Class 150 * PN 10/16 * BS10 Table E Or JIS 10K	420 *191*
	12 *300*	300 *20*	35.00 *889*	24.00 *610*	14.00 *356*			444 *202*
	14 *350*	300 *20*	38.00 *965*	26.00 *660*	16.00 *406*			532 *242*
16 *400*	12 *300*	300 *20*	38.00 *965*	26.00 *660*	16.50 *419*	2" NPT		510 *232*
	14 *350*	300 *20*	38.00 *965*	26.00 *660*	16.50 *419*			532 *242*
	16 *400*	300 *20*	42.00 *1067*	28.50 *724*	17.50 *445*			686 *312*
18 *450*	14 *350*	300 *20*	42.00 *1067*	28.50 *724*	17.50 *445*	2" NPT		673 *306*
	16 *400*	300 *20*	42.00 *1067*	28.50 *724*	17.50 *445*			686 *312*
	18 *450*	300 *20*	50.00 *1270*	35.00 *889*	20.00 *508*			893 *406*
20 *500*	16 *400*	300 *20*	50.00 *1270*	35.00 *889*	20.00 *508*	2" NPT		862 *392*
	18 *450*	300 *20*	50.00 *1270*	35.00 *889*	20.00 *508*			893 *406*
	20 *500*	300 *20*	53.00 *1346*	36.50 *927*	23.50 *597*			1195 *543*

Model 725F Suction Diffuser (Fabricated)

Nominal Size		Max. Working Pressure (CWP)*	Dimensions				Flange Drilling #	Weight
Suction Side	Pump Side		L	C-E	C-T	Drain		
in *mm*	in *mm*	PSI *Bar*	in *mm*	in *mm*	in *mm*	in		Lbs *Kgs*
24 *600*	18 *450*	300 *20*	54.00 *1372*	37.00 *940*	20.50 *521*	2" NPT		1217 *553*
	20 *500*	300 *20*	54.00 *1372*	37.00 *940*	20.50 *521*			1256 *571*
	22 *550*	300 *20*	63.00 *1600*	43.50 *1105*	23.88 *606*			1494 *679*

* Working pressure is based on connection with roll- or cut-grooved standard wall carbon steel pipe.
# When ordering, specify the desired flange drilling.

Flow Data – C_v Values

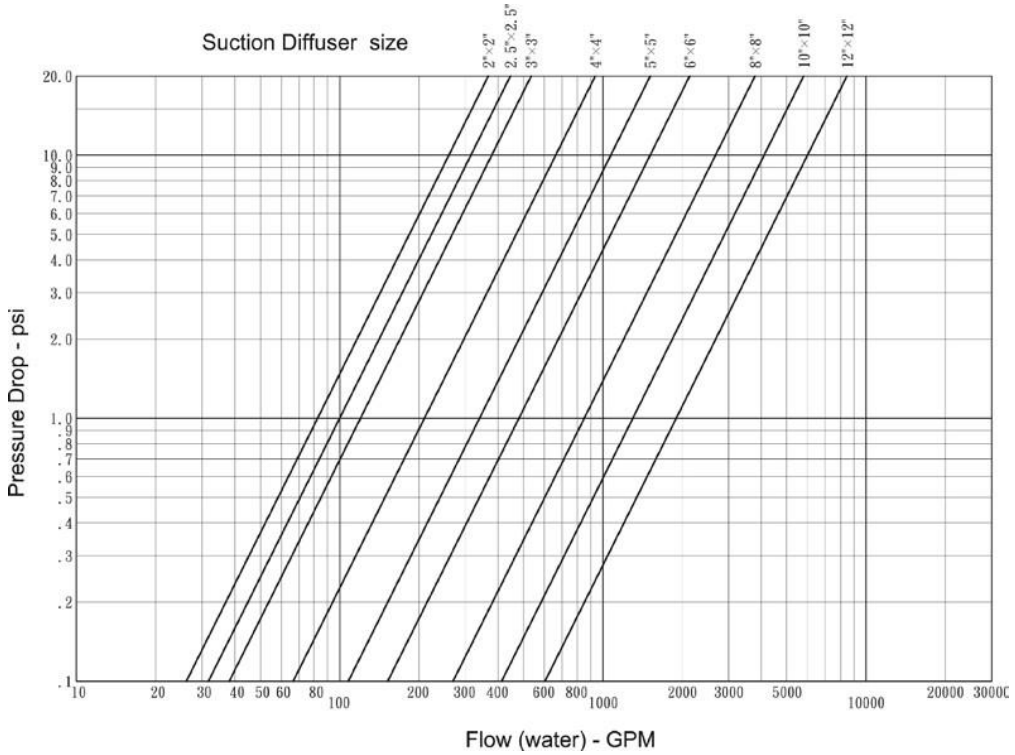
Values for flow of water at +60°F (+16°C).

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

Where: C_v = Flow coefficient
Q = Flow (GPM)
ΔP = Pressure drop (psi)

Model 725G Suction Diffuser

Valve Size	Actual O.D.	Cv Value	Valve Size	Actual O.D.	Cv Value
in *mm*	in *mm*		in *mm*	in *mm*	
2 x 2 *50 x 50*	2.375 *60.3*	82	8 x 8 *200 x 200*	8.625 *219.1*	850
2½ x 2½ *65 x 65*	2.875 *73.0*	100	10 x 10 *250 x 250*	10.750 *273.0*	1300
3 x 3 *80 x 80*	3.500 *88.9*	120	12 x 12 *300 x 300*	12.750 *323.9*	1900
4 x 4 *100 x 100*	4.500 *114.3*	210			
5 x 5 *125 x 125*	5.563 *141.3*	340			
6 x 6 *150 x 150*	6.625 *168.3*	480			



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:

Orange color painted.

☐ Epoxy coated in black.

• 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 or chloramines, 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)*.
*EPDM gaskets for water services are not recommended for steam services unless couplings or components are accessible for frequent gasket replacement.

☐ **Grade "T" Nitrile** (Color code: Orange stripe) (Option) Recommended for petroleum products, vegetable oils, mineral oils and air with oil vapors. Temperature range: -20°F to +180°F (-29°C to +82°C). Also good for water services under +150°F (+66°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" Fluoro-Elastomer, Grade "L" Silicone, Potable water use Grade "E-pw" gaskets, etc. are also available upon request.

• 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 ⅛" (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.
- ***Field Joint Test:*** For one time only the system may be tested hydrostatically at 1½ 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.
- ***Shurjoint*** reserves the right to change specifications, designs and or standard without notice and without incurring any obligations.

Shurjoint *product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact* ***Shurjoint*** *Technical Service.* ***Shurjoint*** *reserves the right to change or modify product design, construction, specifications, or materials without prior notice and without incurring any obligations to make such changes and modifications on* ***Shurjoint*** *products previously subsequently sold.*