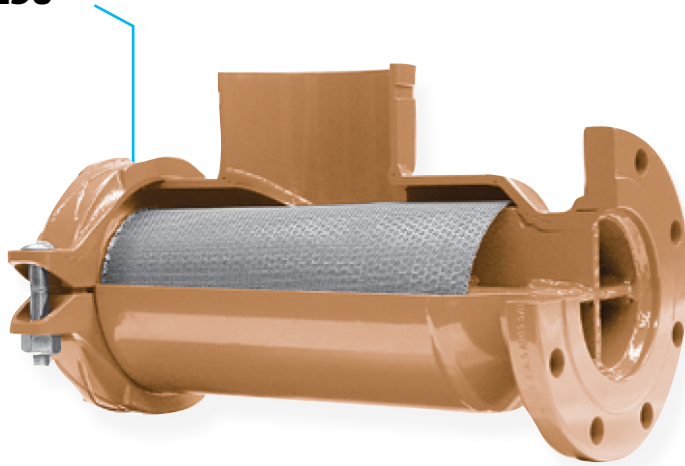


Suction Diffuser Fig. 7250



The Fig. 7250 Gruvlok Suction Diffuser protects your pump and saves you money on your overall installed cost while offering you these advantages:

Saves Space: Mounts directly to the pump. Length is ideal for header spacing, reducing the need for additional fittings.

Saves Labor & Material: The lightweight compact design is easily installed with no need for welding.

Improves Pump Performance: The one-piece diffuser vane and strainer design reduces flow turbulence, streamlines the flow, and traps any hazardous foreign material to better protect your pump.

Pipe Support Lug Standard

Material Specifications

Bolts: SAE J429, Grade 5, Zinc Electroplated ISO 898-1, Class 8.8, Zinc Electroplated followed by a Yellow Chromate Dip.

Heavy Hex Nuts: ASTM A563, Grade A, Zinc Electroplated ISO 898-2, Class 8.8, Zinc Electroplated followed by a Yellow Chromate Dip.

Stainless Steel Bolts & Nuts: Stainless steel bolts and nuts are also available. Contact an ASC Representative for more information.

Housing:

Sizes 2½" x 2½" through 10" x 8": Carbon steel Schedule 40 conforming to ASTM A 53, Grade B.
 Sizes 10" x 10" through 16" x 14": Carbon steel .375" standard weight wall conforming to ASTM A 53, Grade B.

Diffuser Basket:

Stainless steel type 304, #16 perforated plate with 3/16" diameter holes. (51% open area).
 Pre-Filter: Stainless steel type 304 screen - 16 mesh. (removable).

Material Specifications (cont.)

Couplings: Ductile Iron conforming to ASTM A 536, Grade 65-45-12.

Flanges: Carbon steel class 150# conforming to ASME B 16.5.

Drain and Cage Plugs: Carbon steel square head plugs conforming to ASME B16.11.

Coatings: Rust inhibiting paint Color: ORANGE (standard).

Gaskets: Materials

Properties as designated in accordance with ASTM D 2000.

Grade "E" EPDM (Green color code)
 -40°F to 230°F (Service Temperature Range)
 (-40°C to 110°C) Recommended for water service, diluted acids, alkalies solutions, oil-free air and many other chemical services.

NOT FOR USE IN PETROLEUM APPLICATIONS.

Grade "EP" EPDM (Green and Red color code)
 -40°F to 250°F (Service Temperature Range)
 (-40°C to 121°C) Recommended for water service, diluted acids, alkalies solutions, oil-free air and many other chemical services.

NOT FOR USE IN PETROLEUM APPLICATIONS.

For hot water applications the use of Gruvlok Extreme Temperature lubricant is recommended. NSF-61 Certified for cold and hot water applications up through 12".

Grade "T" Nitrile (Orange color code)
 -20°F to 180°F (Service Temperature Range)
 (-29°C to 82°C).

Recommended for petroleum applications air with oil vapors and vegetable and mineral oils.

NOT FOR USE IN HOT WATER OR HOT AIR.



PROJECT INFORMATION	APPROVAL STAMP
Project:	Approved
Address:	Approved as noted
Contractor:	Not approved
Engineer:	Remarks:
Submittal Date:	
Notes 1:	
Notes 2:	

Suction Diffuser Fig. 7250

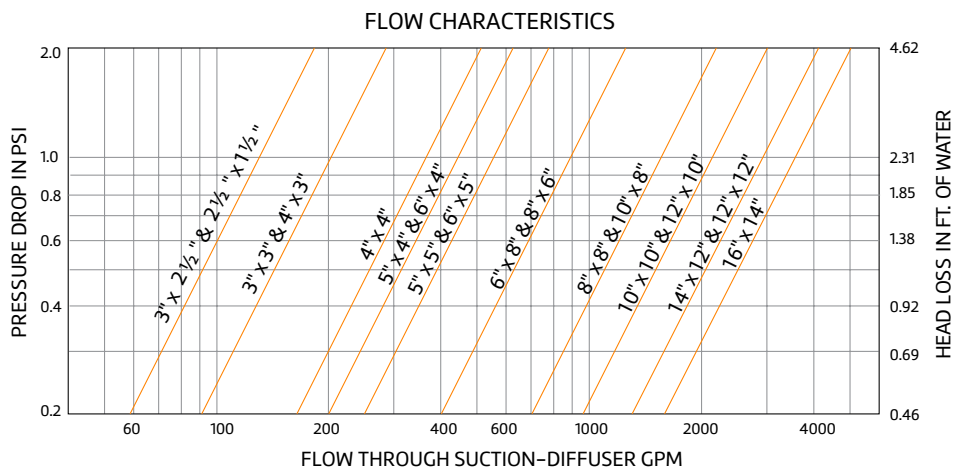
Flow Data

Note 1:

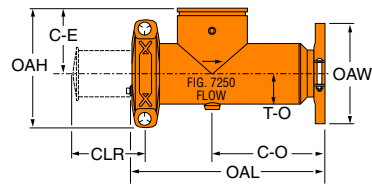
Most U.S. piping engineers specify system startup instructions for new systems which include removing the pre-filter screen after system flushing of the main piping before the system is put into normal operation. Flow data values are based on flow of clean water at ambient temperatures. The pressure drop across the diffuser basket strainer, 50% clogged, is approximately twice as great as that of a clean strainer.

Note 2:

Suction Diffuser baskets need a routine maintenance program to maintain system efficiency.



Suction Diffuser Fig. 7250



Sizes 2½" X 2½" thru 16" x 14"

Fig. 7250 Suction Diffuser

Nominal Size	O.D.	System Side (Grooved)	Pump Side (Flanged)	C-E	C-O	OAL	OAH	OAW Flange O.D.	CLR	T-O	Orifice Cylinder Open Area	Max. Working Pressure	Approx. Wt. Each
In./DN(mm)	In./mm	In./DN(mm)	In./DN(mm)	In./mm	In./mm	In./mm	In./mm	In./mm	In./mm	In./mm	In. Sq./cm. Sq.	PSI/bar	Lbs./Kg
2½ x 2½	2.875 x 2.875	2½	2½	5	8	13½	9	7	13½	2¼	48	300	32
65 x 65	73.0 x 73.0	65	65	127	203	343	229	178	343	57	310	20.7	14.5
3 x 2	3.500 x 2.375	3	2	5	8	13½	9	6	13½	2¼	42	300	34
80 x 50	88.9 x 60.3	80	50	127	203	343	229	152	343	57	271	20.7	15.4
3 x 2½	3.500 x 2.875	3	2½	5	8	13½	9	7	13½	2¼	48	300	34
80 x 65	88.9 x 73.0	80	65	127	203	343	229	178	343	57	310	20.7	15.4
3 x 3	3.500 x 3.500	3	3	5	8	13½	9	7½	10¼	2½/16	58	300	35
80 x 80	88.9 x 88.9	80	80	127	203	343	229	191	260	71	374	20.7	15.9
4 x 2	4.500 x 2.375	4	2	5	8	13½	9	6	13½	2¼	48	300	35
100 x 50	114.3 x 60.3	100	50	127	203	343	229	152	343	57	310	20.7	15.9
4 x 2½	4.500 x 2.875	4	2½	5	8	13½	9	7	13½	2¼	48	300	36
100 x 65	114.3 x 73.0	100	65	127	203	343	229	178	343	57	310	20.7	16.3
4 x 3	4.500 x 3.500	4	3	5	8	13½	9	7½	10¼	2½/16	58	300	37
100 x 80	114.3 x 88.9	100	80	127	203	343	229	191	260	71	374	20.7	16.8
4 x 4	4.500 x 4.500	4	4	6½	10½	17½	11¾	9	13½	3½/16	94	300	70
100 x 100	114.3 x 114.3	100	100	165	267	445	298	229	343	84	607	20.7	31.8
5 x 4	5.563 x 4.500	5	4	6½	10½	17½	11¾	9	13½	3½/16	94	300	72
125 x 100	141.3 x 114.3	125	100	165	267	445	298	229	343	84	607	20.7	32.7
5 x 5	5.563 x 5.563	5	5	6½	10½	17½	13¾	10	13½	4½/16	117	300	75
125 x 125	141.3 x 141.3	125	125	165	267	445	349	254	343	110	755	20.7	34.0
6 x 3	6.625 x 3.500	6	3	6½	10½	17½	11¾	7½	13½	3½/16	94	300	72
150 x 80	168.3 x 88.9	150	80	165	267	445	298	191	343	84	607	20.7	34.0
6 x 4	6.625 x 4.500	6	4	6½	10½	17½	11¾	9	13½	3½/16	94	300	73
150 x 100	168.3 x 114.3	150	100	165	267	445	298	229	343	84	607	20.7	33.1
6 x 5	6.625 x 5.563	6	5	6½	10½	17½	13¾	10	13½	4½/16	117	300	75
150 x 125	168.3 x 141.3	150	125	165	267	445	349	254	343	110	755	20.7	34.0
6 x 6	6.625 x 6.625	6	6	7¾	13¼	21½	14¾	11	16¼	4½/16	167	300	120
150 x 150	168.3 x 168.3	150	150	197	337	546	375	279	413	110	1,077	20.7	54.4
8 x 5	8.625 x 5.563	8	5	7¾	13¼	21½	14¾	10	16¼	4½/16	167	300	128
200 x 125	219.1 x 141.3	200	125	197	337	546	375	254	413	110	1,077	20.7	58.1
8 x 6	8.625 x 6.625	8	6	7¾	13¼	21½	14¾	11	16¼	4½/16	167	300	130
200 x 150	219.1 x 168.3	200	150	197	337	546	375	279	413	110	1,077	20.7	59.0
8 x 8	8.625 x 8.625	8	8	9	15¼	24½	17¾	13½	19¾	5⅞	266	300	190
200 x 200	219.1 x 219.1	200	200	229	387	622	451	343	502	137	1,716	20.7	86.2
10 x 6	10.750 x 6.625	10	6	9	15¼	24½	17¾	11	19¾	5⅞	266	300	195
250 x 150	273.1 x 168.3	250	150	229	387	622	445	279	502	137	1,716	20.7	88.5
10 x 8	10.750 x 8.625	10	8	9	15¼	24½	17¾	13½	19¾	5⅞	266	300	200
250 x 200	273.1 x 219.1	250	200	229	387	622	445	343	502	137	1,716	20.7	90.7
10 x 10	10.750 x 10.750	10	10	10	17¼	28	19⅞	16	23¾	6⅞	384	300	225
250 x 250	273.1 x 273.1	250	250	254	438	711	498	406	603	162	2,477	20.7	102.1
12 x 8	12.750 x 8.625	12	8	10	17¼	28	19⅞	13½	23¾	6⅞	384	300	225
300 x 200	323.9 x 219.1	300	200	254	438	711	498	343	603	162	2,477	20.7	102.1
12 x 10	12.750 x 10.750	12	10	10	17¼	28	19⅞	16	23¾	6⅞	384	300	230
300 x 250	323.9 x 273.1	300	250	254	438	711	498	406	603	162	2,477	20.7	104.3
12 x 12	12.750 x 12.750	12	12	11	24¼	36	20¼	19	34¼	8	695	300	382
300 x 300	323.9 x 323.9	300	300	279	616	914	521	483	870	203	4,484	20.7	173.3
14 x 10	14.000 x 10.750	14	10	11	24¼	36	20¼	16	34¼	8	695	300	382
350 x 250	355.6 x 273.1	350	250	279	616	914	521	406	870	203	4,484	20.7	173.3
14 x 12	14.000 x 12.750	14	12	11	24¼	36	20¼	19	34¼	8	695	300	382
350 x 300	355.6 x 323.9	350	300	279	616	914	521	483	870	203	4,484	20.7	173.3
14 x 14	14.000 x 14.000	14	14	12	26¼	39	23	21	36	9	817	300	467
350 x 350	355.6 x 355.6	350	350	305	667	991	584	533	914	229	5,271	20.7	211.8
16 x 14	16.000 x 14.000	16	14	12	26¼	39	23	21	36	9	817	300	467
400 x 350	406.4 x 355.6	400	350	305	667	991	584	533	914	229	5,271	20.7	211.8

Other sizes available on special request. Contact an ASC Rep. for ordering information.
Dimensions may vary Contact an ASC Rep. for certified values.
Not for use in copper systems. Product must be supported by pipe supports (supports not included).

- "CLR" Dimension indicates clearance needed for diffuser basket removal.
- Drain Holes: (End Cap) -¾" NPT for sizes 2½ x 2½ thru 6 x 5, -1" NPT for sizes 6 x 6 thru 16 x 14.
- Pipe Support - Use 1¼" SCH. 40 Pipe for 2½" thru 10" pipe and 2" SCH. 40 Pipe for 12" and larger diffusers.
- "Orifice Cylinder Open Area" is the total area of the opening in the diffuser basket after the pre-filter screen has been removed.