PARTS & ACCESSORIES:
BASKET-TYPE LINE STRAINERS
VIKING BOLTED-LID SIMPLEX STRAINERS

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SERIES DESCRIPTION

Viking Bolted-Lid Simplex Strainers provide protection for your pumping system with low pressure drop. The inclined position of the strainer basket adjacent to the porting provides smooth flow patterns not found in conventional basket-type strainers.

Viking Bolted-Lid Simplex Strainers reduce cleaning problems encountered with conventional strainers. The basket is removed from the top of the strainer, possibly eliminating the need to completely drain the system or allowing foreign matter to drop back into the line when the strainer is cleaned. The relatively small port-to-port dimensions of the strainer allow easy installation.

Viking Bolted-Lid Simplex Strainers are designed with a tapped port in the lid to easily attach an air eliminator. Strainers are also equipped with a bottom drain plug for complete draining of strainer if needed. They are also equipped with pressure indicator ports.

RELATED PRODUCTS

Parts & Accessories, Lid-Ease Simplex Strainers:
Catalog Section 1986

4” 3” 2”

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FEATURES & BENEFITS

- Strainer bodies available in ductile iron
- Ductile iron can be used for steel requirements in chemical, petrochemical and pharmaceutical industries
- Stainless steel baskets with 3/16” perforation holes standard (no mesh)
- Mesh lining available in 10, 20, 40, 60, 80 or 100 sizes
- Baskets provide maximum hoop strength to prevent distortion or basket damage
- Strainer body comes standard with pre-drilled and tapped differential and vent plugs.

Class 150 Raised Face Ports
2”, 3” & 4”

Class 300 Raised Face Ports
2”, 3” & 4”

MODEL NUMBER KEY

F - 1 0 2 0 - R D U C - 0 2 3

Product:
F = Strainer

Product Type:
1 = Simplex Type

Port Sizes:
020 = 2”
030 = 3”
040 = 4”

Port Types:
R = Flanged, Class 150 Raised Face
H = Flanged, Class 300 Raised Face

Material:
DUC = Ductile Iron

Elastomer Seal:
02 = FKM

Basket Mesh:
0 = No Mesh
1 = 10 Mesh
2 = 20 Mesh
3 = 40 Mesh
4 = 60 Mesh
5 = 80 Mesh
6 = 100 Mesh

Example:

F-1020-RDUC-023

A ductile iron simplex strainer with 2” flanged Class 150 raised face ports, FKM O-Ring seal, 40 mesh basket.

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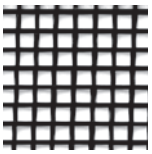
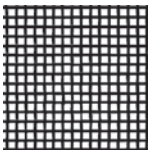
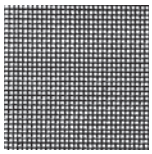
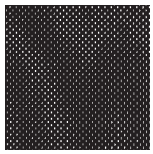
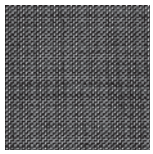
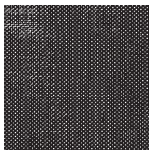
AVAILABLE MESH SIZES

						
Mesh	**10**	**20**	**40**	**60**	**80**	**100**
Opening (Inches)	.075	.034	.015	.0092	.007	.0055
Opening (Microns)	1910	860	380	230	190	140

SPECIFICATIONS – STRAINERS

Model Number	Port Size	Nominal Pipe Area	① Standard Basket Perforation	Basket Surface Area	Basket Free Area	Ratio Free Area / Port Area	Maximum Basket Differential Pressure
	Inches	Inches²	Inches	Inches²	Inches²		PSID
F-1020	2	3.36	.188	33	16.8	5.0	150
F-1030	3	7.39	.188	66	33.7	4.6	125
F-1040	4	12.73	.188	113	57.6	4.5	125

OPTIONAL FEATURES

MAGNETIC INSERTS

Magnetic inserts are available for trapping ferrous particles too small for the basket straining media.
The inserts are secured to basket handle using a spring clip which makes removal for cleaning a simple task

PRESSURE DIFFERENTIAL INDICATORS

Pressure differential indicators are available as an option to indicate when basket needs to be cleaned. Consult Factory.

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CONSTRUCTION

Body & Lid	O-Ring for Lid	Basket Material	Bolt Material
Ductile Iron	FKM	316 Stainless Steel	High Strength Stainless Steel

SPECIFICATIONS

Model Number	Port Size Inches	① Nominal Capacity Suction Rating GPM	② Rated System Pressure PSI	③ Temperature Range Degrees F.	Approximate Shipping Weight Pounds
F-1020-RDUC	2”	100	250	0 to 350	28
F-1020-HDUC	2”	100	640	0 to 350	31
F-1030-RDUC	3”	200	250	0 to 350	58
F-1030-HDUC	3”	200	640	0 to 350	65
F-1040-RDUC	4”	400	250	0 to 350	81
F-1040-HDUC	4”	400	640	0 to 350	96

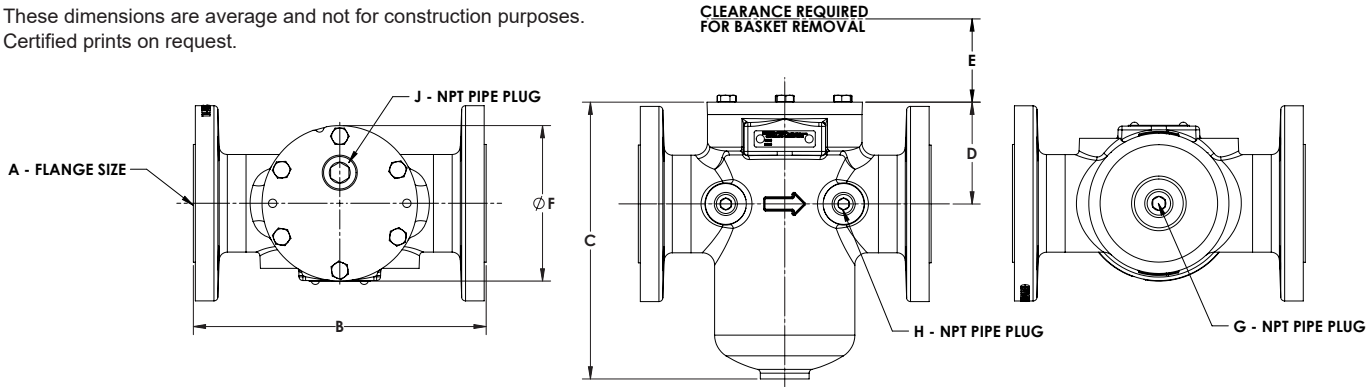
① Capacity based on approx. 1 PSI pressure drop with 40 mesh basket and 38 SSU liquid.

② System pressure ratings for temperature range of 0°F to 100°F per ANSI B16.42 Ductile Iron Pipe Flanges and Flanged Fittings.

③ Elastomers suitable for temperature must be used.

DIMENSIONS

These dimensions are average and not for construction purposes.
Certified prints on request.



Model Number	A		B	C	D	E	F	G	H	J
F-1020-RDUC	① 2” CLASS 150	in	9.00	8.51	3.13	7.50	4.75	1/2”	3/8”	3/4”
		mm	228.6	216.2	79.5	190.5	120.7			
F-1020-HDUC	① 2” CLASS 300	in	9.00	8.51	3.13	7.50	4.75	1/2”	3/8”	3/4”
		mm	228.6	216.2	79.5	190.5	120.7			
F-1030-RDUC	① 3” CLASS 150	in	12.00	10.69	3.94	9.50	7.25	1/2”	3/8”	3/4”
		mm	304.8	271.5	100.0	241.3	184.2			
F-1030-HDUC	① 3” CLASS 300	in	12.00	10.69	3.94	9.50	7.25	1/2”	3/8”	3/4”
		mm	304.8	271.5	100.0	241.3	184.2			
F-1040-RDUC	① 4” CLASS 150	in	14.50	12.25	4.50	11.75	8.50	1/2”	3/8”	3/4”
		mm	368.3	311.2	114.3	298.5	215.9			
F-1040-HDUC	① 4” CLASS 300	in	14.50	12.25	4.50	11.75	8.50	1/2”	3/8”	3/4”
		mm	368.3	311.2	114.3	298.5	215.9			

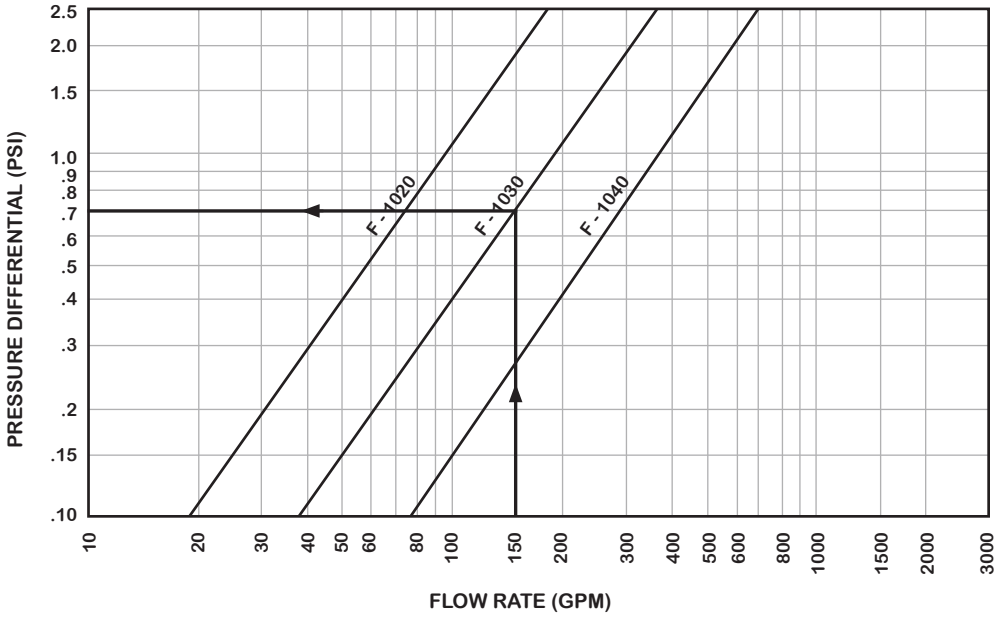
① Flanged ports are suitable for use with Class 150 or Class 300 ANSI companion flanges or flanged fittings.

PRESSURE DROP INFORMATION

Example:

To determine the pressure drop across a strainer for a pump with 3” ports producing a flow rate of 150 GPM, with a viscosity of 700 SSU; first, determine the nominal pressure differential for the 3” strainer (F-1030) by following 150 GPM vertically until it intersects the F-1030 curve then read horizontally on the Pressure Drop Curve the nominal pressure differential (.7 psi). Using the Correction Curves, enter vertically at 700 SSU and proceed until intersecting the 60 mesh curve, then read the correction factor horizontally (3.0). Therefore, the actual pressure drop will be 3.0 x .7 = 2.1 psi (4.28” of Hg.)

Pressure Drop Curves:



Correction Curves: