

2" to 4" E-Type Series Strainers

Bulletin SS03046E Issue/Rev. 0.0 (5/14)

Smith Meter® Strainers

Smith Meter® E-Type Steel Strainers are necessary to provide protection for metering systems against dirt and other foreign material. The large screen area and streamlined flow path (10° slant) minimize pressure drop. The sturdy basket can withstand a 50 psi differential without bursting and is easily removed for cleaning.

Features

- **Streamlined flow path** for lower pressure drop.
- **Large screen area** for less frequent cleaning.
- **Separable inner basket** for easy cleaning.
- **Pressure Taps** (1/2 NPT) upstream and downstream nozzles.
- **Flow Orientation** can be installed horizontally or vertically.
- **Drain** threaded NPT



Specifications

Design / Fabrication

According to PED 97/23/EC

Flanges

Raised Face suitable to fit with:

1. DIN EN PN16
2. Standard ANSI 150 lb. flanges.

Air Vent

1½" NPT plugged.

Differential Pressure Taps

½" NPT plugged.

Inner Liner

Choice of 10, 20, 40 (standard), or 80 mesh stainless steel.

Seals / Temperature Limits

Buna Seals: -29°C to 100°C

Viton Seals: -12°C to 100°C

PTFE¹ Seals: -29°C to 100°C

Outer Basket and Internals

Zinc-plated carbon steel and cast iron.

Options

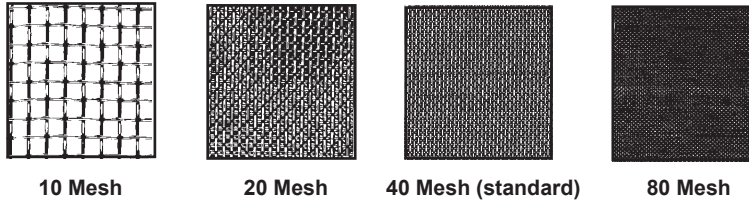
- **Temperature** – Temperatures other than standard range, consult factory.
- **Special Painting** – Consult factory.
- **Automatic Air Release Kit** – For static air elimination:
 - Optional with ATEX Approved Reed Switch
 - Explosion-Proof EEx d II C T4.
 - max. 230V AC/DC 1.0A
- **Basket Differential Pressure Gauge Kit** – With isolation valves to monitor basket cleanliness.
- **Basket Differential Pressure Gauge Kit and ATEX approved Switch** – With isolation valves to monitor basket cleanliness.

¹ PTFE (Polytetrafluoroethylene)

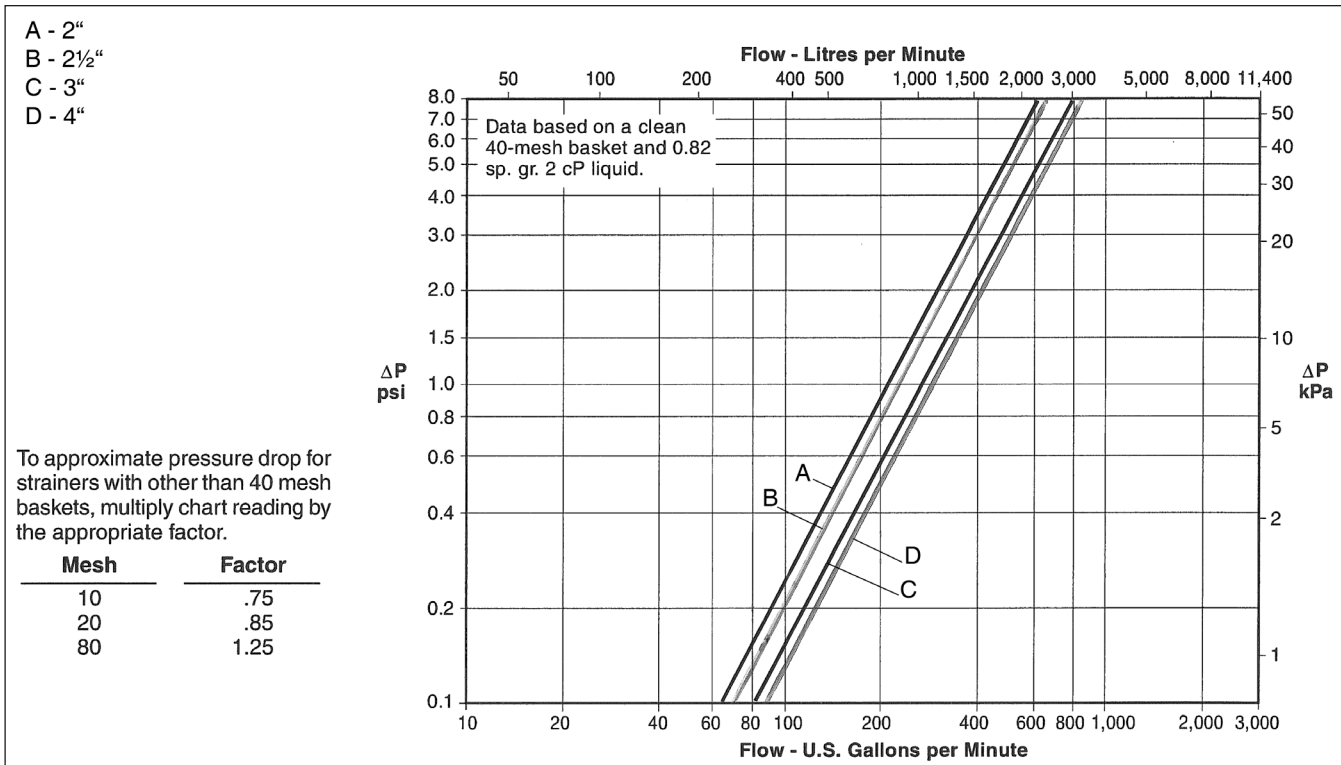
Mesh Options		
Mesh	Opening Size (mm)	Percent Open Area through Inner and Outer Baskets
10	1,91	40,5 %
20	0,91	37,3 %
40 (Std.)	0,38	25,9 %
80	0,18	22,6 %

Open Area Ratio	
Size	Total Basket Area (cm ²)
2"	413
2½"	413
3"	832
4"	832

Screens shown actual size:



Pressure Drop



Working Pressure

Model	End Connections	Housing / Material	Maximum Working Pressure					
			psi		kPa		bar	
			DIN	ANSI	DIN	ANSI	DIN	ANSI
2"	DIN EN PN 16 or ANSI 150 lbs. 0,18	Ductile Iron	232	232	1600	1600	16	16
2½"								
3"		Cast Steel	285	285	1965	1965	19.65	19.65
4"								

Model Code

Example: **E** - **20A** - **04** - **B** - **P** - **0** - **00** - **1**

Position 1: Type of Equipment

E - E-Type Strainer

Position 2: Size/Flange Type

20A - 2", 150 ANSI
 25A - 2,5", 150 ANSI
 30A - 3", 150 ANSI
 40A - 4", 150 ANSI
 20D - DN50, PN16
 25D - DN65, PN16
 30D - DN80, PN16
 40D - DN100, PN16

Position 3: Basket

10 - 10 Mesh
 20 - 20 Mesh
 40 - 40 Mesh
 80 - 80 Mesh

Position 4: Elastomer Seals

B - Buna-N
 V - Viton
 T - PTFE

Position 5: Design Standards

P - European PED-F (Liquid)
 G - European PED-G (Gas)

Position 6: Differential Pressure Gauges/Switches

0 - Tabs only
 G - Differential Gauges
 S - Differential Gauges with ATEX switch

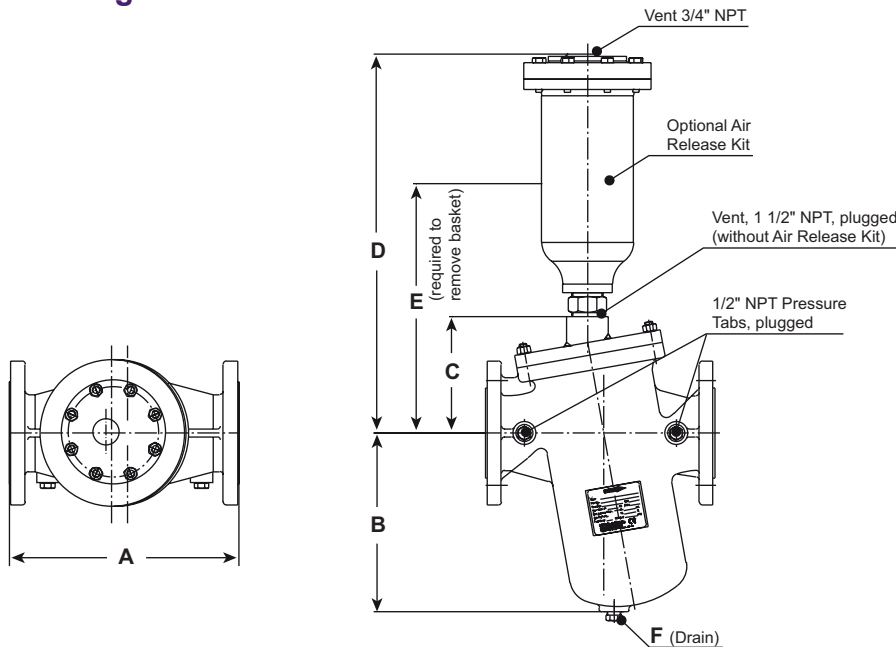
Position 7: Vent / Air Release Kits

00 - NPT Vent port
 R1 - RB Head Buna
 R2 - RB Head Viton
 R3 - RB Head with switch Buna
 R4 - RB Head with switch Viton
 U1 - UB Head Buna
 U2 - UB Head Viton

Position 8: Painting

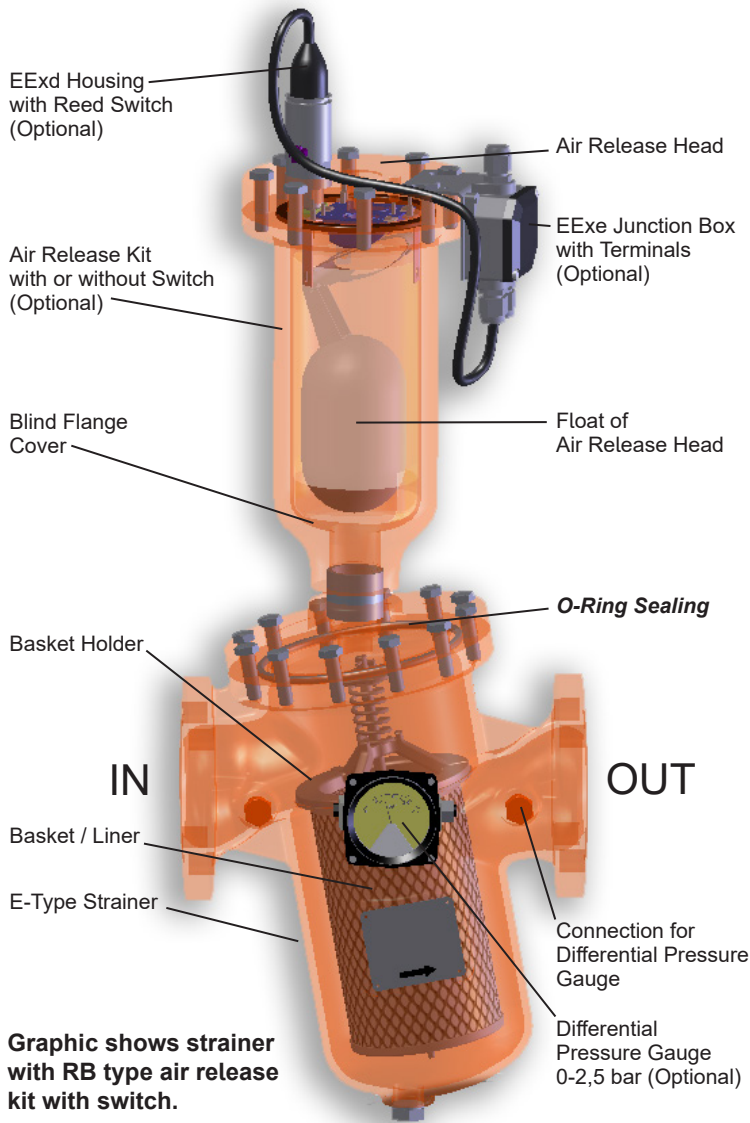
1 - Special painting
 2 - No painting

Dimensions and Weights



Size	A	B	C	D	E	F	Weight (bare strainer)	Volume (litres)
2"	250	226	145	527	360	1/2" NPT	16 kg	3,0
2 1/2"	250	226	145	527	360	1/2" NPT	18 kg	3,0
3"	350	290	200	583	410	3/4" NPT	34 kg	9,2
4"	350	290	200	583	410	3/4" NPT	39 kg	9,2

E-Type Strainer with Air Release Kit



Air Release Kits*			
Kit	Strainer Models	Seals	Materials of Construction
RB Type	Up to 1965 kPa	Buna-N, Viton	Housing: Carbon Steel; Float: Stainless Steel Internal Parts: Aluminum, Stainless Steel
UB Type	Up to 1965 kPa	Viton, Chemraz	Housing: Carbon Steel; Float: Stainless Steel Internal Parts: Carbon Steel, Stainless Steel

* Reference Bulletin [SS03040](#) for RB and UB Air Release Heads

March 2019 - updated branding and contact information.

The specifications contained herein are subject to change without notice and any user of said specifications should verify from the manufacturer that the specifications are currently in effect. Otherwise, the manufacturer assumes no responsibility for the use of specifications which may have been changed and are no longer in effect.