

Miniature In-Line Screens

SS WIRE SCREENS

Description

Fine screens are used to protect orifices and other critical components from the occasional particles that enter the fluid during installation or otherwise. They are not intended to replace normal filtration equipment, but rather to augment the protection of critical components in fluid control systems.

Four sizes of screen particle retention are offered; 10, 15, 25 and 100 microns. The stainless steel wire screens do not introduce loose particles into the fluid stream. The screens are thoroughly cleaned to prevent inadvertent introduction of contaminants.

Applications

In-line screens are suitable for use with liquids or gases compatible with the materials of construction. The screens protect critical components such as orifices from clogging or reducing flow rate.

Applications for in-line screens include protection of:

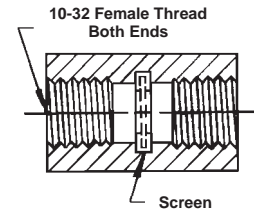
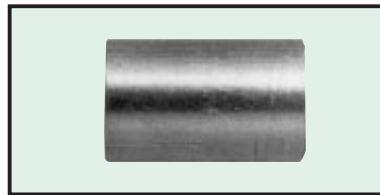
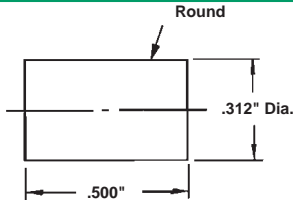
- Precision Orifices
- Pneumatic Transducers
- Gas and Liquid Flow Instruments
- Medical Devices
- Filling and Purging Systems
- Pneumatic Timers
- Transmitters
- Pneumatic Transmission Lines
- Hydraulic Controls
- Leak Test Equipment
- Flow Measurement Devices

Features

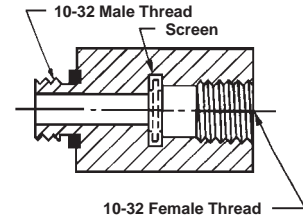
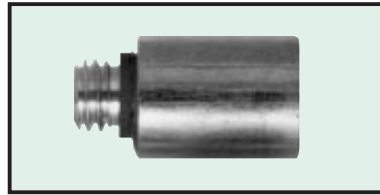
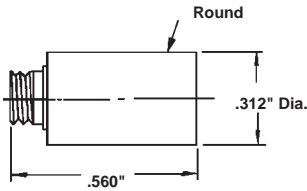
The in-line screen products are all metal; the screen material is made from fine stainless steel wire.

- Particle retention size as small as 10 microns
- Miniature fittings and screens
- Clean assemblies
- No loose fibers or particles
- Long life screen material
- Well defined flow characteristics
- Compatible with standard 10-32 and NPT fittings

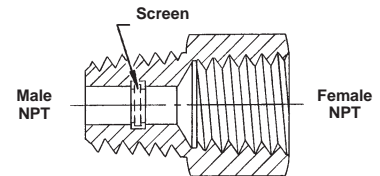
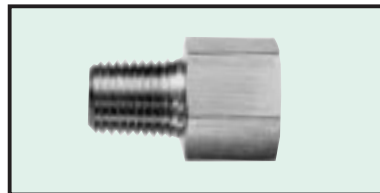
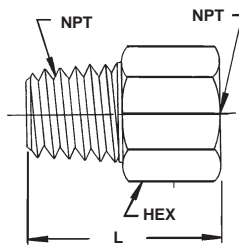
Type FFS



Type FMS

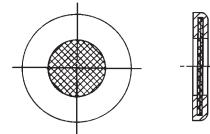
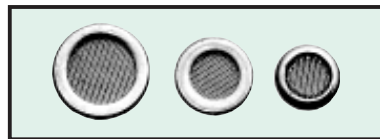
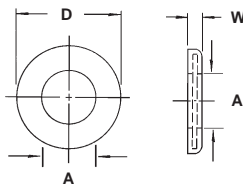


Types DSO GSO



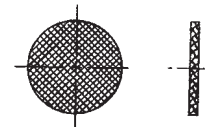
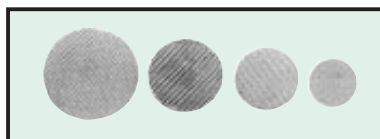
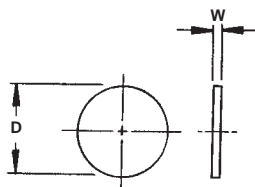
Type	L	Hex	NPT
DSO	.880"	9/16"	1/8"
GSO	1.250"	3/4"	1/4"

Types SSB SSC



Type	D	W	A
SSB	.254"	.030"	.15"
SSC	.312"	.030"	.22"









Types XSA XSB XSC XSD



Type	D	W	Type	D	W
XSA	.211"	.005"/.010"	XSF	.375"	.005"/.010"
XSB	.254"	.005"/.010"	XSG	.500"	.005"/.010"
XSC	.312"	.005"/.010"	XSH	.750"	.005"/.010"
XSD	.165"	.005"/.010"			

SS WIRE SCREENS

Part Numbers – Screen Fittings

Particle Retention		Body Material – Brass				Body Material – SS			
Micron	Inch	Type FFS 10-32 Thread	Type FMS 10-32 Thread	Type DSO 1/8" NPT	Type GSO 1/4" NPT	Type FFS 10-32 Thread	Type FMS 10-32 Thread	Type DSO 1/8" NPT	Type GSO 1/4" NPT
10	.0004	FFS-1-BR	FMS-1-BR	DSO-1-BR	GSO-1-BR	FFS-1-SS	FMS-1-SS	DSO-1-SS	GSO-1-SS
15	.0006	FFS-2-BR	FMS-2-BR	DSO-2-BR	GSO-2-BR	FFS-2-SS	FMS-2-SS	DSO-2-SS	GSO-2-SS
25	.0010	FFS-5-BR	FMS-5-BR	DSO-5-BR	GSO-5-BR	FFS-5-SS	FMS-5-SS	DSO-5-SS	GSO-5-SS
100	.0040	FFS-20-BR	FMS-20-BR	DSO-20-BR	GSO-20-BR	FFS-20-SS	FMS-20-SS	DSO-20-SS	GSO-20-SS
Configuration		10-32 Thread 	10-32 Thread 	1/8" NPT 	1/4" NPT 	10-32 Thread 	10-32 Thread 	1/8" NPT 	1/4" NPT 

Part Numbers – Screens Bound or Plain Types

Particle Retention		Type	Type	Type	Type
Micron	Inch	XSA	SSB	SSC	XSD
10	.0004	XSA-1	SSB-1	SSC-1	—
			XSB-1	XSC-1	XSD-1
15	.0006	XSA-2	SSB-2	SSC-2	—
			XSB-2	XSC-2	XSD-2
25	.0010	XSA-5	SSB-5	SSC-5	—
			XSB-5	XSC-5	XSD-5
100	.0040	XSA-20	SSB-20	SSC-20	—
			XSB-20	XSC-20	XSD-20

Specifications

- **Body Materials**
 - Brass or 303SS
 - Viton Seal on Type FMS
- **Screen Material**
 - 304SS
- **Maximum Operating Pressure**
 - Brass (NPT) – 2000 psig
 - 304SS (NPT) – 4000 psig
 - 10-32 Threads – 100 psig
- **Maximum Pressure Differential Across Screen**
 - 100 psig
- **Flow**
 - See C_v in chart above
- **Fluids**
 - Use with liquids or gases compatible with materials of construction
- **Dimensions**
 - See drawings on page 28

Recommended Screen/Orifice Sizing Chart Shows Maximum Orifice Diameter (inch)¹

Particle Retention		Types FFS, FMS, DSO			Type GSO		
Micron	Inch	Gas Flow MOD*	Liquid Flow MOD*	Screen C _v	Gas Flow MOD*	Liquid Flow MOD*	Screen C _v
10	.0004	.0064	**	.009	.011	**	.028
15	.0006	.0105	**	.025	.018	**	.068
25	.0010	.0165	**	.055	.028	**	.180
100	.0040	.0195	.0195	.090	.033	.033	.250

1. When used with precision orifices, it is important that the screen not have a major influence on the flow through the orifice. The recommended maximum orifice when used with a screen will have less than 1% change in the orifice flow.

* MOD – Maximum Orifice Diameter (Inch)

** Do not use this screen for liquid flow.

Ordering Information

- Select the part number of the in-line screen fitting or bound screen from the charts above.
- Indicate quantity required.

Breathers

SS WIRE SCREENS

Description

Fine screen breathers provide an air passage into equipment, enclosures, and pneumatic controls while preventing the ingestion of solid particles. Miniature fine screen breathers are rated at 15, 25 or 100 microns and are available in either brass or stainless steel fittings. Connection sizes are 10-32, 1/8" or 1/4" NPT.

Applications

The fine screen breathers are used where there is a requirement to insure that only clean fluid enters into a component or system. Typical applications include:

- Equipment enclosures
- Vented control components
- Small 3- or 4-way valves
- Small 2-way vacuum valves
- Air purge equipment
- EMI or RFI shield

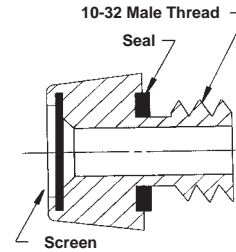
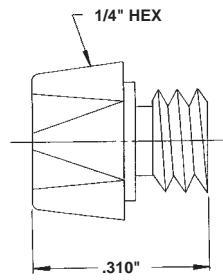
Specifications

- **Materials**
 Body – Brass or 303 SS
 Screen – 304 SS
 Seals – Viton (10-32 only)
- **Maximum Operating Pressure**
 Brass (NPT) – 2000 psig
 303 SS (NPT) – 4000 psig
 10-32 threads – 100 psig
- **Maximum Pressure Differential Across Screen** – 100 psi
- **Flow** – See C_v data in chart at right.
- **Fluids** – Use with liquids or gases compatible with materials of construction.
- **Dimensions** – See drawings this page.

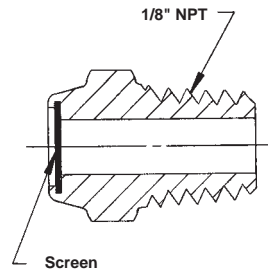
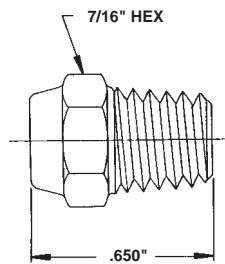
Ordering Information

- Select the part number from the chart at right.
- Indicate quantity and part number on order.

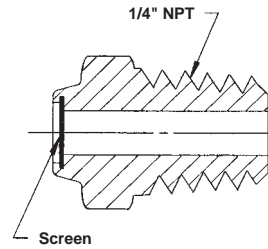
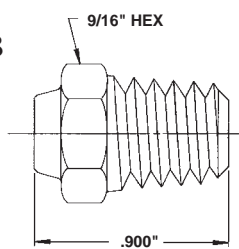
Type QSB



Type BMB



Type EMB



Part Numbers – Breathers

Filter Rating (Microns)	Connection Size	Part Number		Flow C _v
		Brass	Stainless Steel	
15	10-32	QSB-2-BR	QSB-2-SS	.025
	25	QSB-5-BR	QSB-5-SS	.055
	100	QSB-20-BR	QSB-20-SS	.090
15	1/8" NPT	BMB-2-BR	BMB-2-SS	.025
	25	BMB-5-BR	BMB-5-SS	.055
	100	BMB-20-BR	BMB-20-SS	.090
15	1/4" NPT	EMB-2-BR	EMB-2-SS	.068
	25	EMB-5-BR	EMB-5-SS	.180
	100	EMB-20-BR	EMB-20-SS	.250