



General Purpose Welded Metal Diaphragm Seal

Type S Series

General Information for Type S Series Seals

- ✓ **S** Series models have **welded metallic diaphragm** to the **upper housing**, for **general pressure** application. There are three basic configurations: **Threaded**, **Flanged**, and **Inline Flow-Thru**. See model selection chart below for application specific details.
- ✓ **Standard S** Series models utilize a diaphragm **welded** to the upper housing, eliminating the need for retaining ring and the potential of fluid leak.
- ✓ **S** Series diaphragm seals have **contoured top housing**. This design permits free movement of the diaphragm with accurate response to pressure changes and it also protects the seal element from distortion due to improper handling.
- ✓ **S** Series models have **0.07 in³** volumetric displacement.
- ✓ **Standard** design operation to **2,500 PSI** (172 bar) at **100°F** (38°C), with optional elevated pressure rating of **5,000 PSI** (345 bar). The **SX** Series has a standard pressure rating of **10,000 PSI** (690 bar) at 100°F (38°C).
- ✓ **S** Series models are available with wetted materials designed for **corrosive applications**.
- ✓ A wide variety of **filling** and **attachment** options are available. If no filling and attachment options are used, enter a dash (" - ") for those characters.
- ✓ **Special** options (15th character) are also available. If no special options are used, enter a dash (" - ") for this character.

Model Selection Guide

Type	Seal Mounting	Operating Temperature	Operating Pressure	Process Application	Flushing Connection
SB	Thread	100°F (38°C)	2,500 PSI (172 bar) ¹	General Purpose	No
SC	Flange		Flange Dependent	General Purpose	No
SD	Flange		Flange Dependent	General Purpose	Yes
SG	Thread	100°F (38°C)	2,500 PSI (172 bar) ¹	General Purpose	Yes
SJ	Inline Flow-Thru ^A	100°F (38°C)	1,500 PSI (103 bar) ²	Removable Bottom ²	No
SK	Inline Flow-Thru ^B	100°F (38°C)	1,500 PSI (103 bar) ²	Removable Bottom ²	No
SM	Inline Flow-Thru ^C	100°F (38°C)	1,500 PSI (103 bar) ²	Removable Bottom ²	No
SN	Inline Flow-Thru ^D		Flange & Schd Dep	Removable Bottom ²	No
SP	Inline Flow-Thru ^E		Flange & Schd Dep	Removable Bottom ²	No
SR	Flange		Flange Dependent	Tantalum-Clad Lower	No
SW	Thread ⁴	100°F (38°C)	2,500 PSI (172 bar) ³	EPA Clean Air Act	No
SX	Thread ³	100°F (38°C)	10,000 PSI (690 bar) ³	High Pressure	No
SCE	Flange		Flange Dependent	Extended Length	No
SCW	Slip Flange		Flange Dependent	General Purpose	No
SFX	Flange	100°F (38°C)	Flange Dependent	Limited Space	No
SMJ	Inline Flow-Thru ^C	100°F (38°C)	2,500 PSI (172 bar) ²	Jacketed Piping	No
SNJ	Inline Flow-Thru		Flange Dependent	Jacketed Flange Piping	No

5,000 PSI elevated pressure availabl

3,000 PSI elevated pressure availabl

No bleed scre

Welded by user

Thread-attached connection

Welded by user, pipe supplied, schedule dependent

For 3/4" to 2" pipe diameter.

3" to 8" pipe diameter

Figure 1: S-Series Seals



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