

Precision Back Pressure Regulators Improved Mity Mite Replacement Regulator

**Low flow / Laboratory scale
Gas, Liquid & Mixed Phase Service**

Precision: Average: 2%-5%, Max: <1%
of Full Scale Pressure
Pressure: up to 6000 psig
Temperature: up to 300°C (572°F)
Cv: Ranges up to 0.38

EN-S91XW - Direct
Replacement with
PTFE diaphragm

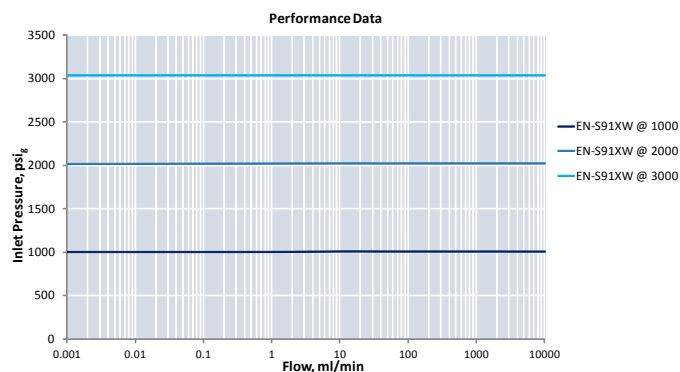


Diaphragms: Left, improved PTFE
diaphragms for higher temperature service

Technical Specifications

Part #	Inlet & Outlet Ports	Reference Port	Body Materials	Diaphragm Materials	Max Standard Pressure	Custom Pressure	Max Temperature	Cv Range
	NPT	NPT			(psig)	(psig)	Degrees C	
EN-ULF	1/8" or 1/4"	1/8"	SS316 (std) Hastelloy, Titanium & Others Avail- able	PTFE (std), Others Available	3000	6000	150 C (std. PTFE)	1E-7 - 0.38
EN-S91W					3000	6000	Higher for other materials	1E-7 - 0.38
EN-S91LW					1000	3000		1E-7 - 0.44
EN-S91XW					3000	6000	1E-7 - 0.13	

- Min Cv dependent on Diaphragm, Flow and Pressure
- Max temperature requires metal diaphragm and upgraded o-rings



Sample performance curves taken with nitrogen with improved PTFE diaphragm

Unique Improved Design

- Replacable Control Orifice
- Specially designed o-ring seals (FKM, FFKM)
- Improved PTFE formulated diaphragm

Challenges Lead to Improved Design

Many Mity Mite customers struggle with process leaks after repeated cycles of their back pressure regulator above 100C. This is due to the accelerated "cold flow" of PTFE in the crush seal. Equilibar has developed an improved design with FKM or FFKM o-rings that retains the performance characteristics of the Mity Mite design while offering improved thermal cycling integrity up to 150C at 3000 psig.

While Equilibar offers many several models of back pressure regulators up to 300C using other materials (such as metal or polyimide diaphragms with FFKM o-rings), this Improved Mity Mite Replacement is offered for certain customer applications requiring the specific sealing characteristics of a thick PTFE diaphragm.

Equilibar specializes in the control of back pressure for a wide variety of demanding applications. Contact an Equilibar Engineer to discuss your application parameters today.

In Stock!

Most common configurations are in stock for shipment in 2-5 days