

- 1/4" - 6" Standard Port Valves
- 1/4" - 4" Full Port Valves
- 1/2" - 4" Characterized Seat Control Valves

Steam

Seat Applications for On/Off and Throttling Control

Valve Seat	Seat Rating On/Off Service	Seat Rating Allowable Throttling Drop
TFE	50 WSP	Do Not Throttle
Reinforced TFE	150 WSP	Do Not Throttle
Polyfill®	250 - 450 WSP (See table on back)	P1 150 psi ΔP 50 psi
High-per Fill®*	300 - 500 WSP (Refer to Energy/Thermal Mizer™ Brochure SV 601)	P1 250 psi ΔP 50 psi
Metal A	600 WSP	P1 300 psi ΔP 150 psi
Metal G†	600 WSP	P1 300 psi ΔP 150 psi
CPT Metal A	N/A	P1 300 psi ΔP 300 psi
CPT Metal G†	N/A	P1 300 psi ΔP 300 psi

*High-per Fill should be used for applications beyond the performance envelope of Polyfill.

†Metal G is recommended ONLY for superheated (dry) steam beyond 600°F.

Seat Ratings — Polyfill

Valve Size	Working Steam Pressure* WSP	Corresponding Temperature**
1/4", 3/8", 1/2" (1/4" - 3/8" 59)	450	459°F
3/4" (1/2" 59)	425	455°F
1" (3/4" 59)	400	447°F
1 1/4" (1" 59)	350	435°F
1 1/2" (1 1/4" 59)	325	428°F
2" (1 1/2" 59)	300	424°F
2 1/2" - 6" (2" - 4" 59)	250	406°F

* Maximum valve pressure rating. Three-way seats of Polyfill should only be used on low pressure, purge-type (30 psi or less), steam applications.

** Valves in superheated steam service may be used at any steam pressure provided the service temperature does not exceed the temperatures shown.

GENERAL NOTES:

- Elastometer body seals are not to be used except for EPDM (EPR).
- Carbon steel for bodies and pipe ends is acceptable unless the steam is poorly treated (acid steam) or the valve will experience periodic exposure to air (oxygen) while wet. Dump, inlet, and exhaust valves normally have this exposure, Stainless steel pipe ends are recommended for these locations.
- In locations where valves can become full of chilled water or condensate and can be heated while closed (as the first valve on a branch), a V3 relief hole to the high pressure side is mandatory.