

Floating Ball Valve Seat Materials



Reinforced PTFE

This material is offered as the standard seal in 150 and 300 class ball valves. 15% glass reinforced PTFE rated suitable for temperatures -45.6 degree C to 232 degree C, chemical resistance is compatible to Virgin TFE with improved cycle life and greater pressure/ temperature rating than PTFE. RPTFE seats are furnished with RPTFE body seals and PTFE packing except on firesafe models which are furnished with graphoil packing and body seals.



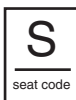
Virgin PTFE

This material is the basic seat material use in most floating ball valves. It's chemical compatibility is excellent for almost all media service applications. Temperature range -45.5 degree C to 204 degree C.



Carbon Filled PTFE

Carbon filled TFE - 25% Carbon Graphite with 75% TFE - is good for temperature ranging from -45.5 degree C to 260 degree C. This material offers a wide temperature range with better cycle life than RTFE.



Stainless Steel Filled PTFE

Combines the strength of metal with the lubricity of TFE. 50% 316 powder combined with 50% TFE. Offers abrasion resistance of metal with higher pressure rating than RTFE. -29 degree C to 288 degree C.



Delrin

Special Delrin seats offered for higher pressure and lower temperature service. They can be used in high pressure air, oil and other gas media but are not suited for strong oxidizing. Temperature rating -1 degree C to 93 degree C. Delrin seats are usually furnished complete with 90 durometer Viton B body seals.



PEEK

Polyetheretherketone - high pressure semi-rigid elastomer. Best suited for high pressure and temperature service. Also offers very good corrosion resistance. Temperature rating 56.6 degree C to 288 degree C.



Nylon

Nylone (polyamide) seats are offered for higher pressure and lower temperature service. They can be used in high temperature air, oil and other gas media but are not suited for strong oxidizing. Not recommended for water. Temperature rating -34.4 degree C to 93 degree C.



UHMW Polyethylene

Ultra-high molecular weight Polyethylene. ideal for use in low level radiation service. This seat also meets the requirements of the tobacco idusry where TFE is prohibited and it offers excellent resistance to abrasive media. Temperature range -56.6 degree C to 93 degree C.



Kel F

Recommended for cold service with good resistance to violent temperature fluctuations. It is good for cryogenic service down to -198 degree C and has higher deformation rating and density than PTFE.



Filled Cavity

Designed to reduce the possibility of contamination by entrapment of process fluid in the void normally found behind the ball and the valve body in conventionally designed ball valves, ideal for applications where cross contamination is a concern, such as food, paints and dyes.