Technical Parameters and Media Compatibility

FELIX SEALING SOLUTIONS · Gland Packing Range · 29 styles



	Graphite Valve Packing					PTFE Packing					Aramid & Synthetic Fiber Packing					Hybrid & Corner-Reinforced				Carbon-Based		High-Temp. Static		General Service					
Type	**FS-P302**	**FS-P305I**	**FS-P305S**	**FS-P308I**	**FS-P308S**	**FS-P103**	**FS-P103S**	**FS-P105**	**FS-P105S**	**FS-P106**	**FS-P203**	**FS-P203S**	**FS-P206**	**FS-P207**	**FS-P209**	**FS-P403**	**FS-P404**	**FS-P405**	**FS-P406**	**FS-P502**	**FS-P505**	**FS-P701**	**FS-P702**	**FS-P704**	**FS-P601**	**FS-P601G**	**FS-P801**	**FS-P802**	**FS-P802G**
Materials of Construction	Graphite	Graphite / Inconel core	Graphite / SS304 core	Graphite / Inconel jacket	Graphite / SS304 jacket	Virgin PTFE	Virgin PTFE / Silicone oil	PTFE filament	PTFE filament / Silicone oil	PTFE / Graphite	P-Aramid	P-Aramid / Silicone core	M-Aramid / PTFE	Spun aramid / PTFE	Novoloid / PTFE	Graphite PTFE / Aramid corner	Aramid / Black PTFE	PTFE / Aramid corner	Aramid / ePTFE	Pre-ox PAN / PTFE or Graphite	Carbon / PTFE or Graphite	Ceramic fiber	Glass fiber	Asbestos / PTFE	Acrylic / PTFE	Acrylic / Graphite	Cotton / Grease	Ramie / PTFE	Ramie / Graphite
Sizes [mm]	3–40	3–40	3–40	3–25	3–25	3–40	3–40	3–40	3–40	3–40	3–40	8–40	3–40	3–40	3–40	6–40	6–40	6–40	6–40	3–40	3–40	6–40	6–50	6–40	3–40	3–40	6–40	6–40	6–40
Density [g/cm³]	1.1–1.4	1.2–1.4	1.2–1.4	1.3–1.7	1.3–1.7	1.2–1.5	1.5–1.8	1.2–1.5	1.4–1.7	1.5–1.8	0.9–1.3	1.0–1.2	0.9–1.1	1.0–1.3	1.2–1.5	1.3–1.6	1.4–1.7	1.2–1.5	1.4–1.65	≥1.1	≥1.1	0.7–1.0	0.7–1.0	1.3–1.6	≥0.9	≥1.0	≥0.9	≥0.8	1.2–1.6
Pressure Rotating [bar]	30	-	-	-	-	15	15	12	12	25	30	30	25	30	25	35	35	35	35	30	30	-	-	20	20	25	10	20	20
Pressure Reciprocating [bar]	-	-	-	-	-	100	100	75	75	150	150	150	100	150	-	150	150	150	150	150	-	-	-	-	-	75	50	50	50
Pressure Static / Valve [bar]	200	300	300	500	500	150	150	80	80	150	200	200	200	200	200	150	200	150	200	250	300	5	-	200	80	80	40	80	80
Speed Rotating [m/s]	20	-	-	-	-	10	12	10	10	20	10	10	10	10	10	15	15	12	15	15	15	-	-	8	8	10	8	10	10
Speed Reciprocating [m/s]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	1	1	1.5	1.5
pH	0–14	0–14	0–14	0–14	0–14	0–14	0–14	0–14	0–14	0–14	4–11	4–11	4–10	4–11	1–12	2–12	2–12	2–12	3–12	1–13	1–13	5–9	-	3–12	3–11	4–11	6–8	5–9	4–12
T min [°C]	-	-200	-200	-200	-200	-100	-	-	-	-	-100	-50	-100	-100	-50	-100	-100	-100	-100	-	-	-	-	-100	-50	-	-20	-40	-40
T max [°C]	+450	+650[1]	+550[1]	+650[1]	+600[1]	+260	+240	+240	+240	+240	+240	+200	+220	+240	+250	+240	+260	+240	+260	+260/ +300[2]	+260/ +450[3]	+1000[4]	+550[5]	+260	+250	+200	+100	+120	+150
Media Compatibility																													
Water	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●			●	●	●	●	●	●
Sewage, Wastewater	○	○	○	○	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	○			○	●	●	○	○	●
Hot Water	●	●	●	●	●	○	○	○	○	●	●	○	●	●	●	●	●	●	●	●	●			●	○	○		○	○
Steam [≤ 280 °C]	●	●	●	●	●	○	○	○	○	○	○		○	○	○	○	○	○	○	●	●			●					
Steam [> 280 °C]	○	●	●	●	●																○								
Abrasive Media, Slurry										○	●	●	○	●	●	●	●	●	●	○	○								
Diluted Acids	●	●	●	●	●	●	●	●	●	●	○	○	○	○	●	●	●	●	●	●	●			○	○	○			
Concentrated Acids	○	○	○	○	○	●	●	○	○	●					○		○			○	○								
Diluted Alkaline, Salt Solutions	●	●	●	●	●	●	●	●	●	●	●	●	○	●	●	●	●	●	●	●	●			○	○	○			○
Concentrated Alkaline	○	○	○	○	○	●	●	○	○	●					○		○			○	○								
Oils, Lubricants	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●			●	○	○	○		
Solvents, Hydrocarbons	●	●	●	●	●	●	●	○	○	●	○	○	○	○	○	○	●	○	●	●	●			○	○				
Hot Gas, Furnace (static)																						●	●						

Not all maximum values can be used at the same time. ● = recommended ○ = suitable blank = not recommended "-" = not applicable / no data

[1] steam; ≤ 450 in air [2] PTFE / graphite impregnation [3] PTFE / graphite (air); higher in steam [4] fiberglass-reinforced: ≤ 550 [5] static only

Compatibility is general guidance by material type. Final selection depends on the combination of pressure, temperature, speed, media and equipment condition — send us your operating data and we will recommend the right style.