
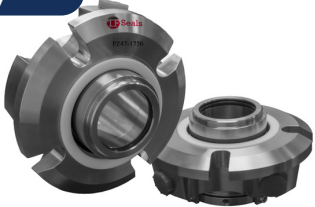




Garlock TF Seals - General Cartridge Seals



Image	Description	Benefits
<p>PZ46</p> 	<p>Operating conditions Temperature: -50°C to 204°C/-58°F to 400°F Pressure: 20 bar (290 PSI) Speed: 23 m/s (75 ft/s) Materials Seal face: Sintered/Reaction bonded Silicon carbide (Q1/Q2), Antimony/Graphite resin impregnated carbon (A/B), Tungsten carbide (U2) Seat: Sintered/Reaction bonded Silicon carbide (Q1/Q2) Secondary seals: FKM (V), EPDM (E), FFKM (K) Springs: CrNiMo steel (G), Hastelloy® C-4 (M) Metal parts: CrNiMo steel (G)</p>	<ul style="list-style-type: none"> • Single seal, standard bore and large bore • Compact cartridge design with precise investment cast gland plate design • Four-bolt gland sets the seal both axially and radially • Large flush connection drilling to ensure optimum flow • Fixed throttle bushing (PZ46T only) • Factory-pret and pre-tested assembly • Fits ANSI B73.1, ISO 3069 and DIN 24960 Seal Chambers • Fits Pinnacle-Flo, Goulds, Durco, Summit, Griswold, ANSI Pumps
<p>PZ47</p> 	<p>Operating conditions: Temperature: -30°C to 205°C/-20°F to 400°F Pressure: Up to 3,000"/75mm: 300 psi(g)/21 bar(g) max. 75mm/3,000" and Over: 200 psi(g)/13 bar(g) max. Speed: 25 m/s (83 ft/s) Materials: Seal face: Sintered/Reaction bonded Silicon carbide (Q1/Q2), Antimony/Graphite resin impregnated carbon (A/B), Tungsten carbide (U2) Seat: Sintered/Reaction bonded Silicon carbide (Q1/Q2) Secondary seals: FKM (V), EPDM (E), FFKM (K) Springs: CrNiMo steel (G), Hastelloy C-4 (M) Metal parts: CrNiMo steel (G)</p>	<ul style="list-style-type: none"> • Single and dual seal, standard bore and large bore • Optimized Primary Ring Design for Greater Reliability • Nonclogging Wave Spring Outside the Product • Single seal has an optional quench gland with carbon ring throttle bushing. • Dual seal Primary ring and mating ring reverse balance designs allow for ID or OD pressurization, which permits the dual seal to operate as a low-pressure barrier tandem seal or a high-pressure barrier double seal. • Factory-pret and pre-tested assembly • Fits ANSI B73.1M, ISO 3069 and DIN 24960 Seal Chambers • Fits Pinnacle-Flo, Goulds, Durco, Summit, Griswold, ANSI Pumps
<p>PZ48</p> 	<p>Operating conditions: Temperature: -30°C to 205 C/-20°F to 400°F Pressure: Up to 3,000"/75mm: 300 psi(g)/21 bar(g) max. 75mm/3,000" and Over: 200 psi(g)/13 bar(g) max. Speed: 25 m/s (83 ft/s) Materials: Seal face: Sintered/Reaction bonded Silicon carbide (Q1/Q2), Antimony/Graphite resin impregnated carbon (A/B), Tungsten carbide (U2) Seat: Sintered/Reaction bonded Silicon carbide (Q1/Q2) Secondary seals: FKM (V), EPDM (E), FFKM (K) Springs: CrNiMo steel (G), Hastelloy® C-4 (M) Metal parts: CrNiMo steel (G)</p>	<ul style="list-style-type: none"> • Single seal, standard bore and large bore Cartridge • Nonclogging Single-Coil Spring "Seal has optional quench gland (PZ48Q) with carbon ring throttle bushing" • Positive Mechanical Drive • Nonclogging Wave Spring Outside the Product • Full Convolution Elastomer Bellows • Factory-pret and pre-tested assembly • Fits ANSI B73.1M, ISO 3069 and DIN 24960 Seal Chambers
<p>PZ05</p> 	<p>Operating conditions: Temperature: -30°C to 205 C/-20°F to 400°F Pressure: 28 bar/400psig Speed: Up to 25 mps/(196 fps) Materials: Seal face: Sintered/Reaction bonded Silicon carbide (Q1/Q2), Antimony/Graphite resin impregnated carbon (A/B), Tungsten carbide (U2) Seat: Sintered/Reaction bonded Silicon carbide (Q1/Q2) Secondary seals: FKM (V), EPDM (E), FFKM (K) Springs: CrNiMo steel (G), Hastelloy C-4 (M) Metal parts: CrNiMo steel (G) Bellows: AM350, Hastelloy®-C276, 316L Metal parts: AM350, Hastelloy®-C276, 316L</p>	<ul style="list-style-type: none"> • Single and dual seal, standard bore and large bore • Welded metal bellows eliminates dynamic O-Rings • High-efficiency pumping mechanism creates a helical flow pattern for ideal internal cooling • Large diameter barrier fluid ports for increased flow • Bi-directional barrier fluid ports operate on both clockwise and counterclockwise rotating equipment • Outboard bellows pressurized on the outside diameter for maximum safety and performance • Hydraulically-balanced bellows seal design • Rotary bellows for enhanced performance in slurry and particulate services • Corrosion-resistant Alloy C-276 bellows construction • Fits a wide range of pumps and other rotating equipment