Key product parameters

Parameter	Typical / published values & notes
Product definition	Pre-assembled, self-contained single-seal cartridge for pumps — simplifies installation (no face handling) and reduces alignment error vs. component seals.
Common construction	Cartridge includes primary ring, mating ring/seat, springs, sleeve and gland/cover in one pre-assembled unit. Available as elastomer O-ring pusher, bellows or metal-bellows cartridge variants.
Working pressure (catalog examples)	Typical catalogue dynamic working pressures commonly published: up to ~20 – 21 bar (≈300 – 305 psi) for many standard cartridge models; certain engineered cartridges list higher hydrostatic ratings.
Temperature range	Example published ranges: −40 °C … +204 – 205 °C for standard cartridges (depends on elastomer/face material). Higher or lower extremes depend on materials selected.
Peripheral speed / sliding velocity	Typical catalogue guidance: up to ~23 – 25 m/s (≈4,700 – 5,000 fpm) for many cartridge seals; check series rpm guidance in TDS for specific shaft diameters.
Face material options	Common face pairings: Carbon (graphite) vs SiC, SiC vs SiC, Tungsten carbide vs Carbon, Silicon nitride — select by fluid/abrasives/temperature.
Secondary seals (elastomers)	Typical O-ring/elastomer choices: Viton (FKM), NBR, EPDM, AFLAS, FFKM depending on fluid compatibility and temperature.
API / emissions	Cartridge single seals are available in low-emission / API-supporting designs.
Installation advantage	Pre-assembled cartridge reduces installation errors and downtime compared with component seals — common vendor claim and supported by installation manuals.
Typical limitations	Cartridge size requires compatible gland / bore; confirm pump stuffing-box geometry and sleeve length before specifying. For extreme pressures/temps consult engineered cartridge or component designs.