

Tandem Seals — Key Product Parameters

Parameter	Typical Published Range / Notes
Seal arrangement	Two seal faces in series on the shaft; primary (inboard) and secondary (outboard). Fluid between seals normally at unpressurized buffer fluid conditions.
Working pressure	Example multi- spring tandem seal ≤ 3.0 MPa (~30 bar) (catalog example for CM15B/11B).
Temperature range	- 40 ° C to +260 ° C shown for typical tandem seals; extended high temperature designs exist.
Shaft speed / rpm	Up to ≤ 3600 rpm typical for many multi- spring tandem designs; linear velocity ≤ 25 m/s.
Face materials	Carbon (graphite), Silicon Carbide (SiC), Tungsten Carbide (WC), etc., depending on series configuration.
Elastomer / secondary seals	FKM (Viton), FEPM, FFKM (ChemLast), EPDM — check series options.
Hydraulics / balance	Hydraulically balanced designs help handle pressure variations; primary often balanced; secondary offset by buffer fluid.
Seal support fluids	Typically buffer fluid (unpressured compared to process) circulates between seals; monitoring indicates primary failure.
Typical advantages	Safety (if primary fails, secondary limits leakage), extended life, easier failure detection. Tandem allows buffer fluid lubrication & separate wear staging.
Cartridge availability	Many OEMs supply cartridge- type tandem seals for ease of installation and alignment.