

Dual Split Mechanical Seal TRS 420



MINIMIZE DOWNTIME - WITH THE ADVANTAGE OF A SPLIT DESIGN

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DUAL SPLIT MECHANICAL SEAL

ADVANTAGES OF A SPLIT SEAL:

- Installed without dismantling equipment.
- Drastically cuts turnaround time.
- Reduced maintenance cost.
- No packing gland to re-tighten.
- Won't wear or score shaft.
- Operates with less leakage than packing.
- · Lasts longer than packing.
- Consumes less power than packing.
- · Uses less time than packing a pump.
- Less leakage to product side.

EQUIPMENT APPLICATIONS:

- Pumps
- Agitators
- Blenders
- Separators
- Dryers
- Mixers
- Reactors

APPLICABLE INDUSTRIES:

- Pulp and Paper, especially Liquor Applications
- Corn/Grain/Food Processing
- Steel
- Wastewater
- Breweries
- Mining
- Power Generation
- Petroleum/Chemical (nonhazardous)

The protection and reliability of double seal with the convenience of a split seal.

REDUCES INVENTORY COSTS

Split design allows the seal to be replaced without disassembly and no need for a back-up pump to be inventoried.

NO MODIFICATION REQUIRED

Retrofits most pumps without modification.

CONSERVES WATER

When used with a supply tank, the 420 circulates barrier fluid in a closed loop.

ALIGNMENT INDICATOR

Pins provide a visual indication of correct alignment. They also function as a visual wear indicator while in service.

FIELD REPAIRABLE

Repair kits are available for quick and economical repair in-field.

COOLING IS GREATLY ENHANCED

The faces are all within close proximity and totally immersed in the barrier fluid, improving seal life.

HANDLES EXCESS RUN-OUT

Unique face configuration allows for greater misalignment vs. conventional seals.

NO ADHESIVE INVOLVED IN INSTALLATION

Which speeds and simplifies the installation procedure.

ALIGNMENT CLIPS

to ensure perfect alignment of ________stationary faces (Patented).

UNIQUE STACKED FACES

For compact design allowing retrofit without modification.

SELF CENTERING

Integral Spacers are affixed to the seal preventing accidental removal.

SINGLE ROTARY FACE

Allowing for maximum movement and colling.

GLAND IS SELF CENTERING

to the shaft with spacers affixed in place preventing their accidental removal.

STATIONARY SPRINGS ARE ISOLATED

from pumped fluid and unaffected if gland is misaligned.

ALIGNMENT PINS PROTRUDE

to show correct installation.

SILICON CARBIDE FACES

installed at 90° to collar splits to ensure face flatness.

ROTARY UNIT USES A POSITIVE DRIVE

locked to shaft by set screws virtually eliminating slippage.

ROTARY COLLAR POSITIONS WITHOUT MEASURING

Disposable spacer allows for quick, easy positioning.

STATIONARY COMPONENTS ARE HELD IN PLACE

in the gland so that no individual parts have to be handled.

PROTECTED O-RINGS

Dynamic O-rings advance in a clean area if face wears,

TRS 420 - SPLIT DUAL SEAL

| ITEM | DESCRIPTION | REPAIR KIT | BARRIER FLUID OUTLET |
|------|---------------------|---------------|----------------------|
| 1 | O-RING | * | |
| 2 | ROTARY COLLAR | | |
| 3 | SET SCREWS | * | |
| 4 | O-RING | * | |
| 5 | O-RING | * | |
| 6 | ROTARY FACE | * | |
| 7 | UPPER INBOARD | * | |
| | STATIONARY FACE | * | |
| 8 | O-RING | * | |
| 9 | LOWER OUTBOARD | * | |
| | STATIONARY FACE | * | |
| 10 | ANTI-ROTATION PINS | * | |
| 11 | CENTERING SPACERS | | |
| 12 | RETAINING CLIPS | * | |
| 13 | GLAND | * | |
| 14 | LOCK WASHERS | * | |
| 15 | CAP SCREWS | * | |
| 16 | COLLAR SEAM GASKETS | * | |
| 17 | O-RING | * | |
| 18 | SPRINGS | * | |
| 19 | SPRINGS | | |
| 20 | GLAND SEAM GASKETS | | |
| | | | |

| А | B (MIN) | B (MAX) | C (MIN) | D | Е | F | G | н | I | J | | | |
|-------------------------------------|------------|------------|------------|-------|------|------|------|------|-----|-----|--|--|--|
| 1.750 | 2.50 | 2.75 | 3.12 | 6.18 | 2.32 | 2.13 | 4.15 | 1.61 | .28 | .56 | | | |
| 1.875 | 2.63 | 2.88 | 3.25 | 6.31 | 2.32 | 2.13 | 4.28 | 1.61 | .28 | .56 | | | |
| 2.000 | 2.75 | 3.00 | 3.37 | 6.44 | 2.32 | 2.13 | 4.39 | 1.61 | .28 | .56 | | | |
| 2.125 | 2.88 | 3.13 | 3.50 | 6.54 | 2.32 | 2.13 | 4.64 | 1.61 | .28 | .69 | | | |
| 2.500 | 3.25 | 3.75 | 4.00 | 6.90 | 2.32 | 2.13 | 5.02 | 1.61 | .28 | .69 | | | |
| 2.625 | 3.37 | 3.88 | 4.12 | 7.02 | 2.32 | 2.13 | 5.14 | 1.61 | .28 | .69 | | | |
| 2.750 | 3.63 | 4.25 | 4.69 | 7.75 | 2.69 | 2.50 | 5.31 | 1.61 | .38 | .69 | | | |
| 3.000 | 3.88 | 4.50 | 4.94 | 8.00 | 2.69 | 2.50 | 5.56 | 1.86 | .38 | .72 | | | |
| 3.250 | 4.13 | 4.75 | 5.19 | 8.25 | 2.69 | 2.50 | 5.81 | 1.86 | .38 | .72 | | | |
| 3.500 | 4.38 | 5.00 | 5.44 | 8.50 | 2.69 | 2.50 | 5.81 | 1.86 | .38 | .81 | | | |
| 3.625 | 4.50 | 5.13 | 5.56 | 8.63 | 2.69 | 2.50 | 6.16 | 1.86 | .38 | .81 | | | |
| 3.750 | 4.63 | 5.25 | 5.69 | 8.75 | 2.69 | 2.50 | 6.31 | 1.86 | .38 | .81 | | | |
| 4.000 | 4.88 | 5.50 | 5.94 | 9.00 | 2.69 | 2.50 | 6.56 | 1.86 | .38 | .81 | | | |
| 4.500 | 5.38 | 6.00 | 6.44 | 9.50 | 2.69 | 2.50 | 6.81 | 1.86 | .38 | .81 | | | |
| 4.750 | 5.63 | 6.25 | 6.69 | 9.75 | 2.69 | 2.50 | 7.31 | 1.86 | .38 | .81 | | | |
| 5.500 | 6.38 | 7.50 | 8.09 | 11.50 | 2.69 | 3.50 | 8.41 | 2.71 | .50 | .94 | | | |
| FOLLOWING FOR BIG BORE PUMPS 2400S+ | | | | | | | | | | | | | |
| 1.750+ | 2.50 | 4.06 | 3.78 | 6.31 | 2.32 | 2.13 | 4.50 | 1.61 | .28 | .56 | | | |
| 1.875+ | 2.63 | 4.03 | 3.91 | 6.25 | 2.32 | 2.13 | 4.41 | 1.61 | .28 | .56 | | | |
| 2.125+ | 2.88 | 4.44 | 4.16 | 7.12 | 2.32 | 2.13 | 5.31 | 1.61 | .28 | .69 | | | |
| 2.500+ | 3.25 | 5.19 | 4.53 | 7.87 | 2.32 | 2.13 | 5.62 | 1.61 | .28 | .69 | | | |
| 2.625+ | 3.37 | 4.88 | 4.66 | 7.50 | 2.32 | 2.13 | 5.44 | 1.61 | .28 | .69 | | | |

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METALLIC GASKETS

Thomson CANFLEX® spiral wound, Kammprofile, high temperature, heat exchanger and ring joint gaskets. We manufacture gaskets from all common metals, exotic alloys and filler materials in all configurations for the most extreme applications.





FASTENERS

All thread studs – ASTM 193 Grade B7, B7M, B8, B8M, B16, ASTM A320 L7, L7M; heavy hex nuts – ASTM A194 Grade 2H, 2HM, 4, L7, L7M, 8 and 8M; Through hardened washers – ASTM F-436; custom coatings; specialty fabricated and machined studs; CANFLEX® approved thread lubricant.

NON-METALLIC GASKETS

Thomson Performance Sealing (TSP) and gaskets fabricated from all types of sheet material including compressed cork, cork/ rubber blends, gasket types, Teflon ™, Garlock[®], Gore[®], all rubber materials, Thomson Multipac and Flexible Graphite.



SUPERLOK CANADA

Instrumentation Tube, Pipe, JIC and DIN Fittings. Instrumentation Ball, Bleed, Check, Double Block and Bleed, Needle, Plug, and Purge Relief Valves. Quick Connects and Filters. Flexible Metal Hose, Tubing and Accessories.



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