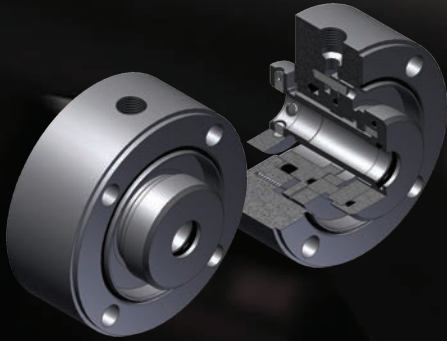




T.R-HTP
MECHANICAL SEALS



SEAL APPLICATION

- Centrifugal High Duty Pumps
- Centrifugal API Process Pumps
- Centrifugal General Purpose Pumps
- Positive Displacement Pumps

PERFORMANCE CAPABILITIES

- Pressure** : Vacuum to 150 bar
- Temperature** : -50 °C to 220 °C
- Sliding Velocity** : Up to 50 m/s
- Sizes** : 40 mm to 200 mm

DESIGN OVERVIEW

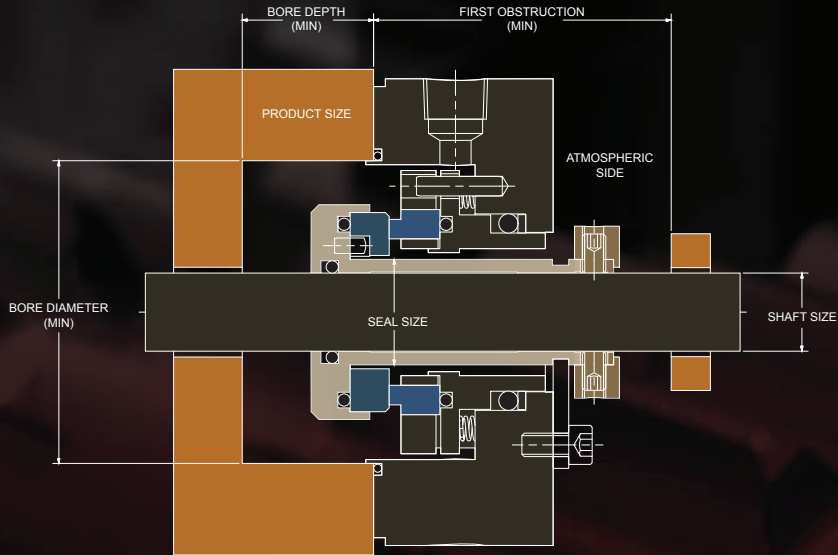
ProSEAL® T.R-HTP is a single balanced pusher seal for application involving high pressure and high sliding velocity

DESIGN FEATURES

- Single balanced pusher seal design
- Engineered seal design for application involving high pressure and high sliding velocity
- Complete cartridge for ease of installation
- Robust and heavy duty seal faces designed for leakage
- Precise seal balance to reduce stress on the seal faces
- All seal faces are hydraulically balanced to reduce deformation due to high pressure
- Multiple spring design for uniform load, shorter overall length and larger axial displacement
- Stationary spring design with minimum rotating mass for high sliding velocity capability.
- Special design with pumping device for forced circulation, better cooling efficiency and better heat removal capability

MATERIAL SPECIFICATION

Seal Face	Carbon Graphite, Silicon Carbide, Tungsten Carbide
Secondary Seal	Fluorocarbon (FKM), Nitrile (NBR), Perfluorocarbon (FFKM), Silicone (VMQ), Ethylene Propylene (EPDM), Polytetrafluoroethylene (PTFE)
Spring	316 Stainless Steel, Alloy C-276
Metal Component	316 Stainless Steel, Alloy C-276



Seal Size *	Shaft Diameter (Max)	Bore Diameter (Min)	Bore Depth (Min)	First Obstruction (Min)
40	33	63	53	75
45	38	68	53	75
50	43	82	53	75
55	48	87	55	81
60	53	92	55	81
65	58	97	61	96
70	63	102	61	96
75	68	113	61	96
80	73	118	61	96
85	78	123	61	96
90	83	128	61	96
95	88	133	61	96
100	90	138	61	96
105	95	143	61	96
110	100	148	61	96
115	105	153	61	96
120	110	158	61	96
125	115	169	64	102
130	120	174	64	102
135	125	179	64	102
140	130	184	64	102
145	135	189	64	102
150	140	206	64	102
155	145	211	64	102
160	150	216	68	108
165	155	221	68	108
170	160	226	68	108
175	165	231	68	108
180	170	236	68	108
185	175	241	68	108
190	180	246	68	108
195	185	251	68	108
200	190	256	68	108

* All dimensions are in mm