



T.R-HCD
MECHANICAL SEALS



SEAL APPLICATION

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

PERFORMANCE CAPABILITIES

- Pressure** : Vacuum to 42 bar
- Temperature** : -50 °C to 220 °C
- Sliding Velocity** : Up to 23 m/s
- Sizes** : 20 mm to 200 mm

DESIGN OVERVIEW

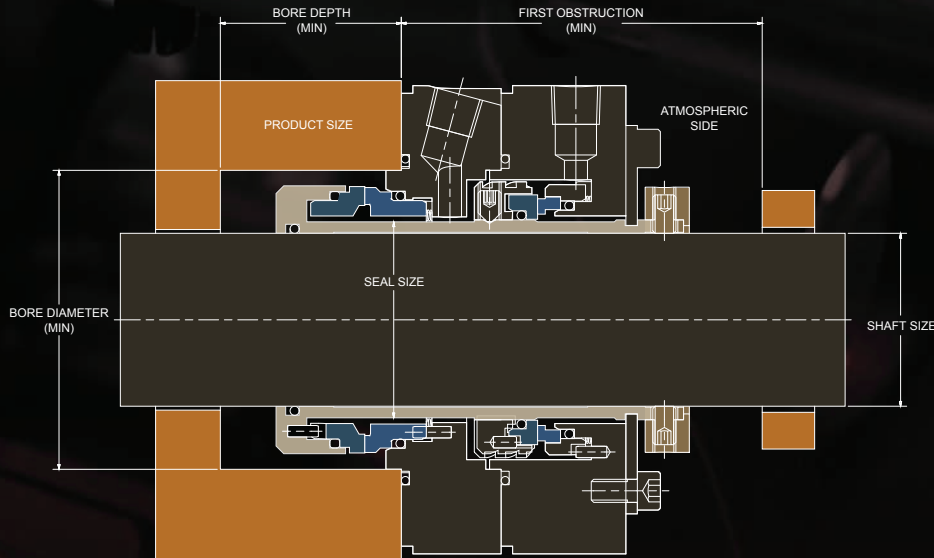
ProSEAL® T.R-HCD is a dual balanced pusher seal for general services, primarily for application in the petrochemical and chemical industry

DESIGN FEATURES

- Dual balanced pusher seal design
- Available in face to back and back to back arrangement
- Complete cartridge for ease of installation
- Heavy duty seal faces designed for zero leakage
- Multiple spring design for uniform load, shorter overall length and larger axial displacement
- Seal faces are loosely inserted to assist in seal face replacement
- Thrust ring is retained by drive lungs preventing spring falling out.
- Special design with pumping device for forced circulation, better cooling efficiency and better heat removal capabilities
- Parts interchangeable between single and dual seal minimizes inventory requirement and maximizes design flexibility

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)
20	15	40	30	50
22	17	42	30	50
24	19	44	30	50
25	20	45	30	50
28	23	48	35	55
30	25	50	35	55
32	25	50	35	55
33	26	51	35	55
35	28	53	35	55
38	30	56	35	55
40	33	58	48	63
43	36	61	48	63
45	38	63	48	63
48	41	66	48	63
50	43	75	48	63
53	46	78	50	67
55	48	80	50	67
58	51	83	50	67
60	53	85	50	67
63	56	88	50	67
65	58	90	55	80
70	63	95	55	80
75	68	105	55	80
80	73	110	55	80
85	78	115	55	80
90	83	120	55	80
95	88	125	55	80
100	90	130	55	80
105	95	135	55	80
110	100	140	55	80
115	105	145	55	80
120	110	150	55	80
125	115	160	58	85
130	120	165	58	85
135	125	170	58	85
140	130	175	58	85
145	135	180	58	85
150	140	195	58	85
155	145	200	58	85
160	150	205	62	90
165	155	210	62	90
170	160	215	62	90
175	165	220	62	90
180	170	225	62	90
185	175	230	62	90
190	180	235	62	90
195	185	240	62	90
200	190	245	62	90

* All dimensions are in mm