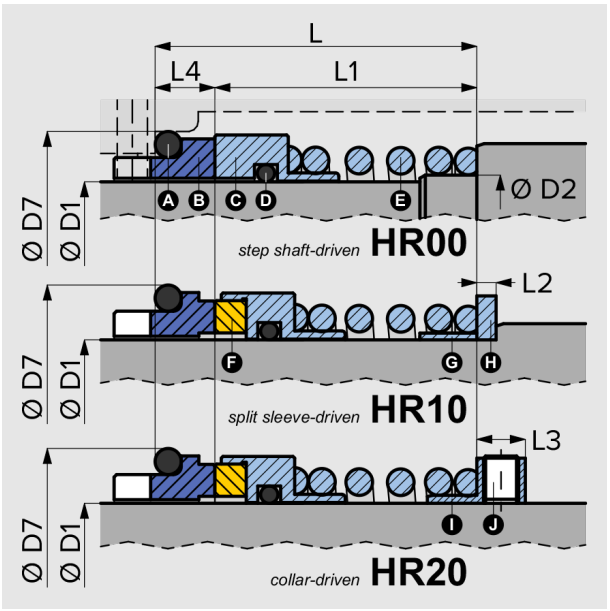
HR00

'R SERIES'
SPECIFICATION SHEET





- **O-ring, Parallel-Spring Drive**
- **Shaft Rotation Dependant**
- **Imperial & Metric Sizes**
- **Marine applications**

HR_ series are parallel spring-driven mechanical seals, based on the "R Series" design. It is commonly used in the marine industry and supplied with either solid or inserted rotary face.

The heavy-duty spring is supplied either with left or right-hand wound spring depending on shaft rotation, denoted by suffix R / L.

Three methods of drive are available:

HR00 is driven directly from a modified shaft.

HR10 is driven by a split-sleeve (G) and backing washer (H), intended for shafts with a machined shoulder only.

HR20 is driven by a set-screwed collar, intended for plain straight-shafts.

Additionally, HR30 is as per HR20 but with a double o-ring mounted seat.

Operating conditions[1]

Temperature: -30°C to +260°C
Pressure: < 10 bar, 145 psi, 1 MPa
Speed: < 22m/s, 4500 fpm
rpm < 1320000/(79.8 x D1 inch)
rpm < 1320000/(3.14 x D1 mm)

Material Options

Rotary Face:
Solid: 304SS or 316SS
Inserted: CAB, CER, SiC or TC
Coated: Stellite or Ceramic
Stationary Face:
Solid: CAB
Inserted: SiC or TC
Elastomer: N, V or EP
All Other Metal Parts: 304S.S.

[1] Guide-values only (due to diversity of possible applications). Enquire for specific-use cases. Maximum values of each parameter cannot be applied together.

PARTS

A Stationary O-ring
B Stationary Face / Ring
C Rotary Solid Face
D Rotary O-ring
E Rotary Parallel Spring
F Rotary Inserted Face
G R10 Split-Sleeve
H R10 Backing Washer
I R20 Drive Collar
J R20 Set Screw

EQUIVALENT

R Series
P08 / P08U
P260 / P270 / P280
RB655 / RB656 / RB657

Shaft Driven:
R00, RA-0 (imp), RM-0 (met)
Type 95 / 95N

Split Sleeve Driven:
R10, RA-1 (imp), RM-1 (met)
Type 96

Collar Driven:
R20, RA-2 (imp), RM-2 (met)
Type 97
Pillar US-2 / CGU
Japan Ship Machinery and Equipment Association (JSMEA)
Piller US-3 (Imp)
Nihon Sealol: EX Type 355

With Double O-ring Seat:
HR30
Type 98
Nippon Pillar US-1 / CCU

DIMENSIONS

D1 = Shaft Size
L1 = Rotary W.L.
D7 = Seat Cavity
L = Overall W.L.
L4 = Seat Height
L2 / L3 = Sleeve / Collar

D1		D2	D7	L4	L1	L	L2	L3
0.625"		19.05	28.57	9.0	24.5	33.5	1.5	8.0
0.750"		22.22	31.75	9.0	24.5	33.5	1.5	8.0
0.875"	**22mm**	25.40	34.93	9.0	26.0	35.0	1.5	9.5
1.000"	**25mm**	28.57	39.85	10.0	30.0	40.0	1.5	9.0
1.125"	**28mm**	31.75	43.05	10.0	31.5	41.5	1.5	9.5
	30mm	33.32	44.63	10.0	31.5	41.5	1.5	9.5
1.250"	**32mm**	34.92	46.32	10.0	33.5	44.5	1.5	9.5
1.375"	**35mm**	38.10	49.48	10.0	37.5	47.5	1.5	9.5
1.4375"		39.75	50.80	10.0	37.5	47.5	1.5	9.5
1.500"	**38mm**	42.88	52.56	10.0	37.5	47.5	1.5	9.5
	40mm	44.45	54.25	10.0	37.5	47.5	1.5	9.5
1.625"	**42mm**	46.02	55.83	10.0	37.5	47.5	1.5	9.5
1.750"	**45mm**	49.20	59.02	10.0	37.5	47.5	1.5	9.5
1.875"	**48mm**	52.37	63.68	10.0	42.5	52.5	1.5	12.5
	50mm	53.97	65.37	10.0	45.5	55.5	1.5	13.0
2.000"		55.57	66.85	10.0	45.5	55.5	1.5	13.0
2.125"	**55mm**	58.72	70.03	10.0	47.0	57.0	1.5	13.0
2.250"		61.90	73.20	10.0	47.0	57.0	1.5	13.0
2.375"	**60mm**	65.07	76.38	10.0	50.5	60.5	1.5	12.5
2.500"		68.28	79.56	10.0	50.5	60.5	1.5	12.5
	65mm	69.85	81.23	10.0	53.5	63.5	1.5	12.5
2.625"		71.42	82.73	10.0	53.5	63.5	1.5	12.5
2.750"	**70mm**	74.60	85.90	10.0	53.5	63.5	1.5	12.5
2.875"		77.77	89.08	10.0	56.5	66.5	3.5	14.5
	75mm	79.37	90.77	10.0	56.5	66.5	3.5	14.5
3.000"		80.97	95.43	10.0	63.0	73.0	3.0	14.5
	80mm	85.73	100.29	10.0	63.0	73.0	3.0	14.5
3.250"		87.30	101.78	10.0	63.0	73.0	3.0	14.5
3.500"		93.67	108.13	10.0	63.0	73.0	3.0	14.5
	90mm	95.25	109.82	10.0	68.0	78.0	3.0	14.0
	100mm	104.77	119.33	10.0	68.0	78.0	3.0	14.0
4.000"		107.95	124.00	10.0	72.5	82.5	3.0	16.0

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