

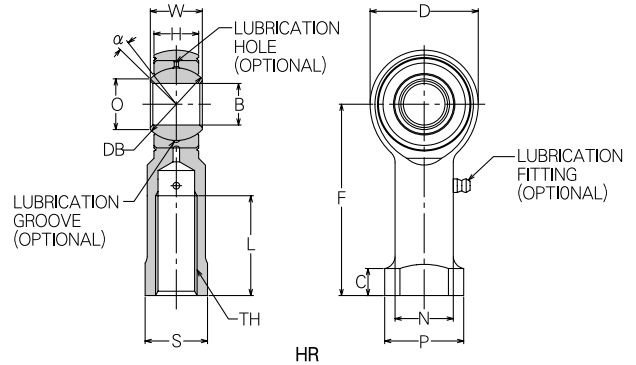
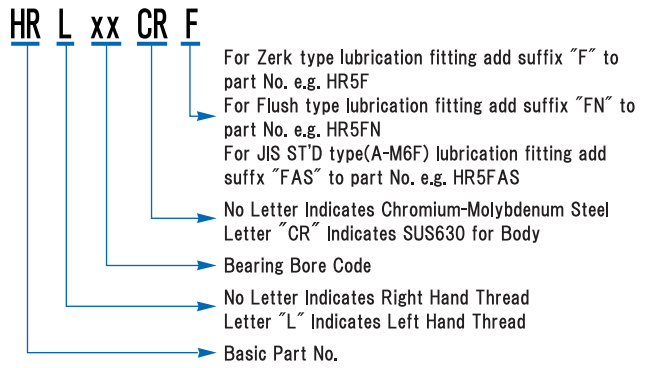
# HR

<b>ROD END FEMALE</b>	<b>METAL TO METAL</b>	<b>3 PIECE</b>
-----------------------	-----------------------	----------------

**Materials**

	HR	HR-CR
<b>BODY</b>	Chromium-Molybdenum Steel Zinc Plated	SUS630 Stainless Steel Passivated
<b>RACE</b>	Stainless Steel / Heat Treated	Stainless Steel / Heat Treated
<b>BALL</b>	Bearing Steel / Chrome Plated	Stainless Steel / Heat Treated

**Description of Types**



Dimensions in mm

MINEBEA Part No.	φB H7	φD ± 0.5	W 0 -0.13	H ± 0.13	F ± 0.5	TH JIS Class 2	L ± 0.7	φN ± 0.5	φP ± 0.5	C +0.2 -0.1	S ± 0.25	α (deg.)	φO Ref.	S φDB Ref.	Static Limit Load kN		Radial Static Ultimate Load kN	Fatigue Load (2) kN	Approx. Weight g
															Radial	Axial (1)			
HR3	3	16.0	7.0	5.25	30.0	M3 × 0.5	16	7.0	9	3.5	8	18	5.2	8.73	22.45	2.94	30.89	5.14	29
HR4	4	18.0	9.5	7.75	32.0	M4 × 0.7		8.5	11		10	16	5.8	11.11	34.71	3.53	43.34	7.15	35
HR5	5	20.5	11.0	8.75	35.0	M5 × 0.8	19	10.8	15	4.5	12	15	7.8	13.49	27.94	5.09	34.91	5.78	40
HR6	6				37.0	M6 × 1.0													
HR8	8	23.0	12.5	8.25	41.0	M8 × 1.25	22	12.5	17	6.5	14	14	10.9	15.48	34.02	5.58	43.44	7.06	51
HR10	10	26.0		10.75	46.0	M10 × 1.5	24	14.0	19		15	8	12.2	17.46	37.65	6.76	47.07	7.84	73
HR12	12	34.0	16.0	13.25	57.0	M12 × 1.75	32	18.5	24	7.5	20	10	15.4	22.22	78.06	8.33	97.57	16.18	150
HR14	14	36.0	17.0	14.25	60.0	M14 × 2.0	33	19.0											
HR15	15	38.0	18.0	15.25	62.0		M16 × 2.0	34	20.0	25	8.5	21	11	19.0	26.19	95.32	9.31	119.15	19.80
HR16	16	39.0	19.0		63.5	M16 × 2.0		35	22.0	27	9.5	23	10	19.2	26.99	100.71	9.70	125.81	20.98
HR17	17	41.0	20.0	16.30	68.0	M16 × 1.5	37	23.0	28	9.5	24	12	20.4	28.58	101.40	10.29	126.70	21.08	241
HR18	18	43.0			74.0	M18 × 1.5	40	24.0	30	10.0	26	10							
HR20	20	45.0	22.0	19.30	76.0	M20 × 1.5	41	25.0	36	12.0	30	6	27.1	34.92	156.21	15.10	195.25	32.55	580
HR22	22	52.0			85.0	M22 × 1.5	47	28.0											
HR25	25	70.0	35.0	25.30	105.0	M24 × 2.0	54	42.0	50	14.0	43	15	32.3	47.62	300.08	20.88	378.04	63.05	1230
HR28	28	75.0			110.0	M27 × 2.0	58	44.0	56	15.0	47	14	36.8	50.80	283.70	23.24	354.60	59.13	1620
HR30	30	78.0	37.0	26.30	120.0	M30 × 2.0	62	48.0	60	16.0	51								

**Notes**

- (1) Axial load indicates either the smaller value of static load or proof load.
  - (2) Special specification can bare higher fatigue load.
  3. Made to order only.
  4. Radial Clearance All Size: 0.051mm MAX
- Please consult MINEBEA for availability of bearings in this series.

Bore size	~ 3	~ 6	~ 10	~ 18	~ 30
H7 Tolerance (μm)	+ 10 0	+ 12 0	+ 15 0	+ 18 0	+ 21 0