

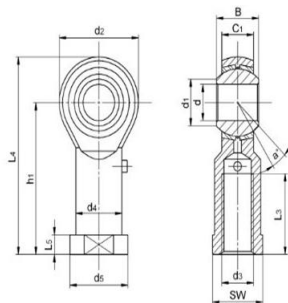
A rod end bearing, also known as a heim joint (N. America) or rose joint (U.K. and elsewhere), is a mechanical articulating joint. Such joints are used on the ends of control rods, steering links, tie rods, or anywhere a precision articulating joint is required, and where a clevis end (which requires perfect 90 degree alignment between the attached shaft and the second component) is unsuitable. A ball swivel with an opening through which a bolt or other attaching hardware may pass is pressed into a circular casing with a threaded shaft attached. The threaded portion may be either male or female. The heim joint's advantage is that the ball insert permits the rod or bolt passing through it to be misaligned to a limited degree (an angle other than 90 degrees).

A link terminated in two heim joints permits misalignment of their attached shafts (viz., other than 180 degrees) when used in tension. When used in compression, the through-rods are forced to the extreme ends of their ball's misalignment range, which cocks the link at an oblique angle.

Rod end bearing:PHSB Series



Ball: Gcr15 Steel, heat treated, HRC56 min.
 Precision ground, polished, hard chromium plated
 Body: Carbon steel, Zinc plated, chromate treated
 Race: Brass
 Sliding contact surfaces: Steel/Brass



Motion(shanghai)Industrial Development Co.,Ltd

Part No.	Dimensions(mm)													Ball	a°	Load ratings		weight
	d +0.038	B	C1	d1	d2	d3	h1	L3	(L4)	L5	d4	d5	sw	dia	mis.	(KN)		≈ kg
	-0.012					UNF-2B								angle	Cr	Cor		
PHSB3	4.826	7.92	6.35	7.77	15.88	10-32	26.97	12.7	34.91	4.75	7.92	10.31	7.92	11.11	10	2.8	7.4	0.015
PHSB4	6.35	9.53	7.14	9.02	19.05	1/4-28	33.32	17.45	42.85	4.75	9.52	11.89	9.53	12.7	13	4.8	11.2	0.025
PHSB5	7.938	11.1	8.74	11.35	22.23	5/16-24	34.93	17.45	46.03	4.75	11.1	12.7	11.1	15.87	10	5.9	13.8	0.036
PHSB6	9.525	12.7	10.31	13.13	25.4	3/8-24	41.28	20.62	53.98	6.35	14.27	17.45	14.27	18.26	9	8.2	18.2	0.061
PHSB7	11.112	14.27	11.1	14.88	28.58	7/16-20	46.02	23.8	60.3	6.35	15.88	19.05	15.88	20.62	11	10	22	0.081
PHSB8	12.7	15.88	12.7	17.73	33.32	1/2-20	53.98	26.97	70.64	6.35	19.05	22.22	19.05	23.8	9	15	31.7	0.133
PHSB10	15.875	19.05	14.27	21.31	38.1	5/8-18	63.5	34.92	82.55	7.92	22.22	25.4	22.22	28.57	11	18	35.1	0.19
PHSB12	19.05	22.23	17.45	24.84	44.45	3/4-16	73.03	39.67	95.25	7.92	25.4	28.58	25.4	33.33	10	27	49.6	0.285
PHSB16	25.4	34.93	25.4	32.23	69.85	1-1/4-12	104.78	53.98	139.7	11.1	38.1	44.45	38.1	47.62	14	60	101	1

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