

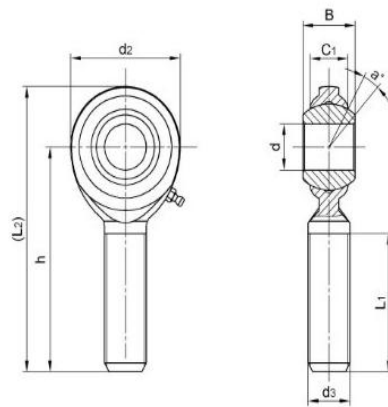
A rod end bearing, also known as a heim joint (N. America) or rose joint (U.K. and elsewhere), is a mechanical articulating joint. Such joints are used on the ends of control rods, steering links, tie rods, or anywhere a precision articulating joint is required, and where a clevis end (which requires 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:CM Series



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



Motion(shanghai)Industrial Development Co.,Ltd

Part No.	Dimensions(mm/inches)								Ball	a°	Load	weight
	d+0.03 -0.01	B	C1	d2	d3 UNF-2A	h	L1	(L2)	dia	mis. angle	ratings (KN)	≈kg
	CM3	4.826	7.92	5.94	15.88	10-32	31.75	19.05	39.69	11.112	13	4.4
CM3	0.19	0.312	0.234	0.625	10-32	1.25	0.75	1.562	0.437	13	4.4	0.136
CM4	6.35	9.53	6.35	19.05	1/4-28	39.67	25.4	49.2	12.7	18	8.2	0.018
CM4	0.25	0.375	0.25	0.75	1/4-28	1.562	1	1.937	0.5	18	8.2	0.018
CM5	7.938	11.1	7.92	22.23	5/16-24	47.63	31.75	58.75	15.875	14	12.7	0.317
CM5	0.3125	0.437	0.312	0.875	5/16-24	1.875	1.25	2.312	0.625	14	12.7	0.317
CM6	9.525	12.7	9.11	25.4	3/8-24	49.22	31.75	61.92	18.263	14	17	0.498
CM6	0.375	0.5	0.359	1	3/8-24	1.938	1.25	2.687	0.719	14	17	0.498
CM7	11.11	14.27	10.31	28.58	7/16-20	53.98	34.93	68.27	20.625	13	21	0.068
CM7	0.4375	0.562	0.406	1.125	7/16-20	2.125	1.375	2.678	0.812	13	21	0.068
CM8	12.7	15.88	11.5	33.32	1/2-20	61.92	38.1	78.58	23.8	12	27.5	0.108
CM8	0.5	0.625	0.453	1.312	1/2-20	2.438	1.5	3.093	0.937	12	27.5	0.108
CM10	15.875	19.05	12.29	38.1	5/8-18	66.68	41.28	85.73	28.575	16	29.9	0.163
CM10	0.625	0.75	0.484	1.5	5/8-18	2.625	1.625	3.375	1.125	16	29.9	0.163
CM12	19.05	22.23	15.06	44.45	3/4-16	73.02	44.45	95.25	33.338	14	44.2	0.258
CM12	0.75	0.875	0.593	1.75	3/4-16	2.875	1.75	3.75	1.312	14	44.2	0.258
CM14	22.225	22.23	15.06	50.8	7/8-14	85.73	47.63	111.1	33.338	14	74.7	0.408
CM14	0.875	0.875	0.593	2	7/8-14	3.375	1.875	4.375	1.312	14	74.7	0.408
CM16	25.4	34.93	25.4	69.85	1-1/4-12	104.78	53.98	139.7	47.625	14	129.1	0.964
CM16	1	1.375	1	2.75	1-1/4-12	4.125	2.125	5.5	1.875	14	129.1	0.964

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