

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).

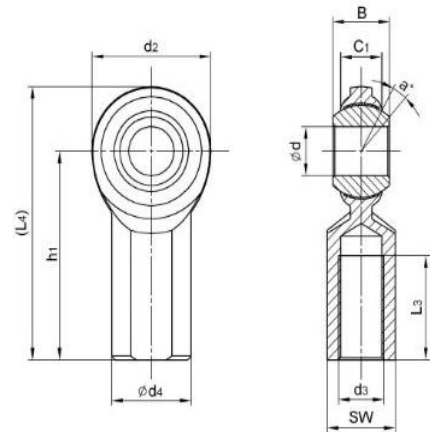
A link terminated in two heim joints permits misalignment of their attached shafts (viz., other than 180 degrees) when used in tension.

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:CF-T Series



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



Motion(shanghai)Industrial Development Co.,Ltd

Part No.	Dimensions(mm/inches)										Ball	a°	Load	weight
	d+0.03	B	C1	d2	d3	h1	L3	(L4)	d4	sw	dia	mis.	Ratings	≈ kg
	-0.01				UNF-2B						angle	(KN)		
CF3T	4.826	7.92	5.94	15.88	10-32	26.97	11.11	34.91	10.31	7.92	11.11	13	5.8	0.018
CF3T	0.19	0.312	0.234	0.625	10-32	1.062	0.437	1.375	0.406	0.312	0.437	13	5.8	0.018
CF4T	6.35	9.53	6.35	19.05	1/4-28	33.32	14.28	42.85	11.89	9.52	12.7	18	8.2	0.022
CF4T	0.25	0.375	0.25	0.75	1/4-28	1.312	0.562	1.687	0.468	0.375	0.5	18	8.2	0.022
CF5T	7.938	11.1	7.92	22.23	5/16-24	34.92	15.88	46.03	12.7	11.1	15.88	14	10.2	0.036
CF5T	0.3125	0.437	0.312	0.875	5/16-24	1.375	0.625	1.812	0.5	0.437	0.625	14	10.2	0.036
CF6T	9.525	12.7	9.11	25.4	3/8-24	41.28	19.05	53.98	17.45	14.27	18.26	14	14	0.059
CF6T	0.375	0.5	0.359	1	3/8-24	1.625	0.75	2.125	0.687	0.562	0.719	14	14	0.059
CF7T	11.112	14.27	10.31	28.58	7/16-20	46.02	22.22	60.3	19.05	15.88	20.62	13	17.6	0.081
CF7T	0.4375	0.562	0.406	1.125	7/16-20	1.812	0.875	2.375	0.75	0.625	0.812	13	17.6	0.081
CF8T	12.7	15.88	11.5	33.32	1/2-20	53.98	25.4	70.64	22.22	19.05	23.8	12	23.7	0.131
CF8T	0.5	0.625	0.453	1.312	1/2-20	2.125	1	2.781	0.875	0.75	0.937	12	23.7	0.131
CF10T	15.875	19.05	12.29	38.1	5/8-18	63.5	31.75	82.55	25.4	22.22	28.58	16	25.7	0.195
CF10T	0.625	0.75	0.484	1.5	5/8-18	2.5	1.25	3.25	1	0.875	1.125	16	25.7	0.195
CF12T	19.05	22.23	15.06	44.45	3/4-16	73.02	38.1	95.25	28.58	25.4	33.33	14	42.4	0.294
CF12T	0.75	0.875	0.593	1.75	3/4-16	2.875	1.5	3.75	1.125	1	1.312	14	42.4	0.294

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