



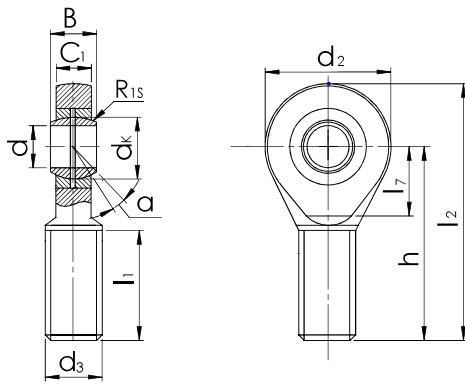
Subject	Symbol	Description
Type	SI	Rod end, right-hand thread.
	SIL	Rod end, left-hand thread.
	SA	Rod end, right-hand thread.
	SAL	Rod end, left-hand thread.
Friction parts	T/K	Steel/PTFE (wrap for smaller bearings and soaked fabric for bigger bearings).
	SS/M	Acid resistant steel/brass.

Features

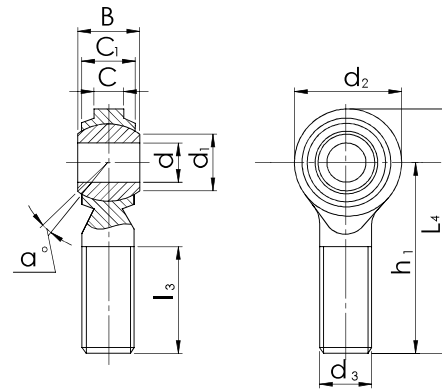
A rod end bearing is a mechanical articulating joint. Such joints are used on the ends of control rods, steering links, tie rods or anywhere a precision articulating joint is required. A ball swivel with an opening through which a bolt or other attaching hardware may pass is pressed into a circular casing with a threaded shaft attached. The threaded portion may be either male or female. Rod ends has spherical plain bearing inserted.

Designation

Rod ends with built-in plain bearings are ready to mount parts and can be quickly and easily fixed to the interacting machine elements. The wide variety of engineering solutions are based on the one hand on implementing various plain bearings (various materials of friction parts) and on the other hand on various assembly options (internal or external threads, right or left hand threads) enable lots of construction solutions. Standard make (TK) bases on the friction pair steel/PTFE . For heavy duty operation SS/M rod ends are most suitable, where special acid resistant steel and brass constitute the friction part.



SA...T



SA...P

ISO	Dimensions (mm)												Basic Load Ratings (N)		Weight (kg)
	d	d ₃	B	C ₁	l ₁	d ₂	l ₇	h	l ₂	d _k	R _{ts}	a			
		6g											≅	Dyn. C	
SA/SAL5 T/K	5	M5x0,8	8	6	19	18	-	33	42	11,1	0,3	13	5,7	6	0,0130
SA/SAL6 T/K	6	M6x1,0	9	6,75	21	20	-	36	46	12,7	0,3	13	7,2	7,65	0,0200
SA/SAL8 T/K	8	M8x1,25	12	9	25	24	-	42	54	15,875	0,3	14	11,6	12,9	0,0380
SA/SAL10 T/K	10	M10x1,5	14	10,5	28	28	-	28	62	19,05	0,3	13	14,5	18	0,0550
SA/SAL12 T/K	12	M12x1,75	16	12	32	32	-	54	70	22,225	0,3	13	17	24	0,0850
SA/SAL12-1 T/K	12	M12x1,25	16	12	32	32	-	54	70	22,225	0,3	13	17	24	0,0850
SA/SAL14 T/K	14	M14x2,0	19	13,5	36	36	18	60	78	25,4	0,3	16	24	31	0,1400
SA/SAL16 T/K	16	M16x2,0	21	15	37	42	21	66	87	28,575	0,3	15	28,5	39	0,2100
SA/SAL16-1 T/K	16	M16x1,5	21	15	37	42	21	66	87	28,575	0,3	15	28,5	39	0,2100
SA/SAL18 T/K	18	M18x1,5	23	16,5	41	44	22	72	94	31,75	0,3	15	42,5	47,5	0,2800
SA/SAL20 T/K	20	M20x1,5	25	18	45	50	25	78	103	34,925	0,3	14	42,5	57	0,3800
SA/SAL22 T/K	22	M22x1,5	28	20	48	54	27	84	111	38,1	0,3	15	57	68	0,4800
SA/SAL25 T/K	25	M24x2,0	31	22	55	60	30	94	124	42,86	0,3	15	68	85	0,6400
SA/SAL28 T/K	28	M27x2,0	35	24	62	66	33	103	136	47,63	0,3	15	86	107	0,8000
SA/SAL30 T/K	30	M30x2,0	37	25	66	70	35	110	145	50,8	0,3	17	88	114	1,1000
SA/SAL35 T/K	35	M36x2,0	43	28	85	81	40	140	180,5	57,15	0,3	16	-	-	1,6400
SA/SAL40 T/K	40	M42x2,0	49	33	90	91	45	150	195,5	66,67	0,3	17	-	-	2,3000
SA/SAL50 T/K	50	M48x2,0	60	45	105	117	58	185	243,5	82,5	0,3	12	-	-	4,8000

ISO	Dimensions (mm)											Basic Load Ratings (N)		Weight (kg)
	d	d ₁	d ₃	B	C	C ₂	d ₂	h ₁	L ₄	I ₃	a			
			6g									≈	Dyn. C	
SA/SAL5 P/K	5	7,7	M5x0,8	8	6	2,9	19	33	42,5	20	12	5700	6000	0,014
SA/SAL6 P/K	6	8,9	M6x1,0	9	6,7	2,9	21	36	46,5	22	11	7200	7650	0,020
SA/SAL8 P/K	8	10,3	M8x1,25	12	9	4,5	25	42	54,5	25	12	11600	12900	0,038
SA/SAL10 P/K	10	12,9	M10x1,5	14	11	4,5	29	48	62,5	29	12	14500	18000	0,055
SA/SAL12 P/K	12	15,4	M12x1,75	16	12	6	33	54	70,5	33	13	17000	24000	0,085
SA/SAL14 P/K	14	16,8	M14x2,0	19	14	6,5	37	60	78,5	36	14	24000	31000	0,140
SA/SAL16 P/K	16	19,3	M16x2,0	21	15	7	43	66	87,5	40	14	28500	39000	0,210
SA/SAL18 P/K	18	21,8	M18x1,5	23	17	7	47	72	95,5	44	14	42500	47500	0,280
SA/SAL20 P/K	20	24,3	M20x1,5	25	18	8	51	78	103,5	47	14	42500	57000	0,380
SA/SAL22 P/K	22	25,8	M22x1,5	28	20	8,8	55	84	111,5	50	15	57000	68000	0,480
SA/SAL25 P/K	25	29,5	M24x2,0	31	22	11	61	94	124,5	57	15	68000	85000	0,640