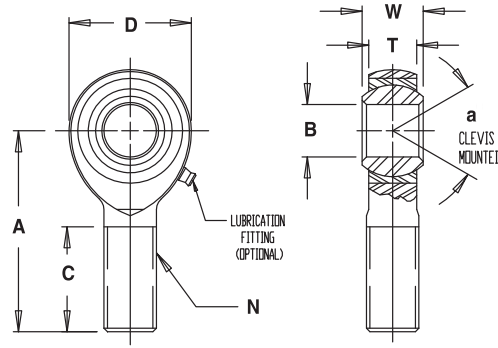




**3-PIECE, COMMERCIAL, SINTERED BRONZE**

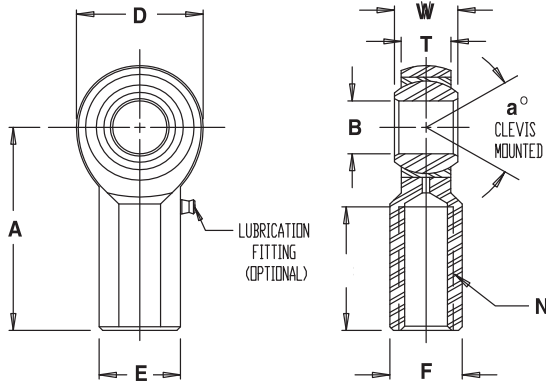
**RM-SB / RF-SB**



**MATERIALS**

BALL	BODY
52100 STEEL	LOW CARBON STEEL
Rc 56 MIN. HARD	ZINC PLATED
HARD CHROME PLATED	CHROMATE TREATED
RACE	
BRASS	

MALE ROD ENDS		B	D	W	T	BALL	A	N	C	a	ULT.	APROX.
RIGHT	LEFT HAND	DIA.	DIA.	WIDTH	WIDTH	DIA.	LGTH	THD.	LGTH	MIS. ANGLE	STATIC RADIAL	WEIGHT
HAND PART NO	PART NO	+ .0025 - .0005	+ .010 - .010	+ .005 - .005	+ .015 - .015	REF.	+ .015 - .015	UNF 3A	+ .062 - .031	REF	LOAD (LBS.)	(lbs.)
RM3SB	RML3SB	.1900	.625	.312	.250	.437	1.250	10-32	.750	13	1,174	.03
RM4SB	RML4SB	.2500	.750	.375	.281	.500	1.562	1/4-28	1.000	16	2,168	.04
RM5SB	RML5SB	.3125	.875	.437	.344	.625	1.875	5/16-24	1.250	14	2,796	.07
RM6SB	RML6SB	.3750	1.000	.500	.406	.719	1.938	3/8-24	1.250	12	4,012	.11
RM7SB	RML7SB	.4375	1.125	.562	.437	.812	2.125	7/16-20	1.375	14	4,244	.16
RM8SB	RML8SB	.5000	1.312	.625	.500	.937	2.438	1/2-20	1.500	12	6,700	.25
RM10SB	RML10SB	.6250	1.500	.750	.562	1.125	2.625	5/8-18	1.625	16	7,400	.38
RM12SB	RML12SB	.7500	1.750	.875	.687	1.312	2.875	3/4-16	1.750	14	11,550	.60



MALE ROD END LOAD RATINGS BASED ON NO LUBRICATING FITTING. FOR LOAD RATINGS WITH LUBRICATOR, PLEASE CONTACT THE RBL ENGINEERING DEPARTMENT.

**MATERIALS**

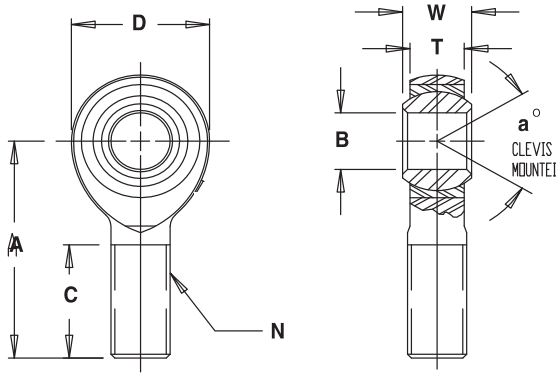
BALL	BODY
52100 STEEL	LOW CARBON STEEL
Rc 56 MIN. HARD	ZINC PLATED
HARD CHROME PLATED	CHROMATE TREATED
RACE	
BRASS	

FEMALE ROD ENDS		B	D	W	T	BALL	A	N	C	E	F	a	ULT.	APROX.
RIGHT	LEFT HAND	DIA.	DIA.	WIDT H	WIDTH	DIA.	LGTH	THD.	LGTH	DIA	FLAT	MIS. ANG.	STATIC RADIAL	WEIGHT
HAND PART NO	PART NO	+ .0025 - .0005	+ .010 - .010	+ .005 - .005	+ .015 - .015	REF.	+ .015 - .015	UNF 2B	+ .062 - .031	+ .010 - .010	+ .010 - .010	REF	LOAD (LBS.)	(lbs.)
RF3SB	RFL3SB	.1900	.625	.312	.250	.437	1.062	10-32	.500	.406	.312	13	1,624	.04
RF4SB	RFL4SB	.2500	.750	.375	.281	.500	1.312	1/4-28	.687	.468	.375	16	2,545	.06
RF5SB	RFL5SB	.3125	.875	.437	.344	.625	1.375	5/16-24	.687	.500	.437	14	3,200	.09
RF6SB	RFL6SB	.3750	1.000	.500	.406	.719	1.625	3/8-24	.812	.687	.562	12	3,950	.15
RF7SB	RFL7SB	.4375	1.125	.562	.437	.812	1.812	7/16-20	.937	.750	.625	14	4,300	.20
RF8SB	RFL8SB	.5000	1.312	.625	.500	.937	2.125	1/2-20	1.062	.875	.750	12	6,700	.33
RF10SB	RFL10SB	.6250	1.500	.750	.562	1.125	2.500	5/8-18	1.375	1.000	.875	16	7,400	.48
RF12SB	RFL12SB	.7500	1.750	.875	.687	1.312	2.875	3/4-16	1.562	1.125	1.000	14	11,550	.72

NOTES: FOR GREASE FITTINGS ADD "Z" TO SUFFIX. EXAMPLE: RM8Z  
FOR STUDS ADD "Y" TO SUFFIX. EXAMPLE: RF6Y

# 3-PIECE, PRECISION-WEAR RESISTANT, PLASTIC RACE

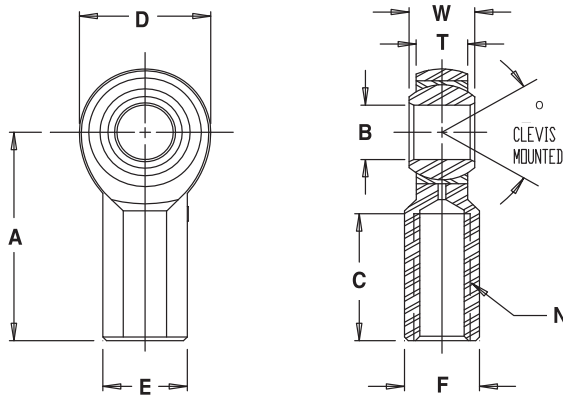
## RNJM / RNJF



### MATERIALS

BALL	BODY
LOW CARBON STEEL	LOW CARBON STEEL
CASE HARDENED	ZINC PLATED
ZINC PLATED	CHROMATE TREATED
RACE	
TEFLON LUBRICATED, FIBER REINFORCED ENGINEERING PLASTIC	

MALE ROD ENDS		B	D	W	T	BALL	A	N	C	a	ULT.	APROX.
RIGHT	LEFT	DIA.	DIA.	WIDTH	WIDTH	DIA.	LGTH	THD.	LGTH	MIS.	STATIC	WEIGHT
HAND	HAND					REF.				ANGLE	RADIAL	(lbs.)
NO	PART NO	+ .0025	+ .010	+ .005	+ .015		+ .015	UNF	+ .062	REF	LOAD	
		- .0005	- .010	- .005	- .015		- .015	3A	- .031		(LBS.)	
RNJM3	RNJML3	.1900	.625	.312	.250	.437	1.250	10-32	.750	13	1,174	.03
RNJM4	RNJML4	.2500	.750	.375	.281	.500	1.562	1/4-28	1.000	16	2,168	.04
RNJM5	RNJML5	.3125	.875	.437	.344	.625	1.875	5/16-24	1.250	14	2,796	.07
RNJM6	RNJML6	.3750	1.000	.500	.406	.719	1.938	3/8-24	1.250	12	4,012	.11
RNJM7	RNJML7	.4375	1.125	.562	.437	.812	2.125	7/16-20	1.375	14	4,244	.16
RNJM8	RNJML8	.5000	1.312	.625	.500	.937	2.438	1/2-20	1.500	12	6,453	.25
RNJM10	RNJML10	.6250	1.500	.750	.562	1.125	2.625	5/8-18	1.625	16	7,400	.38
RNJM12	RNJML12	.7500	1.750	.875	.687	1.312	2.875	3/4-16	1.750	14	10,937	.60



### MATERIALS

BALL	BODY
LOW CARBON STEEL	LOW CARBON STEEL
CASE HARDENED	ZINC PLATED
ZINC PLATED	CHROMATE TREATED
RACE	
TEFLON LUBRICATED, FIBER REINFORCED ENGINEERING PLASTIC	

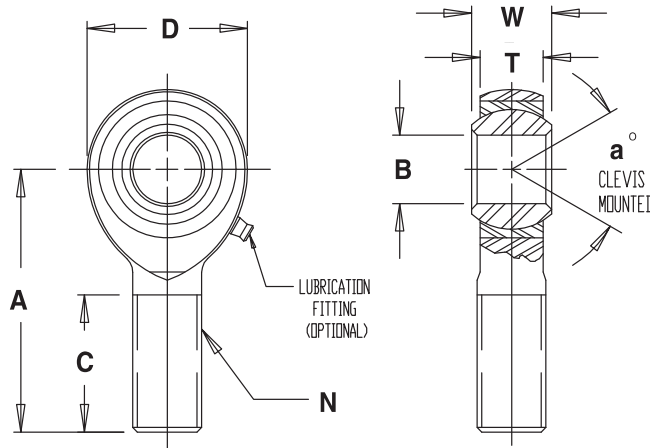
FEMALE ROD ENDS		B	D	W	T	BALL	A	N	C	E	F	a	ULT.	APROX.
RIGHT	LEFT	DIA.	DIA.	WIDTH	WIDTH	DIA.	LGTH	THD.	LGTH	DIA	FLAT	MIS.	STATIC	WEIGHT
HAND	HAND					REF.						ANG.	RADIAL	(lbs.)
NO	PART NO	+ .0025	+ .010	+ .005	+ .015		+ .015	UNF	+ .062	+ .010	+ .010	REF	LOAD	
		- .0005	- .010	- .005	- .015		- .015	2B	- .031	- .010	- .010		(LBS.)	
RNJF3	RNJFL3	.1900	.625	.312	.250	.437	1.062	10-32	.500	.406	.312	13	1,220	.04
RNJF4	RNJFL4	.2500	.750	.375	.281	.500	1.312	1/4-28	.687	.469	.375	16	2,500	.06
RNJF5	RNJFL5	.3125	.875	.437	.344	.625	1.375	5/16-24	.687	.500	.437	14	2,753	.09
RNJF6	RNJFL6	.3750	1.000	.500	.406	.719	1.625	3/8-24	.812	.687	.562	12	3,950	.15
RNJF7	RNJFL7	.4375	1.125	.562	.437	.812	1.812	7/16-20	.937	.750	.625	14	4,300	.20
RNJF8	RNJFL8	.5000	1.312	.625	.500	.937	2.125	1/2-20	1.062	.875	.750	12	6,453	.33
RNJF10	RNJFL10	.6250	1.500	.750	.562	1.125	2.500	5/8-18	1.375	1.000	.875	16	7,400	.48
RNJF12	RNJFL12	.7500	1.750	.875	.687	1.312	2.875	3/4-16	1.562	1.125	1.000	14	10,937	.72

NOTES: FOR STUDS ADD "Y" TO SUFFIX.  
EXAMPLE: RNJM6Y



**3-PIECE, PRECISION-WEAR RESISTANT/PTFE LINERS AVAILABLE**

**RJM / RJML**



MALE ROD ENDS		B DIA.	D DIA.	W WIDTH	T WIDTH	BALL DIA.	A LGTH	N THD.	C LGTH	a MIS. ANGLE	ULT. STATIC RADIAL LOAD (LBS.)	APROX. WEIGHT (lbs.)
RIGHT HAND PART NO	LEFT HAND PART NO	+ .0015 - .0005	+ .010 - .010	+ .000 - .005	+ .015 - .015	REF.	+ .015 - .015	UNF 3A	+ .062 - .031	REF		
RJM2*	RJML2*	.1250	.500	.250	.187	.312	.937	6-32 UNC	.562	16	500	.013
RJM3	RJML3	.1900	.625	.312	.250	.437	1.250	10-32	.750	13	1,174	.03
RJM4	RJML4	.2500	.750	.375	.281	.500	1.562	1/4-28	1.000	16	2,168	.04
RJM5	RJML5	.3125	.875	.437	.344	.625	1.875	5/16-24	1.250	14	2,796	.07
RJM6	RJML6	.3750	1.000	.500	.406	.719	1.938	3/8-24	1.250	12	4,012	.11
RJM7	RJML7	.4375	1.125	.562	.437	.812	2.125	7/16-20	1.375	14	4,244	.16
RJM8	RJML8	.5000	1.312	.625	.500	.937	2.438	1/2-20	1.500	12	6,700	.25
RJM10	RJML10	.6250	1.500	.750	.562	1.125	2.625	5/8-18	1.625	16	7,400	.38
RJM12	RJML12	.7500	1.750	.875	.687	1.312	2.875	3/4-16	1.750	14	11,550	.60
RJM16**	RJML16	1.0000	2.950	1.375	1.015	1.875	4.500	1-1/4-12	2.125	17	43,555	2.736
RJM16-1**	RJML16-1**	1.0000	2.950	1.375	1.015	1.875	4.500	1-14	2.125	17	43,555	2.464
RJM16-2**	RJML16-2**	1.0000	2.950	1.375	1.015	1.875	4.500	1-12	2.125	17	43,555	2.464

MALE ROD END LOAD RATINGS BASED ON NO LUBRICATION FITTING. FOR LOAD RATINGS OF ROD ENDS WITH LUBRICATOR, PLEASE CONTACT THE RBLENGINEERING DEPARTMENT.

\*GREASE FITTINGS & PTFE LINERS NOT AVAILABLE.

\*\* TOLERANCE VARIATION: "D", "A" ARE +/- .020

**NOTES:**

FOR GREASE FITTINGS ADD "Z" TO SUFFIX.

**EXAMPLE:** RJM6Z

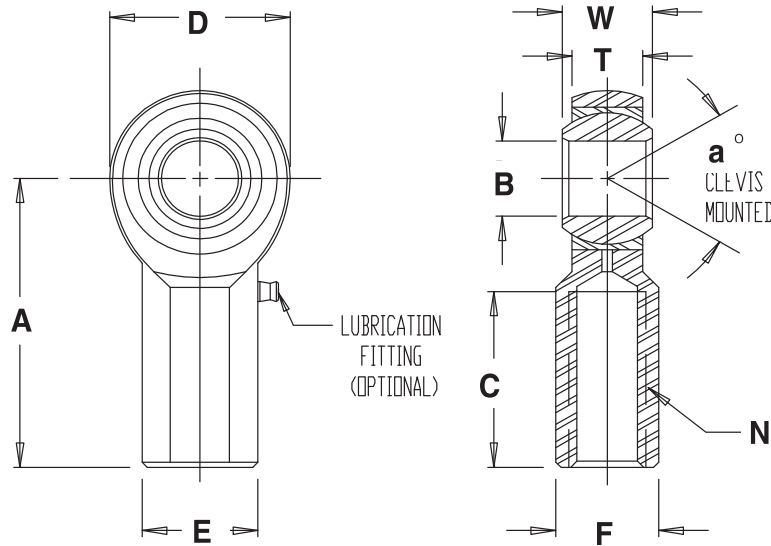
FOR STUDS ADD "Y" TO SUFFIX.

**EXAMPLE:** RJM5Y

FOR TEFLON LINER ADD "T" TO SUFFIX.

**EXAMPLE:** RJM12T

BALL	BODY
52100 STEEL	LOW CARBON STEEL
Rc 56 MIN. HARD	ZINC PLATED
HARD CHROME PLATED	CHROMATE TREATED
RACE	
STEEL ALLOY, HEAT TREATED	
ZINC PLATED, CHROMATE TREATED	



FEMALE ROD ENDS		B DIA.	D DIA.	W WIDTH	T WIDTH	BALL DIA.	A LGTH	N THD.	C LGTH	E DIA	F FLAT	a MIS. ANG.	ULT. STATIC RADIAL LOAD (LBS.)	APROX. WEIGHT (lbs.)
RIGHT HAND PART NO	LEFT HAND PART NO	+ .0025 - .0005	+ .010 - .010	+ .005 - .005	+ .015 - .015	REF.	+ .015 - .015	UNF 2B	+ .062 - .031	+ .010 - .010	+ .010 - .010	REF		
RJF2*	RJFL2*	.1250	.500	.250	.187	.312	.812	6-32UNC	.437	.312	.250	16	1,210	.019
RJF3	RJFL3	.1900	.625	.312	.250	.437	1.062	10-32	.500	.406	.312	13	1,624	.04
RJF4	RJFL4	.2500	.750	.375	.281	.500	1.312	1/4-28	.687	.469	.375	16	2,545	.06
RJF5	RJFL5	.3125	.875	.437	.344	.625	1.375	5/16-24	.687	.500	.437	14	3,200	.09
RJF6	RJFL6	.3750	1.000	.500	.406	.719	1.625	3/8-24	.812	.687	.562	12	3,950	.15
RJF7	RJFL7	.4375	1.125	.562	.437	.812	1.812	7/16-20	.937	.750	.625	14	4,300	.20
RJF8	RJFL8	.5000	1.312	.625	.500	.937	2.125	1/2-20	1.062	.875	.750	12	6,700	.33
RJF10	RJFL10	.6250	1.500	.750	.562	1.125	2.500	5/8-18	1.375	1.000	.875	16	7,400	.48
RJF12	RJFL12	.7500	1.750	.875	.687	1.312	2.875	3/4-16	1.562	1.125	1.000	14	11,550	.72
RJF16**	RJFL16**	1.0000	2.750	1.375	1.000	1.875	4.125	1-1/4-12	2.125	1.625	1.500	17	40,893	2.125
RJF16-1**	RJFL16-1**	1.0000	2.750	1.375	1.000	1.875	4.125	1-14	2.125	1.625	1.500	17	43,555	2.410
RJF16-2**	RJFL16-2**	1.0000	2.750	1.375	1.000	1.875	4.125	1-12	2.125	1.625	1.500	17	43,555	2.410

\*GREASE FITTINGS & PTFE LINERS NOT AVAILABLE.

\*\* TOLERANCE VARIATION: "D", "A" ARE +/- .020

**NOTES:**

FOR GREASE FITTINGS ADD "Z" TO SUFFIX.

**EXAMPLE:** RJF6Z

FOR STUDS ADD "Y" TO SUFFIX.

**EXAMPLE:** RJF5Y

FOR TEFLON LINER ADD "T" TO SUFFIX.

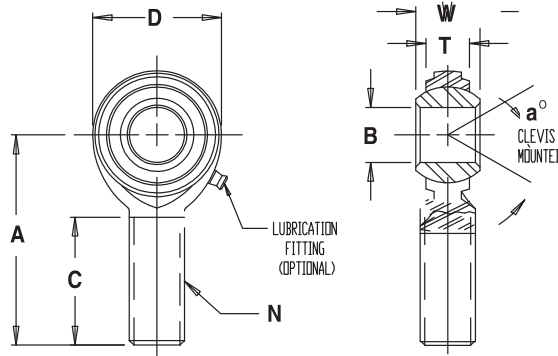
**EXAMPLE:** RJF12T

BALL	BODY
52100 STEEL	LOW CARBON STEEL
Rc 56 MIN. HARD	ZINC PLATED
HARD CHROME PLATED	CHROMATE TREATED
RACE	
STEEL ALLOY, HEAT TREATED	
ZINC PLATED, CHROMATE TREATED	



**2-PIECE, METAL TO METAL**

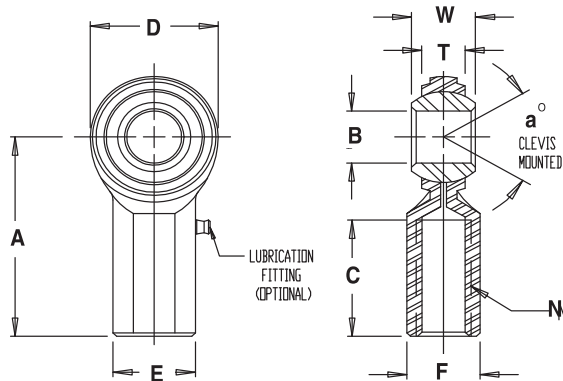
**RCM / RCF**



**MATERIALS**

BALL	BODY
52100 STEEL	LOW CARBON STEEL
Rc 56 MIN.	ZINC PLATED
HARD CHROME PLATED	CHROMATE TREATED

MALE ROD ENDS		B	D	W	T	BALL	A	N	C	a	ULT. STATIC RADIAL LOAD (LBS.)		APROX. WEIGHT (lbs.)
RIGHT HAND PART NO	LEFT HAND PART NO	DIA.	DIA.	WIDTH	WIDTH	DIA.	LGTH	THD.	LGTH	MIS. ANGLE	METAL TO METAL	**TEFLON LINED	
RCM3*	RCML3*	.1900	.625	.312	.234	.437	1.250	10-32	.750	20	1,210	902	.03
RCM4*	RCML4*	.2500	.750	.375	.250	.500	1.562	1/4-28	1.000	27	2,225	1,809	.04
RCM5*	RCML5*	.3125	.875	.437	.312	.625	1.875	5/16-24	1.250	22	3,600	2,984	.07
RCM6	RCML6	.3750	1.000	.500	.359	.719	1.938	3/8-24	1.250	22	5,100	4,244	.11
RCM7	RCML7	.4375	1.125	.562	.406	.812	2.125	7/16-20	1.375	21	6,402	5,312	.15
RCM8	RCML8	.5000	1.312	.625	.453	.937	2.438	1/2-20	1.500	20	8,386	7,211	.24
RCM10	RCML10	.6250	1.500	.750	.484	1.125	2.625	5/8-18	1.625	26	9,813	8,403	.36
RCM12	RCML12	.7500	1.750	.875	.593	1.312	2.875	3/4-16	1.750	24	14,290	12,321	.57



\*GREASE FITTINGS ARE NOT SUPPLIED ON THESE SIZES.  
 MALE ROD END LOAD RATINGS BASED ON NO LUBRICATING FITTING.  
 FOR LOAD RATINGS WITH LUBRICATOR, PLEASE CONTACT THE  
 RBL ENGINEERING DEPARTMENT.

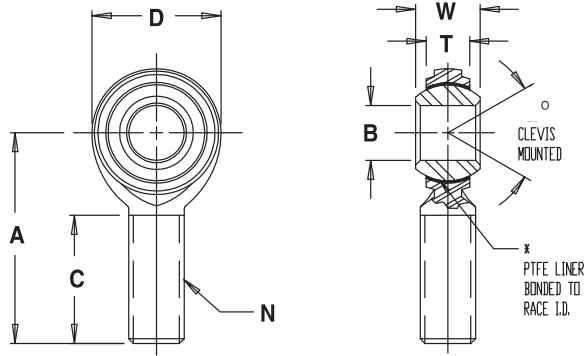
**MATERIALS**

BALL	BODY
52100 STEEL	LOW CARBON STEEL
Rc 56 MIN.	ZINC PLATED
HARD CHROME PLATED	CHROMATE TREATED

FEMALE ROD ENDS		B	D	W	T	BALL	A	N	C	E	F	a	ULT. STATIC RADIAL LOAD (LBS.)	
RIGHT HAND PART NO	LEFT HAND PART NO	DIA.	DIA.	WIDTH	WIDTH	DIA.	LGTH	THD.	LGTH	DIA	FLAT	MIS. ANG.	METAL TO METAL	**TEFLON LINED
RCF3*	RCFL3*	.1900	.625	.312	.234	.437	1.062	10-32	.500	.406	.312	20	2,100	1,637
RCF4-3	N / A	.2500	.750	.375	.250	.500	1.312	10-32	.687	.468	.375	27	3,250	
RCF4	RCFL4	.2500	.750	.375	.250	.500	1.312	1/4-28	.687	.468	.375	27	3,250	2,612
RCF5	RCFL5	.3125	.875	.437	.312	.625	1.375	5/16-24	.687	.500	.437	22	3,934	3,110
RCF6	RCFL6	.3750	1.000	.500	.359	.719	1.625	3/8-24	.812	.687	.562	22	5,100	4,206
RCF7	RCFL7	.4375	1.125	.562	.406	.812	1.812	7/16-20	.937	.750	.625	21	6,420	5,384
RCF8	RCFL8	.5000	1.312	.625	.453	.937	2.125	1/2-20	1.062	.875	.750	20	9,100	7,826
RCF10	RCFL10	.6250	1.500	.750	.484	1.125	2.500	5/8-18	1.375	1.000	.875	26	9,800	8,343
RCF12	RCFL12	.7500	1.750	.875	.593	1.312	2.875	3/4-16	1.562	1.125	1.000	24	14,250	12,342

2-PIECE, STAINLESS STEEL SELF LUBRICATING

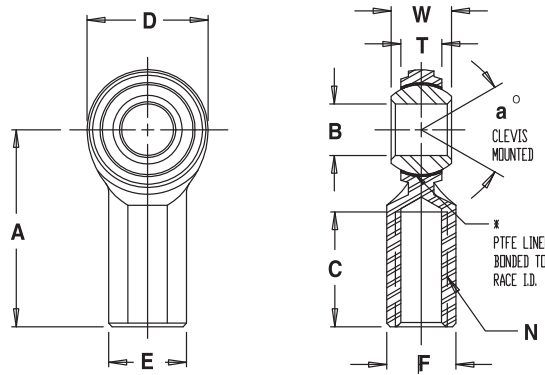
RSCM-T / RSCF-T



MATERIALS

<b>BALL</b>	<b>BODY</b>
440C STAINLESS STEEL HEAT TREATED	303 STAINLESS STEEL PASSIVATED
<b>LINER</b>	
*TEFLON FABRIC	

MALE ROD ENDS		B DIA.	D DIA.	W WIDTH	T WIDTH	BALL DIA.	A LGTH	N THD.	C LGTH	a MIS. ANGL	ULT. STATIC RADIAL LOAD (LBS.)	APROX. WEIGHT (lbs.)
RIGHT HAND PART NO	LEFT HAND PART NO	+ .0025 - .0005	+ .010 - .010	+ .005 - .005	REF.	REF.	+ .015 - .015	UNF 3A	+ .062 - .031	REF		
RSCM3T	RSCML3T	.1900	.625	.312	.234	.437	1.250	10-32	.750	20	912	.03
RSCM4T	RSCML4T	.2500	.750	.375	.250	.500	1.562	1/4-28	1.000	27	1,370	.04
RSCM5T	RSCML5T	.3125	.875	.437	.312	.625	1.875	5/16-24	1.250	22	2,050	.07
RSCM6T	RSCML6T	.3750	1.000	.500	.359	.719	1.938	3/8-24	1.250	22	3,040	.11
RSCM7T	RSCML7T	.4375	1.125	.562	.406	.812	2.125	7/16-20	1.375	21	3,780	.15
RSCM8T	RSCML8T	.5000	1.312	.625	.453	.937	2.438	1/2-20	1.500	20	4,700	.24
RSCM10T	RSCML10T	.6250	1.500	.750	.484	1.125	2.625	5/8-18	1.625	26	5,860	.36
RSCM12T	RSCML12T	.7500	1.750	.875	.593	1.312	2.875	3/4-16	1.750	24	7,512	.57



MATERIALS

<b>BALL</b>	<b>BODY</b>
440C STAINLESS STEEL HEAT TREATED	303 STAINLESS STEEL PASSIVATED
<b>LINER</b>	
*TEFLON FABRIC	

FEMALE ROD ENDS		B DIA.	D DIA.	W WIDTH	T WIDTH	BALL DIA.	A LGTH	N THD.	C LGTH	E DIA	F FLAT	a MIS. ANG.	ULT. STATIC RADIAL LOAD (LBS.)	APROX. WEIGHT (lbs.)
RIGHT HAND PART NO	LEFT HAND PART NO	+ .0025 - .0005	+ .010 - .010	+ .005 - .005	REF.	REF.	+ .015 - .015	UNF 2B	+ .062 - .031	+ .010 - .010	+ .010 - .010	REF		
RSCF3T	RSCFL3T	.1900	.625	.312	.234	.437	1.062	10-32	.500	.406	.312	20	930	.04
RSCF4T	RSCFL4T	.2500	.750	.375	.250	.500	1.312	1/4-28	.687	.468	.375	27	1,380	.05
RSCF5T	RSCFL5T	.3125	.875	.437	.312	.625	1.375	5/16-24	.687	.500	.437	22	2,100	.08
RSCF6T	RSCFL6T	.3750	1.000	.500	.359	.719	1.625	3/8-24	.812	.687	.562	22	3,080	.13
RSCF7T	RSCFL7T	.4375	1.125	.562	.406	.812	1.812	7/16-20	.937	.750	.625	21	3,790	.18
RSCF8T	RSCFL8T	.5000	1.312	.625	.453	.937	2.125	1/2-20	1.062	.875	.750	20	4,720	.29
RSCF10T	RSCFL10T	.6250	1.500	.750	.484	1.125	2.500	5/8-18	1.375	1.000	.875	26	5,870	.43
RSCF12T	RSCFL12T	.7500	1.750	.875	.593	1.312	2.875	3/4-16	1.562	1.125	1.000	24	7,520	.65

\* A trade mark of E.I. Dupont de Nemours & Co., Inc.

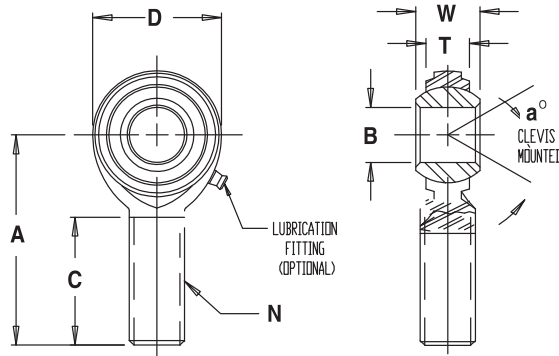
NOTES: FOR STUD ADD "Y" TO SUFFIX.

EXAMPLE: RCM10TY



**2-PIECE METRIC, METAL TO METAL/PTFE LINERS AVAILABLE**

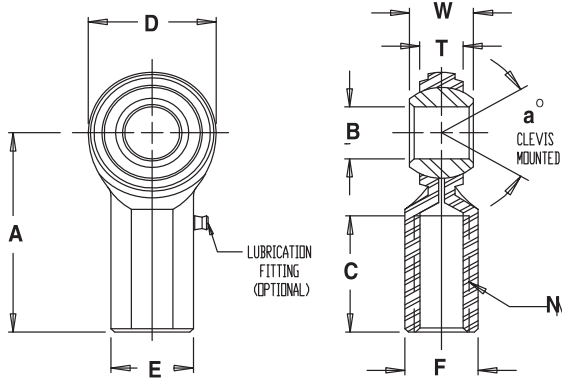
**RCM-M / RCF-M**



**MATERIALS**

BALL	BODY
52100 STEEL	LOW CARBON STEEL
Rc 56 MIN.	ZINC PLATED
HARD CHROME PLATED	CHROMATE TREATED

MALE ROD ENDS		B DIA.	D DIA.	W WIDTH	T WIDTH	BALL DIA.	A LGTH	N THD.	C LGTH	a MIS. ANG.	ULT. STATIC RADIAL LOAD (Newton)	APROX. WEIGHT (g)
RIGHT HAND PART NO	LEFT HAND PART NO	+ .065 - .012	+ .38 - .38	+ .12 - .12	REF.	REF.	+ .40 - .40	THREAD	+ 1.00 - 1.00	REF		
RCM5M*	RCML5M*	5	16	8	5.75	11.10	33	M5 X 0.8	20	22	5,168	12
RCM6M*	RCML6M*	6	19	9	6.25	12.70	36	M6 X 1.0	22	23	7,296	18
RCM8M*	RCML8M*	8	22.25	12	8.0	15.88	42	M8 X 1.25	25	28	13,591	31
RCM10M	RCML10M	10	27	14	9.5	19.05	48	M10 X 1.5	29	26	21,024	68
RCM10MF	RCML10MF	10	27	14	9.5	19.05	48	M10 X 1.25	29	26	21,024	68
RCM12M	RCML12M	12	30	16	10.75	22.23	54	M12 X 1.75	33	27	25,819	78
RCM12MF	RCML12MF	12	30	16	10.75	22.23	54	M12 X 1.25	33	27	25,819	78
RCM14M	RCML14M	14	34.75	19	12.25	25.40	60	M14 X 2.0	36	30	35,214	118
RCM16M	RCML16M	16	38	21	12.75	28.58	66	M16 X 2.0	40	33	37,391	173
RCM18M	RCML18M	18	42	23	14.75	31.75	72	M18 X 1.5	44	30	47,903	260
RCM20M	RCML20M	20	46	25	16.25	34.93	78	M20 X 1.5	47	29	57,101	290



\*GREASE FITTINGS ARE NOT SUPPLIED ON THESE SIZES.  
 MALE ROD END LOAD RATINGS BASED ON NO LUBRICATING FITTING.  
 FOR LOAD RATINGS WITH LUBRICATOR, PLEASE CONTACT THE  
 RBL ENGINEERING DEPARTMENT.

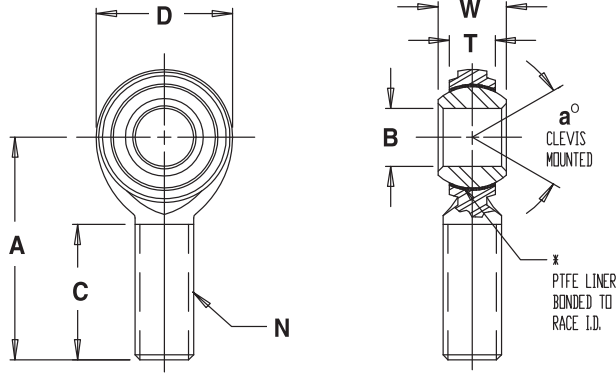
**MATERIALS**

BALL	BODY
52100 STEEL	LOW CARBON STEEL
Rc 56 MIN.	ZINC PLATED
HARD CHROME PLATED	CHROMATE TREATED

FEMALE ROD ENDS		B DIA.	D DIA.	W WIDT H	T WIDTH	BALL DIA.	A LGTH	N THD.	C LGTH	E DIA	F FLAT	a MIS. ANG.	ULT. STATIC RADIAL LOAD (Newton)	APROX. WEIGHT (g)
RIGHT HAND PART NO	LEFT HAND PART NO	+ .065 - .012	+ .38 - .38	+ .12 - .12	REF.	REF.	+ .40 - .40	THREAD	+ 1.00 - 1.00	+ .25 - .25	+ .25 - .25	REF		
RCF5M*	RCFL5M*	5	16	8	5.75	11.10	27	M5 X 0.8	14	11	9	22	8,247	18
RCF6M	RCFL6M	6	19	9	6.25	12.70	30	M6 X 1.0	14	13	11	23	11,895	25
RCF8M	RCFL8M	8	22.25	12	8.0	15.88	36	M8 X 1.25	17	16	14	28	15,190	40
RCF10M	RCFL10M	10	27	14	9.5	19.05	43	M10 X 1.5	21	19	17	26	22,750	80
RCF10MF	RCFL10MF	10	27	14	9.5	19.05	43	M10 X 1.25	21	19	17	26	22,750	80
RCF12M	RCFL12M	12	30	16	10.75	22.23	50	M12 X 1.75	24	22	19	27	25,819	95
RCF12MF	RCFL12MF	12	30	16	10.75	22.23	50	M12 X 1.25	24	22	19	27	25,819	95
RCF14M	RCFL14M	14	34.75	19	12.25	25.40	57	M14 X 2.0	27	25	22	30	35,214	160
RCF16M	RCFL16M	16	38	21	12.75	28.58	64	M16 X 2.0	33	27	22	33	37,391	215
RCF18M	RCFL18M	18	42	23	14.75	31.75	71	M18 X 1.5	36	28.58	25.4	30	47,903	300
RCF20M	RCFL20M	20	46	25	16.25	34.93	77	M20 X 1.5	40	30.15	27	29	57,101	350

2-PIECE METRIC, STAINLESS STEEL, SELF-LUBRICATING

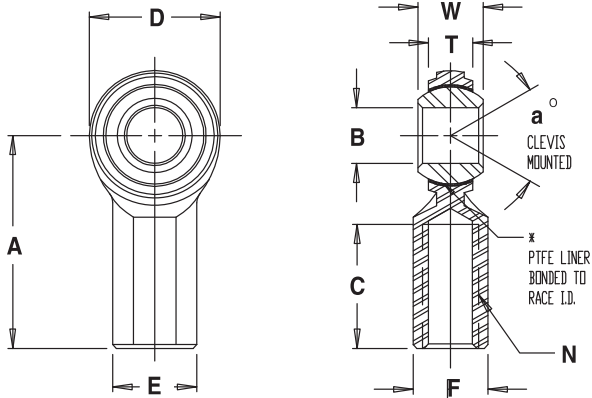
RSCM-MT / RSCF-MT



MATERIALS

BALL	BODY
440C STAINLESS STEEL HEAT TREATED	303 STAINLESS STEEL PASSIVATED
LINER	
*TEFLON FABRIC	

MALE ROD ENDS		B DIA.	D DIA.	W WIDTH	T WIDTH	BALL DIA.	A LGTH	N THD.	C LGTH	a MIS. ANG.	ULT. STATIC RADIAL LOAD (Newton)	APROX. WEIGHT (g)
RIGHT HAND PART NO	LEFT HAND PART NO	+ .065 - .012	+ .38 - .38	+ .12 - .12	REF.	REF.	+ .40 - .40	THREAD	+ 1.00 - 1.00	REF		
RSCM5MT	RSCML5MT	5	16	8	5.75	11.10	33	M5 X 0.8	20	22	4,056	12
RSCM6MT	RSCML6MT	6	19	9	6.25	12.70	36	M6 X 1.0	22	23	6,093	18
RSCM8MT	RSCML8MT	8	22.25	12	8.0	15.88	42	M8 X 1.25	25	28	9,118	31
RSCM10MT	RSCML10MT	10	27	14	9.5	19.05	48	M10 X 1.5	29	26	14,144	68
RSCM12MT	RSCML12MT	12	30	16	10.75	22.23	54	M12 X 1.75	33	27	17,373	78
RSCM14MT	RSCML14MT	14	34.75	19	12.25	25.40	60	M14 X 2.0	36	30	23,699	118
RSCM16MT	RSCML16MT	16	38	21	12.75	28.58	66	M16 X 2.0	40	33	25,162	173



MATERIALS

BALL	BODY
440C STAINLESS STEEL HEAT TREATED	303 STAINLESS STEEL PASSIVATED
LINER	
*TEFLON FABRIC	

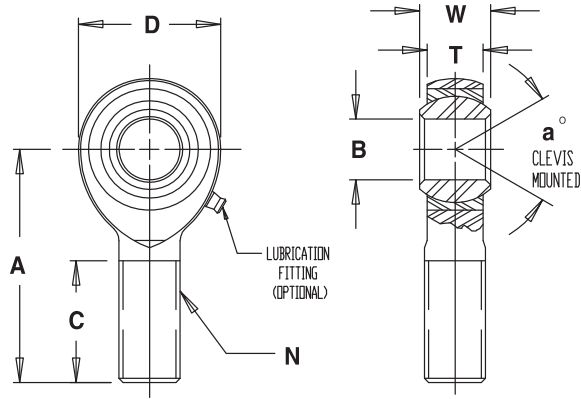
FEMALE ROD ENDS		B DIA.	D DIA.	W WIDT H	T WIDTH	BALL DIA.	A LGTH	N THD.	C LGTH	E DIA	F FLAT	a MIS. ANG.	ULT. STATIC RADIAL LOAD (Newton)	APROX. WEIGHT (g)
RIGHT HAND PART NO	LEFT HAND PART NO	+ .065 - .012	+ .38 - .38	+ .12 - .12	REF.	REF.	+ .40 - .40	THREAD	+ 1.00 - 1.00	+ .25 - .25	+ .25 - .25	REF		
RSCF5MT	RSCFL5MT	5	16	8	5.75	11.10	27	M5 X 0.8	14	11	9	22	4,136	18
RSCF6MT	RSCFL6MT	6	19	9	6.25	12.70	30	M6 X 1.0	14	13	11	23	6,138	25
RSCF8MT	RSCFL8MT	8	22.25	12	8.0	15.88	36	M8 X 1.25	17	16	14	28	9,340	40
RSCF10MT	RSCFL10MT	10	27	14	9.5	19.05	43	M10 X 1.5	21	19	17	26	15,310	80
RSCF12MT	RSCFL12MT	12	30	16	10.75	22.23	50	M12 X 1.75	24	22	19	27	17,373	95
RSCF14MT	RSCFL14MT	14	34.75	19	12.25	25.40	57	M14 X 2.0	27	25	22	30	23,699	160
RSCF16MT	RSCFL16MT	16	38	21	12.75	28.58	64	M16 X 2.0	33	27	22	33	25,162	215

\* A trade mark of E.I. Dupont de Nemours & Co., Inc.

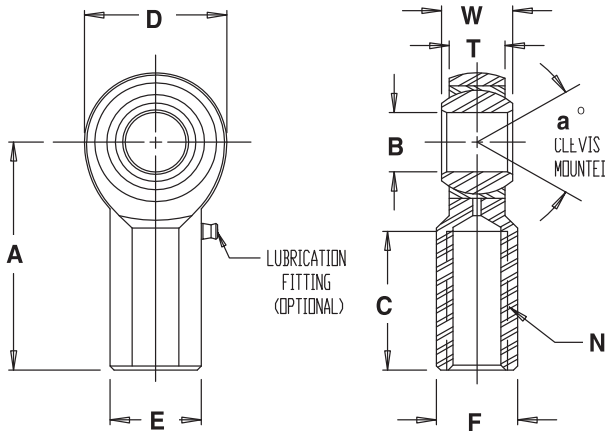


**3-PIECE METRIC, PRECISION-WEAR RESISTANT / PTFE LINERS AVAILABLE**

**RJM-M / RJF-M**



MALE ROD ENDS		B DIA.	D DIA.	W WIDTH	T WIDTH	BALL DIA.	A LGTH	N THD.	C LGTH	a MIS. ANG.	ULT. STATIC RADIAL LOAD (Newton)	APROX. WEIGHT (g)
RIGHT HAND PART NO	LEFT HAND PART NO	+ .065 - .012	+ .38 - .38	+ .12 - .12	+ .13 - .13	REF.	+ .40 - .40	THREAD	+ 1.00 - 1.00	REF		
RJM6M*	RJML6M*	6	19	9	7	12.70	36	M6 X 1.0	22	13	7,295	18
RJM8M*	RJML8M*	8	22.25	12	8.75	15.88	42	M8 X 1.25	25	18	13,595	31
RJM10M	RJML10M	10	27	14	10.5	19.05	48	M10 X 1.5	29	17	20,605	68
RJM12M	RJML12M	12	30	16	12	22.23	54	M12 X 1.75	33	17	18,215	78
RJM14M	RJML14M	14	34.75	19	13.50	25.40	60	M14 X 2.0	36	21	29,840	118
RJM16M	RJML16M	16	38	21	14.25	28.58	66	M16 X 2.0	40	23	32,225	173

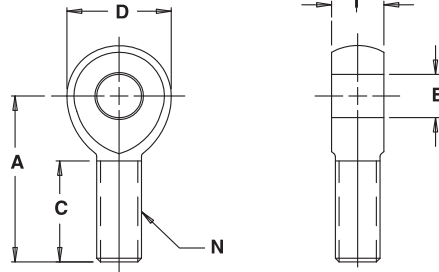


**NOTES:**  
 FOR GREASE FITTINGS ADD "Z" TO SUFFIX.  
**EXAMPLE:** RJF6MZ  
 FOR TEFLON LINER ADD "T" TO SUFFIX.  
**EXAMPLE:** RJF6MT

FEMALE ROD ENDS		B DIA.	D DIA.	W WIDTH	T WIDTH	BALL DIA.	A LGTH	N THD.	C LGTH	E DIA	F FLAT	a MIS. ANG.	ULT. STATIC RADIAL LOAD (Newton)	APROX. WEIGHT (g)
RIGHT HAND PART NO	LEFT HAND PART NO	+ .065 - .012	+ .38 - .38	+ .12 - .12	REF.	REF.	+ .40 - .40	THREAD	+ 1.00 - 1.00	+ .25 - .25	+ .25 - .25	REF		
RJF6M	RJFL6M	6	19	9	7	12.70	30	M6 X 1.0	14	13	11	13	10,575	25
RJF8M	RJFL8M	8	22.25	12	8.75	15.88	36	M8 X 1.25	17	16	14	18	14,075	40
RJF10M	RJFL10M	10	27	14	10.5	19.05	43	M10 X 1.5	21	19	17	17	20,605	80
RJF12M	RJFL12M	12	30	16	12	22.23	50	M12 X 1.75	24	22	19	17	18,215	95
RJF14M	RJFL14M	14	34.75	19	13.50	25.40	57	M14 X 2.0	27	25	22	21	29,840	160
RJF16M	RJFL16M	16	38	21	14.25	28.58	64	M16 X 2.0	33	27	22	23	32,225	215

BALL	BODY	RACE
52100 STEEL Rc 56 MIN. HARD HARD CHROME PLATED	LOW CARBON STEEL ZINC PLATED CHROMATE TREATED	STEEL ALLOY, HEAT TREATED ZINC PLATED, CHROMATE TREATED

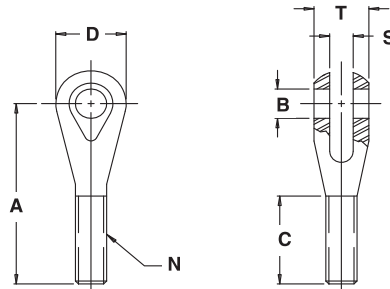
\*GREASE FITTINGS & PTFE LINERS NOT AVAILABLE.



**MATERIALS**  
LOW CARBON STEEL  
ZINC PLATED

**SOLID ROD ENDS**

PART NO.	BORE x THD.	B DIA.	D DIA.	T WIDTH	A LGTH.	C LGTH.	N THD.	ULT. RADIAL STATIC LOAD
	REF.	+0.0025 -0.0005	+0.010 -0.010	+0.005 -0.005	+0.015 -0.015	+0.062 -0.031	UNF 3A	(lbs.)
RD1	5/8 x 5/8	.6250	1.500	.750	2.625	1.625	5/8-18	16,600
RD2	5/8 x 3/4	.6250	1.750	.875	2.875	1.750	3/4-16	18,500
RD3	3/4 x 3/4	.7500	1.750	.875	2.875	1.750	3/4-16	18,500
RD4	1/2 x 1/2	.5000	1.312	.625	2.437	1.500	1/2-20	12,100
RD5	1/2 x 3/4	.5000	1.750	.875	2.875	1.750	3/4-16	18,500
RD8	1/2 x 3/4	.5000	1.500	.750	2.625	1.625	3/4-16	18,500



**MATERIALS**  
LOW CARBON STEEL  
ZINC PLATED OR  
17-4 PH STAINLESS STEEL  
**NOTE:**  
1. ADD "S" TO PREFIX  
EXAMPLE: SCV1

**CLEVIS**

PART NO.	BORE x THD.	B DIA.	D DIA.	T WIDTH	A LGTH.	C LGTH.	S SLOT	N THD.
	REF.	+0.0025 -0.0005	+0.010 -0.010	+0.005 -0.005	+0.015 -0.015	+0.062 -0.031	+0.005 -0.005	UNF 3A
CV1	3/8 x 5/8	.3750	1.125	.825	3.375	2.000	.375	5/8-18
CV2	1/2 x 5/8	.5000	1.125	.825	3.375	2.000	.375	5/8-18
CV3	3/8 x 3/4	.3750	1.125	.825	3.375	2.000	.375	3/4-16
CV4	1/2 x 3/4	.5000	1.125	.825	3.375	2.000	.375	3/4-16
CV5	3/8 x 1/2	.3750	.875	.655	3.012	1.700	.250	1/2-20

**SPECIAL PRODUCTS**



**MATERIAL**  
STEEL- LOW CARBON- ZINC PLATED  
ALUMINUM- 7075- T6

**STEEL JAM NUTS**

RIGHT HAND	LEFT HAND	THD. SIZE	HEX SIZE
SJNR03	SJNL03	10-32	3/8
SJNR04	SJNL04	1/4-28	7/16
SJNR05	SJNL05	5/16-24	1/2
SJNR06	SJNL06	3/8-24	9/16
SJNR07	SJNL07	7/16-20	11/16
SJNR08	SJNL08	1/2-20	3/4
SJNR10	SJNL10	5/8-18	15/16
SJNR12	SJNL12	3/4-16	1-1/8
* SJNR14	SJNL14	7/8-14	1-9/32
* SJNR16	SJNL16	1 1/4-12	1-13/16
* SJNR16-1	SJNL16-1	1-14	1-3/8
* SJNR16-2	SJNL16-2	1-12	1-3/8

**ALUMINUM JAM NUTS**

RIGHT HAND	LEFT HAND	THD. SIZE	HEX SIZE
AJNR03	AJNL03	10-32	3/8
AJNR04	AJNL04	1/4-28	7/16
AJNR05	AJNL05	5/16-24	1/2
AJNR06	AJNL06	3/8-24	9/16
AJNR07	AJNL07	7/16-20	11/16
AJNR08	AJNL08	1/2-20	3/4
AJNR10	AJNL10	5/8-18	3/4
AJNR12	AJNL12	3/4-16	1-1/8

\* NOTE: HEX SIZE MAY VARY DEPENDING ON AVAILABILITY OF MATERIAL.

RBL has several special series rod ends and spherical bearings available to suit your specifications.

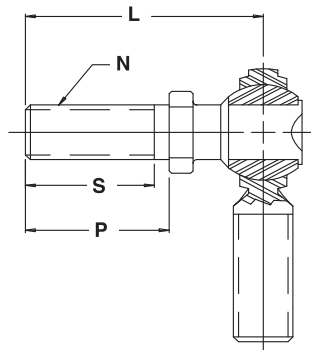
- \*Aluminum
- \*Stainless Steel
- \*Alloy Steel
- \*Chrome Polished
- \*Heavy shank
- \*Wear resistant
- \*High Misalignment
- \*Extra Strength

Special Self-Lubricating PTFE liners available in most series.

Most special series products are available with short lead times.

Consult your local Ringball office for products specifications, dimensions and load ratings.

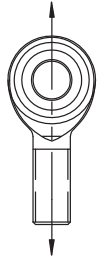
**STUDED ROD ENDS**



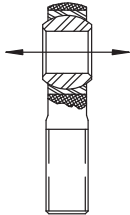
**NOTE:**

1. AVAILABLE ON ALL SERIES.
2. STUD MATERIAL: LOW CARBON STEEL AND ALLOY STEEL (HEAT TREATED) - ZINC PLATED.
3. STUD MISALIGNMENT APPROX. +/- 25° IN ANY DIRECTION.
4. TO SPECIFY RIGHT HAND STUD, ADD SUFFIX "Y" TO PART NUMBER.  
**EXAMPLE:** RCM6Y
5. TO SPECIFY LEFT HAND STUD, ADD SUFFIX "YL" TO PART NUMBER.  
**EXAMPLE:** RCM6YL
6. TO SPECIFY HEAT TREATED STUD, ADD SUFFIX "YX" TO PART NUMBER.  
**EXAMPLE:** RCM6YX
7. FOR LOAD RATINGS WITH STUDS, PLEASE CONTACT F.K. ENGINEERING DEPARTMENT.

ROD END PART SIZE	L LGTH.	P LGTH.	S LGTH.	N THD.
	+.015 -.015	REF.	MIN.	UNF 2A
3	1.016	.500	.437	10-32
4	1.031	.562	.500	1/4-28
5	1.219	.687	.593	5/16-24
6	1.562	.906	.812	3/8-24
7	1.750	1.062	.937	7/16-20
8	2.000	1.125	1.000	1/2-20
10	2.500	1.500	1.375	5/8-18
12	3.000	1.812	1.625	3/4-16



**RADIAL LOAD** - A LOAD APPLIED NORMAL TO THE BEARING BORE AXIS AND PARALLEL TO THE SHANK AXIS.



**AXIAL LOAD** - A LOAD APPLIED ALONG THE BEARING BORE AXIS.

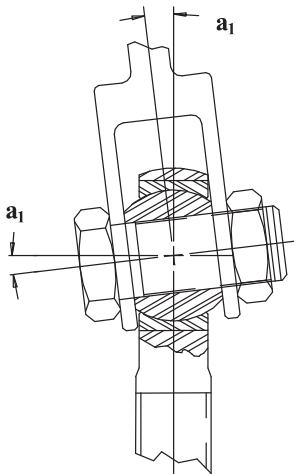
**STATIC RADIAL LIMIT LOAD** - THAT STATIC LOAD REQUIRED TO PRODUCE A SPECIFIED PERMANENT SET IN THE BEARING STRUCTURE. IT WILL VARY FOR A GIVEN SIZE AS A FUNCTION OF CONFIGURATION. IT MAY ALSO BE PIN LIMITED AS A FUNCTION OF BODY RESTRAINTS AS IN THE CASE OF ROD END BEARINGS.

**STATIC RADIAL ULTIMATE LOAD** - THAT LOAD THAT CAN BE APPLIED TO A BEARING WITHOUT FRACTURING THE BALL, RACE, OR ROD END EYE. THE ULTIMATE LOAD RATING IS USUALLY, BUT NOT ALWAYS 1.5 TIMES THE LIMIT LOAD.

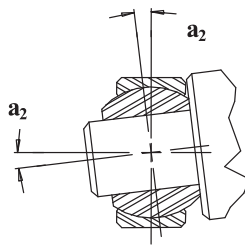
**STATIC AXIAL LIMIT LOAD** - THAT LOAD THAT CAN BE APPLIED TO A BEARING TO PRODUCE A SPECIFIED PERMANENT SET IN THE BEARING STRUCTURE.

**STATIC AXIAL ULTIMATE LOAD** - THAT LOAD THAT CAN BE APPLIED TO A BEARING WITHOUT SEPARATING THE BALL FROM THE RACE. THE ULTIMATE LOAD RATING IS USUALLY, BUT NOT ALWAYS 1.5 TIMES THE LIMIT LOAD.

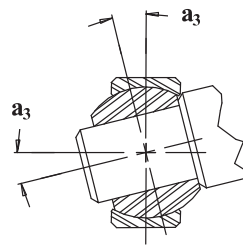
### ANGLE OF MISALIGNMENT



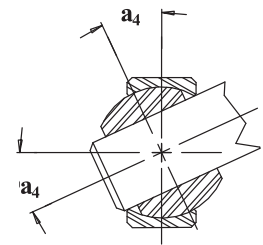
**FIGURE 1**  
 $a_1 = \sin^{-1} \frac{W}{D} - \sin^{-1} \frac{H}{D}$



**FIGURE 2**  
 $a_2 = \sin^{-1} \frac{W}{A} - \sin^{-1} \frac{H}{A}$



**FIGURE 3**  
 $a_3 = \sin^{-1} \frac{W}{R} - \sin^{-1} \frac{H}{R}$



**FIGURE 4**  
 $a_4 = \cos^{-1} \frac{B}{R} - \sin^{-1} \frac{H}{R}$

- B - Ball Bore
- M - Outer Race Chamfer
- D - Head Diameter or Outer Race Diameter
- R - Ball Diameter
- H - Housing Width
- A -  $\sqrt{(D-2M)^2 + H^2}$
- W - Ball Width