

Radial Racing UK

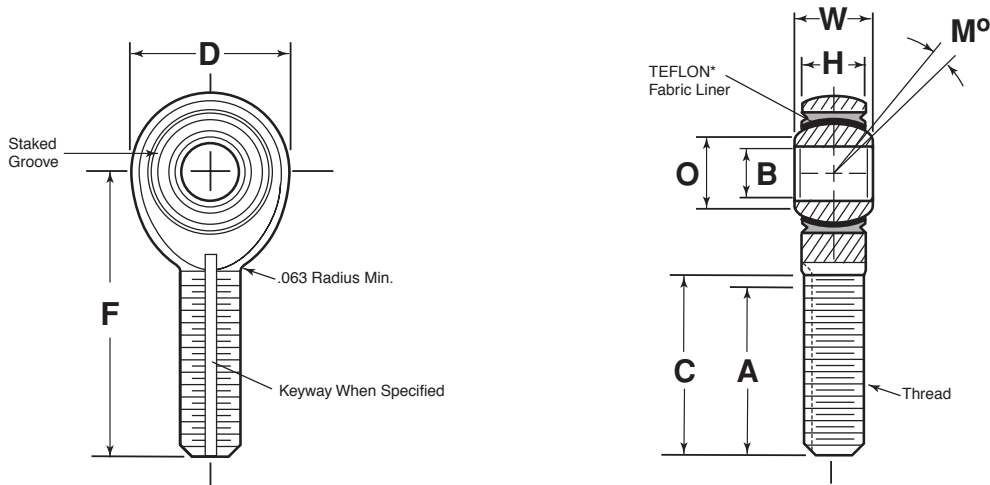
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Radial Racing UK Ltd

**Unit 32, Atcham Business Park
Atcham, Shrewsbury
Shropshire SY4 4UG
01743 762 830**

- 1.Rod End Bearings-Male Aerospace Series
- 2.Rod End Bearings-Male Aerospace Series
- 3.Rod End Bearings-Male High Misalignment Series
- 4.Spherical Bearings-Narrow Aerospace Series
- 5.Spherical Bearings-Wide Aerospace Series
- 6.Spherical Bearings-High Misalignment Series



Male Aerospace Series Teflon* Lined/High Strength

REM-TH-5 / REM-TH-6

RADIAL PART NO.	B	D	W	H	O	Ball Dia.	F	Thread	A	C	Ult. Static Radial Load (LBS)	Fatigue Load (LBS)	Axial Proof Load (LBS)	No Load Break-away Torque (Inch LBS)	M° mis-align angle	Approx Weight (LBS)
	+0.0000 -0.0005	±.010	+0.000 -0.002	±.005	(MIN.)	(REF.)	±.010	CLASS UNJF-3A	±.031	+0.000 -0.020						
REM-3TH	.1900	.806	.437	.337	.300	.531	1.562	.3125-24	.968	.980	2,360	1,470	1,000	.5 to 6	15	.072
REM-4TH	.2500	.806	.437	.337	.300	.531	1.562	.3125-24	.968	.980	4,860	2,380	1,000	.5 to 6	15	.072
REM-5TH	.3125	.900	.437	.327	.360	.593	1.875	.3125-24	1.187	1.270	7,180	2,770	1,100	1 to 15	14	.087
REM-6TH	.3750	1.025	.500	.416	.470	.687	1.938	.3750-24	1.187	1.235	8,550	3,670	1,660	1 to 15	8	.136
REM-7TH	.4375	1.150	.562	.452	.540	.781	2.125	.4375-20	1.281	1.402	12,000	4,800	1,850	1 to 15	10	.183
REM-8TH	.5000	1.337	.625	.515	.610	.875	2.438	.5000-20	1.468	1.589	19,500	7,680	2,040	1 to 15	9	.278
REM-10TH	.6250	1.525	.750	.577	.750	1.062	2.625	.6250-18	1.562	1.683	21,900	9,180	2,430	1 to 15	12	.424
REM-12TH	.7500	1.775	.875	.640	.850	1.250	2.875	.7500-16	1.687	1.808	29,300	11,600	2,810	1 to 15	13	.639
REM-14TH	.8750	2.025	.875	.765	1.000	1.375	3.375	.8750-14	2.000	2.121	34,500	13,100	3,320	1 to 24	6	.963
REM-16TH	1.000	2.775	1.375	1.015	1.270	1.875	4.125	1.2500-12	2.343	2.464	80,300	30,400	4,340	1 to 24	12	2.546

Materials

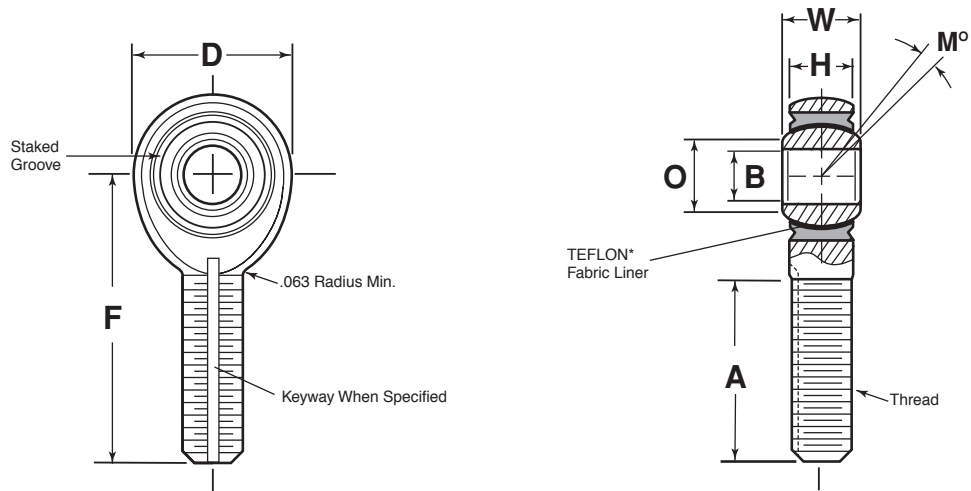
DESIGNATION	BALL	RACE	LINER	BODY
Basic Part No. +5	440C CRES Heat Treated	17-4 PH AMS-5643 CRES Heat Treated	Teflon* fabric permanently bonded to Race I. D.	4340 Steel Heat Treated See Note #4
Basic Part No. +6	Hard Chrome Plated			17-4 PH CRES Heat Treated

*A trade name of E. I. Dupont de Nemours & Co

Notes

1. Add letter "L" to prefix to indicate left hand threads. Example: REML-3TH-6.
2. For keyway per NAS 559 add suffix "K" to part number. Example: REM-3TH-6K.
3. Bearings listed on this page conform to materials, dimensions, and configurations of Mil-B-81935; however, Radial is not approved for procurement under that specification. Consult factory for additional information.
4. Protective plating in accordance with latest revision of Mil-B-81935.

Radial Racing UK



Male/Heavy Duty Shank
High Performance/ *Teflon Lined

XRM-TH-5 / XRM-TH-6

RADIAL PART NO.	B	D	W	H	O	Ball Dia.	F	Thread	A	Ult. Static Radial Load (LBS)	No Load Break-away Torque (Inch LBS)	Axial Proof Load (LBS)	M° mis-align angle	Approx. Weight (LBS)
	+0.0000 -0.0005	±.010	+0.000 -0.002	±.005	(REF)	(REF)	±.010	CLASS UNF-3A	±.031					
XRM-4TH	.2500	.806	.375	.337	.375	.531	1.562	5/16-24	.968	7,550	.5 to 6	1,000	5	.067
XRM-5TH	.3125	.900	.437	.327	.401	.593	1.875	3/8-24	1.187	9,200	1 to 10	1,100	14	.095
XRM-6TH	.3750	1.025	.500	.416	.471	.687	1.938	7/16-20	1.187	10,900	1 to 10	1,660	9	.140
XRM-7TH	.4375	1.150	.562	.452	.542	.781	2.125	1/2-20	1.281	14,050	1 to 10	1,850	10	.210
XRM-8TH	.5000	1.337	.625	.515	.612	.875	2.438	5/8-18	1.468	23,100	1 to 10	2,040	9	.330
XRM-10TH	.6250	1.525	.750	.577	.752	1.062	2.625	3/4-16	1.562	26,050	1 to 10	2,430	12	.480
XRM-12TH	.7500	1.775	.875	.640	.892	1.250	2.875	7/8-14	1.687	34,500	1 to 10	2,810	13	.730

Notes

1. Add letter "L" to prefix to indicate left hand threads. Example: XRML-4TH-6.
2. For keyway per NAS 559 add suffix "K" to part number. Example: XRM-4TH-6K.

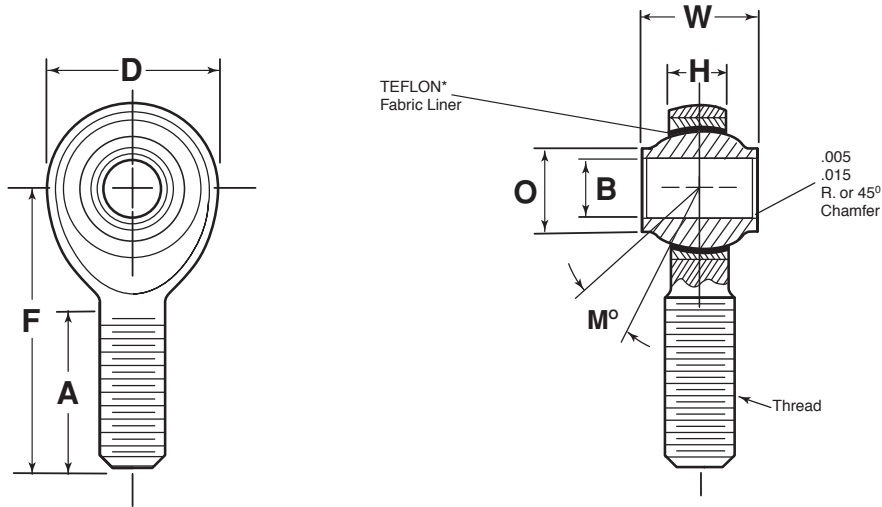
Materials

DESIGNATION	BALL	RACE	BODY	LINER
Basic Part No. +5	440C CRES Heat Treated	17-4 PH AMS-5643 Heat Treated	C. M. Steel Heat Treated Cadmium or Zinc Plated	Teflon* Fabric Permanently Bonded to Race I. D.
Basic Part No. +6			17-4 PH CRES Heat Treated	

*A trade name of E. I. Dupont de Nemours & Co



ROD END BEARINGS/SELF LUBRICATING



High Misalignment
*Teflon Lined

RMYT-H

RADIAL PART NO.	B	D	W	H	O	Ball Dia.	F	Thread	A	Ult. Static Radial Load (LBS)	No Load Break-away Torque (Inch LBS)	M° misalign angle	Approx Weight (LBS)
	+0.0000 -0.0005	±.010	+0.000 -0.005	±.005	(REF.)	(REF.)	±.010	CLASS UNF-3A	+0.062 -0.031				
RMYT-3H	.1900	.750	.500	.220	.319	.437	1.500	5/16-24	1.000	4,830	.5 to 6	13	.07
RMYT-4H	.2500	1.000	.593	.265	.390	.593	1.938	3/8-24	1.250	8,650	1 to 15	23	.11
RMYT-5H	.3125	1.125	.813	.355	.512	.781	2.125	7/16-20	1.375	9,050	1 to 15	22	.16
RMYT-6H	.3750	1.125	.813	.355	.512	.781	2.125	7/16-20	1.375	9,050	1 to 15	22	.15
RMYT-7H	.4375	1.312	.875	.355	.618	.875	2.438	1/2-20	1.500	14,100	1 to 15	21	.25
RMYT-8H	.5000	1.500	.937	.411	.730	1.000	2.625	5/8-18	1.625	19,800	1 to 15	19	.39
RMYT-10H	.6250	1.750	1.200	.577	.856	1.250	2.875	3/4-16	1.750	26,500	1 to 15	19	.62
RMYT-12H	.7500	2.000	1.280	.630	.970	1.375	3.375	7/8-14	1.875	34,200	1 to 15	18	.90
RMYT-14H	.8750	2.200	1.400	.635	1.140	1.531	3.750	7/8-14	2.000	36,400	1 to 15	17	1.08
RMYT-16H	1.000	2.750	1.875	.845	1.278	1.875	4.125	1 1/4-12	2.125	66,500	2 to 24	20	2.20
RMYT-20H	1.250	3.125	1.875	1.045	1.523	2.250	5.000	1 1/4-12	2.875	80,000	2 to 24	20	3.10

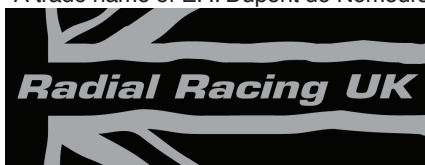
Materials

DESIGNATION	BALL	RACE	BODY	LINER
Basic Part No.	440C CRES Heat Treated	Stainless Steel Heat Treated	C. M. Steel Heat Treated Cadmium Plated	Teflon* Fabric Permanently Bonded to Race I. D.
Basic Part No. +SS			17-4 PH CRES Heat Treated	

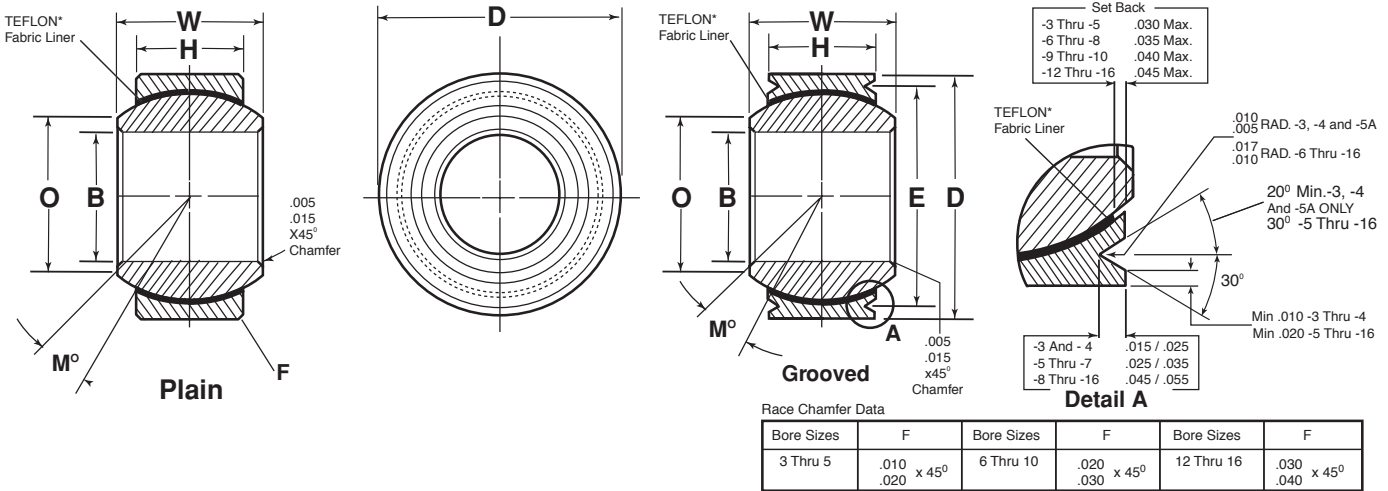
Notes

1. Add letter "L" to prefix to indicate left hand threads. Example: RMYTL-4H.
2. For keyway per NAS 559 add suffix "K" to part number. Example: RMYT-8HK.
3. Temperature range: -65°F to +325°F.

*A trade name of E. I. Dupont de Nemours & Co



SPHERICAL BEARINGS/SELF LUBRICATING



RPHT / RPHT-V NARROW/AEROSPACE *Teflon Lined

RADIAL PART NO.		B	D	W	H	E	O	Ball Dia.	M° mis align angle MIN.	Load Ratings (LBS)				Approx Weight (LBS)
										Static Limit		Dynamic Oscillating Radial Load	No Load Breakaway Torque (Inch Lbs)	
										Radial Load	Axial Load			
Plain	Grooved	+0.000 -0.005	+0.000 -0.005	+0.000 -0.002	±.005	+0.000 -0.008	MIN.	(REF.)						
RPHT-3	RPHT-3V	.1900	.5625	.281	.218	.500	.293	.406	10	3,975	150	1,500	.25 to 5	.020
RPHT-4	RPHT-4V	.2500	.6562	.343	.250	.594	.364	.500	10	6,040	430	3,320	.25 to 5	.020
RPHT-5	RPHT-5V	.3125	.7500	.375	.281	.650	.419	.562	10	8,750	700	5,460	.25 to 8	.030
-	RPHT-5AV	.3125	.7500	.375	.281	.660	.419	.562	10	8,750	700	5,460	.25 to 8	.030
RPHT-6	RPHT-6V	.3750	.8125	.406	.312	.712	.475	.656	9	10,540	1,100	6,600	.25 to 8	.040
RPHT-7	RPHT-7V	.4375	.9062	.437	.343	.806	.530	.718	8	13,200	1,400	8,050	.25 to 8	.050
RPHT-8	RPHT-8V	.5000	1.0000	.500	.390	.876	.640	.813	8	17,900	2,100	10,400	.25 to 8	.070
RPHT-9	RPHT-9V	.5625	1.0937	.562	.437	.970	.670	.875	8	23,200	3,680	13,000	.25 to 8	.090
RPHT-10	RPHT-10V	.6250	1.1875	.625	.500	1.063	.739	.968	8	30,500	4,720	16,450	.25 to 8	.120
RPHT-12	RPHT-12V	.7500	1.4375	.750	.593	1.313	.920	1.187	8	46,400	6,750	23,600	.25 to 8	.210
RPHT-14	RPHT-14V	.8750	1.5625	.875	.703	1.438	.980	1.312	8	62,200	9,350	30,250	.25 to 12	.270
RPHT-16	RPHT-16V	1.0000	1.7500	1.000	.797	1.626	1.118	1.500	9	82,200	12,160	38,000	.25 to 12	.390

Materials

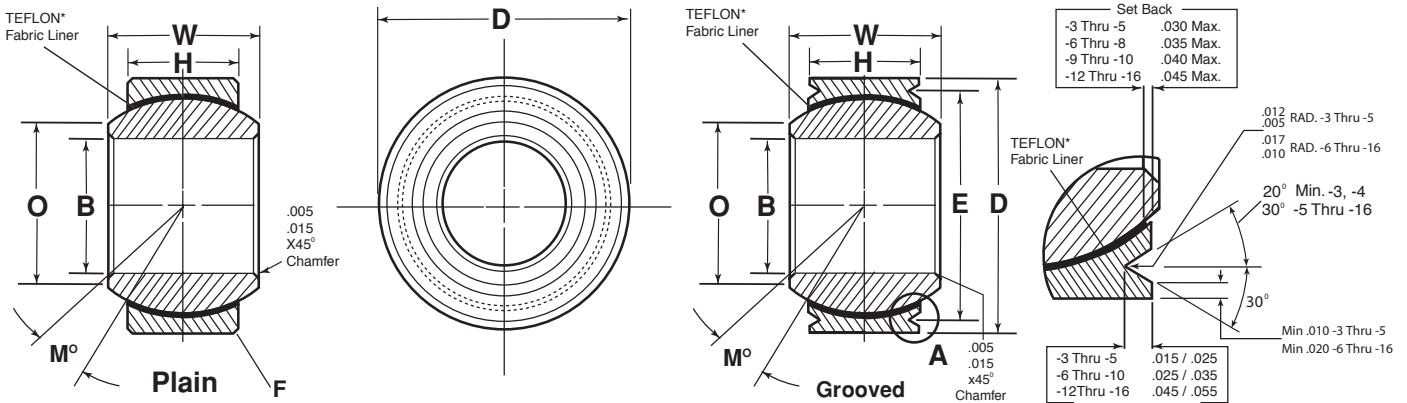
BALL	RACE	LINER
440C (AMS-5630) CRES Heat Treated Hard Chrome Plated	17-4 PH AMS-5643 Heat Treated	Teflon* Fabric Permanently Bonded to Race I. D.

*A trade name of E. I. DuPont de Nemours & Co

Notes

1. Diameters B, D, & E are concentric within .003 T. I. R. on sizes -3 thru -5 and .005 T.I.R. on sizes -6 thru -16.
2. Finish: Ball Diameter- RHR 8 max. Bore, ball face, outer member dia-RHR 32 max. All other surfaces RHR 125 max.
3. Tolerances: Decimals + - .010, Angles: ± 1/2°.
4. Temperature range: -65° F to 325° F.
5. Bearings listed on this page conform to the materials dimensions, and configurations of MS- 14101 (Grooved) and MS- 14104 (Plain); however, Radial is not approved for procurement under that specification. Consult factory for additional information.





Race Chamfer Data

Bore Sizes	F	Bore Sizes	F	Bore Sizes	F
3 Thru 5	.010 .020	6 Thru 10	.020 .030	12 Thru 16	.030 .040

RWT / RWT-V WIDE/AEROSPACE

*Teflon Lined

RADIAL PART NO.		B	D	W	H	E	O	Ball Dia.	M° mis align angle MIN.	Load Ratings (LBS)				Approx Weight (LBS)
										Static Limit		Dynamic Oscillating Radial Load	No Load Breakaway Torque (Inch Lbs)	
Plain	Grooved.	+ .0000 - .0005	+ .0000 - .0005	+ .000 - .002	± .005	+ .000 - .008	MIN.	(REF.)	Radial Load	Axial Load				
RWT-3	RWT-3V	.1900	.6250	.437	.327	.563	.300	.531	15	2,500	1,770	4,900	.25 to 5	.031
RWT-4	RWT-4V	.2500	.6250	.437	.327	.563	.300	.531	15	5,500	1,770	4,900	.25 to 8	.031
RWT-5	RWT-5V	.3125	.6875	.437	.317	.625	.360	.593	14	9,400	1,640	6,050	.25 to 8	.035
RWT-6	RWT-6V	.3750	.8125	.500	.406	.712	.466	.687	8	13,700	2,630	8,310	.25 to 8	.060
RWT-7	RWT-7V	.4375	.9375	.562	.442	.837	.537	.781	10	20,700	3,650	11,750	.25 to 8	.080
-	RWT-7AV	.4375	.9062	.562	.442	.806	.537	.781	10	19,700	3,650	11,750	.25 to 8	.080
RWT-8	RWT-8V	.5000	1.0000	.625	.505	.900	.607	.875	9	21,400	4,970	14,950	.25 to 8	.100
RWT-9	RWT-9V	.5625	1.1250	.687	.536	1.025	.721	1.000	10	26,600	5,370	18,100	.25 to 8	.135
RWT-10	RWT-10V	.6250	1.1875	.750	.567	1.087	.747	1.062	12	29,000	6,130	20,250	.25 to 8	.160
RWT-12	RWT-12V	.7500	1.3750	.875	.630	1.251	.845	1.250	13	37,000	7,730	26,200	.25 to 8	.240
RWT-14	RWT-14V	.8750	1.6250	.875	.755	1.501	.995	1.375	6	65,200	10,800	33,600	.25 to 12	.350
RWT-16	RWT-16V	1.0000	2.1250	1.375	1.005	2.001	1.269	1.875	12	104,000	19,300	56,250	.25 to 12	.970

Materials

Notes

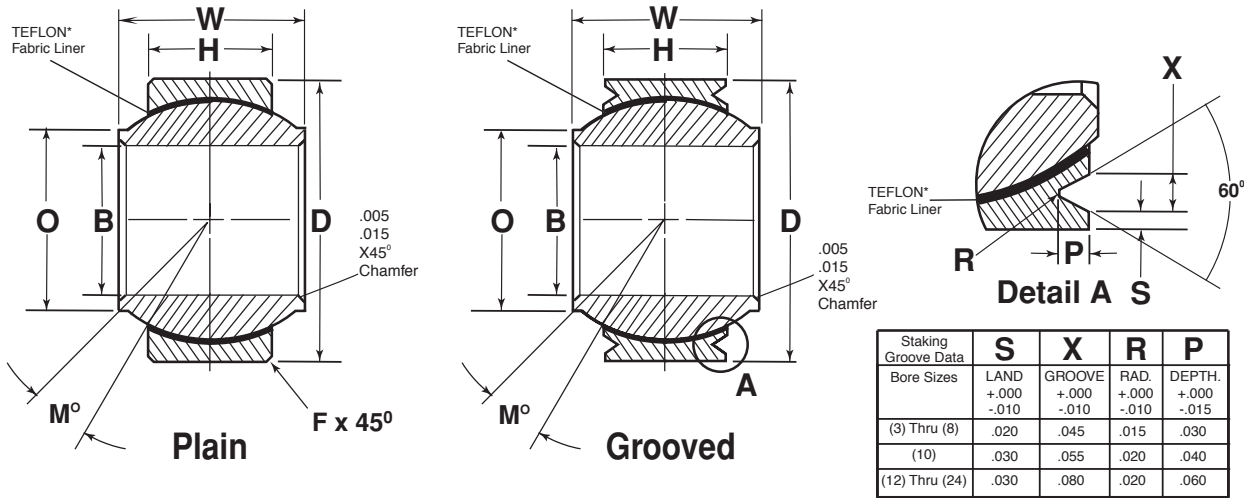
BALL	RACE	LINER
440C (AMS-5630) CRES Heat Treated Hard Chrome Plated	17-4 PH AMS-5643 Heat Treated	Teflon* Fabric Permanently Bonded to Race I. D.

1. Diameters "B", "D", & "E" are concentric within .003 T. I.R. on sizes -3 thru -5 and .005 T. I.R. on sizes -6 thru -16.
2. Finish: Ball Diameter- RHR 8 max. Bore, ball face, outer member dia-RHR 32 max. All other surfaces RHR 125 max.
3. Tolerances: Decimals + - .010, Angles: ± 1/2°.
4. Temperature range: -65° F to 325° F.
5. Bearings listed on this page conform to the materials/dimensions, and configurations of MS-14102 (Plain) and MS-14103 (Grooved) however, Radial is not approved for procurement under that specification. Consult factory for additional information.

*A trade name of E. I. Dupont de Nemours & Co



SPHERICAL BEARINGS/SELF LUBRICATING



RYT / RYT-V

High Misalignment/*Teflon Lined

RADIAL PART NO.		B	D	W	H	O	Ball Dia.	F	M° mis align angle (REF.)	Load Ratings (LBS)				Approx. Weight (LBS)
										Static Limit		Dynamic Oscillating Radial Load	No Load Breakaway Torque (Inch Lbs)	
Plain	Grooved.	+0.000 -0.0005	+0.000 -0.0005	+0.000 -0.005	±.005	(REF.)	(REF.)	+0.000 -0.010		Radial Load	Axial Load			
RYT-3	RYT-3V	.1900	.5625	.500	.210	.319	.437	.020	15	4,100	350	2,100	.5 to 5	.018
RYT-4	RYT-4V	.2500	.7400	.593	.255	.390	.593	.022	24	7,100	750	3,800	1 to 5	.036
RYT-5	RYT-5V	.3125	.6875	.625	.255	.418	.593	.022	20	9,000	750	3,800	1 to 5	.025
RYT-6	RYT-6V	.3750	.9060	.813	.345	.512	.781	.032	23	16,000	2,000	7,200	1 to 5	.068
RYT-7	RYT-7V	.4375	1.0000	.875	.345	.618	.875	.032	22	19,300	2,000	8,100	1 to 5	.095
RYT-8	RYT-8V	.5000	1.1250	.937	.401	.730	1.000	.032	20	26,100	3,200	10,900	1 to 5	.159
RYT-10	RYT-10V	.6250	1.3750	1.200	.567	.856	1.250	.032	20	44,500	7,000	20,000	1 to 5	.245
RYT-12	RYT-12V	.7500	1.5625	1.280	.620	.970	1.375	.044	18	54,800	8,700	24,200	1 to 6	.315
RYT-14	RYT-14V	.8750	1.7500	1.400	.625	1.140	1.531	.044	18	65,800	8,850	27,600	2 to 8	.430
RYT-16	RYT-16V	1.0000	2.1250	1.875	.835	1.278	1.875	.044	21	108,000	15,900	45,600	2 to 8	.831
RYT-20	RYT-20V	1.2500	2.5000	1.875	1.005	1.523	2.250	.044	21	158,000	23,000	66,600	3 to 15	1.318
RYT-24	RYT-24V	1.5000	3.0000	2.250	1.175	1.800	2.672	.044	21	220,000	32,000	93,200	3 to 15	2.223

Materials

Notes

BALL	RACE	LINER
440C CRES Heat Treated Hard Chrome Plated	Stainless Steel Heat Treated	Teflon* Fabric Permanently Bonded to Race I. D.

1. Diameters B & D are concentric within .005 T. I. R.
2. Temperature range: -65° F to +325° F.

*A trade name of E. I. DuPont de Nemours & Co

