ART-E, ART

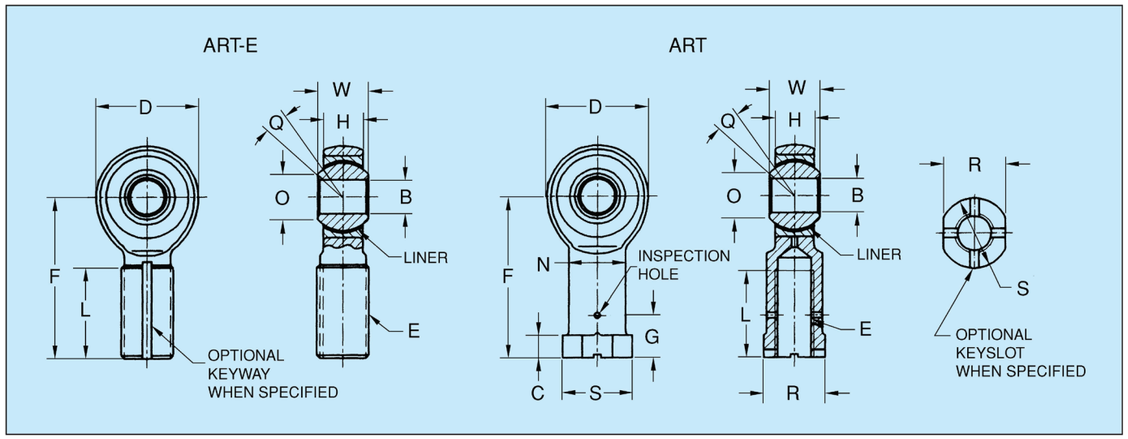
Rod End Bearings - Self-Lubricating
3-Piece, Male & Female

Plating: Body Cadmium plated per AMS-QQ-P-416, Type II, Class 2.
Dimensions: All dimensions apply After plating.
Temperature: -65° to 250°F (-54°C to 121°C).
Option: 1. For left hand threads add "L" to prefix.
2. For keyway or keyslot per NAS 559 and suffix "W" to part number.
Qualification: Bearings in the tables below are approved for MS21242 (Male body) and MS21243 (Female body)

MATERIALS

Part No.	Ball	Race	Liner	Body
Catalog No.	CRES 440C Heat Treated To 55-62 HRC	CRES 410 Heat Treated To 23-35 HRC	*Teflon/Fabric Bonded to race I.D.	4340 STL Heat Treated To 39-42 HRC, Cad. Plated
Catalog No. + CR	CRES 440C Heat Treated To 55-62 HRC	CRES 410 Heat Treated To 23-35 HRC	*Teflon/Fabric Bonded to race I.D.	CRES 17-4PH Heat Treated

Notes: Stainless Steel Series is not available to MS, but may be ordered to NMB Part Number as indicated.
Example: ARTL12CR



MALE

NMB Part Number	(B) Bore Diameter		(D) Head Diameter		(W) Ball Width		(H) Body Width		(O) Shoulder Diameter		Ball Diameter		(F) Ball C/L to End		(E) Thread Size	(L) Complete Thread		(Q) Misalign-ment	Housing I.D.		Keyway Flat		No Load Rotational Breakaway Torque		Ultimate Static Radial Load		Axial Static Proof Load		Fatigue Load		Max. Weight	
	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm		Inch	mm		Inch	mm	Inch	mm	In-lb	N-m	lbs	N	lbs	N	lbs	N	lbs	kg
	+.0000	+0.000	+.010	+0.25	+.000	+0.00	+.005	+0.13					+.010	+0.25		+.031	+0.79				+.000	+0.00										
MS21242	-.0005	-0.013	-.010	-0.25	-.002	-0.05	-.005	-0.13	MIN	MIN	Ref.	Ref.	-.010	-0.25	UNJF-3A	-.031	-0.79	MIN	Ref.	Ref.	-.020	-0.51										
ART3E	.1900	4.826	.806	20.47	.437	11.10	.337	8.56	.300	7.62	.531	13.49	1.562	39.67	.3125-24	.968	24.59	15°	.6250	15.875	.980	24.89	.5-6	0.06-0.68	2360	10497	1000	4448	1470	6539	.072	0.033
ART4E	.2500	6.350	.806	20.47	.437	11.10	.337	8.56	.300	7.62	.531	13.49	1.562	39.67	.3125-24	.968	24.59	15°	.6250	15.875	.980	24.89	.5-6	0.06-0.68	4860	21617	1000	4448	2380	10586	.072	0.033
ART5E	.3125	7.938	.900	22.86	.437	11.10	.327	8.31	.360	9.14	.593	15.06	1.875	47.62	.3125-24	1.187	30.15	14°	.6875	17.462	1.270	32.26	1-10	0.11-1.13	7180	31937	1100	4893	2770	12321	.087	0.040
ART6E	.3750	9.525	1.025	26.04	.500	12.70	.416	10.57	.470	11.94	.687	17.45	1.938	49.23	.3750-24	1.187	30.15	8°	.8125	20.638	1.235	31.37	1-10	0.11-1.13	8550	38030	1660	7384	3570	15879	.136	0.062
ART7E	.4375	11.112	1.150	29.21	.562	14.28	.452	11.48	.540	13.72	.781	19.84	2.125	53.98	.4375-20	1.281	32.54	10°	.9062	23.017	1.402	35.61	1-10	0.11-1.13	12000	53376	1850	8229	4800	21350	.183	0.083
ART8E	.5000	12.700	1.337	33.96	.625	15.88	.515	13.08	.610	15.49	.875	22.22	2.438	61.93	.5000-20	1.468	37.29	9°	1.0000	25.400	1.589	40.36	1-10	0.11-1.13	19500	86736	2040	9074	7680	34161	0.278	0.127
ART10E	.6250	15.875	1.525	38.74	.750	19.05	.577	14.66	.750	19.05	1.062	26.98	2.625	66.68	.6250-18	1.562	39.68	12°	1.1875	30.162	1.683	42.75	1-10	0.11-1.13	21900	97411	2430	10809	9180	40833	0.424	0.193
ART12E	.7500	19.050	1.775	45.08	.875	22.22	.640	16.26	.850	21.59	1.250	31.75	2.875	73.02	.7500-16	1.687	42.85	13°	1.3750	34.925	1.808	45.92	1-10	0.11-1.13	29300	130326	2810	12499	11600	51597	0.639	0.290
ART14E	.8750	22.225	2.025	51.44	.875	22.22	.765	19.43	1.000	25.40	1.375	34.92	3.375	85.72	.8750-14	2.000	50.80	6°	1.6250	41.275	2.121	53.87	2-16	0.23-1.81	34500	153456	3320	14767	13100	58269	0.963	0.437
ART16E	1.0000	25.400	2.775	70.48	1.375	34.92	1.015	25.78	1.270	32.26	1.875	47.62	4.125	104.78	1.2500-12	2.343	59.51	12°	2.1250	53.975	2.464	62.59	2-16	0.23-1.81	80300	357174	4340	19304	30400	135219	2.546	1.155

FEMALE

NMB Part Number	(B) Bore Diameter		(D) Head Diameter		(W) Ball Width		(H) Body Width		(O) Shoulder Diameter		Ball Diameter		(F) Ball C/L to End		(E) Thread Size	(L) Complete Thread		(N) Shank Diameter		(Q) Misalign-ment	(C) Flange Thickness		(R) Wrench Flat		(S) Across Corners or Diameter		(G) Drill C/L to End		Housing I.D.		No Load Rotational Breakaway Torque		Ultimate Static Radial Load		Axial Static Proof Load		Fatigue Load		MAX Weight	
	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm		Inch	mm	Inch	mm		Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	In-lb	N-m	lbs	N	lbs	N	lbs	N	lbs	kg
	+.0000	+0.000	+.010	+0.25	+.000	+0.00	+.005	+0.13					+.010	+0.25				+.010	+0.25		+.010	+0.25	+.002	+0.05			+.020	+0.51										
MS21243	-.0005	-0.013	-.010	-0.25	-.002	-0.05	-.005	-0.13	MIN	MIN	Ref.	Ref.	-.010	-0.25	UNJF-3B	MIN	MIN	-.010	-0.25	MIN	-.062	-1.57	-.010	-0.25	Ref.	Ref.	-.020	-0.51	Ref.	Ref.										
ART3	.1900	4.826	.806	20.47	.437	11.10	.337	8.56	.300	7.62	.531	13.49	1.375	34.92	.3125-24	.750	19.05	.422	10.72	15°	.188	4.78	.437	11.10	.500	12.70	.375	9.52	.6250	15.875	.5-6	0.06-0.68	2360	10487	1000	4448	1470	6539	.080	0.037
ART4	.2500	6.350	.806	20.47	.437	11.10	.337	8.56	.300	7.62	.531	13.49	1.469	37.31	.3125-24	.750	19.05	.422	10.72	15°	.188	4.78	.437	11.10	.500	12.70	.375	9.52	.6250	15.875	.5-6	0.06-0.68	4860	21617	1000	4448	2380	10586	.084	0.039
ART5	.3125	7.938	.900	22.86	.437	11.10	.327	8.31	.360	9.14	.593	15.06	1.625	41.28	.3750-24	.875	22.22	.485	12.32	14°	.250	6.35	.500	12.70	.580	14.73	.437	11.10	.6875	17.462	1-10	0.11-1.13	7180	31937	1100	4893	3020	13433	.102	0.047
ART6	.3750	9.525	1.025	26.04	.500	12.70	.416	10.57	.470	11.94	.687	17.45	1.812	46.02	.3750-24	1.000	25.40	.547	13.89	8°	.250	6.35	.562	14.27	.660	16.76	.437	11.10	.8125	20.638	1-10	0.11-1.13	8550	38030	1660	7384	3570	15879	.161	0.073
ART7	.4375	11.112	1.150	29.21	.562	14.28	.452	11.48	.540	13.72	.781	19.84	2.000	50.80	.4375-20	1.125	28.58	.610	15.49	10°	.250	6.35	.625	15.88	.720	18.29	.500	12.70	.9062	23.017	1-10	0.11-1.13	12000	53376	1850	8229	4800	21350	.212	0.097
ART8	.5000	12.700	1.337	33.96	.625	15.88	.515	13.08	.610	15.49	.875	22.22	2.250	57.15	.5000-20	1.250	31.75	.735	18.67	9°	.250	6.35	.750	19.05	.880	22.35	.562	14.28	1.0000	25.400	1-10	0.11-1.13	19500	86736	2040	9074	8260	36740	.325	0.148
ART10	.6250	15.875	1.525	38.74	.750	19.05	.577	14.66	.750	19.05	1.062	26.98	2.500	63.50	.6250-18	1.375	34.92	.860	21.84	12°	.375	9.52	.875	22.22	1.020	25.91	.687	17.45	1.1875	30.162	1-10	0.11-1.13	21900	97411	2430	10809	9180	40833	.481	0.219
ART12	.7500	19.050	1.775	45.08	.875	22.22	.640	16.26	.850	21.59	1.250	31.75	2.875	73.02	.7500-16	1.625	41.28	.985	25.02	13°	.375	9.52	1.000	25.40	1.160	29.46	.812	20.62	1.3750	34.925	1-10	0.11-1.13	29300	130326	2810	12499	11600	51597	.673	0.306
ART14	.8750	22.225	2.025	51.44	.875	22.22	.765	19.43	1.000	25.40	1.375	34.92	3.375	85.72	.8750-14	1.875	47.62	1.110	28.19	6°	.500	12.70	1.125	28.38	1.300	33.02	.937	23.80	1.6250	41.275	2-16	0.23-1.81	34500	153456	3320	14767	13100	58269	.959	0.435
ART16	1.0000	25.400	2.775	70.48	1.375	34.92	1.015	25.78	1.270	32.26	1.875	47.62	4.125	104.78	1.2500-12	2.125	53.98	1.688	42.88	12°	.563	14.30	1.750	44.45	2.020	51.31	1.312	33.32	2.1250	53.975	2-16	0.23-1.81	80300	357174	4340	19304	30400	135219	2.717	1.233

* A trade name of E.I. duPont de Nemours & Co., Inc.