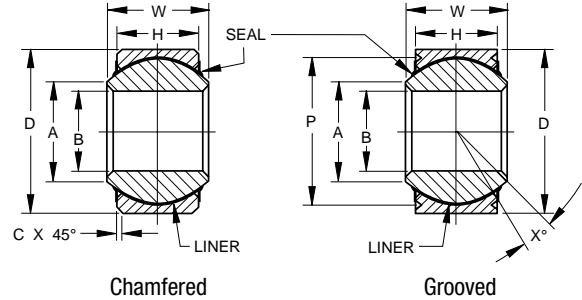


## SEALED SELF-LUBRICATED SPHERICAL BEARING, NARROW

- Narrow series, self-lubricated
- High temperature — low wear  
-65°F to +325°F (-53.9°C to +162.8°C)
- Material  
Outer ring: CRES 17-4PH, AMS 5643, HRC 28 min.  
Inner ring: CRES 440C, AMS 5630, HRC 55 min.  
Liner: “E” Uniflon® qualified to AS81820  
Seal: Silicon rubber seal retained by stainless steel shield



## SPECIFICATIONS AND ORDERING INFORMATION

### DIMENSIONS – TOLERANCES

NESxxBIO NESxxBIOG Dash No.	B		D		H		W		A		C <sup>(1)</sup>		p <sup>(2)</sup> Groove Pitch Diameter		X° Ref.
	+ .0000, -.0005 + .000, -.013		+ .0000, -.0005 + .000, -.013		± .005 ± .13		+ .000, -.002 + .00, -.05		Min.		+ .010, -.000 + .25, -.00		+ .000 in., -.008 in. + .00 mm, -.20mm		
Chamfered/Grooved Part Numbers	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	
3	.1900	4.826	.5625	14.288	.218	5.54	.281	7.14	.293	7.44	.010	.25	.500	12.70	10
4	.2500	6.350	.6562	16.667	.250	6.35	.343	8.71	.364	9.25	.010	.25	.594	15.09	10
5 <sup>(1)</sup>	.3125	7.938	.7500	19.050	.281	7.14	.375	9.52	.419	10.64	.010	.25	.660	16.76	10
5A <sup>(2)</sup>	.3125	7.938	.7500	19.050	.281	7.14	.375	9.52	.419	10.64	.010	.25	.660	16.76	10
6	.3750	9.525	.8125	20.638	.312	7.92	.406	10.31	.475	12.06	.020	.51	.712	18.08	9
7	.4375	11.112	.9062	23.017	.343	8.71	.437	11.10	.530	13.46	.020	.51	.806	20.47	8
8	.5000	12.700	1.0000	25.400	.390	9.91	.500	12.70	.600	15.24	.020	.51	.876	22.25	8
9	.5625	14.288	1.0937	27.780	.437	11.10	.562	14.27	.670	17.02	.020	.51	.970	24.64	8
10	.6250	15.875	1.1875	30.162	.500	12.70	.625	15.88	.739	18.77	.020	.51	1.063	27.00	8
12	.7500	19.050	1.4375	36.512	.593	15.06	.750	19.05	.920	23.37	.030	.76	1.313	33.35	8
14	.8750	22.225	1.5625	39.688	.703	17.86	.875	22.22	.980	24.89	.030	.76	1.438	36.53	8
16	1.0000	25.400	1.7500	44.450	.797	20.24	1.000	25.40	1.118	28.40	.030	.76	1.626	41.30	9

<sup>(1)</sup>Chamfered Type only. <sup>(2)</sup>Grooved Type only. See page 17 for groove dimensions.

### LOAD RATINGS

NESxxBIO NESxxBIOG Dash No.	Oscillating Radial Load Rating <sup>(3)</sup>		Radial Limit Load Rating <sup>(3)</sup>		Axial Limit Load Rating <sup>(3)</sup>		No Load Rotational Breakaway Torque				Weight Max. Ref.	
	lbf.	N	lbf.	N	lbf.	N	Standard		“K” Type		lbs.	kg
3	1500	6700	3975	17600	150	670	.25-5	.03-.56	0-0.5	0-0.06	.02	.010
4	3320	14600	6040	27000	430	1900	.25-5	.03-.56	0-0.5	0-0.06	.02	.010
5 <sup>(1)</sup>	5460	24500	8750	39000	700	3100	.25-8	.03-.90	0-1	0-0.11	.03	.015
5A <sup>(2)</sup>	5460	24500	8750	39000	700	3100	.25-8	.03-.90	0-1	0-0.11	.03	.015
6	6600	29000	10540	46500	1100	4900	.25-8	.03-.90	0-1	0-0.11	.04	.017
7	8050	36000	13200	58500	1400	6200	.25-8	.03-.90	0-1	0-0.11	.05	.023
8	10400	46500	17900	80000	2100	9300	.25-8	.03-.90	0-1	0-0.11	.07	.032
9	13000	58500	23200	104000	3680	16300	.25-8	.03-.90	0-1	0-0.11	.09	.041
10	16450	73500	30500	137000	4720	20800	.25-8	.03-.90	0-1	0-0.11	.12	.056
12	23600	104000	46400	208000	6750	30000	.25-8	.03-.90	0-1	0-0.11	.21	.095
14	30250	134000	62200	275000	9350	41500	.25-12	.03-1.4	0-2	0-0.23	.27	.122
16	38000	170000	82200	365000	12160	54000	.25-12	.03-1.4	0-2	0-0.23	.39	.175

<sup>(1)</sup>Chamfered Type only. <sup>(2)</sup>Grooved Type only.

<sup>(3)</sup>Load ratings based on AS81820. -3 and -4 sizes are limited by pin bending.

Bearing configuration	Part number designations for a 0.2500 in. bore, grooved spherical bearing
Base P/N (no options)	NES04BIOG
Low breakaway torque	NES04BIOGK
Cadmium plating	NES04BIOGC
Zinc Nickel plating	NES04BIOGZ

SPHERICAL BEARINGS