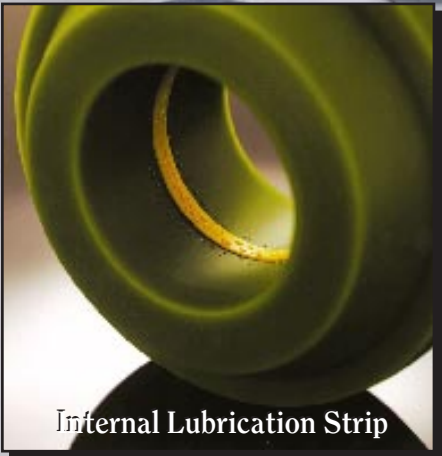


New

The Next
Generation

BOSTON[®]

Washdown Duty
Non-Metallic
Food Grade
Bearing Products

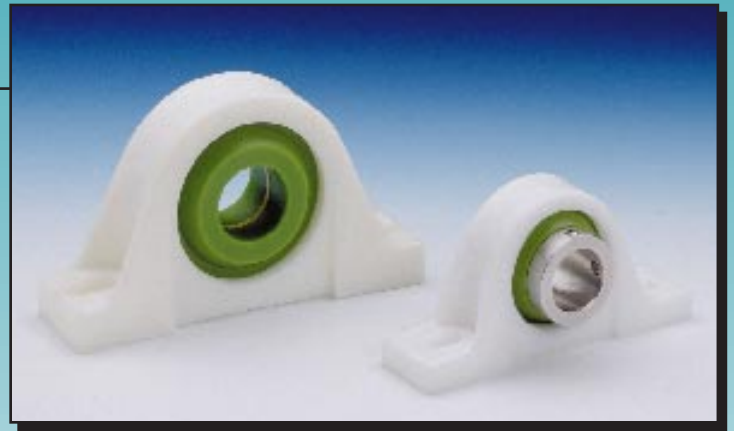


Internal Lubrication Strip

Boston
Gear

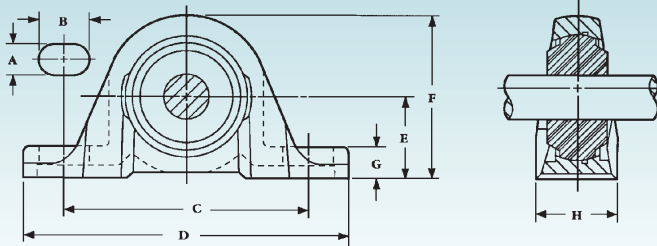
Washdown Non-Metallic Bearings

- Acetal Housing, USDA/FDA Approved
- Self Aligning Inserts
 - Oil Filled UHMW-PE, USDA/FDA Approved
 - Nyloil for Higher Speeds and Greater Loads
 - Stainless Steel Shaft Protectors
- Interchangeable with Cast Iron Units
- Internal Lubrication Strip for Extended Ratings



Pillow Blocks

Order by Catalog Number or Item Code

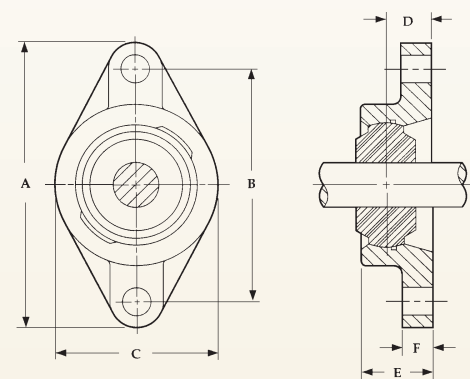


Bore	Dimensions (Inches)								Catalog Number (1)	Item Code	Maximum Limits (2)			
	A	B	C	D	E	F	G	H			RPM	LOAD	PV	Temp (°F)
7/8	3/8	5/8	4	5-3/8	1-5/16	2-3/4	1/2	1-7/16	NMSLA-7/8UH	38708	420	1530	2300	160
									NMSLA-7/8NY	38732	1700	2170	16000	210
									NMSLA-7/8US	38707	310	1650	2300	160
15/16	3/8	5/8	4	5-3/8	1-5/16	2-3/4	1/2	1-7/16	NMSLA-7/8NS	38731	1290	2950	16000	210
									NMSLA-15/16UH	38709	400	1630	2300	160
									NMSLA-15/16NY	38734	1630	2330	16000	210
									NMSLA-15/16US	38710	310	1650	2300	160
1	3/8	5/8	4	5-3/8	1-5/16	2-3/4	1/2	1-7/16	NMSLA-15/16NS	38733	1290	2950	16000	210
									NMSLA-1UH	38711	370	1750	2300	160
									NMSLA-1NY	38735	1500	2500	16000	210
									NMSLA-1US	38712	310	1650	2300	160
1-1/4	1/2	7/8	5-1/8	6-3/8	1-7/8	3-3/4	11/16	1-3/4	NMSLA-1NS	38736	1290	2950	16000	210
									NMSLA-1-1/4UH	38714	290	2880	2300	160
									NMSLA-1-1/4NY	38738	1200	4120	16000	210
									NMSLA-1-1/4US	38713	210	3630	2300	160
1-3/8	1/2	7/8	5-1/8	6-3/8	1-7/8	3-3/4	11/16	1-3/4	NMSLA-1-1/4NS	38737	880	5150	16000	210
									NMSLA-1-3/8UH	38715	270	2880	2300	160
									NMSLA-1-3/8NY	38740	1100	4120	16000	210
									NMSLA-1-3/8US	38716	210	3630	2300	160
1-7/16	1/2	7/8	5-1/8	6-3/8	1-7/8	3-3/4	11/16	1-3/4	NMSLA-1-3/8NS	38739	880	5150	16000	210
									NMSLA-1-7/16UH	38717	260	3320	2300	160
									NMSLA-1-7/16NY	38741	1000	4720	16000	210
									NMSLA-1-7/16US	38718	210	3630	2300	160
									NMSLA-1-7/16NS	38742	880	5150	16000	210

Two Bolt Flange Bearings

Order by Catalog Number or Item Code

Bore	Dimensions (Inches)							Bolt Dia.	Catalog Number (1)	Item Code	Maximum Limits (2)			
	A	B	C	D	E	F	RPM				Load	PV	Temp (°F)	
7/8	5-1/8	3-7/8	2-11/16	23/32	1-3/16	1/2	3/8	NMSTA-7/8UH	38720	420	1530	2300	160	
								NMSTA-7/8NY	38744	1700	2170	16000	210	
								NMSTA-7/8US	38719	310	1650	2300	160	
								NMSTA-7/8NS	38743	1290	2950	16000	210	
15/16	5-1/8	3-7/8	2-11/16	23/32	1-3/16	1/2	3/8	NMSTA-15/16UH	38721	400	1630	2300	160	
								NMSTA-15/16NY	38746	1630	2330	16000	210	
								NMSTA-15/16US	38722	310	1650	2300	160	
								NMSTA-15/16NS	38745	1290	2950	16000	210	
1	5-1/8	3-7/8	2-11/16	23/32	1-3/16	1/2	3/8	NMSTA-1UH	38723	370	1750	2300	160	
								NMSTA-1NY	38747	1500	2500	16000	210	
								NMSTA-1US	38724	310	1650	2300	160	
								NMSTA-1NS	38748	1290	2950	16000	210	
1-1/4	6-5/16	5-1/8	3-5/8	7/8	1-7/16	9/16	1/2	NMSTA-1-1/4UH	38726	290	2880	2300	160	
								NMSTA-1-1/4NY	38750	1200	4120	16000	210	
								NMSTA-1-1/4US	38725	210	3630	2300	160	
								NMSTA-1-1/4NS	38749	880	5150	16000	210	
1-3/8	6-5/16	5-1/8	3-5/8	7/8	1-7/16	9/16	1/2	NMSTA-1-3/8UH	38727	270	2880	2300	160	
								NMSTA-1-3/8NY	38752	1100	4120	16000	210	
								NMSTA-1-3/8US	38728	210	3630	2300	160	
								NMSTA-1-3/8NS	38751	880	5150	16000	210	
1-7/16	6-5/16	5-1/8	3-5/8	7/8	1-7/16	9/16	1/2	NMSTA-1-7/16UH	38729	260	3320	2300	160	
								NMSTA-1-7/16NY	38753	1000	4720	16000	210	
								NMSTA-1-7/16US	38730	210	3630	2300	160	
								NMSTA-1-7/16NS	38754	880	5150	16000	210	

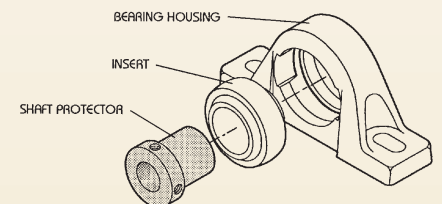


Notes

- (1) Material (Suffix), UH = Oil Filled UHMW-PE (Grey), NY = Nyloil (Green), US = Oil Filled UHMW-PE (Grey) with Stainless Steel Sleeve, NS = Nyloil (Green) with Stainless Steel Sleeve
 (2) Maximum Allowable Limits, Combined P x V Cannot Exceed PV Value, See ratings on back page.

Stainless Steel Shaft Protectors

Boston Gear's stainless steel shaft protectors with locking screws are standard on bearings ending with US or NS. These flanged collars lock to standard shafting and provide a permanently smooth bearing surface. In addition, shaft protectors offer protection from expensive shaft wear which sometimes occurs with journal bearings. Protectors also eliminate the need for shaft collars, and increase load capacity by extending bearing surface area.



Solid Non-Metallic Bearings

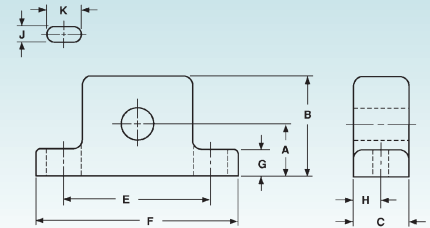
- Low Cost Alternative
- Dimensionally Interchangeable with Most Conventional Bearings
- Materials
 - UHMW-PE-USDA/FDA Approved
 - Nyloil for Higher Speeds and Greater Loads
- Internal Lubrication Strip for Extended Ratings
- Self Lubricating



Pillow Blocks

Order by Catalog Number or Item Code

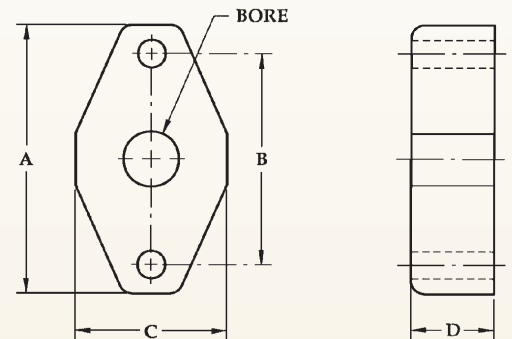
Dimensions (Inches)										Catalog Number (1)	Item Code	Maximum Limits (2)			
Bore	A	B	C	E	F	G	H	J	K			RPM	Load	PV	Temp (°F)
1/2	1-3/16	2-3/16	1-1/2	3-3/8	4-3/4	5/8	3/4	7/16	7/8	NMPPB-1/2UP*	38760	740	1050	2300	180
										NMPPB-1/2NY*	-	3050	1500	16000	210
5/8	1-3/16	2-3/16	1-1/2	3-3/8	4-3/4	5/8	3/4	7/16	7/8	NMPPB-5/8UP*	38761	590	1310	16000	180
										NMPPB-5/8NY*	-	2440	1870	16000	210
3/4	1-5/16	2-1/2	1-1/2	3-3/4	5-1/4	5/8	3/4	7/16	15/16	NMPPB-3/4UP	38762	490	1570	4000	180
										NMPPB-3/4NY	38778	2030	2250	16000	210
13/16	1-5/16	2-1/2	1-1/2	3-3/4	5-1/4	5/8	3/4	7/16	15/16	NMPPB-13/16UP	-	460	1700	4000	180
										NMPPB-7/8UP	-	420	1830	4000	180
7/8	1-7/16	2-3/4	1-1/2	4	5-1/2	3/4	3/4	7/16	15/16	NMPPB-7/8NY	-	1740	2625	16000	210
										NMPPB-15/16UP	-	390	1960	4000	180
15/16	1-7/16	2-3/4	1-1/2	4	5-1/2	3/4	3/4	7/16	15/16	NMPPB-15/16NY	-	1620	2810	16000	210
										NMPPB-1UP	38763	370	2100	4000	180
1	1-7/16	2-3/4	1-1/2	4	5-1/2	3/4	3/4	7/16	15/16	NMPPB-1NY	38779	1520	3000	16000	210
										NMPPB-1-1/16UP	-	350	2230	4000	180
1-1/16	1-11/16	3-1/4	1-1/2	4-3/4	6-1/4	7/8	3/4	9/16	1-1/16	NMPPB-1-1/16NY	-	1430	3180	16000	210
										NMPPB-1-1/8UP	-	330	2360	4000	180
1-1/8	1-11/16	3-1/4	1-1/2	4-3/4	6-1/4	7/8	3/4	9/16	1-1/16	NMPPB-1-1/8NY	-	1350	3370	16000	210
										NMPPB-1-3/16UP	-	310	2490	4000	180
1-3/16	1-11/16	3-1/4	1-1/2	4-3/4	6-1/4	7/8	3/4	9/16	1-1/16	NMPPB-1-3/16NY	-	1280	3560	16000	210
										NMPPB-1-1/4UP	38764	290	3060	4000	180
1-1/4	1-7/8	3-5/8	1-3/4	5	6-1/2	7/8	7/8	9/16	1-1/16	NMPPB-1-1/4NY	38780	1220	4370	16000	210
										NMPPB-1-3/8UP	-	270	3360	4000	180
1-3/8	1-7/8	3-5/8	1-3/4	5	6-1/2	7/8	7/8	9/16	1-1/16	NMPPB-1-7/16UP	38765	260	3520	4000	180
										NMPPB-1-7/16NY	38781	1060	5030	16000	210
1-7/16	1-7/8	3-5/8	1-3/4	5	6-1/2	7/8	7/8	9/16	1-1/16	NMPPB-1-1/2UP	38766	240	3670	4000	180
										NMPPB-1-1/2NY	38782	1010	5250	16000	210



Two Bolt Flange Bearings

Order by Catalog Number or Item Code

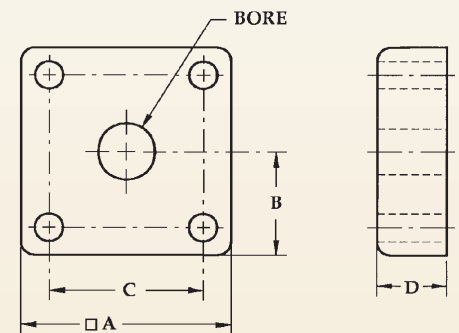
Dimensions (Inches)						Catalog Number (1)	Item Code	Maximum Limits (2)			
Bore	A	B	C	D	Bolt Dia.			RPM	Load	PV	Temp (°F)
1/2	3-7/8	3	2-1/8	1-1/4	3/8	NMPTB-1/2UP*	38767	740	870	2300	180
						NMPTB-3/4UP	38768	490	1570	4000	180
3/4	4-7/16	3-9/16	2-1/2	1-1/2	3/8	NMPTB-3/4NY	38783	2030	2250	16000	210
						NMPTB-1UP	38769	370	2100	4000	180
1	4-15/16	3-7/8	2-3/4	1-1/2	7/16	NMPTB-1NY	38784	1520	3000	16000	210
						NMPTB-1-3/16UP	-	310	2490	4000	180
1-3/16	5-5/8	4-5/8	3-1/4	1-1/2	7/16	NMPTB-1-3/16NY	-	1280	3560	16000	210
						NMPTB-1-1/4UP	38770	290	3060	4000	180
1-1/4	6-1/8	5-1/8	3-5/8	1-3/4	1/2	NMPTB-1-1/4NY	38785	1220	4375	16000	210
						NMPTB-1-7/16UP	38771	260	3520	4000	180
1-7/16	6-1/8	5-1/8	3-5/8	1-3/4	1/2	NMPTB-1-7/16NY	38786	1060	5030	16000	210
						NMPTB-1-1/2UP	38772	240	4200	4000	180
1-1/2	6-13/16	5-5/8	4	2	1/2	NMPTB-1-1/2NY	38787	1010	6000	16000	210



Four Bolt Flange Bearings

Order by Catalog Number or Item Code

Dimensions (Inches)						Catalog Number (1)	Item Code	Maximum Limits (2)			
Bore	A	B	C	D	Bolt Dia.			RPM	Load	PV	Temp (°F)
1/2	3	1-1/2	2-1/8	1	3/8	NMPFB-1/2UP*	-	740	700	2300	180
						NMPFB-3/4UP	38755	490	1310	4000	180
3/4	3-3/8	1-11/16	2-1/2	1-1/4	3/8	NMPFB-3/4NY	38773	2030	1870	16000	210
						NMPFB-1UP	38756	370	1750	4000	180
1	3-3/4	1-7/8	2-3/4	1-1/4	7/16	NMPFB-1NY	38774	1520	2500	16000	210
						NMPFB-1-3/16UP	-	310	2490	4000	180
1-3/16	4-1/4	2-1/8	3-1/4	1-1/2	7/16	NMPFB-1-3/16NY	-	1280	3560	16000	210
						NMPFB-1-1/4UP	38757	290	2620	4000	180
1-1/4	4-3/4	2-1/8	3-5/8	1-1/2	1/2	NMPFB-1-1/4NY	38775	1220	3750	16000	210
						NMPFB-1-7/16UP	38758	260	3610	4000	180
1-7/16	4-3/4	2-3/8	3-5/8	1-1/2	1/2	NMPFB-1-7/16NY	38776	1060	4310	16000	210
						NMPFB-1-1/2UP	38759	260	3610	4000	180
1-1/2	5-1/8	2-9/16	4	1-3/4	1/2	NMPFB-1-1/2NY	38777	780	6780	16000	210

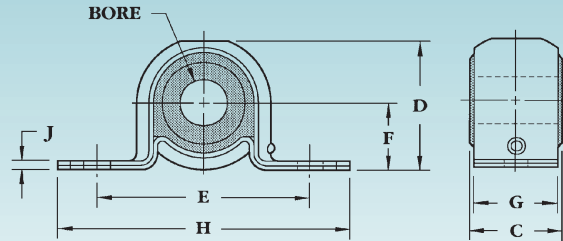


Notes

- (1) * Denotes that the bearing does not contain the internal lubrication strip. Material (Suffix), UP = UHMW-PE (White), NY = Nyloil (Green)
- (2) Maximum allowable limits, combined P x V cannot exceed PV value, See ratings on back page.

Steel Mounted Non-Metallic Bearings

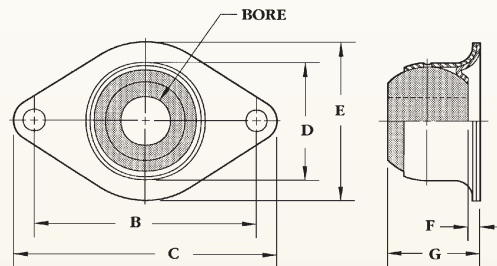
- Stainless Steel Housing (Pillow Block Only)
- Steel Housing (2 Bolt Flange)
- Self-Aligning Bearing
- Interchangeable with Standard Bearings
- Oil Filled UHMW Bearing, USDA/FDA Approved
- Moisture Resistant
- Internal Lubrication Strip for Extended Ratings



Pillow Blocks

Order by Catalog Number or Item Code

Bore	Dimensions (Inches)								Catalog Number (1)	Item Code	Maximum Limits (2)			
	C	D	E	F	G	H	J	Bolt Dia.			RPM	Load	PV	Temp (°F)
1/2									NMPSS-1/2UH*	38691	760	870	4000	160
5/8									NMPSS-5/8UH*	38692	610	1090	4000	160
3/4	1-1/4	1-3/4	2-7/8	29/32	1-1/8	3-15/16	1/8	5/16	NMPSS-3/4SUH	38694	500	1310	4000	160
7/8									NMPSS-7/8SUH	-	430	1530	4000	160
1									NMPSS-1SUH	38844	380	1750	4000	160
3/4									NMPSS-3/4UH	38693	500	1570	4000	160
7/8									NMPSS-7/8UH	-	430	1830	4000	160
1	1-1/2	2-1/16	3-1/4	1-1/16	1-5/16	4-9/16	1/8	3/8	NMPSS-1UH	38695	380	2100	4000	160
1-1/8									NMPSS-1-1/8UH	-	330	2360	4000	160
1-3/16									NMPSS-1-3/16UH	-	320	2490	4000	160
1-1/4									NMPSS-1-1/4UH	38696	300	2620	4000	160



Two Bolt Flange Bearings

Order by Catalog Number or Item Code

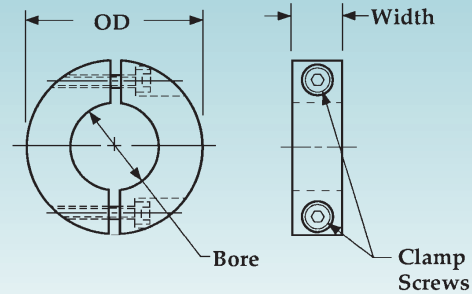
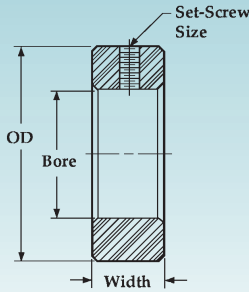
Bore	Dimensions (Inches)								Catalog Number (1)	Item Code	Maximum Limits (2)			
	B	C	D	E	F	G	Bolt Dia.	RPM			Load	PV	Temp (°F)	
1/2									NMPSS2-1/2UH*	38697	760	870	4000	160
5/8	2-3/4	3-3/8	1-13/16	2-7/16	5/32	1-7/16	5/16		NMPSS2-5/8UH*	38698	610	1090	4000	160
3/4									NMPSS2-3/4SUH	38700	500	1310	4000	160
7/8									NMPSS2-7/8SUH	-	430	1530	4000	160
1									NMPSS2-1SUH	-	380	1750	4000	160
3/4									NMPSS2-3/4UH	38699	500	1560	4000	160
7/8									NMPSS2-7/8UH	-	430	1830	4000	160
1	3-9/32	4	2-5/32	2-3/4	1/16	1-9/16	3/8		NMPSS2-1UH	38701	380	2100	4000	160
1-1/8									NMPSS2-1-1/8UH	-	330	2360	4000	160
1-3/16									NMPSS2-1-3/16UH	-	320	2490	4000	160
1-1/4									NMPSS2-1-1/4UH	38702	300	2620	4000	160

Notes

- (1) * Denotes that the bearing does not contain the internal lubrication strip. Material (Suffix), UH=Oil Filled UHMW-PE (Grey)
 (2) Maximum allowable limits, combined P x V cannot exceed PV value, See ratings on back page.

Collars

- Nylon Material
- USDA/FDA Approved
- Two Styles
 - Shaft Collar
 - Split Clamp Collar
- Recessed Clamping Screws on Split Clamping Collar for Safety.
- Stainless Steel Hardware



Order by Catalog Number or Item Code

Shaft Collars

Split Clamping Collars

Bore	OD	Width	Set Screw Thread	Catalog Number	Item Code
1/4	3/4	7/16	10-24	NSC25	38802
5/16	7/8	7/16	10-24	NSC31	38803
3/8	7/8	7/16	10-24	NSC37	38804
7/16	7/8	7/16	1/4-20	NSC43	38805
1/2	1	7/16	1/4-20	NSC50	38806
9/16	1-1/8	1/2	1/4-20	NSC56	-
5/8	1-1/8	1/2	5/16-18	NSC62	38807
3/4	1-1/4	9/16	5/16-18	NSC75	38808
7/8	1-1/2	9/16	5/16-18	NSC87	38809
1	1-5/8	5/8	5/16-18	NSC100	38810
1-3/16	2	11/16	3/8-16	NSC118	-
1-1/4	2	11/16	3/8-16	NSC125	38811
1-3/8	2-1/8	3/4	3/8-16	NSC137	-
1-7/16	2-1/4	3/4	3/8-16	NSC143	38812
1-1/2	2-1/4	3/4	3/8-16	NSC150	38813
1-5/8	2-1/2	13/16	3/8-16	NSC162	-
1-3/4	2-3/4	7/8	1/2-13	NSC175	38814
1-7/8	2-3/4	7/8	1/2-13	NSC187	-
1-15/16	3	7/8	1/2-13	NSC193	-
2	3	7/8	1/2-13	NSC200	38815
2-3/16	3-1/4	15/16	1/2-13	NSC218	-
2-1/4	3-1/4	15/16	1/2-13	NSC225	-
2-7/16	3-1/2	1	1/2-13	NSC243	-
2-1/2	3-1/2	1	1/2-13	NSC250	-
2-3/4	3-3/4	1	1/2-13	NSC275	-
3	4-1/4	1-1/8	1/2-13	NSC300	-

Bore	OD	Width	Clamp Screw Thread	Catalog Number	Item Code
1/4	1	3/8	6-32	2NSC25	38788
5/16	1	3/8	6-32	2NSC31	38789
3/8	1-1/4	1/2	6-32	2NSC37	38790
7/16	1-1/4	1/2	6-32	2NSC43	38791
1/2	1-3/8	9/16	8-32	2NSC50	38792
9/16	1-3/8	9/16	8-32	2NSC56	-
5/8	1-5/8	5/8	10-32	2NSC62	38793
3/4	1-3/4	5/8	10-32	2NSC75	38794
7/8	2	3/4	10-32	2NSC87	38795
1	2-1/8	3/4	1/4-20	2NSC100	38796
1-3/16	2-5/16	3/4	1/4-20	2NSC118	-
1-1/4	2-3/8	3/4	1/4-20	2NSC125	38797
1-3/8	2-1/2	3/4	1/4-20	2NSC137	-
1-7/16	2-5/8	3/4	1/4-20	2NSC143	38798
1-1/2	2-5/8	3/4	1/4-20	2NSC150	38799
1-5/8	3	15/16	5/16-18	2NSC162	-
1-3/4	3-1/8	15/16	5/16-18	2NSC175	38800
1-7/8	3-1/4	15/16	5/16-18	2NSC187	-
1-15/16	3-1/4	15/16	5/16-18	2NSC193	-
2	3-3/8	15/16	5/16-18	2NSC200	38801
2-3/16	3-5/8	15/16	5/16-18	2NSC218	-
2-1/4	3-5/8	15/16	5/16-18	2NSC225	-
2-7/16	4-1/8	1-1/8	3/8-16	2NSC243	-
2-1/2	4-1/8	1-1/8	3/8-16	2NSC250	-
2-3/4	4-3/8	1-1/8	3/8-16	2NSC275	-
3	4-1/2	1-1/8	3/8-16	2NSC300	-

Dimensions are in inches

Bore	Tolerance
1/4-1	+0.003" -0.000"
1-3/16 -2	+0.004" -0.000"
2-3/16 -3	+0.006" -0.000"

Typical Applications

- Food Processing
- Pharmaceuticals
- Medical
- Packaging
- Sewage Treatment
- Wood Products
- Pulp and Paper
- Bottling

Benefits

- FDA/USDA Approved
- Corrosion Resistant
- Sanitary
- Interchangeable with their Metal Counterparts
- Moisture Resistant

Ratings

How to Measure Operating PV,

The Load carrying capability of plastic bearings can be expressed as a pressure-velocity (PV) factor

P = Expressed as pounds per square inch on the projected bearing area.

V = The velocity in feet per minute on the shaft surface.

PV is then obtained by multiplying P x V as shown

$$V \text{ (FPM)} = .262 \times (\text{Shaft Diameter}) \times (\text{Shaft RPM})$$

$$P \text{ (PSI)} = \frac{\text{Bearing Load}}{(\text{Bearing Diameter}) \times (\text{Bearing Length})}$$

Material	Max PV	Max P	Max V	Max Temp (°F)	Color
UHMW-PE	2300	1400	100	180	White
Nyloil	16000	2000	400	210	Green
UHMW-PE with Internal Wear Strip	4000	1400	100	180	White
Nyloil with Internal Wear Strip	16000	2000	400	210	Green
Oil Filled UHMW-PE	2300	1400	100	160	Gray

Shaft Hardness

Shaft hardness is a major factor in the operation of plastic bearings. Shapes and bearings will last longer as the degree of hardness increases. Shaft finish of 16 RMS is recommended for most applications.

Internal Lubrication Strip



The internal lubrication strip provides lubricity which doubles the PV value when tested against non-lubricated UHMW or nylon bearings. The internal lubrication strip emits lubrication at the point of friction. You can easily see droplets of our oil located inside the bore. The oil is FDA/USDA approved.

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