

# FYH<sup>®</sup>

# NU-LOC<sup>®</sup>

## NU Concentric-LOC BALL BEARING UNITS



**ABEG<sup>®</sup>**  
Advanced Bearing Expert Group



**EASY INSTALLATION**  
**360° SHAFT CONTACT**  
**TRUE CONCENTRIC LOCK**

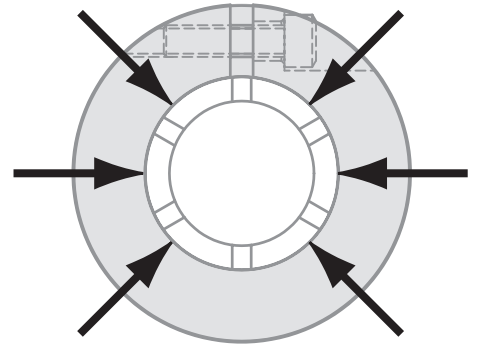
CATALOG NO.3401



[fyhbearings.com](http://fyhbearings.com)

## Uniform LOC

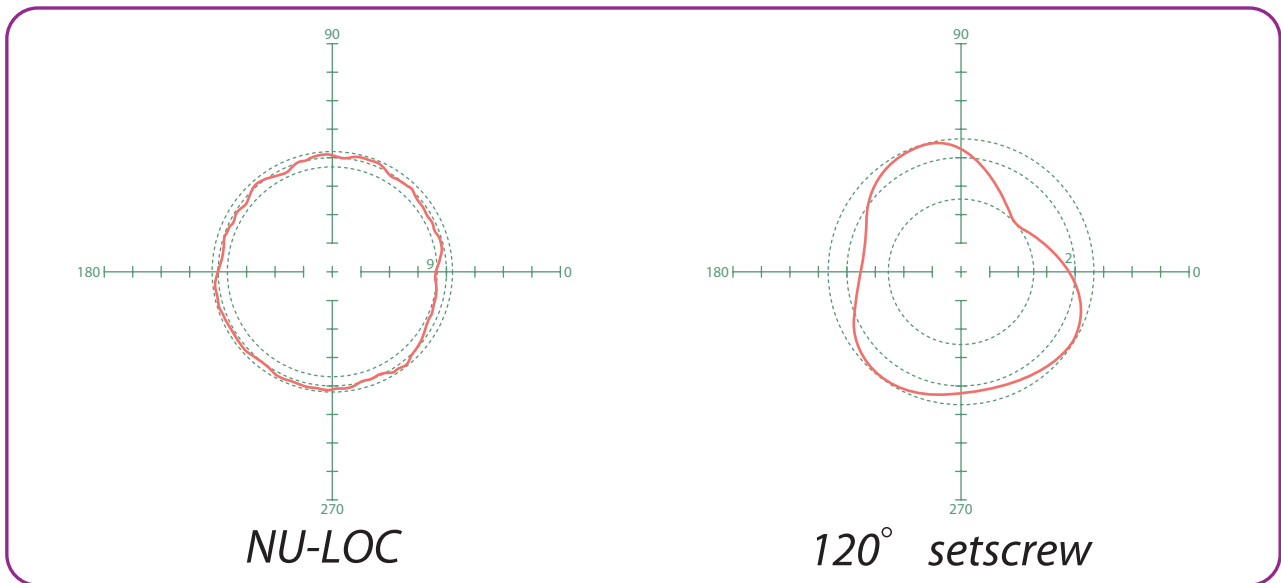
The FYH NU-LOC bearing grips the shaft more uniformly, which allows 360 degrees of equalized locking contact. The roundness of the ball path on NU-LOC bearings results in better operation and longer life. NU-LOC concentric locking collars are designed to prevent shaft marring and burring. A single standard hex head cap screw can be tightened quickly and easily. NU-LOC bearings can replace either setscrew or eccentric locking collar inserts.



### 360° LOCKING

NU-LOC concentric locking collar with a single cap screw provides great holding power. The collar is installed over the slotted inner ring on the shaft concentrically.

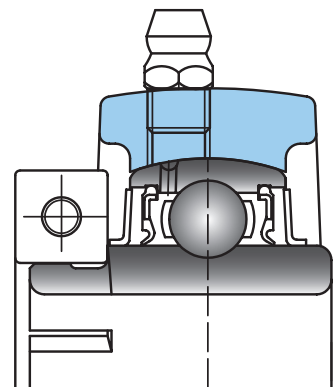
### Ballpath Roundness

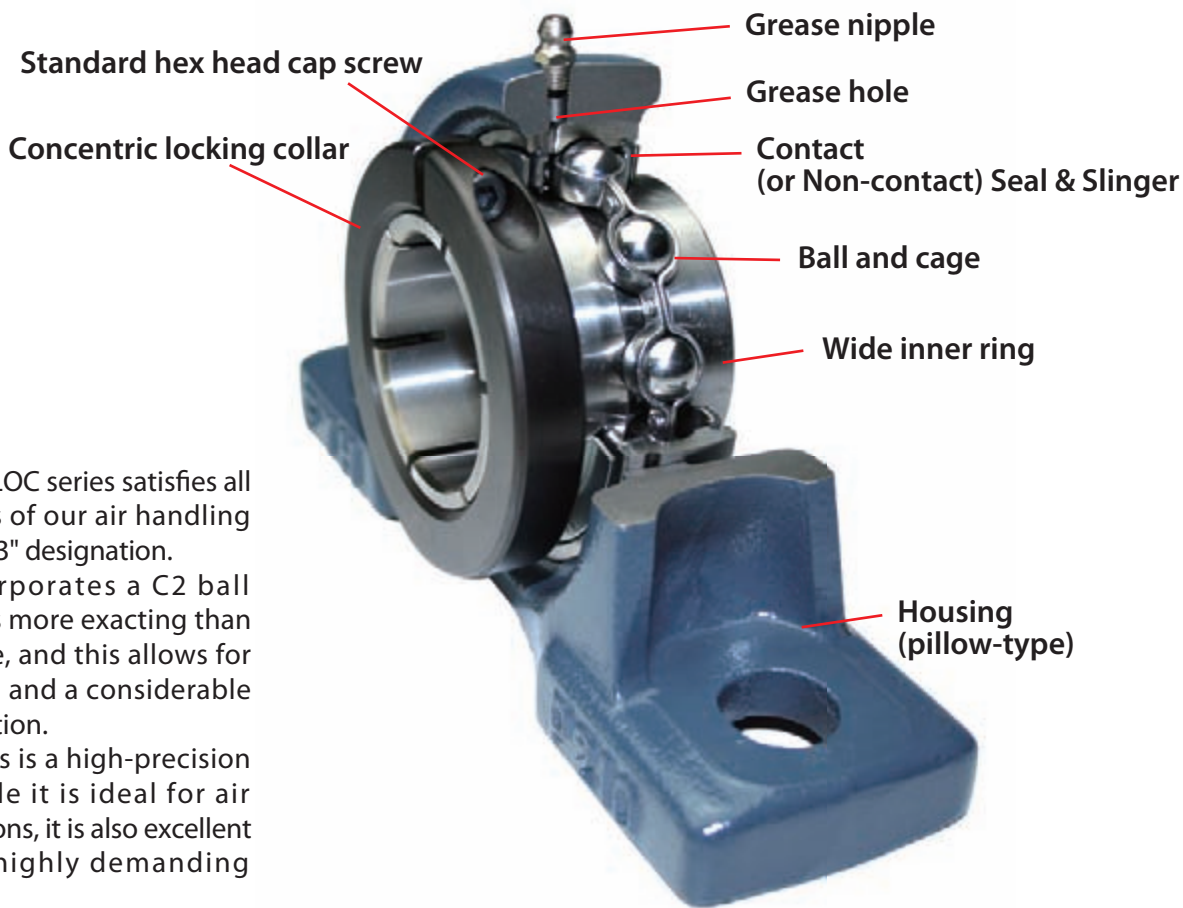


Quick & Easy Installation with a single hex cap screw.



### Cross-Section Detail






The standard NU-LOC series satisfies all the specifications of our air handling series under the "S3" designation.

This series incorporates a C2 ball clearance which is more exacting than the standard style, and this allows for quieter operation and a considerable reduction of vibration.

The NU-LOC series is a high-precision design and, while it is ideal for air handling applications, it is also excellent for many more highly demanding applications.

SUFFIX																																																			
<b>S3</b>	<b>P18</b>	P18 is the suffix code that designates smaller bore tolerance which allows for a tighter fit with the shaft. This, in turn, reduces vibration and noise and dramatically increases bearing life.																																																	
		<b>Tolerance and tolerance values of inner rings of P18 suffix (unit: <math>\mu\text{m}</math>)</b>																																																	
		<table border="1"> <thead> <tr> <th colspan="2">Nominal bearing bore dia. <math>d</math> (mm)</th> <th colspan="2">Variation of tolerance of average bore dia. in plane <math>\Delta d_{mp}</math></th> <th>Unequal bore dia. in plane <math>V_{dp}</math></th> <th>Radial runout of inner ring <math>K_{ia}</math></th> </tr> <tr> <th>Over</th> <th>Incl.</th> <th>Max.</th> <th>Min.</th> <th>Max.</th> <th>Max.</th> </tr> </thead> <tbody> <tr> <td>-</td> <td>10</td> <td>+13</td> <td>0</td> <td>6</td> <td>7</td> </tr> <tr> <td>10</td> <td>18</td> <td>+13</td> <td>0</td> <td>6</td> <td>8</td> </tr> <tr> <td>18</td> <td>31.75</td> <td>+13</td> <td>0</td> <td>10</td> <td>10</td> </tr> <tr> <td>31.75</td> <td>50.8</td> <td>+15</td> <td>0</td> <td>10</td> <td>10</td> </tr> <tr> <td>50.8</td> <td>80</td> <td>+18</td> <td>0</td> <td>14</td> <td>13</td> </tr> </tbody> </table>		Nominal bearing bore dia. $d$ (mm)		Variation of tolerance of average bore dia. in plane $\Delta d_{mp}$		Unequal bore dia. in plane $V_{dp}$	Radial runout of inner ring $K_{ia}$	Over	Incl.	Max.	Min.	Max.	Max.	-	10	+13	0	6	7	10	18	+13	0	6	8	18	31.75	+13	0	10	10	31.75	50.8	+15	0	10	10	50.8	80	+18	0	14	13						
Nominal bearing bore dia. $d$ (mm)		Variation of tolerance of average bore dia. in plane $\Delta d_{mp}$		Unequal bore dia. in plane $V_{dp}$	Radial runout of inner ring $K_{ia}$																																														
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-	10	+13	0	6	7																																														
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18	31.75	+13	0	10	10																																														
31.75	50.8	+15	0	10	10																																														
50.8	80	+18	0	14	13																																														
		<b>Tolerance and tolerance values of inner rings of ISO standard (unit: <math>\mu\text{m}</math>)</b>																																																	
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Nominal bearing bore dia. $d$ (mm)		Variation of tolerance of average bore dia. in plane $\Delta d_{mp}$		Unequal bore dia. in plane $V_{dp}$	Radial runout of inner ring $K_{ia}$																																														
Over	Incl.	Max.	Min.	Max.	Max.																																														
-	10	+15	0	10	10																																														
10	18	+15	0	10	15																																														
18	31.75	+18	0	12	18																																														
31.75	50.8	+21	0	14	20																																														
50.8	80	+24	0	16	25																																														
	<b>P11</b>	The anti-rotation pin, in conjunction with the standard "J" fit housing, means very secure housing fit in high speed applications.																																																	
	<b>C2</b>	Internal bearing clearance is defined as the allowable space between the rolling elements and the raceways. C2 is smaller clearance than the standard, and it reduces the noise and vibration in high speed applications.																																																	

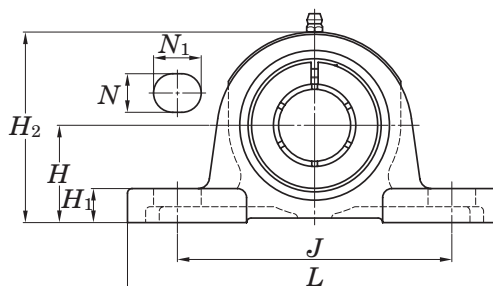
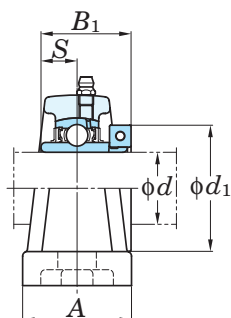


# Pillow type units NU-LOC

## NCP

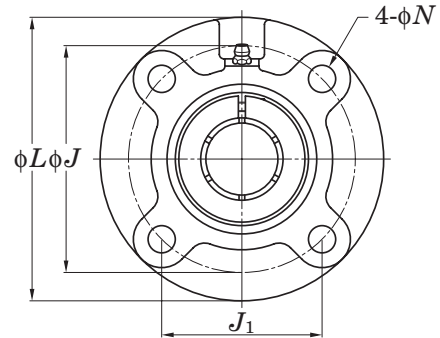
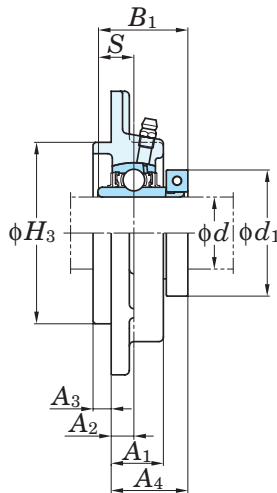
### Cylindrical bore (with concentric locking collar)

$d$  20 ~ 60 mm



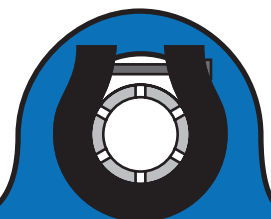
Shaft Dia mm inch		Dimensions inch mm										Bolt Size inch mm	Unit No.	Housing No.	Bearing No.	Mass kg	
$d$		$H$	$L$	$A$	$J$	$N$	$N_1$	$H_1$	$H_2$	$B_1$	$S$	$d_1$					
20	3/4	1 5/16	5	1 1/2	3 3/4	1/2	23/32	1/2	2 17/32	1 9/32	0.500	1 3/4	3/8	NCP204-12 NCP204	P204	NC204-12 NC204	0.80
		33.3	127	38	95	13	18	13	64	32.5	12.7	44.5	M10				
25	7/8	1 7/16	5 1/2	1 1/2	4 1/8	1/2	23/32	1/2	2 25/32	1 7/16	0.563	1 15/16	3/8	NCP205-14	P205	NC205-14 NC205-15 NC205	1.0
	15/16													NCP205-15			
	1													NCP205-16			
30	1 1/8	1 11/16	6 1/2	1 7/8	4 3/4	21/32	13/16	19/32	3 5/16	1 9/16	0.626	2 3/16	1/2	NCP206-18 NCP206	P206	NC206-18 NC206 NC206-19 NC206-20	1.5
	1 3/16	42.9	165	48	121	17	21	15	84	39.7	15.9	55.6	M14	NCP206-19			
	1 1/4	NCP206-20															
35	1 1/4	1 7/8	6 9/16	1 7/8	5	21/32	13/16	5/8	3 21/32	1 3/4	0.689	2 7/16	1/2	NCP207-20	P207	NC207-20	1.9
		47.6	167	48	127	17	21	16	93	44.5	17.5	61.9	M14				
	1 3/8	1 7/8	6 9/16	1 7/8	5	21/32	13/16	5/8	3 21/32	1 3/4	0.689	2 9/16	1/2	NCP207-22 NCP207			
1 7/16	47.6	167	48	127	17	21	16	93	44.5	17.5	65.1	M14	NCP207-23	NC207-23			
40	1 1/2	1 15/16	7 1/4	2 1/8	5 13/32	21/32	13/16	21/32	3 27/32	2	0.748	2 11/16	1/2	NCP208-24 NCP208	P208	NC208-24 NC208	2.4
		49.2	184	54	137	17	21	17	98	50.8	19	68.3	M14				
45	1 5/8	2 1/8	7 15/32	2 1/8	5 3/4	21/32	13/16	21/32	4 3/16	2	0.748	2 13/16	1/2	NCP209-26	P209	NC209-26	2.6
		54	190	54	146	17	21	17	106	50.8	19	71.4	M14				
	1 11/16	2 1/8	7 15/32	2 1/8	5 3/4	21/32	13/16	21/32	4 3/16	2	0.748	2 15/16	1/2	NCP209-27 NCP209-28 NCP209			
1 3/4	54	190	54	146	17	21	17	106	50.8	19	74.6	M14					
50	1 15/16	2 1/4	8 1/8	2 3/8	6 1/4	25/32	7/8	3/4	4 7/16	2 3/32	0.748	3 3/8	5/8	NCP210-31 NCP210	P210	NC210-31 NC210 NC210-32	3.5
	2	57.2	206	60	159	20	22	19	113	53.1	19	85.7	M16	NCP210-32			
55	2	2 1/2	8 5/8	2 3/8	6 23/32	25/32	7/8	3/4	4 29/32	2 1/4	0.874	3 1/2	5/8	NCP211-32	P211	NC211-32	4.0
		63.5	219	60	171	20	22	19	125	57.1	22.2	88.9	M16				
	2 3/16	2 1/2	8 5/8	2 3/8	6 23/32	25/32	7/8	3/4	4 29/32	2 1/4	0.874	3 5/8	5/8	NCP211 NCP211-35	P211	NC211 NC211-35	4.0
	63.5	219	60	171	20	22	19	125	57.1	22.2	92.1	M16					
60	2 1/4	2 3/4	9 1/2	2 3/4	7 1/4	25/32	31/32	7/8	5 7/16	2 5/8	1.000	4 1/16	5/8	NCP212-36	P212	NC212-36	5.6
		69.8	241	70	184	20	25	22	138	66.7	25.4	103.2	M16				
	2 3/4	2 3/4	9 1/2	2 3/4	7 1/4	25/32	31/32	7/8	5 7/16	2 5/8	1.000	4 1/8	5/8	NCP212 NCP212-39	P212	NC212 NC212-39	5.6
	69.8	241	70	184	20	25	22	138	66.7	25.4	104.8	M16					

**Round flange cartridge type units NU-LOC  
NCFC**  
Cylindrical bore (with concentric locking collar)  
 $d$  20 ~ 60 mm

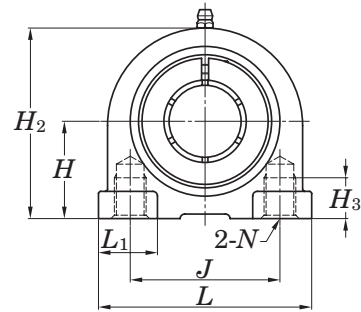
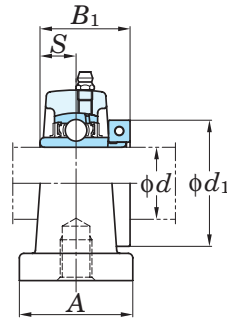
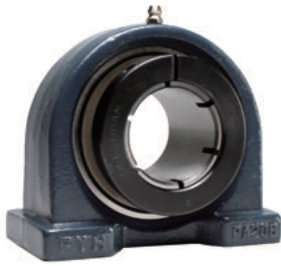


Shaft Dia		Dimensions											Bolt Size	Unit No.	Housing No.	Bearing No.	Mass	
mm	inch	inch mm																inch
$d$		$L$	$H_3$	$J$	$J_1$	$N$	$A_1$	$A_2$	$A_3$	$A_4$	$B_1$	$S$	$d_1$	mm				
20	3/4	3 15/16	2.4409	3 5/64	2 11/64	15/32	13/16	25/64	13/64	1 3/16	1 9/32	0.500	1 3/4	3/8	NCFC204-12	FC204	NC204-12	0.87
		100	62	78	55.1	12	20.5	10	5	29.8	32.5	12.7	44.5	M10	NCFC204		NC204	
25	7/8	4 17/32	2.7559	3 35/64	2 1/2	15/32	13/16	25/64	15/64	1 9/32	1 7/16	0.563	1 15/16	3/8	NCFC205-14	FC205	NC205-14	1.2
	15/16														NCFC205-15		NC205-15	
	1														NCFC205-16		NC205-16	
30	1 1/8	4 29/32	3.1496	3 15/16	2 25/32	15/32	29/32	25/64	5/16	1 11/32	1 9/16	0.626	2 3/16	3/8	NCFC206-18	FC206	NC206-18	1.5
	1 3/16														NCFC206		NC206	
	1 1/4														NCFC206-19		NC206-19	
35	1 1/4	5 5/16	3.5433	4 21/64	3 1/16	35/64	1 1/32	7/16	5/16	1 1/2	1 3/4	0.689	2 7/16	7/16	NCFC207-20	FC207	NC207-20	2.0
															NCFC207-22		NC207-22	
	1 3/8														NCFC207		NC207	
40	1 1/2	5 23/32	3.9370	4 23/32	3 11/32	35/64	1 1/32	7/16	25/64	1 11/16	2	0.748	2 11/16	7/16	NCFC208-24	FC208	NC208-24	2.4
															NCFC208		NC208	
	1 5/8														NCFC208-26		NC208-26	
45	1 5/8	6 5/16	4.1339	5 13/64	3 43/64	5/8	1 1/32	25/64	15/32	1 21/32	2	0.748	2 13/16	1/2	NCFC209-26	FC209	NC209-26	3.0
															NCFC209-27		NC209-27	
	1 11/16														NCFC209-28		NC209-28	
50	1 3/4	6 5/16	4.1339	5 13/64	3 43/64	5/8	1 1/32	25/64	15/32	1 21/32	2	0.748	2 15/16	1/2	NCFC209-28	FC209	NC209-28	3.0
															NCFC209		NC209	
	1 15/16														NCFC209-29		NC209-29	
55	2	7 9/32	4.9213	5 29/32	4 11/64	3/4	1 7/32	33/64	15/32	1 7/8	2 1/4	0.874	3 1/2	5/8	NCFC210-31	FC210	NC210-31	3.5
															NCFC210		NC210	
	2														NCFC210-32		NC210-32	
60	2 1/4	7 9/32	4.9213	5 29/32	4 11/64	3/4	1 7/32	33/64	15/32	1 7/8	2 1/4	0.874	3 5/8	5/8	NCFC211-32	FC211	NC211-32	4.6
															NCFC211		NC211	
	2 3/16														NCFC211-35		NC211-35	
60	2 1/4	7 11/16	5.3150	6 19/64	4 29/64	3/4	1 13/32	43/64	15/32	2 9/32	2 5/8	1.000	4 1/16	5/8	NCFC212-36	FC212	NC212-36	5.7
															NCFC212		NC212	
	2 7/16														NCFC212-39		NC212-39	

NCFCF (For USA) is also available. Contact FYH for unit specifications.



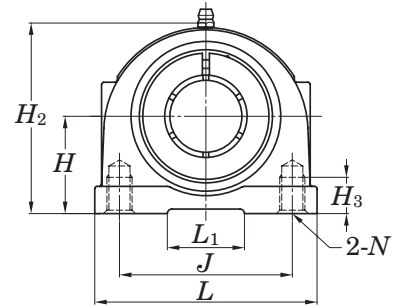
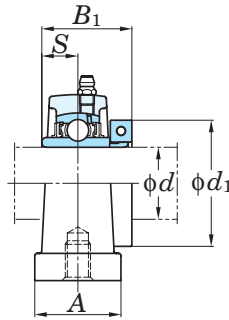
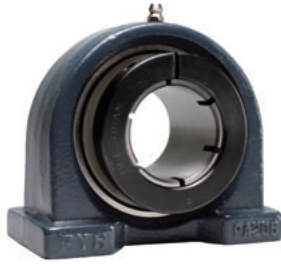
**Tapped-base pillow type units NU-LOC**  
**NCPA**  
**Cylindrical bore (with concentric locking collar)**  
*d* 20 ~ 50 mm



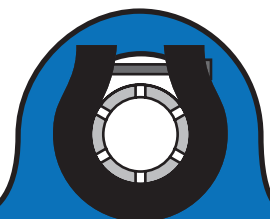
Shaft Dia		Dimensions										Unit No.	Housing No.	Bearing No.	Mass		
mm	inch	inch mm															
<i>d</i>		<i>H</i>	<i>L</i>	<i>A</i>	<i>J</i>	<i>N</i>	<i>H</i> <sub>2</sub>	<i>H</i> <sub>3</sub>	<i>L</i> <sub>1</sub>	<i>B</i> <sub>1</sub>	<i>S</i>	<i>d</i> <sub>1</sub>				kg	
20	3/4	1 3/16	3	1 9/16	2 3/64	M10×1.5	2 3/8	1/2	1 1/16	1 9/32	0.500	1 3/4	NCPA204-12	PA204	NC204-12 NC204	0.73	
		30.2	76	40	52		60	13	27	32.5	12.7	44.5	NCPA204				
25	7/8	1 7/16	3 5/16	1 25/32	2 13/64	M10×1.5	2 25/32	1/2	1 3/16	1 7/16	0.563	1 15/16	NCPA205-14	PA205	NC205-14 NC205-15 NC205	1.0	
	15/16												NCPA205-15				
	1												NCPA205-16				
30	1 1/8	1 11/16	3 11/16	1 31/32	2 19/32	M14×2	3 5/16	23/32	1 13/32	1 9/16	0.626	2 3/16	NCPA206-18	PA206	NC206-18 NC206 NC206-19 NC206-20	1.4	
	1 3/16	42.9	94	50	66		84	18	36	39.7	15.9	55.6	NCPA206				
	1 1/4																NCPA206-19
																	NCPA206-20
35	1 1/4	1 7/8	3 11/32	2 5/32	3 5/32	M14×2	3 21/32	25/32	1 5/8	1 3/4	0.689	2 7/16	NCPA207-20	PA207	NC207-20	2.0	
		47.6	110	55	80		93	20	41	44.5	17.5	61.9					
	1 3/8																NCPA207-22
	1 7/16	47.6	110	55	80	M14×2	93	20	41	44.5	17.5	65.1	NCPA207	PA207	NC207-22 NC207	2.0	
													NCPA207-23		NC207-23		
40	1 1/2	1 15/16	4 9/16	2 9/32	3 5/16	M14×2	3 15/16	25/32	1 5/8	2	0.748	2 11/16	NCPA208-24	PA208	NC208-24 NC208	2.4	
		49.2	116	58	84		100	20	41	50.8	19	68.3	NCPA208				
45	1 5/8	2 9/64	4 23/32	2 3/8	3 35/64	M14×2	4 3/16	31/32	1 21/32	2	0.748	2 13/16	NCPA209-26	PA209	NC209-26	2.6	
		54.2	120	60	90		106	25	42	50.8	19	71.4					
	1 11/16																NCPA209-27
	1 3/4	2 9/64	4 23/32	2 3/8	3 35/64	M14×2	4 3/16	31/32	1 21/32	2	0.748	2 15/16	NCPA209-28	PA209	NC209-27 NC209-28 NC209	2.6	
													NCPA209				
50	1 15/16	2 1/4	5 1/8	2 17/32	3 45/64	M16×2	4 7/16	31/32	1 27/32	2 3/32	0.748	3 3/8	NCPA210-31	PA210	NC210-31 NC210	3.4	
		57.2	130	64	94		113	25	47	53.1	19	85.7	NCPA210				
	2												NCPA210-32		NC210-32		

**Tapped-base pillow type units NU-LOC  
NCPAN**  
Cylindrical bore (with concentric locking collar)  
 $d$  20 ~ 35 mm

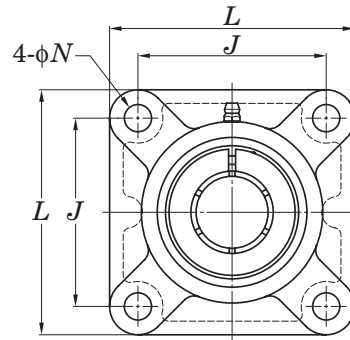
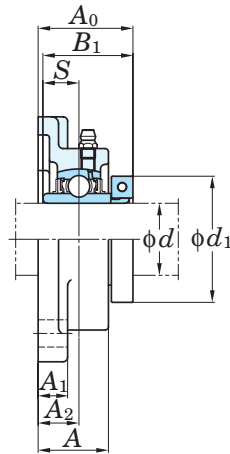
**For USA**



Shaft Dia		Dimensions										Unit No.	Housing No.	Bearing No.	Mass	
mm	inch	inch mm														
$d$		$H$	$L$	$A$	$J$	$N$	$H_2$	$H_3$	$L_1$	$B_1$	$S$	$d_1$				kg
20	$3/4$	$1\ 5/16$	$2\ 9/16$	$1\ 1/4$	2	$3/8-16UNC$	$2\ 17/32$	$1/2$	$7/8$	$1\ 9/32$	0.500	$1\ 3/4$	NCPAN204-12	PAN204	NC204-12 NC204	0.80
			33.3	65	32	50.8		64	12.7	22	32.5	12.7	44.5			
25	$7/8$	$1\ 7/16$	$2\ 3/4$	$1\ 13/32$	2	$3/8-16UNC$	$2\ 3/4$	$1/2$	$15/16$	$1\ 7/16$	0.563	$1\ 15/16$	NCPAN205-14	PAN205	NC205-14 NC205-15 NC205	1.4
													NCPAN205-15			
													NCPAN205-16			
30	1	$1\ 11/16$	$3\ 27/32$	$1\ 1/2$	3	$7/16-14UNC$	$3\ 7/32$	$5/8$	$1\ 11/32$	$1\ 9/16$	0.626	$2\ 3/16$	NCPAN206-18	PAN206	NC206-18 NC206 NC206-19 NC206-20	1.9
													NCPAN206			
													NCPAN206-19			
													NCPAN206-20			
35	$1\ 1/4$	$1\ 7/8$	$4\ 11/32$	$1\ 7/8$	$3\ 1/4$	$1/2-13UNC$	$3\ 21/32$	$3/4$	$1\ 3/32$	$1\ 3/4$	0.689	$2\ 7/16$	NCPAN207-20	PAN207	NC207-20	2.3
	$1\ 3/8$	$1\ 7/8$	$4\ 11/32$	$1\ 7/8$	$3\ 1/4$	$1/2-13UNC$	$3\ 21/32$	$3/4$	$1\ 3/32$	$1\ 3/4$	0.689	$2\ 9/16$	NCPAN207-22	PAN207	NC207-22 NC207	2.3
	$1\ 7/16$												NCPAN207-23			



**Square four-bolt flange type units NU-LOC  
NCF**  
Cylindrical bore (with concentric locking collar)  
 $d$  20 ~ 60 mm

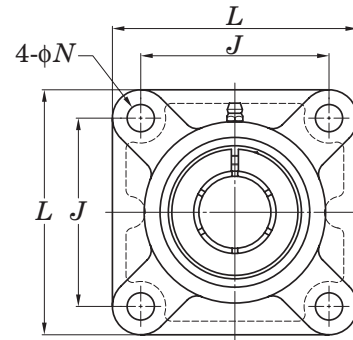
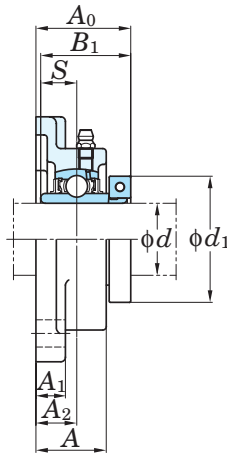


Shaft Dia mm inch		Dimensions inch mm										Bolt Size inch mm	Unit No.	Housing No.	Bearing No.	Mass kg
$d$		$L$	$A$	$J$	$N$	$A_1$	$A_2$	$A_0$	$B_1$	$S$	$d_1$					
20	3/4	3 3/8 86	1 25.5	2 33/64 64	15/32 12	7/16 11	19/32 15	1 3/8 34.8	1 9/32 32.5	0.500 12.7	1 3/4 44.5	3/8 M10	NCF204-12 NCF204	F204	NC204-12 NC204	0.73
	7/8 15/16	3 3/4 95	1 1/16 27	2 3/4 70	15/32 12	1/2 13	5/8 16	1 1/2 38.2	1 7/16 36.5	0.563 14.3	1 15/16 49.2	3/8 M10	NCF205-14 NCF205-15 NCF205	F205	NC205-14 NC205-15 NC205	1.0
30	1 1/8	4 1/4 108	1 7/32 31	3 17/64 83	15/32 12	1/2 13	45/64 18	1 21/32 41.8	1 9/16 39.7	0.626 15.9	2 3/16 55.6	3/8 M10	NCF206-18 NCF206	F206	NC206-18 NC206	1.3
	1 3/16	4 19/32 117	1 11/32 34	3 5/8 92	35/64 14	19/32 15	3/4 19	1 13/16 46	1 3/4 44.5	0.689 17.5	2 7/16 61.9	7/16 M12	NCF207-20	F207	NC207-20	1.8
	1 1/4	4 19/32 117	1 11/32 34	3 5/8 92	35/64 14	19/32 15	3/4 19	1 13/16 46	1 3/4 44.5	0.689 17.5	2 9/16 65.1	7/16 M12	NCF207-22 NCF207 NCF207-23	F207	NC207-22 NC207 NC207-23	1.8
40	1 1/2	5 1/8 130	1 13/32 36	4 1/64 102	5/8 16	19/32 15	53/64 21	2 3/32 52.8	2 50.8	0.748 19	2 11/16 68.3	1/2 M14	NCF208-24 NCF208	F208	NC208-24 NC208	2.3
	1 5/8	5 13/32 137	1 1/2 38	4 9/64 105	5/8 16	5/8 16	55/64 22	2 1/8 53.8	2 50.8	0.748 19	2 13/16 71.4	1/2 M14	NCF209-26	F209	NC209-26	2.6
45	1 11/16	5 13/32 137	1 1/2 38	4 9/64 105	5/8 16	5/8 16	55/64 22	2 1/8 53.8	2 50.8	0.748 19	2 15/16 74.6	1/2 M14	NCF209-27 NCF209-28 NCF209	F209	NC209-27 NC209-28 NC209	2.6
	1 3/4	5 5/8 143	1 9/16 40	4 3/8 111	5/8 16	5/8 16	55/64 22	2 7/32 56.1	2 3/32 53.1	0.748 19	3 3/8 85.7	1/2 M14	NCF210-31 NCF210 NCF210-32	F210	NC210-31 NC210 NC210-32	3.1
55	2	6 3/8 162	1 11/16 43	5 1/8 130	3/4 19	23/32 18	63/64 25	2 11/32 59.9	2 1/4 57.1	0.874 22.2	3 1/2 88.9	5/8 M16	NCF211-32	F211	NC211-32	3.8
	2 3/16	6 3/8 162	1 11/16 43	5 1/8 130	3/4 19	23/32 18	63/64 25	2 11/32 59.9	2 1/4 57.1	0.874 22.2	3 5/8 92.1	5/8 M16	NCF211 NCF211-35	F211	NC211 NC211-35	3.8
60	2 1/4	6 7/8 175	1 7/8 48	5 5/8 143	3/4 19	23/32 18	1 9/64 29	2 25/32 70.3	2 5/8 66.7	1.000 25.4	4 1/16 103.2	5/8 M16	NCF212-36	F212	NC212-36	4.9
	2 7/16	6 7/8 175	1 7/8 48	5 5/8 143	3/4 19	23/32 18	1 9/64 29	2 25/32 70.3	2 5/8 66.7	1.000 25.4	4 1/8 104.8	5/8 M16	NCF212 NCF212-39	F212	NC212 NC212-39	4.9

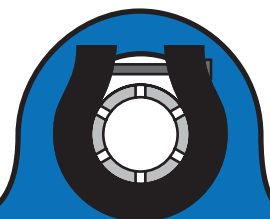


**Square four-bolt flange type units NU-LOC  
NCF-E  
Cylindrical bore (with concentric locking collar)**  
 $d$  20 ~ 60 mm

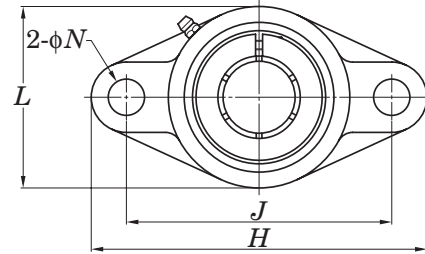
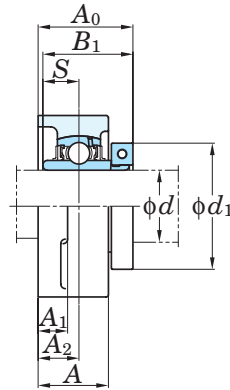
For USA



Shaft Dia mm inch		Dimensions inch mm										Bolt Size inch mm	Unit No.	Housing No.	Bearing No.	Mass kg
$d$		$L$	$A$	$J$	$N$	$A_1$	$A_2$	$A_0$	$B_1$	$S$	$d_1$					
20	3/4	3 3/8 86	1 25.5	2 33/64 64	7/16 11	7/16 11	19/32 15	1 3/8 34.8	1 9/32 32.5	0.500 12.7	1 3/4 44.5	3/8 -	NCF204-12E NCF204E	F204E	NC204-12 NC204	0.73
	7/8 15/16	3 3/4 95	1 1/16 27	2 3/4 70	15/32 12	1/2 13	5/8 16	1 1/2 38.2	1 7/16 36.5	0.563 14.3	1 15/16 49.2	3/8 M10	NCF205-14 NCF205-15 NCF205 NCF205-16	F205	NC205-14 NC205-15 NC205 NC205-16	1.0
30	1 1/8	4 1/4 108	1 7/32 31	3 17/64 83	33/64 13	1/2 13	45/64 18	1 21/32 41.8	1 9/16 39.7	0.626 15.9	2 3/16 55.6	7/16 -	NCF206-18E NCF206E NCF206-19E NCF206-20E	F206E	NC206-18 NC206 NC206-19 NC206-20	1.3
	1 3/16	4 19/32 117	1 11/32 34	3 5/8 92	33/64 13	19/32 15	3/4 19	1 13/16 46	1 3/4 44.5	0.689 17.5	2 7/16 61.9	7/16 -	NCF207-20E	F207E	NC207-20	1.8
	1 1/4	4 19/32 117	1 11/32 34	3 5/8 92	33/64 13	19/32 15	3/4 19	1 13/16 46	1 3/4 44.5	0.689 17.5	2 9/16 65.1	7/16 -	NCF207-22E NCF207E NCF207-23E	F207E	NC207-22 NC207 NC207-23	1.8
35	1 1/4	5 1/8 130	1 13/32 36	4 1/64 102	35/64 14	19/32 15	53/64 21	2 3/32 52.8	2 50.8	0.748 19	2 11/16 68.3	1/2 -	NCF208-24E NCF208E	F208E	NC208-24 NC208	2.3
	1 5/8	5 13/32 137	1 1/2 38	4 9/64 105	5/8 16	5/8 16	55/64 22	2 1/8 53.8	2 50.8	0.748 19	2 13/16 71.4	1/2 M14	NCF209-26	F209	NC209-26	2.6
45	1 11/16	5 13/32 137	1 1/2 38	4 9/64 105	5/8 16	5/8 16	55/64 22	2 1/8 53.8	2 50.8	0.748 19	2 15/16 74.6	1/2 M14	NCF209-27 NCF209-28 NCF209	F209	NC209-27 NC209-28 NC209	2.6
	1 3/4	5 13/32 137	1 1/2 38	4 9/64 105	5/8 16	5/8 16	55/64 22	2 1/8 53.8	2 50.8	0.748 19	2 15/16 74.6	1/2 M14	NCF209-27 NCF209-28 NCF209	F209	NC209-27 NC209-28 NC209	2.6
50	1 15/16	5 5/8 143	1 9/16 40	4 3/8 111	5/8 16	5/8 16	55/64 22	2 7/32 56.1	2 3/32 53.1	0.748 19	3 3/8 85.7	1/2 M14	NCF210-31 NCF210 NCF210-32	F210	NC210-31 NC210 NC210-32	3.1
	2	6 3/8 162	1 11/16 43	5 1/8 130	43/64 17	23/32 18	63/64 25	2 11/32 59.9	2 1/4 57.1	0.874 22.2	3 1/2 88.9	5/8 -	NCF211-32E	F211E	NC211-32	3.8
55	2 3/16	6 3/8 162	1 11/16 43	5 1/8 130	43/64 17	23/32 18	63/64 25	2 11/32 59.9	2 1/4 57.1	0.874 22.2	3 5/8 92.1	5/8 -	NCF211E NCF211-35E	F211E	NC211 NC211-35	3.8
	2 1/4	6 7/8 175	1 7/8 48	5 5/8 143	43/64 17	23/32 18	1 9/64 29	2 25/32 70.3	2 5/8 66.7	1.000 25.4	4 1/16 103.2	5/8 -	NCF212-36E	F212E	NC212-36	4.9
60	2 1/4	6 7/8 175	1 7/8 48	5 5/8 143	43/64 17	23/32 18	1 9/64 29	2 25/32 70.3	2 5/8 66.7	1.000 25.4	4 1/8 104.8	5/8 -	NCF212E NCF212-39E	F212E	NC212 NC212-39	4.9
	2 7/16	6 7/8 175	1 7/8 48	5 5/8 143	43/64 17	23/32 18	1 9/64 29	2 25/32 70.3	2 5/8 66.7	1.000 25.4	4 1/8 104.8	5/8 -	NCF212E NCF212-39E	F212E	NC212 NC212-39	4.9



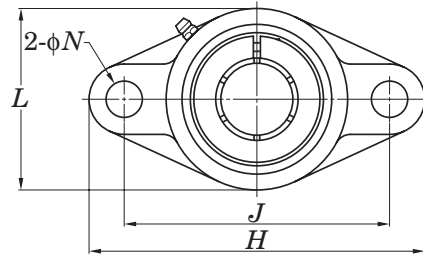
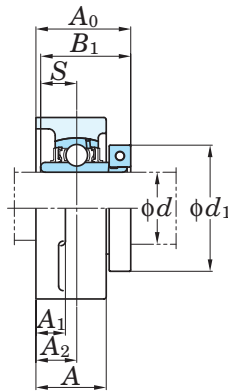
**Oval tow-bolt flange type units NU-LOC  
NCFL**  
Cylindrical bore (with concentric locking collar)  
 $d$  20 ~ 60 mm



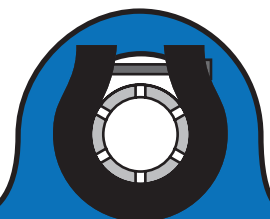
Shaft Dia mm inch		Dimensions inch mm											Bolt Size	Unit No.	Housing No.	Bearing No.	Mass
$d$		$H$	$L$	$A$	$J$	$N$	$A_1$	$A_2$	$A_0$	$B_1$	$S$	$d_1$	inch mm				kg
20	3/4	4 7/16	2 3/8	1	3 35/64	15/32	7/16	19/32	1 3/8	1 9/32	0.500	1 3/4	3/8	NCFL204-12 NCFL204	FL204	NC204-12 NC204	0.62
		113	60	25.5	90	12	11	15	34.8	32.5	12.7	44.5	M10				
25	7/8	5 1/8	2 11/16	1 1/16	3 57/64	5/8	1/2	5/8	1 1/2	1 7/16	0.563	1 15/16	1/2	NCFL205-14 NCFL205-15 NCFL205	FL205	NC205-14 NC205-15 NC205	0.84
	15/16																
	1																
30	1 1/8	5 13/16	3 5/32	1 7/32	4 39/64	5/8	1/2	45/64	1 21/32	1 9/16	0.626	2 3/16	1/2	NCFL206-18 NCFL206 NCFL206-19 NCFL206-20	FL206	NC206-18 NC206 NC206-19 NC206-20	1.1
	1 3/16																
	1 1/4																
35	1 1/4	6 11/32	3 17/32	1 11/32	5 1/8	5/8	9/16	3/4	1 13/16	1 3/4	0.689	2 7/16	1/2	NCFL207-20	FL207	NC207-20	1.5
	1 3/8																
40	1 1/2	6 7/8	3 15/16	1 13/32	5 43/64	5/8	9/16	53/64	2 3/32	2	0.748	2 11/16	1/2	NCFL208-24 NCFL208	FL208	NC208-24 NC208	2.0
	1 5/8																
45	1 5/8	7 13/32	4 1/4	1 1/2	5 53/64	3/4	19/32	55/64	2 1/8	2	0.748	2 13/16	5/8	NCFL209-26	FL209	NC209-26	2.3
	1 11/16																
50	1 3/4	7 13/32	4 1/4	1 1/2	5 53/64	3/4	19/32	55/64	2 1/8	2	0.748	2 15/16	5/8	NCFL209-27 NCFL209-28 NCFL209	FL209	NC209-27 NC209-28 NC209	2.3
	1 15/16																
55	2	8 13/16	5 1/8	1 11/16	7 1/4	3/4	23/32	63/64	2 11/32	2 1/4	0.874	3 1/2	5/8	NCFL210-31 NCFL210 NCFL210-32	FL210	NC210-31 NC210 NC210-32	2.8
	2																
60	2 1/4	9 27/32	5 1/2	1 7/8	7 61/64	29/32	23/32	1 9/64	2 25/32	2 5/8	1.000	4 1/16	3/4	NCFL211-32 NCFL211 NCFL211-35	FL211	NC211-32 NC211 NC211-35	3.7
	2 3/16																
60	2 1/4	9 27/32	5 1/2	1 7/8	7 61/64	29/32	23/32	1 9/64	2 25/32	2 5/8	1.000	4 1/8	3/4	NCFL212-36	FL212	NC212-36	4.9
	2 7/16																
60	2 7/16	9 27/32	5 1/2	1 7/8	7 61/64	29/32	23/32	1 9/64	2 25/32	2 5/8	1.000	4 1/8	3/4	NCFL212 NCFL212-39	FL212	NC212 NC212-39	4.9
	2 7/16																

**Oval tow-bolt flange type units NU-LOC  
NCFL-E**  
Cylindrical bore (with concentric locking collar)  
 $d$  20 ~ 60 mm

**For USA**



Shaft Dia		Dimensions											Bolt Size	Unit No.	Housing No.	Bearing No.	Mass
mm	inch	inch mm															
$d$		$H$	$L$	$A$	$J$	$N$	$A_1$	$A_2$	$A_0$	$B_1$	$S$	$d_1$	inch				kg
20	3/4	4 7/16	2 3/8	1	3 17/32	25/64	7/16	19/32	1 3/8	1 9/32	0.500	1 3/4	5/16	NCFL204-12E NCFL204E	FL204E	NC204-12 NC204	0.62
		113	60	25.5	89.7	10	11	15	34.8	32.5	12.7	44.5					
25	7/8	5 1/8	2 11/16	1 1/16	3 57/64	15/32	1/2	5/8	1 1/2	1 7/16	0.563	1 15/16	3/8	NCFL205-14E NCFL205-15E NCFL205E NCFL205-16E	FL205E	NC205-14 NC205-15 NC205 NC205-16	0.84
	15/16																
	1	130	68	27	98.8	12	13	16	38.2	36.5	14.3	49.2					
30	1 1/8	5 13/16	3 5/32	1 7/32	4 19/32	15/32	1/2	45/64	1 21/32	1 9/16	0.626	2 3/16	3/8	NCFL206-18E NCFL206E NCFL206-19E NCFL206-20E	FL206E	NC206-18 NC206 NC206-19 NC206-20	1.1
	1 3/16																
	1 1/4	148	80	31	116.7	12	13	18	41.8	39.7	15.9	55.6					
35	1 1/4	6 11/32	3 17/32	1 11/32	5 1/8	33/64	9/16	3/4	1 13/16	1 3/4	0.689	2 7/16	7/16	NCFL207-20E	FL207E	NC207-20	1.5
	1 3/8																
	1 7/16	161	90	34	130.2	13	14	19	46	44.5	17.5	61.9					
40	1 1/2	6 7/8	3 15/16	1 13/32	5 21/32	33/64	9/16	53/64	2 3/32	2	0.748	2 11/16	7/16	NCFL208-24E NCFL208E	FL208E	NC208-24 NC208	2.0
	1 5/8																
	1 3/4	175	100	36	143.7	13	14	21	52.8	50.8	19	68.3					
45	1 5/8	7 13/32	4 1/4	1 1/2	5 27/32	19/32	19/32	55/64	2 1/8	2	0.748	2 13/16	1/2	NCFL209-26E	FL209E	NC209-26	2.3
	1 11/16																
	1 3/4	188	108	38	148.4	15	15	22	53.8	50.8	19	71.4					
50	1 15/16	7 3/4	4 17/32	1 9/16	6 3/16	19/32	19/32	55/64	2 7/32	2 3/32	0.748	3 3/8	1/2	NCFL210-31E NCFL210E NCFL210-32E	FL210E	NC210-31 NC210 NC210-32	2.8
	2																
	2	197	115	40	157	15	15	22	56.1	53.1	19	85.7					
55	2	8 13/16	5 1/8	1 11/16	7 1/4	21/32	23/32	63/64	2 11/32	2 1/4	0.874	3 1/2	9/16	NCFL211-32E	FL211E	NC211-32	3.7
	2 3/16																
	2 3/16	224	130	43	184	16.5	18	25	59.9	57.1	22.2	88.9					
60	2 1/4	9 27/32	5 1/2	1 7/8	7 61/64	21/32	23/32	1 9/64	2 25/32	2 5/8	1.000	4 1/16	9/16	NCFL212-36E	FL212E	NC212-36	4.9
	2 3/4																
	2 7/16	250	140	48	202	16.5	18	29	70.3	66.7	25.4	103.2					
60	2 3/4	9 27/32	5 1/2	1 7/8	7 61/64	21/32	23/32	1 9/64	2 25/32	2 5/8	1.000	4 1/8	9/16	NCFL212E NCFL212-39E	FL212E	NC212 NC212-39	4.9
	2 7/16																
2 7/16	250	140	48	202	16.5	18	29	70.3	66.7	25.4	104.8						

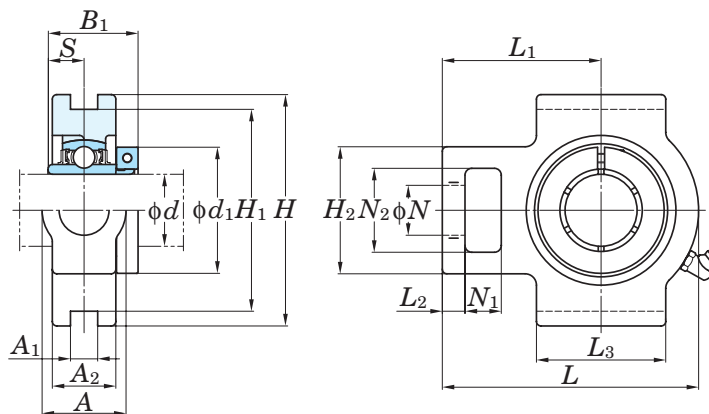
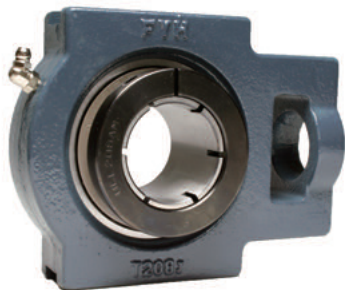


# Take-up type units NU-LOC

## NCT

### Cylindrical bore (with concentric locking collar)

$d$  20 ~ 60 mm



Shaft Dia mm inch		Dimensions inch mm															Unit No.	Housing No.	Bearing No.	Mass kg	
$d$		$A$	$A_1$	$A_2$	$H$	$H_1$	$H_2$	$L$	$L_1$	$L_2$	$L_3$	$N$	$N_1$	$N_2$	$B_1$	$S$	$d_1$				
20	3/4	1 1/4	15/32	13/16	3 1/2	2 63/64	2	3 11/16	2 13/32	13/32	2	3/4	5/8	1 1/4	1 9/32	0.500	1 3/4	NCT204-12 NCT204	T204	NC204-12 NC204	0.90
		32	12	21	89	76	51	94	61	10	51	19	16	32	32.5	12.7	44.5				
25	7/8	1 1/4	15/32	15/16	3 1/2	2 63/64	2	3 13/16	2 7/16	13/32	2	3/4	5/8	1 1/4	1 7/16	0.563	1 15/16	NCT205-14 NCT205-15 NCT205	T205	NC205-14 NC205-15 NC205	1.0
	15/16	32	12	24	89	76	51	97	62	10	51	19	16	32	36.5	14.3	49.2				
	1																	NCT205-16		NC205-16	
30	1 1/8	1 15/32	15/32	1 3/32	4 1/32	3 1/2	2 7/32	4 7/16	2 3/4	13/32	2 1/4	7/8	5/8	1 15/32	1 9/16	0.626	2 3/16	NCT206-18 NCT206	T206	NC206-18 NC206	1.5
	1 3/16	37	12	28	102	89	56	113	70	10	57	22	16	37	39.7	15.9	55.6				
	1 1/4																	NCT206-19 NCT206-20		NC206-19 NC206-20	
35	1 1/4	1 15/32	15/32	1 3/16	4 1/32	3 1/2	2 17/32	5 3/32	3 1/16	1/2	2 17/32	7/8	5/8	1 15/32	1 3/4	0.689	2 7/16	NCT207-20	T207	NC207-20	1.9
		37	12	30	102	89	64	129	78	13	64	22	16	37	44.5	17.5	61.9				
	1 3/8	1 15/32	15/32	1 3/16	4 1/32	3 1/2	2 17/32	5 3/32	3 1/16	1/2	2 17/32	7/8	5/8	1 15/32	1 3/4	0.689	2 9/16	NCT207-22 NCT207	T207	NC207-22 NC207	1.9
	1 7/16	37	12	30	102	89	64	129	78	13	64	22	16	37	44.5	17.5	65.1				
40	1 1/2	1 15/16	5/8	1 5/16	4 1/2	4 1/64	3 9/32	5 21/32	3 15/32	19/32	3 9/32	1 5/32	3/4	1 15/16	2	0.748	2 11/16	NCT208-24 NCT208	T208	NC208-24 NC208	2.9
		49	16	33	114	102	83	144	88	16	83	29	19	49	50.8	19	68.3				
45	1 5/8	1 15/16	5/8	1 3/8	4 19/32	4 1/64	3 9/32	5 21/32	3 7/16	5/8	3 9/32	1 5/32	3/4	1 15/16	2	0.748	2 13/16	NCT209-26	T209	NC209-26	2.8
		49	16	35	117	102	83	144	87	16	83	29	19	49	50.8	19	71.4				
	1 11/16	1 15/16	5/8	1 3/8	4 19/32	4 1/64	3 9/32	5 21/32	3 7/16	5/8	3 9/32	1 5/32	3/4	1 15/16	2	0.748	2 15/16	NCT209-27 NCT209-28 NCT209	T209	NC209-27 NC209-28 NC209	2.8
	1 3/4	49	16	35	117	102	83	144	87	16	83	29	19	49	50.8	19	74.6				
50	1 15/16	1 15/16	5/8	1 15/32	4 19/32	4 1/64	3 9/32	5 7/8	3 17/32	5/8	3 3/8	1 5/32	3/4	1 15/16	2 3/32	0.748	3 3/8	NCT210-31 NCT210	T210	NC210-31 NC210	3.2
		49	16	37	117	102	83	149	90	16	86	29	19	49	53.1	19	85.7				
	2	2 17/32	55/64	1 1/2	5 3/4	5 1/8	4 1/32	6 23/32	4 3/16	3/4	3 3/4	1 3/8	31/32	2 17/32	2 1/4	0.874	3 1/2	NCT211-32	T211	NC211-32	4.4
	64	22	38	146	130	102	171	106	19	95	35	25	64	57.1	22.2	88.9					
55		2 17/32	55/64	1 1/2	5 3/4	5 1/8	4 1/32	6 23/32	4 3/16	3/4	3 3/4	1 3/8	31/32	2 17/32	2 1/4	0.874	3 5/8	NCT211 NCT211-35	T211	NC211 NC211-35	4.4
	2 3/16	64	22	38	146	130	102	171	106	19	95	35	25	64	57.1	22.2	92.1				
60	2 1/4	2 17/32	55/64	1 21/32	5 3/4	5 1/8	4 1/32	7 5/8	4 11/16	3/4	4 1/32	1 3/8	1 1/4	2 17/32	2 5/8	1.000	4 1/16	NCT212-36	T212	NC212-36	5.6
		64	22	42	146	130	102	194	119	19	102	35	32	64	66.7	25.4	103.2				
		2 17/32	55/64	1 21/32	5 3/4	5 1/8	4 1/32	7 5/8	4 11/16	3/4	4 1/32	1 3/8	1 1/4	2 17/32	2 5/8	1.000	4 1/8	NCT212 NCT212-39	T212	NC212 NC212-39	5.6
	2 7/16	64	22	42	146	130	102	194	119	19	102	35	32	64	66.7	25.4	104.8				

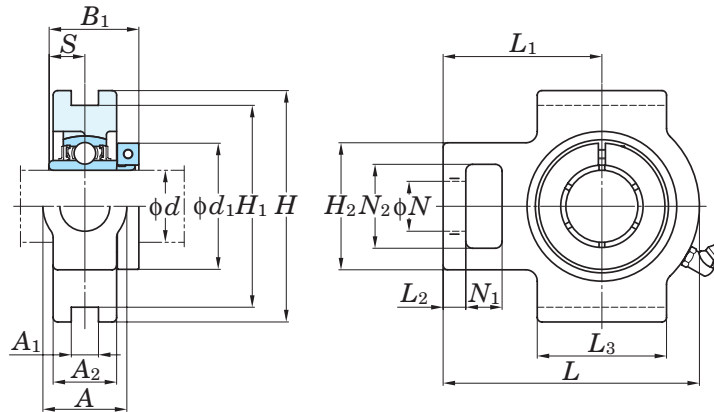
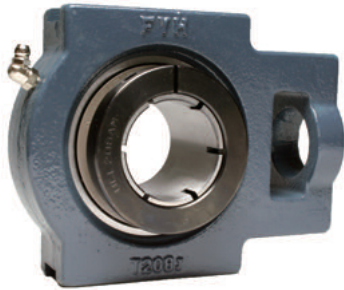
# Take-up type units NU-LOC

## NCT-E

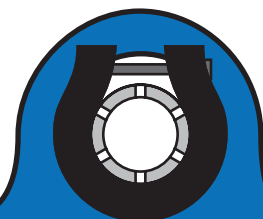
### Cylindrical bore (with concentric locking collar)

$d$  20 ~ 60 mm

For USA



Shaft Dia mm inch	Dimensions																Unit No.	Housing No.	Bearing No.	Mass	
	inch mm																				
$d$	A	A <sub>1</sub>	A <sub>2</sub>	H	H <sub>1</sub>	H <sub>2</sub>	L	L <sub>1</sub>	L <sub>2</sub>	L <sub>3</sub>	N	N <sub>1</sub>	N <sub>2</sub>	B <sub>1</sub>	S	$d_1$				kg	
20 3/4	1 1/4	17/32	13/16	3 1/2	3	2	3 11/16	2 13/32	13/32	2	3/4	5/8	1 1/4	1 9/32	0.500	1 3/4	NCT204-12E	T204E	NC204-12 NC204	0.90	
	32	13.5	21	89	76.2	51	94	61	10	51	19	16	32	32.5	12.7	44.5	NCT204E				
25 7/8 15/16 1	1 1/4	17/32	15/16	3 1/2	3	2	3 13/16	2 7/16	13/32	2	3/4	5/8	1 1/4	1 7/16	0.563	1 15/16	NCT205-14E	T205E	NC205-14 NC205-15 NC205 NC205-16	1.0	
	32	13.5	24	89	76.2	51	97	62	10	51	19	16	32	36.5	14.3	49.2	NCT205-15E				
																					NCT205E
30 1 1/8 1 3/16 1 1/4	1 15/32	17/32	1 3/16	4 1/32	3 1/2	2 7/32	4 7/16	2 3/4	13/32	2 1/4	7/8	5/8	1 15/32	1 9/16	0.626	2 3/16	NCT206-18E	T206E	NC206-18 NC206 NC206-19 NC206-20	1.5	
	37	13.5	28	102	88.9	56	113	70	10	57	22	16	37	39.7	15.9	55.6	NCT206E				
																					NCT206-19E
																					NCT206-20E
35 1 1/4 1 3/8 1 7/16	1 15/32	17/32	1 3/16	4 1/32	3 1/2	2 17/32	5 3/32	3 1/16	1/2	2 17/32	7/8	5/8	1 15/32	1 3/4	0.689	2 7/16	NCT207-20E	T207E	NC207-20	1.9	
	37	13.5	30	102	88.9	64	129	78	13	64	22	16	37	44.5	17.5	61.9	NCT207-22E				
																					NCT207E
40 1 1/2	1 15/32	11/16	1 5/16	4 1/2	4	3 9/32	5 21/32	3 15/32	5/8	3 9/32	1 5/32	3/4	1 15/16	2	0.748	2 11/16	NCT208-24E	T208E	NC208-24 NC208	2.9	
	49	17.5	33	114	101.6	83	144	88	16	83	29	19	49	50.8	19	68.3	NCT208E				
45 1 5/8 1 11/16 1 3/4	1 15/16	11/16	1 3/8	4 19/32	4	3 9/32	5 21/32	3 7/16	5/8	3 9/32	1 5/32	3/4	1 15/16	2	0.748	2 13/16	NCT209-26E	T209E	NC209-26 NC209-27 NC209-28 NC209	2.8	
	49	17.5	35	117	101.6	83	144	87	16	83	29	19	49	50.8	19	71.4	NCT209-27E				
																					NCT209-28E
50 1 15/16 2	1 15/16	11/16	1 15/32	4 19/32	4	3 9/32	5 7/8	3 17/32	5/8	3 3/8	1 5/32	3/4	1 15/16	2 3/32	0.748	3 3/8	NCT209E	T210E	NC210-27 NC210-28 NC210 NC210-32	2.8	
	49	17.5	37	117	101.6	83	149	90	16	86	29	19	49	53.1	19	85.7	NCT210-31E				
55 2 2 3/16	2 17/32	1 1/16	1 1/2	5 3/4	5 1/8	4 1/32	6 23/32	4 3/16	3/4	3 3/4	1 3/8	31/32	2 17/32	2 1/4	0.874	3 1/2	NCT210-32E	T211E	NC211-32 NC211 NC211-35	4.4	
	64	27	38	146	130.17	102	171	106	19	95	35	25	64	57.1	22.2	88.9	NCT211E				
																					NCT211-35E
60 2 1/4 2 7/16	2 17/32	1 1/16	1 21/32	5 3/4	5 1/8	4 1/32	7 5/8	4 11/16	3/4	4 1/32	1 3/8	1 1/4	2 17/32	2 5/8	1.000	4 1/16	NCT212-36E	T212E	NC212-36 NC212 NC212-39	5.6	
	64	27	42	146	130.17	102	194	119	19	102	35	32	64	66.7	25.4	103.2	NCT212E				
																		NCT212-39E			

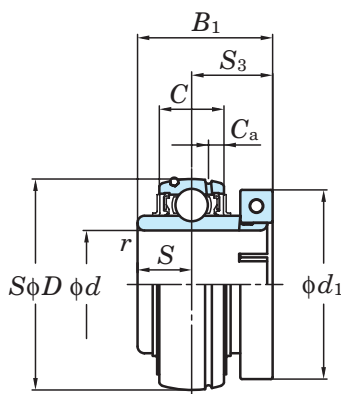


# Ball bearing inserts NU-LOC

NC

Cylindrical bore (with concentric locking collar)

$d$  20 ~ 60 mm



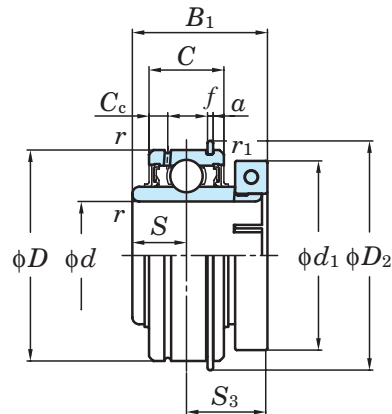
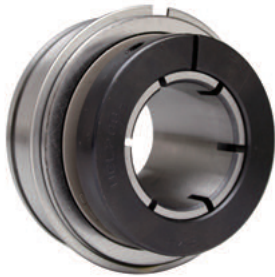
Shaft Dia		Dimensions				Basic Load Ratings		Factor	Bearing No.	Collar No.	Dimensions				Cap screw	Mass				
mm	inch	inch mm				kN					inch mm				inch mm	kg				
$d$		$D$	$B_1$	$C$	$r$	$C_r$	$C_{or}$	$f_0$			$C_a$	$S$	$S_3$	$d_1$						
20	3/4	1.850	1.280	0.630	0.039	12.8	6.65	13.2	NC204-12 NC204	UCL204B UCL204B	0.157	0.500	0.780	1.752	No.8-32UNC M4×0.7	0.30				
		47	32.5	16	1						4	12.7	19.8	44.5						
25	7/8	2.047	1.437	0.669	0.039	14.0	7.85	13.9	NC205-14 NC205-15 NC205	UCL205A UCL205A UCL205A	0.197	0.563	0.874	1.937	No.8-32UNC No.8-32UNC M4×0.7	0.40				
	15/16										52	36.5	17	1			5	14.3	22.2	49.2
	1																			
30	1 1/8	2.441	1.563	0.748	0.039	19.5	11.3	13.9	NC206-18 NC206	UCL206A UCL206A	0.197	0.626	0.937	2.189	No.8-32UNC M4×0.7	0.50				
	1 3/16										62	39.7	19	1			5	15.9	23.8	55.6
	1 1/4																			
35	1 1/4	2.835	1.752	0.787	0.043	25.7	15.4	13.9	NC207-20	UCL207A	0.217	0.689	1.063	2.437	No.10-24UNC	0.80				
											72	44.5	20	1.1			5.5	17.5	27	61.9
	1 3/8																			
40	1 1/2	3.150	2.000	0.827	0.043	29.1	17.8	14.0	NC208-24 NC208	UCL208A UCL208A	0.236	0.748	1.252	2.689	No.10-24UNC M5×0.8	1.0				
											80	50.8	21	1.1			6	19	31.8	68.3
	1 7/16																			
45	1 5/8	3.346	2.000	0.866	0.043	34.1	21.3	14.0	NC209-26	UCL209A	0.236	0.748	1.252	2.811	No.10-24UNC	1.1				
											85	50.8	22	1.1			6	19	31.8	71.4
	1 11/16																			
50	1 3/4	3.346	2.000	0.866	0.043	34.1	21.3	14.0	NC209-27 NC209-28 NC209	UCL209B UCL209B UCL209B	0.236	0.748	1.252	2.937	No.10-24UNC No.10-24UNC M5×0.8	1.1				
											85	50.8	22	1.1			6	19	31.8	74.6
	1 15/16																			
55	2	3.937	2.248	0.984	0.059	43.4	29.4	14.4	NC210-31 NC210 NC210-32	UCL210A UCL210A UCL210A	0.236	0.748	1.343	3.374	1/4-20UNC M6×1 1/4-20UNC	1.4				
											90	53.1	24	1.1			6	19	34.1	85.7
	2 1/16																			
60	2 1/4	3.937	2.248	0.984	0.059	43.4	29.4	14.4	NC211-32	UCL211A	0.276	0.874	1.374	3.500	1/4-20UNC	1.5				
											100	57.1	25	1.5			7	22.2	34.9	88.9
	2 3/16																			
60	2 1/4	4.331	2.626	1.063	0.059	52.4	36.2	14.4	NC211 NC211-35	UCL211B UCL211B	0.276	0.874	1.374	3.626	M6×1 1/4-20UNC	1.5				
											100	57.1	25	1.5			7	22.2	34.9	92.1
	2 3/8																			
60	2 1/4	4.331	2.626	1.063	0.059	52.4	36.2	14.4	NC212-36	UCL212A	0.295	1.000	1.626	4.063	5/16-18UNC	2.2				
											110	66.7	27	1.5			7.5	25.4	41.3	103.2
	2 7/16																			
60	2 7/16	4.331	2.626	1.063	0.059	52.4	36.2	14.4	NC212 NC212-39	UCL212B UCL213B	0.295	1.000	1.626	4.126	M8×1.25 5/16-18UNC	2.2				
											110	66.7	27	1.5			7.5	25.4	41.3	104.8

# Ball bearing inserts NU-LOC

ERC

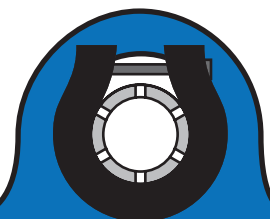
Cylindrical bore (with concentric locking collar)

$d$  20 ~ 60 mm



Shaft Dia mm inch		Dimensions														Bearing No.	Mass kg		
		D		C		r		r <sub>1</sub> (min)		C <sub>c</sub>		a		f				D <sub>2</sub>	
d		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch		
20	3/4	47	1.850	16	0.630	1	0.039	0.5	0.020	4	0.157	2.38	0.094	1.07	0.042	52.5	2.067	ERC204-12 ERC204	0.36
25	7/8	52	2.047	19	0.748	1	0.039	0.5	0.020	5	0.197	2.38	0.094	1.07	0.042	57.7	2.272	ERC205-14	0.47
	15/16																	ERC205-15	
	1																	ERC205-16	
30	1 1/8	62	2.441	22	0.866	1	0.039	0.5	0.020	5.5	0.217	3.18	0.125	1.65	0.065	67.5	2.657	ERC206-18	0.57
	1 3/16																	ERC206	
	1 1/4																	ERC206-19 ERC206-20	
35	1 1/4	72	2.835	24	0.945	1.1	0.043	0.5	0.020	5.5	0.217	3.18	0.125	1.65	0.065	78.4	3.087	ERC207-20	0.95
	1 3/8																	ERC207-22	
	1 7/16																	ERC207 ERC207-23	
40	1 1/2	80	3.150	28	1.102	1.1	0.043	0.5	0.020	6	0.236	3.18	0.125	1.65	0.065	86.4	3.402	ERC208-24 ERC208	1.2
45	1 5/8	85	3.346	28	1.102	1.1	0.043	0.5	0.020	6	0.236	3.18	0.125	1.65	0.065	91.4	3.598	ERC209-26	1.3
	1 11/16																	ERC209-27	
	1 3/4																	ERC209-28 ERC209	
50	1 15/16	90	3.543	28	1.102	1.1	0.043	0.5	0.020	7.5	0.295	3.18	0.125	2.41	0.095	96.3	3.791	ERC210-31	1.6
	2																	ERC210 ERC210-32	
55	2	100	3.937	30	1.181	1.5	0.059	0.5	0.020	7.5	0.295	3.18	0.125	2.41	0.095	106.3	4.185	ERC211-32	1.8
	2 3/16																	ERC211 ERC211-35	
60	2 1/4	110	4.331	32	1.260	1.5	0.059	0.5	0.020	7.5	0.295	3.18	0.125	2.41	0.095	116.4	4.583	ERC212-36	2.5
	2 7/16																	ERC212 ERC212-39	

Note : See NC insert series for additional dimensions.



## NU Concentric Cap Screw Tightening Trque

Shaft Dia		Bearing No.	Collar No.	Cap screw	Recommended Torque					
mm	inch				Foot · Lbs.	Inch · Lbs.	N · m			
<i>d</i>				inch mm						
20	3/4	NU204-12	UCL204B	No.8-32UNC	5.5 – 6.0	66 – 73	7.4 – 8.2			
		NU204	UCL204B	M4×0.7						
25	7/8	NU205-14	UCL205A	No.8-32UNC						
	15/16	NU205-15	UCL205A	No.8-32UNC						
	1	NU205-16	UCL205A	M4×0.7						
30	1 1/8	NU206-18	UCL206A	No.8-32UNC						
	1 3/16	NU206	UCL206A	M4×0.7						
	1 1/4	NU206-19	UCL206A	No.8-32UNC						
	1 1/4	NU206-20	UCL206A	No.8-32UNC						
35	1 3/8	NU207-22	UCL207A	No.10-24UNC						
	1 7/16	NU207	UCL207B	No.10-24UNC						
	1 7/16	NU207-23	UCL207B	M5×0.8						
40	1 1/2	NU208-24	UCL208A	No.10-24UNC	7.5 – 8.3	90 – 99	10.2 – 11.2			
		NU208	UCL208A	M5×0.8						
45	1 5/8	NU209-26	UCL209A	No.10-24UNC						
	1 11/16	NU209-27	UCL209B	No.10-24UNC						
	1 3/4	NU209-28	UCL209B	No.10-24UNC						
50	1 15/16	NU210-31	UCL210A	1/4-20UNC				13.0 – 14.3	155 – 172	17.6 – 19.4
	2	NU210	UCL210A	M6×1						
55	2	NU210-32	UCL210A	1/4-20UNC						
	2	NU211-32	UCL211A	1/4-20UNC						
	2 3/16	NU211	UCL211B	M6×1						
60	2 1/4	NU211-35	UCL211B	1/4-20UNC						
	2 1/4	NU212-36	UCL212A	5/16-18UNC				30.7 – 33.9	368 – 407	41.6 – 46.0
	2 7/16	NU212	UCL212B	M8×1.25						
2 7/16	NU212-39	UCL213B	5/16-18UNC							