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NSK-RHP

NSK AND RHP BEARINGS – DESIGNATION SYSTEMS

NSK-RHP



NSK AND RHP BEARINGS – DESIGNATION SYSTEMS

NSK and RHP Bearings – Designation Systems

The image displays various NSK bearing designation systems overlaid on a background of technical documents and bearing images. The designations include:

- N 334**: Dimension Series
- 4312 B**: Bore Code
- 7204 B**: Configuration
- 22214 EJ**: Special metric series deep groove ball bearings
- 1208 K**: Stabilised
- 30321**: Special specification
- 6203 DDU**: All metal bearings
- 3304 B**: Special specification

Technical documents in the background include:

- NSK-355
- NSK-354
- NSK-353
- NSK-352
- NSK-351
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- NSK-1

INTRODUCTION

NSK-RHP is part of the International NSK Group who are one of the world's leading manufacturers of rolling bearings, automotive components and mechatronic products.

The group has 36 manufacturing units around the world, employing over 24,000 people and is represented by sales offices, and authorised distributors almost everywhere.

Our manufacturing programme includes bearings from 1mm bore to 5 metres, covering virtually all conceivable application areas.

Designation Systems

1/NRDS/E/12.97

Every care has been taken to ensure that the information in this publication is accurate but no liability can be accepted for any errors or omissions.

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NSK AND RHP BEARINGS – DESIGNATION SYSTEMS

The objective of this publication is to introduce and explain the designation systems used to identify NSK and RHP Bearings.

The contents cover basic designations for ball and roller bearing series and their prefixes and suffixes. In addition to assisting in bearing identification it helps to cross refer NSK and RHP types.

This publication is intended for use within the NSK-RHP organisation and can be used in conjunction with the publication, NSK and RHP-Prefixes and Suffixes 1/NRPS/E/12.97.



Designation Systems

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RHP Silver-Lube Bearing Units & Inserts

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RHP Disc Harrow Bearings

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7

*Index of standard designations listed
for NSK and RHP products*

NSK Product		
Manual Page No.	Bearing Series	For RHP ref. see page no.
4	Metric series Radial Ball Bearings	19
5	Inch series Radial Ball Bearings	20
6	Metric series Single Row Angular Contact Ball Bearings	21
7	Metric series Double Row Angular Contact Ball Bearings	23
8	Metric series Four Point Contact Ball Bearings	24
9	Metric series Cylindrical Roller Bearings	26
10	Metric series Tapered Roller Bearings	-
11	Inch series tapered roller bearings	-
12	Metric series Double Row Spherical Roller Bearings	28
13	Metric series Single and Double Direction Ball and Spherical Roller Thrust Bearings	25
14	Angular Contact Thrust Ball Bearings	-
15	Metric series Miniature Deep Groove Ball Bearings	-
16	Special Metric series Miniature Deep Groove Ball Bearings	-
17	Inch series Miniature Deep Groove Ball Bearings	-

RHP Product

Manual Page No.	Bearing Series	For NSK ref. see page no.
19	Metric series Radial Ball Bearings	4
20	Inch series Radial Ball Bearings	5
21	Metric series Single Row Angular Contact Ball Bearings	6
22	Inch series Single Row Angular Contact Ball Bearings	-
23	Metric series Double Row Angular Contact Ball Bearings	7
24	Metric and Inch series Four Point Contact Ball Bearings	8
25	Metric and Inch series Single Direction Thrust Ball Bearings	13
26	Metric series Cylindrical Roller Bearings	9
27	Inch series Cylindrical Roller Bearings	-
28	Metric series Double Row Spherical Roller Bearings	12
29	Metric series Double Row Spherical Roller Bearings for use in vibratory equipment	12
30	Externally Aligning Ball and Roller Bearings	-

6 2 10 ZZ K C2 X26

6	TYPE	6	Single row radial ball bearing
		16	Single row radial ball bearing - narrow, extra light series
		E	Single row radial ball bearing - separable Magneto type
		EN	Single row radial ball bearing - separable Magneto type
		L	Single row radial ball bearing - separable Magneto type
		BO	Single row radial ball bearing - separable Magneto type
		BL	Single row radial ball bearing - with filling slots and maximum load capacity
		1	Double row radial ball bearing - self-aligning
		2	Double row radial ball bearing - self-aligning; wide series

2	DIMENSION SERIES	NSK	ISO	NSK	ISO
		8	18	2	02
		9	19	3	03
		0	10	4	04

10	BORE CODE	4 - 4mm (Magneto type)	00 - 10mm (except Magneto)
		5 - 5mm	01 - 12mm (except Magneto)
		6 - 6mm	02 - 15mm (except Magneto)
		7 - 7mm	03 - 17mm (except Magneto)
		8 - 8mm	
		9 - 9mm	For bore code 04 upwards, the general rule is to multiply by 5 to obtain bore size in mm.
		10 - 10mm (Magneto type)	The exceptions to this are bearings with bore diameter of 22mm, 28mm, 32mm and 500mm and above.
		11 - 11mm (Magneto type)	These are denoted by the type and ISO series (60, 62, 63), followed by / and the bore diameter in mm ie. 62/22, 63/32 etc.
		12 - 12mm (Magneto type)	
		13 - 13mm (Magneto type)	
		14 - 14mm (Magneto type)	
		15 - 15mm (Magneto type)	
		16 - 16mm (Magneto type)	
		17 - 17mm (Magneto type)	
		18 - 18mm (Magneto type)	
		19 - 19mm (Magneto type)	
20 - 20mm (Magneto type)			

	CAGE TYPE CODE	Not usually included for pressed steel (J) type cage For others see list of CAGE TYPE CODES on Appendix 1 – Page 32
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ZZ	SEALING ARRANGEMENT	See list of STANDARD VARIANT CODES on Appendix 2 – Page 34
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K	RING CONFIGURATION	K Tapered bore 1 : 12 K30 Tapered bore 1 : 30 E Notch or Lubricating groove in ring For other ring configurations see Appendix 2
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C2	INTERNAL CLEARANCE	C1 Radial clearance less than C2 C2 Radial clearance less than Normal CN Normal grade of radial internal clearance - not marked C3 Radial internal clearance greater than Normal C4 Radial internal clearance greater than C3 C5 Radial internal clearance greater than C4 CM Standard clearance for quiet electric motors CG* Special radial internal clearance where * denotes mean figure in µm
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X26	SPECIAL SPECIFICATION	X26 Dimensionally stabilised for operating temperature of 150°C max. X28 Dimensionally stabilised for operating temperature of 200°C max. X29 Dimensionally stabilised for operating temperature of 250°C max.
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Designation Systems

RLS 5 DDU C3

RLS	TYPE	RLS Light series single row radial ball bearing RMS Medium series single row radial ball bearing
5	BORE CODE	Nominal bore size expressed in 1/8" units. eg. Bore code 5 = 5 x 1/8" units = 5/8".
DDU	SEALING ARRANGEMENT	See list of STANDARD VARIANT CODES on Appendix 2 – Page 34
C3	INTERNAL CLEARANCE	C1 Radial clearance less than C2 C2 Radial clearance less than Normal CN Normal grade of radial internal clearance - not marked C3 Radial internal clearance greater than Normal C4 Radial internal clearance greater than C3 C5 Radial internal clearance greater than C4 CM Standard clearance for quiet electric motors CG* Special radial internal clearance where * denotes mean figure in μm

7 2 10 C T DU L X26

7	TYPE	7 Single row angular contact ball bearing			
2	DIMENSION SERIES	NSK	ISO	NSK	ISO
		9	19	2	02
		0	10	3	03
10	BORE CODE	00 - 10mm	04 upwards, multiply by 5 to obtain bore size in mm.		
		01 - 12mm			
		02 - 15mm			
		03 - 17mm			
C	CONTACT ANGLE	C	15°	A	30°
		A5	25°	B	40°
T	CAGE TYPE CODE	See list of CAGE TYPE CODES on Appendix 1 – Page 32			
DU	GROUPING	DB	Matched Pair - Back to Back configuration		
		DF	Matched Pair - Face to Face configuration		
		DT	Matched Pair - Tandem configuration		
		DU	Matched Pair - Universal mounting		
		SU	Single Bearing - Universally faced - Can be used DB or DF with 2, 3, 4 etc. rows		
		G	Any combination of 2 bearings can be used. Both sides ground for matching.		
			For other possible grouping arrangements see Appendix 3 – Page 35		
L	PRELOAD	EL	Extra Light Preload		
		C7 or L	Light Preload		
		C8 or M	Medium Preload		
		C9 or H	Heavy Preload		
		CA*	Special Axial Clearance		
		CP*	Special Axial Preload		
X26	SPECIAL SPECIFICATION	X26	Dimensionally stabilised for operating temperature of 150°C max.		
		X28	Dimensionally stabilised for operating temperature of 200°C max.		
		X29	Dimensionally stabilised for operating temperature of 250°C max.		

5 2 10 ZZ X26

5	TYPE	5 Double row angular contact ball bearing - 25° Contact angle 3 Double row angular contact ball bearing - 32° Contact angle									
2	DIMENSION SERIES	<table border="1"> <thead> <tr> <th>NSK</th> <th>ISO</th> <th></th> </tr> </thead> <tbody> <tr> <td>2</td> <td>02</td> <td></td> </tr> <tr> <td>3</td> <td>03</td> <td></td> </tr> </tbody> </table>	NSK	ISO		2	02		3	03	
NSK	ISO										
2	02										
3	03										
10	BORE CODE	00 - 10mm 04 upwards, multiply by 5 to obtain bore size in mm. 01 - 12mm 02 - 15mm 03 - 17mm									
	CAGE TYPE CODE	Usually fitted with pressed steel cage with no suffix stated. If suffix is quoted see Appendix 1 – Page 32									
ZZ	STANDARD VARIANT	See list of STANDARD VARIANT CODES on Appendix 2 – Page 34									
X26	SPECIAL SPECIFICATION	X26 Dimensionally stabilised for operating temperature of 150°C max. X28 Dimensionally stabilised for operating temperature of 200°C max. X29 Dimensionally stabilised for operating temperature of 250°C max.									

QJ 2 06 X26

QJ	TYPE	QJ Single row duplex ball bearing - with split inner ring	
2	DIMENSION SERIES	NSK	ISO
		10	10
		2	02
		3	03
06	BORE CODE	00 - 10mm 01 - 12mm 02 - 15mm 03 - 17mm	04 upwards, multiply by 5 to obtain bore size in mm.
	CAGE TYPE CODE	Usually fitted with pressed steel cage with no suffix stated. If suffix is quoted see Appendix 1 – Page 32	
X26	SPECIAL SPECIFICATION	X26 Dimensionally stabilised for operating temperature of 150°C max. X28 Dimensionally stabilised for operating temperature of 200°C max. X29 Dimensionally stabilised for operating temperature of 250°C max.	

N 2 16 E T K C3 X26

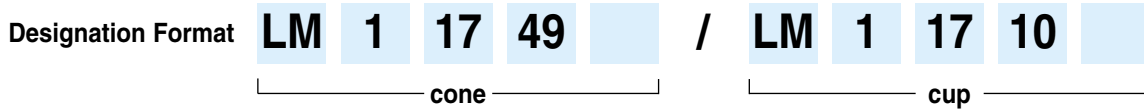
N	TYPE	<p>N Single row cylindrical roller bearing - two ribs on inner ring</p> <p>NU Single row cylindrical roller bearing - two ribs on outer ring</p> <p>NJ Single row cylindrical roller bearing - two ribs on outer ring - one rib on inner</p> <p>NF Single row cylindrical roller bearing - two ribs on inner ring - one rib on outer</p> <p>NH Single row cylindrical roller bearing - as NJ type but with additional L shaped thrust collar</p> <p>NUP Single row cylindrical roller bearing - two ribs on outer ring - one rib + one loose rib on inner</p> <p>NU2 Single row cylindrical roller bearing - two ribs on outer ring - Extra wide series</p> <p>NJ2 Single row cylindrical roller bearing - two ribs on outer ring - one rib on inner - Extra wide series</p> <p>NUP2 Single row cylindrical roller bearing - two ribs on outer ring - one rib + one loose rib on inner - Extra wide series</p> <p>NN Double row cylindrical roller bearing - three ribs on inner ring - Extra wide series</p> <p>NNU Double row cylindrical roller bearing - three ribs on outer ring - Extra wide series</p>																
2	DIMENSION SERIES	<table border="1"> <thead> <tr> <th>NSK</th> <th>ISO</th> <th>NSK</th> <th>ISO</th> </tr> </thead> <tbody> <tr> <td>19</td> <td>19</td> <td>3</td> <td>03</td> </tr> <tr> <td>10</td> <td>10</td> <td>4</td> <td>04</td> </tr> <tr> <td>2</td> <td>02</td> <td></td> <td></td> </tr> </tbody> </table>	NSK	ISO	NSK	ISO	19	19	3	03	10	10	4	04	2	02		
NSK	ISO	NSK	ISO															
19	19	3	03															
10	10	4	04															
2	02																	
16	BORE CODE	<p>00 - 10mm 04 upwards, multiply by 5 to obtain bore size in mm.</p> <p>01 - 12mm</p> <p>02 - 15mm</p> <p>03 - 17mm</p>																
E	DESIGN FEATURE	E Higher Radial Load Rating																
T	CAGE CODES	See list of CAGE TYPE CODES on Appendix 1 – Page 32																
K	RING CONFIGURATION	<p>K Tapered bore 1 : 12</p> <p>K30 Tapered bore 1 : 30</p> <p>E1 Notch or Lubricating groove in ring</p>																
C3	INTERNAL CLEARANCE	<p>C2 Radial clearance less than Normal - marked '0' or 'C2'</p> <p>CN Normal grade of radial internal clearance - not marked</p> <p>C3 Radial internal clearance greater than Normal - marked '000' or 'C3'</p> <p>C4 Radial internal clearance greater than C3 - marked '0000' or 'C4'</p> <p>C5 Radial internal clearance greater than C4 - marked '00000' or 'C5'</p>																
X26	SPECIAL SPECIFICATION	<p>X26 Dimensionally stabilised for operating temperature of 150°C max.</p> <p>X28 Dimensionally stabilised for operating temperature of 200°C max.</p> <p>X29 Dimensionally stabilised for operating temperature of 250°C max.</p>																

Designation Format **HR 322 04 CJ**

HR	DESIGN PREFIX	Designed for high load carrying capacity
322	BASIC NUMBER	The first 3 digits represent the TYPE CODE and the DIMENSION SERIES.
04	BORE CODE	00 - 10mm 01 - 12mm 02 - 15mm 03 - 17mm 04 upwards, multiply by 5 to obtain bore size in mm.
CJ	DESIGN FEATURE	C Medium angle tapered roller bearing D Steep angle tapered roller bearing J Outer ring raceway diameter and angle comply with ISO/R355 X Dimension Series 20 and 29 - major dimensions comply with ISO/R355

Designation Format **T 7 F C 045**

T	T	Symbol Representing Tapered Roller Bearing
7	7	Symbol Representing Contact Angle
F	F	Symbol Representing ISO Diameter Series
C	C	Symbol Representing ISO Width Series
045	045	Symbol Representing Bearing Bore in mm.



LM	DUTY	LL Lighter than Light L Light LM Light Medium M Medium HM Heavy Medium H Heavy HH Heavier than Heavy
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1	INCLUDED ANGLE	<table border="0"> <tr> <td>1 < 24°</td> <td>6 > 30°30' < 32°30'</td> </tr> <tr> <td>2 > 24° < 25°30'</td> <td>7 > 32°30' < 36°</td> </tr> <tr> <td>3 > 25°30' < 27°</td> <td>8 > 36° < 45°</td> </tr> <tr> <td>4 > 27° < 28°30'</td> <td>9 > 45°</td> </tr> <tr> <td>5 > 28°30' < 30°30'</td> <td></td> </tr> </table>	1 < 24°	6 > 30°30' < 32°30'	2 > 24° < 25°30'	7 > 32°30' < 36°	3 > 25°30' < 27°	8 > 36° < 45°	4 > 27° < 28°30'	9 > 45°	5 > 28°30' < 30°30'	
1 < 24°	6 > 30°30' < 32°30'											
2 > 24° < 25°30'	7 > 32°30' < 36°											
3 > 25°30' < 27°	8 > 36° < 45°											
4 > 27° < 28°30'	9 > 45°											
5 > 28°30' < 30°30'												

17	BASIC SERIES	<table border="0"> <thead> <tr> <th>Series</th> <th>Basic range in inches</th> </tr> </thead> <tbody> <tr><td>00-19</td><td>0-1</td></tr> <tr><td>20-99</td><td>1-2</td></tr> <tr><td>000-029</td><td>1-2</td></tr> <tr><td>039-129</td><td>2-3</td></tr> <tr><td>130-189</td><td>3-4</td></tr> <tr><td>190-239</td><td>4-5</td></tr> <tr><td>240-289</td><td>5-6</td></tr> <tr><td>290-339</td><td>6-7</td></tr> <tr><td>340-389</td><td>7-8</td></tr> <tr><td>390-429</td><td>8-9</td></tr> </tbody> </table>	Series	Basic range in inches	00-19	0-1	20-99	1-2	000-029	1-2	039-129	2-3	130-189	3-4	190-239	4-5	240-289	5-6	290-339	6-7	340-389	7-8	390-429	8-9
Series	Basic range in inches																							
00-19	0-1																							
20-99	1-2																							
000-029	1-2																							
039-129	2-3																							
130-189	3-4																							
190-239	4-5																							
240-289	5-6																							
290-339	6-7																							
340-389	7-8																							
390-429	8-9																							

49	PART NUMBERS WITHIN BASIC SERIES	10-19 = Cup (Outer); 10 = minimum OD 30-49 = Cone (Inner); 49 = maximum bore
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	SPECIAL FEATURE
--	------------------------

2 22 15 CA K E4 C2 S11 -VS

2	TYPE	Type Code 2 - Spherical roller bearing				
22	DIMENSION SERIES	NSK	ISO	NSK	ISO	
		30	30	22	22	
		40	40	32	32	
		31	31	13	13	
		41	41	23	23	
		39	39			
15	BORE CODE	For bore code 04 upwards, the general rule is to multiply by 5 to obtain bore size in mm.		The exceptions to this are bearings with bore diameter of 500mm and above. These are denoted by the type and ISO series (230, 239), followed by / and the bore diameter (500mm, 630mm etc.) ie. 230/500, 239/630 etc.		
CA	DESIGN FEATURE OR CAGE	C	Design with C type pressed steel cage			
		CA	Designed with machined brass cage			
		CAM	Designed with machined brass cage			
		CD	Designed with D type pressed steel cage			
		H	Designed for increased capacity - glass fibre reinforced nylon cage			
		T12	Glass fibre reinforced cage			
K	RING CONFIGURATION	K	Tapered bore 1 : 12			
		K30	Tapered bore 1 : 30			
E4		E4	Outer ring with oil holes and groove (For H type over 180mm O.D. and other types over 150mm O.D. oil holes and grooves are standard)			
C2	INTERNAL CLEARANCE	C1	Radial clearance less than C2			
		C2	Radial clearance less than Normal			
		CN	Normal grade of radial internal clearance - not marked			
		C3	Radial internal clearance greater than Normal			
		C4	Radial internal clearance greater than C3			
		C5	Radial internal clearance greater than C4			
		CG*	Special radial internal clearance where * denotes mean figure in μm			
S11		S11	Dimensionally stabilised for operating temperature of 150°/200°C max.			
-VS		-VS	Special specification for vibratory equipment			

NSK

Metric series single and double direction ball and spherical roller thrust bearings

512 07 X

BALL THRUST BEARINGS

293 20 H

SPHERICAL ROLLER THRUST BEARINGS

512

TYPE and SERIES (first 3 digits in basic number)

511, 512, 513, 514	Single direction ball thrust bearing - with flat seat
532, 533, 534	Single direction ball thrust bearing - with aligning seat
532U, 533U, 534U	Single direction ball thrust bearing - with aligning seat washer
522, 523, 524	Double direction ball thrust bearing - with flat seat
542, 543, 544	Double direction ball thrust bearing - with aligning seat washer
292, 293, 294	Single direction spherical thrust roller bearing

07

BORE CODE (last 2 digits in basic number)

00 - 10mm	For bore code 04 upwards, the general rule is to multiply by 5 to obtain bore size in mm. The exception is spherical roller thrust bearings with 500mm bore diameter which are designated 292/500, 293/500 and 294/500. Note that for double direction thrust bearings this diameter is the bore diameter of the two outer washers. The bore diameter of the centre washer is smaller.
00 - 12mm	
02 - 15mm	
03 - 17mm	

M

CAGE

See list of CAGE TYPE CODES on Appendix 1 – Page 32

X

DESIGN FEATURE

X	Denotes Modified Boundary Dimensions to I.S.O.
U	Denotes with Aligning Seat Washer.
P5	Denotes Precision Class 5 (ABEC 5).

INCH AND METRIC SERIES BEARINGS

In addition to the above there is also available a Cylindrical Roller Thrust Bearings series ranging from 35mm bore (Designation 35TMP14) to 320mm bore (Designation 320TMP12).

There are two types of bearing listed under this category.

ANGULAR CONTACT THRUST BALL BEARINGS FOR BALL SCREWS

Bearings in this category are specially designed to support Precision Ball Screws. The contact angle is 60° and they are usually used in sets of two or more bearings in a preload condition.

Bearings are fitted with moulded polyamide cages.

A typical designation for this series would be:-

30TAC62B DF C10 PN7A

For more details on this series refer to catalogue Pr. No. A124, Precision Rolling Bearings for Machine Tool Spindles and C912S, Super Precision Bearings - Equivalent Data.

DOUBLE DIRECTION ANGULAR CONTACT THRUST BALL BEARINGS

Bearings in this category are specially designed high precision bearings for use in the main spindles of machine tools.

Bearings in series 29 and 20 have the same bore and O.D. as the double row cylindrical roller bearings in series NN30 and NN49 respectively and are generally used in conjunction with these roller bearings.

Bearings are generally fitted with machined brass cages. Typical designations for this series would be:-

100TAC20X PN7+L C6

or

140TAC20D PN7+L C6

For more details on this series refer to catalogue Pr. No. A124, Precision Rolling Bearings for Machine Tool Spindles.

60 1X W MC3 P4 L UC3 AF2

F 60 5 h J ZZ MC2 P5 B32

F	BEARING TYPE	No symbol F	Standard type Flanged O.D. type
60	BEARING SERIES	68, 69, 60, 62, 63	
5	BORE DIAMETER	1 ~ 9 1X, 2X etc.	Bore diameter in mm. Bore diameter in mm. where X represents a part millimetre. i.e. 1.5mm.
h	MATERIAL CODE	No symbol h	Bearing steel (SUJ2) Stainless steel (SUS440C)
J	CAGE TYPE CODE	J Ribbon cage JL Ribbon cage (Light Clinched) W Crown cage T Synthetic resin cage (Cage symbols are occasionally omitted)	
ZZ	SEALING ARRANGEMENT	See list of STANDARD VARIANT CODES on Appendix 2 – Page 34	
MC2	INTERNAL CLEARANCE	MC1 Radial clearance less than MC2 MC2 Radial clearance less than MC3 MC3 Normal radial internal clearance MC4 Radial internal clearance greater than MC3 MC5 Radial internal clearance greater than MC4 MC6 Radial internal clearance greater than MC5	
P5	TOLERANCE CLASS	No symbol P6	JIS Class 0 JIS Class 6 P5 P4 JIS Class 5 JIS Class 4
	TORQUE SPECIFICATION	No symbol L	No torque specification Low torque
	BORE or O.D. SORTING CODE	UC1 Bearings are sorted into two groups depending on bore tolerance UC2 Bearings are sorted into two groups depending on O.D. tolerance UC3 Bearings are sorted into four groups depending on bore and O.D. tolerances	
B32	LUBRICANT CODE	Oil AF2 Aeroshell Fluid 12 A4D Anderol L-401D (Others available on request)	Grease B32 Beacon 325 PS2 Multemp PS2 (Others available on request)

S MR 84 W ZZ MC3 P5 UC1 B32

MF 148 J MC4

S	MATERIAL CODE	No symbol S	Bearing steel (SUJ2) Stainless steel (SUS440C)
MR	BEARING TYPE	MR Special metric series MF Special metric series with flanged O.D.	
84	SIZE NUMBER	Number indicates O.D. and bore size	
W	CAGE TYPE CODE	J Ribbon cage JL Ribbon cage (Light Clinched) W Crown cage T Synthetic resin cage (Cage symbols are occasionally omitted)	
ZZ	SEALING ARRANGMENT	See list of STANDARD VARIANT CODES on Appendix 2 – Page 34	
MC3	INTERNAL CLEARANCE	MC1 Radial clearance less than MC2 MC2 Radial clearance less than MC3 MC3 Normal radial internal clearance MC4 Radial internal clearance greater than MC3 MC5 Radial internal clearance greater than MC4 MC6 Radial internal clearance greater than MC5	
P5	TOLERANCE CLASS	No symbol P6	JIS Class 0 JIS Class 6 P5 P4 JIS Class 5 JIS Class 4
	TORQUE SPECIFICATION	No symbol L	No torque specification Low torque
UC1	BORE or O.D. SORTING CODE	UC1 Bearings are sorted into two groups depending on bore tolerance UC2 Bearings are sorted into two groups depending on O.D. tolerance UC3 Bearings are sorted into four groups depending on bore and O.D. tolerances	
B32	LUBRICANT CODE	Oil AF2 Aeroshell Fluid 12 A4D Anderol L-401D (Others available on request)	Grease B32 Beacon 325 PS2 Multemp PS2 (Others available on request)

Designation Systems

S FR 133 X3 J ZZS MC4 7P L UC3 AF2

R 2 J ZZ MC3 B32

S	MATERIAL CODE	No symbol S	Bearing steel (SUJ2) Stainless steel (SUS440C)
FR	BEARING TYPE	R	Inch series deep groove ball bearing FR Inch series deep groove ball bearing with flanged O.D. RW Inch series deep groove ball with extended inner ring
133	SIZE NUMBER	Number indicates O.D. and bore size	
X3		Special Design Symbol	
J	CAGE TYPE CODE	J	Ribbon cage JL Ribbon cage (Light Clinched) W Crown cage T Synthetic resin cage (Cage symbols are occasionally omitted)
ZZS	SEALING ARRANGEMENT	See list of STANDARD VARIANT CODES on Appendix 2 – Page 34	
MC4	INTERNAL CLEARANCE	MC1	Radial clearance less than MC2 MC2 Radial clearance less than MC3 MC3 Normal radial internal clearance MC4 Radial internal clearance greater than MC3 MC5 Radial internal clearance greater than MC4 MC6 Radial internal clearance greater than MC5
7P	TOLERANCE CLASS	No symbol 3	ABEC 1 ABEC 3 5P 7P ABEC 5P ABEC 7P
L	TORQUE SPECIFICATION	No symbol L	No torque specification Low torque
UC3	BORE or O.D. SORTING CODE	UC1	Bearings are sorted into two groups depending on bore tolerance UC2 Bearings are sorted into two groups depending on O.D. tolerance UC3 Bearings are sorted into four groups depending on bore and O.D. tolerances
AF2	LUBRICANT CODE	Oil AF2 A4D (Others available on request)	Aeroshell Fluid 12 Anderol L-401D (Others available on request) Grease B32 PS2 (Others available on request) Beacon 325 Multemp PS2

Metric series radial ball bearings

RHP

6 2 10 K RS J C2 LOC P6 S*

6	TYPE	6 Single row radial ball bearing 16 Single row radial ball bearing - narrow, extra light series 98 Single row radial ball bearing - narrow light series E Magneto bearings (For NSK brand see Radial Ball Bearings – Page 4) L Magneto bearings (For NSK brand see Radial Ball Bearings – Page 4) M Single row radial ball bearing - with filling slots and maximum load capacity 4 Double row radial ball bearing 1 Double row radial ball bearing - self-aligning 2 Double row radial ball bearing - self-aligning; wide series																								
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RS	SEALING ARRANGEMENT	See list of STANDARD VARIANT CODES on Appendix 2 – Page 34																								
J	CAGE TYPE CODE	See list of CAGE TYPE CODES on Appendix 1 – Page 32																								
C2	INTERNAL CLEARANCE	C2 Radial clearance less than Normal - marked '0' or 'C2' CN Normal grade of radial internal clearance - not marked C3 Radial internal clearance greater than Normal - marked '000' or 'C3' C4 Radial internal clearance greater than C3 marked '0000' or 'C4' C5 Radial internal clearance greater than C4 marked '00000' or 'C5' R* Special radial internal clearance (* denotes mean figure in µm)																								
LOC	SPECIAL FEATURE	LOC Location Bearing - reduced outside diameter																								
P6	PRECISION GRADE	ELEC "Electric" standard EP Precision grade dedicated to Inch series bearings EP1 ABEC1 tolerances P6E Electric Motor Bearing tolerances (ISO Tolerance class 6) and special radial internal clearances T Motor Traction Specification (PDS Q28)																								
S*	HEAT STABILISED Where * gives the Specification number	<table border="1"> <thead> <tr> <th>Specification number</th> <th>Operational temperature</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Up to 200°C max.</td> </tr> <tr> <td>2</td> <td>Up to 250°C max.</td> </tr> <tr> <td>3</td> <td>Up to 300°C max.</td> </tr> <tr> <td>4</td> <td>Up to 350°C max.</td> </tr> </tbody> </table>	Specification number	Operational temperature	1	Up to 200°C max.	2	Up to 250°C max.	3	Up to 300°C max.	4	Up to 350°C max.														
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LJ 4 K RS J C2 LOC EP

LJ	TYPE	<p>R Small Radial ball journal (ABEC 1 & 3, also ISO classes 6, 4 & 2)</p> <p>KLNJ Small Radial ball journal (BS292 Part 2 Standard Limits)</p> <p>LNJ Small Radial ball journal - full type</p> <p>XLJ Extra light series radial ball journal</p> <p>LJ Light series single row radial ball bearing</p> <p>LJBL Light series single row radial ball bearings - max. capacity type with filling slot</p> <p>MJ Medium series single row radial ball bearing</p> <p>MJBL Medium series single row radial ball bearing - max. capacity type with filling slot</p> <p>HJ Heavy series single row radial ball bearing</p> <p>HJBL Heavy series radial ball journal bearing - max. capacity type with filling slot</p>
4	BORE CODE	<p>4 The bore code shall be numeric and comprise the nominal inch bore size as fractions and integers i.e. 1/2; 2; 3.1/2</p> <p>4E E was used to denote inch series bearings with 4 inches bore and over. Now, only used when there is no other distinguishing symbol within the bearing designation.</p>
K	TAPERED BORE	<p>K Tapered bore 1:12</p>
RS	SEALING ARRANGEMENT	<p>See list of STANDARD VARIANT CODES on Appendix 2 – Page 34</p>
J	CAGE TYPE CODE	<p>See list of CAGE TYPE CODES on Appendix 1 – Page 32</p>
C2	INTERNAL CLEARANCE	<p>C2 Radial clearance less than Normal - marked '0' or 'C2'</p> <p>CN Normal grade of radial internal clearance - not marked</p> <p>C3 Radial internal clearance greater than Normal - marked '000' or 'C3'</p> <p>C4 Radial internal clearance greater than C3 marked '0000' or 'C4'</p> <p>C5 Radial internal clearance greater than C4 marked '00000' or 'C5'</p> <p>R* Special radial internal clearance (* denotes mean figure in μm)</p>
LOC	SPECIAL FEATURE	<p>LOC Location Bearing - reduced outside diameter</p>
EP	PRECISION GRADE	<p>ELEC "Electric" standard</p> <p>EP Precision grade dedicated to Inch series bearings</p> <p>EP1 ABEC1 tolerances</p> <p>P6E Electric Motor Bearing tolerances (ISO Tolerance class 6) and special radial internal clearances</p> <p>T Motor Traction Specification (PDS Q28)</p>

7 2 10 B E TN DU M P6

7	TYPE	7 Single row angular contact ball bearing E Magneto bearings (For NSK brand see Radial Ball Bearings – Page 4) L Magneto bearings (For NSK brand see Radial Ball Bearings – Page 4)																												
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C	X2	15°	A	X4	30°																									
●	●	20°	B	X6	40°																									
E	X3	25°																												
E	DESIGN FEATURE	E Higher Radial Load Rating																												
TN	CAGE TYPE CODE	See list of CAGE TYPE CODES on Appendix 1 – Page 32																												
DU	GROUPING (Most used)	DB Matched Pair - Back to Back configuration DF Matched Pair - Face to Face configuration DT Matched Pair - Tandem configuration DU Matched Pair - Universal mounting SU Single Bearing - Universally faced For other possible grouping arrangements see Appendix 3 – Page 35																												
M	PRELOAD	F Flush Faced L Light Preload M Medium Preload H Heavy Preload S Standard Axial Clearance U Universally faced Single Bearing to give Standard Axial Clearance when mounted in pairs UX Universally faced single bearing to give an Axial Clearance less than Standard Axial Clearance when mounted in pairs. A* Special Axial Clearance (*Denotes mean figure in µm.) P* Special Axial Preload (*Denotes mean figure in µm.)																												
P6	PRECISION GRADE	ELEC “Electric” standard EP Precision grade dedicated to Inch series bearings EP1 ABEC1 tolerances P6E Electric Motor Bearing tolerances (ISO Tolerance class 6) and special radial internal clearances.																												

● Denotes standard feature, no indicator necessary

LJT 4 X2 M DU L EP

LJT	TYPE	XLJT Single row angular contact ball bearing - Extra light series LJT Single row angular contact ball bearing - Light series MJT Single row angular contact ball bearing - Medium series
4	BORE CODE	4 The bore code shall be numeric and comprise the nominal bore as fractions and integers i.e. 1/2; 3.1/2 etc. 4E E was used to denote inch series bearings with 4 inches bore and over. Now only used where there is no other distinguishing symbol within a bearing designation.
X2	CONTACT ANGLE	X2 15° ● 20° X4 30°
M	CAGE TYPE CODE	See list of CAGE TYPE CODES on Appendix 1 – Page 32
DU	GROUPING (Most used)	DB Matched Pair - Back to Back configuration DF Matched Pair - Face to Face configuration DT Matched Pair - Tandem configuration DU Matched Pair - Universal mounting
L	PRELOAD	L Light Preload M Medium Preload H Heavy Preload S Standard Axial Clearance U Universally faced Single Bearing to give Standard Axial Clearance when mounted in pairs UX Universally faced single bearing to give an Axial Clearance less than Standard Axial Clearance when mounted in pairs. A* Special Axial Clearance eg. DBA138 (*Denotes mean figure in µm.) P* Special Axial Preload eg. DBP18 (*Denotes mean figure in µm.)
EP	PRECISION GRADE	ELEC "Electric" standard EP Precision grade dedicated to Inch series bearings EP1 ABEC1 tolerances P6E Electric Motor Bearing tolerances (ISO Tolerance class 6) and special radial internal clearances.

● Denotes standard feature, no indicator necessary

3 2 10 ZR J C2

3	TYPE	<p>3 Double row angular contact ball bearing - filling slots - contact angles diverge - 32°</p> <p>3_B Double row angular contact ball bearing - no filling slots - contact angles diverge - 25°</p> <p>LDJK Double row angular contact ball bearing - no filling slots - contact angles converge - 30°</p> <p>MDJK Double row angular contact ball bearing - no filling slots - contact angles converge - 30°</p> <p>HDJK Double row angular contact ball bearing - no filling slots - contact angles converge - 30°</p> <p>LDJT Double row angular contact ball bearing - with split outer ring - Light series - 30°</p> <p>MDJT Double row angular contact ball bearing - with split outer ring - Medium series - 30°</p>												
2	DIMENSION SERIES	<table border="1"> <thead> <tr> <th>RHP</th> <th>ISO</th> <th>RHP</th> <th>ISO</th> </tr> </thead> <tbody> <tr> <td>10</td> <td>10</td> <td>3</td> <td>03</td> </tr> <tr> <td>2</td> <td>02</td> <td>4</td> <td>04</td> </tr> </tbody> </table>	RHP	ISO	RHP	ISO	10	10	3	03	2	02	4	04
RHP	ISO	RHP	ISO											
10	10	3	03											
2	02	4	04											
10	BORE CODE	<p>00 - 10mm 04 upwards, multiply by 5 to obtain bore size in mm.</p> <p>01 - 12mm</p> <p>02 - 15mm</p> <p>03 - 17mm</p>												
ZR	STANDARD VARIANT	See list of STANDARD VARIANT CODES on Appendix 2 – Page 34												
J	CAGE TYPE CODE	See list of CAGE TYPE CODES on Appendix 1 – Page 32												
C2	INTERNAL CLEARANCE	<p>C2 Radial clearance less than Normal - marked '0' or 'C2'</p> <p>CN Normal grade of radial internal clearance - not marked</p> <p>C3 Radial internal clearance greater than Normal - marked '000' or 'C3'</p> <p>C4 Radial internal clearance greater than C3 marked '0000' or 'C4'</p> <p>A* Special radial internal clearance (* denotes mean figure in µm)</p> <p>P* Special axial preload. (* denotes mean figure in µm)</p>												

QJ 2 10 NR MB C3 LOC**METRIC SERIES BEARINGS**

QJ	TYPE	QJ	Single row duplex ball bearing - with split inner ring
2	DIMENSION SERIES	RHP	ISO
		2	02
		3	03
10	BORE CODE	00 - 10mm 01 - 12mm 02 - 15mm 03 - 17mm	04 upwards, multiply by 5 to obtain bore size in mm.

QJL 4 NR MB C3 LOC**INCH SERIES BEARINGS**

QJL	TYPE	QJL	Single row duplex ball bearing - with split inner ring - Light series
		QJM	Single row duplex ball bearing - with split inner ring - Medium series
4	BORE CODE	4	The bore code shall be numeric and comprise the nominal bore as fractions and integers ie. 1/2; 2; 3.1/2 etc.
		4E	E was used to denote inch series bearings with 4 inches bore and over. Now only used when there is no other distinguishing symbol within a bearing designation.

INCH AND METRIC SERIES BEARINGS

NR	STANDARD VARIANT	See list of STANDARD VARIANT CODES on Appendix 2 – Page 34	
MB	CAGE CODES	See list of CAGE TYPE CODES on Appendix 1 – Page 32	
C3	INTERNAL CLEARANCE	C3	Axial clearance greater than Normal - marked '000' or 'C3'
		A*	Special axial clearance (* denotes mean figure in μm)
LOC	SPECIAL FEATURE	LOC	Location Bearing - reduced outside diameter

512 07 J**METRIC SERIES BEARINGS****512****TYPE AND SERIES**
(first 3 digits in basic number)511 Extra light series single direction ball thrust bearing
512 Light series single direction ball thrust bearing
513 Medium series single direction ball thrust bearing**07****BORE CODE**
(last 2 digits in basic number)00 - 10mm
01 - 12mm
02 - 15mm
03 - 17mm
04 upwards, multiply by 5 to obtain bore size in mm.**LT 1.1/2 B E J****INCH SERIES BEARINGS****LT****TYPE AND SERIES**FT Inch series flat track single direction ball thrust bearing - flat seating
XLT Inch series - Extra Light - single direction ball thrust bearing
LT or LT-B Inch series - Light - single direction ball thrust bearing
MT Inch series - Medium - single direction ball thrust bearing**1.1/2****BORE CODE**

The bore code shall be numeric and comprise the nominal bore as fractions and integers ie. 1/2; 2; 3.1/2 etc.

INCH AND METRIC SERIES BEARINGS**B**Used only with LT series bearings up to 1.7/8 inch bore.
Refers to bearings with one large bore washer and one small bore washer.**E**E Was used to denote inch series bearings with 4 inches bore and over.
Now only used when there is no other distinguishing symbol within a bearing designation.**J****CAGE TYPE CODE**

See list of CAGE TYPE CODES on Appendix 1 – Page 32

N 2 16 E K NR M P6 C2

N	TYPE	N	Single row cylindrical roller bearing - two ribs on inner ring		
		NU	Single row cylindrical roller bearing - two ribs on outer ring		
		NJ	Single row cylindrical roller bearing - two ribs on outer ring one rib on inner		
		NF	Single row cylindrical roller bearing - two ribs on inner ring one rib on outer		
		NUP	Single row cylindrical roller bearing - two ribs on outer ring one rib + one loose rib on inner		
		NP	Single row cylindrical roller bearing - two ribs on inner ring one rib + one loose rib on outer		
		NC	Single row cylindrical roller bearing - two ribs on each ring		
		NU2	Single row cylindrical roller bearing - two ribs on outer ring - Extra wide series		
		NU3	Double row cylindrical roller bearing - two ribs on outer ring		
		NJ3	Double row cylindrical roller bearing - two ribs on outer ring one rib on inner		
		NUP3	Double row cylindrical roller bearing - two ribs on outer ring one rib + one loose on inner		
		RNU	Outer, cage and rollers assembly only - two ribs on outer ring		
		RNF	Inner, cage and rollers assembly only - two ribs on inner ring		
		2	DIMENSION SERIES	RHP	ISO
10	10			3	03
2	02			4	04
16	BORE CODE	00 - 10mm	04 upwards, multiply by 5 to obtain bore size in mm.		
		01 - 12mm			
		02 - 15mm			
		03 - 17mm			
E	DESIGN FEATURE	E	Higher Radial Load Rating		
		EE	Higher Load Rating plus Improved internal design feature giving greater axial load carrying capability. Note: All standard products will be with interchangeable rings and P6 tolerances.		
K	TAPERED BORE	K	Tapered bore 1 : 12		
NR	STANDARD VARIANT	See list of STANDARD VARIANT CODES on Appendix 2 – Page 34			
M	CAGE CODES	See list of CAGE TYPE CODES on Appendix 1 – Page 32			
P6	PRECISION GRADE	P6	ABEC 3 Tolerances or ISO Tolerance Class 6 (Used for some current production in conjunction with interchangeable rings)		
		X	Same as for P6 above but only used for bearings with outside diameter greater than 110mm.		
		T	Motor Traction Specification (PDS Q28)		
C2	INTERNAL CLEARANCE	C2	Radial clearance less than Normal - marked '0' or 'C2'		
		CN	Normal grade of radial internal clearance - not marked or marked 'CN'		
		C3	Radial internal clearance greater than Normal - marked '000' or 'C3'		
		C4	Radial internal clearance greater than C3 - marked '0000' or 'C4'		
		C5	Radial internal clearance greater than C4 - marked '00000' or 'C5'		
		R*	Special radial internal clearance where * denotes mean figure in µm		

LRJ 4 K NR M C2 EP

LRJ	TYPE	<p>XLRJ; LRJ; MRJ Single row cylindrical roller bearing - two ribs on inner ring Extra light, Light & Medium series</p> <p>LLRJ; MMRJ Single row cylindrical roller bearing - two ribs on outer ring Light & Medium series</p> <p>MMRJA Single row cylindrical roller bearing - two ribs on outer ring one rib on inner - Medium series</p> <p>XLRJA; LRJA; MRJA Single row cylindrical roller bearing - two ribs on inner ring one rib on outer - Extra light; Light & Medium series</p> <p>MMRJB Single row cylindrical roller bearing - two ribs on outer ring one rib + one loose rib on inner - Medium series</p> <p>XLLRJN; LLRJN; MMRJN Single row cylindrical roller bearing - two ribs on each ring Extra light; Light & Medium series</p>
4	BORE CODE	<p>4 The bore code shall be numeric and comprise the nominal inch bore size as fractions and integers ie. 1/2; 2; 3.1/2</p> <p>4E E was used to denote inch series bearings with 4 inches bore and over. Now only used when there is no other distinguishing symbol within a bearing designation.</p>
K	TAPERED BORE	K Tapered bore 1 : 12
NR	STANDARD VARIANT	See list of STANDARD VARIANT CODES on Appendix 2 – Page 34
M	CAGE CODES	See list of CAGE TYPE CODES on Appendix 1 – Page 32
C2	INTERNAL CLEARANCE	<p>C2 Radial clearance less than Normal - marked '0' or 'C2'</p> <p>CN Normal grade of radial internal clearance - not marked or marked 'CN'</p> <p>C3 Radial internal clearance greater than Normal - marked '000' or 'C3'</p> <p>C4 Radial internal clearance greater than C3 - marked '0000' or 'C4'</p> <p>C5 Radial internal clearance greater than C4 - marked '00000' or 'C5'</p> <p>R* Special radial internal clearance (* denotes mean figure in μm)</p>
EP	PRECISION GRADE	<p>ELEC "Electric" standard</p> <p>EP Precision grade dedicated to Inch series bearings</p> <p>EP1 ABEC1 tolerances</p> <p>P6E Electric Motor Bearing tolerances (ISO Tolerance class 6) and special radial internal clearances</p> <p>T Motor Traction Specification (PDS Q28)</p>

2 22 15 E X1 K M W33 C3 U22 R*

2	TYPE	Type Code 2 - Spherical roller bearing																				
22	DIMENSION SERIES	<p>Digits 2 and 3 represent the ISO DIMENSION SERIES as described below.</p> <table border="1"> <thead> <tr> <th>RHP</th> <th>ISO</th> <th>RHP</th> <th>ISO</th> </tr> </thead> <tbody> <tr> <td>30</td> <td>30</td> <td>22</td> <td>22</td> </tr> <tr> <td>40</td> <td>40</td> <td>32</td> <td>32</td> </tr> <tr> <td>31</td> <td>31</td> <td>13</td> <td>13</td> </tr> <tr> <td>41</td> <td>41</td> <td>23</td> <td>23</td> </tr> </tbody> </table>	RHP	ISO	RHP	ISO	30	30	22	22	40	40	32	32	31	31	13	13	41	41	23	23
RHP	ISO	RHP	ISO																			
30	30	22	22																			
40	40	32	32																			
31	31	13	13																			
41	41	23	23																			
15	BORE CODE	<p>Digits 4 and 5 combined represent the BORE CODE. The BORE CODE multiplied by 5 results in the bore size in mm. eg. Bore Code = 15; Bore Diameter = 15 x 5 = 75mm.</p>																				
E	DESIGN FEATURE	E Higher Radial Load Rating																				
X1	DESIGN FEATURE	<p>X1 Extended outer ring X2 Extended inner ring</p>																				
K	TAPERED BORE	K Tapered bore 1 : 12																				
M	CAGE CODES	<p>For E-type bearings No suffix - Two piece Polyamide cage - TN type M - 1-piece rolling element centred machined brass cage J - 2-piece rolling element centred pressed steel cage For non-E-type bearings J - 2-piece rolling pressed steel cage (1-piece pressed steel for 213 series) M - 2-piece rolling element centred brass cage M - 1-piece outer ring centred brass cage for 213 series MB - 2-piece or 1-piece inner ring centred brass cage MA - 2-piece outer ring centred brass cage</p>																				
W33	LUBRICATION and O.D. SPECIALITY FEATURES	<p>W33 Lubrication holes and grooves in outer ring E5 Lubrication holes and grooves in inner ring E7 E5 + W33</p>																				
C3	INTERNAL CLEARANCE	<p>C2 Radial clearance less than Normal - marked 'C2' CN Normal grade of radial internal clearance - marked 'CN' C3 Radial internal clearance greater than Normal - marked 'C3' C4 Radial internal clearance greater than C3 - marked 'C4' C5 Radial internal clearance greater than C4 - marked 'C5' (Not used if R* or R*/* is included to denote a special internal clearance)</p>																				
U22	QUALITY FEATURE	Special quality control specification																				
R*	SPECIAL INTERNAL CLEARANCE	<p>R* Special radial internal clearance (* denotes mean figure in µm) Not used if C2; CN etc. specifies a catalogue clearances)</p> <p>Note: R*/* may appear on bearings already in use where */* represent max. and min. values in µm.</p>																				

Bearings with tapered bores can be supplied with adapter sleeve, locking nut and washer (designated H----).
Typical designations for bearing with adapter sleeve would be 22212K + H312 or 22312K + H312.

Metric series double row spherical roller bearings for use in vibratory equipment

RHP

2 23 26 E K VB C4

Section 2

2	TYPE	Type Code 2 - Spherical roller bearing								
23	DIMENSION SERIES	<p>Digits 2 and 3 represent the ISO DIMENSION SERIES as described below.</p> <table border="1"> <thead> <tr> <th>RHP</th> <th>ISO</th> </tr> </thead> <tbody> <tr> <td>21</td> <td>21</td> </tr> <tr> <td>22</td> <td>22</td> </tr> <tr> <td>23</td> <td>23</td> </tr> </tbody> </table>	RHP	ISO	21	21	22	22	23	23
RHP	ISO									
21	21									
22	22									
23	23									
26	BORE CODE	<p>Digits 4 and 5 combined represent the BORE CODE. The BORE CODE multiplied by 5 results in the bore size in mm. eg. Bore Code = 26; Bore Diameter = 26 x 5 = 130mm.</p>								
E	DESIGN FEATURE	E Higher Radial Load Rating								
K	TAPERED BORE	K Tapered bore 1 : 12								
VB	CAPABILITY FEATURE	<p>VB Vibratory application specification which covers these features: 1-piece rolling element centred machined brass cage Outer ring has lubricating holes with interconnecting groove on O.D. (as W33)</p> <p>C4 Radial internal clearance greater than C3 and with reduced tolerance band *Note: (C4 Radial internal clearance with reduced tolerance band supplied as standard)</p>								
C4	INTERNAL CLEARANCE	<p>C4 Standard - see Note above* If not Standard CN Normal grade of radial internal clearance with reduced tolerance band C3 Radial internal clearance greater than Normal and with reduced tolerance band</p>								

LSN 10 C2

BALL BEARING SERIES

Available in Inch dimensions only

RLSN 10 C2

ROLLER BEARING SERIES

Available in Inch dimensions only

LSN	BALL BEARING TYPE and SERIES	<p>LSN Light series externally aligning ball bearing with seating ring. MSN Medium series externally aligning ball bearing with seating ring. LSW Light series externally aligning ball bearing in wide aligning housing with end covers. MSW Medium series externally aligning ball bearing in wide aligning housing with end covers. LTW Light series externally aligning ball bearing in wide aligning housing with end covers and tapered bore adapter sleeve. MTW Medium series externally aligning ball bearing in wide aligning housing with end covers and tapered bore adapter sleeve.</p>
RLSN	ROLLER BEARING TYPE and SERIES	<p>RLSN Light series externally aligning roller bearing with seating ring. Two ribs on each ring. RLSN-E Light series externally aligning roller bearing with seating ring. Two ribs on outer and parallel inner ring. RMSN Medium series externally aligning roller bearing with seating ring. Two ribs on each ring. RMSN-E Medium series externally aligning roller bearing with seating ring. Two ribs on outer and parallel inner ring. RLSW Light series externally aligning roller bearing in wide aligning housing with end covers. RMSW Medium series externally aligning roller bearing in wide aligning housing with end covers. RLTW Light series externally aligning roller bearing in wide aligning housing with end covers and tapered bore adapter sleeve. RMTW Medium series externally aligning roller bearing in wide aligning housing with end covers and tapered bore adapter sleeve.</p>
10	BORE CODE	<p>The bore code is simply a numeric sequence which is given as integers and fractions ie. 7; 12.1/2; 21 etc. The reference does not represent the bore size in either inch or metric size.</p>
C2	INTERNAL CLEARANCE	<p>C2 Radial clearance less than Normal - marked '0' or 'C2' CN Normal grade of radial internal clearance - not marked or marked 'CN' C3 Radial internal clearance greater than Normal - marked '000' or 'C3' C4 Radial internal clearance greater than C3 - marked '0000' or 'C4' Note: The standard RIC for ball bearings with cylindrical bore is CN. Ball bearings with tapered bore and all cylindrical roller bearings are supplied with C3 clearance. The bearing clearance grade is only marked on the bearing outer ring when fits differ from the above standard fits.</p>
	CAGE TYPE CODE (Not quoted)	<p>Note: The ball bearings are fitted with steel (J) cages up to 6" bore (Light series) and 5.1/2" bore size (Medium series). Above these sizes the standard ball bearing cages are machined brass. For all roller bearings the standard cages are machined brass (M or MB).</p>

Designation Systems

Appendices

Manual Page No.	Appendix Number	Sheet No.	
32	1	1	Cage Type Codes for NSK and RHP Products
33		2	Cage Type Codes for NSK and RHP Products
34	2	1	Standard Variant Codes for NSK and RHP Products
35	3	1	Mounting Configuration Codes for NSK and RHP Single Row Angular Contact Ball Bearings

NSK Suffix	RHP Suffix	Definition
C, CD		Steel cage for Spherical Roller Bearings
CAM		1 - Piece Brass Cage for Spherical Roller Bearing
F		2 - Piece Machined Steel Cage
	F	1 - Piece, or 2 - Piece Riveted, Rolling Element Centred Machined Steel Cage
	FA	1 - Piece Outer Ring Centred Machined Steel Cage
	FAS	1 - Piece Outer Ring Centred Machined Steel Cage with Lubrication Groove in Locating Surface
	FB	1 - Piece Inner Ring Centred Machined Steel Cage
	FBS	1 - Piece Inner Ring Centred Machined Steel Cage with Lubrication Groove in Locating Surface
	FNA	2 - Piece Riveted Outer Ring Centred Machined Steel Cage
	FNB	2 - Piece Riveted Inner ring Centred Machined Steel Cage
	FP	1 - Piece Rolling Element Centred Machined Steel Cage
H		Polyamide Cage for Spherical Roller Bearings
H		Pressed Steel Cage for Spherical Thrust Roller Bearing
J	J	1 - Piece, or 2 - Piece Riveted, Rolling Element Centred Pressed Steel Cage
	JB	1 - Piece Inner Ring Centred Pressed Steel Cage
JC		2 - Piece Pressed Cage for Quiet Applications (Single Row Radial Ball Bearings)
	JC	2 - Piece Rolling Element Centred Pressed Steel Cleated (Claw) Cage
	JH	1 - Piece Rolling Element Centred Pressed Steel Snap-on Type Cage
	JN	Multi Piece Rolling Element Centred Pressed Steel Cage with Spacer Segments
	JP	1 - Piece Rolling Element Centred Pressed Steel Window Type Cage
JW	JW	2 - Piece Rolling Element Centred Pressed Steel Welded Cage
	L	Machined Light Alloy Cage
	LA	1 - Piece Outer Ring Centred Machined Light Metal Alloy Cage
	LAS	1 - Piece Outer Ring Centred Machined Light Metal Alloy Cage with Lubrication Groove in Locating Surface
	LB	1 - Piece Inner Ring Centred Machined Light Metal Alloy Cage
	LAB	1 - Piece Inner Ring Centred Machined Light Metal Alloy Cage with Lubrication Groove in Locating Surface
	LNA	2 - Piece Riveted Outer Ring Centred Machined Light Metal Alloy Cage
	LNB	2 - Piece Riveted Inner Ring Centred Machined Light Metal Alloy Cage
M	M	1 - Piece, or 2 - Piece Riveted, Rolling Element Centred Machined Brass Cage
MA		Rivetless Brass Cage with Bent Tabs (Single Row Radial Roller Bearings)
	MA	1 - Piece Outer Ring Centred Machined Brass Cage
	MAS	1 - Piece Outer Ring Centred Machined Brass Cage with Lubrication Groove in Locating Surface
MB		Split Crown Type Machined Brass Cage (Double Row Roller Bearings)
	MB	1 - Piece Inner Ring Centred Machined Brass Cage
	MBS	1 - Piece Inner Ring Centred Machined Brass Cage with Lubrication Groove in Locating Surface
	MNA	2 - Piece Riveted Outer Ring Centred Machined Brass Cage
	MNB	2 - Piece Riveted Inner Ring Centred Machined Brass Cage
MR		2 - Piece Roller Guided Brass Cage (Single Row Roller Bearings)
T	T	Machined Laminated Phenolic Cage (Single Row Radial or A. C. Bearings)
T	T	Glass Fibre Reinforced Nylon Cage (Radial Roller Bearings)
	TA	1 - Piece Outer Ring Centred Machined Laminated Phenolic Cage
	TNA	2 - Piece Riveted Outer Ring Centred Machined Laminated Phenolic Cage
	TB	1 - Piece Inner Ring Centred Machined Laminated Phenolic cage
	TNB	1 - Piece, or 2 - Piece Riveted, Inner Ring Centred Machined Laminated Phenolic Cage
	TL	Self Lubricating Cage
	TN	1 - Piece Moulded Polyamide Cage
	TNH	1 - Piece Rolling Element Centred Snap-on Type Moulded Polyamide Cage
TNG		Polyamide Cage for Double Row Conrad Type Bearing
TY		Glass Fibre Reinforced Nylon Cage (Angular Contact Type Bearings)
T12		Glass Fibre Reinforced Nylon Cage (Ball Journal, Taper Roller and Spherical Roller Bearings)
V	V	No Cage (Full Complement)
	VB	1 - Piece Rolling Element Centred Machined Brass Cage - Spherical Roller Bearing for Vibratory Equipment
	VH	No Cage - Full Complement of Rollers Self Retained
	VM	2 - Piece Riveted Rolling Element Centred Machined Brass Cage
	VMP	2 - Piece Rolling Element Centred Machined Brass Cage - Upset Cage Bar to Retain Cage Cap. High Complement Rolling Element
W		One Piece Pressed Cage
WS		Pressed Steel Cage for E Type High Capacity Roller Bearing
Y		Pressed Brass Cage
	Y	1 - Piece Rolling Element Centred Snap-on Type Pressed Brass Cage
	YC	2 - Piece Rolling Element Centred Pressed Brass Cleated (Claw) Type Cage

Omission of Cage Symbol	O Indicates when the Cage Ref. may be omitted (NSK products only)					
Cage Type	J	JW	W	Y	M	
Ball Bearing	Single row radial	O	O			
	Single row angular contact					O
	Double row radial			O		
	Double row angular contact			O		
	Self aligning			O		
	Thrust			O		
	Magneto				O	
Roller Bearing	Tapered			O		
	Cylindrical					O*
	*But 02, 03, 04, 22 and 23 must carry "M" symbol					

NSK Suffix	RHP Suffix	Variant
N	N	Snap ring groove
NX		Special snap ring groove dimensions (i.e. NX1, NX2 etc for different special ring groove dimensions)
NR	NR	Snap ring groove and snap ring
Z	Z	Single shield
	ZR	Single shield - parallel O/dia. inner
ZZ	-2Z	Doubled shielded
ZS		Single shield (Retained by circlip in outer ring - usually for miniature ball bearings)
ZZS		Double shield (Retained by circlip in outer ring - usually for miniature ball bearings)
	-2ZR	Double shielded - parallel O/dia. inner
ZN	ZN	Single shield with snap ring groove on opposite side to shield
	ZRN	Single shield - parallel O/dia. inner ring - with snap ring groove on opposite side to shield
ZNR	ZNR	Single shield with snap ring groove and snap ring on opposite side to shield
	ZRNR	Single shield - parallel O/dia. inner ring - with snap ring groove and snap ring on opposite side to shield
NZ	ZNB	Single shield with snap ring groove on same side as shield
	ZRNB	Single shield - parallel O/dia. inner ring - snap ring groove on same side as shield
NRZ	ZNBR	Single shield - snap ring groove and snap ring on same side as shield
	ZRNBR	Single shield - parallel O/dia. inner ring - with snap ring groove and snap ring on same side as shield
RS/D/DU	RS	Single seal
	RSR	Single seal - parallel O/dia. inner ring
2RS/DD/DDU	-2RS	Double sealed
DW		Single light contact seal - small bore metric radial ball bearings
DDW		Double light contact seal - small bore metric radial ball bearings
TS		Single contact type Teflon seal - usually for miniature ball bearings
TTS		Double contact type Teflon seal - usually for miniature ball bearings
V		Single sealed with removable rubber non-contact type seal
VV		Double sealed with removable rubber non-contact type seal
	-2RSR	Double sealed - parallel O/dia. inner ring
	RSN	Single seal with snap ring groove on opposite side to seal
	RSRN	Single seal - parallel O/dia. inner ring - with snap ring groove on opposite side to seal
	RSNR	Single seal with snap ring groove and snap ring on opposite side to seal
	RSFNR	Single seal - parallel O/dia. inner ring - with snap ring groove and snap ring on opposite side to seal
	RSNB	Single seal with snap ring groove on same side as seal
	RSRNB	Single seal - parallel O/dia. inner ring - with snap ring groove on same side as seal
	RSNBR	Single seal with snap ring groove and snap ring on same side as seal
	RSRNB	Single seal - parallel O/dia. inner ring - with snap ring groove and snap ring on same side as seal
	RSZ	Single seal, single shield
	RSRZ	Single seal - parallel O/dia. inner ring - and single shield
	RSZN	Single seal, single shield with snap ring groove on same side as shield
	RSRZN	Single seal - parallel O/dia. inner ring - single shield with snap ring groove on same side as shield
	RSZNR	Single seal, single shield with snap ring groove and snap ring on same side as shield
	RSRZNR	Single seal - parallel O/dia. inner ring - single shield with snap ring groove and snap ring on same side as shield
	RSZNB	Single seal, single shield with snap ring groove on same side as seal
	RSRZNB	Single seal - parallel O/dia. inner ring - single shield with snap ring groove on same side as seal
	RSZNBR	Single seal, single shield with snap ring groove and snap ring on same side as seal
	RSRZNBR	Single seal - parallel O/dia. inner ring - single shield with snap ring groove and snap ring on same side as seal

DU* DDU V* VV* type seals (Where * represents a numeric suffix)

Suffix	Definition
2	DU type seal without air vent
5	DU and V type seals made from Buna N material
7	DU and V type Viton seal
8	DU and V type Polyacrylic seal
9	DU and V type seal made from Silicone rubber
28	DU type seal made from Acryl Ester rubber without air vents

Mounting configurations for NSK and RHP single row angular contact ball bearings

Appendix 3 Sheet 1 of 1

NSK Suffix	RHP Suffix	Configuration
DB	DB	Matched pair - Back to Back configuration
DF	DF	Matched pair - Face to Face configuration
DT	DT	Matched pair - Tandem configuration
DBD	2TB	Matched set of 3 - Tandem pair mounted Back to Back with a Single bearing
DFD	2TF	Matched set of 3 - Tandem pair mounted Face to Face with a Single bearing
DTD	3T	Matched set of 3 bearings mounted in Tandem configuration
DBB	QB	Matched set of 4 - Tandem pair mounted Back to Back with Tandem pair
DFB	QF	Matched set of 4 - Tandem pair mounted Face to Face with Tandem pair
DTT	4T	Matched set of 4 bearings mounted in Tandem configuration
DBT	3TB	Matched set of 4 - 3 bearings in Tandem mounted Back to Back with a Single bearing
DFT	3TF	Matched set of 4 - 3 bearings in Tandem mounted Face to Face with a Single bearing
SU	SU	Single bearing Universally faced for use in multiple sets mounted in any configuration
DU	DU	Universally faced pair of identical bearings for use in DB, DF or DT configuration
G	U	Any combination of 2 bearings can be used. (Both sides are ground for matching)
DR	D	2 bearings mounted side by side but with no face control

6 0 10 T B CN P4

6	TYPE	6	Single row radial ball bearing		
0	DIMENSION SERIES	RHP	ISO	RHP	ISO
		9	19	2	02
		0	10	3	03
10	BORE CODE	00 - 10mm 01 - 12mm 02 - 15mm 03 - 17mm	04 upwards, multiply by 5 to obtain bore size in mm.		
	CONSTRUCTION	● S	Normal type Ceramic ball type		
	SEALING ARRANGEMENT	Z -ZZ RS -2RS	Single shield Double shield Single seal Double seal		
T	CAGE MATERIAL	T M L TN/TNH	Phenolic resin Brass Aluminium Polyamide		
B	LOCATION	A B BH	Outer ring guided Inner ring guided Inner ring guided		
CN	INTERNAL CLEARANCE	Standard R.I.C.	C1 CN C2 C3 C4		
		Special R.I.C. Special Axial Clearance	R** A**		
P4	PRECISION GRADE	RHP	ISO Class	ABEC	
		P0	Normal	1	
		P6	6	3	
		P5	5	5	
		P4	4	7	
		P3	Dimensional accuracy P4. Running accuracy P2		
		P2	2	9	
	SPECIAL REQUIREMENTS	Refer to RHP for details			

● Denotes standard feature, no indicator necessary

** Denotes mean figure in μm

Note: For further details on availability consult RHP

BSB 025 062 DU M P3

BSB	TYPE	BSB BSCU BSPB	Ballscrew support bearing Cartridge unit Pillow block unit
	DIMENSION SERIES	RHP ● 2 3	ISO Non ISO 02 03
025 for Brgs 25 for Units	BORE CODE	RHP METRIC Size in mm.	RHP INCH Nom size in 100'ths of an inch e.g. 150 = 1.1/2"
062	O.D. CODE For BSB For BSCU For BSPB	RHP METRIC Size in mm. (Except for I.S.O. Series) Housing diameter in mm. Base to bore centreline height in mm.	RHP INCH ●
DU	GROUPING	SU DU, DB, DF, DT 3U, 3T, 2TB, 2TF 3TB, 3TF QB, QF, QU	Single universal Paired unit Triple set Quad set Quad set
M	PRELOAD	RHP L M H H G**	LEVEL Light - Metric series Medium - Metric series Heavy - Metric series Standard Preload - Inch Series Special Preload
	SPECIAL PRECISION	K5	Special Precision. Applies only to single bearings
P3	PRECISION GRADE	Dimensional accuracy P4. Running accuracy P2.	

● Denotes standard feature, no indicator necessary

** Denotes mean figure in µm

N 10 16 M C1 P5

N	TYPE	N NU	Single row cylindrical roller bearing - two ribs on inner, plain outer - two ribs on outer, plain inner		
10	DIMENSION SERIES	RHP 19 10	ISO 19 10	RHP 2 3	ISO 02 03
16	BORE CODE	00 - 10mm 01 - 12mm 02 - 15mm 03 - 17mm	04 upwards, multiply by 5 to obtain bore size in mm.		
M	CAGE CODES	M MA MB MNB J	Machined brass locate rolling elements Machined brass locate bore of outer ring Machined brass locate O.D. of inner ring Machined brass - 2 piece riveted - located on O.D. of inner ring Pressed steel located on rolling elements		
C1	INTERNAL CLEARANCE	Standard R.I.C. Special R.I.C.	C1 CN C2 C3 C4 R**		
P5	PRECISION GRADE	RHP P5	ISO Class 5	ABEC 5	

** Denotes mean figure in μm

Note: For further details on availability consult RHP

Metric series double row roller bearings
with tapered bore

RHP

NN 30 10 K TN SP W33 C1

NN	TYPE	Double row roller bearing	
30	DIMENSION SERIES	RHP 30	ISO 30
10	BORE CODE	00 - 10mm 01 - 12mm 02 - 15mm 03 - 17mm	04 upwards, multiply by 5 to obtain bore size in mm.
K	CONSTRUCTION FEATURE	Tapered bore	
TN	CAGE MATERIAL AND LOCATION	Carbon fibre reinforced polyamide - rolling element guided	
SP	PRECISION GRADE	SP UP	Special precision Ultra precision
W33	CONSTRUCTION FEATURE	Lubricating groove and 3 radial holes in outer ring	
C1	INTERNAL CLEARANCE	Standard R.I.C.	C1 C2

Section 3

NSK

UC P 2 09 -26S

UC

INSERT TYPE

UC/UB - Set Screw Lock
EW/EN - Eccentric Collar Lock
UK - Taper Sleeve Lock

P

HOUSING TYPE

P/IP/PH/PA/EP/LP - Cast Iron Pillow Block Units
F/FC/FS/FL/FA/FK - Cast Iron Flanged Units
PF/PFL/PP - Pressed Steel Housing
T/C/RP/PPR/LF/EH/BF - Misc.

2

DIAMETER SERIES

2 - Light Series
3 - Medium Series

09

**BORE CODE
(METRIC)**

00 - 10mm 04 upwards, multiply by 5 to obtain bore size in mm.
01 - 12mm
02 - 15mm
03 - 17mm

NOTE - If metric bore then the information below is not applicable

THE LETTER 'R' IS INCLUDED AFTER THE 'BORE CODE' WHEN THE UNITS ARE MADE IN THE RHP FACTORIES (eg. UCP209R-26S)

-26S

**SEPARATOR WITH
IMPERIAL CODE**

Imperial Bore Diameter 1/2" to 4" inclusive denoted in 1/16" units
(e.g. Bore Code 26 = 26/16 = 1.625 = 1.5/8" Bore)

UC 2 08 -24S**UC****INSERT TYPE**UC/UB - Set Screw Lock
EW/EN - Eccentric Collar Lock
UK - Taper Sleeve Lock**2****DIAMETER SERIES**2 - Light Series
3 - Medium Series**08****BORE CODE
(METRIC)**00 - 10mm
01 - 12mm
02 - 15mm
03 - 17mm
04 upwards, multiply by 5 to obtain bore size in mm.

NOTE - If metric bore then the information below is not applicable

THE LETTER 'R' IS INCLUDED AFTER THE 'BORE CODE' WHEN THE UNITS ARE MADE IN THE RHP FACTORIES (eg. UCP208R-24S)

-24S**SEPARATOR WITH
IMPERIAL CODE**Imperial Bore Diameter 1/2" to 4" inclusive denoted in 1/16" units
(e.g. Bore Code 24 = $24/16 = 1.50 = 1.1/2"$ Bore)

RHP

Standard Self-Lube® bearing units (excluding taper lock)

J NP 45 DEC FS

J	PREFIX CHARACTER	<p>No Prefix - Standard Product T - Triple Lip Seal J - Reverse Outer Ring Assembly (ie. Outer Ring Grease Groove same side as Locking End of Inner Ring)</p>
NP	HOUSING TYPE	<p>NP/SL/MP/CNP/SNP - Cast Iron Pillow Block Units SF/MSF/MSFT/LFTC/FC/MFC - Cast Iron Flanged Units ST/MST - Cast Iron Take Up Units BT/SLC/MSC/SCHB/SCH - Misc. Units SLFE/SLFT/SLFL/LPB/LPBR - Pressed Steel Housings</p>
45	NOMINAL BORE DIAMETER (Imperial & Metric)	<p>Metric Bore Diameter 12 to 100 inclusive denoted in mm. Imperial Bore Diameter 1/2" to 4" inclusive denoted in inches</p>
DEC	SHAFT LOCKING TYPE & INNER RING LENGTH INDICATOR	<p>No character - Set Screw Lock - Long Inner Ring A - Set Screw Lock - Short inner ring DEC - Eccentric collar lock with long inner ring EC - Eccentric collar lock with short inner ring</p>
FS	SUFFIX CHARACTERS (Only the main ones listed)	<p>J - METAL CAGE FITTED MS44 - High temperature insert (+ 150° C max.) - D4M marked on box MS33 - High temperature insert (-55° C min.) - D3M marked on box FS - FLINGER SEALS FITTED 2Z - SHIELDS FITTED L - Larger than normal unit fitted for the basic bore size R - Smaller than normal unit fitted for the basic bore size Note: A combination of suffix characters may apply (eg. 2ZFS)</p>

*Standard Taper Lock Self-Lube® bearing units
with sleeve assembly fitted*

RHP

NP 10 45 - 1.1/2 K

NP	HOUSING TYPE	NP/MP - Cast Iron Pillow Block Units MSF/MSFT - Cast Iron Flanged Units
10	OUTER RING TYPE	10 - Light Series - Outer Ring Spherical O.D.
45	BASIC GROUP INDICATOR	25 to 55 inclusive
-	SEPARATING DIGIT	Separates Basic Group from Taper Sleeve Bore Diameter
1.1/2	NOMINAL BORE DIAMETER (Imperial & Metric)	Metric Bore Diameter 20 to 50 inclusive denoted in mm. Imperial Bore Diameter 3/4" to 2" inclusive denoted in inches
K		K Tapered bore inner ring - sleeve fitted

Designation Systems

Standard Taper Lock Self-Lube[®] bearing units
- no taper sleeve fitted

RHP

NP 10 45 K

NP	HOUSING TYPE	NP/MP - Cast Iron Pillow Block Units MSF/MSFT - Cast Iron Flanged Units
10	OUTER RING TYPE	10 - Light Series - Outer Ring Spherical O.D.
45	BASIC GROUP INDICATOR	25 to 55 inclusive
K		K Tapered bore 1 : 12

T 10 45 - 1.5/8 DEC G J

T	PREFIX CHARACTER	T J No Prefix - Standard Product - Triple Lip Seal - Reverse Outer Ring Assembly (ie. Outer Ring Grease Groove same side as Locking End of Inner Ring)
10	OUTER RING TYPE	10 to 16 inclusive (Even Numbers only) Light Series - Outer Ring Spherical O.D. 11 to 17 inclusive (Odd Numbers only) Light Series - Outer Ring Parallel O.D. 22 - Extra Light Type - Outer Ring Spherical O.D. 23 - Extra Light Type - Outer Ring Parallel O.D. 30 - Medium Series - Outer Ring Spherical O.D. 31 - Medium Series - Outer Ring Parallel O.D.
45	BASIC GROUP INDICATOR	17 to 95 inclusive
-	SEPARATING DIGIT	Separates Basic Group from Insert Bore Diameter
1.5/8	NOMINAL BORE DIAMETER (Imperial & Metric)	Metric Bore Diameter 12 to 95 inclusive denoted in mm. Imperial Bore Diameter 1/2" to 4 inclusive denoted in inches
DEC	SHAFT LOCKING TYPE & INNER RING LENGTH INDICATOR	No character - Set Screw Lock DEC - Eccentric collar lock with long inner ring EC - Eccentric collar lock with short inner ring
G	LUBRICATION FACILITY	No Suffix - Insert cannot be re-greased G - Insert can be re-greased
J	SUFFIX CHARACTERS (Only the main ones listed)	J - Metal cage fitted MS44 - High temperature insert (+ 150° C max.) - D4M marked on box MS33 - High temperature insert (-55° C min.) - D3M marked on box FS - Flinger seals fitted 2Z - Shields fitted L - Larger than normal unit fitted for the basic bore size R - Smaller than normal unit fitted for the basic bore size Note: A combination of suffix characters may apply (eg. 2ZFS)

Standard Taper Lock Self-Lube® inserts with sleeve assembly fitted

RHP

10 25 - 20 K G

10	OUTER RING TYPE	10 - Light Series - Outer Ring Spherical O.D. 11 - Light Series - Outer Ring Parallel O.D.
25	BASIC GROUP INDICATOR	25 to 55 inclusive
-	SEPARATING DIGIT	Separates Basic Group from Taper Sleeve Bore Diameter
20	NOMINAL BORE DIAMETER (Imperial & Metric)	Metric Bore Diameter 20 to 50 inclusive denoted in mm. Imperial Bore Diameter 3/4" to 2" inclusive denoted in inches
K		K Tapered bore inner ring - sleeve fitted
G	LUBRICATION FACILITY	No Suffix - Insert cannot be re-greased G - Insert can be re-greased

*Standard Taper Lock Self-Lube[®] bearing inserts
- no taper sleeve fitted*

RHP

10 25 K G

10	OUTER RING TYPE	10 - Light Series - Outer Ring Spherical O.D. 11 - Light Series - Outer Ring Parallel O.D.
25	BASIC GROUP INDICATOR	25 to 55 inclusive
K		K Tapered bore 1 : 12
G	LUBRICATION FACILITY	No Suffix - Insert cannot be re-greased G - Insert can be re-greased

25 P**25****BASIC GROUP
INDICATOR**

20 to 60 inclusive

P

Identifies Protection

RHP

Standard Silver-Lube bearing units (Set Screw Lock Type)

P NP 25 CR

P	PREFIX CHARACTER	P - Identifies Plastic Housing
NP	HOUSING TYPE	NP - Pillow Block Units SF - Four Bolt Flanged Units SFT - Two Bolt Flanged Units
25	NOMINAL BORE DIAMETER (Imperial & Metric)	Metric Bore Diameter 20 to 35 inclusive denoted in mm. Imperial Bore Diameter 3/4" to 1.7/16" inclusive denoted in inches
CR	SUFFIX CHARACTERS	CR - Identifies Corrosion Resistant Bearing Insert fitted

J 10 25 - 25 G CR

J	PREFIX CHARACTER	J - Reverse Outer Ring Assembly (ie. Lubrication Hole same side as Locking End of Inner Ring)
10	OUTER RING TYPE	10 - Light Series - Outer Ring Spherical O.D.
25	BASIC GROUP INDICATOR	20 to 35 inclusive
-	SEPARATING DIGIT	Separates Basic Group from Nominal Bore Diameter
25	NOMINAL BORE DIAMETER (Imperial & Metric)	Metric Bore Diameter 20 to 35 inclusive denoted in mm. Imperial Bore Diameter 3/4" to 1.7/16" inclusive denoted in inches
G	LUBRICATION FACILITY	G - Insert can be re-greased
CR	SUFFIX CHARACTERS	CR - Identifies Corrosion Resistant Bearing Insert

P 25 P**P****PREFIX
CHARACTER**

P - Identifies Plastic End Cover

25**BASIC GROUP
INDICATOR**

20 to 35 inclusive

P**SUFFIX
CHARACTER**

P - Identifies Protection

RHP

Disc Harrow bearings (Square and Round bore)

PD NF 1 40 - 1.1/2 G

PD	OUTER RING WIDTH	PD - Wide Outer Ring D - Narrow Outer Ring
NF	OUTER RING O.D. FORM	NF - Outer Ring Spherical O.D. F - Outer Ring Parallel O.D.
1	INNER RING WIDTH	1 - Narrow Inner Ring 2 - Wide Inner Ring
40	BASIC GROUP INDICATOR	40 to 55 inclusive
-	SEPARATING DIGIT	- Separates Basic Group from Bore Size For Round Bores / For Square Bores
1.1/2	NOMINAL BORE SIZE (Imperial & Metric)	Round Bores - (Imperial). 1.3/16" to 2.3/16" inclusive Round Bores - (Metric). 40mm, 45mm, and 50mm. Square Bores - (Imperial). 7/8" to 1.1/2" inclusive (Across Flats) denoted in 1/8" units (eg. 7/8" = 7) Square Bores - (Metric). 30mm, and 40mm. (Across Flats) denoted as 9A and 12A Respectively
G	LUBRICATION FACILITY	No Suffix - Insert cannot be re-greased G - Insert can be re-greased

