2) Inner diameter code

See Table 2.6 for the inner diameter code representing bearing nominal inner diameter.

Table 2.6 Inner diameter code

Bearing nominal inner diameter/mm		Inner diameter code	Example
0.6 to 10 (non-integral)		Directly denoted by millimeter code of nominal inner diameter (units:mm) and separated from dimension series code with "/".	Deep groove ball bearing 619/2.5 d=2.5mm
1 to 9 (integer)		Denoted by nominal bore inner diameter(units:mm) code , for deep groove ball bearings and angular contact ball bearings 7, 8, 9 diameter series, inner diameter and dimension series code are separated with "/"	Deep groove ball bearing 625、619/5 d=5mm
10 to 17	10 12 15 17	00 01 02 03	Deep groove ball bearing 6200 d=10mm
20 to 480 excluding (22 , 28 , 32)		Nominal inner diameter divided by 5 if the quotient is a single number, "0" need to be added on the left , such as 08	Spherical roller bearing 23208 d=40mm
Greater than and equal to 500 and 22, 28, 32		Directly denoted by nominal inner diameter(units:mm) , dimension series are separated by "/"	Spherical roller bearing 230 / 500 D=500mm

2.5 Prefix code

The prefix code of rolling bearings are represented by letters. See Table 2.7 for the number and their meanings.

Table 2.7

Code	Meaning	Example
L	Separable inner ring or outer ring of separable bearing	LNU 205
R	Bearing without separable inner and outer rings (only applied to NA type roller bearing)	RNU 205
K	Roller and cage component	K 81105
WS	Cylindrical thrust roller bearing shaft washer	WS 81105
GS	Cylindrical thrust roller bearing housing washer	GS 81105
F	Radial ball bearings with flanged outer ring, (only applied to d 10mm)	F 619/5
KOW-	Thrust bearing without shaft washer	KOW-51105
KIW-	Thrust bearing without housing washer	KIW-51106
LR	Bearings with separable inner ring or outer ring and rolling element	—

2.6 Suffix code

Suffix code are represented with letters (or add numbers).(Note: Compiling rules of suffix codes are in the following page)

1) Internal structure codes are shown in Table 2.8.

Table 2.8 inner structure code

Code	Meaning	Example
A、B C、D E	1)Represent internal structure change 2)Represent standard design. Its meanings change along with different types and structures.	B 1.Angular contact ball bearing Nominal contact angle a= 40° 7205 B 2.Tapered roller bearing contact angle increase 32305 B C 1.Angular contact ball bearing Nominal contact angle a=15° 7005 C 2.Spherical roller bearing C type 23122 C CA type 23022 CA/W 33 CC type 22205 CC E Reinforced type NU 207 E
AC D ZW	Angular contact ball bearing Nominal contact angle a= 25 ° Split bearing Needle roller cage component Double row	7210 AC K 50×55×20 D K 50×55×20 ZW

Note: E Improved type. internal structure design is improved and bearing's loading capacity is increased.

2) Seal, dust proof and outline change codes and meanings are shown in Table 2.9.

Table 2.9 Seal, dust proof and outline change

Code	Example
K	1210 K, self-aligning ball bearing with tapered bore
	23220 K, spherical roller bearing with tapered bore
K30	24122 K 30, spherical roller bearing with tapered bore (1:30)
R	30307 R, tapered roller bearing with flanged outer ring
N	6210 N, deep groove ball bearing with snap ring groove on outer ring
NR	6210 NR, deep groove ball bearing with snap ring groove and snap ring on outer ring
-RS	6210- RS, deep groove ball bearing with frame rubber seals on one side (contact type)
-2RS	6210- 2RS, deep groove ball bearing with frame rubber seals on both sides (contact type)
-RZ	6210- RZ, deep groove ball bearing with frame rubber seals on one side (non-contact type)
-2RZ	6210-2 RZ, deep groove ball bearing with frame rubber seals on both sides (non-contact type)

Code	Example
-Z	6210-Z, deep groove ball bearing with shield on one side
-2Z	6210-2 Z, deep groove ball bearing with shield on both sides
-RSZ	6210- RSZ, deep groove ball bearing with frame rubber seals (contact type) on one side and shield on the other side
-RZZ	6210- RZZ, deep groove ball bearing with frame rubber seals (non-contact type) on one side and shield on the other side
-ZN	6210-ZN, deep groove ball bearing with shield on one side and snap ring groove on the other side of the outer ring
-2ZN	6210-2 ZN, deep groove ball bearing with shields on both sides, and snap ring groove on the outer ring
-ZNR	6210-ZNR, deep groove ball bearing with shield on one side and snap ring (groove) on the other side of outer ring
-ZNB	6210-2 ZNB, deep groove ball bearing with shield and snap ring groove on the same side
U	53210 U, thrust ball bearing with spherical seat washer

3) Cage structure, material code

See Table 2.10 for cage structures and material codes.

Table 2.10

Code	Meaning
a) cage material	
F	Steel, nodular cast iron or powder metallurgic solid cages added numbers to represent different materials
F1	Carbon steel
F2	Graphitic steel
F3	Nodular cast iron
F4	Powder metallurgy
Q	Bronze solid cages added numbers to represent different materials
Q1	Ferro-aluminum manganese bronze
Q2	Ferro-silicon zinc bronze
Q3	Tantnickel bronze
Q4	Aluminum bronze
M	Brass solid cage
L	Light alloy solid cage added numbers to represent different materials
L1	LY11CZ/Duralumin 11
L2	LY 12 CZ/Duralumin 12
T	Phenolic aldehyde laminated cloth tube solid cage
TH	Glass fiber reinforcement phenolic resin cage (basket type)
TN	Engineering plastic molded cages added numbers to represent different materials
TN1	Nylon
TN2	Polysulfone
TN3	Polyimide
TN4	Polycarbonate
TN5	Polyformaldehyde
J	Steel sheet pressed cages added numbers to represent different materials
Y	Copper sheet pressed cages added numbers to represent different materials
SZ	Cages are made of spring wire or spring.
V	Full of rolling elements (without cage)

Code	Meaning
b) cage structure type and surface treatment	
H	Self-locking pocket cage
W	Weld cage
R	Riveted cage (mostly used for large bearings)
E	Phosphated treatment cage
D	Carbonitrided cage
D1	Carbonizing cage
D2	Nitriding cage
C	Coated cages (C1: silvering)
A	Outer ring guide
B	Inner ring guide
P	Window shape cages with broaching or punching guided by inner ring or outer ring
S	Guide surface with lubricating groove

Note: codes of "b" have to be used together with those of "a".

Compilation rule of suffix code

1) Suffix code are on the right side of the basic number, and there is a one-character space from the basic number (excluding codes with " – " "/").When there are many changed items and several groups of Suffix code, they shall be arranged according to the order in Table 2.2 from left to right;

2) If changed is after Group 4 (including Group 4), "/" is used before its code to separate it from the previous code;
E.g.: 6 203-2Z/P6

3) If changed is either of the two after Group 4 and the meanings of the number or letter might be mixed so, there should be a one-character space between the codes.
E.g.: 6 203-2Z/P6 V1

4) Codes of tolerance classes

Tolerance classes codes are shown in Table 2.11.

Table 2.11 Tolerance classes codes

Code comparison		Example		
New standard	Old standard	New standard		Old standard
/P0	G	6203	Deep groove ball bearing whose tolerance class is 0	203
/P6	E	6203/P6	Deep groove ball bearing whose tolerance class is 6	E 203
/P6x	Ex	30210/P6x	Tapered roller bearing whose tolerance class is 6x	Ex 7210
/P5	D	6203/P5	Deep groove ball bearing whose tolerance class is 5	D 203
/P4	C	6203/P4	Deep groove ball bearing whose tolerance class is 4	C 203
/P2	B	6203/P2	Deep groove ball bearing whose tolerance class is 2	B 203

5) Clearance code

Clearance codes are shown in Table 2.12.

Table 2.12 Tolerance clearance classes

Code comparison		Example	
New standard	Old standard	New standard	Old standard
/C1	1	NN 3006 K/C1, Double row cylindrical roller bearing whose radial clearance belongs to Group 1	1G 3282106
/C2	2	6210/C2, Deep groove ball bearing whose radial clearance belongs to Group 2	2G 210
—	—	6210, Deep groove ball bearing whose radial clearance belongs to Group 0	210
/C3	3	6210/C3, Deep groove ball bearing whose radial clearance belongs to Group 3	3G 210
/C4	4	NN 3006K/C4, Double row cylindrical roller bearing with tapered bore whose radial clearance belongs to Group 4	4G 3182106
/C5	5	NNU 4920K/C5, Double row roller bearing with tapered bore and without rib on inner ring whose radial clearance isGroup 5	5G 4382920

Note: When required to represent the tolerance class code and clearance at the same time, it can be simplified by adding the clearance group number to tolerance class (Group 0 is omitted).
For example: P53=P5+C3 means that the bearing tolerance class is Group P5, and radial clearance is Group 3.

6) Vibration code

Vibration codes are shown in Table 2.13.

Table 2.13 Vibration codes

Code	Meaning	Example
/Z	Bearing's vibration acceleration level added values represent different extremums Vibration acceleration extremums conforming to Group Z1 specified by standards Vibration acceleration extremums conforming to Group Z2 specified by standards Vibration acceleration extremums conforming to Group Z3 specified by standards Vibration acceleration extremums conforming to Group Z4 specified by standards	6204/Z1 6204-2RS/Z2
/V	Bearing's vibration velocity level , added values represent different extremums Vibration velocity level extremums conforming to Group V1 specified by standards Vibration velocity level extremums conforming to Group V2 specified by standards Vibration velocity level extremums conforming to Group V3 specified by standards Vibration velocity level extremums conforming to Group V4 specified by standards	6305/V1 6305/V2

Note: Other codes and non-standard special bearing codes are not listed in the above table. Please consult the technical center of C&U Group if necessry.

7) Arrangement code

Arrangement codes are shown in Table 2.14

Table 2.14 Configuration codes

Code	Meaning	Example
/DB	Matched back to back mounting	7210C/DB
/DF	Matched face-to-face mounting	32205/DF
/DT	Matched tandem mounting	7210C/DT

8) Code of bearings with accessories

Codes of bearings with accessories consist of bearing codes (compiled according to mentioned method) + accessory code. Specific codes are listed in Table 2.15.

Table 2.15

Accessory Name	Code of bearings with accessories	Example
Adapter sleeve	Bearing code + urgent adaptive sleeve code	22205 K+H 305
Withdrawal sleeve	Bearing code + withdrawal sleeve code	22205 K+AH 305
Inner ring	Needle roller bearing without inner rings needle roller combined bearing bearing code + IR	NKX 30+IR
Separate thrust collar	Applied to cylindrical roller bearing Bearing code + separate thrust collar code (2)	NJ 210+HJ 210

Remarks:

(1) Only applied to the package and drawing, design document, manual mark of bearings with accessories, but not applicable to bearing ratio marker.

(2) Can combine and simplify NJ… +HJ… =NH,
E.g.: NH 210