

**Complementary SKF marking****Symbols placed before the basic bearing marking**

- L - free separable bearing ring
- R - separable bearing without free ring
- K - inner or outer cone bearing ring from standard AFBMA bearings series

**Symbols placed after the basic bearing marking**  
**Inner design marking**

- A
- B
- C
- D - altered inner design in comparison with the original design
- CC - single row angular ball bearing with contact angle 12°
- C - single row angular ball bearing with contact angle 15°
- AC - single row angular ball bearing with contact angle 25°
- B - single row angular ball bearing with contact angle 40°
- B - cone bearing with increased contact angle
- C
- CC - barrel bearing with inner ring without guiding lips, with free ring separating two rows of rollers and pressed sheet metal cage
- E - barrel bearing with inner ring without guiding lips, with free ring separating two rows of rollers and pressed sheet metal cage with increased capacity
- CA
- CAC - barrel bearing with inner ring with guiding lips, with free ring separating two rows of rollers and solid metal cage
- EC
- ECA
- ECAC - barrel bearings ( C, CA, and CAC type) with increased capacity
- EC - single row cone bearing with increased capacity

**Outer design marking**

- K - Cone opening with 1:12 convergence
- K30 - Cone opening with 1:30 convergence
- N - Ring groove on outer ring
- NR - Ring groove on outer ring and snap ring
- N2 - Two fixed cuttings on outer ring
- X - Dimensions in accordance with ISO standards
- X - Roller race surface (bearing-rollers)

**Sealing marking**

- Z - Protection metal
- ZZ - Protection metal on both sides of the bearing
- ZN - Protection metal and ring groove on the outer ring on the opposite side of the metal
- ZNR - Protection metal and ring groove with snap ring on the opposite side of protection metal
- RS - Rubber seal (needle bearing)
- 2RS - RS seal on both sides of the bearing
- RS1 - Rubber seal
- 2RS1 - RS1 seal on both sides of the bearing
- RZ - No-contact rubber seal

2RZ - RZ seal on both sides of the bearing  
LS - Rubber seal (linear ball bearings)  
2LS - LS seal on both sides  
PP - Rubber seals on both sides  
2F - Thrower on both sides of the bearing (self-aligning ball bearings)  
2RF - Thrower sealing on both sides of the bearing (self-aligning ball bearings)

### **Cage marking**

J - Pressed sheet steel cage  
Y - Pressed sheet brass cage  
F - Solid steel or special cast iron cage  
L - Light metal solid cage  
M - Solid brass cage  
T - Tekstolit cage  
P TN9 - Glass fibre reinforced polyamide cage

Additional A and B letters are used to indicate the cage guidance way. A means that cage is guided on outer ring. B indicates that cage is guided on inner ring. Lack of additional letter means that cage is guided on rolling elements

V - Bearing with full number of rolling elements (without cage)

### **Work precision grade**

CLN - Tight tolerance in accordance with 6X standard  
CL3 - Precision grade in accordance with ISO 3 grade (inch cone bearings)  
CL0 - Precision grade in accordance with ISO 0 grade, higher than CL3 (inch cone bearings)  
CL7A - standard cone bearings for pinion  
CL7C - special cone bearings for pinion  
P6 - Precision grade in accordance with ISO 6  
P5 - Precision grade in accordance with ISO 5  
P4 - Precision grade in accordance with ISO 4  
P4A - dimensions precision in accordance with ISO 4 and rotation precision in accordance with ABEC9 by AFBMA  
PA9A - Precision grade in accordance with ABEC9 by AFBMA  
PA9B - dimensions precision in accordance with ABEC9 by AFBMA, and rotation precision higher than PA9A  
SP - dimensions precision similar to ISO 5, and rotation precision in accordance with ISO 4  
UP - dimensions precision similar to ISO 4, and rotation precision higher than ISO 4

### **Inner slackness marking**

C1 - slackness lower than C2  
C2 - slackness lower than normal  
CN - normal slackness  
C3 - slackness higher than normal  
C4 - slackness higher than C3  
C5 - slackness higher than C4

Precision and slackness grades are connected without C sign

### **Quality (bearing silent running) marking**

Q - optimized contact and surface quality geometry (cone bearings)  
Q66 - vibration level lower than normal, peak vibration parameters lowered  
QE5 - special bearing quality for electric devices  
QE6 - standard bearing quality for electric devices

### **Bearings in assembly marking**

GA

GB

GC - single row angular ball bearing designed for mounting in assembly (in system O, X or T) with a clamp:

(A) - light

(B) - medium

(C) - heavy

before mounting in system O or X

CA - single row angular ball bearing in CB designed for mounting in CC (in system O, X or T) with axial clearance:

(A) - low

(B) - normal

(C) - increased

przed zabudowa w ukladzie O lub X.

DB

DF

DT - two ordinary ball bearings, single row angular ball bearings, single row cone bearings designed for mounting in assembly:

(B) - in system O

(F) - in system X

(T) - in system T

DG - two ordinary ball bearings, single row angular ball bearings, single row cone bearings designed for mounting in assembly (in system O, X or T). Letters which appear directly after these symbols indicate axial clearance or two bearings clamp before mounting in system O or X

A - light clamp (single row angular ball bearings)

B - medium clamp (single row angular ball bearings)

C - heavy clamp (single row angular ball bearings)

CA - low slackness (ordinary ball bearings and single row angular ball bearings)

CB - normal slackness (ordinary ball bearings and single row angular ball bearings)

CC - increased slackness (ordinary ball bearings)

CG - "zero" slackness (cone bearings)

C... - special slackness (given number indicates the slackness parameter)

GA - light clamp (ordinary ball bearings)

GB - medium clamp (ordinary ball bearings)

G... - special clamp (number given crosses out the clamp parameter)

### **Stabilization marking**

Bearings are stabilized for working temperatures

S0 - up to 150°C

S1 - up to 200°C

S2 - up to 250°C

S3 - up to 300°C

S4 - up to 350°C

### **Lubrication marking**

AS - grease hole in outer ring (needle bearings)

ASR - grease groove and grease hole in outer ring (needle bearings)

IS - grease hole in inner ring (needle bearings)

ISR - grease groove and grease hole in inner ring (needle bearings)

W - no grease holes in bearing rings

W20 - three grease holes in outer ring

W26 - six grease holes in inner ring

W33 - grease groove and three grease holes in outer ring

W33X - grease groove and three grease holes in outer ring

W513 - W26 + W33

W518 - W20 + W26

### **Grease marking**

HT - grease for high working temperatures (-20 do+130°C)  
LHT - grease for low and high working temperatures (-40 do+140°C)  
LT - grease for low working temperatures (-50 do + 80°C)  
MT - grease for medium working temperatures (-30 do+110°C)  
A - grease amount in bearing lower than normal  
B - grease amount in bearing higher than normal  
C - grease amount in bearing higher than normal (higher than B)

### Special design

VA... - special-purpose bearing  
VB... - bearing with altered inner design (in comparison with standard design)  
VE... - bearing with altered inner or outer design  
VS... - bearing with special inner slackness  
These symbols appear together with 3 digit number

Example marking:

6210-2RS1 NR C3/HT51B -  
6210-2RS1 NR C3/HT51B - ordinary ball bearings  
6210-2RS1 NR C3/HT51B - with two rubber seals  
6210-2RS1 NR C3/HT51B - ring groove on outer ring and snap ring  
6210-2RS1 NR C3/HT51B - slackness C3,  
6210-2RS1 NR C3/HT51B - filled with special grease for high working temperatures  
6210-2RS1 NR C3/HT51B - grease amount larger than normal

6208-2Z/VA208  
6208-2Z/VA208 - ordinary ball bearing  
6208-2Z/VA208 - with two protection metals  
6208-2Z/VA208 - designed specially for cotter trolleys

60/1000 MB C3  
60/1000 MB C3 - ordinary ball bearing  
60/1000 MB C3 - solid brass cage  
60/1000 MB C3 - guided on inner ring  
60/1000 MB C3 - radial clearance C3

7207 ACD/P4A  
7207 ACD/P4A - single row angular ball bearing  
7207 ACD/P4A - contact angle 25°  
7207 ACD/P4A - altered inner design  
7207 ACD/P4A - precision grade P4A  
7207 ACD/P4A - tekstolit cage guided on outer ring (not indicated)

71904 CD GA/PA9A  
71904 CD GA/PA9A - single row angular ball bearing  
71904 CD GA/PA9A - contact angle 15°  
71904 CD GA/PA9A - altered inner design  
71904 CD GA/PA9A - designed for mounting in assembly (in system O, X or T) with clamp, before mounting in system O or X  
71904 CD GA/PA9A - precision in accordance with ABEC9 by AFBMA tekstolit cage guided on outer ring (not indicated)

7306 BECB P P5  
7306 BECB P P5 - single row angular ball bearing  
7306 BECB P P5 - contact angle 40°  
7306 BECB P P5 - designed for mounting in assembly (in system O, X or T) with normal axial clearance, before mounting in system O or X  
7306 BECB P P5 - glass fibre reinforced polyamide cage, guided on rolling elements

7306 BECB P P5 - precision grade P5

NU224 EC J P63

NU224 EC J P63 - single row roller bearing

NU224 EC J P63 - altered inner design

NU224 EC J P63 - pressed steel cage, increased bearing capacity

NU224 EC J P63 - precision grade P6

NU224 EC J P63 - radial clearance C3

L 31313

L 31313 - free ring (outer)

L 31313 - cone bearing 31313

bbbK-09195

K-09195 - outer ring

K-09195 - cone bearing (inch) from series 09000 by AFBMA

32220/DF

32220/DF - two single row cone bearings

32220/DF - paired for mounting in assembly in system X, standard axial clearance (not indicated)

23068 CC K C3/W33

23068 CC K C3/W33 - barrel bearing

23068 CC K C3/W33 - inner ring without guiding lip, free ring separating two rows, pressed steel cage

23068 CC K C3/W33 - Cone opening with 1:12 convergence

23068 CC K C3/W33 - Radial clearance C3

23068 CC K C3/W33 - Grease groove and three grease holes in outer ring

---