



SYMBOLS OF BEARINGS

Designation of Bearings

Example:	6202	TN	ZZ	N	P6	C3	S1
Position	1	2	3	4	5	6	7

1. Base Designation:

Base designation consist of symbols for the bearing series and the bearing bore.

The first two digits are symbols for the series identifying bearing type and dimensions.

The last two digits identify bearing bore diameter.

..00 Bore Diameter = 10 mm

..01 Bore Diameter = 12 mm

..02 Bore Diameter = 15 mm

..03 Bore Diameter = 17 mm

..04 Bore Diameter = 20 mm

from 04 onwards, bore diameter symbol is calculated with formula symbol x 5

For example: Bore Diameter of bearing 6205 us calculated as
 $05 \times 5 = 25 \text{ mm}$

2. Cages:

J	Pressed Steel Cage
Y	Pressed Brass Cage
TN	Polyamide 6.6 Plastic Cage
TN1	Glass Fibre Reinforced Polyamide 6.6 Plastic Cage
M	Solid Brass Cage

3. Sealing of Bearings:

Z	Shield on one side
ZZ	Shield on both sides
RS	Seal on one side
2RS	Seal on both sides

RSR	} Rubber Seal Types
RS1	
RSS	
RDD	

Standard material for seals is NBR and is not shown on the designation.
"A" stands for Acrylic material. "V" is for Viton material.

ZN		Shield on one side. Snap ring on other side.
ZNB	}	Shield/ seal. Snap ring on other side.
RSNB		
ZNBR	}	Same as ZNB / RSNB, but with a snap ring.
RSNBR		

4. Inner Construction & Outer Profile:

B	Angular Contact ball bearing with 40 °
K	Tapered bore bearing (taper 1:12)
K30	Tapered bore bearing (taper 1:30)
N	Snap ring groove on outer ring
NR	Snap ring groove and snap ring
V	Oil groove on the outer ring
NO	Groove and O-ring

5. Tolerance Classes:

Tolerance classes are according to ISO 492 / TS 6269.

-	P0 (not shown)
P6	Tighter tolerance class than P0
P5	Tighter tolerance class than P6
P4	Tighter tolerance class than P5
P2	Tighter tolerance class than P4

6. Bearing Clearance:

C2	Smaller radial clearance than C0
-	C0, normal clearance (not shown)
C3	Larger radial clearance than C0
C4	Larger radial clearance than C3
C5	Larger radial clearance than C4

Note: H, M, and L letters indicate tight clearance

H	High
M	Medium
L	Low

The clearance group might be combined with the tolerance field.

For Example; P63 = P6 + C3

7. Heat Treatment:

-	S0, Operating temperature up to max. 150°C (not shown) (ring hardness: HRc 60-64)
S1	Operating temperature between 150°C & 200°C (ring hardness: HRc 57-61)
S2	Operating temperature between 200° & 250°C (ring hardness: HRc 53-57)
S3	Operating temperature between 250° & 300°C (ring hardness: HRc 51-55)
S4	Operating temperature between 300° & 350°C (ring hardness: HRc 50-54)