

BEARING IDENTIFICATION EXAMPLE

1. Find the following Bearing: 6205 2RS1C3

The bearing type design that you need is a single row deep groove ball bearing with the following dimensions and suffix.

d = 25mm

D = 52mm

B = 15mm

Result = 6205

The bearing also has a rubber seal either side of the bearing.

2RS1 = 2 Rubber seals

2RSR = 2 Rubber seals

DDU = 2 Rubber seals

ZZ = 2 Metal shields

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Result = 6205 2RS1

And the internal clearance being C3 means that the bearing has room for expansion if needed between the races of the bearing, whilst holding the outer ring and moving the inner ring in a radial movement you will detect a little amount of play between the 2 rings. All standard clearance bearings have this movement, it may only be a small amount of movement but is controlled by international standards. C3 means the bearing has more clearance than standard.

For example, we may use C3 clearance on bearings where a cold start up application may cause the balls to heat up quickly, the heat needs to go somewhere. Some of the heat gets passed through the outer race to the housing and the inner race to the shaft, this causes expansion which closes the clearance in the bearing. If you did not allow for this clearance the bearing would not have room for expansion and lead to bearing failure.

C2 = Clearance less than normal

C3 = Clearance greater than normal

C4 = Clearance greater than C3

Result = 6205 2RS1C3