



# 7210 BEP Angular contact ball bearings, single row

- Popular item

## Angular contact ball bearings, single row

### Bearing data

[Tolerances,](#)

Normal (metric), P6, P5, Normal (inch),

[Internal clearance,](#)

CA+CB+CC, G,

[Preload,](#)

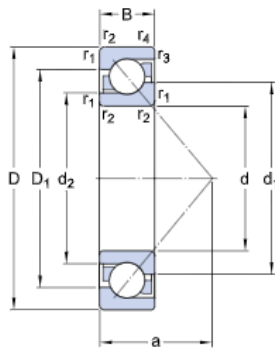
GA+GB+GC

### Bearing interfaces

[Seat tolerances for standard conditions,](#)

[Tolerances and resultant fit](#)

## Technical specification



### DIMENSIONS

d	50 mm	Bore diameter
D	90 mm	Outside diameter
B	20 mm	Width
d1	≈ 65.75 mm	Shoulder diameter inner ring (large side face)
d2	≈ 57.68 mm	Shoulder diameter inner ring (small side face)
D1	≈ 75.15 mm	Shoulder diameter outer ring (large side face)
a	39 mm	Distance pressure point
r <sub>1,2</sub>	min. 1.1 mm	Chamfer dimension
r <sub>3,4</sub>	min. 0.6 mm	Chamfer dimension outer ring small side face

### ABUTMENT DIMENSIONS

d <sub>e</sub>	min. 57 mm	Abutment diameter shaft
D <sub>i</sub>	max. 83 mm	Abutment diameter housing
D <sub>j</sub>	max. 85.8 mm	Abutment diameter housing
r <sub>a</sub>	max. 1 mm	Fillet radius
r <sub>b</sub>	max. 0.6 mm	Fillet radius



## CALCULATION DATA

C	37.7 kN	Basic dynamic load rating
C <sub>0</sub>	28.5 kN	Basic static load rating
P <sub>u</sub>	1.22 kN	Fatigue load limit
	9 000 r/min	Reference speed
	8 500 r/min	Limiting speed
A	0.014	Calculation factor
k <sub>r</sub>	0.095	Calculation factor
e	1.14	Calculation factor

## SINGLE BEARING OR BEARING PAIR ARRANGED IN TANDEM

X	0.35	Calculation factor
Y <sub>0</sub>	0.26	Calculation factor
Y <sub>2</sub>	0.57	Calculation factor

## BEARING PAIR ARRANGED BACK-TO-BACK OR FACE-TO-FACE

X	0.57	Calculation factor
Y <sub>0</sub>	0.52	Calculation factor
Y <sub>1</sub>	0.55	Calculation factor
Y <sub>2</sub>	0.93	Calculation factor