

Technical data

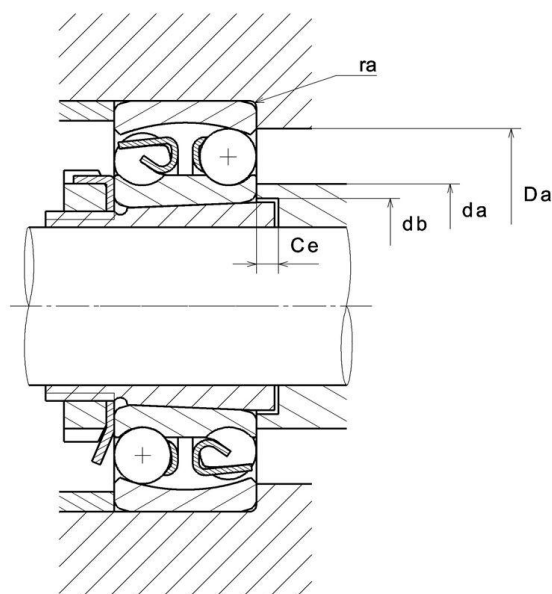
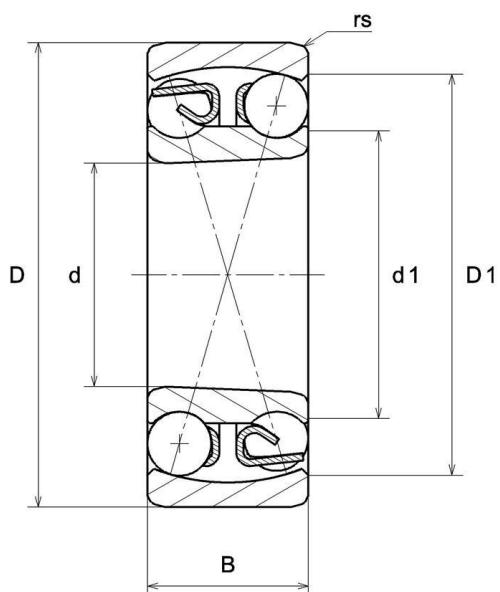
2209.K

Double-row self-aligning ball bearings



Self-aligning ball bearing, pressed steel cage, tapered bore, open

VISUAL (S)



2209.K

Double-row self-aligning ball bearings

PRODUCT DEFINITION

Brand	SNR
d - Internal diameter	45 mm
D - External diameter	85 mm
B - Bearing/Inner ring width	23 mm
d1 - External diameter inner ring	57,7 mm
D1 - Inner diameter outer ring	71,8 mm
rs - Min fillet radius	1,1 mm
Associated sleeve reference	H309
Radial clearance class	CN
Precision class	P0
Mass	0,54 kg

PRODUCT PERFORMANCE

C - Dynamic load	23000000 mN
C0 - Static load	8200000 mN
Cu - Fatigue limit load	370000 mN
e - Coefficient	0.31
Y0 - Static axial load coefficient	2.16
Y1 - Lower axial load coefficient	2.06
Y2 - Upper axial load coefficient	3.19
N ref - Reference thermal speed	48600 °/s
N lim - Mechanical Limit Speed	60000 °/s
Tmin - Min operating temperature	233,15 °K
Tmax - Max operating temperature	393,15 °K



NTN Europe

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BEARING FREQUENCIES	
BPFO - Over rolling frequency on outer ring (60 rpm)	7.698 Hz
BPFI - Over rolling frequency on inner (60 rpm)	10.302 Hz
BSF - Over rolling frequency on rolling element (60 rpm)	6.63 Hz
BRF - Rotational frequency - rolling element (60 rpm)	3.315 Hz
FTF - Rotational frequency - cage (60 rpm)	0.428 Hz

ABUTMENT	
da min - Min shoulder diameter IR	51,5 mm
da max - Max shoulder diameter IR	56 mm
db - Min diameter for Sleeve	50 mm
Ce - Min length fro Sleeve	8 mm
Da max - Max shoulder diameter OR	78,5 mm
ra max - Max shaft & housing fillet radius	1 mm

