

PDF technical sheet

230/710BL1C3

Double row spherical roller bearings

Spherical roller bearing, with central rib on inner ring, 2-part machined cage centred on inner ring, groove and lubrication holes on outer ring

Product definition	
d	27.9528 "
D	40.5512 "
B	9.2913 "
d2	32.2047 "
D1	36.8543 "
rs min	0.2953 "
b	1.2992 "
k	0.7874 "
e	0.22
Y1	3.02
Y2	4.5
Y0	2.96
Radial clearance class	C3
Brand	NTN

Product performance	
Dynamic load, C	7,200 kN
Static load, C0	16,200 kN
Fatigue limit load, Cu	1,142 kN
Nref	330 RPM
Nlim	490 RPM
Min operating temperature, Tmin	-40 °C
Max operating temperature, Tmax	248 °C
Characteristic cage frequency, FTF	0.46 Hz
Characteristic rolling element frequency, BSF	11.15 Hz
Characteristic outer ring frequency, BPF0	13.68 Hz
Characteristic inner ring frequency, BPFI	16.32 Hz

Abutment dimensions	
da min	29.0551 "
Da max	39.4488 "
ra max	0.2362 "

Calculation factors

Equivalent dynamic radial load

$$P = X.F_r + Y.F_a$$

$F_a / F_r \leq e$		$F_a / F_r > e$	
X	Y	X	Y
1	Y1	0.67	Y2

Equivalent static radial load

$$P_0 = X_0.F_r + Y_0.F_a$$

X_0	Y_0
1	Y0

The values for e, Y1, Y2 and Y0 are shown in the above table .