

PDF technical sheet

23284BL1K

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, tapered bore 1:12

Product definition	
d	16.5354 "
D	29.9213 "
B	10.7087 "
d2	20.7874 "
D1	25.3031 "
rs min	0.2953 "
Number of lubrication holes	8
b	1.2992 "
k	0.7874 "
Associated sleeve reference	H3284
e	0.36
Y1	1.86
Y2	2.77
Y0	1.82
Radial clearance class	CN
Brand	NTN

Product performance	
Dynamic load, C	6,550 kN
Static load, C0	12,000 kN
Fatigue limit load, Cu	800 kN
Nref	340 RPM
Nlim	700 RPM
Min operating temperature, Tmin	-40 °C
Max operating temperature, Tmax	248 °C
Characteristic cage frequency, FTF	0.43 Hz
Characteristic rolling element frequency, BSF	6.95 Hz
Characteristic outer ring frequency, BPF0	8.20 Hz
Characteristic inner ring frequency, BPFI	10.80 Hz

Abutment dimensions

da min	17.7953 "
db min	17.6772 "
Ce min	0.6299 "
Da max	28.6614 "
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 .