

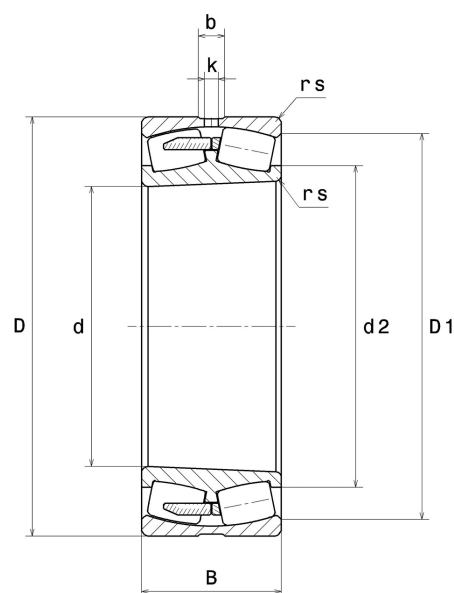
PDF technical sheet 23960K



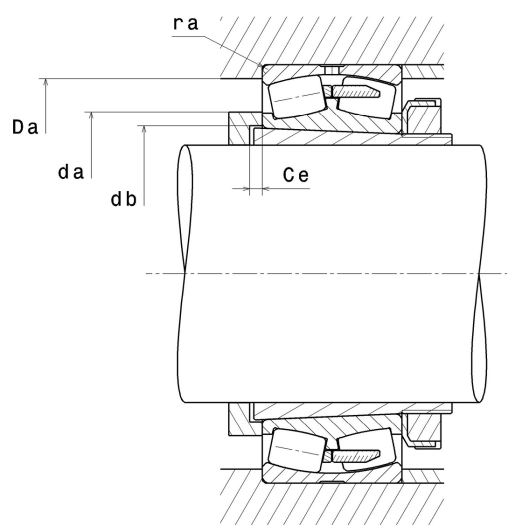
Double row spherical roller bearings

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	11.8110 "
D	16.5354 "
B	3.5433 "
rs min	0.1181 "
Number of lubrication holes	8
b	0.5512 "
k	0.3150 "
Associated sleeve reference	H3960
e	0.2
Y1	3.34
Y2	4.98
Y0	3.27
Radial clearance class	CN
Brand	NTN



Product performance	
Dynamic load, C	1,110 kN
Static load, C0	2,320 kN
Fatigue limit load, Cu	198 kN
Nref	1,000 RPM
Nlim	1,300 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	13.32 Hz
Characteristic outer ring frequency, BPF0	16.67 Hz
Characteristic inner ring frequency, BPF1	19.33 Hz



Abutment dimensions

da min	12.2992 "
db min	12.2835 "
Ce min	0.4724 "
Da max	16.0472 "
ra max	0.0984 "

Calculation factors

Equivalent dynamic radial load

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

Fa / Fr ≤ e		Fa / Fr > 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 .