Brand of NTN corporation



Technical data

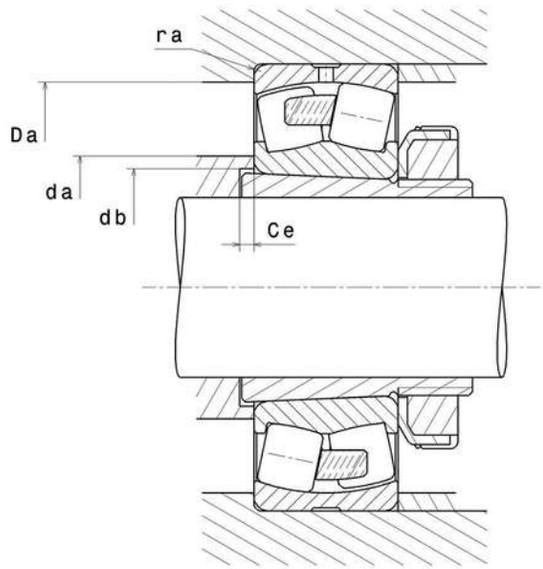
22324EKF800

Spherical roller bearings

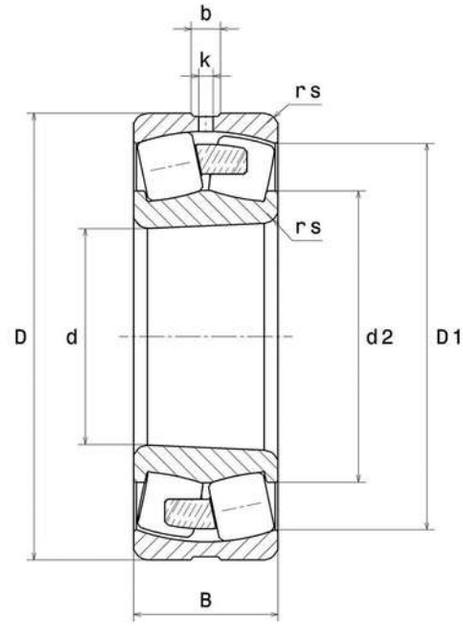
Spherical roller bearing for vibratory applications, one-piece machined cage, groove and lubrication holes on outer ring, tapered bore 1:12, special C4 class clearance

ULTAGE

VISUAL (S)



22324EKF800
Spherical roller bearings



PRODUCT DEFINITION	
Brand	SNR
d - Internal diameter	120 mm
D - External diameter	260 mm
B - Bearing/Inner ring width	86 mm
d2 - External diameter inner ring	0 mm
D1 - Inner diameter outer ring	224 mm
rs - Min fillet radius	3 mm
Number of lubrication holes	3 ou 4
b - Groove width	17,98 mm
k - Hole diameter	8 mm
Associated sleeve reference	H2324
Radial clearance class	C4 Special
Mass	22,15 kg

22324EKF800
Spherical roller bearings

PRODUCT PERFORMANCE	
C - Dynamic load	1170000000 mN
C0 - Static load	1280000000 mN
Cu - Fatigue limit load	127000000 mN
e - Coefficient	0.32
Y0 - Static axial load coefficient	2.04
Y1 - Lower axial load coefficient	2.09
Y2 - Upper axial load coefficient	3.11
N ref - Reference thermal speed	12000 °/s
N lim - Mechanical Limit Speed	15000 °/s
Tmin - Min operating temperature	233,15 °K
Tmax - Max operating temperature	473,15 °K

BEARING FREQUENCIES	
BPFO - Over rolling frequency on outer ring (60 rpm)	6.578 Hz
BPFI - Over rolling frequency on inner (60 rpm)	9.422 Hz
BSF - Over rolling frequency on rolling element (60 rpm)	5.328 Hz
BRF - Rotational frequency – rolling element (60 rpm)	2.664 Hz
FTF - Rotational frequency - cage (60 rpm)	0.411 Hz

ABUTMENT	
da max - Max shoulder diameter IR	0 mm
da min - Min shoulder diameter IR	134 mm
db - Min diameter for Sleeve	131 mm
Ce - Min length fro Sleeve	7 mm
Da max - Max shoulder diameter OR	246 mm

ABUTMENT

ra max - Max shaft & housing fillet radius	2,5 mm

INDUSTRY CALCUL FACTORS

Equivalent dynamic radial load

$P = X.Fr + Y.Fa$

Fa / Fr ≤ e		Fa / Fr > e	
X	Y	X	Y
1	Y1	0.67	Y2

Equivalent static radial load

$Po = Xo.Fr + Yo.Fa$

X_0	Y_0
1	Y0

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