

PDF technical sheet

10X22209EAKW33EEC3

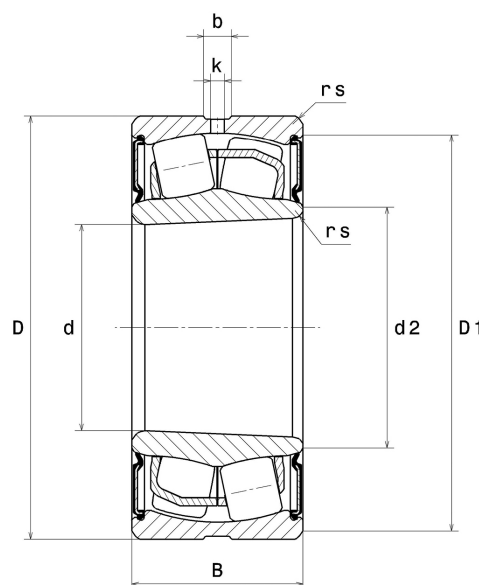


Double row spherical roller bearings

Spherical roller bearing, pressed steel cage, groove and lubrication holes on outer ring, tapered bore 1:12, non ISO width, contact seals on both sides

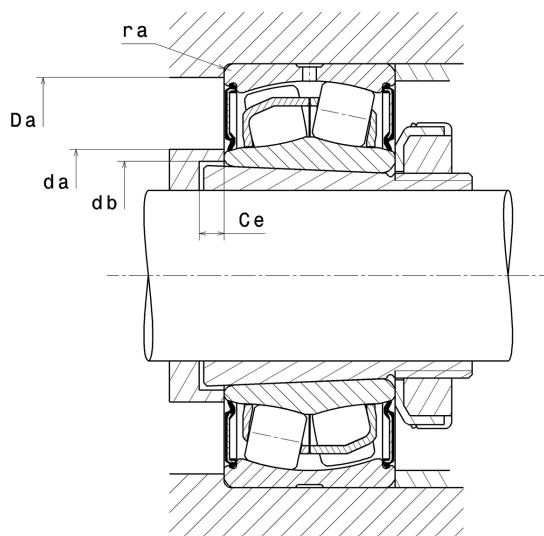
Product definition

d	1.7717 "
D	3.3465 "
B	1.1024 "
d2	2.0630 "
D1	3.0984 "
rs min	0.0433 "
Number of lubrication holes	3
b	0.2283 "
k	0.0984 "
e	0.26
Y1	2.64
Y2	3.93
Y0	2.58
Radial clearance class	C3
Mass	2.25 oz
Brand	SNR



Product performance

Dynamic load, C	121 kN
Static load, C0	113 kN
Fatigue limit load, Cu	12.70 kN
Nlim	2,100 RPM
Min operating temperature, Tmin	14 °C
Max operating temperature, Tmax	248 °C
Characteristic cage frequency, FTF	0.42 Hz
Characteristic rolling element frequency, BSF	6.07 Hz
Characteristic outer ring frequency, BPF0	7.16 Hz
Characteristic inner ring frequency, BPF1	9.85 Hz



Abutment dimensions

da min	2.0472 "
da max	2.0630 "
Da max	3.0984 "
ra max	0.0394 "

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 .