

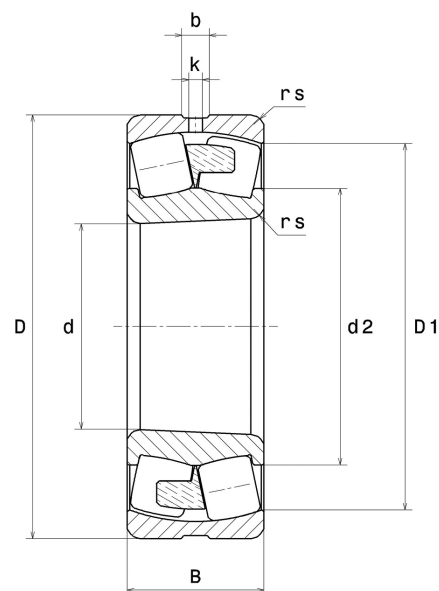
PDF technical sheet 23160EMKW33C3



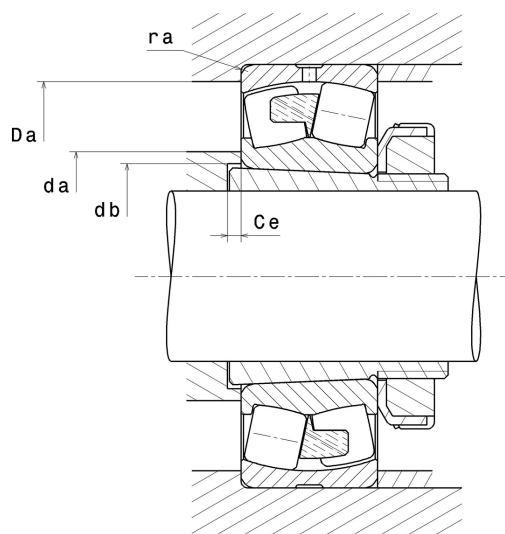
Double row spherical roller bearings

Spherical roller bearing, one-piece machined cage centred on inner ring, groove and lubrication holes on outer ring, tapered bore 1:12

Product definition	
d	11.8110 "
D	19.6850 "
B	6.2992 "
d2	13.5394 "
D1	17.4606 "
rs min	0.1969 "
Number of lubrication holes	8
b	1.0630 "
k	0.6299 "
Associated sleeve reference	H3160H
e	0.3
Y1	2.28
Y2	3.39
Y0	2.23
Radial clearance class	C3
Mass	434.61 oz
Brand	SNR



Product performance	
Dynamic load, C	3,770 kN
Static load, C0	5,350 kN
Fatigue limit load, Cu	303 kN
Nref	800 RPM
Nlim	1,300 RPM
Min operating temperature, Tmin	-40 °C
Max operating temperature, Tmax	392 °C
Characteristic cage frequency, FTF	0.43 Hz
Characteristic rolling element frequency, BSF	7.33 Hz
Characteristic outer ring frequency, BPF0	9.12 Hz
Characteristic inner ring frequency, BPF1	11.88 Hz



Abutment dimensions

da min	12.5984 "
db min	12.5197 "
Ce min	0.4724 "
Da max	18.8976 "
ra max	0.1575 "

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 .