

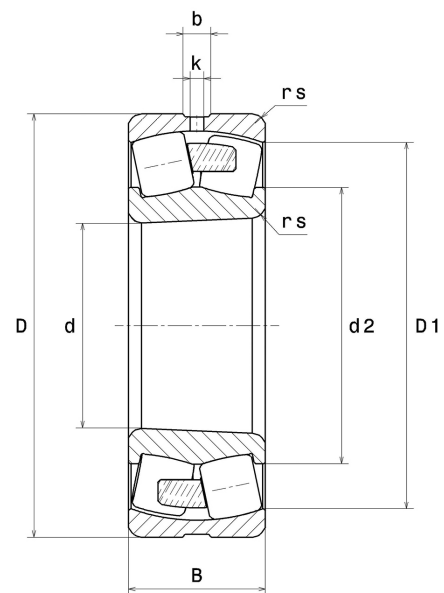
# PDF technical sheet 22212EMKW33C3



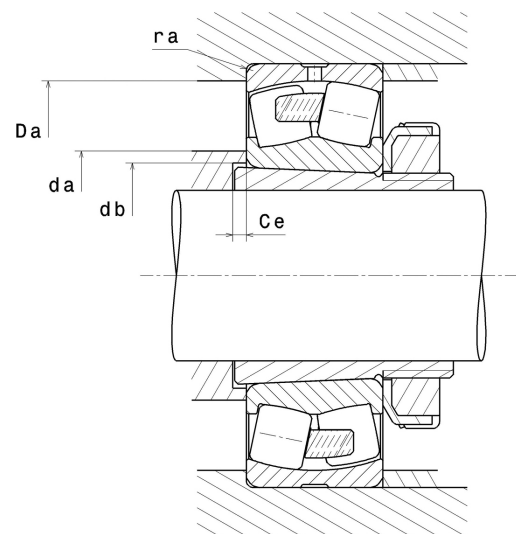
## Double row spherical roller bearings

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

Product definition	
d	2.3622 "
D	4.3307 "
B	1.1024 "
D1	3.8780 "
rs min	0.0591 "
Number of lubrication holes	3
b	0.2717 "
k	0.1181 "
Associated sleeve reference	H312
e	0.24
Y1	2.84
Y2	4.23
Y0	2.78
Radial clearance class	C3
Mass	3.95 oz
Brand	SNR



Product performance	
Dynamic load, C	179 kN
Static load, C0	171 kN
Fatigue limit load, Cu	20.80 kN
Nref	5,700 RPM
Nlim	7,500 RPM
Min operating temperature, Tmin	-40 °C
Max operating temperature, Tmax	392 °C
Characteristic cage frequency, FTF	0.42 Hz
Characteristic rolling element frequency, BSF	6.17 Hz
Characteristic outer ring frequency, BPF0	7.17 Hz
Characteristic inner ring frequency, BPF1	9.83 Hz



### Abutment dimensions

da min	2.7165 "
Da max	3.9764 "
ra max	0.0591 "

### 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 <sub>0</sub>	Y <sub>0</sub>
1	Y0

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