

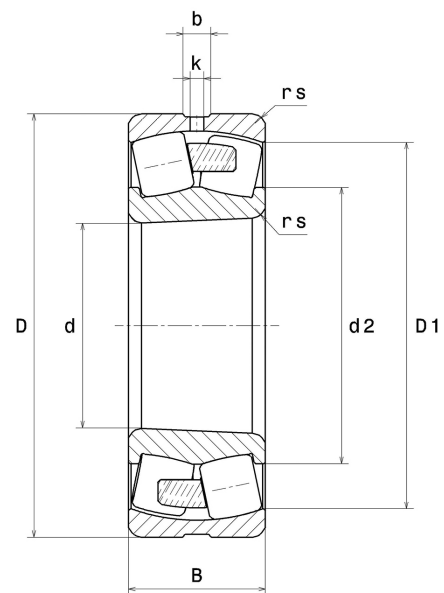
## PDF technical sheet 22205EMKW33C3



### 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	0.9843 "
D	2.0472 "
B	0.7087 "
D1	1.7913 "
rs min	0.0394 "
Number of lubrication holes	3
b	0.1181 "
k	0.0591 "
Associated sleeve reference	H305
e	0.34
Y1	2
Y2	2.98
Y0	1.96
Radial clearance class	C3
Mass	0.56 oz
Brand	SNR



Product performance	
Dynamic load, C	54.20 kN
Static load, C0	42.80 kN
Fatigue limit load, Cu	4.35 kN
Nref	14,000 RPM
Nlim	17,000 RPM
Min operating temperature, Tmin	-40 °C
Max operating temperature, Tmax	392 °C
Characteristic cage frequency, FTF	0.40 Hz
Characteristic rolling element frequency, BSF	4.85 Hz
Characteristic outer ring frequency, BPF0	5.24 Hz
Characteristic inner ring frequency, BPF1	7.76 Hz



### Abutment dimensions

da min	1.2047 "
Da max	1.8268 "
ra max	0.0394 "

### 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 .