

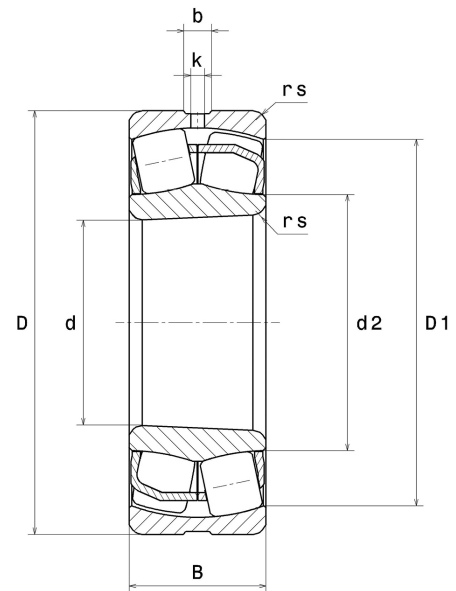
## PDF technical sheet 22314EAKW33



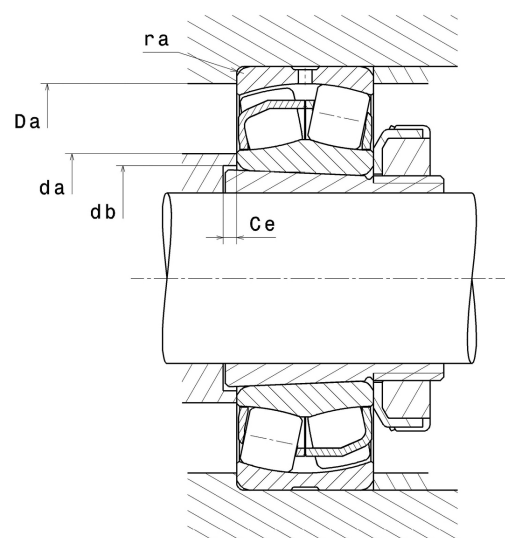
### Double row spherical roller bearings

Spherical roller bearing, pressed steel cage, groove and lubrication holes on outer ring, tapered bore 1:12

Product definition	
d	2.7559 "
D	5.9055 "
B	2.0079 "
d2	3.3858 "
D1	5.0669 "
rs min	0.0827 "
Number of lubrication holes	3
b	0.4094 "
k	0.1969 "
Associated sleeve reference	H2314
e	0.34
Y1	2
Y2	2.98
Y0	1.96
Radial clearance class	CN
Mass	14.46 oz
Brand	SNR



Product performance	
Dynamic load, C	420 kN
Static load, C0	396 kN
Fatigue limit load, Cu	37.80 kN
Nref	3,800 RPM
Nlim	4,500 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	4.72 Hz
Characteristic outer ring frequency, BPF0	5.61 Hz
Characteristic inner ring frequency, BPF1	8.39 Hz



### Abutment dimensions

da min	3.2283 "
db min	2.9921 "
Ce min	0.2362 "
Da max	5.4331 "
ra max	0.0787 "

### Calculation 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

$$P_0 = X_0.Fr + Y_0.Fa$$

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

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