

PDF technical sheet

21318VMKC3

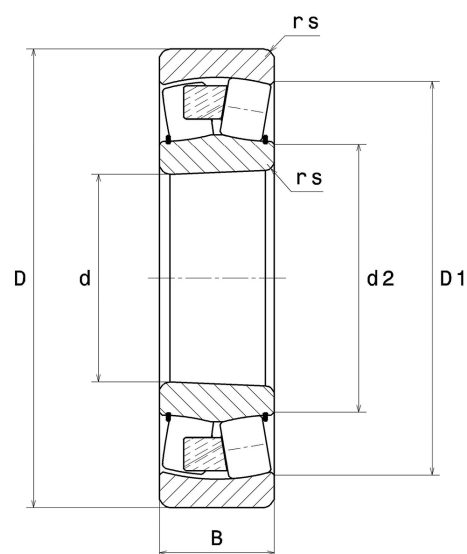


Double row spherical roller bearings

Spherical roller bearing, one-piece machined cage, tapered bore 1:12

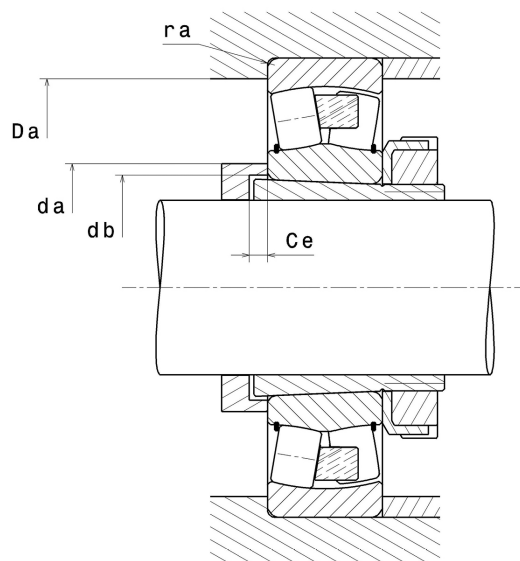
Product definition

d	3.5433 "
D	7.4803 "
B	1.6929 "
D1	6.3583 "
rs min	0.1181 "
Number of lubrication holes	
Associated sleeve reference	H318
e	0.22
Y1	3
Y2	4.47
Y0	2.93
Radial clearance class	C3
Mass	21.27 oz
Brand	SNR



Product performance

Dynamic load, C	405 kN
Static load, C0	398 kN
Fatigue limit load, Cu	48.60 kN
Nref	3,400 RPM
Nlim	4,300 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	6.02 Hz
Characteristic outer ring frequency, BPF0	6.72 Hz
Characteristic inner ring frequency, BPF1	9.28 Hz



Abutment dimensions

da min	4.0945 "
Da max	6.9291 "
ra max	0.0984 "

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 ₀	Y ₀
1	Y0

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