Technical data

23024EMKW33C4

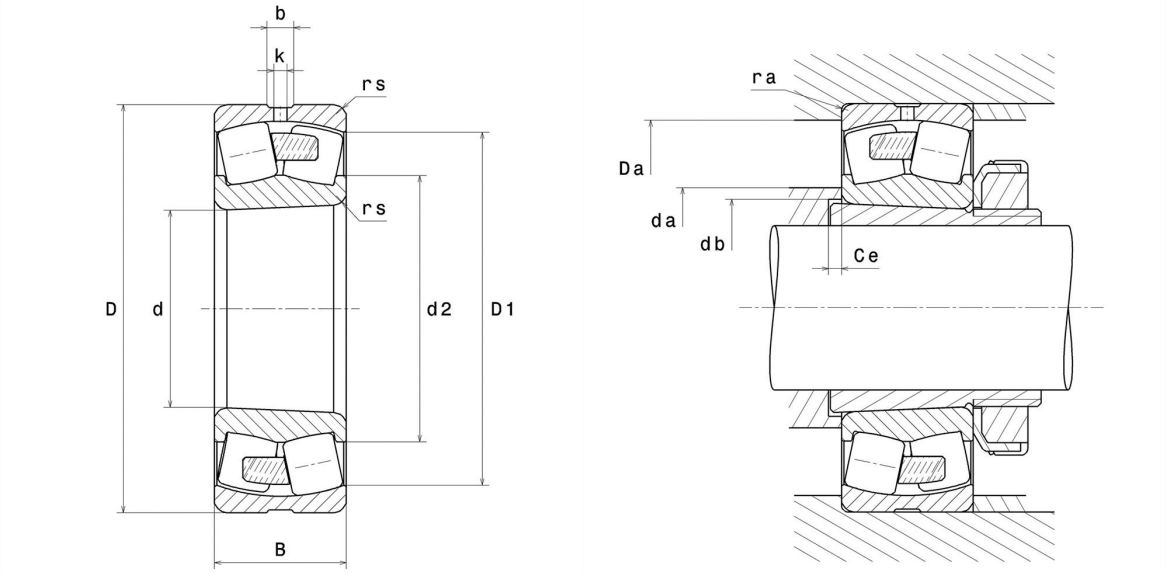
Double row spherical roller bearings



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

ULTAGE

Visual(s)



Product definition

d	120 mm
D	180 mm
B	46 mm
D1	164.9 mm
rs min	2 mm
Number of lubrication holes	3
b	7.8 mm
k	3.5 mm
Associated sleeve reference	H3024
e	0.22
Y1	3.14
Y2	4.67
Y0	3.07
Radial clearance class	C4
Mass	3.9 kg
Brand	SNR

Product performance

Dynamic load, C	446 kN
Static load, C0	577 kN
Fatigue limit load, Cu	51.7 kN
Nref	3,300 Tr/min
Nlim	3,900 Tr/min
Min operating temperature, Tmin	-40 °C
Max operating temperature, Tmax	200 °C
Characteristic cage frequency, FTF	0.45 Hz
Characteristic rolling element frequency, BSF	9.06 Hz
Characteristic outer ring frequency, BPF0	11.15 Hz
Characteristic inner ring frequency, BPFI	13.85 Hz

Abutment dimensions

da min	128.8 mm
da max	2 mm
db min	127 mm
Ce min	7 mm
Da max	171.2 mm
ra max	2 mm

Calculation factors

Equivalent dynamic radial load

$P = X.Fr + Y.Fa$

$Fa/Fr \leq e$		$Fa/Fr > e$	
X	Y	X	Y
1	Y1	0.67	Y2

Equivalent static radial load

$P_0 = X_0.Fr + Y_0.Fa$

X_0	Y_0
1	Y0

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