



Technical data

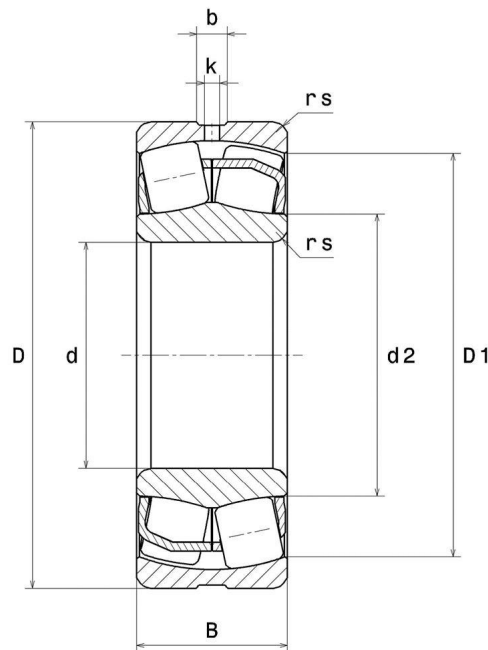
22309EAW33

Spherical roller bearings

Spherical roller bearing, pressed steel cage, groove and lubrication holes on outer ring

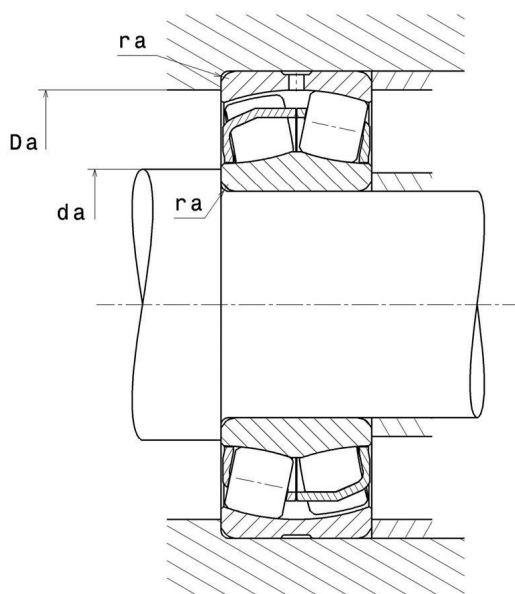
ULTAGE

VISUAL (S)



22309EAW33

Spherical roller bearings



PRODUCT DIMENSIONS

Internal diameter d	45 mm
External diameter D	100 mm
Bearing/Inner ring width(B)	36 mm
External diameter inner ring d2	58 mm
Inner diameter outer ring D1	85,8 mm
Min fillet radius rs	1,5 mm
Number of lubrication holes	3 or 4
Groove width (b)	6,43 mm
Hole diameter (k)	3 mm
Coef e	0.36
Lower axial load coef (Y1)	1.9
Upper axial load coef (Y2)	2.83
Static axial load coef (Y0)	1.86
Radial clearance class	CN
Mass	1,352 kg
Brand	SNR

PRODUCT PERFORMANCE

Dynamic load, C	206 kN
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PRODUCT PERFORMANCE

Static load, C₀	187 kN
Fatigue limit load, C_u	22,8 kN
Reference thermal speed (N_{ref})	5300 tr/min
Mechanical Limit Speed N_{lim}	6700 tr/min
Min operating temperature, T_{min}	-40 °C
Max operating temperature, T_{max}	200 °C
Characteristic cage frequency, FTF	0.403 Hz
Characteristic rolling element frequency, BSF	4.852 Hz
Characteristic outer ring frequency, BPF₀	5.649 Hz
Characteristic inner ring frequency, BPFI	8.351 Hz

ABUTMENT

Max shoulder diameter IR da max	0 mm
Min shoulder diameter IR da min	54 mm
Max shoulder diameter OR Da max	91 mm
Max shaft & housing fillet radius ra max	1,5 mm

INDUSTRY CALCUL 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 .