



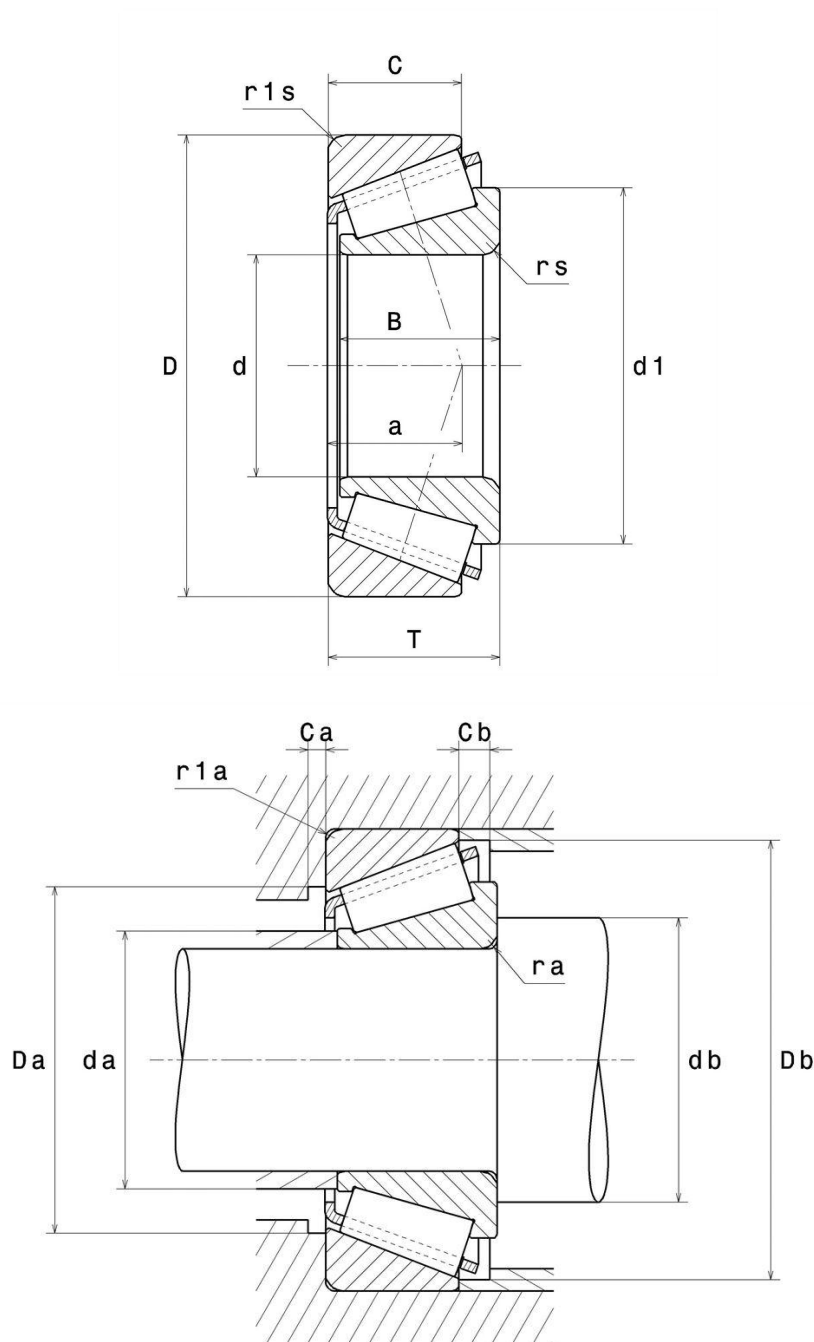
Technical data

33205A

Single row tapered roller bearings

Tapered roller bearing, pressed steel cage

VISUAL (S)



33205A

Single row tapered roller bearings

PRODUCT DEFINITION

Brand	SNR
d - Internal diameter	25 mm
D - External diameter	52 mm
B - Bearing/Inner ring width	22 mm
C - Outer ring width	18 mm
T - Total width	22 mm
d1 - External diameter inner ring	38,7 mm
a - Charge load application point	14,1 mm
rs - Min fillet radius	1 mm
r1s - Min fillet radius	1 mm
Mass	0,215 kg
ISO 355 reference	T2DE025

PRODUCT PERFORMANCE

C - Dynamic load	47,1 kN
A2 - Rating life coefficient	1
C0 - Static load	55,8 kN
Cu - Fatigue limit load	6,8 kN
e - Coefficient	0.35
Y0 - Static axial load coefficient	0.94
Y2 - Upper axial load coefficient	1.71
Nref - Reference thermal speed	8300 tr/min
Nlim - Mechanical Limit Speed	14000 tr/min
Tmin - Min operating temperature	-40 °C

PRODUCT PERFORMANCE

Tmax - Max operating temperature	120 °C
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BEARING FREQUENCIES

BPFO - Characteristic outer ring frequency (60 rpm)	6.25 Hz
BPFI - Characteristic inner ring frequency (60 rpm)	8.75 Hz
FTF - Characteristic cage frequency (60 rpm)	0.417 Hz
BSF - Characteristic rolling element frequency (60 rpm)	5.681 Hz

ABUTMENT

da max - Max shoulder diameter IR	30 mm
db min - Min IR shoulder diameter	30,5 mm
Da min - Min shoulder diameter OR	43 mm
Da max - Max shoulder diameter OR	46,5 mm
Db min - Min OR shoulder diameter	49 mm
Ca - Min clearance	4 mm
Cb - Min clearance	4 mm
ra max - Max fillet radius	1 mm
r1a - Max fillet radius	1 mm

INDUSTRY CALCUL FACTORS

Equivalent dynamic radial load

$$P = X.F_r + Y.F_a$$

$F_a / F_r \leq e$		$F_a / F_r > e$	
X	Y	X	Y
1	0	0.4	Y ₂

Equivalent static radial load

$$P_0 = X_0.F_r + Y_0.F_a$$

X_0	Y_0
0.5	Y ₀

If $P_0 \leq F_r$, then use $P_0 = F_r$

The values for e , Y_2 and Y_0 are shown in the above table