

Technical data

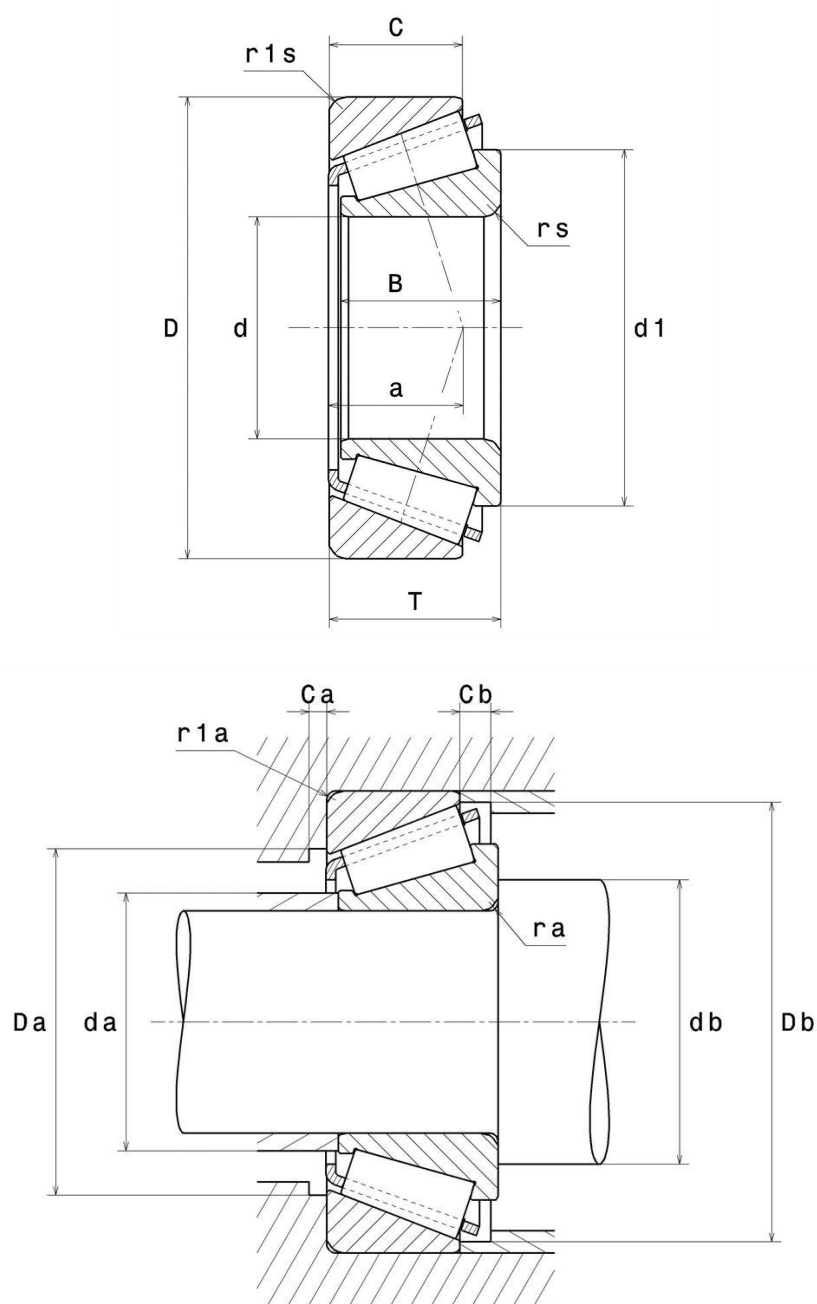
32024A

Single row tapered roller bearings



Tapered roller bearing, pressed steel cage

VISUAL (S)



PRODUCT DEFINITION	
Brand	SNR
d - Internal diameter	120 mm
D - External diameter	180 mm
B - Bearing/Inner ring width	38 mm
C - Outer ring width	29 mm
T - Total width	38 mm
d1 - External diameter inner ring	149,9 mm
a - Charge load application point	39,3 mm
rs - Min fillet radius	2,5 mm
r1s - Min fillet radius	2 mm
Mass	3,16 kg

PRODUCT PERFORMANCE	
C - Dynamic load	248 kN
A2 - Rating life coefficient	1
C0 - Static load	395 kN
Cu - Fatigue limit load	42,7 kN
e - Coefficient	0.46
Y0 - Static axial load coefficient	0.72
Y2 - Upper axial load coefficient	1.31
N ref - Reference thermal speed	2500 tr/min
N lim - Mechanical Limit Speed	3700 tr/min
Tmin - Min operating temperature	-40 °C
Tmax - Max operating temperature	120 °C



BEARING FREQUENCIES

BPFO - Characteristic outer ring frequency (60 rpm)	12.688 Hz
BPFI - Characteristic inner ring frequency (60 rpm)	15.312 Hz
FTF - Characteristic cage frequency (60 rpm)	0.453 Hz
BSF - Characteristic rolling element frequency (60 rpm)	10.116 Hz

ABUTMENT

da max - Max shoulder diameter IR	131 mm
db min - Min IR shoulder diameter	130 mm
Da min - Min shoulder diameter OR	161 mm
Da max - Max shoulder diameter OR	170 mm
Db min - Min OR shoulder diameter	173 mm
Ca - Min clearance	7 mm
Cb - Min clearance	9 mm
ra max - Max fillet radius	2 mm
r1a - Max fillet radius	2 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	Y2

Equivalent static radial load

$P_0 = X_0.F_r + Y_0.F_a$

X_0	Y_0
0.5	Y0

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

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

