

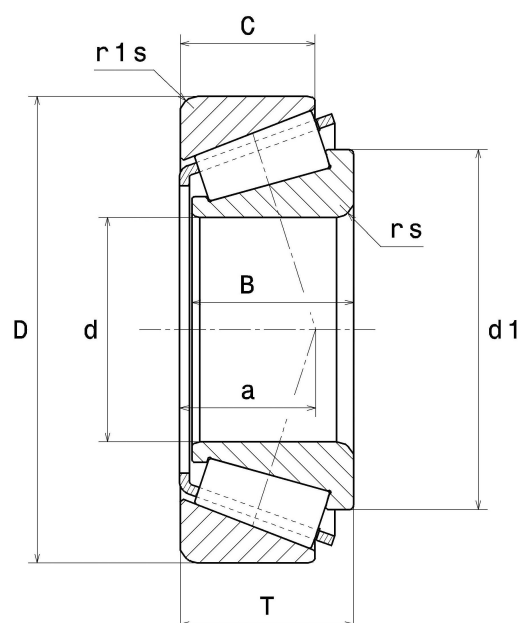
PDF technical sheet 4TA4050/A4138



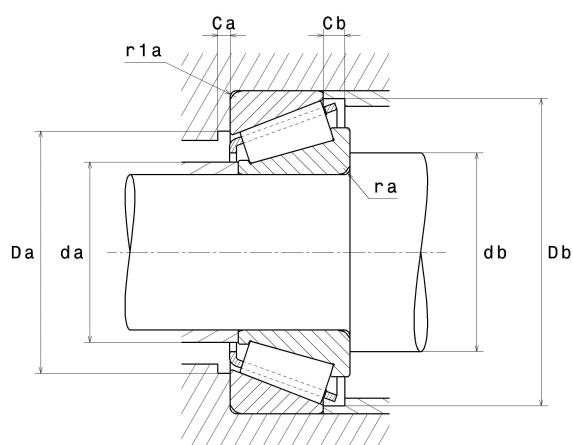
Single row tapered roller bearings

Tapered roller bearing, pressed steel cage

Product definition	
d	0.5000 "
D	1.3775 "
B	0.4326 "
C	0.3437 "
T	0.4330 "
a	0.3346 "
e	0.45
Y2	1.32
Y0	0.73
Mass	0.19 oz
Brand	NTN



Product performance	
Dynamic load, C	12.30 kN
Rating life coefficient, A2	1.4
Static load, C0	11.60 kN
Fatigue limit load, Cu	1.41 kN
Nlim (oil)	16,000 RPM
Nlim (grease)	12,000 RPM
Min operating temperature, Tmin	-40 °C
Max operating temperature, Tmax	248 °C



Abutment dimensions	
ra max	0.0512 "
r1a max	0.0512 "

Calculation 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 $P_0 < F_r$, then use $P_0 = F_r$

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