

PDF technical sheet 67790/67720



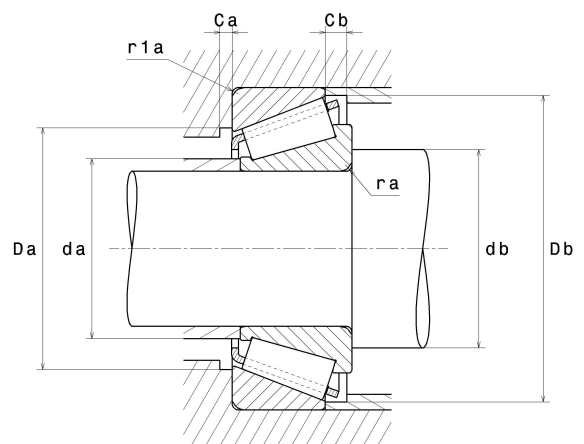
Single row tapered roller bearings

Tapered roller bearing, pressed steel cage

Product definition	
d	7.0000 "
D	9.7500 "
B	1.8750 "
C	1.5000 "
T	1.8750 "
d1	8.4252 "
a	2.0443 "
e	0.44
Y2	1.36
Y0	0.75
Mass	23.17 oz
Brand	BOWER



Product performance	
Dynamic load, C	340 kN
Rating life coefficient, A2	1.4
Static load, C0	690 kN
Fatigue limit load, Cu	67.20 kN
Nlim (oil)	1,700 RPM
Nlim (grease)	1,300 RPM
Min operating temperature, Tmin	-40 °C
Max operating temperature, Tmax	248 °C
Characteristic cage frequency, FTF	0.47 Hz
Characteristic rolling element frequency, BSF	13.87 Hz
Characteristic outer ring frequency, BPF0	16.76 Hz
Characteristic inner ring frequency, BPFI	19.24 Hz



Abutment dimensions	
ra max	0.1378 "
r1a max	0.1299 "

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