

PDF technical sheet 90381/90744



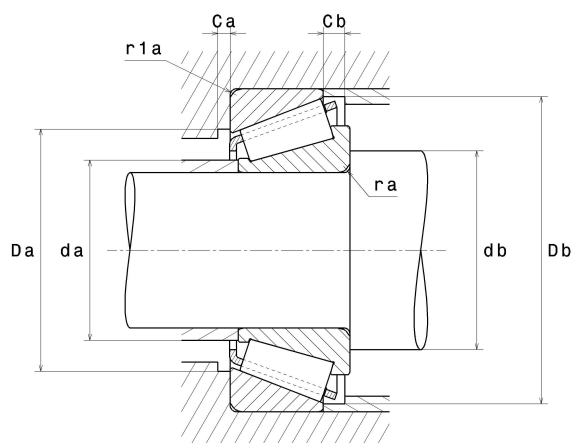
Single row tapered roller bearings

Tapered roller bearing, pressed steel cage

Product definition	
d	3.8125 "
D	7.4375 "
B	1.8125 "
C	1.2500 "
T	2.0000 "
d1	5.7283 "
a	2.5079 "
e	0.87
Y2	0.69
Y0	0.38
Mass	20.00 oz
Brand	BOWER



Product performance	
Dynamic load, C	281 kN
Rating life coefficient, A2	1.4
Static load, C0	365 kN
Nlim (oil)	2,400 RPM
Nlim (grease)	1,800 RPM
Min operating temperature, Tmin	-40 °C
Max operating temperature, Tmax	248 °C



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