

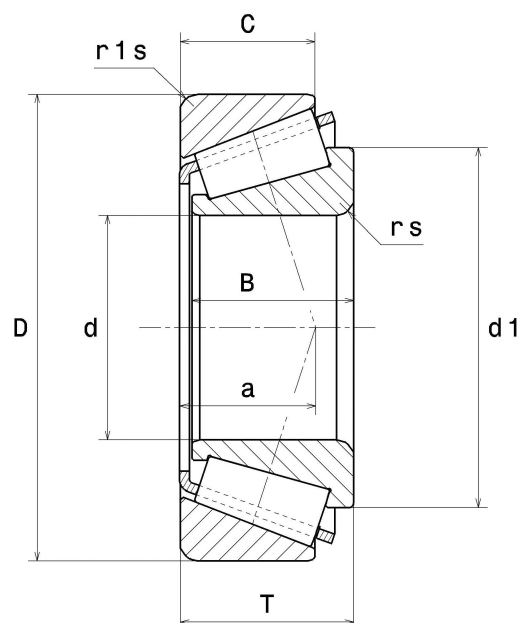
PDF technical sheet 36690/36620



Single row tapered roller bearings

Tapered roller bearing, pressed steel cage

Product definition	
d	5.7500 "
D	7.6250 "
B	1.1250 "
C	0.9063 "
T	1.1250 "
d1	6.7323 "
a	1.3219 "
e	0.37
Y2	1.63
Y0	0.9
Mass	8.01 oz
Brand	BOWER



Product performance	
Dynamic load, C	165 kN
Rating life coefficient, A2	1.4
Static load, C0	340 kN
Fatigue limit load, Cu	35.30 kN
Nlim (oil)	2,200 RPM
Nlim (grease)	1,600 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	17.21 Hz
Characteristic outer ring frequency, BPF0	20.29 Hz
Characteristic inner ring frequency, BPFI	22.71 Hz



Abutment dimensions	
ra max	0.0591 "
r1a max	0.0591 "

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