

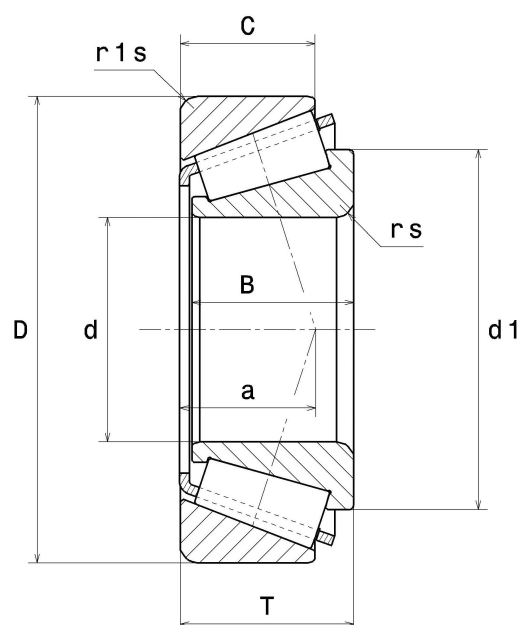
PDF technical sheet 4T46780/46720



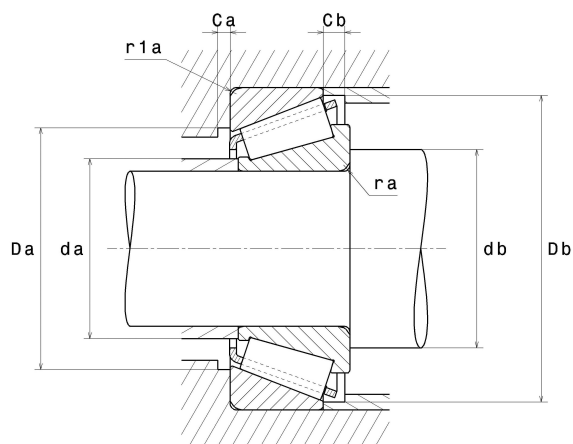
Single row tapered roller bearings

Tapered roller bearing, pressed steel cage

Product definition	
d	6.2500 "
D	8.8750 "
B	1.5625 "
C	1.3125 "
T	1.6250 "
d1	7.7756 "
a	1.7274 "
e	0.38
Y2	1.57
Y0	0.86
Mass	18.34 oz
Brand	BOWER



Product performance	
Dynamic load, C	254 kN
Rating life coefficient, A2	1.4
Static load, C0	555 kN
Fatigue limit load, Cu	55.30 kN
Nlim (oil)	1,900 RPM
Nlim (grease)	1,400 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	16.72 Hz
Characteristic outer ring frequency, BPF0	19.79 Hz
Characteristic inner ring frequency, BPFI	22.21 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