

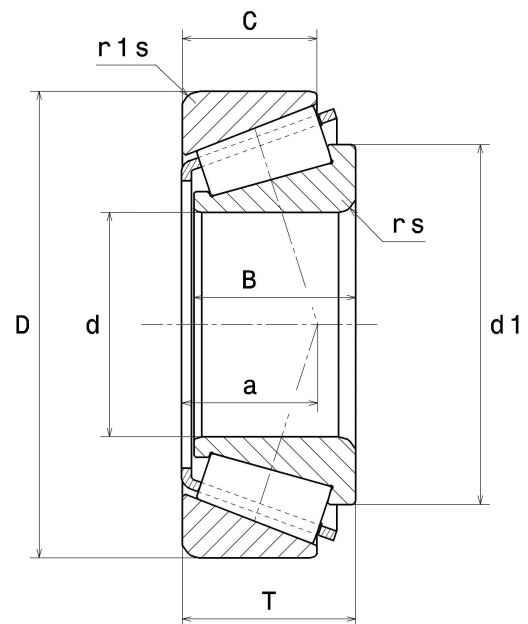
## PDF technical sheet 32009VC12



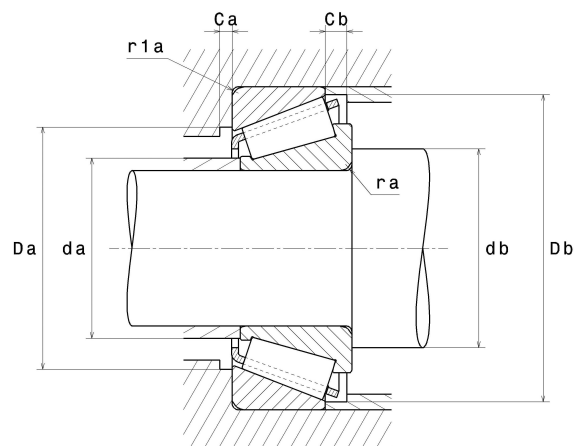
### Single row tapered roller bearings

Tapered roller bearing, pressed steel cage

Product definition	
d	1.7717 "
D	2.9528 "
B	0.7874 "
C	0.6102 "
T	0.7874 "
d1	2.4055 "
a	0.6535 "
rs min	0.0394 "
r1s min	0.0394 "
e	0.39
Y2	1.53
Y0	0.84
Mass	1.20 oz
ISO 355 reference	T3CC045
Brand	SNR



Product performance	
Dynamic load, C	59.40 kN
Rating life coefficient, A2	1
Static load, C0	80.20 kN
Fatigue limit load, Cu	9.80 kN
Nref	5,600 RPM
Nlim	9,300 RPM
Min operating temperature, Tmin	-40 °C
Max operating temperature, Tmax	248 °C
Characteristic cage frequency, FTF	0.44 Hz
Characteristic rolling element frequency, BSF	8.20 Hz
Characteristic outer ring frequency, BPF0	9.28 Hz
Characteristic inner ring frequency, BPF1	11.72 Hz



### Abutment dimensions

da max	2.0079 "
db min	1.9882 "
Da min	2.6378 "
Da max	2.7362 "
Db min	2.8346 "
Ca min	0.1575 "
Cb min	0.1772 "
ra max	0.0394 "
r1a max	0.0394 "

### Calculation factors

#### Equivalent dynamic radial load

$$P = X.F_r + Y.F_a$$

Fa / Fr ≤ e		Fa / Fr > 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 <sub>0</sub>	Y <sub>0</sub>
0.5	Y0

If  $P_0 \leq F_r$ , then use  $P_0 = F_r$

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