



Technical data

4T-HM803149/HM803111

Single row tapered roller bearings

Tapered roller bearing, pressed steel cage

Visual(s)



Product definition

d	44.45 mm
D	88.9 mm
B	29.37 mm
C	23.02 mm
T	30.16 mm
a	25.6 mm
rs min	3.5 mm
r1s min	0.8 mm
e	0.55
Y2	1.1
Y0	0.6
Mass	0.85 kg
Brand	NTN

Product performance

Dynamic load, C	93.5 kN
Rating life coefficient, A2	1.4
Static load, C0	125 kN
Nlim (oil)	5,800 Tr/min
Nlim (grease)	4,300 Tr/min
Min operating temperature, Tmin	-40 °C
Max operating temperature, Tmax	120 °C
Characteristic cage frequency, FTF	0.43 Hz
Characteristic rolling element frequency, BSF	6.8 Hz
Characteristic outer ring frequency, BPF0	7.79 Hz
Characteristic inner ring frequency, BPFI	10.21 Hz

Abutment dimensions

ra max	3.5 mm
r1a max	0.8 mm

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 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