



Technical data

4T-LM11949/LM11910

Single row tapered roller bearings

Tapered roller bearing, pressed steel cage

Visual(s)



Product definition

d	19.05 mm
D	45.24 mm
B	16.64 mm
C	12.06 mm
T	15.49 mm
d1	31 mm
a	9.89 mm
e	0.3
Y2	2
Y0	1.1
Mass	0.12 kg
Brand	NTN

Product performance

Dynamic load, C	28.3 kN
Rating life coefficient, A2	1.4
Static load, C0	28.6 kN
Fatigue limit load, Cu	3.5 kN
Nlim (oil)	12,000 Tr/min
Nlim (grease)	8,900 Tr/min
Min operating temperature, Tmin	-40 °C
Max operating temperature, Tmax	120 °C
Characteristic cage frequency, FTF	0.4 Hz
Characteristic rolling element frequency, BSF	4.98 Hz
Characteristic outer ring frequency, BPF0	5.67 Hz
Characteristic inner ring frequency, BPFI	8.33 Hz

Abutment dimensions

ra max	1.3 mm
r1a max	1.3 mm

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

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