



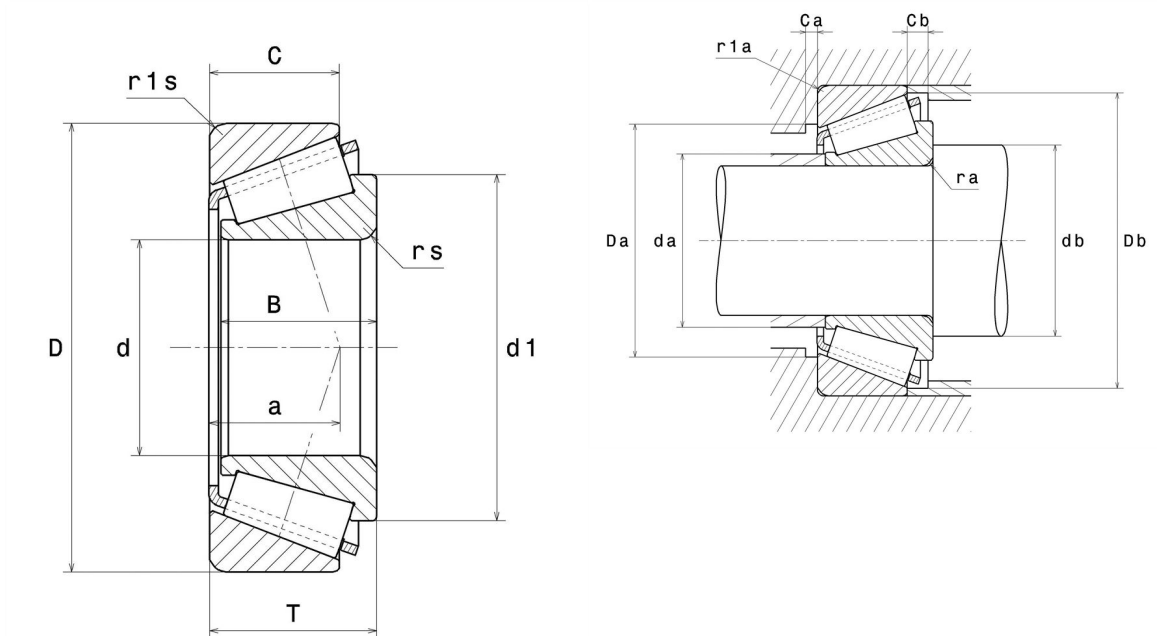
Technical data

4T-HM220149/HM220110

Single row tapered roller bearings

Tapered roller bearing, pressed steel cage

Visual(s)



Product definition

d	99.97 mm
D	156.98 mm
B	42 mm
C	34 mm
T	42 mm
a	33.1 mm
rs min	8 mm
r1s min	3.56 mm
e	0.33
Y2	1.8
Y0	0.99
Mass	2.82 kg
Brand	NTN

Product performance

Dynamic load, C	248 kN
Rating life coefficient, A2	1.4
Static load, C0	380 kN
Nlim (oil)	2,900 Tr/min
Nlim (grease)	2,200 Tr/min
Min operating temperature, Tmin	-40 °C
Max operating temperature, Tmax	120 °C
Characteristic cage frequency, FTF	0.44 Hz
Characteristic rolling element frequency, BSF	8.24 Hz
Characteristic outer ring frequency, BPF0	9.71 Hz
Characteristic inner ring frequency, BPFI	12.29 Hz

Abutment dimensions

ra max	8 mm
r1a max	3.5 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