

Technical data

32221U

Single row tapered roller bearings

Tapered roller bearing, pressed steel cage



VISUAL (S)



PRODUCT DEFINITION

Brand	NTN
d - Internal diameter	105 mm
D - External diameter	190 mm
B - Bearing/Inner ring width	50 mm
C - Outer ring width	43 mm
T - Total width	53 mm
a - Charge load application point	44 mm
rs - Min fillet radius	2,5 mm
r1s - Min fillet radius	2 mm
Mass	6,23 kg
ISO 355 reference	T3FC105

PRODUCT PERFORMANCE

C - Dynamic load	420000000 mN
C0 - Static load	540000000 mN
Cu - Fatigue limit load	59000000 mN
A2 - Rating life coefficient	1
e - Coefficient	0.42
Y0 - Static axial load coefficient	0.79
Y2 - Upper axial load coefficient	1.43
N lim - Oil lubrication limit speed	15000 °/s
N lim - Grease lubrication limit speed	11400 °/s
Tmin - Min operating temperature	233,15 °K
Tmax - Max operating temperature	393,15 °K



ABUTMENT

da max - Max shoulder diameter IR	119 mm
db min - Min IR shoulder diameter	119 mm
Da max - Max shoulder diameter OR	178 mm
Db min - Min OR shoulder diameter	180 mm
ra max - Max fillet radius	2,5 mm
r1a - Max fillet radius	2 mm

INDUSTRY CALCUL 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

