

PDF technical sheet NU312ET2XC3



Single row cylindrical roller bearings

Single row cylindrical roller bearing, floating, separable, polyamide cage

Product definition	
d	2.3622 "
D	5.1181 "
B	1.2205 "
E	4.5276 "
F	3.0315 "
rs min	0.0827 "
r1s min	0.0827 "
Radial clearance class	C3
Mass (without HJ ring)	6.47 oz
Brand	NTN



Product performance	
Dynamic load, C	150 kN
Static load, C0	157 kN
Fatigue limit load, Cu	19.10 kN
Nlim (oil)	5,800 RPM
Nlim (grease)	4,900 RPM
Min operating temperature, Tmin	-40 °C
Max operating temperature, Tmax	248 °C
Characteristic cage frequency, FTF	0.40 Hz
Characteristic rolling element frequency, BSF	4.86 Hz
Characteristic outer ring frequency, BPF0	5.21 Hz
Characteristic inner ring frequency, BPFI	7.79 Hz



Abutment dimensions	
da min	2.7953 "
da max	2.9528 "
db min	3.1102 "
Da max	4.6850 "
ra max	0.0787 "
r1a max	0.0787 "

Calculation factors

Equivalent dynamic radial load

$$P = Fr$$

Equivalent static radial load

$$P_0 = Fr$$