

PDF technical sheet N314C3



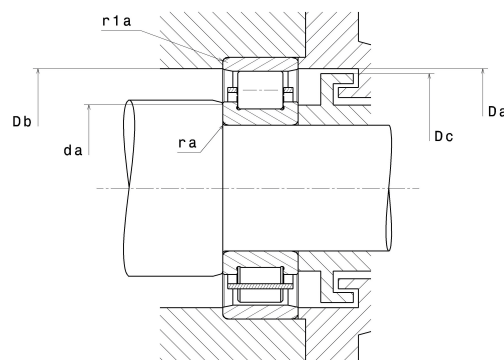
Single row cylindrical roller bearings

Single row cylindrical roller bearing, floating, separable, pressed steel cage

Product definition	
d	2.7559 "
D	5.9055 "
B	1.3780 "
E	5.1181 "
F	3.5433 "
d1	3.8583 "
rs min	0.0827 "
r1s min	0.0827 "
Radial clearance class	C3
Mass (without HJ ring)	9.41 oz
Brand	NTN



Product performance	
Dynamic load, C	158 kN
Static load, C0	168 kN
Fatigue limit load, Cu	19.90 kN
Nlim (oil)	5,500 RPM
Nlim (grease)	4,700 RPM
Min operating temperature, Tmin	-40 °C
Max operating temperature, Tmax	248 °C
Characteristic cage frequency, FTF	0.41 Hz
Characteristic rolling element frequency, BSF	5.32 Hz
Characteristic outer ring frequency, BPF0	5.32 Hz
Characteristic inner ring frequency, BPFI	7.68 Hz



Abutment dimensions	
da min	3.1890 "
Da max	5.4724 "
Db min	5.2362 "
Dc max	5.0394 "
ra max	0.0787 "
r1a max	0.0787 "

Calculation factors

Equivalent dynamic radial load

$$P = Fr$$

Equivalent static radial load

$$P_0 = Fr$$