Technical data

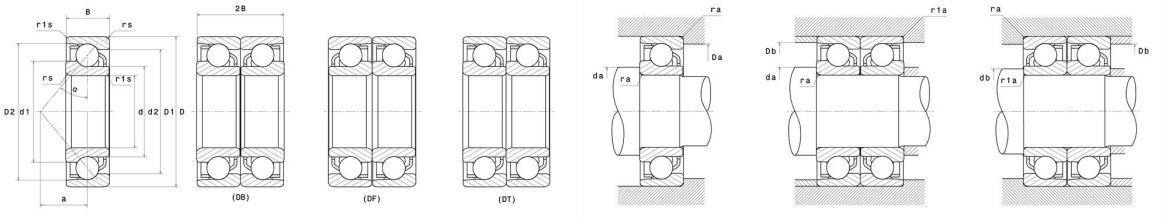
7318B

Single row or matched pairs of angular contact ball bearings

Angular contact ball bearings, pressed steel cage



Visual(s)



Product definition

d	90 mm
D	190 mm
B	43 mm
a	80.5 mm
Contact angle α	40 °
rs min	3 mm
r1s min	1.1 mm
Mass	5.16 kg
Brand	NTN

Product performance

Dynamic load, C	156 kN
Static load, C0	135 kN
Fatigue limit load, Cu	5.2 kN
Nlim (oil)	4,500 Tr/min
Nlim (grease)	3,400 Tr/min
Min operating temperature, Tmin	-40 °C
Max operating temperature, Tmax	120 °C
Characteristic cage frequency, FTF	0.41 Hz
Characteristic rolling element frequency, BSF	4.28 Hz
Characteristic outer ring frequency, BPF0	4.96 Hz
Characteristic inner ring frequency, BPFI	7.04 Hz

Abutment dimensions

da min	104 mm
db min	97 mm
Da max	176 mm
Db max	183 mm
r1a max	1 mm
ra max	2.5 mm

Calculation factors

Equivalent dynamic radial load

$P = X.Fr + Y.Fa$

	e	Single or DT bearing arrangement				DB or DF arrangement			
		Fa / Fr ≤ e		Fa / Fr > e		Fa / Fr ≤ e		Fa / Fr > e	
		X	Y	X	Y	X	Y	X	Y
30°	0.8	1	0	0.9	0.76	1	0.78	0.63	1.24
40°	1.14			0.35	0.57		0.55	0.57	0.93

Equivalent static radial load

$P_0 = X_0.Fr + Y_0.Fa$

a	Single or DT bearing arrangement		DB or DF arrangement	
	X_0	Y_0	X_0	Y_0
30°	0.5	0.33	1	0.66
40°		0.26		0.52

For single or DT bearing arrangement :

If $P_0 < Fr$, then use $P_0 = Fr$