



BTW 80 CTN9/SP

Angular contact thrust ball bearings,
double direction, super-precision

Bearing data

[Tolerances,](#)
P4C, SP, UP

Principles of bearing

selection and application

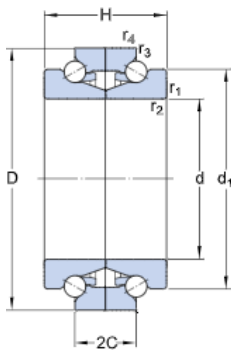
[Chamfer dimensions,](#)

[Seat tolerances for standard conditions,](#)

shafts, housings, shafts, housings,

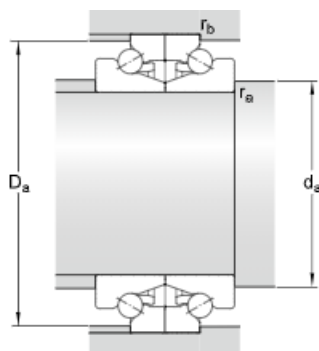
[Initial grease fill](#)

Technical specification



DIMENSIONS

d	80 mm
D	125 mm
H	54 mm
d ₁	106.2 mm
2C	27 mm
r _{1,2}	min. 1.1 mm
r _{3,4}	min. 0.6 mm



ABUTMENT DIMENSIONS

d _a	min. 97 mm
D _a	min. 117.3 mm
D _a	max. 119 mm
r _a	max. 1 mm
r _b	max. 0.6 mm

CALCULATION DATA

Basic dynamic load rating	C	47.5 kN
Basic static load rating	C ₀	140 kN
Fatigue load limit	P _u	6.55 kN
Attainable speed for grease lubrication		5 600 r/min
Attainable speed for oil-air lubrication		6 700 r/min
Contact angle	α	60 °
Preload		575 N
Static axial stiffness		735 N/μm
Reference grease quantity	G _{ref}	10.6 cm

MASS

Mass bearing	1.95 kg
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More information

<p>Product details</p> <ul style="list-style-type: none"> Designs and variants Markings on bearings Bearing data Preload, clearance, and stiffness Loads Attainable speeds Mounting Designation system 	<p>Engineering information</p> <ul style="list-style-type: none"> Principles of bearing selection and application General bearing knowledge Bearing selection process Bearing failure and how to prevent it 	<p>Tools</p> <ul style="list-style-type: none"> SimPro Quick SimPro Spindle Engineering Calculator LubeSelect for SKF greases Heater selection tool
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