



BTW 180 CM/SP

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

Bearing data

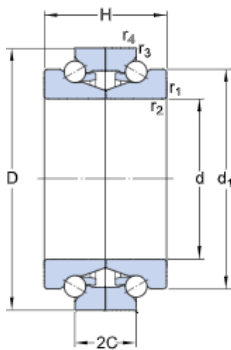
[Tolerances,](#)
P4C, SP, UP

Principles of bearing
selection and application
[Chamfer dimensions,](#)

[Seat tolerances for standard
conditions,](#)

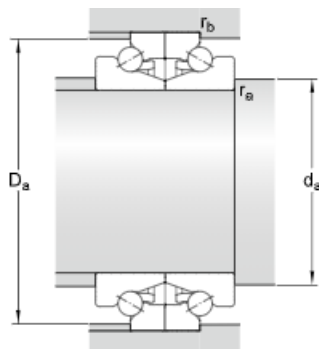
shafts, housings, shafts, housings,
[Initial grease fill](#)

Technical specification



DIMENSIONS

d	180 mm
D	280 mm
H	120 mm
d_1	238.3 mm
2C	60 mm
$r_{1,2}$	min. 2.1 mm
$r_{3,4}$	min. 1 mm



ABUTMENT DIMENSIONS

d_a	min. 214 mm
D_a	min. 262.6 mm
D_a	max. 264 mm
r_a	max. 2 mm
r_b	max. 1 mm

CALCULATION DATA

Basic dynamic load rating	C	199 kN
Basic static load rating	C ₀	710 kN
Fatigue load limit	P _u	22.4 kN
Attainable speed for grease lubrication		2 000 r/min
Attainable speed for oil-air lubrication		2 600 r/min
Contact angle	α	60 °
Preload		1 290 N
Static axial stiffness		1 314 N/μm
Reference grease quantity	G _{ref}	116.7 cm

MASS

Mass bearing	23.1 kg
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More information

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