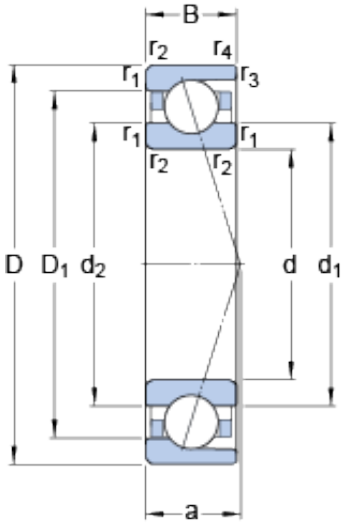




Off-the-shelf SKF shaft Co., Ltd



17 mm x 35 mm x 10 mm SKF 7003 ACD/P4A TAC series for ball screw support

Bearing No. 7003 ACD/P4A

7003 ACD/P4A Bearing 2D drawings and 3D CAD models

Size	35x17x10 mm
Bore Diameter	35 mm
Outer Diameter	17 mm
Width	10 mm
d	17 mm
D	35 mm
B	10 mm
d ₁	22.6 mm
d ₂	22.6 mm
D ₁	29.3 mm
r _{1,2} - min.	0.3 mm
r _{3,4} - min.	0.2 mm
a	11.2 mm
d _a - min.	19 mm
d _b - min.	19 mm
D _a - max.	33 mm
D _b - max.	33.6 mm
r _a - max.	0.3 mm
r _b - max.	0.2 mm
d _n	23.7 mm
Basic dynamic load rating - C	6.5 kN
Basic static load rating - C ₀	3.1 kN
Fatigue load limit - P _u	0.132 kN
Limiting speed for grease	45000 r/min



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Lubrication	
Limiting speed for oil lubrication	70000 mm/min
Ball - D_w	5.556 mm
Ball - z	12
G_{ref}	0.54 cm ³
Calculation factor - e	0.68
Calculation factor - Y_2	0.87
Calculation factor - Y_0	0.38
Calculation factor - X_2	0.41
Calculation factor - Y_1	0.92
Calculation factor - Y_2	1.41
Calculation factor - Y_0	0.76
Calculation factor - X_2	0.67
Preload class A - G_A	40 N
Preload class B - G_B	80 N
Preload class C - G_C	160 N
Preload class D - G_D	320 N
Calculation factor - f	1.04
Calculation factor - f_1	0.99
Calculation factor - f_{2A}	1
Calculation factor - f_{2B}	1.02
Calculation factor - f_{2C}	1.05
Calculation factor - f_{2D}	1.08
Calculation factor - f_{HC}	1
Preload class A	48 N/micron
Preload class B	62 N/micron
Preload class C	81 N/micron
Preload class D	107 N/micron



Off-the-shelf SKF shaft Co., Ltd

Category	Precision Ball Bearings
Inventory	0.0
Manufacturer Name	SKF
Minimum Buy Quantity	N/A
Weight / Kilogram	0.042
EAN	7316570721355
Product Group	B04270
Enclosure	Open
Precision Class	ABEC 7 ISO P4
Material - Ball	Steel
Number of Bearings	1 (Single)
Contact Angle	25 Degree
Preload	None
Raceway Style	1 Rib Outer Ring
Cage Material	Phenolic
Rolling Element	Ball Bearing
Flush Ground	No
Inch - Metric	Metric
Other Features	Single Row Angular Contact High Precision
Long Description	17MM Bore; 35MM Outside Diameter; 10MM Width; Open Enclosure; ABEC 7 ISO P4 Precision; Steel Ball Material; 1 (Single) Bearings; 25 Degree Contact Angle; Phenolic Cage Material; 1 Rib Outer Ring Rac
Category	Precision Ball Bearings
UNSPSC	31171531
Harmonized Tariff Code	8482.10.50.28
Noun	Bearing
Keyword String	Angular Contact Ball
Manufacturer URL	http://www.skf.com



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Manufacturer Item Number	7003 ACD/P4A
Weight / LBS	0.093
Width	0.394 Inch 10 Millimeter
Bore	0.669 Inch 17 Millimeter
Outside Diameter	1.378 Inch 35 Millimeter
bore diameter:	17 mm
radial static load capacity:	3.1 kN
outside diameter:	35 mm
maximum rpm (grease):	45000 rpm
overall width:	10 mm
maximum rpm (oil):	70000 rpm
contact angle:	25 °
bearing material:	Steel
duplex type:	Duplex Universal
cage material:	Cotton Fabric Reinforced Phenolic
closure type:	Open
fillet radius:	0.3 mm
precision rating:	P4
series:	70
operating temperature range:	300 ° F
manufacturer product page:	Click here
radial dynamic load capacity:	6.5 kN
manufacturer upc number:	7316570721355
d ₁	22.6 mm
d ₂	22.6 mm
D ₁	29.3 mm
r _{1,2} min.	0.3 mm
r _{3,4} min.	0.2 mm
d _a min.	19 mm
d _b min.	19 mm



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D_a max.	33 mm
D_b max.	33.6 mm
r_a max.	0.3 mm
r_b max.	0.2 mm
d_n	23.7 mm
Basic dynamic load rating C	6.5 kN
Basic static load rating C_0	3.1 kN
Fatigue load limit P_u	0.132 kN
Attainable speed for grease lubrication	45000 r/min
Attainable speed for oil-air lubrication	70000 r/min
Ball diameter D_w	5.556 mm
Number of balls z	12
Reference grease quantity G_{ref}	0.54 cm ³
Preload class A G_A	40 N
Static axial stiffness, preload class A	48 N/ μ m
Preload class B G_B	80 N
Static axial stiffness, preload class B	62 N/ μ m
Preload class C G_C	160 N
Static axial stiffness, preload class C	81 N/ μ m
Preload class D G_D	320 N
Static axial stiffness, preload class D	107 N/ μ m
Calculation factor f	1.04
Calculation factor f_1	0.99
Calculation factor f_{2A}	1
Calculation factor f_{2B}	1.02
Calculation factor f_{2C}	1.05
Calculation factor f_{2D}	1.08



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Calculation factor f_{HC}	1
Calculation factor e	0.68
Calculation factor (single, tandem) Y_2	0.87
Calculation factor (single, tandem) Y_0	0.38
Calculation factor (single, tandem) X_2	0.41
Calculation factor (back-to-back, face-to-face) Y_1	0.92
Calculation factor (back-to-back, face-to-face) Y_2	1.41
Calculation factor (back-to-back, face-to-face) Y_0	0.76
Calculation factor (back-to-back, face-to-face) X_2	0.67
Mass bearing	0.038 kg