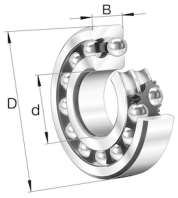


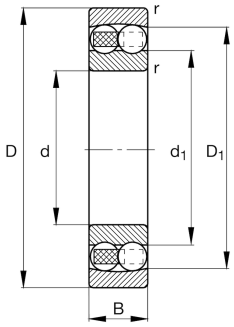
FAG

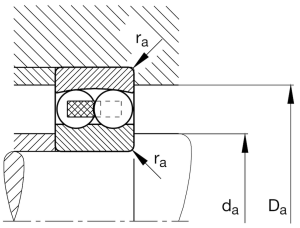
2205-TVH

Self-aligning ball bearing

Self-aligning ball bearing 22..-TVH, plastic cage

Technical information





Your current product variant

Bore type	Z	Cylindrical
Sealing	Without	Not sealed
Cage	TVH	Solid cage made of glass-fiber reinforced polyamide PA66
Tolerance class	PN	Normal (ISO 492:2023)
Radial internal clearance	CN (Group N)	Normal internal clearance
Lubricant	Without	Bearing not greased

Main Dimensions & Performance Data

d	25 mm	Bore diameter
D	52 mm	Outside diameter
B	18 mm	Width
C_r	17,300 N	Basic dynamic load rating, radial
C_{0r}	4,450 N	Basic static load rating, radial
C_{ur}	285 N	Fatigue load limit, radial
n_G	14,400 1/min	Limiting speed
$n_{\vartheta r}$	13,400 1/min	Reference speed
≈m	0.155 kg	Weight

Mounting dimensions

$d_{a\ min}$	30.6 mm	Minimum diameter shaft shoulder
$D_{a\ max}$	46.4 mm	Maximum diameter of housing shoulder
$r_{a\ max}$	1 mm	Maximum fillet radius

Dimensions

r_{min}	1 mm	Minimum chamfer dimension
D_1	44.42 mm	Shoulder diameter outer ring
d_1	32.25 mm	Shoulder diameter inner ring

Temperature range

T_{min}	-30 °C	Operating temperature min.
T_{max}	120 °C	Operating temperature max.

Calculation factors

e	0.35	Limiting value of Fa/Fr for the applicability of diff. Values of factors X and Y
Y_1	1.78	Dynamic axial load factor
Y_2	2.75	Dynamic axial load factor
Y_0	1.86	Static axial load factor

Characteristics

Radial load

Axial load in one direction

Axial load in two directions


Grease Lubrication


Oil Lubrication


Not sealed


Static angular error and misalignment


Dynamic angular error and misalignment