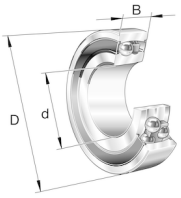


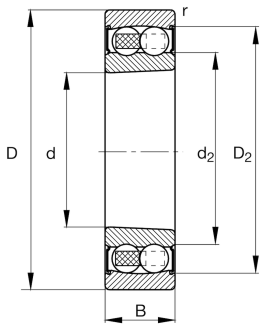
FAG

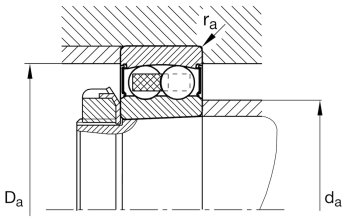
2205-K-2RS-TVH-C3

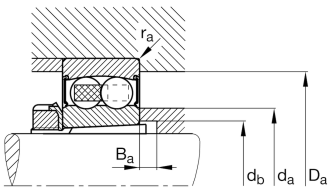
Self-aligning ball bearing

Self-aligning ball bearing 22..-K-2RS-TVH,
tapered bore taper 1:12, seals, plastic cage

Technical information







Your current product variant

Bore type	K	Tapered, taper 1:12
Sealing	2RS	Contact seal on both sides
Cage	TVH	Solid cage made of glass-fiber reinforced polyamide PA66
Tolerance class	PN	Normal (ISO 492:2023)
Radial internal clearance	C3 (Group 3)	Internal clearance larger than CN
Lubricant	GA14	Ball bearing grease, low noise

Main Dimensions & Performance Data

d	25 mm	Bore diameter
D	52 mm	Outside diameter
B	18 mm	Width
C_r	12,300 N	Basic dynamic load rating, radial
C_{0r}	3,300 N	Basic static load rating, radial
C_{ur}	209 N	Fatigue load limit, radial
n_G	8,500 1/min	Limiting speed
≈m	0.16 kg	Weight

Mounting dimensions

$d_{a\ min}$	30.6 mm	Minimum diameter shaft shoulder
$d_{a\ max}$	32 mm	Maximum diameter shaft shoulder
$D_{a\ max}$	46.4 mm	Maximum diameter of housing shoulder
$d_{b\ min}$	28 mm	Minimum cavity diameter of the sleeve
$B_{a\ min}$	5 mm	Minimum cavity width of the sleeve
$r_{a\ max}$	1 mm	Maximum fillet radius

Dimensions

r_{min}	1 mm	Minimum chamfer dimension
D_1	43.596 mm	Shoulder diameter outer ring
D_2	45.27 mm	Caliber diameter outer ring
d_1	32.9 mm	Shoulder diameter inner ring
d_2	30.7 mm	Caliber diameter inner ring

Temperature range

T_{min}	-20 °C	Operating temperature min.
T_{max}	100 °C	Operating temperature max.

Calculation factors

e	0.27	Limiting value of Fa/Fr for the applicability of diff. Values of factors X and Y
Y_1	2.36	Dynamic axial load factor
Y_2	3.65	Dynamic axial load factor
Y_0	2.47	Static axial load factor

Additional information

	H305	Adapter sleeve

Characteristics

Radial load

Axial load in one direction

Axial load in two directions

Lifetime lubrication, freedom from maintenance


Grease Lubrication


Sealed on both sides


Static angular error and misalignment


Dynamic angular error and misalignment