

**FAG****2205-2RS-TVH-C3**

Self-aligning ball bearing

Self-aligning ball bearing 22..-2RS-TVH,
seals, plastic cage

Technical information



Your current product variant

Bore type	Z	Cylindrical
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
$\approx m$	0.156 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	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 F_a/F_r 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

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