



FAG

21316-E1-XL-K-TVPB-C3

Spherical Roller Bearing

Spherical roller bearings 213..-E1-K, main dimensions to DIN 635-2, with tapered bore, taper 1:12

X-life

Technical information



Your current product variant

Design	E1	Without central rip
Bore type	K	Tapered, taper 1:12
Cage	TVPB	Plastic cage
Radial internal clearance	C3 (Group 3)	Internal clearance larger than CN
Relubrication facility	Standard	

Main Dimensions & Performance Data

d	80 mm	Bore diameter
D	170 mm	Outside diameter
B	39 mm	Width
C_r	305.000 N	Basic dynamic load rating, radial
C_{0r}	325.000 N	Basic static load rating, radial
C_{ur}	39.000 N	Fatigue load limit, radial
n_G	5.700 1/min	Limiting speed
n_{gr}	4.050 1/min	Reference speed
$\approx m$	4,224 kg	Weight



Mounting dimensions

$d_{a \min}$	92 mm	Minimum diameter shaft shoulder
$D_{a \max}$	158 mm	Maximum diameter of housing shoulder
$r_{a \max}$	2,1 mm	Maximum recess radius
$B_{a \min}$	5 mm	Minimum cavity width of the sleeve
$d_{a \max}$	99 mm	Maximum diameter of shaft shoulder
$d_{b \min}$	85 mm	Minimum cavity diameter of the sleeve

Dimensions

r_{\min}	2,1 mm	Minimum chamfer dimension
D_1	135,4 mm	Bore diameter outer ring
d_2	99,8 mm	Raceway diameter of the inner ring
d_s	3,2 mm	Diameter lubrication hole
n_s	6,5 mm	Width of lubricating groove

Temperature range

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

Calculation factors

e	0,22	Limiting value of F_a/F_r for the applicability of diff. Values of factors X and Y
Y_1	3,04	Dynamic axial load factor
Y_2	4,53	Dynamic axial load factor
Y_0	2,97	Static axial load factor

Additional information

H316	Adapter sleeve
AH316	Withdrawal sleeve



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