



FAG

23038-E1-XL-TVPB

Spherical Roller Bearing

Spherical roller bearings 230..-E1, main dimensions to DIN 635-2

X-life

Technical information



Your current product variant

Design	E1	Without central rip
Bore type	Z	Cylindrical
Cage	TVPB	Plastic cage
Radial internal clearance	CN (Group N)	Normal internal clearance
Relubrication facility	Standard	



Main Dimensions & Performance Data

d	190 mm	Bore diameter
D	290 mm	Outside diameter
B	75 mm	Width
C_r	1.080.000 N	Basic dynamic load rating, radial
C_{0r}	1.550.000 N	Basic static load rating, radial
C_{ur}	183.000 N	Fatigue load limit, radial
n_G	2.490 1/min	Limiting speed
n_{gr}	1.660 1/min	Reference speed
$\approx m$	16,64 kg	Weight



Mounting dimensions

$d_{a \min}$	200,2 mm	Minimum diameter shaft shoulder
$D_{a \max}$	279,8 mm	Maximum diameter of housing shoulder
$r_{a \max}$	2,1 mm	Maximum recess radius

Dimensions

r_{\min}	2,1 mm	Minimum chamfer dimension
D_1	264,5 mm	Bore diameter outer ring
d_2	211,9 mm	Raceway diameter of the inner ring
d_s	8 mm	Diameter lubrication hole
n_s	15 mm	Width of lubricating groove

Temperature range

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

Calculation factors

e	0,23	Limiting value of F_a/F_r for the applicability of diff. Values of factors X and Y
Y_1	2,98	Dynamic axial load factor
Y_2	4,44	Dynamic axial load factor
Y_0	2,92	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