

29424 E

Spherical roller thrust bearings accommodate very heavy axial and considerable radial loads. They have the highest load rating of all thrust bearings, enabling compact, high power density bearing arrangements. By combining two or more spherical roller thrust bearings, it is possible to create a bearing arrangement that is either self-aligning, allowing misalignment of the shaft, or very stiff.



Dimensions		
d	120 mm	Bore diameter
D	250 mm	Outside diameter
H	78 mm	Height
d ₁	≈ 216 mm	Outside diameter of shaft washer end side face
D ₁	≈ 171 mm	Shoulder diameter outer ring
B	50.5 mm	Width shaft washer or length of shaft washer bore diameter that fits on shaft (bearings with a stamped steel cage)
B ₁	70.3 mm	Height shaft washer + cage
C	36.5 mm	Height housing washer
s	74 mm	Distance from shaft washer end side face to pressure point
r _{1,2}	min. 4 mm	Chamfer dimension shaft washer



Abutment dimensions

d_a	min. 180 mm	Diameter of shaft abutment
d_{b1}	max. 132 mm	Abutment diameter of spacer ring
d_{b2}	max. 142 mm	Outside diameter of spacer ring
D_a	max. 209 mm	Diameter of housing abutment
r_a	max. 3 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	1 370 kN
Basic static load rating	C_0	3 450 kN
Fatigue load limit	P_u	375 kN
Reference speed		1 500 r/min
Limiting speed		2 600 r/min
Minimum axial load factor	A	1.1

Tolerances and clearances

GENERAL BEARING SPECIFICATIONS

- Tolerances: table

BEARING INTERFACES

- Seat tolerances for standard conditions
- Tolerances and resultant fit