

29416 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	80 mm	Bore diameter
D	170 mm	Outside diameter
H	54 mm	Height
d ₁	≈ 147 mm	Outside diameter of shaft washer end side face
D ₁	≈ 113 mm	Shoulder diameter outer ring
B	35 mm	Width shaft washer or length of shaft washer bore diameter that fits on shaft (bearings with a stamped steel cage)
B ₁	48.1 mm	Height shaft washer + cage
C	26.5 mm	Height housing washer
s	50 mm	Distance from shaft washer end side face to pressure point
r _{1,2}	min. 2.1 mm	Chamfer dimension shaft washer



Abutment dimensions

d_a	min. 120 mm	Diameter of shaft abutment
d_{b1}	max. 88 mm	Abutment diameter of spacer ring
d_{b2}	max. 88 mm	Outside diameter of spacer ring
D_a	max. 141 mm	Diameter of housing abutment
r_a	max. 2 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	670 kN
Basic static load rating	C_0	1 630 kN
Fatigue load limit	P_u	193 kN
Reference speed		2 200 r/min
Limiting speed		3 800 r/min
Minimum axial load factor	A	0.25

Tolerances and clearances

GENERAL BEARING SPECIFICATIONS

- Tolerances: table

BEARING INTERFACES

- Seat tolerances for standard conditions
- Tolerances and resultant fit