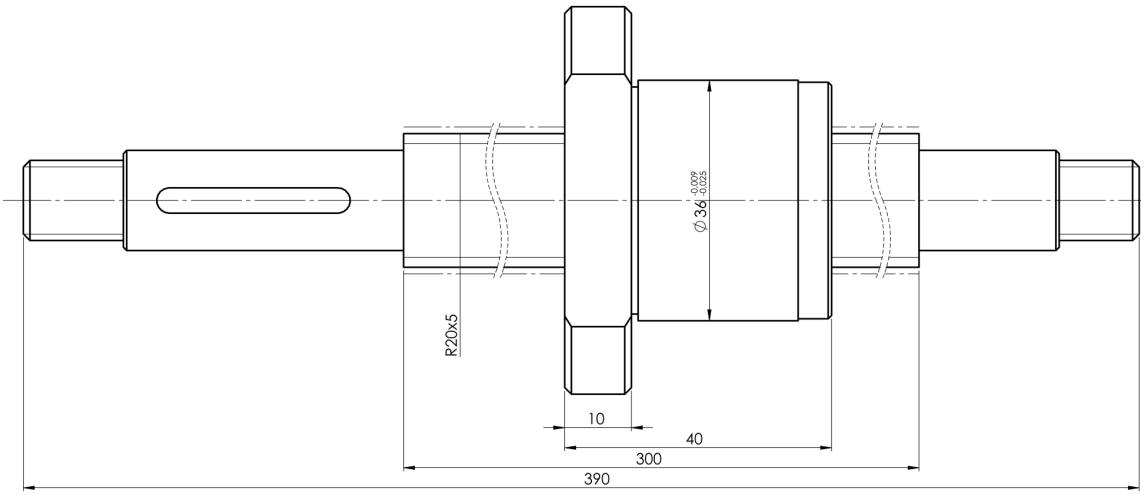
Datasheet

Ball screw assembly

R20-5T4-FSDU-300-390-0.05-R

Assembly drawing

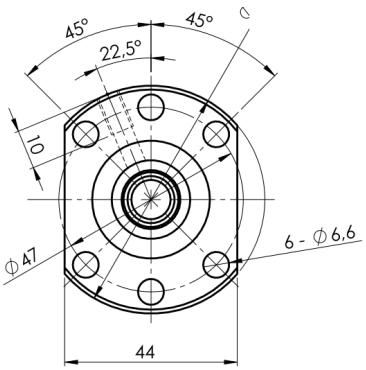


Configuration

Nominal shaft diameter	20 mm
Lead	5 mm
Overall length	390 mm
Threaded length	300 mm
Lead accuracy	50 µm / 300 mm
Thread direction / starts	Right-hand / 1
Nut type	Single flanged nut

Nut dimensions

Body diameter	36 mm
Body diameter tolerance	-0.009 / -0.025 mm
Overall nut length	40 mm
Flange diameter	58 mm
Width across flats	44 mm
Flange thickness	10 mm
Bolt circle diameter (BCD)	47 mm
Mounting holes	6 × Ø6.6 mm



Load ratings

Dynamic load rating Ca

15.4 kN

Static load rating C0a

32.1 kN

Datasheet

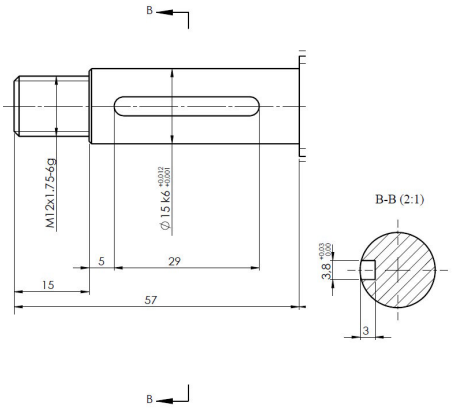
Ball screw assembly

R20-5T4-FSDU-300-390-0.05-R

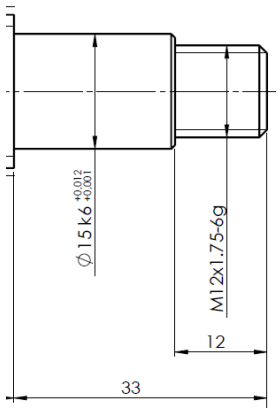
Shaft-end machining

All dimensions in millimetres. Drawings are not to scale.

Left shaft end



Right shaft end



Left shaft-end dimensions

End thread	M12×1.75-6g
Bearing seat	Ø15 k6
Seat tolerance	+0.001 / +0.012 mm
End length	57 mm
Thread length	15 mm
Shoulder offset	5 mm
Keyway length	29 mm
Keyway width	3 mm
Keyway depth	3.8 (+0.00 / +0.03) mm

Right shaft-end dimensions

End thread	M12×1.75-6g
Bearing seat	Ø15 k6
Seat tolerance	+0.001 / +0.012 mm
End length	33 mm
Thread length	12 mm

Material and technical characteristics

Screw material	50CrMo4 QT / equivalent
Nut material	SCM420H / equivalent
Hardness (screw / nut)	58–62 HRC
Ball diameter	Ø3.175 mm
Axial play	< 0.04 mm
Thread profile	Gothic
Surface finish (specified)	Ra 1.6 µm
Drawing tolerance standard	ISO 2768-mK
Assembly mass (approx.)	1.1 kg