



Metric Ball Screws



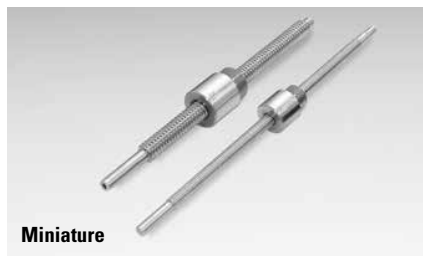
Miniature Rolled Ball Screws

Miniature Rolled Ball Screw Assemblies are an efficient, cost-effective solution in a small envelope. Ball screw assemblies range from 4 to 14 mm in diameter, with standard lead accuracies of 52 microns/300 mm. Miniature Rolled Ball Screws are ideal for laboratory, semiconductor, and medical applications.

Metric Rolled Ball Screws

Thomson Rolled Ball Screw Assemblies are designed and manufactured to provide high level performance at an affordable price. Ball screws are manufactured using Thomson's patented, German-engineered Precision Screw Forming (PST) Technology, which provides high accuracy (23 microns/300 mm standard) with the manufacturing efficiency of rolled processes. Ball Screw Assemblies are available in a wide range of diameters, leads, and nut styles - all designed to provide quiet, smooth running, and efficient performance. Ball nuts include one of three unique ball return systems (depending on the diameter and lead of the screw used) providing perfect guidance, low wear, and smooth running performance. Thomson Rolled Ball Screw Assemblies are ideal for machining centers, factory automation, packaging, injection molding, wood working, water jet cutting, electronic assembly, and medical applications.

Metric Ball Screws Overview



Miniature Rolled Ball Screws												
Diam.	Lead											
	1 mm	2 mm	2.5 mm	3 mm	4 mm	5 mm	6 mm	8 mm	10 mm	12 mm	15 mm	20 mm
4 mm	●											
5 mm					●							
6 mm	●	●					●					
8 mm	●	●	●	●		●		●		●		
10 mm		●		●	●				●		●	●
12 mm		●		●	●	●			●			
13 mm					●	●			●	●		●
14 mm		●		●	●							

Metric Rolled Ball Screws														
Diam.	Lead													
	1 mm	2 mm	4 mm	5 mm	6 mm	8 mm	10 mm	12 mm	15 mm	20 mm	25 mm	32 mm	40 mm	50 mm
16 mm				●			●							
20 mm				●						●				●
25 mm				●			●			●	●			●
32 mm				●			●			●		●	●	
40 mm				●			●			●			●	
50 mm							●			●				
63 mm							●			●				
80 mm							●							

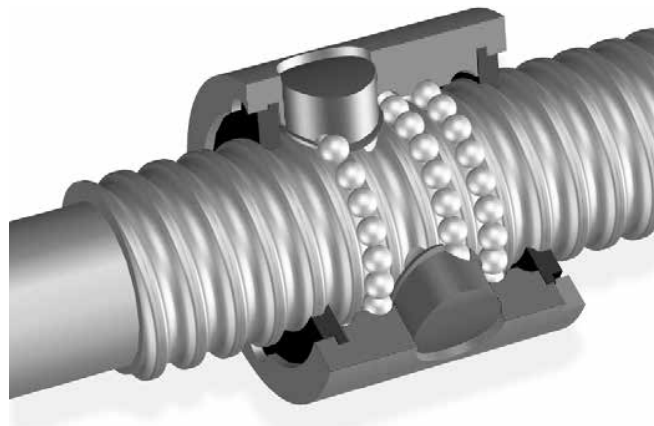


Metric Ball Screw Nuts - Return Systems Overview

All ball screws require a recirculation system for the ball nut balls. Thomson return systems are optimized for each diameter and lead combination to maximize load capacity, minimize footprint and guarantee smooth and reliable operation.

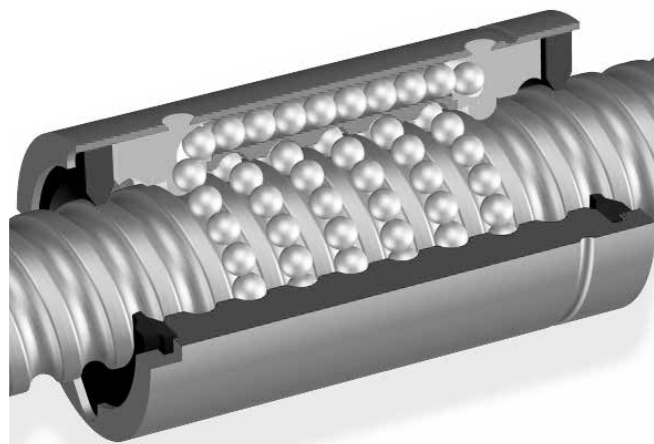
Single Circuit and Multi Circuit

After each turn, the balls are lifted from the shaft raceway and set back by a single turn. Thomson return systems made from glass-fiber reinforced plastic or steel guarantee a faultless and gentle recirculation of the balls.



Internal Return

After several turns, the balls are returned either by a patented plastic recirculation system integrated into the nut or through recirculation channels also integrated into the nut using steel recirculation inserts.



External Return

The balls are recirculated via two special end caps and return channels integrated into the nut.

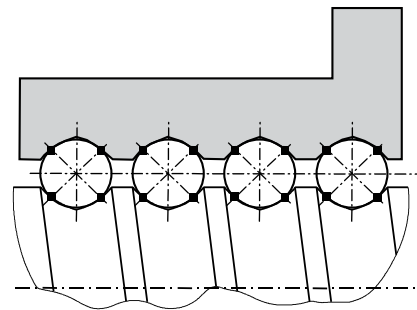


Metric Ball Screw Nuts - Pre-Loading Alternatives

Most of our metric ball nuts come standard as non-preloaded with pre-loaded available as an option on most sizes. Non-Preloaded Ball Nuts are a flexible, economical solution for use in industrial, transport grade applications. Preloaded Ball Nuts should be considered to eliminate backlash and increase system stiffness in applications where multi-directional positional accuracy and repeatability are required.

Pre-load (Type Z1)

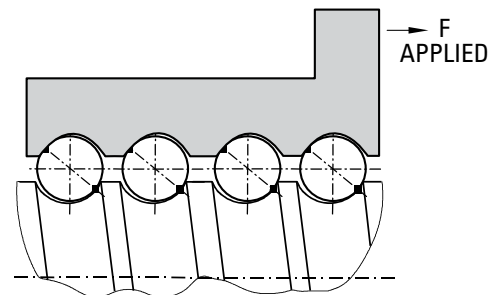
- Oversized balls slightly larger than the ball groove space are used to provide zero backlash between the screw and nut.
- The preload is approximately 1% to 2% of dynamic load capacity.
- Typically used for positioning applications where higher-level repeatability is desired.



No Pre-load (Type Z2)

(Standard lash)

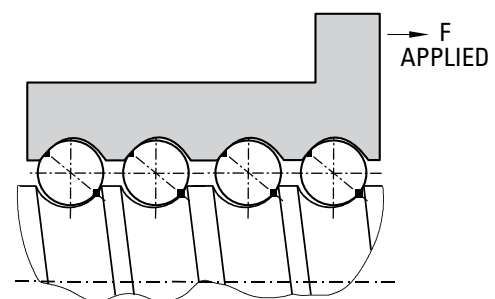
- Axial play is present between screw and nut.
- Typically used for transport or vertical applications.



No Pre-load (Type Z3)

(Minimum lash)

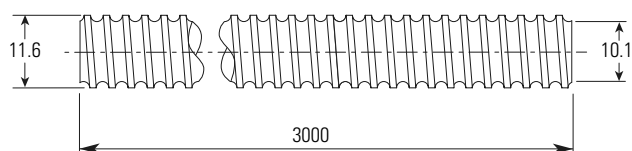
- Axial play is present between screw and nut (held to 0.05 mm maximum).
- Typically used for transport or vertical applications.





Ø 12 x 4 mm Metric Ball Screws – Rolled

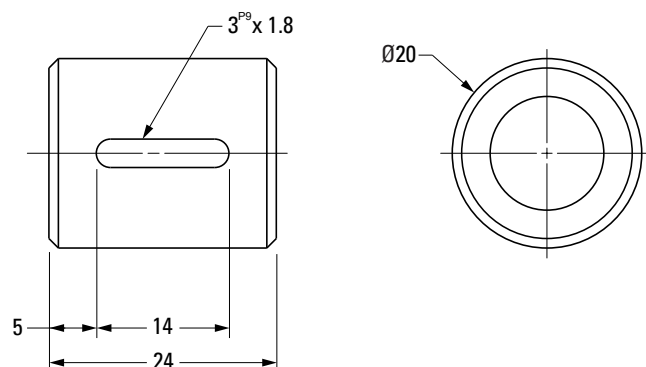
Ball Screw



Nominal Ball Screw Diameter	12 mm
Nominal Ball Screw Lead	4 mm
Thread Direction	Right Hand
Number of Thread Starts	1
Screw Material	CF53
Screw Weight	0.76 kg/m
Nominal Ball Diameter	2.0 mm
Lead Accuracy ⁽¹⁾ P5 Part Number	195-9715

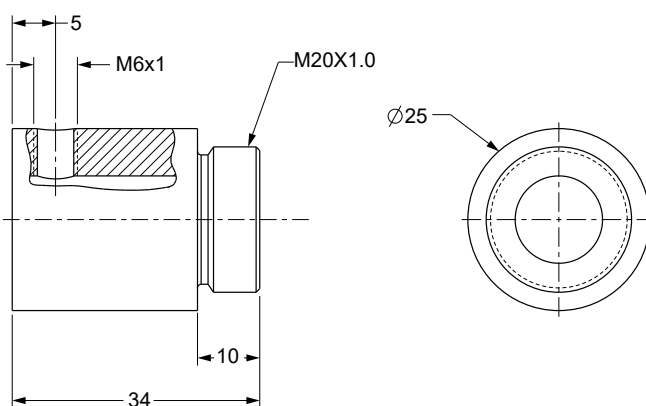
Ball screws can be cut to the length you require. Specify ball screw part number and overall length at time of order

Cylindrical Ball Nut, KGM-N



Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	4.9 kN
Max. Static Load	6.6 kN
Number of Circuits	3
Torque to Raise 1 kN	0.708 Nm
Nut Weight	0.1 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.024 mm
Ball Return Type	Channel
Number of Balls	63
Wiper Type	N/A
Part Number	KGM-N-1204-RH-00

Threaded Ball Nut, KGM-G



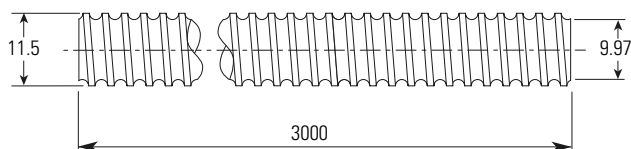
Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	3.8 kN
Max. Static Load	4.3 kN
Number of Circuits	3
Torque to Raise 1 kN	0.708 Nm
Nut Weight	0.1 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.024 mm
Ball Return Type	Single Circuit
Number of Balls	60
Wiper Type	N/A
Part Number	KGM-G-1204-RH-00

(1) P3 = 12 µm / 300 mm, P5 = 23 µm / 300 mm, T5 = 23 µm / 300 mm, T7 = 52 µm / 300 mm
 (2) Z1= light preload to 1-2%, Z2 = no preload, clearance held to max. indicated in table (standard unless specified), Z3 = no preload, clearance held to max. 0.05 mm

Note: Dimensional information for all End Journals and Bearing Supports is available on page 118 – 137. Information on required lubrication is on page 177.

Ø 12 x 5 mm Metric Ball Screws – Rolled

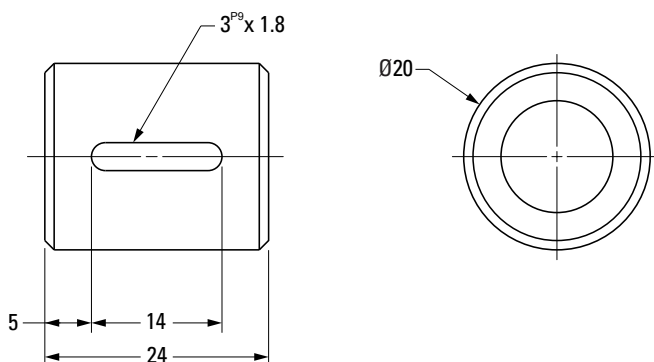
Ball Screw



Nominal Ball Screw Diameter	12 mm
Nominal Ball Screw Lead	5 mm
Thread Direction	Right Hand
Number of Thread Starts	1
Screw Material	CF53
Screw Weight	0.76 kg/m
Nominal Ball Diameter	5 mm
Lead Accuracy ⁽¹⁾ P5 Part Number	195-9716

Ball screws can be cut to the length you require. Specify ball screw part number and overall length at time of order

Cylindrical Ball Nut, KGM-N



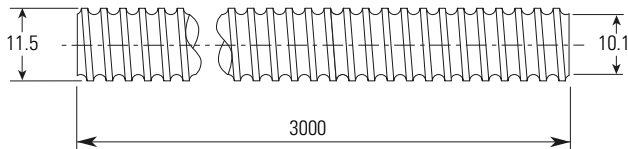
Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	4.4 kN
Max. Static Load	6.8 kN
Number of Circuits	3
Torque to Raise 1 kN	0.885 Nm
Nut Weight	0.1 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.024 mm
Ball Return Type	Channel
Number of Balls	63
Wiper Type	N/A
Part Number	KGM-N-1205-RH-00

(1) P3 = 12 µm / 300 mm, P5 = 23 µm / 300 mm, T5 = 23 µm / 300 mm, T7 = 52 µm / 300 mm
(2) Z1= light preload to 1-2%, Z2 = no preload, clearance held to max. indicated in table (standard unless specified), Z3 = no preload, clearance held to max. 0.05 mm



Ø 12 x 10 mm Metric Ball Screws – Rolled

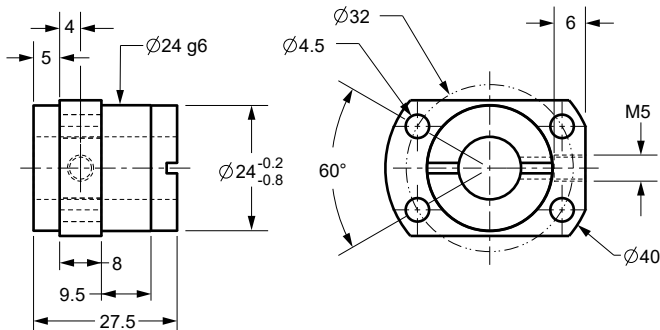
Ball Screw



Nominal Ball Screw Diameter	12 mm
Nominal Ball Screw Lead	10 mm
Thread Direction	Right Hand
Number of Thread Starts	2
Screw Material	CF53
Screw Weight	0.75 kg/m
Nominal Ball Diameter	2.0 mm
Lead Accuracy ⁽¹⁾ P5 Part Number	195-9717

Ball screws can be cut to the length you require. Specify ball screw part number and overall length at time of order

Flanged Ball Nut



DIN 69051 Compliance

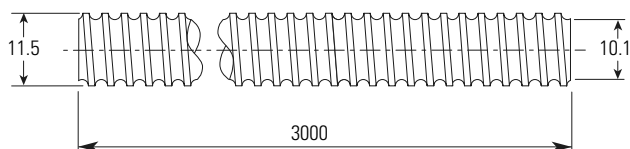
Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	4.9 kN
Max. Static Load	8.0 kN
Number of Circuits	4
Torque to Raise 1 kN	1.77 Nm
Nut Weight	0.1 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.024 mm
Ball Return Type	End Cap
Number of Balls	63
Wiper Type	Rubber
Part Number	7105-448-001

(1) P3 = 12 µm / 300 mm, P5 = 23 µm / 300 mm, T5 = 23 µm / 300 mm, T7 = 52 µm / 300 mm
 (2) Z1= light preload to 1-2%, Z2 = no preload, clearance held to max. indicated in table (standard unless specified), Z3 = no preload, clearance held to max. 0.05 mm

Note: Dimensional information for all End Journals and Bearing Supports is available on page 118 – 137. Information on required lubrication is on page 177.

Ø 12 x 10 mm Metric Ball Screws – Rolled

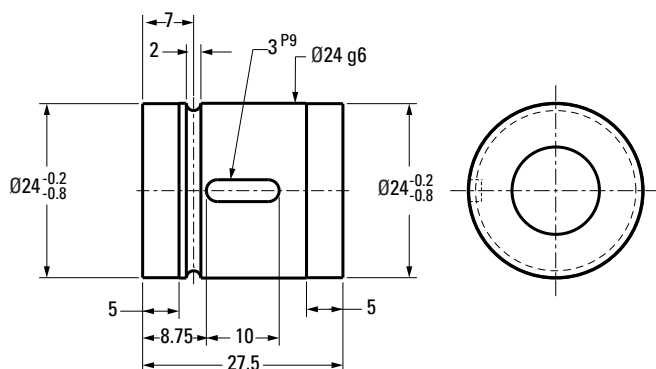
Ball Screw



Nominal Ball Screw Diameter	12 mm
Nominal Ball Screw Lead	10 mm
Thread Direction	Right Hand
Number of Thread Starts	2
Screw Material	CF53
Screw Weight	0.75 kg/m
Nominal Ball Diameter	2.0 mm
Lead Accuracy ⁽¹⁾ P5 Part Number	195-9717

Ball screws can be cut to the length you require. Specify ball screw part number and overall length at time of order

Cylindrical Ball Nut, KGM-D



DIN 69051 Compliance

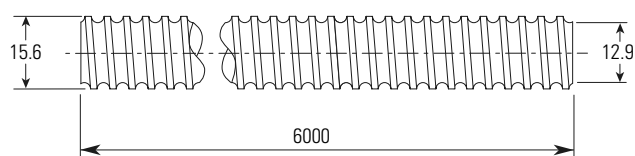
Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	4.49 kN
Max. Static Load	8.0 kN
Number of Circuits	4
Torque to Raise 1 kN	1.77 Nm
Nut Weight	0.1 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.024 mm
Ball Return Type	End Cap
Number of Balls	63
Wiper Type	Polymer
Part Number	KGM-D-1210-RH-00

(1) P3 = 12 µm / 300 mm, P5 = 23 µm / 300 mm, T5 = 23 µm / 300 mm, T7 = 52 µm / 300 mm
(2) Z1= light preload to 1-2%, Z2 = no preload, clearance held to max. indicated in table (standard unless specified), Z3 = no preload, clearance held to max. 0.05 mm

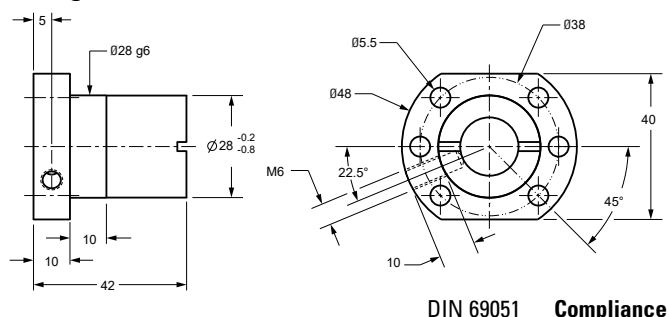


Ø 16 x 5 mm Metric Ball Screws – Rolled

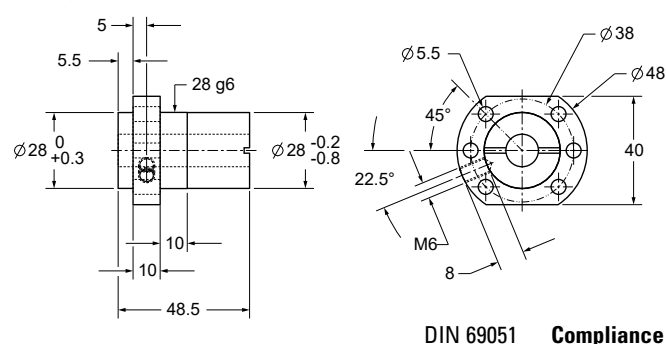
Ball Screw



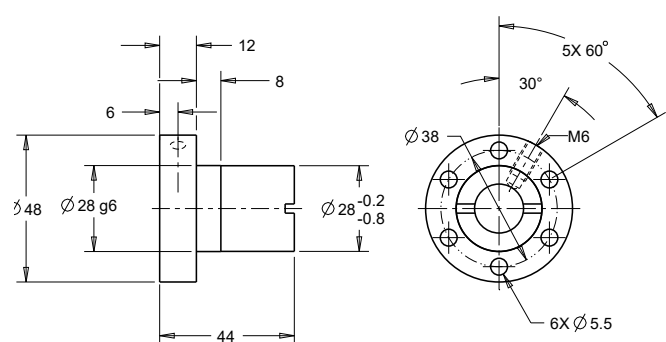
Flanged Ball Nut



Flanged Ball Nut, KGF-D (FK)



Flanged Ball Nut, KGF-N



Note: Dimensional information for all End Journals and Bearing Supports is available on page 118 – 137. Information on required lubrication is on page 177.

Nominal Ball Screw Diameter	16 mm
Nominal Ball Screw Lead	5 mm
Thread Direction	Right Hand
Number of Thread Starts	1
Screw Material	CF53
Screw Weight	1.38 kg/m
Nominal Ball Diameter	3.5 mm
Lead Accuracy ⁽¹⁾ P5 Part Number	195-9698

Ball screws can be cut to the length you require. Specify ball screw part number and overall length at time of order

Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	9.3 kN
Max. Static Load	13.1 kN
Number of Circuits	3
Torque to Raise 1 kN	0.885 Nm
Nut Weight	0.2 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.041 mm
Ball Return Type	Single Circuit Polymer
Number of Balls	45
Wiper Type	Rubber
Part Number	7106-448-061

Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	9.5 kN
Max. Static Load	10.9 kN
Number of Circuits	3
Torque to Raise 1 kN	0.885 Nm
Nut Weight	0.3 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.041 mm
Ball Return Type	Single Circuit Metal
Number of Balls	42
Wiper Type	Polymer
Part Number	KGF-D-1605-RH-KK

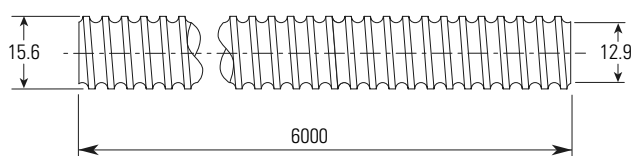
Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	9.3 kN
Max. Static Load	13.1 kN
Number of Circuits	3
Torque to Raise 1 kN	0.885 Nm
Nut Weight	0.2 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.041 mm
Ball Return Type	Single Circuit
Number of Balls	45
Wiper Type	Rubber
Part Number	KGF-N-1605-RH-EE

(1) P3 = 12 µm / 300 mm, P5 = 23 µm / 300 mm, T5 = 23 µm / 300 mm, T7 = 52 µm / 300 mm
 (2) Z1= light preload to 1-2%, Z2 = no preload, clearance held to max. indicated in table (standard unless specified), Z3 = no preload, clearance held to max. 0.05 mm

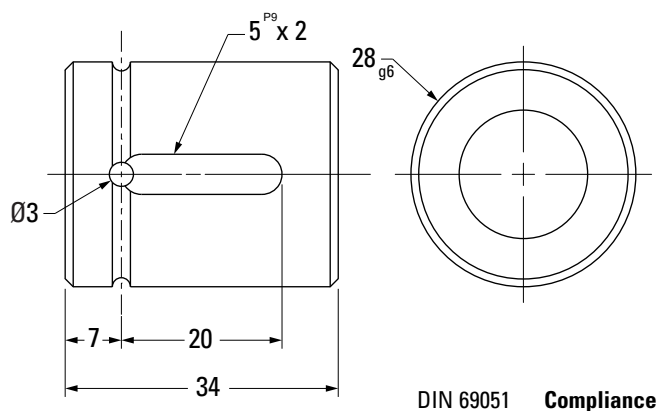
Ball Screws and Ball Splines

Ø 16 x 5 mm Metric Ball Screws – Rolled

Ball Screw



Cylindrical Ball Nut, KGM-D

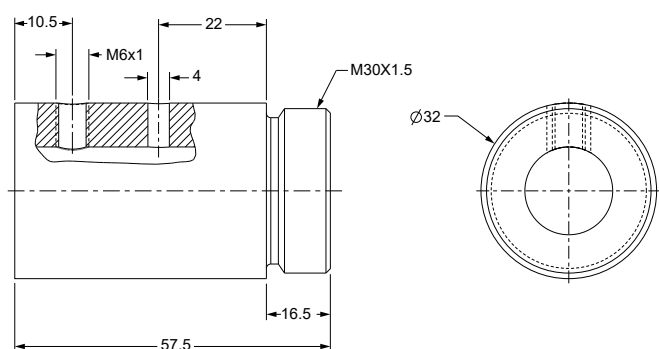


Nominal Ball Screw Diameter	16 mm
Nominal Ball Screw Lead	5 mm
Thread Direction	Right Hand
Number of Thread Starts	1
Screw Material	CF53
Screw Weight	1.38 kg/m
Nominal Ball Diameter	3.5 mm
Lead Accuracy ⁽¹⁾ P5 Part Number	195-9698

Ball screws can be cut to the length you require. Specify ball screw part number and overall length at time of order

Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	9.3 kN
Max. Static Load	13.1 kN
Number of Circuits	3
Torque to Raise 1 kN	0.885 Nm
Nut Weight	0.10 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.041 mm
Ball Return Type	Single Circuit
Number of Balls	45
Wiper Type	Polymer
Part Number	KGM-D-1605-RH-EE

Threaded Ball Nut, KGM-G



Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	12.1 kN
Max. Static Load	14.5 kN
Number of Circuits	4
Torque to Raise 1 kN	0.885 Nm
Nut Weight	0.22 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.041 mm
Ball Return Type	Single Circuit
Number of Balls	56
Wiper Type	Polymer
Part Number	KGM-G-1605-RH-KK

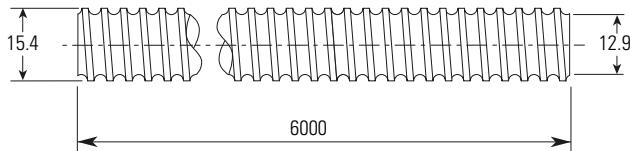
(1) P3 = 12 µm / 300 mm, P5 = 23 µm / 300 mm, T5 = 23 µm / 300 mm, T7 = 52 µm / 300 mm
 (2) Z1= light preload to 1-2%, Z2 = no preload, clearance held to max. indicated in table (standard unless specified), Z3 = no preload, clearance held to max. 0.05 mm

Note: Dimensional information for all End Journals and Bearing Supports is available on page 118 – 137. Information on required lubrication is on page 177.



Ø 16 x 10 mm Metric Ball Screws – Rolled

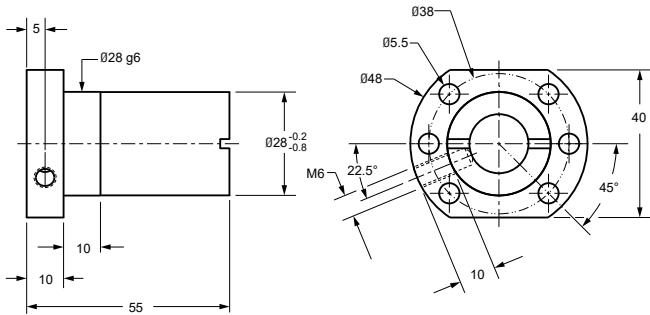
Ball Screw



Nominal Ball Screw Diameter	16 mm
Nominal Ball Screw Lead	10 mm
Thread Direction	Right Hand
Number of Thread Starts	2
Screw Material	CF53
Screw Weight	1.26 kg/m
Nominal Ball Diameter	3.0 mm
Lead Accuracy ⁽¹⁾ P5 Part Number	195-9699

Ball screws can be cut to the length you require. Specify ball screw part number and overall length at time of order

Flanged Ball Nut



DIN 69051 Compliance

Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	15.4 kN
Max. Static Load	26.5 kN
Number of Circuits	6
Torque to Raise 1 kN	1.77 Nm
Nut Weight	0.3 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.041 mm
Ball Return Type	Channel
Number of Balls	102
Wiper Type	Rubber
Part Number	7106-448-062

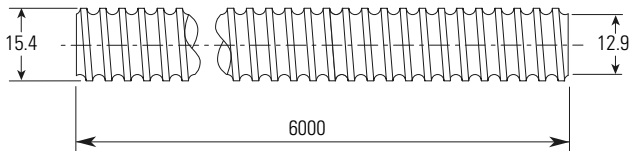
(1) P3 = 12 µm / 300 mm, P5 = 23 µm / 300 mm, T5 = 23 µm / 300 mm, T7 = 52 µm / 300 mm

(2) Z1= light preload to 1-2%, Z2 = no preload, clearance held to max. indicated in table (standard unless specified), Z3 = no preload, clearance held to max. 0.05 mm

Note: Dimensional information for all End Journals and Bearing Supports is available on page 118 – 137. Information on required lubrication is on page 177.

Ø 16 x 10 mm Metric Ball Screws – Rolled

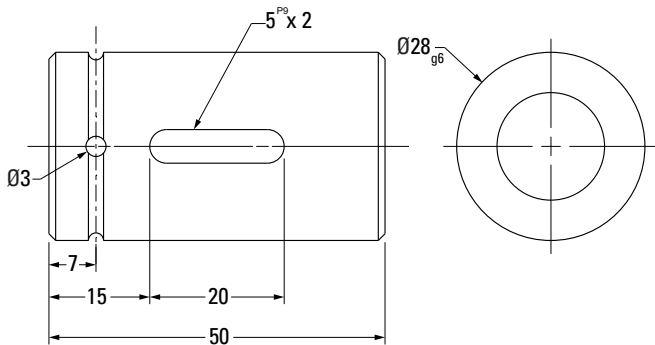
Ball Screw



Nominal Ball Screw Diameter	16 mm
Nominal Ball Screw Lead	10 mm
Thread Direction	Right Hand
Number of Thread Starts	2
Screw Material	CF53
Screw Weight	1.26 kg/m
Nominal Ball Diameter	3.0 mm
Lead Accuracy ⁽¹⁾ P5 Part Number	195-9699

Ball screws can be cut to the length you require. Specify ball screw part number and overall length at time of order

Cylindrical Ball Nut, KGM-D



DIN 69051 Compliance

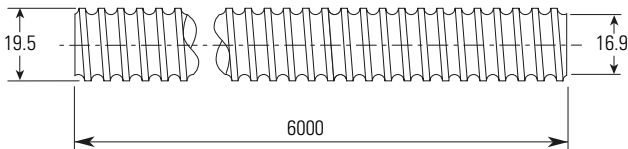
Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	15.4 kN
Max. Static Load	26.5 kN
Number of Circuits	6
Torque to Raise 1 kN	1.77 Nm
Nut Weight	0.2 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.035 mm
Ball Return Type	Channel
Number of Balls	102
Wiper Type	Polymer
Part Number	KGM-D-1610-RH-EE

(1) P3 = 12 µm / 300 mm, P5 = 23 µm / 300 mm, T5 = 23 µm / 300 mm, T7 = 52 µm / 300 mm
 (2) Z1= light preload to 1-2%, Z2 = no preload, clearance held to max. indicated in table (standard unless specified), Z3 = no preload, clearance held to max. 0.05 mm

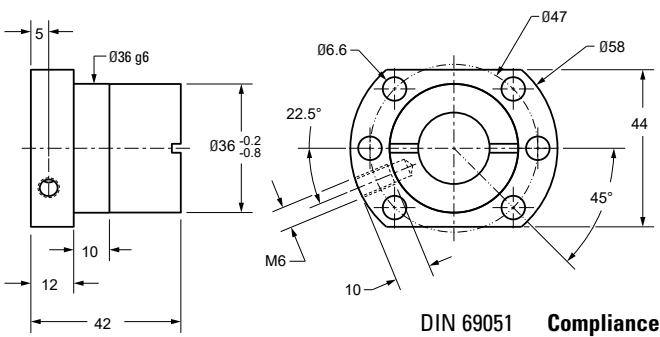


Ø 20 x 5 mm Metric Ball Screws – Rolled

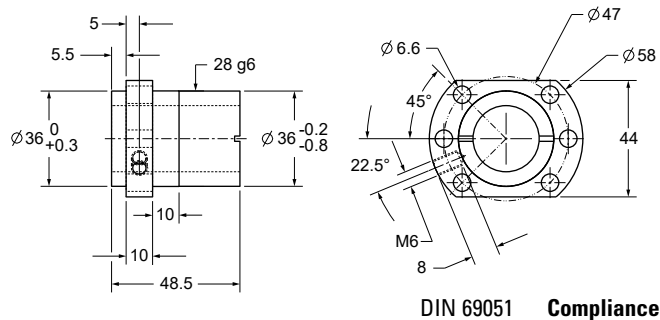
Ball Screw



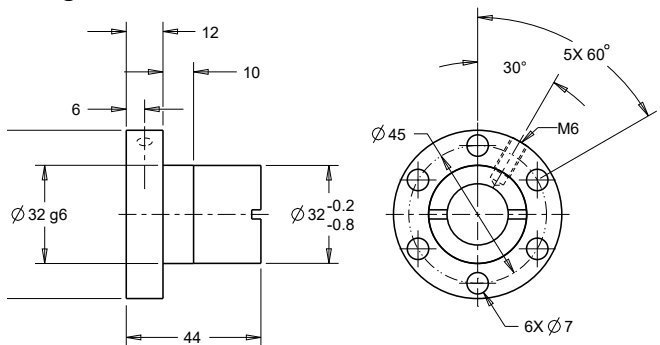
Flanged Ball Nut



Flanged Ball Nut, KGF-D (FK)



Flanged Ball Nut, KGF-N



Note: Dimensional information for all End Journals and Bearing Supports is available on page 118 – 137. Information on required lubrication is on page 177.

Nominal Ball Screw Diameter	20 mm
Nominal Ball Screw Lead	5 mm
Thread Direction	Right Hand
Number of Thread Starts	1
Screw Material	CF53
Screw Weight	2.20 kg/m
Nominal Ball Diameter	3.5 mm
Lead Accuracy ⁽¹⁾ P5 Part Number	195-9700

Ball screws can be cut to the length you require. Specify ball screw part number and overall length at time of order

Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	10.5 kN
Max. Static Load	16.6 kN
Number of Circuits	3
Torque to Raise 1 kN	0.885 Nm
Nut Weight	0.25 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.035 mm
Ball Return Type	Channel
Number of Balls	48
Wiper Type	Rubber
Part Number	7107-448-063

Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	11.5 kN
Max. Static Load	15.5 kN
Number of Circuits	3
Torque to Raise 1 kN	0.885 Nm
Nut Weight	0.4 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.041 mm
Ball Return Type	Single Circuit Metal
Number of Balls	54
Wiper Type	Polymer
Part Number	KGF-D-2005-RH-KK

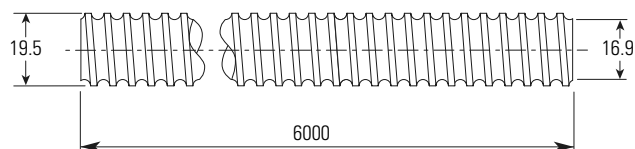
Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	10.5 kN
Max. Static Load	16.6 kN
Number of Circuits	3
Torque to Raise 1 kN	0.885 Nm
Nut Weight	0.25 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.041 mm
Ball Return Type	Single Circuit
Number of Balls	48
Wiper Type	Rubber
Part Number	KGF-N-2005-RH-EE

(1) P3 = 12 µm / 300 mm, P5 = 23 µm / 300 mm, T5 = 23 µm / 300 mm, T7 = 52 µm / 300 mm

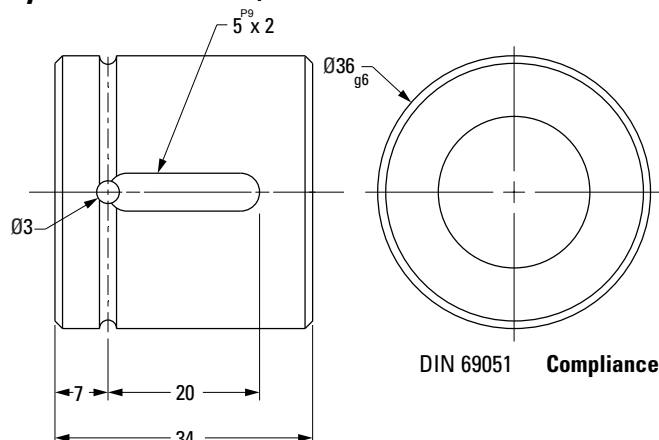
(2) Z1= light preload to 1-2%, Z2 = no preload, clearance held to max. indicated in table (standard unless specified), Z3 = no preload, clearance held to max. 0.05 mm

Ø 20 x 5 mm Metric Ball Screws – Rolled

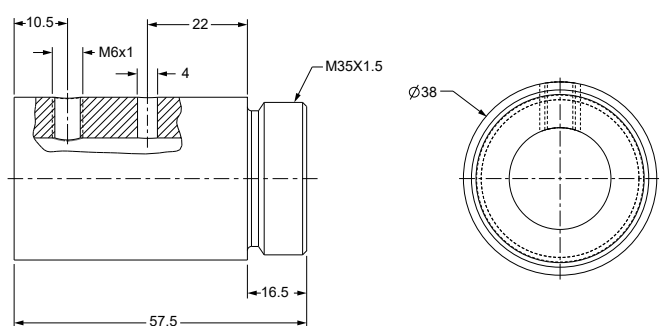
Ball Screw



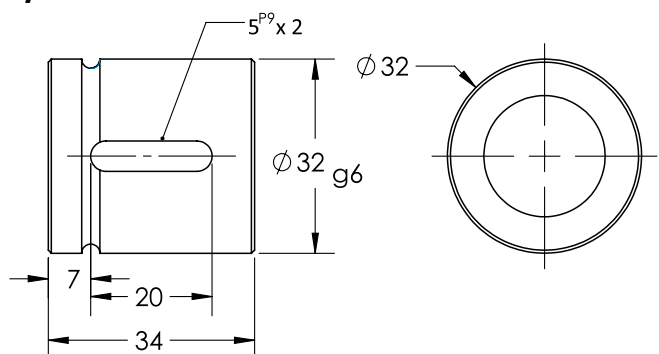
Cylindrical Ball Nut, KGM-D



Threaded Ball Nut, KGM-G



Cylindrical Ball Nut, KGM-N



Note: Dimensional information for all End Journals and Bearing Supports is available on page 118 – 137. Information on required lubrication is on page 177.

www.thomsonlinear.com

Nominal Ball Screw Diameter	20 mm
Nominal Ball Screw Lead	5 mm
Thread Direction	Right Hand
Number of Thread Starts	1
Screw Material	CF53
Screw Weight	2.20 kg/m
Nominal Ball Diameter	3.5 mm
Lead Accuracy ⁽¹⁾ P5 Part Number	195-9700

Ball screws can be cut to the length you require. Specify ball screw part number and overall length at time of order

Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	10.5 kN
Max. Static Load	16.6 kN
Number of Circuits	3
Torque to Raise 1 kN	0.885 Nm
Nut Weight	0.2 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.041 mm
Ball Return Type	Channel
Number of Balls	48
Wiper Type	Polymer
Part Number	KGM-D-2005-RH-EE

Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	14.8 kN
Max. Static Load	20.7 kN
Number of Circuits	4
Torque to Raise 1 kN	0.885 Nm
Nut Weight	0.3 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.041 mm
Ball Return Type	Single Circuit
Number of Balls	72
Wiper Type	Polymer
Part Number	KGM-G-2005-RH-KK

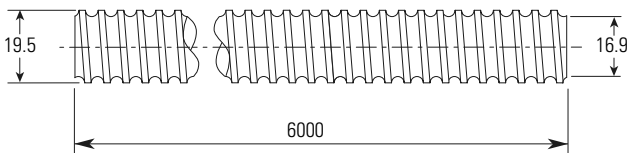
Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	10.5 kN
Max. Static Load	16.6 kN
Number of Circuits	3
Torque to Raise 1 kN	0.885 Nm
Nut Weight	0.1 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.041 mm
Ball Return Type	Single Circuit Metal
Number of Balls	48
Wiper Type	Rubber
Part Number	KGM-N-2005-RH-EE

(1) P3 = 12 µm / 300 mm, P5 = 23 µm / 300 mm, T5 = 23 µm / 300 mm, T7 = 52 µm / 300 mm
 (2) Z1= light preload to 1-2%, Z2 = no preload, clearance held to max. indicated in table (standard unless specified), Z3 = no preload, clearance held to max. 0.05 mm



Ø 20 x 20 mm Metric Ball Screws – Rolled

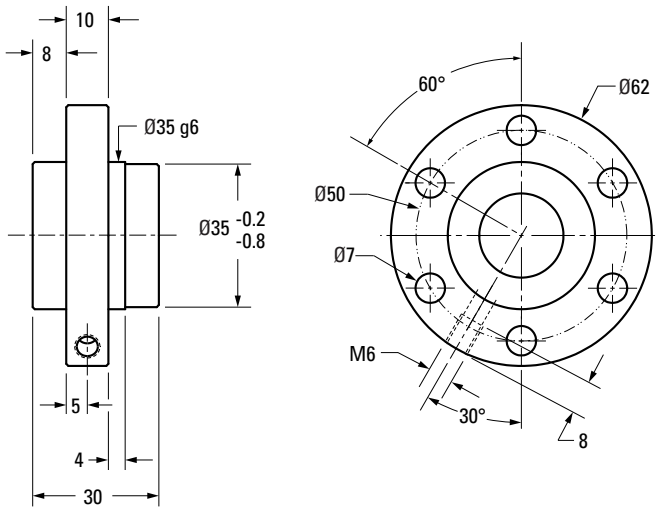
Ball Screw



Nominal Ball Screw Diameter	20 mm
Nominal Ball Screw Lead	20 mm
Thread Direction	Right Hand
Number of Thread Starts	4
Screw Material	CF53
Screw Weight	2.23 kg/m
Nominal Ball Diameter	3.5 mm
Lead Accuracy ⁽¹⁾ P5 Part Number	195-9718

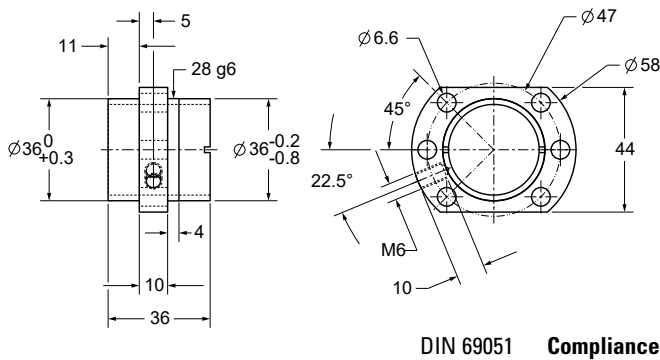
Ball screws can be cut to the length you require. Specify ball screw part number and overall length at time of order

Flanged Ball Nut, KGF-N



Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	11.6 kN
Max. Static Load	18.4 kN
Number of Circuits	4
Torque to Raise 1 kN	3.54 Nm
Nut Weight	0.3 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.041 mm
Ball Return Type	End Cap
Number of Balls	100
Wiper Type	Rubber
Part Number	KGF-N-2020-RH-EE

Flanged Ball Nut, KGF-D (FH)



DIN 69051 Compliance

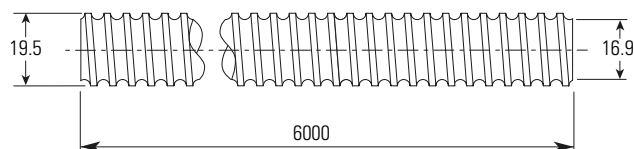
Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	10.8 kN
Max. Static Load	17.5 kN
Number of Circuits	2.8
Torque to Raise 1 kN	3.54 Nm
Nut Weight	0.5 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.041 mm
Ball Return Type	End Cap
Number of Balls	100
Wiper Type	Polymer
Part Number	KGF-D-2020-RH-KK

(1) P3 = 12 µm / 300 mm, P5 = 23 µm / 300 mm, T5 = 23 µm / 300 mm, T7 = 52 µm / 300 mm
 (2) Z1= light preload to 1-2%, Z2 = no preload, clearance held to max. indicated in table (standard unless specified), Z3 = no preload, clearance held to max. 0.05 mm

Note: Dimensional information for all End Journals and Bearing Supports is available on page 118 – 137. Information on required lubrication is on page 177.

Ø 20 x 20 mm Metric Ball Screws – Rolled

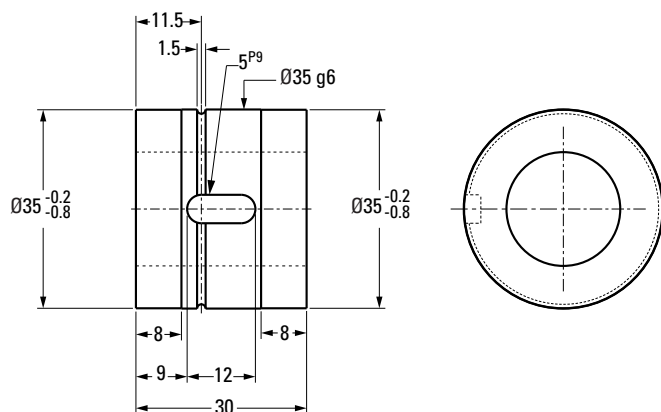
Ball Screw



Nominal Ball Screw Diameter	20 mm
Nominal Ball Screw Lead	20 mm
Thread Direction	Right Hand
Number of Thread Starts	4
Screw Material	CF53
Screw Weight	2.23 kg/m
Nominal Ball Diameter	3.5 mm
Lead Accuracy ⁽¹⁾ P5 Part Number	195-9718

Ball screws can be cut to the length you require. Specify ball screw part number and overall length at time of order

Cylindrical Ball Nut, KGM-N



Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	11.6 kN
Max. Static Load	18.4 kN
Number of Circuits	4
Torque to Raise 1 kN	3.54 Nm
Nut Weight	0.2 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.041 mm
Ball Return Type	End Cap
Number of Balls	100
Wiper Type	Polymer
Part Number	KGM-N-2020-RH-EE

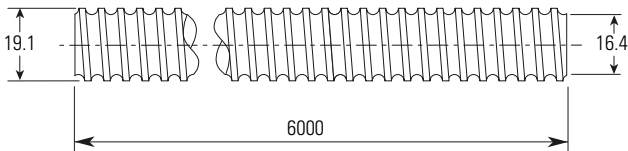
(1) P3 = 12 µm / 300 mm, P5 = 23 µm / 300 mm, T5 = 23 µm / 300 mm, T7 = 52 µm / 300 mm

(2) Z1= light preload to 1-2%, Z2 = no preload, clearance held to max. indicated in table (standard unless specified), Z3 = no preload, clearance held to max. 0.05 mm



Ø 20 x 50 mm Metric Ball Screws – Rolled

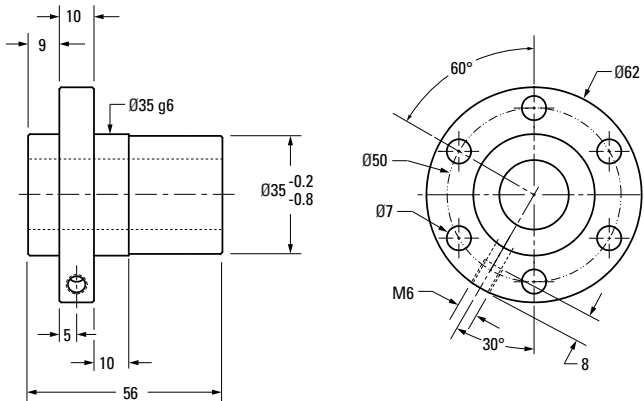
Ball Screw



Nominal Ball Screw Diameter	20 mm
Nominal Ball Screw Lead	50 mm
Thread Direction	Right Hand
Number of Thread Starts	5
Screw Material	CF53
Screw Weight	2.05 kg/m
Nominal Ball Diameter	3.5 mm
Lead Accuracy ⁽¹⁾ P5 Part Number	195-9729

Ball screws can be cut to the length you require. Specify ball screw part number and overall length at time of order

Flanged Ball Nut, KGF-N



Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	13.0 kN
Max. Static Load	24.6 kN
Number of Circuits	5
Torque to Raise 1 kN	8.85 Nm
Nut Weight	0.4 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.041 mm
Ball Return Type	End Cap
Number of Balls	140
Wiper Type	Rubber
Part Number	KGF-N-2050-RH-EE

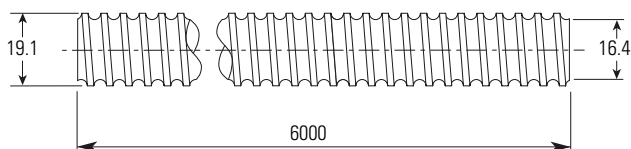
(1) P3 = 12 µm / 300 mm, P5 = 23 µm / 300 mm, T5 = 23 µm / 300 mm, T7 = 52 µm / 300 mm

(2) Z1= light preload to 1-2%, Z2 = no preload, clearance held to max. indicated in table (standard unless specified), Z3 = no preload, clearance held to max. 0.05 mm

Note: Dimensional information for all End Journals and Bearing Supports is available on page 118 – 137. Information on required lubrication is on page 177.

Ø 20 x 50 mm Metric Ball Screws – Rolled

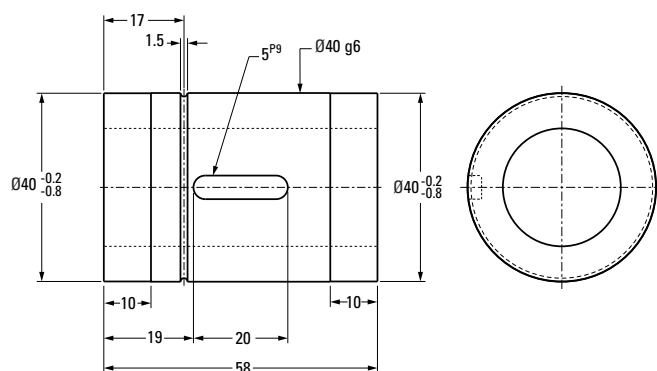
Ball Screw



Nominal Ball Screw Diameter	20 mm
Nominal Ball Screw Lead	50 mm
Thread Direction	Right Hand
Number of Thread Starts	5
Screw Material	CF53
Screw Weight	2.05 kg/m
Nominal Ball Diameter	3.5 mm
Lead Accuracy ⁽¹⁾ P5 Part Number	195-9729

Ball screws can be cut to the length you require. Specify ball screw part number and overall length at time of order

Cylindrical Ball Nut, KGM-N



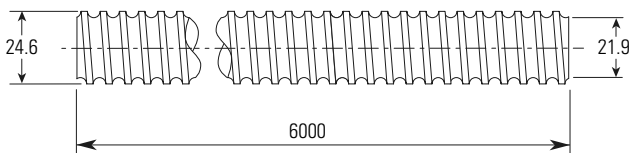
Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	13.0 kN
Max. Static Load	24.6 kN
Number of Circuits	5
Torque to Raise 1 kN	8.85 Nm
Nut Weight	0.3 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.041 mm
Ball Return Type	End Cap
Number of Balls	140
Wiper Type	Rubber
Part Number	KGM-N-2050-RH-EE

(1) P3 = 12 µm / 300 mm, P5 = 23 µm / 300 mm, T5 = 23 µm / 300 mm, T7 = 52 µm / 300 mm
 (2) Z1= light preload to 1-2%, Z2 = no preload, clearance held to max. indicated in table (standard unless specified), Z3 = no preload, clearance held to max. 0.05 mm

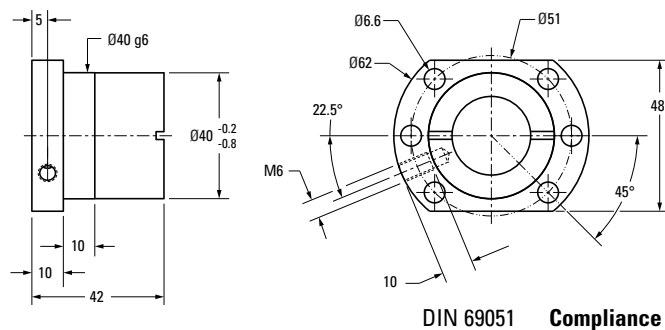


Ø 25 x 5 mm Metric Ball Screws – Rolled

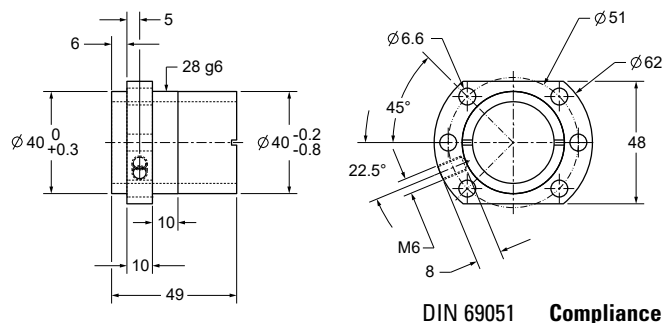
Ball Screw



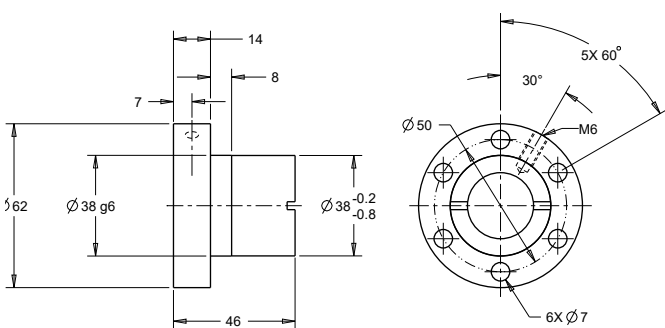
Flanged Ball Nut



Flanged Ball Nut, KGF-D (FK)



Flanged Ball Nut, KGF-N



Note: Dimensional information for all End Journals and Bearing Supports is available on page 118 – 137. Information on required lubrication is on page 177.

Nominal Ball Screw Diameter	25 mm
Nominal Ball Screw Lead	5 mm
Thread Direction	Right Hand
Number of Thread Starts	1
Screw Material	CF53
Screw Weight	3.32 kg/m
Nominal Ball Diameter	3.5 mm
Lead Accuracy ⁽¹⁾ P5 Part Number	195-9701

Ball screws can be cut to the length you require. Specify ball screw part number and overall length at time of order

Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	12.3 kN
Max. Static Load	22.5 kN
Number of Circuits	3
Torque to Raise 1 kN	0.885 Nm
Nut Weight	0.4 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.041 mm
Ball Return Type	Single Circuit
Number of Balls	63
Wiper Type	Rubber
Part Number	7110-448-064

Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	13.1 kN
Max. Static Load	20.2 kN
Number of Circuits	3
Torque to Raise 1 kN	0.885 Nm
Nut Weight	0.4 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.041 mm
Ball Return Type	Single Circuit Metal
Number of Balls	66
Wiper Type	Polymer
Part Number	KGF-D-2505-RH-KK

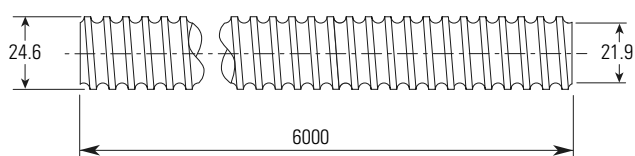
Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	12.3 kN
Max. Static Load	22.5 kN
Number of Circuits	3
Torque to Raise 1 kN	0.885 Nm
Nut Weight	0.4 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.041 mm
Ball Return Type	Single Circuit
Number of Balls	63
Wiper Type	Rubber
Part Number	KGF-N-2505-RH-EE

(1) P3 = 12 µm / 300 mm, P5 = 23 µm / 300 mm, T5 = 23 µm / 300 mm, T7 = 52 µm / 300 mm
 (2) Z1 = light preload to 1-2%, Z2 = no preload, clearance held to max. indicated in table (standard unless specified), Z3 = no preload, clearance held to max. 0.05 mm

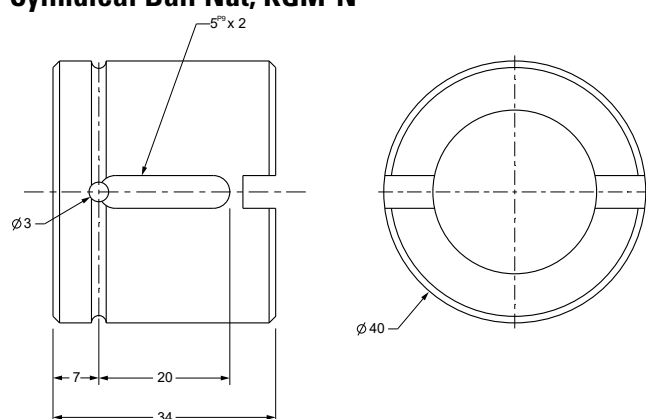
Ball Screws and Ball Splines

Ø 25 x 5 mm Metric Ball Screws – Rolled

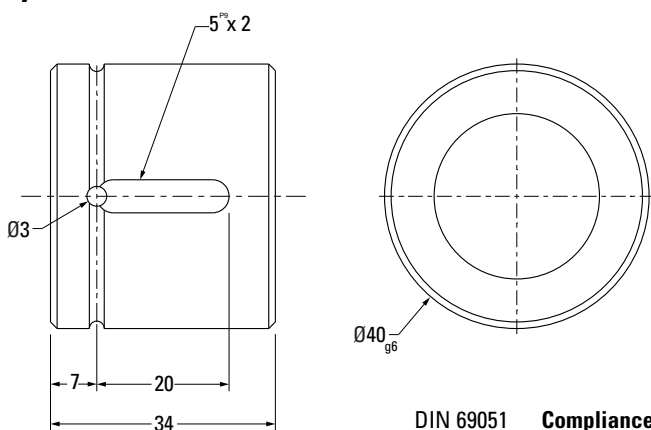
Ball Screw



Cylindrical Ball Nut, KGM-N

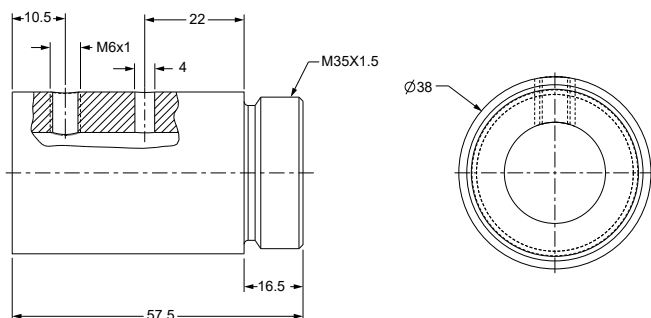


Cylindrical Ball Nut, KGM-D



DIN 69051 Compliance

Threaded Ball Nut, KGM-G



Note: Dimensional information for all End Journals and Bearing Supports is available on page 118 – 137. Information on required lubrication is on page 177.

Nominal Ball Screw Diameter	25 mm
Nominal Ball Screw Lead	5 mm
Thread Direction	Right Hand
Number of Thread Starts	1
Screw Material	CF53
Screw Weight	3.32 kg/m
Nominal Ball Diameter	3.5 mm
Lead Accuracy ⁽¹⁾ P5 Part Number	195-9701

Ball screws can be cut to the length you require. Specify ball screw part number and overall length at time of order

Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	12.3 kN
Max. Static Load	22.5 kN
Number of Circuits	3
Torque to Raise 1 kN	0.885 Nm
Nut Weight	0.15 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.041 mm
Ball Return Type	End Cap
Number of Balls	63
Wiper Type	Rubber
Part Number	KGM-N-2505-RH-EE

Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	12.3 kN
Max. Static Load	22.5 kN
Number of Circuits	3
Torque to Raise 1 kN	0.885 Nm
Nut Weight	0.2 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.090 mm
Ball Return Type	Single Circuit
Number of Balls	63
Wiper Type	Rubber
Part Number	KGM-D-2505-RH-EE

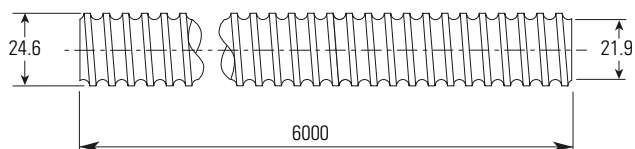
Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	20.4 kN
Max. Static Load	33.7 kN
Number of Circuits	5
Torque to Raise 1 kN	0.885 Nm
Nut Weight	0.2 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.090 mm
Ball Return Type	Single Circuit
Number of Balls	110
Wiper Type	Polymer
Part Number	KGM-G-2505-RH-KK

(1) P3 = 12 µm / 300 mm, P5 = 23 µm / 300 mm, T5 = 23 µm / 300 mm, T7 = 52 µm / 300 mm
 (2) Z1= light preload to 1-2%, Z2 = no preload, clearance held to max. indicated in table (standard unless specified), Z3 = no preload, clearance held to max. 0.05 mm



Ø 25 x 10 mm Metric Ball Screws – Rolled

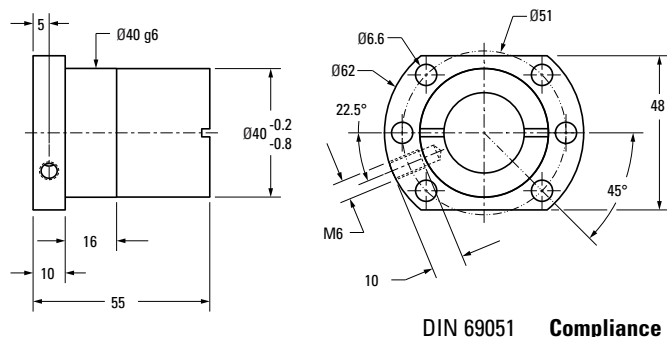
Ball Screw



Nominal Ball Screw Diameter	25 mm
Nominal Ball Screw Lead	10 mm
Thread Direction	Right Hand
Number of Thread Starts	2
Screw Material	CF53
Screw Weight	3.34 kg/m
Nominal Ball Diameter	3.5 mm
Lead Accuracy ⁽¹⁾ P5 Part Number	195-9702

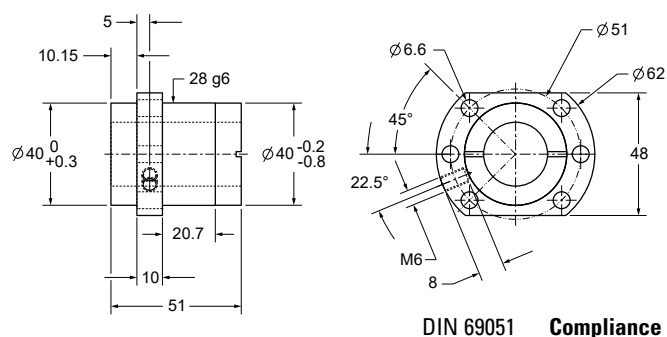
Ball screws can be cut to the length you require. Specify ball screw part number and overall length at time of order

Flanged Ball Nut



Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	13.2 kN
Max. Static Load	25.3 kN
Number of Circuits	3
Torque to Raise 1 kN	1.77 Nm
Nut Weight	0.5 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.041 mm
Ball Return Type	Channel
Number of Balls	75
Wiper Type	Rubber
Part Number	7110-448-065

Flanged Ball Nut, KGF-D (FH)



Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	24.7 kN
Max. Static Load	53.4 kN
Number of Circuits	6.1
Torque to Raise 1 kN	1.77 Nm
Nut Weight	0.5 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.041 mm
Ball Return Type	End Cap
Number of Balls	164
Wiper Type	Polymer
Part Number	KGF-D-2510-RH-KK

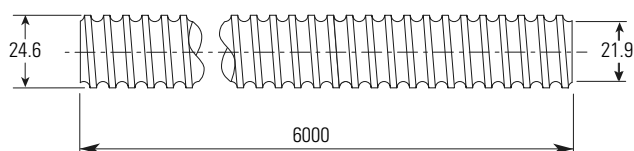
(1) P3 = 12 µm / 300 mm, P5 = 23 µm / 300 mm, T5 = 23 µm / 300 mm, T7 = 52 µm / 300 mm
 (2) Z1= light preload to 1-2%, Z2 = no preload, clearance held to max. indicated in table (standard unless specified), Z3 = no preload, clearance held to max. 0.05 mm

Note: Dimensional information for all End Journals and Bearing Supports is available on page 118 – 137. Information on required lubrication is on page 177.

Ball Screws and Ball Splines

Ø 25 x 10 mm Metric Ball Screws – Rolled

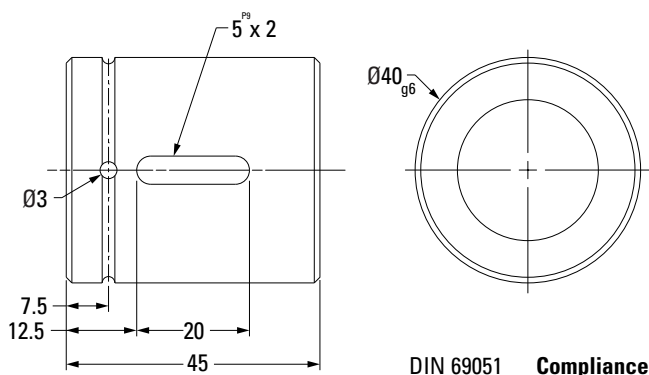
Ball Screw



Nominal Ball Screw Diameter	25 mm
Nominal Ball Screw Lead	10 mm
Thread Direction	Right Hand
Number of Thread Starts	2
Screw Material	CF53
Screw Weight	3.34 kg/m
Nominal Ball Diameter	3.5 mm
Lead Accuracy ⁽¹⁾ P5 Part Number	195-9702

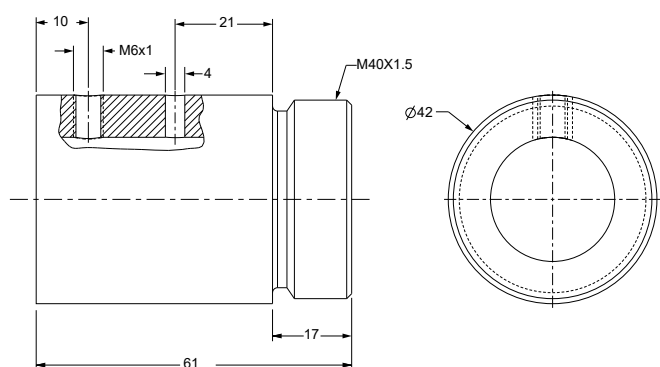
Ball screws can be cut to the length you require. Specify ball screw part number and overall length at time of order

Cylindrical Ball Nut, KGM-D



Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	13.2 kN
Max. Static Load	25.3 kN
Number of Circuits	3
Torque to Raise 1 kN	1.77 Nm
Nut Weight	0.24 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.041 mm
Ball Return Type	Channel
Number of Balls	75
Wiper Type	Rubber
Part Number	KGM-D-2510-RH-EE

Threaded Ball Nut, KGM-G



Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	19.9 kN
Max. Static Load	31.8 kN
Number of Circuits	6
Torque to Raise 1 kN	1.77 Nm
Nut Weight	0.4 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.041 mm
Ball Return Type	Multi Circuit
Number of Balls	55
Wiper Type	Polymer
Part Number	KGM-G-2510-RH-KK

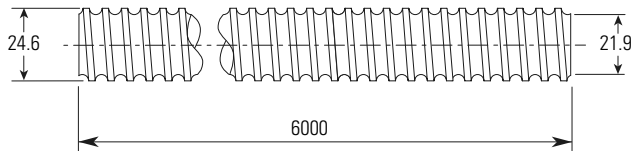
(1) P3 = 12 µm / 300 mm, P5 = 23 µm / 300 mm, T5 = 23 µm / 300 mm, T7 = 52 µm / 300 mm
 (2) Z1= light preload to 1-2%, Z2 = no preload, clearance held to max. indicated in table (standard unless specified), Z3 = no preload, clearance held to max. 0.05 mm

Note: Dimensional information for all End Journals and Bearing Supports is available on page 118 – 137. Information on required lubrication is on page 177.



Ø 25 x 20 mm Metric Ball Screws – Rolled

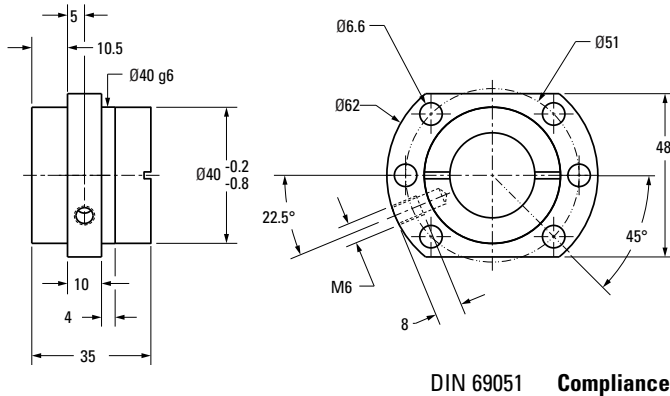
Ball Screw



Nominal Ball Screw Diameter	25 mm
Nominal Ball Screw Lead	20 mm
Thread Direction	Right Hand
Number of Thread Starts	4
Screw Material	CF53
Screw Weight	3.32 kg/m
Nominal Ball Diameter	3.5 mm
Lead Accuracy ⁽¹⁾ P5 Part Number	195-9703

Ball screws can be cut to the length you require. Specify ball screw part number and overall length at time of order

Flanged Ball Nut



Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	13.0 kN
Max. Static Load	23.3 kN
Number of Circuits	4
Torque to Raise 1 kN	3.54 Nm
Nut Weight	0.3 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.041 mm
Ball Return Type	End Cap
Number of Balls	80
Wiper Type	Rubber
Part Number	7110-448-066

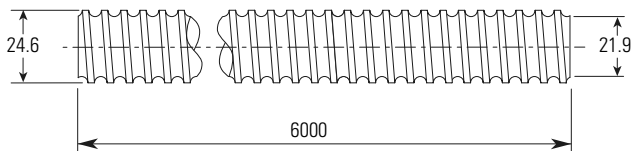
(1) P3 = 12 µm / 300 mm, P5 = 23 µm / 300 mm, T5 = 23 µm / 300 mm, T7 = 52 µm / 300 mm

(2) Z1= light preload to 1-2%, Z2 = no preload, clearance held to max. indicated in table (standard unless specified), Z3 = no preload, clearance held to max. 0.05 mm

Note: Dimensional information for all End Journals and Bearing Supports is available on page 118 – 137. Information on required lubrication is on page 177.

Ø 25 x 20 mm Metric Ball Screws – Rolled

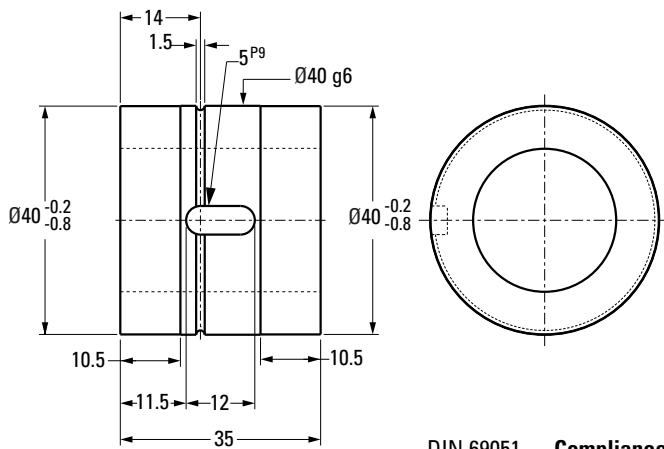
Ball Screw



Nominal Ball Screw Diameter	25 mm
Nominal Ball Screw Lead	20 mm
Thread Direction	Right Hand
Number of Thread Starts	4
Screw Material	CF53
Screw Weight	3.32 kg/m
Nominal Ball Diameter	3.5 mm
Lead Accuracy ⁽¹⁾ P5 Part Number	195-9703

Ball screws can be cut to the length you require. Specify ball screw part number and overall length at time of order

Cylindrical Ball Nut, KGM-D



DIN 69051 Compliance

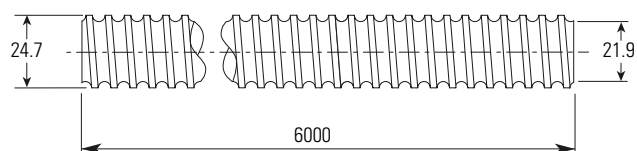
Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	13.0 kN
Max. Static Load	23.3 kN
Number of Circuits	4
Torque to Raise 1 kN	3.54 Nm
Nut Weight	0.2 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.041 mm
Ball Return Type	End Cap
Number of Balls	80
Wiper Type	Rubber
Part Number	KGM-D-2520-RH-EE

(1) P3 = 12 µm / 300 mm, P5 = 23 µm / 300 mm, T5 = 23 µm / 300 mm, T7 = 52 µm / 300 mm
 (2) Z1= light preload to 1-2%, Z2 = no preload, clearance held to max. indicated in table (standard unless specified), Z3 = no preload, clearance held to max. 0.05 mm



Ø 25 x 25 mm Metric Ball Screws – Rolled

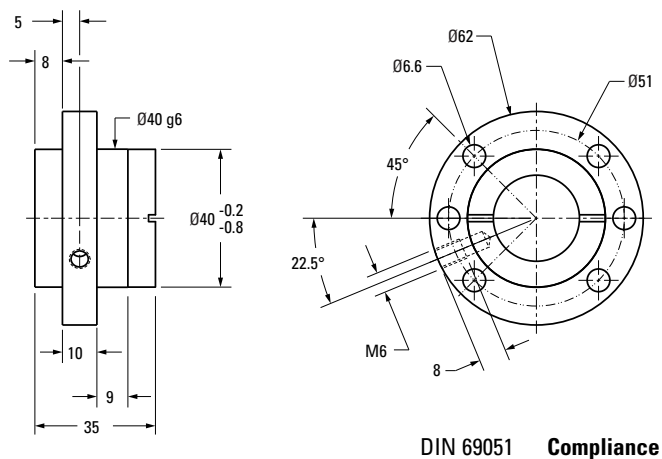
Ball Screw



Nominal Ball Screw Diameter	25 mm
Nominal Ball Screw Lead	25 mm
Thread Direction	Right Hand
Number of Thread Starts	5
Screw Material	CF53
Screw Weight	3.4 kg/m
Nominal Ball Diameter	3.5 mm
Lead Accuracy ⁽¹⁾ P5 Part Number	195-9704

Ball screws can be cut to the length you require. Specify ball screw part number and overall length at time of order

Flanged Ball Nut



Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	16.7 kN
Max. Static Load	32.2 kN
Number of Circuits	5
Torque to Raise 1 kN	4.43 Nm
Nut Weight	0.7 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.041 mm
Ball Return Type	End Cap
Number of Balls	130
Wiper Type	Rubber
Part Number	7110-448-067

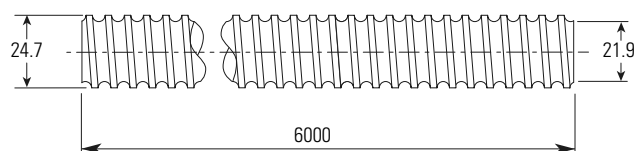
(1) P3 = 12 µm / 300 mm, P5 = 23 µm / 300 mm, T5 = 23 µm / 300 mm, T7 = 52 µm / 300 mm

(2) Z1= light preload to 1-2%, Z2 = no preload, clearance held to max. indicated in table (standard unless specified), Z3 = no preload, clearance held to max. 0.05 mm

Note: Dimensional information for all End Journals and Bearing Supports is available on page 118 – 137. Information on required lubrication is on page 177.

Ø 25 x 25 mm Metric Ball Screws – Rolled

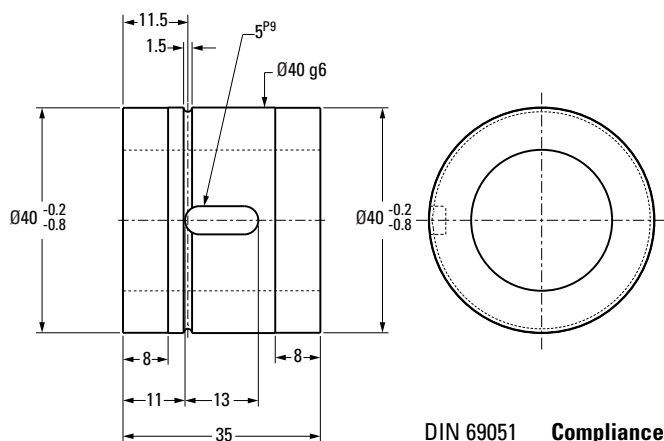
Ball Screw



Nominal Ball Screw Diameter	25 mm
Nominal Ball Screw Lead	25 mm
Thread Direction	Right Hand
Number of Thread Starts	5
Screw Material	CF53
Screw Weight	3.4 kg/m
Nominal Ball Diameter	3.5 mm
Lead Accuracy ⁽¹⁾ P5 Part Number	195-9704

Ball screws can be cut to the length you require. Specify ball screw part number and overall length at time of order

Cylindrical Ball Nut, KGM-D



DIN 69051 Compliance

Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	16.7 kN
Max. Static Load	32.2 kN
Number of Circuits	5
Torque to Raise 1 kN	4.43 Nm
Nut Weight	0.5 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.041 mm
Ball Return Type	End Cap
Number of Balls	130
Wiper Type	Rubber
Part Number	KGM-D-2525-RH-EE

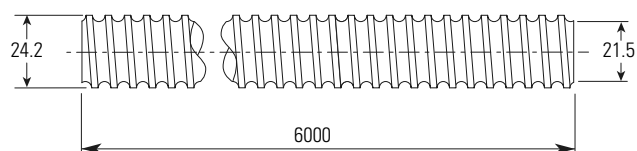
(1) P3 = 12 µm / 300 mm, P5 = 23 µm / 300 mm, T5 = 23 µm / 300 mm, T7 = 52 µm / 300 mm

(2) Z1= light preload to 1-2%, Z2 = no preload, clearance held to max. indicated in table (standard unless specified), Z3 = no preload, clearance held to max. 0.05 mm



Ø 25 x 50 mm Metric Ball Screws – Rolled

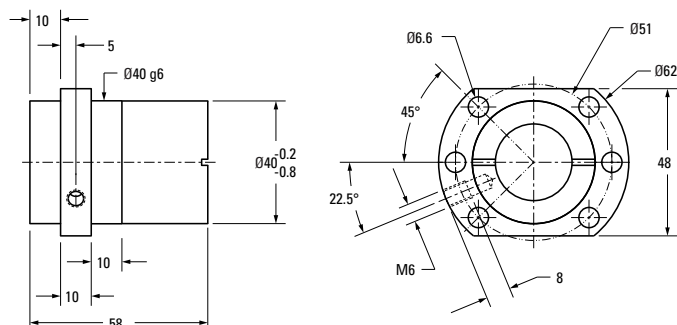
Ball Screw



Nominal Ball Screw Diameter	25 mm
Nominal Ball Screw Lead	50 mm
Thread Direction	Right Hand
Number of Thread Starts	5
Screw Material	CF53
Screw Weight	3.37 kg/m
Nominal Ball Diameter	3.5 mm
Lead Accuracy ⁽¹⁾ P5 Part Number	195-9730

Ball screws can be cut to the length you require. Specify ball screw part number and overall length at time of order

Flanged Ball Nut



DIN 69051 Compliance

Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	15.4 kN
Max. Static Load	31.7 kN
Number of Circuits	5
Torque to Raise 1 kN	8.85 Nm
Nut Weight	0.4 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.041 mm
Ball Return Type	End Cap
Number of Balls	130
Wiper Type	Rubber
Part Number	7110-448-068

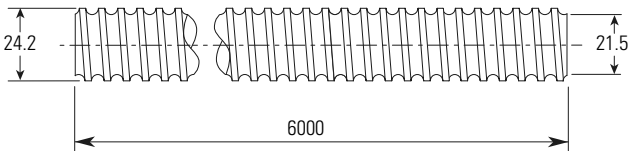
(1) P3 = 12 µm / 300 mm, P5 = 23 µm / 300 mm, T5 = 23 µm / 300 mm, T7 = 52 µm / 300 mm

(2) Z1= light preload to 1-2%, Z2 = no preload, clearance held to max. indicated in table (standard unless specified), Z3 = no preload, clearance held to max. 0.05 mm

Note: Dimensional information for all End Journals and Bearing Supports is available on page 118 – 137. Information on required lubrication is on page 177.

Ø 25 x 50 mm Metric Ball Screws – Rolled

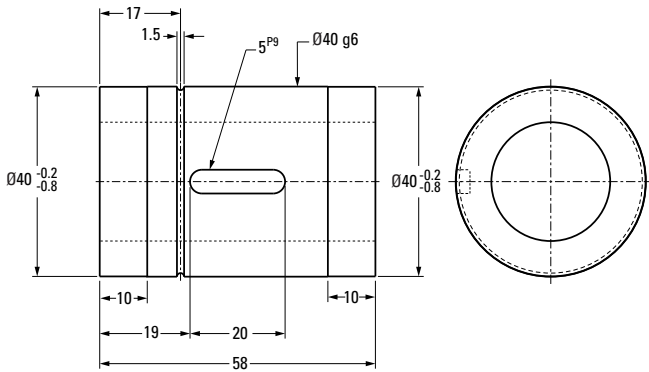
Ball Screw



Nominal Ball Screw Diameter	25 mm
Nominal Ball Screw Lead	50 mm
Thread Direction	Right Hand
Number of Thread Starts	5
Screw Material	CF53
Screw Weight	3.37 kg/m
Nominal Ball Diameter	3.5 mm
Lead Accuracy ⁽¹⁾ P5 Part Number	195-9730

Ball screws can be cut to the length you require. Specify ball screw part number and overall length at time of order

Cylindrical Ball Nut, KGM-D



DIN 69051 Compliance

Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	15.4 kN
Max. Static Load	31.7 kN
Number of Circuits	5
Torque to Raise 1 kN	8.85 Nm
Nut Weight	0.3 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.041 mm
Ball Return Type	End Cap
Number of Balls	130
Wiper Type	Rubber
Part Number	KGM-D-2550-RH-EE

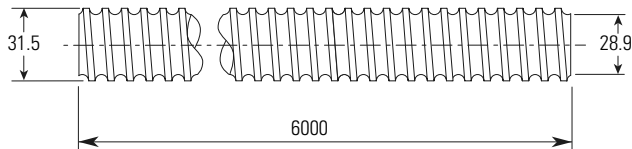
(1) P3 = 12 µm / 300 mm, P5 = 23 µm / 300 mm, T5 = 23 µm / 300 mm, T7 = 52 µm / 300 mm

(2) Z1= light preload to 1-2%, Z2 = no preload, clearance held to max. indicated in table (standard unless specified), Z3 = no preload, clearance held to max. 0.05 mm

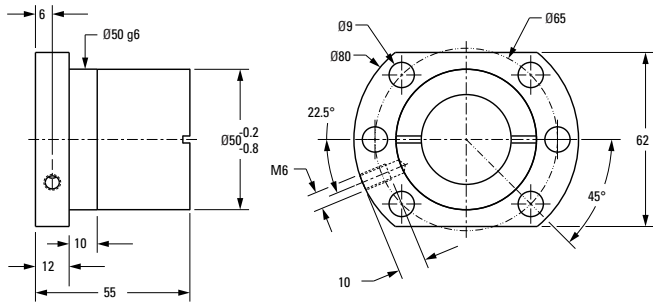


Ø 32 x 5 mm Metric Ball Screws – Rolled

Ball Screw

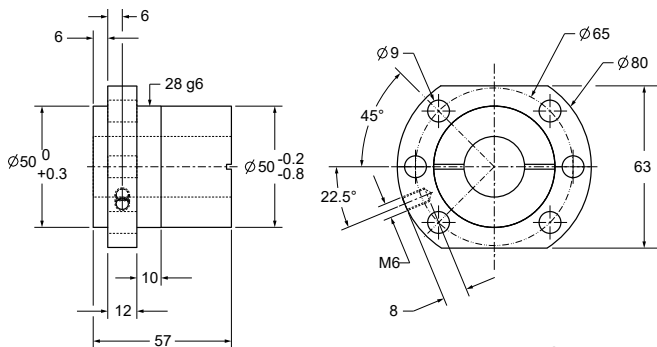


Flanged Ball Nut



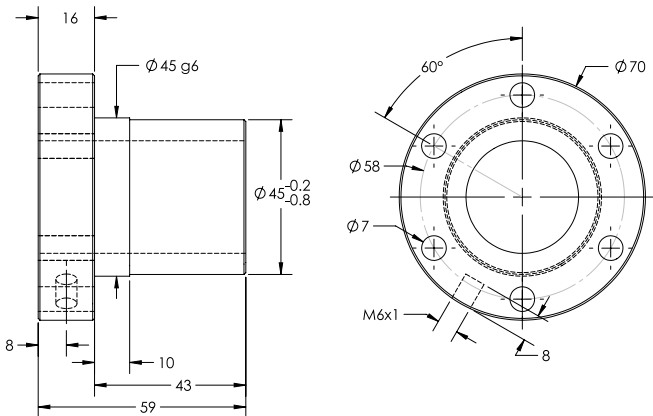
DIN 69051 Compliance

Flanged Ball Nut, KGF-D (FK)



DIN 69051 Compliance

Flanged Ball Nut, KGF-N



Note: Dimensional information for all End Journals and Bearing Supports is available on page 118 – 137. Information on required lubrication is on page 177.

Nominal Ball Screw Diameter	32 mm
Nominal Ball Screw Lead	5 mm
Thread Direction	Right Hand
Number of Thread Starts	1
Screw Material	CF53
Screw Weight	5.9 kg/m
Nominal Ball Diameter	3.5 mm
Lead Accuracy ⁽¹⁾ P5 Part Number	195-9706

Ball screws can be cut to the length you require. Specify ball screw part number and overall length at time of order

Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	21.5 kN
Max. Static Load	49.3 kN
Number of Circuits	5
Torque to Raise 1 kN	0.885 Nm
Nut Weight	0.6 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.041 mm
Ball Return Type	Single Circuit
Number of Balls	140
Wiper Type	Rubber
Part Number	7112-448-069

Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	19.3 kN
Max. Static Load	36.3 kN
Number of Circuits	4
Torque to Raise 1 kN	0.885 Nm
Nut Weight	0.7 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.041 mm
Ball Return Type	Single Circuit Metal
Number of Balls	116
Wiper Type	Polymer
Part Number	KGF-D-3205-RH-KK

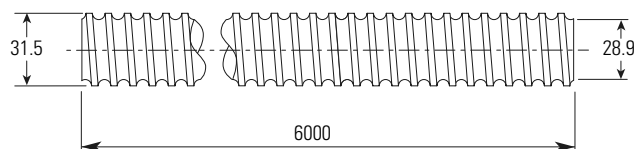
Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	21.5 kN
Max. Static Load	49.3 kN
Number of Circuits	5
Torque to Raise 1 kN	0.885 Nm
Nut Weight	0.6 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.041 mm
Ball Return Type	Single Circuit Metal
Number of Balls	140
Wiper Type	Rubber
Part Number	KGF-N-3205-RH-EE

(1) P3 = 12 µm / 300 mm, P5 = 23 µm / 300 mm, T5 = 23 µm / 300 mm, T7 = 52 µm / 300 mm

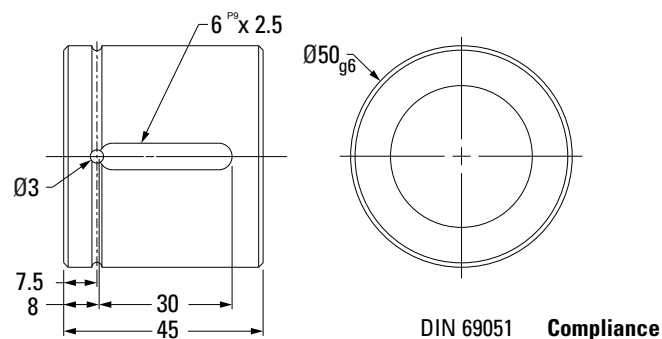
(2) Z1 = light preload to 1-2%, Z2 = no preload, clearance held to max. indicated in table (standard unless specified), Z3 = no preload, clearance held to max. 0.05 mm

Ø 32 x 5 mm Metric Ball Screws – Rolled

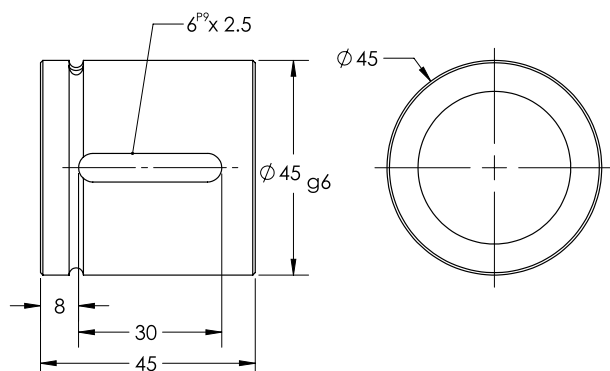
Ball Screw



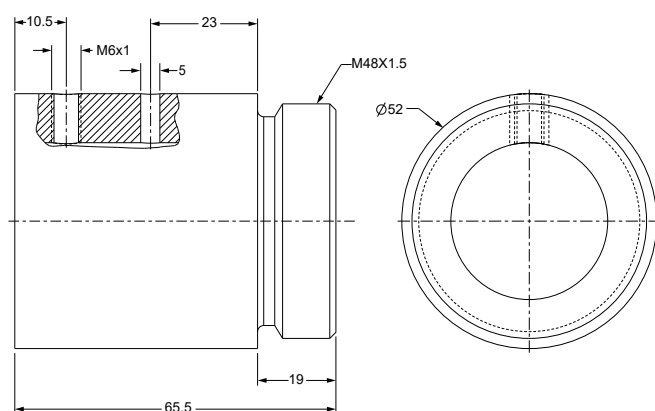
Cylindrical Ball Nut, KGM-D



Cylindrical Ball Nut, KGM-N



Threaded Ball Nut, KGM-G



Note: Dimensional information for all End Journals and Bearing Supports is available on page 118 – 137. Information on required lubrication is on page 177.

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Nominal Ball Screw Diameter	32 mm
Nominal Ball Screw Lead	5 mm
Thread Direction	Right Hand
Number of Thread Starts	1
Screw Material	CF53
Screw Weight	5.9 kg/m
Nominal Ball Diameter	3.5 mm
Lead Accuracy ⁽¹⁾ P5 Part Number	195-9706

Ball screws can be cut to the length you require. Specify ball screw part number and overall length at time of order

Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	21.5 kN
Max. Static Load	49.3 kN
Number of Circuits	5
Torque to Raise 1 kN	0.885 Nm
Nut Weight	0.5 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.041 mm
Ball Return Type	Single Circuit
Number of Balls	140
Wiper Type	Rubber
Part Number	KGM-D-3205-RH-EE

Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	21.5 kN
Max. Static Load	49.3 kN
Number of Circuits	5
Torque to Raise 1 kN	0.885 Nm
Nut Weight	0.3 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.041 mm
Ball Return Type	Single Circuit Metal
Number of Balls	140
Wiper Type	Rubber
Part Number	KGM-N-3205-RH-EE

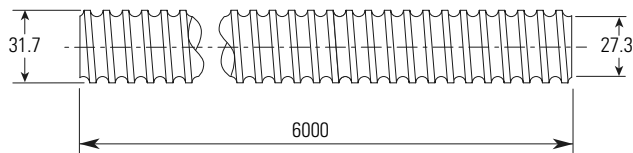
Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	23.3 kN
Max. Static Load	45.5 kN
Number of Circuits	5
Torque to Raise 1 kN	0.885 Nm
Nut Weight	0.6 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.041 mm
Ball Return Type	Single Circuit
Number of Balls	145
Wiper Type	Polymer
Part Number	KGM-G-3205-RH-KK

(1) P3 = 12 µm / 300 mm, P5 = 23 µm / 300 mm, T5 = 23 µm / 300 mm, T7 = 52 µm / 300 mm
 (2) Z1= light preload to 1-2%, Z2 = no preload, clearance held to max. indicated in table (standard unless specified), Z3 = no preload, clearance held to max. 0.05 mm



Ø 32 x 10 mm Metric Ball Screws – Rolled

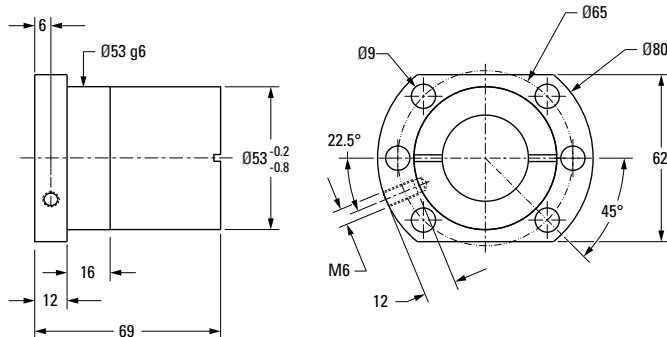
Ball Screw



Nominal Ball Screw Diameter	32 mm
Nominal Ball Screw Lead	10 mm
Thread Direction	Right Hand
Number of Thread Starts	1
Screw Material	CF53
Screw Weight	5.56 kg/m
Nominal Ball Diameter	7.144 mm
Lead Accuracy ⁽¹⁾ P5 Part Number	195-9707

Ball screws can be cut to the length you require. Specify ball screw part number and overall length at time of order

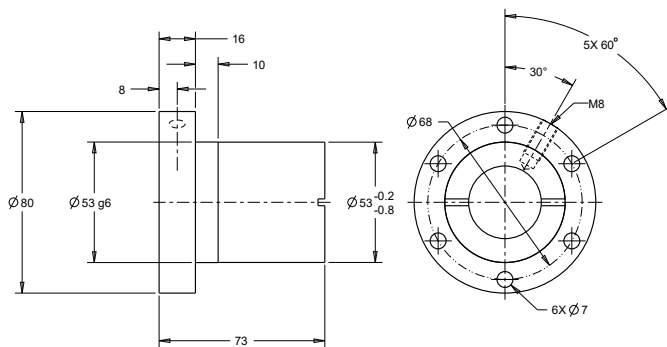
Flanged Ball Nut



DIN 69051 Compliance

Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	33.4 kN
Max. Static Load	54.5 kN
Number of Circuits	3
Torque to Raise 1 kN	1.77 Nm
Nut Weight	0.9 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.084 mm
Ball Return Type	Single Circuit
Number of Balls	42
Wiper Type	Rubber
Part Number	7112-448-070

Flanged Ball Nut, KGF-N



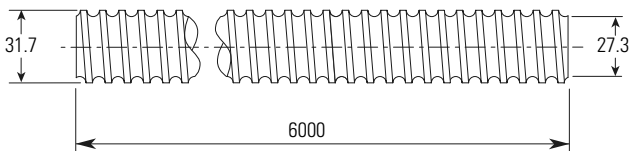
Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	33.4 kN
Max. Static Load	54.5 kN
Number of Circuits	3
Torque to Raise 1 kN	1.77 Nm
Nut Weight	0.9 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.084 mm
Ball Return Type	Single Circuit Metal
Number of Balls	42
Wiper Type	Rubber
Part Number	KGF-N-3210-RH-EE

(1) P3 = 12 µm / 300 mm, P5 = 23 µm / 300 mm, T5 = 23 µm / 300 mm, T7 = 52 µm / 300 mm
 (2) Z1= light preload to 1-2%, Z2 = no preload, clearance held to max. indicated in table (standard unless specified), Z3 = no preload, clearance held to max. 0.05 mm

Note: Dimensional information for all End Journals and Bearing Supports is available on page 118 – 137. Information on required lubrication is on page 177.

Ø 32 x 10 mm Metric Ball Screws – Rolled

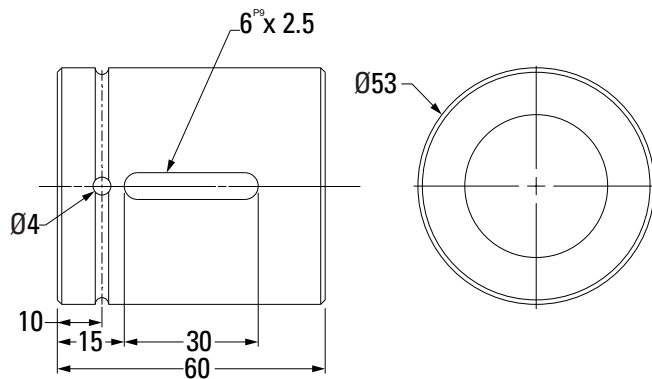
Ball Screw



Nominal Ball Screw Diameter	32 mm
Nominal Ball Screw Lead	10 mm
Thread Direction	Right Hand
Number of Thread Starts	1
Screw Material	CF53
Screw Weight	5.56 kg/m
Nominal Ball Diameter	7.144 mm
Lead Accuracy ⁽¹⁾ P5 Part Number	195-9707

Ball screws can be cut to the length you require. Specify ball screw part number and overall length at time of order

Cylindrical Ball Nut, KGM-N



Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	33.4 kN
Max. Static Load	54.5 kN
Number of Circuits	3
Torque to Raise 1 kN	1.77 Nm
Nut Weight	0.6 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.084 mm
Ball Return Type	Single Circuit Polymer
Number of Balls	42
Wiper Type	Rubber
Part Number	KGM-N-3210-RH-EE

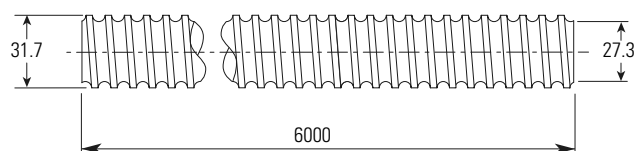
(1) P3 = 12 µm / 300 mm, P5 = 23 µm / 300 mm, T5 = 23 µm / 300 mm, T7 = 52 µm / 300 mm
 (2) Z1= light preload to 1-2%, Z2 = no preload, clearance held to max. indicated in table (standard unless specified), Z3 = no preload, clearance held to max. 0.05 mm

Note: Dimensional information for all End Journals and Bearing Supports is available on page 118 – 137. Information on required lubrication is on page 177.



Ø 32 x 20 mm Metric Ball Screws – Rolled

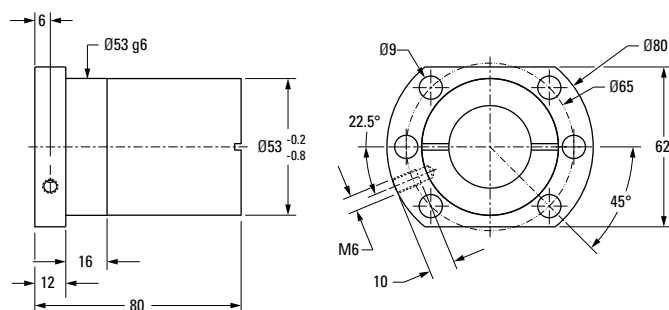
Ball Screw



Nominal Ball Screw Diameter	32 mm
Nominal Ball Screw Lead	20 mm
Thread Direction	Right Hand
Number of Thread Starts	2
Screw Material	CF53
Screw Weight	5.60 kg/m
Nominal Ball Diameter	5.000 mm
Lead Accuracy ⁽¹⁾ P5 Part Number	195-9708

Ball screws can be cut to the length you require. Specify ball screw part number and overall length at time of order

Flanged Ball Nut



DIN 69051 Compliance

Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	29.7 kN
Max. Static Load	59.8 kN
Number of Circuits	4
Torque to Raise 1 kN	1.77 Nm
Nut Weight	0.9 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.059 mm
Ball Return Type	Channel
Number of Balls	84
Wiper Type	Rubber
Part Number	7112-448-071

(1) P3 = 12 µm / 300 mm, P5 = 23 µm / 300 mm, T5 = 23 µm / 300 mm, T7 = 52 µm / 300 mm

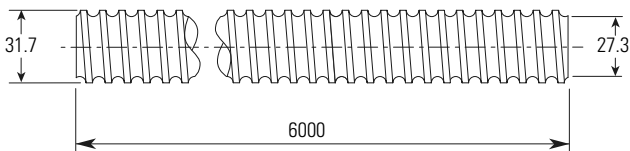
(2) Z1= light preload to 1-2%, Z2 = no preload, clearance held to max. indicated in table (standard unless specified), Z3 = no preload, clearance held to max. 0.05 mm

Note: Dimensional information for all End Journals and Bearing Supports is available on page 118 – 137. Information on required lubrication is on page 177.

Ball Screws and Ball Splines

Ø 32 x 20 mm Metric Ball Screws – Rolled

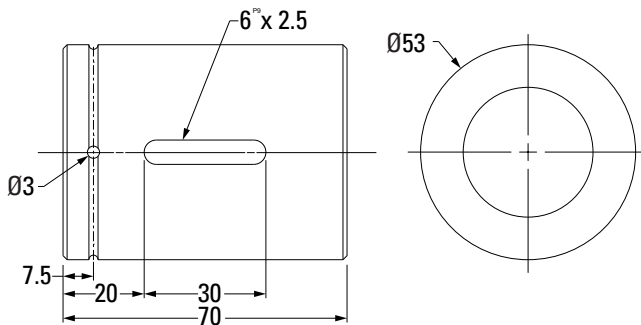
Ball Screw



Nominal Ball Screw Diameter	32 mm
Nominal Ball Screw Lead	20 mm
Thread Direction	Right Hand
Number of Thread Starts	2
Screw Material	CF53
Screw Weight	5.60 kg/m
Nominal Ball Diameter	5.000 mm
Lead Accuracy ⁽¹⁾ P5 Part Number	195-9708

Ball screws can be cut to the length you require. Specify ball screw part number and overall length at time of order

Cylindrical Ball Nut, KGM-N



Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	29.7 kN
Max. Static Load	59.8 kN
Number of Circuits	4
Torque to Raise 1 kN	1.77 Nm
Nut Weight	0.6 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.059 mm
Ball Return Type	Channel
Number of Balls	84
Wiper Type	Rubber
Part Number	KGM-N-3220-RH-EE

(1) P3 = 12 µm / 300 mm, P5 = 23 µm / 300 mm, T5 = 23 µm / 300 mm, T7 = 52 µm / 300 mm

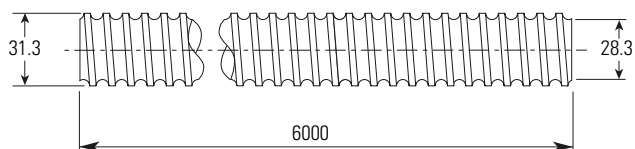
(2) Z1= light preload to 1-2%, Z2 = no preload, clearance held to max. indicated in table (standard unless specified), Z3 = no preload, clearance held to max. 0.05 mm

Note: Dimensional information for all End Journals and Bearing Supports is available on page 118 – 137. Information on required lubrication is on page 177.



Ø 32 x 32 mm Metric Ball Screws – Rolled

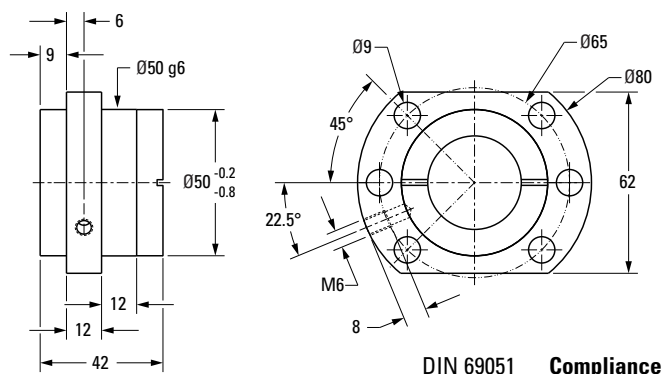
Ball Screw



Nominal Ball Screw Diameter	32 mm
Nominal Ball Screw Lead	32 mm
Thread Direction	Right Hand
Number of Thread Starts	4
Screw Material	CF53
Screw Weight	5.74 kg/m
Nominal Ball Diameter	3.969 mm
Lead Accuracy ⁽¹⁾ P5 Part Number	195-9722

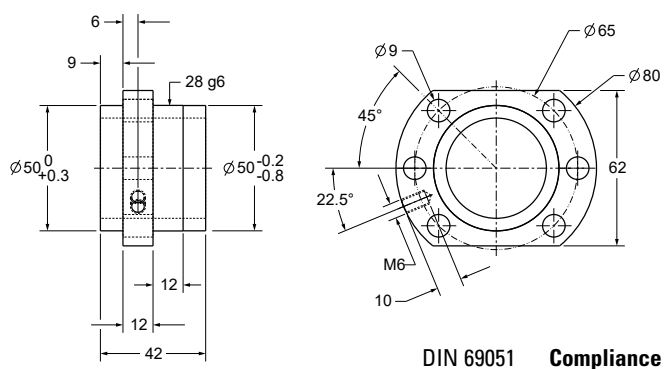
Ball screws can be cut to the length you require. Specify ball screw part number and overall length at time of order

Flanged Ball Nut



Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	19.7 kN
Max. Static Load	37.4 kN
Number of Circuits	4
Torque to Raise 1 kN	5.66 Nm
Nut Weight	0.8 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.047 mm
Ball Return Type	End Cap
Number of Balls	124
Wiper Type	Rubber
Part Number	7112-448-072

Flanged Ball Nut, KGF-D (FH)



Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	19.7 kN
Max. Static Load	39.0 kN
Number of Circuits	4
Torque to Raise 1 kN	5.66 Nm
Nut Weight	0.8 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.047 mm
Ball Return Type	End Cap
Number of Balls	124
Wiper Type	Polymer
Part Number	KGF-D-3232-RH-KK

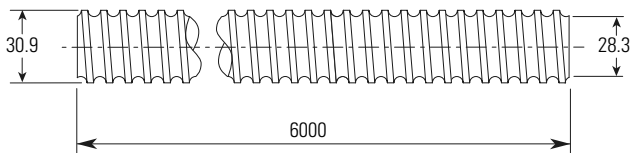
(1) P3 = 12 µm / 300 mm, P5 = 23 µm / 300 mm, T5 = 23 µm / 300 mm, T7 = 52 µm / 300 mm
 (2) Z1= light preload to 1-2%, Z2 = no preload, clearance held to max. indicated in table (standard unless specified), Z3 = no preload, clearance held to max. 0.05 mm

Note: Dimensional information for all End Journals and Bearing Supports is available on page 118 – 137. Information on required lubrication is on page 177.

Ball Screws and Ball Splines

Ø 32 x 40 mm Metric Ball Screws – Rolled

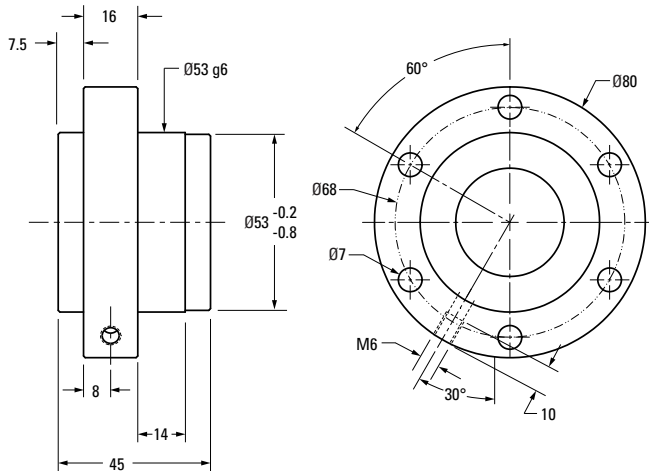
Ball Screw



Nominal Ball Screw Diameter	32 mm
Nominal Ball Screw Lead	40 mm
Thread Direction	Right Hand
Number of Thread Starts	4
Screw Material	CF53
Screw Weight	5.63 kg/m
Nominal Ball Diameter	3.5 mm
Lead Accuracy ⁽¹⁾ P5 Part Number	195-9723

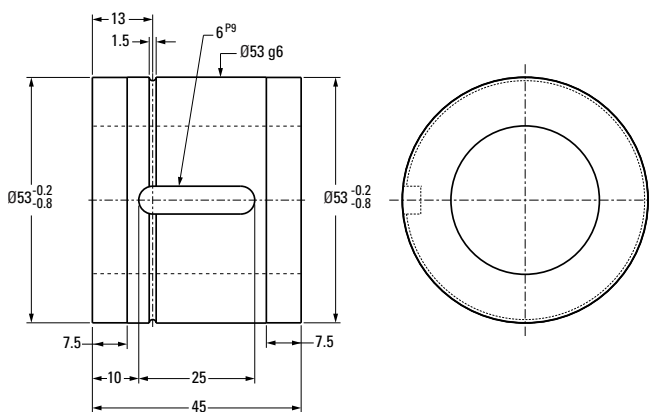
Ball screws can be cut to the length you require. Specify ball screw part number and overall length at time of order

Flanged Ball Nut, KGF-N



Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	14.9 kN
Max. Static Load	32.4 kN
Number of Circuits	4
Torque to Raise 1 kN	7.08 Nm
Nut Weight	0.5 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.041 mm
Ball Return Type	End Cap
Number of Balls	168
Wiper Type	Rubber
Part Number	KGF-N-3240-RH-EE

Cylindrical Ball Nut, KGM-N



Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	14.9 kN
Max. Static Load	32.4 kN
Number of Circuits	4
Torque to Raise 1 kN	7.08 Nm
Nut Weight	0.46 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.041 mm
Ball Return Type	End Cap
Number of Balls	168
Wiper Type	Rubber
Part Number	KGM-N-3240-RH-EE

(1) P3 = 12 µm / 300 mm, P5 = 23 µm / 300 mm, T5 = 23 µm / 300 mm, T7 = 52 µm / 300 mm

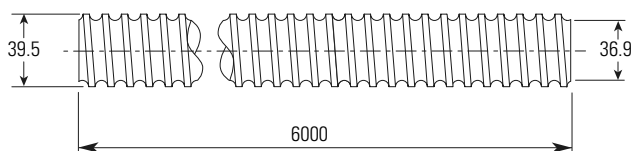
(2) Z1= light preload to 1-2%, Z2 = no preload, clearance held to max. indicated in table (standard unless specified), Z3 = no preload, clearance held to max. 0.05 mm

Note: Dimensional information for all End Journals and Bearing Supports is available on page 118 – 137. Information on required lubrication is on page 177.

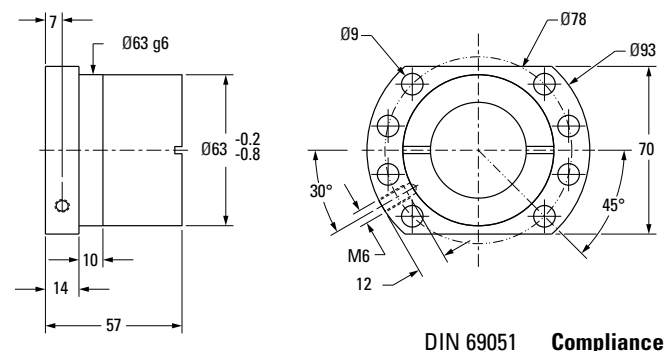


Ø 40 x 5 mm Metric Ball Screws – Rolled

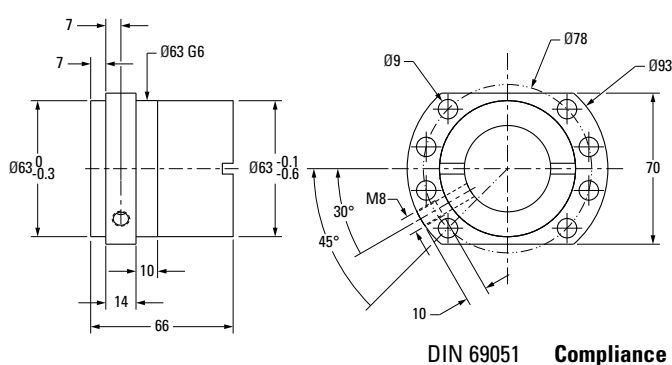
Ball Screw



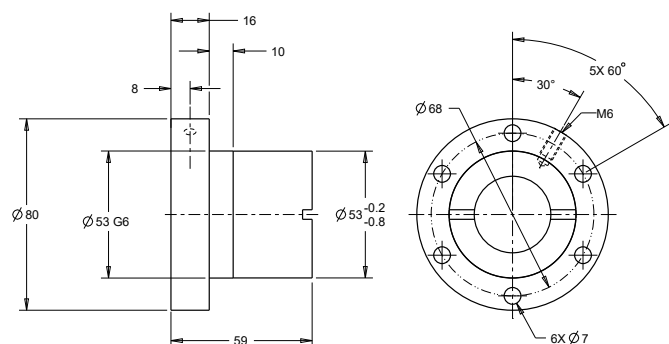
Flanged Ball Nut



Flanged Ball Nut, KGF-D (FK)



Flanged Ball Nut, KGF-N



Note: Dimensional information for all End Journals and Bearing Supports is available on page 118 – 137. Information on required lubrication is on page 177.

Nominal Ball Screw Diameter	40 mm
Nominal Ball Screw Lead	5 mm
Thread Direction	Right Hand
Number of Thread Starts	1
Screw Material	CF53
Screw Weight	9.03 kg/m
Nominal Ball Diameter	3.5 mm
Lead Accuracy ⁽¹⁾ P5 Part Number	195-9710

Ball screws can be cut to the length you require. Specify ball screw part number and overall length at time of order

Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	23.8 kN
Max. Static Load	63.1 kN
Number of Circuits	5
Torque to Raise 1 kN	0.885 Nm
Nut Weight	0.7 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.041 mm
Ball Return Type	Single Circuit
Number of Balls	180
Wiper Type	Rubber
Part Number	7115-448-073

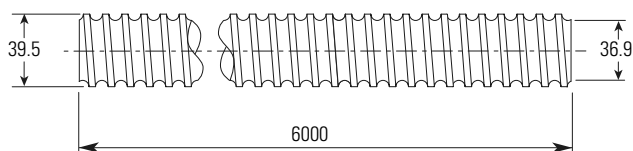
Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	26.3 kN
Max. Static Load	59.2 kN
Number of Circuits	5
Torque to Raise 1 kN	0.885 Nm
Nut Weight	1.2 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.041 mm
Ball Return Type	EUS
Number of Balls	180
Wiper Type	Polymer
Part Number	KGF-D-4005-RH-KK

Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	23.8 kN
Number of Circuits	5
Max. Static Load	63.1 kN
Torque to Raise 1 kN	0.885 Nm
Nut Weight	0.7 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.041 mm
Ball Return Type	Single Circuit
Number of Balls	180
Wiper Type	Rubber
Part Number	KGF-N-4005-RH-EE

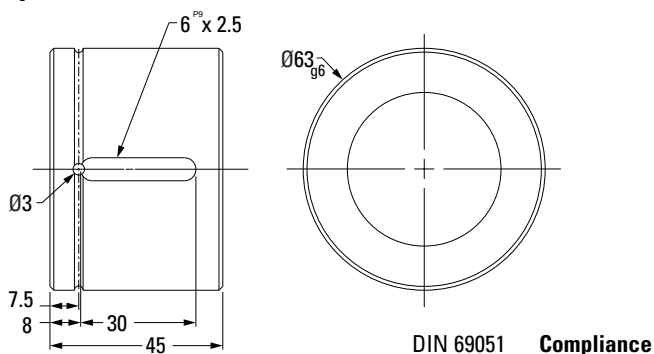
(1) P3 = 12 µm / 300 mm, P5 = 23 µm / 300 mm, T5 = 23 µm / 300 mm, T7 = 52 µm / 300 mm
 (2) Z1= light preload to 1-2%, Z2 = no preload, clearance held to max. indicated in table (standard unless specified), Z3 = no preload, clearance held to max. 0.05 mm

Ø 40 x 5 mm Metric Ball Screws – Rolled

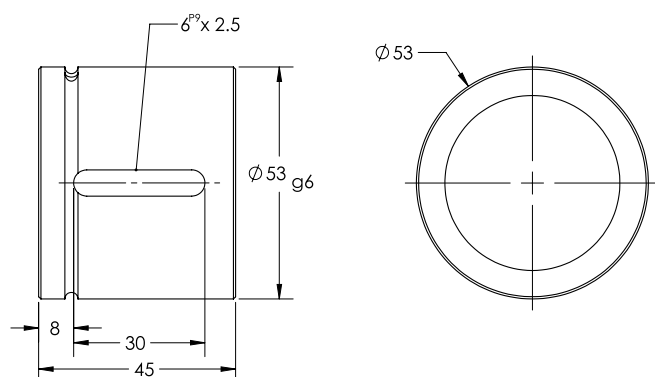
Ball Screw



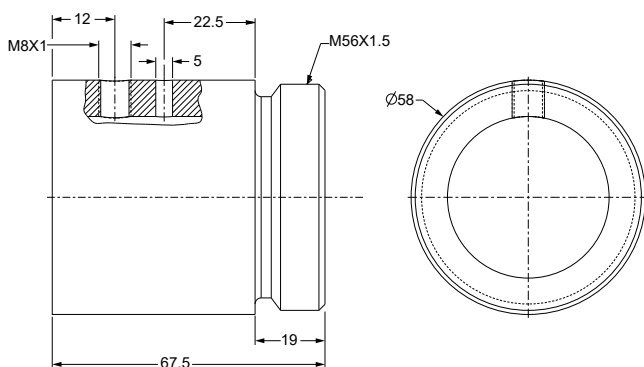
Cylindrical Ball Nut, KGM-D



Cylindrical Ball Nut, KGM-N



Threaded Ball Nut, KGM-G



Note: Dimensional information for all End Journals and Bearing Supports is available on page 118 – 137. Information on required lubrication is on page 177.

Nominal Ball Screw Diameter	40 mm
Nominal Ball Screw Lead	5 mm
Thread Direction	Right Hand
Number of Thread Starts	1
Screw Material	CF53
Screw Weight	9.03 kg/m
Nominal Ball Diameter	3.5 mm
Lead Accuracy ⁽¹⁾ P5 Part Number	195-9710

Ball screws can be cut to the length you require. Specify ball screw part number and overall length at time of order

Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	21.5 kN
Max. Static Load	49.3 kN
Number of Circuits	5
Torque to Raise 1 kN	0.885 Nm
Nut Weight	0.8 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.041 mm
Ball Return Type	Single Circuit
Number of Balls	180
Wiper Type	Rubber
Part Number	KGM-D-4005-RH-EE

Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	23.8 kN
Max. Static Load	63.1kN
Number of Circuits	5
Torque to Raise 1 kN	0.885 Nm
Nut Weight	0.6 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.041 mm
Ball Return Type	Single Circuit Metal
Number of Balls	180
Wiper Type	Rubber
Part Number	KGM-N-4005-RH-EE

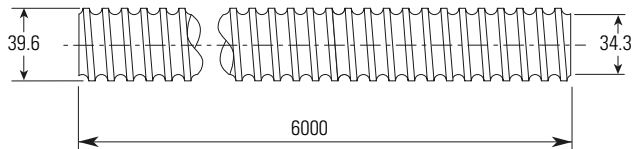
Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	26.3 kN
Max. Static Load	59.2 kN
Number of Circuits	5
Torque to Raise 1 kN	0.885 Nm
Nut Weight	0.6 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.041 mm
Ball Return Type	Single Circuit
Number of Balls	180
Wiper Type	Polymer
Part Number	KGM-G-4005-RH-KK

(1) P3 = 12 µm / 300 mm, P5 = 23 µm / 300 mm, T5 = 23 µm / 300 mm, T7 = 52 µm / 300 mm
 (2) Z1= light preload to 1-2%, Z2 = no preload, clearance held to max. indicated in table (standard unless specified), Z3 = no preload, clearance held to max. 0.05 mm

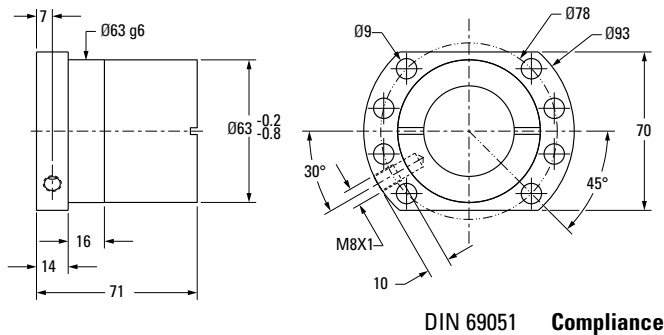


Ø 40 x 10 mm Metric Ball Screws – Rolled

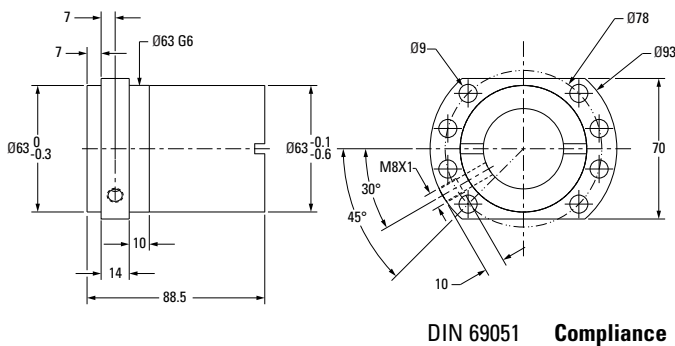
Ball Screw



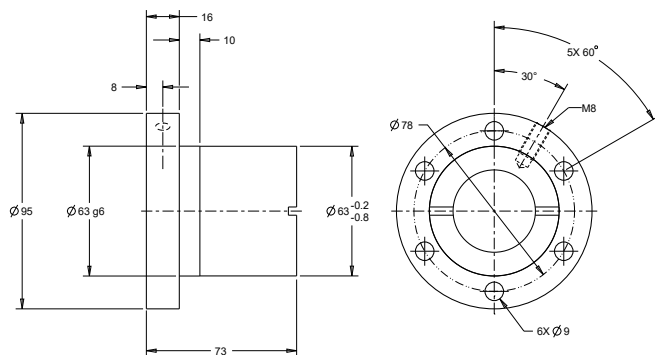
Flanged Ball Nut



Flanged Ball Nut, KGF-D (FK)



Flanged Ball Nut, KGF-N



Note: Dimensional information for all End Journals and Bearing Supports is available on page 118 – 137. Information on required lubrication is on page 177.

Nominal Ball Screw Diameter	40 mm
Nominal Ball Screw Lead	10 mm
Thread Direction	Right Hand
Number of Thread Starts	1
Screw Material	CF53
Screw Weight	8.43 kg/m
Nominal Ball Diameter	7.144 mm
Lead Accuracy ⁽¹⁾ P5 Part Number	195-9711

Ball screws can be cut to the length you require. Specify ball screw part number and overall length at time of order

Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	38.0 kN
Max. Static Load	69.2 kN
Number of Circuits	3
Torque to Raise 1 kN	1.77 Nm
Nut Weight	1.2 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.084 mm
Ball Return Type	Single Circuit
Number of Balls	54
Wiper Type	Rubber
Part Number	7115-448-074

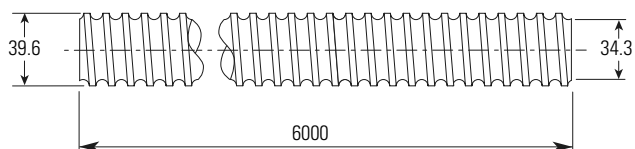
Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	64.9 kN
Max. Static Load	109.0 kN
Number of Circuits	4
Torque to Raise 1 kN	1.77 Nm
Nut Weight	1.4 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.084 mm
Ball Return Type	Single Circuit Metal
Number of Balls	72
Wiper Type	Polymer
Part Number	KGF-D-4010-RH-KK

Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	69.1 kN
Number of Circuits	3
Max. Static Load	109.0 kN
Torque to Raise 1 kN	1.77 Nm
Nut Weight	1.2 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.084 mm
Ball Return Type	Single Circuit
Number of Balls	54
Wiper Type	Rubber
Part Number	KGF-N-4010-RH-EE

(1) P3 = 12 µm / 300 mm, P5 = 23 µm / 300 mm, T5 = 23 µm / 300 mm, T7 = 52 µm / 300 mm
 (2) Z1= light preload to 1-2%, Z2 = no preload, clearance held to max. indicated in table (standard unless specified), Z3 = no preload, clearance held to max. 0.05 mm

Ø 40 x 10 mm Metric Ball Screws – Rolled

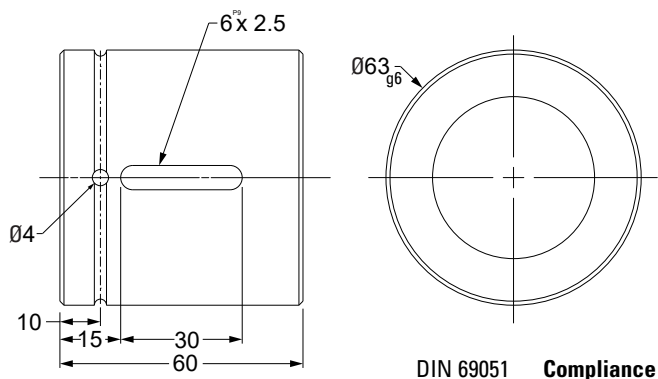
Ball Screw



Nominal Ball Screw Diameter	40 mm
Nominal Ball Screw Lead	10 mm
Thread Direction	Right Hand
Number of Thread Starts	1
Screw Material	CF53
Screw Weight	8.43 kg/m
Nominal Ball Diameter	7.144 mm
Lead Accuracy ⁽¹⁾ P5 Part Number	195-9711

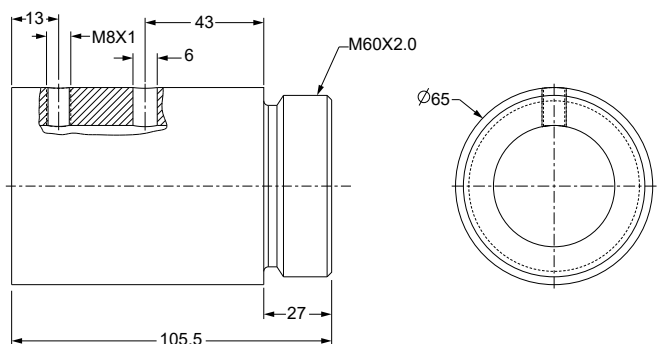
Ball screws can be cut to the length you require. Specify ball screw part number and overall length at time of order

Cylindrical Ball Nut, KGM-D



Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	38.0 kN
Max. Static Load	69.1 kN
Number of Circuits	3
Torque to Raise 1 kN	1.77 Nm
Nut Weight	1.0 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.084 mm
Ball Return Type	Single Circuit
Number of Balls	54
Wiper Type	Rubber
Part Number	KGM-D-4010-RH-EE

Threaded Ball Nut, KGM-G



Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	78.6 kN
Max. Static Load	136.2 kN
Number of Circuits	5
Torque to Raise 1 kN	1.77 Nm
Nut Weight	1.3 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.084 mm
Ball Return Type	Single Circuit
Number of Balls	90
Wiper Type	Polymer
Part Number	KGM-G-4010-RH-KK

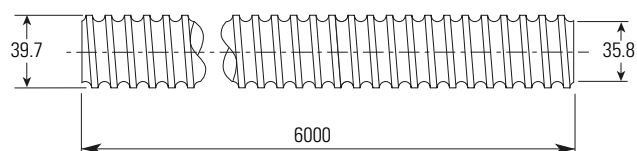
(1) P3 = 12 µm / 300 mm, P5 = 23 µm / 300 mm, T5 = 23 µm / 300 mm, T7 = 52 µm / 300 mm
 (2) Z1= light preload to 1-2%, Z2 = no preload, clearance held to max. indicated in table (standard unless specified), Z3 = no preload, clearance held to max. 0.05 mm

Note: Dimensional information for all End Journals and Bearing Supports is available on page 118 – 137. Information on required lubrication is on page 177.



Ø 40 x 20 mm Metric Ball Screws – Rolled

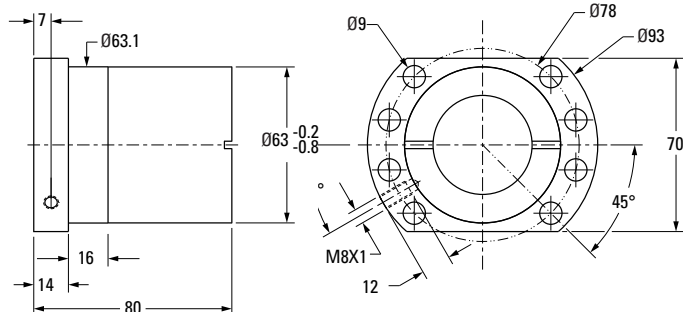
Ball Screw



Nominal Ball Screw Diameter	40 mm
Nominal Ball Screw Lead	20 mm
Thread Direction	Right Hand
Number of Thread Starts	2
Screw Material	CF53
Screw Weight	9.0 kg/m
Nominal Ball Diameter	5.0 mm
Lead Accuracy ⁽¹⁾ P5 Part Number	195-9712

Ball screws can be cut to the length you require. Specify ball screw part number and overall length at time of order

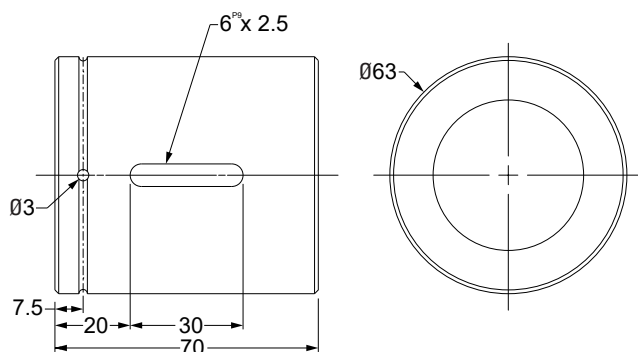
Flanged Ball Nut



DIN 69051 Compliance

Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	33.3 kN
Max. Static Load	76.1 kN
Number of Circuits	4
Torque to Raise 1 kN	3.54 Nm
Nut Weight	1.5 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.059 mm
Ball Return Type	Channel
Number of Balls	104
Wiper Type	Rubber
Part Number	7115-448-075

Cylindrical Ball Nut, KGM-D



DIN 69051 Compliance

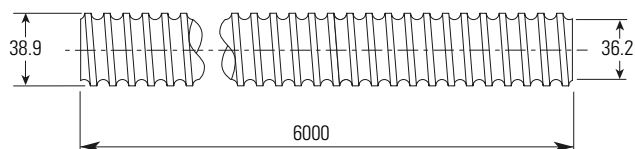
Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	33.3 kN
Max. Static Load	76.1 kN
Number of Circuits	4
Torque to Raise 1 kN	3.54 Nm
Nut Weight	1.2 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.059 mm
Ball Return Type	Channel
Number of Balls	102
Wiper Type	Rubber
Part Number	KGM-D-4020-RH-EE

(1) P3 = 12 µm / 300 mm, P5 = 23 µm / 300 mm, T5 = 23 µm / 300 mm, T7 = 52 µm / 300 mm
 (2) Z1= light preload to 1-2%, Z2 = no preload, clearance held to max. indicated in table (standard unless specified), Z3 = no preload, clearance held to max. 0.05 mm

Note: Dimensional information for all End Journals and Bearing Supports is available on page 118 – 137. Information on required lubrication is on page 177.

Ø 40 x 40 mm Metric Ball Screws – Rolled

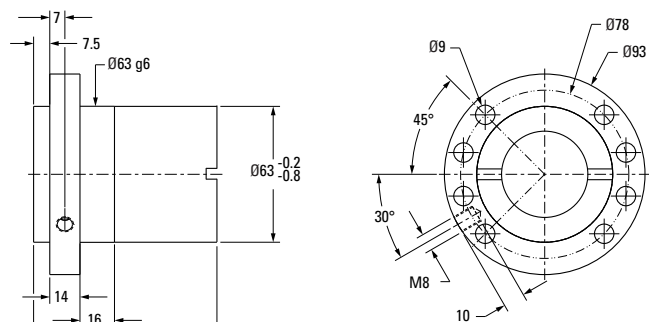
Ball Screw



Nominal Ball Screw Diameter	40 mm
Nominal Ball Screw Lead	40 mm
Thread Direction	Right Hand
Number of Thread Starts	4
Screw Material	CF53
Screw Weight	9.0 kg/m
Nominal Ball Diameter	3.5 mm
Lead Accuracy ⁽¹⁾ P5 Part Number	195-9713

Ball screws can be cut to the length you require. Specify ball screw part number and overall length at time of order

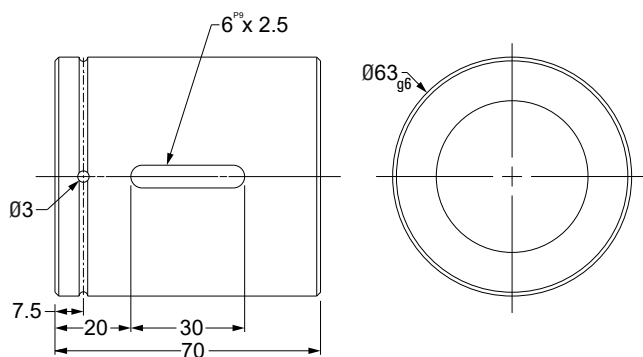
Flanged Ball Nut



DIN 69051 Compliance

Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	35.0 kN
Max. Static Load	101.9 kN
Number of Circuits	8
Torque to Raise 1 kN	7.08 Nm
Nut Weight	1.2 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.041 mm
Ball Return Type	End Cap
Number of Balls	360
Wiper Type	Rubber
Part Number	7115-448-076

Cylindrical Ball Nut, KGM-D



DIN 69051 Compliance

Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	35.0 kN
Max. Static Load	101.9 kN
Number of Circuits	8
Torque to Raise 1 kN	7.08 Nm
Nut Weight	0.9 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.041 mm
Ball Return Type	End Cap
Number of Balls	380
Wiper Type	Rubber
Part Number	KGM-D-4040-RH-EE

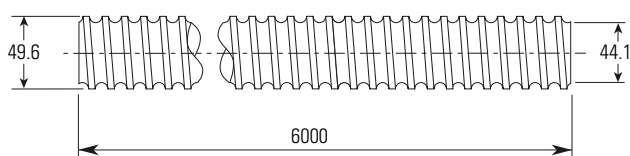
(1) P3 = 12 µm / 300 mm, P5 = 23 µm / 300 mm, T5 = 23 µm / 300 mm, T7 = 52 µm / 300 mm
 (2) Z1= light preload to 1-2%, Z2 = no preload, clearance held to max. indicated in table (standard unless specified), Z3 = no preload, clearance held to max. 0.05 mm

Note: Dimensional information for all End Journals and Bearing Supports is available on page 118 – 137. Information on required lubrication is on page 177.

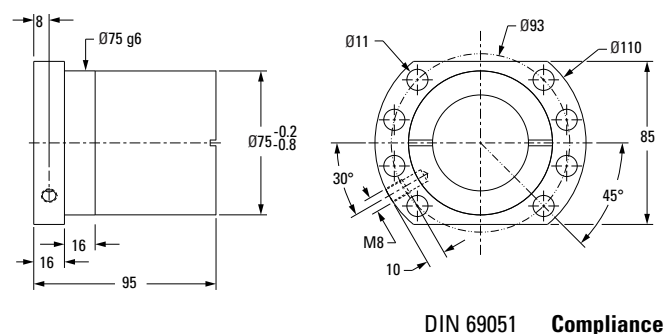


Ø 50 x 10 mm Metric Ball Screws – Rolled

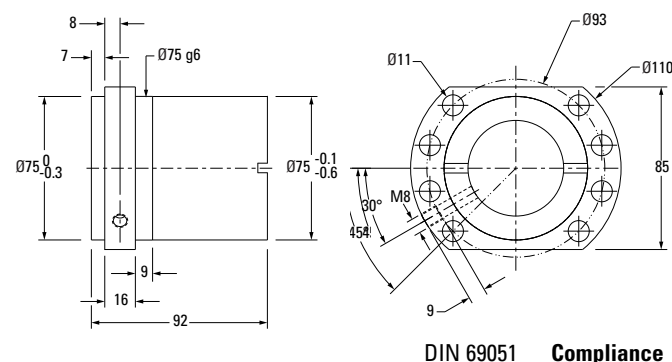
Ball Screw



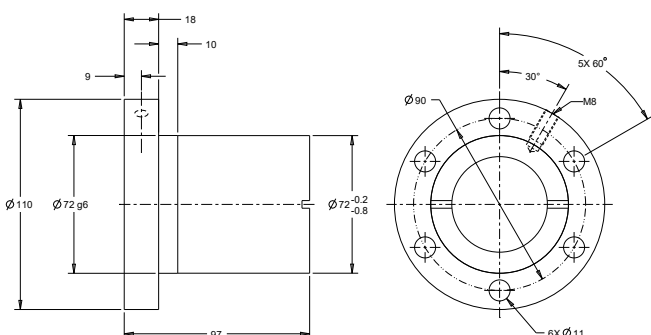
Flanged Ball Nut



Flanged Ball Nut, KGF-D (FK)



Flanged Ball Nut, KGF-N



Note: Dimensional information for all End Journals and Bearing Supports is available on page 118 – 137. Information on required lubrication is on page 177.

Nominal Ball Screw Diameter	50 mm
Nominal Ball Screw Lead	10 mm
Thread Direction	Right Hand
Number of Thread Starts	1
Screw Material	CF53
Screw Weight	13.5 kg/m
Nominal Ball Diameter	7.144 mm
Lead Accuracy ⁽¹⁾ P5 Part Number	195-9714

Ball screws can be cut to the length you require. Specify ball screw part number and overall length at time of order

Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	68.7 kN
Max. Static Load	155.8 kN
Number of Circuits	5
Torque to Raise 1 kN	1.77 Nm
Nut Weight	2.0 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.084 mm
Ball Return Type	Single Circuit
Number of Balls	115
Wiper Type	Rubber
Part Number	7120-448-077

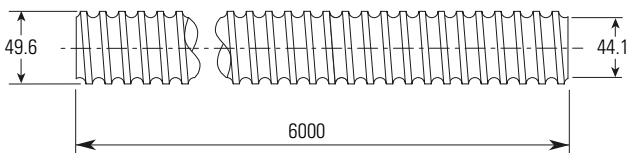
Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	66.4 kN
Max. Static Load	134.3 kN
Number of Circuits	4
Torque to Raise 1 kN	1.77 Nm
Nut Weight	2.0 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.084 mm
Ball Return Type	Single Circuit Metal
Number of Balls	88
Wiper Type	Polymer
Part Number	KGF-D-5010-RH-KK

Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	68.7 kN
Max. Static Load	155.8 kN
Number of Circuits	5
Torque to Raise 1 kN	1.77 Nm
Nut Weight	2.0 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.084 mm
Ball Return Type	Single Circuit
Number of Balls	115
Wiper Type	Rubber
Part Number	KGF-N-5010-RH-EE

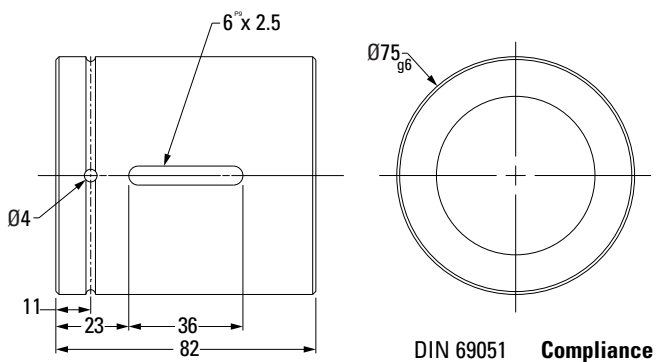
(1) P3 = 12 µm / 300 mm, P5 = 23 µm / 300 mm, T5 = 23 µm / 300 mm, T7 = 52 µm / 300 mm
 (2) Z1= light preload to 1-2%, Z2 = no preload, clearance held to max. indicated in table (standard unless specified), Z3 = no preload, clearance held to max. 0.05 mm

Ø 50 x 10 mm Metric Ball Screws – Rolled

Ball Screw



Cylindrical Ball Nut, KGM-D

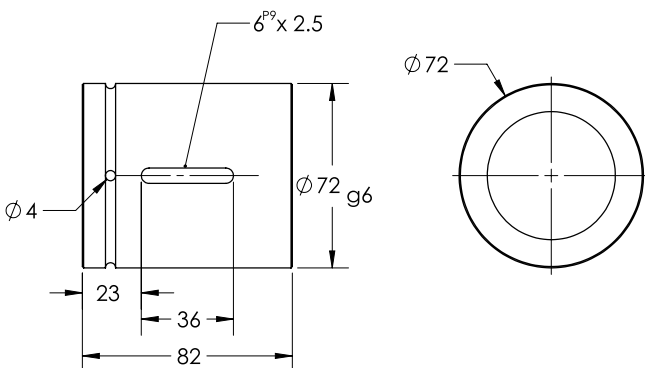


Nominal Ball Screw Diameter	50 mm
Nominal Ball Screw Lead	10 mm
Thread Direction	Right Hand
Number of Thread Starts	1
Screw Material	CF53
Screw Weight	13.5 kg/m
Nominal Ball Diameter	7.144 mm
Lead Accuracy ⁽¹⁾ P5 Part Number	195-9714

Ball screws can be cut to the length you require. Specify ball screw part number and overall length at time of order

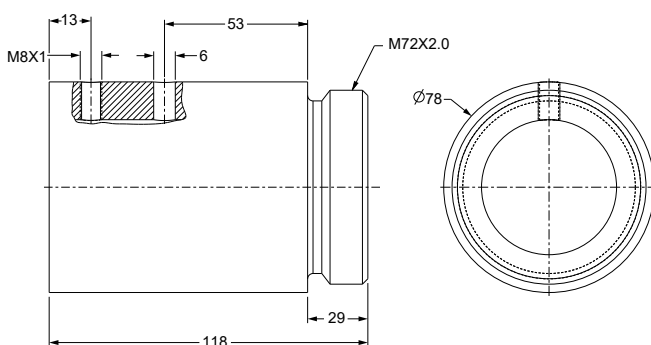
Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	68.7 kN
Max. Static Load	155.8 kN
Number of Circuits	5
Torque to Raise 1 kN	1.77 Nm
Nut Weight	0.9 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.084 mm
Ball Return Type	Single Circuit
Number of Balls	155
Wiper Type	Rubber
Part Number	KGM-D-5010-RH-EE

Cylindrical Ball Nut, KGM-N



Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	68.7 kN
Max. Static Load	155.8 kN
Number of Circuits	5
Torque to Raise 1 kN	1.77 Nm
Nut Weight	1.1 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.084 mm
Ball Return Type	Single Circuit Metal
Number of Balls	115
Wiper Type	Rubber
Part Number	KGM-N-5010-RH-EE

Threaded Ball Nut, KGM-G



Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	97.8 kN
Max. Static Load	213.2 kN
Number of Circuits	6
Torque to Raise 1 kN	1.77 Nm
Nut Weight	2.0 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.084 mm
Ball Return Type	Single Circuit
Number of Balls	132
Wiper Type	Polymer
Part Number	KGM-G-5010-RH-KK

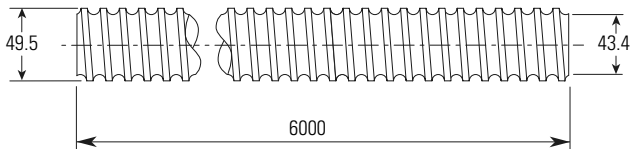
Note: Dimensional information for all End Journals and Bearing Supports is available on page 118 – 137. Information on required lubrication is on page 177.

(1) P3 = 12 µm / 300 mm, P5 = 23 µm / 300 mm, T5 = 23 µm / 300 mm, T7 = 52 µm / 300 mm
(2) Z1= light preload to 1-2%, Z2 = no preload, clearance held to max. indicated in table (standard unless specified), Z3 = no preload, clearance held to max. 0.05 mm



Ø 50 x 20 mm Metric Ball Screws – Rolled

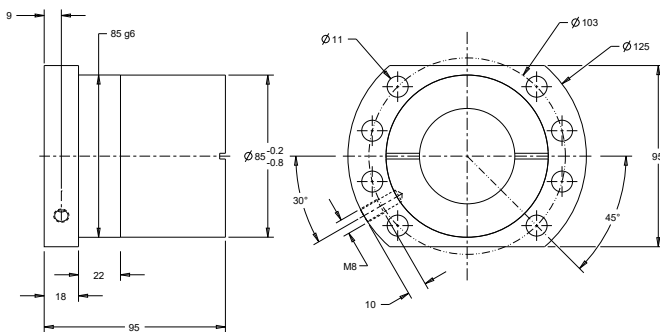
Ball Screw



Nominal Ball Screw Diameter	50 mm
Nominal Ball Screw Lead	20 mm
Thread Direction	Right Hand
Number of Thread Starts	2
Screw Material	CF53
Screw Weight	13.4 kg/m
Nominal Ball Diameter	7.144 mm
Lead Accuracy ⁽¹⁾ P5 Part Number	195-9725

Ball screws can be cut to the length you require. Specify ball screw part number and overall length at time of order

Flanged Ball Nut



DIN 69051 Compliance

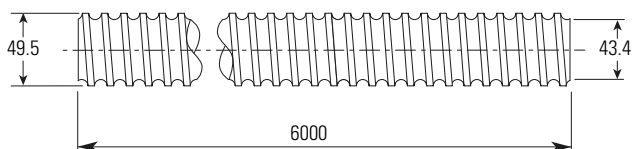
Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	60.0 kN
Max. Static Load	136.3 kN
Number of Circuits	4
Torque to Raise 1 kN	3.54 Nm
Nut Weight	2.5 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.084 mm
Ball Return Type	Channel
Number of Balls	100
Wiper Type	Rubber
Part Number	7120-448-078

(1) P3 = 12 µm / 300 mm, P5 = 23 µm / 300 mm, T5 = 23 µm / 300 mm, T7 = 52 µm / 300 mm
 (2) Z1= light preload to 1-2%, Z2 = no preload, clearance held to max. indicated in table (standard unless specified), Z3 = no preload, clearance held to max. 0.05 mm

Note: Dimensional information for all End Journals and Bearing Supports is available on page 118 – 137. Information on required lubrication is on page 177.

Ø 50 x 20 mm Metric Ball Screws – Rolled

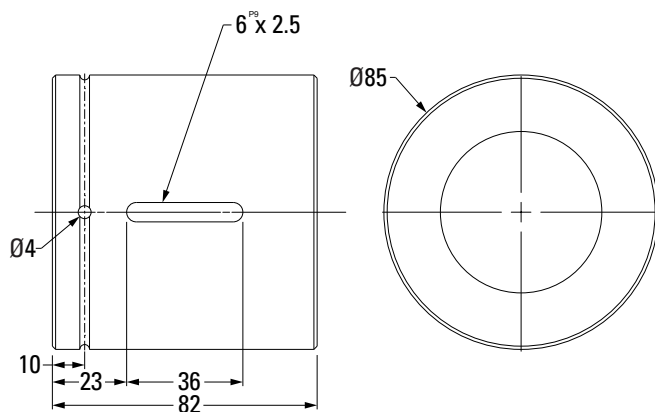
Ball Screw



Nominal Ball Screw Diameter	50 mm
Nominal Ball Screw Lead	20 mm
Thread Direction	Right Hand
Number of Thread Starts	2
Screw Material	CF53
Screw Weight	13.4 kg/m
Nominal Ball Diameter	7.144 mm
Lead Accuracy⁽¹⁾ P5 Part Number	195-9725

Ball screws can be cut to the length you require. Specify ball screw part number and overall length at time of order

Cylindrical Ball Nut, KGM-N



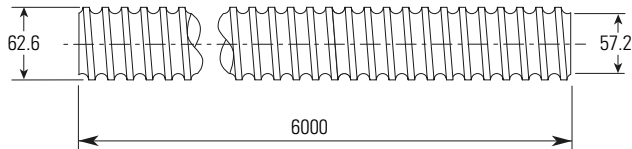
Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	60.0 kN
Max. Static Load	136.3 kN
Number of Circuits	4
Torque to Raise 1 kN	3.54 Nm
Nut Weight	1.4 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.084 mm
Ball Return Type	Channel
Number of Balls	100
Wiper Type	Rubber
Part Number	KGM-N-5020-RH-EE

(1) P3 = 12 µm / 300 mm, P5 = 23 µm / 300 mm, T5 = 23 µm / 300 mm, T7 = 52 µm / 300 mm
 (2) Z1= light preload to 1-2%, Z2 = no preload, clearance held to max. indicated in table (standard unless specified), Z3 = no preload, clearance held to max. 0.05 mm

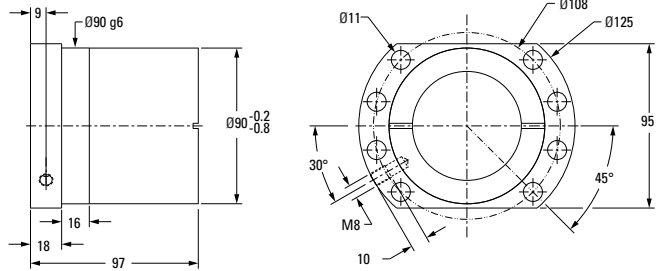


Ø 63 x 10 mm Metric Ball Screws – Rolled

Ball Screw

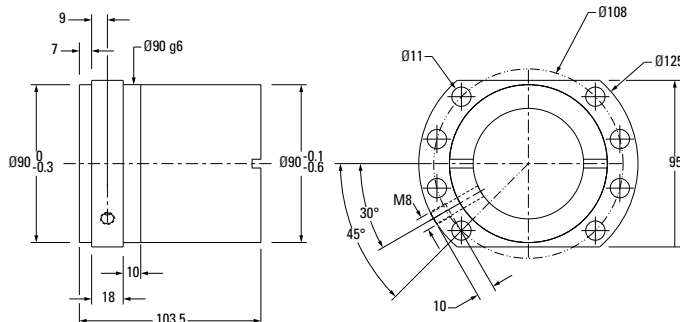


Flanged Ball Nut



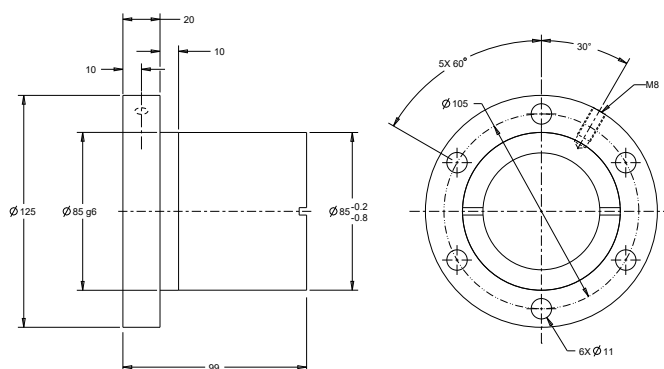
DIN 69051 Compliance

Flanged Ball Nut, KGF-D (FK)



DIN 69051 Compliance

Flanged Ball Nut, KGF-N



Note: Dimensional information for all End Journals and Bearing Supports is available on page 118 – 137. Information on required lubrication is on page 177.

Nominal Ball Screw Diameter	63 mm
Nominal Ball Screw Lead	10 mm
Thread Direction	Right Hand
Number of Thread Starts	1
Screw Material	CF53
Screw Weight	22.0 kg/m
Nominal Ball Diameter	7.144 mm
Lead Accuracy ⁽¹⁾ P5 Part Number	195-9726

Ball screws can be cut to the length you require. Specify ball screw part number and overall length at time of order

Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	76.0 kN
Max. Static Load	197.0 kN
Number of Circuits	5
Torque to Raise 1 kN	1.77 Nm
Nut Weight	2.0 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.084 mm
Ball Return Type	Single Circuit
Number of Balls	140
Wiper Type	Rubber
Part Number	7125-448-001

Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	93.8 kN
Max. Static Load	229.7 kN
Number of Circuits	5
Torque to Raise 1 kN	1.77 Nm
Nut Weight	2.0 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.084 mm
Ball Return Type	Single Circuit Metal
Number of Balls	140
Wiper Type	Polymer
Part Number	KGF-D-6310-RH-KK

Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	76.0 kN
Max. Static Load	197.0 kN
Number of Circuits	5
Torque to Raise 1 kN	1.77 Nm
Nut Weight	2.0 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.084 mm
Ball Return Type	Single Circuit
Number of Balls	140
Wiper Type	Rubber
Part Number	KGF-N-6310-RH-EE

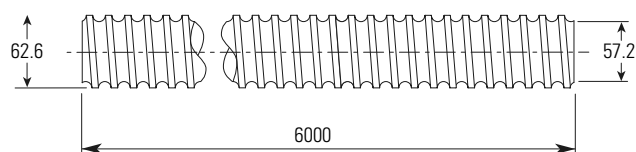
(1) P3 = 12 µm / 300 mm, P5 = 23 µm / 300 mm, T5 = 23 µm / 300 mm, T7 = 52 µm / 300 mm

(2) Z1= light preload to 1-2%, Z2 = no preload, clearance held to max. indicated in table (standard unless specified), Z3 = no preload, clearance held to max. 0.05 mm

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Ø 63 x 10 mm Metric Ball Screws – Rolled

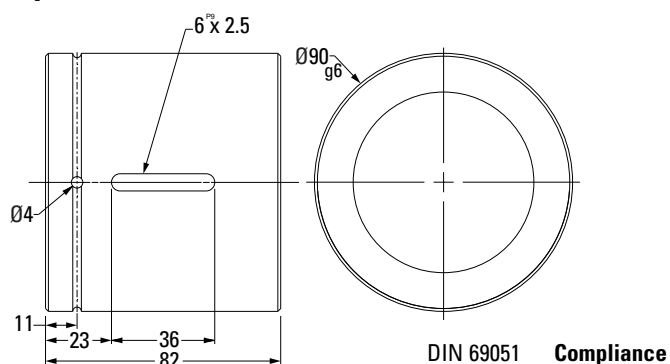
Ball Screw



Nominal Ball Screw Diameter	63 mm
Nominal Ball Screw Lead	10 mm
Thread Direction	Right Hand
Number of Thread Starts	1
Screw Material	CF53
Screw Weight	22.0 kg/m
Nominal Ball Diameter	7.144 mm
Lead Accuracy ⁽¹⁾ P5 Part Number	195-9726

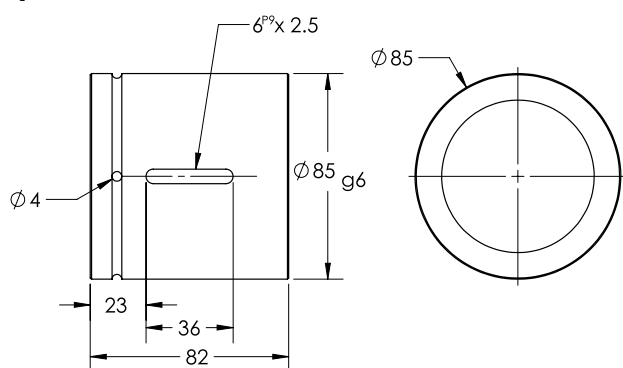
Ball screws can be cut to the length you require. Specify ball screw part number and overall length at time of order

Cylindrical Ball Nut, KGM-D



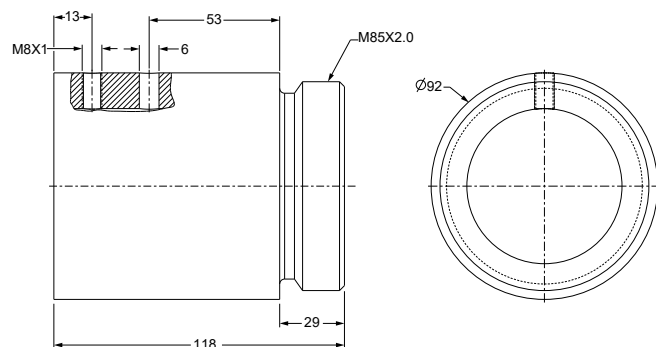
Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	68.7 kN
Max. Static Load	155.8 kN
Number of Circuits	5
Torque to Raise 1 kN	1.77 Nm
Nut Weight	0.9 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.084 mm
Ball Return Type	Single Circuit
Number of Balls	140
Wiper Type	Rubber
Part Number	KGM-D-6310-RH-EE

Cylindrical Ball Nut, KGM-N



Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	76.0 kN
Max. Static Load	197.0 kN
Number of Circuits	5
Torque to Raise 1 kN	1.77 Nm
Nut Weight	1.5 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.084 mm
Ball Return Type	Single Circuit Metal
Number of Balls	140
Wiper Type	Rubber
Part Number	KGM-N-6310-RH-EE

Threaded Ball Nut, KGM-G



Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	109.7 kN
Max. Static Load	213.2 kN
Number of Circuits	6
Torque to Raise 1 kN	1.77 Nm
Nut Weight	2.0 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.084 mm
Ball Return Type	Single Circuit
Number of Balls	168
Wiper Type	Polymer
Part Number	KGM-G-6310-RH-KK

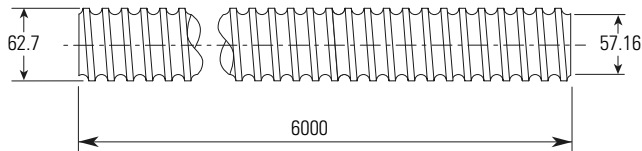
Note: Dimensional information for all End Journals and Bearing Supports is available on page 118 – 137. Information on required lubrication is on page 177.

(1) P3 = 12 µm / 300 mm, P5 = 23 µm / 300 mm, T5 = 23 µm / 300 mm, T7 = 52 µm / 300 mm
 (2) Z1= light preload to 1-2%, Z2 = no preload, clearance held to max. indicated in table (standard unless specified), Z3 = no preload, clearance held to max. 0.05 mm



Ø 63 x 20 mm Metric Ball Screws – Rolled

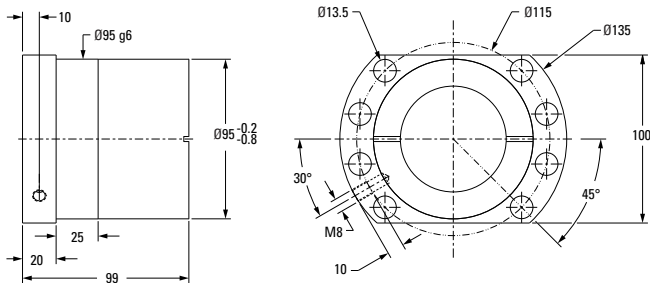
Ball Screw



Nominal Ball Screw Diameter	63 mm
Nominal Ball Screw Lead	20 mm
Thread Direction	Right Hand
Number of Thread Starts	2
Screw Material	CF53
Screw Weight	22 kg/m
Nominal Ball Diameter	7.14 mm
Lead Accuracy ⁽¹⁾ P5 Part Number	195-9727

Ball screws can be cut to the length you require. Specify ball screw part number and overall length at time of order

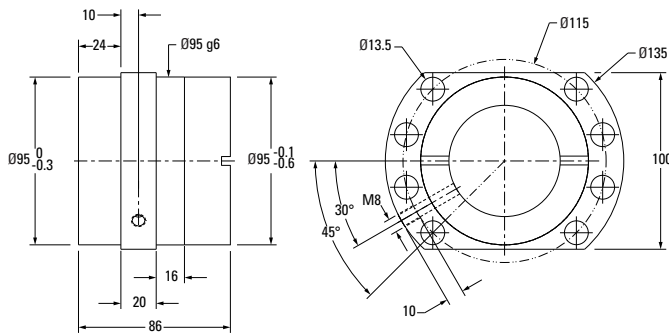
Flanged Ball Nut



DIN 69051 Compliance

Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	78.4 kN
Max. Static Load	173.4 kN
Number of Circuits	4
Torque to Raise 1 kN	3.54 Nm
Nut Weight	2.95 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.084 mm
Ball Return Type	Single Circuit Polymer
Number of Balls	96
Wiper Type	Rubber
Part Number	7125-448-002

Flanged Ball Nut, KGF-D (FH)



DIN 69051 Compliance

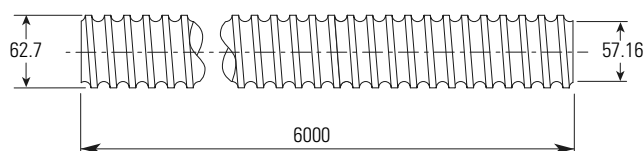
Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	103.1 kN
Max. Static Load	270.8 kN
Number of Circuits	5.6
Torque to Raise 1 kN	3.54 Nm
Nut Weight	3.8 kg/m
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.084 mm
Ball Return Type	End Cap
Number of Balls	96
Wiper Type	Polymer
Part Number	KGF-D-6320-RH-KK

(1) P3 = 12 µm / 300 mm, P5 = 23 µm / 300 mm, T5 = 23 µm / 300 mm, T7 = 52 µm / 300 mm
 (2) Z1= light preload to 1-2%, Z2 = no preload, clearance held to max. indicated in table (standard unless specified), Z3 = no preload, clearance held to max. 0.05 mm

Note: Dimensional information for all End Journals and Bearing Supports is available on page 118 – 137. Information on required lubrication is on page 177.

Ø 63 x 20 mm Metric Ball Screws – Rolled

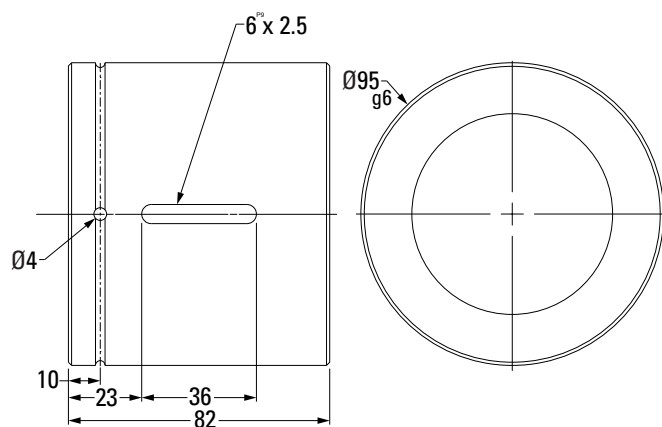
Ball Screw



Nominal Ball Screw Diameter	63 mm
Nominal Ball Screw Lead	20 mm
Thread Direction	Right Hand
Number of Thread Starts	2
Screw Material	CF53
Screw Weight	22 kg/m
Nominal Ball Diameter	7.14 mm
Lead Accuracy ⁽¹⁾ P5 Part Number	195-9727

Ball screws can be cut to the length you require. Specify ball screw part number and overall length at time of order

Cylindrical Ball Nut, KGM-D



DIN 69051 Compliance

Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	78.4 kN
Max. Static Load	171.3 kN
Number of Circuits	4
Torque to Raise 1 kN	3.54 Nm
Nut Weight	1.95 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.084 mm
Ball Return Type	Channel
Number of Balls	96
Wiper Type	Rubber
Part Number	KGM-D-6320-RH-EE

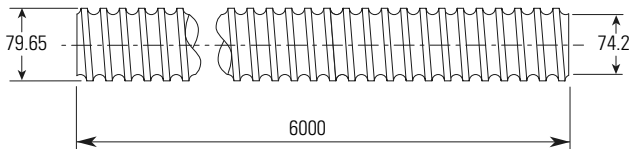
(1) P3 = 12 µm / 300 mm, P5 = 23 µm / 300 mm, T5 = 23 µm / 300 mm, T7 = 52 µm / 300 mm

(2) Z1= light preload to 1-2%, Z2 = no preload, clearance held to max. indicated in table (standard unless specified), Z3 = no preload, clearance held to max. 0.05 mm



Ø 80 x 10 mm Metric Ball Screws – Rolled

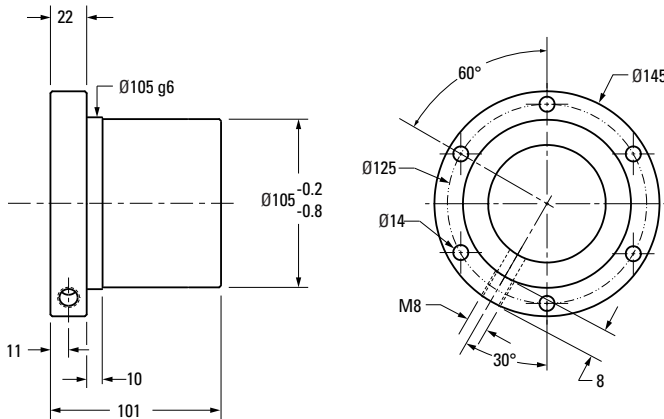
Ball Screw



Nominal Ball Screw Diameter	80 mm
Nominal Ball Screw Lead	10 mm
Thread Direction	Right Hand
Number of Thread Starts	1
Screw Material	CF53
Screw Weight	36.4 kg/m
Nominal Ball Diameter	7.144 mm
Lead Accuracy ⁽¹⁾ P5 Part Number	195-9728

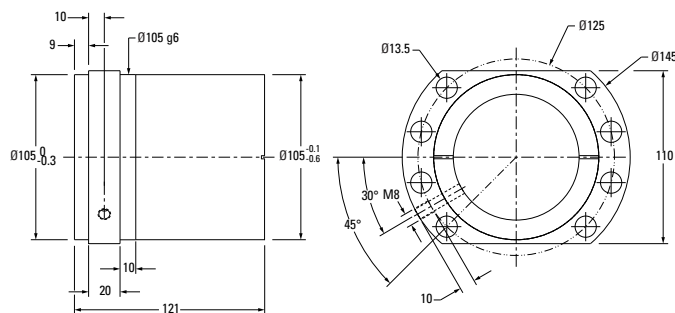
Ball screws can be cut to the length you require. Specify ball screw part number and overall length at time of order

Flanged Ball Nut, KGF-N



Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	86.3 kN
Max. Static Load	262.4 kN
Number of Circuits	5
Torque to Raise 1 kN	1.77 Nm
Nut Weight	3.9 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.08 mm
Ball Return Type	Single Circuit Polymer
Number of Balls	175
Wiper Type	Rubber
Part Number	KGF-N-8010-RH-EE

Flanged Ball Nut, KGF-D (FK)



DIN 69051 Compliance

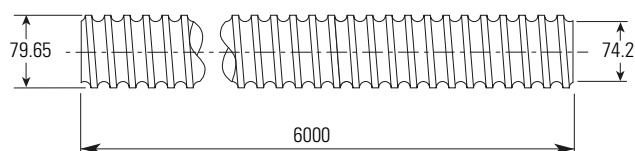
Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	121.9 kN
Max. Static Load	374.9 kN
Number of Circuits	6
Torque to Raise 1 kN	1.77 Nm
Nut Weight	3.9 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.084 mm
Ball Return Type	Single Circuit Metal
Number of Balls	210
Wiper Type	Polymer
Part Number	KGF-D-8010-RH-KK

(1) P3 = 12 µm / 300 mm, P5 = 23 µm / 300 mm, T5 = 23 µm / 300 mm, T7 = 52 µm / 300 mm
 (2) Z1= light preload to 1-2%, Z2 = no preload, clearance held to max. indicated in table (standard unless specified), Z3 = no preload, clearance held to max. 0.05 mm

Note: Dimensional information for all End Journals and Bearing Supports is available on page 118 – 137. Information on required lubrication is on page 177.

Ø 80 x 10 mm Metric Ball Screws – Rolled

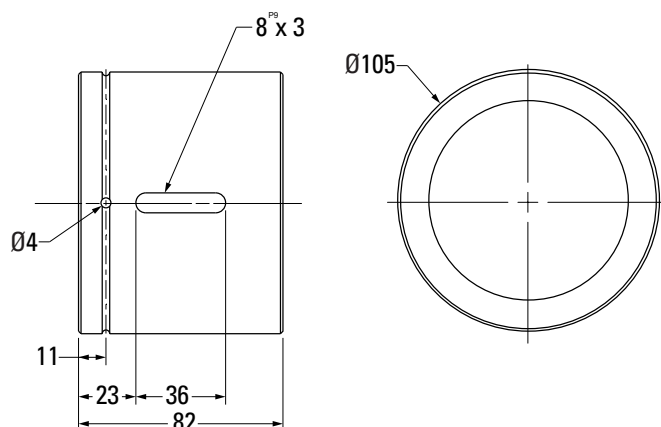
Ball Screw



Nominal Ball Screw Diameter	80 mm
Nominal Ball Screw Lead	10 mm
Thread Direction	Right Hand
Number of Thread Starts	1
Screw Material	CF53
Screw Weight	36.4 kg/m
Nominal Ball Diameter	7.144 mm
Lead Accuracy ⁽¹⁾ P5 Part Number	195-9728

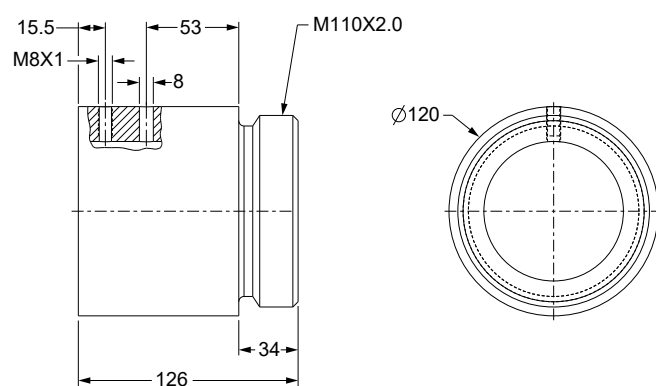
Ball screws can be cut to the length you require. Specify ball screw part number and overall length at time of order

Cylindrical Ball Nut, KGM-N



Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	86.3 kN
Max. Static Load	262.4 kN
Number of Circuits	5
Torque to Raise 1 kN	1.77 Nm
Nut Weight	3.9 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.08 mm
Ball Return Type	Single Circuit Polymer
Number of Balls	175
Wiper Type	Rubber
Part Number	KGM-N-8010-RH-EE

Threaded Ball Nut, KGM-G



Thread Direction	Right Hand
Nut Material	1.7131 (ESP 65)
Dynamic Load	121.9 kN
Max. Static Load	375 kN
Number of Circuits	6
Torque to Raise 1 kN	1.77 Nm
Nut Weight	4.9 kg
Preload Classes ⁽²⁾	Z1, Z2 (standard), Z3
Standard max. Backlash (Z2)	0.18 mm
Ball Return Type	Single Circuit Metal
Number of Balls	210
Wiper Type	Polymer
Part Number	KGM-G-8010-RH-KK

(1) P3 = 12 µm / 300 mm, P5 = 23 µm / 300 mm, T5 = 23 µm / 300 mm, T7 = 52 µm / 300 mm
 (2) Z1= light preload to 1-2%, Z2 = no preload, clearance held to max. indicated in table (standard unless specified), Z3 = no preload, clearance held to max. 0.05 mm

Note: Dimensional information for all End Journals and Bearing Supports is available on page 118 – 137. Information on required lubrication is on page 177.

Ordering

Ordering Key - Metric Ball Screws

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
RM	16	05	FD	Z1-	271.54	R	X-	FK	1	S	X		X	

1. Nut configuration

RM = Metric

2. Nominal thread diameter

10 = 10 mm
 12 = 12 mm
 16 = 16 mm
 20 = 20 mm
 25 = 25 mm
 32 = 32 mm
 40 = 40 mm
 50 = 50 mm
 63 = 63 mm
 80 = 80 mm

3. Thread lead

02 = 2 mm
 03 = 3 mm
 04 = 4 mm
 05 = 5 mm
 10 = 10 mm
 20 = 20 mm
 25 = 25 mm
 32 = 32 mm
 40 = 40 mm
 50 = 50 mm

4. Nut style

F = Flanged internal ball return (FSI)
 T = Threaded internal ball return (TSI)
 R = Cylindrical internal ball return (RSI)
 FD = Flanged (DIN 69051), internal ball return
 FH = Flanged, end cap return
 FK = Flanged, metal ball return
 FN = Flanged, polymer ball return
 MD = Flanged (DIN 69051), polymer ball return
 MG = Threaded, metal ball return
 MN = Cylindrical, internal ball return
 FS = No nut, Finesline screw only
 Blank = No nut, standard screw only

5. Nut assembly condition

Z1- = Light preload (1-2%)
 Z2- = Standard backlash
 Z3- = Backlash reduced (0.05 mm max.)

6. Threaded length

xxx.xx- = Length (mm)

7. Nut orientation

R = Nut faces right end
 L = Nut faces left end
 X = Nut ships on arbor

8. Wipers

X- = No wipers
 W- = Polymer wipers (standard)

9. Left end configuration

X = Cut to length
 K = Machine to print
 xx.x = Annealed length [inch]
 BK = Base mount
 BF = Floating base mount
 FK = Flange mount
 FF = Floating flange mount
 QK = Base/flange mount
 QF = Floating base/flange mount
 WK = Heavy duty flange
 MK = Motor mount

10. Left end drive configuration

Blank = With drive extension or cut to length
 1 = Without drive extension

11. Left screw support configuration

X = No support (machined only)
 S = Support installed on machined surface

12. Right end configuration

X = Cut to length
 K = Machine to print
 xx.x = Annealed length [inch]
 BK = Base mount
 BF = Floating base mount
 FK = Flange mount
 FF = Floating flange mount
 QK = Base/flange mount
 QF = Floating base/flange mount
 WK = Heavy duty flange
 MK = Motor mount

13. Right end drive configuration

Blank = With drive extension or cut to length
 1 = Without drive extension

14. Right screw support configuration

X = No support (machined only)
 S = Support installed on machined surface

15. Custom Modifier

Blank = Standard
 M = Custom

NOTE: Not all bearing supports are available in all sizes. See catalog or tact customer support for available combinations