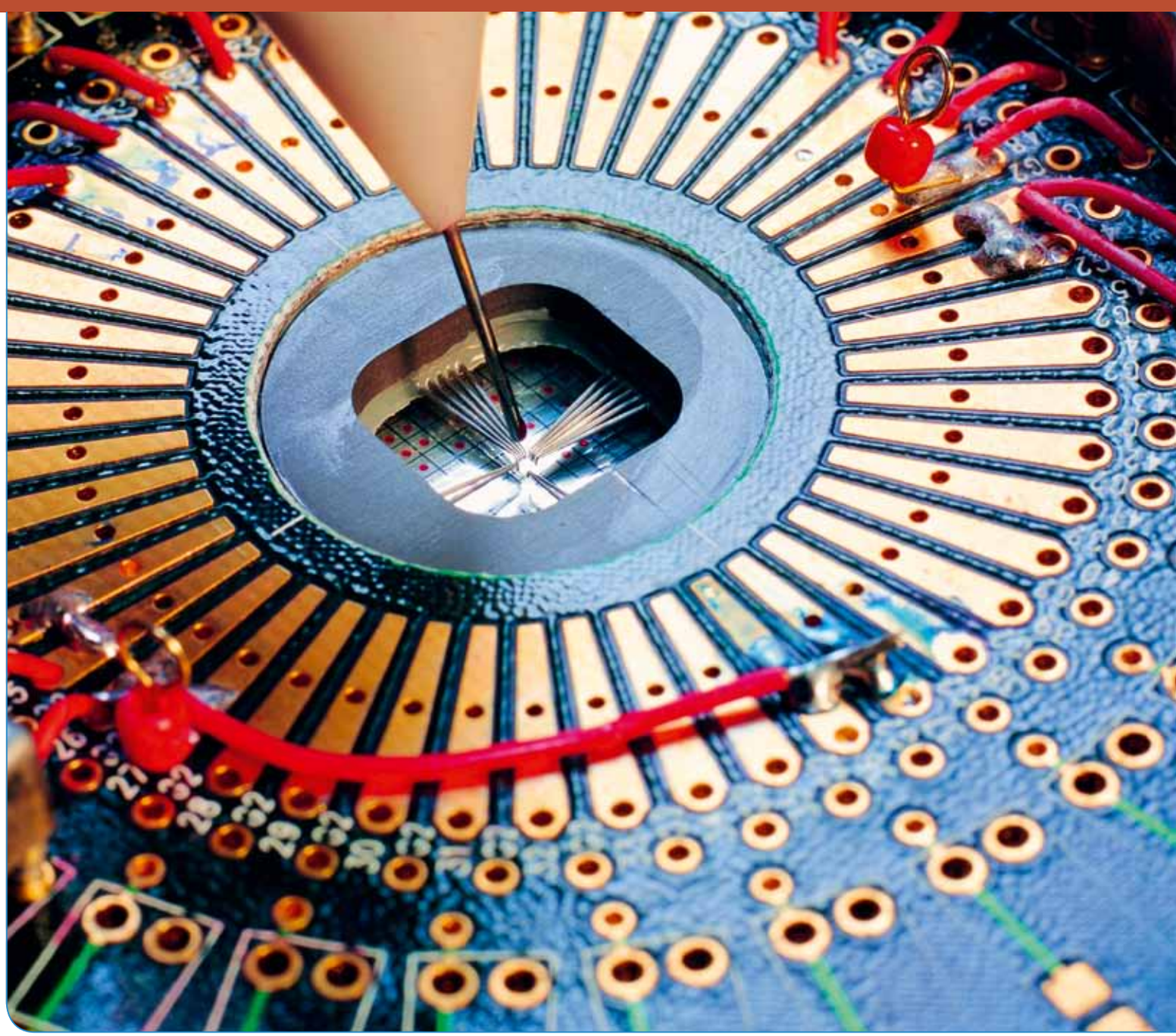
Miniature Ball Screws
Diameter 3 – 16 mm



MINIATURE BALL SCREWS 3 – 16 MM

Miniature ball screws are mainly used in Semiconductor Technology, Optics, Medical Technology and Measurement Technology markets. There are two different standard shaft styles available, style A and B, which are available in various stroke lengths. On inquiry we offer suitable support bearings as well.

In addition to the standard ball screws, Steinmeyer also offers screws and nuts in completely custom execution. All sizes are available in ground execution up to accuracy class P0. And from diameter 8 mm to 16 mm we also offer miniature rolled screws in accuracy class T7 to T10.

Standard or Custom.

Whether you select a standard item from our extensive product range, or are looking for something specifically tailored to your needs: Steinmeyer has a solution!

Our extensive list of standard screws is the right place to start collecting information. Even custom solutions may actually use the same nut as a standard screw, so nut dimensions as well as technical data are the same.

We also manufacture ball screws entirely customized: unusual nut shapes, different pitches or diameters, special materials, special coatings, etc. If that‘s what you are looking for, please contact us.

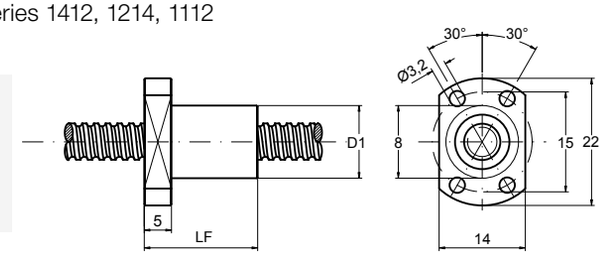
TECHNICAL TIP

Our standard product range for miniature ball screws includes two different shaft versions, in various lengths, that can be combined with four different nut designs. You may choose from a number of different diameters and leads, and several accuracy classes. We have tried to present this variety as user-friendly as possible.

In addition to the different shaft lengths and travels, we supply ball screws with modifications such as reduced length or completely customized shafts. These non-standard shafts may be combined with one of the standard nuts shown here, or with custom nuts. We will be pleased to quote whatever you require. Just send us a drawing or sketch.

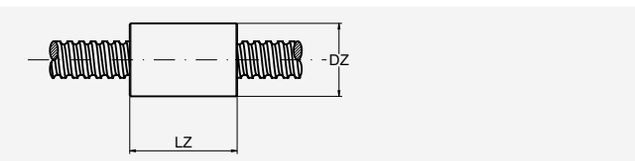
NOMINAL DIAMETER 3 mm

Ground execution with standard bearing journal P0 - P5
Series 1412, 1214, 1112



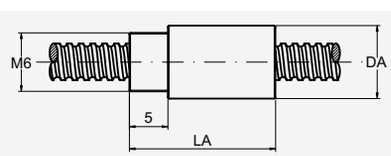
FLANGE NUT

■ **Series 1412:**
Nut with flange and standard wipers on both ends



CYLINDRICAL NUT

■ **Series 1214:**
Cylindrical nut without wipers



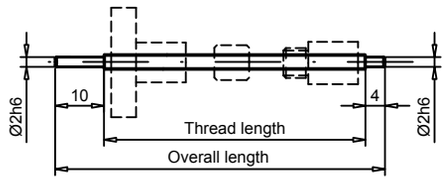
NUT WITH CONNECTING THREAD

■ **Series 1112:**
Nut with connecting thread without wipers

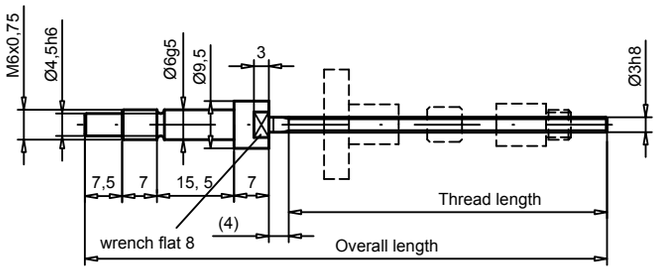
Technical data

Numbering system see page 52 (Please specify the accuracy class)	1412/0,5.3.76.90	1412/0,5.3.44.85	1412/0,5.3.64.105	1412/0,5.3.94.135	1412/1.3.76.90	1412/1.3.44.85	1412/1.3.64.105	1412/1.3.94.135
Shaft style	A	B	B	B	A	B	B	B
Lead P [mm]	0.5	0.5	0.5	0.5	1	1	1	1
Nominal diameter d_N [mm]	3	3	3	3	3	3	3	3
Nominal stroke [mm]	50	20	40	70	50	20	40	70
Ball circles i	2	2	2	2	2	2	2	2
Ball diameter [mm]	0.6	0.6	0.6	0.6	0.8	0.8	0.8	0.8
Dynamic load capacity C_a [N]	90	90	90	90	240	240	240	240
Static load capacity C_{0a} [N]	90	90	90	90	250	250	250	250
Max. axial play [mm] with backlash	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Max. friction torque [Ncm] (preloaded nut)	0.3 (1)	0.3 (1)	0.3 (1)	0.3 (1)	0.3 (1)	0.3 (1)	0.3 (1)	0.3 (1)
Nut length LF / LZ / LA [mm]	15	15	15	15	15	15	15	15
Nut diameter D1g6 / DZh6 / DA [mm]	8	8	8	8	8	8	8	8

■ **Shaft style A**



■ **Shaft style B**

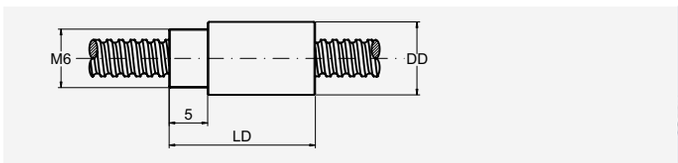


Nuts shown in standard orientation. Select one nut from table.

	1214/0,5.3.76.90	1214/0,5.3.44.85	1214/0,5.3.64.105	1214/0,5.3.94.135	1214/1.3.76.90	1214/1.3.44.85	1214/1.3.64.105	1214/1.3.94.135	1112/0,5.3.76.90	1112/0,5.3.44.85	1112/0,5.3.64.105	1112/0,5.3.94.135	1112/1.3.76.90	1112/1.3.44.85	1112/1.3.64.105	1112/1.3.94.135
	A	B	B	B	A	B	B	B	A	B	B	B	A	B	B	B
	0.5	0.5	0.5	0.5	1	1	1	1	0.5	0.5	0.5	0.5	1	1	1	1
	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	50	20	40	70	50	20	40	70	50	20	40	70	50	20	40	70
	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	0.6	0.6	0.6	0.6	0.8	0.8	0.8	0.8	0.6	0.6	0.6	0.6	0.8	0.8	0.8	0.8
	90	90	90	90	240	240	240	240	90	90	90	90	240	240	240	240
	90	90	90	90	250	250	250	250	90	90	90	90	250	250	250	250
	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
	0.3 (1)	0.3 (1)	0.3 (1)	0.3 (1)	0.3 (1)	0.3 (1)	0.3 (1)	0.3 (1)	0.3 (1)	0.3 (1)	0.3 (1)	0.3 (1)	0.3 (1)	0.3 (1)	0.3 (1)	0.3 (1)
	7	7	7	7	7	7	7	7	15	15	15	15	15	15	15	15
	7	7	7	7	7	7	7	7	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5

NOMINAL DIAMETER 3 mm

Ground execution with standard bearing journal P0 - P5
Series 1510



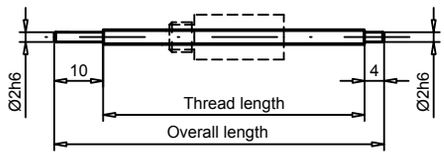
NUT WITH CONNECTING THREAD

■ **Series 1510:**
Spring preloaded double nut in housing with connecting thread without wipers

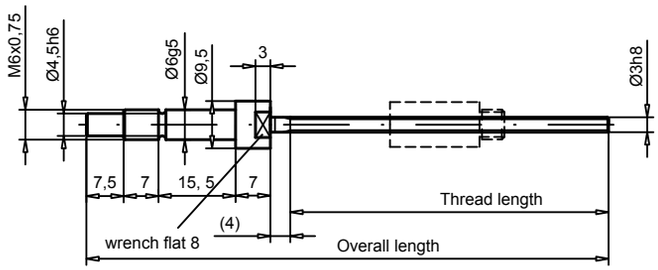
Technical data

Numbering system see page 52 (Please specify the accuracy class)	1510/0,5.3.76.90	1510/0,5.3.44.85	1510/0,5.3.64.105	1510/0,5.3.94.135	1510/1.3.76.90	1510/1.3.44.85	1510/1.3.64.105	1510/1.3.94.135
Shaft style	A	B	B	B	A	B	B	B
Lead P [mm]	0.5	0.5	0.5	0.5	1	1	1	1
Nominal diameter d_N [mm]	3	3	3	3	3	3	3	3
Nominal stroke [mm]	50	20	40	70	50	20	40	70
Ball circles i	2	2	2	2	2	2	2	2
Ball diameter [mm]	0.6	0.6	0.6	0.6	0.8	0.8	0.8	0.8
Dynamic load capacity C_a [N]	100	100	100	100	200	200	200	200
Static load capacity C_{0a} [N]	200	200	200	200	300	300	300	300
Max. preload [N]	10	10	10	10	15	15	15	15
Max. axial load [N]	6	6	6	6	10	10	10	10
Friction torque T_{pr0} [Ncm]	0.4-0.8	0.4-0.8	0.4-0.8	0.4-0.8	0.4-0.8	0.4-0.8	0.4-0.8	0.4-0.8
Nut length LD [mm]	23	23	23	23	23	23	23	23
Nut diameter DD [mm]	9	9	9	9	9	9	9	9

■ **Shaft style A**



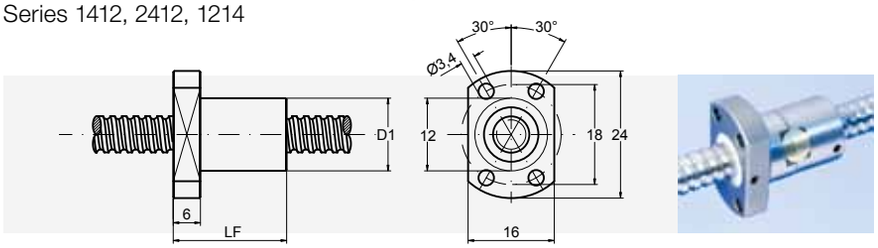
■ **Shaft style B**



Please follow the advice on page 24/25.

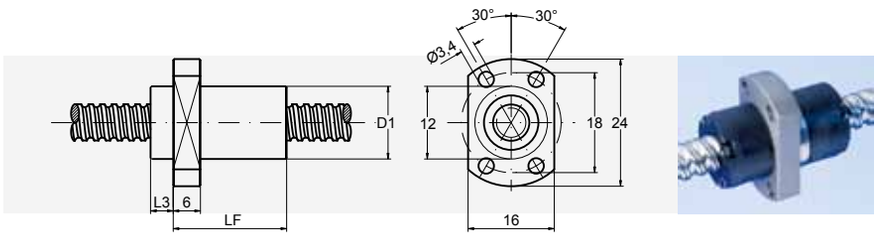
NOMINAL DIAMETER 5 mm

Ground execution with standard bearing journal P0 - P5
Series 1412, 2412, 1214



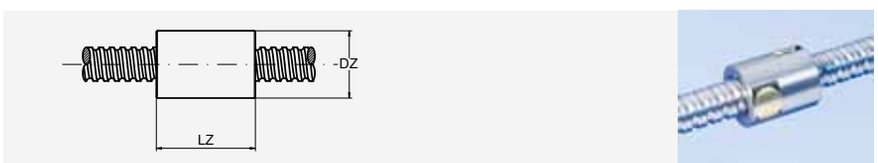
NUT WITH CONNECTING THREAD

■ **Series 1412:**
Nut with flange and standard wipers on both ends



FLANGE NUT

■ **Series 2412:**
Nut with flange and standard wipers on both ends



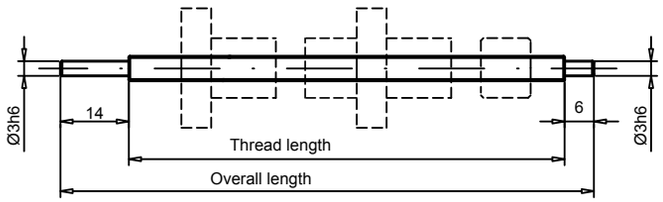
CYLINDICAL NUT

■ **Series 1214:**
Cylindrical nut without wipers

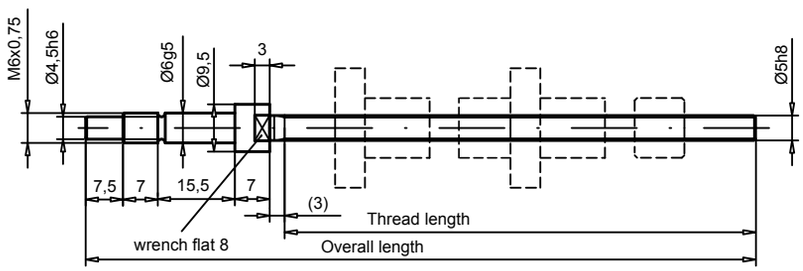
Technical data

Numbering system see page 52 (Please specify the accuracy class)	1412/0,5.5.90.110	1412/0,5.5.65.105	1412/0,5.5.125.165	1412/1.5.90.110	1412/1.5.65.105	1412/1.5.125.165	1412/1,5.5.90.110	1412/1,5.5.125.165
Shaft style	A	B	B	A	B	B	A	B
Lead P [mm]	0.5	0.5	0.5	1	1	1	1.5	1.5
Nominal diameter d_N [mm]	5	5	5	5	5	5	5	5
Nominal stroke [mm]	60	40	100	60	40	100	60	100
Ball circles i	3	3	3	3	3	3	3	3
Ball diameter [mm]	0.6	0.6	0.6	0.8	0.8	0.8	1	1
Dynamic load capacity C_a [N]	170	170	170	490	490	490	640	640
Static load capacity C_{0a} [N]	240	240	240	740	740	740	860	860
Max. axial play [mm] with backlash	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02
Max. friction torque [Ncm] (preloaded nut)	0.4 (1.5)	0.4 (1.5)	0.4 (1.5)	0.4 (1.5)	0.4 (1.5)	0.4 (1.5)	0.4 (1.5)	0.4 (1.5)
Nut length LF / LZ [mm]	22	22	22	21	21	21	23	23
Nut diameter D1g6 / DZh6 [mm]	12	12	12	12	12	12	12	12
L3 [mm]	-	-	-	-	-	-	-	-

■ **Shaft style A**



■ **Shaft style B**

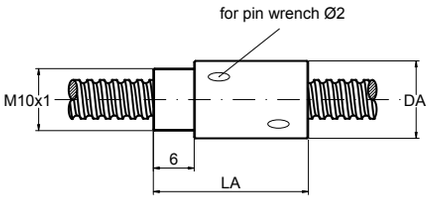


Nuts shown in standard orientation. Select one nut from table.

	2412/2.5.90.110	2412/2.5.65.105	2412/2.5.125.165	2412/3.5.90.110	2412/3.5.65.105	2412/3.5.125.165	1214/0,5.5.90.110	1214/0,5.5.65.105	1214/0,5.5.125.165	1214/1.5.90.110	1214/1.5.65.105	1214/1.5.125.165	1214/1,5.5.90.110	1214/1,5.5.65.105	1214/1,5.5.125.165
	A	B	B	A	B	B	A	B	B	A	B	B	A	B	B
	2	2	2	3	3	3	0.5	0.5	0.5	1	1	1	1.5	1.5	1.5
	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	60	40	100	60	40	100	60	40	100	60	40	100	60	40	100
	5	5	5	4	4	4	3	3	3	3	3	3	3	3	3
	1	1	1	1	1	1	0.6	0.6	0.6	0.8	0.8	0.8	1	1	1
	990	990	990	790	790	790	170	170	170	490	490	490	640	640	640
	1490	1490	1490	1150	1150	1150	240	240	240	740	740	740	860	860	860
	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02
	0.4 (1.5)	0.4 (1.5)	0.4 (1.5)	0.4 (1.5)	0.4 (1.5)	0.4 (1.5)	0.4 (1.5)	0.4 (1.5)	0.4 (1.5)	0.4 (1.5)	0.4 (1.5)	0.4 (1.5)	0.4 (1.5)	0.4 (1.5)	0.4 (1.5)
	12	12	12	13	13	13	13	13	13	12	12	12	14	14	14
	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
	5	5	5	5	5	5	-	-	-	-	-	-	-	-	-

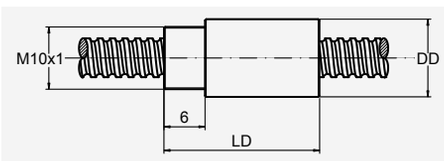
NOMINAL DIAMETER 5 mm

Ground execution with standard bearing journal P0 - P5
Series 1112, 1510



NUT WITH CONNECTING THREAD

■ **Series 1112:**
Nut with connecting thread without wipers



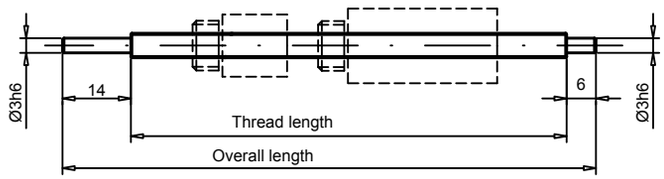
NUT WITH CONNECTING THREAD

■ **Series 1510:**
Spring preloaded double nut in housing with connecting thread without wipers

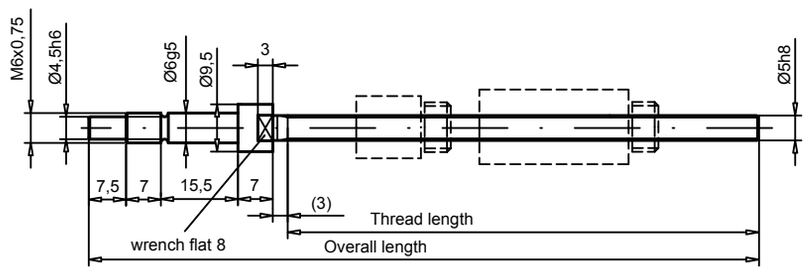
Technical data

Numbering system see page 52 (Please specify the accuracy class)	1112/0,5.5.90.110	1112/0,5.5.65.105	1112/0,5.5.125.165	1112/1.5.90.110	1112/1.5.65.105	1112/1.5.125.165	1112/1,5.5.90.110	1112/1,5.5.65.105	1112/1,5.5.125.165
Shaft style	A	B	B	A	B	B	A	B	B
Lead P [mm]	0.5	0.5	0.5	1	1	1	1.5	1.5	1.5
Nominal diameter d_N [mm]	5	5	5	5	5	5	5	5	5
Nominal stroke [mm]	60	40	100	60	40	100	60	40	100
Ball circles i	3	3	3	3	3	3	3	3	3
Ball diameter [mm]	0.6	0.6	0.6	0.8	0.8	0.8	1	1	1
Dynamic load capacity C_a [N]	170	170	170	490	490	490	640	640	640
Static load capacity C_{0a} [N]	240	240	240	740	740	740	860	860	860
Max. axial play [mm] with backlash	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02
Max. friction torque [Ncm] (preloaded nut)	0.4 (1.5)	0.4 (1.5)	0.4 (1.5)	0.4 (1.5)	0.4 (1.5)	0.4 (1.5)	0.4 (1.5)	0.4 (1.5)	0.4 (1.5)
Max. preload [N]	-	-	-	-	-	-	-	-	-
Max. axial load [N]	-	-	-	-	-	-	-	-	-
Friction torque T_{pr0} [Ncm]	-	-	-	-	-	-	-	-	-
Nut length LA / LD [mm]	19	19	19	18	18	18	20	20	20
Nut diameter DA / DD [mm]	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5

■ **Shaft style A**



■ **Shaft style B**

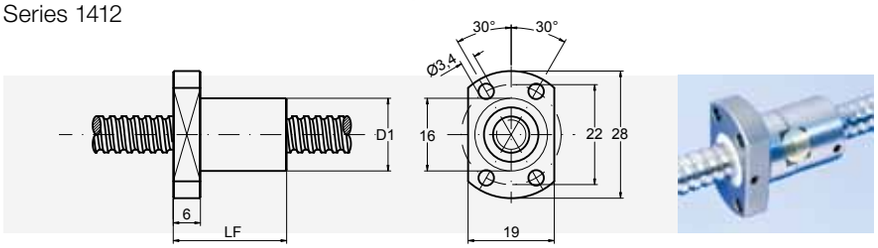


Nuts shown in standard orientation. Select one nut from table. Please follow the advice on page 24/25.

1510/0,5.5.90.110	1510/0,5.5.65.105	1510/0,5.5.125.165	1510/1.5.90.110	1510/1.5.65.105	1510/1.5.125.165	1510/1,5.5.90.110	1510/1,5.5.65.105	1510/1,5.5.125.165
A	B	B	A	B	B	A	B	B
0.5	0.5	0.5	1	1	1	1.5	1.5	1.5
5	5	5	5	5	5	5	5	5
60	40	100	60	40	100	60	40	100
2	2	2	2	2	2	2	2	2
0.6	0.6	0.6	0.8	0.8	0.8	1	1	1
100	100	100	400	400	400	500	500	500
100	100	100	500	500	500	600	600	600
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
10	10	10	20	20	20	20	20	20
6	6	6	15	15	15	15	15	15
0.5-1.0	0.5-1.0	0.5-1.0	0.5-1.0	0.5-1.0	0.5-1.0	0.5-1.0	0.5-1.0	0.5-1.0
36	36	36	36	36	36	36	36	36
15	15	15	15	15	15	15	15	15

NOMINAL DIAMETER 8 mm

Ground execution with standard bearing journal P0 - P5
Series 1412



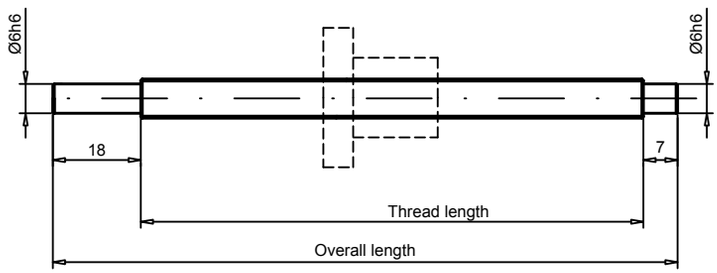
FLANGE NUT

■ **Series 1412:**
Nut with flange and standard wipers on both ends

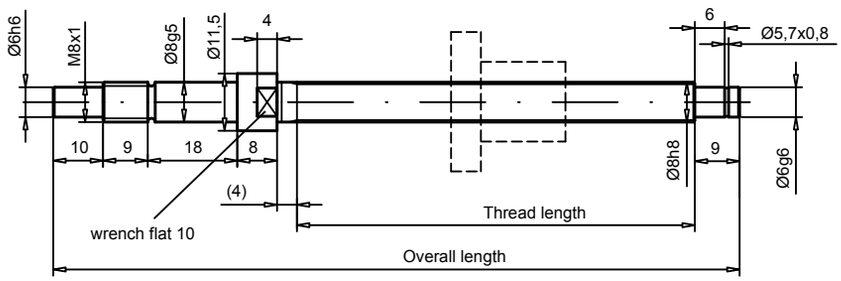
Technical data

Numbering system see page 52 (Please specify the accuracy class)	1412/0,5.8.145.170	1412/0,5.8.245.270	1412/0,5.8.80.138	1412/0,5.8.190.248	1412/1.8.145.170	1412/1.8.245.270	1412/1.8.80.138	1412/1.8.190.248	1412/1,5.8.110.168	1412/1,5.8.190.248	1412/2.8.145.170	1412.2.8.245.270
Shaft style	A	A	B	B	A	A	B	B	B	B	A	A
Lead P [mm]	0.5	0.5	0.5	0.5	1	1	1	1	1.5	1.5	2	2
Nominal diameter d_N [mm]	8	8	8	8	8	8	8	8	8	8	8	8
Nominal stroke [mm]	100	200	40	150	100	200	40	150	70	150	100	200
Ball circles i	3	3	3	3	3	3	3	3	3	3	3	3
Ball diameter [mm]	0.6	0.6	0.6	0.6	0.8	0.8	0.8	0.8	1	1	1.5	1.5
Dynamic load capacity C_a [N]	400	400	400	400	900	900	900	900	1200	1200	2000	2000
Static load capacity C_{0a} [N]	500	500	500	500	1200	1200	1200	1200	1500	1500	2100	2100
Max. axial play [mm] with backlash	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02
Max. friction torque [Ncm] (preloaded nut)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)
Nut length LF [mm]	22	22	22	22	23	23	23	23	23	23	28	28
Nut diameter D1g6 [mm]	16	16	16	16	16	16	16	16	16	16	16	16

■ Shaft style A



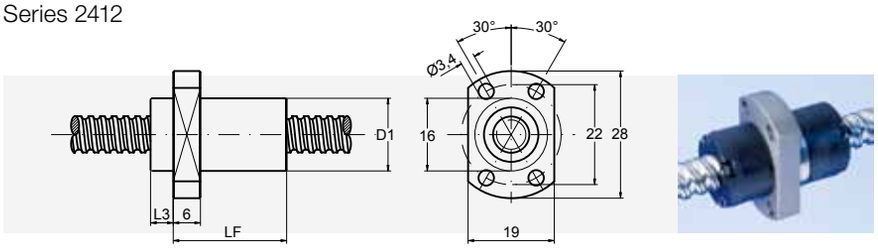
■ Shaft style B



	1412/2.8.80.138	1412/2.8.190.248	1412/2,5.8.145.170	1412/2,5.8.245.270	1412/2,5.8.80.138	1412/2,5.8.190.248	1412/3.8.145.170	1412/3.8.245.270	1412/3.8.80.138	1412/3.8.190.248	1412/4.8.145.170	1412/4.8.245.270	1412/4.8.80.138	1412/4.8.190.248
	B	B	A	A	B	B	A	A	B	B	A	A	B	B
	2	2	2.5	2.5	2.5	2.5	3	3	3	3	4	4	4	4
	8	8	8	8	8	8	8	8	8	8	8	8	8	8
	40	150	100	200	40	150	100	200	40	150	100	200	40	150
	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100
	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)
	28	28	30	30	30	30	27	27	27	27	31	31	31	31
	16	16	16	16	16	16	16	16	16	16	16	16	16	16

NOMINAL DIAMETER 8 mm

Ground execution with standard bearing journal P0 - P5
Series 2412



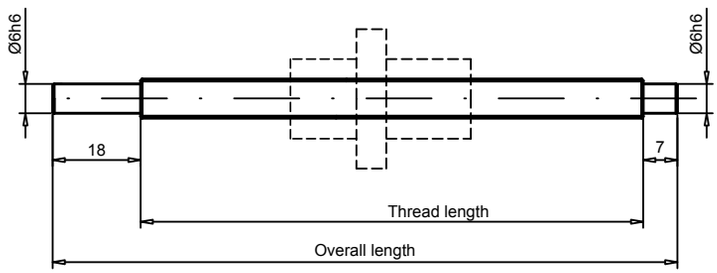
FLANGE NUT

■ **Series 2412:**
Nut with flange and standard wipers on both ends

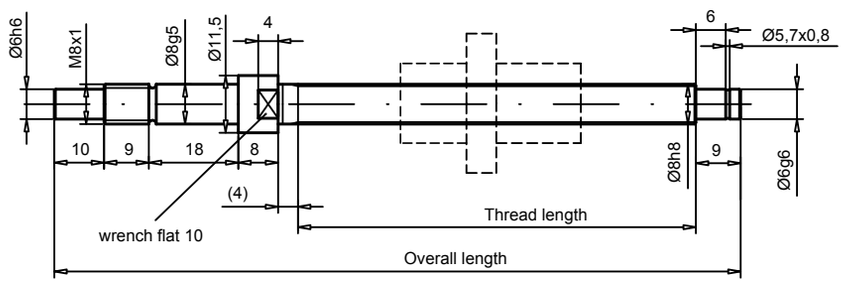
Technical data

Numbering system see page 52 (Please specify the accuracy class)	2412/2.8.145.170	2412/2.8.245.270	2412/2.8.80.138	2412/2.8.190.248	2412/4.8.145.170	2412/4.8.245.270	2412/4.8.80.138	2412/4.8.190.248	2412/5.8.145.170	2412/5.8.245.270	2412/5.8.80.138	2412/5.8.190.248
Shaft style	A	A	B	B	A	A	B	B	A	A	B	B
Lead P [mm]	2	2	2	2	4	4	4	4	5	5	5	5
Nominal diameter d_N [mm]	8	8	8	8	8	8	8	8	8	8	8	8
Nominal stroke [mm]	100	200	40	150	100	200	40	150	100	200	40	150
Ball circles i	5	5	5	5	5	5	5	5	3	3	3	3
Ball diameter [mm]	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Dynamic load capacity C_a [N]	3100	3100	3100	3100	3000	3000	3000	3000	1900	1900	1900	1900
Static load capacity C_{0a} [N]	3600	3600	3600	3600	3600	3600	3600	3600	2100	2100	2100	2100
Max. axial play [mm] with backlash	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Max. friction torque [Ncm] (preloaded nut)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)
Nut length LF [mm]	12	12	12	12	21	21	21	21	16	16	16	16
Nut diameter D1g6 [mm]	16	16	16	16	16	16	16	16	16	16	16	16
Länge Stirndeckel L3 [mm]	5	5	5	5	6	6	6	6	6	6	6	6

■ Shaft style A



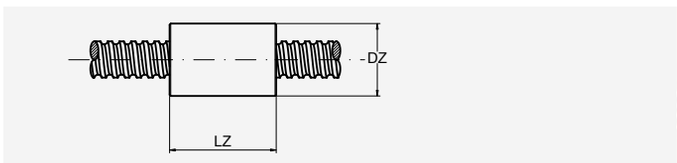
■ Shaft style B



	2412/8.8.145.170	2412/8.8.245.270	2412/8.8.80.138	2412/8.8.190.248
	A	A	B	B
	8	8	8	8
	8	8	8	8
	100	200	40	150
	2	2	2	2
	1.5	1.5	1.5	1.5
	1200	1200	1200	1200
	1200	1200	1200	1200
	0.02	0.02	0.02	0.02
	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)
	16	16	16	16
	16	16	16	16
	6	6	6	6

NOMINAL DIAMETER 8 mm

Ground execution with standard bearing journal P0 - P5
Series 1214



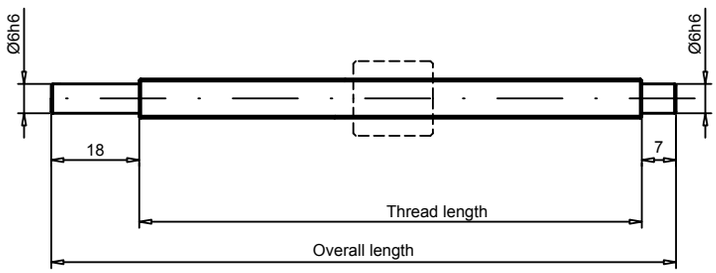
CYLINDRICAL NUT

■ **Series 1214:**
Cylindrical nut without wipers

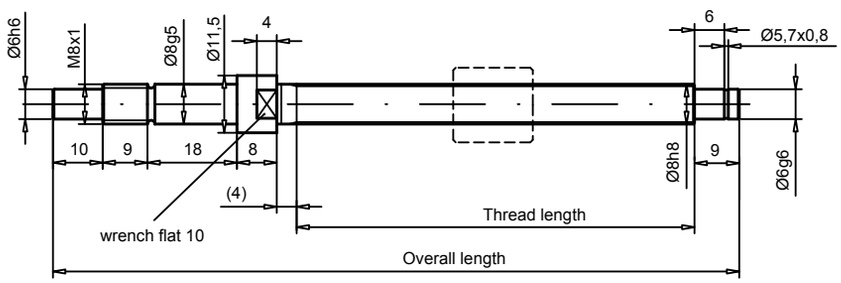
Technical data

Numbering system see page 52 (Please specify the accuracy class)	1214/0,5.8.145.170	1214/0,5.8.245.270	1214/0,5.8.80.138	1214/0,5.8.190.248	1214/1.8.145.170	1214/1.8.245.270	1214/1.8.80.138	1214/1.8.190.248	1214/1,5.8.145.170	1214/1,5.8.245.270	1214/1,5.8.80.138	1214/1,5.8.190.248
Shaft style	A	A	B	B	A	A	B	B	A	A	B	B
Lead P [mm]	0.5	0.5	0.5	0.5	1	1	1	1	1.5	1.5	1.5	1.5
Nominal diameter d_N [mm]	8	8	8	8	8	8	8	8	8	8	8	8
Nominal stroke [mm]	100	200	40	150	100	200	40	150	100	200	40	150
Ball circles i	3	3	3	3	3	3	3	3	3	3	3	3
Ball diameter [mm]	0.6	0.6	0.6	0.6	0.8	0.8	0.8	0.8	1	1	1	1
Dynamic load capacity C_a [N]	400	400	400	400	900	900	900	900	1200	1200	1200	1200
Static load capacity C_{0a} [N]	500	500	500	500	1200	1200	1200	1200	1500	1500	1500	1500
Max. axial play [mm] with backlash	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Max. friction torque [Ncm] (preloaded nut)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)
Nut length LZ [mm]	13	13	13	13	14	14	14	14	14	14	14	14
Nut diameter DZh6 [mm]	15	15	15	15	15	15	15	15	15	15	15	15

■ Shaft style A



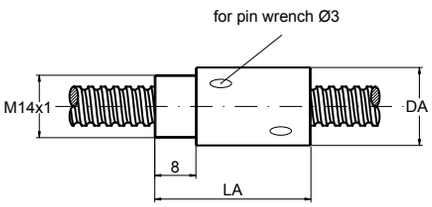
■ Shaft style B



	1214/2.8.145.170	1214/2.8.245.270	1214/2.8.80.138	1214/2.8.190.248	1214/2,5.8.145.170	1214/2,5.8.245.270	1214/2,5.8.80.138	1214/2,5.8.190.248	1214/3.8.145.170	1214/3.8.245.270	1214/3.8.80.138	1214/3.8.190.248	1214/4.8.145.170	1214/4.8.245.270	1214/4.8.80.138	1214/4.8.190.248
	A	A	B	B	A	A	B	B	A	A	B	B	A	A	B	B
	2	2	2	2	2.5	2.5	2.5	2.5	3	3	3	3	4	4	4	4
	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
	100	200	40	150	100	200	40	150	100	200	40	150	100	200	40	150
	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100
	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)
	19	19	19	19	21	21	21	21	18	18	18	18	22	22	22	22
	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15

NOMINAL DIAMETER 8 mm

Ground execution with standard bearing journal P0 - P5
Series 1112



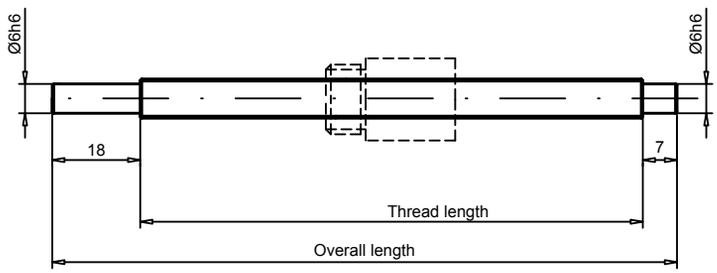
NUT WITH CONNECTING THREAD

■ **Series 1112:**
Nut with connecting thread without wipers

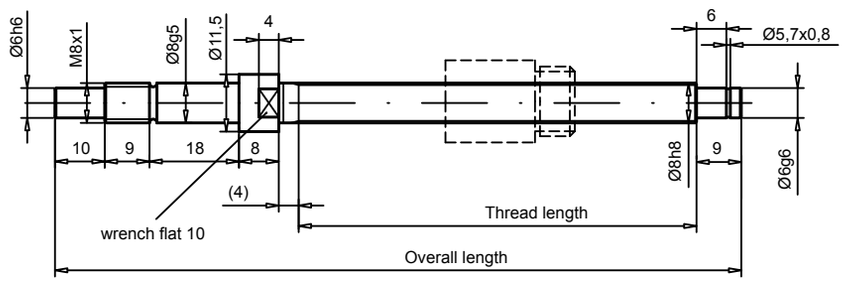
Technical data

Numbering system see page 52 (Please specify the accuracy class)	1112/0,5.8.145.170	1112/0,5.8.245.270	1112/0,5.8.80.138	1112/0,5.8.190.248	1112/1.8.145.170	1112/1.8.245.270	1112/1.8.80.138	1112/1.8.190.248	1112/1,5.8.145.170	1112/1,5.8.1245.270	1112/1,5.8.80.138	1112/1,5.8.190.248
Shaft style	A	A	B	B	A	A	B	B	A	A	B	B
Lead P [mm]	0.5	0.5	0.5	0.5	1	1	1	1	1.5	1.5	1.5	1.5
Nominal diameter d_N [mm]	8	8	8	8	8	8	8	8	8	8	8	8
Nominal stroke [mm]	100	200	40	150	100	200	40	150	100	200	40	150
Ball circles i	3	3	3	3	3	3	3	3	3	3	3	3
Ball diameter [mm]	0.6	0.6	0.6	0.6	0.8	0.8	0.8	0.8	1	1	1	1
Dynamic load capacity C_a [N]	400	400	400	400	900	900	900	900	1200	1200	1200	1200
Static load capacity C_{0a} [N]	500	500	500	500	1200	1200	1200	1200	1500	1500	1500	1500
Max. axial play [mm] with backlash	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Max. friction torque [Ncm] (preloaded nut)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)
Nut length LA [mm]	21	21	21	21	22	22	22	22	22	22	22	22
Nut diameter DA [mm]	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5

■ **Shaft style A**



■ **Shaft style B**

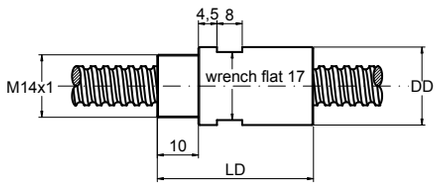


Nuts shown in standard orientation. Select one nut from table.

	1112/2.8.145.170	1112/2.8.245.270	1112/2.8.80.138	1112/2.8.190.248	1112/2,5.8.145.170	1112/2,5.8.245.270	1112/2,5.8.80.138	1112/2,5.8.190.248	1112/3.8.145.170	1112/3.8.245.270	1112/3.8.80.138	1112/3.8.190.248	1112/4.8.145.170	1112/4.8.245.270	1112/4.8.80.138	1112/4.8.190.248
	A	A	B	B	A	A	B	B	A	A	B	B	A	A	B	B
	2	2	2	2	2.5	2.5	2.5	2.5	3	3	3	3	4	4	4	4
	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
	100	200	40	150	100	200	40	150	100	200	40	150	100	200	40	150
	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100
	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)
	27	27	27	27	29	29	29	29	26	26	26	26	30	30	30	30
	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5

NOMINAL DIAMETER 8 mm

Ground execution with standard bearing journal P0 - P5
Series 1510



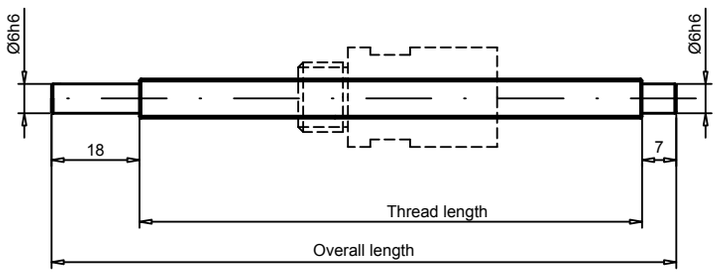
NUT WITH CONNECTING THREAD

■ **Series 1510:**
Spring preloaded double nut in housing with connecting thread without wipers

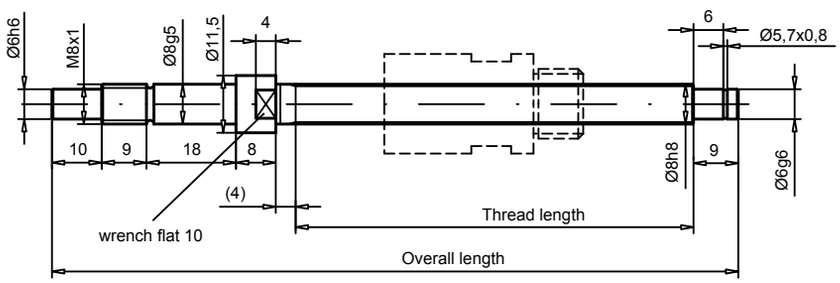
Technical data

Numbering system see page 52 (Please specify the accuracy class)	1510/0,5.8.145.170	1510/0,5.8.245.270	1510/0,5.8.80.138	1510/0,5.8.190.248	1510/1.8.145.170	1510/1.8.245.270	1510/1.8.80.138	1510/1.8.190.248	1510/2.8.145.170	1510/2.8.245.270	1510/2.8.80.138	1510/2.8.190.248
Shaft style	A	A	B	B	A	A	B	B	A	A	B	B
Lead P [mm]	0.5	0.5	0.5	0.5	1	1	1	1	2	2	2	2
Nominal diameter d_N [mm]	8	8	8	8	8	8	8	8	8	8	8	8
Nominal stroke [mm]	100	200	40	150	100	200	40	150	100	200	40	150
Ball circles i	2	2	2	2	2	2	2	2	2	2	2	2
Ball diameter [mm]	0.6	0.6	0.6	0.6	0.8	0.8	0.8	0.8	1.5	1.5	1.5	1.5
Dynamic load capacity C_a [N]	200	200	200	200	600	600	600	600	1400	1400	1400	1400
Static load capacity C_{0a} [N]	300	300	300	300	800	800	800	800	1400	1400	1400	1400
Max. preload [N]	15	15	15	15	30	30	30	30	50	50	50	50
Max. axial load [N]	10	10	10	10	20	20	20	20	40	40	40	40
Friction torque T_{pr0} [Ncm]	0.7-1.5	0.7-1.5	0.7-1.5	0.7-1.5	0.7-1.5	0.7-1.5	0.7-1.5	0.7-1.5	0.7-1.5	0.7-1.5	0.7-1.5	0.7-1.5
Nut length LD [mm]	40	40	40	40	40	40	40	40	40	40	40	40
Nut diameter DD [mm]	20	20	20	20	20	20	20	20	20	20	20	20

■ **Shaft style A**



■ **Shaft style B**

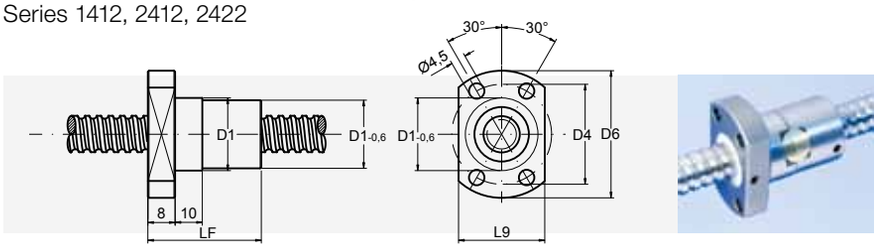


Please follow the advice on page 24/25.

	1510/2,5.8.145.170	1510/2,5.8.245.270	1510/2,5.8.80.138	1510/2,5.8.190.248
	A	A	B	B
	2.5	2.5	2.5	2.5
	8	8	8	8
	100	200	40	150
	2	2	2	2
	1.5	1.5	1.5	1.5
	1400	1400	1400	1400
	1400	1400	1400	1400
	50	50	50	50
	40	40	40	40
	0.7-1.5	0.7-1.5	0.7-1.5	0.7-1.5
	40	40	40	40
	20	20	20	20

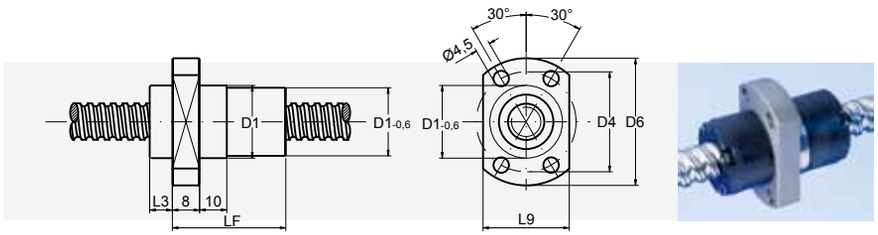
NOMINAL DIAMETER 12 mm

Ground execution with standard bearing journal P0 - P5
Series 1412, 2412, 2422



FLANGE NUT

■ **Series 1412:**
Nut with flange and standard wipers on both ends



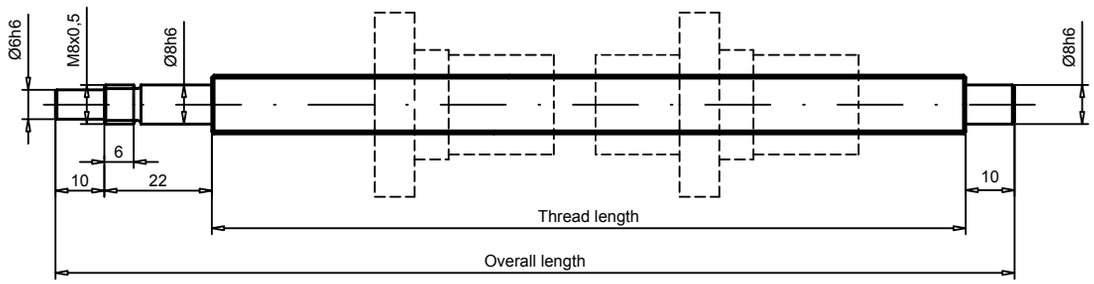
FLANGE NUT

■ **Series 2412, 2422:**
Nut with flange and standard wipers on both ends

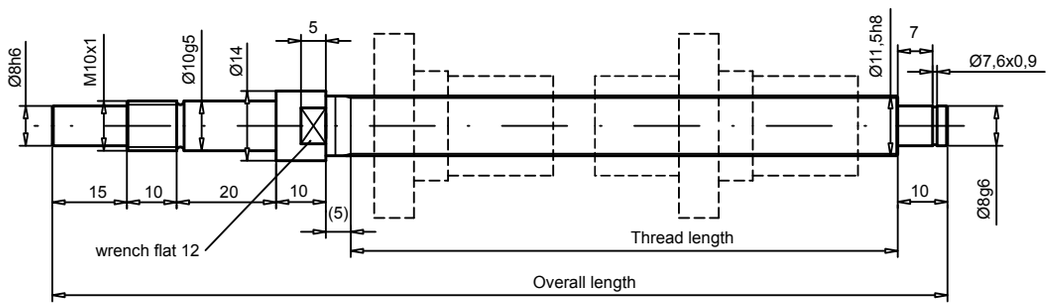
Technical data

Numbering system see page 52 (Please specify the accuracy class)	1412/1.12.355.397	1412/1.12.160.230	1412/1.12.510.580	1412/2.12.355.397	1412/2.12.160.230	1412/2.12.510.580	1412/3.12.355.397	1412/3.12.160.230	1412/3.12.510.580	1412/4.12.355.397	1412/4.12.160.230	1412/4.12.510.580
Shaft style	A	B	B	A	B	B	A	B	B	A	B	B
Lead P [mm]	1	1	1	2	2	2	3	3	3	4	4	4
Nominal diameter d_N [mm]	12	12	12	12	12	12	12	12	12	12	12	12
Nominal stroke [mm]	300	100	450	300	100	450	300	100	450	300	100	450
Ball circles i	3	3	3	3	3	3	3	3	3	3	3	3
Ball diameter [mm]	0.8	0.8	0.8	1.5	1.5	1.5	2	2	2	2	2	2
Dynamic load capacity C_a [N]	1100	1100	1100	2500	2500	2500	3600	3600	3600	3600	3600	3600
Static load capacity C_{0a} [N]	2000	2000	2000	3400	3400	3400	4300	4300	4300	4300	4300	4300
Max. axial play [mm] with backlash	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Max. friction torque [Ncm] (preloaded nut)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)
Nut length LF [mm]	25	25	25	30	30	30	37	37	37	36	36	36
Nut diameter D1g6 [mm]	20	20	20	20	20	20	22	22	22	22	22	22
L3 [mm]	-	-	-	-	-	-	-	-	-	-	-	-
D4 [mm]	29	29	29	29	29	29	29	29	29	29	29	29
D6 [mm]	37	37	37	37	37	37	37	37	37	37	37	37
L9 [mm]	24	24	24	24	24	24	24	24	24	24	24	24

■ **Shaft style A**



■ **Shaft style B**

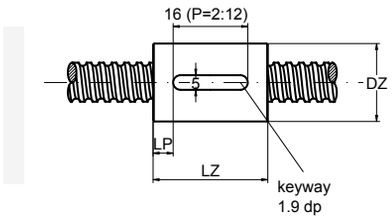


Nuts shown in standard orientation. Select one nut from table.

	1412/5.12.355.397	1412/5.12.160.230	1412/5.12.510.580	2412/5.12.355.397	2412/5.12.160.230	2412/5.12.510.580	2422/10.12.355.397	2422/10.12.160.230	2422/10.12.510.580	2422/10.12.355.397	2422/10.12.160.230	2422/10.12.510.580
	A	B	B	A	B	B	A	B	B	A	B	B
	5	5	5	5	5	5	10	10	10	10	10	10
	12	12	12	12	12	12	12	12	12	12	12	12
	300	100	450	300	100	450	300	100	450	300	100	450
	3	3	3	5	5	5	2 + 2	2 + 2	2 + 2	3 + 3	3 + 3	3 + 3
	2	2	2	2	2	2	2.5	2.5	2.5	2.5	2.5	2.5
	3600	3600	3600	5600	5600	5600	5800	5800	5800	8500	8500	8500
	4300	4300	4300	7600	7600	7600	7000	7000	7000	11100	11100	11100
	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03
	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)
	39	39	39	25	25	25	20	20	20	30	30	30
	22	22	22	24	24	24	24	24	24	24	24	24
	-	-	-	8	8	8	9	9	9	9	9	9
	29	29	29	32	32	32	32	32	32	32	32	32
	37	37	37	40	40	40	40	40	40	40	40	40
	24	24	24	26	26	26	26	26	26	26	26	26

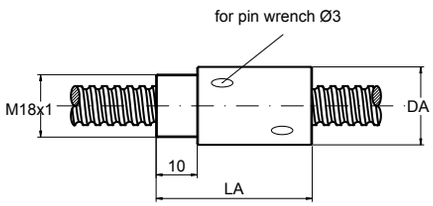
NOMINAL DIAMETER 12 mm

Ground execution with standard bearing journal P0 - P5
Series 1214, 1112



CYLINDRICAL NUT

■ **Series 1214:**
Cylindrical nut without wipers



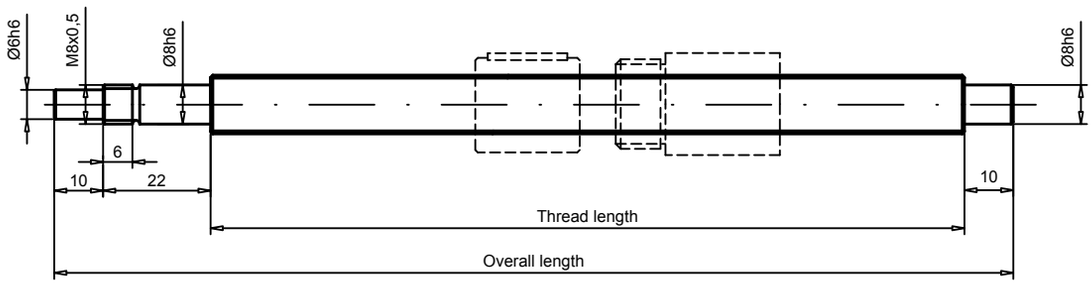
NUT WITH CONNECTING THREAD

■ **Series 1112:**
Cylindrical nut without wipers

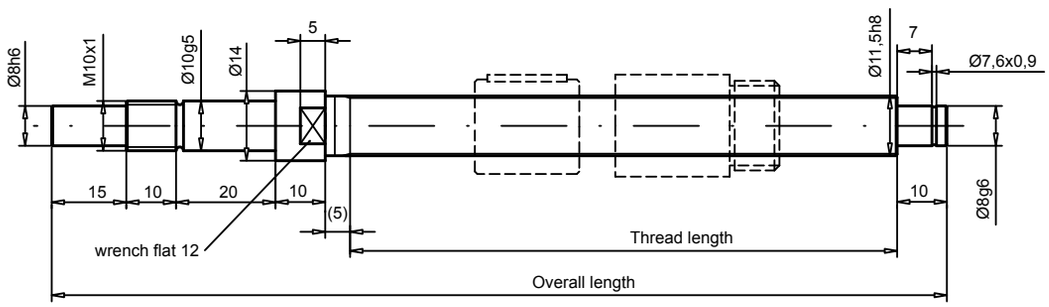
Technical data

Numbering system see page 52 (Please specify the accuracy class)	1214/1.12.355.397	1214/1.12.160.230	1214/1.12.510.580	1214/2.12.355.397	1214/2.12.160.230	1214/2.12.510.580	1214/3.12.355.397	1214/3.12.160.230	1214/3.12.510.580	1214/4.12.355.397	1214/4.12.160.230	1214/4.12.510.580	1214/5.12.355.397
Shaft style	A	B	B	A	B	B	A	B	B	A	B	B	A
Lead P [mm]	1	1	1	2	2	2	3	3	3	4	4	4	5
Nominal diameter d_N [mm]	12	12	12	12	12	12	12	12	12	12	12	12	12
Nominal stroke [mm]	300	100	450	300	100	450	300	100	450	300	100	450	300
Ball circles i	3	3	3	3	3	3	3	3	3	3	3	3	3
Ball diameter [mm]	0.8	0.8	0.8	1.5	1.5	1.5	2	2	2	2	2	2	2
Dynamic load capacity C_a [N]	1100	1100	1100	2500	2500	2500	3600	3600	3600	3600	3600	3600	3600
Static load capacity C_{0a} [N]	2000	2000	2000	3400	3400	3400	4300	4300	4300	4300	4300	4300	4300
Max. axial play [mm] with backlash	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Max. friction torque [Ncm] (preloaded nut)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)
Nut length LZ / LA [mm]	17	17	17	19	19	19	26	26	26	22	22	22	26
Nut diameter Dzh6 / DA [mm]	19	19	19	19	19	19	19	19	19	19	19	19	19
LP [mm]	2.5	2.5	2.5	1.5	1.5	1.5	5	5	5	3.5	3.5	3.5	5

■ **Shaft style A**



■ **Shaft style B**

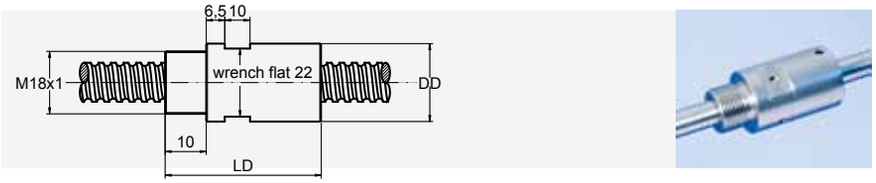


Nuts shown in standard orientation. Select one nut from table.

1214/5.12.160.230	1214/5.12.510.580	1112/1.12.355.397	1112/1.12.160.230	1112/1.12.510.580	1112/2.12.355.397	1112/2.12.160.230	1112/2.12.510.580	1112/3.12.355.397	1112/3.12.160.230	1112/3.12.510.580	1112/4.12.355.397	1112/4.12.160.230	1112/4.12.510.580	1112/5.12.355.397	1112/5.12.160.230	1112/5.12.510.580
B	B	A	B	B	A	B	B	A	B	B	A	B	B	A	B	B
5	5	1	1	1	2	2	2	3	3	3	4	4	4	5	5	5
12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
100	450	300	100	450	300	100	450	300	100	450	300	100	450	300	100	450
3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
2	2	0.8	0.8	0.8	1.5	1.5	1.5	2	2	2	2	2	2	2	2	2
3600	3600	1100	1100	1100	2500	2500	2500	3600	3600	3600	3600	3600	3600	3600	3600	3600
4300	4300	2000	2000	2000	3400	3400	3400	4300	4300	4300	4300	4300	4300	4300	4300	4300
0.02	0.02	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
1 (3)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)
26	26	24	24	24	29	29	29	36	36	36	33	33	33	36	36	36
19	19	20.5	20.5	20.5	20.5	20.5	20.5	20.5	20.5	20.5	22.5	22.5	22.5	22.5	22.5	22.5
5	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

NOMINAL DIAMETER 12 mm

Ground execution with standard bearing journal P0 - P5
Series 1510



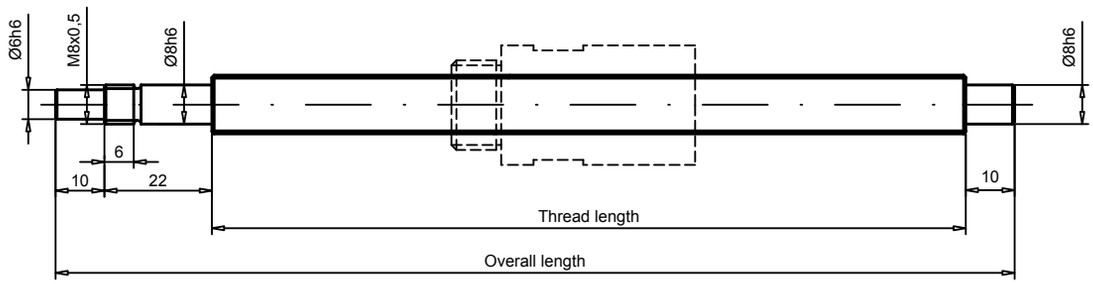
NUT WITH CONNECTING THREAD

■ **Series 1510:**
Spring preloaded double nut in housing with connecting thread without wipers

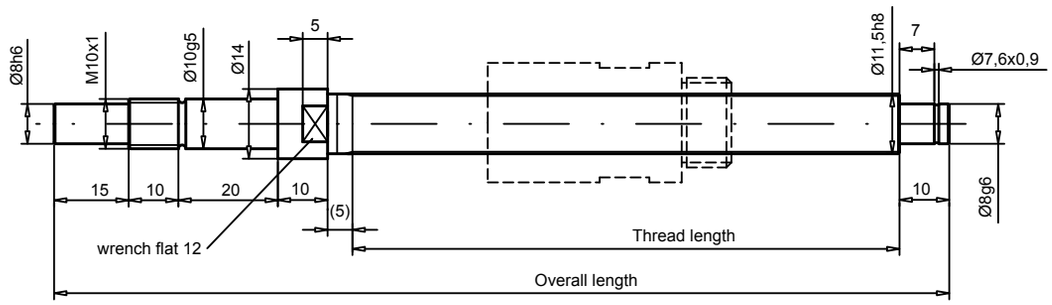
Technical data

Numbering system see page 52 (Please specify the accuracy class)	1510/1.12.355.397	1510/1.12.160.230	1510/1.12.510.580	1510/2.12.355.397	1510/2.12.160.230	1510/2.12.510.580	1510/3.12.355.397	1510/3.12.160.230	1510/3.12.510.580	1510/4.12.355.397	1510/4.12.160.230	1510/4.12.510.580
Shaft style	A	B	B	A	B	B	A	B	B	A	B	B
Lead P [mm]	1	1	1	2	2	2	3	3	3	4	4	4
Nominal diameter d_N [mm]	12	12	12	12	12	12	12	12	12	12	12	12
Nominal stroke [mm]	300	100	450	300	100	450	300	100	450	300	100	450
Ball circles i	2	2	2	2	2	2	2	2	2	2	2	2
Ball diameter [mm]	0.8	0.8	0.8	1.5	1.5	1.5	2	2	2	2	2	2
Dynamic load capacity C_a [N]	800	800	800	1800	1800	1800	2500	2500	2500	2500	2500	2500
Static load capacity C_{0a} [N]	1300	1300	1300	2200	2200	2200	2800	2800	2800	2800	2800	2800
Max. preload [N]	50	50	50	80	80	80	80	80	80	80	80	80
Max. axial load [N]	40	40	40	70	70	70	70	70	70	70	70	70
Friction torque T_{pr0} [Ncm]	1.0-2.0	1.0-2.0	1.0-2.0	1.0-2.0	1.0-2.0	1.0-2.0	1.0-2.0	1.0-2.0	1.0-2.0	1.0-2.0	1.0-2.0	1.0-2.0
Nut length LD [mm]	49	49	49	49	49	49	49	49	49	49	49	49
Nut diameter DD [mm]	24	24	24	24	24	24	24	24	24	24	24	24

■ **Shaft style A**



■ **Shaft style B**

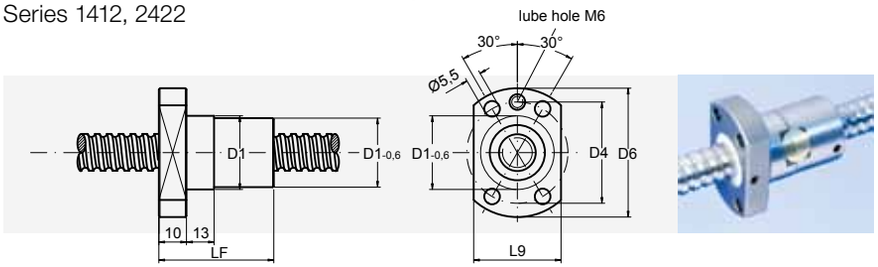


Please follow the advice on page 24/25.

	1510/5.12.355.397	1510/5.12.160.230	1510/5.12.510.580	
	A	B	B	
	5	5	5	
	12	12	12	
	300	100	450	
	2	2	2	
	2	2	2	
	2500	2500	2500	
	2800	2800	2800	
	80	80	80	
	70	70	70	
	1.0-2.0	1.0-2.0	1.0-2.0	
	49	49	49	
	24	24	24	

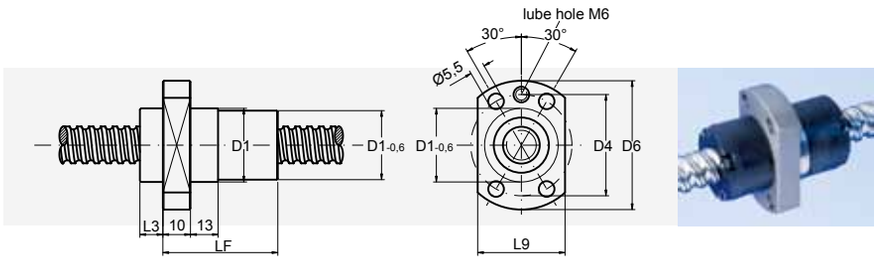
NOMINAL DIAMETER 16 mm

Ground execution with standard bearing journal P0 - P5
Series 1412, 2422



FLANGE NUT

■ **Series 1412:**
Nut with flange and standard wipers on both ends



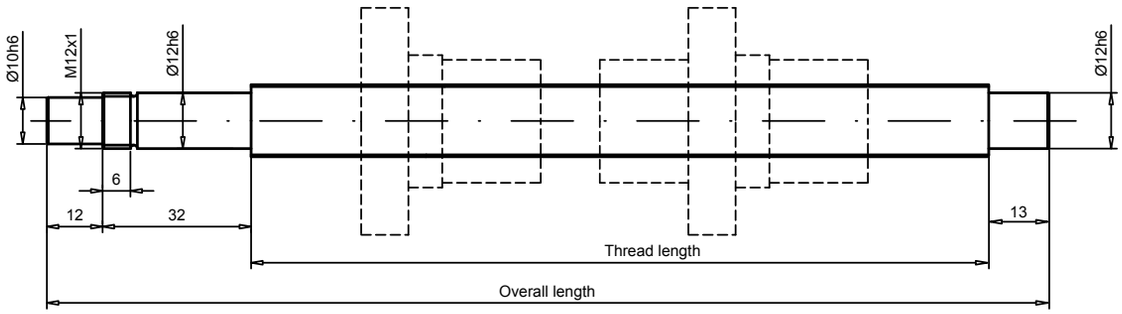
FLANGE NUT

■ **Series 2422:**
Nut with flange and standard wipers on both ends

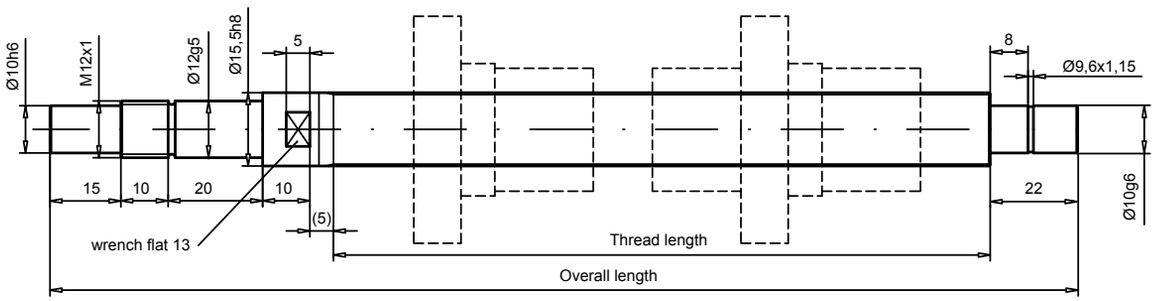
Technical data

Numbering system see page 52 (Please specify the accuracy class)	1412/2.16.470.527	1412/2.16.189.271	1412/2.16.689.771	1412/4.16.470.527	1412/4.16.189.271	1412/4.16.689.771	1412/5.16.470.527	1412/5.16.189.271	1412/5.16.689.771
Shaft style	A	B	B	A	B	B	A	B	B
Lead P [mm]	2	2	2	4	4	4	5	5	5
Nominal diameter d_N [mm]	16	16	16	16	16	16	16	16	16
Nominal stroke [mm]	400	100	600	400	100	600	400	100	600
Ball circles i	3	3	3	3	3	3	3	3	3
Ball diameter [mm]	1.5	1.5	1.5	3	3	3	3.5	3.5	3.5
Dynamic load capacity C_a [N]	2900	2900	2900	8900	8900	8900	10100	10100	10100
Static load capacity C_{0a} [N]	4900	4900	4900	11400	11400	11400	12000	12000	12000
Max. axial play [mm] with backlash	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03
Max. friction torque [Ncm] (preloaded nut)	1.4 (4)	1.4 (4)	1.4 (4)	1.4 (4)	1.4 (4)	1.4 (4)	1.4 (4)	1.4 (4)	1.4 (4)
Nut length LF [mm]	32	32	32	38	38	38	44	44	44
Nut diameter D1g6 [mm]	25	25	25	28	28	28	28	28	28
L3 [mm]	-	-	-	-	-	-	-	-	-
D4 [mm]	35	35	35	38	38	38	38	38	38
D6 [mm]	44	44	44	48	48	48	48	48	48
L9 [mm]	29	29	29	31	31	31	31	31	31

■ **Shaft style A**



■ **Shaft style B**



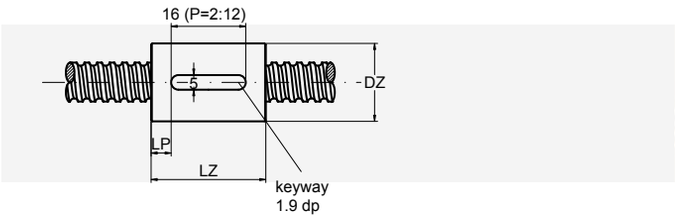
Nuts shown in standard orientation. Select one nut from table.

*Please specify the number of circles

2422/10.16.470.527*	2422/10.16.189.271*	2422/10.16.689.771*	2422/10.16.470.527*	2422/10.16.189.271*	2422/10.16.689.771*	2422/16.16.470.527	2422/16.16.189.271	2422/16.16.689.771	2422/20.16.470.527	2422/20.16.189.271	2422/20.16.689.771	2422/30.16.470.527	2422/30.16.189.271	2422/30.16.689.771
A	B	B	A	B	B	A	B	B	A	B	B	A	B	B
10	10	10	10	10	10	16	16	16	20	20	20	30	30	30
16	16	16	16	16	16	16	16	16	16	16	16	16	16	16
400	100	600	400	100	600	400	100	600	400	100	600	400	100	600
3 + 3	3 + 3	3 + 3	5 + 5	5 + 5	5 + 5	2 + 2	2 + 2	2 + 2	2 + 2	2 + 2	2 + 2	0.5+0.5	0.5+0.5	0.5+0.5
3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
19600	19600	19600	31400	31400	31400	13400	13400	13400	13000	13000	13000	2300	2300	2300
27700	27700	27700	47800	47800	47800	47800	18300	18300	17900	17900	17900	2500	2500	2500
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
1.4 (4)	1.4 (4)	1.4 (4)	1.4 (4)	1.4 (4)	1.4 (4)	1.4 (4)	1.4 (4)	1.4 (4)	1.4 (4)	1.4 (4)	1.4 (4)	1.4 (4)	1.4 (4)	1.4 (4)
32	32	32	52	52	52	31	31	31	38	38	38	26	26	26
32	32	32	32	32	32	32	32	32	32	32	32	32	32	32
12	12	12	12	12	12	10	10	10	10	10	10	12	12	12
42	42	42	42	42	42	42	42	42	42	42	42	42	42	42
52	52	52	52	52	52	52	52	52	52	52	52	52	52	52
40	40	40	40	40	40	40	40	40	40	40	40	40	40	40

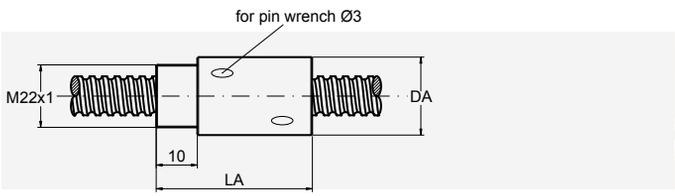
NOMINAL DIAMETER 16 mm

Ground execution with standard bearing journal P0 - P5
Series 1214, 1112



CYLINDRICAL NUT

■ **Series 1214:**
Cylindrical nut without wipers



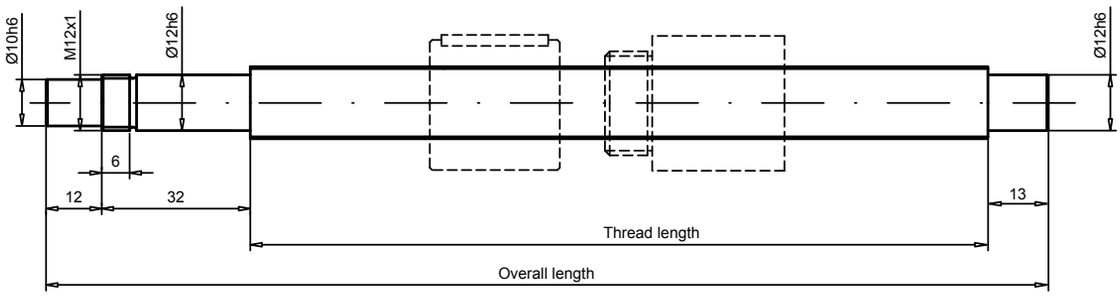
NUT WITH CONNECTING THREAD

■ **Series 1112::**
Nut with connecting thread without wipers

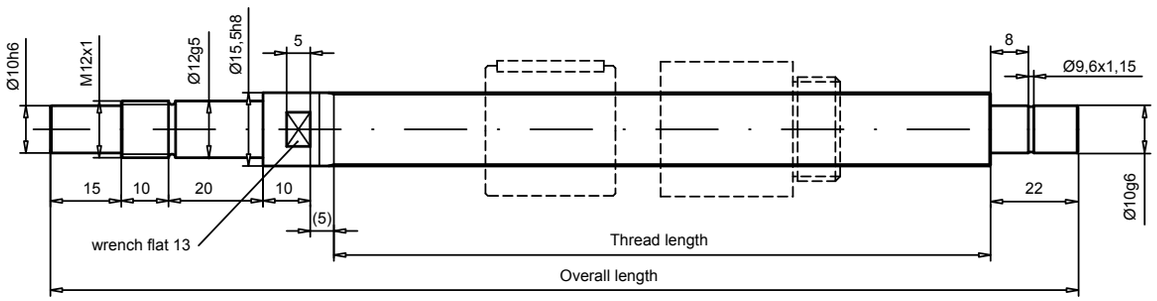
Technical data

Numbering system see page 52 (Please specify the accuracy class)	1214/2.16.470.527	1214/2.16.189.271	1214/2.16.689.771	1214/4.16.470.527	1214/4.16.189.271	1214/4.16.689.771	1214/5.16.470.527	1214/5.16.189.271	1214/5.16.689.771
Shaft style	A	B	B	A	B	B	A	B	B
Lead P [mm]	2	2	2	4	4	4	5	5	5
Nominal diameter d_N [mm]	16	16	16	16	16	16	16	16	16
Nominal stroke [mm]	400	100	600	400	100	600	400	100	600
Ball circles i	3	3	3	3	3	3	3	3	3
Ball diameter [mm]	1.5	1.5	1.5	3	3	3	3.5	3.5	3.5
Dynamic load capacity C_a [N]	2900	2900	2900	8900	8900	8900	10100	10100	10100
Static load capacity C_{0a} [N]	4900	4900	4900	11400	11400	11400	12000	12000	12000
Max. axial play [mm] with backlash	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03
Max. friction torque [Ncm] (preloaded nut)	1.4 (4)	1.4 (4)	1.4 (4)	1.4 (4)	1.4 (4)	1.4 (4)	1.4 (4)	1.4 (4)	1.4 (4)
Nut length LZ / LA [mm]	19	19	19	21	21	21	27	27	27
Nut diameter DZh6 / DA [mm]	28	28	28	28	28	28	28	28	28
LP [mm]	1.5	1.5	1.5	2.5	2.5	2.5	5.5	5.5	5.5

■ **Shaft style A**



■ **Shaft style B**

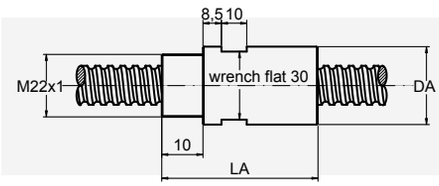


Nuts shown in standard orientation. Select one nut from table.

1112/2.16.470.527	1112/2.16.189.271	1112/2.16.689.771	1112/4.16.470.527	1112/4.16.189.271	1112/4.16.689.771	1112/5.16.470.527	1112/5.16.189.271	1112/5.16.689.771
A	B	B	A	B	B	A	B	B
2	2	2	4	4	4	5	5	5
16	16	16	16	16	16	16	16	16
400	100	600	400	100	600	400	100	600
3	3	3	3	3	3	3	3	3
1.5	1.5	1.5	3	3	3	3.5	3.5	3.5
2900	2900	2900	8900	8900	8900	10100	10100	10100
4900	4900	4900	11400	11400	11400	12000	12000	12000
0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03
1.4 (4)	1.4 (4)	1.4 (4)	1.4 (4)	1.4 (4)	1.4 (4)	1.4 (4)	1.4 (4)	1.4 (4)
29	29	29	36	36	36	43	43	43
25.5	25.5	25.5	28.5	28.5	28.5	28.5	28.5	28.5
-	-	-	-	-	-	-	-	-

NOMINAL DIAMETER 16 mm

Ground execution with standard bearing journal P0 - P5
Series 1510



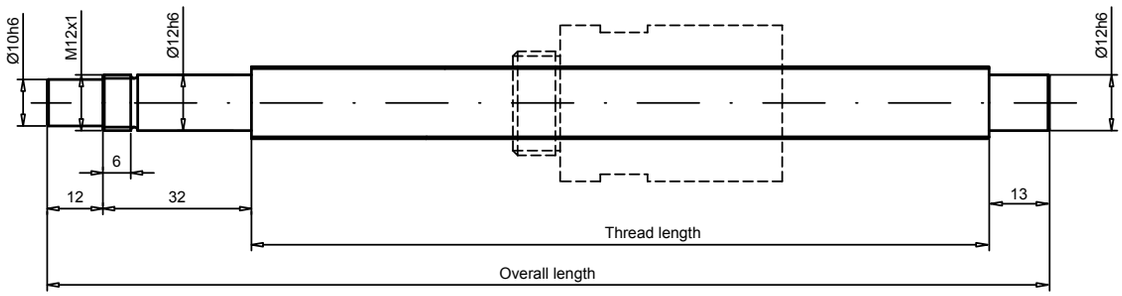
NUT WITH CONNECTING THREAD

■ **Series 1510:**
Spring preloaded double nut in housing with connecting thread without wipers

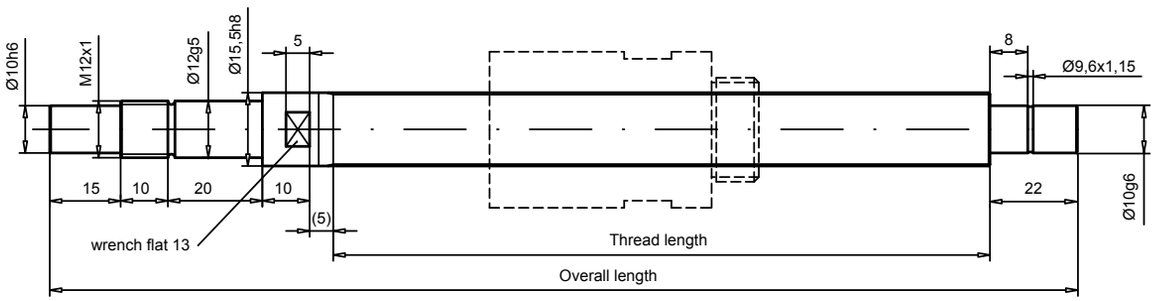
Technical data

Numbering system see page 52 (Please specify the accuracy class)	1510/2.16.470.527	1510/2.16.189.271	1510/2.16.689.771	1510/2,5.16.470.527	1510/2,5.16.189.271	1510/2,5.16.689.771	1510/4.16.470.527	1510/4.16.189.271	1510/4.16.689.771	1510/5.16.470.527	1510/5.16.189.271	1510/5.16.689.771
Shaft style	A	B	B	A	B	B	A	B	B	A	B	B
Lead P [mm]	2	2	2	2.5	2.5	2.5	4	4	4	5	5	5
Nominal diameter d_N [mm]	16	16	16	16	16	16	16	16	16	16	16	16
Nominal stroke [mm]	400	100	600	400	100	600	400	100	600	400	100	600
Ball circles i	2	2	2	2	2	2	2	2	2	2	2	2
Ball diameter [mm]	1.5	1.5	1.5	1.5	1.5	1.5	2	2	2	2.5	2.5	2.5
Dynamic load capacity C_a [N]	2100	2100	2100	2100	2100	2100	3000	3000	3000	3900	3900	3900
Static load capacity C_{0a} [N]	3200	3200	3200	3200	3200	3200	4000	4000	4000	4700	4700	4700
Max. preload [N]	120	120	120	120	120	120	120	120	120	150	150	150
Max. axial load [N]	100	100	100	100	100	100	100	100	100	130	130	130
Friction torque T_{pr0} [Ncm]	1.5-3.0	1.5-3.0	1.5-3.0	1.5-3.0	1.5-3.0	1.5-3.0	1.5-3.0	1.5-3.0	1.5-3.0	1.5-3.0	1.5-3.0	1.5-3.0
Nut length LA [mm]	57	57	57	57	57	57	57	57	57	57	57	57
Nut diameter DA [mm]	33	33	33	33	33	33	33	33	33	33	33	33

■ **Shaft style A**



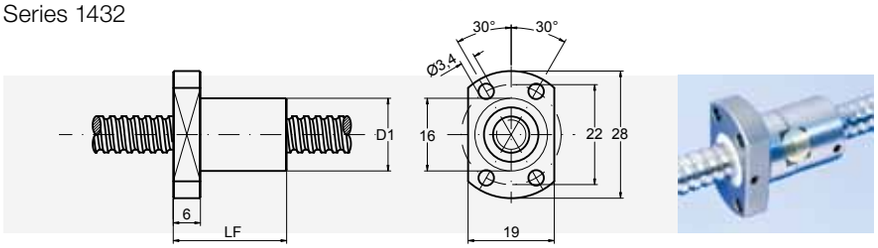
■ **Shaft style B**



Please follow the advice on page 24/25.

NOMINAL DIAMETER 8 mm

Rolled execution with standard bearing journal T7 - T10
Series 1432



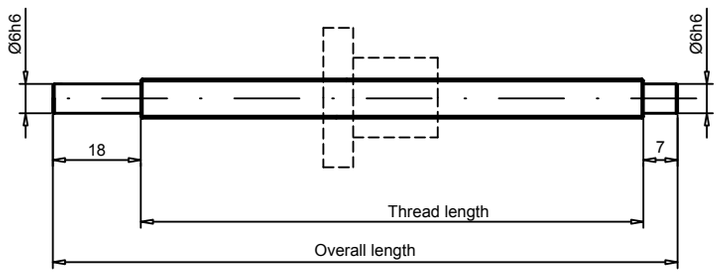
FLANGE NUT

■ **Series 1432:**
Nut with flange and standard wipers on both ends

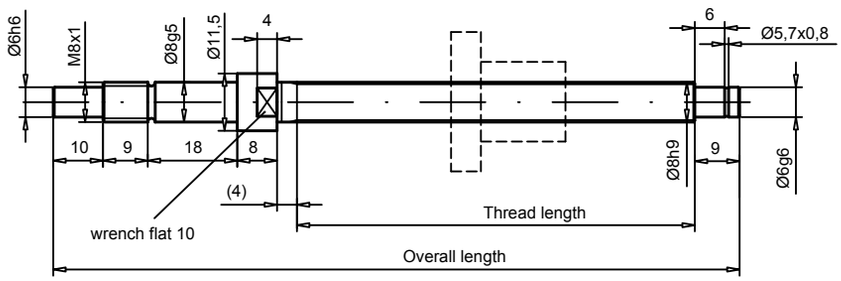
Technical data

Numbering system see page 52 (Please specify the accuracy class)	1432/1.8.145.170	1432/1.8.245.270	1432/1.8.80.138	1432/1.8.190.248	1432/2.8.145.170	1432/2.8.245.270	1432/2.8.80.138	1432/2.8.190.248	1432/2,5.8.145.170	1432/2,5.8.245.270	1432/2,5.8.80.138	1432/2,5.8.190.248
Shaft style	A	A	B	B	A	A	B	B	A	A	B	B
Lead P [mm]	1	1	1	1	2	2	2	2	2.5	2.5	2.5	2.5
Nominal diameter d_N [mm]	8	8	8	8	8	8	8	8	8	8	8	8
Nominal stroke [mm]	100	200	40	150	100	200	40	150	100	200	40	150
Ball circles i	3	3	3	3	3	3	3	3	3	3	3	3
Ball diameter [mm]	1	1	1	1	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Dynamic load capacity C_a [N]	1100	1100	1100	1100	1800	1800	1800	1800	1800	1800	1800	1800
Static load capacity C_{0a} [N]	1400	1400	1400	1400	1900	1900	1900	1900	1900	1900	1900	1900
Max. axial play [mm] with backlash	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Max. friction torque [Ncm] (preloaded nut)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)
Nut length LF [mm]	23	23	23	23	28	28	28	28	30	30	30	30
Nut diameter D1g6 [mm]	16	16	16	16	16	16	16	16	16	16	16	16

■ Shaft style A



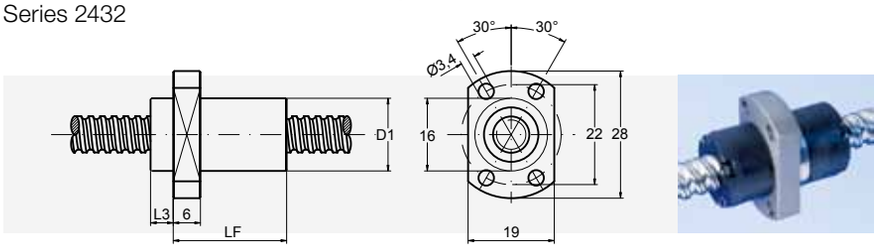
■ Shaft style B



	1432/3.8.145.170	1432/3.8.245.270	1432/3.8.80.138	1432/3.8.190.248	1432/4.8.145.170	1432/4.8.245.270	1432/4.8.80.138	1432/4.8.190.248
	A	A	B	B	A	A	B	B
	3	3	3	3	4	4	4	4
	8	8	8	8	8	8	8	8
	100	200	40	150	100	200	40	150
	3	3	3	3	3	3	3	3
	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	1800	1800	1800	1800	1800	1800	1800	1800
	1900	1900	1900	1900	1900	1900	1900	1900
	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)
	27	27	27	27	31	31	31	31
	16	16	16	16	16	16	16	16

NOMINAL DIAMETER 8 mm

Rolled execution with standard bearing journal T7 - T10
Series 2432



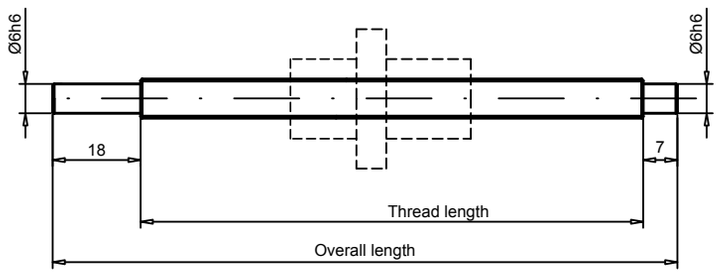
FLANGE NUT

■ **Series 2432:**
Nut with flange and standard wipers on both ends

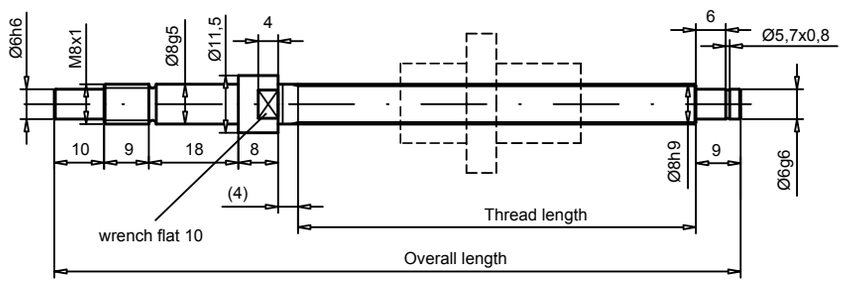
Technical data

Numbering system see page 52 (Please specify the accuracy class)	2432/2.8.145.170	2432/2.8.245.270	2432/2.8.80.138	2432/2.8.190.248	2432/4.8.145.170	2432/4.8.245.270	2432/4.8.80.138	2432/4.8.190.248	2432/5.8.145.170	2432/5.8.245.270	2432/5.8.80.138	2432/5.8.190.248
Shaft style	A	A	B	B	A	A	B	B	A	A	B	B
Lead P [mm]	2	2	2	2	4	4	4	4	5	5	5	5
Nominal diameter d_N [mm]	8	8	8	8	8	8	8	8	8	8	8	8
Nominal stroke [mm]	100	200	40	150	100	200	40	150	100	200	40	150
Ball circles i	5	5	5	5	5	5	5	5	3	3	3	3
Ball diameter [mm]	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Dynamic load capacity C_a [N]	2800	2800	2800	2800	2700	2700	2700	2700	1800	1800	1800	1800
Static load capacity C_{0a} [N]	3300	3300	3300	3300	3300	3300	3300	3300	1900	1900	1900	1900
Max. axial play [mm] with backlash	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Max. friction torque [Ncm] (preloaded nut)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)
Nut length LF [mm]	12	12	12	12	21	21	21	21	16	16	16	16
Nut diameter D1g6 [mm]	16	16	16	16	16	16	16	16	16	16	16	16
L3 [mm]	5	5	5	5	6	6	6	6	6	6	6	6

■ **Shaft style A**



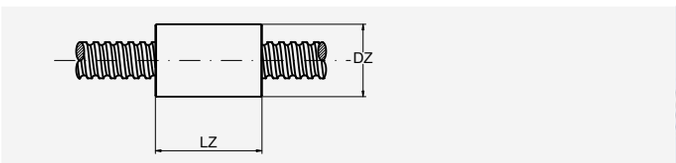
■ **Shaft style B**



Nuts shown in standard orientation. Select one nut from table.

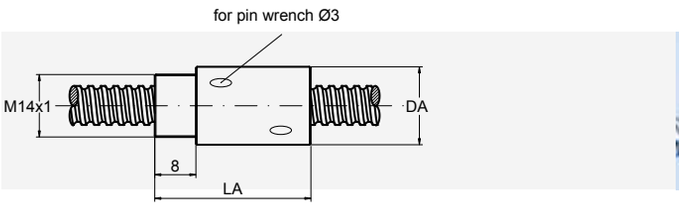
NOMINAL DIAMETER 8 mm

Rolled execution with standard bearing journal T7 - T10
Series 1234, 1132



CYLINDRICAL NUT

■ **Series 1234:**
Cylindrical nut without wipers



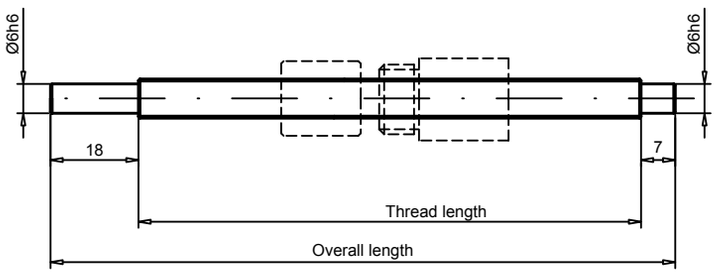
NUT WITH CONNECTING THREAD

■ **Series 1132:**
Nut with connecting thread without wipers

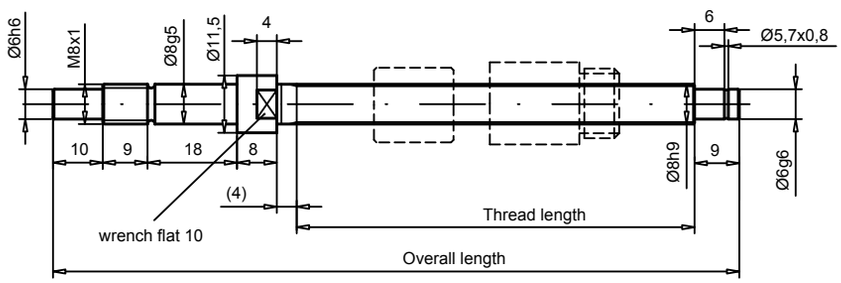
Technical data

Numbering system see page 52 (Please specify the accuracy class)	1234/1.8.145.170	1234/1.8.245.270	1234/1.8.80.138	1234/1.8.190.248	1234/2.8.145.170	1234/2.8.245.270	1234/2.8.190.248	1234/2,5.8.145.170	1234/2,5.8.245.270	1234/2,5.8.80.138	1234/2,5.8.190.248	1234/3.8.145.170
Shaft style	A	A	B	B	A	A	B	A	A	B	B	A
Lead P [mm]	1	1	1	1	2	2	2	2.5	2.5	2.5	2.5	3
Nominal diameter d_N [mm]	8	8	8	8	8	8	8	8	8	8	8	8
Nominal stroke [mm]	100	200	40	150	100	200	150	100	200	40	150	100
Ball circles i	3	3	3	3	3	3	3	3	3	3	3	3
Ball diameter [mm]	1	1	1	1	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Dynamic load capacity C_a [N]	1100	1100	1100	1100	1800	1800	1800	1800	1800	1800	1800	1800
Static load capacity C_{0a} [N]	1400	1400	1400	1400	1900	1900	1900	1900	1900	1900	1900	1900
Max. axial play [mm] with backlash	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Max. friction torque [Ncm] (preloaded nut)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)
Nut length LZ / LA [mm]	14	14	14	14	19	19	19	21	21	21	21	18
Nut diameter DZh6 / DA [mm]	15	15	15	15	15	15	15	15	15	15	15	15

■ **Shaft style A**



■ **Shaft style B**

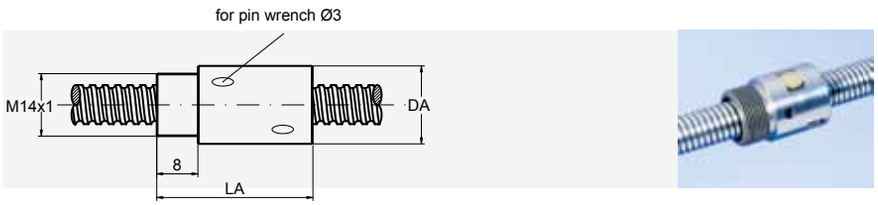


Nuts shown in standard orientation. Select one nut from table.

	1234/3.8.245.270	1234/3.8.80.138	1234/3.8.190.248	1234/4.8.145.170	1234/4.8.245.270	1234/4.8.80.138	1234/4.8.190.248	1132/1.8.145.170	1132/1.8.245.270	1132/1.8.80.138	1132/1.8.190.248	1132/2.8.145.170	1132/2.8.245.270	1132/2.8.80.138	1132/2.8.190.248
	A	B	B	A	A	B	B	A	A	B	B	A	A	B	B
	3	3	3	4	4	4	4	1	1	1	1	2	2	2	2
	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
	200	40	150	100	200	40	150	100	200	40	150	100	200	40	150
	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1	1	1	1	1.5	1.5	1.5	1.5
	1800	1800	1800	1800	1800	1800	1800	1100	1100	1100	1100	1800	1800	1800	1800
	1900	1900	1900	1900	1900	1900	1900	1400	1400	1400	1400	1900	1900	1900	1900
	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02
	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)
	18	18	18	22	22	22	22	22	22	22	22	27	27	27	27
	15	15	15	15	15	15	15	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5

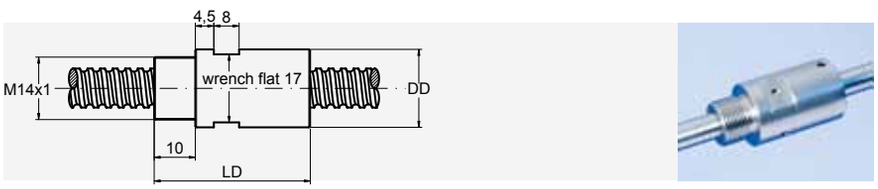
NOMINAL DIAMETER 8 mm

Rolled execution with standard bearing journal T7 - T10
Series 1132, 1530



NUT WITH CONNECTING THREAD

■ **Series 1132:**
Nut with connecting thread without wipers



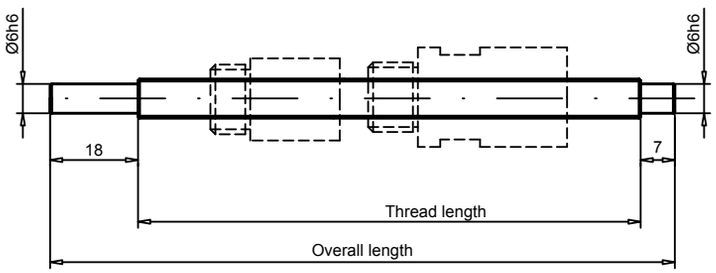
NUT WITH CONNECTING THREAD

■ **Series 1530:**
Spring preloaded double nut in housing with connecting thread without wipers

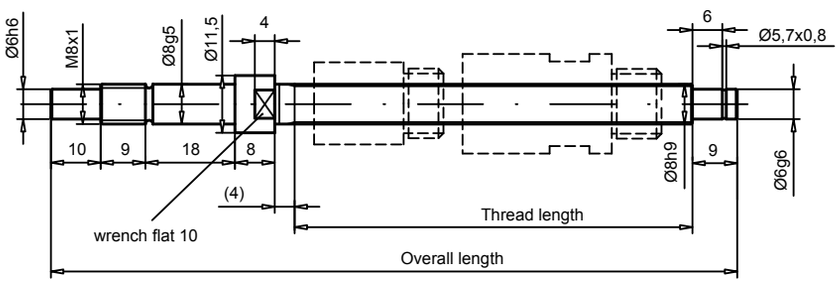
Technical data

Numbering system see page 52 (Please specify the accuracy class)	1132/2,5.8.145.170	1132/2,5.8.245.270	1132/2,5.8.80.138	1132/2,5.8.190.248	1132/3.8.145.170	1132/3.8.245.270	1132/3.8.80.138	1132/3.8.190.248	1132/4.8.145.170	1132/4.8.245.270	1132/4.8.80.138	1132/4.8.190.248
Shaft style	A	A	B	B	A	A	B	B	A	A	B	B
Lead P [mm]	2.5	2.5	2.5	2.5	3	3	3	3	4	4	4	4
Nominal diameter d_N [mm]	8	8	8	8	8	8	8	8	8	8	8	8
Nominal stroke [mm]	100	200	40	150	100	200	40	150	100	200	40	150
Ball circles i	3	3	3	3	3	3	3	3	3	3	3	3
Ball diameter [mm]	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Dynamic load capacity C_a [N]	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Static load capacity C_{0a} [N]	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Max. axial play [mm] with backlash	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Max. friction torque [Ncm] (preloaded nut)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)	0.5 (2)
Max. preload [N]	-	-	-	-	-	-	-	-	-	-	-	-
Max. axial load [N]	-	-	-	-	-	-	-	-	-	-	-	-
Friction torque T_{pr0} [Ncm]	-	-	-	-	-	-	-	-	-	-	-	-
Nut length LA / LD [mm]	29	29	29	29	26	26	26	26	30	30	30	30
Nut diameter DA / DD [mm]	16.5	16.5	16.5	165	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5

■ **Shaft style A**



■ **Shaft style B**

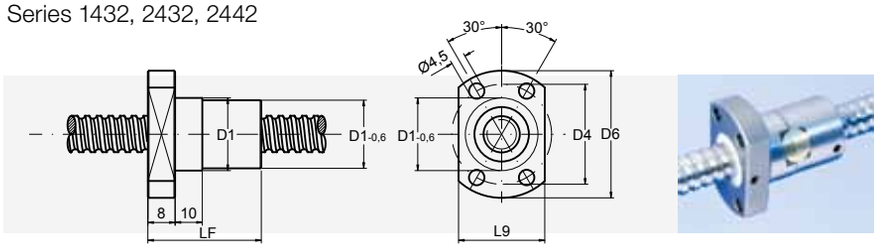


Nuts shown in standard orientation. Select one nut from table. Please follow the advice on page 24/25.

	1530/1.8.145.170	1530/1.8.245.270	1530/1.8.80.138	1530/1.8.190.248	1530/2.8.145.170	1530/2.8.245.270	1530/2.8.80.138	1530/2.8.190.248	1530/2,5.8.145.170	1530/2,5.8.245.270	1530/2,5.8.80.138	1530/2,5.8.190.248
	A	A	B	B	A	A	B	B	A	A	B	B
	1	1	1	1	2	2	2	2	2.5	2.5	2.5	2.5
	8	8	8	8	8	8	8	8	8	8	8	8
	100	200	40	150	100	200	40	150	100	200	40	150
	2	2	2	2	2	2	2	2	2	2	2	2
	1	1	1	1	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	800	800	800	800	1300	1300	1300	1300	1300	1300	1300	1300
	900	900	900	900	1300	1300	1300	1300	1300	1300	1300	1300
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	30	30	30	30	50	50	50	50	50	50	50	50
	20	20	20	20	40	40	40	40	40	40	40	40
	0.7-1.5	0.7-1.5	0.7-1.5	0.7-1.5	0.7-1.5	0.7-1.5	0.7-1.5	0.7-1.5	0.7-1.5	0.7-1.5	0.7-1.5	0.7-1.5
	40	40	40	40	40	40	40	40	40	40	40	40
	20	20	20	20	20	20	20	20	20	20	20	20

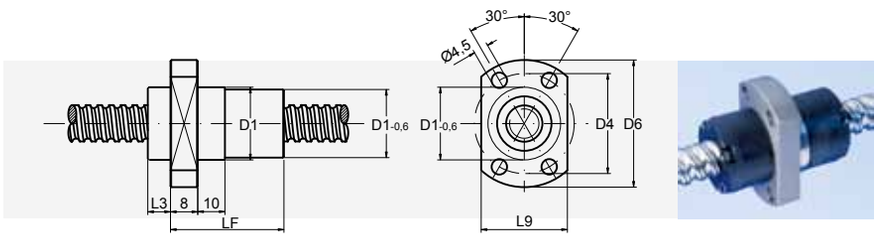
NOMINAL DIAMETER 12 mm

Rolled execution with standard bearing journal T7 - T10
Series 1432, 2432, 2442



FLANGE NUT

■ **Series 1432:**
Nut with flange and standard wipers on both ends



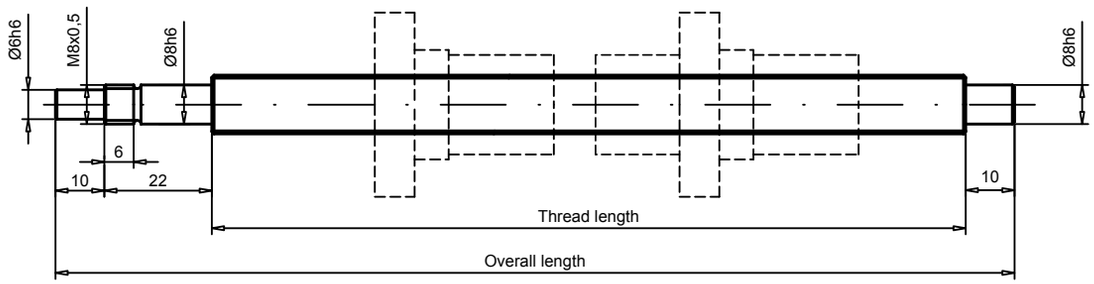
FLANGE NUT

■ **Series 2432, 2442:**
Nut with flange and standard wipers on both ends

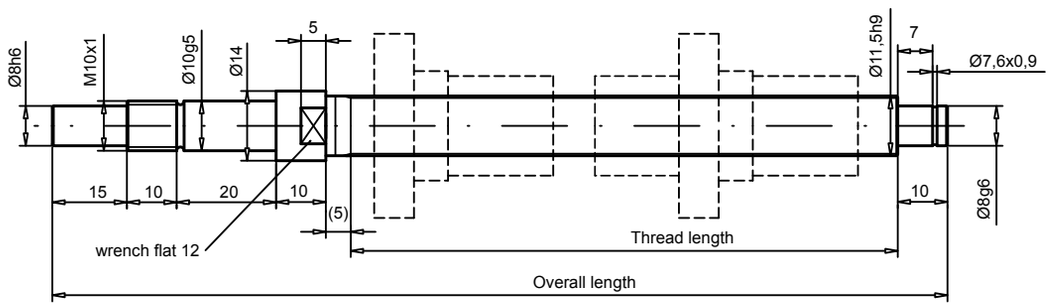
Technical data

Numbering system see page 52 (Please specify the accuracy class)	1432/1.12.355.397	1432/1.12.160.230	1432/1.12.510.580	1432/2.12.355.397	1432/2.12.160.230	1432/2.12.510.580	1432/3.12.355.397	1432/3.12.160.230	1432/3.12.510.580	1432/4.12.355.397	1432/4.12.160.230	1432/4.12.510.580
Shaft style	A	B	B	A	B	B	A	B	B	A	B	B
Lead P [mm]	1	1	1	2	2	2	3	3	3	4	4	4
Nominal diameter d_N [mm]	12	12	12	12	12	12	12	12	12	12	12	12
Nominal stroke [mm]	300	100	450	300	100	450	300	100	450	300	100	450
Ball circles i	3	3	3	3	3	3	3	3	3	3	3	3
Ball diameter [mm]	1	1	1	1.5	1.5	1.5	2	2	2	2	2	2
Dynamic load capacity C_a [N]	1300	1300	1300	2300	2300	2300	3300	3300	3300	3300	3300	3300
Static load capacity C_{0a} [N]	2200	2200	2200	3100	3100	3100	3900	3900	3900	3900	3900	3900
Max. axial play [mm] with backlash	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Max. friction torque [Ncm] (preloaded nut)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)
Nut length LF [mm]	25	25	25	30	30	30	37	37	37	36	36	36
Nut diameter D1g6 [mm]	20	20	20	20	20	20	22	22	22	22	22	22
L3 [mm]	-	-	-	-	-	-	-	-	-	-	-	-
D4 [mm]	29	29	29	29	29	29	29	29	29	29	29	29
D6 [mm]	37	37	37	37	37	37	37	37	37	37	37	37
L9 [mm]	24	24	24	24	24	24	24	24	24	24	24	24

■ **Shaft style A**



■ **Shaft style B**

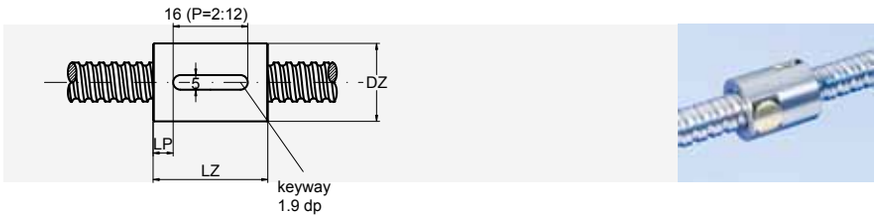


Nuts shown in standard orientation. Select one nut from table.

	1432/5.12.355.397	1432/5.12.160.230	1432/5.12.510.580	2432/5.12.355.397	2432/5.12.160.230	2432/5.12.510.580	2442/10.12.355.397	2442/10.12.160.230	2442/10.12.510.580	2442/10.12.355.397	2442/10.12.160.230	2442/10.12.510.580
	A	B	B	A	B	B	A	B	B	A	B	B
	5	5	5	5	5	5	10	10	10	10	10	10
	12	12	12	12	12	12	12	12	12	12	12	12
	300	100	450	300	100	450	300	100	450	300	100	450
	3	3	3	5	5	5	2 + 2	2+ 2	2 + 2	3 + 3	3 + 3	3 + 3
	2	2	2	2	2	2	2.5	2.5	2.5	2.5	2.5	2.5
	3200	3200	3200	5100	5100	5100	5300	5300	5300	7700	7700	7700
	3900	3900	3900	6900	6900	6900	6400	6400	6400	10000	10000	10000
	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03
	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)
	39	39	39	25	25	25	20	20	20	30	30	30
	22	22	22	24	24	24	24	24	24	24	24	24
	-	-	-	8	8	8	9	9	9	9	9	9
	29	29	29	32	32	32	32	32	32	32	32	32
	37	37	37	40	40	40	40	40	40	40	40	40
	24	24	24	26	26	26	26	26	26	26	26	26

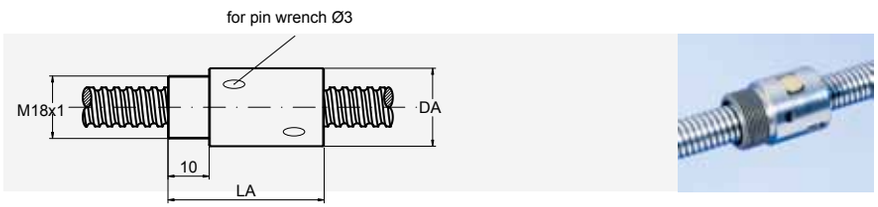
NOMINAL DIAMETER 12 mm

Rolled execution with standard bearing journal T7 - T10
Series 1234, 1132



CYLINDRICAL NUT

■ **Series 1234:**
Cylindrical nut without wipers



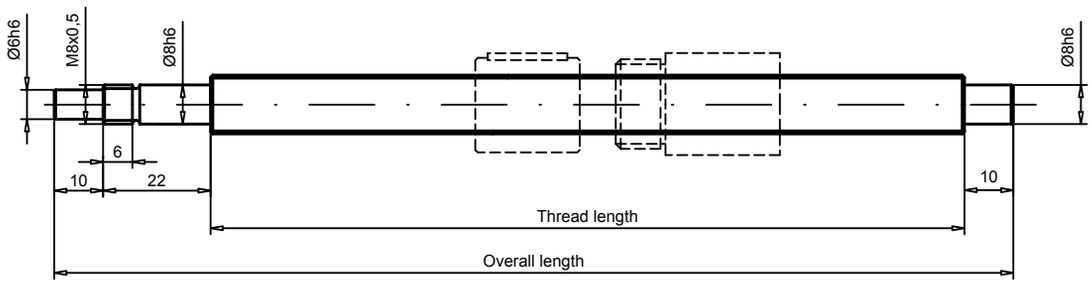
NUT WITH CONNECTING THREAD

■ **Series 1132:**
Nut with connecting thread without wipers

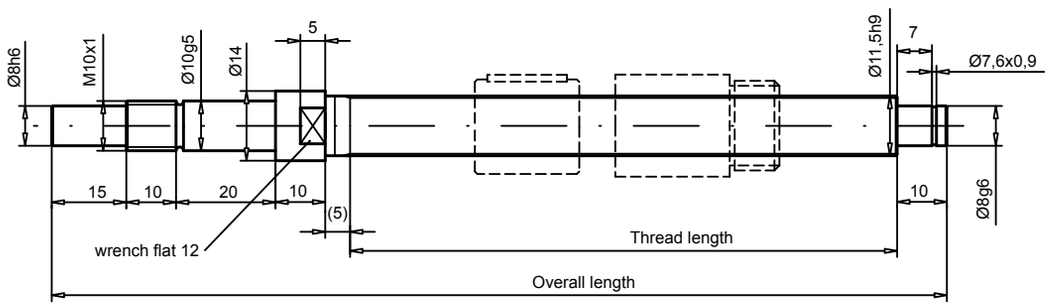
Technical data

Numbering system see page 52 (Please specify the accuracy class)	1234/1.12.355.397	1234/1.12.160.230	1234/1.12.510.580	1234/2.12.355.397	1234/2.12.160.230	1234/2.12.510.580	1234/3.12.355.397	1234/3.12.160.230	1234/3.12.510.580	1234/4.12.355.397	1234/4.12.160.230	1234/4.12.510.580	1234/5.12.355.397
Shaft style	A	B	B	A	B	B	A	B	B	A	B	B	A
Lead P [mm]	1	1	1	2	2	2	3	3	3	4	4	4	5
Nominal diameter d_N [mm]	12	12	12	12	12	12	12	12	12	12	12	12	12
Nominal stroke [mm]	300	100	450	300	100	450	300	100	450	300	100	450	300
Ball circles i	3	3	3	3	3	3	3	3	3	3	3	3	3
Ball diameter [mm]	1	1	1	1.5	1.5	1.5	2	2	2	2	2	2	2
Dynamic load capacity C_a [N]	1300	1300	1300	2300	2300	2300	3300	3300	3300	3300	3300	3300	3200
Static load capacity C_{0a} [N]	2200	2200	2200	3100	3100	3100	3900	3900	3900	3900	3900	3900	3900
Max. axial play [mm] with backlash	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Max. friction torque [Ncm] (preloaded nut)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)
Nut length LZ / LA [mm]	17	17	17	19	19	19	26	26	26	22	22	22	26
Nut diameter Dzh6 / DA [mm]	19	19	19	19	19	19	19	19	19	19	19	19	19
LP [mm]	2.5	2.5	2.5	1.5	1.5	1.5	5	5	5	3.5	3.5	3.5	5

■ **Shaft style A**



■ **Shaft style B**

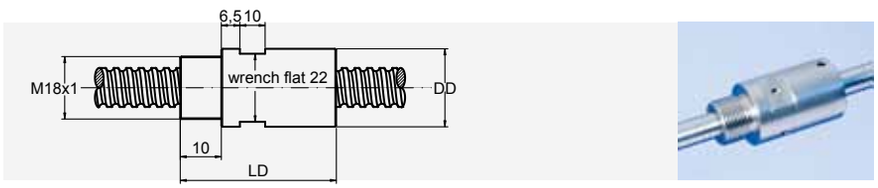


Nuts shown in standard orientation. Select one nut from table.

1234/5.12.160.230	1234/5.12.510.580	1132/1.12.355.397	1132/1.12.160.230	1132/1.12.510.580	1132/2.12.355.397	1132/2.12.160.230	1132/2.12.510.580	1132/3.12.355.397	1132/3.12.160.230	1132/3.12.510.580	1132/4.12.355.397	1132/4.12.160.230	1132/4.12.510.580	1132/5.12.355.397	1132/5.12.160.230	1132/5.12.510.580
B	B	A	B	B	A	B	B	A	B	B	A	B	B	A	B	B
5	5	1	1	1	2	2	2	3	3	3	4	4	4	5	5	5
12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
100	450	300	100	450	300	100	450	300	100	450	300	100	450	300	100	450
3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
2	2	1	1	1	1.5	1.5	1.5	2	2	2	2	2	2	2	2	2
3200	3200	1300	1300	1300	2300	2300	2300	3300	3300	3300	3300	3300	3300	3200	3200	3200
3900	3900	2200	2200	2200	3100	3100	3100	3900	3900	3900	3900	3900	3900	3900	3900	3900
0.02	0.02	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
1 (3)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)	1 (3)
26	26	24	24	24	29	29	29	36	36	36	33	33	33	36	36	36
19	19	20.5	20.5	20.5	20.5	20.5	20.5	20.5	20.5	20.5	22.5	22.5	22.5	22.5	22.5	22.5
5	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

NOMINAL DIAMETER 12 mm

Rolled execution with standard bearing journal T7 - T10
Series 1530



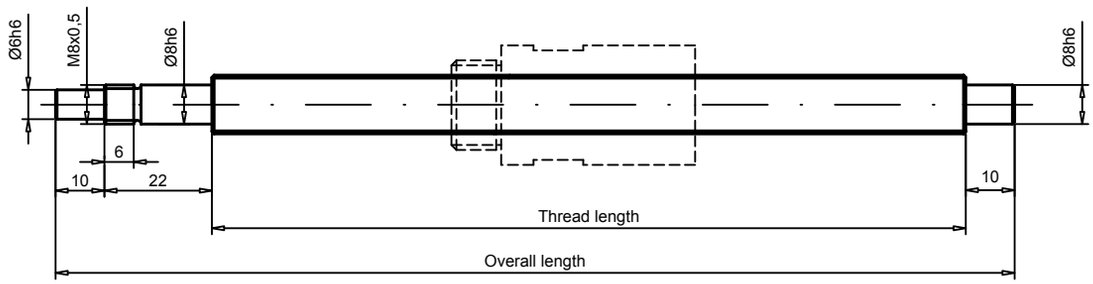
NUT WITH CONNECTING THREAD

■ **Series 1530:**
Spring preloaded double nut in housing with connecting thread without wipers

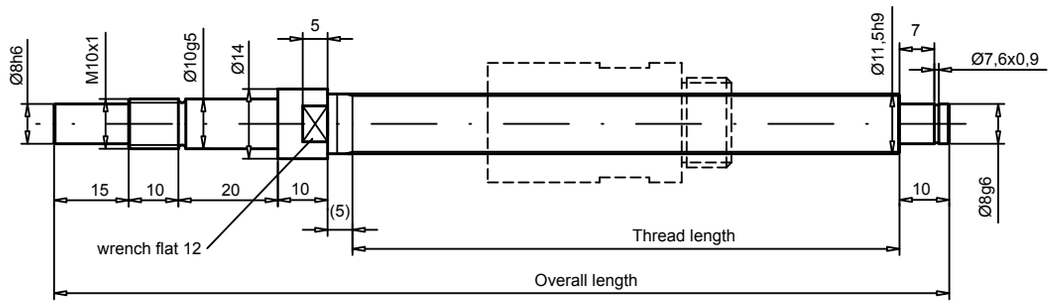
Technical data

Numbering system see page 52 (Please specify the accuracy class)	1530/1.12.355.397	1530/1.12.160.230	1530/1.12.510.580	1530/2.12.355.397	1530/2.12.160.230	1530/2.12.510.580	1530/3.12.355.397	1530/3.12.160.230	1530/3.12.510.580	1530/4.12.355.397	1530/4.12.160.230	1530/4.12.510.580
Shaft style	A	B	B	A	B	B	A	B	B	A	B	B
Lead P [mm]	1	1	1	2	2	2	3	3	3	4	4	4
Nominal diameter d_N [mm]	12	12	12	12	12	12	12	12	12	12	12	12
Nominal stroke [mm]	300	100	450	300	100	450	300	100	450	300	100	450
Ball circles i	2	2	2	2	2	2	2	2	2	2	2	2
Ball diameter [mm]	1	1	1	1.5	1.5	1.5	2	2	2	2	2	2
Dynamic load capacity C_a [N]	900	900	900	1600	1600	1600	2300	2300	2300	2300	2300	2300
Static load capacity C_{0a} [N]	1500	1500	1500	2100	2100	2100	2600	2600	2600	2600	2600	2600
Max. preload [N]	50	50	50	80	80	80	80	80	80	80	80	80
Max. axial load [N]	40	40	40	70	70	70	70	70	70	70	70	70
Friction torque T_{pr0} [Ncm]	1.0-2.0	1.0-2.0	1.0-2.0	1.0-2.0	1.0-2.0	1.0-2.0	1.0-2.0	1.0-2.0	1.0-2.0	1.0-2.0	1.0-2.0	1.0-2.0
Nut length LD [mm]	49	49	49	49	49	49	49	49	49	49	49	49
Nut diameter DD [mm]	24	24	24	24	24	24	24	24	24	24	24	24

■ **Shaft style A**



■ **Shaft style B**

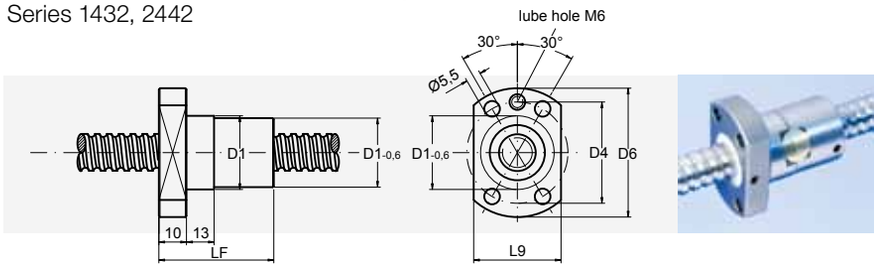


Please follow the advice on page 24/25.

	1530/5.12.355.397	1530/5.12.160.230	1530/5.12.510.580	
	A	B	B	
	5	5	5	
	12	12	12	
	300	100	450	
	2	2	2	
	2	2	2	
	2300	2300	2300	
	2600	2600	2600	
	80	80	80	
	70	70	70	
	1.0-2.0	1.0-2.0	1.0-2.0	
	49	49	49	
	24	24	24	

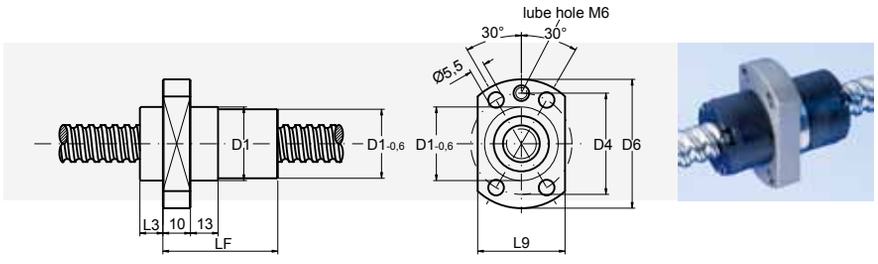
NOMINAL DIAMETER 16 mm

Rolled execution with standard bearing journal T7 - T10
Series 1432, 2442



FLANGE NUT

■ **Series 1432:**
Nut with flange and standard wipers on both ends



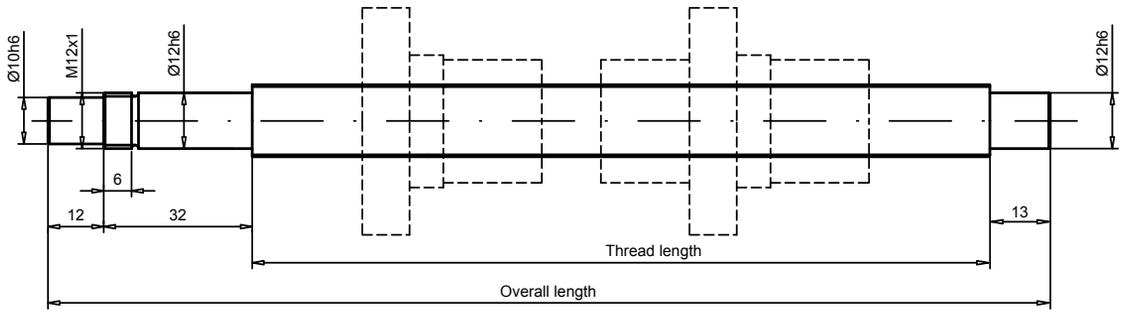
FLANGE NUT

■ **Series 2442:**
Nut with flange and standard wipers on both ends

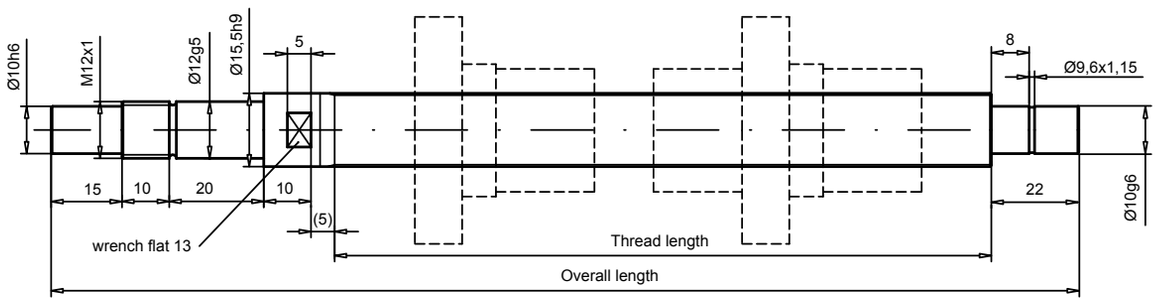
Technical data

Numbering system see page 52 (Please specify the accuracy class)	1432/2.16.470.527	1432/2.16.189.271	1432/2.16.689.771	1432/4.16.470.527	1432/4.16.189.271	1432/4.16.689.771	1432/5.16.470.527	1432/5.16.189.271	1432/5.16.689.771
Shaft style	A	B	B	A	B	B	A	B	B
Lead P [mm]	2	2	2	4	4	4	5	5	5
Nominal diameter d_N [mm]	16	16	16	16	16	16	16	16	16
Nominal stroke [mm]	400	100	600	400	100	600	400	100	600
Ball circles i	3	3	3	3	3	3	3	3	3
Ball diameter [mm]	1.5	1.5	1.5	3	3	3	3.5	3.5	3.5
Dynamic load capacity C_a [N]	2700	2700	2700	8000	8000	8000	9100	9100	9100
Static load capacity C_{0a} [N]	4400	4400	4400	10300	10300	10300	10900	10900	10900
Max. axial play [mm] with backlash	0.02	0.02	0.02	0.03	0.03	0.03	0.04	0.04	0.04
Max. friction torque [Ncm] (preloaded nut)	1.4 (4)	1.4 (4)	1.4 (4)	1.4 (4)	1.4 (4)	1.4 (4)	1.4 (4)	1.4 (4)	1.4 (4)
Nut length LF [mm]	32	32	32	38	38	38	44	44	44
Nut diameter D1g6 [mm]	25	25	25	28	28	28	28	28	28
L3 [mm]	-	-	-	-	-	-	-	-	-
D4 [mm]	35	35	35	38	38	38	38	38	38
D6 [mm]	44	44	44	48	48	48	48	48	48
L9 [mm]	29	29	29	31	31	31	31	31	31

■ **Shaft style A**



■ **Shaft style B**

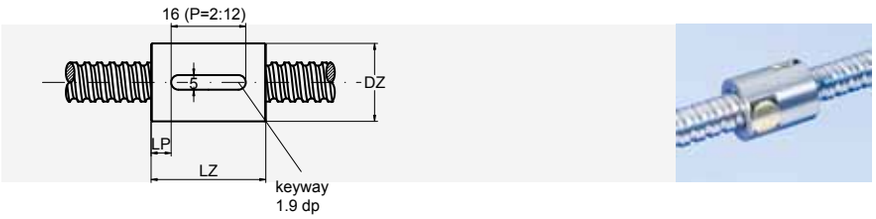


Nuts shown in standard orientation. Select one nut from table. *Please specify the number of circles

2442/10.16.470.527*	2442/10.16.189.271*	2442/10.16.689.771*	2442/10.16.470.527*	2442/10.16.189.271*	2442/10.16.689.771*	2442/16.16.470.527	2442/16.16.189.271	2442/16.16.689.771	2442/20.16.470.527	2442/20.16.189.271	2442/20.16.689.771	2442/30.16.470.527	2442/30.16.189.271	2442/30.16.689.771
A	B	B	A	B	B	A	B	B	A	B	B	A	B	B
10	10	10	10	10	10	16	16	16	20	20	20	30	30	30
16	16	16	16	16	16	16	16	16	16	16	16	16	16	16
400	100	600	400	100	600	400	100	600	400	100	600	400	100	600
3 + 3	3 + 3	3 + 3	5 + 5	5 + 5	5 + 5	2 + 2	2 + 2	2 + 2	2 + 2	2 + 2	2 + 2	0.5+0.5	0.5+0.5	0.5+0.5
3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
17700	17700	17700	28300	28300	28300	12100	12100	12100	11700	11700	11700	2100	2100	2100
25000	25000	25000	43100	43100	43100	16500	16500	16500	16100	16100	16100	2300	2300	2300
0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
1.4 (4)	1.4 (4)	1.4 (4)	1.4 (4)	1.4 (4)	1.4 (4)	1.4 (4)	1.4 (4)	1.4 (4)	1.4 (4)	1.4 (4)	1.4 (4)	1.4 (4)	1.4 (4)	1.4 (4)
32	32	32	52	52	52	31	31	31	38	38	38	26	26	26
32	32	32	32	32	32	32	32	32	32	32	32	32	32	32
12	12	12	12	12	12	10	10	10	10	10	10	12	12	12
42	42	42	42	42	42	42	42	42	42	42	42	42	42	42
52	52	52	52	52	52	52	52	52	52	52	52	52	52	52
40	40	40	40	40	40	40	40	40	40	40	40	40	40	40

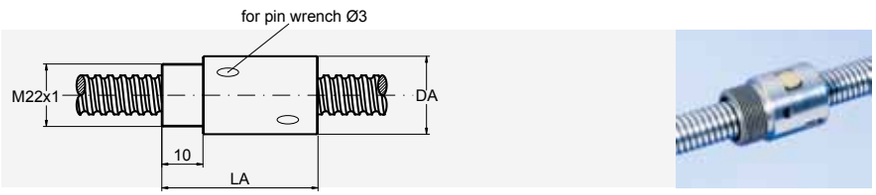
NOMINAL DIAMETER 16 mm

Rolled execution with standard bearing journal T7 - T10
Series 1234, 1132



CYLINDRICAL NUT

■ **Series 1234:**
Cylindrical nut without wipers



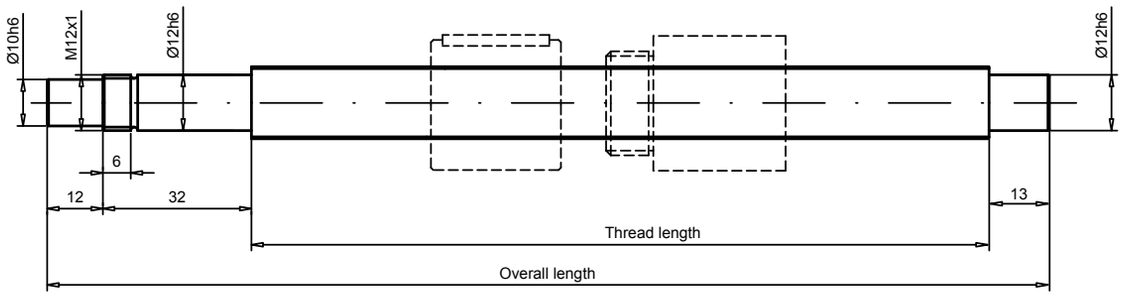
NUT WITH CONNECTING THREAD

■ **Series 1132:**
Nut with connecting thread without wipers

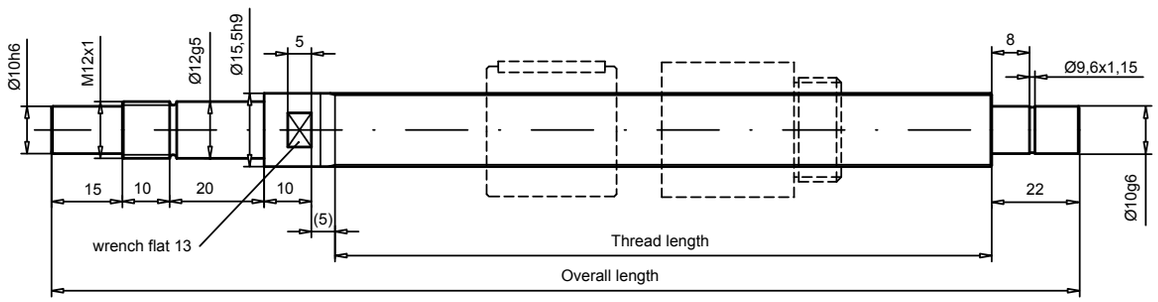
Technical data

Numbering system see page 52 (Please specify the accuracy class)	1234/2.16.470.527	1234/2.16.189.271	1234/2.16.689.771	1234/4.16.470.527	1234/4.16.189.271	1234/4.16.689.771	1234/5.16.470.527	1234/5.16.189.271	1234/5.16.689.771
Shaft style	A	B	B	A	B	B	A	B	B
Lead P [mm]	2	2	2	4	4	4	5	5	5
Nominal diameter d_N [mm]	16	16	16	16	16	16	16	16	16
Nominal stroke [mm]	400	100	600	400	100	600	400	100	600
Ball circles i	3	3	3	3	3	3	3	3	3
Ball diameter [mm]	1.5	1.5	1.5	3	3	3	3.5	3.5	3.5
Dynamic load capacity C_a [N]	2700	2700	2700	8000	8000	8000	9100	9100	9100
Static load capacity C_{0a} [N]	4400	4400	4400	10300	10300	10300	10900	10900	10900
Max. axial play [mm] with backlash	0.02	0.02	0.02	0.03	0.03	0.03	0.04	0.04	0.04
Max. friction torque [Ncm] (preloaded nut)	1.4 (4)	1.4 (4)	1.4 (4)	1.4 (4)	1.4 (4)	1.4 (4)	1.4 (4)	1.4 (4)	1.4 (4)
Nut length LZ / LA [mm]	19	19	19	21	21	21	27	27	27
Nut diameter DZh6 / DA [mm]	28	28	28	28	28	28	28	28	28
LP [mm]	1.5	1.5	1.5	2.5	2.5	2.5	5.5	5.5	5.5

■ **Shaft style A**



■ **Shaft style B**

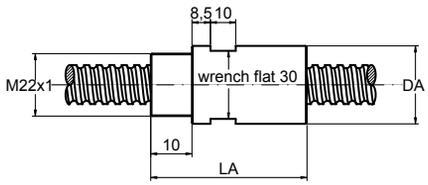


Nuts shown in standard orientation. Select one nut from table.

1132/2.16.470.527	1132/2.16.189.271	1132/2.16.689.771	1132/4.16.470.527	1132/4.16.189.271	1132/4.16.689.771	1132/5.16.470.527	1132/5.16.189.271	1132/5.16.689.771
A	B	B	A	B	B	A	B	B
2	2	2	4	4	4	5	5	5
16	16	16	16	16	16	16	16	16
400	100	600	400	100	600	400	100	600
3	3	3	3	3	3	3	3	3
1.5	1.5	1.5	3	3	3	3.5	3.5	3.5
2700	2700	2700	8000	8000	8000	9100	9100	9100
4400	4400	4400	10300	10300	10300	10900	10900	10900
0.02	0.02	0.02	0.03	0.03	0.03	0.04	0.04	0.04
1.4 (4)	1.4 (4)	1.4 (4)	1.4 (4)	1.4 (4)	1.4 (4)	1.4 (4)	1.4 (4)	1.4 (4)
29	29	29	38	38	38	43	43	43
25.5	25.5	25.5	28.5	28.5	28.5	28.5	28.5	28.5
-	-	-	-	-	-	-	-	-

NOMINAL DIAMETER 16 mm

Rolled execution with standard bearing journal T7 - T10
Series 1530



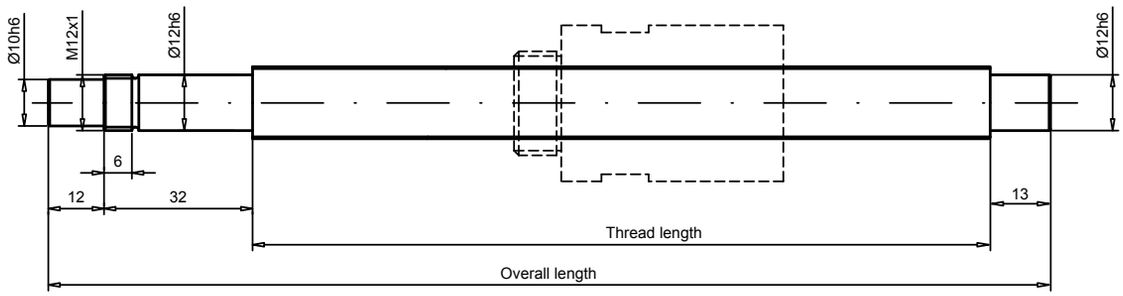
NUT WITH CONNECTING THREAD

■ **Series 1530:**
Spring preloaded double nut in housing with connecting thread without wipers

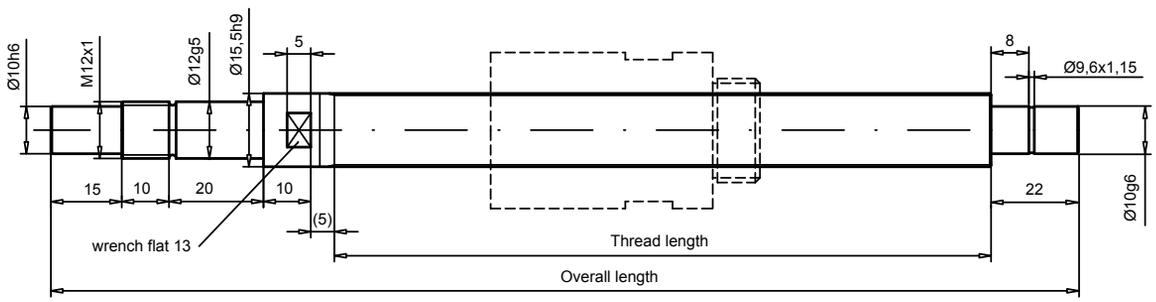
Technical data

Numbering system see page 52 (Please specify the accuracy class)	1530/2.16.470.527	1530/2.16.189.271	1530/2.16.689.771	1530/4.16.470.527	1530/4.16.189.271	1530/4.16.689.771	1530/5.16.470.527	1530/5.16.189.271	1530/5.16.689.771
Shaft style	A	B	B	A	B	B	A	B	B
Lead P [mm]	2	2	2	4	4	4	5	5	5
Nominal diameter d_N [mm]	16	16	16	16	16	16	16	16	16
Nominal stroke [mm]	400	100	600	400	100	600	400	100	600
Ball circles i	2	2	2	2	2	2	2	2	2
Ball diameter [mm]	1.5	1.5	1.5	2	2	2	2.5	2.5	2.5
Dynamic load capacity C_a [N]	1900	1900	1900	2700	2700	2700	3500	3500	3500
Static load capacity C_{0a} [N]	2900	2900	2900	3600	3600	3600	4300	4300	4300
Max. preload [N]	120	120	120	120	120	120	150	150	150
Max. axial load [N]	100	100	100	100	100	100	130	130	130
Friction torque T_{pr0} [Ncm]	1.5-3.0	1.5-3.0	1.5-3.0	1.5-3.0	1.5-3.0	1.5-3.0	1.5-3.0	1.5-3.0	1.5-3.0
Nut length LD [mm]	57	57	57	57	57	57	57	57	57
Nut diameter DD [mm]	33	33	33	33	33	33	33	33	33

■ **Shaft style A**



■ **Shaft style B**



Please follow the advice on page 24/25.