

Standard ball screws



Miniature ball screws



Rolled ball screws

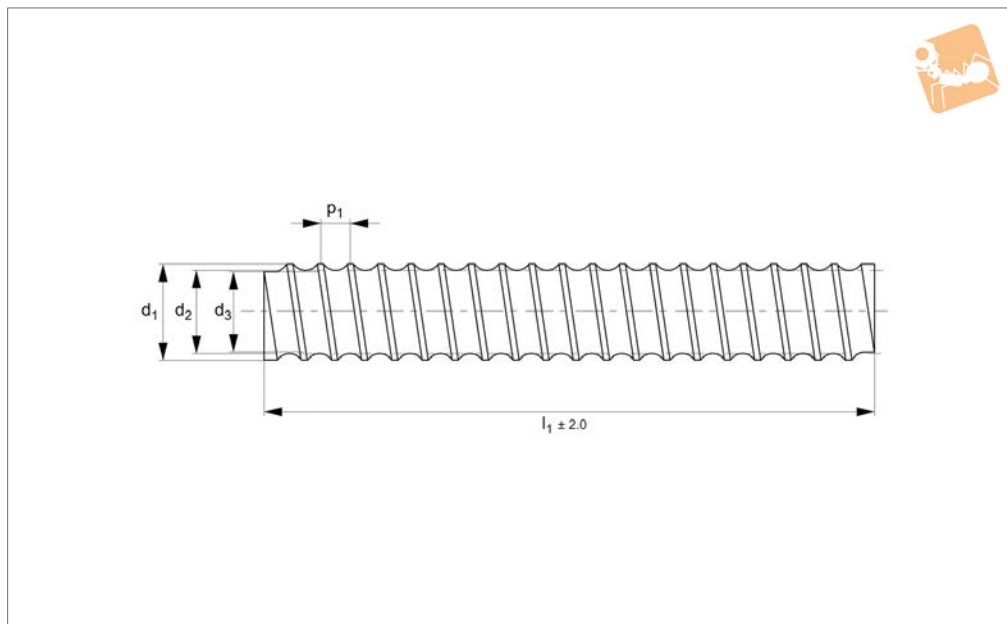
Ø	Pitch (travel per revolution)						
	5	10	16	20	25	40	50
16	●	●	●				
20	●	●		●			
25	●	●			●		
32	●	●		●			
40	●	●		●		●	
50		●		●			●
63		●		●			
80		●		●			

Miniature ball screws

Ø	Pitch (travel per revolution)						Nut
	1	2	2.5	4	5		
6	●					flanged	
8	●	●	●			flanged	
10		●		●		flanged/cylinder	
12		●		●	●	flanged/cylinder	
14		●				flanged/cylinder	



L1375.16



Material

Steel (CF53 or C55R), induction hardened to 60 HRC ±2, polished.

Technical Notes

Gothic profile with a 5 or 10mm lead. Tolerance T7 - 50µ/300mm. Shorter lengths or longer lengths up to a maximum

of 3000mm available.

For ball screw nuts see parts L1370-L1374 & L1377.

For end screw machining to suit ball screw support units see relevant ball screw supports (L1388-L1406). End machining on request.

Important Notes

Ensure the ball nut can be fitted to the ball screw after machining. Do not remove the ball nut from the sleeve prior to installation - the balls come free rendering the ball nut unusable.

Order No.	Screw dia. x lead	Lead	d ₁	d ₂	d ₃	l ₁	Mass moment of inertia kg·m ²	Weight kg
L1375.16-05-0500	16x 5	5	17.08	16	13.90	500	4,45x10 ⁻⁵	0.71
L1375.16-05-0600	16x 5	5	17.08	16	13.90	600	4,45x10 ⁻⁵	0.85
L1375.16-05-0800	16x 5	5	17.08	16	13.90	800	4,45x10 ⁻⁵	1.13
L1375.16-05-1000	16x 5	5	17.08	16	13.90	1000	4,45x10 ⁻⁵	1.41
L1375.16-05-1500	16x 5	5	17.08	16	13.90	1500	4,45x10 ⁻⁵	2.12
L1375.16-05-2000	16x 5	5	17.08	16	13.90	2000	4,45x10 ⁻⁵	2.82
L1375.16-05-2500	16x 5	5	17.08	16	13.90	2500	4,45x10 ⁻⁵	3.53
L1375.16-05-3000	16x 5	5	17.08	16	13.90	3000	4,45x10 ⁻⁵	4.23
L1375.16-10-0500	16x10	10	17.08	16	12.90	500	4,36x10 ⁻⁵	0.73
L1375.16-10-0600	16x10	10	17.08	16	12.90	600	4,36x10 ⁻⁵	0.88
L1375.16-10-0800	16x10	10	17.08	16	12.90	800	4,36x10 ⁻⁵	1.17
L1375.16-10-1000	16x10	10	17.08	16	12.90	1000	4,36x10 ⁻⁵	1.46
L1375.16-10-1500	16x10	10	17.08	16	12.90	1500	4,36x10 ⁻⁵	2.19
L1375.16-10-2000	16x10	10	17.08	16	12.90	2000	4,36x10 ⁻⁵	2.92
L1375.16-10-2500	16x10	10	17.08	16	12.90	2500	4,36x10 ⁻⁵	3.65
L1375.16-10-3000	16x10	10	17.08	16	12.90	3000	4,36x10 ⁻⁵	4.38
L1375.16-16-0500	16x16	16	17.08	16	12.90	500	4,36x10 ⁻⁵	0.73
L1375.16-16-0600	16x16	16	17.08	16	12.90	600	4,36x10 ⁻⁵	0.88
L1375.16-16-0800	16x16	16	17.08	16	12.90	800	4,36x10 ⁻⁵	1.17
L1375.16-16-1000	16x16	16	17.08	16	12.90	1000	4,36x10 ⁻⁵	1.46
L1375.16-16-1500	16x16	16	17.08	16	12.90	1500	4,36x10 ⁻⁵	2.19
L1375.16-16-2000	16x16	16	17.08	16	12.90	2000	4,36x10 ⁻⁵	2.92
L1375.16-16-2500	16x16	16	17.08	16	12.90	2500	4,36x10 ⁻⁵	3.65
L1375.16-16-3000	16x16	16	17.08	16	12.90	3000	4,36x10 ⁻⁵	4.38
L1375.16-20-0500	16x20	20	17.08	16	12.90	500	4,36x10 ⁻⁵	0.73
L1375.16-20-0600	16x20	20	17.08	16	12.90	600	4,36x10 ⁻⁵	0.88
L1375.16-20-0800	16x20	20	17.08	16	12.90	800	4,36x10 ⁻⁵	1.17
L1375.16-20-1000	16x20	20	17.08	16	12.90	1000	4,36x10 ⁻⁵	1.46
L1375.16-20-1500	16x20	20	17.08	16	12.90	1500	4,36x10 ⁻⁵	2.19
L1375.16-20-2000	16x20	20	17.08	16	12.90	2000	4,36x10 ⁻⁵	2.92

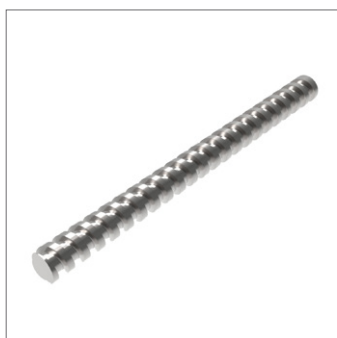


Ø 16 Ball Screws rolled

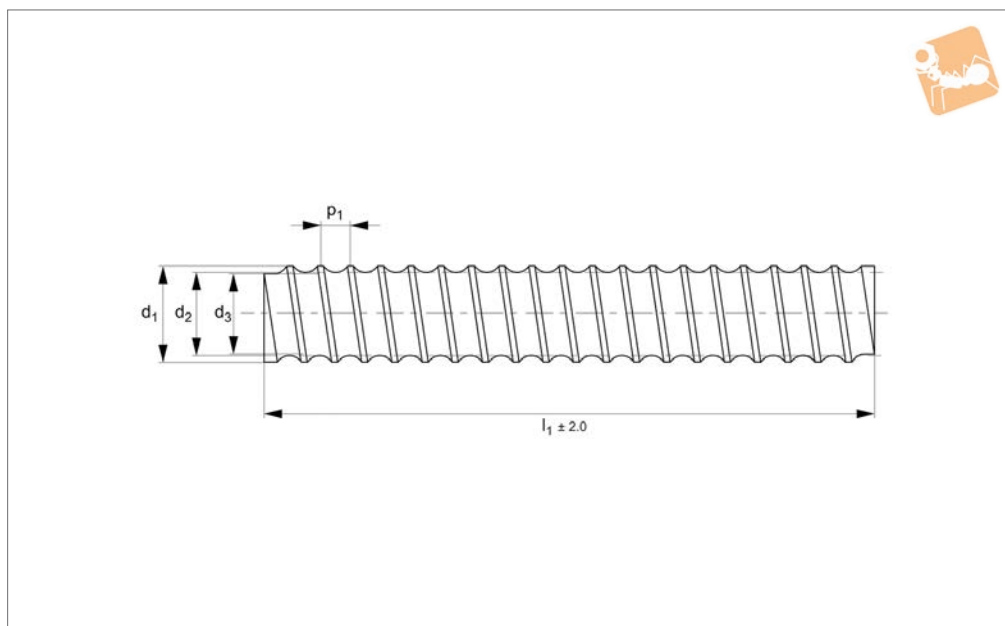
Ball Screw & Nuts



Order No.	Screw dia. x lead	Lead	d ₁	d ₂	d ₃	l ₁	Mass moment of inertia kg·m ²	Weight kg
L1375.16-20-2500	16x20	20	17.08	16	12.90	2500	4,36x10 ⁻⁵	3.65
L1375.16-20-3000	16x20	20	17.08	16	12.90	3000	4,36x10 ⁻⁵	4.38
L1375.16-32-0500	16x32	32	17.08	16	12.90	500	4,36x10 ⁻⁵	0.73
L1375.16-32-0600	16x32	32	17.08	16	12.90	600	4,36x10 ⁻⁵	0.88
L1375.16-32-0800	16x32	32	17.08	16	12.90	800	4,36x10 ⁻⁵	1.17
L1375.16-32-1000	16x32	32	17.08	16	12.90	1000	4,36x10 ⁻⁵	1.46
L1375.16-32-1500	16x32	32	17.08	16	12.90	1500	4,36x10 ⁻⁵	2.19
L1375.16-32-2000	16x32	32	17.08	16	12.90	2000	4,36x10 ⁻⁵	2.92
L1375.16-32-2500	16x32	32	17.08	16	12.90	2500	4,36x10 ⁻⁵	3.65
L1375.16-32-3000	16x32	32	17.08	16	12.90	3000	4,36x10 ⁻⁵	4.38



L1375.20



Material

Steel (CF53 or C55R), induction hardened to 60 HRC ± 2 , polished.

Technical Notes

Gothic profile with a 5,20 or 50mm lead. Tolerance T7 - 50 μ /300mm. Shorter lengths or longer lengths up to a maximum of 3000mm available.

For ball screw nuts see parts L1370-L1374 & L1377.

For end screw machining to suit ball screw support units see relevant ball screw supports (L1388-L1406). End machining on request.

Also available as a left hand thread for 5mm pitch.

Important Notes

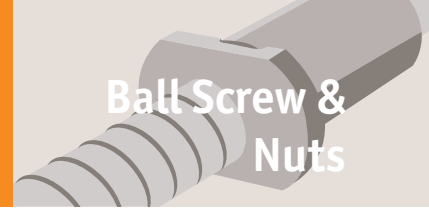
Ensure the ball nut can be fitted to the ball screw after machining. Do not remove the ball nut from the sleeve prior to installation - the balls come free rendering the ball nut unusable.

Order No.	Screw dia. x lead	Lead w_1	d_1	d_2	d_3	l_1	Mass moment of inertia $kg \cdot m^2$	Weight kg
L1375.20-05-0500	20x 5	5	21.08	20	17.9	500	$1,12 \times 10^{-4}$	1.18
L1375.20-05-0600	20x 5	5	21.08	20	17.9	600	$1,12 \times 10^{-4}$	1.41
L1375.20-05-0800	20x 5	5	21.08	20	17.9	800	$1,12 \times 10^{-4}$	1.88
L1375.20-05-1000	20x 5	5	21.08	20	17.9	1000	$1,12 \times 10^{-4}$	2.35
L1375.20-05-1500	20x 5	5	21.08	20	17.9	1500	$1,12 \times 10^{-4}$	3.53
L1375.20-05-2000	20x 5	5	21.08	20	17.9	2000	$1,12 \times 10^{-4}$	4.70
L1375.20-05-2500	20x 5	5	21.08	20	17.9	2500	$1,12 \times 10^{-4}$	5.88
L1375.20-05-3000	20x 5	5	21.08	20	17.9	3000	$1,12 \times 10^{-4}$	7.05
L1375.20-10-0500	20x10	10	21.08	10	17.9	500	$1,18 \times 10^{-4}$	1.21
L1375.20-10-0600	20x10	10	21.08	10	17.9	600	$1,18 \times 10^{-4}$	1.45
L1375.20-10-0800	20x10	10	21.08	10	17.9	800	$1,18 \times 10^{-4}$	1.93
L1375.20-10-1000	20x10	10	21.08	10	17.9	1000	$1,18 \times 10^{-4}$	2.41
L1375.20-10-1500	20x10	10	21.08	10	17.9	1500	$1,18 \times 10^{-4}$	3.62
L1375.20-10-2000	20x10	10	21.08	10	17.9	2000	$1,18 \times 10^{-4}$	4.82
L1375.20-10-2500	20x10	10	21.08	10	17.9	2500	$1,18 \times 10^{-4}$	6.03
L1375.20-10-3000	20x10	10	21.08	10	17.9	3000	$1,18 \times 10^{-4}$	7.23
L1375.20-20-0500	20x20	20	20.76	20	17.6	500	$1,00 \times 10^{-4}$	1.11
L1375.20-20-0600	20x20	20	20.76	20	17.6	600	$1,00 \times 10^{-4}$	1.33
L1375.20-20-0800	20x20	20	20.76	20	17.6	800	$1,00 \times 10^{-4}$	1.77
L1375.20-20-1000	20x20	20	20.76	20	17.6	1000	$1,00 \times 10^{-4}$	2.21
L1375.20-20-1500	20x20	20	20.76	20	17.6	1500	$1,00 \times 10^{-4}$	3.32
L1375.20-20-2000	20x20	20	20.76	20	17.6	2000	$1,00 \times 10^{-4}$	4.42
L1375.20-20-2500	20x20	20	20.76	20	17.6	2500	$1,00 \times 10^{-4}$	5.53
L1375.20-20-3000	20x20	20	20.76	20	17.6	3000	$1,00 \times 10^{-4}$	6.63
L1375.20-40-0500	20x40	40	20.76	20	17.6	500	$1,00 \times 10^{-4}$	1.11
L1375.20-40-0600	20x40	40	20.76	20	17.6	600	$1,00 \times 10^{-4}$	1.33
L1375.20-40-0800	20x40	40	20.76	20	17.6	800	$1,00 \times 10^{-4}$	1.77
L1375.20-40-1000	20x40	40	20.76	20	17.6	1000	$1,00 \times 10^{-4}$	2.21
L1375.20-40-1500	20x40	40	20.76	20	17.6	1500	$1,00 \times 10^{-4}$	3.32



Ø 20 Ball Screws rolled

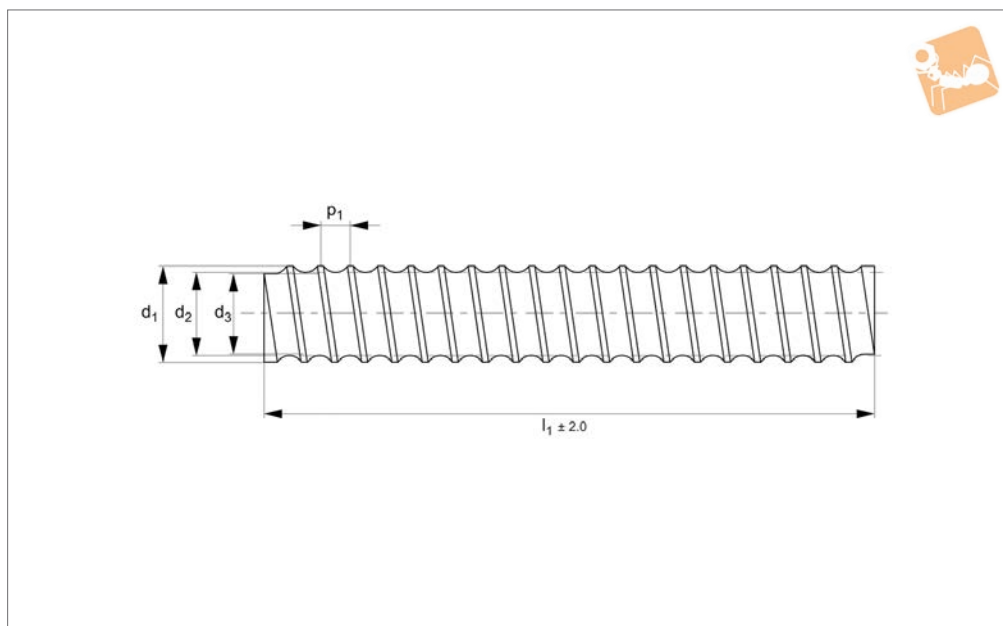
Ball Screw & Nuts



Order No.	Screw dia. x lead	Lead w_1	d_1	d_2	d_3	l_1	Mass moment of inertia $\text{kg}\cdot\text{m}^2$	Weight kg
L1375.20-40-2000	20x40	40	20.76	20	17.6	2000	$1,00 \times 10^{-4}$	4.42
L1375.20-40-2500	20x40	40	20.76	20	17.6	2500	$1,00 \times 10^{-4}$	5.53
L1375.20-40-3000	20x40	40	20.76	20	17.6	3000	$1,00 \times 10^{-4}$	6.63



L1375.25



Material

Steel (CF53 or C55R), induction hardened to 60 HRC ± 2 , polished.

Technical Notes

Gothic profile with a 5, 10 or 2mm lead. Tolerance T7 - 50 μ /300mm. Shorter lengths or longer lengths up to a maximum

of 6000mm available.

For ball screw nuts see parts L1370-L1374 & L1377.

For end screw machining to suit ball screw support units see relevant ball screw supports (L1388-L1406). End machining on request.

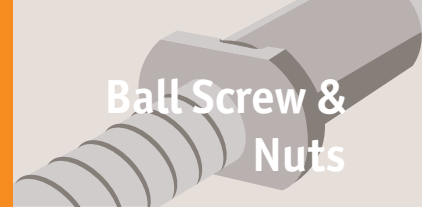
Important Notes

Ensure the ball nut can be fitted to the ball screw after machining. Do not remove the ball nut from the sleeve prior to installation - the balls come free rendering the ball nut unusable.

Order No.	Screw dia. x lead	Lead w_1	d_1	d_2	d_3	l_1	Mass moment of inertia $kg \cdot m^2$	Weight kg
L1375.25-05-0500	25x 5	5	26.08	25	22.9	500	$2,62 \times 10^{-4}$	1.80
L1375.25-05-0600	25x 5	5	26.08	25	22.9	600	$2,62 \times 10^{-4}$	2.15
L1375.25-05-0800	25x 5	5	26.08	25	22.9	800	$2,62 \times 10^{-4}$	2.87
L1375.25-05-1000	25x 5	5	26.08	25	22.9	1000	$2,62 \times 10^{-4}$	3.59
L1375.25-05-1500	25x 5	5	26.08	25	22.9	1500	$2,62 \times 10^{-4}$	5.39
L1375.25-05-2000	25x 5	5	26.08	25	22.9	2000	$2,62 \times 10^{-4}$	7.18
L1375.25-05-2500	25x 5	5	26.08	25	22.9	2500	$2,62 \times 10^{-4}$	8.98
L1375.25-05-3000	25x 5	5	26.08	25	22.9	3000	$2,62 \times 10^{-4}$	10.77
L1375.25-05-3500	25x 5	5	26.08	25	22.9	3500	$2,62 \times 10^{-4}$	2.87
L1375.25-05-4000	25x 5	5	26.08	25	22.9	4000	$2,62 \times 10^{-4}$	3.59
L1375.25-05-4500	25x 5	5	26.08	25	22.9	4500	$2,62 \times 10^{-4}$	5.39
L1375.25-05-5000	25x 5	5	26.08	25	22.9	5000	$2,62 \times 10^{-4}$	7.18
L1375.25-05-5500	25x 5	5	26.08	25	22.9	5500	$2,62 \times 10^{-4}$	8.98
L1375.25-05-6000	25x 5	5	26.08	25	22.9	6000	$2,62 \times 10^{-4}$	10.77
L1375.25-10-0500	25x10	10	27.15	25	20.8	500	$2,94 \times 10^{-4}$	1.91
L1375.25-10-0600	25x10	10	27.15	25	20.8	600	$2,94 \times 10^{-4}$	2.29
L1375.25-10-0800	25x10	10	27.15	25	20.8	800	$2,94 \times 10^{-4}$	3.05
L1375.25-10-1000	25x10	10	27.15	25	20.8	1000	$2,94 \times 10^{-4}$	3.81
L1375.25-10-1500	25x10	10	27.15	25	20.8	1500	$2,94 \times 10^{-4}$	5.72
L1375.25-10-2000	25x10	10	27.15	25	20.8	2000	$2,94 \times 10^{-4}$	7.62
L1375.25-10-2500	25x10	10	27.15	25	20.8	2500	$2,94 \times 10^{-4}$	9.53
L1375.25-10-3000	25x10	10	27.15	25	20.8	3000	$2,94 \times 10^{-4}$	11.43
L1375.25-10-3500	25x10	10	26.08	25	22.9	3500	$2,62 \times 10^{-4}$	2.87
L1375.25-10-4000	25x10	10	26.08	25	22.9	4000	$2,62 \times 10^{-4}$	3.59
L1375.25-10-4500	25x10	10	26.08	25	22.9	4500	$2,62 \times 10^{-4}$	5.39
L1375.25-10-5000	25x10	10	26.08	25	22.9	5000	$2,62 \times 10^{-4}$	7.18
L1375.25-10-5500	25x10	10	26.08	25	22.9	5500	$2,62 \times 10^{-4}$	8.98
L1375.25-10-6000	25x10	10	26.08	25	22.9	6000	$2,62 \times 10^{-4}$	10.77
L1375.25-25-0500	25x25	25	26.09	25	22.9	500	$2,60 \times 10^{-4}$	1.82
L1375.25-25-0600	25x25	25	26.09	25	22.9	600	$2,60 \times 10^{-4}$	2.18



Ø 25 Ball Screws rolled



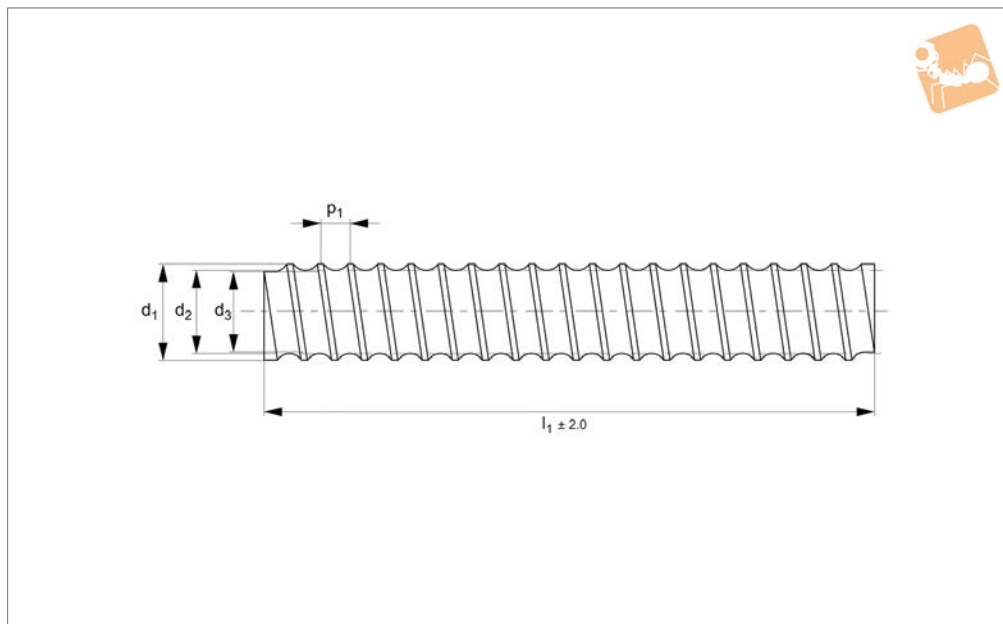
Ball Screw & Nuts

Order No.	Screw dia. x lead	Lead w_1	d_1	d_2	d_3	l_1	Mass moment of inertia $\text{kg}\cdot\text{m}^2$	Weight kg
L1375.25-25-0800	25x25	25	26.09	25	22.9	800	$2,60 \times 10^{-4}$	2.91
L1375.25-25-1000	25x25	25	26.09	25	22.9	1000	$2,60 \times 10^{-4}$	3.64
L1375.25-25-1500	25x25	25	26.09	25	22.9	1500	$2,60 \times 10^{-4}$	5.46
L1375.25-25-2000	25x25	25	26.09	25	22.9	2000	$2,60 \times 10^{-4}$	7.28
L1375.25-25-2500	25x25	25	26.09	25	22.9	2500	$2,60 \times 10^{-4}$	9.10
L1375.25-25-3000	25x25	25	26.09	25	22.9	3000	$2,60 \times 10^{-4}$	10.92
L1375.25-25-3500	25x25	25	26.08	25	22.9	3500	$2,62 \times 10^{-4}$	2.87
L1375.25-25-4000	25x25	25	26.08	25	22.9	4000	$2,62 \times 10^{-4}$	3.59
L1375.25-25-4500	25x25	25	26.08	25	22.9	4500	$2,62 \times 10^{-4}$	5.39
L1375.25-25-5000	25x25	25	26.08	25	22.9	5000	$2,62 \times 10^{-4}$	7.18
L1375.25-25-5500	25x25	25	26.08	25	22.9	5500	$2,62 \times 10^{-4}$	8.98
L1375.25-25-6000	25x25	25	26.08	25	22.9	6000	$2,62 \times 10^{-4}$	10.77
L1375.25-50-0500	25x50	50	26.09	25	22.9	500	$2,60 \times 10^{-4}$	1.82
L1375.25-50-0600	25x50	50	26.09	25	22.9	600	$2,60 \times 10^{-4}$	2.18
L1375.25-50-0800	25x50	50	26.09	25	22.9	800	$2,60 \times 10^{-4}$	2.91
L1375.25-50-1000	25x50	50	26.09	25	22.9	1000	$2,60 \times 10^{-4}$	3.64
L1375.25-50-1500	25x50	50	26.09	25	22.9	1500	$2,60 \times 10^{-4}$	5.46
L1375.25-50-2000	25x50	50	26.09	25	22.9	2000	$2,60 \times 10^{-4}$	7.28
L1375.25-50-2500	25x50	50	26.09	25	22.9	2500	$2,60 \times 10^{-4}$	9.10
L1375.25-50-3000	25x50	50	26.09	25	22.9	3000	$2,60 \times 10^{-4}$	10.92
L1375.25-50-3500	25x50	50	26.08	25	22.9	3500	$2,62 \times 10^{-4}$	2.87
L1375.25-50-4000	25x50	50	26.08	25	22.9	4000	$2,62 \times 10^{-4}$	3.59
L1375.25-50-4500	25x50	50	26.08	25	22.9	4500	$2,62 \times 10^{-4}$	5.39
L1375.25-50-5000	25x50	50	26.08	25	22.9	5000	$2,62 \times 10^{-4}$	7.18
L1375.25-50-5500	25x50	50	26.08	25	22.9	5500	$2,62 \times 10^{-4}$	8.98
L1375.25-50-6000	25x50	50	26.08	25	22.9	6000	$2,62 \times 10^{-4}$	10.77

BALL SCREW & NUTS



L1375.32



Material

Steel (CF53 or C55R), induction hardened to 60 HRC ± 2 , polished.

Technical Notes

Gothic profile with a 5, 10, 20 or 40mm lead.

Tolerance T7 - 50 μ /300mm. Shorter lengths or longer lengths up to a maximum

of 6000mm available.

For ball screw nuts see parts L1370-L1374 & L1377.

For end screw machining to suit ball screw support units see relevant ball screw supports (L1388-L1406). End machining on request.

Also available as a left hand thread for

5mm pitch.

Important Notes

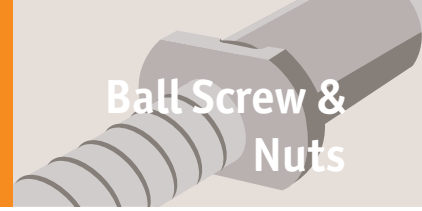
Ensure the ball nut can be fitted to the ball screw after machining. Do not remove the ball nut from the sleeve prior to installation - the balls come free rendering the ball nut unusable.

Order No.	Screw dia. x lead	Lead w_1	d_1	d_2	d_3	l_1	Mass moment of inertia $kg \cdot m^2$	Weight kg
L1375.32-05-0500	32x 5	5	33.08	32	29.90	500	$7,25 \times 10^{-4}$	2.99
L1375.32-05-0600	32x 5	5	33.08	32	29.90	600	$7,25 \times 10^{-4}$	3.59
L1375.32-05-0800	32x 5	5	33.08	32	29.90	800	$7,25 \times 10^{-4}$	4.78
L1375.32-05-1000	32x 5	5	33.08	32	29.90	1000	$7,25 \times 10^{-4}$	5.98
L1375.32-05-1500	32x 5	5	33.08	32	29.90	1500	$7,25 \times 10^{-4}$	8.97
L1375.32-05-2000	32x 5	5	33.08	32	29.90	2000	$7,25 \times 10^{-4}$	11.96
L1375.32-05-2500	32x 5	5	33.08	32	29.90	2500	$7,25 \times 10^{-4}$	14.95
L1375.32-05-3000	32x 5	5	33.08	32	29.90	3000	$7,25 \times 10^{-4}$	17.94
L1375.32-05-3500	32x 5	5	33.08	32	29.90	3500	$7,25 \times 10^{-4}$	4.78
L1375.32-05-4000	32x 5	5	33.08	32	29.90	4000	$7,25 \times 10^{-4}$	5.98
L1375.32-05-4500	32x 5	5	33.08	32	29.90	4500	$7,25 \times 10^{-4}$	8.97
L1375.32-05-5000	32x 5	5	33.08	32	29.90	5000	$7,25 \times 10^{-4}$	11.96
L1375.32-05-5500	32x 5	5	33.08	32	29.90	5500	$7,25 \times 10^{-4}$	14.95
L1375.32-05-6000	32x 5	5	33.08	32	29.90	6000	$7,25 \times 10^{-4}$	14.95
L1375.32-10-0500	32x10	10	34.15	32	27.80	500	$7,69 \times 10^{-4}$	3.08
L1375.32-10-0600	32x10	10	34.15	32	27.80	600	$7,69 \times 10^{-4}$	3.70
L1375.32-10-0800	32x10	10	34.15	32	27.80	800	$7,69 \times 10^{-4}$	4.93
L1375.32-10-1000	32x10	10	34.15	32	27.80	1000	$7,69 \times 10^{-4}$	6.16
L1375.32-10-1500	32x10	10	34.15	32	27.80	1500	$7,69 \times 10^{-4}$	9.24
L1375.32-10-2000	32x10	10	34.15	32	27.80	2000	$7,69 \times 10^{-4}$	12.32
L1375.32-10-2500	32x10	10	34.15	32	27.80	2500	$7,69 \times 10^{-4}$	15.40
L1375.32-10-3000	32x10	10	34.15	32	27.80	3000	$7,69 \times 10^{-4}$	18.48
L1375.32-10-3500	32x10	10	33.08	32	29.90	3500	$7,25 \times 10^{-4}$	4.78
L1375.32-10-4000	32x10	10	33.08	32	29.90	4000	$7,25 \times 10^{-4}$	5.98
L1375.32-10-4500	32x10	10	33.08	32	29.90	4500	$7,25 \times 10^{-4}$	8.97
L1375.32-10-5000	32x10	10	33.08	32	29.90	5000	$7,25 \times 10^{-4}$	11.96
L1375.32-10-5500	32x10	10	33.08	32	29.90	5500	$7,25 \times 10^{-4}$	14.95
L1375.32-10-6000	32x10	10	33.08	32	29.90	6000	$7,25 \times 10^{-4}$	14.95
L1375.32-20-0500	32x20	20	33.35	32	29.38	500	$7,76 \times 10^{-4}$	3.19



Ø 32 Ball Screws rolled

Ball Screw & Nuts

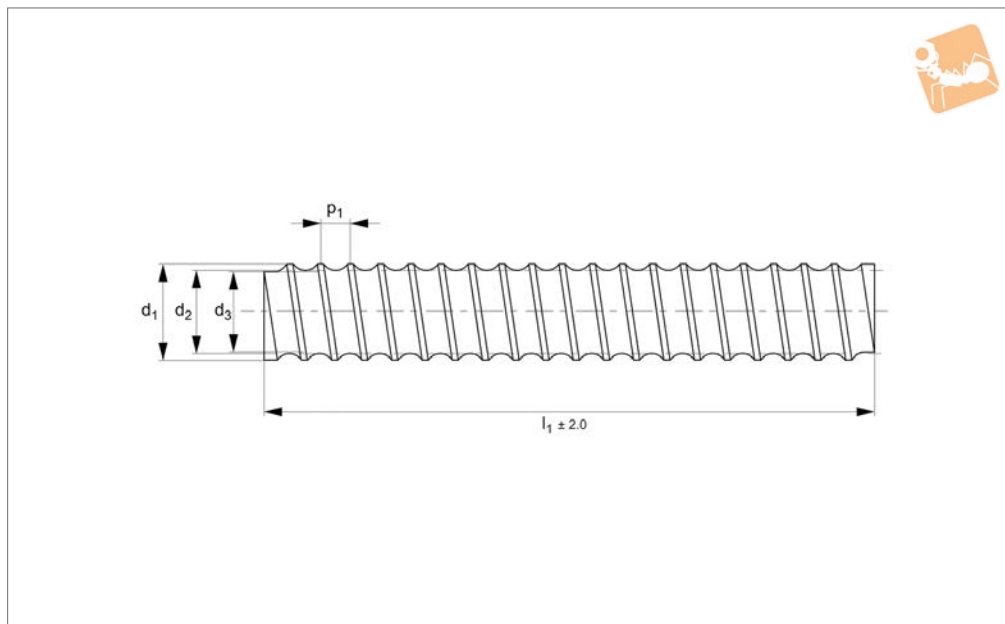


Order No.	Screw dia. x lead	Lead w_1	d_1	d_2	d_3	l_1	Mass moment of inertia kg·m ²	Weight kg
L1375.32-20-0600	32x20	20	33.35	32	29.38	600	7,76x10 ⁻⁴	3.82
L1375.32-20-0800	32x20	20	33.35	32	29.38	800	7,76x10 ⁻⁴	5.10
L1375.32-20-1000	32x20	20	33.35	32	29.38	1000	7,76x10 ⁻⁴	6.37
L1375.32-20-1500	32x20	20	33.35	32	29.38	1500	7,76x10 ⁻⁴	9.56
L1375.32-20-2000	32x20	20	33.35	32	29.38	2000	7,76x10 ⁻⁴	12.74
L1375.32-20-2500	32x20	20	33.35	32	29.38	2500	7,76x10 ⁻⁴	15.93
L1375.32-20-3000	32x20	20	33.35	32	29.38	3000	7,76x10 ⁻⁴	19.11
L1375.32-20-3500	32x20	20	33.08	32	29.90	3500	7,25x10 ⁻⁴	4.78
L1375.32-20-4000	32x20	20	33.08	32	29.90	4000	7,25x10 ⁻⁴	5.98
L1375.32-20-4500	32x20	20	33.08	32	29.90	4500	7,25x10 ⁻⁴	8.97
L1375.32-20-5000	32x20	20	33.08	32	29.90	5000	7,25x10 ⁻⁴	11.96
L1375.32-20-5500	32x20	20	33.08	32	29.90	5500	7,25x10 ⁻⁴	14.95
L1375.32-20-6000	32x20	20	33.08	32	29.90	6000	7,25x10 ⁻⁴	14.95
L1375.32-32-0500	32x32	32	32.35	32	28.40	500	6,89x10 ⁻⁴	2.91
L1375.32-32-0600	32x32	32	32.35	32	28.40	600	6,89x10 ⁻⁴	3.49
L1375.32-32-0800	32x32	32	32.35	32	28.40	800	6,89x10 ⁻⁴	4.65
L1375.32-32-1000	32x32	32	32.35	32	28.40	1000	6,89x10 ⁻⁴	5.81
L1375.32-32-1500	32x32	32	32.35	32	28.40	1500	6,89x10 ⁻⁴	8.72
L1375.32-32-2000	32x32	32	32.35	32	28.40	2000	6,89x10 ⁻⁴	11.62
L1375.32-32-2500	32x32	32	32.35	32	28.40	2500	6,89x10 ⁻⁴	14.53
L1375.32-32-3000	32x32	32	32.35	32	28.40	3000	6,89x10 ⁻⁴	17.43
L1375.32-32-3500	32x32	32	32.35	32	28.40	3500	6,89x10 ⁻⁴	4.65
L1375.32-32-4000	32x32	32	32.35	32	28.40	4000	6,89x10 ⁻⁴	5.81
L1375.32-32-4500	32x32	32	32.35	32	28.40	4500	6,89x10 ⁻⁴	8.72
L1375.32-32-5000	32x32	32	32.35	32	28.40	5000	6,89x10 ⁻⁴	11.62
L1375.32-32-5500	32x32	32	32.35	32	28.40	5500	6,89x10 ⁻⁴	14.53
L1375.32-32-6000	32x32	32	32.35	32	28.40	6000	6,89x10 ⁻⁴	17.43
L1375.32-64-0500	32x64	64	32.35	32	28.40	500	6,89x10 ⁻⁴	2.91
L1375.32-64-0600	32x64	64	32.35	32	28.40	600	6,89x10 ⁻⁴	3.49
L1375.32-64-0800	32x64	64	32.35	32	28.40	800	6,89x10 ⁻⁴	4.65
L1375.32-64-1000	32x64	64	32.35	32	28.40	1000	6,89x10 ⁻⁴	5.81
L1375.32-64-1500	32x64	64	32.35	32	28.40	1500	6,89x10 ⁻⁴	8.72
L1375.32-64-2000	32x64	64	32.35	32	28.40	2000	6,89x10 ⁻⁴	11.62
L1375.32-64-2500	32x64	64	32.35	32	28.40	2500	6,89x10 ⁻⁴	14.53
L1375.32-64-3000	32x64	64	32.35	32	28.40	3000	6,89x10 ⁻⁴	17.43
L1375.32-64-3500	32x64	64	32.35	32	28.40	3500	6,89x10 ⁻⁴	4.65
L1375.32-64-4000	32x64	64	32.35	32	28.40	4000	6,89x10 ⁻⁴	5.81
L1375.32-64-4500	32x64	64	32.35	32	28.40	4500	6,89x10 ⁻⁴	8.72
L1375.32-64-5000	32x64	64	32.35	32	28.40	5000	6,89x10 ⁻⁴	11.62
L1375.32-64-5500	32x64	64	32.35	32	28.40	5500	6,89x10 ⁻⁴	14.53
L1375.32-64-6000	32x64	64	32.35	32	28.40	6000	6,89x10 ⁻⁴	17.43

BALL SCREW & NUTS



L1375.40



Material

Steel (CF53 or C55R), induction hardened to 60 HRC ± 2 , polished.

Technical Notes

Gothic profile with a 5, 10 or 20mm lead. Tolerance T7 - 50 μ /300mm. Shorter lengths or longer lengths up to a maximum

of 6000mm available.

For ball screw nuts see parts L1370-L1374 & L1377.

For end screw machining to suit ball screw support units see relevant ball screw supports (L1388-L1406). End machining on request.

Important Notes

Ensure the ball nut can be fitted to the ball screw after machining. Do not remove the ball nut from the sleeve prior to installation - the balls come free rendering the ball nut unusable.

Order No.	Screw dia. x lead	Lead w_1	d_1	d_2	d_3	l_1	Mass moment of inertia $kg \cdot m^2$	Weight kg
L1375.40-05-0500	40x 5	5	41.08	40	37.9	500	$1,81 \times 10^{-3}$	4.72
L1375.40-05-0600	40x 5	5	41.08	40	37.9	600	$1,81 \times 10^{-3}$	5.66
L1375.40-05-0800	40x 5	5	41.08	40	37.9	800	$1,81 \times 10^{-3}$	7.55
L1375.40-05-1000	40x 5	5	41.08	40	37.9	1000	$1,81 \times 10^{-3}$	9.44
L1375.40-05-1500	40x 5	5	41.08	40	37.9	1500	$1,81 \times 10^{-3}$	14.16
L1375.40-05-2000	40x 5	5	41.08	40	37.9	2000	$1,81 \times 10^{-3}$	18.88
L1375.40-05-2500	40x 5	5	41.08	40	37.9	2500	$1,81 \times 10^{-3}$	23.60
L1375.40-05-3000	40x 5	5	41.08	40	37.9	3000	$1,81 \times 10^{-3}$	28.32
L1375.40-05-3500	40x 5	5	41.08	40	37.9	3500	$1,81 \times 10^{-3}$	7.55
L1375.40-05-4000	40x 5	5	41.08	40	37.9	4000	$1,81 \times 10^{-3}$	9.44
L1375.40-05-4500	40x 5	5	41.08	40	37.9	4500	$1,81 \times 10^{-3}$	14.16
L1375.40-05-5000	40x 5	5	41.08	40	37.9	5000	$1,81 \times 10^{-3}$	18.88
L1375.40-05-5500	40x 5	5	41.08	40	37.9	5500	$1,81 \times 10^{-3}$	23.60
L1375.40-05-6000	40x 5	5	41.08	40	37.9	6000	$1,81 \times 10^{-3}$	28.32
L1375.40-10-0500	40x10	10	42.15	40	35.8	500	$1,66 \times 10^{-3}$	4.51
L1375.40-10-0600	40x10	10	42.15	40	35.8	600	$1,66 \times 10^{-3}$	5.41
L1375.40-10-0800	40x10	10	42.15	40	35.8	800	$1,66 \times 10^{-3}$	7.22
L1375.40-10-1000	40x10	10	42.15	40	35.8	1000	$1,66 \times 10^{-3}$	9.02
L1375.40-10-1500	40x10	10	42.15	40	35.8	1500	$1,66 \times 10^{-3}$	13.53
L1375.40-10-2000	40x10	10	42.15	40	35.8	2000	$1,66 \times 10^{-3}$	18.04
L1375.40-10-2500	40x10	10	42.15	40	35.8	2500	$1,66 \times 10^{-3}$	22.55
L1375.40-10-3000	40x10	10	42.15	40	35.8	3000	$1,66 \times 10^{-3}$	27.06
L1375.40-10-3500	40x10	10	42.15	40	37.9	3500	$1,81 \times 10^{-3}$	7.55
L1375.40-10-4000	40x10	10	42.15	40	37.9	4000	$1,81 \times 10^{-3}$	9.44
L1375.40-10-4500	40x10	10	42.15	40	37.9	4500	$1,81 \times 10^{-3}$	14.16
L1375.40-10-5000	40x10	10	42.15	40	37.9	5000	$1,81 \times 10^{-3}$	18.88
L1375.40-10-5500	40x10	10	42.15	40	37.9	5500	$1,81 \times 10^{-3}$	23.60
L1375.40-10-6000	40x10	10	42.15	40	37.9	6000	$1,81 \times 10^{-3}$	28.32
L1375.40-20-0500	40x20	20	42.15	40	35.8	500	$1,66 \times 10^{-3}$	4.51
L1375.40-20-0600	40x20	20	42.15	40	35.8	600	$1,66 \times 10^{-3}$	5.41



Ø 40 Ball Screws rolled

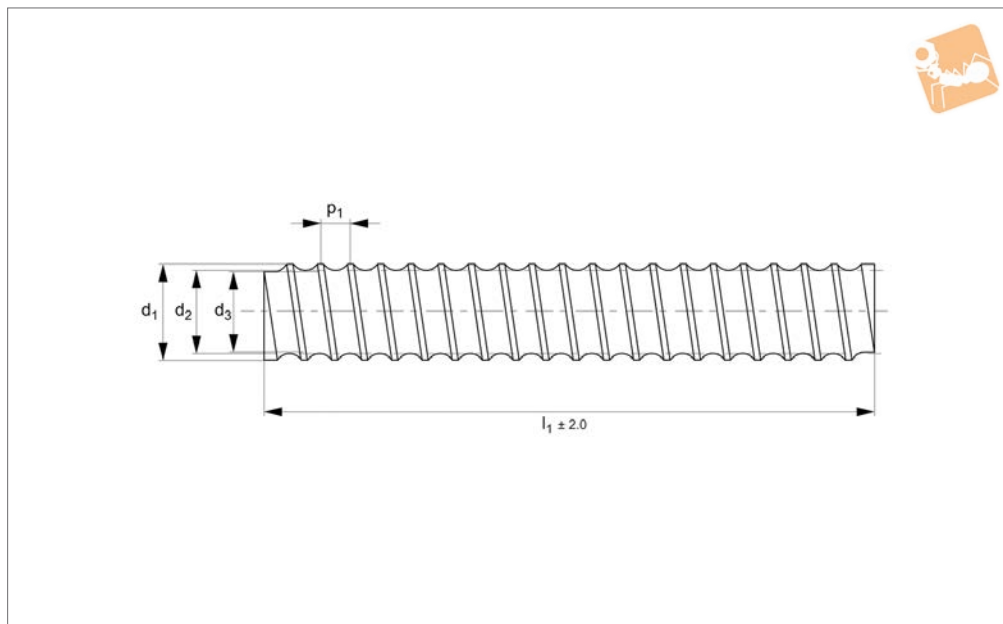
Ball Screw & Nuts



Order No.	Screw dia. x lead	Lead w_1	d_1	d_2	d_3	l_1	Mass moment of inertia $\text{kg}\cdot\text{m}^2$	Weight kg
L1375.40-20-0800	40x20	20	42.15	40	35.8	800	$1,66 \times 10^{-3}$	7.22
L1375.40-20-1000	40x20	20	42.15	40	35.8	1000	$1,66 \times 10^{-3}$	9.02
L1375.40-20-1500	40x20	20	42.15	40	35.8	1500	$1,66 \times 10^{-3}$	13.53
L1375.40-20-2000	40x20	20	42.15	40	35.8	2000	$1,66 \times 10^{-3}$	18.04
L1375.40-20-2500	40x20	20	42.15	40	35.8	2500	$1,66 \times 10^{-3}$	22.55
L1375.40-20-3000	40x20	20	42.15	40	35.8	3000	$1,66 \times 10^{-3}$	27.06
L1375.40-20-3500	40x20	20	41.08	40	37.9	3500	$1,81 \times 10^{-3}$	7.55
L1375.40-20-4000	40x20	20	41.08	40	37.9	4000	$1,81 \times 10^{-3}$	9.44
L1375.40-20-4500	40x20	20	41.08	40	37.9	4500	$1,81 \times 10^{-3}$	14.16
L1375.40-20-5000	40x20	20	41.08	40	37.9	5000	$1,81 \times 10^{-3}$	18.88
L1375.40-20-5500	40x20	20	41.08	40	37.9	5500	$1,81 \times 10^{-3}$	23.60
L1375.40-20-6000	40x20	20	41.08	40	37.9	6000	$1,81 \times 10^{-3}$	28.32
L1375.40-40-0500	40x40	40	39.52	40	33.2	500	$1,43 \times 10^{-3}$	4.15
L1375.40-40-0600	40x40	40	39.52	40	33.2	600	$1,43 \times 10^{-3}$	4.97
L1375.40-40-0800	40x40	40	39.52	40	33.2	800	$1,43 \times 10^{-3}$	6.63
L1375.40-40-1000	40x40	40	39.52	40	33.2	1000	$1,43 \times 10^{-3}$	8.29
L1375.40-40-1500	40x40	40	39.52	40	33.2	1500	$1,43 \times 10^{-3}$	12.44
L1375.40-40-2000	40x40	40	39.52	40	33.2	2000	$1,43 \times 10^{-3}$	16.58
L1375.40-40-2500	40x40	40	39.52	40	33.2	2500	$1,43 \times 10^{-3}$	20.73
L1375.40-40-3000	40x40	40	39.52	40	33.2	3000	$1,43 \times 10^{-3}$	24.87
L1375.40-40-3500	40x40	40	41.08	40	37.9	3500	$1,81 \times 10^{-3}$	7.55
L1375.40-40-4000	40x40	40	41.08	40	37.9	4000	$1,81 \times 10^{-3}$	9.44
L1375.40-40-4500	40x40	40	41.08	40	37.9	4500	$1,81 \times 10^{-3}$	14.16
L1375.40-40-5000	40x40	40	41.08	40	37.9	5000	$1,81 \times 10^{-3}$	18.88
L1375.40-40-5500	40x40	40	41.08	40	37.9	5500	$1,81 \times 10^{-3}$	23.60
L1375.40-40-6000	40x40	40	41.08	40	37.9	6000	$1,81 \times 10^{-3}$	28.32
L1375.40-80-0500	40x80	80	39.52	40	33.2	500	$1,43 \times 10^{-3}$	4.15
L1375.40-80-0600	40x80	80	39.52	40	33.2	600	$1,43 \times 10^{-3}$	4.97
L1375.40-80-0800	40x80	80	39.52	40	33.2	800	$1,43 \times 10^{-3}$	6.63
L1375.40-80-1000	40x80	80	39.52	40	33.2	1000	$1,43 \times 10^{-3}$	8.29
L1375.40-80-1500	40x80	80	39.52	40	33.2	1500	$1,43 \times 10^{-3}$	12.44
L1375.40-80-2000	40x80	80	39.52	40	33.2	2000	$1,43 \times 10^{-3}$	16.58
L1375.40-80-2500	40x80	80	39.52	40	33.2	2500	$1,43 \times 10^{-3}$	20.73
L1375.40-80-3000	40x80	80	39.52	40	33.2	3000	$1,43 \times 10^{-3}$	24.87
L1375.40-80-3500	40x80	80	41.08	40	37.9	3500	$1,81 \times 10^{-3}$	7.55
L1375.40-80-4000	40x80	80	41.08	40	37.9	4000	$1,81 \times 10^{-3}$	9.44
L1375.40-80-4500	40x80	80	41.08	40	37.9	4500	$1,81 \times 10^{-3}$	14.16
L1375.40-80-5000	40x80	80	41.08	40	37.9	5000	$1,81 \times 10^{-3}$	18.88
L1375.40-80-5500	40x80	80	41.08	40	37.9	5500	$1,81 \times 10^{-3}$	23.60
L1375.40-80-6000	40x80	80	41.08	40	37.9	6000	$1,81 \times 10^{-3}$	28.32



L1375.50



Material

Steel (CF53 or C55R), induction hardened to 60 HRC ± 2 , polished.

Technical Notes

Gothic profile with a 10 or 20mm lead. Tolerance T7 - 50 μ /300mm. Shorter lengths or longer lengths up to a maximum

of 6000mm available.

For ball screw nuts see parts L1370-L1374 & L1377.

For end screw machining to suit ball screw support units see relevant ball screw supports (L1388-L1406). End machining on request.

Important Notes

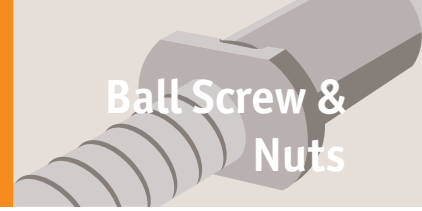
Ensure the ball nut can be fitted to the ball screw after machining. Do not remove the ball nut from the sleeve prior to installation - the balls come free rendering the ball nut unusable.

Order No.	Screw dia. x lead	Lead w_1	d_1	d_2	d_3	l_1	Mass moment of inertia $kg \cdot m^2$	Weight kg
L1375.50-05-0500	50x05	05	52.15	50	45.80	500	$4,19 \times 10^{-3}$	7.18
L1375.50-05-0600	50x05	05	52.15	50	45.80	600	$4,19 \times 10^{-3}$	8.61
L1375.50-05-0800	50x05	05	52.15	50	45.80	800	$4,19 \times 10^{-3}$	11.48
L1375.50-05-1000	50x05	05	52.15	50	45.80	1000	$4,19 \times 10^{-3}$	14.35
L1375.50-05-1500	50x05	05	52.15	50	45.80	1500	$4,19 \times 10^{-3}$	21.53
L1375.50-05-2000	50x05	05	52.15	50	45.80	2000	$4,19 \times 10^{-3}$	28.70
L1375.50-05-2500	50x05	05	52.15	50	45.80	2500	$4,19 \times 10^{-3}$	35.88
L1375.50-05-3000	50x05	05	52.15	50	45.80	3000	$4,19 \times 10^{-3}$	43.05
L1375.50-05-3500	50x05	05	52.15	50	45.80	3500	$4,19 \times 10^{-3}$	11.48
L1375.50-05-4000	50x05	05	52.15	50	45.80	4000	$4,19 \times 10^{-3}$	14.35
L1375.50-05-4500	50x05	05	52.15	50	45.80	4500	$4,19 \times 10^{-3}$	21.53
L1375.50-05-5000	50x05	05	52.15	50	45.80	5000	$4,19 \times 10^{-3}$	28.70
L1375.50-05-5500	50x05	05	52.15	50	45.80	5500	$4,19 \times 10^{-3}$	35.88
L1375.50-05-6000	50x05	05	52.15	50	45.80	6000	$4,19 \times 10^{-3}$	43.05
L1375.50-10-0500	50x10	10	52.15	50	45.80	500	$4,19 \times 10^{-3}$	7.18
L1375.50-10-0600	50x10	10	52.15	50	45.80	600	$4,19 \times 10^{-3}$	8.61
L1375.50-10-0800	50x10	10	52.15	50	45.80	800	$4,19 \times 10^{-3}$	11.48
L1375.50-10-1000	50x10	10	52.15	50	45.80	1000	$4,19 \times 10^{-3}$	14.35
L1375.50-10-1500	50x10	10	52.15	50	45.80	1500	$4,19 \times 10^{-3}$	21.53
L1375.50-10-2000	50x10	10	52.15	50	45.80	2000	$4,19 \times 10^{-3}$	28.70
L1375.50-10-2500	50x10	10	52.15	50	45.80	2500	$4,19 \times 10^{-3}$	35.88
L1375.50-10-3000	50x10	10	52.15	50	45.80	3000	$4,19 \times 10^{-3}$	43.05
L1375.50-10-3500	50x10	10	52.15	50	45.80	3500	$4,19 \times 10^{-3}$	11.48
L1375.50-10-4000	50x10	10	52.15	50	45.80	4000	$4,19 \times 10^{-3}$	14.35
L1375.50-10-4500	50x10	10	52.15	50	45.80	4500	$4,19 \times 10^{-3}$	21.53
L1375.50-10-5000	50x10	10	52.15	50	45.80	5000	$4,19 \times 10^{-3}$	28.70
L1375.50-10-5500	50x10	10	52.15	50	45.80	5500	$4,19 \times 10^{-3}$	35.88
L1375.50-10-6000	50x10	10	52.15	50	45.80	6000	$4,19 \times 10^{-3}$	43.05
L1375.50-20-0500	50x20	20	53.58	50	44.05	500	$4,45 \times 10^{-3}$	7.41
L1375.50-20-0600	50x20	20	53.58	50	44.05	600	$4,45 \times 10^{-3}$	8.89



Ø 50 Ball Screws rolled

Ball Screw & Nuts

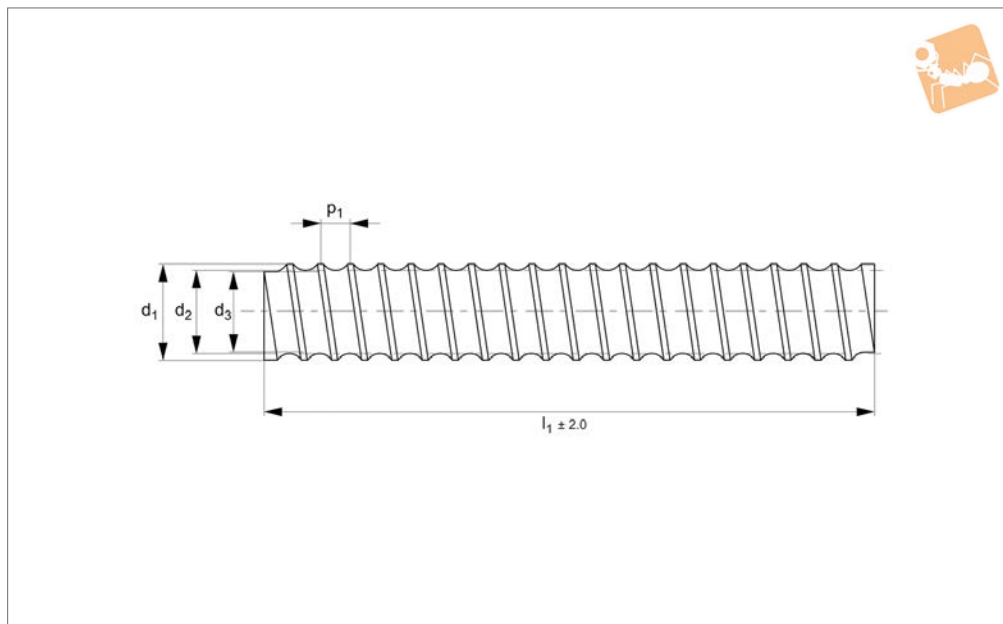


Order No.	Screw dia. x lead	Lead w_1	d_1	d_2	d_3	l_1	Mass moment of inertia kg·m ²	Weight kg
L1375.50-20-0800	50x20	20	53.58	50	44.05	800	4,45x10 ⁻³	11.86
L1375.50-20-1000	50x20	20	53.58	50	44.05	1000	4,45x10 ⁻³	14.82
L1375.50-20-1500	50x20	20	53.58	50	44.05	1500	4,45x10 ⁻³	22.23
L1375.50-20-2000	50x20	20	53.58	50	44.05	2000	4,45x10 ⁻³	29.64
L1375.50-20-2500	50x20	20	53.58	50	44.05	2500	4,45x10 ⁻³	37.05
L1375.50-20-3000	50x20	20	53.58	50	44.05	3000	4,45x10 ⁻³	44.46
L1375.50-20-3500	50x20	20	53.58	50	44.05	3500	4,45x10 ⁻³	11.86
L1375.50-20-4000	50x20	20	53.58	50	44.05	4000	4,45x10 ⁻³	14.82
L1375.50-20-4500	50x20	20	53.58	50	44.05	4500	4,45x10 ⁻³	22.23
L1375.50-20-5000	50x20	20	53.58	50	44.05	5000	4,45x10 ⁻³	29.64
L1375.50-20-5500	50x20	20	53.58	50	44.05	5500	4,45x10 ⁻³	37.05
L1375.50-20-6000	50x20	20	53.58	50	44.05	6000	4,45x10 ⁻³	44.46
L1375.50-50-0500	50x50	50	53.58	50	44.05	500	4,45x10 ⁻³	7.30
L1375.50-50-0600	50x50	50	53.58	50	44.05	600	4,45x10 ⁻³	8.76
L1375.50-50-0800	50x50	50	53.58	50	44.05	800	4,45x10 ⁻³	11.68
L1375.50-50-1000	50x50	50	53.58	50	44.05	1000	4,45x10 ⁻³	14.59
L1375.50-50-1500	50x50	50	53.58	50	44.05	1500	4,45x10 ⁻³	21.89
L1375.50-50-2000	50x50	50	53.58	50	44.05	2000	4,45x10 ⁻³	29.18
L1375.50-50-2500	50x50	50	53.58	50	44.05	2500	4,45x10 ⁻³	36.48
L1375.50-50-3000	50x50	50	53.58	50	44.05	3000	4,45x10 ⁻³	43.77
L1375.50-50-3500	50x50	50	53.58	50	44.05	3500	4,45x10 ⁻³	11.68
L1375.50-50-4000	50x50	50	53.58	50	44.05	4000	4,45x10 ⁻³	14.59
L1375.50-50-4500	50x50	50	53.58	50	44.05	4500	4,45x10 ⁻³	21.89
L1375.50-50-5000	50x50	50	53.58	50	44.05	5000	4,45x10 ⁻³	29.18
L1375.50-50-5500	50x50	50	53.58	50	44.05	5500	4,45x10 ⁻³	36.48
L1375.50-50-6000	50x50	50	53.58	50	44.05	6000	4,45x10 ⁻³	43.77
L1375.50-100-0500	50x100	100	53.58	50	44.05	500	4,45x10 ⁻³	7.30
L1375.50-100-0600	50x100	100	53.58	50	44.05	600	4,45x10 ⁻³	8.76
L1375.50-100-0800	50x100	100	53.58	50	44.05	800	4,45x10 ⁻³	11.68
L1375.50-100-1000	50x100	100	53.58	50	44.05	1000	4,45x10 ⁻³	14.59
L1375.50-100-1500	50x100	100	53.58	50	44.05	1500	4,45x10 ⁻³	21.89
L1375.50-100-2000	50x100	100	53.58	50	44.05	2000	4,45x10 ⁻³	29.18
L1375.50-100-2500	50x100	100	53.58	50	44.05	2500	4,45x10 ⁻³	36.48
L1375.50-100-3000	50x100	100	53.58	50	44.05	3000	4,45x10 ⁻³	43.77
L1375.50-100-3500	50x100	100	53.58	50	44.05	3500	4,45x10 ⁻³	11.68
L1375.50-100-4000	50x100	100	53.58	50	44.05	4000	4,45x10 ⁻³	14.59
L1375.50-100-4500	50x100	100	53.58	50	44.05	4500	4,45x10 ⁻³	21.89
L1375.50-100-5000	50x100	100	53.58	50	44.05	5000	4,45x10 ⁻³	29.18
L1375.50-100-5500	50x100	100	53.58	50	44.05	5500	4,45x10 ⁻³	36.48
L1375.50-100-6000	50x100	100	53.58	50	44.05	6000	4,45x10 ⁻³	43.77

BALL SCREW & NUTS



L1375.80



Material

Steel (CF53 or C55R), induction hardened to 60 HRC ±2, polished.

Technical Notes

Gothic profile with a 10mm lead.
Tolerance T7 - 50µ/300mm. Shorter lengths or longer lengths up to a maximum

of 6500mm available.

For ball screw nuts see parts L1370-L1374 & L1377.

For end screw machining to suit ball screw support units see relevant ball screw supports (L1388-L1406). End machining on request.

Important Notes

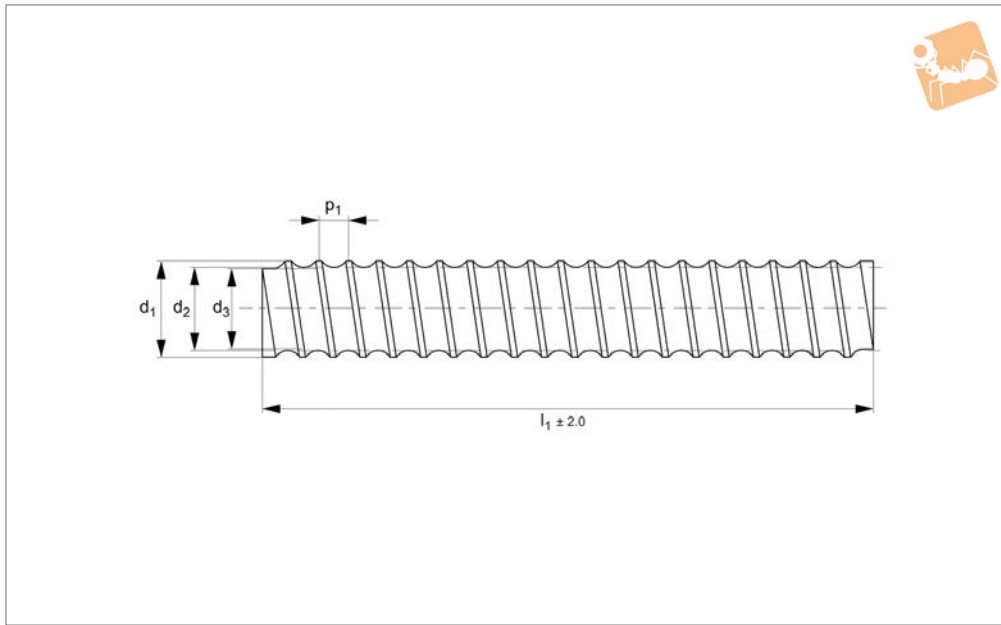
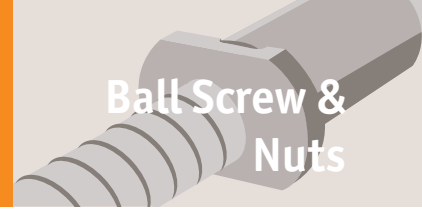
Ensure the ball nut can be fitted to the ball screw after machining. Do not remove the ball nut from the sleeve prior to installation - the balls come free rendering the ball nut unusable.

Order No.	Screw dia. x lead	Lead w_1	d_1	d_2	d_3	l_1	Mass moment of inertia $kg \cdot m^2$	Weight kg
L1375.80-10-0500	80x10	10	82.15	80	75.8	500	$2,89 \times 10^{-2}$	18.88
L1375.80-10-0600	80x10	10	82.15	80	75.8	600	$2,89 \times 10^{-2}$	22.66
L1375.80-10-0700	80x10	10	82.15	80	75.8	700	$2,89 \times 10^{-2}$	26.43
L1375.80-10-0800	80x10	10	82.15	80	75.8	800	$2,89 \times 10^{-2}$	30.21
L1375.80-10-1000	80x10	10	82.15	80	75.8	1000	$2,89 \times 10^{-2}$	37.76
L1375.80-10-1500	80x10	10	82.15	80	75.8	1500	$2,89 \times 10^{-2}$	56.64
L1375.80-10-2000	80x10	10	82.15	80	75.8	2000	$2,89 \times 10^{-2}$	75.52
L1375.80-10-2500	80x10	10	82.15	80	75.8	2500	$2,89 \times 10^{-2}$	94.40
L1375.80-10-3000	80x10	10	82.15	80	75.8	3000	$2,89 \times 10^{-2}$	113.28
L1375.80-10-3500	80x10	10	82.15	80	75.8	3500	$2,89 \times 10^{-2}$	30.21
L1375.80-10-4000	80x10	10	82.15	80	75.8	4000	$2,89 \times 10^{-2}$	37.76
L1375.80-10-4500	80x10	10	82.15	80	75.8	4500	$2,89 \times 10^{-2}$	56.64
L1375.80-10-5000	80x10	10	82.15	80	75.8	5000	$2,89 \times 10^{-2}$	75.52
L1375.80-10-5500	80x10	10	82.15	80	75.8	5500	$2,89 \times 10^{-2}$	94.40
L1375.80-10-6000	80x10	10	82.15	80	75.8	6000	$2,89 \times 10^{-2}$	113.28
L1375.80-10-6500	80x10	10	82.15	80	75.8	6500	$2,89 \times 10^{-2}$	113.28



Ø 63 Ball Screws rolled

Ball Screw & Nuts



L1375.63

BALL SCREW & NUTS

Material

Steel (CF53 or C55R), induction hardened to 60 HRC ± 2 , polished.

Technical Notes

Gothic profile with a 10mm lead. Tolerance T7 - 50 μ /300mm. Shorter lengths or longer lengths up to a maximum

of 6000mm available.

For ball screw nuts see parts L1370-L1374 & L1377.

For end screw machining to suit ball screw support units see relevant ball screw supports (L1388-L1406). End machining on request.

Important Notes

Ensure the ball nut can be fitted to the ball screw after machining. Do not remove the ball nut from the sleeve prior to installation - the balls come free rendering the ball nut unusable.

Order No.	Screw dia. x lead	Lead w_1	d_1	d_2	d_3	l_1	Mass moment of inertia $kg \cdot m^2$	Weight kg
L1375.63-10-0500	63x10	10	65.15	63	58.8	500	$1,09 \times 10^{-2}$	11.56
L1375.63-10-0600	63x10	10	65.15	63	58.8	600	$1,09 \times 10^{-2}$	13.87
L1375.63-10-0700	63x10	10	65.15	63	58.8	700	$1,09 \times 10^{-2}$	16.18
L1375.63-10-0800	63x10	10	65.15	63	58.8	800	$1,09 \times 10^{-2}$	18.50
L1375.63-10-1000	63x10	10	65.15	63	58.8	1000	$1,09 \times 10^{-2}$	23.12
L1375.63-10-1500	63x10	10	65.15	63	58.8	1500	$1,09 \times 10^{-2}$	34.68
L1375.63-10-2000	63x10	10	65.15	63	58.8	2000	$1,09 \times 10^{-2}$	46.24
L1375.63-10-2500	63x10	10	65.15	63	58.8	2500	$1,09 \times 10^{-2}$	57.80
L1375.63-10-3000	63x10	10	65.15	63	58.8	3000	$1,09 \times 10^{-2}$	69.36
L1375.63-10-3500	63x10	10	65.15	63	58.8	3500	$1,09 \times 10^{-2}$	18.50
L1375.63-10-4000	63x10	10	65.15	63	58.8	4000	$1,09 \times 10^{-2}$	23.12
L1375.63-10-4500	63x10	10	65.15	63	58.8	4500	$1,09 \times 10^{-2}$	34.68
L1375.63-10-5000	63x10	10	65.15	63	58.8	5000	$1,09 \times 10^{-2}$	46.24
L1375.63-10-5500	63x10	10	65.15	63	58.8	5500	$1,09 \times 10^{-2}$	57.80
L1375.63-10-6000	63x10	10	65.15	63	58.8	6000	$1,09 \times 10^{-2}$	69.36
L1375.63-10-6500	63x10	10	65.15	63	58.8	6500	$1,09 \times 10^{-2}$	69.36



When selecting a ball screw some of the main factors to consider are:

- Maximum required travel speed
- Maximum axial compression (buckling load)
- Method of support of the ball screws
- Type of unit required, flanged, cylindrical etc.

In general it is best to support the ball screws with our ball screw support units (L1388 to L1406) with a fixed end (generally where the motor is mounted) and a floating (support) end. The support units are selected to suit the loads likely to be required, the size of the ball screw (especially its core diameter) and the type of mounting required. Details of the machining required for each end of the ball screw are shown in the bearing mounts technical section.

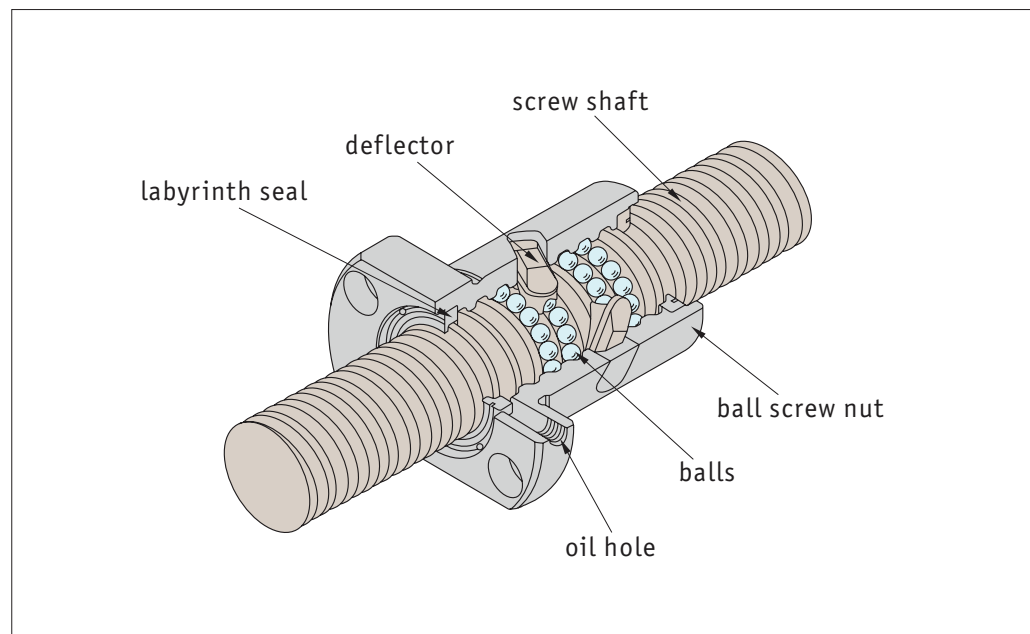
The data table for the ball screws show the diameter, the lead of the ball screw (i.e. how far the nut travels for one complete revolution of the screw) as well as the mass moment of inertia (also known as the rotational moment of inertia) - this is the extent to which an object resists rotational acceleration about its axis.

Maximum speeds and buckling load data are shown in the technical pages.

When using a ball screw the ambient temperature should not exceed +80°C.

During assembly, the parallel alignment of the guides should be ensure.

The details on the concentricity of the ball nuts to the ball screws are shown on the technical pages. For linear guideways for use with ball screws please see our part numbers L1016 etc.



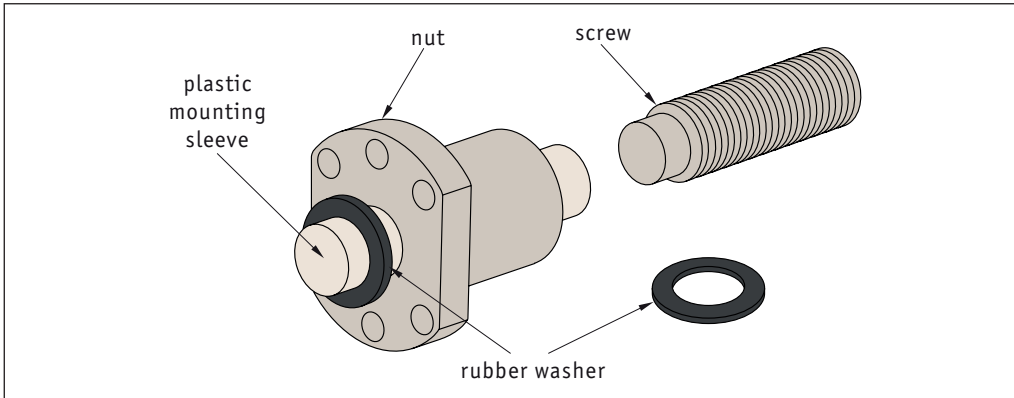
Lubrication - the ball screws must be adequately lubricated. This is dependent on load, speed, motion sequence and temperature. Do not use lubricants containing Mo/So or graphite.



In general, the ball nut is already on the ball screw and should not be removed. If you need to machine the ball screw, then the plastic mounting sleeve should be used to retain the ball bearings whilst the nut is removed.

Mounting the nut on the screw

Sometimes ball screws are delivered with a separate ball nut. When mounting the nut on to the screw take care as if done incorrectly the ball bearings may come off the ball nut.



Ball nuts should be mounted only with the help of a plastic mounting sleeve (delivered with the nut). The start of the thread should be aligned so that the seal and the internal parts of the nut are not damaged.

1. Remove the rubber washer from one side of the sleeve. Push on the nut with the sleeve on the end of the screw. Press the sleeve against the start of the screw thread.
2. Screw the nut onto the thread using a slight axial pressure, then screw the nut on for its entire length.
3. Remove the mounting sleeve only when the nut is completely threaded on to the screw.
4. Lock the nut on to the screw (to prevent any unscrewing) using an O ring or similar - whilst installing the system.

If the balls do unfortunately escape...

1. Pick them up (the nut is only compatible with the original balls). The load capacity can still be achieved if one or two balls are missing.
2. Carefully clean all parts, use the sleeve as a mounting jig and replace the balls.
3. Start with the lowest circuit. Insert the balls into the nut circuit - the sleeve prevents the balls from falling out again.
4. Do not place the balls in the empty circuit located between the two deflectors.

If you have any technical queries please call **0333 207 4498**.