

Power Leadscrew Range

THE DYNAMICS OF MOVEMENT

LEADSCREWS MACHINED IN-HOUSE:

Power Leadscrews are available in both steel and stainless steel with a range of bespoke machining options available. These can be supplied with a large selection of round bodied flanged or non-flanged bronze matched thread nuts from stock.

Power Leadscrew Order Example

Single Start Screws:

Code: **TR 20 X4 R -2000 C45**

Options: 1 2 3 4 5 6

Options	Lead Screw Specifications
1	Trapezoidal Thread
2	Nominal Screw Diameter
3	Pitch
4	Thread Direction: R or L (Right or Left)
5	Total Screw Length
6	Material

Multi Start Screws:

Code: **TR 2 -24 X4 R -1000 C45**

Options: 1 2 3 4 5 6 7

Options	Lead Screw Specifications
1	Trapezoidal Thread
2	Number Of Starts
3	Nominal Screw Diameter
4	Pitch
5	Thread Direction: R or L (Right or Left)
6	Total Screw Length
7	Material

Leadscrew Nut:

Code: **MLN-FB 10 2 R**

Options: 1 2 3 4

Options	Lead Screw Specifications
1	Nut Type
2	Diameter
3	Lead
4	Thread Direction: R or L (Right or Left)

Trapezoidal Screw Specifications

Diameter x Lead	d1		d2		d3		Thread Starts	Lead Angle	⁽¹⁾ Efficiency η		⁽²⁾ H1 mm	I Moment of inertia mm ⁴
	Major diameter tolerance 4h		Effective or pitch dia. tolerance 7e		Minor diameter tolerance 7h				f=0.1	f=0.2		
	min.	max.	min.	max.	min.	max.						
	mm		mm		mm							
Tr 10 x 2	9.820	10.000	8.739	8.929	7.191	7.500	1	4°02'	0.41	0.26	1.0	131
Tr 10 x 3	9.764	10.000	8.203	8.415	6.150	6.500	1	6°25'	0.52	0.35	1.5	70
Tr 10 x 4 (P2)	9.820	10.000	8.739	8.929	7.191	7.500	2	8°03'	0.58	0.40	1.0	131
Tr 12 x 3	11.764	12.000	10.191	10.415	8.135	8.500	1	5°12'	0.47	0.31	1.5	215
Tr 12 x 6 (P3)	11.764	12.000	10.191	10.415	8.135	8.500	2	10°19'	0.63	0.46	1.5	215
Tr 14 x 3	13.764	14.000	12.191	12.415	10.135	10.500	1	4°22'	0.43	0.27	1.5	518
Tr 14 x 4	13.700	14.000	11.640	11.905	9.074	9.500	1	6°03'	0.51	0.34	2.0	333
Tr 14 x 6 (P3)	13.764	14.000	12.191	12.415	10.135	10.500	2	8°41'	0.59	0.42	1.5	518
Tr 16 x 4	15.700	16.000	13.640	13.905	11.074	11.500	1	5°12'	0.47	0.31	2.0	738
Tr 16 x 8 (P4)	15.700	16.000	13.640	13.905	11.074	11.500	2	10°19'	0.63	0.46	2.0	738
Tr 18 x 4	17.700	18.000	15.640	15.905	13.074	13.500	1	4°33'	0.44	0.28	2.0	1434
Tr 18 x 8 (P4)	17.700	18.000	15.640	15.905	13.074	13.500	2	9°02'	0.60	0.43	2.0	1434
Tr 20 x 4	19.700	20.000	17.640	17.905	15.074	15.500	1	4°03'	0.41	0.26	2.0	2534
Tr 20 x 8 (P4)	19.700	20.000	17.640	17.905	15.074	15.500	2	8°03'	0.58	0.40	2.0	2534
Tr 20 x 20 (P5)	19.665	20.000	17.114	17.394	14.044	14.500	4	20°00'	0.76	0.60	2.5	1910
Tr 22 x 5	21.665	22.000	19.114	19.394	16.044	16.500	1	4°40'	0.45	0.28	2.5	3232
Tr 22 x 10 (P5)	21.665	22.000	19.114	19.394	16.044	16.500	2	9°16'	0.61	0.43	2.5	3232
Tr 24 x 5	23.665	24.000	21.094	21.394	18.019	18.500	1	4°14'	0.42	0.27	2.5	5175
Tr 24 x 10 (P5)	23.665	24.000	21.094	21.394	18.019	18.500	2	8°25'	0.59	0.41	2.5	5175
Tr 25 x 3	24.764	25.000	23.165	23.415	21.103	21.500	1	2°20'	0.29	0.17	1.5	9735
Tr 25 x 5	24.665	25.000	22.094	22.394	19.019	19.500	1	4°03'	0.41	0.26	2.5	6423
Tr 25 x 10 (P5)	24.665	25.000	22.094	22.394	19.019	19.500	2	8°03'	0.58	0.40	2.5	6423
Tr 25 x 25 (P5)	24.665	25.000	22.094	22.394	19.019	19.500	5	19°30'	0.75	0.60	2.5	6423
Tr 26 x 5	25.665	26.000	23.094	23.394	20.019	20.500	1	3°52'	0.40	0.25	2.5	7884
Tr 26 x 10 (P5)	25.665	26.000	23.094	23.394	20.019	20.500	2	7°42'	0.57	0.39	2.5	7884
Tr 28 x 5	27.665	28.000	25.094	25.394	22.019	22.500	1	3°34'	0.38	0.23	2.5	11539
Tr 28 x 10 (P5)	27.665	28.000	25.094	25.394	22.019	22.500	2	7°07'	0.55	0.37	2.5	11539
Tr 30 x 3	29.764	30.000	28.165	28.415	26.103	26.500	1	1°55'	0.25	0.14	1.5	22900
Tr 30 x 4	29.700	30.000	27.640	27.905	25.074	25.500	1	2°36'	0.31	0.18	2.0	19400
Tr 30 x 5	29.665	30.000	27.094	27.394	24.019	24.500	1	3°19'	0.36	0.22	2.5	16340
Tr 30 x 6	29.625	30.000	26.547	26.882	22.463	23.000	1	4°03'	0.41	0.26	3.0	13650
Tr 30 x 12 (P6)	29.625	30.000	26.547	26.882	22.463	23.000	2	8°03'	0.58	0.40	3.0	13650
Tr 30 x 30 (P5)	29.665	30.000	27.094	27.394	24.019	24.500	6	19°09'	0.75	0.59	2.5	16340
Tr 32 x 6	31.625	32.000	28.547	28.882	24.463	25.000	1	3°46'	0.39	0.24	3.0	17580
Tr 32 x 12 (P6)	31.625	32.000	28.547	28.882	24.463	25.000	2	7°30'	0.56	0.38	3.0	17580
Tr 35 x 3	34.764	35.000	33.165	33.415	31.103	31.500	1	1°38'	0.22	0.12	1.5	46128
Tr 35 x 4	34.700	35.000	32.640	32.905	30.074	30.500	1	2°13'	0.28	0.16	2.0	40150
Tr 35 x 5	34.665	35.000	32.094	32.394	29.019	29.500	1	2°48'	0.33	0.19	2.5	34810
Tr 35 x 6	34.625	35.000	31.547	31.882	27.463	28.000	1	3°25'	0.37	0.23	3.0	30000
Tr 35 x 8	34.550	35.000	30.493	30.868	25.399	26.000	1	4°42'	0.45	0.29	4.0	21980
Tr 36 x 6	35.625	36.000	32.547	32.882	28.463	29.000	1	3°19'	0.36	0.22	3.0	34540
Tr 36 x 12 (P6)	35.625	36.000	32.547	32.882	28.463	29.000	2	6°36'	0.53	0.36	3.0	34540
Tr 40 x 3	39.764	40.000	38.165	38.415	36.103	36.500	1	1°25'	0.20	0.11	1.5	83395
Tr 40 x 4	39.700	40.000	37.640	37.905	35.074	35.500	1	1°55'	0.25	0.14	2	74290
Tr 40 x 5	39.665	40.000	37.094	37.394	34.019	34.500	1	2°26'	0.30	0.17	2.5	65740
Tr 40 x 6	39.625	40.000	36.547	36.882	32.463	33.000	1	2°57'	0.34	0.20	3	57950
Tr 40 x 7	39.575	40.000	36.020	36.375	31.431	32.000	1	3°30'	0.38	0.23	3.5	51030
Tr 40 x 8	39.550	40.000	35.493	35.868	30.399	31.000	1	4°03'	0.41	0.26	4	44560
Tr 40 x 10	39.470	40.000	34.450	34.850	28.350	29.000	1	5°12'	0.47	0.31	5	31700
Tr 40 x 14 (P7)	39.575	40.000	36.020	36.375	31.431	32.000	2	6°58'	0.54	0.37	3.5	51030
Tr 40 x 40 (P8)	39.550	40.000	35.493	35.868	30.399	31.000	5	19°30'	0.75	0.60	4	44560
Tr 44 x 7	43.575	44.000	40.020	40.375	35.431	36.000	1	3°09'	0.35	0.21	3.5	81820
Tr 45 x 8	44.550	45.000	40.493	40.868	35.399	36.000	1	3°33'	0.38	0.23	4	81245
Tr 50 x 3	49.764	50.000	48.150	48.415	46.084	46.500	1	1°08'	0.16	0.09	1.5	121400
Tr 50 x 4	49.700	50.000	47.605	47.905	45.074	45.500	1	1°31'	0.21	0.12	2	202600
Tr 50 x 5	49.665	50.000	47.094	47.394	44.019	44.500	1	1°55'	0.25	0.14	2.5	184300
Tr 50 x 6	49.625	50.000	46.547	46.882	42.463	43.000	1	2°20'	0.29	0.17	3	167240
Tr 50 x 8	49.550	50.000	45.468	45.868	40.368	41.000	1	3°10'	0.35	0.21	4	136930
Tr 50 x 10	49.470	50.000	44.425	44.850	38.319	39.000	1	4°03'	0.41	0.26	5	105834
Tr 55 x 9	54.500	55.000	49.935	50.360	44.329	45.000	1	3°15'	0.36	0.22	4.5	189550
Tr 60 x 6	59.625	60.000	56.547	56.882	52.463	53.000	1	1°55'	0.25	0.14	3	386240
Tr 60 x 7	59.575	60.000	56.020	56.375	51.431	52.000	1	2°16'	0.28	0.16	3.5	343450
Tr 60 x 9	59.500	60.000	54.935	55.360	49.329	50.000	1	2°57'	0.34	0.20	4.5	302600
Tr 70 x 10	69.470	70.000	64.425	64.850	58.319	59.000	1	2°48'	0.33	0.19	5	587540
Tr 80 x 10	79.470	80.000	74.425	74.850	68.319	69.000	1	2°26'	0.30	0.17	5	1069390
Tr 90 x 12	89.400	90.000	83.335	83.830	76.246	77.000	1	2°36'	0.31	0.18	6	1658969
Tr 95 x 16	94.290	95.000	86.250	86.810	76.110	77.000	1	3°21'	0.37	0.22	8	1647164
Tr 100 x 12	99.400	100.000	93.330	93.830	86.215	87.000	1	2°19'	0.29	0.17	6	2712072
Tr 100 x 16	99.290	100.000	91.250	91.810	81.110	82.000	1	3°10'	0.35	0.21	8	2124553
Tr 120 x 14	119.330	120.000	112.290	112.820	103.157	104.00	1	2°16'	0.28	0.16	7	5558591
Tr 120 x 16	119.290	120.000	111.250	111.810	101.110	102.00	1	2°36'	0.31	0.16	8	5130342
Tr 140 x 14	139.330	140.000	132.290	132.820	123.157	124.00	1	1°55'	0.25	0.14	7	11292921
Tr 160 x 16	159.290	160.000	151.250	151.810	141.110	142.00	1	1°55'	0.25	0.14	8	19462609

(1) Useful effect for conversion of rotary movement to linear movement with friction coefficient $f=0.1$ and $f=0.2$.

(2) Radial support dimension between screw and nut thread.

Single Start Trapezoidal Screw List

Single Start	Carbon Steel				Stainless Steel			
	C45		C15		A2 (304)		A4 (316)	
	TRC45 accuracy 0.1mm / 300mm		TRC15 accuracy 0.2mm / 300mm		TR304 accuracy 0.2mm / 300mm		TR316 accuracy 0.2mm / 300mm	
Thread	RH	LH	RH	LH	RH	LH	RH	LH
Tr 10 x 2	•	•	•	•	•	•	•	•
Tr 10 x 3	•	•	•	•	•	•	•	•
Tr 12 x 3	•	•	•	•	•	•	•	•
Tr 14 x 3	•	•	•	•	•	•	•	•
Tr 14 x 4	•	•	•	•	•	•	•	•
Tr 16 x 4	•	•	•	•	•	•	•	•
Tr 18 x 4	•	•	•	•	•	•	•	•
Tr 20 x 4	•	•	•	•	•	•	•	•
Tr 22 x 5	•	•	•	•	•	•	•	•
Tr 24 x 5	•	•	•	•	•	•	•	•
Tr 25 x 3	•	•	•	•	•	•	•	•
Tr 25 x 5	•	•	•	•	•	•	•	•
Tr 26 x 5	•	•	•	•	•	•	•	•
Tr 28 x 5	•	•	•	•	•	•	•	•
Tr 30 x 3	•	•	•	•	•	•	•	•
Tr 30 x 4	•	•	•	•	•	•	•	•
Tr 30 x 5	•	•	•	•	•	•	•	•
Tr 30 x 6	•	•	•	•	•	•	•	•
Tr 32 x 6	•	•	•	•	•	•	•	•
Tr 35 x 3	•	•	•	•	•	•	•	•
Tr 35 x 4	•	•	•	•	•	•	•	•
Tr 35 x 5	•	•	•	•	•	•	•	•
Tr 35 x 6	•	•	•	•	•	•	•	•
Tr 35 x 8	•	•	•	•	•	•	•	•
Tr 36 x 6	•	•	•	•	•	•	•	•
Tr 40 x 3	•	•	•	•	•	•	•	•
Tr 40 x 4	•	•	•	•	•	•	•	•
Tr 40 x 5	•	•	•	•	•	•	•	•
Tr 40 x 6	•	•	•	•	•	•	•	•
Tr 40 x 7	•	•	•	•	•	•	•	•
Tr 40 x 8	•	•	•	•	•	•	•	•
Tr 40 x 10	•	•	•	•	•	•	•	•
Tr 44 x 7	•	•	•	•	•	•	•	•
Tr 45 x 8	•	•	•	•	•	•	•	•
Tr 50 x 3	•	•	•	•	•	•	•	•
Tr 50 x 4	•	•	•	•	•	•	•	•
Tr 50 x 5	•	•	•	•	•	•	•	•
Tr 50 x 6	•	•	•	•	•	•	•	•
Tr 50 x 8	•	•	•	•	•	•	•	•
Tr 50 x 10	•	•	•	•	•	•	•	•
Tr 55 x 9	•	•	•	•	•	•	•	•
Tr 60 x 6	•	•	•	•	•	•	•	•
Tr 60 x 7	•	•	•	•	•	•	•	•
Tr 60 x 9	•	•	•	•	•	•	•	•
Tr 70 x 10	•	•	•	•	•	•	•	•
Tr 80 x 10	•	•	•	•	•	•	•	•
Tr 90 x 12	•	•	•	•	•	•	•	•
Tr 95 x 16	•	•	•	•	•	•	•	•
Tr 100 x 12	•	•	•	•	•	•	•	•
Tr 100 x 16	•	•	•	•	•	•	•	•
Tr 120 x 14	•	•	•	•	•	•	•	•
Tr 120 x 16	•	•	•	•	•	•	•	•
Tr 140 x 14	•	•	•	•	•	•	•	•

• : Standard UK Stocked Product

• : Made To Order

Multiple Start Trapezoidal Screw List

Multiple Start	Carbon Steel				Stainless Steel	
	C15		C45		A2 (304)	
	TRC15 accuracy 0.2mm / 300mm		TRC45 accuracy 0.1mm / 300mm		TR304 accuracy 0.2mm / 300mm	
Thread	RH	LH	RH	LH	RH	LH
Tr 10 x 4 (P2)	•	•	•	•	•	•
Tr 12 x 6 (P3)	•	•	•	•	•	•
Tr 14 x 6 (P3)	•	•	•	•	•	•
Tr 16 x 8 (P4)	•	•	•	•	•	•
Tr 18 x 8 (P4)	•	•	•	•	•	•
Tr 20 x 8 (P4)	•	•	•	•	•	•
Tr 20 x 20 (P5)	•	•	•	•	•	•
Tr 22 x 10 (P5)	•	•	•	•	•	•
Tr 24 x 10 (P5)	•	•	•	•	•	•
Tr 25 x 10 (P5)	•	•	•	•	•	•
Tr 25 x 25 (P5)	•	•	•	•	•	•
Tr 26 x 10 (P5)	•	•	•	•	•	•
Tr 28 x 10 (P5)	•	•	•	•	•	•
Tr 30 x 12 (P6)	•	•	•	•	•	•
Tr 30 x 30 (P5)	•	•	•	•	•	•
Tr 32 x 12 (P6)	•	•	•	•	•	•
Tr 36 x 12 (P6)	•	•	•	•	•	•
Tr 40 x 14 (P7)	•	•	•	•	•	•
Tr 40 x 40 (P8)	•	•	•	•	•	•

• : Standard UK Stocked Product

• : Made To Order