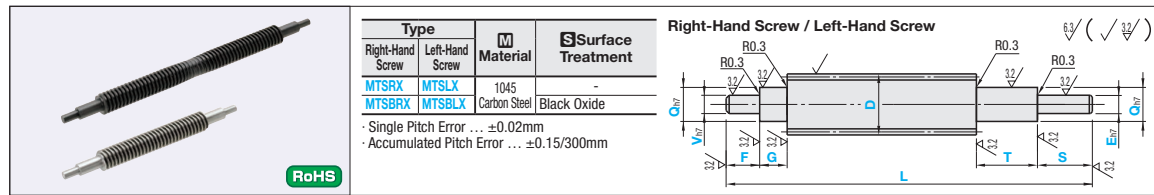


Lead Screw

Both Ends Double Stepped



Type	Material	Surface Treatment
Right-Hand Screw MTSRX MTSBRX	1045 Carbon Steel	Black Oxide
Left-Hand Screw MTSLX MTSBLX	1045 Carbon Steel	Black Oxide

Single Pitch Error ... ±0.02mm
Accumulated Pitch Error ... ±0.15/300mm

RoHS

Part Number	Type	1mm Increment		V / Q	E 1mm Increment	D	Pitch P
		D	L, F, G, T, S				
(Right-Hand Screw) MTSRX MTSBRX	12	80-1000	7 8 9	Q/2 ≤ E ≤ Q-1	12	2	
	14	100-1200	8 9 10		14	3	
	16	150-1200	9 10 12		16	4	
	18		10 12 14 15		18	5	
	20		10 12 14 15		20	6	
(Left-Hand Screw) MTSLX MTSBLX	22		12 14 15 16 17	22	8		
	25		14 15 16 17 20	25			
	28		14 15 16 17 20 25	28			
	32		20 25 30	32			
	36		25 30 35 40	36			
40			40				
50			50				

When combined with position indicators, the standard Q diameters are 8-20. P.701, 702

Ordering Example: Part Number - L - F - V - T - G - Q - S - E
MTSRX16 - 456 - F37 - V10 - T47 - G80 - Q12 - S49 - E8

Days to Ship [Configure Online](#)

Price [Configure Online](#)

Right-Hand Screw / Left-Hand Screw

Part Number	Type	Unit Price					
		D	Min. L-200	L201-400	L401-600	L601-800	L801-1000
12							
14							
16							
18							
20							
22							
25							
28							
32							
36							
40							
50							

MTSRX
MTSBRX
MTSLX
MTSBLX

Alterations Part Number - L - F - V - T - G - Q - S - E - (AC, SV, MV, etc.)
MTSBRX20 - 583 - F48 - V12 - T58 - G70 - Q15 - S63 - E10 - AC12.0

Alterations	Flat Machining	Retaining Ring Groove	Wrench Flats	Coarse Tapping	Threaded	Square Chamfering	Keyway
Code	FV (V part) FE (E part)	AC (V part) AE (E part)	SV (V part) SE (E part)	MV (V part) ME (E part)	BC (V side) BQ (E side)	ZV (V part) ZE (E part)	KQ (V part) KV (E part) KE (E part)
Spec.	FV, FE, FW, FY = 0.5mm Increment FV=Applied on V part FE=Applied on E part Either V or E FV5-FW10-FY1 When V(E) ≥ 25, FY ≤ 1.0 When V(E) ≥ 26, FY ≤ 2.0 3 ≤ FW ≤ 20	AC(AE) = 0.1mm Increment AC(AE) ≤ F(S) + G(T) - m - n Machining Limit AC=Applied on V part AE=Applied on E part AC13.3 V, E Tolerance m ^{+0.14} / n ^{-0.14} 7 4 +0.075 0.7 n2.1 8 5 0 0.9 10 9.6 0 -0.09 12 11.5 14 13.4 15 14.3 0 1.15 16 15.2 -0.11 17 16.2 20 19 1.35 25 23.9 0 30 28.6 -0.21 1.65 35 33 40 38 0 -0.25 1.9 n2.2	SV, SE, SW, SY = 1mm Increment SE=Applied on V part SV=Applied on E part Either V or E SV3-SW10-SY7 When V(E) < 15, then SW=V(E)-2 When V(E) ≥ 25, then SW=V(E)-3 When 30 ≤ V(E), then SW=V(E)-5 3 ≤ SY ≤ 20	MV=Applied on V part ME=Applied on E part MV24 V, E Tolerance m ^{+0.14} / n ^{-0.14} 5, 6 3 7, 8 3, 4 9, 10 3, 4, 5 11, 12 3, 4, 5, 6 13-15 3, 4, 5, 6, 8 16-18 3, 4, 5, 6, 8, 10 19-24 3, 4, 5, 6, 8, 10, 12 25-30 3, 4, 5, 6, 8, 10, 12, 16, 20 31-39 3, 4, 5, 6, 8, 10, 12, 16, 20, 24, 30 40 3, 4, 5, 6, 8, 10, 12, 16, 20, 24, 30	BC, BQ: Mx3 BC, BQ: Pitchx3 BC, BQ: G, T-Pitchx3 BC=Applied on Q part of V side BQ=Applied on Q part of E side Q MxPitch 8 M8x1.0 10 M10x1.0 12 M12x1.0 14 M14x1.0 15 M15x1.0 17 M17x1.0 20 M20x1.0 25 M25x1.5 30 M30x1.5 35 M35x1.5 40 M40x1.5 (V(E)/2) √2-W May not be manufacturable depending on V (E), and W relationship.	W, A=1mm Increment ZV=Applied on V part ZE=Applied on E part Applicable to either V or E ZV=V, ZE=E Specified ZV-V, ZE-E W 1mm Increment W, A=1mm Increment ZV=Applied on V part ZE=Applied on E part Applicable to either V or E ZV=V, ZE=E Specified ZV-V, ZE-E W 1mm Increment	KQ, KV, KE, C=1mm Increment C ≤ 60 KQ=Applied on Q part KV=Applied on V part KE=Applied on E part When KV, KE, KV=0, keyway R will be eliminated on the shaft end side. Applicable to one of Q, V or E. Keyway Dimension Dia. Q, V, E Reference Dimension (mm) t1 tolerance r1 6, 7 2 -0.004 1.2 0.08 8-10 3 -0.029 1.8 +0.1 -0.16 11-12 4 0 2.5 0 13-17 5 3.0 0 18-22 6 3.5 0 23-30 8 4.0 0 31-38 10 -0.036 5.0 +0.2 0.25 39, 40 12 0 -0.043 5.0 0 -0.40

When wrench flats, square chamfering and keyway alterations are combined each other, their orientations will be random.

Lead Screw

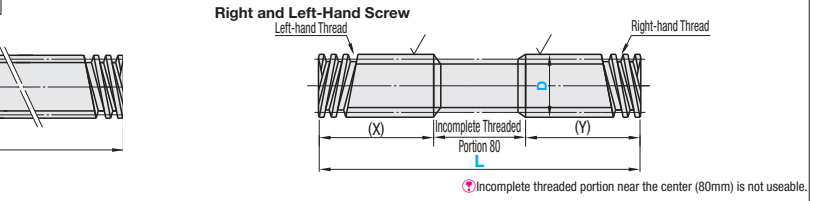
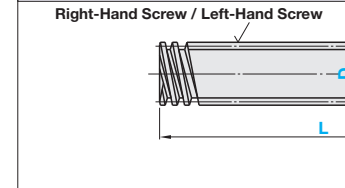
Straight



Type	Material	Surface Treatment
Right-Hand Screw MTSR MTSBR	1045 Carbon Steel	Black Oxide
Left-Hand Screw MTSL MTSBL	1045 Carbon Steel	Black Oxide
Right and Left-Hand Screw MTSW MTSBW	303 Stainless Steel	-

Dimension Tolerance of MTSRL and MTSLL: 0-+5
6.3 / (√3.2)

X=Y for Right and Left-Hand Screws.



Right-Hand Screw, Left-Hand Screw, Right and Left-Hand Screw

Part Number	Type	MTS, MTSL, MTSB		MTSW, MTSBW		MTSRL, MTSLL		(X)(Y)	Pitch P
		D	L 1mm Increment	L 1mm Increment	L 100mm Increment	L 100mm Increment	L 100mm Increment		
(Right-Hand Screw) MTSR MTSBR (Long Size) MTSRL (Stainless Steel) MTSTR	8 10 12 14 16 18 20	50-500						-	1.5
(Left-Hand Screw) MTSL MTSBL (Long Size) MTSLL (Stainless Steel) MTSTL	22 25 28 32 36 40 50	150-1200		150-1200	800-2000	800-2000		When D=10-14 50 ≤ (X) ≤ 460 When D=16-50 50 ≤ (X) ≤ 560 (X)=(Y) (X)=(L-80)/2 (Y)=(L-80)/2	2 3 4 5
(Right and Left-Hand Screw) MTSW MTSBW	36 40 50	200-1200		200-1200	800-2000	800-2000			6 8

D dimension 22, 36, 40 and 50 are not applicable to Stainless Steel. D dimension 25, 28 and 32 are applicable to Right-Hand Screw only.
The both ends of MTSRL and MTSLL have not been processed. Additional machining (chamfering, processing of the shaft ends, etc.) is required for use.
D8 is available for MTSR and MTSBR only.

Ordering Example: Part Number - L
MTSL25 - 480
MTSRL32 - 1800

Price [Configure Online](#)

Days to Ship [Configure Online](#)

Right-Hand Screw, Left-Hand Screw

Part Number	Type	Unit Price					
		D	Min. L-200	L201-400	L401-600	L601-800	L801-1000
8							
10							
12							
14							
16							
18							
20							
22							
25							
28							
32							
36							
40							
50							

Right-Hand Screw, Left-Hand Screw, Stainless Steel

Part Number	Type	Unit Price					
		D	Min. L-200	L201-400	L401-600	L601-800	L801-1000
10							
12							
14							
16							
18							
20							
25							
28							
32							

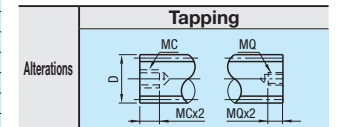
Right and Left-Hand Screw

Part Number	Type	Unit Price					
		D	Min. L-200	L201-400	L401-600	L601-800	L801-1000
10							
12							
14							
16							
18							
20							
22							
25							
28							
32							
36							
40							
50							

Right-Hand Screw Long, Left-Hand Screw

Part Number	Type	Unit Price						
		D	L800, 900	L1000, 1100	L1200, 1300	L1400, 1500	L1600, 1700	L1800, 1900
16								
18								
20								
22								
25								
28								
32								
36								
40								

Alterations Part Number - L - (MC, MQ)
MTSR20 - 456 - MC8



Code	MC (Left End)	MQ (Right End)
Ordering Code	MC24	
Spec.	MC: machined on the left end, MQ: machined on the right end	
	D	MC / MQ (Selection Range)
	8	3, 4
	10	3, 4, 5
	12, 14	3, 4, 5, 6
	16	3, 4, 5, 6, 8
	18	3, 4, 5, 6, 8, 10, 12
	20, 22	3, 4, 5, 6, 8, 10, 12, 16
	25, 28	3, 4, 5, 6, 8, 10, 12, 16, 20
	32	3, 4, 5, 6, 8, 10, 12, 16, 20, 24
	36, 40, 50	3, 4, 5, 6, 8, 10, 12, 16, 20, 24

Not applicable to MTSRL and MTSLL

Price Adder