

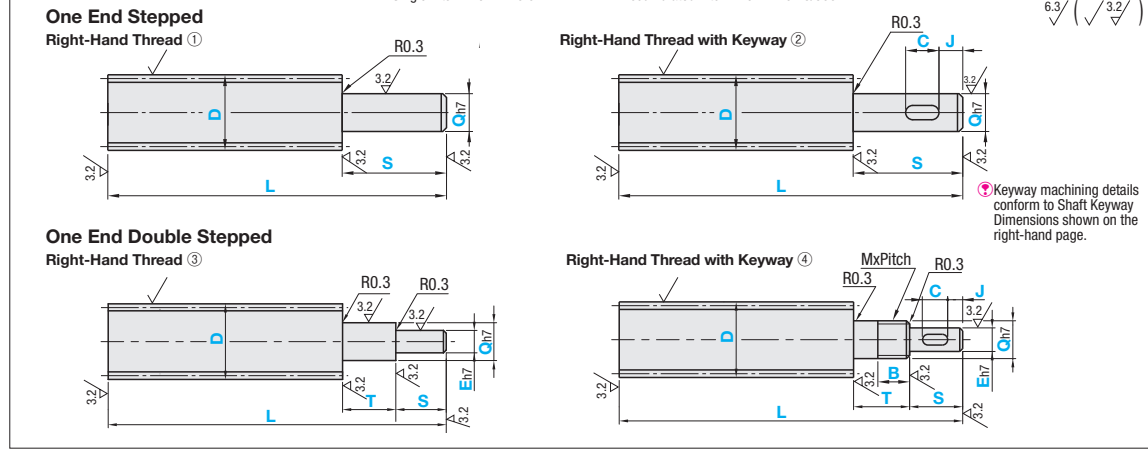
Lead Screw

One End Stepped / One End Double Stepped

Can be used when Shaft Length (Stroke) is short.

Type				Material	Surface Treatment
One End Stepped		One End Double Stepped			
① Right-Hand Thread	② Right-Hand Thread with Keyway	③ Right-Hand Thread	④ Right-Hand Thread with Keyway		
MTSRA	MTSRB	MTSRC	MTSRD	EN 1.1191 Equiv.	Black Oxide LTBC Plating
MTSBRA	MTSBRB	MTSBRC	MTSBRD		
RMTSRA	RMTSRB	RMTSRC	RMTSRD		
MTSTRA	-	MTSTRC	-	EN 1.4305 Equiv.	-

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



Part Number		1mm Increment		Q Selection		E		D	Pitch
Type	D	L	T, S			1mm Increment			P
① One End Stepped Right-Hand Thread MTSRA MTSBRA RMTSRA D≤32, L≤1000 MTSTRA	8	50-500	2s≤S≤Q, Ex7 2s≤T≤Qx7 When Q, E≤9, T, S are five or less times of Q, E.	6	Q/2s≤Q-1			8	1.5
	10	80-1000		6 7				10	2
	12			6 7 8 9				12	3
	14	100-1200		8 9 10				14	4
	16			9 10 12				16	5
	18			10 12 14 15				18	6
	20			10 12 14 15				20	8
	22	150-1200		10 12 14 15				22	10
	25			12 14 15 16 17				25	12
	28			14 15 16 17 20				28	14
32	14 15 16 17 20 25		32	16					
36	17 20 25		36	18					
40	20 25 30		40	20					
50	200-1200	25 30 35 40	50	25					
				30			32		

For One End Double Stepped Type, Q dimension 6 cannot be selected when D dimension is 8. When combined with position indicators, the standard Q diameters are 8 ~ 20. P811, 812

Part Number		1mm Increment		Q Selection		E		1mm Increment		B	MxPitch	D	Pitch
Type	D	L	T, S										P
② One End Stepped MTSRB MTSBRB RMTSRB D≤32, L≤1000	8	80-1000	2s≤S≤Q, Ex7 2s≤T≤Qx7 When Q, E≤9, T, S are five or less times of Q, E.	7 8 9	E=6	C=60	S-C-J=2	J=0, keyway R will be eliminated on the shaft end side.	When Q≥20, 3s≤S≤Qx3 B≤T3	When Q≥25, 5s≤S≤Qx3 B≤T5	When any thread is added, B=0	12	2
	10	100-1200		8 9 10								14	3
	12			9 10 12								16	4
	14	150-1200		10 12 14 15								18	5
	16			10 12 14 15								20	6
	18			12 14 15 16 17								22	8
	20			14 15 16 17 20								25	10
	22	200-1200		14 15 16 17 20								28	12
	25			17 20 25								32	14
	28			20 25 30								36	16
32	25 30 35 40		40	18									
36			50	20									
40				25									
50			30										

When combined with position indicators, the standard Q are 8 ~ 20. P811, 812

Ordering Example	Part Number	L	S	Q	C	J	Part Number	L	T	Q	S	E	C	J	B
	MTSRA16	- 456 -	S49 -	Q10			MTSRC16	- 456 -	T20 -	Q12 -	S10 -	E9 -	C5 -	J0 -	B10
	MTSRB16	- 456 -	S10 -	Q12 -	C5 -	J0	MTSRD16	- 456 -	T20 -	Q12 -	S10 -	E8 -	C5 -	J0 -	B10

Unit price for the product is price in the table multiplied by price multiplier. Price in the table x Price Multiplier = Unit Price

① One End Stepped Right-Hand Thread						
Part Number	D	Min. L - 200	L201-400	L401-600	L601-800	L801-1000 L1001-1200
MTSRA	8					
	10					
	12					
	14					
	16					
	18					
	20					
	22					
	25					
	28					
	32					
	36					
	40					
	50					
(Stainless Steel)	10					
	12					
	14					
	16					
	18					
	20					
	22					
	25					
	28					
	32					

③ One End Double Stepped Right-Hand Thread						
Part Number	D	Min. L - 200	L201-400	L401-600	L601-800	L801-1000 L1001-1200
MTSRC	8					
	10					
	12					
	14					
	16					
	18					
	20					
	22					
	25					
	28					
	32					
	36					
	40					
	50					
(Stainless Steel)	10					
	12					
	14					
	16					
	18					
	20					
	22					
	25					
	28					
	32					

Alterations [Part Number] - L - S - Q - C - J - (MC, MQ ... etc.)

Alterations	Flat Machining	Retaining Ring Groove	Wrench Flats	Coarse Tapping	Threaded For Bearing Nut	Square Chamfering	Keyway																											
Code	FC (D part) FE (E part)	AE (E part)	SC (D part) SE (E part)	MC (Left End) MQ (Q part) ME (E part)	BQ (Q part)	ZQ (Q part) ZE (E part)	KQ (Q part) KE (E part)																											
Spec.	<p>FC/FE=0 or FC/FE=2</p> <p>FY=1.0</p> <p>When Q(E)≥26, FY=2.0</p> <p>3s≤FY≤20</p>	<p>Not applicable to One End Stepped Type (including with Right-Hand Thread type with Keyway).</p> <p>AE=0.1mm Increment</p> <p>AE=0.5~1mm (For the m value, see the table below. (For the m value, consider the tolerance.))</p> <p>AE=Applied on E part</p>	<p>SC is not applicable to One End Double Stepped Type</p> <p>SC.SE.SW.SY=1mm Increment</p> <p>SC=Applied on Q part SE=Applied on E part</p>	<p>E-3, 4 is not applicable.</p> <p>E-3 is not applicable to Right-Hand Thread with Keyway</p> <p>MC=Applied on the Left End MQ=Applied on Q part ME=Applied on E part</p> <p>MCQ24</p> <p>D, Q, E MC, MQ, ME (Selection Range)</p> <table border="1"> <tr><td>0</td><td>5.6</td><td>3</td></tr> <tr><td>7.8</td><td>3.4</td><td></td></tr> <tr><td>9.10</td><td>3.4, 5</td><td></td></tr> <tr><td>11.12</td><td>3.4, 5, 6</td><td></td></tr> <tr><td>13-15</td><td>3.4, 5, 6, 8</td><td></td></tr> <tr><td>16-24</td><td>3.4, 5, 6, 8, 10</td><td></td></tr> <tr><td>25-30</td><td>3.4, 5, 6, 8, 10, 12, 16</td><td></td></tr> <tr><td>31-39</td><td>3.4, 5, 6, 8, 10, 12, 16, 20</td><td></td></tr> <tr><td>40-50</td><td>3.4, 5, 6, 8, 10, 12, 16, 20, 24, 30</td><td></td></tr> </table>	0	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		16-24	3.4, 5, 6, 8, 10		25-30	3.4, 5, 6, 8, 10, 12, 16		31-39	3.4, 5, 6, 8, 10, 12, 16, 20		40-50	3.4, 5, 6, 8, 10, 12, 16, 20, 24, 30		<p>Not applicable when Q=7, 9, 16</p> <p>BQ=MX3</p> <p>BQ=Pitchx3</p> <p>BQ=S.T.Pitchx3</p> <p>Only for One End Double Stepped Type, when 25≤Q≤40, QzE=3.</p>	<p>Not applicable to One End Double Stepped Type.</p> <p>WA=1mm Increment ZQ=Applied on Q part ZE=Applied on E part</p> <p>Specify ZQ=Q Specify ZE=E</p>	<p>Not applicable to One End Stepped Type</p> <p>KQ, KE=1mm Increment</p> <p>KQ=Applied on Q part KE=Applied on E part</p> <p>When Q, KE=Q, keyway R will be eliminated on the end.</p> <p>C≤60</p> <p>T-C-KQ≥2</p> <p>KQ/KE≥2</p> <p>When Q, KE=Q, keyway R will be eliminated on the end.</p>
0	5.6	3																																
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Ordering Example	FC5-PW10-FY1		SC3-SW10-SY7	MCQ24	BQ020	ZQ0	KQ08-C10																											

Specify an alteration position to be 2mm or more away from the stepped part. For details, see P.787

Do not specify multiple alterations in such a way that they overlap with each other in the rotating direction on the same shaft. For details, see P.787

When flat machining, wrench flats, square chamfering and keyway alterations are combined with each other, their orientations will be random. For details, see P.787

When adding multiple alterations, there must be 2mm or more clearance between each feature. For details, see P.787