Lead Screws
-Both Ends Double Stepped Type-

Large Volume Order

CAD Data Folder Name:10_Slide_Screws

When ordering, select Part Number and Values from Selection Steps ❶~❿.

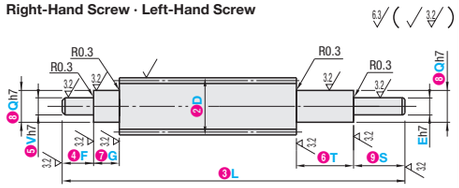
Ordering Example

Part Number (❶Type·❷D)	-	❸L	-	❹F	-	❺V	-	❻T	-	❼G	-	❽Q	-	❾S	-	❿E
MTSRX16	-	583	-	F48	-	V10	-	T47	-	G60	-	Q12	-	S49	-	E8

Type		Material	Surface Treatment
Right-Hand Screw	Left-Hand Screw		
MTSRX	MTSLX	S45C	-
MTSBRX	MTSBLX		Black Oxide

·Single Pitch Error…±0.02mm
·Accumulated Pitch Error…±0.15/300mm

Right-Hand Screw · Left-Hand Screw



Part Number ❶Type	❷D	❸L	❹F·❼G·❻T·❾S	❺V·❽Q Selection	❿E 1mm Increment	D	Pitch P
(Right-Hand Screw) MTSRX MTSBRX (Left-Hand Screw) MTSLX MTSBLX	12	80~1000	2≤F≤Vx7 2≤G≤Qx7 2≤S≤Ex7 2≤T≤Qx7 ❗When Q, V, and E≤9, F, G, T, S will be 5x or less of Q, V, E.	7 8 9	Q/2≤E≤Q-1	12	2
	14			8 9 10		14	3
	16	100~1200		9 10 12		16	
	18	150~1200		9 10 12		18	4
	20			10 12 14 15		20	
	22			10 12 14 15		22	5
	25			12 14 15 16 17		25	
	28			14 15 16 17 20		28	
	32	200~1200		14 15 16 17 20 25		32	6
	36			17 20 25		36	
	40			20 25 30		40	
	50			25 30 35 40		50	8

❗When combined with position indicators, the standard Q diameters are 8~20. ☞ P.535·536

Days to Ship: 5 Days | Express A

Order Quantity	Standard Service Regular Quantity	Standard Service Large Quantity	Non-Standard Service Large Quantity
Quantity	1~29	30~50	51~
Days to ship	Standard	+5 Days	To be quoted

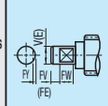
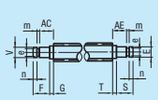
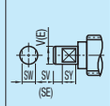
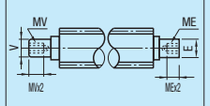
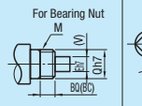
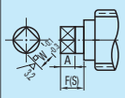
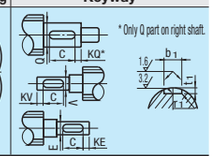
•Dia. less than 25mm

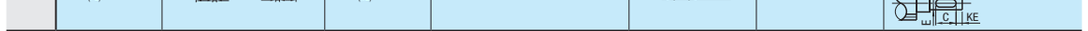
Large Volume Order +5 Days Quantity 30~50

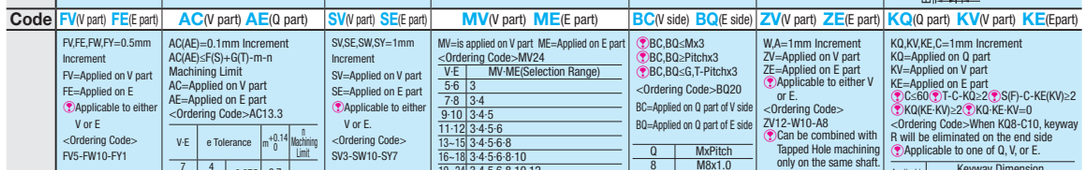
❗Express Service is not available.

Alterations

Part Number (❶Type·❷D)	-	❸L	-	❹F	-	❺V	-	❻T	-	❼G	-	❽Q	-	❾S	-	❿E	-	(AC·SV·MV…etc.)
MTSRX16	-	583	-	F48	-	V10	-	T58	-	G70	-	Q15	-	S49	-	E10	-	AC12.0

	Flat Machining	Retaining Ring Groove	Wrench Flats	Coarse Tapping	Threaded	Square Chamfering	Keyway
Alterations							
Code	FV(V part) FE(E part)	AC(V part) AE(Q 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(Q part) KV(V part) KE(Epart)
Spec.	FV,FE,FW,FY=0.5mm Increment FV=Applied on V part FE=Applied on E part ❗Applicable to either V or E <Ordering Code> 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 <Ordering Code>AC13.3	SV,SE,SW,SY=1mm Increment SV=Applied on V part SE=Applied on E part ❗Applicable to either V or E. <Ordering Code> SV3-SW10-SY7 ❗When V(E)<15, then SW≥V(E)-2 ❗When 15≤V(E)≤25, then SW≥V(E)-3 ❗When 30≤V(E), then SW≥V(E)-5 ❗3≤SY≤20	MV=is applied on V part ME=Applied on E part <Ordering Code>MV24 ⊗E=4 is not applicable	❗BC,BQ≤Mx3 ❗BC,BQ≥Pitchx3 ❗BC,BQ≤G,T-Pitchx3 <Ordering Code>BQ20 BC=Applied on Q part of V side BQ=Applied on Q part of E side	W,A=1mm Increment ZV=Applied on V part ZE=Applied on E part ❗Applicable to either V or E. <Ordering Code> ZV12-W10-A8 ❗Can be combined with Tapped Hole machining only on the same shaft. (See P.576 for machining conditions.) ❗5≤A≤20 ❗ZV,ZE>W ❗ZV=V, ZE=E Specified (V(E)/2) √2≤W May not be manufacturable depending on V (E), and W relationship.	KQ,KV,KE,C=1mm Increment KQ=Applied on Q part KV=Applied on V part KE=Applied on E part ❗C≤60 ❗T-C-KQ≥2 ❗S(F)-C-KE(KV)≥2 ❗KQ(KE-KV)≥2 ❗KQ-KE-KV=0 <Ordering Code>When KQ8-C10, keyway R will be eliminated on the end side ❗Applicable to one of Q, V, or E.





V·E	e Tolerance		m +0.14 0	n Machining Limit
7	4	+0.075 0	0.7	n≥1.2
8	5			
9	6		0.9	
10	9.6	0 -0.09	1.15	n≥1.5
12	11.5	0 -0.11		
14	13.4			
15	14.3			
16	15.2			
17	16.2			
20	19	0 -0.21	1.35	
25	23.9		1.65	
30	28.6			
35	33			
40	38	0 -0.25	1.9	n≥2

V·E	MV·ME(Selection Range)
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
31~39	3·4·5·6·8·10·12·16·20
40	3·4·5·6·8·10·12·16·20·24·30

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

⊗Not applicable when Q=7, 9, 16

V·E	W 1mm Increment
6~10	5~8
11~14	8~10
15~19	10~14
20~25	14~20
26~30	19~24
31~35	22~28
36~40	26~30

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

Lead Screws
-Straight Type-

Large Volume Order

CAD Data Folder Name:10_Slide_Screws

When ordering, select Part Number and Values from Selection Steps ❶~❸.

Ordering Example

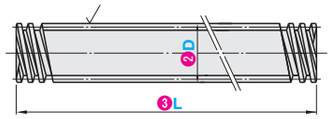
Part Number (❶Type·❷D)	-	❸L
MTSL25	-	583
MTSRL25	-	1800

Type			Material	Surface Treatment
Right-Hand Screw	Left-Hand Screw	R / L Screw		
MTSR	MTSL	MTSW	S45C	-
MTSBR	MTSBL	MTSBW		Black Oxide
MTSRL (Long Size)	MTSLL (Long Size)	-		-
MTSTR	MTSTL	-	SUS303	-

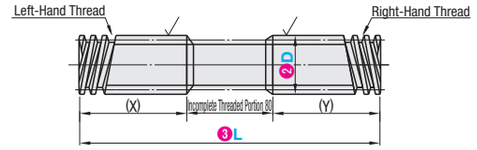
❗L Dimension Tolerance of MTSRL and MTSLL: 0 ~ +5

❗X=Y for Right and Left-Hand Screws.

Right-Hand Screw · Left-Hand Screw



R / L Screw



❗Incomplete threaded portion near the center (80mm) is not useable.

■Right-Hand Screw / Left-Hand Screw / Right and Left-Hand Screw

Part Number ❶Type	❷D	MTS□·MTST□·MTSB□ ❸L 1mm Increment	MTSW·MTSBW ❸L 1mm Increment	MTSRL·MTSLL ❸L 1mm Increment	(X)(Y)	Pitch P
(Right-Hand Screw) MTSR MTSBR MTSRL (Long Size) MTSTR (Stainless Steel)	*8	50~500	-	-	-	1.5
	10	80~1000	130~1000	-	When D=10~14 50≤(X)≤460	2
	12					
	14				When D=16~50 50≤(X)≤560	3
	16	100~1200	130~1200	800~2000		
(Left-Hand Screw) MTSL MTSBL MTSLL (Long Size) MTSTL (Stainless Steel)	18	150~1200	150~1200	800~2000	(X)=(Y) (X)=(L-80)/2 (Y)=(L-80)/2	4
	20					
	22					5
	25					
	28					
(Right and Left-Hand Screw) MTSW MTSBW	32	200~1200	200~1200	800~2000		6
	36					
	40					
	50			-		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.
❗Both ends of MTSRL and MTSLL are "as cut off". Additional machining (chamfering, processing of the shaft ends, etc.) is required for use.
❗D8 is available for MTSR and MTSBR only.

Days to Ship: 5 Days | Express A

Order Quantity	Standard Service Regular Quantity	Standard Service Large Quantity	Non-Standard Service Large Quantity
Quantity	1~29	30~50	51~
Days to ship	Standard	+5 Days	To be quoted

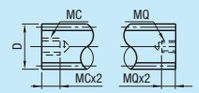
•Dia. less than 25mm

Large Volume Order +5 Days Quantity 30~50

❗only MTSR / MTSRB / MTSTR / MTSL / MTSBL / MTSTL
❗Express Service is not available.

Alterations

Part Number (❶Type·❷D)	-	❸L	-	(MC·MQ)
MTSR16	-	456	-	MC8

	Tapping
Alterations	
Code	MC(Left End) MQ(Right End)
Spec.	<Ordering Code> MC24 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
20·22	3 · 4 · 5 · 6 · 8 · 10 · 12
25·28	3 · 4 · 5 · 6 · 8 · 10 · 12 · 16
32	3 · 4 · 5 · 6 · 8 · 10 · 12 · 16 · 20
36·40·50	3 · 4 · 5 · 6 · 8 · 10 · 12 · 16 · 20 · 24

⊗Not applicable to MTSRL and MTSLL