

Parallel Keys / Tapered Machine Keys with Gib Head Blank Type

Screw Plugs

Parallel Keys RoHS **KET**

JIS B 1301-1996 (New JIS Standard)

Type	Material	Tensile Strength
KET	S45C	600N/mm ² or More

Part Number	Tolerance (h9)	H Tolerance	C
3	0	0	0.16-0.25
4	-0.025	0	
5	0	-0.030	
6	-0.030	0	0.25-0.40
7	0	-0.036	
8	-0.036	0	
10	0	-0.090	0.40-0.60

Part Number	Tolerance (h9)	H Tolerance	C
12	0	0	
14	0	0	
15	-0.043	-0.090	0.40-0.60
16	0	0	
18	0	-0.110	

Ordering Example **Part Number**
KET10

Parallel Keys - Stainless Steel RoHS **KETS**

JIS B 1301-1996 (New JIS Standard)

Type	Material	Tensile Strength
KETS	SUS316	600N/mm ² or More

Part Number	H	C
2	0.2	0.2
3	0.2	0.2
4	0.2	0.2
5	0.2	0.2
6	+0.015	0.3
7	-0.025	0.3
8	0.3	0.3
10	0.3	0.5
12	0.3	0.5
14	0.3	0.5

Ordering Example **Part Number** - **H**
KETS8 - 7

Tapered Machine Keys with Gib Head RoHS **KTH**

JIS B 1301-1996 (New JIS Standard)

Type	Material	Tensile Strength
KTH	S45C	600N/mm ² or More

Part Number	h	L	h1	h2, f	(e)	C
4	0	30	7	4	4	0.16-0.25
5	-0.030	40	8	5	5	
6	0	45	10	6	6	0.25-0.40
7	0	50	7	7	7	
8	-0.036	60	11	7	8	
10	0	75	8	8	10	
12	0	90	12	8	12	
14	0	110	14	9	14	0.40-0.60
15	0	110	15	10	15	
16	-0.043	120	16	10	16	
18	0	135	18	11	18	
20	0	150	20	12	20	
22	0	170	22	14	22	
24	0	180	24	16	24	0.60-0.80
25	-0.052	200	22	14	25	
28	0	210	25	16	28	
32	0	240	28	18	32	
35	0	260	32	22	35	
36	-0.062	280	20	36	36	1.00-1.20
38	0	285	36	24	38	

Ordering Example **Part Number**
KTH12

Alterations **Part Number** - **(LC)**
KTH10 - LC60

Alteration	Code	Spec.																				
L Dimension Change	LC	LC=1mm Increment LC (Min.)=LCxL For LC (Min.), see below																				
		<table border="1"> <thead> <tr> <th>B</th> <th>LC (Min.)</th> </tr> </thead> <tbody> <tr><td>4, 5</td><td>10</td></tr> <tr><td>6, 7, 8</td><td>15</td></tr> <tr><td>10, 12</td><td>20</td></tr> <tr><td>14, 15, 16</td><td>22</td></tr> <tr><td>18, 20</td><td>25</td></tr> <tr><td>22, 24, 25</td><td>30</td></tr> <tr><td>28</td><td>35</td></tr> <tr><td>32, 35, 36</td><td>40</td></tr> <tr><td>38</td><td>45</td></tr> </tbody> </table>	B	LC (Min.)	4, 5	10	6, 7, 8	15	10, 12	20	14, 15, 16	22	18, 20	25	22, 24, 25	30	28	35	32, 35, 36	40	38	45
B	LC (Min.)																					
4, 5	10																					
6, 7, 8	15																					
10, 12	20																					
14, 15, 16	22																					
18, 20	25																					
22, 24, 25	30																					
28	35																					
32, 35, 36	40																					
38	45																					

MSW RoHS **MSWA** (Through Hole Type) **MSWZ** (With Washer Type)

Material: MSW SCM435(M2.5-10) S45C(M12-45)
MSWA, MSWZ S45C

Hardness: 34-43HRC
Surface Treatment: Black Oxide (JIS B 0207 Class 2)

Standard Type

MxP	L	B	t	Part Number	Type	M
2.5	0.45	3	1.3	1.2	2.5	
3	0.5	3	1.5		3*	
4	0.7	4	2	1.5	4*	
5	0.8	5	2.5	2	5*	
6	1.0	6	3	3.5	6	
8	1.25	8	4	5	8	
10	1.5		5	6	10	
12		10	6	5	12	
14			8		14	
16			10		16	
18			10		18	
20			12		20	
22			12		22	
24			12		24	
25			12		25	
26	1.5	12	14	6	26	
27	(Fine)				27	
28					28	
30					30	
33					33	
36					36	
38					38	
40					40	
42					42	
45					45	

* The tip of MSW3, 4, 5 is a cut point.

MxP	L	B	Part Number	Type	M
8	1.25	8	4	8	
10	1.5		5	10	
12		10	6	12	
14			8	14	
16			8	16	
18			10	18	
20			10	20	
22			12	22	
24	1.5	12	14	24	
25	(Fine)			25	
26				26	
27				27	
28				28	
30				30	
33				33	

MxP	L	B	H	t	C	Part Number	Type	M
6	1.0	8	3	9		6		
8	1.25	10	4	11		8		
10	1.5		5	13		10		
12			6	15		12		
14			8	17		14		
16			8	19		16		
18			10	21		18		
20			10	23		20		
22			12	25		22		
24	1.5	12	14	27		24		
25	(Fine)			28		25		
26				29		26		
27				30		27		
28				31		28		
30				33		30		
33				36		33		

Short Type

MxP	L	B	t	Part Number	Type	M-L
8	1.25	4		8-6		
10	1.5	5		10-6		
12		6	3	12-6		
14		6		14-6		
16		8		16-6		
18		10		18-6		
20		10		20-8		
22		12		22-8		
24				24-8		
25	(Fine)			25-8		
26		14	4	26-8		
27				27-8		
28				28-8		
30				30-8		
33		17		33-8		

MxP	L	B	Part Number	Type	M-L
8	1.25	4	8-6		
10	1.5	5	10-6		
12		6	12-6		
14		6	14-6		
16		8	16-6		
18		10	18-6		
20		10	20-8		
22		12	22-8		
24			24-8		
25	(Fine)		25-8		
26		14	26-8		
27			27-8		
28			28-8		
30			30-8		
33		17	33-8		

MxP	L	B	H	t	C	Part Number	Type	M-L
10	1.5	5	13			10-10		
12		6	15			12-10		
14		8	17			14-10		
16		8	19			16-10		
18		10	21			18-10		
20		10	23			20-10		
22	1.5	12	25	4	2.0	22-10		
24	(Fine)		27			24-10		
25			28			25-10		
26		14	29			26-10		
27			30			27-10		
28			31			28-10		
30			33			30-12		
33		12	36	5		33-12		

Short Type has shorter L dimension and fewer threads, compared with the standard type (MSW, MSWA, MSWZ). Before use, check the load applied to the screw plug and the material of the plate to be tapped.

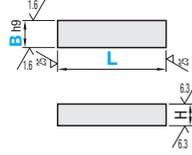
Ordering Example **Part Number**
MSW18
MSWS18 - 6

Parallel Keys

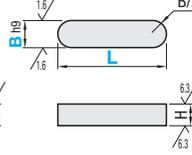
Parallel Keys Configurable



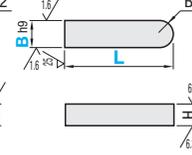
**KED
KEDS (Stainless Steel)
KEDH (Hardened Type)**



**KES
KESS (Stainless Steel)
KESH (Hardened Type)**



**KEG
KEGS (Stainless Steel)
KEGH (Hardened Type)**



L	Tolerance	L	Tolerance
~10	0 -0.18	81-120	0 -0.35
11~18	0 -0.18	121-180	0 -0.40
19~30	0 -0.21	181-250	0 -0.46
31~50	0 -0.25	251-300	0 -0.52
51~80	0 -0.30		

Type	Material	Tensile Strength
KED KES KEG	S45C	600N/mm ² or More
KEDS KESS KEGS	SUS316	600N/mm ² or More
KEDH KESH KEGH	S45C25-30HRC	700N/mm ² or More

RoHS ⚠ Hardened Type has an engraved mark for identification.
B Dimension/H Dimension conform to B 1301-1996 (New JIS Standard).

Part Number Type	Bh9	L										H Tolerance	C												
		2	3	4	5	6	7	8	10	12	14			15	16	18									
KED KES KEG <small>(Stainless Steel)</small>	0	6	8	10	15	20						2	0	0.16											
	-0.025	6	8	10	12	15	16	18	20	25	30	3	-0.025	0.25											
	0	8	10	12	15	16	18	20	25	28	30	35	40	45	50	4	0	0.25							
	-0.030	10	12	15	16	18	20	22	25	28	30	32	35	40	45	50	55	60	5	0	0.25				
	0	10	12	15	16	18	20	22	25	28	30	32	35	40	45	50	60	70	7	0	0.40				
	-0.036	10	12	15	16	18	20	22	25	28	30	32	35	40	45	50	55	60	65	70	80	90	8	0	0.40
	0	12	15	16	18	20	25	30	35	40	45	50	55	60	65	70	80	90	9	0	0.40				
	-0.043	12	15	16	18	20	25	30	35	40	45	50	55	60	65	70	80	90	10	0	0.60				
	0	14	15	16	18	20	25	30	35	40	45	50	55	60	65	70	80	90	11	0	0.60				
	-0.043	14	15	16	18	20	25	30	35	40	45	50	55	60	65	70	80	90	12	0	0.60				
	0	15	16	18	20	25	30	35	40	45	50	55	60	65	70	80	90	100	13	0	0.60				
	-0.043	15	16	18	20	25	30	35	40	45	50	55	60	65	70	80	90	100	14	0	0.60				
	0	16	18	20	25	30	35	40	45	50	55	60	65	70	80	90	100	110	15	0	0.60				
	-0.110	16	18	20	25	30	35	40	45	50	55	60	65	70	80	90	100	110	16	0	0.60				
	0	18	20	25	30	35	40	45	50	55	60	65	70	80	90	100	110	111	0	0.110					

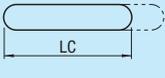
Ordering Example: **Part Number** - **L**
KED6 - 30

Part Number Type	Bh9	L										H Tolerance	C						
		4	5	6	7	8	10	12	14	15	16			18					
KEDH KESH KEGH <small>(Hardened Type)</small>	0	8	10	12	15	16	20	25	30			4	0	0.16					
	-0.030	8	10	12	15	16	20	25	26	28	30	32	35	40	45	50	5	0	0.25
	0	10	12	15	16	20	25	26	28	30	32	35	40	45	50	6	0	0.25	
	-0.036	10	12	15	16	20	25	26	28	30	32	35	40	45	50	7	0	0.40	
	0	12	15	16	20	25	26	28	30	32	35	40	45	50	8	0	0.40		
	-0.036	12	15	16	20	25	26	28	30	32	35	40	45	50	9	0	0.40		
0	14	15	16	20	25	26	28	30	32	35	40	45	50	10	0	0.40			
-0.043	14	15	16	20	25	26	28	30	32	35	40	45	50	11	0	0.60			

Ordering Example: **Part Number** - **L**
KESH6 - 30

B	KED, KES, KEG				KEDS, KESS, KEGS				KEDH, KESH, KEGH			
	Unit Price	Volume Discount Rate	Unit Price	Volume Discount Rate	Unit Price	Volume Discount Rate	Unit Price	Volume Discount Rate	Unit Price	Volume Discount Rate	Unit Price	Volume Discount Rate
2	1-3 pc(s)	4~19	20-100	101-400	1-3 pc(s)	4~19	20-100	101-400	1-3 pc(s)	4~19	20-100	101-400
3												
4												
5												
6												
7												
8												
10												
12												
14												
15												
16												
18												

Alterations



Code

LC

Spec.

Cuts L dimension in 1mm increment.

B	LC Range	B	LC Range
2	5-20	10	15-80
3	6-30	12	20-80
4	8-50	14	25-90
5	8-50	15	25-90
6	10-60	16	35-100
7	15-60	18	35-110
8	15-80		

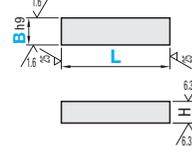
Ordering Example: **Part Number** - **L(LC)**
KED6 - LC28

**Parallel Keys
Configurable**

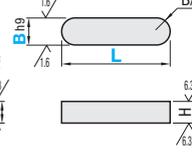


RoHS

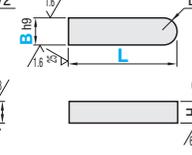
KEDF



KESF



KEGF



L	Tolerance	L	Tolerance
~10	0 -0.18	81-120	0 -0.35
11~18	0 -0.18	121-180	0 -0.40
19~30	0 -0.21	181-250	0 -0.46
31~50	0 -0.25	251-300	0 -0.52
51~80	0 -0.30		

Type	Material	Tensile Strength
KEDF KESF KEGF	S45C	600N/mm ² or More

RoHS ⚠ If requested items cannot be found in Standard Type (P249), please use Configurable Type.
B Dimension/H Dimension conform to B 1301-1996 (New JIS Standard).

Part Number Type	Bh9	L 1mm Increment	H Tolerance	C	KEDF				KESF				KEGF				
					Unit Price	Volume Discount Rate											
KEDF KESF KEGF	0	5-20	2	0													
	-0.025	21-30	3	-0.025	0.16-0.25												
	0	6-30	4	0													
	-0.030	31-50	5	-0.030													
	0	6-50	6	0													
	-0.036	51-60	7	-0.036	0.25-0.40												
	0	61-80	8	0													
	-0.036	8-60	9	-0.036													
	0	10-60	10	0													
	-0.043	61-100	11	-0.043	0.40-0.60												
	0	10-80	12	0													
	-0.043	81-100	13	-0.043													
	0	15-80	14	0													
	-0.043	81-150	15	-0.043													
	0	16-90	16	0													
	-0.043	91-150	17	-0.043													
	0	20-100	18	0													
	-0.043	101-150	19	-0.043													
0	30-110	20	0														
-0.110	111-150	21	-0.110														

Ordering Example: **Part Number** - **L**
KEGF2 - 12

Part Number Type	Bh9	L 1mm Increment	H Tolerance	C	KEDF				KESF				KEGF				
					Unit Price	Volume Discount Rate											
KEDF KESF KEGF	0	40-100	12	0													
	-0.052	101-150	13	-0.052	0.60-0.80												
	0	151-200	14	0													
	-0.052	40-100	15	-0.052													
	0	101-150	16	0													
	-0.052	151-200	17	-0.052													
	0	201-250	18	0													
	-0.052	40-100	19	-0.052													
	0	101-150	20	0													
	-0.052	151-200	21	-0.052													
	0	201-250	22	0													
	-0.062	251-300	23	-0.062													

Ordering Example: **Part Number** - **L**
KEGF28 - 120

Parallel Keys

With Counterbore / With Tapped Counterbore Hole

Parallel Keys With Counterbore

**KEDZ
KEDSZ** (Stainless Steel)

**KESZ
KESSZ** (Stainless Steel)

**KEGZ
KEGSZ** (Stainless Steel)

L	Tolerance
~15	0 -0.18
16-30	0 -0.21
31-50	0 -0.25
51-80	0 -0.30
81-110	0 -0.35

Type	Material	Tensile Strength
KEDZ KESZ KEGZ	S45C	600N/mm ² or More
KEDSZ KESSZ KEGSZ	SUS316	

Part Number	Type	Bh9	L 5mm Increment	H Tolerance	d	d1	h	C	Unit Price					
									KEDZ	KEDSZ	KESZ	KESSZ	KEGZ	KEGSZ
8	KEDZ KEDSZ (Stainless Steel)	0	15-80	7	3.4	6	3.5	0.25-0.40						
10		-0.036	15-80	8	4.5	7.5	4.5							
12	KESZ KESSZ (Stainless Steel)	0	20-80	9	5.5	9.5	5.5	0.40-0.60						
14			30-90											
15	KEGZ KEGSZ (Stainless Steel)	-0.043	30-90	10	6.6	11	6.5							
16			40-100											
18			40-110	11										

Parallel Keys With Tapped Counterbore Hole

**KEDY
KEDSY** (Stainless Steel)

**KESY
KESSY** (Stainless Steel)

**KEYY
KEGSY** (Stainless Steel)

L	Tolerance
~15	0 -0.18
16-30	0 -0.21
31-50	0 -0.25
51-80	0 -0.30
81-110	0 -0.35

Type	Material	Tensile Strength
KEDY KESY KEYY	S45C	600N/mm ² or More
KEDSY KESSY KEGSY	SUS316	

⚠ The hole can be used as a mounting hole as well as a tapped hole.

Part Number	Type	Bh9	L 5mm Increment	H Tolerance	Tapped M (d)	Mounting Screw	d1	h	C	Unit Price					
										KEDY	KEDSY	KESY	KESSY	KEYY	KEGSY
8	KEDY KEDSY (Stainless Steel)	0	15-80	7	M4 (3.5)	M3	6	3.5	0.25-0.40						
10		-0.036	15-80	8	M5 (4.3)	M4	7.5	4.5							
12	KESY KESSY (Stainless Steel)	0	20-80	9	M6 (5.3)	M5	9.5	5.5	0.40-0.60						
14			30-90												
15	KEYY KEGSY (Stainless Steel)	-0.043	30-90	10											
16			40-100												
18			40-110	11											

Ordering Example: Part Number - L
KEDZ8 - 30
KEDY10 - 40

Alterations Example: Part Number - L(LC)
KEDZ8 - LC28

Alteration	Code	Spec.
Full Length	LC	Cuts L dimension within the standard L dimension range. LC=1mm Increment

Parallel Keys

With Counterbores and Tapped Hole / With Tapped Hole

Parallel Keys With Counterbores and Tapped Hole

**KEDW
KEDSW** (Stainless Steel)

**KESW
KESSW** (Stainless Steel)

**KEGW
KEGSW** (Stainless Steel)

L	Tolerance
~50	0 -0.25
51-80	0 -0.30
81-110	0 -0.35

Type	Material	Tensile Strength
KEDW KESW KEGW	S45C	600N/mm ² or More
KEDSW KESSW KEGSW	SUS316	

Counterbored Hole Pitch = L-(bx2)

Part Number	Type	Bh9	L 5mm Increment	H Tolerance	d	d1	h	b	M (Coarse)	C	Unit Price					
											KEDW	KEDSW	KESW	KESSW	KEGW	KEGSW
8	KEDW KEDSW (Stainless Steel)	0	35-80	7	3.4	6	3.5	8	M3	0.25-0.40						
10		-0.036	45-80	8	4.5	7.5	4.5	10	M4							
12	KESW KESSW (Stainless Steel)	0	50-80	9	5.5	9.5	5.5	12	M5	0.40-0.60						
14			50-90													
15	KEGW KEGSW (Stainless Steel)	-0.043	50-90	10	6.6	11	6.5	18	M6							
16			60-100													
18			60-110	11												

Parallel Keys With Tapped Hole

**KEDM
KEDSM** (Stainless Steel)

**KESM
KESSM** (Stainless Steel)

**KEGM
KEGSM** (Stainless Steel)

L	Tolerance
~10	0 -0.18
11-15	0 -0.18
16-30	0 -0.21
31-50	0 -0.25
51-80	0 -0.30
81-110	0 -0.35

Type	Material	Tensile Strength
KEDM KESM KEGM	S45C	600N/mm ² or More
KEDSM KESSM KEGSM	SUS316	

Part Number	Type	Bh9	L 5mm Increment	H Tolerance	M (Coarse)	C	Unit Price							
							KEDM	KEDSM	KESM	KESSM	KEGM	KEGSM		
5	KEDM KEDSM (Stainless Steel)	0	10-50	5	0	0.25-0.40								
6		-0.030	10-60	6	-0.030	M3								
7	KESM KESSM (Stainless Steel)	0	15-60	7	0 -0.036	M4								
8			15-80											
10	KEGM KEGSM (Stainless Steel)	-0.043	15-80	8	0	M5								
12			20-80											
14			30-90	9	0 -0.090	M6								
15			30-90											
16			40-100	10										
18			40-110				11	0 -0.110						

Ordering Example: Part Number - L
KEDM5 - 30
KEDW12 - 80

Alterations Example: Part Number - L(LC) - (MPC)
KEDW8 - LC28
KEDM5 - 30 - MPC8

Alterations	Code	Spec.
Full Length	LC	Cuts L dimension within the standard L dimension range. LC=1mm Increment
Tap Position Change	MPC	Changes the tapped hole position. MPC=1mm Increment With Tapped Hole M≤MPC≤L-M

Parallel Keys / Tapered Machine Keys with Gib Head Blank Type

Parallel Keys (KET) are now on the website.

Parallel Keys - Stainless Steel

KETS

Type: **KETS** Material: **SUS316** Tensile Strength: **600N/mm² or More**

Part Number Type	B	H	C	Unit Price 1 ~ 3 pc(s)	Volume Discount Rate		
					4-19	20-49	50-100
KETS	2	+0.015 -0.025	0.2				
	3						
	4						
	5						
	6						
	7						
	8						
10	+0.015 -0.025	0.3					
12							
14							
			0.5				

Ordering Example: **Part Number** - **H**
KETS8 - **7**

Tapered Machine Keys with Gib Head

KTH

Type: **KTH** Material: **S45C** Tensile Strength: **600N/mm² or More**

B Dimension/H Dimension conform to B 1301-1996 (New JIS Standard).

Part Number Type	Bh9	h	L	h1	h2, t	(e)	C	Unit Price 1 ~ 4 pc(s)	Volume Discount Rate		
									5-9	10-29	30-49
KTH	4	0	4	30	7	4	0.16-0.25				
	5	-0.030	5	40	8	5	0.25-0.40				
	6		6	45	10	6					
	7	0	7.2	50	10	7	0.40-0.60				
	8		8	60	11	7		8			
	10	-0.036	8	75	12	8	0.60-0.80				
	12		9	90	14	9		14			
	14	0	10.2	110	15	10	1.00-1.20				
	15		10	120	16	10		16			
	16	-0.043	10	135	18	11	0.40-0.60				
	18		11	150	20	12		20			
	20	0	12	170	22	14	0.25-0.40				
	22		14	180	24	16		24			
	24	-0.052	16.2	200	22	14	0.60-0.80				
	25		14	210	25	16		28			
	28	0	16	240	28	18	0.40-0.60				
	32		18	260	32	22		35			
	35	-0.062	22.3	280	20	36	1.00-1.20				
36	20		285	36	24	38					

Ordering Example: **Part Number** - **(LC)**
KTH10 - **LC60**

Alterations

Alteration	Code	Spec.																				
L Dimension Change	LC	LC=1mm Increment LC (Min.)>LC<L For LC (Min.), see below.																				
		<table border="1"> <thead> <tr> <th>B</th> <th>LC (Min.)</th> </tr> </thead> <tbody> <tr><td>4, 5</td><td>10</td></tr> <tr><td>6, 7, 8</td><td>15</td></tr> <tr><td>10, 12</td><td>20</td></tr> <tr><td>14, 15, 16</td><td>22</td></tr> <tr><td>18, 20</td><td>25</td></tr> <tr><td>22, 24, 25</td><td>30</td></tr> <tr><td>28</td><td>35</td></tr> <tr><td>32, 35, 36</td><td>40</td></tr> <tr><td>38</td><td>45</td></tr> </tbody> </table>	B	LC (Min.)	4, 5	10	6, 7, 8	15	10, 12	20	14, 15, 16	22	18, 20	25	22, 24, 25	30	28	35	32, 35, 36	40	38	45
B	LC (Min.)																					
4, 5	10																					
6, 7, 8	15																					
10, 12	20																					
14, 15, 16	22																					
18, 20	25																					
22, 24, 25	30																					
28	35																					
32, 35, 36	40																					
38	45																					

Screw Plugs

MSW (Dimple Shape and Dimension)

Part Number/dz max.
MSW3 1.4
MSW4 2.0
MSW5 2.5

⚠ The tip of MSW3, 4, 5 is a cut point.

Type	M	Material	Hardness	Surface Treatment
MSW	2.5-10	SCM435	45-53HRC	Black Oxide (JIS B 0207 Class 2)
MSWA, MSWZ	8-33	S45C	34-43HRC	Black Oxide (JIS B 0207 Class 2)

Material: **MSWZ-MSWZS** S45C
Hardness: 33-38HRC
Surface Treatment: Black Oxide (JIS B 0207 Class 2)

Standard Type

MxP	L	B	t	Part Number Type	Unit Price M	Volume Discount Rate
2.5	0.45	3	1.3	MSW	2.5	1-299
3	0.5	3	1.5		3*	300-500
4	0.7	4	2		4*	
5	0.8	5	2.5		5*	
6	1.0	6	3		6	
8	1.25	8	4		8	
10	1.5	8	5		10	
12	1.5	6	5.5		12	
14		8	5.5		14	
16	1.5	10	6		16	
18		10	6	18		
20	1.5	12	6	20		
22		12	6	22		
24	1.5	14	6	24		
25		14	6	25		
26	1.5	17	6	26		
27		17	6	27		
28	1.5	18	10	28		
30		18	10	30		
33	1.5	17	10	33		
36		17	10	36		
38	1.5	18	10	38		
40		18	10	40		
42	1.5	18	10	42		
45		18	10	45		

⚠ The tip of MSW3, 4, 5 is a cut point.

Short Type

MxP	L	B	t	Part Number Type	Unit Price M-L	Volume Discount Rate
8	1.25	4	4	MSWS (Short)	8-6	1-299
10	1.5	5	5		10-6	300-499
12	1.5	6	3		12-6	500-999
14		6	3		14-6	1000-2000
16	1.5	8	4		16-6	
18		8	4		18-6	
20	1.5	10	4		20-8	
22		10	4		22-8	
24	1.5	12	4		24-8	
25		12	4		25-8	
26	1.5	14	4	26-8		
27		14	4	27-8		
28	1.5	17	4	28-8		
30		17	4	30-8		
33	1.5	17	4	33-8		
36		17	4	36-8		

MSWA (Through Hole)

MxP	L	B	Part Number Type	Unit Price M	Volume Discount Rate
8	1.25	4	MSWA (Through Hole)	8	1-299 pc(s)
10	1.5	5		10	300-499
12	1.5	6		12	500-999
14		6		14	1000-2000
16	1.5	8		16	
18		8		18	
20	1.5	10		20	
22		10		22	
24	1.5	12		24	
25		12		25	
26	1.5	14	26		
27		14	27		
28	1.5	17	28		
30		17	30		
33	1.5	17	33		
36		17	36		

MSWZ (With Washer)

MxP	L	B	H	t	C	Part Number Type	Unit Price M	Volume Discount Rate
6	1.0	8	3	9	MSWZ (With Washer)	6	1-99 pc(s)	100-199
8	1.25	10	4	11		8	200-299	
10	1.5	5	13	10		10	300-500	
12	1.5	6	15	12		12		
14		6	15	14				
16	1.5	8	17	16		16		
18		8	17	18				
20	1.5	10	21	20		20		
22		10	21	22				
24	1.5	12	25	24		24		
25		12	25	25				
26	1.5	14	29	26	26			
27		14	29	27				
28	1.5	17	31	28	28			
30		17	31	30				
33	1.5	17	33	33	33			
36		17	33	36				

MSWZS (With Washer, Short)

MxP	L	B	H	t	C	Part Number Type	Unit Price M-L	Volume Discount Rate
10	1.5	5	13	MSWZS (With Washer, Short)	2.0	10-10	1-99 pc(s)	100-199
12	1.5	6	15			12-10	200-299	
14		6	15			14-10	300-500	
16	1.5	8	19			16-10		
18		8	19			18-10		
20	1.5	10	21			20-10		
22		10	21			22-10		
24	1.5	12	25			24-10		
25		12	25			25-10		
26	1.5	14	29			26-10		
27		14	29	27-10				
28	1.5	17	31	28-10				
30		17	31	30-12				
33	1.5	17	36	33-12				
36		17	36	36-12				

⚠ Short Type has shorter L dimension and fewer threads, compared with the standard type (MSW, MSWA, MSWZ). Before use, check the load applied to the screw plug and the material of the plate to be tapped.

Ordering Example: **Part Number**
MSW18
MSWZS18-6

For orders larger than indicated quantity, please check with WOS-P99