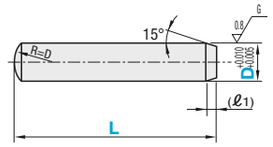
Dowel Pins
Oversized

■Straight



RoHS



Type	M Material	H Hardness
MS	EN 1.3505 Equiv.	58HRC~
MSC	EN 1.4125 Equiv.	58HRC~
MSCSS	EN 1.4301 Equiv.	-

ℓ1 dimension may become larger than the value shown in the catalog due to polishing process.

ℓ1	Part Number Type	D	L	Unit Price 1~499	Volume Discount Rate 500~2000
0.4	MS	1	6 8 10		
0.6		1.5	6 8 10		
1		2	6 8 10 15 20		
		2.5	6 8 10 15 20 25 30		
		3	6 8 10 15 20 25 30 35 40		
1.5		4	8 10 15 20 25 30 35 40 45 50		
		5	8 10 15 20 25 30 35 40 45 50		
2		6	8 10 15 20 25 30 35 40 45 50 55 60		
2.5		8	10 15 20 25 30 35 40 45 50 55 60 65 70 80		
3		10	15 20 25 30 35 40 45 50 55 60 65 70 80		
3.5		12	20 25 30 35 40 45 50 55 60 70 80		
		13	30 40 50 60 70 80		

For orders of 1 ~ 9 pc(s): Unit Price + Low Quantity Surcharge (1 Line Item)

For orders larger than indicated quantity, please check with WOS.

ℓ1	Part Number Type	D	L	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~49	50~99	100~2000
0.4	MSC	1	5 6 8 10				
0.6		1.5	5 6 8 10				
1		2	5 6 8 10 12 15 20				
		2.5	6 8 10 12 15 20				
		3	6 8 10 12 15 20 25 30 35 40				
1.5		4	8 10 12 15 20 25 30 35 40 50				
		5	8 10 12 15 20 25 30 35 40 50				
2		6	8 10 12 15 20 25 30 35 40 50 60				
2.5		8	10 15 20 25 30 35 40 50 60				
3		10	10 15 20 25 30 35 40 50 60				
3.5		12	30 35 40 50 60				

For orders larger than indicated quantity, please check with WOS.

ℓ1	Part Number Type	D	L	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~49	50~99	100~500
0.4	MSCSS	1	5 6 8 10				
0.6		1.5	5 6 8 10				
1		2	5 6 8 10 12 15				
		2.5	6 8 10 12 15				
		3	6 8 10 12 15 20				
1.5		4	8 10 12 15 20				
		5	10 12 15 20				
2		6	10 12 15 20 25				

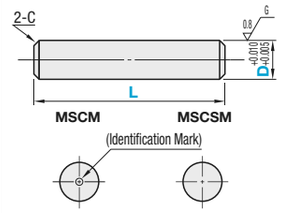
For orders larger than indicated quantity, please check with WOS.

■Straight, Chamfered



RoHS

Type	M Material	H Hardness
MSCM	EN 1.4125 Equiv.	58HRC~
MSCSM	EN 1.4301 Equiv.	-



C	Part Number Type	D	L	Unit Price 1 ~ 19 pc(s).	Volume Discount Rate 20~29	30~49	50~100
0.3 or Less	MSCM	2	6 8 10 12 15				
		3	10 12 15 20				
		4	10 12 15 20				
0.5		5	10 12 15 20				
		6	10 12 15 20 25				

For orders larger than indicated quantity, please check with WOS.

C	Part Number Type	D	L	Unit Price 1 ~ 19 pc(s).	Volume Discount Rate 20~29	30~49	50~100
0.3 or Less	MSCSM	2	6 8 10 12 15				
		3	10 12 15 20				
		4	10 12 15 20				
0.5		5	10 12 15 20				
		6	10 12 15 20 25				

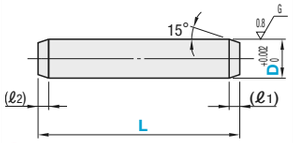
For orders larger than indicated quantity, please check with WOS.

■Straight – High Precision



RoHS

Type	M Material	H Hardness
MSV	EN 1.3505 Equiv.	58HRC~
MSVC	EN 1.4125 Equiv.	58HRC~



Measurement is taken place in constant temperature room.

ℓ1, ℓ2 dimension may become larger than the value shown in the catalog due to polishing process.

ℓ1	ℓ2	Part Number Type	D	L	Unit Price 1~49	Volume Discount Rate 50~499	500~2000
1	0.2	MSV	2	6 8 10			
	0.5		3	8 10 15 20 25 30			
1.5			4	10 15 20 25 30			
			5	10 15 20 25 30			
2			6	10 15 20 25 30			
2.5			8	20 30 40			
3			10	30 40 50 60			

For orders of 1 ~ 9 pc(s): Unit Price + Low Quantity Surcharge (1 Line Item)

For orders larger than indicated quantity, please check with WOS.

ℓ1	ℓ2	Part Number Type	D	L	Unit Price 1~9 pc(s).	Volume Discount Rate 10~49	50~99	100~500
0.4	0.1	MSVC	1	5 6 8 10				
0.6			1.5	5 6 8 10				
1	0.2		2	5 6 8 10				
	0.5		3	6 8 10 15 20 25 30				
1.5			4	8 10 15 20 25 30				
			5	10 15 20 25 30				
2			6	10 15 20 25 30				
2.5			8	20 30 40				
3			10	30 40 50 60				

For orders larger than indicated quantity, please check with WOS.

For orders larger than indicated quantity, please request a quotation.P99

Ordering Example

Part Number	-	L
MS2	-	10
MSCM4	-	12
MSV2	-	6

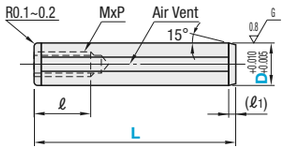
Dowel Pins
Oversized

■One End Tapped



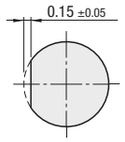
RoHS

Type	M Material	H Hardness
MSTP	EN 1.3505 Equiv.	58HRC~
MSTPC	EN 1.4125 Equiv.	58HRC~
MSTPCS	EN 1.4301 Equiv.	-



Air Vent Depth

All air vents are identical in depth.



- When D=5 or 6 and L=10, the pilot hole for tapping may go through.
- * ℓ=6 only when D=6 and L=10
- ℓ1 dimension may become larger than the value shown in the catalog due to polishing process.

ℓ1	MxP	ℓ	Part Number Type	D	L	Unit Price 1~299	Volume Discount Rate 300~500
1.5	3x0.5	6	MSTP	5	10 15 20 25 30		
2.0	4x0.7	*8		6	10 15 20 25 30 35 40 50		
	5x0.8			8	15 20 25 30 35 40 45 50 60 70 80		
2.5	6x1.0	10		10	15 20 25 30 35 40 45 50 60 70 80		
				12	20 30 40 50 60 70 80		
	8x1.25	15		13	40 50 60 70 80		
3.0				16	40 50 60 70		

For orders larger than indicated quantity, please check with WOS.

ℓ1	MxP	ℓ	Part Number Type	D	L	Unit Price 1~19	Volume Discount Rate 20~99	100~500
1.5	3x0.5	6	MSTPC	5	10 15 20			
2.0	4x0.7	8		6	15 20 25 30			
	5x0.8			8	15 20 25 30 35 40			
2.5	6x1.0	10		10	20 25 30 35 40 45 50 60			
	8x1.25	15		12	30 40 50 60			
				13	30 40 50 60			

For orders larger than indicated quantity, please check with WOS.

ℓ1	MxP	ℓ	Part Number Type	D	L	Unit Price 1~19	Volume Discount Rate 20~29	30~49	50~100
1.5	3x0.5	6	MSTPCS	5	10 15 20 25 30				
2.0	4x0.7	8		6	10 15 20 25 30 35 40				
	5x0.8			8	15 20 25 30 35 40 45 50				

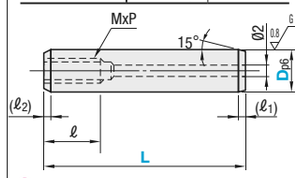
For orders larger than indicated quantity, please check with WOS.

■One End Tapped (Hollow)



RoHS

Type	M Material	H Hardness
THS	EN 1.3505 Equiv.	45~50HRC
THSS	EN 1.4125 Equiv.	



- ℓ1, ℓ2 dimension may become larger than the value shown in the catalog due to polishing process.

ℓ1	ℓ2	ℓ	MxP	Dp6	Part Number Type	D	L	Unit Price 1~499 pc(s).	Volume Discount Rate 500~999	1000~1999	2000~4000
2	0.3	8	4x0.7	+0.020 +0.012	THS	6	15 20 25 30 35				
	0.5		5x0.8	+0.024 +0.015		8	15 20 25 30 35				
2.5		10	6x1.0			10	20 25 30 35 40				
	1.0			+0.029 +0.018		12	20 25 30 35 40 45				

For orders larger than indicated quantity, please check with WOS.

ℓ1	ℓ2	ℓ	MxP	Dp6	Part Number Type	D	L	Unit Price 1~499 pc(s).	Volume Discount Rate 500~999	1000~1999	2000~4000
2	0.3	8	4x0.7	+0.020 +0.012	THSS	6	15 20 25 30 35				
	0.5		5x0.8	+0.024 +0.015		8	15 20 25 30 35				
2.5		10	6x1.0			10	20 25 30 35 40				
	1.0			+0.029 +0.018		12	20 25 30 35 40 45				

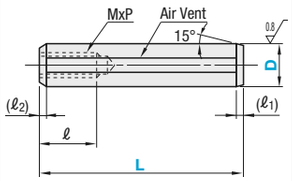
For orders larger than indicated quantity, please check with WOS.

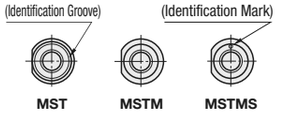
■One End Tapped



RoHS

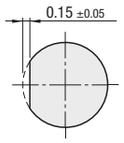
Type	D Tolerance	M Material	H Hardness
MST	p6	EN 1.3505 Equiv.	45~50HRC
MSTM	m6		
MSTMS		EN 1.4125 Equiv.	





Air Vent Depth

All air vents are identical in depth.



- When D=5 or 6 and L=10, the pilot hole for tapping may go through.
- * ℓ=6 only when D=6 and L=10
- ℓ1, ℓ2 dimension may become larger than the value shown in the catalog due to polishing process.

ℓ1	ℓ2	MxP	ℓ	Dp6	Part Number Type	D	L	Unit Price 1~299	Volume Discount Rate 300~500
1.5	0.5	3x0.5	6	+0.020 +0.012	MST (p6 Type)	5	10 15 20 25 30		
2.0		4x0.7	*8			6	10 15 20 25 30 35 40 50		
		5x0.8		+0.024 +0.015		8	15 20 25 30 35 40 45 50 60 70 80		
2.5	1.0	6x1.0	10			10	15 20 25 30 35 40 45 50 60 70 80		
				+0.029 +0.018		12	20 30 40 50 60 70 80		
		8x1.25	15			13	40 50 60 70 80		
3.0						16	40 50 60 70 80		
		10x1.5	18	+0.035 +0.022		20	50 60 70 80		

For orders larger than indicated quantity, please check with WOS.

ℓ1	ℓ2	MxP	ℓ	Dm6	Part Number Type	D	L	Unit Price 1~299	Volume Discount Rate 300~500
1.5	0.3	3x0.5	6	+0.012 +0.004	MSTM (m6 Type)	5	10 15 20 25 30		
2.0		4x0.7	*8			6	10 15 20 25 30 35 40 50		
	0.5	5x0.8		+0.015 +0.006		8	15 20 25 30 35 40 45 50 60 70 80		
2.5		6x1.0	10			10	15 20 25 30 35 40 45 50 60 70 80		
	1.0			+0.018 +0.007		12	20 30 40 50 60 70 80		
		8x1.25	15			13	40 50 60 70 80		
3.0	1.5					16	40 50 70 80		
		10x1.5	18	+0.021 +0.008		20	50 60 70 80		

MST, MSTM For orders of 1 ~ 9 pc(s): Unit Price + Low Quantity Surcharge (1 Line Item)

For orders larger than indicated quantity, please check with WOS.

ℓ1	ℓ2	MxP	ℓ	Dm6	Part Number Type	D	L	Unit Price 1 ~ 19 pc(s).	Volume Discount Rate 20~29	30~49	50~100
1.5	0.3	3x0.5	6	+0.012 +0.004	MSTMS (m6 Type)	5	10 15 20				
2.0		4x0.7	*8			6	10 15 20 25 30				
	0.5	5x0.8		+0.015 +0.006		8	15 20 25 30 35 40				
		6x1.0				10	20 25 30 35				

For orders larger than indicated quantity, please check with WOS.

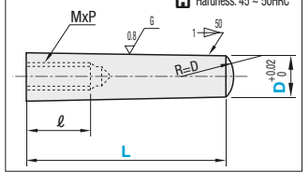
■Tapered, Tapped



RoHS

MTT

M Material: ISO-TC90 Equiv.
H Hardness: 45 ~ 50HRC



MxP	ℓ	Part Number Type	D	L	Unit Price 1 ~ 499 pc(s).	Volume Discount Rate 500~999	1000~1999	2000~4000
5x0.8	9	MTT	8	30 40				
6x1.0	10		10	40 50				
			12	40 50				
8x1.25	14		13	50 60				
10x1.5	16		16	60 70				

For orders larger than indicated quantity, please check with WOS.
For orders larger than indicated quantity, please request a quotation. P.99

Ordering Example

Part Number	-	L
MSTP5	-	10
MSTMS6	-	20

Dowel Pins / General Purpose Pins

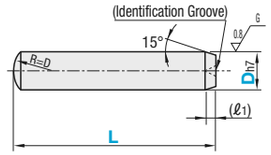
Undersized

■Dowel Pin - Straight (h7)



RoHS

Type	Material	Hardness
MSH	EN 1.4125 Equiv.	45~50HRC
MSHS	EN 1.4301 Equiv.	-



- The identification groove is available for MSH only.
- Ø1.5 or smaller pins have no identification groove.
- ℓ1 dimension may become larger than the value shown in the catalog due to polishing process.

ℓ1	Dh7	Part Number Type	D	L	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~49	50~99	100~500
0.4	0 -0.01	MSH	1	5 6 8 10				
0.6			1.5	5 6 8 10				
1			2	5 6 8 10 12 15 20				
			2.5	6 8 10 12 15 20 25 30				
	0 -0.012		3	6 8 10 12 15 20 25 30 35 40				
1.5			4	8 10 12 15 20 25 30 35 40 45 50				
			5	8 10 12 15 20 25 30 35 40 45 50				
2			6	8 10 12 15 20 25 30 35 40 45 50 55 60				
	0 -0.015		8	10 15 20 25 30 35 40 50 60				
2.5			10	15 20 25 30 35 40 50 60				

For orders larger than indicated quantity, please check with WOS.

ℓ1	Dh7	Part Number Type	D	L	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~49	50~99	100~200
0.4	0 -0.01	MSHS	1	5 6 8 10				
0.6			1.5	5 6 8 10				
1			2	5 6 8 10 12 15 18 20				
			2.5	6 8 10 12 15				
			3	6 8 10 12 15 18 20				
1.5	0 -0.012		4	8 10 12 15 18 20				
			5	8 10 12 15 18 20				
2			6	10 12 15 18 20				
	0 -0.015		8	15 18 20				

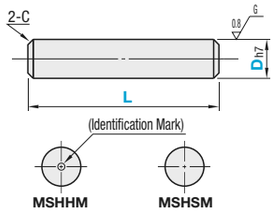
For orders larger than indicated quantity, please check with WOS.

■Dowel Pins - Chamfered



RoHS

Type	Material	Hardness
MSHHM	EN 1.4125 Equiv.	58HRC~
MSHSM	EN 1.4301 Equiv.	-



C	Dh7	Part Number Type	D	L	Unit Price 1 ~ 19 pc(s).	Volume Discount Rate 20~29	30~49	50~100
0.3 or Less	0 -0.01	MSHHM	2	6 8 10 12 15				
			3	6 8 10 12 15 20				
	0 -0.012		4	8 10 12 15 20				
0.5			5	8 10 12 15 20				
			6	10 12 15 20				
	0 -0.015		8	15 20				

For orders larger than indicated quantity, please check with WOS.

C	Dh7	Part Number Type	D	L	Unit Price 1 ~ 19 pc(s).	Volume Discount Rate 20~29	30~49	50~100
0.3 or Less	0 -0.01	MSHSM	2	6 8 10 12 15				
			3	6 8 10 12 15 20				
	0 -0.012		4	8 10 12 15 20				
0.5			5	8 10 12 15 20				
			6	10 12 15 20				
	0 -0.015		8	15 20				

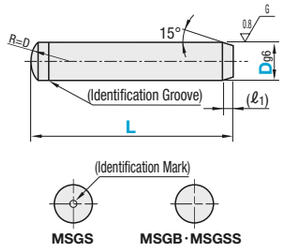
For orders larger than indicated quantity, please check with WOS.

■General Purpose Pin - Straight (g6)



RoHS

Type	Material	Hardness
MSGB	EN 1.3505 Equiv.	58HRC~
MSGS	EN 1.4125 Equiv.	58HRC~
MSGSS	EN 1.4301 Equiv.	-



- ℓ1 dimension may become larger than the value shown in the catalog due to polishing process.

ℓ1	Dg6	Part Number Type	D	L
1.0	-0.002 -0.008	MSGB MSGS MSGSS	2	6 8 10 12 15
			3	6 8 10 12 15 20
1.5	-0.004 -0.012		4	8 10 12 15 20
			5	8 10 12 15 20
2.0			6	10 12 15 20
	-0.005 -0.014		8	15 20

D	MSGB Unit Price 1 ~ 19 pc(s).	MSGB Volume Discount Rate 20~29	30~49	50~100	MSGS Unit Price 1 ~ 19 pc(s).	MSGS Volume Discount Rate 20~29	30~49	50~100	MSGSS Unit Price 1 ~ 19 pc(s).	MSGSS Volume Discount Rate 20~29	30~49	50~100
2												
3												
4												
5												
6												
8												

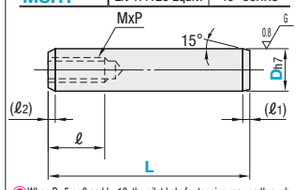
For orders larger than indicated quantity, please check with WOS.

■Dowel Pin One End Tapped (h7)



RoHS

Type	Material	Hardness
MSHT	EN 1.4125 Equiv.	40~50HRC



- When D=5 or 6 and L=10, the pilot hole for tapping may go through.
- * ℓ=6 only when D=6 and L=10
- ℓ1 · ℓ2 dimension may become larger than the value shown in the catalog due to polishing process.

ℓ1	ℓ2	MxP	ℓ	Dh7	Part Number Type	D	L	Unit Price 1 ~ 499 pc(s).	Volume Discount Rate 500~999	1000~1999	2000~4000
1.5	0.3	3 x 0.5	6	0 -0.012	MSHT	5	10 15 20 25 30				
2.0	0.5	4 x 0.7	*8			6	10 15 20 25 30 35 40 45 50				
		5 x 0.8		0 -0.015		8	15 20 25 30 35 40 45 50				
2.5	1.0	6 x 1.0	10			10	15 20 25 30 35 40 45 50				
				0 -0.018		12	30 35 40 45 50				

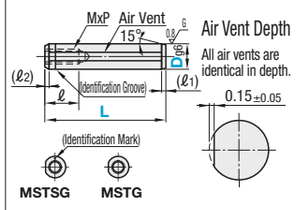
For orders larger than indicated quantity, please check with WOS.

■General Purpose Pins - One End Tapped (g6)



RoHS

Type	Material	Hardness
MSTG	EN 1.3505 Equiv.	45~50HRC
MSTSG	EN 1.4125 Equiv.	45~50HRC



- ℓ1 · ℓ2 dimension may become larger than the value shown in the catalog due to polishing process.

ℓ1	ℓ2	MxP	ℓ	Dg6	Part Number Type	D	L	Unit Price 1 ~ 19 pc(s).	Volume Discount Rate 20~29	30~49	50~100
1.5	0.3	3x0.5	6	-0.004 -0.012	MSTG	5	10 15 20				
2.0	0.3	4x0.7	8			6	10 15 20 25 30				
2.0	0.5	5x0.8	8	-0.005 -0.014		8	15 20 25 30 35 40				
2.5	0.5	6x1.0	10			10	20 25 30 35 40				
2.5	1	6x1.0	10	-0.006 -0.017		12	30 35 40 45				

For orders larger than indicated quantity, please check with WOS.

ℓ1	ℓ2	MxP	ℓ	Dg6	Part Number Type	D	L	Unit Price 1 ~ 19 pc(s).	Volume Discount Rate 20~29	30~49	50~100
1.5	0.3	3x0.5	6	-0.004 -0.012	MSTSG	5	10 15 20				
2.0	0.3	4x0.7	8			6	10 15 20 25 30				
2.0	0.5	5x0.8	8	-0.005 -0.014		8	15 20 25 30 40				
2.5	0.5	6x1.0	10			10	20 25 30 40				

For orders larger than indicated quantity, please check with WOS.

Ordering Example

Part Number	-	L
MSH2	-	6
MSGB3	-	12

Dowel Pins / Dowel Removal Jigs

Undersized

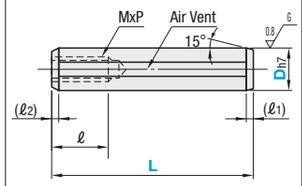
■Dowel Pin One End Tapped (h7)



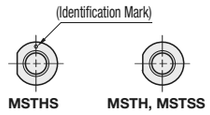
RoHS

Type	M Material	H Hardness
MSTH	EN 1.3505 Equiv.	45~50HRC
MSTHS	EN 1.4125 Equiv.	45~50HRC
MSTSS	EN 1.4301 Equiv.	-

MSTH MSTHS MSTSS

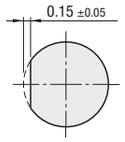


When D=5 or 6 and L=10, the pilot hole for tapping may go through.
* ℓ=6 only when D=6 and L=10
With an air vent.



Air Vent Depth

All air vents are identical in depth.
Applicable Products:**MSTH, MSTHS, MSTSS**



ℓ1, ℓ2 dimension may become larger than the value shown in the catalog due to polishing process.

ℓ1	ℓ2	M x P	ℓ	Dh7	Part Number Type	D	L	Unit Price 1~299	Volume Discount Rate 300~500
1.5	0.3	3 x 0.5	6	0 -0.012	MSTH	5	10 15 20 25 30		
2.0		4 x 0.7	*8			6	10 15 20 25 30 35 40 50		
	0.5	5 x 0.8		0 -0.015		8	15 20 25 30 35 40 45 50 60 70 80		
2.5		6 x 1.0	10			10	15 20 25 30 35 40 45 50 60 70 80 100 120		
	1.0			0 -0.018		12	20 30 40 50 60 70 80 100 120		
		8 x 1.25	15			13	40 50 60 70 80 100 120		
3.0	1.5					16	40 50 60 70 80 100 120 150		

For orders larger than indicated quantity, please check with WOS.

ℓ1	ℓ2	MxP	ℓ	Dh7	Part Number Type	D	L	Unit Price 1 ~ 19 pc(s).	Volume Discount Rate 20~29	30~49	50~100
1.5	0.3	3x0.5	6	0 -0.012	MSTHS	5	10 15 20				
2.0		4x0.7	8			6	10 15 20 25 30				
	0.5	5x0.8		0 -0.015		8	15 20 25 30 35 40				
2.5		6x1.0	10			10	30 35 40 45				

For orders larger than indicated quantity, please check with WOS.

ℓ1	ℓ2	MxP	ℓ	Dh7	Part Number Type	D	L	Unit Price 1 ~ 19 pc(s).	Volume Discount Rate 20~29	30~49	50~100
1.5	0.3	3x0.5	6	0 -0.012	MSTSS	5	10 15 20				
2.0		4x0.7	8			6	10 15 20 25 30				
	0.5	5x0.8		0 -0.015		8	15 20 25 30 35 40				
2.5		6x1.0	10			10	30 35 40 45				

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

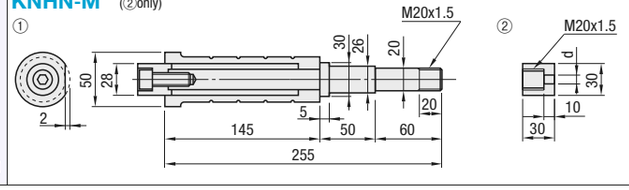
Ordering Example: Part Number - L → MSTHS6 - 10

■Dowel Removal Jigs



RoHS

KNHN (①Main Body + ②Holder Cap 1pc.)
KNHN-M (②only)



①Main Body
M Material: EN 1.1191 Equiv.
H Hardness: 38 ~ 42HRC
②Holder Cap
For M4, M5, M6, M8, M10

Part Number	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~20
KNHN (①+②)		

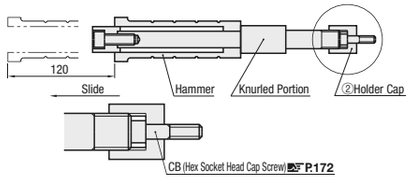
d	Part Number Type	No.	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10~20
4.2	KNHN-M (②only)	4		
5.2		5		
6.3		6		
8.5		8		
10.5		10		

For orders larger than indicated quantity, please check with WOS.

Ordering Example: Part Number → KNHN / KNHN - M5

■How to Use

1. Insert the hex socket head cap screw (CB) into the holder cap.
2. Attach ② holder cap to the tip of main body.
3. Attach screw tip onto the dowel pin by turning the knurled portion of shaft.
4. Slide the hammer to remove dowel pin.



Dual-Fit Dowel Pins

p6-h7 p6-g6 / Hollow, Tapped

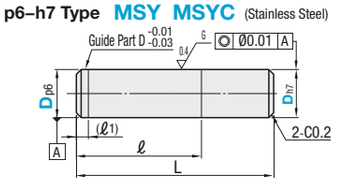
ℓ1 dimension may become larger than the value shown in the catalog due to polishing process.

■Dual-Fit Dowel Pins

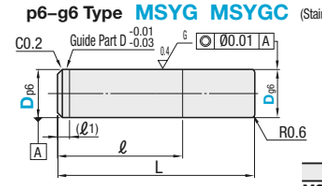


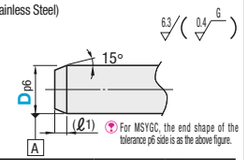
RoHS

p6–h7 Type MSY MSYC (Stainless Steel)



p6–g6 Type MSYG MSYGC (Stainless Steel)





For MSYGC, the end shape of the tolerance p6 side is as the above figure.

Type	M Material	H Hardness
MSY MSYG	EN 1.3505 Equiv.	58HRC~
MSYC MSYGC	EN 1.4125 Equiv.	

Part Number Type	D	D Tolerance p6	h7	No.	L	ℓ	ℓ1	MSY Unit Price 1 ~ 99 pc(s).	MSY Volume Discount Rate 100 ~ 1000 pcs.	MSYC Unit Price 1~99	MSYC Volume Discount Rate 100 ~ 1000 pcs.
MSY MSYC (Stainless Steel)	3	+0.012 +0.006	0 -0.010	803	8	3	1				
				8		4					
				805		5					
				1003	10	3					
				1005		5					
				10		7					
				12	12	6					
				15	15	10					
				20	20	13					
	4			803	8	3					
				8		4					
				805	10	5					
				1005		5					
				10		7					
				1008		8					
				1205	12	5					
				12		6					
				1208		8					
				1508	15	8					
				15		10					
				1512		12					
				20	20	13					
	5	+0.020 +0.012	0 -0.012	1003	10	3	1.5				
				1005		5					
				10		7					
				1205	12	5					
				12		6					
				1208		8					
				1508	15	8					
				15		10					
				1512		12					
				18	18	12					
				20	20	13					
	6			1005	10	5					
				10		7					
				1008	12	8					
				1205		5					
				12		6					
				1208		8					
				1508	15	8					
				15		10					
				1512		12					
				18	18	12					
				20	20	13					
	8	+0.024 +0.015	0 -0.015	18	18	12	2				
				20	20	13					
				25	25	16					
				30	30	19					
	10			18	18	12					
				25	25	16					
				30	30	19					
	12	+0.028 +0.018	0 -0.018	40	40	25					

For orders larger than indicated quantity, please check with WOS.

Part Number Type	D	D Tolerance p6	g6	No.	L	ℓ	ℓ1	MSYG Unit Price 1 ~ 99 pc(s).	MSYG Volume Discount Rate 100 ~ 1000 pcs.	MSYGC Unit Price 1 ~ 99 pc(s).	MSYGC Volume Discount Rate 100 ~ 1000 pcs.
MSYG MSYGC (Stainless Steel)	3	+0.012 +0.006	-0.002 -0.008	803	8	3	1				
				8		4					
				805		5					
				1003	10	3					
				1005		5					
				10		7					
				12	12	6					
				15	15	10					
				20	20	13					
	4			803	8	3					
				8		4					
				805	10	5					
				1005		5					
				10		7					
				1008		8					
				1205	12	5					
				12		6					
				1208		8					
				1508	15	8					
				15		10					
				1512		12					
				20	20	13					
	5	+0.020 +0.012	-0.004 -0.012	1003	10	3	1.5				
				1005		5					
				10		7					
				1205	12	5					
				12		6					
				1208		8					
				1508	15	8					
				15		10					
				1512		12					
				18	18	12					
				20	20	13					
	6			1005	10	5					
				10		7					
				1008	12	8					
				1205		5					
				12		6					
				1208		8					
				1508	15	8					
				15		10					
				1512		12					
				18	18	12					
				20	20	13					
	8	+0.024 +0.015	-0.005 -0.014	18	18	12	2				
				20	20	13					
				25	25	16					
				30	30	19					
	10			18	18	12					
				25	25	16					
				30	30	19					
	12	+0.028 +0.018	-0.006 -0.017	40	40	25					

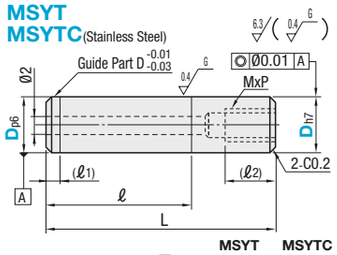
For orders larger than indicated quantity, please check with WOS.

■Dual-Fit Dowel Pins Hollow, Tapped



RoHS

MSYT MSYTC (Stainless Steel)



The end shape of the tolerance p6 side for MSYTC is same as that of MSYGC.

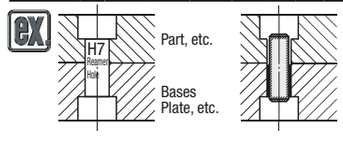
MSYT: M Material: EN 1.3505 Equiv. H Hardness: 58HRC ~ 58HRC~
MSYTC: EN 1.4125 Equiv.

ℓ1, ℓ2 dimension may become larger than the value shown in the catalog due to polishing process.

Ordering Example: Part Number - No. → MSY3 - 10 / MSYG6 - 1208 / MSYT8 - 18

Part Number Type	D	D Tolerance p6	h7	No.	MxP	L	ℓ	ℓ1	ℓ2	MSYT Unit Price 1 ~ 99 pc(s).	MSYT Volume Discount Rate 100 ~ 1000 pcs.	MSYTC Unit Price 1 ~ 99 pc(s).	MSYTC Volume Discount Rate 100 ~ 1000 pcs.
MSYT MSYTC (Stainless Steel)	6	+0.020 +0.012	0 -0.012	1205	4x0.7	15	5	1.5	5				
				12			6						
				1208			8						
				1508			8						
				15			10						
				1512			12						
				18		18	12						
				20		20	13		8				
	8	+0.024 +0.015	0 -0.015	18	5x0.8	18	12	1.5					
				20		20	13						
				25		25	16						
				30		30	19						
	10			18		18	12	2					
				25		25	16						
				30		30	19		10				
	12	+0.028 +0.018	0 -0.018	40	6x1.0	40	25						

For orders larger than indicated quantity, please check with WOS.



Stepped Dowel Pins / Insulating Dowel Pins / Plastic Dowel Pins

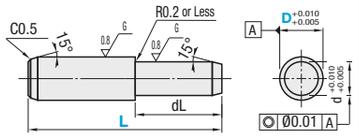
Spring Pins

■Stepped Dowel Pins Standard with Tapped Hole

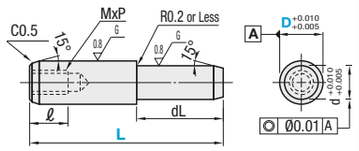


RoHS

MSFW
MSFWC (Stainless Steel)

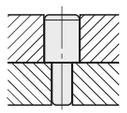


MSFWM (With Tapped Hole)
MSFWCM (Stainless Steel with Tapped Hole)



Type		Material	Hardness
MSFW	MSFWM	EN 1.3505 Equiv.	58HRC~
MSFWC	MSFWCM	EN 1.4125 Equiv.	

Example



Convenient for readjustment and prevention to fall off.

Part Number Type	D	L	MxP	ℓ	d	dL	Unit Price MSFW	MSFWC	MSFWM	MSFWCM
MSFW MSFWC (Stainless Steel) MSFWM (With Tapped Hole) MSFWCM (Stainless Steel with Tapped Hole)	5	15	-	-	4	5			-	-
		25				10				
	6	20	-	-	5	10			-	-
		30	3x0.5	6		15				
	8	25	4x0.7	8	6	10				
		35				15				
	10	35	5x0.8		8	15				
		40				15				
	13	45	6x1.0	10	10	20				
		55				25				
		70				30				

Ordering Example: Part Number - L → MSFW10 - 35

■Insulating Dowel Pins

RoHS

MSIP

Ⓜ Body: Fabric Base Bakelite Core Rod: EN 1.4301 Equiv.
Properties of Bakelite P.955
The D dimension tolerance is the result of measurement at room temperature (20°C).

Part Number Type	D	D Tolerance	d	L	Unit Price L8·10	L15	L20	L25	L30	L35	L40	L45	L50
MSIP	6	+0.03 0	3	8 10 15 20 25 30 35 40								-	-
	8		4	10 15 20 25 30 35 40								-	-
	9			15 20 25 30 35 40 45 50	-								
	10		5	15 20 25 30 35 40 45 50	-								
	12		6	20 25 30 35 40 45 50	-	-							

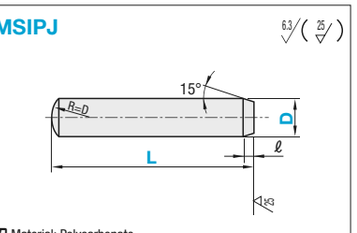
Ordering Example: Part Number - L → MSIP6 - 30

■Plastic Dowel Pins



RoHS

MSIPJ



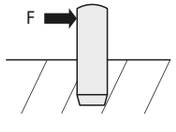
Ⓜ Material: Polycarbonate
Properties of Polycarbonate P.949
The D dimension tolerance is the result of measurement at room temperature (20°C).

Part Number Type	D	D Tolerance	ℓ	L	Unit Price L10	L15	L20	L25
MSIPJ	3	+0.03 0	1.0	10 15 20				-
	4		1.5	10 15 20				-
	5			10 15 20				-
	6		2.0	10 15 20 25				
	8			15 20 25	-			

Ordering Example: Part Number - L → MSIPJ6 - 25

D	Static Yield Load (kN)
3	0.4
4	0.6
5	1.1
6	1.4
8	2.1

■ Static Shear Failure Data



■Spring Pins

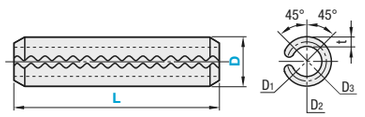


RoHS

SSPR



SSPSR (Stainless Steel)



L	L Tolerance
5~ 10	+0.5 0
12~ 50	+1.0 0
56~100	+1.5 0

Type	Material	Hardness
JIS-SSPR	Spring Steel	45~50HRC
JIS-SSPSR	Spring Stainless Steel Alloy	42~48HRC

Part Number Type	D - L		*kN JIS-SSPR	JIS-SSPSR	t (Reference) JIS-SSPR	JIS-SSPSR	D min	max
SSPR (D2~10) SSPSR (D2~6)	2	(Price Table below)	2.76	2.76	0.4	0.4	2.15	2.25
	3		6.2	6.2	0.6	0.6	3.15	3.25
	4		10.8	10.8	0.8	0.8	4.2	4.4
	5		17.25	17.25	1	1	5.2	5.4
	6		24.83	24.83	1.2	1.2	6.2	6.4
	8		44.13	-	1.6	-	8.3	8.6
	10		68.94	-	2	-	10.3	10.6

Maximum value of D is the maximum value on the pin's circumference and the minimum value for D is the average of D1, D2 and D3.
Reference: t conforms to JSMA No. 6 (Japan Spring Manufactures Association Standard).
* kN = Minimum Double Shearing Load

Ordering Example: Part Number → SSPR5 - 40

Part Number Type	D - L	SSPR Unit Price 1 ~ 99 pcs.	SSPR Volume Discount Rate 100 ~ 1000 pcs.	SSPSR Unit Price 1 ~ 99 pcs.	SSPSR Volume Discount Rate 100 ~ 1000 pcs.
SSPR 2-	5				
SSPSR (Stainless Steel)	6				
	8				
	10				
	12				
	14				
	16				
	18				
	20				
SSPR 3-	6				
SSPSR (Stainless Steel)	8				
	10				
	12				
	14				
	16				
	18				
	20				
	22				
	25				
	28				
	32				
SSPR 4-	8				
SSPSR (Stainless Steel)	10				
	12				
	14				
	16				
	18				
	20				
	22				
	25				
	28				
	32				
	36				
	40				
SSPR 5-	10				
SSPSR (Stainless Steel)	12				
	14				
	16				
	18				
	20				
	22				
	25				
	28				
	32				
	36				
	40				
	45				
	50				

Part Number Type	D - L	SSPR Unit Price 1 ~ 99 pcs.	SSPR Volume Discount Rate 100 ~ 1000 pcs.	SSPSR Unit Price 1 ~ 99 pcs.		SSPSR Volume Discount Rate 100 ~ 1000 pcs.
SSPR 6-	12					
SSPSR (Stainless Steel)	14					
	16					
	18					
	20					
	22					
	25					
	28					
	32					
	36					
	40					
	45					
	50					
	56					
SSPR 8-	16			-	-	-
	18			-	-	-
	20			-	-	-
	22			-	-	-
	25			-	-	-
	28			-	-	-
	32			-	-	-
	36			-	-	-
	40			-	-	-
	45			-	-	-
	50			-	-	-
	56			-	-	-
	63			-	-	-
	70			-	-	-
	80			-	-	-
SSPR 10-	18			-	-	-
	20			-	-	-
	22			-	-	-
	25			-	-	-
	28			-	-	-
	32			-	-	-
	36			-	-	-
	40			-	-	-
	45			-	-	-
	50			-	-	-
	56			-	-	-
	63			-	-	-
	70			-	-	-
	80			-	-	-
	90			-	-	-
	100			-	-	-

No specifications available for sizes with no prices shown.