

# Circular Posts

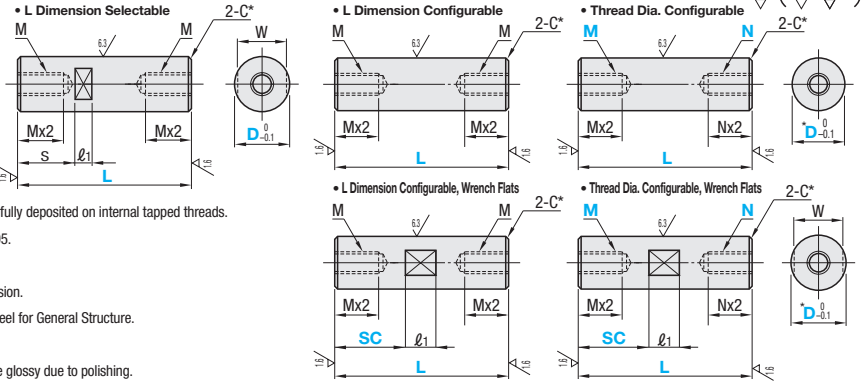
## Both Ends Tapped, Wrench Flats

For this product, L dim. can be configured in 0.1mm increments by specifying LKC Alteration.

### Both Ends Tapped



L Dimension Selectable	Type				Material	Surface Treatment	*C0.2-0.5 at the corner
	Standard	Wrench Flats	Thread Dia. Configurable	Thread Dia. Configurable, Wrench Flats			
-	NETRF	NETRS	NETF	NETS	Steel for General Structure	Black Oxide	
ETKR	ETKRF	ETKRS	ETKF	ETKS	Steel for General Structure	Electroless Nickel Plating	
PETR	PETRF	PETRS	PETF	PETS	Steel for General Structure	Trivalent Chromate (Black)	
-	BETRF	BETRS	-	BETS	SUS304	-	
SETR	SETRF	SETRS	SETF	SETS	SUS304	-	
-	AETRF	AETRS	AETF	AETS	A2017-T4	Clear Anodize	



- Trivalent Chromate (Black) may not always be fully deposited on internal tapped threads.
- D tolerance of trivalent chromate (black) is ±0.05.
- L ≥ Mx2 + Nx2
- Tapping may cause slight swelling of D dimension.
- Anti-rust Oil is applied on products made of Steel for General Structure.
- SC ≤ L - l1
- The area around the wrench flats may become glossy due to polishing.

### L Dimension Selectable

Part Number	Type	D	L Selection																	M (Coarse)	S	W	l1	
Steel for General Structure	ETKR PETR	6	15	20	25	30	35	40	45	50	60	70	80	90	100	110	120	130	140	150	3	3.5	5	8
		8	20	25	30	35	40	45	50	60	70	80	90	100	110	120	130	140	150	200	4	6	7	
		10	20	25	30	35	40	45	50	60	70	80	90	100	110	120	130	140	150	200	5	6	8	
		12	25	30	35	40	45	50	60	70	80	90	100	110	120	130	140	150	200	6	7.5	10		
SUS304	SETR	15	35	40	45	50	60	70	80	90	100	110	120	130	140	150	200	8	10	13	10			
		20	40	45	50	60	70	80	90	100	110	120	130	140	150	200	10	15	17					

### L Dimension Configurable / L Dimension Configurable, Wrench Flats

Part Number	Type	D	L	SC	M	W	l1
L Dimension Configurable	L Dimension Configurable, Wrench Flats	*1 5	8-100	0-92	2.6	4	8
Steel for General Structure	Steel for General Structure	6	8-100	0-92	3	5	
NETRF	NETRS	8	10-200	0-192	4	7	
ETKRF	ETKRS	10	15-400	0-392	5	8	
PETRF	PETRS	12	25-500	0-490	6	10	10
BETRF	BETRS	15	25-600	0-590	8	13	
SUS304	SUS304	20	30-600	0-590	10	17	15
SETRF	SETRS	25	40-700	0-690	12	22	
A2017-T4	A2017-T4	*2 35	50-800	0-785	16	27	20
AETRF	AETRS	*2 40	50-900	0-885	16	30	
		*2 50	60-1000	0-980	20	36	
			75-1000	0-980	24	41	

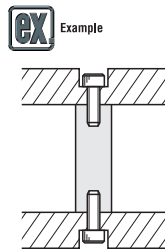
- \*1. D=5 is not available for A2017-T4 material. When L ≤ Mx4, the tapped hole goes through. When L ≤ (Mx2+5)+(Nx2+5), the tapped pilot hole may go through.
- \*2. D ≥ 35 is applicable only to N□□□□, E□□□□ and P□□□□. When SC ≤ Mx3, W-M ≥ 2 is needed. When L-SC ≤ Nx3, W-N ≥ 2 is needed.

### Thread Dia. Configurable / Thread Dia. Configurable, Wrench Flats

Part Number	Type	D	L	SC	M / N	W	l1
Thread Dia. Configurable	Thread Dia. Configurable, Wrench Flats	*1 5	15-100	0-92	2.6 3	4	8
Steel for General Structure	Steel for General Structure	6	15-100	0-92	3 4	5	
NETF	NETS	8	15-200	0-192	3 4 5	7	
ETKF	ETKS	10	20-400	0-392	3 4 5 6	8	
PETF	PETS	12	25-500	0-490	4 5 6 8	10	10
BETF	BETS	15	30-600	0-590	5 6 8 10	13	
SUS304	SUS304	20	40-600	0-590	5 6 8 10 12	17	15
SETF	SETS	25	50-700	0-690	5 6 8 10 12 16	22	
A2017-T4	A2017-T4	*2 35	60-800	0-785	5 6 8 10 12 16 20	27	20
AETTF	AETTS	*2 40	75-900	0-885	6 8 10 12 16 20 24	30	
		*2 50	75-1000	0-980	8 10 12 16 20 24	36	
			75-1000	0-980	10 12 16 20 24	41	

- \*1. D=5 is not available for A2017-T4 material. When L ≤ Mx4, the tapped hole goes through. When L ≤ (Mx2+5)+(Nx2+5), the tapped pilot hole may go through.
- \*2. D ≥ 35 is applicable only to N□□□□, E□□□□ and P□□□□. When SC ≤ Mx3, W-M ≥ 2 is needed. When L-SC ≤ Nx3, W-N ≥ 2 is needed.

L Dimension Tolerance	
L8-300	±0.1
L300.5-600	±0.3
L600.5-800	±0.4



Ordering Example	Part Number	L	SC	M	N
ETKR10	- 150				
ETKRF10	- 150				
ETKF20	- 400			M8	N10
SET25	- 500		SC100	M10	N12

For products uncovered by the e-Catalog Standard, see P.131.

### L Dimension Selectable

Part Number	Type	D	Min. L - 50	L80-100	L110-150	L200
Steel for General Structure	6	8	-	-	-	-
Black Oxide	10	12	-	-	-	-
ETKR	15	20	-	-	-	-

Part Number	Type	D	Min. L - 50	L60-100	L110-150	L200
Steel for General Structure	6	8	-	-	-	-
Electroless Nickel Plating	10	12	-	-	-	-
PETR	15	20	-	-	-	-

Part Number	Type	D	Min. L - 50	L60-100	L110-150	L200
SUS304	6	8	-	-	-	-
SETR	10	12	-	-	-	-
	15	20	-	-	-	-

### L Dimension Configurable / L Dimension Configurable, Wrench Flats

Part Number	Type	D	Min. L - 200	L200.5-400	L400.5-600	L600.5-800	L800.5-1000
Steel for General Structure	5	6	-	-	-	-	-
Black Oxide	8	10	-	-	-	-	-
ETKRF	12	15	-	-	-	-	-
ETKRS	15	20	-	-	-	-	-
NETRF	20	25	-	-	-	-	-
NETRS	25	30	-	-	-	-	-
For Wrench Flats Type, add the relevant surcharge to the price list on the right.	30	35	-	-	-	-	-
	40	40	-	-	-	-	-
	50	50	-	-	-	-	-

Part Number	Type	D	Min. L - 200	L200.5-400	L400.5-600	L600.5-800	L800.5-1000
Steel for General Structure	5	6	-	-	-	-	-
Electroless Nickel Plating	8	10	-	-	-	-	-
PETRF	12	15	-	-	-	-	-
PETRS	20	25	-	-	-	-	-
For Wrench Flats Type, add the relevant surcharge to the price list on the right.	30	35	-	-	-	-	-
	40	40	-	-	-	-	-
	50	50	-	-	-	-	-

Part Number	Type	D	Min. L - 200	L200.5-400	L400.5-600	L600.5-800
SUS304	5	6	-	-	-	-
SETRF	8	10	-	-	-	-
SETRS	12	15	-	-	-	-
For Wrench Flats Type, add the relevant surcharge to the price list on the right.	20	25	-	-	-	-
	30	35	-	-	-	-
A2017-T4	6	8	-	-	-	-
Clear Anodize	8	10	-	-	-	-
AETRF	12	15	-	-	-	-
AETRS	20	25	-	-	-	-
For Wrench Flats Type, add the relevant surcharge to the price list on the right.	30	30	-	-	-	-

### Thread Dia. Configurable / Thread Dia. Configurable, Wrench Flats

Part Number	Type	D	Min. L - 200	L200.5-400	L400.5-600	L600.5-800	L800.5-1000
Steel for General Structure	5	6	-	-	-	-	-
Black Oxide	8	10	-	-	-	-	-
NETF	12	15	-	-	-	-	-
NETS	20	25	-	-	-	-	-
For Wrench Flats Type, add the relevant surcharge to the price list on the right.	30	35	-	-	-	-	-
	40	40	-	-	-	-	-
	50	50	-	-	-	-	-

Part Number	Type	D	Min. L - 200	L200.5-400	L400.5-600	L600.5-800	L800.5-1000
Steel for General Structure	5	6	-	-	-	-	-
Electroless Nickel Plating	8	10	-	-	-	-	-
PETF	15	20	-	-	-	-	-
PETS	25	30	-	-	-	-	-
For Wrench Flats Type, add the relevant surcharge to the price list on the right.	35	40	-	-	-	-	-
	50	50	-	-	-	-	-

Part Number	Type	D	Min. L - 200	L200.5-400	L400.5-600	L600.5-800
SUS304	5	6	-	-	-	-
SETF	8	10	-	-	-	-
SETS	12	15	-	-	-	-
For Wrench Flats Type, add the relevant surcharge to the price list on the right.	20	25	-	-	-	-
	30	30	-	-	-	-
A2017-T4	6	8	-	-	-	-
AETTF	10	12	-	-	-	-
AETTS	15	20	-	-	-	-
For Wrench Flats Type, add the relevant surcharge to the price list on the right.	25	30	-	-	-	-

Alterations	Part Number	L	SC	M	N	(LKC, HL)
	ETKRF10	- 150.3				LKC
	ETKF20	- 400		M8	N10	LKC
	SET25	- 500	SC100	M10	N12	HL300

Alterations	L Dimension Tolerance	Effective Tapped Length	Through Hole for Hex Wrench
	LKC	MD(Mx3)	HL
Code	LKC	MD ND	HL
Spec.	L Dimension tolerances are as follows: Ordering Code LKC By specifying LKC, L dim. can be configured in 0.1mm increment. L   L Tolerance 8-300   ±0.05 300.5-600   ±0.10 600.5-1000   ±0.15 *Not Applicable to L Dimension Selectable Type.	Changes the Effective Tapped Length to "M (N) x 3." Ordering Code MD6/ND6 (M is changed to MD, or N is changed to ND.) * Not Applicable to L Dimension Selectable Type.	HL = 1mm Increment Ordering Code HL10 * d/2+5<HL<L-(d/2+5) * Applicable to 8<D<30 only D   d   Hex Wrench Width 8   2.5   2 10   3   2.5 12   3.5   3 15   4.6   4 D   d   Hex Wrench Width 20   5.8   5 25   6.9   6 30   9.2   8 * When HL is combined with SC, a through hole is machined in perpendicular to SC part. * Not Applicable to L Dimension Selectable Type.