Circular Posts

Both Ends Tapped, Wrench Flats

■Both Ends Tapped

RoHS10

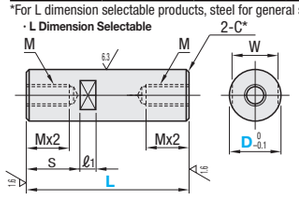
L Dimension Selectable	Type: L Dimension Configurable: Standard	Wrench Flats	Thread Dia. Configurable	Thread Dia. Configurable, Wrench Flats
-	NETRF	NETRS	NETF	NETS
ETKR	ETKRF	ETKRS	ETKF	ETKS
PETR	PETRF	PETRS	PETF	PETS
-	BETRF	BETRS	-	BETS
SETR	SETRF	SETRS	SETF	SETS
-	AETRF	AETRS	AETTF	AETTS

Material	Surface Treatment
*EN 1.0038 Equiv.	-
	Black Oxide
	Electroless Nickel Plating
	Trivalent Chromate (Black)
EN 1.4301 Equiv.	-
EN AW-2017-T4 Equiv.	Clear Anodize

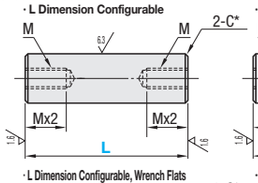
*C0.2~0.5 at the corner

*For L dimension selectable products, steel for general structure is used.

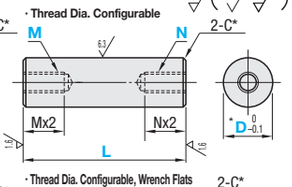
· L Dimension Selectable



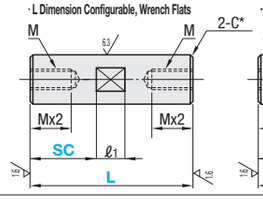
· L Dimension Configurable



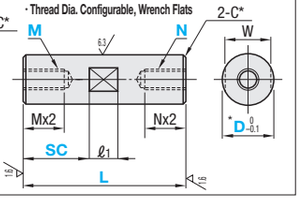
· Thread Dia. Configurable



· L Dimension Configurable, Wrench Flats



· Thread Dia. Configurable, Wrench Flats



25 (6.3 1.6)

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.

For steel for general structure/EN 1.0038 Equiv., anti-rust oil is provided.

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
General Structural Steel ETKR PETR	6	15 20 25 30 35 40 45 50	3	3.5	5	8
	8	20 25 30 35 40 45 50 60 70 80 90 100 110 120 130 140 150	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	
EN 1.4301 Equiv. SETR	12	25 30 35 40 45 50 60 70 80 90 100 110 120 130 140 150 200	6	7.5	10	10
	15	35 40 45 50 60 70 80 90 100 110 120 130 140 150 200	8	10	13	
	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 0.5mm Increment	SC 1 mm Increment With Wrench Flats Only	M (Coarse)	W	ℓ1
L Dimension Configurable EN 1.0038 Equiv. NETRF ETKRF PETRF BETRF	*1 5	8~50	0~42	2.6	4	8
L Dimension Configurable, Wrench Flats EN 1.0038 Equiv. NETRS ETKRS PETRS BETRS	6	8~50	0~42	3	5	
	8	10~150	0~142	4	7	
	10	15~350	0~342	5	8	
	12	25~400	0~390	6	10	10
	15	25~500	0~490	8	13	
EN 1.4301 Equiv. SETRF	20	30~500	0~490	10	17	
EN 1.4301 Equiv. SETRS	25	40~600	0~590	12	22	
EN AW-2017-T4 Equiv. AETRF	30	50~700	0~685	16	27	15
EN AW-2017-T4 Equiv. AETRS	*2 35	50~800	0~785	16	30	
	*2 40	60~900	0~880	20	36	20
	*2 50	75~1000	0~980	24	41	

*1. D=5 is not available for EN AW-2017-T4 Equiv. material. When L≤Mx4, tapped hole goes through. When L≤(Mx2+5)+(Nx2+5), the pilot hole may go through.

*2. D≥35 is applicable only to **N**□□□□, **E**□□□□ and **P**□□□□.

■Thread Diameter Configurable / Thread Diameter Configurable, Wrench Flats

Part Number Type	D	L 0.5mm Increment	SC 1 mm Increment With Wrench Flats Only	M / N (Coarse) Selection	W	ℓ1
Thread Dia. Configurable EN 1.0038 Equiv. NETF ETKF PETF	*1 5	15~50	0~42	2.6 3	4	8
Thread Dia. Configurable, Wrench Flats EN 1.0038 Equiv. NETS ETKS PETS BETS	6	15~50	0~42	3 4	5	
	8	15~150	0~142	3 4 5	7	
	10	20~350	0~342	4 5 6	8	
	12	25~400	0~390	5 6 8	10	10
	15	30~500	0~490	6 8 10	13	
EN 1.4301 Equiv. SETF	20	40~500	0~490	6 8 10 12	17	
EN 1.4301 Equiv. SETS	25	50~600	0~590	6 8 10 12 16	22	
EN AW-2017-T4 Equiv. AETTF	30	60~700	0~685	6 8 10 12 16 20	27	15
EN AW-2017-T4 Equiv. AETTS	*2 35	75~800	0~785	8 10 12 16 20 24	30	15
	*2 40	75~900	0~880	10 12 16 20 24	36	20
	*2 50	75~1000	0~980	12 16 20 24	41	20

*1. D=5 is not available for EN AW-2017-T4 Equiv. material. L≥Mx2+Nx2 When SC≤Mx3, W-M≥2 is needed. When L-SC≤Nx3, W-N≥2 is needed.

*2. D≥35 is applicable only to **N**□□□□, **E**□□□□ and **P**□□□□.

L Dimension Tolerance		
L	8~ 300	±0.1
L300.5~	600	±0.3
L600.5~1000		±0.4

However, when L≤200, and when order volume at one time is less than 10 pcs., since the processing is done simultaneously, the difference of L dimension is within ±0.02.

Except L Dimension Selectable

Ordering Example

Part Number	-	L	-	SC	-	M	-	N
ETKR10	-	150						
ETKRF10	-	150						
ETKF20	-	400			-	M8	-	N10
SETS25	-	500	-	SC100	-	M10	-	N12

■L Dimension Selectable

Part Number Type	D	Unit Price Min. L ~ 50	L60~100	L110~150	L200
General Structural Steel Black Oxide ETKR	6		-	-	-
	8				-
	10				
	12				
	15				
	20				

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

Part Number Type	D	Unit Price Min. L ~ 50	L60~100	L110~150	L200
EN 1.4301 Equiv. SETR	6		-	-	-
	8				-
	10				
	12				
	15				
	20				

■L Dimension Configurable / L Dimension Configurable, Wrench Flats

Part Number Type	D	Unit Price Min. L ~ 200	L200.5~400	L400.5~600	L600.5~800	L800.5~1000
EN 1.0038 Equiv. NETRF	5		-	-	-	-
	6		-	-	-	-
	8		-	-	-	-
	10			-	-	-
	12			-	-	-
	15				-	-
EN 1.0038 Equiv. NETRS	20				-	-
	25				-	-
	30					-
	35					-
	40					
	50					
EN 1.0038 Equiv. Black Oxide ETKRF	5		-	-	-	-
	6		-	-	-	-
	8		-	-	-	-
	10			-	-	-
	12			-	-	-
	15				-	-
	20				-	-
ETKRS	25				-	-
	30					-
	35					-
	40					
	50					

Part Number Type	D	Unit Price Min. L ~ 200	L200.5~400	L400.5~600	L600.5~800	L800.5~1000
EN 1.0038 Equiv. Electroless Nickel Plating PETRF	5		-	-	-	-
	6		-	-	-	-
	8		-	-	-	-
	10			-	-	-
	12			-	-	-
	15				-	-
	20				-	-
PETRS	25				-	-
	30					-
	35					-
	40					
	50					
EN 1.0038 Equiv. Trivalent Chromate BETRF	5		-	-	-	-
	6		-	-	-	-
	8		-	-	-	-
	10			-	-	-
	12			-	-	-
	15				-	-
	20				-	-
BETRS	25				-	-
	30					-
	35					-
	40					
	50					

Part Number Type	D	Unit Price Min. L ~ 200	L200.5~400	L400.5~600	L600.5~800	L800.5~1000
EN 1.4301 Equiv. SETRF	5		-	-	-	-
	6		-	-	-	-
	8		-	-	-	-
	10			-	-	-
	12			-	-	-
	15				-	-
SETRS	20				-	-
	25				-	-
	30					-
	35					-
	40					
	50					
EN AW-2017-T4 Equiv. Clear Anodize AETRF	6		-	-	-	-
	8		-	-	-	-
	10			-	-	-
	12			-	-	-
	15				-	-
	20				-	-
AETRS	25				-	-
	30					-
	35					-
	40					
	50					

■Thread Diameter Configurable / Thread Diameter Configurable, Wrench Flats

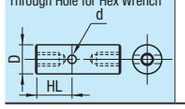
Part Number Type	D	Unit Price Min. L ~ 200	L200.5~400	L400.5~600	L600.5~800	L800.5~1000
EN 1.0038 Equiv. NETF	5		-	-	-	-
	6		-	-	-	-
	8		-	-	-	-
	10			-	-	-
	12			-	-	-
	15				-	-
EN 1.0038 Equiv. NETS	20				-	-
	25				-	-
	30					-
	35					-
	40					
	50					
EN 1.0038 Equiv. Black Oxide ETKF	5		-	-	-	-
	6		-	-	-	-
	8		-	-	-	-
	10			-	-	-
	12			-	-	-
	15				-	-
	20				-	-
ETKS	25				-	-
	30					-
	35					-
	40					
	50					

Part Number Type	D	Unit Price Min. L ~ 200	L200.5~400	L400.5~600	L600.5~800	L800.5~1000
EN 1.0038 Equiv. Electroless Nickel Plating PETF	5		-	-	-	-
	6		-	-	-	-
	8		-	-	-	-
	10			-	-	-
	12			-	-	-
	15				-	-
	20				-	-
PETS	25				-	-
	30					-
	35					-
	40					
	50					
EN 1.0038 Equiv. Trivalent Chromate BETF	5		-	-	-	-
	6		-	-	-	-
	8		-	-	-	-
	10			-	-	-
	12			-	-	-
	15				-	-
	20				-	-
BETS	25				-	-
	30					-
	35					-
	40					
	50					

Part Number Type	D	Unit Price Min. L ~ 200	L200.5~400	L400.5~600	L600.5~800	L800.5~1000
EN 1.4301 Equiv. SETF	5		-	-	-	-
	6		-	-	-	-
	8		-	-	-	-
	10			-	-	-
	12			-	-	-
	15				-	-
SETS	20				-	-
	25				-	-
	30					-
	35					-
	40					
	50					
EN AW-2017-T4 Equiv. Clear Anodize AETTF	6		-	-	-	-
	8		-	-	-	-
	10			-	-	-
	12			-	-	-
	15				-	-
	20				-	-
AETTS	25				-	-
	30					-
	35					-
	40					
	50					

Alterations

Part Number	-	L	-	SC	-	M	-	N	-	(LKC, HL)
ETKRF10	-	150							-	LKC
ETKF20	-	400			-	M8	-	N10	-	LKC
SETS25	-	500	-	SC100	-	M10	-	N12	-	HL300

Alterations	Code	Spec.
L Dimension Tolerance 	LKC	L Dimension tolerances are as follows: ⊗Not Applicable to L Dimension Selectable Ordering Code LKC L: 8~300 ±0.05; 300.5~600 ±0.10; 600.5~1000 ±0.15
Through Hole for Hex Wrench 	HL	HL=1mm Increment d/2+5≤HL≤L-(d/2+5) Applicable to 8≤D≤30 only Ordering Code HL10 ⊗Not Applicable to L Dimension Selectable D / d / Hex Wrench Width: 8 / 2.5 / 2; 10 / 3 / 2.5; 12 / 3.5 / 3; 15 / 4.6 / 4; 20 / 5.8 / 5; 25 / 6.9 / 6; 30 / 9.2 / 8

Example