

Locating Pins for Fixtures - Standard Grade, Long Head

Locating Pins for Fixtures - Standard Grade, Screw Mounted

Features: Height direction positioning is also enabled by using in combination with Height Adjusting Washer (listed on our website). Polishing Relief Groove is smaller than that with conventional products to avoid a workpiece getting stuck. **For products uncovered by e-Catalog Standard, see P.131.**

Shouldered

Type	Material	Hardness	Type	Material	Hardness	Surface Treatment	Surface Finish Relief		
Threaded			Threaded						
LANAR	LATAR	SCM435	Treated Hardness 35~40HRC	R-ANAR	R-ATAR	SCM435	35~40HRC (Surface 750HV-)	Hard Chrome Plating	<p>Reference: $\sin 15^\circ = 0.259$ $\tan 15^\circ = 0.267$</p>
TLANAR	TLATAR	SCM415	Carburized Treated Hardness: 55HRC- (Depth: 0.7~0.8) Anti-carburizing on Threads						

Threaded

Set Screw

With Surface Treatment, $\sqrt{6}$ changes to $\sqrt{15}$

$e = P/2 \tan 15^\circ + R - (R/\sin 15^\circ)$ \odot The center hole remains.

Part Number	Type	Dh7	P	B	L	Unit Price															
						0.1mm Increment	1mm Increment	Selection	ℓ	L1	ℓ_1	H	d	R	Applicable Set Screw	LANAR	LATAR	TLANAR	TLATAR	R-ANAR	R-ATAR
6	Hardened (Threaded)	6	5.0~8.0	20~30	5 8 10	6	8	8	9	4	1	M5									
8	Carburized (Threaded)	8	5.0~10.0	20~30	5 8 10 12 15	10	8	8	11	5	1.5	M5									
10	Hard Chrome (Threaded)	10	4.5~12.0	20~40	5 8 10 12 15	12	10	8	13	7	2	M6									
10T	(Set Screw)	10T	4.5~12.0	20~40	5 8 10 12 15	18	5	8	13	7	2	M6									
12	(Set Screw)	12	9.0~14.0	30~50	8 10 12 15 18	15	12	10	15	9	3	M8									
16	(Set Screw)	16	13.0~18.0	30~50	10 12 15 18 20	18	12	10	19	13	4	M8									

No Shoulder

Type	Material	Hardness	Type	Material	Hardness	Surface Treatment		
Threaded			Threaded					
LNNAR	LNTAR	SCM435	Treated Hardness 35~40HRC	R-NNAR	R-NTAR	SCM435	35~40HRC (Surface 750HV-)	Hard Chrome Plating
TLNNAR	TLNTAR	SCM415	Carburized Treated Hardness: 55HRC- (Depth: 0.7~0.8) Anti-carburizing on Threads					

Reference: $\sin 15^\circ = 0.259$
 $\tan 15^\circ = 0.267$

Threaded

Set Screw

$e = P/2 \tan 15^\circ + R - (R/\sin 15^\circ)$ \odot The center hole remains.

$\sqrt{6}$ denoted locations will be $\sqrt{15}$ when the pin is surface treated.

Part Number	Type	Dh7	P	B	L	Unit Price															
						0.1mm Increment	1mm Increment	Selection	ℓ	L1	ℓ_1	d	R	Applicable Set Screw	LNNAR	LNTAR	TLNNAR	TLNTAR	R-NNAR	R-NTAR	
6	Hardened (Threaded)	6	8.0~12.0	30~50	5 8 10	6	8	8	4	3	M5										
8	Carburized (Threaded)	8	10.0~16.0		5 8 10 12 15	10	8	8	5	4	M5										
10	Hard Chrome (Threaded)	10	12.0~20.0		5 8 10 12 15	12	10	8	7	4	M6										
10T	(Set Screw)	10T	12.0~20.0		5 8 10 12 15	15	5	8	7	5	M6										
12	(Set Screw)	12	14.0~25.0		8 10 12 15 18	15	12	10	9	6	M8										
16	(Set Screw)	16	18.0~32.0		10 12 15 18 20	18	12	10	13	8	M8										
20	(Set Screw)	20	22.0~35.0		12 15 18 20	22	12	10	17	8	M8										

Ordering Part Number - P - B - L
 Example LANTAR 10 - P7.8 - B20
 LNNAR 8 - P12.0 - B40 - L10

Alterations Part Number - P - B - L - (KC, SD, MC, RTC)
 Example LANTAR8 - P6.8 - B20 - SC

Alterations	Wear Groove Alterations	Flat Machining	Wrench Flats	Thread Dia.	Upper Relief Radius Change	Tip Angle Change
	<p>Drill 4 grooves at D Dim. Abrasion manage can be facilitated by checking the wear of the grooves. * Applicable to Hardening, Carburized and Round Shape prods. only * When combined with RTC, Groove starts from "R value + 1 mm" area. Groove Depth: 0.2mm (±0.05mm) Groove Shape: V Groove (90°)</p>	<p>Shouldered * H-P:2 * H-1:0.1</p> <p>No Shoulder</p>	<p>SC</p>	<p>MC</p>	<p>RTC</p>	<p>RC</p>
Code	MK	KD	SC	MC	RTC	RC
Spec.	* Applicable to Shouldered Type only. * RTC: (H-P)2	* Applicable to Shouldered Type only. * RTC: (H-P)2	* Applicable to Shouldered Type only.	* Applicable to Threaded Type only.	* Applicable to Threaded Type only.	* Applicable to Threaded Type only.

Features: Screw Mounted Pins. Polishing Relief Groove is smaller than the conventional products to avoid a workpiece from getting stuck. **For products uncovered by e-Catalog Standard, see P.131.**

Shouldered

Type	Material	Hardness	Surface Finish Relief
Shouldered			
ELABA	Round	SCM435	Treated Hardness 35~40HRC
ELABD	Diamond	SCM435	Treated Hardness 35~40HRC
TELABA	Round	SCM415	Carburized Treated Hardness: 55HRC- (Depth: 0.7~0.8) Anti-carburizing on Tapped Part
TELABD	Diamond	SCM415	Carburized Treated Hardness: 55HRC- (Depth: 0.7~0.8) Anti-carburizing on Tapped Part

Reference: $\sin 15^\circ = 0.259$
 $\tan 15^\circ = 0.267$

$e = P/2 \tan 15^\circ + R - (R/\sin 15^\circ)$

\odot Relief dimensions are reference values.

\odot Pilot hole depth is for reference.

Part Number	Type	Dh7	P	B	L	ℓ	H	R	M	W	Unit Price			
											0.1mm Increment	0.1mm Increment	1mm Increment	ELABA
6	Hardened (Round)	6	3.0~8.0	2.0~35.0 (B≤Px4)	10~16	5	9	1	M3	1~2				
8	Carburized (Round)	8	3.0~10.0		12~20	6	11	1.5	M4	1~2				
10	Hard Chrome (Round)	10	4.5~12.0		15~20	8	13	2	M5	1~3				
10T	(Set Screw)	10T	4.5~12.0		18~20	8	13	2	M6	1~3				
12	(Set Screw)	12	7.0~14.0		15~20	8	15	3	M5	4				
16	(Set Screw)	16	13.0~18.0		21~32	12	19	4	M8	5				
20	(Set Screw)	20	16.0~22.0		21~40	12	23	4	M8	5				

\odot W Dimension D6, D8: W=2 when P>5.0 D10, 10T: W=1 when P<5.0, W=2 when 5.0≤P<7.0, W=3 when P>7.0

No Shoulder

Type	Material	Hardness	
No Shoulder			
ELNBA	Round	SCM435	Treated Hardness 35~40HRC
ELNBD	Diamond	SCM435	Treated Hardness 35~40HRC
TELNBA	Round	SCM415	Carburized Treated Hardness: 55HRC- (Depth: 0.7~0.8) Anti-carburizing on Tapped Part
TELNBD	Diamond	SCM415	Carburized Treated Hardness: 55HRC- (Depth: 0.7~0.8) Anti-carburizing on Tapped Part

Reference: $\sin 15^\circ = 0.259$
 $\tan 15^\circ = 0.267$

$e = P/2 \tan 15^\circ + R - (R/\sin 15^\circ)$

\odot Pilot hole depth is for reference.

Part Number	Type	Dh7	P	B	L	ℓ	R	M	W	Unit Price			
										0.1mm Increment	0.1mm Increment	1mm Increment	ELNBA
6	Hardened (Round)	6	8.0~12.0	2.0~35.0 (B≤Px4)	9~16	5	3	M3	3				
8	Carburized (Round)	8	10.0~16.0		9~20	6	4	M4	3.5				
10	Hard Chrome (Round)	10	12.0~20.0		10~20	8	4	M5	4				
10T	(Set Screw)	10T	12.0~20.0		10~24	8	5	M6	4				
12	(Set Screw)	12	14.0~25.0		10~32	8	6	M5	6				
16	(Set Screw)	16	18.0~32.0		10~40	12	8	M8	8				
20	(Set Screw)	20	22.0~35.0		10~40	12	8	M8	9				

\odot For the Diamond Shape, the value of 5mm~ can be configured for the B dimension.

Ordering Part Number - P - B - L
 Example ELABA 8 - P6.8 - B14.0 - L10
 ELNBA 10 - P14.0 - B25.0 - L15

Alterations Part Number - P - B - L - (KC, KD, etc.)
 Example ELABA10 - P7.0 - B14.0 - L12 - KD

Alterations	Wear Groove Alterations	Flat Position	Flat Machining	Wrench Flats	Upper Relief Radius Change	Tip Angle Change
		<p>Shouldered * H-P:2 * H-1:0.1</p> <p>No Shoulder * H-P:2 * H-1:0.1</p>	<p>Shouldered * H-P:2 * H-1:0.1</p> <p>No Shoulder</p>	<p>SC</p>	<p>RTC</p>	<p>RC</p>
Code	MK	KC	KD	SC	RTC	RC
Spec.	* Applicable to Shouldered Type only.	* Applicable to Shouldered Type only.	* Applicable to Shouldered Type only.	* Applicable to Shouldered Type only.	* Applicable to Shouldered Type only.	* Applicable to Shouldered Type only.