

Locating Pins for Fixtures

Standard Grade, No Shoulder

Features: For Standard Grade, P Dim. Tolerance is -0.05 (for Precision Grade, -0.01 or -0.02), concentricity is 0.03 or 0.05 (for Precision Grade, 0.01 or 0.02).

Threaded

Type	Material	Hardness	Type	Material	Hardness	Surface Treatment
ELNNA	Round EN 1.7220	Hardening 35-40HRC	R-LNNA	Round EN 1.7220	35-40HRC (Surface 750HV ~)	Hard Chrome Plating
ELNND	Diamond	Equiv.	R-LNND	Diamond	Equiv.	
TELNNA	Round EN 1.7242	Carburized 55HRC-(depth 0.7-0.8) / Anti-carburizing on Threads	D-LNNA	Round EN 1.2379	55HRC ~ (Surface 3000HV)	Dicoat® Treated
TELNND	Diamond	Equiv.	D-LNND	Diamond	Equiv.	
			H-LNNA	Round EN 1.2379	55HRC ~ (Surface 3000HV)	TiCN Treatment
			H-LNND	Diamond	Equiv.	

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

1 Dicoat® Treated / TiCN Thread Shape

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

Dicoat® Treated / TiCN Treated items do not come with a center hole.

Part Number	Type	D _{H7}	P	B	L Selection	L ₁	R	W	Unit Price														
									ELNNA	ELNND	TELNNA	TELNND	R-LNNA	R-LNND	D-LNNA	D-LNND	H-LNNA	H-LNND					
Hardened (Round)	Carburized (Round)	6	0	8.0-12.0	5	8	10	6	3	3													
					8	10	12	10	4	3.5													
					10	12	15	12	4	4													
					12	15	18	15	5	5													
					15	18	20	18	6	6													
Diamond (Diamond)	Diamond (Diamond)	6	0	10.0-16.0	5	8	10	10	4	3.5													
					8	10	12	10	4	3.5													
					10	12	15	12	4	4													
					12	15	18	15	5	5													
					15	18	20	18	6	6													

L dimension in () is not applicable to Diamond Shape, Dicoat® and TiCN treatment.
B Dimension is selectable from 5 mm ~ for Dicoat® Treated / TiCN Treated Products/Diamond Shape.

Set Screw

Type	Material	Hardness	Type	Material	Hardness	Surface Treatment
ELNTA	Round EN 1.7220	Hardening 35-40HRC	R-LNTA	Round EN 1.7220	35-40HRC (Surface 750HV ~)	Hard Chrome Plating
ELNTD	Diamond	Equiv.	R-LNTD	Diamond	Equiv.	
TELNTA	Round EN 1.7242	Carburized 55HRC-(depth 0.7-0.8) / Anti-carburizing on Threads	D-LNTA	Round EN 1.2379	55HRC ~ (Surface 3000HV)	Dicoat® Treated
TELNTD	Diamond	Equiv.	D-LNTD	Diamond	Equiv.	
			H-LNTA	Round EN 1.2379	55HRC ~ (Surface 3000HV)	TiCN Treatment
			H-LNTD	Diamond	Equiv.	

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

1 Dicoat® Treated / TiCN Treated items will have the () precision.

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

Dicoat® Treated / TiCN Treated items do not come with a center hole.

Part Number	Type	D _{H7}	P	B	L Selection	L ₁	d	R	Applicable Set Screw	W	Unit Price													
											ELNTA	ELNTD	TELNTA	TELNTD	R-LNTA	R-LNTD	D-LNTA	D-LNTD	H-LNTA	H-LNTD				
Hardened (Round)	Carburized (Round)	6	0	8.0-12.0	5	8	4	3	M5	3														
					8	10	12	10	4	M5	3.5													
					10	12	15	12	4	M6	4													
					12	15	18	15	5	M6	5													
					15	18	20	18	6	M8	6													
Diamond (Diamond)	Diamond (Diamond)	6	0	10.0-16.0	5	8	5	4	M5	3.5														
					8	10	7	4	M6	4														
					10	12	7	5	M6	5														
					12	15	9	6	M8	6														
					15	18	13	8	M8	8														

B Dimension is selectable from 5 mm ~ for Dicoat® Treated / TiCN Treated Products / Diamond Shape.

Part Number: **P** - **B** - **L** - **A** - **E**

Example: ELNNA 10 - P12.0 - B10 - L8 (Threaded)

Example: ELNTA 6 - P10.0 - B15 (Set Screw)

Alterations: **P** - **B** - **L** - **A** - **E** - (KC, KD -etc.)

Example: ELNNA 6 - P8.0 - B14 - L5 - KD

Alterations	Wear Groove Alterations	Flat Position	Flat Machining	Thread Dia.	Thread Length
Code	MK	KC	KD	MC	FC
Spec.	Drill 4 grooves at B Dimension. The wear and tear of the grooves indicate the degree of wear. Applicable to Hardening, Carburized and Round Shape Products only Applicable when B ≥ 4 Groove Depth: 0.2mm (±0.05mm) Groove Shape: V Groove (90°)	Ordering Code KC Changes the flat position to 90° from the standard position 0°. Applicable to Diamond Shape Type only.	Ordering Code KD Machining on one side. Applicable to Round Shape Type only.	Ordering Code MC Changes the thread diameter. D/3:M-C Mmin3 Applicable to Threaded only.	Ordering Code FC Changes the thread length. FC=1mm Increment D5-10 : M:FC:Mx2 D12, 16: M:FC:Mx2.5 D20 : M:FC:Mx2 Applicable when B ≥ 4 Groove Depth: 0.2mm (±0.05mm) Groove Shape: V Groove (90°)

Locating Pins for Fixtures

Tip Shape Selectable, Standard Grade, No Shoulder

Features: For Standard Grade, P Dim. Tolerance is -0.05 (for Precision Grade, -0.01 or -0.02), concentricity is 0.03 or 0.05 (for Precision Grade, 0.01 or 0.02).

Threaded

Type	Material	Hardness	Type	Material	Hardness	Surface Treatment
SELNNA	Round EN 1.7220	Hardening 35-40HRC	D-SLNNA	Round EN 1.2379	55HRC ~ (Surface 3000HV)	Dicoat® Treated
SELNND	Diamond	Equiv.	D-SLNND	Diamond	Equiv.	
TSELNNA	Round EN 1.7242	Carburized 55HRC-(depth 0.7-0.8) / Anti-carburizing on Threads				
TSELNND	Diamond	Equiv.				

Reference: $\sin 15^\circ = 0.259$ $\tan 15^\circ = 0.267$ $\sin 30^\circ = 0.5$ $\tan 30^\circ = 0.577$ $\sin 45^\circ = 0.707$ $\tan 45^\circ = 1$ $\sin 60^\circ = 0.866$ $\tan 60^\circ = 1.732$

1 Dicoat® Treated - TiCN Thread Shape

Tip Shape: Select from the diagram on the right.

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

Only the Shape B Dicoat® Treated items do not come with a center hole.

Part Number	Type	Tip Shape	D _{H7}	P	B	L Selection	A Selection	E	L ₁	R	W	Unit Price												
												SELNNA	SELNND	TSELNNA	TSELNND	D-SLNNA	D-SLNND							
Hardened (Round)	Carburized (Round)	A (Tapered)	6	0	8.0-12.0	5	8	10	*30	6	3	3												
						8	10	12	10	4	3.5													
						10	12	15	12	4	4													
						12	15	18	15	5	5													
						15	18	20	18	6	6													
Diamond (Diamond)	Diamond (Diamond)	B (Taper R)	6	0	10.0-16.0	5	8	10	*30	6	3	3												
						8	10	12	10	4	3.5													
						10	12	15	12	4	4													
						12	15	18	15	5	5													
						15	18	20	18	6	6													

Angle A*30 is not applicable to Tip Shape B. Select from Standard Grade, No Shoulder (P.1691).
B Dimension is selectable from 5 mm ~ for Dicoat® Treated / Diamond Shape.

Set Screw

Type	Material	Hardness	Type	Material	Hardness	Surface Treatment
SELNTA	Round EN 1.7220	Hardening 35-40HRC	D-SLNTA	Round EN 1.2379	55HRC ~ (Surface 3000HV)	Dicoat® Treated
SELNTD	Diamond	Equiv.	D-SLNTD	Diamond	Equiv.	
TSELNTA	Round EN 1.7242	Carburized 55HRC-(depth 0.7-0.8) / Anti-carburizing on Threads				
TSELNTD	Diamond	Equiv.				

Reference: $\sin 15^\circ = 0.259$ $\tan 15^\circ = 0.267$ $\sin 30^\circ = 0.5$ $\tan 30^\circ = 0.577$ $\sin 45^\circ = 0.707$ $\tan 45^\circ = 1$ $\sin 60^\circ = 0.866$ $\tan 60^\circ = 1.732$

1 Dicoat® Treated items will have the () precision.

Tip Shape: Select from the diagram on the right.

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

Only the Shape B Dicoat® Treated items do not come with a center hole.

Part Number	Type	Tip Shape	D _{H7}	P	B	L Selection	A Selection	E	L ₁	d	R	Applicable Set Screw	W	Unit Price											
														SELNTA	SELNTD	TSELNTA	TSELNTD	D-SLNTA	D-SLNTD						
Hardened (Round)	Carburized (Round)	A (Tapered)	6	0	8.0-12.0	5	8	4	3	M5	3														
						8	10	12	10	4	M5	3.5													
						10	12	15	12	4	M6	4													
						12	15	18	15	5	M6	5													
						15	18	20	18	6	M8	6													
Diamond (Diamond)	Diamond (Diamond)	B (Taper R)	6	0	10.0-16.0	5	8	5	4	M5	3.5														
						8	10	7	4	M6	4														
						10	12	7	5	M6	5														
						12	15	9	6	M8	6														
						15	18	13	8	M8	8														

Angle A*30 is not applicable to Tip Shape B. Select from Standard Grade, No Shoulder (P.1691).
B Dimension is selectable from 5 mm ~ for Dicoat® Treated / Diamond Shape.

Part Number: **P** - **B** - **L** - **A** - **E**

Example: SELNNA A 16 - P18.0 - B21 - L15 - A60 - E2 (Threaded)

Example: SELNTA B 10 - P14.0 - B10 - A60 (Set Screw)

Alterations: **P** - **B** - **L** - **A** - **E** - (KC, KD -etc.)

Example: SELNTA A 6 - P8.0 - B14 - A30 - E2 - KD

Alterations	Wear Groove Alterations	Flat Position	Flat Machining	Thread Dia.	Thread Length
Code	MK	KC	KD	MC	FC
Spec.	Drill 4 grooves at B Dimension. The wear and tear of the grooves indicate the degree of wear. Applicable to Hardening, Carburized and Round Shape Products only Applicable when B ≥ 4 Groove Depth: 0.2mm (±0.05mm) Groove Shape: V Groove (90°)	Ordering Code KC Changes the flat position to 90° from the standard position 0°. Applicable to Diamond Shape Type only.	Ordering Code KD Machining on one side. Applicable to Round Shape Type only.	Ordering Code MC Changes the thread diameter. D/3:M-C Mmin3 Applicable to Threaded only.	Ordering Code FC Changes the thread length. FC=1mm Increment D5-10 : M:FC:Mx2 D12, 16: M:FC:Mx2.5 D20 : M:FC:Mx2 Applicable when B ≥ 4 Groove Depth: 0.2mm (±0.05mm) Groove Shape: V Groove (90°)