

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

RoHS 10

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

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

Part Number	Type	Dh7	P	B	L Selection	L1	R	W	Unit Price											
									ELNNA	ELNND	TELNNA	TELNND	R-LNNA	R-LNND	D-LNNA	D-LNND	H-LNNA	H-LNND		
6	Hardened (Round)	6	0	8.0-12.0	5 8 10	6	3	3												
8	Carburized (Round)	8	0	10.0-16.0	5 8 10 12 15	10	4	3.5												
10	Hard Chrome (Round)	10	0	12.0-20.0	(5) (8) 10 12 15	12	4	4												
10T	Dicoat (Round)	10T	0	12.0-20.0	(5) (8) 10 12 15	15	5	5												
12	TiCN (Diamond)	12	0	14.0-25.0	(8) 10 12 15 18	15	6	6												
16	Dicoat (Diamond)	16	0	18.0-32.0	(10) 12 15 18 20	18	8	8												
20	TiCN (Diamond)	20	0	22.0-35.0	12 15 18 20	22	8	9												

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.

RoHS 10

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

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

Part Number	Type	Dh7	P	B	L Selection	L1	d	R	Applicable Set Screw	W	Unit Price									
											ELNTA	ELNTD	TELNTA	TELNTD	R-LNTA	R-LNTD	D-LNTA	D-LNTD	H-LNTA	H-LNTD
6	Hardened (Round)	6	0	8.0-12.0	5 8 4 3	M5	3													
8	Carburized (Round)	8	0	10.0-16.0	5 8 5 4	M5	3.5													
10	Hard Chrome (Round)	10	0	12.0-20.0	10 8 7 4	M6	4													
10T	Dicoat (Round)	10T	0	12.0-20.0	5 8 7 5	M6	5													
12	TiCN (Diamond)	12	0	14.0-25.0	12 10 9 6	M8	6													
16	Dicoat (Diamond)	16	0	18.0-32.0	12 10 13 8	M8	8													
20	TiCN (Diamond)	20	0	22.0-35.0	12 10 17 8	M8	9													

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

Part Number: **P** - **B** - **L** - **A** - **E** (Threaded)

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

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

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

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 MC8 Changes the thread diameter. D/3: M-C Mmin3 Applicable to Threaded only.	Ordering Code FC15 Changes the thread length. FC=1mm increment D8-10: 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.

RoHS 10

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

Part Number	Type	Tip Shape	Dh7	P	B	L Selection	A Selection	E	L1	R	W	Unit Price								
												SELNNA	SELNND	TSELNNA	TSELNND	D-SLNNA	D-SLNND			
6	Hardened (Round)	A	6	0	8.0-12.0	5 8 10	*30	6	3	3										
8	Carburized (Round)	A	8	0	10.0-16.0	5 8 10 12 15	60	10	4	3.5										
10	Hard Chrome (Round)	A	10	0	12.0-20.0	(5) (8) 10 12 15	90	12	4	4										
10T	Dicoat (Round)	A	10T	0	12.0-20.0	(5) (8) 10 12 15	120	15	5	5										
12	TiCN (Diamond)	B	12	0	14.0-25.0	(8) 10 12 15 18		15	6	6										
16	Dicoat (Diamond)	B	16	0	18.0-32.0	(10) 12 15 18 20		18	8	8										
20	TiCN (Diamond)	B	20	0	22.0-35.0	12 15 18 20		22	8	9										

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.

RoHS 10

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

Part Number	Type	Tip Shape	Dh7	P	B	L Selection	A Selection	E	L1	d	R	Applicable Set Screw	W	Unit Price							
														SELNTA	SELNTD	TSELNTA	TSELNTD	D-SLNTA	D-SLNTD		
6	Hardened (Round)	A	6	0	8.0-12.0	5 8 4 3	*30	6	3	3	M5	3									
8	Carburized (Round)	A	8	0	10.0-16.0	5 8 5 4	60	10	4	3.5	M5	3.5									
10	Hard Chrome (Round)	A	10	0	12.0-20.0	10 8 7 4	90	12	4	4	M6	4									
10T	Dicoat (Round)	A	10T	0	12.0-20.0	5 8 7 5	120	15	5	5	M6	5									
12	TiCN (Diamond)	B	12	0	14.0-25.0	12 10 9 6		15	6	6	M8	6									
16	Dicoat (Diamond)	B	16	0	18.0-32.0	12 10 13 8		18	8	8	M8	8									
20	TiCN (Diamond)	B	20	0	22.0-35.0	12 10 17 8		22	8	9	M8	9									

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** (Threaded)

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

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

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

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 MC8 Changes the thread diameter. D/3: M-C Mmin3 Applicable to Threaded only.	Ordering Code FC15 Changes the thread length. FC=1mm increment D8-10: 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°)