

Locating Pins for Fixtures

Standard Grade, Shouldered



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). Polishing Relief Groove is smaller than the conventional products to avoid a workpiece getting stuck.

Type	Material	Hardness	Type	Material	Hardness	Surface Treatment	Surface Finish Relief
ELANA	Round EN 1.7220 Equiv.	Hardening 35-40HRC	R-LANA	Round EN 1.7220 Equiv.	35-40HRC (Surface 750HV ~)	Hard Chrome Plating	
ELAND	Diamond		R-LAND	Diamond			
TELANA	Round EN 1.7242 Equiv.	Carburized Treated Hardness: 55HRC~ (Depth: 0.7 ~ 0.8) Anti-carburizing on Threads	D-LANA	Round EN 1.2379 Equiv.	55HRC~ (Surface 3000HV)	Dicoat® Treated	
TELAND	Diamond		D-LAND	Diamond			
			H-LANA	Round EN 1.2379 Equiv.	55HRC~ (Surface 3000HV)	TiCN Treatment	

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

① Dicoat® Treated / TiCN Thread Shape

② Dicoat® Treated / TiCN items will have the () precision and Thread Shape will be (1).

③ Relief dimensions are reference values.

Part Number	Type	Dh7	P Configurable 0.1mm Increment	B Configurable from Increment	L Selection					Unit Price															
					$\delta 1$	H	R	W	ELANA	ELAND	TELANA	TELAND	R-LANA	R-LAND	D-LANA	D-LAND	H-LANA	H-LAND							
Hardened (Round) ELANA (Diamond) ELAND	6	0	0.012	3.0-7.0	5	8	10	6	9	1	1-2														
	8	0		3.0-9.0	5	8	10	12	15	10	11	1.5	1-2												
	10	0	-0.015	4.5-12.0	(5)	(8)	(10)	12	15	12	13	2	1-3												
	10T	0		4.5-12.0	(5)	(8)	(10)	12	15	18	13	2	1-3												
	12	0		9.0-13.0	(8)	10	12	15	18	15	3	4													
16	0	-0.018	13.0-16.0	(10)	12	15	18	20	18	19	4	5													

④ 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

⑤ L dimension in () is not applicable to Diamond Shape, Dicoat® and TiCN treatment.

⑥ B Dimension 5 mm ~ will be selected for Dicoat® Treated / TiCN Treated items.

Type	Material	Hardness	Type	Material	Hardness	Surface Treatment	Surface Finish Relief
ELATA	Round EN 1.7220 Equiv.	Hardening 35-40HRC	R-LATA	Round EN 1.7220 Equiv.	35-40HRC (Surface 750HV ~)	Hard Chrome Plating	
ELATD	Diamond		R-LATD	Diamond			
TELATA	Round EN 1.7242 Equiv.	Carburized 55HRC~ (depth 0.7 ~ 0.8) / Anti-carburizing on Threads	D-LATA	Round EN 1.2379 Equiv.	55HRC~ (Surface 3000HV)	Dicoat® Treated	
TELATD	Diamond		D-LATD	Diamond			
			H-LATA	Round EN 1.2379 Equiv.	55HRC~ (Surface 3000HV)	TiCN Treatment	

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

⑦ Dicoat® Treated / TiCN Treated items will have the () precision.

⑧ Relief dimensions are reference values.

Part Number	Type	Dh7	P Configurable 0.1mm Increment	B Configurable from Increment	L Selection					Unit Price														
					$\delta 1$	H	d	R	Applicable Set Screw	W	ELATA	ELATD	TELATA	TELATD	R-LATA	R-LATD	D-LATA	D-LATD	H-LATA	H-LATD				
Hardened (Round) ELATA (Diamond) ELATD	6	0	0.012	3.0-7.0	8	8	9	4	1	M5	1-2													
	8	0		3.0-9.0	8	8	11	5	1.5	M5	1-2													
	10	0	-0.015	4.5-12.0	10	8	13	7	2	M6	1-3													
	10T	0		4.5-12.0	5	8	13	7	2	M6	1-3													
	12	0		9.0-13.0	12	10	15	9	3	M8	4													
16	0	-0.018	13.0-16.0	12	10	19	13	4	M8	5														

④ 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

⑥ B Dimension 5 mm ~ will be selected for Dicoat® Treated / TiCN Treated items.

Ordering Example

Part Number	Type	D	P	B	L
ELANA	B	-	P6.0	-	B15 - L10
ELATA	10	-	P6.8	-	B10

Alterations

Part Number	Type	D	P	B	L	(KC, KD, SC, MC)
ELANA	6	-	P6.8	-	B14 - L5	SC

Alterations	Wear Groove Alterations	Flat Position	Flat Machining	Wrench Flats	Thread Dia.	Thread Length	Upper Relief Radius Change
Code	MK	KC	KD	SC	MC	FC	RTC
Spec.	Drill 4 grooves at B Dimension. The wear and tear of the grooves indicate the degree of wear. ① Applicable to Hardening, Carburized and Round Shape Products only. ② Applicable when B > 4. ③ When used together with RTC, the groove starts from the area of R value +1 mm. 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°. ① Applicable to Diamond Shape Type only.	Ordering Code KD Machining on one side. ① H-P:2 ② Applicable to Round Shape Type only.	Ordering Code SC Adds wrench flats. ① H 9 11 13 15 19 ② H 7 8 11 13 17 ③ Applicable to Round Shape Type only.	Ordering Code MC8 Changes the thread diameter. ① D/3: M-D Mmin3 ② Applicable to Threaded only.	Ordering Code FC15 Changes the thread length. FC=1mm Increment D6-10: M-FC-Mx3 D12, 16: M-FC-Mx2.5 D20 : M-FC-Mx2 ① Applicable to Threaded only. ② Not applicable to Dicoat® and TiCN treatment.	Ordering Code RTC1 Changes the relief to the following radius R. Selection R1 R2 R3 ① RTC: (H-P)2 ② Applicable when B:5

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Tip Shape Selectable, Standard Grade, Shouldered



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). Tip shape is selectable. Polishing Relief Groove is smaller than the conventional products to avoid a workpiece getting stuck.

Type	Material	Hardness	Type	Material	Hardness	Surface Treatment	Surface Finish Relief
SELANA	Round EN 1.7220 Equiv.	Hardening 35-40HRC	R-SLANA	Round EN 1.7220 Equiv.	35-40HRC (Surface 750HV ~)	Hard Chrome Plating	
SELAND	Diamond		R-SLAND	Diamond			
TSELANA	Round EN 1.7242 Equiv.	Carburized 55HRC~ (depth 0.7 ~ 0.8) / Anti-carburizing on Threads	D-SLANA	Round EN 1.2379 Equiv.	55HRC~ (Surface 3000HV)	Dicoat® Treated	
TSELAND	Diamond		D-SLAND	Diamond			
			H-SLANA	Round EN 1.2379 Equiv.	55HRC~ (Surface 3000HV)	TiCN Treatment	

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 Thread Shape

② Dicoat® Treated / TiCN Treated items will have the () precision.

③ Relief dimensions are reference values.

Part Number	Type	Tip Shape	Dh7	P Configurable 0.1mm Increment	B Configurable from Increment	L Selection					Unit Price													
						$\delta 1$	H	R	W	SELANA	SELAND	TSELANA	TSELAND	R-SLANA	R-SLAND	D-SLANA	D-SLAND							
Hardened (Round) SELANA (Diamond) SELAND	6	A	0	0.012	3.0-7.0	5	8	10	6	9	1	1-2												
	8	A	0		3.0-9.0	5	8	10	12	15	10	11	1.5	1-2										
	10	A	0	-0.015	4.5-12.0	(5)	(8)	(10)	12	15	12	13	2	1-3										
	10T	B	0		4.5-12.0	(5)	(8)	(10)	12	15	18	13	2	1-3										
	12	B	0		9.0-13.0	(8)	10	12	15	18	15	3	4											
16	B	0	-0.018	13.0-16.0	(10)	12	15	18	20	18	19	4	5											

④ 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

⑤ Angle A°30 is not applicable to Tip Shape B. Select from Standard Grade, Shouldered (P.1689).

⑥ B Dimension 5 mm ~ will be selected for Dicoat® Treated / TiCN Treated items.

Type	Material	Hardness	Type	Material	Hardness	Surface Treatment	Surface Finish Relief
SELATA	Round EN 1.7220 Equiv.	Hardening 35-40HRC	R-SLATA	Round EN 1.7220 Equiv.	35-40HRC (Surface 750HV ~)	Hard Chrome Plating	
SELATD	Diamond		R-SLATD	Diamond			
TSELATA	Round EN 1.7242 Equiv.	Carburized 55HRC~ (depth 0.7 ~ 0.8) / Anti-carburizing on Threads	D-SLATA	Round EN 1.2379 Equiv.	55HRC~ (Surface 3000HV)	Dicoat® Treated	
TSELATD	Diamond		D-SLATD	Diamond			
			H-SLATA	Round EN 1.2379 Equiv.	55HRC~ (Surface 3000HV)	TiCN Treatment	

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

⑦ Dicoat® Treated / TiCN Treated items will have the () precision.

⑧ Relief dimensions are reference values.

Part Number	Type	Tip Shape	Dh7	P Configurable 0.1mm Increment	B Configurable from Increment	L Selection					Unit Price													
						$\delta 1$	H	d	R	Applicable Set Screw	W	SELATA	SELATD	TSELATA	TSELATD	R-SLATA	R-SLATD	D-SLATA	D-SLATD	H-SLATA	H-SLATD			
Hardened (Round) SELATA (Diamond) SELATD	6	A	0	0.012	3.0-7.0	8	8	9	4	1	M5	1-2												
	8	A	0		3.0-9.0	8	8	11	5	1.5	M5	1-2												
	10	A	0	-0.015	4.5-12.0	10	8	13	7	2	M6	1-3												
	10T	B	0		4.5-12.0	5	8	13	7	2	M6	1-3												
	12	B	0		9.0-13.0	12	10	15	9	3	M8	4												
16	B	0	-0.018	13.0-16.0	12	10	19	13	4	M8	5													

④ 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

⑥ Angle A°30 is not applicable to Tip Shape B. Select from Standard Grade, Shouldered (P.1689).

⑥ B Dimension 5 mm ~ will be selected for Dicoat® Treated / TiCN Treated items.

Ordering Example

Part Number	Type	Tip Shape	D	P	B	L	A	E
SELANA	A	16	-	P14.2	-	B21	-	L15 - A60 - E2
SELATA	B	8	-	P6.0	-	B15	-	A90

Alterations

Part Number	Type	Tip Shape	D	P	B	L	A	E	(KC, KD, SC, MC)
SELATA	A	6	-	P6.8	-	B14	-	A30 - E2	SC

Alterations	Wear Groove Alterations	Flat Position	Flat Machining	Wrench Flats	Thread Dia.	Thread Length	Upper Relief Radius Change
Code	MK	KC	KD	SC	MC	FC	RTC
Spec.	Drill 4 grooves at B Dimension. The wear and tear of the grooves indicate the degree of wear. ① Applicable to Hardening, Carburized and Round Shape Products only. ② Applicable when B > 4. ③ When used together with RTC, the groove starts from the area of R value +1 mm. 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°. ① Applicable to Diamond Shape Type only.	Ordering Code KD Machining on one side. ① H-P:2 ② Applicable to Round Shape Type only.	Ordering Code SC Adds wrench flats. ① H 9 11 13 15 19 ② H 7 8 11 13 17 ③ Applicable to Round Shape Type only.	Ordering Code MC8 Changes the thread diameter. ① D/3: M-D Mmin3 ② Applicable to Threaded only.	Ordering Code FC15 Changes the thread length. FC=1mm Increment D6-10: M-FC-Mx3 D12, 16: M-FC-Mx2.5 D20 : M-FC-Mx2 ① Applicable to Threaded only. ② Not applicable to Dicoat® and TiCN treatment.	Ordering Code RTC1 Changes the relief to the following radius R. Selection R1 R2 R3 ① RTC: (H-P)2 ② Applicable when B:5