


Locating Pin for Jigs & Fixtures

Precision with Shoulder / Pilot Shape Selectable, *continued*

Threaded



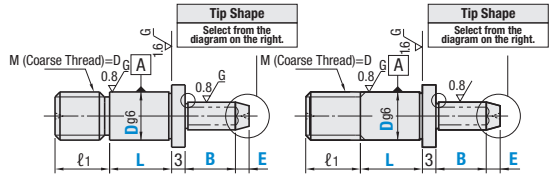
RoHS10

Type	Material	Hardness
SLANA Round	4137 Alloy Steel	Hardened 35~40 HRC min.
SLAND Diamond	4137 Alloy Steel	Hardened 35~40 HRC min.
TSLANA Round	SCM415 Alloy Steel (JIS)	Carburized 55 HRC min. (Depth 0.7~0.8) Anti-Carburizing on Threads
TSLAND Diamond	SCM415 Alloy Steel (JIS)	Carburized 55 HRC min. (Depth 0.7~0.8) Anti-Carburizing on Threads

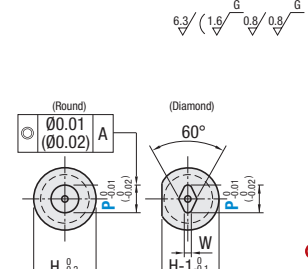
Reference: $\sin 15^\circ = 0.259$ $\sin 30^\circ = 0.5$ $\sin 45^\circ = 0.707$
 $\tan 15^\circ = 0.267$ $\tan 30^\circ = 0.577$ $\tan 45^\circ = 1$

Type	Material	Hardness	Surface Treatment
D-SANA Round	D2 Tool Steel	55 HRC min. (Surface 3000 HV min.)	Dicoat® Treated
D-SAND Diamond	D2 Tool Steel Equivalent	55 HRC min. (Surface 3000 HV min.)	Dicoat® Treated
R-SANA Round	4137 Alloy Steel	35~40 HRC min. (Surface 750 HV min.)	Hard Chrome Plating
R-SAND Diamond	4137 Alloy Steel	35~40 HRC min. (Surface 750 HV min.)	Hard Chrome Plating

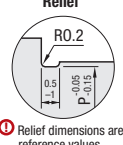
Hardened / Carburized / Chrome Plated **Dicoat® Treated**



Tip Shape
Select from the diagram on the right.



Surface Finish Relief
R0.2



Relief dimensions are reference values.

Pilot-Tip Shape Selection

A Shape
The center hole remains.
P-2Etan (A/2) ≥ 0.73
P-2Etan (A/2) ≥ 2 (Dicoat®)

B Shape
The center hole remains.
e = P/2tan (A/2) + R (R/sin (A/2))

Part Number		Tip Shape	D ₆₇	P 0.1 mm Increment	B 1 mm Increment	L Selection	A Selection	E (Shape A) 1 mm Increment	ℓ ₁	H	R	W	
Hardened (Round) SLANA	Carburized (Round) TSLANA	Hard Chrome (Round) R-SANA	Dicoat® (Round) D-SANA	A (Tapered)	6	-0.004 -0.012	3.0-8.0	*30	1-10	6	9	1	1
					8	3.0-10.0	10			11	1.5	(2)	
					10	-0.005 -0.014	4.5-12.0			12	13	2	1-3
					10T	-0.006 -0.017	9.0-14.0			15	15	3	4
(Diamond) SLAND	(Diamond) TSLAND	(Diamond) R-SAND	(Diamond) D-SAND	B (Taper R)	12	-0.006 -0.017	13.0-18.0	90	1-10	15	15	3	4
					16	18	19			4	5		

⊙ 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 ⊗ L dimension in () is not applicable to Diamond Shape and Dicoat® treatment.
 ⊗ Angle A *30 is not applicable to Tip Shape B. Select from Precision with Shoulder Type (P.1542)

Part Number Example

Type	Tip Shape	D	P	B	L	A	E
SLANA	A	6	P6.8	B14	L8	A30	E2

Part Number Alterations


Type	Tip Shape	D	P	B	L	A	E	(KC / KD / SC / MC)
R-SANA	B	10	P4.5	B10	L5	A60		KD

Alterations	Grooves for Wear Sign	Flat Position	Flat Machining	Wrench Flats	Thread Diameter	Thread Length	Upper Relief Radius Change
Code	MK	KC	KD	SC	MC	FC	RTC
Spec.	Machine 4 grooves on B Dimension. The wear and tear of the grooves indicate the degree of wears. ⊙ Applicable to Hardened, Carburized and Round Shape Products only ⊙ Applicable when B ≥ 4 ⊙ When used together with RTC, the groove starts from the area of R value + 1 mm. Groove Depth: 0.2mm (±0.06 mm) 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 Adds wrench flats. ⊙ H-P≥2 ⊙ Applicable to Round Shape Type only.	Ordering Code: SC Changes the thread diameter. H 9 11 13 15 19 H 7 8 11 13 17 ⊙ D/3≤M<D Mmin3 ⊙ Applicable to Threaded Type only.	Ordering Code: MC8 Changes the thread diameter. ⊙ D/3≤M<D Mmin3 ⊙ Applicable to Threaded Type only.	Ordering Code: FC15 Changes the thread length. FC=1 mm increment D6-10: M≤FC≤Mx3 D12-16: M≤FC≤Mx2.5 D20: M≤FC≤Mx2 ⊙ Applicable to Threaded only. ⊙ Not applicable to Dicoat® and TiCN treatment.	Ordering Code: RTC1 Changes the relief to the following radius R. Selection: R1 R2 R3 RTC≤(H-P)/2 ⊙ Applicable when B≥5

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Precision with Shoulder / Pilot Shape Selectable, *continued*

Set Screw Flat Type



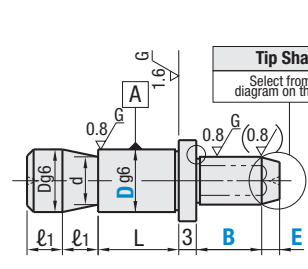
RoHS10

Type	Material	Hardness
SLATA Round	4137 Alloy Steel	Hardened 35~40 HRC
SLATD Diamond	4137 Alloy Steel	Hardened 35~40 HRC
TSLATA Round	SCM415 Alloy Steel (JIS)	Carburized 55 HRC min. (Depth 0.7~0.8) Anti-Carburizing on Threads
TSLATD Diamond	SCM415 Alloy Steel (JIS)	Carburized 55 HRC min. (Depth 0.7~0.8) Anti-Carburizing on Threads

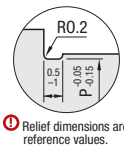
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 $\tan 15^\circ = 0.267$ $\tan 30^\circ = 0.577$ $\tan 45^\circ = 1$

Type	Material	Hardness	Surface Treatment
D-SATA Round	D2 Tool Steel	55 HRC min. (Surface 3000 HV min.)	Dicoat® Treated
D-SATD Diamond	D2 Tool Steel Equivalent	55 HRC min. (Surface 3000 HV min.)	Dicoat® Treated
R-SATA Round	4137 Alloy Steel	35~40 HRC min. (Surface 750 HV min.)	Hard Chrome Plating
R-SATD Diamond	4137 Alloy Steel	35~40 HRC min. (Surface 750 HV min.)	Hard Chrome Plating

Tip Shape
Select from the diagram on the right.



Surface Finish Relief
R0.2



Relief dimensions are reference values.

Pilot-Tip Shape Selection

A Shape
The center hole remains.
P-2Etan (A/2) ≥ 0.73
P-2Etan (A/2) ≥ 2 (Dicoat®)

B Shape
The center hole remains.
e = P/2tan (A/2) + R (R/sin (A/2))

Part Number		Tip Shape	Dg6	P 0.1 mm Increment	B 1 mm Increment	A Selection	E (Shape A) 1 mm Inc.	L	ℓ ₁	H	d	R	Applicable Set Screw	W
Hardened (Round) SLATA	Carburized (Round) TSLATA	Hard Chrome (Round) R-SATA	Dicoat® (Round) D-SATA	A (Tapered)	6	-0.004 -0.012	3.0-8.0	*30	1-10	6	9	1	M5	1-2
					8	3.0-10.0	10			11	1.5	M5	1-2	
					10	-0.005 -0.014	4.5-12.0			12	13	2	M6	1-3
					10T	-0.006 -0.017	9.0-14.0			15	15	3	M8	4
(Diamond) SLATD	(Diamond) TSLATD	(Diamond) R-SATD	(Diamond) D-SATD	B (Taper R)	12	-0.006 -0.017	13.0-18.0	90	1-10	15	15	3	M8	4
					16	18	19			4	5			

⊙ 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 ⊗ Angle A *30 is not applicable to Tip Shape B. Select from Standard Grade, Shouldered (P.1542)
 ⊙ B Dimension 5 mm – will be selected for Dicoat® Treated / TiCN Treated items.

Part Number Example

Type	Tip Shape	D	P	B	L	A	E
SLATA	B	8	P7.5	B15	L8	A60	

Part Number Alterations

Type	Tip Shape	D	P	B	L	A	E	(KC / KD / SC / MC)
R-SANA	B	10	P4.5	B10	L5	A60		KD

Alterations	Grooves for Wear Sign	Flat Position	Flat Machining	Wrench Flats	Thread Diameter	Thread Length	Upper Relief Radius Change
Code	MK	KC	KD	SC	MC	FC	RTC
Spec.	Machine 4 grooves on B Dimension. The wear and tear of the grooves indicate the degree of wears. ⊙ Applicable to Hardened, Carburized and Round Shape Products only ⊙ Applicable when B ≥ 4 ⊙ When used together with RTC, the groove starts from the area of R value + 1 mm. Groove Depth: 0.2mm (±0.06 mm) 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 Adds wrench flats. ⊙ H-P≥2 ⊙ Applicable to Round Shape Type only.	Ordering Code: SC Changes the thread diameter. H 9 11 13 15 19 H 7 8 11 13 17 ⊙ D/3≤M<D Mmin3 ⊙ Applicable to Threaded Type only.	Ordering Code: MC8 Changes the thread diameter. ⊙ D/3≤M<D Mmin3 ⊙ Applicable to Threaded Type only.	Ordering Code: FC15 Changes the thread length. FC=1 mm increment D6-10: M≤FC≤Mx3 D12-16: M≤FC≤Mx2.5 D20: M≤FC≤Mx2 ⊙ Applicable to Threaded only. ⊙ Not applicable to Dicoat® and TiCN treatment.	Ordering Code: RTC1 Changes the relief to the following radius R. Selection: R1 R2 R3 RTC≤(H-P)/2 ⊙ Applicable when B≥5