Locating Pins for Fixtures - Precision Grade, Configurable

Shouldered

Features: Precision Grade Pins with wider selection of D/P/B/L/T Dimensions.

Threaded

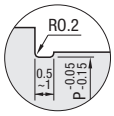
Type: Round	Type: Diamond	M Material	H Hardness
FLANA	FLAND	SCM435	Treated Hardness 35~40HRC
FTLANA	FTLAND	SCM415	Carburized Hardness 55HRC~
FSLANA	FSLAND	SUS304	-
FCLANA	FCLAND	SUS440C or 13Cr stainless	Treated Hardness 50~55HRC

* Carburized: depth 0.7 ~ 0.8 / Anti-carburizing on Threads

Type: Round	Type: Diamond	M Material	H Hardness	S Surface Treatment
R-FANA	Round	SCM435	35~40HRC (Surface 750HV ~)	Hard Chrome Plating
R-FAND	Diamond			
D-FANA	Round	SKD11 Equivalent	55HRC ~ (Surface 3000HV)	Dicoat® Treated
D-FAND	Diamond			

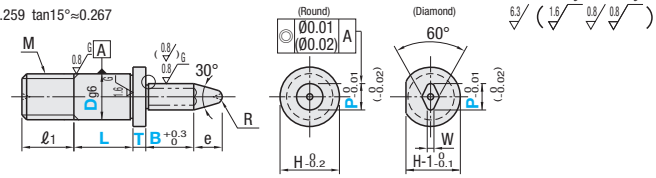
Dicoat® Treated items will have the ( ) precision.

Surface Finish Relief



Relief dimensions are reference values.

Reference: sin15≈0.259 tan15°≈0.267



D	g6
3	-0.002 -0.008
4~6	-0.004 -0.012
8, 10	-0.005 -0.014
12, 16	-0.006 -0.017
20	-0.007 -0.020

e=P/2/tan15°+R-(R/sin15°)
Dicoat® Treated / TiCN Treated items do not come with a center hole.

Part Number / Type	D	P 0.1mm Increment	B 0.1mm Increment	L 1mm Increment	T 0.1mm Increment	ℓ1	H	R	M (Coarse)	W	Unit Price FLANA	FLAND	FTLANA	FTLAND	FSLANA	FSLAND	FCLANA	FCLAND	R-FANA	R-FAND	D-FANA	D-FAND
Hardened (Round) FLANA / (Diamond) FLAND	3	3.0~4.0	2.0~16.0	5~10	2.0~10.0	5	6	1	M3	1~2											-	-
Carburized (Round) FTLANA / (Diamond) FTLAND	4	3.0~5.0	2.0~20.0	5~10		6	7	1	M4	1~2											-	-
SUS304 (Round) FSLANA / (Diamond) FSLAND	5	3.0~6.0	2.0~24.0	5~10		6	8	1	M5	1~2											-	-
SUS440C or 13Cr stainless (Round) FCLANA / (Diamond) FCLAND	6	3.0~7.0	2.0~28.0	5~10		6	9	1	M6	1~2												
Hard Chrome (Round) R-FANA / (Diamond) R-FAND	8	3.0~9.0	2.0~35.0	5~10		10	11	1.5	M8	1~2												
Dicoat (Round) D-FANA / (Diamond) D-FAND	10	5.0~12.0	3.0~35.0	8~15		12	13	2	M10	2~3												
	12	7.0~13.0	3.0~35.0	10~18		15	15	3	M12	4												
	16	13.0~16.0	5.0~35.0	12~20		18	19	4	M16	5												
	20	16.0~20.0	5.0~35.0	15~20		22	23	4	M20	5									-	-	-	-

B≤Px4 (W) Dimension D≤8: W=2 when P>5.0 D10: W=3 when P>7.0

Set Screw

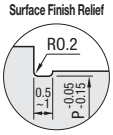
Type: Round	Type: Diamond	M Material	H Hardness
FLATA	FLATD	SCM435	Treated Hardness 35~40HRC
FTLATA	FTLATD	SCM415	Carburized Hardness 55HRC~
FSLATA	FSLATD	SUS304	-
FCLATA	FCLATD	SUS440C or 13Cr stainless	Treated Hardness 50~55HRC

* Carburized: depth 0.7 ~ 0.8 / Anti-carburizing on Threads

Type: Round	Type: Diamond	M Material	H Hardness	S Surface Treatment
R-FATA	Round	SCM435	35~40HRC (Surface 750HV ~)	Hard Chrome Plating
R-FATD	Diamond			
D-FATA	Round	SKD11 Equivalent	55HRC ~ (Surface 3000HV)	Dicoat® Treated
D-FATD	Diamond			

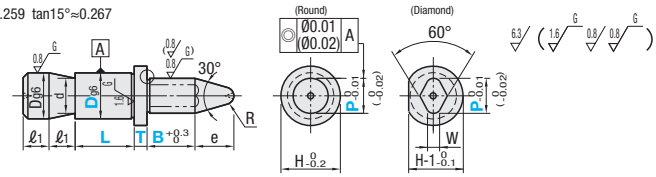
Dicoat® Treated items will have the ( ) precision.

Surface Finish Relief



Relief dimensions are reference values.

Reference: sin15≈0.259 tan15°≈0.267



D	g6
6	-0.004 -0.012
8, 10	-0.005 -0.014
12, 16	-0.006 -0.017
20	-0.007 -0.020

e=P/2/tan15°+R-(R/sin15°)
Dicoat® Treated / TiCN Treated items do not come with a center hole.

Part Number / Type	D	P 0.1mm Increment	B 0.1mm Increment	L 1mm Increment	T 0.1mm Increment	ℓ1	H	d	R	Applicable Set Screw	W	Unit Price FLATA	FLATD	FTLATA	FTLATD	FSLATA	FSLATD	FCLATA	FCLATD	R-FATA	R-FATD	D-FATA	D-FATD
Hardened (Round) FLATA / (Diamond) FLATD	6	3.0~7.0	2.0~28.0	5~10	2.0~10.0	8	9	4	1	M5	1~2												
Carburized (Round) FTLATA / (Diamond) FTLATD	8	3.0~9.0	2.0~35.0	5~10		8	11	5	1.5	M5	1~2												
SUS304 (Round) FSLATA / (Diamond) FSLATD	10	5.0~12.0	3.0~35.0	8~15		8	13	7	2	M6	2~3												
SUS440C or 13Cr stainless (Round) FCLATA / (Diamond) FCLATD	12	7.0~13.0	3.0~35.0	10~18		10	15	9	3	M6	4												
Hard Chrome (Round) R-FATA / (Diamond) R-FATD	16	13.0~16.0	5.0~35.0	10~20		10	19	13	4	M8	5												
Dicoat (Round) D-FATA / (Diamond) D-FATD	20	16.0~20.0	5.0~35.0	10~20		10	23	17	4	M8	5									-	-	-	-

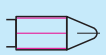
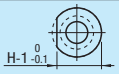
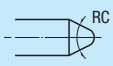
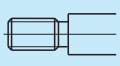
B≤Px4 (W) Dimension D6, D8: W=2 when P>5.0 D10: W=3 when P>7.0

Ordering Example

Part Number	-	P	-	B	-	L	-	T
FLANA6	-	P6.8	-	B10.5	-	L5	-	T3.1
FSLATA12	-	P9.6	-	B21.5	-	L10	-	T5.3

Alterations

Part Number	-	P	-	B	-	L	-	T	-	(KC, KD, SC···etc.)
FLANA6	-	P6.8	-	B10.5	-	L5	-	T3.1	-	SC8
FSLATA12	-	P9.6	-	B21.5	-	L10	-	T5.3	-	SC14

	Wear Groove Alterations	Flat Position	Flat Machining	Wrench Flats	Tip Angle Change	Relief	Upper Relief Radius Change
Alterations							· Dicoat® RTC · Others RTC
Code	MK	KC	KD	SC	RC	NNC	RTC
Spec.	Drill 4 grooves on the B dimension area. The wear and tear of the grooves indicate the degree of wears. Applicable to Hardening, 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 (±0.05mm) 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. H-P≥2	Ordering Code SC10 Adds wrench flats. SC=1mm Increment SC>D SC>P SC≤H-2 Applicable to Round Shape Type only.	Ordering Code RC60 Changes the tip angle. Selection 60°, 90°, 120°	Ordering Code NNC Adds a relief at the thread end. Not applicable to Set Screw Type. For damage prevention, Dicoat® treatment is not applicable.	Ordering Code RTC1 Changes the relief to the following radius R. Selection R1 R2 R3 RTC≤(H-P)/2 Applicable when B≥5