

OIL-FREE SLIDE UNITS FOR LOOSE CORE

Non JIS material definition is listed on P.1351 - 1352

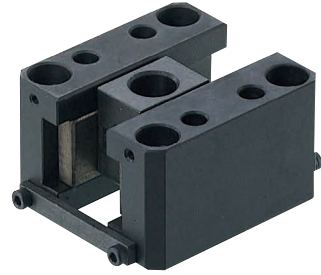
RoHS

Features of Oil-free Slide Units for Loose Core

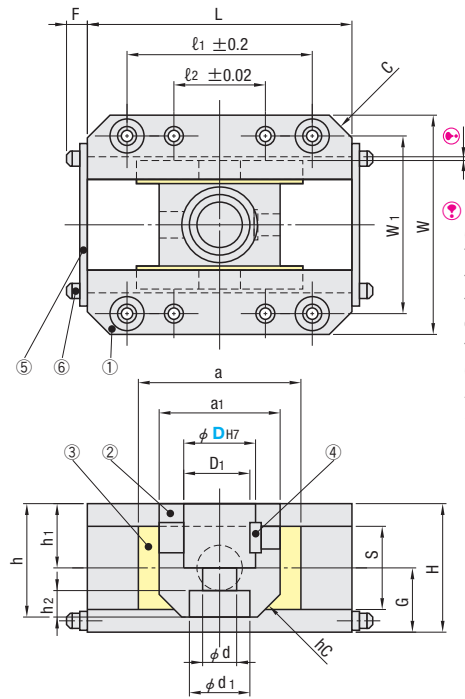
- Enables the inclined pin to slide smoothly when pushing out a loose core (including undercut) at an angle.
- The inclined pin guide slides within the range of θ , and the automatic center adjustment function reduces wear and scoring on the guide and slide plates.

Item	Components	Parts Name	Material	Piece
①	Slide base	Slide Base	S55C	2
②	Inclined pin holder	Inclined Pin Holder	SCM440	1
③	Slide plate	Slide Plate	*CAC304+Solid lubricant	2
④	Spring Pins & Dowel Pins	Set Pin	S45C	1
⑤	Stopper	Stopper	SS400	2
⑥	Stopper fixing screw	Set Screw for Stopper	SCM435	4

* High strength brass casting class 4 (Old JIS: HBsC4)

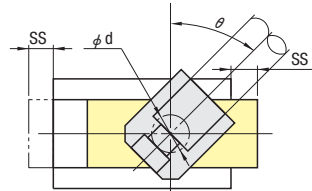


SCY

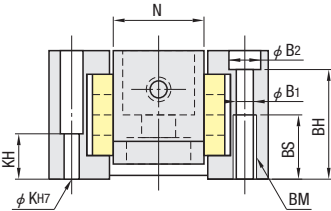


One side has a clearance of 0.5mm. Thus when you hope to precisely adjust, take the stopper ⑤ off and reduce the clearance in the current state. Alternatively, use a standard type that has a clearance of 0.1mm.

The stroke length can be maximized by removing the stopper ⑤



Part Number	Regular stroke	SS	Max. stroke (S _{max}) with the stopper removed	Range of inclination angle θ
SCY8	18	7.0	13.5	$0^\circ \leq \theta \leq 20^\circ$ ※ θ can be set up to 30° , however we recommend the range above.
SCY10	18	9.0	17.0	



① Slide base				② Inclined pin holder						③ Slide plate			Part Number		U/Price				
W	L	H	C	D ₁	d	d ₁	h	h ₁	h ₂	a ₁	hC	N	S	a		Type	D		
44	44	24	3	7.5	4.5	10	20	12	5	16	2.5	12	14	26	12	5	SCY	8 10	Quotation
50	50	28	3	8.5	5.5	11	24	14	6	20	3	14	16	32	14	5			

Part Number	Bolt hole dimensions											
	Type	D	l ₁	l ₂	W ₁	B ₁	B ₂	BM	BH	BS	K	KH
SCY	8	30	12	35	4.3	8	M5	19.0	14	4	4	10
	10	36	16	38	4.3	8	M5	23.0	14	4	10	



Order

Part Number
SCY8

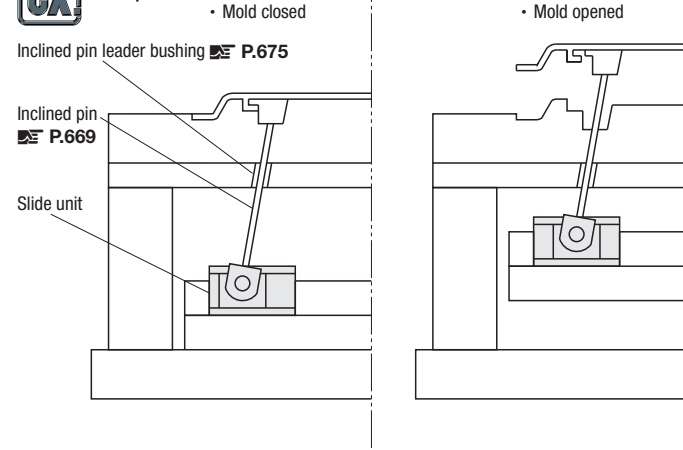


Days to Ship

Quotation

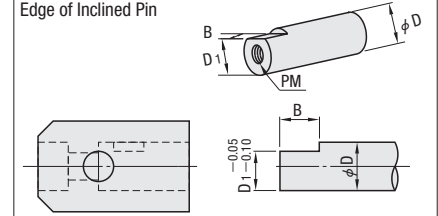


Example



Inclined pin dimensions

Inclined pin edge cutout
Edge of Inclined Pin

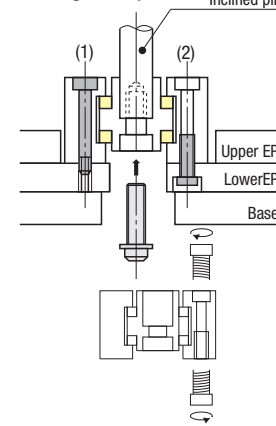


Inclined pin dimensions

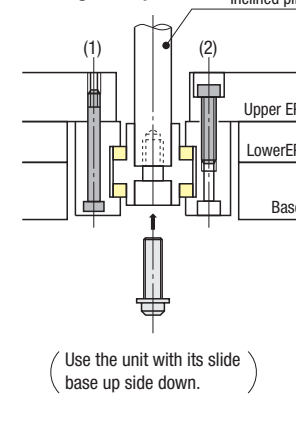
D	D ₁	B	PM
8	7.5	10	M 4
10	8.5	10	M 5

Mounting examples

Mounting examples A



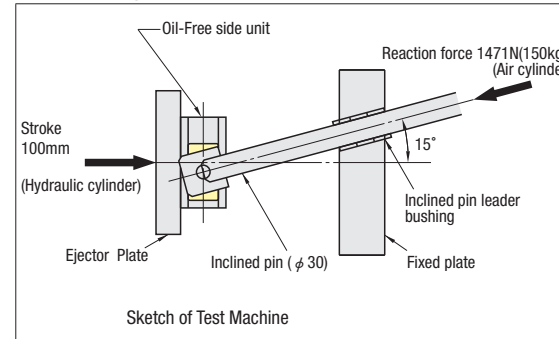
Mounting examples B



(Use the unit with its slide base up side down.)

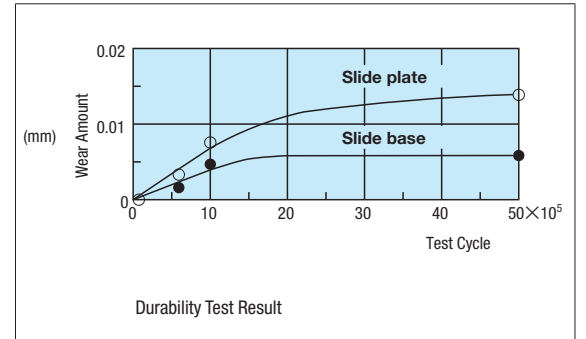
- Refer to the above table for dimensions of the inclined pin's edge cutout and screw size (PM). The counterbore on the inclined pin holder is made in a size that accommodates for a socket head cap screw with a spring washer.
- The unit can be mounted on an ejector plate in two ways: (1) Screwing into the ejector plate, or (2) Screwing into the unit. For (2) use a socket head cap screw that corresponds to BM in the Bolt hole dimensions table. For (1) select a rank below the corresponding BM (i.e., M6 screw when BM is M8).
- Prior to mounting, apply * grease to the unit in order to protect it from wear during initial running-in.
- If the stroke is long, it is recommended that you use a bushing that supports the inclined pin. P.675

Durability test data



Testing method and conditions

Tested Product : Oil-free Slide Guide Units for Loose Core Old Standard SCY30
Inclination angle : 15°
Reaction: 1471N(150kgf) (applied at the ejector plate start up and kept until the stroke reaches 10mm)
Stroke: Ejector plate stroke 100mm (Slide plate stroke 26.8mm)
Testing speed: 0.42S⁻¹(25cpm) (Slide plate's sliding speed 0.04m/s {2.5m/min})



Results of durability test

- Repeated 500,000 times, the test results indicate excellent abrasion resistance with an average wear amount of 0.005mm on the slide base, 0.013mm on the slide plate.
- This is considered to be attributable to the slide unit's automatic center adjustment function that helped prevent uneven sliding, and the oil-free bearing's excellent scoring resistance.

Slide Cores
Loose Cores