

Sine Vices Super Precision

SNV

Manufactured from selected tool steel these vices are fully hardened (55-60 HRC) and tempered

All surfaces are precisely ground

Ideal for use in manufacturing processes where highest standard of clamping accuracy at desired angle is required

A minute angle step of 0.2°/5 mm allows very small angles to be set with ease using standard gauge blocks

These are available in 2 models:

- a. Screw Type: SNV/7
- b. Screwless Type: SNV/6



Sine Vice being used to drill an angled hole on a machine wheel

SPECIFICATIONS

ACCURACIES	GUARANTEED		ACTUAL AVERAGE	
FLATNESS OF BEARING SURFACE	0.00039"	10 μ	0.00019"	5 μ
PARALLELISM OF SLIDE FACE & TOP FACE TO BOTTOM FACE	0.00039"	10 μ	0.00019"	5 μ
SQUARENESS OF SIDES & SLIDE FACES	0.00047"	12 μ	0.00031"	8 μ
PARALLELISM OF SIDES & SLIDE WAYS	0.00031"	8 μ	0.00019"	5 μ
SQUARENESS OF FIXED JAW BACK TO BOTTOM SURFACE & SIDES	0.00047"	12 μ	0.00031"	8 μ
PARALLELISM OF FIXED JAW & LENGTH FACES	0.00031"	8 μ	0.00019"	5 μ
PARALLELISM OF JAW FACES	0.00031"	8 μ	0.00019"	5 μ
SLIDING JAW SQUARE TO BOTTOM FACE WHEN VICE IS CLAMPED	0.00047"	12 μ	0.00031"	8 μ
SLIDING JAW FACE PARALLEL WHEN VICE IS CLAMPED	0.00031"	8 μ	0.00019"	5 μ
CENTER TO CENTER DISTANCE	0.00039"	10 μ	0.00019"	5 μ

ORDERING INFORMATION

CAT NR.	ORD NR.	TYPE	BODY DIMENSIONS	JAW WIDTH	JAW OPENING	JAW DEPTH	MINUTE ANGLE STEP	CENTER TO CENTER DISTANCE	NET WEIGHT	BOX QTY.
			(INCH)	(INCH)	(INCH)	(INCH)	(INCH)	(INCH)	(KG)	
SNV/6	35215	Screwless	7-1/32 × 3-1/4 × 3-11/32	2-3/4	3-3/4	1-9/16	0.2	6	4.3	4
SNV/7	35216	Screw type	8 × 2-3/4 × 3-17/32	2-3/4	3	1-9/16	0.2	7	4.5	4



SNV/7

SNV/6

DETERMINING THE HEIGHT (H) OF THE GAUGE BLOCK TO BE USED

$$h = \sin \alpha \times D \text{ for surface A}$$

$$h = \sin \alpha \times D + 5 \text{ mm} / 0.2" \text{ for surface B}$$

eg: To determine height of gauge block for angle adjustment of 10°,

Given D = 150 mm:

$$h = \sin 10^\circ \times 150 = 26.04 \text{ mm}$$

Thus for setting on angle of 10°, a gauge block of height 26.04 mm is required

USING GAUGE BLOCKS

1. Pivot the Sine Vice upwards.
2. Insert gauge block between surface A & the headed dowel
3. Turn back screw so that Sine Vice is pressed against the gauge block & locked positively
4. When adjusting very small angles, place appropriate gauge blocks on surface B which is lower than A by 5mm/0.2"

