V-Anvil Micrometers

SERIES 314, 114 — 3 Flutes and 5 Flutes

FEATURES

- Measures the outside diameter of cutting tools (such as taps, reamers, end mills) with an odd number of flutes.
- With ratchet stop for constant force.
- Supplied with setting standard.
- Non-slip grip finish (digital models).
- V-anvils with a centerline groove are available. They are useful for measuring pitch diameters of taps which have a small diameter by using single-wire method.
- With SPC output (Series 314).
- Supplied in fitted plastic case.

Technical Data

Accuracy: Refer to the list of specifications
Resolution*: .00005" / 0.001mm or 0.001mm
Graduation**: .001" or .0001", 0.01mm
Flatness (spindle/anvil):
Analog model: .000024" / 0.6µm, .00005" / 1.3µm
Digital Model: .000012" / 0.3µm, .00004" / 1µm
Spindle face: Carbide tipped
Display*: LCD
Battery*: SR44 (1 pc.), **938882**
Battery life*: Approx. 2.4 years under normal use
*Digital models **Analog models

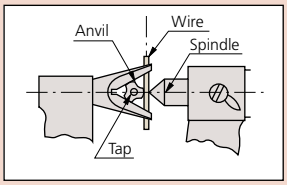
Function of Digital Model

Zero / ABS, Data hold, Data output, Preset,
inch/mm conversion (on inch/metric models only)
Function lock, 2 Presets
Alarm: Low voltage, Counting value composition error

Optional Accessories for Digital Model

05CZA662: SPC cable with data switch (40" / 1m)
05CZA663: SPC cable with data switch (80" / 2m)

Pitch Diameter Measurement of Tap by Single-wire Method Inch/Metric



314-351-30

114-121

114-202

114-204

SPECIFICATIONS

Metric Digital model for 3 flutes cutting head

Range	Resolution	Order No.	Accuracy	Remarks	Setting Standard	Mass (g)
1 - 15mm	0.001mm	**314-251-30**	±4µm	w/Groove	ø5mm	275
		314-261-30	±4µm	—	ø5mm	275
10 - 25mm	0.001mm	**314-252-30**	±4µm	w/Groove	ø10mm	410
		314-262-30	±4µm	—	ø10mm	410
25 - 40mm	0.001mm	**314-253-30**	±5µm	—	ø25mm	465

Inch/Metric Digital model for 3 flutes cutting head

Range	Resolution	Order No.	Accuracy	Remarks	Setting Standard	Mass (g)
.05 - .6"/ 1.27 - 15.24mm	.00005" / 0.001mm	**314-351-30**	±.0002"	w/Groove	ø.2"	275
		314-361-30	±.0002"	—	ø.2"	275
.4" - 1"/ 10.16 - 25.4mm	.00005" / 0.001mm	**314-352-30**	±.0002"	w/Groove	ø.4"	410
		314-362-30	±.0002"	—	ø.4"	410
1" - 1.6"/ 25.4 - 40.64mm	.00005" / 0.001mm	**314-353-30**	±.00025"	—	ø 1"	465

SPECIFICATIONS

Metric For 3 flutes cutting head

Range	Graduation	Order No.	Accuracy	Setting Standard	Remarks	Mass (g)
1 - 15mm	0.01mm	**114-101**	±4µm	ø5mm	w/Groove	120
		114-161	±4µm	ø5mm	—	120
10 - 25mm	0.01mm	**114-102**	±4µm	ø10mm	w/Groove	280
		114-162	±4µm	ø10mm	—	280
2.3 - 25mm	0.01mm	**114-204***	±4µm	ø5mm	—	290
25 - 40mm	0.01mm	**114-103**	±5µm	ø25mm	—	400
40 - 55mm	0.01mm	**114-104**	±6µm	ø40mm	—	465
55 - 70mm	0.01mm	**114-105**	±6µm	ø55mm	—	675
70 - 85mm	0.01mm	**114-106**	±7µm	ø70mm	—	910

*Carbide-tipped anvil

Inch For 3 flutes cutting head

Range	Graduation	Order No.	Accuracy	Setting Standard	Mass (g)
.05 - .6"	.001"	**114-163**	±.0002"	ø.2"	120
.09 - 1"	.0001"	**114-202***	±.0002"	ø.2"	280
1 - 1.6"	.001"	**114-113**	±.00025"	ø1"	400
1.6 - 2.2"	.001"	**114-114**	±.0003"	ø1.6"	465

*Carbide-tipped anvil and .0001" reading is obtained with vernier.

Metric For 5 flutes cutting head

Range	Graduation	Order No.	Accuracy	Setting Standard	Remarks	Mass (g)
5 - 25mm	0.01mm	**114-121**	±4µm	ø5mm	w/Groove	255
		114-165	±4µm	ø5mm	—	255
2.3 - 25mm	0.01mm	**114-137***	±4µm	ø5mm	—	220
25 - 45mm	0.01mm	**114-122**	±5µm	ø25mm	—	400
45 - 65mm	0.01mm	**114-123**	±6µm	ø55mm	—	540
65 - 85mm	0.01mm	**114-124**	±7µm	ø70mm	—	760

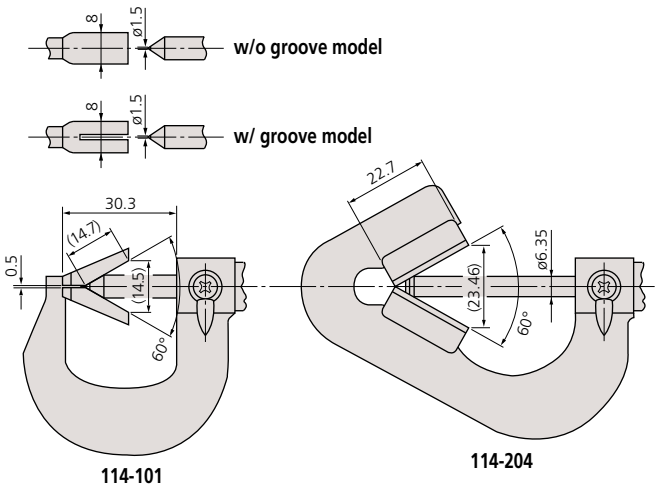
*Carbide-tipped anvil

Inch For 5 flutes cutting head

Range	Graduation	Order No.	Accuracy	Setting Standard	Mass (g)
.09 - 1"	.0001"	**114-135**	±.0002"	ø.2"	255

DIMENSIONS

Unit: mm



Range	a
.05 - .6" / 10 - 25mm	6.2
1 - 1.6" / 25 - 40mm	19.14
1.6 - 2.2" / 40 - 55mm	32.13
55 - 70mm	45.12
70 - 85mm	58.11