

Vacuum End-Effector

mV Series



Features

- different wafer sizes (8"/12")
- standard and e.g. eWLB wafer handling
- lift pin handshake
- back side handling
- for loading and unloading of several mechatronic components
- automated quick coupling or adapter (incl. e.g. mapping sensor)

ASK FOR YOUR CUSTOMIZED SOLUTION!

Functional description

Vacuum end-effectors (mV series) are designed for back side handling of e.g. eWLB wafers using vacuum. They enable handling for all procedures of extremely warped and stiff wafers which are difficult to planarize (with planarization force above 4.5 N).

With its special shape and vacuum pins there is only minimal contact between the end-effector and the wafer back side and no contact in the center. An adapter for special applications is available.

Loading	Automated
Wafer detection	Vacuum sensing
End-effector detection	Type and size
Centering accuracy (X, Y axis)	n.a.
Automated coupling	Optional (or with adapter)
Materials	Stainless steel, anodized aluminum, PEEK, NBR
PEEK coating	Conductive
Pneumatic	
Pneumatic media	Vacuum
Supply pressure	n.a.
Optimum Bernoulli pressure	n.a.
Supply Vacuum	-50 kPa to -85 kPa

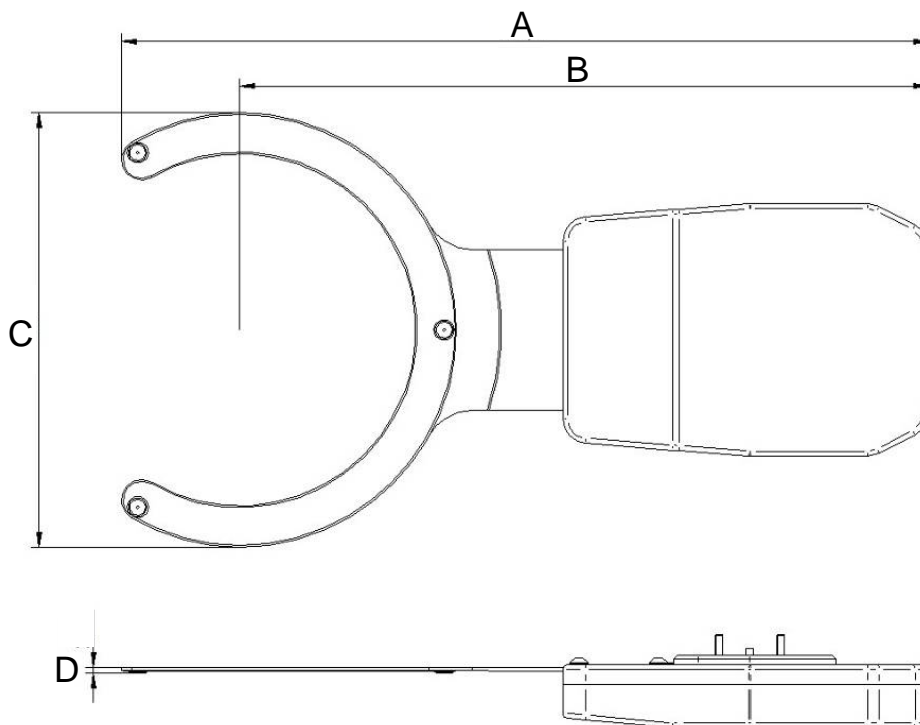
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Vacuum End-Effector

mV Types & wafer sizes

Type	mV 150	mV 200	mV 300
Wafer size	n.a.	200 mm (8")	300 mm (12")
Wafer thickness (depends on wafer type)		> 200 µm (8 mil)	> 200 µm (8 mil)
Warpage (depends on wafer thickness)		Up to 12 mm	Up to 12 mm
Weight		400 g	600 g
Mechanical dimensions in mm			
A (length)	n.a.	326	433
B (distance to wafer center)		278	347
C (diameter/width of end-effector)		175	240
D (height)		2,28	4,83

Special customized designs available!



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