

Edge Grip End-Effector

mEG Series



Features

- different wafer sizes (6"/8"/12"/18")
- MEMS wafer handling
- back side handling
- conductive PEEK coating
- for loading and unloading of several mechatronic components
- automated quick coupling or adapter (incl. e.g. mapping sensor, speed regulator etc.)

ASK FOR YOUR CUSTOMIZED SOLUTION!

Functional description

The edge grip end-effectors (mEG series) are designed for back side handling of MEMS wafers. They enable direct handling of wafers with two flats (primary and secondary flat). The alignment of the wafer is not important for the handling procedure. The edge grip end-effector touches the wafer only at the edge exclusion. The process area is safe. An adapter for special applications is available.

Loading	Automated
Wafer detection	Vacuum sensing or capacitive sensing (with adapter)
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	CDA
Supply pressure	5.5 – 6.5 bar
Optimum Bernoulli pressure	n.a.
Supply Vacuum	-50 kPa to -85 kPa

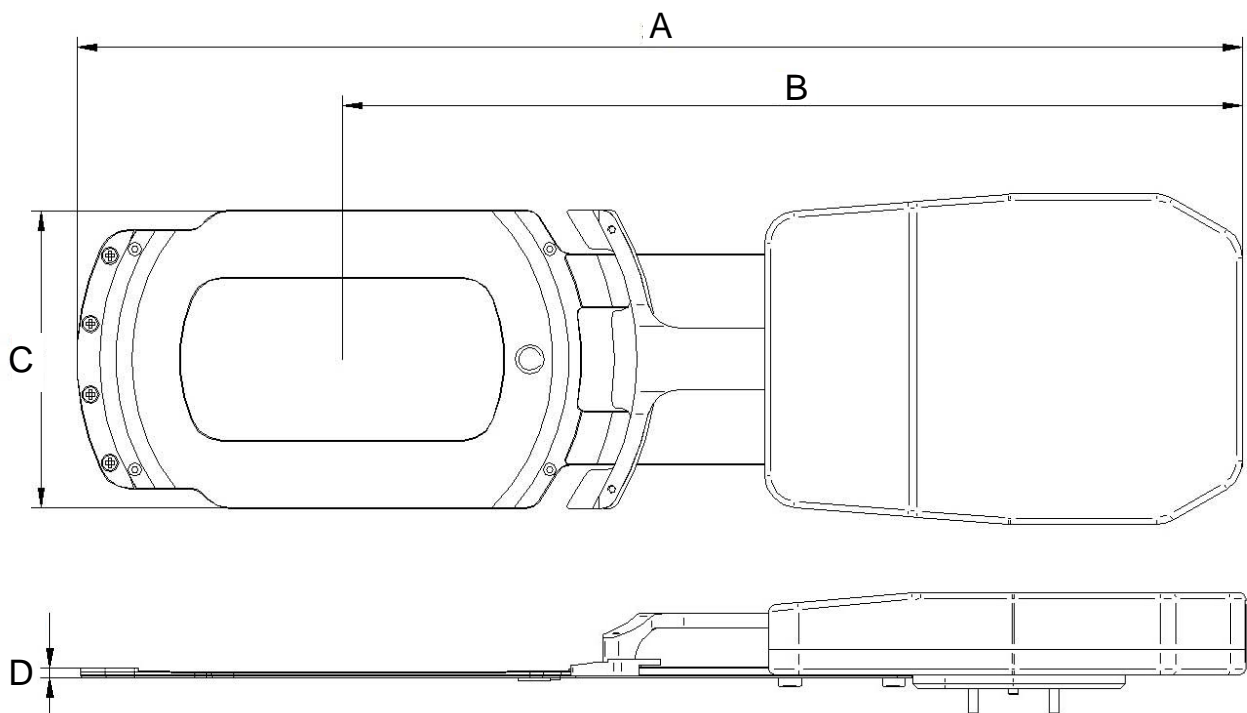
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mEG Types & wafer sizes

Type	mEG 150	mEG 200	mEG 300 (multiple gripper)	mEG 450
Wafer size	150 mm (6")	200 mm (8")	300 mm (12")	450 mm (18")
Wafer thickness	> 200 µm (8 mil)	> 300 µm (12 mil)	Special design! Drawing on request	Special design! Drawing on request
Warpage (depends on wafer thickness)	-	-		
Weight	596 g	690 g		
Mechanical dimensions in mm				
A (length)	313	344		
B (distance to wafer center)	233	246		
C (width of end-effector)	92	128		
D (height)	3,5	2,9		

Special customized designs available!



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