



MH Wobble Sticks - Mechanical Hand Series

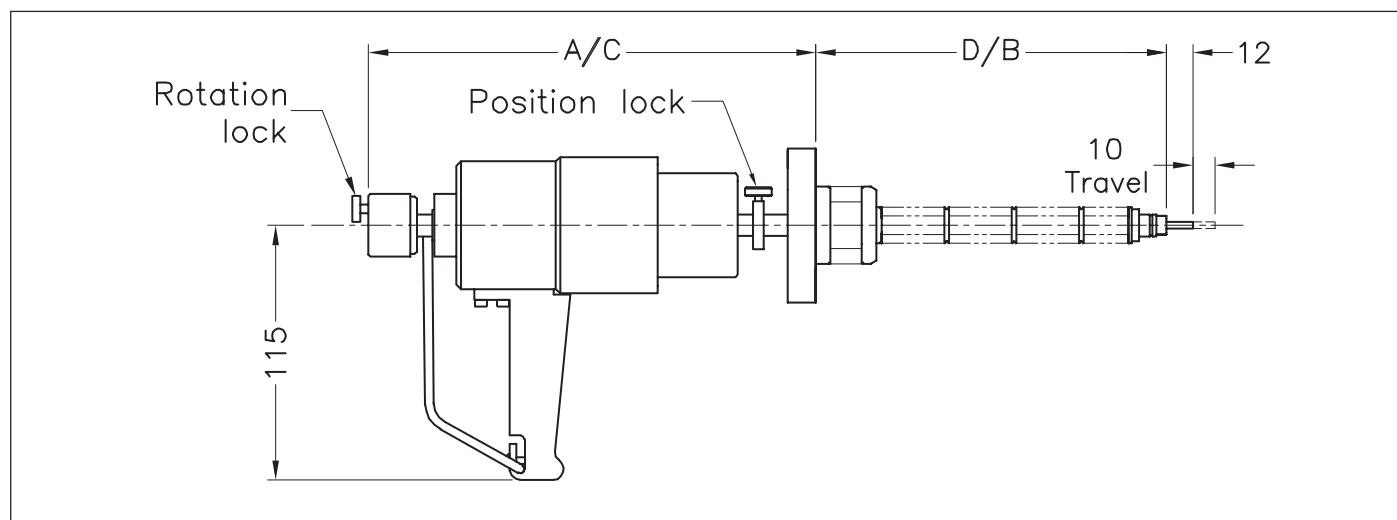
The mechanical hand used for gripping linear and rotary movement. Tactile operation to give the user a true 'feeling' of position inside the vacuum chamber.



Product Overview

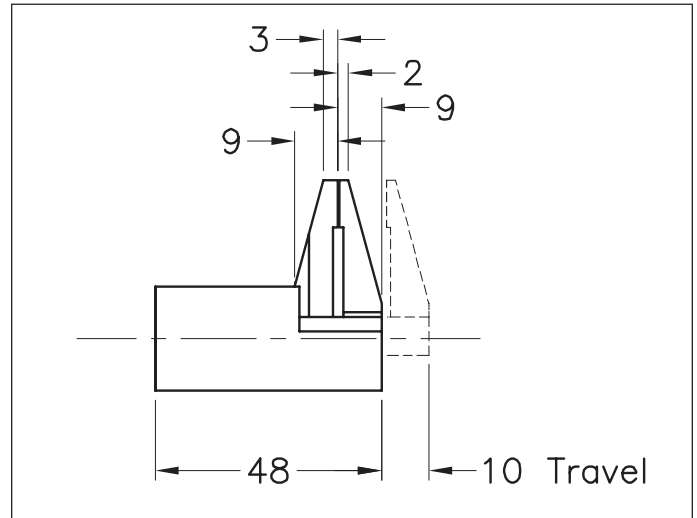
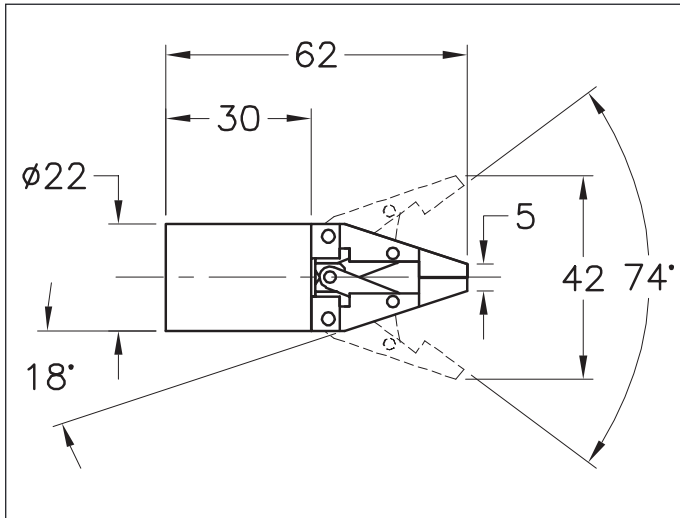
- Linear travels from 80mm to 280mm
- +/- 22° of angular movement
- Dual edge welded bellows.
- 70mm OD conflat mounting flange.
- Leak rate <math>< 1 \times 10^{-10}</math> mbar ls⁻¹
- Pressure range 1 bar to 10⁻¹¹ mbar
- All stainless steel in vacuum construction
- Rotation and linear locks
- Spring loaded jaws (NC)
- On-axis symmetric jaw operation (74° max opening angle)
- Perpendicular jaw operation, 10 mm opening.
- Jaws to customer specifications available.

The mechanical hand can be used for the movement, re-arrangement and transfer of samples, STM tip changes, or even as an in-vacuum screwdriver.





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Mechanical Hand - MH Series

DN Type	Flange OD mm	Linear Travel mm	Retracted A mm	Extended C mm	Description	Order Code
DN40	70	80	285	205	Mechanical Hand (No Jaw)	ZMH075
DN40	70	151	356	205	Mechanical Hand (No Jaw)	ZMH150
DN40	70	237	442	205	Mechanical Hand (No Jaw)	ZMH225
DN40	70	280	485	205	Mechanical Hand (No Jaw)	ZMH275
DN40	70	80	285	205	Mechanical Hand with fitted symmetrical jaw	ZMH075S
DN40	70	151	356	205	Mechanical Hand with fitted symmetrical jaw	ZMH150S
DN40	70	237	442	205	Mechanical Hand with fitted symmetrical jaw	ZMH225S
DN40	70	280	485	205	Mechanical Hand with fitted symmetrical jaw	ZMH275S
DN40	70	80	285	205	Mechanical Hand with fitted perpendicular jaw	ZMH075P
DN40	70	151	356	205	Mechanical Hand with fitted perpendicular jaw	ZMH150P
DN40	70	237	442	205	Mechanical Hand with fitted perpendicular jaw	ZMH225P
DN40	70	280	485	205	Mechanical Hand with fitted perpendicular jaw	ZMH275P
					Symmetrical double acting in-line pincer	ZJAWSY
					Perpendicular parallel acting pincer	ZJAWPE

Technical Data - MH Series

Mounting Flange	70 mm OD
Orientation	Any
Construction	Stainless steel, bellows sealed actuation
Articulation	±22.5° tilt
Z Travel Range	80, 150, 236, 279 mm
Rotation	360° continuous
Azimuthal Force	10 N Maximum rotational
Torque	0.3 Nm

Technical Data - MH Series

Torque Limiting Mechanism	Yes, extends bellows lifetime
Rotation Lock	Yes
Linear Lock/Clamp	Yes
Bake out temperature	250 °C
Jaw/Pincer Options	1: Perpendicular parallel acting pincer (10N max force, 10 mm opening, sprung closed) 2: Symmetrical double acting in-line pincer (3N max force, 74° max opening, sprung closed)