

M-653 · M-655 Differential Micrometer Drive

Stroke to 20 mm, Manual



- 0.1 μm Sensitivity
- 1 μm Graduations
- Travel Range up to 20 mm

Model	Travel range coarse/fine	Spindle pitch coarse/fine	Shaft \varnothing	Tip \varnothing	Total length at 0 mm
M-653.00	5/0.2 mm	0.4/0.02 mm	6 mm	3 mm	56 mm
M-655.00	20/1.0 mm	0.5/0.05 mm	12 mm	6,8 mm	112 mm

M-631 · M-632 · M-633 Micrometer Drive

Non-Rotating Tip, Optional Piezo Drive, Manual



- 10, 25 and 50 mm Travel Range
- Pitch 0.5 mm/rev.
- Low-Friction Construction
- 1 μm Manual Sensitivity
- Sub-nm Resolution with Optional PZT Actuator

Model	Travel range	Max. push/ pull force	Tip \varnothing	Shaft \varnothing	Total length at 0 mm
M-631.00	10 mm	50 N	12 mm	16 mm	76 mm
M-632.00	25 mm	50 N	12 mm	16 mm	110.5 mm
M-633.00	50 mm	50 N	12 mm	16 mm	170.5 mm

M-619 – M-626 Precision Micrometer Drive

Stroke to 25 mm, Manual



- 1 μm Sensitivity
- 10 μm Graduations
- Model M-626.05 with Lockable Spindle

Model	Travel range	Shaft \varnothing	Tip \varnothing	Total length at 0 mm
M-619.00	6.5 mm	6 mm	3.5 mm	37 mm
M-619.10	6.5 mm	6 mm	3.5 mm	44.5 mm
M-620.00	10 mm	6 mm	3 mm	44 mm
M-621.00	10 mm	8 mm	5 mm	45 mm
M-622.00	15 mm	10 mm	5.5 mm	63 mm
M-623.00	15 mm	12 mm	5.5 mm	69 mm
M-626.00 & M-626.05	18 mm	6 mm	3 mm	53 mm
M-626.10	18 mm	6 mm	3 mm	64.5 mm
M-624.00	25 mm	12 mm	6.8 mm	87 mm

M-653 · M-655

Differential Micrometer Drives



M-653.00 differential micrometer drive

Ordering Information

M-653.00
Differential Micrometer Drive with
5 mm Coarse Range and 0.2 mm
Fine Range

M-655.00
Differential Micrometer Drive with
20 mm Coarse Range and 1 mm
Fine Range

Ask about custom designs!

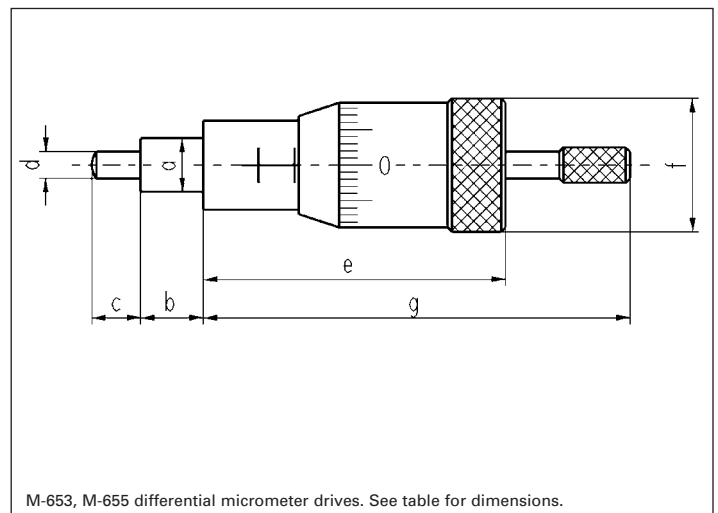
- 0.1 μm Sensitivity
- 1 μm Graduations
- Travel to 20 mm

M-653 and M-655 differential micrometer drives provide coarse travel to 20 mm and sub-micron resolution in a single unit. The large positioning knob provides fast coarse positioning with 1 μm sensitivity, while the small knob provides additional fine motion with 0.1 μm resolution over a limited travel range.

Technical Data

Models	M-653.00	M-655.00	Units
Coarse Range	5	20	mm
Fine Range	0.2	1.0	mm
Coarse Pitch	0.4	0.5	mm
Fine Pitch	0.02	0.05	mm
Scale Reading, Fine	0.001	0.001	mm
Shaft ϕ (a)	6	12	mm
Shaft Length (b)	7	15	mm
Tip at 0 mm (c)	1	7	mm
Tip ϕ (d)	3	6.8	mm
Thimble at 0 mm (e)	30	57	mm
Thimble ϕ (f)	15	30	mm
Thimble max. (g)	48	90	mm

Note: letter codes refer to drawing



M-653, M-655 differential micrometer drives. See table for dimensions.