

# Technical Data/ Performance Characteristics



	Leica M50	Leica M80
<b>Optical data</b>	5:1 manual, stage changer	8:1 manual, zoom
Zoom		
Data with standard optics (1× objective/10× eyepieces)		
– Zoom range	five stage: 6.3×, 10×, 16×, 25×, 40×	7.5× – 60×
– Resolution	225lp/mm	309lp/mm
– Working distance	89.6mm (achromatic 1×)	83.4mm (planachromatic 1×)
– Object field	5.75mm – 36.5mm	3.8mm – 30.7mm
Maximum values (based on optics combination)		
– Magnification	320×	480×
– Resolution	450lp/mm	618lp/mm
– Visible structural width	1.11µm	0.81µm
– Numerical aperture	0.15	0.206
– Object field	116.8mm	98mm
Working distances	303mm (achromatic 0.32×) 188.5mm (achromatic 0.5×) 148mm (achromatic 0.63×) 114mm (achromatic 0.8×) 89.6mm (achromatic 1×) 65.5mm (achromatic 1.25×) 46mm (achromatic 1.6×) 27.4mm (achromatic 2.0×) 106.9mm (planachromatic 0.8×) 83.4mm (planachromatic 1.0×) 41.5mm (planachromatic 1.6×)	303mm (achromatic 0.32×) 188.5mm (achromatic 0.5×) 148mm (achromatic 0.63×) 114mm (achromatic 0.8×) 89.6mm (achromatic 1×) 65.5mm (achromatic 1.25×) 46mm (achromatic 1.6×) 27.4mm (achromatic 2.0×) 106.9mm (planachromatic 0.8×) 83.4mm (planachromatic 1.0×) 41.5mm (planachromatic 1.6×)
<b>Optics Carrier</b>		
Design principle	Multiple-coated optical system with two parallel beam paths and one main objective (CMO), lead-free	Multiple-coated optical system with two parallel beam paths and one main objective (CMO), lead-free
Specific surface resistivity (housing)	2×10 <sup>11</sup> Ω/mm <sup>2</sup> discharge time <2 seconds from 1000V to 100V	2×10 <sup>11</sup> Ω/mm <sup>2</sup> discharge time <2 seconds from 1000V to 100V
Engageable zoom notches	–	8 switchable positions for repetitive tasks