

605 Series

Precision Gimbal Optic Mounts

Key Features

- Optic surface automatically locates on gimbal axes
- Convenient, kinematic optic mounting requires no tools
- 360° coarse/ $\pm 5^\circ$ fine adjustment ranges with up to 0.3 arc sec sensitivity
- Compatible with English or metric mounting
- Choice of drives



605-2 includes 2 to 1 in. (50.8 to 25.4 mm) adaptor. 605-4 has an optional 4 to 3 in. (101.6 to 76.2 mm) adaptor available.

Newport's popular **605 Series Gimbal Mounts** provide ultra-stable positioning of optics up to 4 in. (101.6 mm) in diameter. The pivot axes rotate 360°, and hex-head setscrews provide coarse-adjustment lock-down for each axis. Standard AIS Fine Adjustment Screws provide $\pm 5^\circ$ of high-resolution fine adjustment and have tamper-proof lockscrews. The pivot axes employ wobble-free, pre-loaded radial ball bearings and are spring-loaded to eliminate backlash. Adaptors provide optic registration on the gimbal axes.

605 Series Mounts incorporate an especially convenient kinematic mounting design to accommodate optics of various thicknesses. The spring-loaded retaining clips have finger-grip handles. Three polished steel balls kinematically register the optic surface on the gimbal axes for pure rotational motion. The retaining clips provide compressive loading opposite the balls, so the optic is not distorted. The edge of the optic rests on two steel rods. A nylon-tipped screw provides a small amount of opposing pressure for stable optic orientation—all providing exceptionally stable mounting.

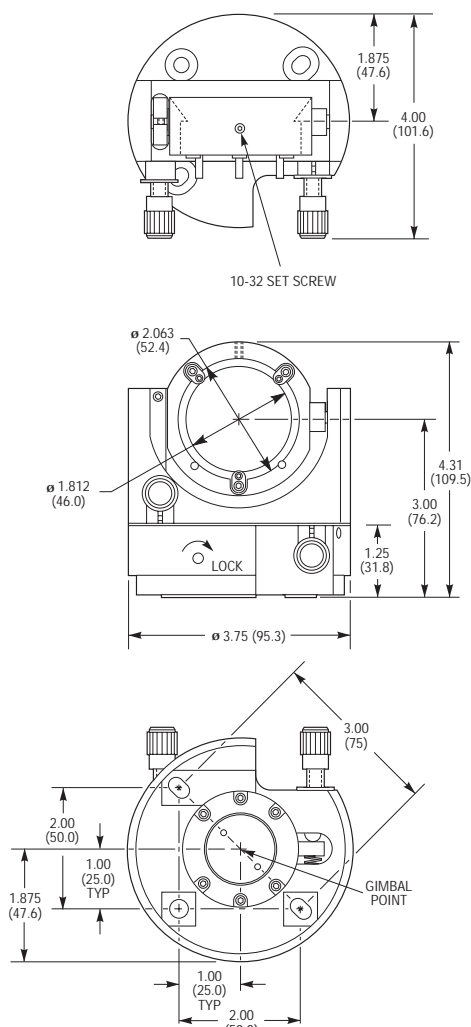
Engraved index lines mark the periphery of the mount's base. A vernier provides 15 arc min settability. A 3/32 hex wrench (included) is used to lock the axes and optic retaining screw.

For higher resolution, 605 Series mounts are offered with DM-13 Differential Micrometers. Versions ready for Motorized Actuators are also available.

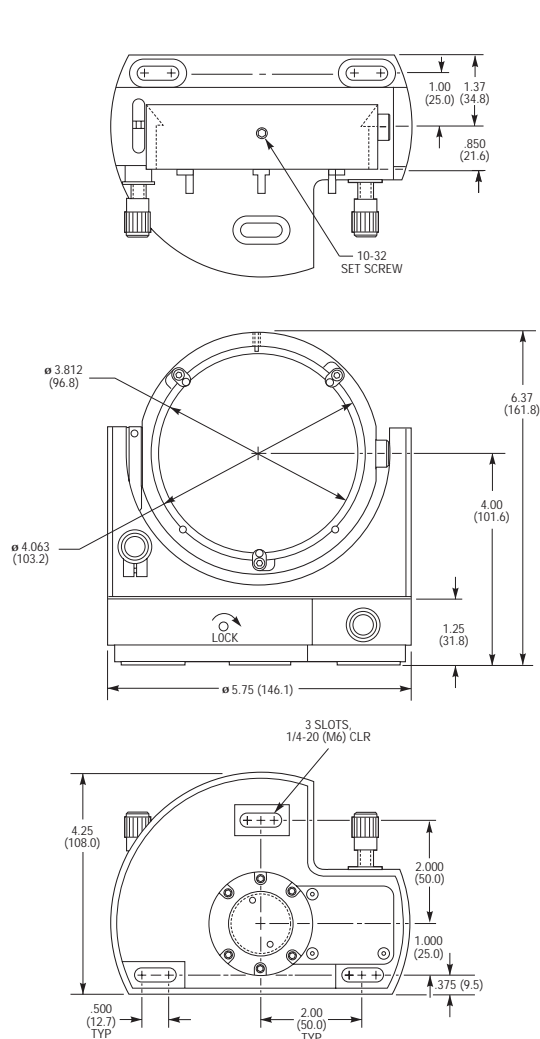
Specifications

	605-2		605-4	
Coarse/Fine Range (each axis)	360°/10°		360°/10°	
Sensitivity with AIS Adjustment Screws (arc sec)	6		4	
Sensitivity with DM-13 Differential Micrometers (arc sec)	0.5		0.3	
Vernier Graduations (arc min)	15		15	
Orthogonality (arc min)	1		1	
	605-2	605-2 w/Adaptor (included)	605-4	605A-4-3 Adaptor
Optic Thickness [in. (mm)]	0.25-0.62 (6-16)	0.12-0.40 (3-10)	0.43-0.87 (11-22)	0.40-0.68 (10-17)

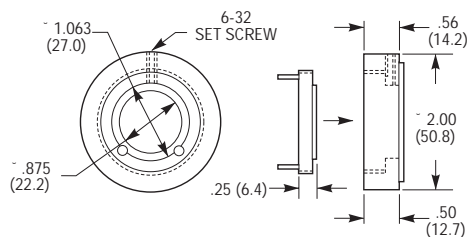
Model 605-2



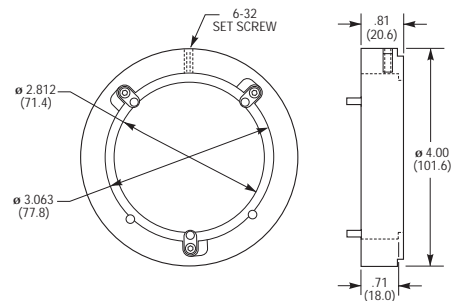
Model 605-4



Model 605A-2-1



Model 605A-4-3



Ordering Information

Model*	Description
605-2	Mount for 2 and 1 in. (50.8 and 25.4 mm) optics
605A-2-1	Additional adaptors for 1 in. optics
605-4	Mount for 4 in. (101.6 mm) optics
605A-4-3	Adaptor for 3 in. (76.2 mm) optics

* Append -DM (e.g. 605-4-DM) for mounts equipped with DM-13 Differential Micrometers; Append -OMA (e.g. 605-4-OMA) for mounts ready for LTA Series, NSA12, or CMA Series Motorized Drives (order drives separately)

CAD See our website
for CAD files