

V-106

Voice-Coil Scanning System

>> Click <http://www.pi.ws/fwd/Micropositioning> for the Latest Specs on these Products

Replaced by V-106.11S



V-106.2S voice-coil scanning system (V-106.02 XY stage and V-820.20 PC controller card)

Ordering Information

V-106.1S
Voice-Coil Scanning System: Controller Card (V-820.20) and X-Axis Stage, 6 mm

V-106.2S
Voice-Coil Scanning System: Controller Card (V-820.20) and XY Stage, 6 mm

V-820.20
Voice-Coil Scanning Controller, PC Card, 2-Axis

Ask about custom designs!

- Fast Scanning & Positioning
- X and XY Versions
- Velocity up to 50 mm/sec
- Travel Range: 5 mm
- Resolution: 0.1 μ m
- PC-Card Servo-Controller
- Windows™ Software

The V-106 voice-coil scanning and positioning system is designed for applications where small samples have to be positioned or scanned with high velocity and high resolution. It provides superior responsiveness compared to micropositioners with conven-

tional leadscrew drives. The mechanics (X or XY stage) are driven by an integrated, non-contact, zero-friction, voice-coil actuator. Scan velocities up to 50 mm/sec over a range of 5 mm are feasible with typical loads of less than 100 grams. Integrated linear encoders provide position resolution of 0.1 μ m.

system and other features such as I/O lines and hardware interrupt capability.

A mounting plate and software tools (LabView drivers, libraries in C, Pascal, Basic...) are included in the system.

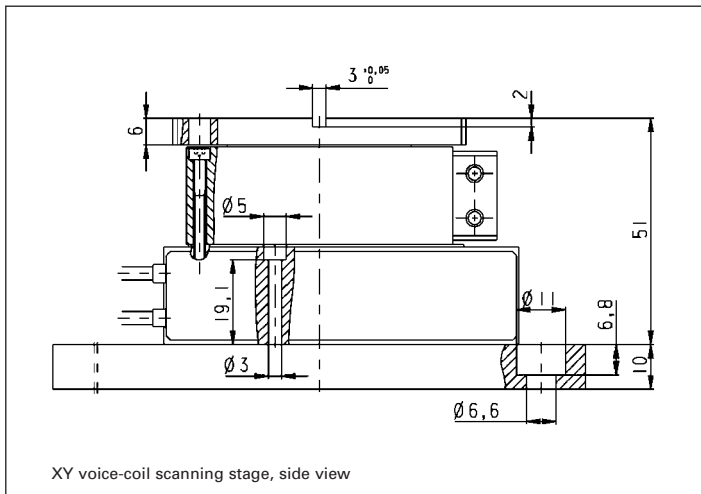
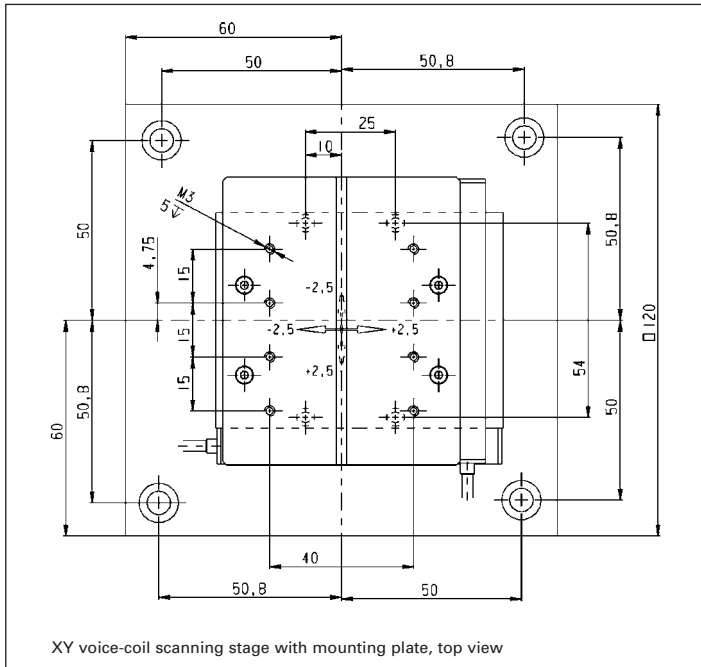
Application Examples

- Semiconductor testing
- Photonics alignment and packaging
- Medical analytical equipment
- Micro-dispensing applications
- Optical device testing
- Lens testing
- Scanning microscopy
- Micromanufacturing

Non-Contact Limit and Origin Switches

Integrated, non-contact, high-precision Hall-effect origin and limit switches, protect your equipment and increase versatility in automation applications.

The digital controller comes on an ISA-bus-card for industrial PCs (a PCI card is also available) and features on-board linear amplifiers for two individual axes, a 32-bit PID-V-ff servo



Technical Data

Models	V-106	Units
Travel	5	mm
Min. Incremental Motion	0.1	μm
Repeatability	0.2	μm
Max. Velocity	50	mm/sec
Displacement sensor	Incremental linear encoder	
Controller	PC-board, 32-bit digital PID-Vff (part#: V-820.20)	
Interface	PC ISA bus, I/O mapped, interrupt and break-point capability	
Software	Windows™ operating program, LabView™ drivers, libraries in C, BASIC, Pascal, Delphi	
MTBF	>20,000 hours	

Piezo Actuators

Nanopositioning & Scanning Systems

Active Optics / Steering Mirrors

Tutorial: Piezo-electrics in Positioning

Capacitive Position Sensors

Piezo Drivers & Nanopositioning Controllers

Hexapods / Micropositioning

Photonics Alignment Solutions

Motion Controllers

Ceramic Linear Motors & Stages

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