

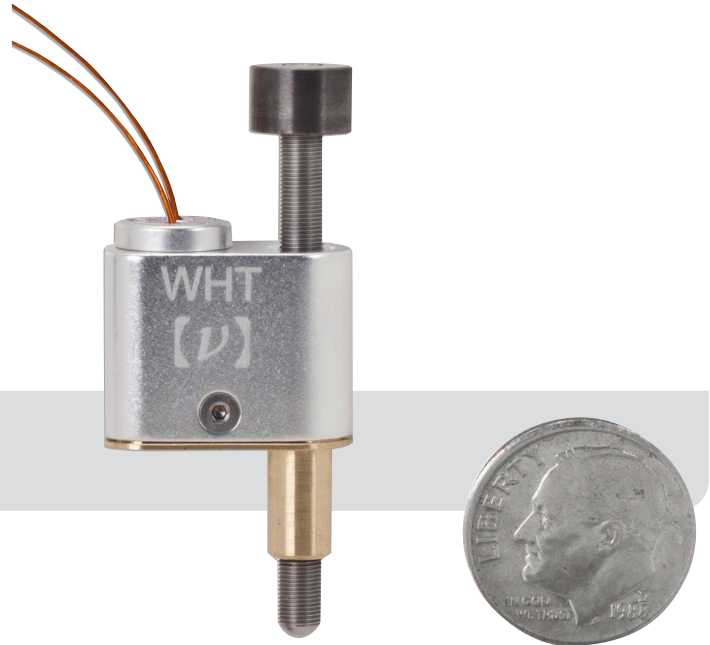
8353-V and 8353-UHV

Vacuum Compatible Tiny Picomotor Actuator



The 8353-V Vacuum Compatible Tiny Picomotor Actuator is designed for environments down to 10^{-6} hPa. It's perfect for moving small optics and stages in your vacuum chambers.

Also available in 10^{-9} hPa compatible version (ref. 8353-UHV Ultra-High Vacuum Compatible Tiny Actuator).

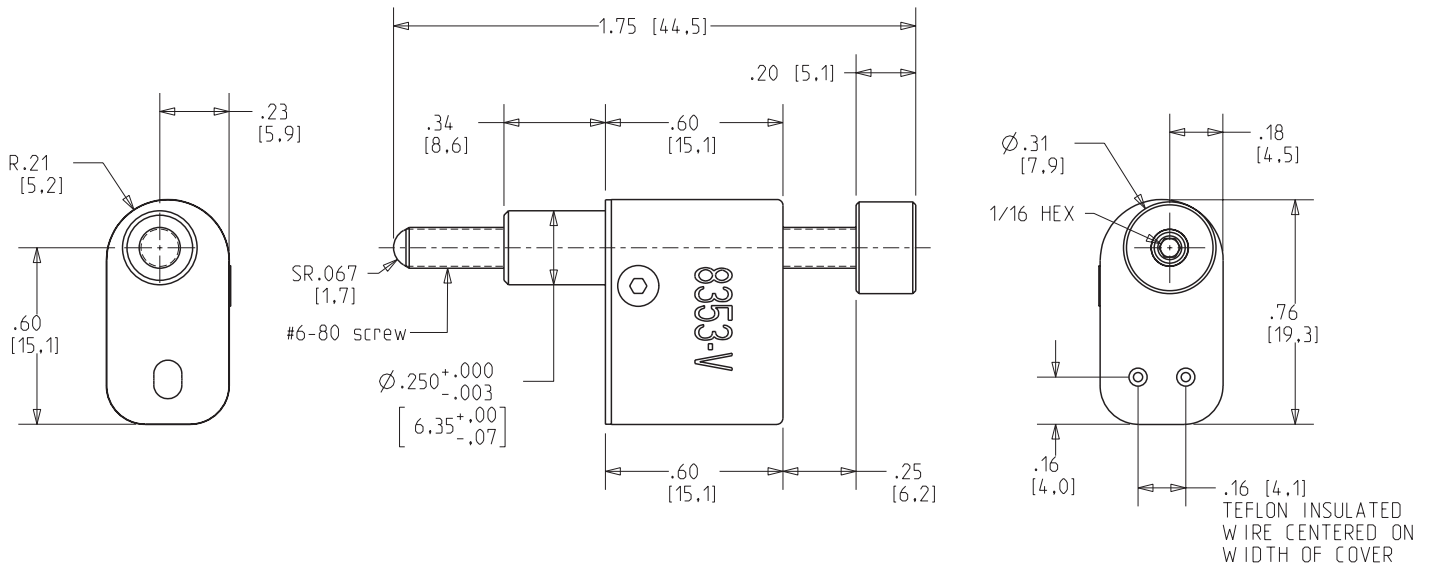
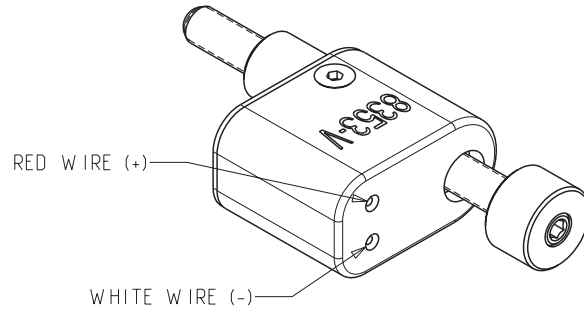


Product Features

- 10^{-6} and 10^{-9} hPa vacuum compatible
- Ultra-compact design
- Set-and-forget long-term stability
- Minimum Incremental Motion <30nm
- Nominal axial load capacity (N) = 9.8 N

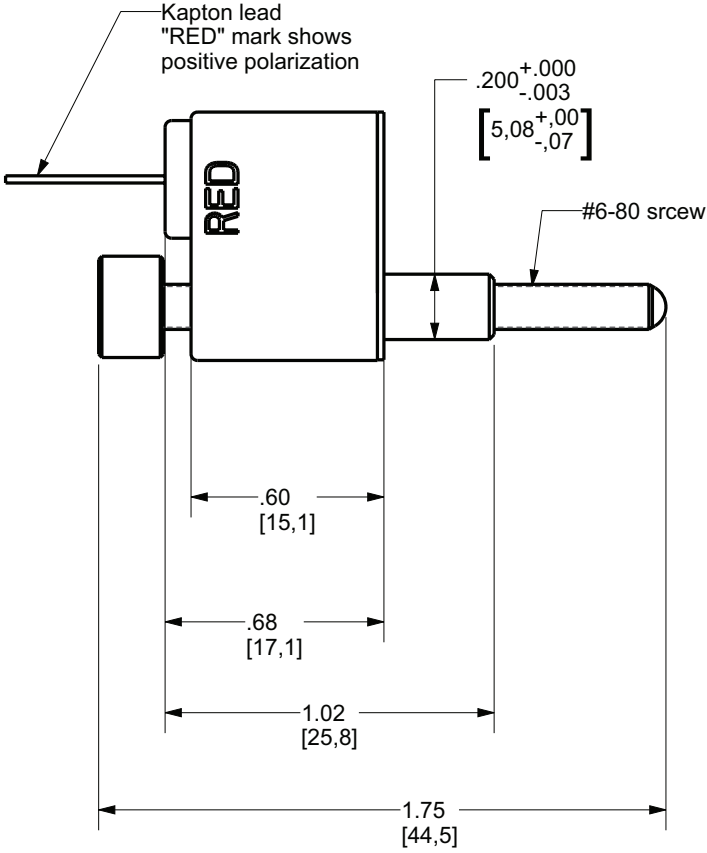
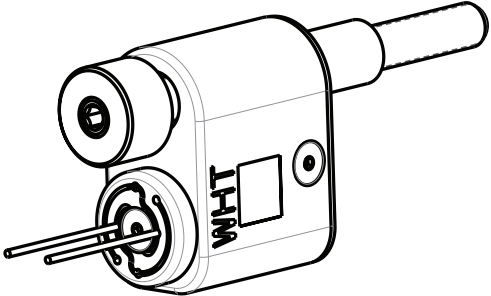
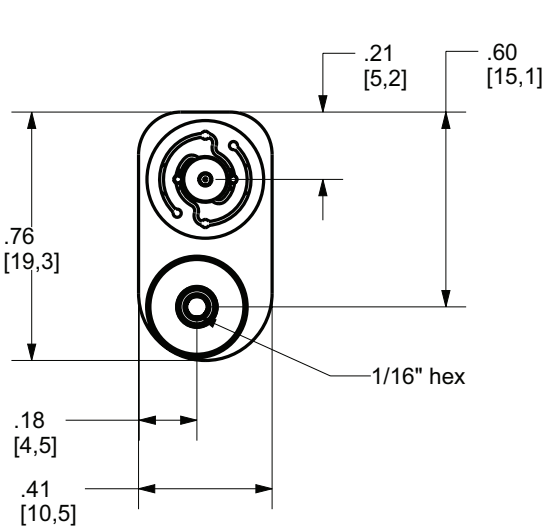
Dimensional Drawings

8353-V



Unless otherwise noted, dimensions are in inches with metric dimensions in mm in brackets

8353-UHV



Specifications	8353-V	8353-UHV
Travel Range (mm)		12.7
MIM (nm)		< 30
Max speed* (mm/min)		>1.27
Nominal axial load capacity (N)		9.8
Max axial holding force (N)		45
Frequency (Hz)		< 1750
Rated Life* (steps)		> 1.5x10 ⁹
Vacuum Compatibility** (hPa)	10 ⁻⁶	10 ⁻⁹
Vacuum Wire Material	Teflon	Kapton
Wire Length (mm)	44.5	152.4
Connector type	Inside chamber: Flying leads Outside chamber: 2.1m RJ22 cable (supplied)	
Mounting	6.35 mm shank	5.08 mm shank
Long term Operating Temperature(° C)	+10 to +40	
Storage Conditions (° C)	-5 to 40°C, < 40% HR	

* @1750Hz & 9.8N

Recommended Controllers/Drivers

Model	Description
8703	Picomotor Driver, Single-Axis, TTL/Analog
8712	Picomotor Driver, Single-Axis, PCB-Mountable
8742	Motion Controller, Picomotor, Open-Loop, 4 Channel
8742-4-KIT	Picomotor Controller Kit, Four-Axis
8742-8-KIT	Picomotor Controller Kit, Eight-Axis
8742-12-KIT	Picomotor Controller Kit, Twelve-Axis

ORDERING Information

Model	Description
8353-V	Tiny Picomotor Actuator, 0.5 inch travel, vacuum compatible, Teflon
8353-UHV	Tiny Picomotor Actuator, 0.5 inch travel, ultra- high vacuum, Kapton