www.phytron.eu/LAV

EXTREME

LAV Linear Actuator

For Applications in Ultra-High-Vacuum and Cryogenic Environment

RoHS compliant CE

The LAV linear actuator is the consistent answer to the precise adjustment of cavities in the UHV and cryogenic environment.

The linear actuator is particularly characterised by its use in extremely challenging environmental conditions. At the same time, the LAV guarantees high performance in conjunction with precise positioning.

The use of a stepper motor eliminates the need for sensitive feedback sensors. This allows the use in the harsh environmental conditions without limiting the positioning accuracy.

Optionally, the LAV can also be tailored to its task. Both the mechanical parameters of the spindle nut system and those of the motor can be adapted. If application parameters require different power or speed, these can also be implemented.

Thus, the LAV is a reliable and durable solution for adjusting cavities or other adjustment and adjustment tasks in challenging environmental conditions.

In Focus

vacuum | radiation resistance | low temperature

- 2-phase stepper motor
  - Ø 52 mm
  - 200 steps /rev. [1.8°]
  - 10 000 full steps/rev.
  - 42 V, 1.2 A
- Integrated planetary gear 50:1, dry lubricated, normal backlash (35 arcmin)
- Operating temperature -269 to +40 °C
- designed for the movement of 1300 N axial load
- Spindle and nut system with M12x1 mm
- Material for housing, flanges and internal parts made of stainless steel

Options

- customised solutions

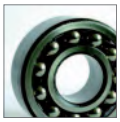
Highlights

Made for the EXTREMES

EXTREME environment

radiation up to 10^6 J/kg, ultra high vacuum, up to 573 K (winding) / down to 4 K

reliability



smooth running, extended lifetime, proven know-how: more than 1000 successful space motors

cleanliness

outgassed motors, clean room assembly, stray magnetic flux optimisation, EMC shielding

Partners for a perfect fit

project management

proactive involvement in specification process to minimise risks and costs, ISO 9001 and EN9100

perfect fit

qualified product series and individualised solutions: R&D, engineering and production site in Germany

testing options

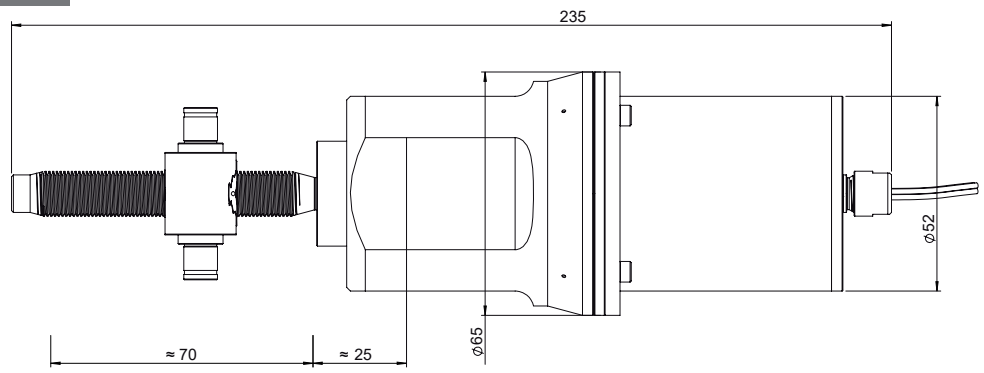
vacuum, vibration, duty cycle, climate, liquid N_2 and full testing documentation

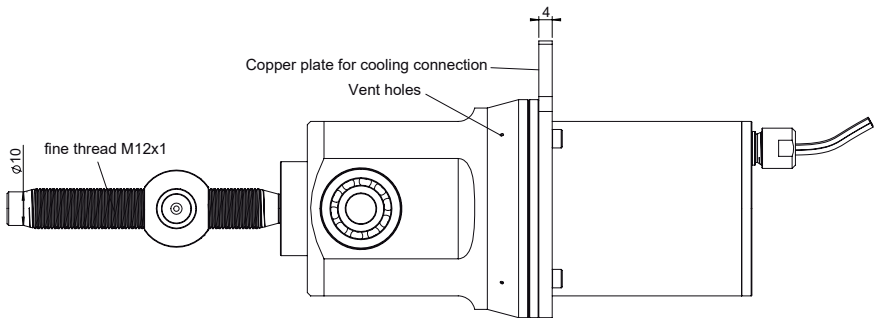
Edition 2019 March

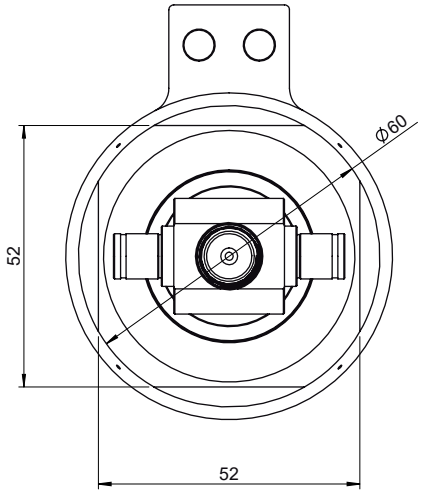
phytron
Extreme. Precision. Positioning.

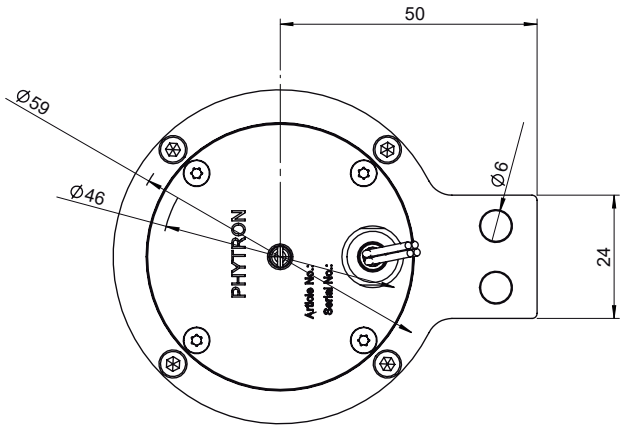
Extreme

Dimensions









Ordering Code

The variable elements of the product are displayed in colour.

Ordering Code	LAV	52 . 200 . 1,2 - VGPL 52 / 50 - X

Type | Size | Step | Rated current | VPGL Gear | Customised

All illustrations, descriptions and technical specifications are subject to modifications; no responsibility is accepted for the accuracy of this information.

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