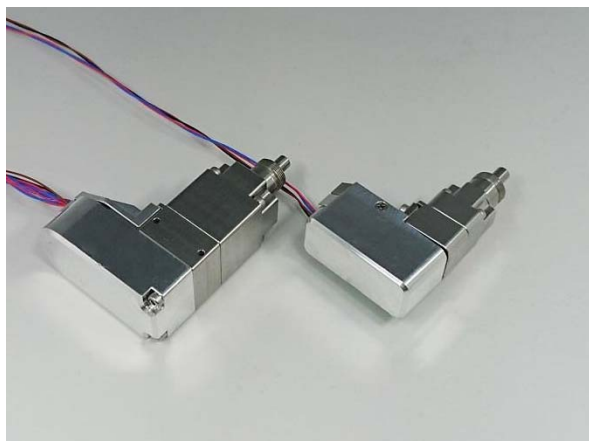


Low outgas Ultrasonic Actuators for remote controlling in high vacuum chamber.

- VPKA achieves travel of 13mm and travel speed of 0.5mm/sec with a compact size.
- BARRIERTA SUPER IS/V grease is used for sliding part.



Guide

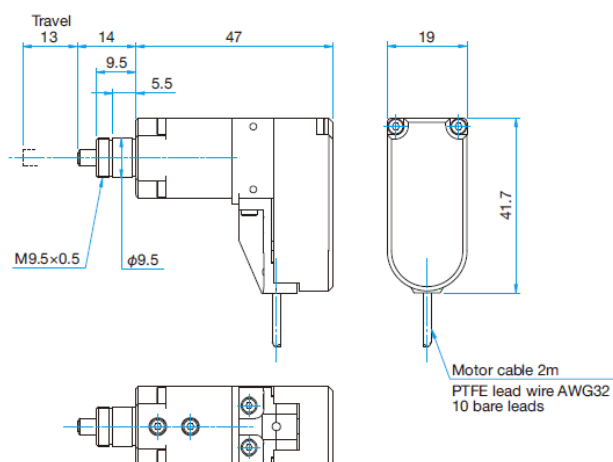
- ▶ Please contact our sales to assemble VPKA with your own manual stages or holders.
- ▶ Custom tips can be supplied. Please contact our sales.
- ▶ We supply VPKA fixed with vacuum mirror holder, VMHG as a customized product with ball tip VPKA.

Specifications

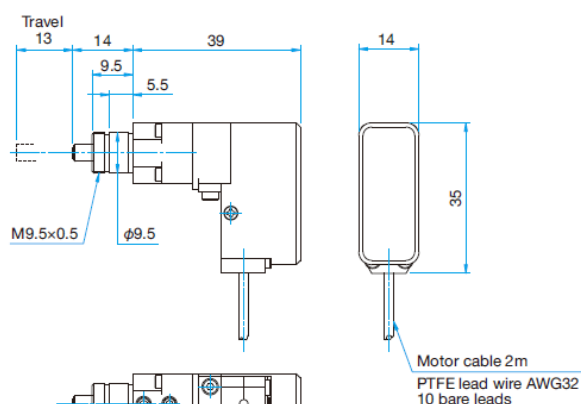
Part Number	VPKA-13ACT	VPKAS-13ACT
Travel [mm]	13	
Resolution [μm]	<1 μm	
Holding Power[N]	30N	15N
Maximum travel speed[mm/sec]	> 0.5mm/sec	
Weight [kg]	0.2kg	0.1kg

Outline Drawing

VPKA-13ACT



VPKAS-13ACT



Option

■ Connection VPKA-13ACT/VPKAS-13ACT with PKA-ID-02

Specifications	
Part Number	DS3-CA-SG-2.5
Length of Cable [m]	2.5



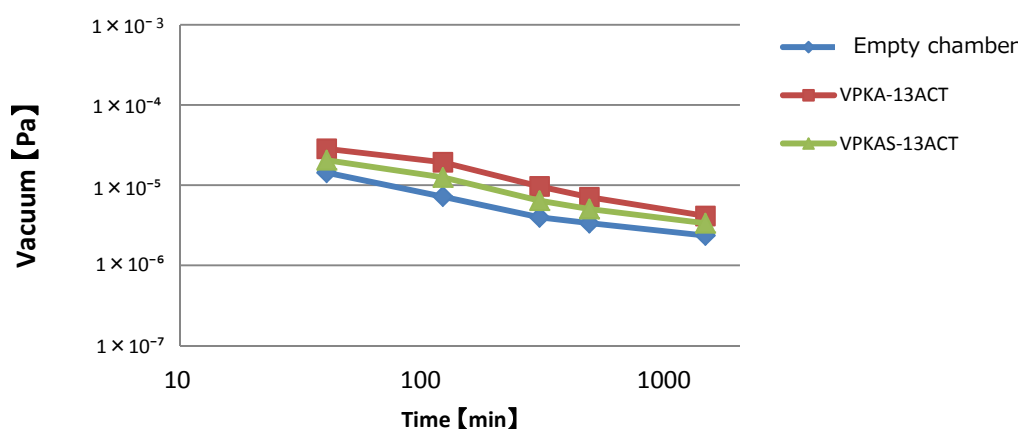
■ Evaluation

• Emitted amount of gas

Part Number	Emitted Amount of Gas Q (after 40 minutes of emission) 【Pa · m ³ /s/unit】
VPKA-13ACT	7.78×10^{-7}
VPKAS-13ACT	3.65×10^{-7}

The value measured with the conductance modulation method will be different depending on the conductance (ex. exhaust speed and the degree of vacuum) of the vacuum system. Please use the data for the confirmation of outgassing decay or the relative comparison of the products. Please contact us if the comparison is necessary with other evaluation methods.

• Ultimate vacuum



■ System specifications

Vacuum pump

Type : Turbo-Molecular Pump

Part Number : STP-301

Manufacturer : Seiyu Instruments Inc
(Now Edwards Japan Limited)

Pumping speed : 300 ℓ /s

Mass spectrometer

Type : Quadrupole mass spectrometer

Part Number : QME200

Atomic mass number range : 1~200

Manufacturer : PFEIFFER

Pin assignment for connector of controller (PKA-ID-02) Axis1, Axis2 connector

No.	Name	No.	Name
1	A pulse output+	4	B pulse output-
2	A pulse output-	5	-
3	B pulse output+	6	-

Connector : HR10G-7R-6S (Hirose Electric Co., Ltd.)

Pin assignment for cable of actuator (PTFE Cable)

No.	Cable	Name
1	Brown	A pulse output+
2	Black	A pulse output-
3	Blue×4	B pulse output+
4	Red×4	B pulse output-

Pin assignment for cable (DS3-CA-SG-2.5)

No.	Name	No.	Name
1	A pulse output+ (Orange Black)	4	B pulse output- (Gray Red)
2	A pulse output- (Orange Red)	5	-
3	B pulse output+ (Gray black)	6	-

Connector : HR10A-7P-6P (Hirose Electric Co., Ltd.)