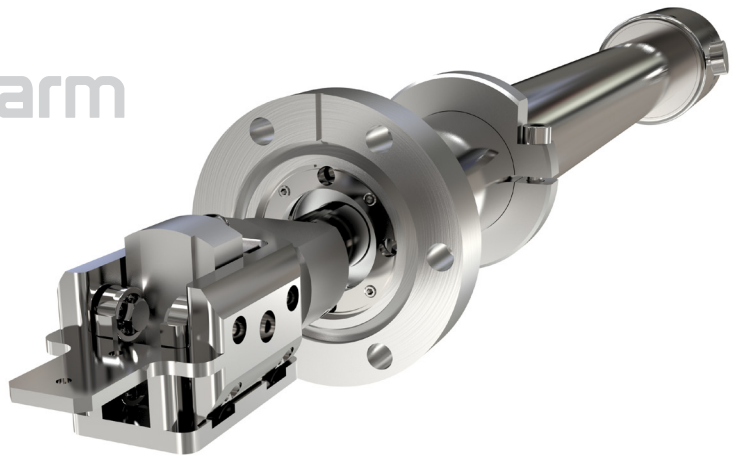


Elevating transfer arm

XPowerProbe

(XEPP Dual Axis Transfer Arm)



Complete sampling-handling system providing linear motion and up to 50mm of lift in the Y-axis for sample hand-off. Stroke lengths from 304mm to 1219mm and motorisation options available.

XEPP KEY ADVANTAGES

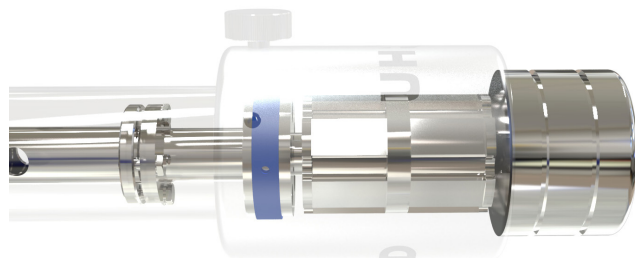
- » Up to 50mm of lift in the Y-axis
- » Unrivalled axial coupling strength
- » Exceptional axial stiffness
- » Minimal outgassing during transfer
- » Zero backlash under low load
- » Bakeable to 250°C without removing any components (manual version)

The XEPP transforms conventional approaches to sample transfer. In addition to its internally-guided linear motion, the probe has the ability to elevate its end-effector throughout its stroke, providing 12.7mm of lift as standard (with 25mm and 50mm options) in the Y axis for sample hand-off.

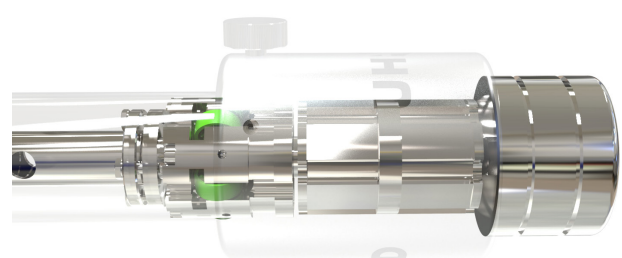
This PowerProbe variant greatly simplifies sample transfer techniques, providing a single device to provide both linear motion for sample introduction and the lift/lower motion to collect or hand-off the sample.

With a range of industry-standard effectors, the XEPP provides a complete sample-handling system in its own right removing the need for secondary motion tools. This reduces cost and simplifies the transfer process.

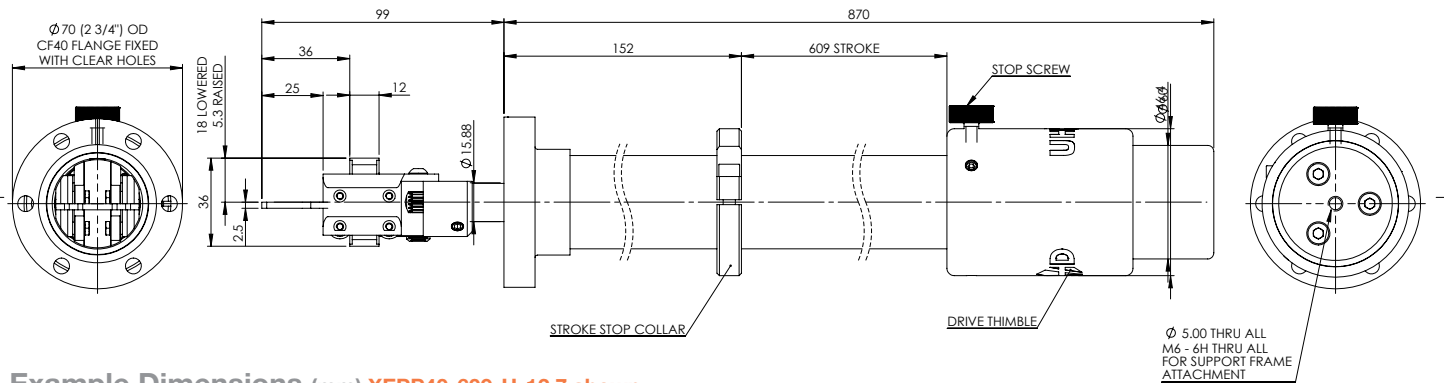
Comparison to standard EPP40



Standard EPP40 uses PEEK sliding bearings shown in blue.



XEPP40 uses rolling metal bearings shown in green to minimise pressure rise during translation.



Example Dimensions (mm) XEPP40-609-H-12.7 shown
 Visit www.uhvdesign.com to configure, view and download 3D models

XEPP Technical Data

SPECIFICATION	VALUE
System mounting flange size standard (12.7mm lift)	CF40 (2 3/4" OD) with clear holes
System mounting flange size optional (25.4mm or 50.8mm lift)	CF63 (4 1/2" OD) with clear holes
Magnetic rotary breakaway torque	4Nm (35 in-lbs)
Magnetic linear breakaway thrust - standard	140 N (31.5 lbs)
Available stroke range	304mm to 1219mm
Elevating Lift stroke - standard	12.7mm (0.5")
Elevating Lift stroke - options	25.4mm (1") or 50.8mm (2")
Bakeout temperature	250 °C with motor removed
Shaft radial run out	N/A
Shaft radial deviation (linearity) over full stroke	+/- 1 degree
Maximum cantilevered load	1.5 Nm (13 in-lbs) on elevating plate
Maximum working axial load	90 N (20 lbs)
Retracted position switch - type	Bakeable micro switch wire to WD-020
Stepper motor option	AS4118L1804 with P42H (4:1) gearbox
Stepper motor - motor wiring	Wired to M12 5-pin
Stepper motor option - switches	Bakeable limit and home switches with lemo socket wired to diagram WD-030
Stepper motor maximum linear speed	25 mm/second (ballscrew option up to 100mm/second)
Linear resolution per 1/2 step	0.00375 mm
Motor option - leadscrew pitch	6mm

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