BRUNNER
dedication + innovation

FORCE
TRAVEL
PERFORMANCE

MADE SWISS

CLS-P LINEAR MOTION.

Your choice for Helicopter and Fixed-Wing up to FFS Level D.

The BRUNNER CLS-P Active Force Feedback Linear Motion meets the highest demands of professional flight simulation. As a top level element of our Control Loading System portfolio of leading drop-in devices, the CLS-P Linear Motion integrates perfectly into many new or existing FNPT I as well as in FNPT II MCC or even FFS Level D Helicopter or Fixed-Wing cockpit environments.

Supporting standard procedure training as well as abnormal and emergency procedure training, the BRUNNER CLS-P Linear Motion provides excellent quality, highest fidelity and unique durability at an unmatched price-performance level.

The combination of integrated force sensor and high dynamic servo drive reacts with realistic movements of even finest inputs and offers an excellent artificial feel feeling for highest demands!

Our CLS-P Linear Motion is supporting single as well as dual pilot applications. It is designed for use with original or customer designed control mechanics (e.g. B737, C130, NH90) and provides high forces up to 2000N.

Enabled by our CLS2Sim software-environment, the CLS-P Linear Motion communicates easily with commercially available simulation software such as X-Plane, M-FSX, and Prepar3D®. Any third party flight simulation connects via a simple TCP/IP or UDP remote interface protocol.

ENDURING   SUSTAINABLE   FAIR   ATTENTIVE   OBJECTIVE   HOLISTIC   INNOVATIVE   ENDURING   SUSTAINABLE   FAIR   ATTENTIVE   OBJECTIVE   HOLISTIC

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Features.

- BRUNNER Drop-In: fully integrated, with built-in power unit and control unit, no additional auxiliary devices required
- High resolution load cell and high dynamic servo drive for highest fidelity and most realistic flight experience
- Simulated effects: engine, ground, turbulence, real trim, autopilot etc.
- Aircraft and type-specific profiles
- Dynamic pressure dependent force profile
- BRUNNER real-time synchronization logic for dual-pilot cockpit with automatic pilot/co-pilot take-over (MCC)
- Designed for standard, abnormal and emergency procedure training
- CANaerospace on request

- Plug & Play (CAN or USB), optional Ethernet via BRUNNER high-speed Ethernet2CAN gateway
- Reliable, smooth, backlash and maintenance free design
- Contactless high-resolution position feedback
- No fan, very quiet, high efficient
- Direct support for X-Plane, FSX, FSX Steam edition, Prepare-3D with BRUNNER CLS2Sim SW, X-Plane plugin for Windows, Linux and Mac
- Fully external control for QTG testing, applied over a simple network protocol
- Safety integrated, Safe Torque Off (STO)
- Swiss Made
- 2 Years Warranty

Specification.

Peak Force	2000 N / 450 lbs	**Power**	400 W peak (no fan)
Travel	140 mm / 5.5 in	**Operating Voltage**	90-265VAC 50/60Hz (IEC5)
Interface	CAN (RJ45), USB (USB-2 Type-B) Ethernet via optional Ethernet2CAN gateway	**Size**	465 x 183 x 115 mm 18.3 x 7.2 x 4.5 in
		Weight	12 kg / 26.5 lbs

Dimensions.

CANopen

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