BRUNNER
dedication + innovation

MADE SWISS

CLS-P RUDDER with Toe Brakes.

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

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

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

The integrated high resolution load cell and the high dynamic brushless AC Servo technology reacts with realistic movements to even finest inputs and offers excellent artificial feeling for highest demands! Our CLS-P Rudder is supporting single as well as dual pilot applications. A unique real-time synchronization logic enables unmatched and automatic pilot/co-pilot take-over functionality for MCC training applications.

Enabled by our CLS2Sim software-environment, the CLS-P Rudder 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.

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CLS-P RUDDER with Toe Brakes.

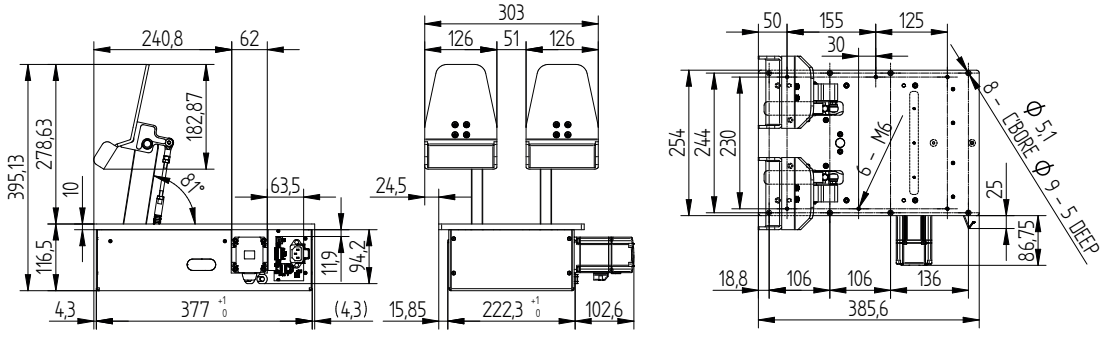
Features.

- BRUNNER Drop-In: fully integrated, with built-in power unit and control unit, no additional auxiliary devices required
- Integrated Load Cell for highest fidelity and most realistic flight experience
- Proportional Toe brakes
- Simulated effects: engine, ground, turbulence, real trim, autopilot, one engine out scenario, etc.
- Aircraft and type-specific profiles
- Dynamic pressure dependent force profile
- BRUNNER real-time synchronization logic for dual-pilot cockpit, automatic pilot/co-pilot take-over (MCC)
- Contactless high-resolution position feedback
- No fan, very quiet, high efficient
- Designed for standard, abnormal and emergency procedure training
- Plug & Play (CAN or USB), optional Ethernet via optional high-speed Ethernet2CAN gateway
- CANaerospace on request
- Reliable, smooth, backlash and maintenance free design
- 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 test, applied over a simple network protocol
- Unlimited CLS2Sim license for single cockpit application
- Safety integrated, Safe Torque Off (STO)
- Swiss Made
- 2 Years Warranty

Specification.

Peak Force	900 N / 202 lb-ft
Travel	130 mm / 5.1 in, +/- 22°
Interface	CAN (RJ45), USB (USB-2 Type B) Ethernet via optional Ethernet2CAN gateway
Power	800 W peak (no fan)
Operating Voltage	90-255 VAC 50/60 Hz (IEC13)
Size	385 x 254 x 397 mm 15.2 x 10 x 15.7 in
Weight	12.5 kg / 27.6 lbs

Dimensions.



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