

STÄHLE

Throttle actuator

AP-G series

for computer controlled driving of vehicles
on chassis dynamometers



- With micro controller for setup
- Integrated illuminated keyboard
- Very high accuracy and repeatability
- Fail-safe actuator-design
- Operating temperature -40°C to +80°C



STÄHLE
ROBOT SYSTEMS

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Actuators for remote control of accelerator pedal

Descriptions




- Fail-safe principle with spring loaded safety technology
- Unloaded accelerator pedal as basic actuator position (non-powered)
- Emergency-Off button on actuator unit and cell E-STOP loop interface
- Set-up mode to teach minimum and maximum actuator stroke via keyboard on actuator unit
- Positioning set-point 0...10V corresponding to 0...100% pedal stroke
- Feedback signal for pedal position 0...10V corresponding to 0...100% pedal stroke
- Input for external "actuator enable" signal
- Potential free relays output signal for "ready" and "setup"
- Integrated micro controller for scaling, set-up and logic
- High accurate and dynamic position control with PWM – axis controller

Technical Data

AP-G/2.10

AP-G/FR.10

AP-G/F.10

			
Actuator design	Seat-mounted Optional seat rail mounting adapter	Semi-Foot-room socket-mounted/Optional seat rail mounting adapter	Foot-room socket-mounted
Special Features	ACC+Brake version available	Pure Brake axis version available	
Weight	App. 15 kg incl. separate seat plate	App. 15 kg incl. separate base plate	App. 19 kg incl. base plate
Positioning system	electrical	electrical	electrical
Motion course	linear	linear	linear
Non-powered position	accelerator pedal unloaded (zero position) via build-in spring		
Stroke	max. 150 mm	max. 150 mm	max. 150 mm
Force	max. 100 N	Max. 75 N (free) Max. 100 N (fixed)	max. 75 (free) max. 150 N (fixed)
Speed	max. 0.45 m/s	max. 0.45 m/s	max. 0.45 m/s
Stroke limitation	20 ... 150 mm	20 ... 150 mm	20 ... 150 mm
Position measuring	conductive plastic potentiometer	conductive plastic potentiometer	conductive plastic potentiometer with tachometer
Positioning accuracy	< 0.3 mm worst case < 0.15 mm (typically)	< 0.3 mm worst case < 0.15 mm (typically)	0.15 mm worst case < 0.1 mm (typically)
Measur. resolution	0.04 mm (12 bit)	0.04 mm (12 bit)	0.04 mm (12 bit)
Temperature range	-40°C ... +80°C	-40°C ... +80°C	-40°C ... +80°C
Motor voltage	24 VDC (PWM)	24 VDC (PWM)	60 VDC (PWM)

Scope of supply

Actuator unit with mounting set, pedal rod with 2 pedal clamps (different sizes)
 Power controller 19" 3 HE 115/230V, 300W with integrated micro controller
 Power cable + Signal cable, shielded, 10m, AUX connector set for I/O interface

Options

- Other axis configurations
- Force measurement
- Fieldbus slave interfaces
- Custom interfaces