

“tough tech for tough environments“

PA-R-440-7 servo-actuator

data sheet - technical specifications

Supply data:

Operating voltage: 18 – 32 V DC
Operating voltage typical: 24 V DC
Standby current: 40mA

Input signal:

PWM signal, TTL level (standard)
PWM signal, differential (RS485 transceiver) (optional)
or RS485 data protocol (optional)

PWM parameter:

Frame rate: 2,6 - 1000ms
Valid pulse length: 1,0 - 2,0ms
left / center / right: 1,0ms - 1,5ms - 2,0ms

Position feedback:

analog, differential: 0-5V
Scale factor: 27.78 mV/deg

Performance data:

Maximum torque: > 35 Nm (> 26 lbf ft)
Rated torque^{**}: 20 Nm (14,8 lbf ft)
Speed at rated torque: 70°/sec @ 28 V DC, 55°/sec. @ 24 V DC
No load speed: 105°/sec @ 28 V DC, 90°/sec. @ 24 V DC
Gear train backlash: < 0,5°
Travel angle: ± 90° (-5%)
Maximum travel angle (optional): ± 170° (-5%)
Slip clutch release momentum: 35 Nm (> 26 lbf ft) +20%
Peak current - short time: 16A
Stall current - continuous: 2A (limited)
Minimum detectable signal step: max 0,25µsec. (adjustable)
Weight: 1500gr. (3,3lb)

^{**}according to specifications of Pegasus Actuators GmbH
(please inquire the test-specifications)

Environmental data:

Axial load on output shaft: < 150N
Operating temperature: -40°C - +70°C (-40°F - +158°F)
Storage temperature: -40°C - +80°C (-40°F - +176°F)

Environmental specifications:

Vibration test: Please inquire test documentation
Shock test: Please inquire test documentation
Protection class: IP67



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Main components:

Case: IP67 water and dust protected with solid vertical and horizontal fixation.
material: CNC machined aluminum, bead blasted and anodized.

Gear train: hardened steel spur gear type, 10 roller bearings, with PA-SC gear train protection system, output shaft with defined alignment..

Motor: Neodym-magnet BLDC motor, double ball raced.

Amplifier: digital positioning controller

Sensor travel angle:

mechanical: 360° (no end stops)

electrical - (standard): $\pm 45^\circ$

electrical - (optional): $\pm 160^\circ$

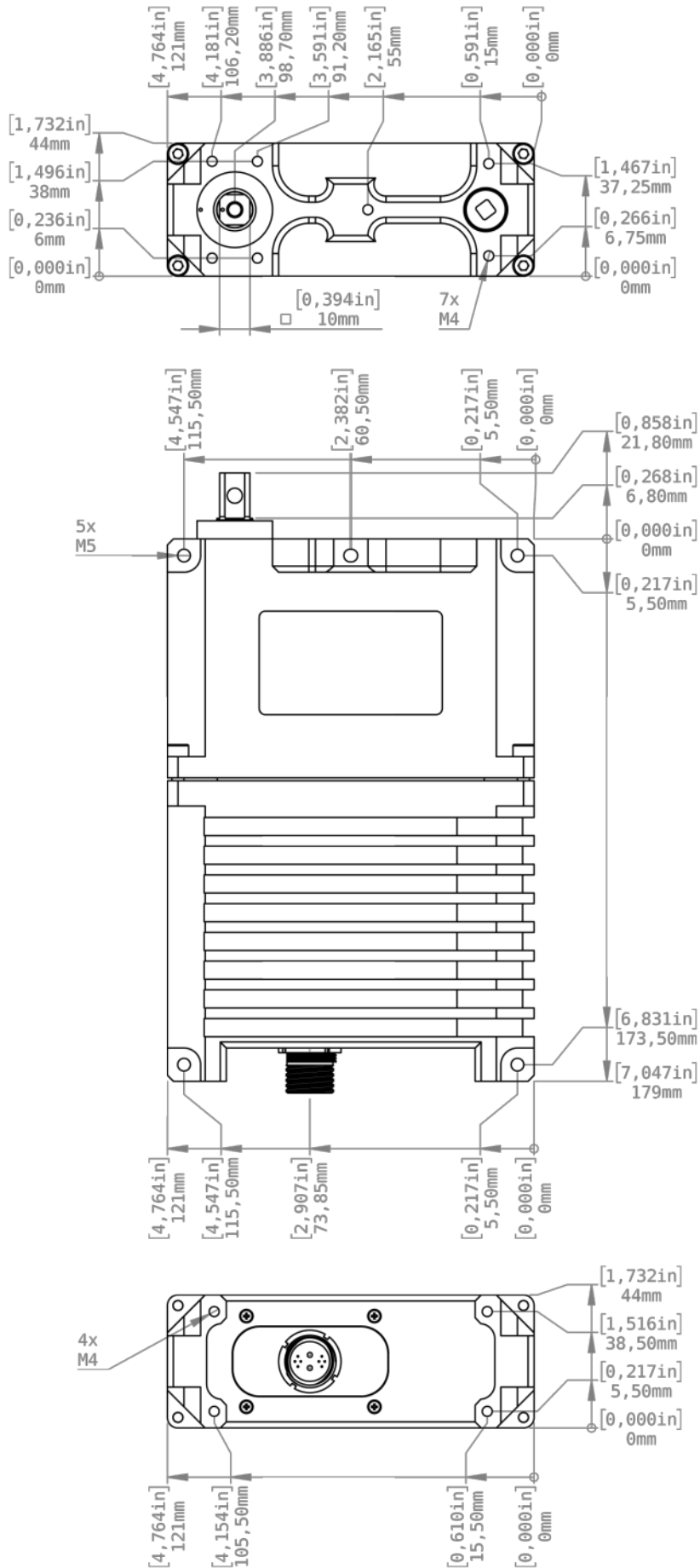
Actuator connector:

Glenair Series 801 Mighty Mouse connector (standard)

Glenair Series 28 HiPer-D Combo connector (optional)

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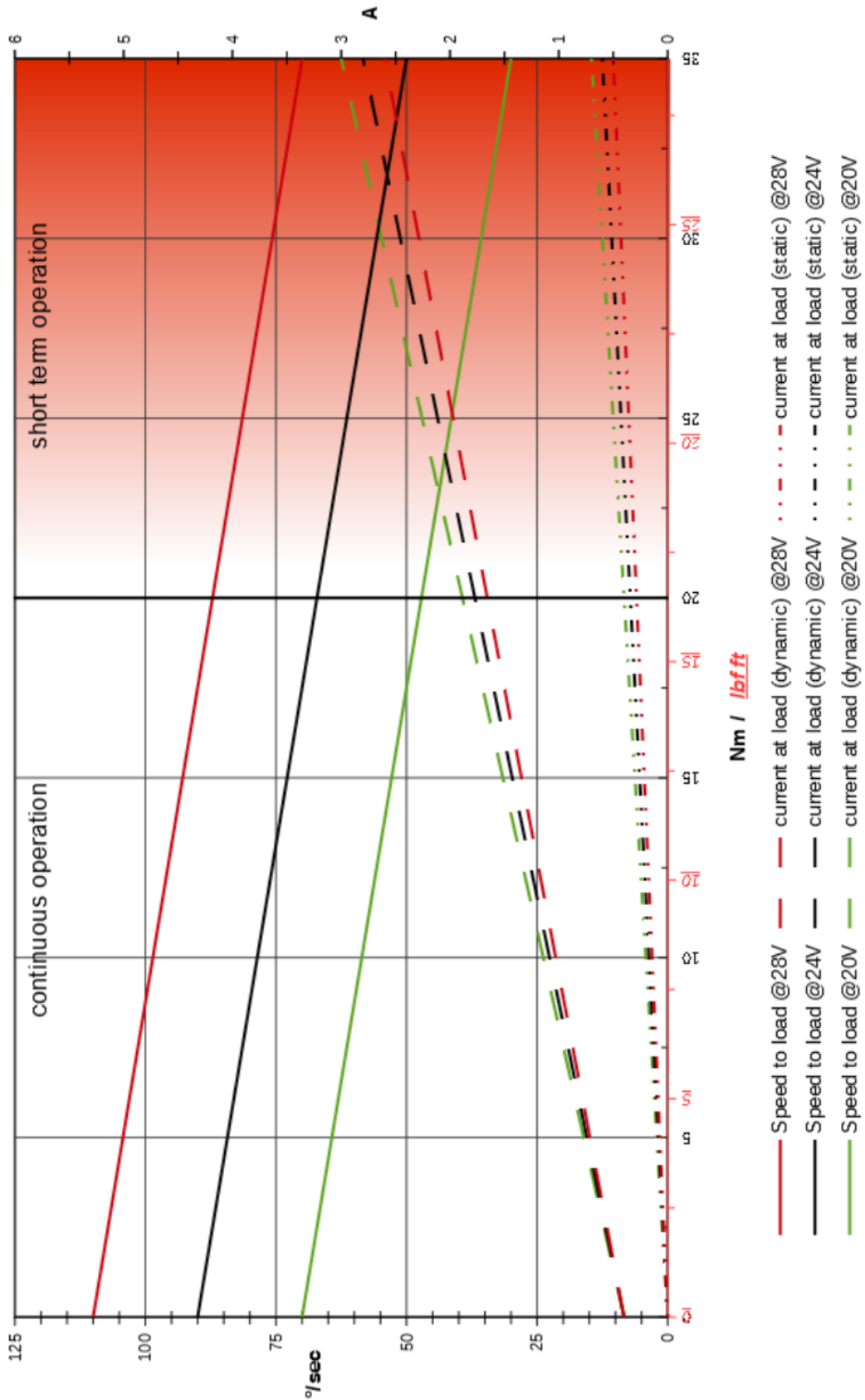


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PA-R-440-7-C-24-X-XXX-XX
24V



! The overload protection limits the performance of the actuator during overload conditions. !