

“tough tech for tough environments”

PA-R-205-6 servo-actuator



data sheet - technical specifications

Supply data:

Operating voltage: 18 – 32 V DC
Operating voltage typical: 24 VDC
Standby current: 25mA

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: > 350 Ncm (> 495 oz-in)
Rated torque**: 180 Ncm (255 oz-in)
Speed at rated torque: 130°/sec @ 28 VDC, 105°/sec. @ 24 VDC
No load speed: 210°/sec @ 28 VDC, 180°/sec. @ 24 VDC
Gear train backlash: < 0,5°
Travel angle: ± 90° (-5%)
Maximum travel angle (optional): ± 170° (-5%)
Slip clutch release momentum: 350 Ncm (> 495 oz-in) +20%
Peak current - short time: 1,1A
Stall current - continuous: 280mA (limited)
Minimum detectable signal step: max 0,25µsec. (adjustable)
Weight: 150gr. (5,3 oz)

**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, anodized.

Gear train: hardened steel spur gear type, 6 ball races with rigid output shaft (optional with slip clutch output shaft), output shaft with defined alignment..

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

Amplifier: digital positioning controller

Travel angle:

mechanical: 360° (no end stops)

electrical - (standard): $\pm 90^\circ$ *1

electrical - (optional): $\pm 170^\circ$

Actuator connector:

Industrial grade DE9 type connector (standard)

Glenair Series 801 Mighty Mouse connector (optional)

Cable pigtail (optional)

*1 PWM type Actuators (Signal A + B) are factory-set to $\pm 45^\circ$
this can be changed up to $\pm 90^\circ$ with the PA-Control programming tool

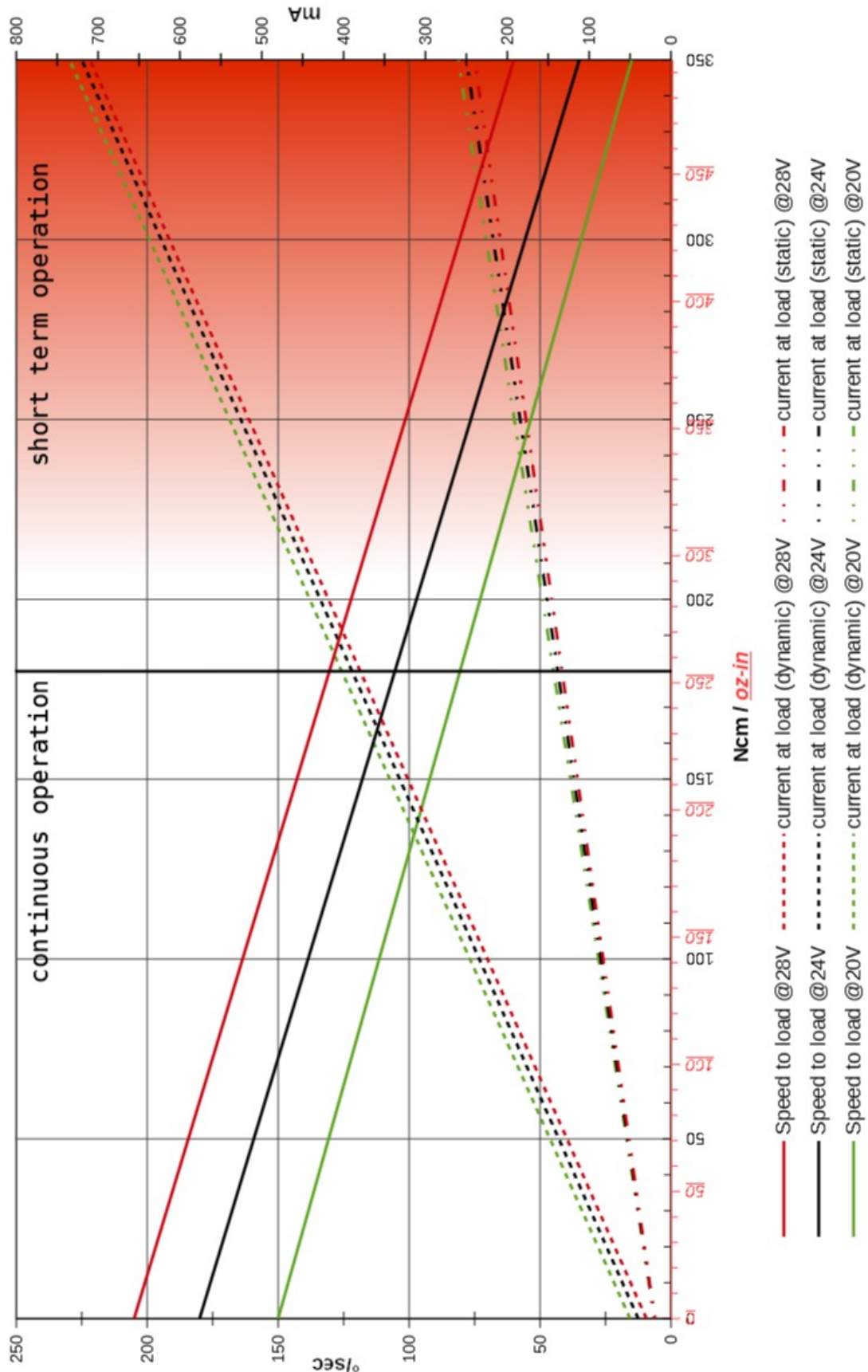


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Performance graph, PA-R-205-6 with nominal 24VDC

PA-R-205-6-X-24-X-XXX-XX 24V



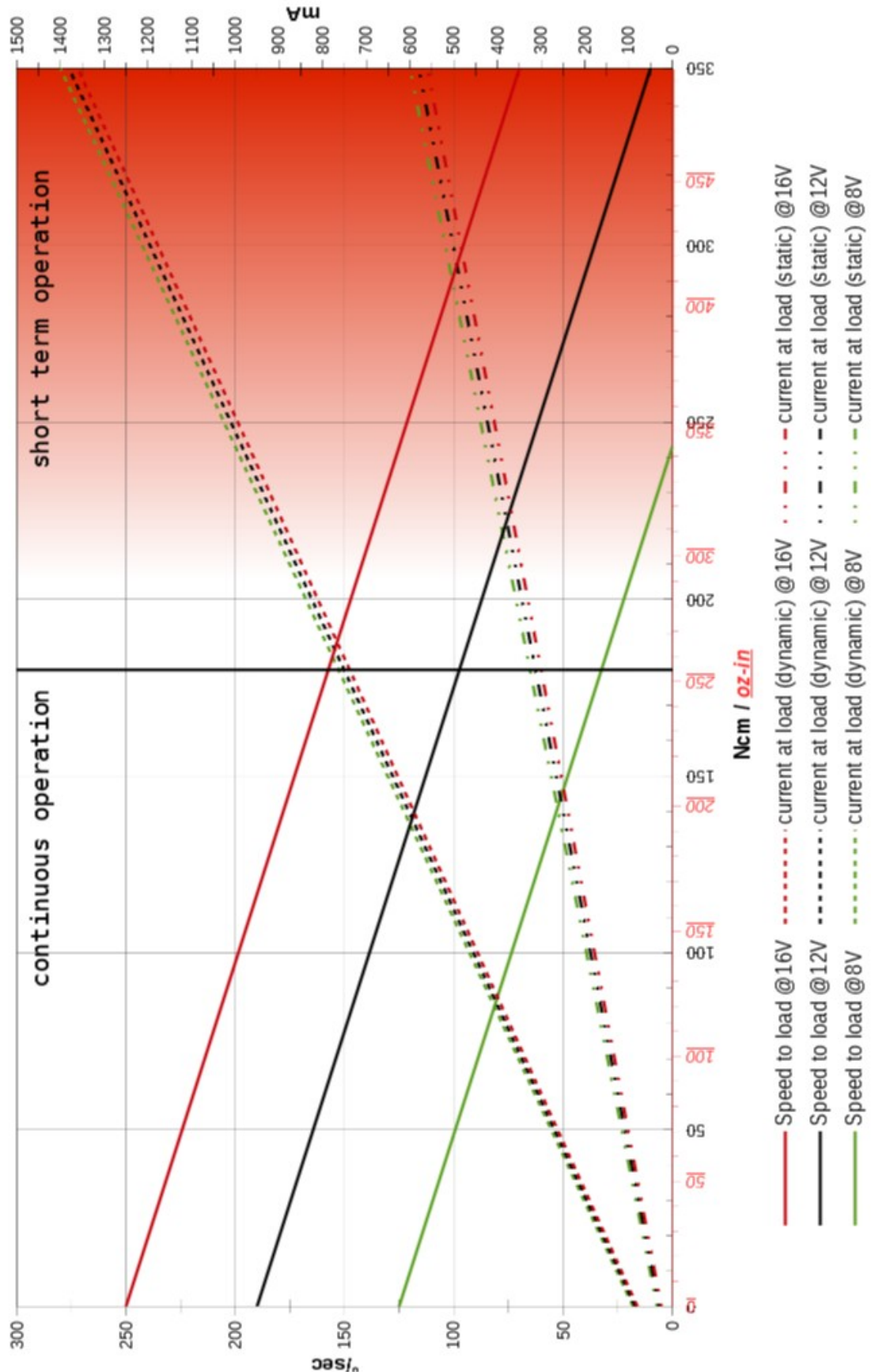
! The overload protection limits the performance of the actuator during overload conditions. !

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PA-R-205-6 servo-actuator

Performance graph, PA-R-205-6 with nominal 12VDC

PA-R-205-6-X-12-X-XXX-XX 12V



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

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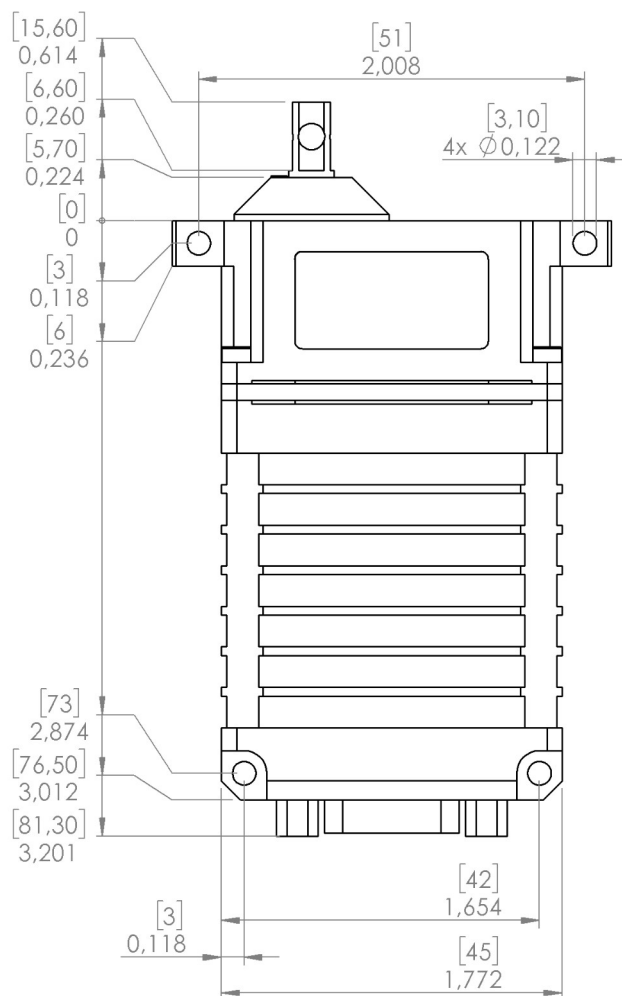
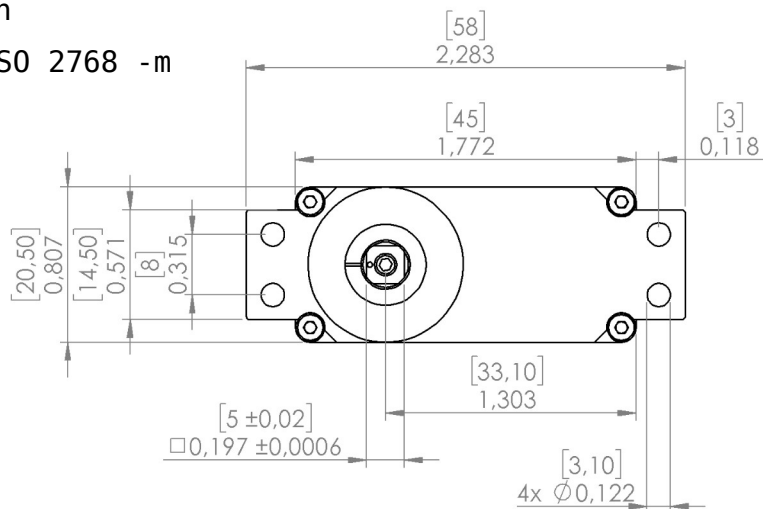
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PA-R-205-6 type, footprint for DE9 connector, -30

dimensions: [mm]
in

tolerances: ISO 2768 -m



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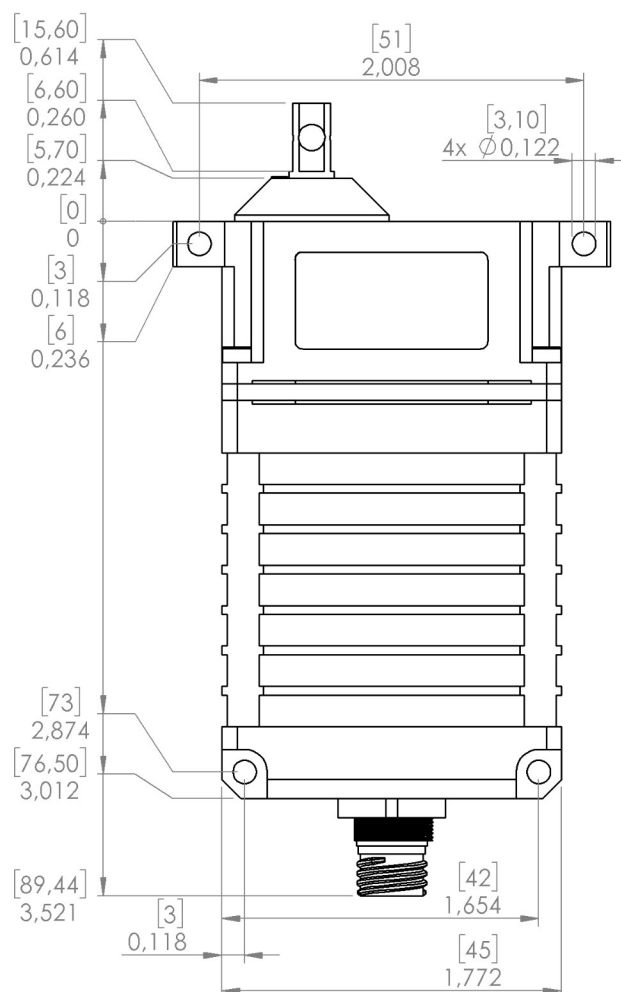
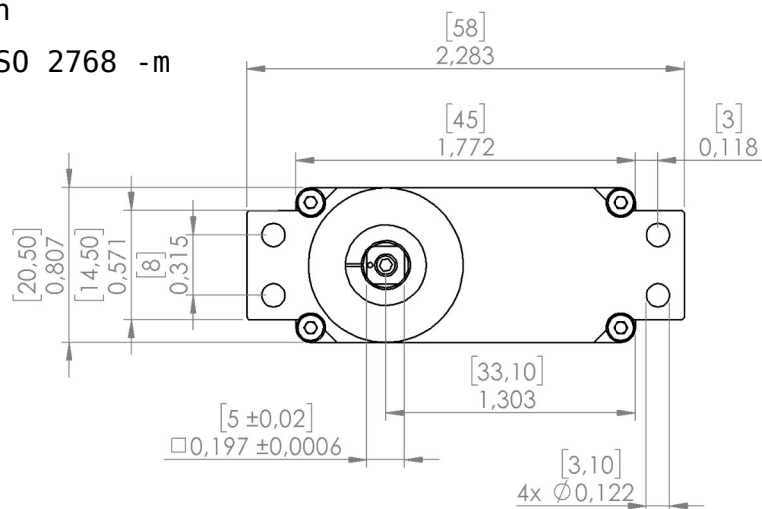
PA-R-205-6 servo-actuator

Pegasus
Actuators GmbH

PA-R-205-6 type, footprint for Glenair 801 connector, -33

dimensions: [mm]
in

tolerances: ISO 2768 -m



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PA-R-205-6 servo-actuator



PA-R-205-6 type, footprint for cable pigtail, -37

dimensions: [mm]
in

tolerances: ISO 2768 -m

