

con50

Linear In-line Actuator

concens 
 - excellent electric actuators


Standard Specifications

Motor/Gear

12/24VDC power supply, permanent magnet motor

Gear ratio		4	14	17	24	49	84
Maximum load	[N]	500	1750	2200	3100	4500	4500
Speed at maximum load	[mm/s]	70	20	17	12	6	4

**Max. static load/
Self locking force**PA brackets: 4700N Alu/AISI: 16800N
Depending on stroke length for push-applications**Temperature**

■ Operation: -5°C to +70°C ■ Storage: -40°C to +70°C

Relative humidity

20% to 70%, atmospheric pressure = 1atm

Protection class

IP66

Cable specification1m, 2X1.3mm² (AWG16), Ø=6.4mm, black, Molex Mini-Fit Jr. 6 pin**Bending Radius**

6x cable diameter

MaterialsMotor and actuator tube are powder coated steel
Piston rod is stainless steel
Front and rear brackets are PA**Duty cycle**

Max. 10% or 2 minutes in use followed by 18 minutes rest

Color

Black (RAL9005)

Stroke length/weight

Stroke	[mm]	50	100	150	200	250	300	350	400	500	750
Weight	[kg]	2.1	2.3	2.6	2.8	3.1	3.3	3.6	3.8	4.3	5.6

Max. load limited to 2000 N for stroke lengths ≥ 500 mm

Actual weight may vary depending on model and options selected

Options

- Stainless steel versions (AISI 304 or 316)
- Brackets in aluminum or stainless steel
- Brackets with clevis
- Brackets with spherical bearings
- Hall sensors for positioning and/or synchronization
- IP68/IP69K (gear ratio 1:4 not available)
- Low noise version
- Spline and emergency lowering
- Atex zone 22, group II 3 D compliant
- Certified according to EN/UL/CSA60.601 (24VDC only)

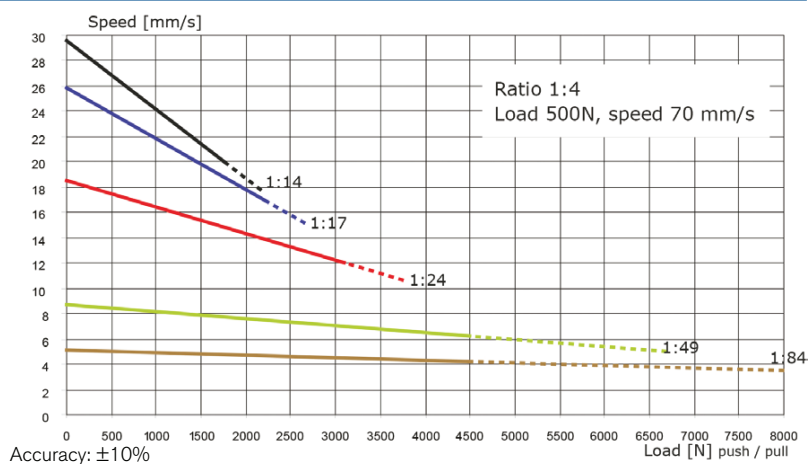
- Eskimo version (-40°C to +70°C)
- Other cable lengths (1-9m)

On Request

- Available in all RAL colors
- Other stroke lengths available
- Customized front and rear brackets
- Customized built-in dimensions

**Contact Concens for any
special requirements**

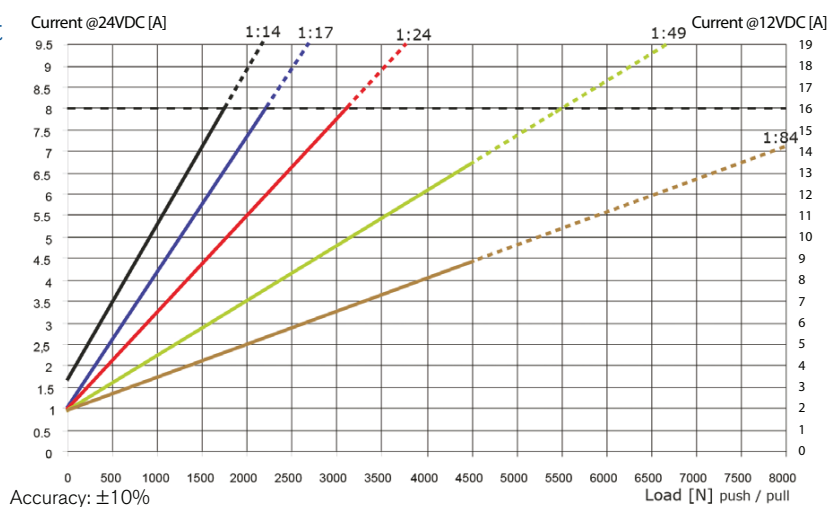
Speed/Force



Force/Current

Use in the dashed area is not recommended. Please contact Concens for further information.

Max. 7A when used in connection with C3 system.

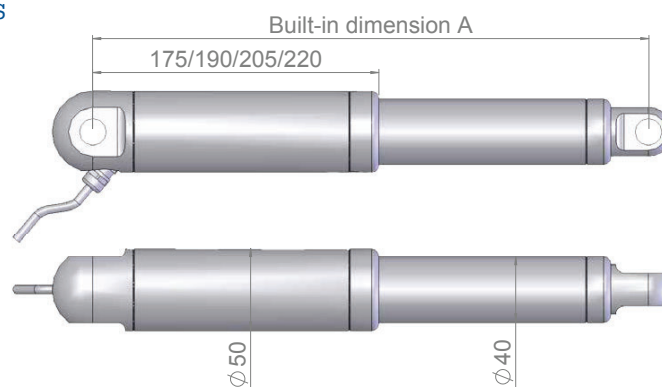


Recommended max. current: 12VDC = 16A and 24VDC = 8A

Dimensions

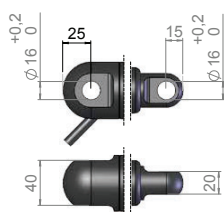
Axial backlash:
+/- 0.5mm

General dimensional variation:
+/- 1mm



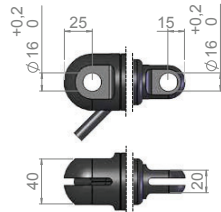
Gear Ratio	Built-In Dimension 'A'				
	Standard	Clevis Rear	Hall	UL/EN60.601	IP68/IP69k
4, 14, 17, 24	240+stroke	-	+15	+15	+14
49, 84	255+stroke	-	+15	+15	+14

Standard Brackets



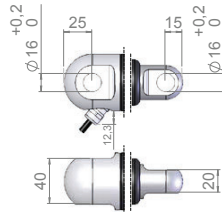
Polyamide (PA)

Max. static load 2000N
Max. load 3100N
(gear ratio 1:24)



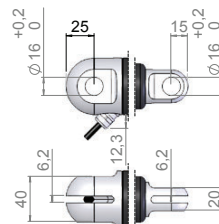
PA with clevis

Max. static load 2000N
Max. load 3100N
(gear ratio 1:24)



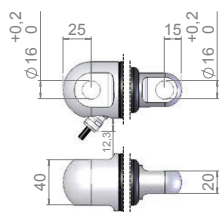
Alu

Max. static load
16800N



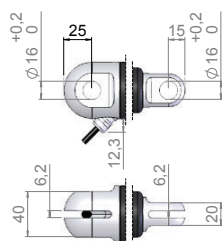
Alu with clevis

Max. static load
16800N



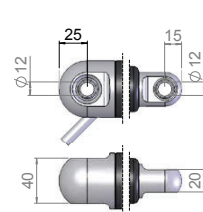
Stainless steel

Max. static load
16800N



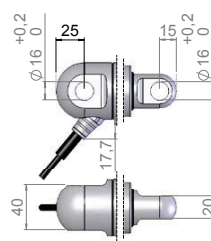
Stainless steel with clevis

Max. static load
16800N



Alu with spherical bearings

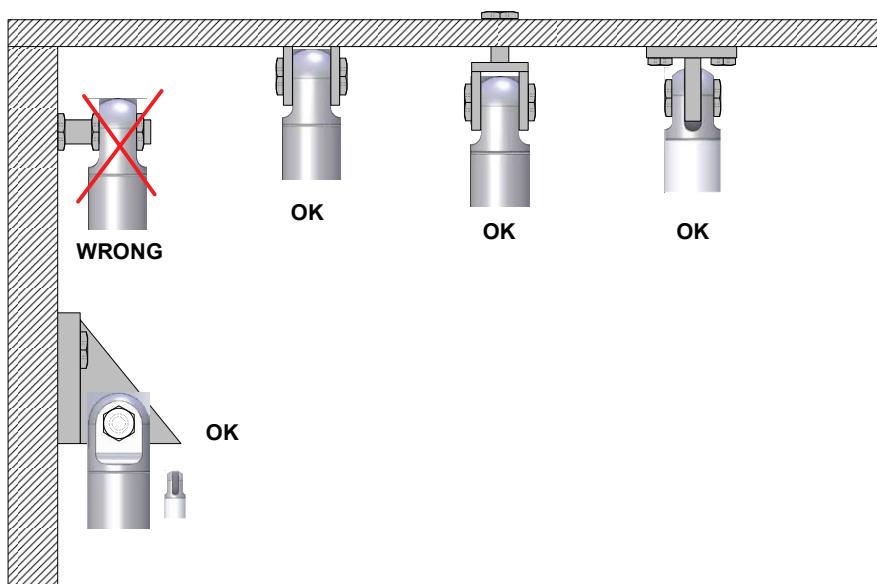
Max. static load
11000N



Alu / Stainless steel IP69K

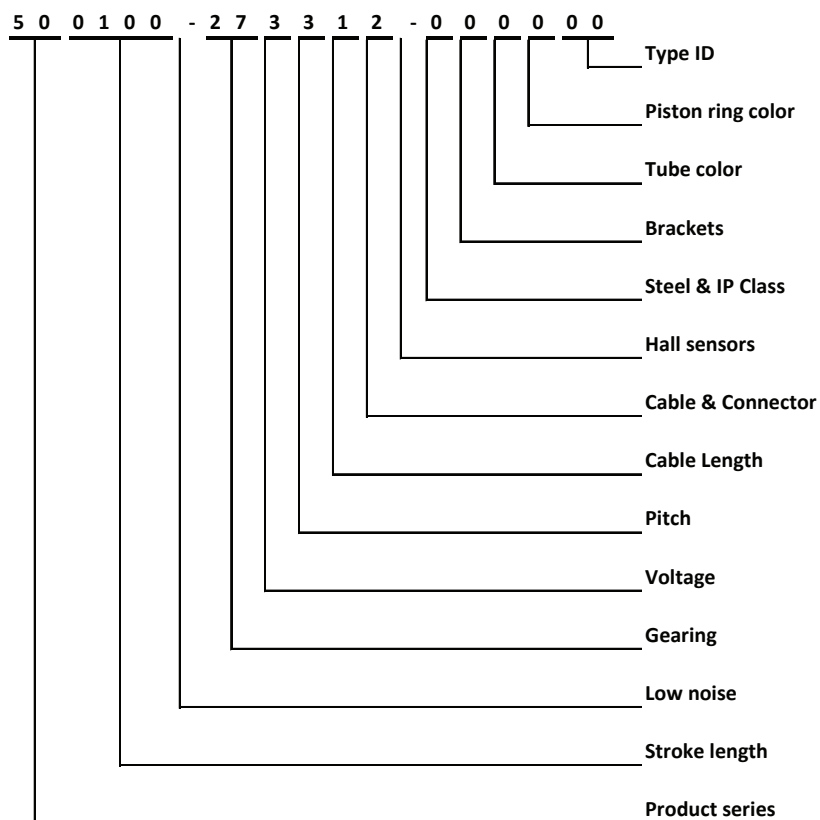
Max. static load
5400N

Recommended Mounting Methods



- Do not clamp actuators on tubing
- Always keep both brackets mounted in the same orientation and ensure to flush mount actuator
- Brackets must always be able to rotate on axels in mountings

Con50 Item Number Combination



Please Note

- Power supply without over-current protection can cause serious damage to the actuator at mechanical end-stop or when actuator is overloaded in another way
- Radial forces might have an adverse affect on the performance or lead to damage of the actuator
- Keep piston tube clean
- Longer cable lengths may cause voltage drop which affects the performance of the actuator
- For medical applications maximum ambient temperature is 48°C
- Function of the actuator is subject to the settings of the control box
- Concens does not have any responsibility for possible errors in this data sheet
- Specifications are subject to change without notice
- The dust and water sealing of IP68/IP69K actuators might affect their performance
- All specifications are for 25 °C ambient – low temperature might affect performance

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