

con35

Linear In-line Actuator

concens 
 - excellent electric actuators


Standard Specifications

Motor/Gear

12/24VDC power supply, permanent magnet motor

Gear ratio		5	14	19	27	51	71
Maximum load	[N]	120	400	600	900	1600	2200
Speed at maximum load	[mm/s]	33	16	12	7.5	4	3

**Max. static load/
Self locking force**PA brackets: 2000N Alu/AISI: 5400N
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, 2X0.65mm² (AWG19), Ø = 4.8mm, black, Molex Mini-Fit Jr. 6 pin**Bending Radius**

6x cable diameter

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

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

Color

Black (RAL 9005)

Stroke length/weight

Stroke	[mm]	50	100	150	200	250	300	350	400	500	750
Weight	[kg]	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.6	1.8	2.3

Max. load limited to 1000 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
- Piston rod available in black
- Hall sensors for positioning and/or synchronization
- IP68/IP69K (gear ratio 1:5 not available)
- Low noise version
- 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)

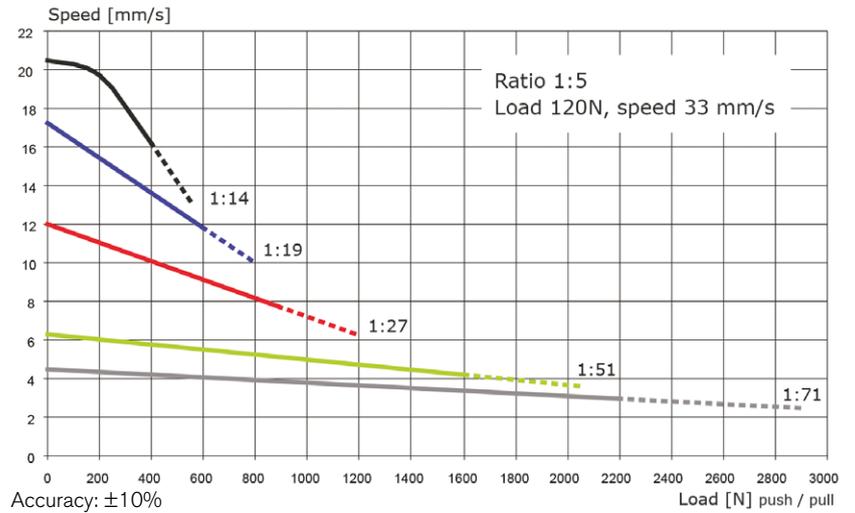
On Request

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

**Contact Concens for any
special requirements**

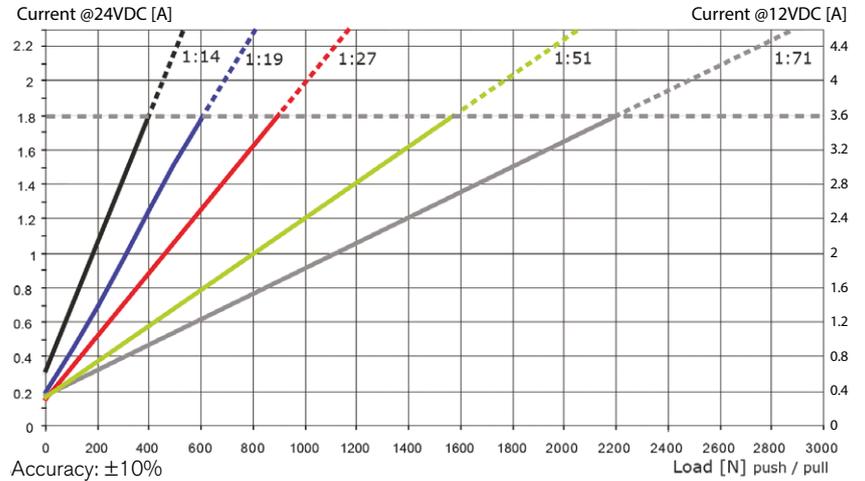
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Speed/Force



Force/Current

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

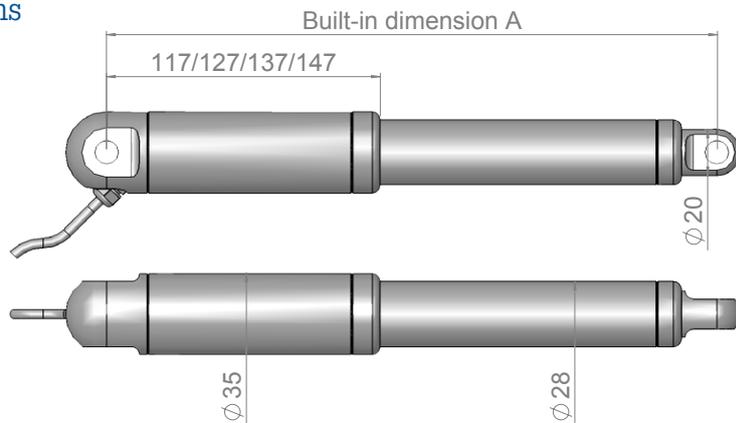


Recommended max. current: 12VDC = 3.6A and 24VDC = 1.8A

Dimensions

Axial backlash: +/- 0.5mm

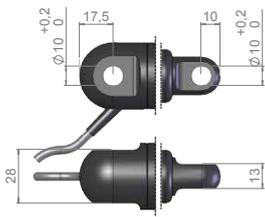
General dimensional variation: +/- 1mm



Built-In Dimension 'A'					
Gear Ratio	Standard	Clevis Rear	Hall	UL/EN60.601	IP68/IP69k
5, 14, 19, 27	160+stroke	+10	+10	+10	+11
51, 71	170+stroke	+10	+10	+10	+11
Stroke lengths => 500mm: +7mm					
Stroke lengths => 700mm: +42mm					

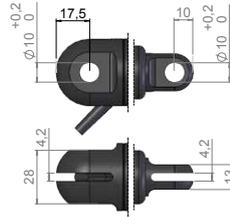
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Brackets



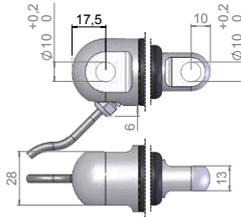
Polyamide (PA)

Max. static load 2000N
Max. load 900N
(gear ratio 1:27)



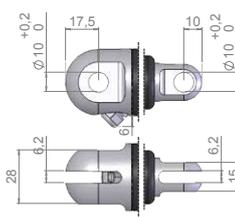
PA with clevis

Max. static load 2000N
Max. load 900N
(gear ratio 1:27)



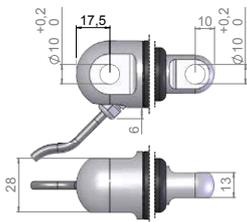
Alu

Max. static load 5400N



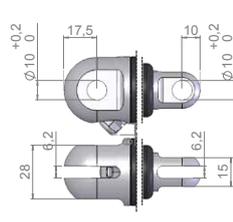
Alu with clevis

Max. static load 5400N



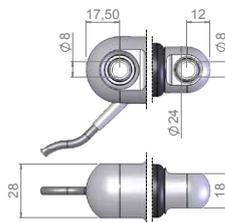
Stainless steel

Max. static load 5400N



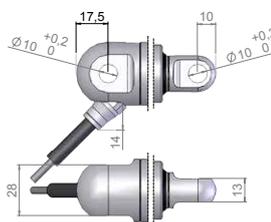
Stainless steel with clevis

Max. static load 5400N



Alu with spherical bearings

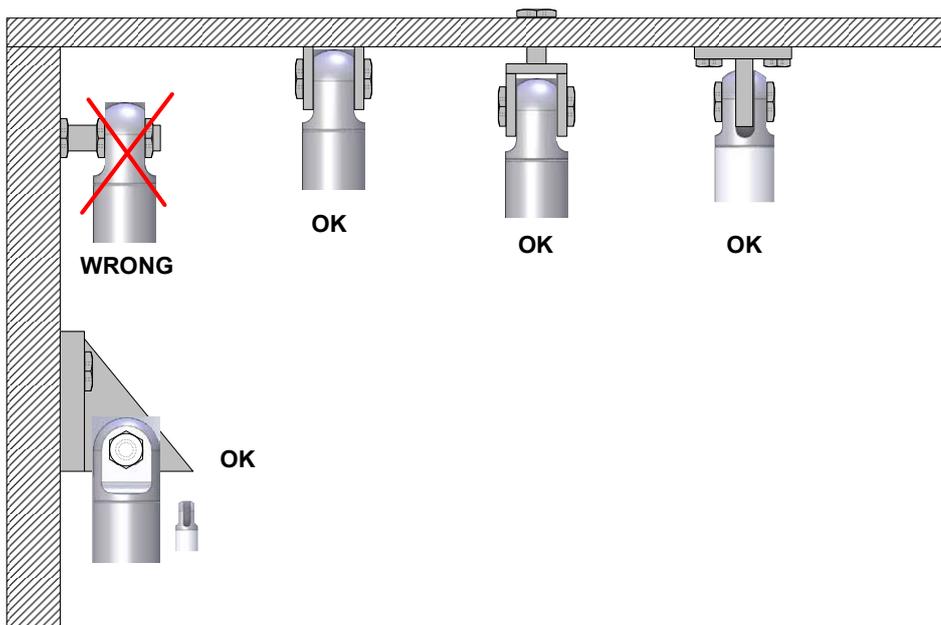
Max. static load 5400N



Alu / Stainless steel IP69K

Max. static load 5400N

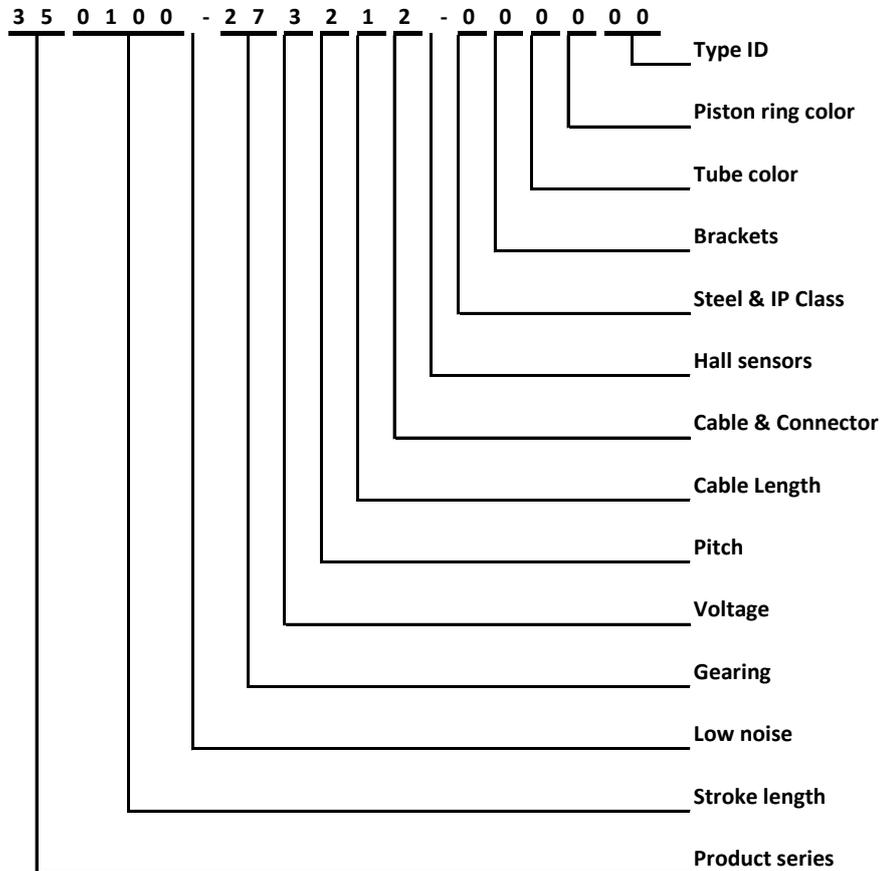
Recommended Mounting Methods



- 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

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Con35 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
- Concents 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