

## 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 = 1 atm

## Protection class

IP66

## Cable specification

1m, 2X0.65mm<sup>2</sup> (AWG19), Ø = 4.8mm, black, Molex Mini-Fit Jr. 6 pin

## Bending Radius

6x cable diameter

## Materials

 Motor 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).

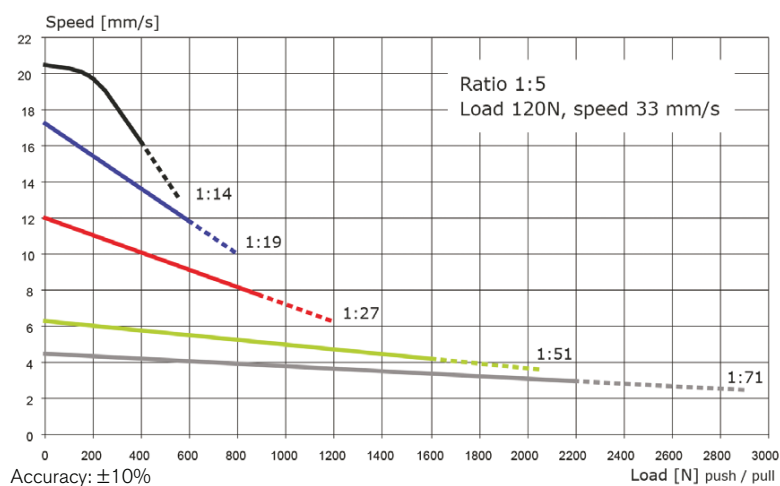
- Eskimo version (-40°C to +70°C)
- Other cable lengths (1-9m)

## On Request

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

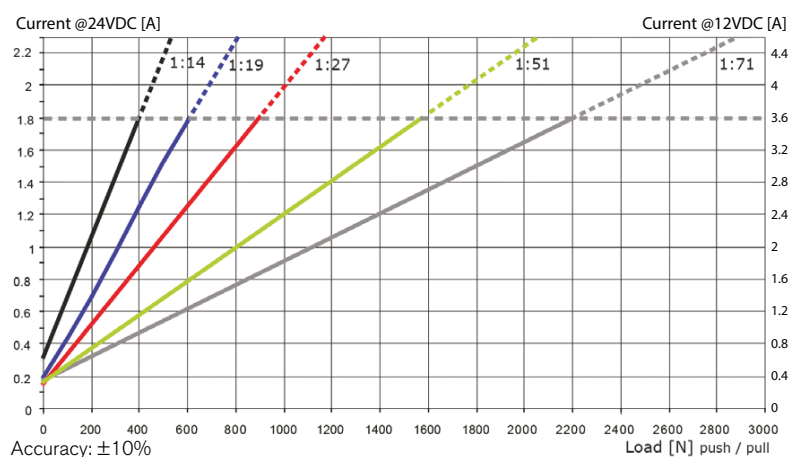
**Contact Concens for any  
special requirements**

## Speed/Force



## Force/Current

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

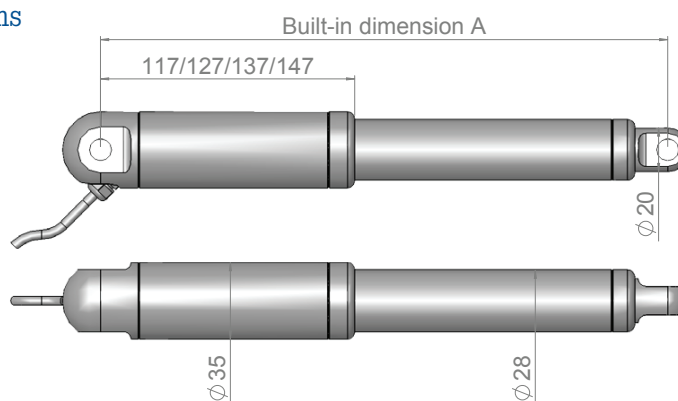


Recommended max. current: 12VDC = 3.6A and 24VDC = 1.8A

## Dimensions

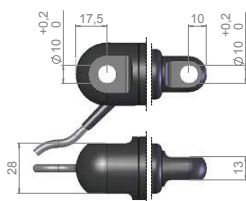
Axial backlash:  
+/- 0.5mm

General  
dimensional  
variation:  
+/- 1mm



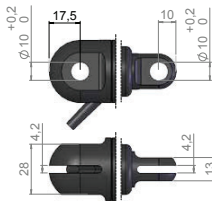
Gear Ratio	Built-In Dimension 'A'				
	Standard	Clevis Rear	Hall	UL/EN60.601	IP68/IP69k
5, 14, 19, 27	160+stroke	+10	+10	+10	+11
51, 71	170+stroke	+10	+10	+10	+11
Stroke lengths => 500mm: +7mm					
Stroke lengths => 700mm: +42mm					

## Brackets



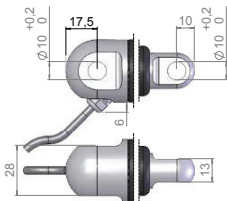
### Polyamide (PA)

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



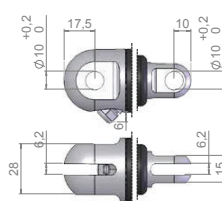
### PA with clevis

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



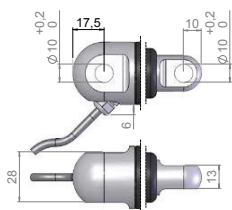
### Alu

Max. static load 5400N



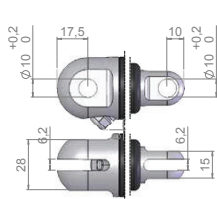
### Alu with clevis

Max. static load 5400N



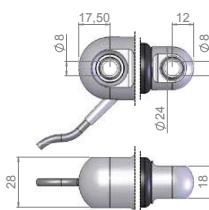
### Stainless steel

Max. static load 5400N



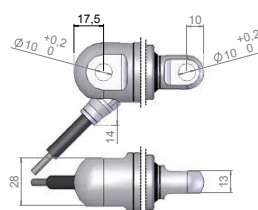
### Stainless steel with clevis

Max. static load 5400N



### Alu with spherical bearings

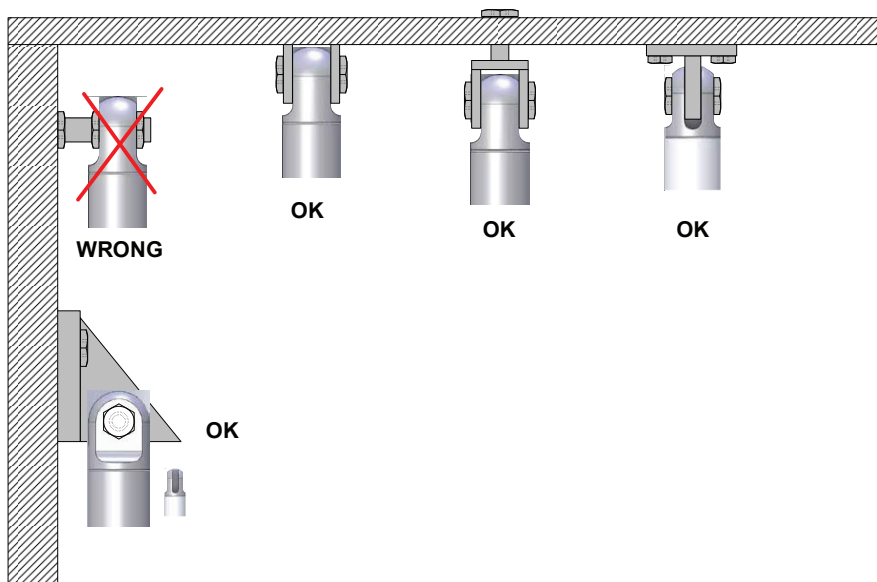
Max. static load 5400N



### Alu / Stainless steel IP69K

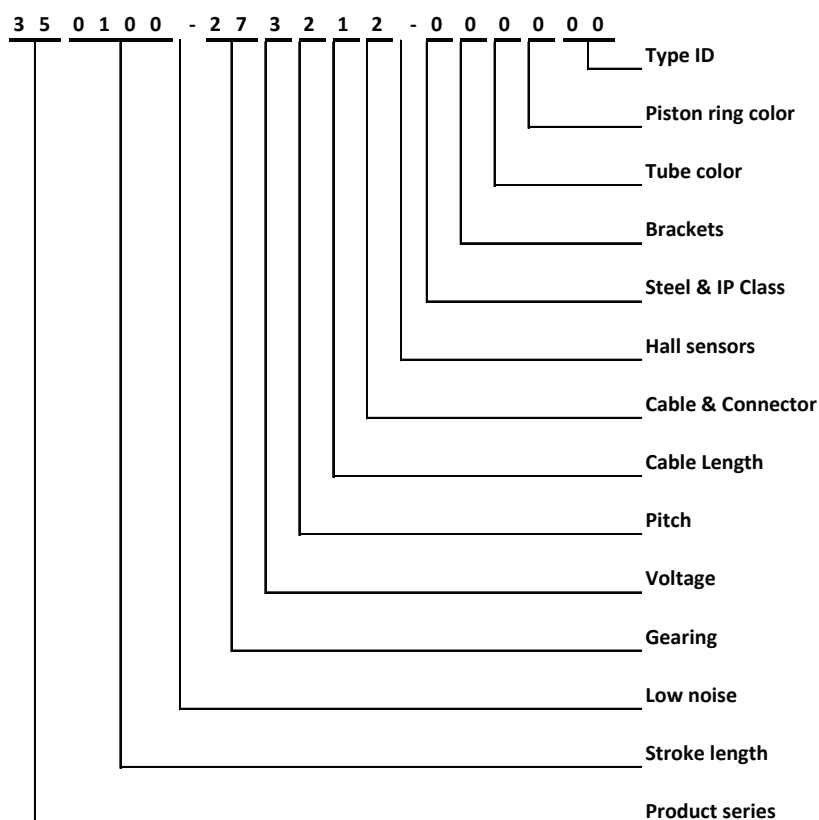
Max. static load 5400N

## 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

### 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
- 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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