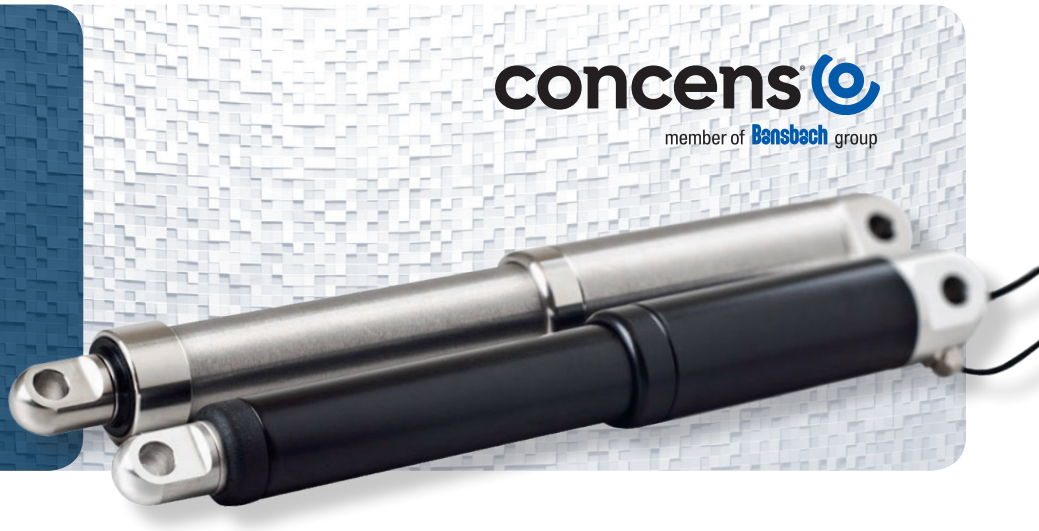
GB

DATA SHEET

con60

Linear In-line Actuator

concens
member of Bansbach group



Standard Specifications (Specifications for non-standard actuators eg. HE-version, may vary)

Motor/Gear

24 VDC power supply, permanent magnet motor (max. current is 11,5 A, absolute max. voltage is 28 VDC)

Gear ratio		19	43	66	81	100
Maximum load	[N]	1900	4300	6600	8100	10000
Speed at maximum load	[mm/s]	26	12	8	6	5

Max. static load/ Self locking force
Alu/Stainless steel: 18100 N
Depending on stroke length for push-applications
Max. load limited to 5000 N for stroke length > 400 mm

Temperature
- Operation: - 20 °C to + 50 °C
- Storage: - 40 °C to + 70 °C

Protection class
IP66

Cable specification
1 m, 2 x 1.3 mm² (AWG16), Ø = 6.4 mm, black, Molex Mini-Fit Jr. 6 pin

Bending Radius
6 x cable diameter

Materials
Motor and actuator tube are powder coated steel
Piston rod is stainless steel
Front and rear brackets are aluminium

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]	4.1	4.4	4.7	5	5.3	5.6	5.9	6.2	6.8	7.6

Actual weight may vary depending on model and specifications

Options

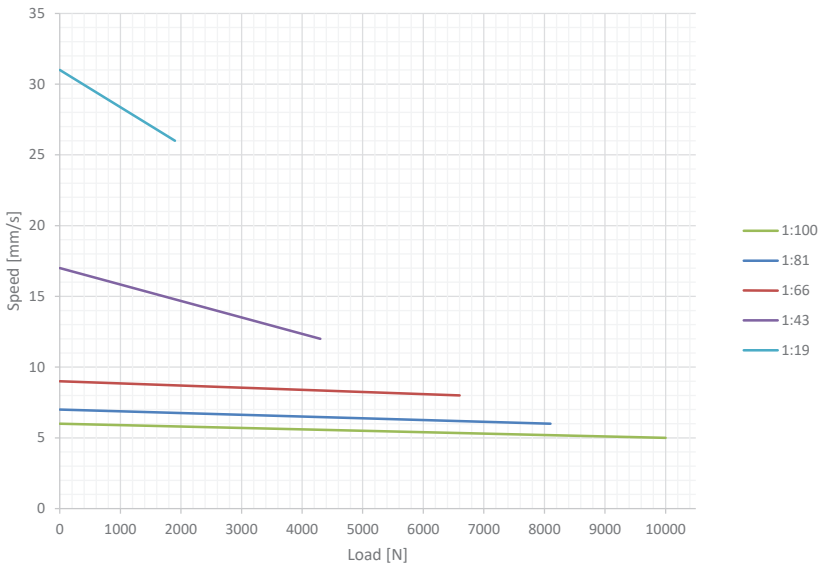
- Stainless steel versions (AISI 316)
- Brackets in stainless steel
- Brackets with clevis
- Brackets with spherical bearings
- Hall sensors for positioning and/or synchronization
- HE (Harsh Environment) version
  Tested according to IP68 and IP69 and passed the criteria for a depth of one meter for one hour.
  Test reports are available on request.
- Low noise version
- Spline and emergency lowering
- Other cable lengths (1 - 9 m)
- Actuators with the S&EL option are not IP-rated due to the technical design of the front bracket
- Version certified according to IEC60601-1, ANSI/AAMI/ES60601-1, CAN/CSA-22.2 No60601-1 available

On Request

- Available in all RAL colors
- Other stroke lengths available
- Customised front and rear brackets
- Customised build-in-dimensions

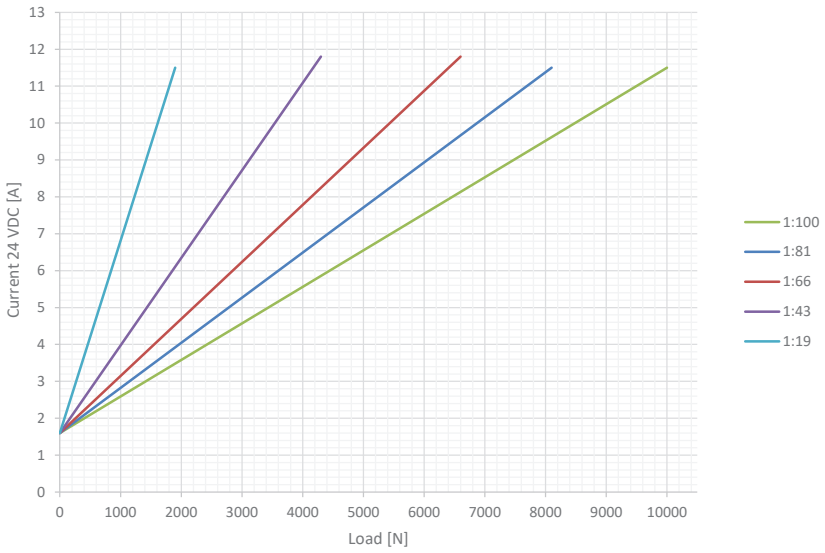
Contact Concens for any special requirements

Speed/Force



Graphs are indicative only

Force/Current

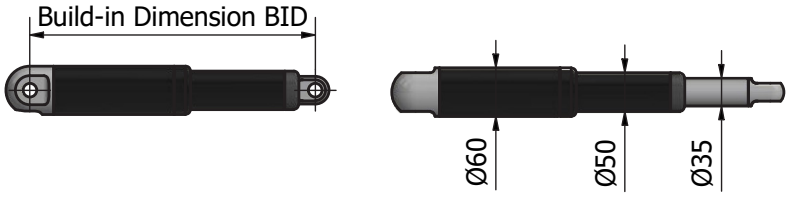


Recommended max. current: 24 VDC = 11,5 A. Graphs are indicative only

Dimensions

Axial backlash:
+/- 0.5 mm

General dimensional variation:
+/- 1 mm



Build-in Dimension 'BID'				
Gear Ratio	Standard	Hall	Harsh Enviroment	Emergency lowering/spline
All ratios	358 mm + stroke	+ 15 mm	+ 25 mm	+ 31 mm/+ 10 mm
Stroke length > 400 mm + 25 mm not HE-version Stroke lengths > 750 mm + 100 mm (On request)				

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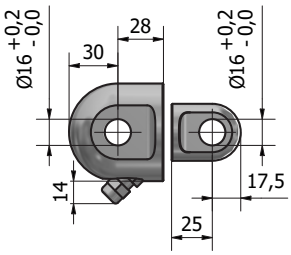
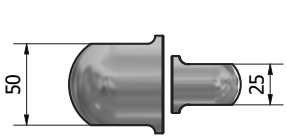
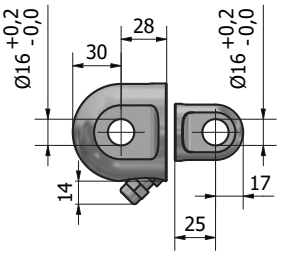
Standard Brackets

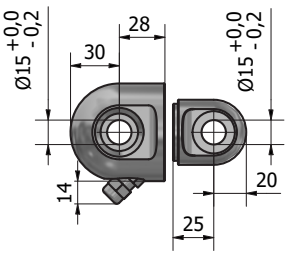


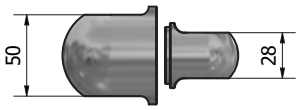


Alu/Stainless steel
Max. static load
18100 N



Alu/Stainless steel with clevis
Max.static load 18100 N

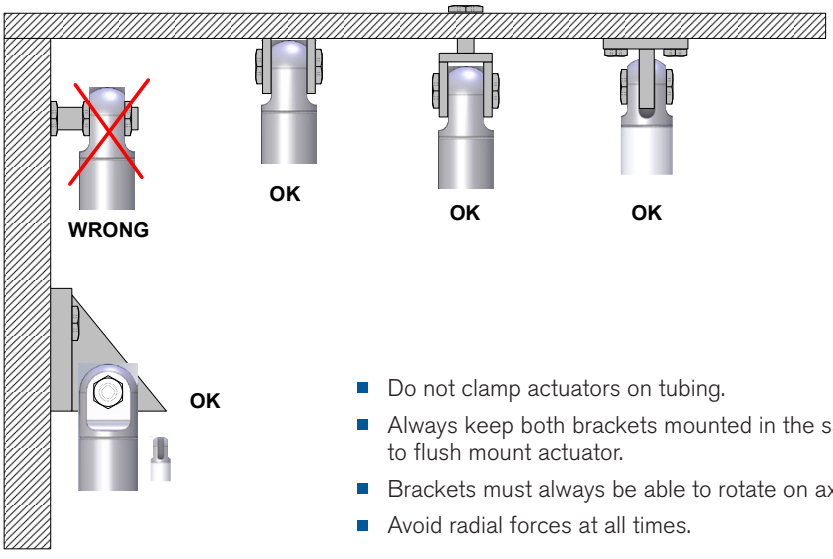




Alu with spherical bearings/
Stainless steel with stainless spherical bearings
Max. static load 11000 N
Max tilt 8°

Please Note:
AISI316 versions with lock-ring in quality:
EN 1.4122 (X39CrMo17-1)

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.
- Avoid radial forces at all times.

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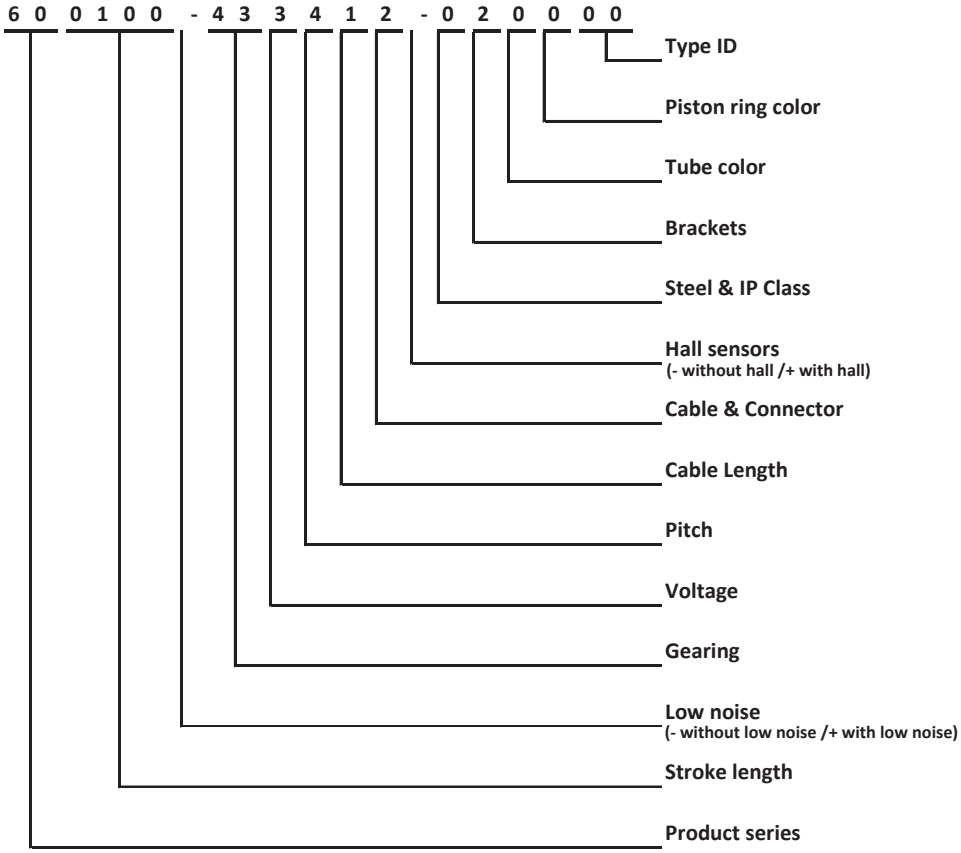
con60 Item Number Combination



Recommendations and warnings

- Never expose the actuator to hammer strike during installation or in other situations.
- Retrofitted bushings should be pressed into the bracket-borings. No hammering.
- 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.
- Keep piston tube clean.
- Longer cable lengths may cause voltage drop which affects the performance of the actuator.
- For medical applications (IEC60601-1, ANSI/AAMI/ES60601-1, CAN/CSA-22.2 No60601-1): Operating temperature + 5 °C to + 48 °C , Relative humidity 20 % - 70 % atmospheric pressure = 1atm. Connect to medically approved supply source only and according to guidelines provided with the source.
- Function of the actuator is subject to the settings of the controller. If using your own controller please contact Concens.
- The dust and water sealing of HE (Harsh Environment) actuators might affect their performance.
- All specifications are for 25 °C ambient – low temperature might affect performance.
- Depending on load and application, nominal and actual stroke length may differ due to internal disc springs not being fully compressed.
- The combination of gearing and stroke can cause limitations in the use of "End limit FW" when using the C2-30 control. See more in the datasheet for C2-30.

IEC 60417-5172
Class II equipment

ISO 7010-M002
Refer to instruction manual/booklet

Disclaimer

- Concens products are continuously developed, built and tested for highest requirements and reliability but it is always the responsibility of the customer to validate and test the suitability of our products in a given application and environment. Concens products must not be used in safety critical applications.
- We do our utmost to provide accurate and up-to-date information at all times. In spite of that, Concens cannot be held responsible for any errors in the documentation. Specifications are subject to change without prior notice.

For more information, please visit our website at www.concens.com

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