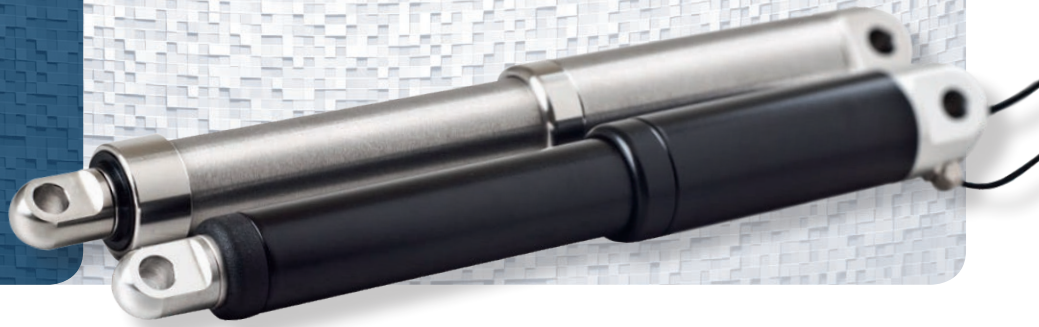


icon

Linear In-line Actuator



Intelligent actuators with integrated controller (icon) enable the use of MODBUS RTU on an RS485 serial communication. One of the industry's most powerful standards.

The icon options provide everything from easy maintenance, control and installation, to a wide range of customizable settings and feedback that will help tailor the movement solution to your specific needs and application.

Standard Specifications

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

Cable specification Cores: 2 x AWG 16 + 6 x AWG 28, Ø = 6,4 mm, black jacket, Molex Mini-Fit Jr. 8 pin or similar.

Bending Radius 6 x cable diameter

Actual weight may vary depending on model and options selected

For other mechanical data please refer to Concens standard con35/50/60 datasheet.

Configurations

| Configuration | SDB | SDH | SDP | SPP | SBS (bus based) | MDO (synchronization) |
|---------------|----------------------------|---------------------------|-------------------------------|------------------------------|-----------------------|---------------------------------|
| P/N letter | A | B | C | D | E | F |
| Description | Single/Direction/ Basic | Single/Direction/ Hall | Single/Direction/ Position | Single/Position/ Position | Single/Bus/ Status | Multiple/Direction/ Override |
| 1 | +12/24VDC | +12/24VDC | +12/24VDC | +12/24VDC | +12/24VDC | +12/24VDC |
| 2 | PWR GND | PWR GND | PWR GND | PWR GND | PWR GND | PWR GND |
| 3 | RS485A | RS485A | RS485A | RS485A | RS485A | RS485A |
| 4 | RS485B | RS485B | RS485B | RS485B | RS485B | RS485B |
| 5 | Input: Direction IN | Input: Direction IN | Input: Direction IN | Output: Ref. 5/10VDC | Input: STOP | Input: Direction IN |
| 6 | Input: Direction OUT | Input: Direction OUT | Input: Direction OUT | Input: Position (analog) | Output: Error | Input: Direction OUT |
| 7 | | Output: HallA | Output: Position (analog) | In/output: STOP/ Pos. OK | | Input: Override |
| 8 | | Output: HallB | Signal-GND | Signal-GND | Signal-GND | Signal-GND |
| | Single actuator setup | | | | | Multi actuator setup |

Contact Concens for availability at this time

Features

- Adjustable start ramp
- Adjustable stop ramp
- Adjustable current limit
- Industrial interface MODBUS RTU on RS485
- Internal stroke limitation
- Internal heat protection
- Plug & Play solution with conXion box

Dimensions

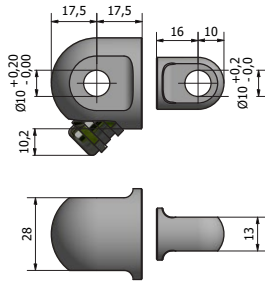
Same BID (Build in Dimension) as con35/50/60 with Hall. Please see original datasheet for con35/50/60

Use of "safe zone" will inevitably decrease the usable part of the stroke length of the actuator.

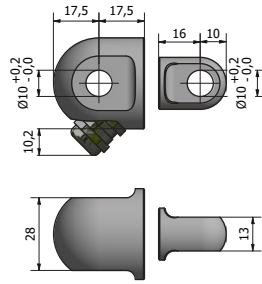
Contact Concens for any special requirements

icon

Standard Brackets icon35 only



Alu
Max. static load 5400 N



Stainless steel
Max. static load 5400 N

Standard brackets for icon50 and icon60, please see original datasheet for [con50](#) and [con60](#)

Electrical Wiring



| | SDB | SDH | SDP | SPP | SBS | MDO |
|--|-----------------------|---------------|----------------------|-----------------|------------|---------------|
| | + 24 Vdc. +12 Vdc. | | | | | |
| | GND | | | | | |
| | RS485A+ | | | | | |
| | RS485B- | | | | | |
| | Direction in | Direction in | Direction in | Pos in | HW stop | Direction in |
| | Direction out | Direction out | Direction out | Pos ok out | Error out | Direction out |
| | Not used | Signal Hall B | Signal-GND | Signal-GND | Signal-GND | Signal-GND |
| | Not used | Signal Hall A | Position Voltage out | 5 – 10 Vdc ref. | Not used | Override |

Electrical Data

- Max. Current load:** icon35: 2 Adc @ 24 Vdc, 4 Adc @ 12 Vdc
icon50: 8 Adc @ 24 Vdc, 16 Adc @ 12 Vdc
icon60: 16 Adc @ 24 Vdc
- Idle current:** Approx 10 mAdc
- Current trip delay:** 20 ms
- PWM frequency:** 25 kHz
- Digital inputs:** 'High': $U_{in} = 4 \text{ Vdc} - V_{supply}$; 'Low': $U_{in} = 0 \text{ Vdc} - 1 \text{ Vdc}$
- Supply voltage:** 12 VDC (min 10 VDC at 1 meter cable, max 14 VDC) or 24 VDC (min 20 VDC at 1 meter cable, max 28 VDC) (max ripple < 10 % @ full load)
- Serial data line:** RS485 asynchronous, point to point or multi-point, 2 wire half-duplex
- Communications:** Modbus RTU
- Bauds rate:** 115000 bps
- Com setup:** 8 Bit, Parity -None, Stop bit -1

For more information on Modbus RTU please go to www.modbus.org MODBUS over serial line specification and implementation guide V1.0

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.