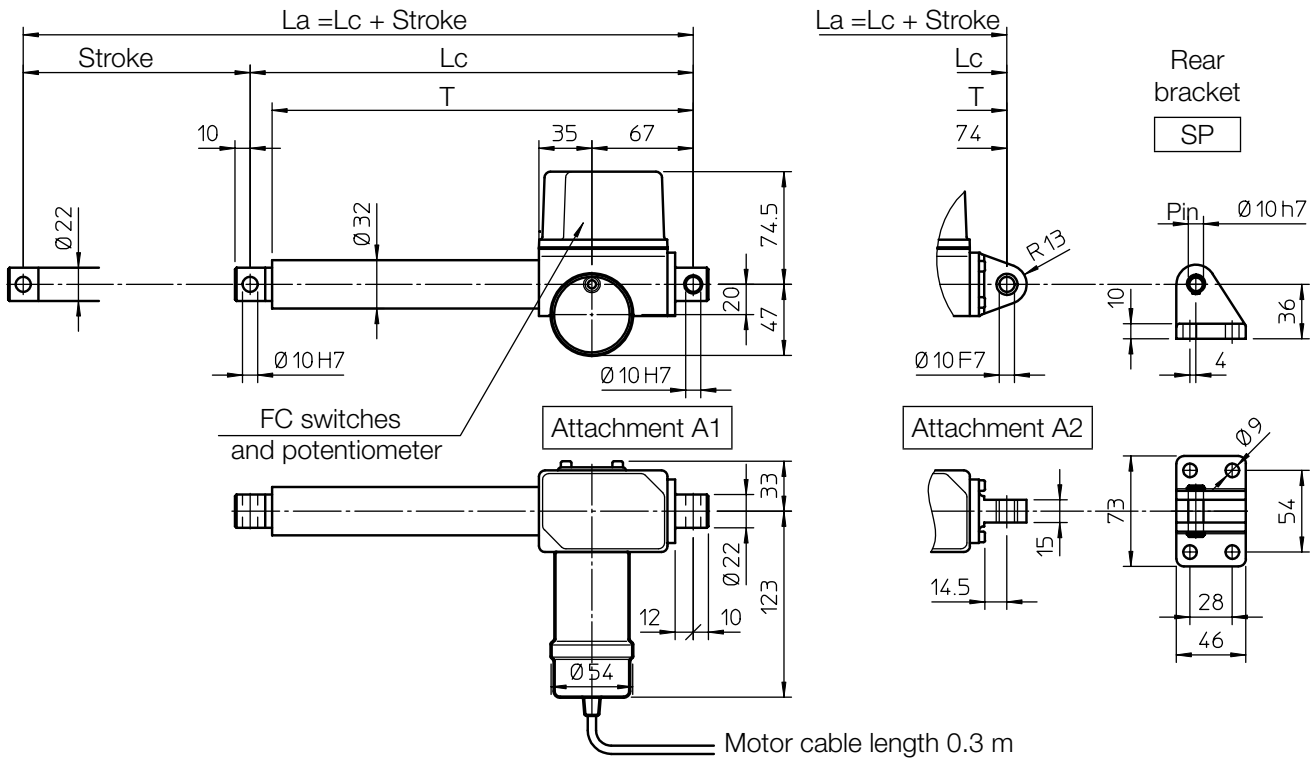


OVERALL DIMENSIONS



Length	Actuator with Attachment A1	Actuator with Attachment A2
Lc [mm]	142 + Stroke	150 + Stroke
T [mm]	129 + Stroke	136 + Stroke

PERFORMANCES AND FEATURES

- Pull-Push load up to 2 000 N
 - Linear speed up to 48 mm/s (DC motor)
 - Linear speed up to 30 mm/s (AC motor)
 - Standard stroke lengths: 100, 150, 200, 250, 300 mm (for different / longer stroke lengths please contact us)
 - Aluminium alloy housing and rear attachment
 - Anodized aluminium outer tube
 - Anodized aluminium push rod – tolerance h8
 - Rear attachment:
 - A1 zinc-plated steel
 - A2 aluminium alloy with bronze bush
 - Stainless steel AISI 303 front attachment
 - Motors: (motor features details on page 69 and 70)
 - 12 or 24 V DC motor with permanent magnets
 - AC 3-phase or 1-phase motor
 - Duty cycle with max load:
 - DC motor max.15% over 10 min at (-10 ... +40) °C
 - AC motor max.30% over 10 min at (-10 ... +40) °C
 - Standard protection:
 - with DC motor IP65
- Test IP6X according to EN 60529 §12 §13.4-13.6
Test IPX5 according to EN 60529 §14.2.5 (tests made with not running actuator)
- with AC motor IP55

- Standard motor mounting position as per sketch (right-hand, code RH)
- Long-life lubrication, maintenance free

ACCESSORIES

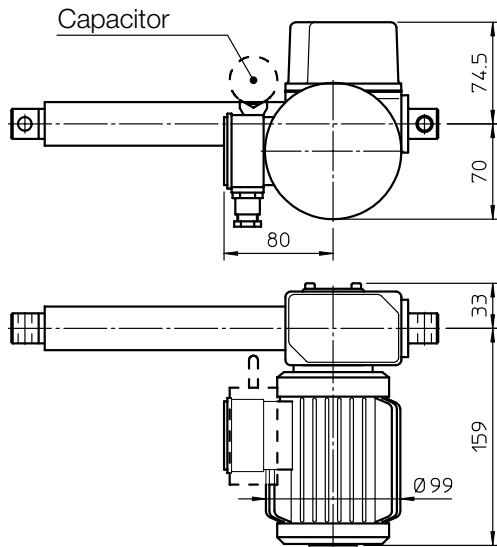
- Stainless steel push rod (code SS)
- Rear bracket (code SP) with rear attachment A2
- Adjustable electric stroke end switches (code FC2)
- Adjustable electric stroke end switches, switching off the motor (not available with AC 3-phase motor) (code FC2X)
- Extra switch for intermediate position (code FC)
- Rotative potentiometer 5kOhm for positioning control (code POR5K)

NOTE: Extra limit switch and rotative potentiometer cannot be selected together

OPTIONS

- Motor mounting position on opposite side (left-hand, code LH)
- Fixing attachment turned at 90° (code RPT 90)

PERFORMANCES with AC 3-phase 50 Hz 230/400 V or 1-phase 50 Hz 230 V motor



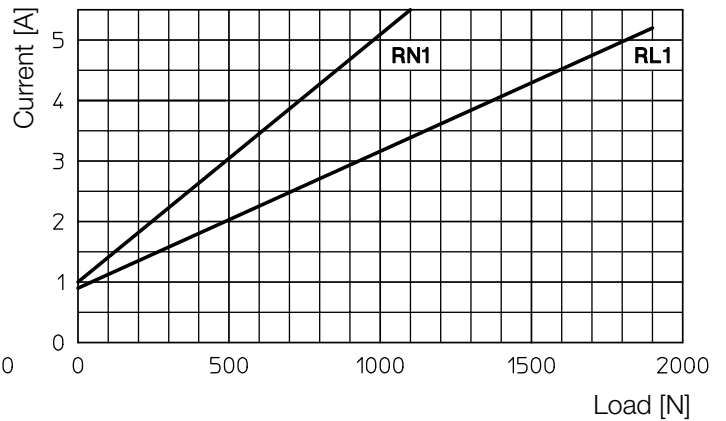
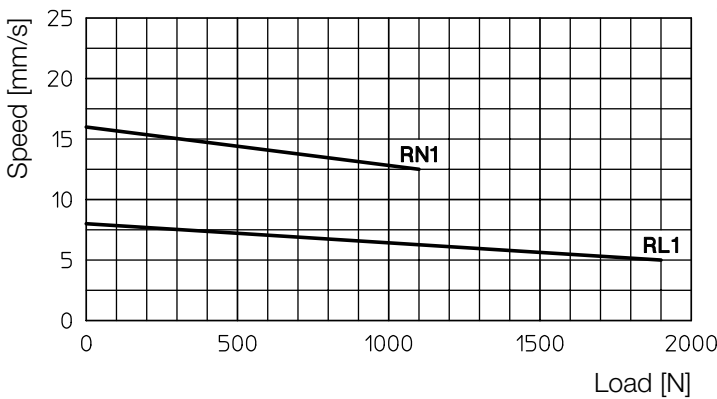
1-start acme screw Tr 13.5x3		
0.06 kW - 2 pole motor		
RATIO	LOAD [N]	SPEED [mm/s]
RN1	1500	11
RL1	2000	5.5

2-starts acme screw Tr 14x8 (P4)		
0.06 kW - 2 pole motor		
RATIO	LOAD [N]	SPEED [mm/s]
RN2	1000	30
RL2	1100	15

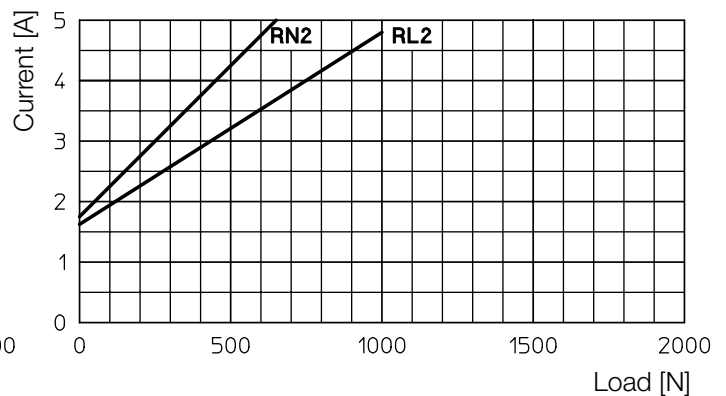
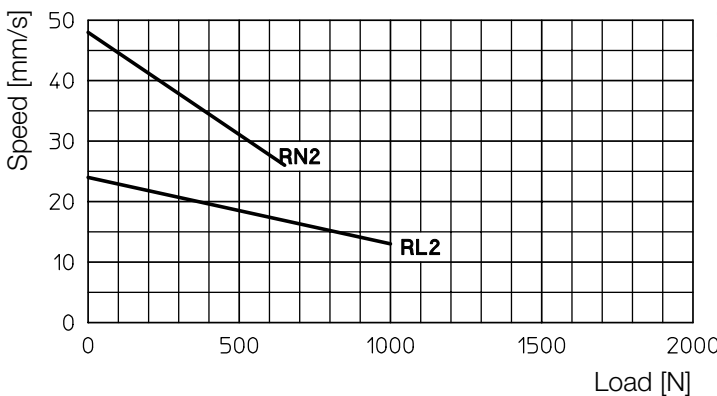
PERFORMANCES with 24 V DC motor

(Performances with 12 V DC motor: same load, linear speed 10 % less, electrical consumption 2 times more)

1-start acme screw Tr 13.5x3



2-starts acme screw Tr 14x8 (P4)



Self-locking conditions

Information about statically self-locking conditions with pull or push load on page 68.

ORDERING CODE EXAMPLE

CLA 20	RL1	C200	CC 24 V	FC2	POR 5K			
Actuator	Selected ratio	Required stroke	Motor	Stroke end switches	Accessories		Options	

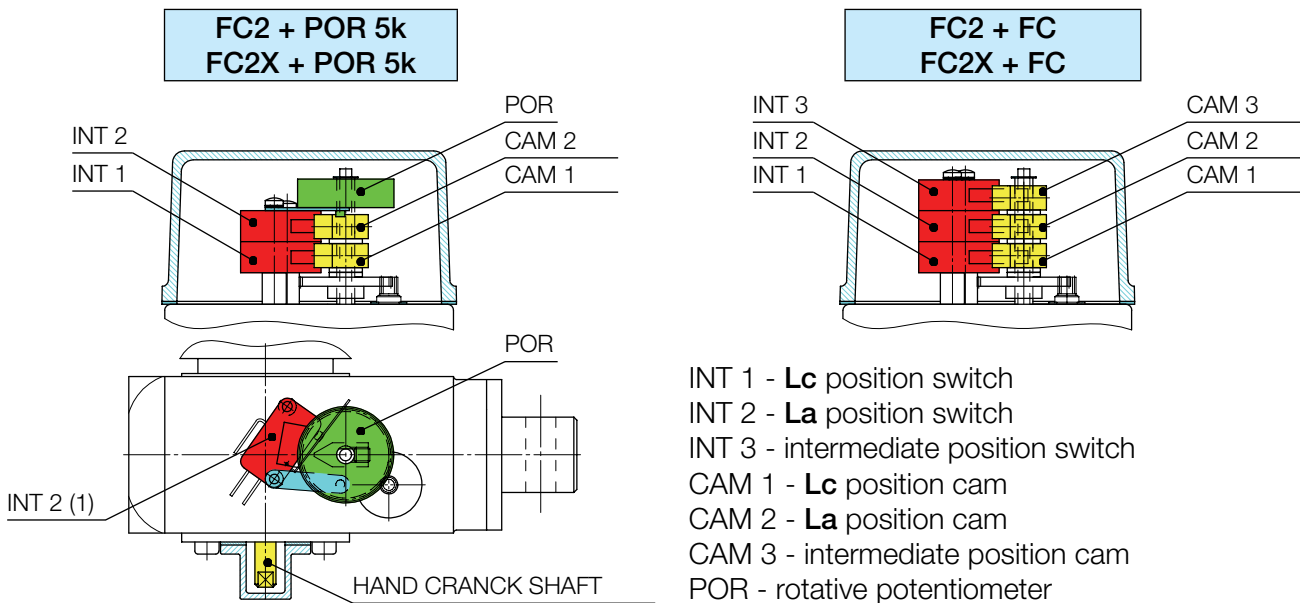
13.4 Electric cam-operated stroke end switches (linear actuators CLA and CLB Series)

Code **FC2**: two electric cam-operated switches, wired on contact NC (to be connected into the external control circuit). On request, the switches can be wired on the contact NO or on the switch-over contact CS. (For available configurations please contact our Technical Dpt).

Code **FC2X**: two electric cam-operated switches, internally wired between power supply and electric motor, in order to switch off the power supply directly, without relays. Available for actuators with Dc or AC 1-phase motor.

Code **FC2 + FC** or **FC2X + FC**: Stroke end switches FC2 or FC2X with a third switch for any intermediate position. The third switch can be wired on contact NC or NO on request. (For different configurations please contact our Technical Dpt).

SWITCH RATED VALUES		
Voltage	Max current	
	Resistive load	Inductive load
250 Vac	21 A	12 A
30 Vdc	14 A	12 A
125 Vdc	0.8 A	0.6 A



Lc = actuator retracted length, **La = Lc + Stroke** – actuator extended length

13.4 Rotative potentiometer for positioning control (linear actuators CLA and CLB Series)

Code **POR 5k**: rotative potentiometer, single turn (340°), 5 kOhm ± 20 %, linearity ± 2 %

The rotative potentiometer is an absolute transducer, whose output signal is proportional to the current position of the actuator push rod. Analogic output signal.

Standard cable: 4 x 0.25 mm² + shield, 1.5 m length (for different configurations please contact us).

POR 5k standard wiring diagram:

POR Power supply: 0 V dc

Reference signal: ZERO

Reference signal: RETURN

POR Power supply: + V cc

SHIELD

