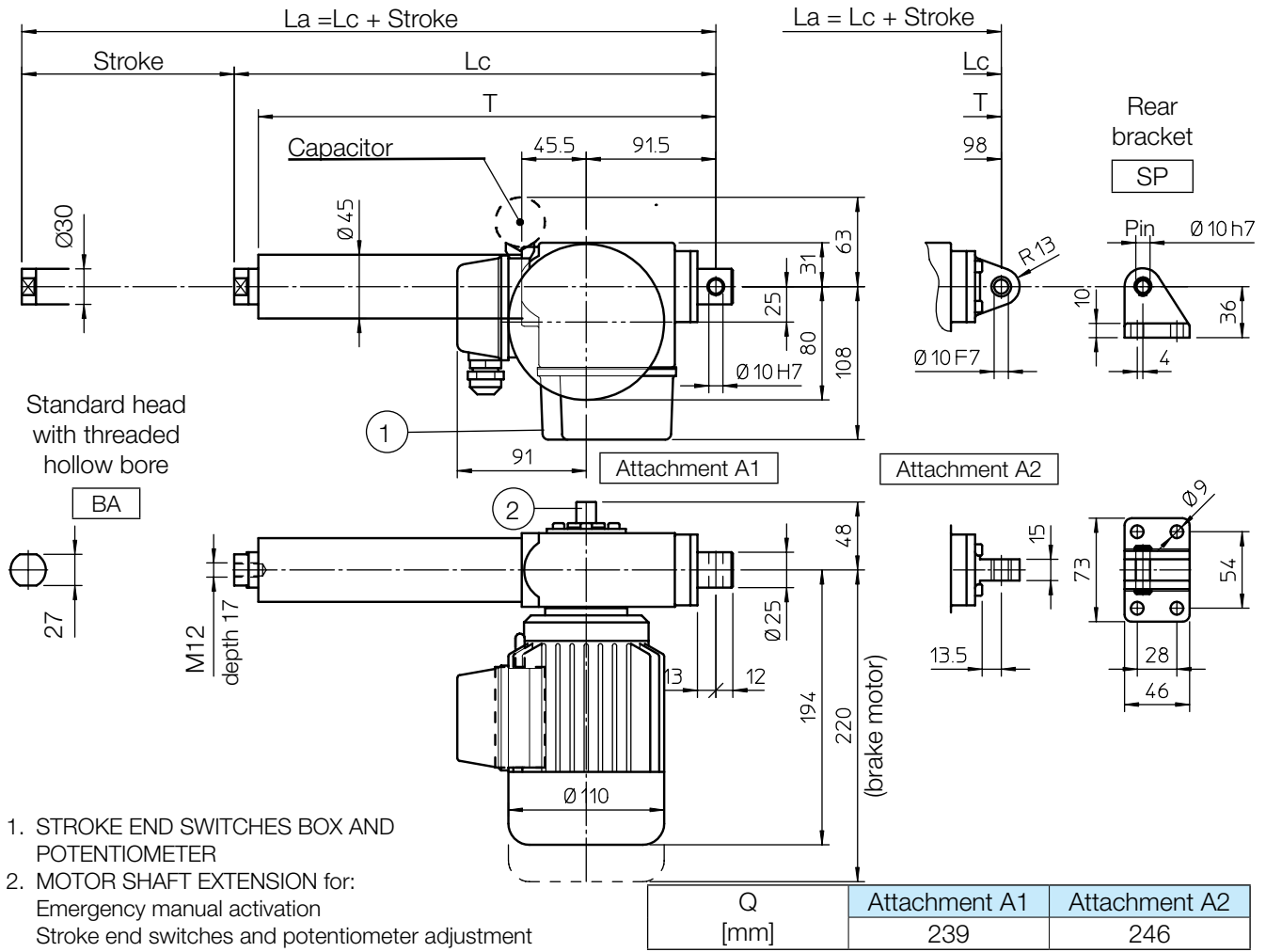
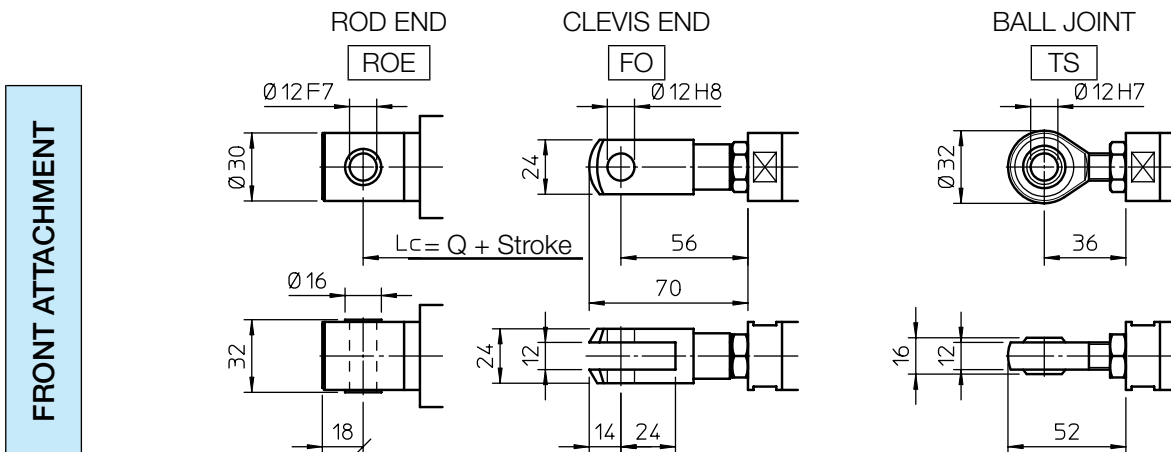


## OVERALL DIMENSIONS



STROKE CODE	Actuator - Attachment A1				Actuator - Attachment A2				MASS [Kg]	
	STROKE [mm]	LENGTH		T [mm]	STROKE [mm]	LENGTH		T [mm]	standard motor	brake motor
		Lc [mm]	La [mm]			Lc [mm]	La [mm]			
C100	100	336	436	300	100	343	443	307	5.3	5.8
C150	150	386	536	350	150	393	543	357	5.5	6.0
C200	200	436	636	400	200	443	643	407	5.7	6.2
C300	300	536	836	500	300	543	843	507	6.1	6.6
C400	400	636	1036	600	400	643	1043	607	6.5	7.0
C500	500	736	1236	700	500	743	1243	707	6.9	7.4



**PERFORMANCES AND FEATURES**

- Push load up to 7 000 N
- Pull load up to 4 000 N
- Linear speed up to 58 mm/s
- Standard stroke lengths:  
100, 150, 200, 300, 400, 500 mm
- Ball screw BS 16 x 5 (technical details on page 66)
- Aluminium alloy housing
- Anodized aluminium outer tube
- Chrome-plated steel push rod
- Rear attachment:
  - A1: zinc-plated steel rod end with bronze bush
  - A2: aluminium alloy with bronze bush
- Standard head BA or rod end ROE  
in stainless steel AISI 303 with bronze bush
- AC 3-phase or 1-phase motor  
(motor features details on page 70)
- Duty cycle with max load:  
100% over 10 min at (-10 ... +40) °C
- Standard protection IP 55 (IP 54 with brake)
- Standard motor mounting position as per sketch  
(right-hand, code RH)
- Long-life lubrication, maintenance free

**ACCESSORIES**

- Different front attachments
- Stainless steel push rod (code SS)
- Rear bracket (code SP) with rear attachment A2
- Mechanical overload protection:  
safety clutch (code FS)
- Brakemotor
- Adjustable electric stroke end switches (code FC2)
- Adjustable electric stroke end switches,  
switching off the motor (code FC2X)  
(not available with AC 3-phase motor)
- 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**

Ball screw BS 16 x 5				
RATIO	0.09 kW - 4 pole motor		0.12 kW - 2 pole motor	
	LOAD [N]	SPEED [mm/s]	LOAD [N]	SPEED [mm/s]
RH1	2160	29	1480	58
RV1	3260	19	2300	37
RN1	5990	9.5	4170	19
RL1	7000	4.5	7000	9.5

**Self-locking conditions**

Self-locking condition is achievable with brake motor only.

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

**ORDERING CODE EXAMPLE**

CLB 27	RL1	C200	CA 400 V	FC2	POR 5K				
Actuator	Selected ratio	Required stroke	Motor	Stroke end switches	Accessories			Options	

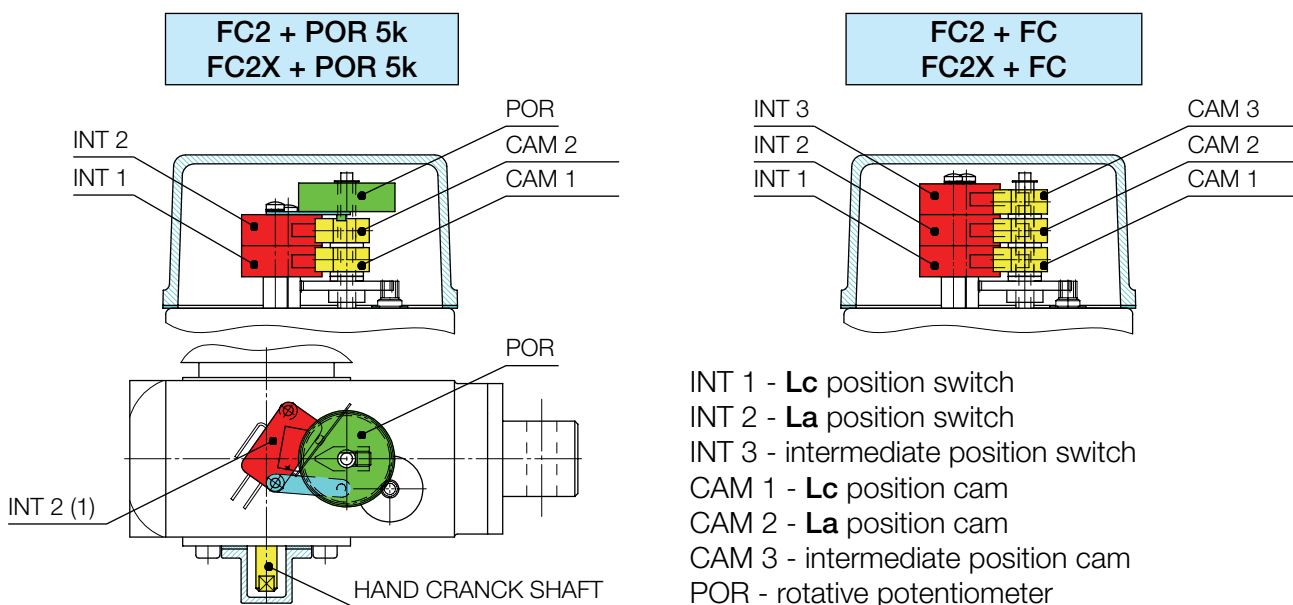
## 13.4 Electric cam-operated stroke end switches (linear actuators CLA and CLB Series)

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 mm<sup>2</sup> + 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

