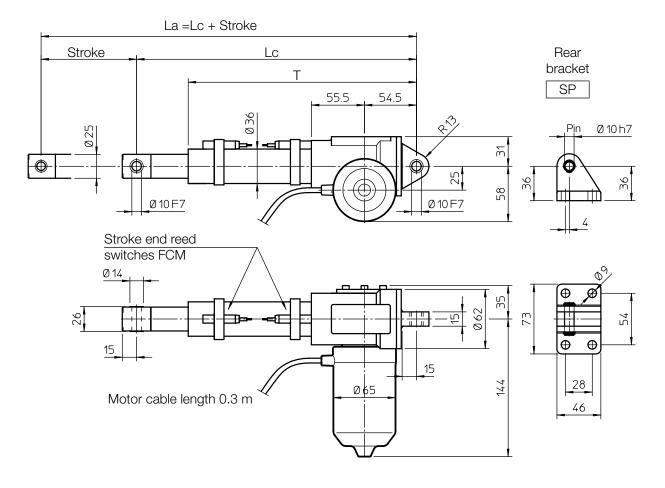


# **BSA 08**

## OVERALL DIMENSIONS



STROKE	STROKE	LENGTH		т	MASS [Kg]	
CODE	[mm]	<b>Lc</b> [mm]	<b>Lc</b> [mm] <b>La</b> [mm]			
C100	100	327	427	296	3.6	
C150	150	377	527	346	3.7	
C200	200	427	627	396	3.9	
C250	250	477	727	446	4.0	
C300	300	527	827	496	4.2	
C400	400	627	1027	596	4.5	
C500	500	727	1227	696	4.8	



# BALL SCREW LINEAR ACTUATOR

**BSA 08** 

## PERFORMANCES AND FEATURES

- Pull-Push load up to 5 000 N
- Linear speed up to 64 mm/s
- Standard stroke lengths:
  100, 150, 200, 250, 300, 400, 500 mm
- Ball screw BS 14 x 5 (technical details on page 66)
- Aluminium alloy housing and rear attachment with bronze bush
- Anodized aluminium outer tube
- Chrome-plated steel push rod tolerance f7
- Stainless steel AISI 303 front attachment with bronze bush
- 12, 24 or 36 V DC motor with electromagnetic noise suppressor (motor features details on page 69) (BRAKE NOT AVAILABLE)
- Duty cycle with max load: 50% over 10 min at (-10 ... +40) °C
- Standard motor mounting position as per sketch (right-hand, code RH)

- Standard protection IP 65
  - 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)
- Long-life lubrication, maintenance free

## ACCESSORIES

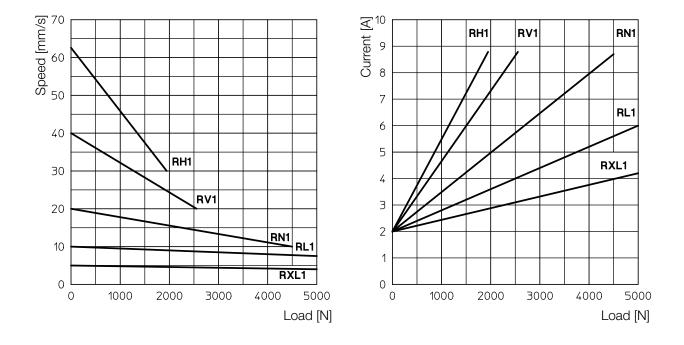
- Stainless steel push rod (code SS)
- Rear bracket (code SP)
- Mechanical overload protection: safety clutch (code FS)
- Two adjustable stroke end reed switches (code FCM)
- Extra switch for intermediate position

#### OPTIONS

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

# PERFORMANCES with 24 V DC motor

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



#### Self-locking conditions

Brake motor not available. Therefore the statically self-locking condition is not achievable. Information about statically self-locking conditions with pull or push load on page 68.

#### ORDERING CODE EXAMPLE

BSA 08	RL2	C200	CC 24 V	FCM					
Actuator	Selected ratio	Required stroke	Motor	Stroke end switches	ŀ	Accessorie	S	Opt	ions

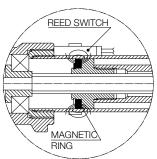


# GENERAL NOTE

In case the linear actuator is used in an application where the stroke end switches must be connected to PLC or PC, we suggest to make the connection with a galvanic separation circuit.



# 13.1 Magnetic stroke end switches (reed) FCM (linear actuators ATL, BSA, UAL, UBA Series, LMI 02 and LMP 03)



The magnetic field of the ring fixed on the nut activates the reed contact of the switch locked on the protective tube with a clamp.

The position of the switches along the tube is easily adjustable.

The switches used to determine any intermediate position (between Lc and La) will switch over in two different positions, depending on the push rod motion direction (extending or retracting).

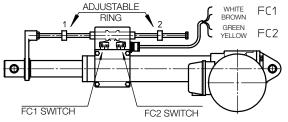
**WARNING!** The magnetic reed-switches can work only if connected to a wiring control circuit in order to activate the electric relay. Do not connect them in series between the power supply and the electric motor!

REED CONTACT RATED VALUE					
	DC	AC			
Rated voltage	(3 130) V	(3 130) V			
Max. commutable power	20 W	20 VA			
Max. commutable current	300 mA (resistive load)				
Max. inductive load	3 W				

**Standard: NC switch** (normally closed contact) equipped with signalling LEDS and protective varistor against voltage peaks.

Standard cable length 2 m; wires 2 × 0.75 mm<sup>2</sup> Different configurations available on request: NO (normally open); CS (exchanging contact). For more information please contact our Technical Dpt.

# 13.2 Electric stroke end switches FCE (actuators ATL 10, ATL 12, BSA 10, BSA 12)



CONTACT RATED VALUE				
Voltaga	Max current			
Voltage	Resistive load	Inductive load		
250 Vac	5 A	3 A		
30 Vdc	5 A	0.1 A		
125 Vdc	1.4 A	-		

Two electric switches, installed inside a sealed plastic box, are activated by two adjustable rings through a shaft collar. **Standard switches are wired on the NC contact,** 

cable length 1.5 m; wires  $4 \times 0.75$  mm<sup>2</sup>

On request, they can be wired on the NO contact or on the switch-over contact CS (for available configurations please contact our Technical Dpt).

Min retracted length Lc is adjusted by ring 1. FC1 switch is connected with the WHITE and the BROWN cables.

**Max extended length La** is adjusted by ring 2. FC2 switch is connected with the YELLOW and the GREEN cables. The position of the brass rings along the stainless steel supporting rod is easily adjustable.

**WARNING!** The electric reed switches can work only if connected to a wiring control circuit in order to activate the electric relay. Do not connect them in series between the power supply and the electric motor!