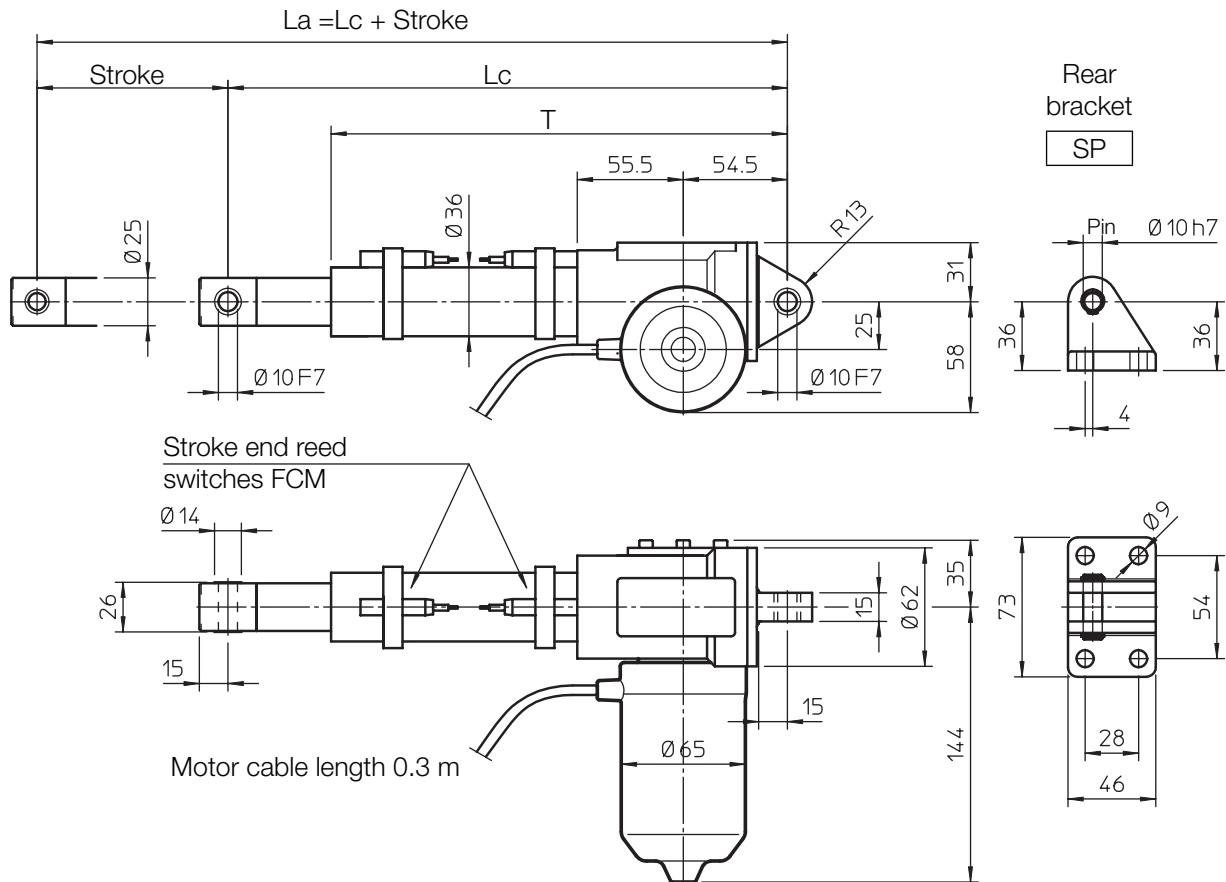


## OVERALL DIMENSIONS



STROKE CODE	STROKE [mm]	LENGTH		T [mm]	MASS [Kg]
		Lc [mm]	La [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

### 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

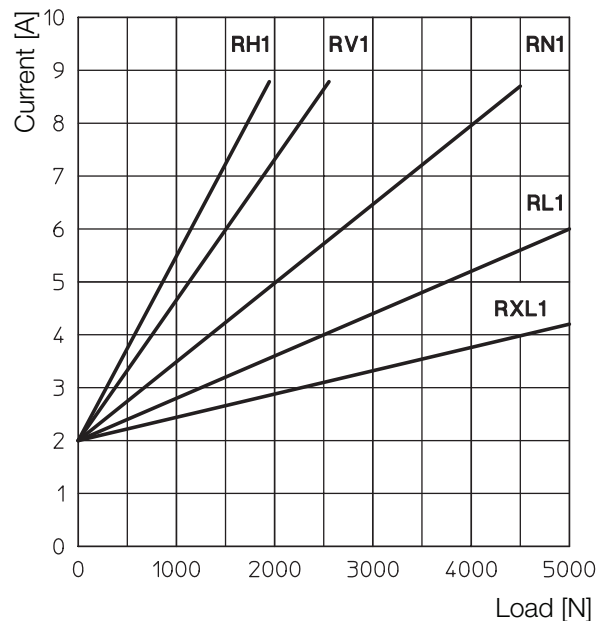
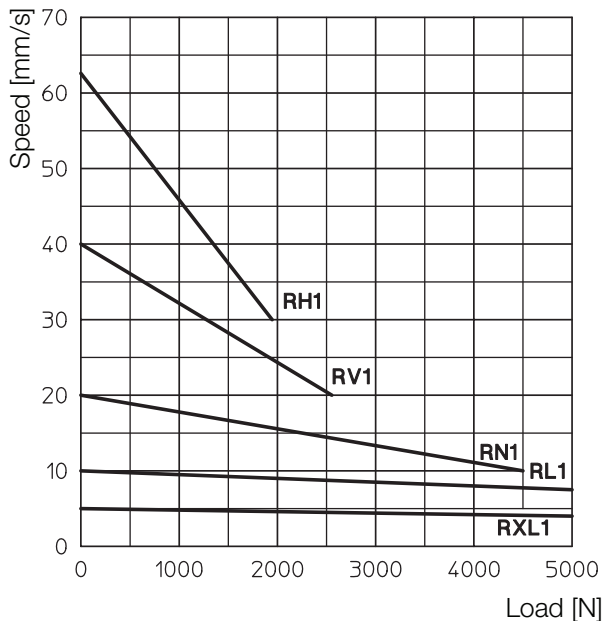
- Stainless steel push rod (code SS)
- Rear bracket (code SP)
- Mechanical overload protection: safety clutch (code FS)
- Two adjustable stroke end reed switches (code FCM)
- Extra switch for intermediate position

### 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)



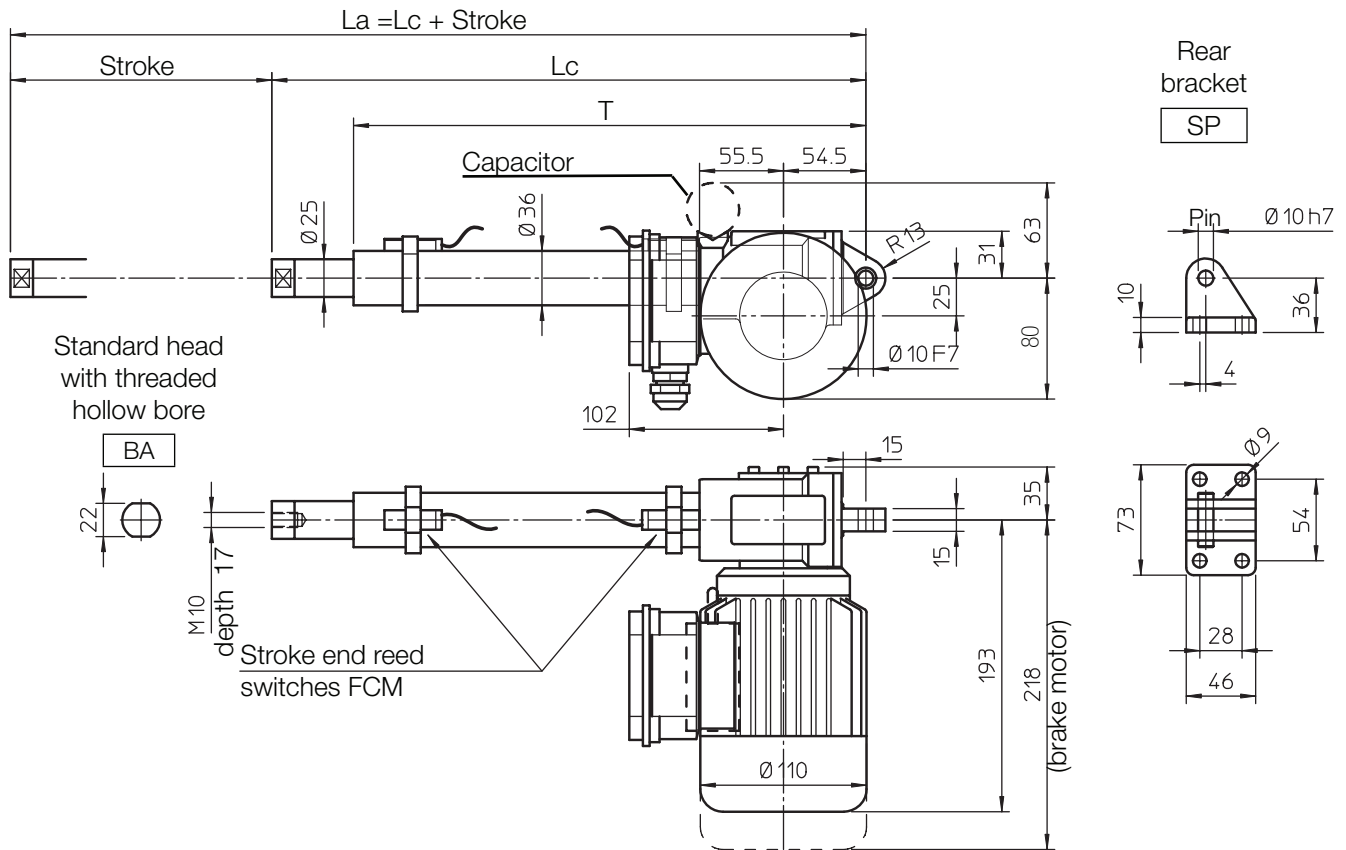
### Self-locking conditions

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.

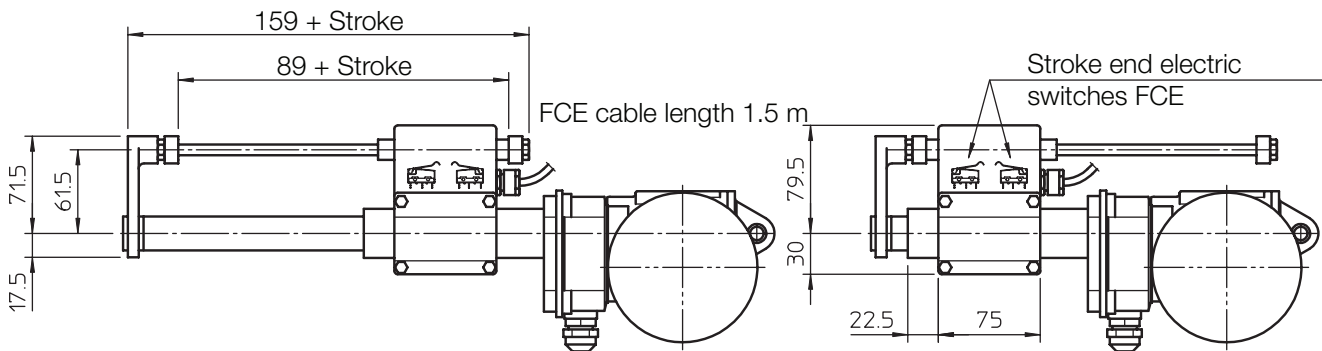
### ORDERING CODE EXAMPLE

BSA 08	RL2	C200	CC 24 V	FCM			
Actuator	Selected ratio	Required stroke	Motor	Stroke end switches	Accessories		Options

## OVERALL DIMENSIONS



STROKE CODE	Actuator - FCE switches		Actuator - FCM switches			T [mm]	MASS [Kg]		
	STROKE [mm]	LENGTH	STROKE [mm]	LENGTH			standard motor	brake motor	
		Lc [mm]	La [mm]		Lc [mm]	La [mm]			
C100	85	281	366	53	313	366	239	4.8	5.3
C150	135	331	466	103	363	466	289	4.9	5.4
C200	185	381	566	153	413	566	339	5.1	5.6
C250	235	431	666	203	463	666	389	5.2	5.7
C300	285	481	766	253	513	766	439	5.4	5.9
C400	385	581	966	353	613	966	539	5.7	6.2
C500	485	681	1166	453	713	1166	639	6.0	6.5

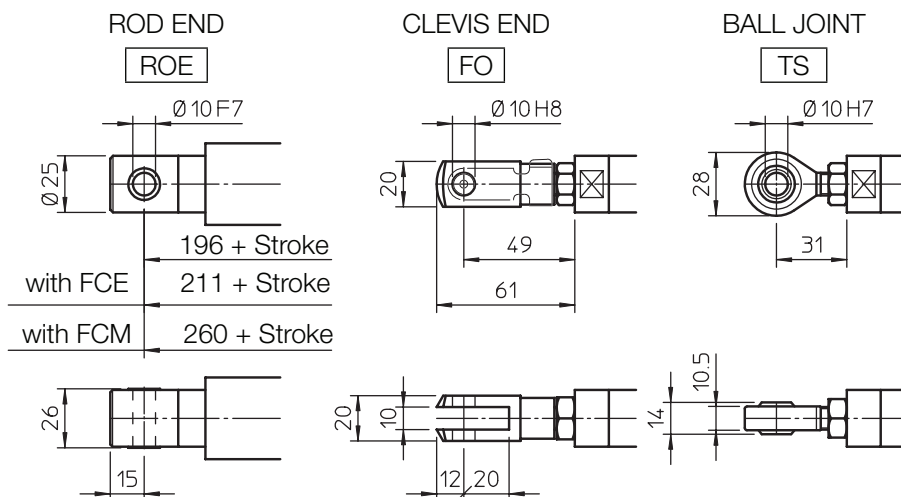


### Self-locking conditions

Self-locking condition is achievable with brake motor only.

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

**FRONT ATTACHMENT**



### PERFORMANCES AND FEATURES

- Push load up to 5 000 N
- Pull load up to 4 000 N
- Linear speed up to 58 mm/s
- Standard stroke lengths: 100, 150, 200, 250, 300, 400, 500 mm (for different / longer stroke lengths please contact us)
- 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
- Standard head BA or rod end ROE in stainless steel AISI 303 with bronze bush
- 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)
- Mechanical overload protection: safety clutch (code FS)
- Brake motor
- Two adjustable stroke end reed switches (code FCM)
- Extra switch for intermediate position
- Electro-mechanical stroke end switch (code FCE) (for linear speed up to 30 mm/s) (technical data on page 72)

### OPTIONS

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

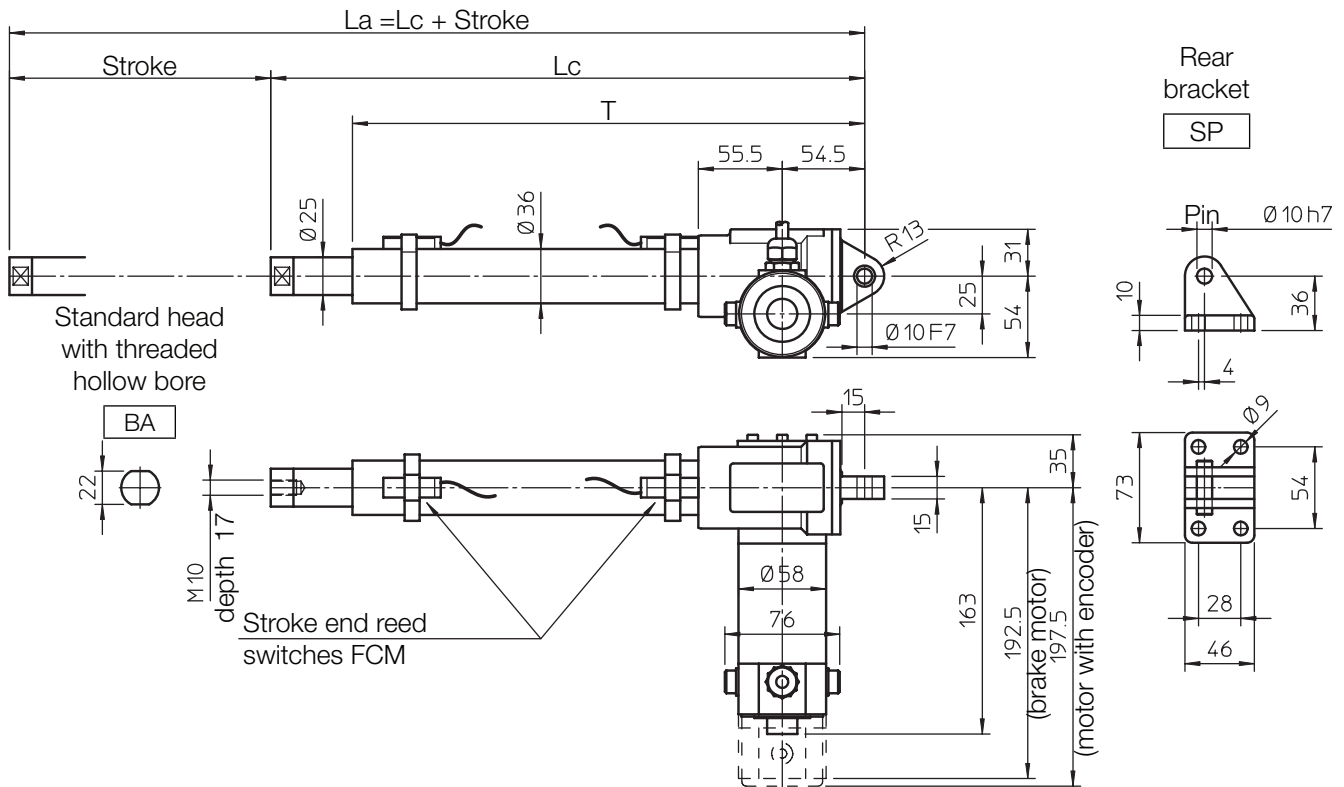
### PERFORMANCES with AC 3-phase 50 Hz 230/400 V or 1-phase 50 Hz 230 V motor

Ball screw BS 14 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	2180	29	1490	58
RV1	3290	19	2300	37
RN1	5000	9	4230	19
RL1	5000	4.5	5000	9
RXL1	5000	2.5	5000	4.5

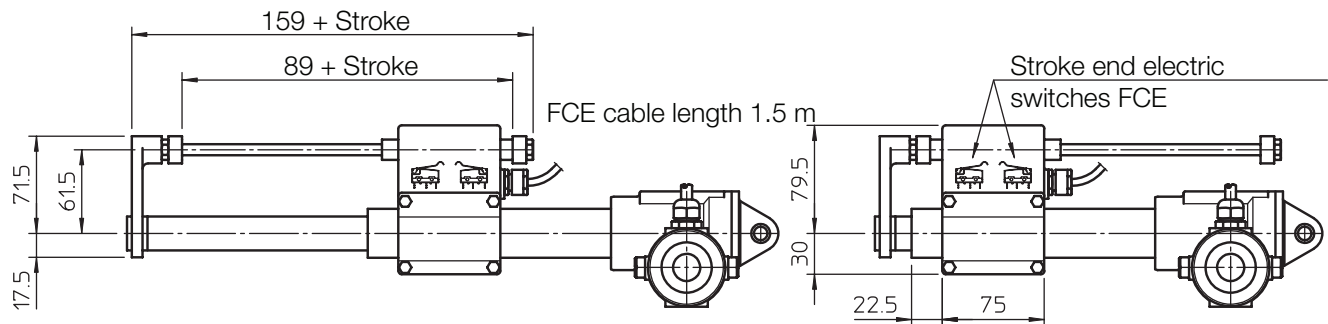
### ORDERING CODE EXAMPLE

BSA 10	RL1	C200	CA 230/400 V	FCM				
Actuator	Selected ratio	Required stroke	Motor	Stroke end switches	Accessories			Options

## OVERALL DIMENSIONS



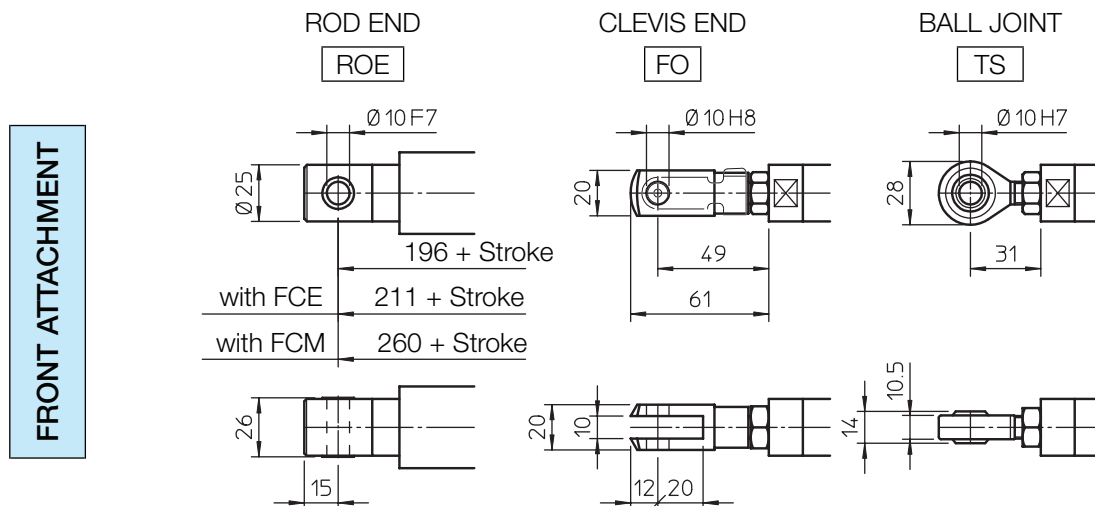
STROKE CODE	Actuator - FCE switches		Actuator - FCM switches			T [mm]	MASS [Kg]	
	STROKE [mm]	LENGTH	STROKE [mm]	LENGTH	LENGTH		standard motor	brake motor
		Lc [mm]	La [mm]		Lc [mm]	La [mm]		
C100	85	281	366	53	313	366	4.8	5.3
C150	135	331	466	103	363	466	4.9	5.4
C200	185	381	566	153	413	566	5.1	5.6
C250	235	431	666	203	463	666	5.2	5.7
C300	285	481	766	253	513	766	5.4	5.9
C400	385	581	966	353	613	966	5.7	6.2
C500	485	681	1166	453	713	1166	6.0	6.5



### 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.



### PERFORMANCES AND FEATURES

- Push load up to 5 000 N
- Pull load up to 4 000 N
- Linear speed up to 63 mm/s
- Standard stroke lengths: 100, 150, 200, 250, 300, 400, 500 mm (for different / longer stroke lengths please contact us)
- 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
- Standard head BA or rod end ROE in stainless steel AISI 303 with bronze bush
- 12 or 24 V DC motor (motor features details on page 69)
- Duty cycle with max load: 100% over 10 min at (-10 ... +40) °C
- Standard protection IP 54
- 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)
- Mechanical overload protection: safety clutch (code FS)
- Brake motor
- Two adjustable stroke end reed switches (code FCM)
- Extra switch for intermediate position
- Electro-mechanical stroke end switch (code FCE) (for linear speed up to 30 mm/s) (technical data on page 72)
- Bi-directional incremental encoder, 100 ppr with zero set pulse, Push-Pull, 8÷24 Vcc (code EH38) (encoder features details on page 75)

### 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

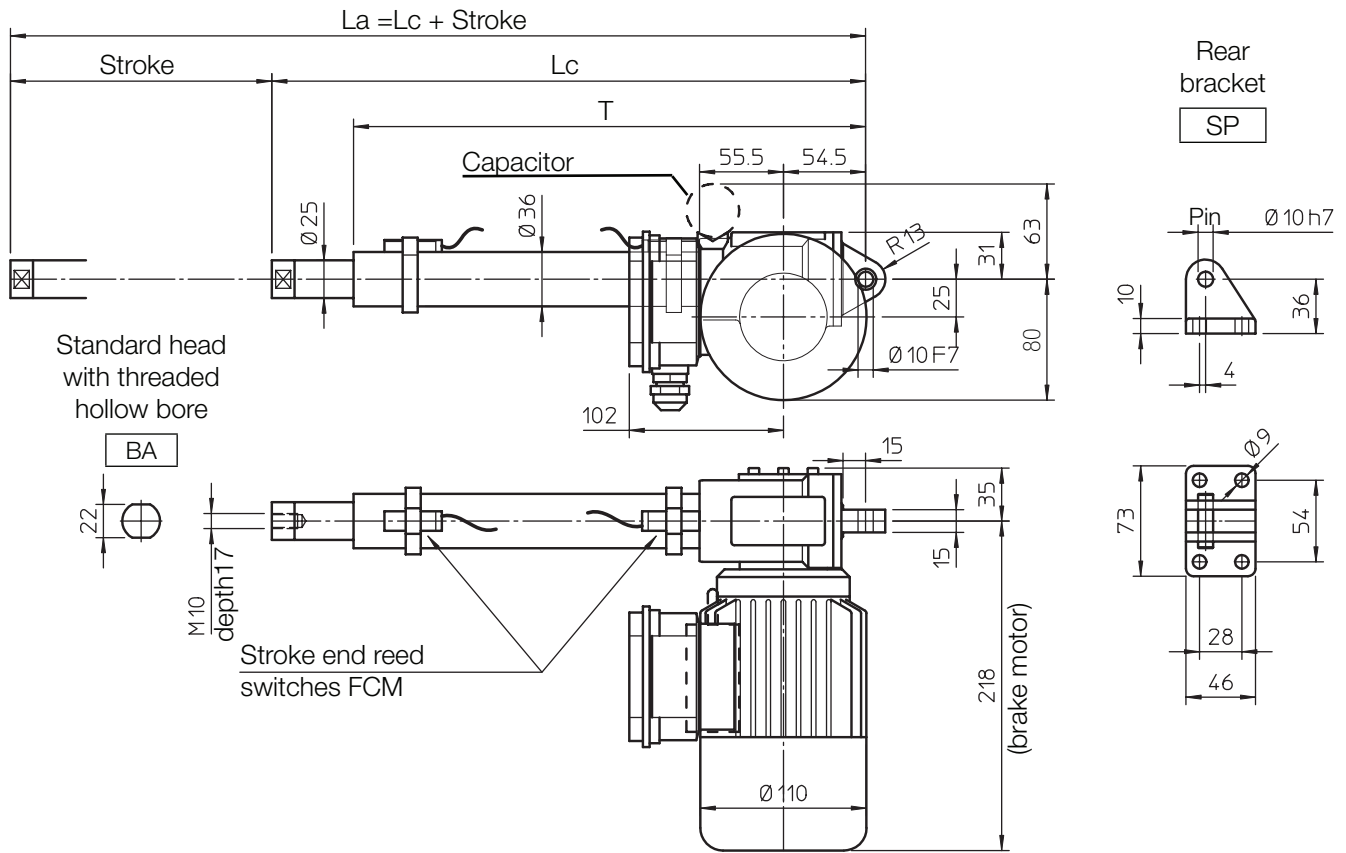
(Performances with 12 V DC motor: same load, linear speed 10 % less, electrical consumption 2 times more)

Ball screw BS 14 x 5			
RATIO	LOAD [N]	SPEED [mm/s]	CURRENT [A]
RH1	800	63	4
RV1	1260	40	4
RN1	2350	20	4
RL1	4130	10	4
RXL1	5000	5	3

### ORDERING CODE EXAMPLE

BSA 10	RL1	C200	CC 24 V	FCM				
Actuator	Selected ratio	Required stroke	Motor	Stroke end switches	Accessories			Options

## OVERALL DIMENSIONS



Length [mm]	
Lc	243 + Stroke
T	212 + Stroke

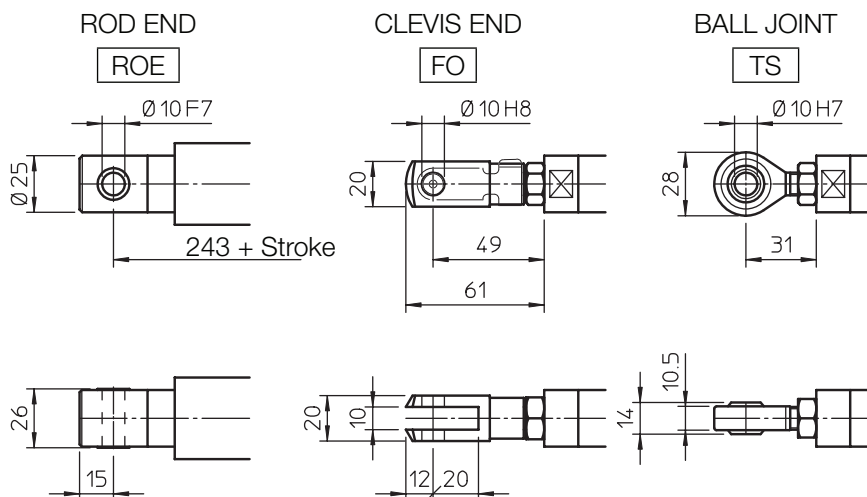
STROKE CODE	STROKE [mm]	LENGTH		T [mm]	MASS [Kg]
		Lc [mm]	La [mm]		
C100	100	343	443	312	5.4
C150	150	393	543	362	5.5
C200	200	443	643	412	5.7
C250	250	493	743	462	5.8
C300	300	543	843	512	6.0
C400	400	643	1043	612	6.3
C500	500	743	1243	712	6.6

### 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.

FRONT ATTACHMENT



### PERFORMANCES AND FEATURES

- Push load up to 5 000 N
- Pull load up to 4 000 N
- Linear speed up to 117 mm/s
- Standard stroke lengths: 100, 150, 200, 250, 300, 400, 500 mm (for different / longer stroke lengths please contact us)
- Ball screw BS 14 x 10 (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
- Standard head BA or rod end ROE in stainless steel AISI 303 with bronze bush
- AC 3-phase or 1-phase brakemotor (motor features details on page 70)
- Duty cycle with max load: 100% over 10 min at (-10 ... +40) °C

- Standard motor mounting position as per sketch (right-hand, code RH)
- Standard protection IP 54
- Long-life lubrication, maintenance free

### ACCESSORIES

- Different front attachments
- 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 AC 3-phase 50 Hz 230/400 V or 1-phase 50 Hz 230 V motor

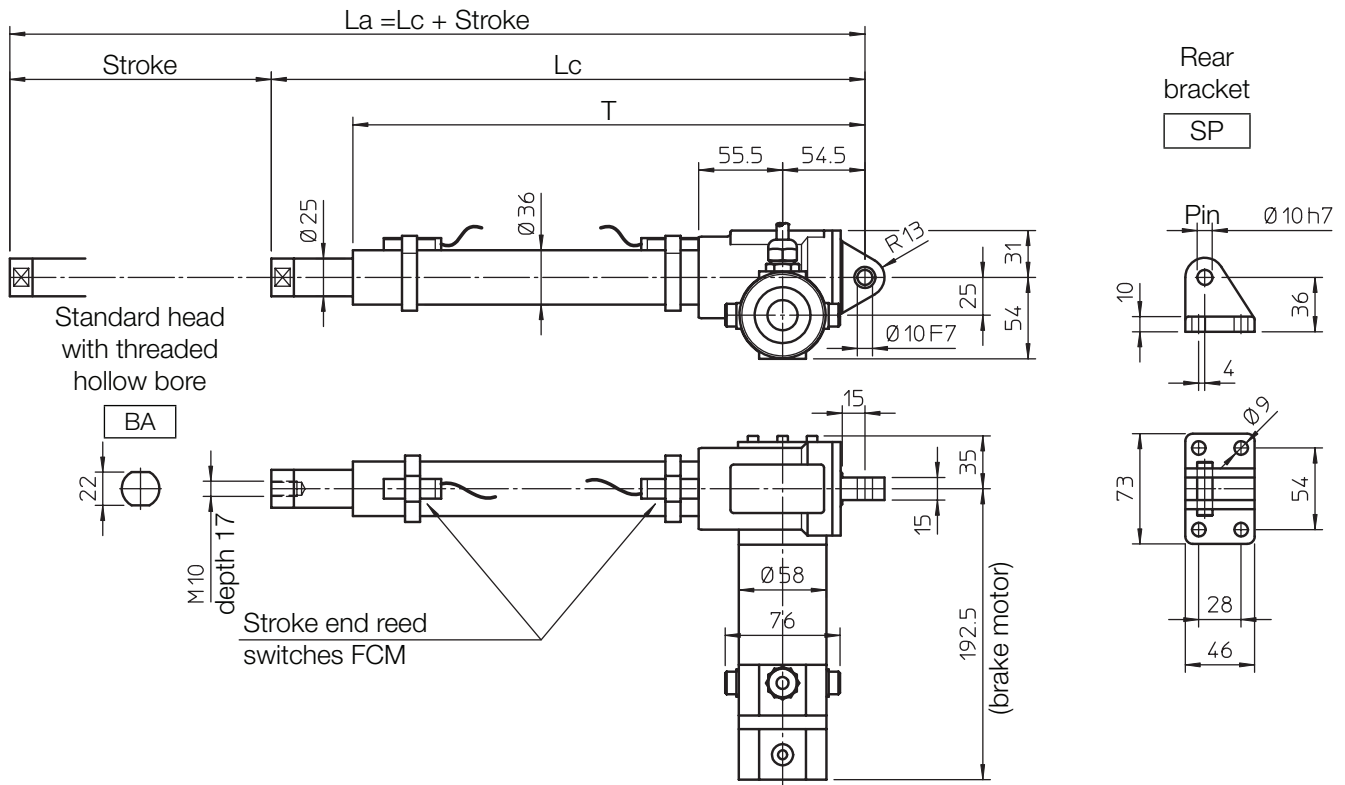
Ball screw BS 14 x 10				
RATIO	0.09 kW - 4 pole motor		0.12 kW - 2 pole motor	
	LOAD [N]	SPEED [mm/s]	LOAD [N]	SPEED [mm/s]
RH2	1120	58	760	117
RV2	1730	37	1170	75
RN2	3100	19	2220	37
RL2	5000	9.5	3790	19

### ORDERING CODE EXAMPLE

BSA 11	RL1	C200	CA 230/400 V	FCM				
Actuator	Selected ratio	Required stroke	Motor	Stroke end switches	Accessories			Options



## OVERALL DIMENSIONS



Length [mm]	
$L_c$	243 + Stroke
$T$	212 + Stroke

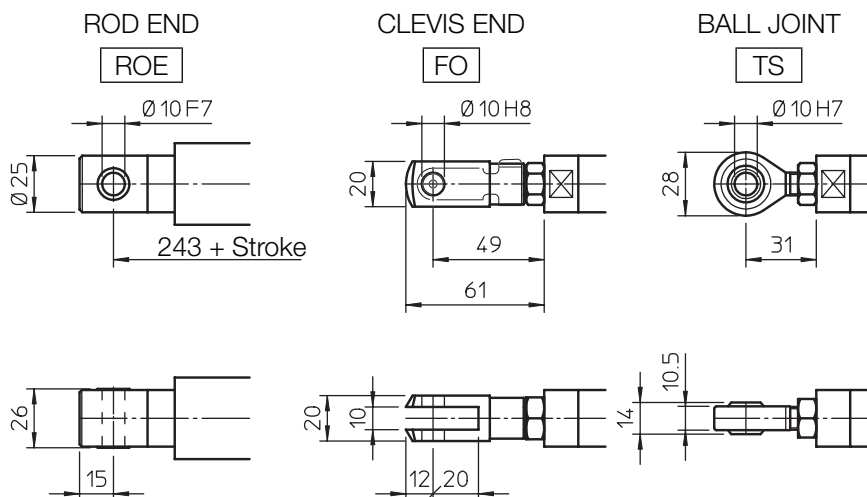
STROKE CODE	STROKE [mm]	LENGTH		T [mm]	MASS [Kg]
		$L_c$ [mm]	$L_a$ [mm]		
C100	100	343	443	312	4.1
C150	150	393	543	362	4.2
C200	200	443	643	412	4.4
C250	250	493	743	462	4.5
C300	300	543	843	512	4.7
C400	400	643	1043	612	5.0
C500	500	743	1243	712	5.3

### 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.

FRONT ATTACHMENT



### PERFORMANCES AND FEATURES

- Push-Pull load up to 5 000 N
- Linear speed up to 125 mm/s
- Standard stroke lengths: 100, 150, 200, 250, 300, 400, 500 mm (for different / longer stroke lengths please contact us)
- Ball screw BS 14 x 10 (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
- Standard head BA or rod end ROE in stainless steel AISI 303 with bronze bush
- 12 or 24 V DC brakemotor (motor features details on page 69)
- Duty cycle with max load: 100% over 10 min at (-10 ... +40) °C

- Standard motor mounting position as per sketch (right-hand, code RH)
- Standard protection IP 54
- Long-life lubrication, maintenance free

### ACCESSORIES

- Different front attachments
- 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

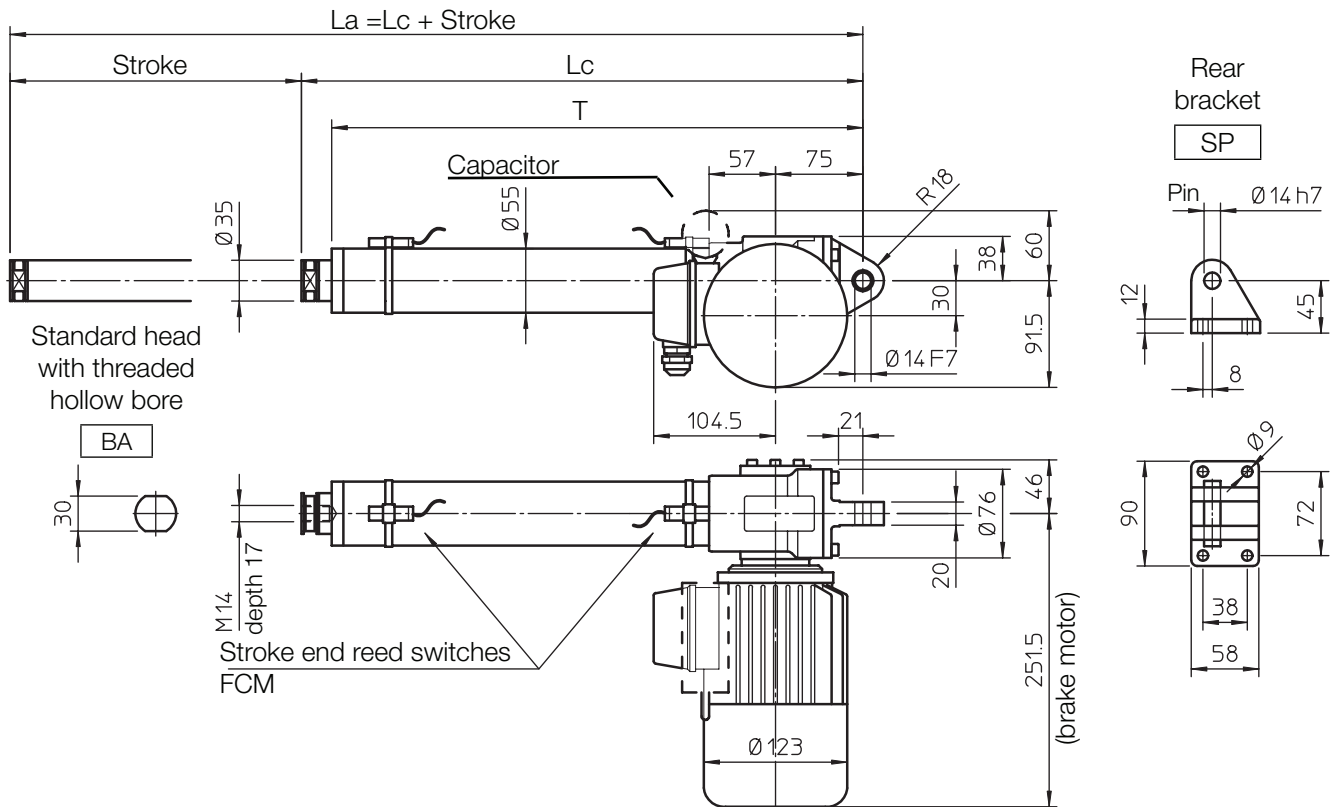
(Performances with 12 V DC motor: same load, linear speed 10 % less, electrical consumption 2 times more)

Ball screw BS 14 x 10			
RATIO	LOAD [N]	SPEED [mm/s]	CURRENT [A]
RH2	410	125	4
RV2	640	80	4
RN2	1200	40	4
RL2	2100	20	4

### ORDERING CODE EXAMPLE

BSA 11	RL1	C200	CC 24 V	FCM				
Actuator	Selected ratio	Required stroke	Motor	Stroke end switches	Accessories			Options

## OVERALL DIMENSIONS



Length	Actuator
Lc [mm]	279 + Stroke
T [mm]	238 + Stroke

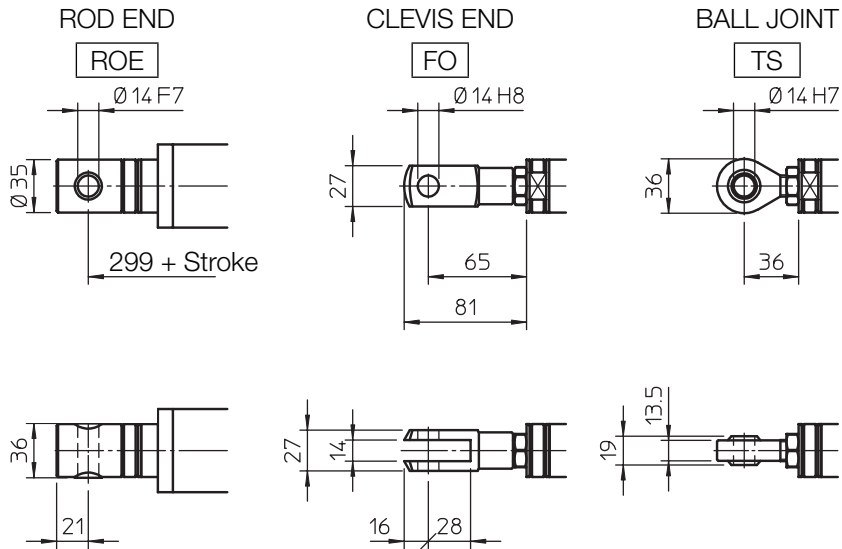
STROKE CODE	STROKE [mm]	LENGTH		T [mm]	MASS [Kg]
		Lc [mm]	La [mm]		
C100	100	379	479	338	8.9
C200	200	479	679	438	9.7
C300	300	579	879	538	10.5
C400	400	679	1079	638	11.3
C500	500	779	1279	738	12.1
C600	600	879	1479	838	12.9
C700	700	979	1679	938	13.7
C800	800	1079	1879	1038	14.5

### 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.

FRONT ATTACHMENT



### PERFORMANCES AND FEATURES

- Push-Pull load up to 9 000 N
- Linear speed up to 58 mm/s
- Standard stroke lengths: 100, 200, 300, 400, 500, 600, 700, 800 mm
- Ball screw BS 20 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
- Standard head BA or rod end ROE in stainless steel AISI 303 with bronze bush
- AC 3-phase or 1-phase brakemotor (motor features details on page 70)
- Duty cycle with max load: 100% over 10 min at (-10 ... +40) °C
- Standard motor mounting position as per sketch (right-hand, code RH)
- Standard protection IP 54
- Long-life lubrication, maintenance free

### ACCESSORIES

- Different front attachments
- 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 AC 3-phase 50 Hz 230/400 V or 1-phase 50 Hz 230 V motor

Ball screw BS 20 x 5				
RATIO	0.18 kW - 4 pole motor		0.25 kW - 2 pole motor	
	LOAD [N]	SPEED [mm/s]	LOAD [N]	SPEED [mm/s]
RV1	4300	29	3060	58
RN1	9000	7	9000	14
RL1	9000	3.5	9000	7

### ORDERING CODE EXAMPLE

BSA 12	RL1	C200	CA 230/400 V	FCM				
Actuator	Selected ratio	Required stroke	Motor	Stroke end switches	Accessories			Options