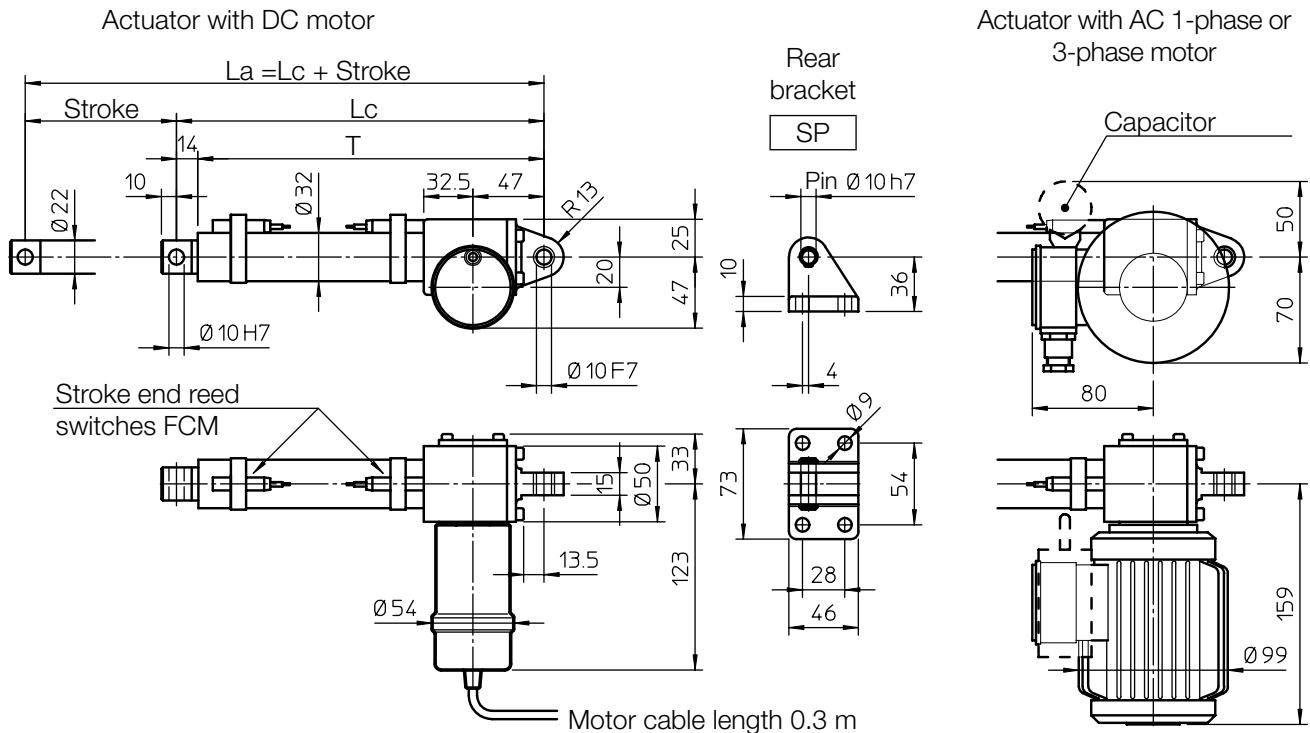


## OVERALL DIMENSIONS



STROKE CODE	STROKE [mm]	LENGTH		T [mm]	MASS with DC motor [kg]	MASS with AC motor [kg]
		Lc [mm]	La [mm]			
C100	100	243	343	229	1.35	3.20
C150	150	293	443	279	1.60	3.45
C200	200	343	543	329	1.85	3.70
C300	300	443	743	429	2.10	3.95

Length	Stroke ≤ 300 mm	Stroke > 300 mm
Lc [mm]	143 + Stroke	158 + Stroke
T [mm]	129 + Stroke	129 + Stroke

### PERFORMANCES AND FEATURES

- Pull-Push load up to 2 000 N
- Linear speed up to: 48 mm/s (DC motor)  
30 mm/s (AC motor)
- Standard stroke lengths: 100, 150, 200, 300 mm (for different / longer stroke lengths please contact us)
- Aluminium alloy housing and rear attachment, with bronze bush
- Anodized aluminium outer tube
- Anodized aluminium push rod – tolerance h8
- 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 motor mounting position as per sketch (right-hand, code RH)

- 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
  - with AC motor IP55
  - (tests made with not running actuator)
- Long-life lubrication, maintenance free

### ACCESSORIES

- Stainless steel push rod (code SS)
- Rear bracket (code SP)
- Two adjustable stroke end reed switches (code FCM)
- Extra switches for intermediate positions

### 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

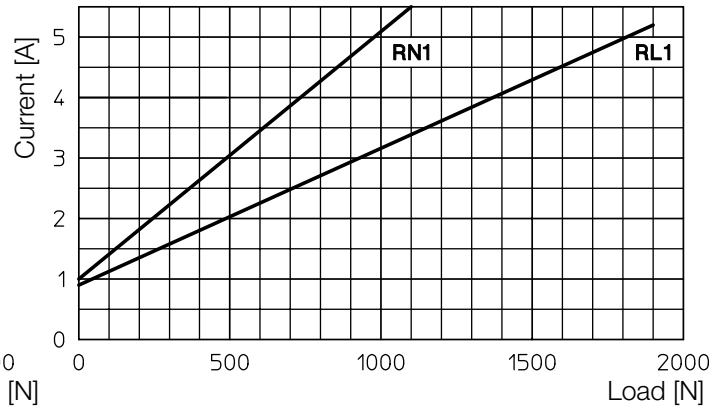
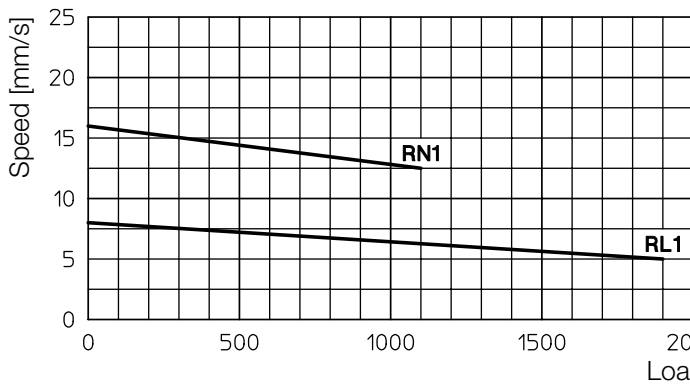
1-start acme screw Tr 13.5x3		
0.06 kW - 2 pole motor		
RATIO	LOAD [N]	SPEED [mm/s]
RN1	1500	11
RL1	2000	5.5

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

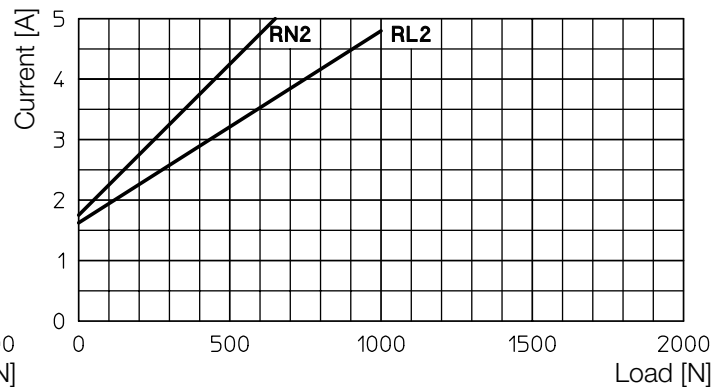
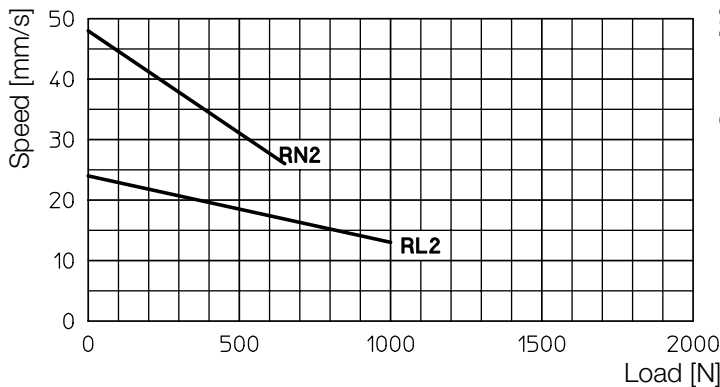
### PERFORMANCES with 24 V DC motor

(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)



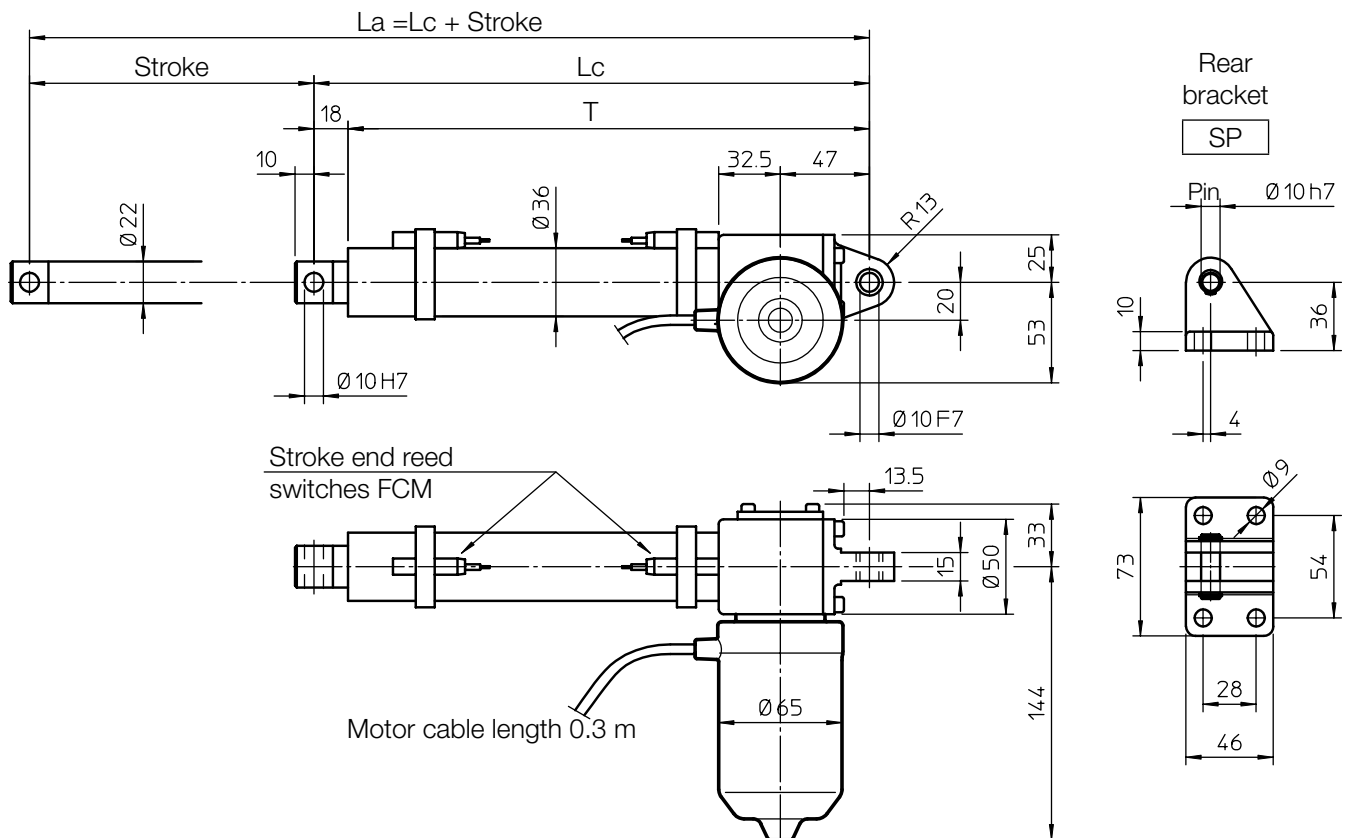
### Self-locking conditions

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

### ORDERING CODE EXAMPLE

ATL 02	RL1	C200	CC 24 V	FCM				
Actuator	Selected ratio	Required stroke	Motor	Stroke end switches	Accessories			Options

## OVERALL DIMENSIONS



STROKE CODE	STROKE [mm]	LENGTH		T [mm]	MASS [kg]
		Lc [mm]	La [mm]		
C100	100	243	343	225	2.00
C150	150	293	443	275	2.25
C200	200	343	543	325	2.50
C300	300	443	743	425	2.75

Length	Stroke $\leq$ 300 mm	Stroke $>$ 300 mm
Lc [mm]	143 + Stroke	158 + Stroke
T [mm]	125 + Stroke	125 + Stroke

## PERFORMANCES AND FEATURES

- Pull-Push load up to 2 500 N
- Linear speed up to 32 mm/s
- Standard stroke lengths: 100, 150, 200, 300 mm (for different / longer stroke lengths please contact us)
- Aluminium alloy housing and rear attachment, with bronze bush
- Anodized aluminium outer tube
- Anodized aluminium push rod – tolerance h8
- Stainless steel AISI 303 front attachment
- 12, 24 or 36 V DC motor with electromagnetic noise suppressor (motor features details on page 69)
- Duty cycle with max load: 15% over 10 min at (-10 ... +40) °C
- Standard motor mounting position as per sketch (right-hand, code RH)

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

## ACCESSORIES

- Stainless steel push rod (code SS)
- Rear bracket (code SP)
- Two adjustable stroke end reed switches (code FCM)
- Extra switches for intermediate positions

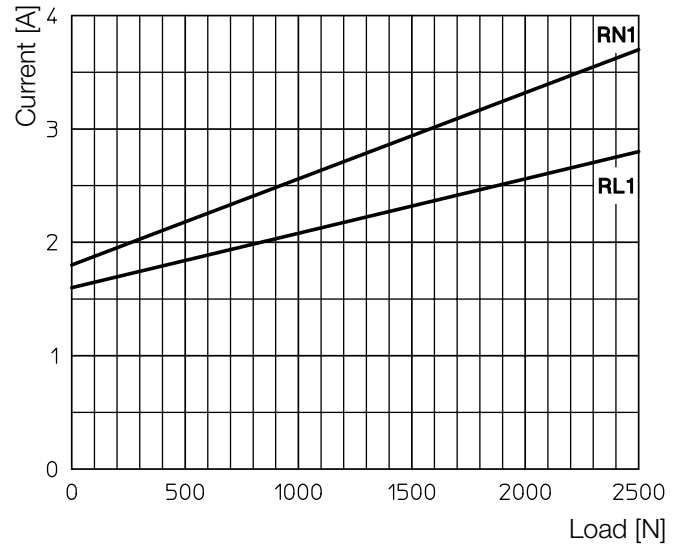
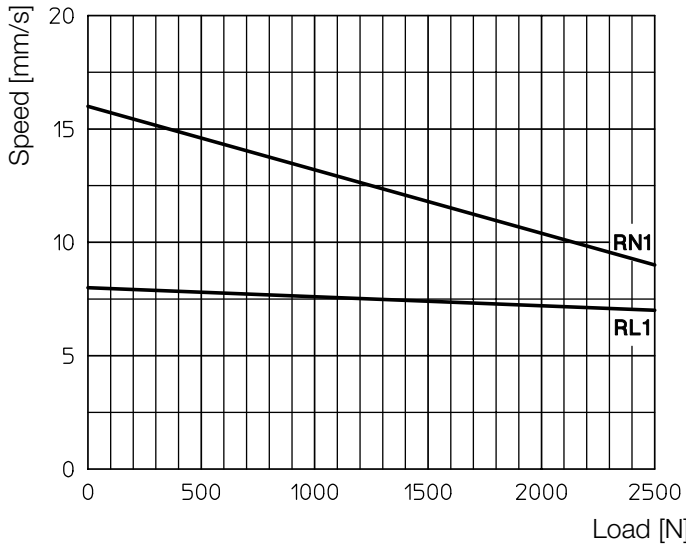
## OPTIONS

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

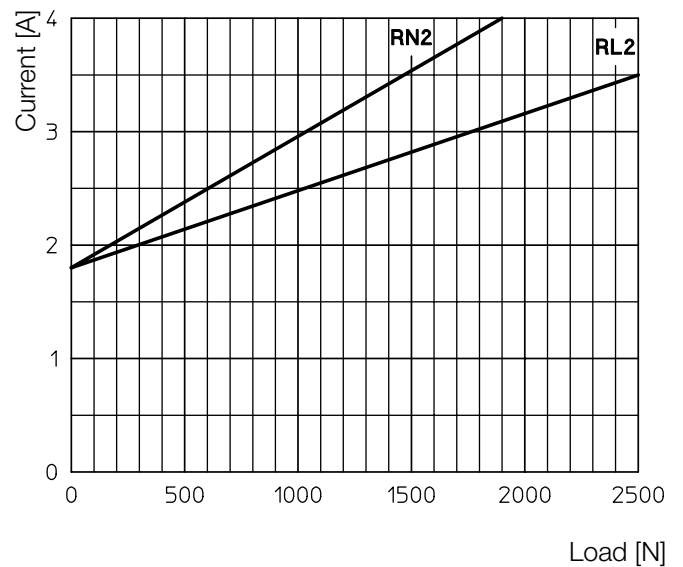
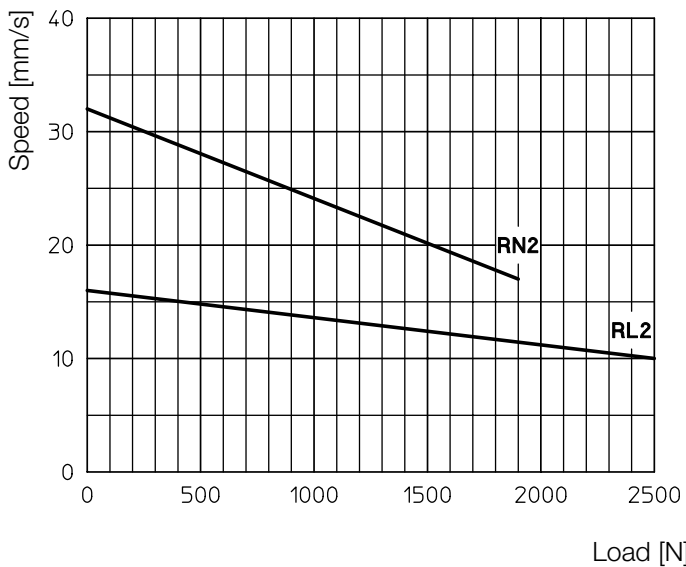
### PERFORMANCES with 24 V DC motor

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

#### 1-start acme screw Tr 14x4



#### 2-starts acme screw Tr 14x8 (P4)



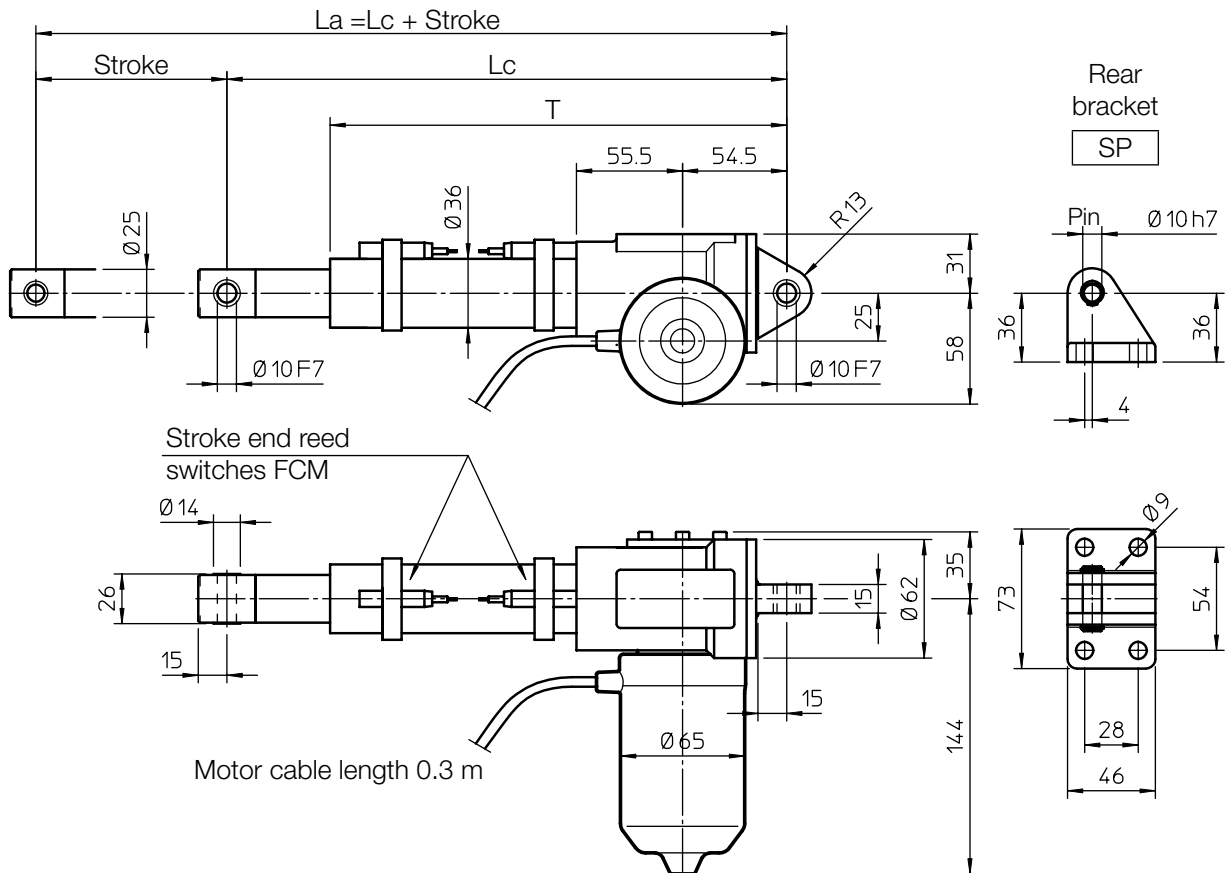
#### Self-locking conditions

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

#### ORDERING CODE EXAMPLE

ATL 05	RL1	C200	CC 24 V	FCM				
Actuator	Selected ratio	Required stroke	Motor	Stroke end switches	Accessories			Options

## OVERALL DIMENSIONS



STROKE CODE	Actuator without FCM			Actuator with FCM			T [mm]	MASS [Kg]
	STROKE [mm]	LENGTH		STROKE [mm]	LENGTH			
		Lc [mm]	La [mm]		Lc [mm]	La [mm]		
C100	100	266	366	73	293	366	239	3.5
C150	150	316	466	123	343	466	289	3.7
C200	200	366	566	173	393	566	339	3.8
C300	300	466	766	273	439	766	439	4.1
C400	400	566	966	373	593	966	539	4.4
C500	500	666	1166	473	693	1166	639	4.7

### PERFORMANCES AND FEATURES

- Pull-Push load up to 4 000 N
- Linear speed up to 150 mm/s
- Standard stroke lengths: 100, 150, 200, 300, 400, 500 mm (for different / longer stroke lengths please contact us)
- 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
- 12, 24 or 36 V DC motor with electromagnetic noise suppressor (motor features details on page 69)
- Duty cycle with max. load: 15% over 10 min at (-10 ... +40) °C
- Standard motor mounting position as per sketch (right-hand, code RH)
- Standard protection 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)
- Long-life lubrication, maintenance free

Length	with FCE	with FCM
Lc [mm]	166 + Stroke	220 + Stroke
T [mm]	139 + Stroke	166 + Stroke

### ACCESSORIES

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

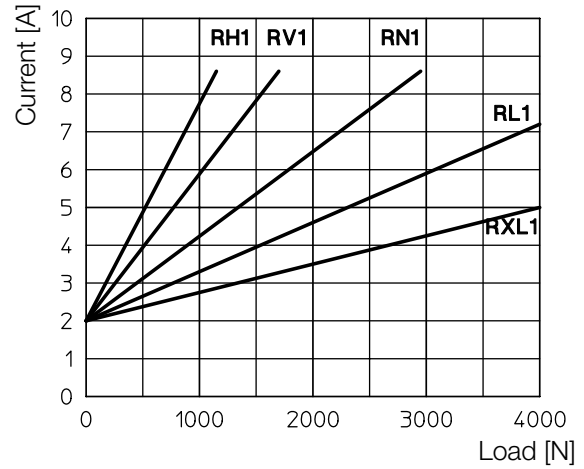
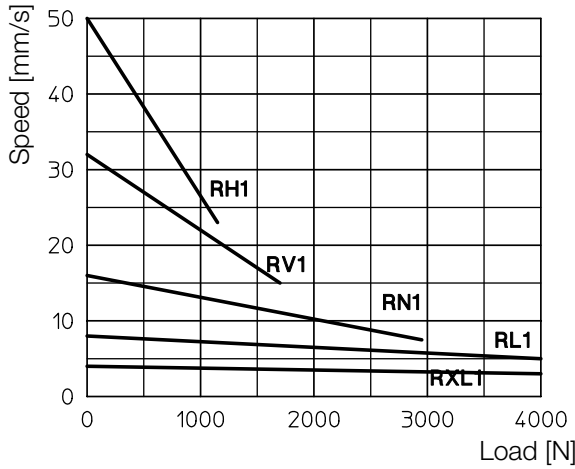
### OPTIONS

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

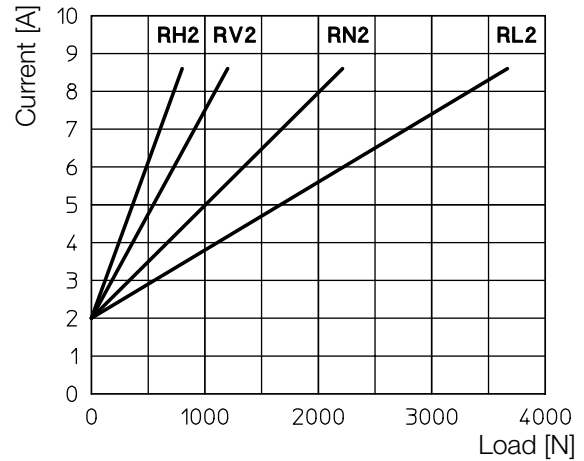
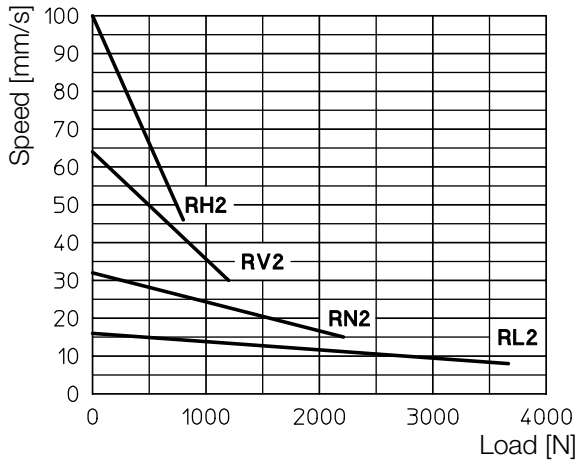
### PERFORMANCES with 24 V DC motor

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

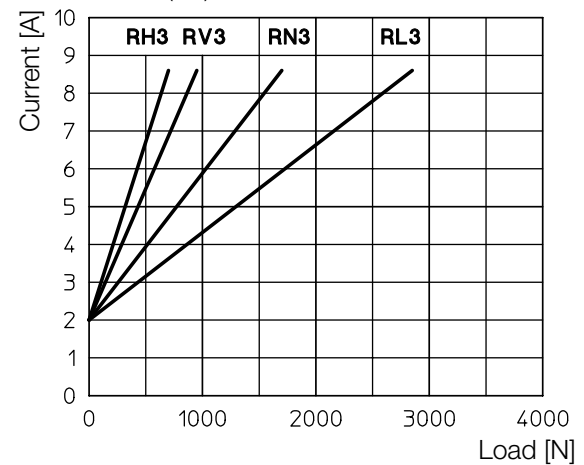
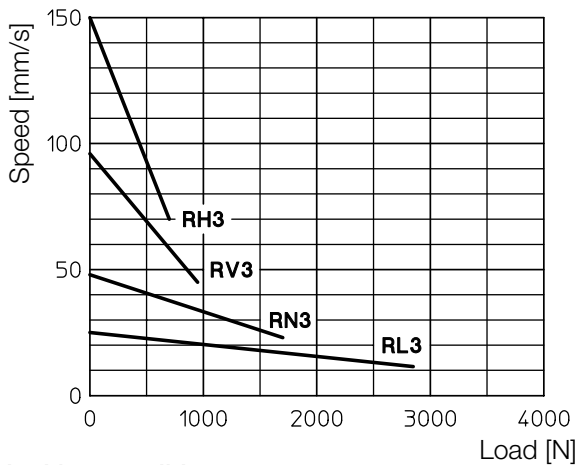
#### 1-start acme screw Tr 14x4



#### 2-starts acme screw Tr 14x8 (P4)



#### 3-starts acme screw Tr 14x12 (P4)



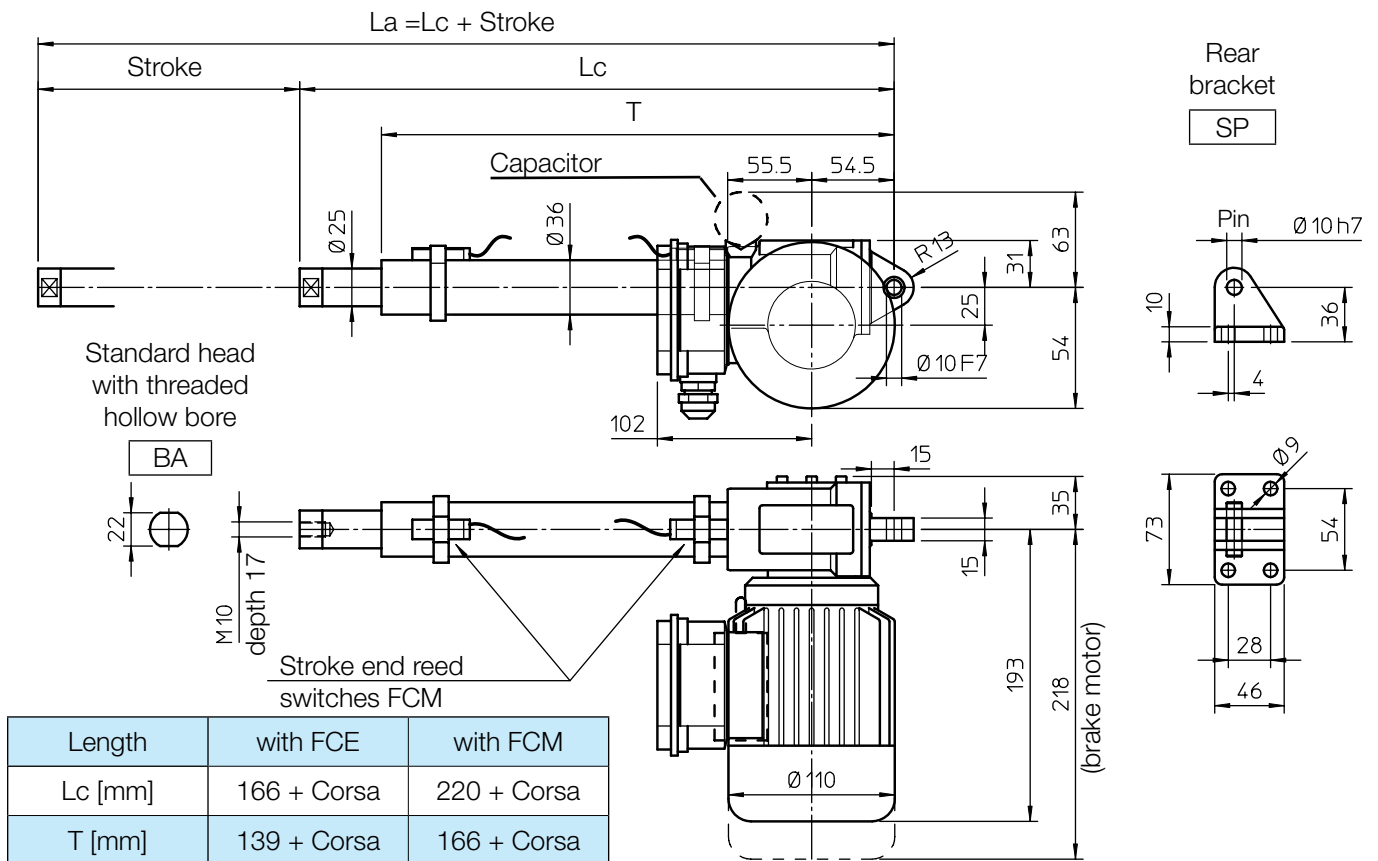
#### Self-locking conditions

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

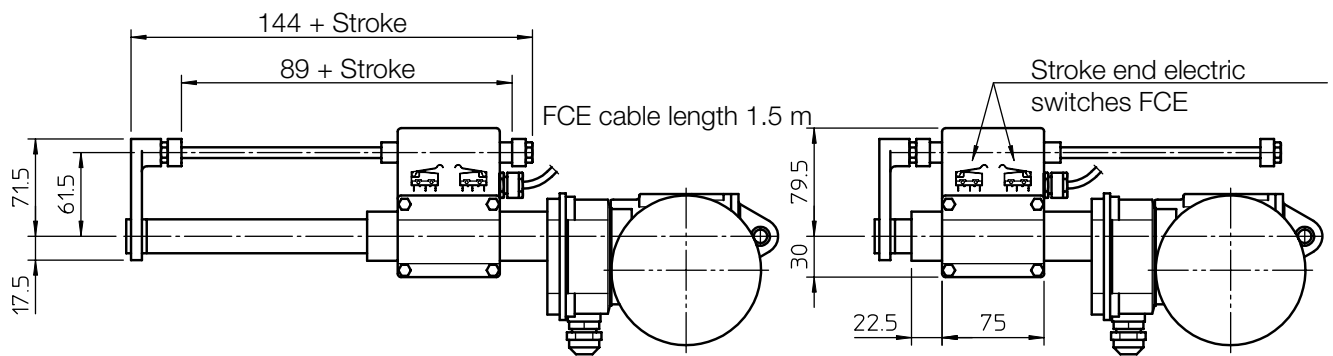
#### ORDERING CODE EXAMPLE

ATL 08	RL1	C200	CC 24 V	FCM			
Actuator	Selected ratio	Required stroke	Motor	Stroke end switches	Accessories		Options

## OVERALL DIMENSIONS



STROKE CODE	C100	C150	C200	C300	C400	C500
Working stroke length with FCE [mm]	100	150	200	300	400	500
Working stroke length with FCM [mm]	73	123	173	273	373	473



ROD END

ROE

CLEVIS END

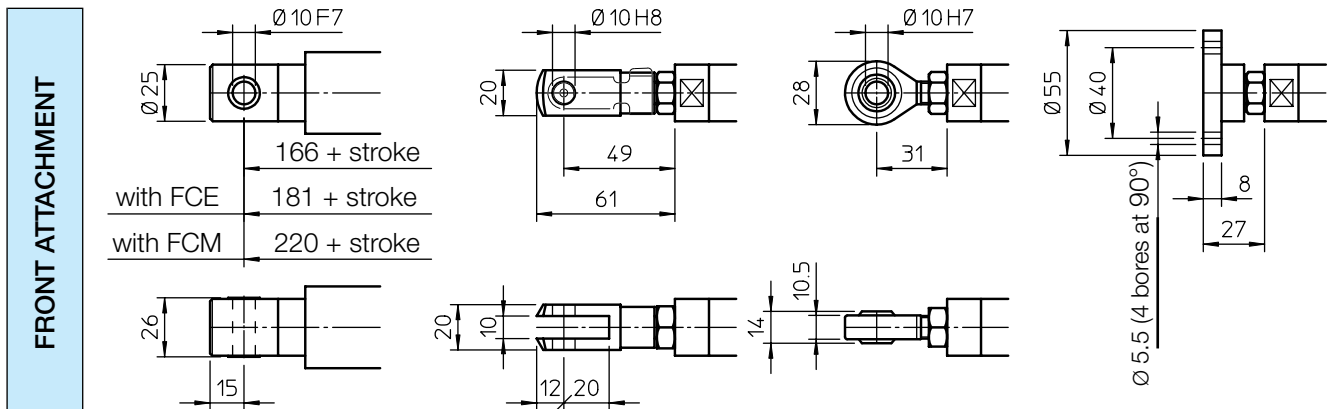
FO

BALL JOINT

TS

FLANGE END

FL



## PERFORMANCES AND FEATURES

- Push load up to 5 000 N
- Pull load up to 4 000 N
- Linear speed up to 140 mm/s
- Standard stroke lengths: 100, 150, 200, 300, 400, 500 mm (for different / longer stroke lengths please contact us)
- 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 motor (motor features details on page 70)
- Duty cycle with max load: 30% over 10 min at (-10...+40) °C
- Standard protection IP55 (IP54 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 switches for intermediate positions
- Electromechanical stroke end switch for linear speed up to 30 mm/s (code FCE) (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

1-start acme screw Tr 14x4				
RATIO	0.09 kW - 4 pole motor		0.12 kW - 2 pole motor	
	LOAD [N]	SPEED [mm/s]	LOAD [N]	SPEED [mm/s]
RH1	1750	23	1250	47
RV1	2620	15	1860	30
RN1	4490	7.5	3230	15
RL1	5000	3.5	5000	7.5
RXL1	5000	2	5000	3.5

2-starts acme screw Tr 14x8 (P4)				
RATIO	0.09 kW - 4 pole motor		0.12 kW - 2 pole motor	
	LOAD [N]	SPEED [mm/s]	LOAD [N]	SPEED [mm/s]
RH2	1070	47	790	93
RV2	1620	30	1180	60
RN2	2880	15	2080	30
RL2	4800	7.5	3520	15

3-starts acme screw Tr 14x12 (P4)				
RATIO	0.09 kW - 4 pole motor		0.12 kW - 2 pole motor	
	LOAD [N]	SPEED [mm/s]	LOAD [N]	SPEED [mm/s]
RH3	800	70	560	140
RV3	1210	45	860	90
RN3	2190	22	1540	45
RL3	3680	11	2680	22

### Self-locking conditions

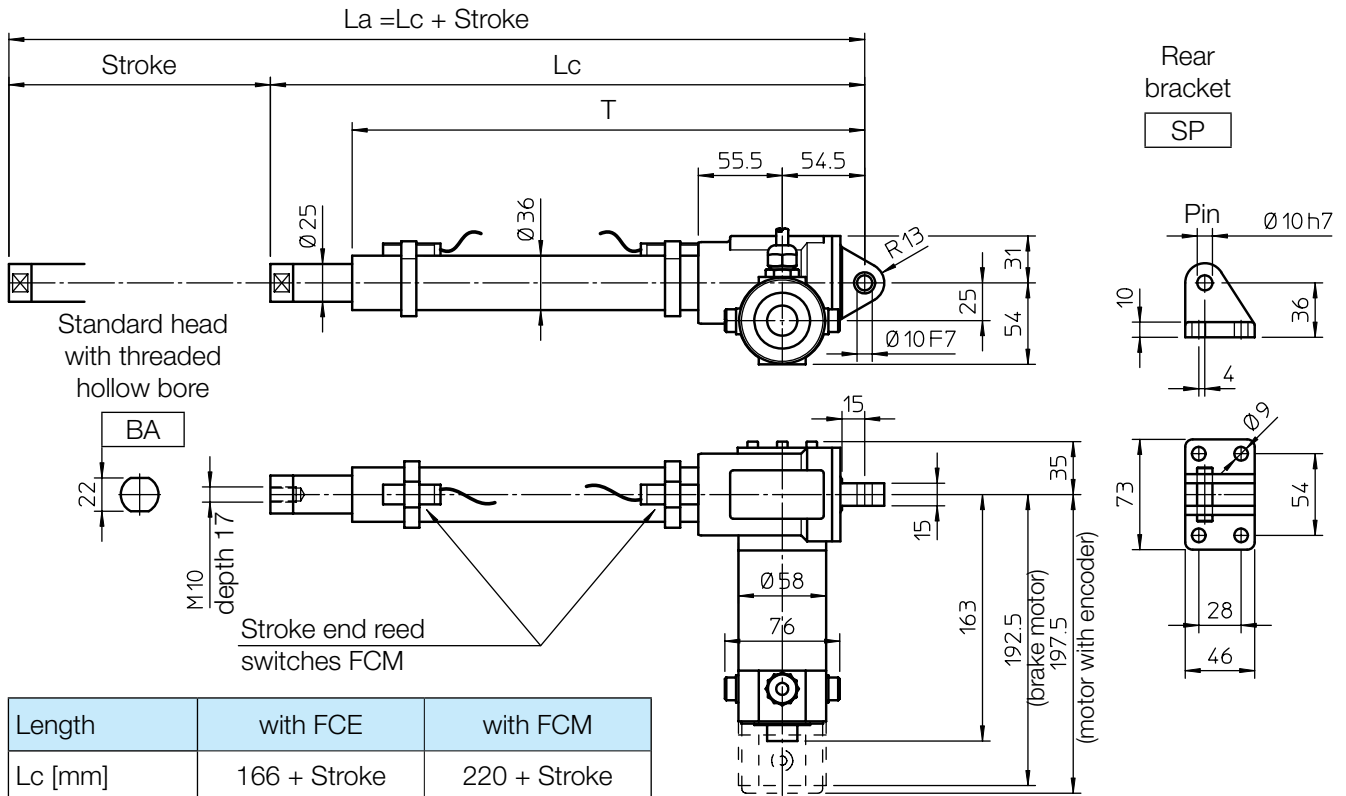
Information about statically self-locking conditions with pull or push load on page 68.

### ORDERING CODE EXAMPLE

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

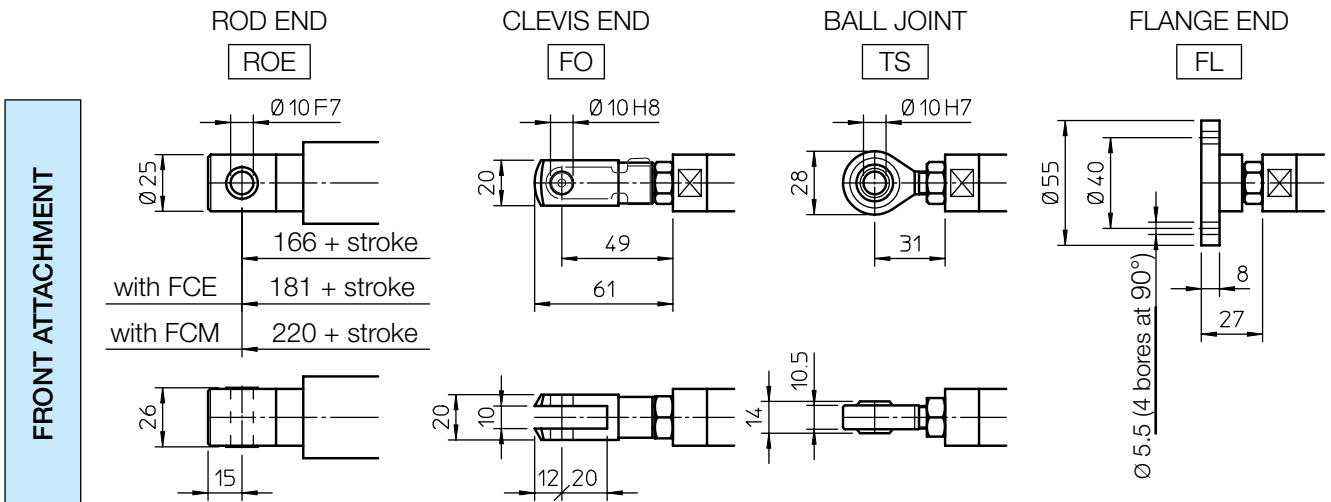
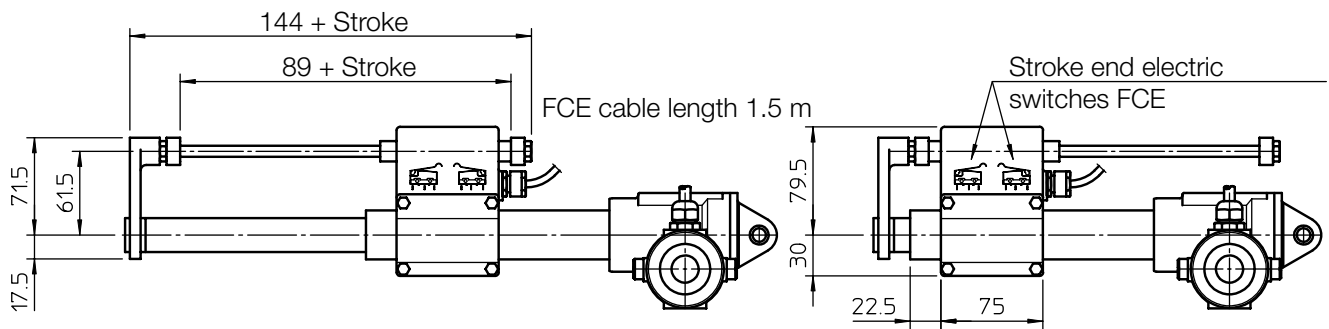


## OVERALL DIMENSIONS



Length	with FCE	with FCM
Lc [mm]	166 + Stroke	220 + Stroke
T [mm]	139 + Stroke	166 + Stroke

STROKE CODE	C100	C150	C200	C300	C400	C500
Working stroke length with FCE [mm]	100	150	200	300	400	500
Working stroke length with FCM [mm]	73	123	173	273	373	473





# ACME SCREW LINEAR ACTUATOR ATL 10 DC motor

## PERFORMANCES AND FEATURES

- Pull-Push load up to 4 000 N
- Linear speed up to 150 mm/s
- Standard stroke lengths: 100, 150, 200, 300, 400, 500 mm (for different / longer stroke lengths please contact us)
- 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
- DC 12 or 24 V motor (motor features details on page 69)
- Duty cycle with max load: 30% over 10 min at (-10 ... +40) °C
- Standard protection IP54
- 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)
- Brakemotor
- Bi-directional incremental encoder, 100 ppr with zero set pulse, Push-Pull, 8÷24 Vdc (code EH38)
- Two adjustable stroke end reed switches (code FCM)
- Extra switches for intermediate positions
- Electromechanical stroke end switch for linear speed up to 30 mm/s (code FCE) (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 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 14x4			
RATIO	LOAD [N]	SPEED [mm/s]	CURRENT [A]
RH1	680	50	4
RV1	1020	32	4
RN1	1770	16	4
RL1	2960	8	4
RXL1	4000	4	4

2-starts acme screw Tr 14x8 (P4)			
RATIO	LOAD [N]	SPEED [mm/s]	CURRENT [A]
RH2	430	100	4
RV2	650	64	4
RN2	1160	32	4
RL2	1970	16	4

3-starts acme screw Tr 14x12 (P4)			
RATIO	LOAD [N]	SPEED [mm/s]	CURRENT [A]
RH3	310	150	4
RV3	470	96	4
RN3	840	48	4
RL3	1430	24	4

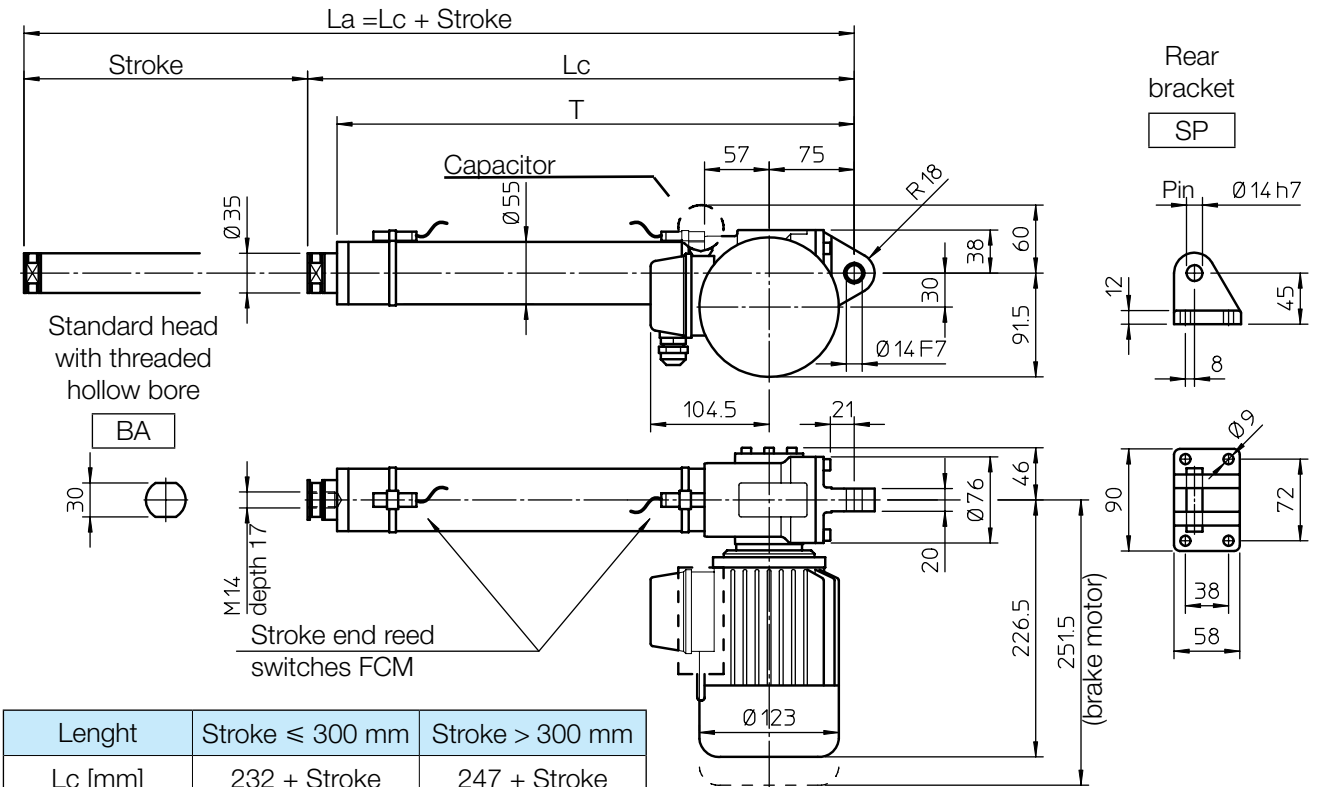
## Self-locking conditions

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

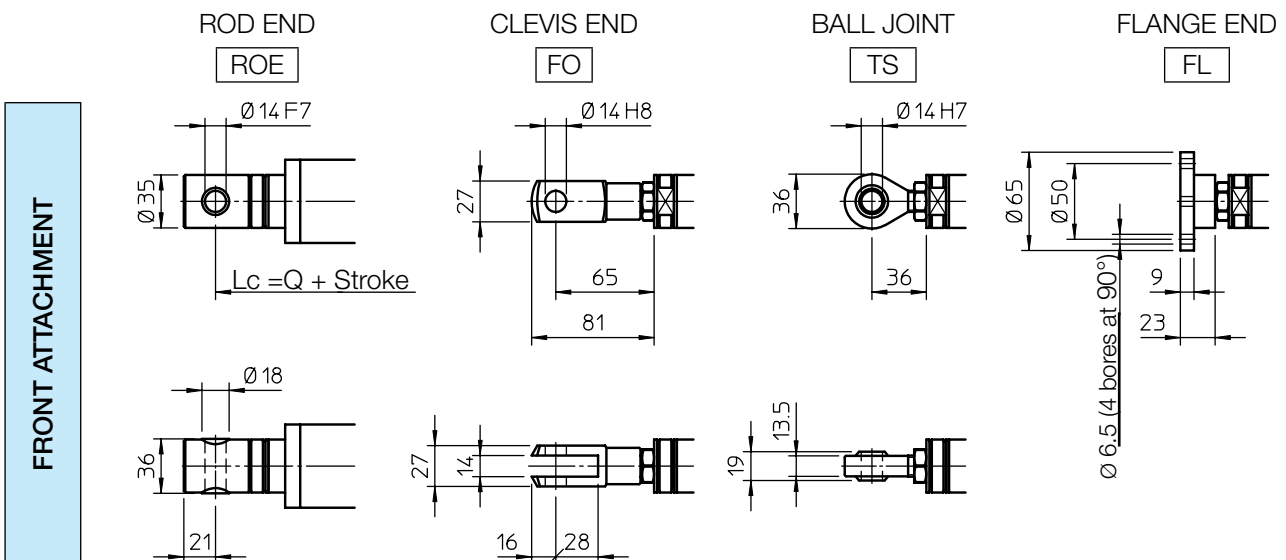
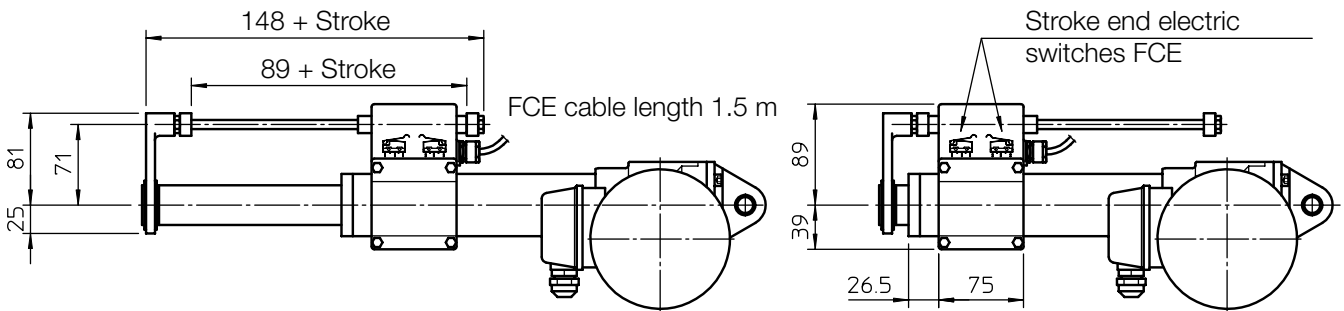
## ORDERING CODE EXAMPLE

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

## OVERALL DIMENSIONS



Length	Stroke $\leq 300$ mm	Stroke $> 300$ mm
$Lc$ [mm]	$232 + \text{Stroke}$	$247 + \text{Stroke}$
$T$ [mm]	$206 + \text{Stroke}$	$206 + \text{Stroke}$
$Q$ [mm]	252	267



## PERFORMANCES AND FEATURES

- Push load up to 11 000 N
- Pull load up to 8 000 N
- Linear speed up to 93 mm/s
- Standard stroke lengths:  
100, 150, 200, 300, 400, 500, 600, 700, 800 mm  
(for different /longer stroke lengths please contact us)
- Aluminium alloy housing and rear attachment,  
with bronze bush
- Anodized aluminium outer tube
- Chrome-plated steel push rod – tolerance f7
- Standard front head BA or rod end ROE  
in stainless steel AISI 303 with bronze bush
- AC 3-phase or 1-phase motor  
(motor features on page 70)
- Standard protection IP55 (IP54 with brake)
- Duty cycle with max load:  
30% over 10 min at (-10 ... +40) °C
- 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 switches for intermediate positions
- Electro-mechanical stroke end switch  
for linear speed up to 30 mm/s  
(code FCE)  
(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

1-start acme screw Tr 18x4				
RATIO	0.18 kW - 4 pole motor		0.25 kW - 2 pole motor	
	LOAD [N]	SPEED [mm/s]	LOAD [N]	SPEED [mm/s]
RV1	3130	23	2450	47
RN1	9620	5.5	7320	11
RL1	11000	2.5	11000	5.5

2-starts acme screw Tr 18x8 (P4)				
RATIO	0.18 kW - 4 pole motor		0.25 kW - 2 pole motor	
	LOAD [N]	SPEED [mm/s]	LOAD [N]	SPEED [mm/s]
RV2	2070	47	1590	93
RN2	6710	11	4500	22
RL2	10280	5.5	7660	11

## Self-locking conditions

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

## ORDERING CODE EXAMPLE

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