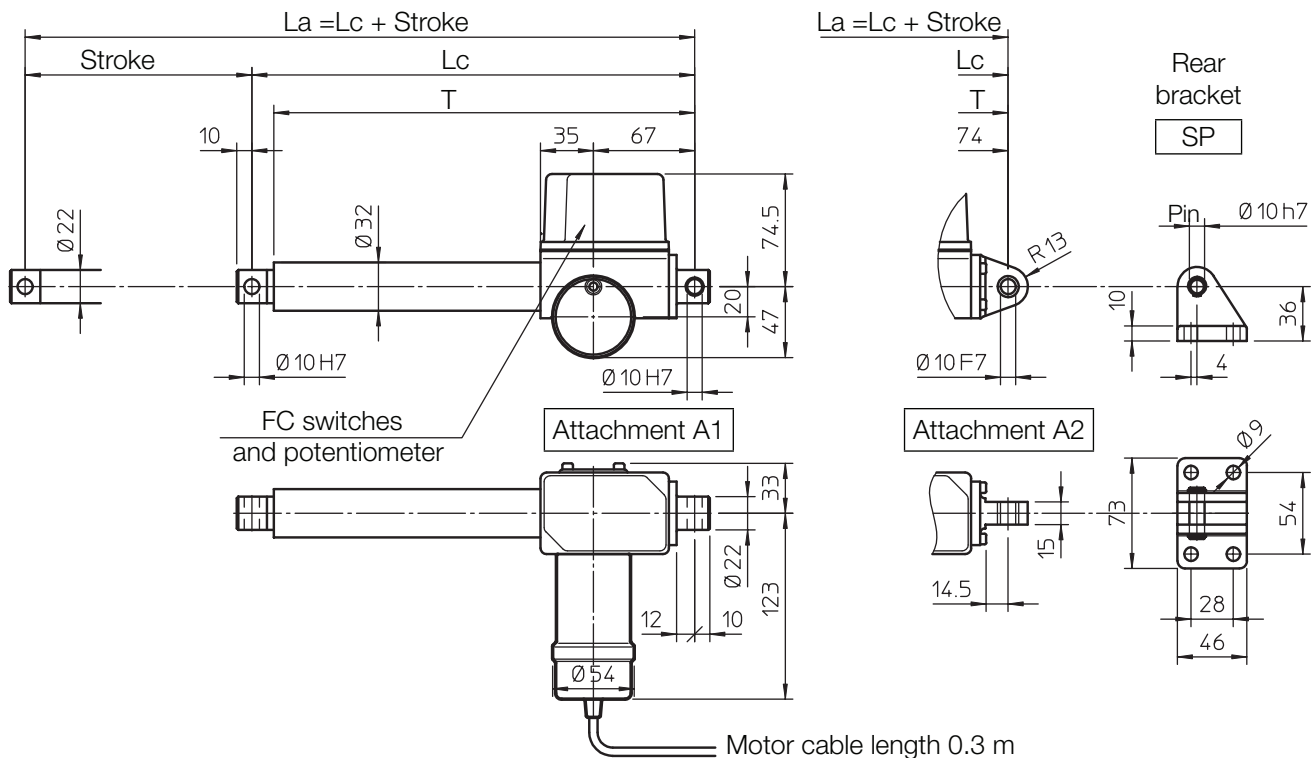


OVERALL DIMENSIONS



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

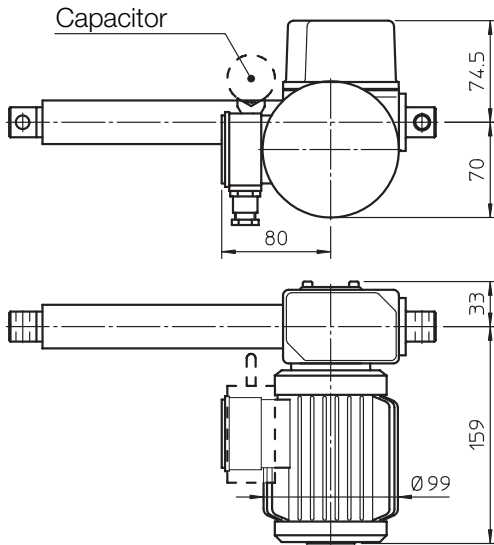
- Stainless steel push rod (code SS)
- Rear bracket (code SP) with rear attachment A2
- Adjustable electric stroke end switches (code FC2)
- Adjustable electric stroke end switches, switching off the motor (not available with AC 3-phase motor) (code FC2X)
- Extra switch for intermediate position (code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



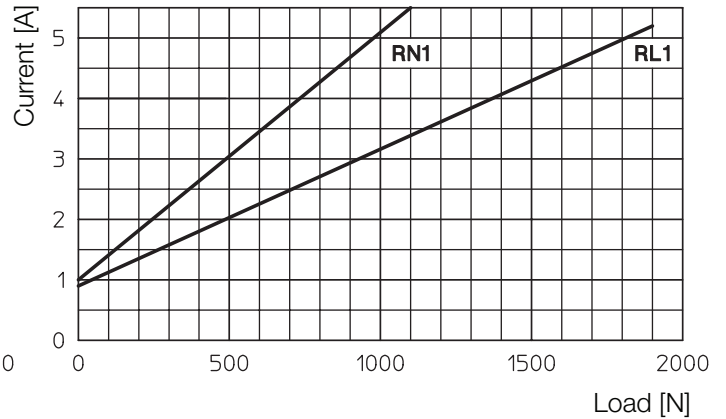
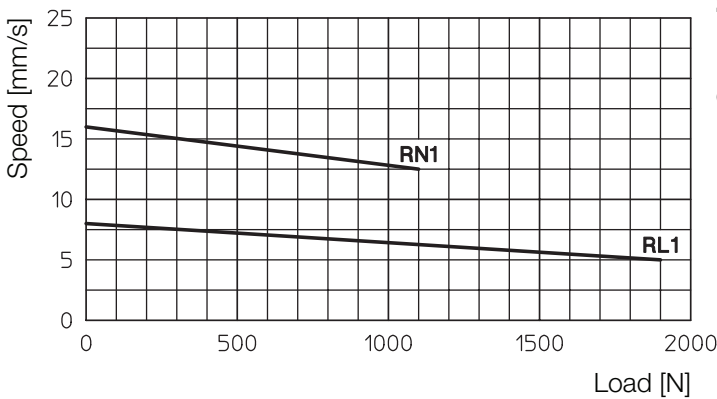
1-start acme screw Tr 13.5×3		
0.06 kW - 2 pole motor		
RATIO	LOAD [N]	SPEED [mm/s]
RN1	1500	11
RL1	2000	5.5

2-starts acme screw Tr 14×8 (P4)		
0.06 kW - 2 pole motor		
RATIO	LOAD [N]	SPEED [mm/s]
RN2	1000	30
RL2	1100	15

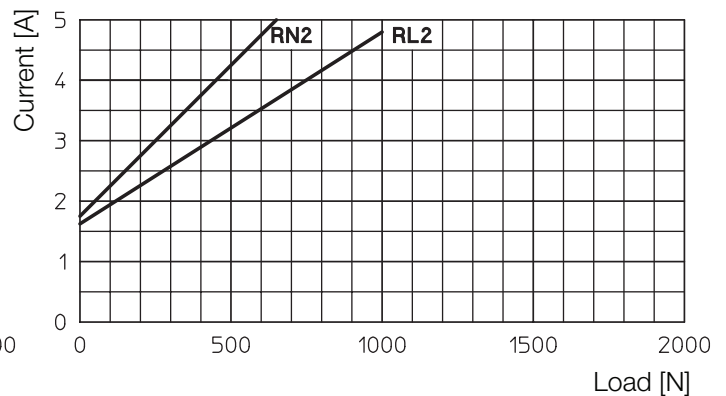
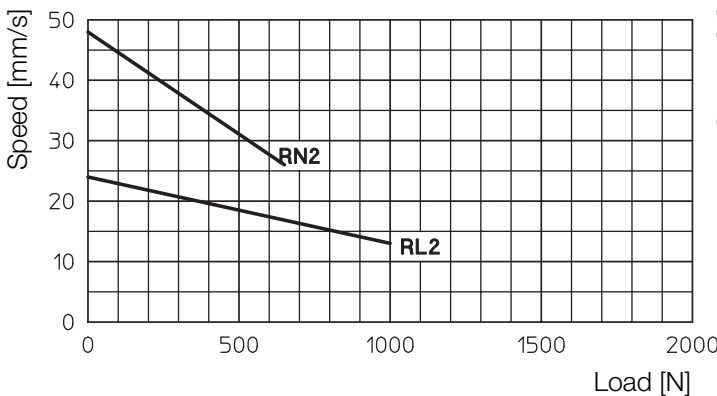
PERFORMANCES with 24 V DC motor

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

1-start acme screw Tr 13.5×3



2-starts acme screw Tr 14×8 (P4)



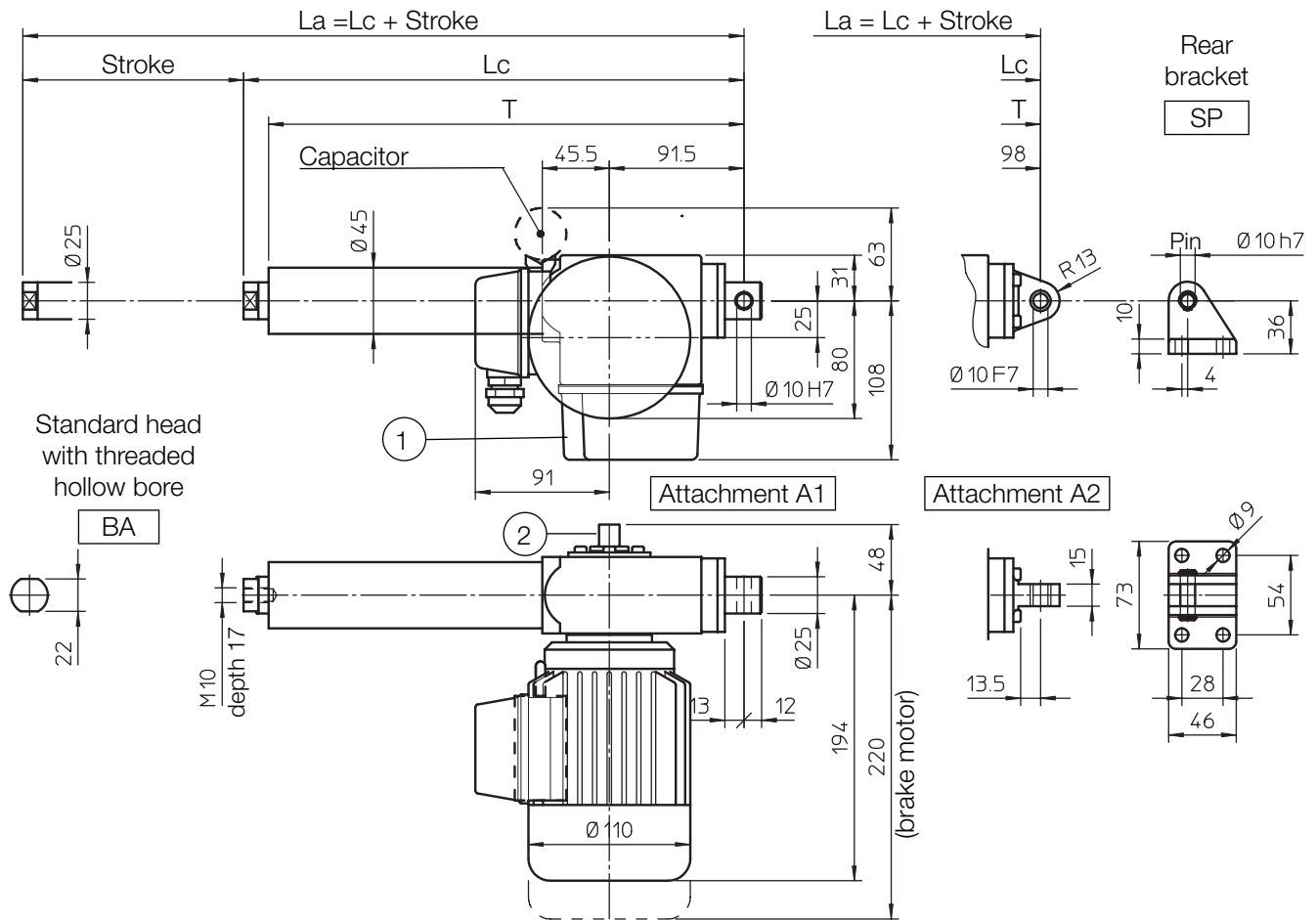
Self-locking conditions

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	

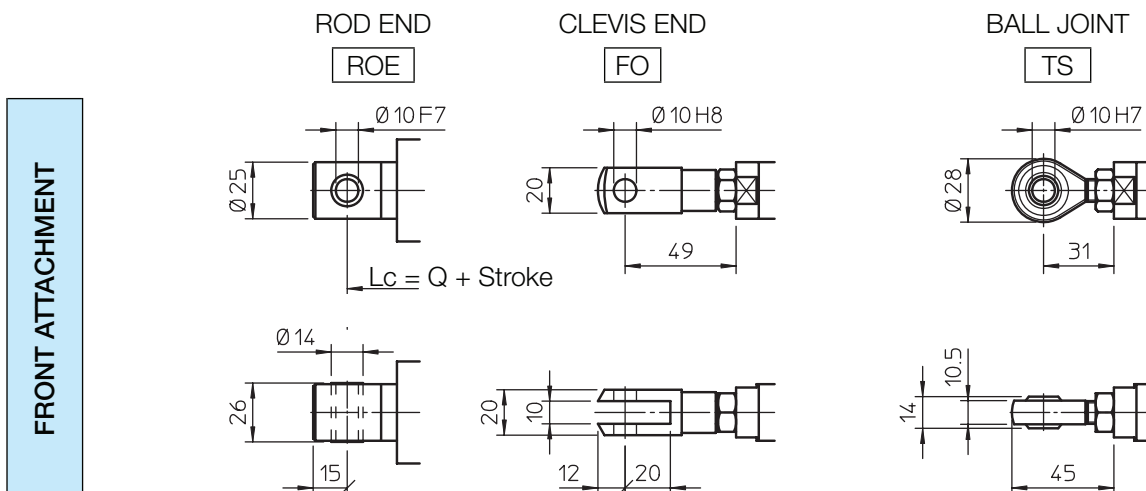
OVERALL DIMENSIONS



1. STROKE END SWITCHES BOX AND POTENTIOMETER
2. MOTOR SHAFT EXTENSION for:
Emergency manual activation
Stroke end switches and potentiometer adjustment

Q [mm]	Attachment A1	Attachment A2
	195	202

STROKE CODE	Actuator - Attachment A1			Actuator - Attachment A2			MASS [Kg]
	STROKE [mm]	LENGTH		STROKE [mm]	LENGTH		
		Lc [mm]	La [mm]		Lc [mm]	La [mm]	
C100	100	290	390	100	297	397	5.3
C200	200	390	590	200	397	597	5.6
C300	300	490	790	300	497	797	5.9



PERFORMANCES AND FEATURES

- Push load up to 5 000 N
- Pull load up to 4 000 N
- Linear speed up to 93 mm/s
- Standard stroke lengths: 100, 150, 200, 250, 300 mm (for different / longer stroke lengths please contact us)
- Aluminium alloy housing
- Rear attachment:
 - A1 zinc-plated steel
 - A2 aluminium alloy 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 on page 70)
- Duty cycle with max load: 30% over 10 min at (-10 ... +40) °C
- Standard protection:
 - with AC motor without brake IP55
 - with AC brake-motor 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) with rear attachment A2
- Mechanical overload protection: safety clutch (code FS)
- Brake motor
- 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 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

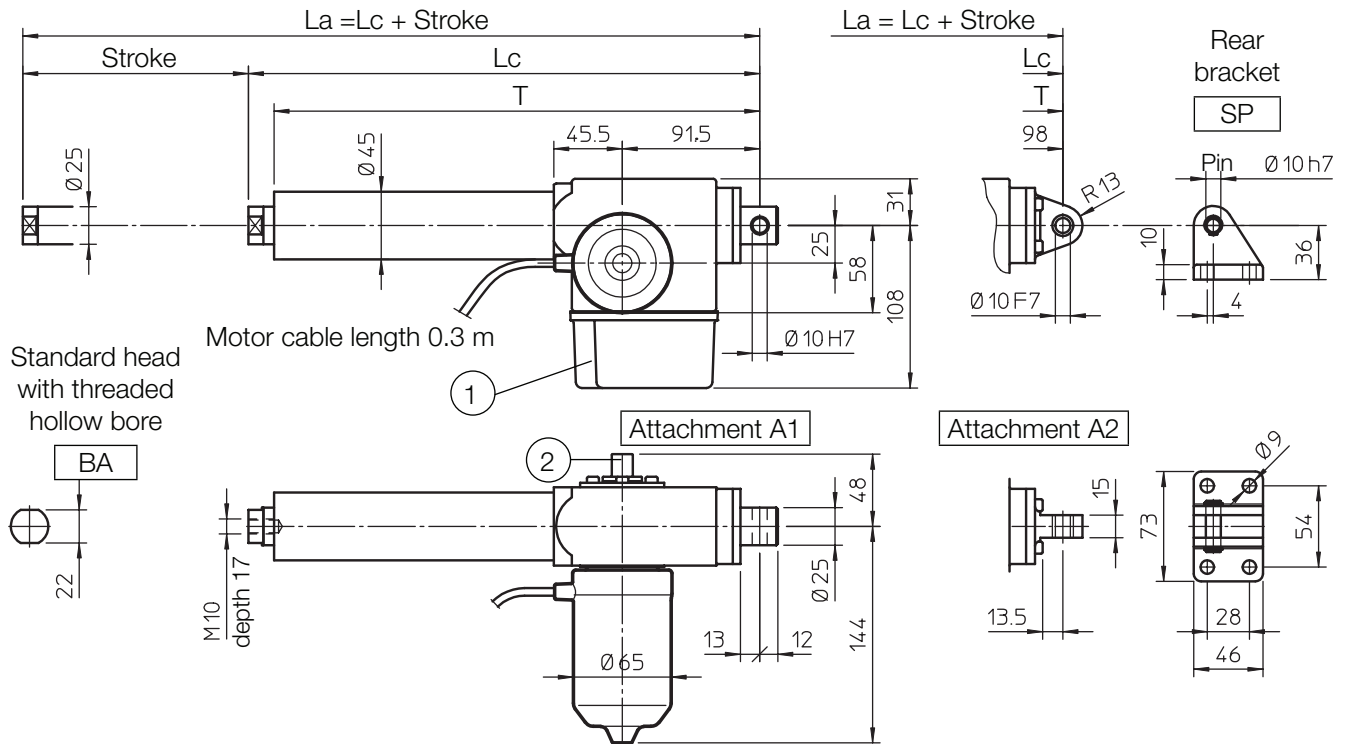
Self-locking conditions

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

ORDERING CODE EXAMPLE

CLA 25	RL1	C200	CA 230/400 V	FC2	POR 5K				
Actuator	Selected ratio	Required stroke	Motor	Stroke end switches	Accessories			Options	

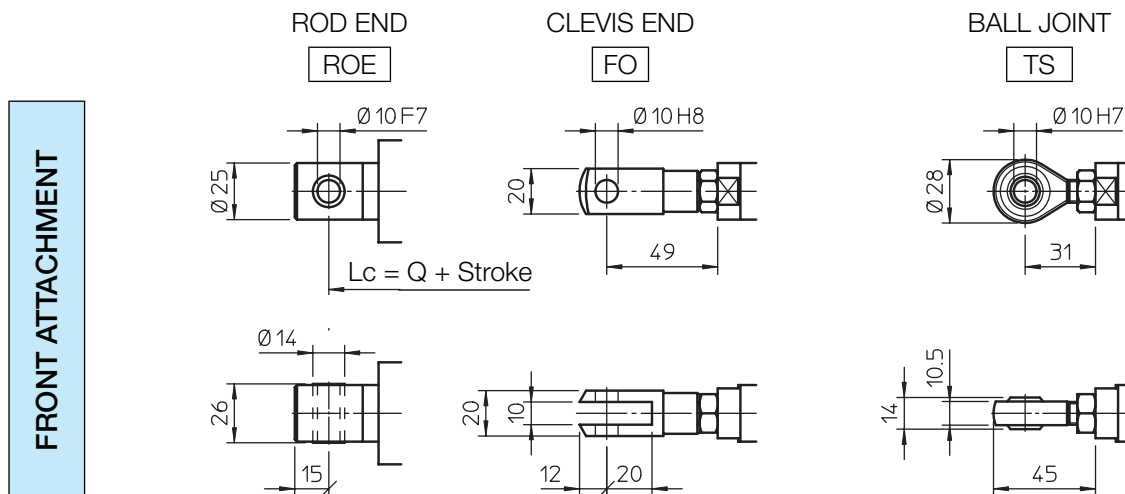
OVERALL DIMENSIONS



1. STROKE END SWITCHES BOX AND POTENTIOMETER
2. MOTOR SHAFT EXTENSION for:
Emergency manual activation
Stroke end switches and potentiometer adjustment

Q [mm]	Attachment A1	Attachment A2
	195	202

STROKE CODE	Actuator - Attachment A1				Actuator - Attachment A2				MASS [Kg]
	STROKE [mm]	LENGTH		T [mm]	STROKE [mm]	LENGTH		T [mm]	
		Lc [mm]	La [mm]			Lc [mm]	La [mm]		
C100	100	290	390	273	100	297	397	280	4.1
C200	200	390	590	373	200	397	597	380	4.4
C300	300	490	790	473	300	497	797	480	4.7



Self-locking conditions

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



ACME SCREW LINEAR ACTUATOR CLA 25 DC motor

PERFORMANCES AND FEATURES

- Pull-Push load up to 4 000 N
- Linear speed up to 100 mm/s
- Standard stroke lengths:
100, 150, 200, 250, 300 mm
(for different / longer stroke lengths please contact us)
- Aluminium alloy housing
- Rear attachment:
 - A1 zinc-plated steel
 - A2 aluminium alloy 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, 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 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)

- 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)
- 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

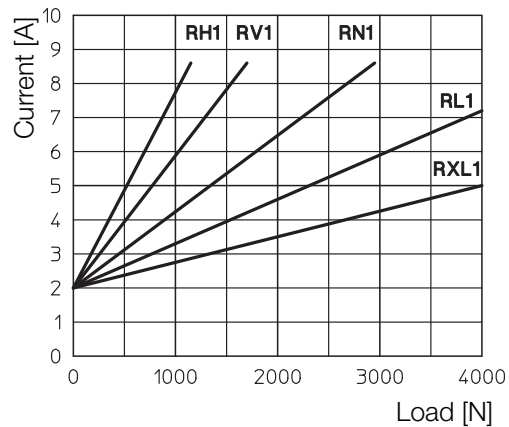
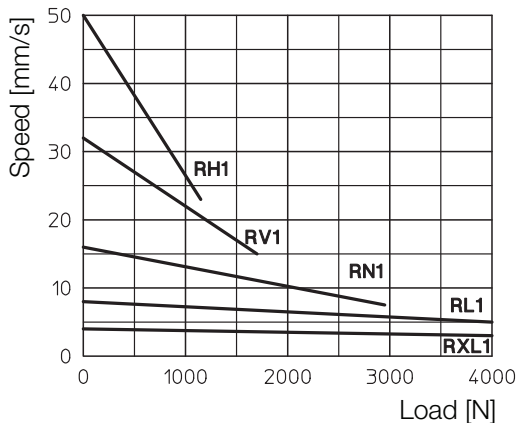
OPTIONS

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

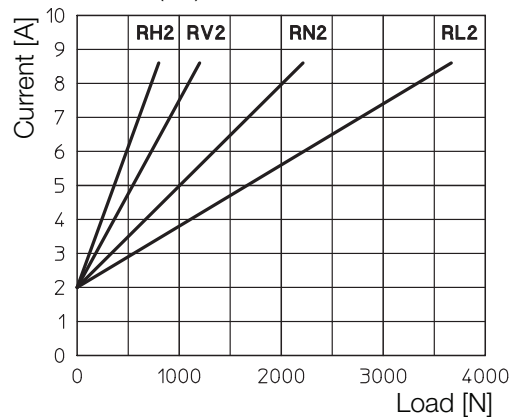
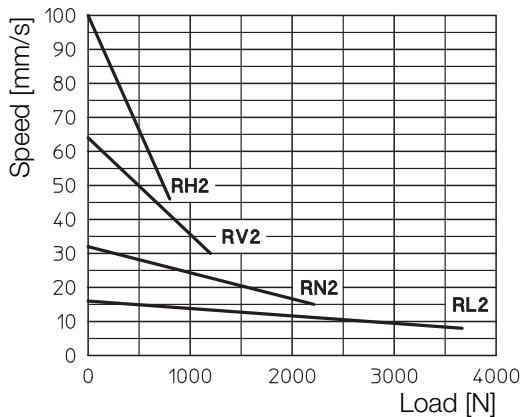
PERFORMANCES with 24 V DC motor

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

1-start acme screw Tr 14x4



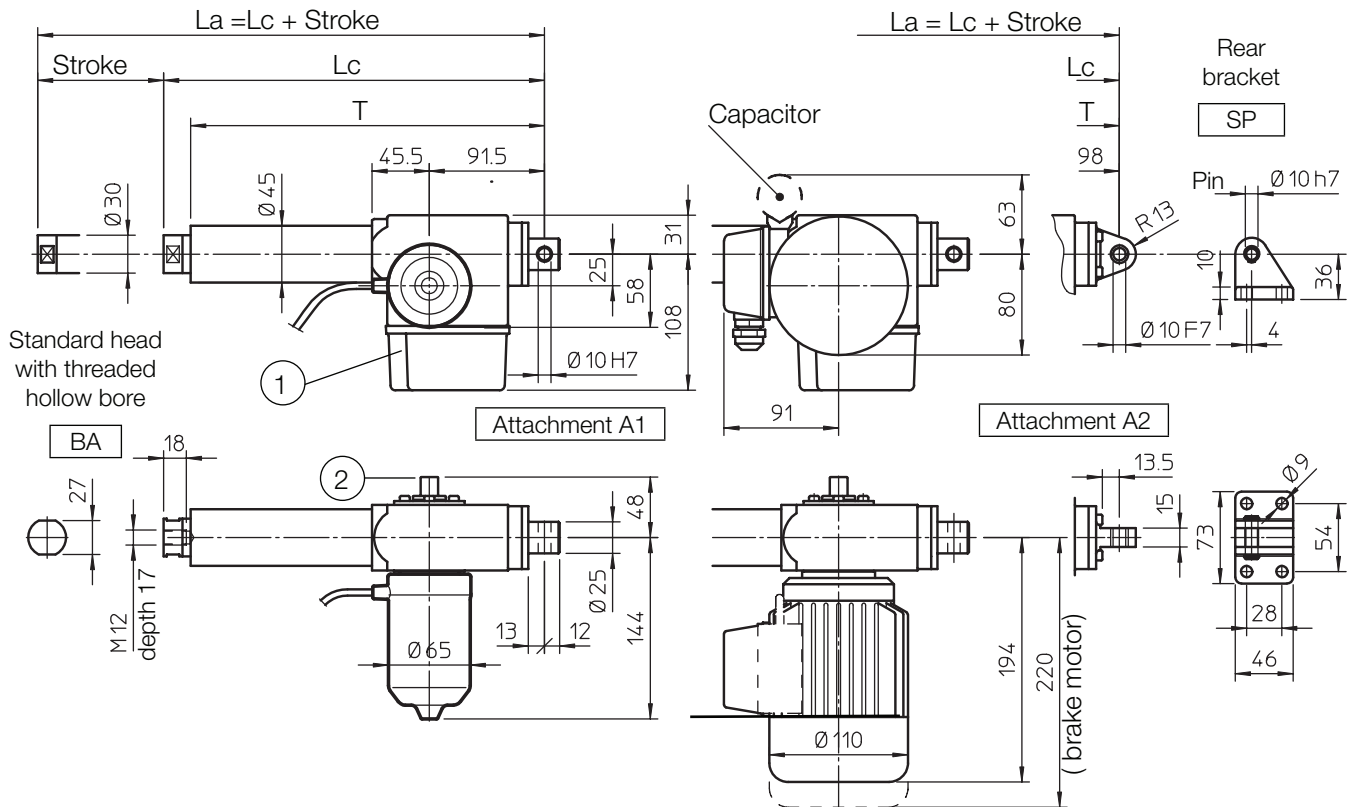
2-starts acme screw Tr 14x8 (P4)



ORDERING CODE EXAMPLE

CLA 25	RL1	C200	CC 24 V	FC2	POR 5K			
Actuator	Selected ratio	Required stroke	Motor	Stroke end switches	Accessories			Options

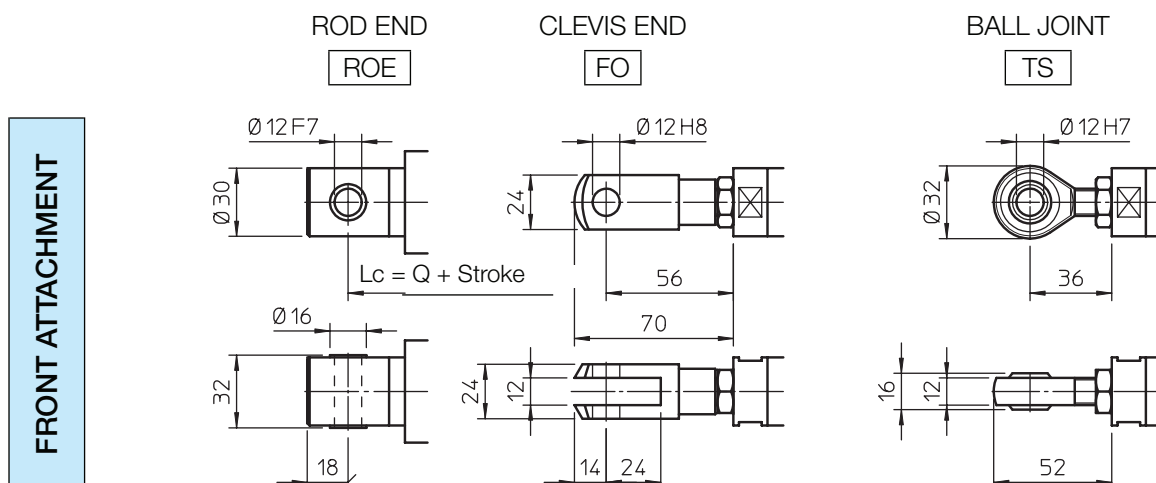
OVERALL DIMENSIONS



1. STROKE END SWITCHES BOX AND POTENTIOMETER
2. MOTOR SHAFT EXTENSION for:
Emergency manual activation
Stroke end switches and potentiometer adjustment

Q [mm]	Attachment A1	Attachment A2
	220	227

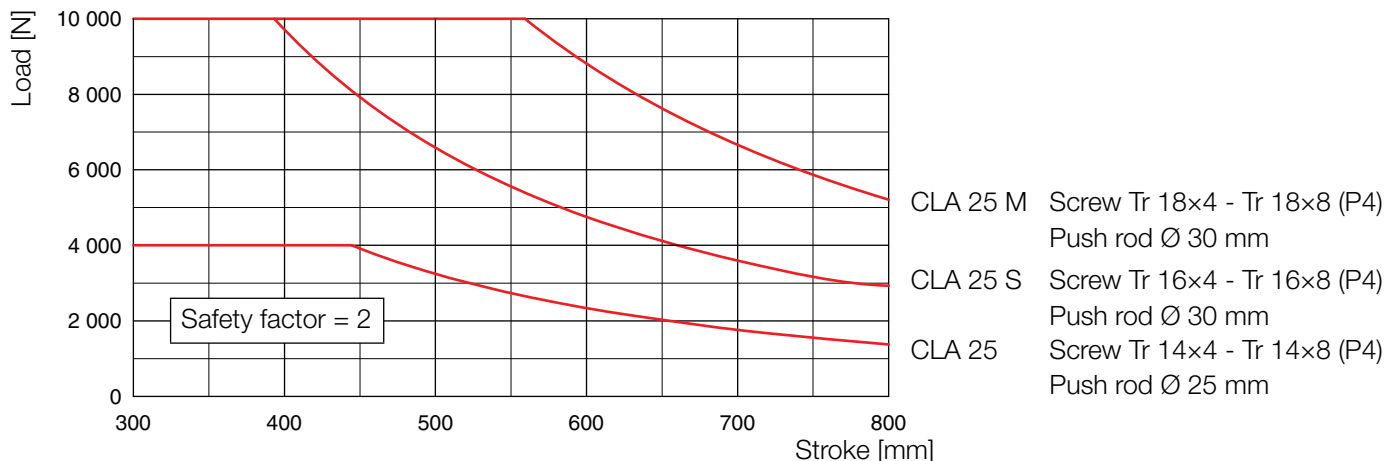
STROKE CODE	Actuator - Attachment A1			Actuator - Attachment A2			MASS [Kg] DC motor	MASS [Kg] AC motor
	STROKE [mm]	LENGTH		T [mm]	STROKE [mm]	LENGTH		
		Lc [mm]	La [mm]			Lc [mm]	La [mm]	
C300	300	516	816	481	300	523	823	488
C400	400	616	1016	581	400	623	1023	588
C500	500	716	1216	681	500	723	1223	688
C600	600	816	1416	781	600	823	1423	788
C700	700	916	1616	881	700	923	1623	888
C800	800	1016	1816	981	800	1023	1823	988



CLA 25 S and **CLA 25 M** are reinforced versions of CLA 25 linear actuator, with stronger linear drive part to improve push load resistance in case of long stroke lengths. For tables and performances graphs with the available ratios please refer to CLA 25 linear actuator.

Furthermore, compared to CLA 25 actuator, the anti-turn device (AR) is here available.

Buckling push load diagram



PERFORMANCES AND FEATURES

- Pull-Push load up to 5 000 N
- Linear speed up to 100 mm/s (DC motor)
Linear speed up to 90 mm/s (AC motor)
- Standard stroke lengths:
300, 400, 500, 600, 700, 800 mm
(for different / longer stroke lengths please contact us)
- Aluminium alloy housing
- Rear attachment:
 - A1 zinc-plated steel
 - A2 aluminium alloy with bronze bush
- Anodized aluminium outer tube
- Chrome-plated steel push rod – tolerance f7
- Standard head BA or rod end ROE
stainless steel AISI 303 with bronze bush
- Motors:
 - 12, 24 or 36 V DC motor
with electromagnetic noise suppressor
 - AC 3-phase or 1-phase motor
(motor features details on page 69, 70)
- 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 without brake IP55
 - with AC brake-motor 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)
with rear attachment A2
- Mechanical overload protection:
safety clutch (code FS)
- AC 1-phase or 3-phase brakemotor
- Anti-turn device (code AR)
- 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)

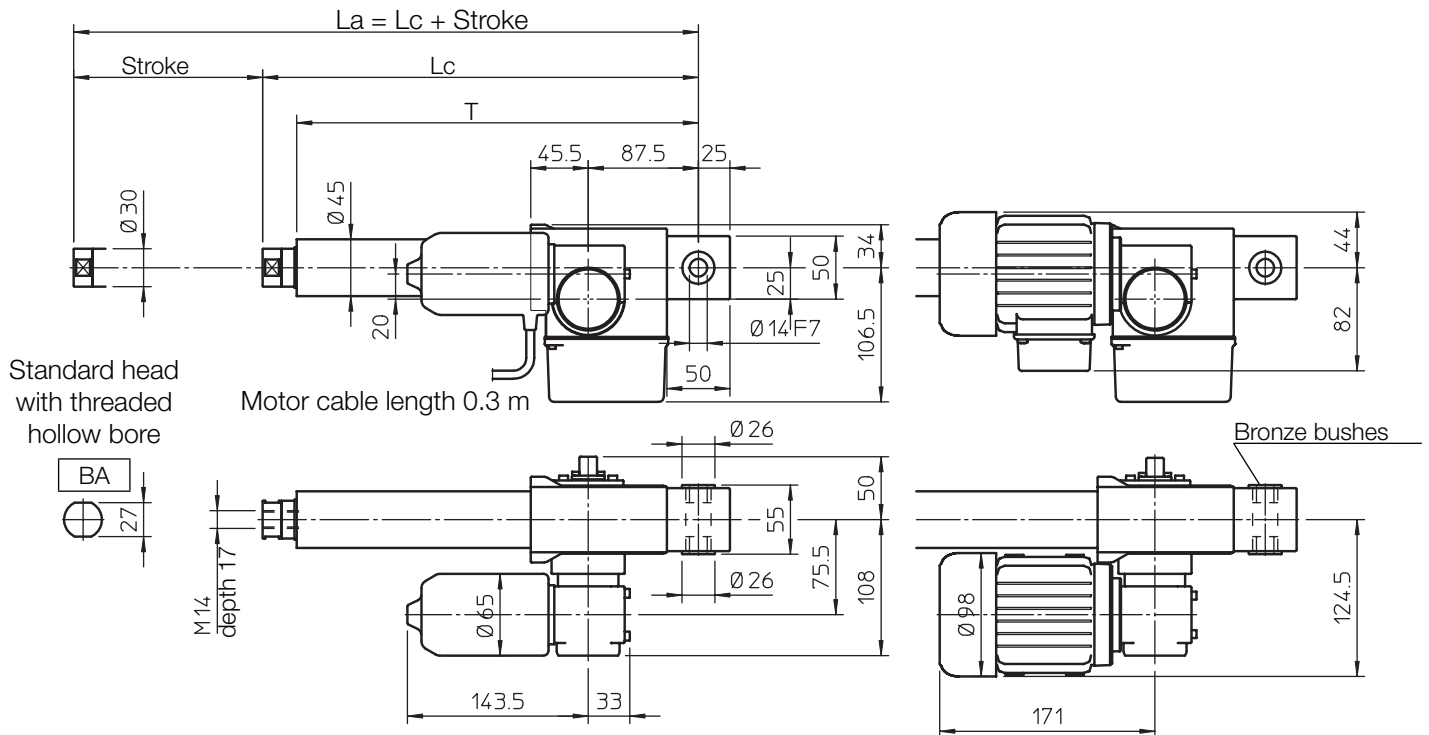
Self-locking conditions

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

ORDERING CODE EXAMPLE

CLA 25 S	RL1	C300	CC 24 V	FC2	POR 5K				
Actuator	Selected ratio	Required stroke	Motor	Stroke end switches	Accessories			Options	

OVERALL DIMENSIONS



Length [mm]	
Lc [mm]	230 + Stroke
T [mm]	191 + Stroke

PERFORMANCES AND FEATURES

- Pull-Push load up to 10 000 N
- Linear speed up to 8 mm/s (DC motor)
- Linear speed up 3,7 mm/s (AC motor)
- Standard stroke lengths: 200, 300, 400, 500, 600, 700, 800 mm (for different / longer stroke lengths please contact us)
- Cast iron housing with integral rear attachment and bronze bush
- Anodized aluminium outer tube
- Chrome-plated steel push rod – tolerance f7
- Stainless steel AISI 303 front attachment BA
- Motors:
 - 12, 24 or 36 V DC motor with electromagnetic noise suppressor
 - AC 3-phase or 1-phase motor (motor features details on pages 69 and 70)
- 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 without brake IP55
 - with AC brake-motor IP54

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

ACCESSORIES

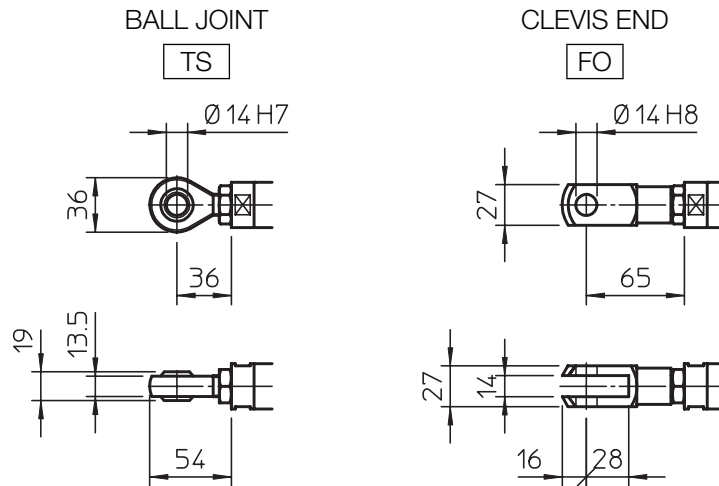
- Different front attachments
- Stainless steel push rod (code SS)
- Mechanical overload protection: safety clutch (code FS)
- Anti-turn device (code AR)
- Adjustable electric stroke end switches (code FC2)
- Adjustable electric stroke end switches, switching off the motor (not available with AC 3-phase 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 and first stage gearbox unit mounting position on opposite side (left-hand, code LH)

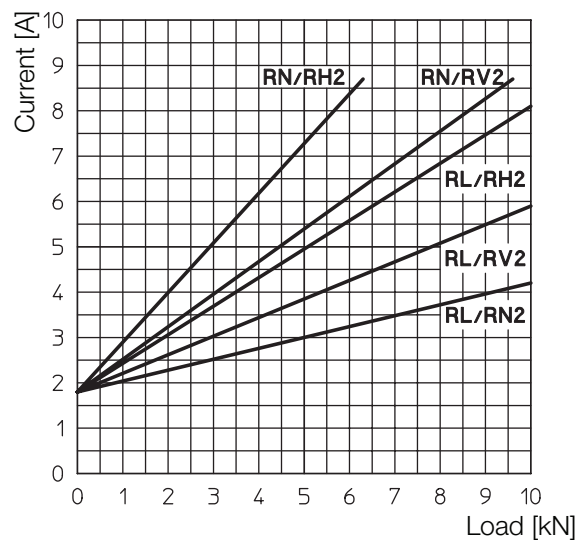
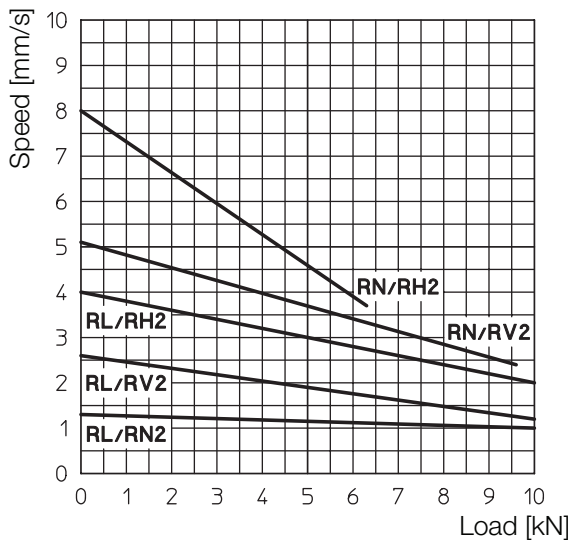
FRONT ATTACHMENT



PERFORMANCES with 24 V DC motor

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

2-starts acme screw Tr 18x8 (P4)



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

2-starts acme screw Tr 18x8 (P4)		
RATIO	0.06 kW - 2 pole motor	
	LOAD [N]	SPEED [mm/s]
RL/RH2	3600	3.7
RL/RV2	5500	2.4
RL/RN2	9600	1.2

Self-locking conditions

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

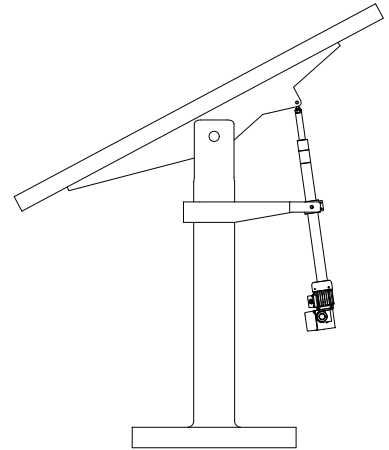
ORDERING CODE EXAMPLE

CLA 28	RL1	C800	CC 24 V	FC2	POR 5K				
Actuator	Selected ratio	Required stroke	Motor	Stroke end switches	Accessories			Options	

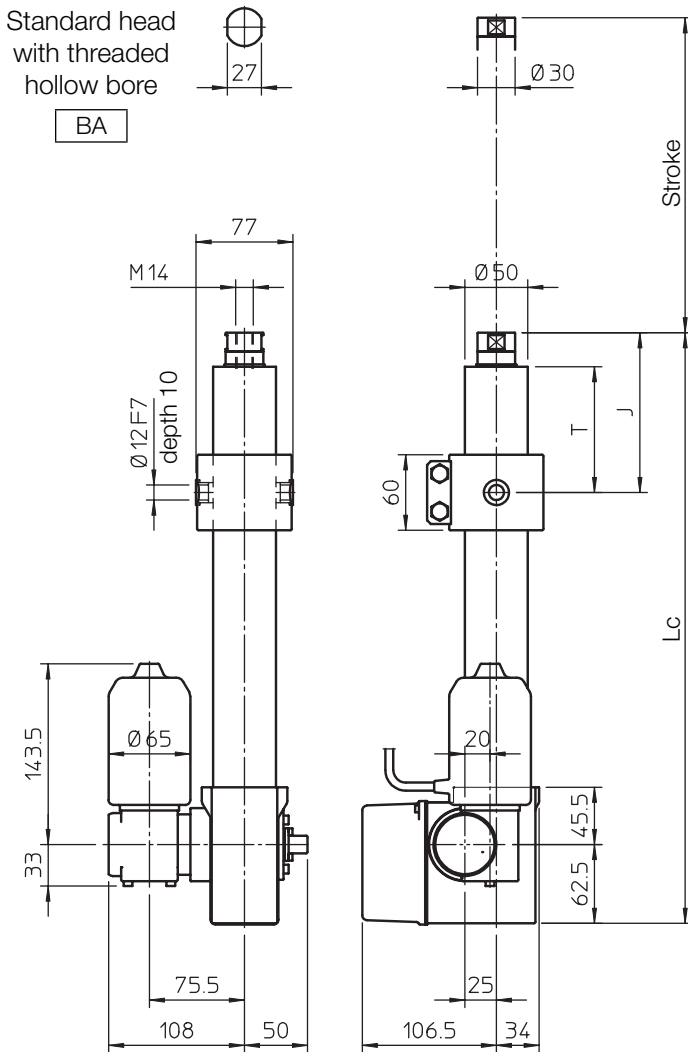
CLA 28 T linear actuator differs from CLA 28 on the protective tube execution, which is made of zinc-plated steel, ext. Ø 50 mm, allowing the fitting of a bracket with self-lubricating bushes on protective tube itself.

The actuator can be hinged on these bushes, reducing by this way the attachments centre distance and improving the total resistance against push load buckling.

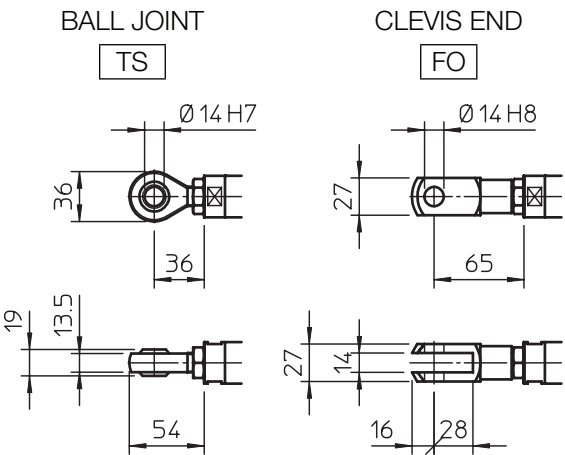
A typical application is lifting motion on solar trackers.



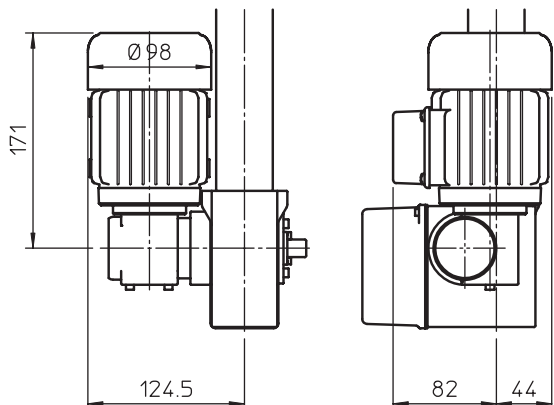
OVERALL DIMENSIONS



FRONT ATTACHMENT



Length [mm]	
Lc	178 + Stroke
J	on customer's demand



T dimension is on customer's demand according to the following formula:

$$120 \leq T \leq \frac{\text{Stroke}}{2}$$

PERFORMANCES AND FEATURES

- Pull-Push load up to 10 000 N
- Linear speed up to 8 mm/s (DC motor)
- Linear speed up to 3,7 mm/s (AC motor)
- Standard stroke lengths:
400, 500, 600, 700, 800, 900, 1 000 mm
(for different / longer stroke lengths please contact us)
- Cast iron housing with integral rear attachment
- Zinc-plated steel hinge on outer tube with self-lubricating bushes
- Zinc-plated steel outer tube with increased thickness
- Chrome-plated steel push rod – tolerance f7
- Stainless steel AISI 303 front attachment
- Motors:
 - 12, 24 or 36 V DC motor with electromagnetic noise suppressor
 - AC 3-phase or 1-phase motor (motor features details on pages 69, 70)
- 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 without brake IP55
with AC brake-motor IP54

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

ACCESSORIES

- Different front attachments
- Stainless steel push rod (code SS)
- Anti-turn device (code AR)
- 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

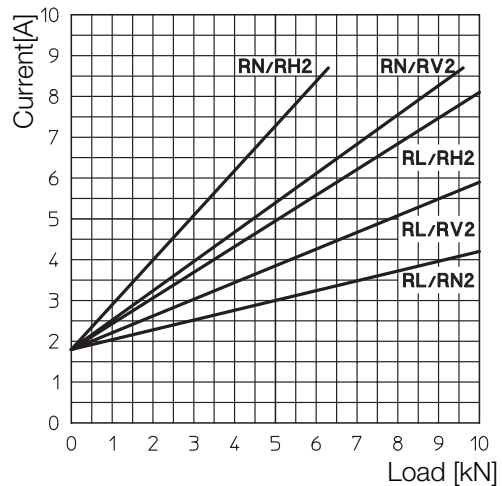
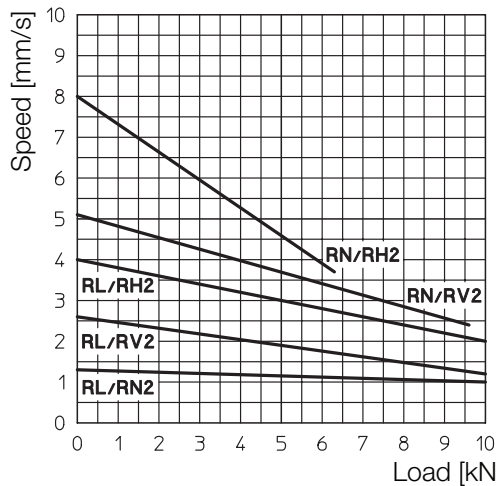
OPTIONS

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

Self-locking conditions

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

PERFORMANCES with 24 V DC motor 2-starts acme screw Tr 18x8 (P4)



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

2-starts acme screw Tr 18x8 (P4)		
0.06 kW - 2 pole motor		
RATIO	LOAD [N]	SPEED [mm/s]
RL/RH2	3600	3.7
RL/RV2	5500	2.4
RL/RN2	9600	1.2

ORDERING CODE EXAMPLE

CLA 28 T	RL1	C800	CC 24 V	FC2	POR 5K			
Actuator	Selected ratio	Required stroke	Motor	Stroke end switches	Accessories		Options	