

## ALI2 Model CE

- Permanent magnet motor CE
  - Three phase or single phase motor CE
  - Worm gearbox
  - Acme lead screw or ballscrew (VRS)
  - Chrome plated steel push rod
  - Life long grease lubricated
  - IP65, tested according to rule CEI EN 60529
  - NB: Only for brake motors Standard IP54, IP65 on request
  - Working temperature range -10°C +60°C
  - Intermittent duty S3 30% (5 min) a +30°C\*
  - Limit switches, potentiometer and encoder on request
- (\*) For any special duty please contact our technical dept.

ALI2 (Vac 3-phase)					
Fmax (N)	Speed (mm/s)	Version	Motor size	Motor power (KW)	Motor speed (rpm)
* 450	110	M01	IEC50	0.09	2800
* 500	70	M02	IEC50	0.09	2800
* 650	50	M03	IEC50	0.09	2800
* 850	40	M04	IEC50	0.09	2800
1000	30	M05	IEC50	0.06	1400
1400	20	M06	IEC50	0.06	1400
2200	10	M07	IEC50	0.06	1400
2500	5	M08	IEC50	0.06	1400

ALI2 (Vdc)						
Fmax (N)	Speed (mm/s)	Version	Motor size	Motor power (KW)	Motor speed (rpm)	Max Current for F max(A) 24Vdc
* 800	110	M08	61.5	-	3000	13
* 850	70	M09	61.5	-	3000	9
* 1100	55	M10	61.5	-	3000	9,5
* 1500	40	M11	61.5	-	3000	11
2000	30	M12	61.5	-	3000	10,5
2500	20	M13	61.5	-	3000	10,5
2500	10	M14	61.5	-	3000	9,5

ALI2 VRS (ballscrew) (Vac 3-phase)					
Fmax (N)	Speed (mm/s)	Version	Motor size	Motor power (KW)	Motor speed (rpm)
* 1500	45	M01	IEC50	0.09	2800
1800	30	M02	IEC50	0.09	2800
2000	20	M03	IEC50	0.06	1400
2500	10	M04	IEC50	0.06	1400
2500	5	M05	IEC50	0.06	1400

With single-phase motors type M (see motor choice guideline in paragraph ACCESSORIES) performances are 20% lower than the three-phase motor.

- \* When speed is more than 40 mm/s and/or strokes longer than 350mm, check STROKE SETUP section; BRAKEMOTOR IS RECOMMENDED
- \*\* For 12 Vdc power supply currents are doubled and loads are 20% lower.

BEFORE OPERATING ACTUATOR MAKE SURE YOU READ AND UNDERSTOOD BASIC OPERATIONAL INSTRUCTIONS SHOWN ON USERMANUALS, AVAILABLE FROM WEBSITE.

THIS DOCUMENT DISPLAYS MOST TYPICAL STANDARD FEATURES AND SETUPS: CONTACT OUR OFFICES FOR MORE.

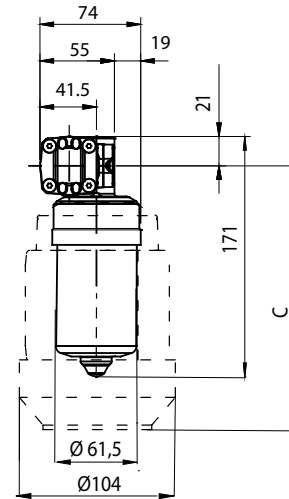
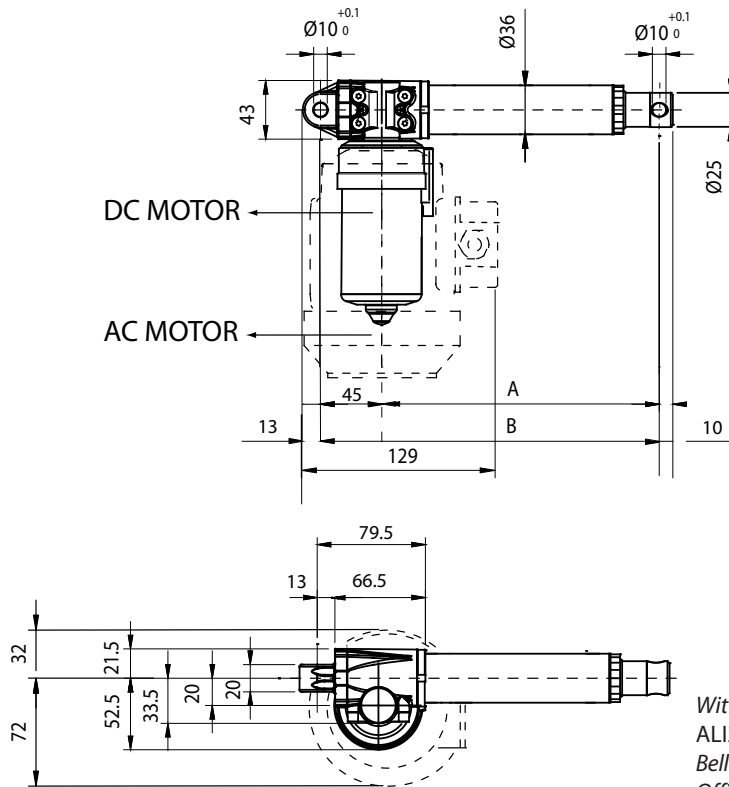
ACTUATOR SHALL NOT COME TO **MECHANICAL STROKE-END**, TO **AVOID FAILURES**.

CONSIDER MECVEL'S LIMITSWITCHES ( MODEL ALI2-F or ALI2-FCM) OR PUT THEM ON MACHINE/FRAME.



MecVel reserves the right to change products information and/or features without notice; all data contained in this catalogue are purely indicative and not binding for the company.

## ALI2 Version without limitswitches



DIMENSION	Stroke < to 320 mm	Stroke > to 320 mm
A	70 + stroke	80 + stroke
B	115 + stroke	125 + stroke
C with brake	220.5	
C without brake	182.5	

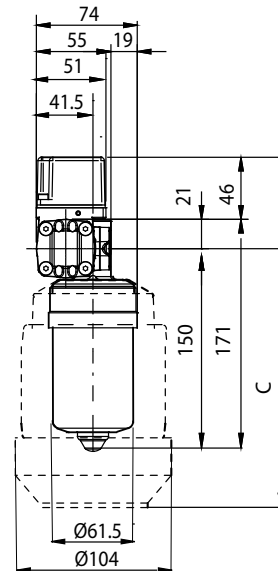
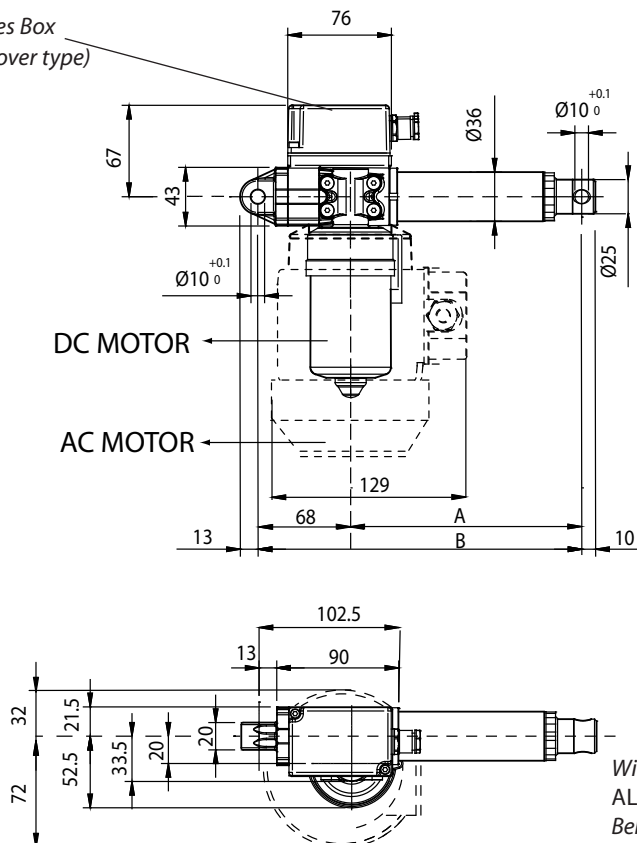
With safety nut "G" = + 30 mm

ALI2-VRS = + 40 mm ( safety nut unavailable)

Bellows + 20mm (for FCM limitswitches contact our Offices)

## ALI2-F Version with limitswitches

Limitswitches Box  
(2 x changeover type)

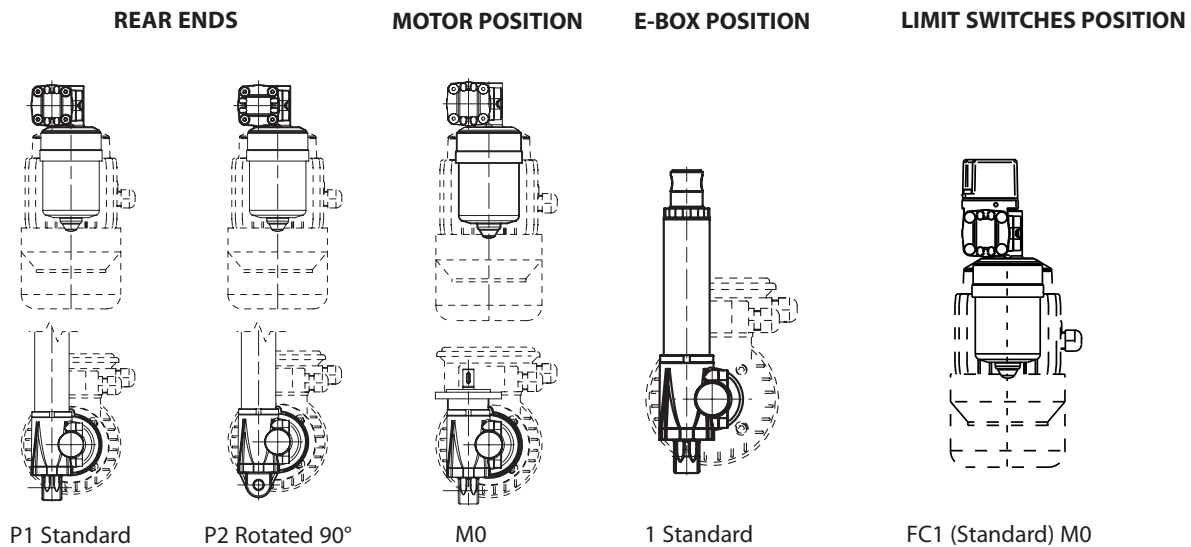


DIMENSION	Stroke < to 320 mm	Stroke > to 320 mm
A	70 + stroke	80 + stroke
B	138 + stroke	148 + stroke
C with brake	220.5	
C without brake	182.5	

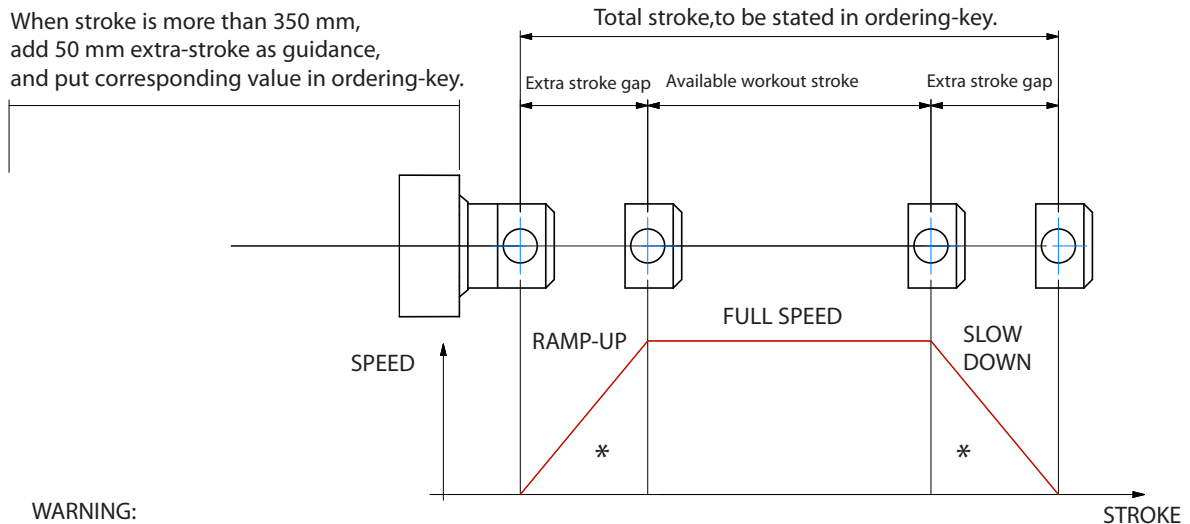
With safety nut "G" = + 30 mm

ALI2-F-VRS = + 40 mm ( safety nut unavailable)

Bellows + 20mm (for FCM limitswitches contact our Offices)

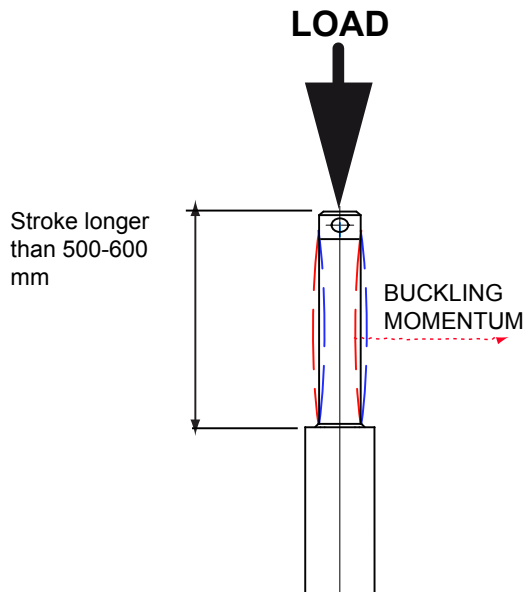


**STROKE SETUP:** Useful tips for handling stroke and avoid run-on-block collision.



**WARNING:**  
**SPEED-TIMING ALONG STROKELENGTH:**  
 ramps are extremely important when speed is > 40mm/s !!! Inverter or PWM drive recommended!  
 \* The more speed raises the more extra stroke has to raise too.

**BUCKLING:** When stroke is longer than 500mm, BUCKLING can be a risk: please check mounting with our offices and/or see user-manuals.



**IMPORTANT:**  
 Long strokes, even if load is low, can generate significant buckling momentums, as sketch slows.  
 This happens when actuator is in its all-opened position: that's the reason why we recommend 100 mm extra-stroke.  
 Pushtube will have this 100 mm-portion always inside the overtube, improving guidance against buckling.  
 For more information on this, contact our office.

# ORDERING KEY

ALI2 / 0250 / M01 / CA-400/50-T-50-4-0,09 / AB / M0 / 1 / E01 / 2FC1 / P0T01A / FC1 / P1 / A1

**MODEL:** \_\_\_\_\_  
 ALI2 / ALI2-F / ALI2-VRS / ALI2-F-VRS / ALI2-FCM

**STROKE:** \_\_\_\_\_  
 es. 250 mm = 0250  
 min 50; with 50 as incremental

**VERSION:** (pag.21) \_\_\_\_\_  
 M08 / M09 / M10 / M11 / M12 / M13 / M14 (version C.C.)  
 M01 / M02 / M03 / M04 / M05 / M06 / M07 / M08 M09 / M10 (version C.A)

**MOTOR:** (Pag. ACCESSORIES) \_\_\_\_\_  
 Advise only if with motor:  
**A.C.:** version, voltage, type, size, n°pole, power  
**D.C.:** version, voltage, size, Rpm

**AC MOTOR OPTIONS:** (Pag. ACCESSORIES) \_\_\_\_\_  
 No motor or DC motor: leave all following parameters blank  
 Protection Degree: IP65, for selfbrake motor IP54 standard  
 Brake type: for brakemotors only: ES. FECA  
 Options: Advise if needed (ES. AB 2'shaft)

**MOTOR POSITION:** \_\_\_\_\_  
**M0** None: Leave blank

**E-BOX POSITION:** \_\_\_\_\_  
**1**

**ENCODER:** (Pag. ACCESSORIES) \_\_\_\_\_  
 None: Leave blank

**LIMIT SWITCHES:** (Pag. ACCESSORIES) \_\_\_\_\_  
**2FC1** None: Leave blank

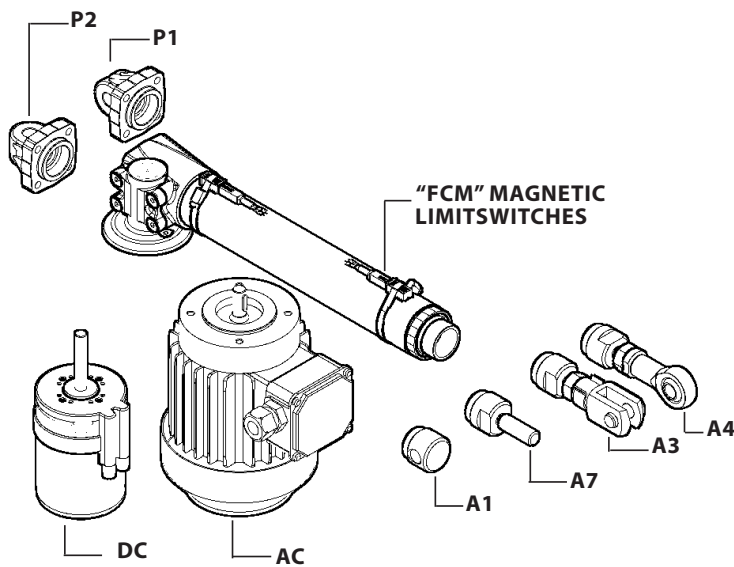
**POTENTIOMETER:** (Pag. ACCESSORIES) \_\_\_\_\_  
**POT01A** (1Kohm) **POT10A** (10Kohm) None: / Leave blank

**LIMIT SWITCHES POSITION:** \_\_\_\_\_  
**FC1** None: Leave blank

**REAR END:** \_\_\_\_\_  
**P1** = Eyelet (standard) **P2** = Eyelet (90°)

**FRONT END:** \_\_\_\_\_  
**A1** = Eyelet (Std pag.22) **A3** = Yoke + Clip  
**A4** = Rod end **A7** = M10 male

**NOTE: COMPLETE THE ORDERING KEY ADDING THE OPTIONS YOU CAN FIND IN THE "ACCESSORIES AND OPTIONS" SECTION**



**Note:** "B" dimension changes according to model

ALI2 = See pictures  
 ALI2 stroke > 320 mm = + 10 mm  
 ALI2-FCM = + 34 mm  
 ALI2-FCM stroke > 320 mm = +44  
 ALI2-F = + 23 mm  
 ALI2-F stroke > 320 mm = + 33 mm

With safety nut "G" = + 30 mm  
 ALI2-VRS = + 40 mm  
 ALI2-F-VRS = + 63 mm  
 Bellows + 20mm

