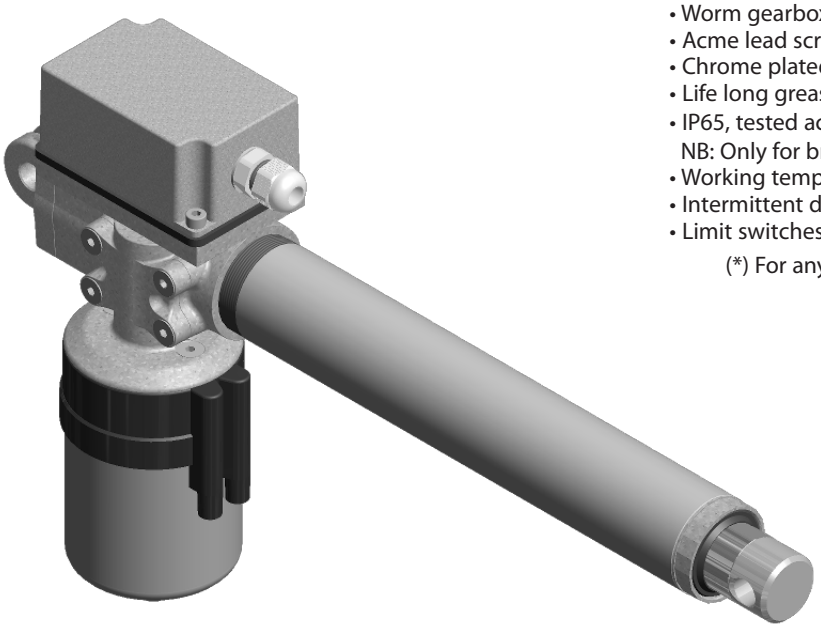


ALI2 Model CE

- 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 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

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	

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.

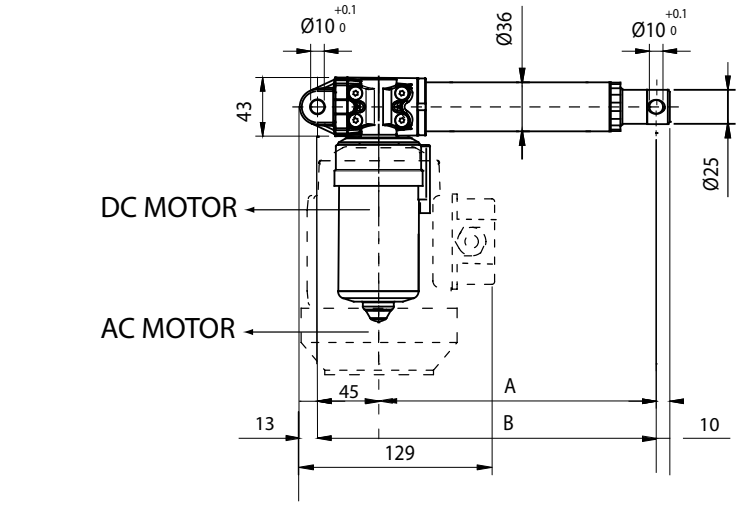
THIS DOCUMENT DISPLAYS MOST TYPICAL STANDARD FEATURES AND SETUPS: CONTACT OUR OFFICES FOR MORE.

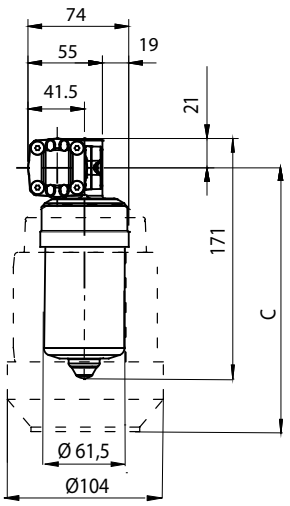
ACTUATOR SHALL NOT COME TO **MECHANICAL STROKE-END**, TO **AVOID FAILURES**.

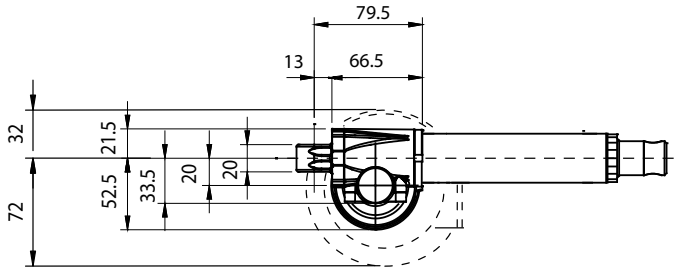
CONSIDER MECVEL's LIMITSWITCHES (MODEL ALI2-F or ALI2-FCM) OR PUT THEM ON MACHINE/FRAME.

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



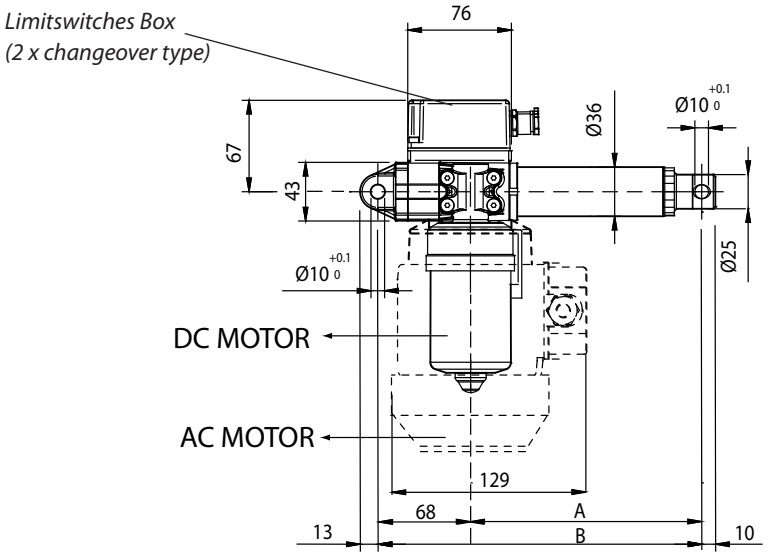


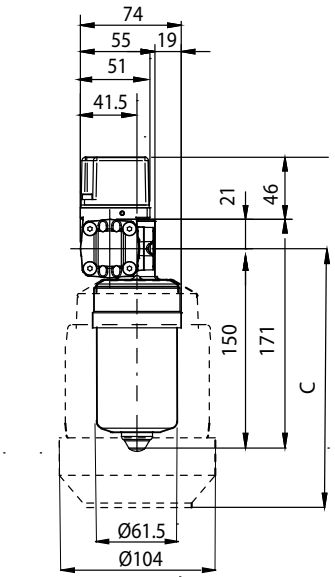


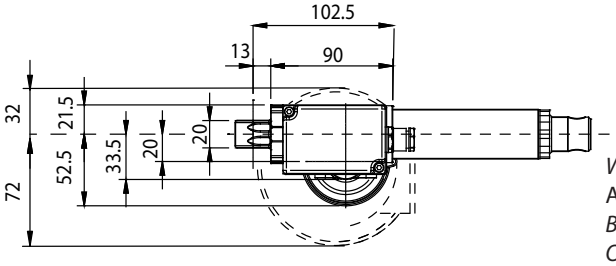
DIMENSION	Stroke < to 320 mm	Stroke > to 320 mm
A	70 + stroke	80 + stroke
B	115 + stroke	125 + stroke
C with brake	220.5	
C without brake	182.5	

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



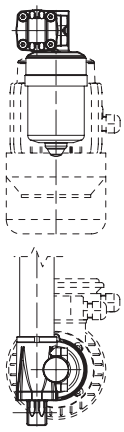


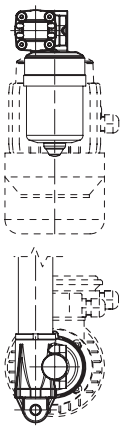


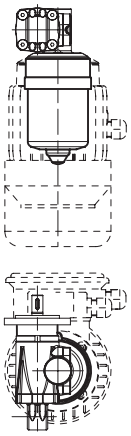
DIMENSION	Stroke < to 320 mm	Stroke > to 320 mm
A	70 + stroke	80 + stroke
B	138 + stroke	148 + stroke
C with brake	220.5	
C without brake	182.5	

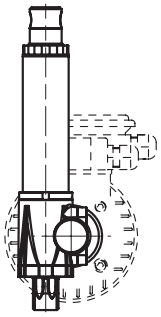
With safety nut "G" = + 30 mm
ALI2-F-VRS = + 40 mm (safety nut unavailable)
Bellows + 20mm (*for FCM limitswitches contact our Offices*)

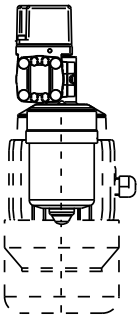
REAR ENDS **MOTOR POSITION** **E-BOX POSITION** **LIMIT SWITCHES POSITION**


P1 Standard

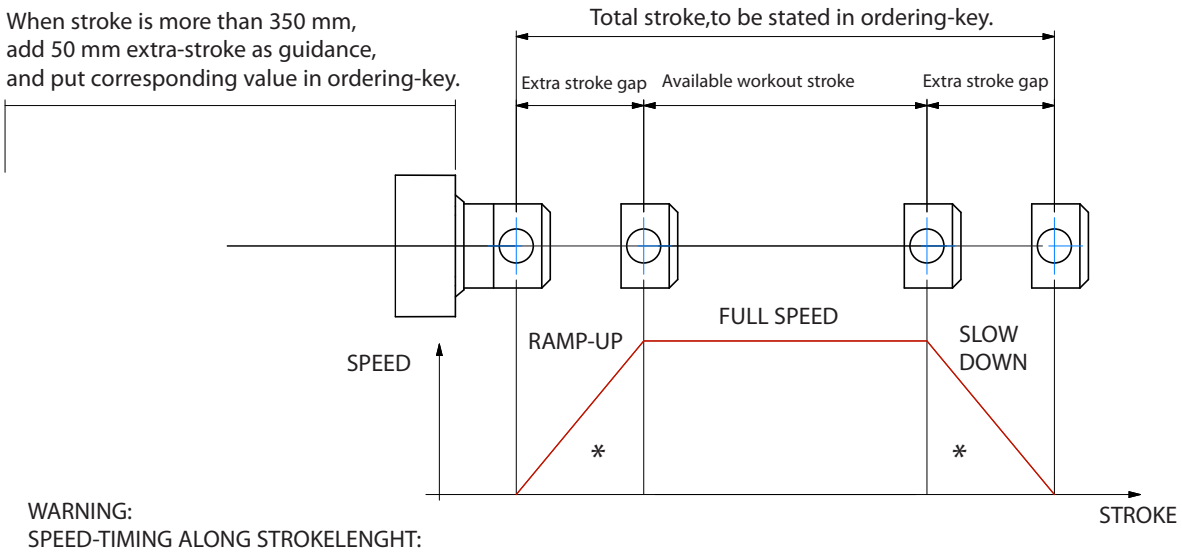

P2 Rotated 90°


M0


1 Standard

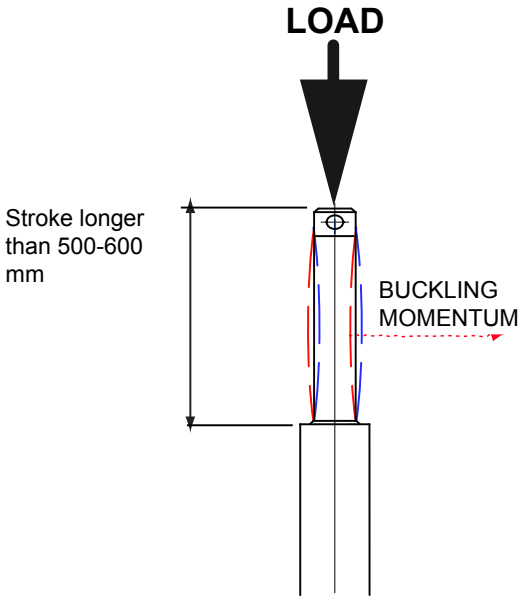

FC1 (Standard) M0

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



WARNING:
SPEED-TIMING ALONG STROKELENGHT:
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 this100 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

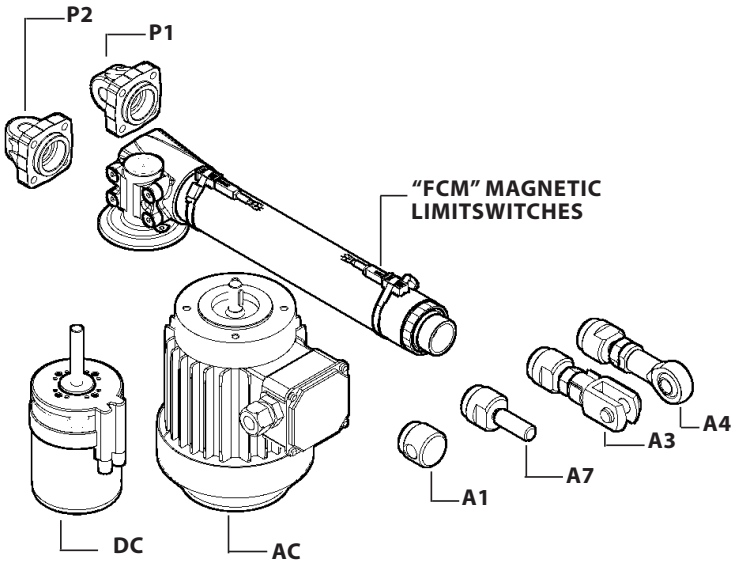
POTENTIOMETER: (Pag. ACCESSORIES)
POT01A (1Kohm) **POT10A** (10Kohm) None: / Leave blank

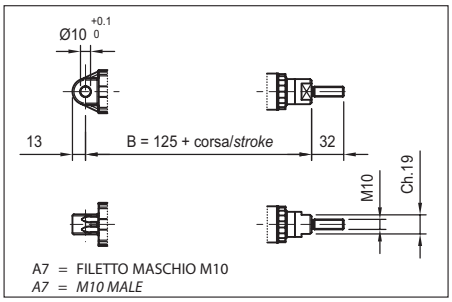
LIMIT SWITCHES POSITION:
FC1 None: Leave blank

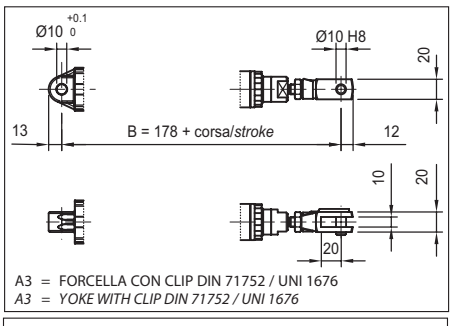
REAR END:
P1 = Eyelet (standard) **P2** = Eyelet (90°)

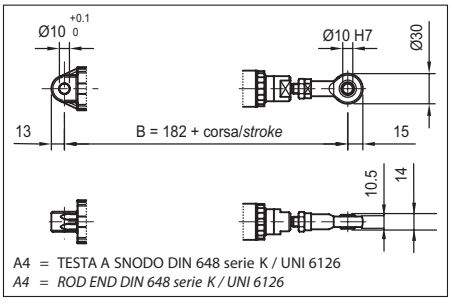
FRONT END:
A1 = Eyelet (Std pag.22) **A3** = Yoke + Clip
A4 = Rod end **A7** = M10 male

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