

- Three phase or single phase AC motor
- Worm gearbox
- Acme lead screw or ballscrew (VRS)
- Chrome plated steel push rod
- Grease (standard) or oil lubricated on request
- IP55, 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% (5min) +30°C
- Limit switch, potentiometer, encoder on request
- At-Ex II 3 D T4 version (AC motor) on request



ALI5 (Vac 3-phase Acme lead screw)				
Fmax (N)	Speed (mm/s)	Version	Motor size	Motor power (KW)
4300 *	93	M01	IEC80	1.1 2 poles
7200 *	47	M02	IEC80	1.1 2 poles
11000	23	M03	IEC80	1.1 2 poles
18000	12	M04	IEC80	1.1 2 poles
18000	6	M05	IEC71	0.37 4 poles
18000	3	M06	IEC71	0.37 4 poles

ALI 5 VRS (Vac 3-phase ballscrew)				
Fmax (N)	Speed (mm/s)	Version	Motor size	Motor power (KW)
4800 *	93	M45	IEC71	0.55 2 poles
6000 *	47	M46	IEC71	0.37 2 poles
7500	23	M47	IEC71	0.37 2 poles
9500	12	M48	IEC71	0.25 4 poles
12000	6	M49	IEC71	0.25 4 poles

\* When speed is more than 30 mm/s and/or strokes longer than 350mm, check STROKE SETUP section.

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

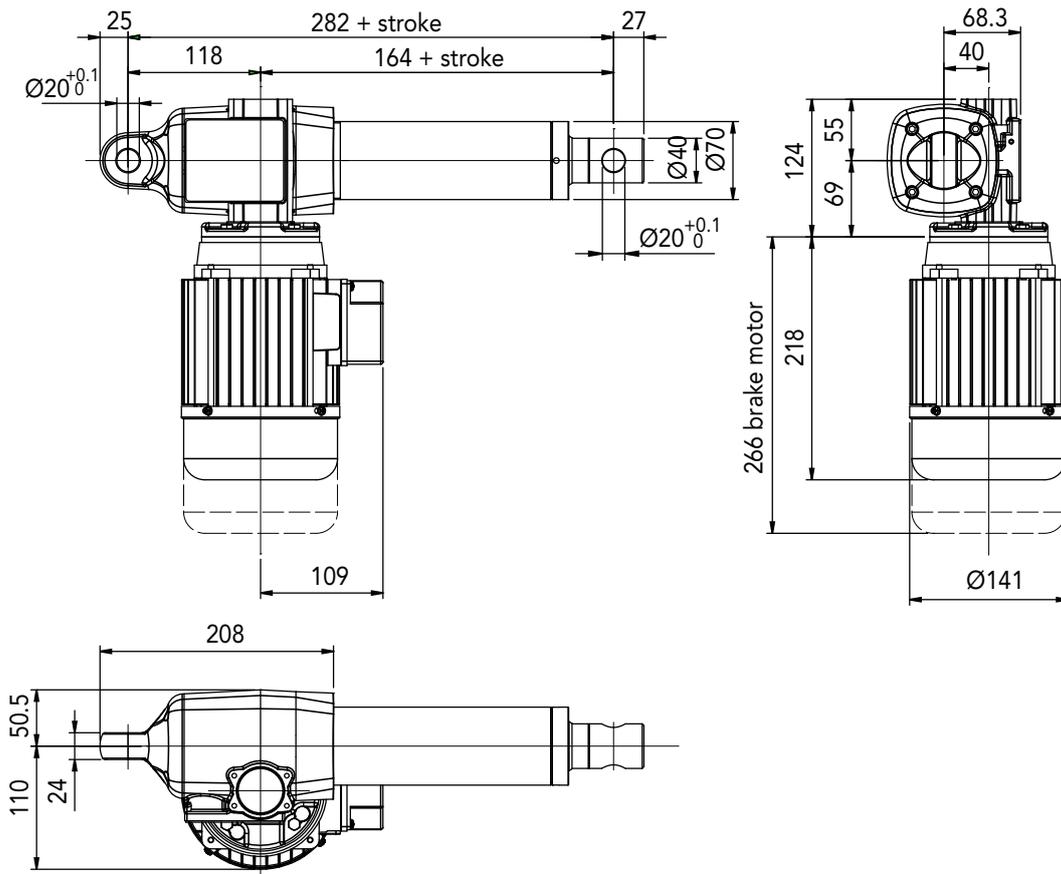
→ The brakemotor is strongly recommended

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

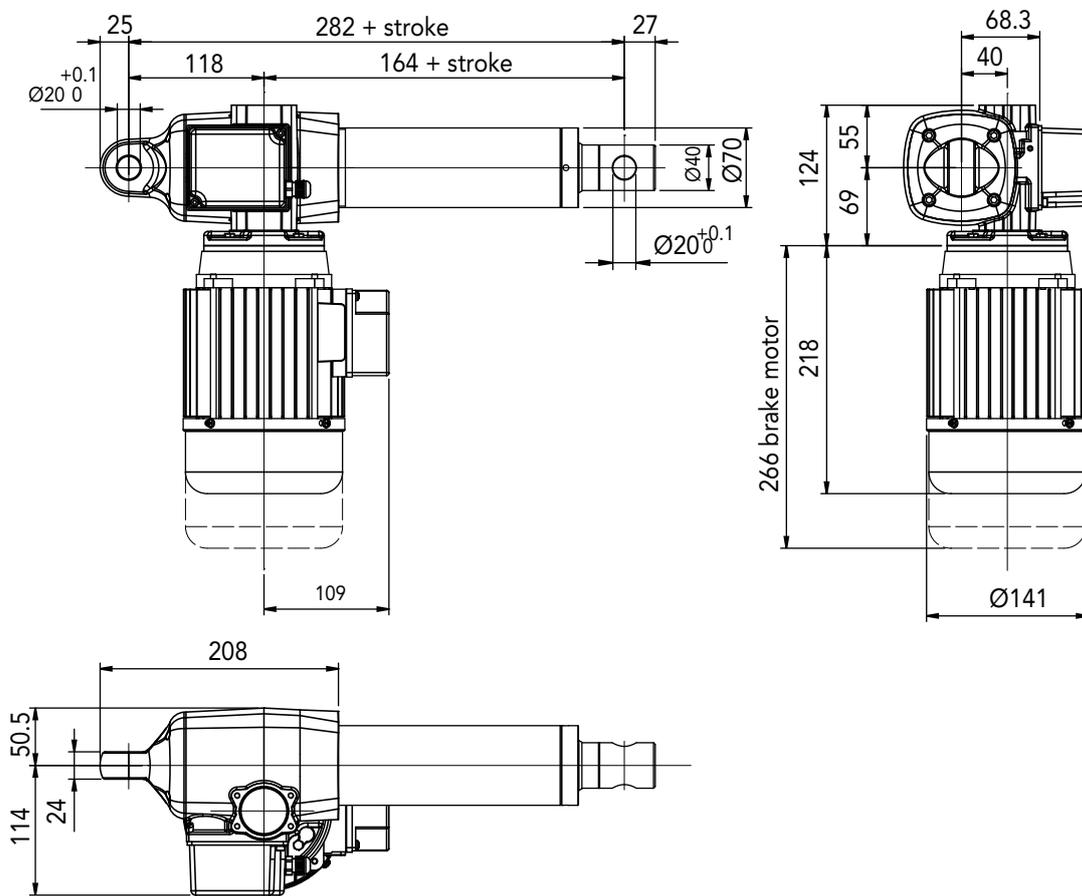
THIS DOCUMENT DISPLAYS MOST TYPICAL STANDARD FEATURES AND SETUPS: CONTACT OUR OFFICES FOR MORE. ACTUATOR SHALL NOT COME TO MECHANICAL STROKE-END, TO AVOID FAILURES. CONSIDER MECVEL'S LIMITSWITCHES ( MODEL ALI5-F or ALI5-FCM) OR PUT THEM ON MACHINE/FRAME.

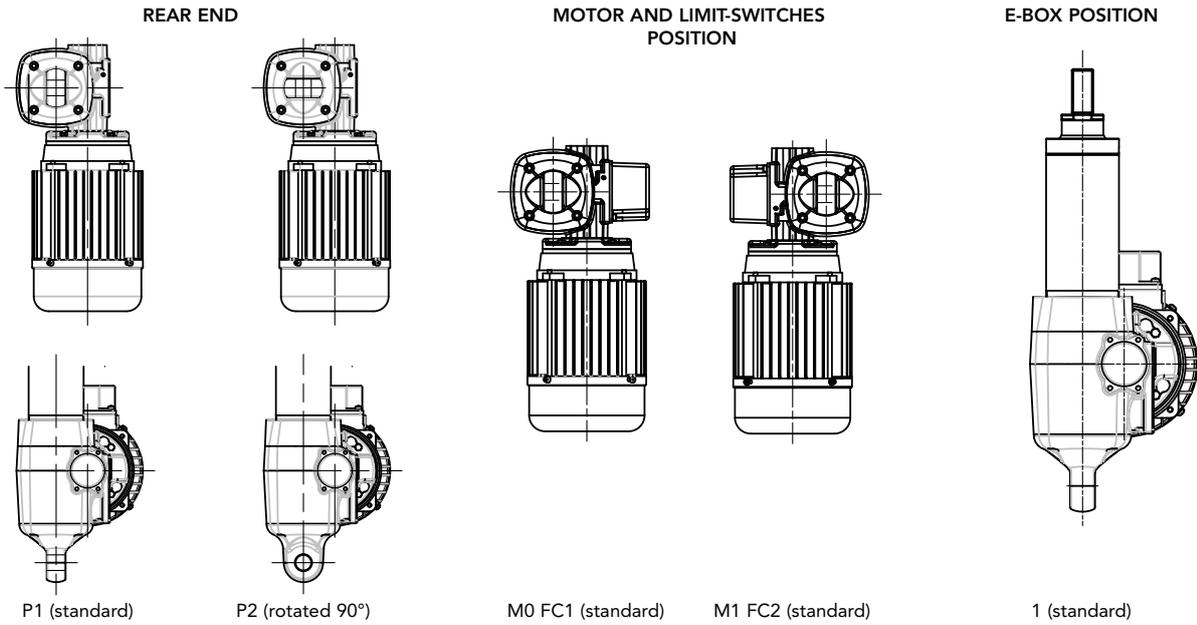
 MecVel reserves the right to change products information and/or features without notice; all data contained in this catalogue are purely indicative and not binding for the company.

VERSION WITHOUT LIMITSWITCHES



VERSION WITH LIMITSWITCHES

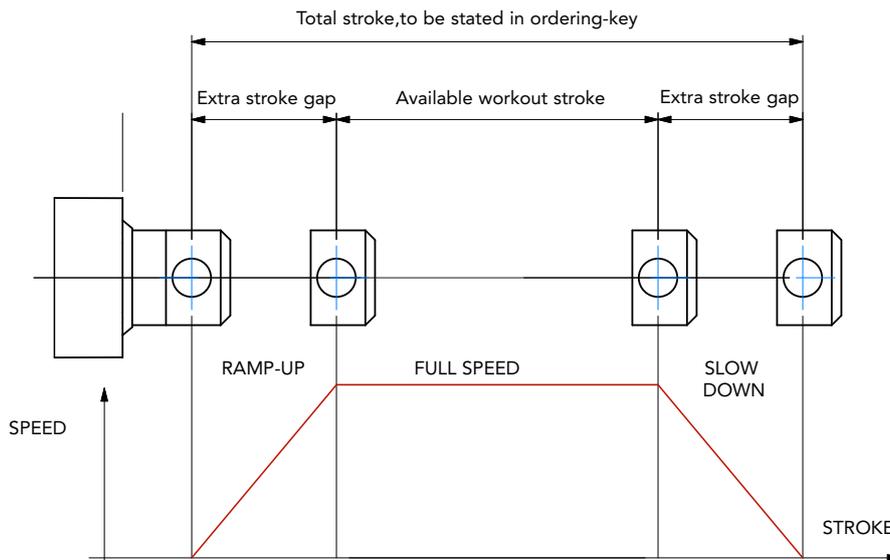




## STROKE SETUP

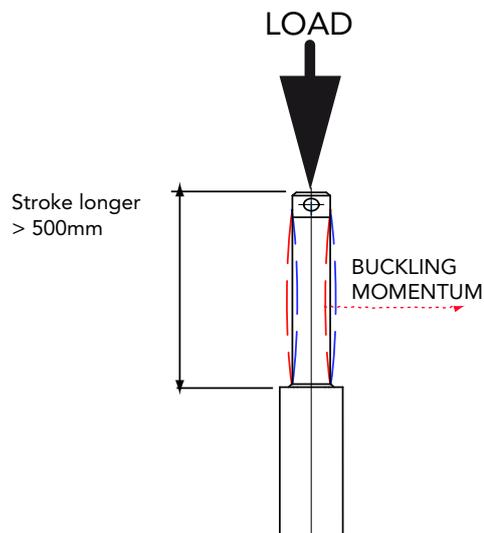
Useful tips for handling stroke and avoid run-on-block collision.

- When stroke is more than 350 mm, add 50 mm extra-stroke as guidance, and put corresponding value in ordering-key.
- **WARNING SPEED-TIMING ALONG STROKELENGTH:** ramps are extremely important when speed is >30 mm/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 usermanuals.



### 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.

ALI5/0250/M05/CA-400/50-T-71-4-0,37/AB/M0/1/E06/2FC1/POT01A/FC1/P1/A1/

**MODEL**

ALI5 / ALI5-F / ALI5 VRS / ALI5-F VRS / ALI5-FCM / ALI5-FCM VRS / ALI5-FCI / ALI5-FCI VRS

**STROKE**

es. 300 mm = 0300

**VERSION**

M01 / M02 / M03 / M04 / M05 / M06 / M45 / M46 / M47 / M48 / M49

M00 = Not standard speed

Flanged version = advice reduction ratio and screw pitch

**MOTOR**

AC: version, voltage, type, size, n°pole, power

With motorflange only put 0

With special motorflange put: PD

**AC MOTOR OPTIONS**

Motorflange: for motorflange version only advise size - i.e.for IEC71 B14 put 71B14

No motor: leave all following parameters blank

Protection Degree: IP65, for selfbrake motor IP54 standard

Brake type: for brakemotors only: ES. FECA

**MOTOR POSITION**

M0 M1 None: Leave blank

**LIMIT SWITCHES**

2FC1 None: Leave blank

**LIMIT SWITCHES POSITION**

FC1 FC2 None: Leave blank

**E-BOX POSITION**

1 No Motor: Leave blank

**ENCODER**

Options pg.76 None: Leave blank

**POTENTIOMETER**

POT01A (1Kohm) POT10A (10Kohm) None: Leave blank

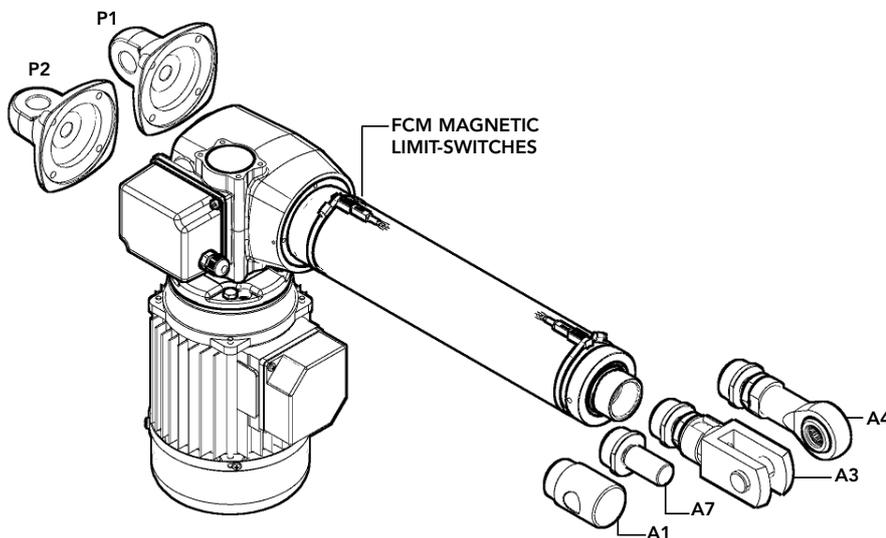
**REAR END**

P1 = Eyelet (standard) P2 = Eyelet (90°)

**FRONT END**

A1 = Eyelet (standard) A3 = Yoke + CliP A4 = Rod end A7 = M20 male

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



**Note:** "B" dimension variations depending on model

- ALI5 / ALI5-F = See pictures
- ALI5 / ALI5-F stroke > 500 = + 20 mm
- ALI5-FCM stroke < 500 = + 40 mm
- ALI5-FCM stroke > 500 = + 60 mm
- ALI5-FCI stroke < 500 = + 30 mm
- ALI5-FCI stroke > 500 = + 50 mm
- ALI5-VRS ALI5-F-VRS stroke < 500 = + 88 mm
- ALI5-VRS ALI5-F-VRS stroke > 500 = + 108 mm
- ALI5-VRS-FCM corsa stroke < 500 = + 128 mm
- ALI5-VRS-FCM stroke > 500 = + 148 mm
- ALI5-VRS-FCI stroke < 500 = + 118 mm
- ALI5-VRS-FCI stroke > 500 = + 138 mm
- ALI5 with safety nut "G" = + 50 mm
- ALI5 with antirotation device "L" = + 15 mm
- ALI5 with bellows = +25 (excluding FCM and FCI version)

