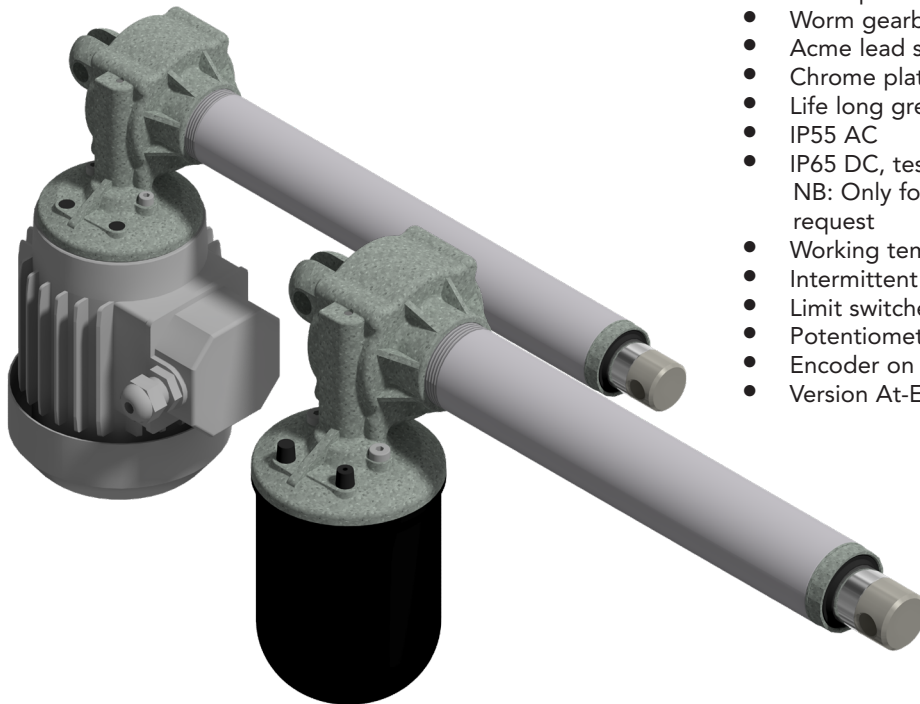




- Permanent magnet DC motor 12-24 V
- Three phase or single phase AC motor
- Worm gearbox
- Acme lead screw or ballscrew (VRS)
- Chrome plated steel push rod
- Life long grease lubricated
- IP55 AC
- IP65 DC, tested according to rule CEI EN 60529
NB: Only for brake motors Standard IP54, IP65 on request
- Working temperature range -10°C +60°C
- Intermittent duty S3 30% (5 min) a +30°C, only for AC
- Limit switches on request
- Potentiometer on request
- Encoder on request
- Version At-Ex II 3 D T4 (AC motor) on request

ALI3 (Vac 3-phase)				
Fmax (N)	Speed (mm/s)	Version	Motor size	Motor power (KW)
2600	20	M01	IEC56	0.09 2 poles
2800	14	M02	IEC56	0.09 2 poles
4800	7	M03	IEC56	0.09 2 poles
5000	5	M04	IEC56	0.09 2 poles
5000	2,5	M05	IEC56	0.09 2 poles

ALI3 VRS (ballscrew) (Vac 3-phase)				
Fmax (N)	Speed (mm/s)	Version	Motor size	Motor power (KW)
5000	9	M01	IEC56	0.09 2 poles
5000	3,5	M02	IEC56	0.09 2 poles

ALI3 (Vdc)						
Fmax (N)	Speed (mm/s)	Version	Motor size	Motor speed (rpm)	Max Current for F max(A) 24Vdc	Fs % base 5 min.
3600 *	35	M01	59	4900	15	10
3600	25	M02	59	4900	12	10
6000	12	M03	59	4900	14	10
6000	9	M04	59	4900	9,5	10
6000	5	M05	59	4900	7	20

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

For the DC models its is possible to add an IP20 break.

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

** For 12 Vdc power supply currents are doubled and loads are 20% lower.

→ The brakemotor is strongly recommended

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

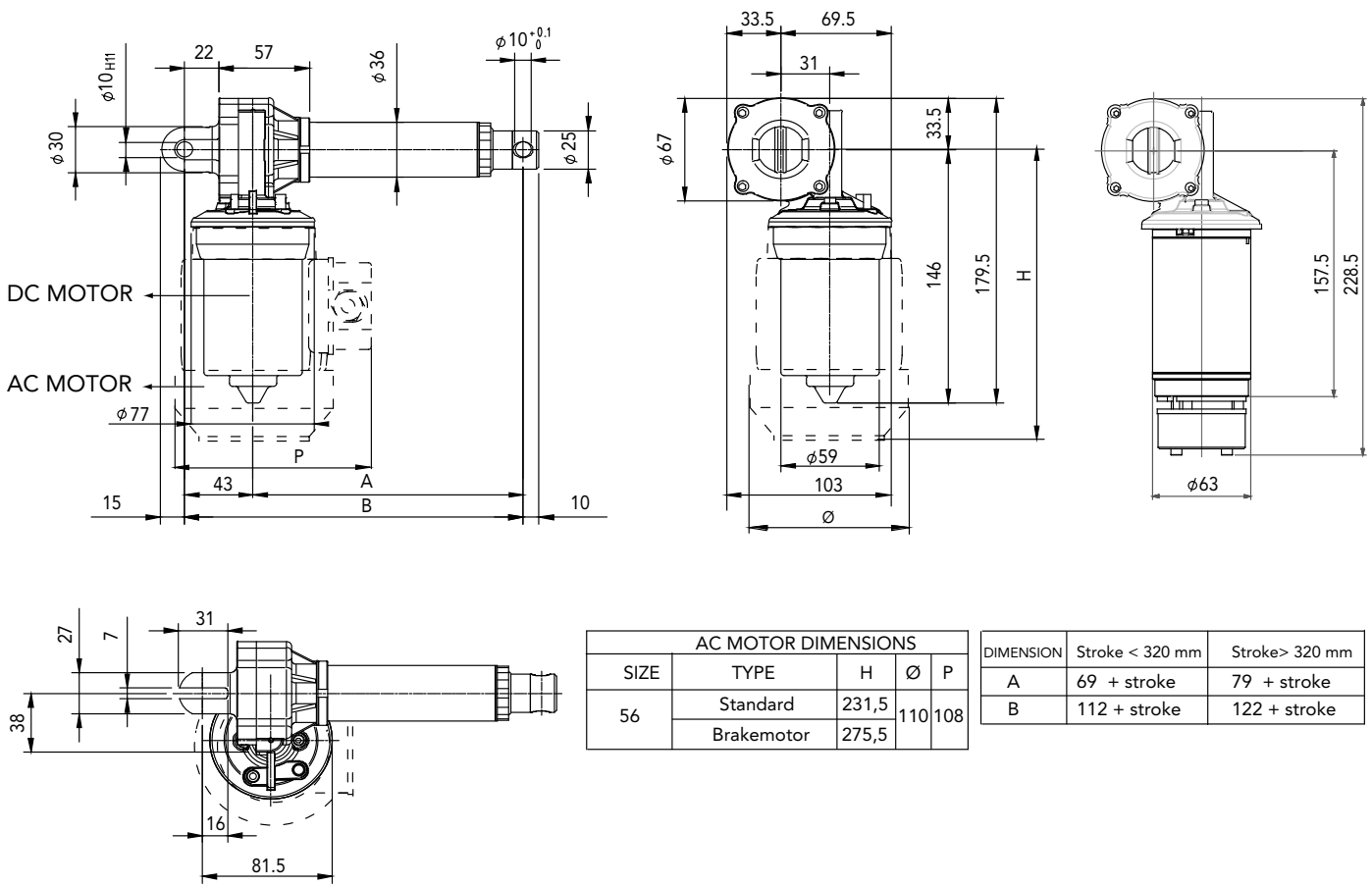
THIS DOCUMENT DISPLAYS MOST TYPICAL STANDARD FEATURES AND SETUPS: CONTACT OUR OFFICES FOR MORE. ACTUATOR SHALL NOT COME TO MECHANICAL STROKE-END, TO AVOID FAILURES. CONSIDER MECVEL's LIMITSWITCHES (MODEL ALI3-F or ALI3-FCM) OR PUT THEM ON MACHINE/FRAME.



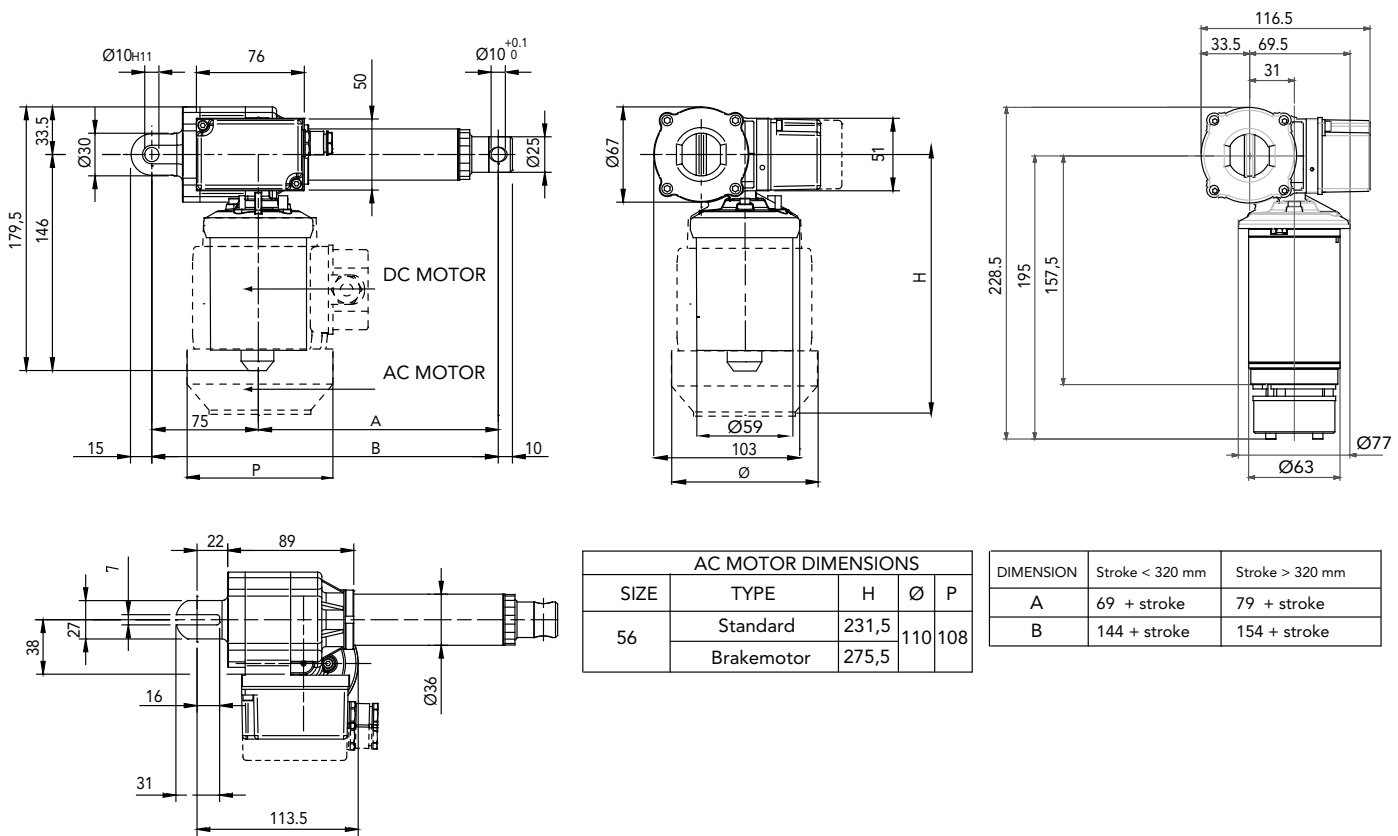
MecVel reserves the right to change products information and/or features without notice; all data contained in this catalogue are purely indicative and not binding for the company.

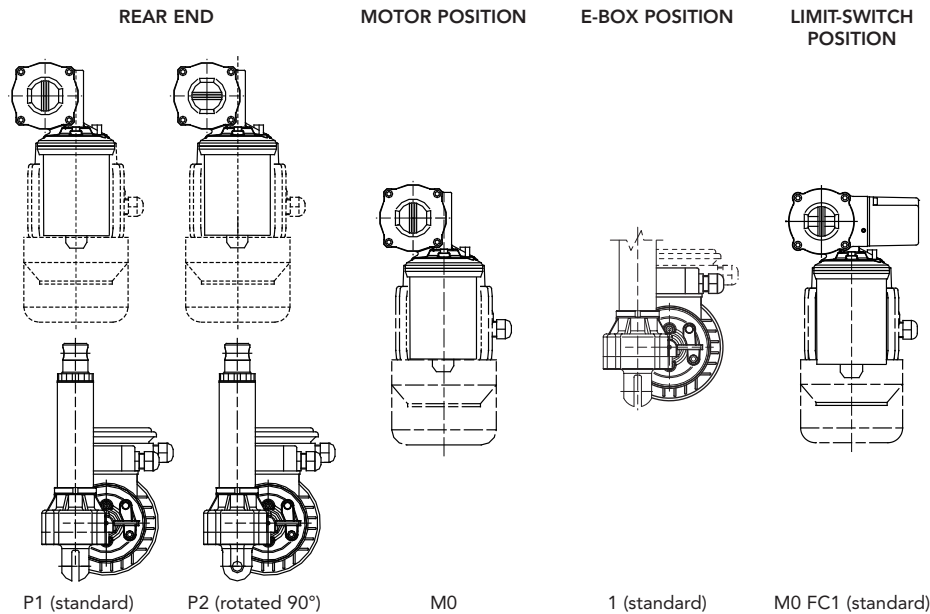


VERSION WITHOUT LIMITSWITCHES



VERSION WITH LIMITSWITCHES

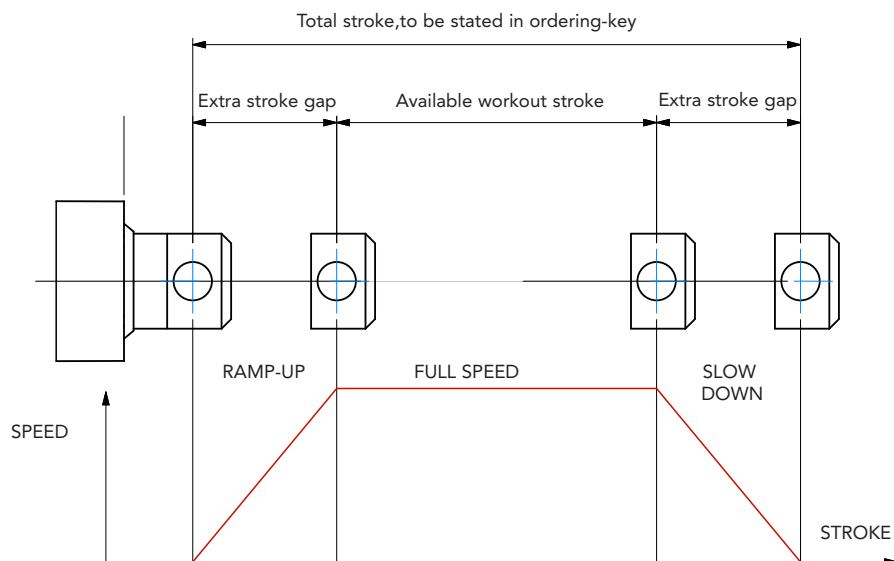




STROKE SETUP

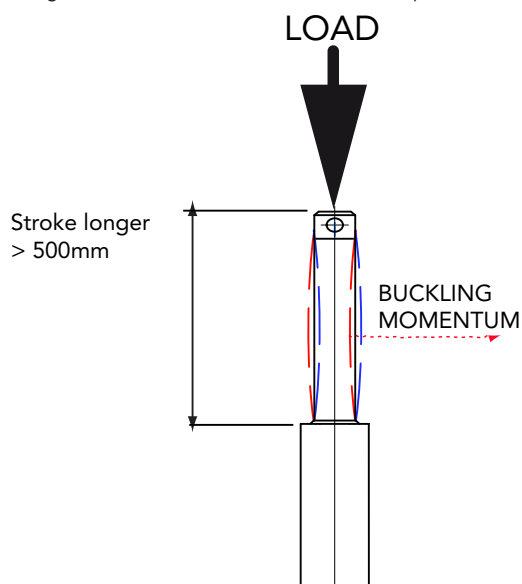
Useful tips for handling stroke and avoid run-on-block collision.

- 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 $>30 \text{ mm/s}$! 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 shows. 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.

ALI3/0250/M03/CA-400/50-T-56-2-0,09/AB/M0/1/E06/2FC1/POT01A/FC1/P1/A1/

MODEL

ALI3 / ALI3-F / ALI3-VRS / ALI3-F-VRS / ALI3-FCM / ALI3-FCM-VRS

STROKE

es. 250 mm = 0250

VERSION

M01 / M02 / M03 / M04 / M05 (DC)

M01 / M02 / M03 / M04 / M05 (AC)

M00 = Not standard speed

MOTOR

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

CC: version, voltage, size, Rpm

AC MOTOR OPTIONS

With DC motor, dont consider the following lines

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

Options pg.76

None: Leave blank

LIMIT SWITCHES

None: Leave blank

POTENTIOMETER

POT01A (1Kohm)

POT10A (10Kohm)

None: Leave blank

LIMIT SWITCHES POSITION

FC1

None: Leave blank

REAR END

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

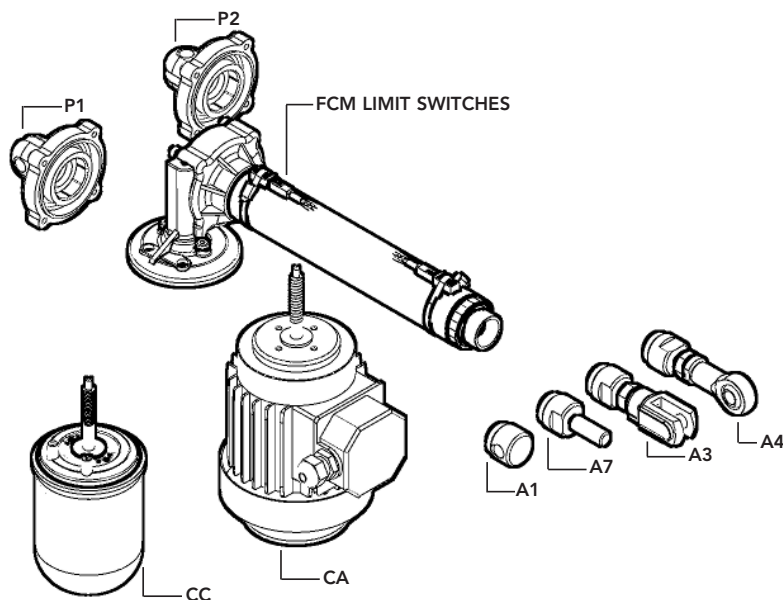
FRONT END

A1 = Eyelet (standard) A4 = Rod end

A3 = Yoke + Clip

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

ALI3 = See pictures

ALI3 stroke > 320 mm = + 10 mm

ALI3-FCM = + 34 mm

ALI3-FCM stroke > 320 mm = +44

ALI3-F = + 23 mm

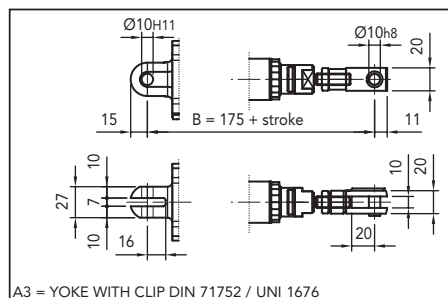
ALI3-F stroke > 320 mm = + 33 mm

With safety nut "G" = + 30 mm

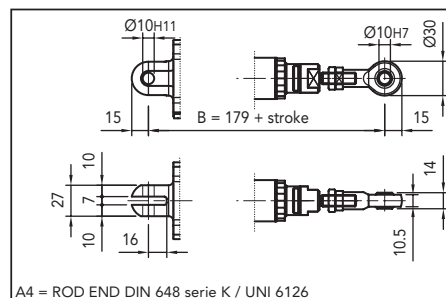
ALI3-VRS = + 40 mm

ALI3-F-VRS = + 63 mm

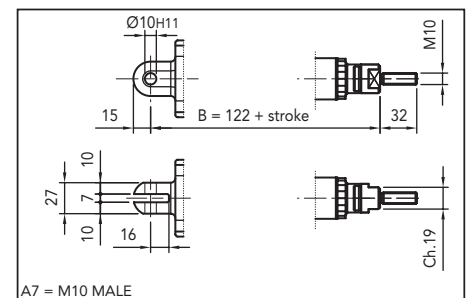
Bellows + 20mm



A3 = YOKE WITH CLIP DIN 71752 / UNI 1676



A4 = ROD END DIN 648 serie K / UNI 6126



A7 = M10 MALE