

ALI4-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
D.C. motor IP 54 standard - IP65 on request
- 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.

ALI4 (Vac 3-phase)

	Fmax (N)	Speed (mm/s)	Version	Motor size	Motor power (KW)	Motor speed (rpm)
*	2100	93	M01	IEC71	0,55	2800
*	3900	47	M02	IEC71	0,55	2800
	5300	23	M03	IEC63	0,37	1400
	8600	9	M04	IEC63	0,22	1400
	9400	6	M05	IEC63	0,18	1400
	10000	3	M06	IEC63	0,13	1400
	10000	2	M07	IEC56	0,09	1400

ALI4 (Vdc)

	Fmax (N)	Speed (mm/s)	Version	Motor size	Motor power (KW)	Motor speed (rpm)	Max Current for Fmax(A) 24Vdc	**
*	600	100	M20	D.85	-	3000	10	
*	1100	50	M21	D.85	-	3000	13	
	2800	20	M22	D.85	-	3000	13,5	
	4100	13	M23	D.85	-	3000	14	
	6800	7	M24	D.85	-	3000	12	
	10000	4	M25	D.85	-	3000	13	

ALI4-VRS (ballscrew 16x5) (Vac)

	Fmax (N)	Speed (mm/s)	Version	Motor size	Motor power (KW)	Motor speed (rpm)
*	2500	58	M08	IEC63	0,25	2800
	3100	29	M09	IEC63	0,18	1400
	3400	23	M10	IEC56	0,14	2800
	5000	15	M11	IEC56	0,14	2800
	6000	7	M12	IEC56	0,09	1400
	7500	4	M13	IEC56	0,09	1400

ALI4 - VRS (ballscrew 16x5) 24 Vdc

	Fmax (N)	Speed (mm/s)	Version	Motor size	Motor power (KW)	Motor speed (rpm)	Max Current for Fmax(A) 24Vdc	**
*	2400	63	M26	D.85	-	3000	14	
	3400	25	M27	D.85	-	3000	12	
	3900	16	M28	D.85	-	3000	10	
	6800	8	M29	D.85	-	3000	9	
	7500	5	M30	D.85	-	3000	9	

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.

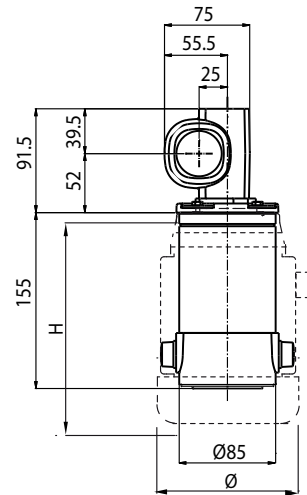
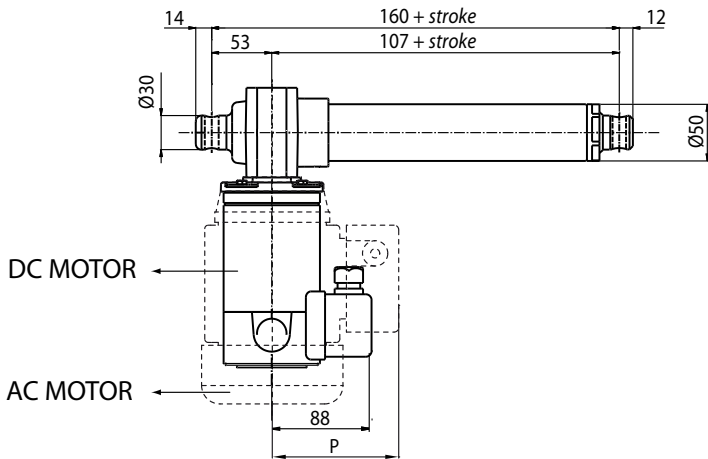
ACTUATOR SHALL NOT COME TO **MECHANICAL STROKE-END**, TO AVOID **FAILURES**.

CONSIDER MECVEL's LIMITSWITCHES (MODEL ALI4-F or ALI4-FCM) OR PUT THEM ON MACHINE/FRAME.



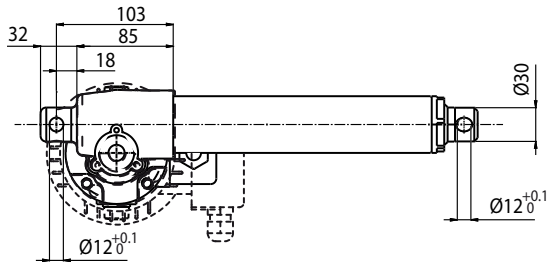
MecVel reserves the right to change products information and/or features without notice; all data contained in this catalogue are purely indicative and not binding for the company.

ALI4 Version without limitswitches

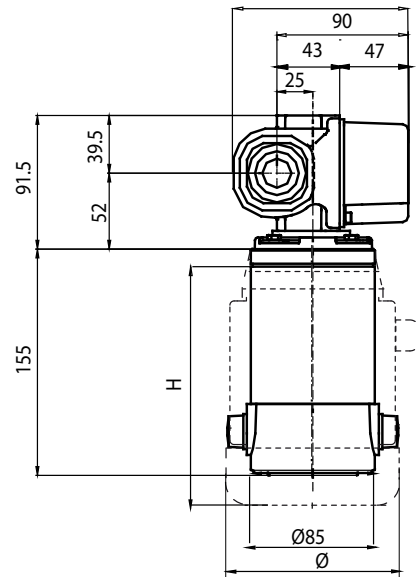
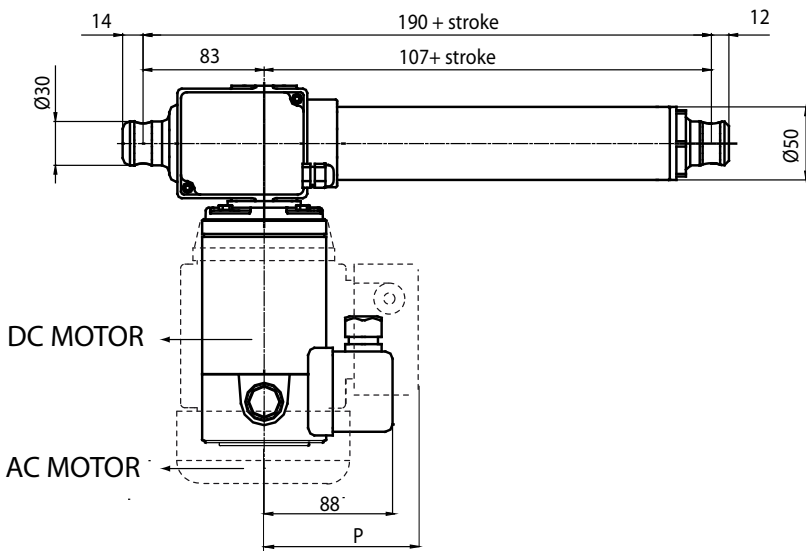


A.C. MOTORS DIMENSIONS				
GR. / SIZE	TYPE	H	Ø	P
56	Standard	168	116	108
	Brake motors	200		
63	Standard	190	129	110
	Brake motors	235		
71	Standard	220	146	121
	Brake motors	267		

With safety nut "G" = + 30 mm
 ALI4-VRS = + 25 mm (safety nut unavailable)
 Bellows + 20mm (for FCM limitswitches contact our Offices)

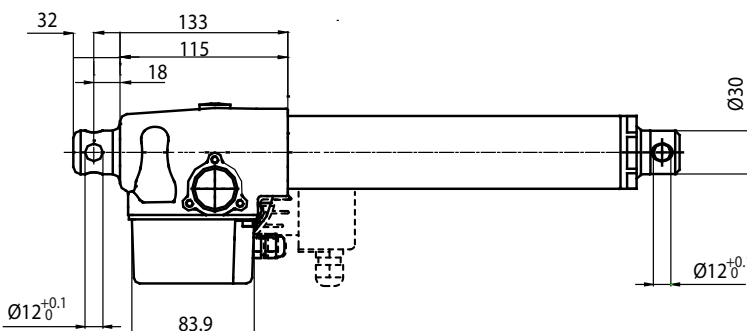


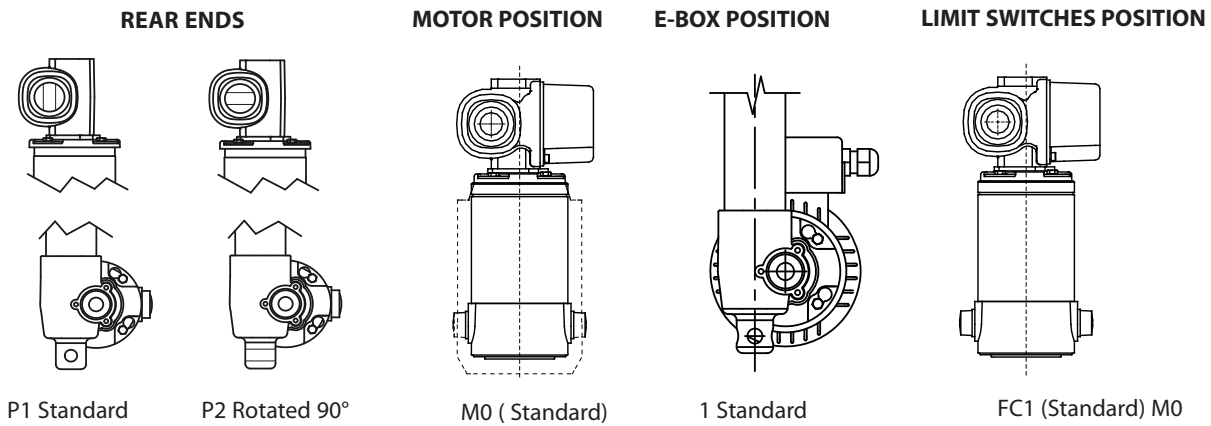
ALI4-F Version with limitswitches



A.C. MOTORS DIMENSIONS				
SIZE	TYPE	H	Ø	P
56	Standard	168	116	108
	Brake motors	200		
63	Standard	190	129	110
	Brake motors	235		
71	Standard	220	146	121
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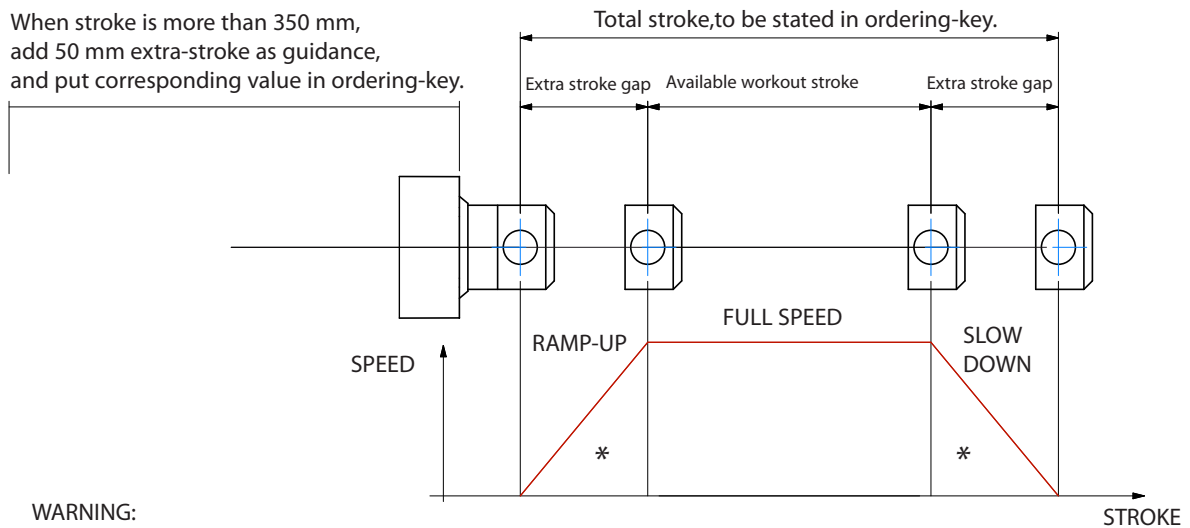
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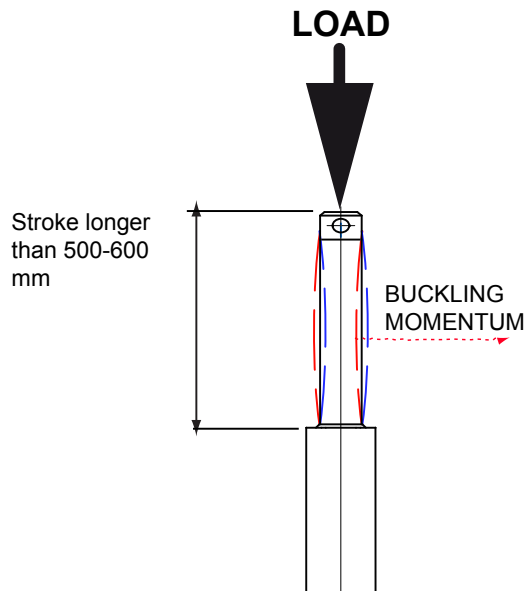
STROKE SETUP: Useful tips for handling stroke and avoid run-on-block collision.

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 > 40mm/s !!! Inverter or PWM drive recommended!
 * The more speed raises the more extra stroke has to raise too.

BUCKLING: With strokes 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.

ALI4 / 0250 / M01 / CA-400/50-T-56-4-0,09 / AB / FC1 / M0 / 1 / E01 / 2FC2 / POT01A / P1 / A1

MODEL: _____
 ALI4 / ALI4-F / ALI4-FCM / ALI4-FCI
 ALI4-VRS / ALI4-VRS-F / ALI4-VRS-FCM
 ALI4-VRS-FCI

STROKE: _____
 es. 250 mm = 0250

VERSION: (Pag. 37) _____
 Advise: choose among
 M00 Not standard speed
 Flanged Version = Rpm
 Advise reduction ratio and screw pitch

MOTOR: _____
 Advise only if with motor:
A.C.: version, voltage, type, size, n°pole, power
D.C.: version, voltage, size, Rpm
 With motorflange only put 0
 With special motorflange put: PD

AC MOTOR OPTIONS: (Pag.ACCESSORIES) _____
 Motorflange: for motorflange version only advise size - i.e.for IEC56 B14 put 56B14
 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)

LIMIT SWITCHES POSITION: _____
FC1 None: Leave blank

MOTOR POSITION: _____
M0 None: Leave blank

E-BOX POSITION: _____
1 No Motor: Leave blank

ENCODER: (Pag. ACCESSORIES) _____
 None: Leave blank

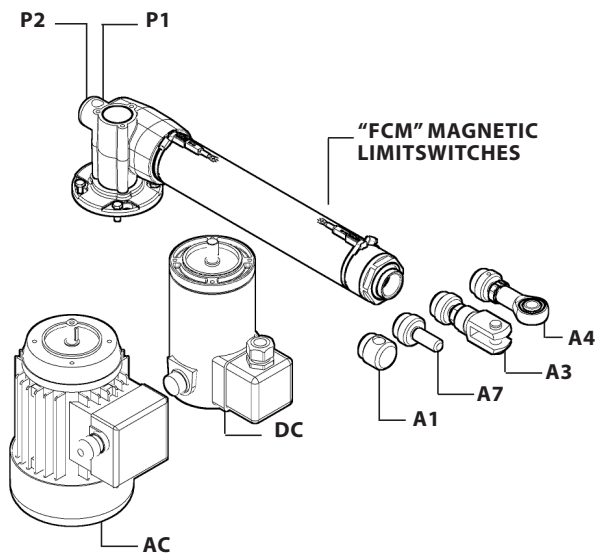
LIMIT SWITCHES: (Pag. ACCESSORIES) _____
 None: Leave blank

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

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

FRONT END: _____
A1 = Eyelet (Std pag.38) **A3** = Yoke + Clip
A4 = Rod end **A7** = M12 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

ALI4 = see pictures	ALI4-F = + 30 mm	ALI4-FCM = + 42,5 mm	ALI4-FCI = + 42,5 mm
	with safety nut "G" = + 30 mm	(i.e. ALI4-F "G" option = +30)	
ALI4-VRS (versione 16x5) = + 25 mm	ALI4-VRS-F (versione 16x5) = + 55 mm		
ALI4-VRS-FCM (versione 16x5) = + 53 mm	ALI4-VRS-FCI (versione 16x5) = + 53 mm		
L = + 15 mm			
Bellows = + 15 mm (excluding FCM and FCI version, for versions FCM and FCI contact MecVel)			

