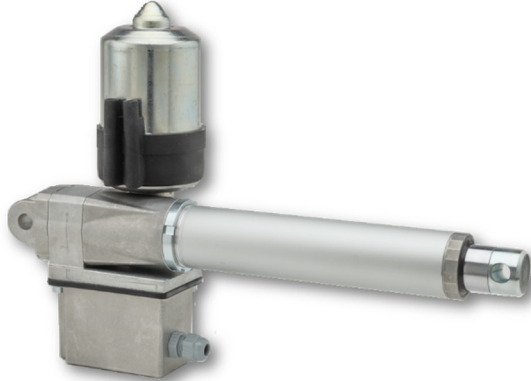


t: +(27) 011 468 1881 c: +(27) 074 465 1744
 e: 01@BirCraft.co.za w: www.BirCraft.co.za

Linear Actuators

ALI 2 - Model



Features and Options:

- ✓ Permanent magnet motor CE
- ✓ Three phase or single-phase motor CE
- ✓ Worm gearbox
- ✓ Acme lead screw or ball screw (VRS)
- ✓ Chrome plated steel push rod
- ✓ Lifelong 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 requests, please contact our Sales Department for more assistance.

ALI2 (VAC 3 – PHASE)

FMAX (N)	SPEED (MM/S)	VERSION	MOTOR SIZE	MOTOR SPEED (RPM)	MAX CURRENT FOR FMAX (A) – 24VDC ²
450 ¹	110	M01	IEC50	0.09	2800
500 ¹	70	M02	IEC50	0.09	2800
650 ¹	50	M03	IEC50	0.09	2800
850 ¹	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 SPEED (RPM)	MAX CURRENT FOR FMAX (A) – 24VDC ²
800 ¹	110	M08	61.5	3000	13
850 ¹	70	M09	61.5	3000	9
1100 ¹	55	M10	61.5	3000	9.5
1500 ¹	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 SPEED (RPM)	MAX CURRENT FOR FMAX 24VDC ²
1500 ¹	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, performances are 20% lower than the three-phase motor.

¹When speed is more than 40 mm/s and/or strokes longer than 350 mm, check STROKE SETUP section.

²For 12 Vdc power supply currents are doubled and loads are 20%

THIS DOCUMENT DISPLAYS THE MOST TYPICAL STANDARD FEATURES AND SETUPS. PLEASE CONTACT OUR SALES TEAM FOR MORE INFORMATION

Linear Actuators

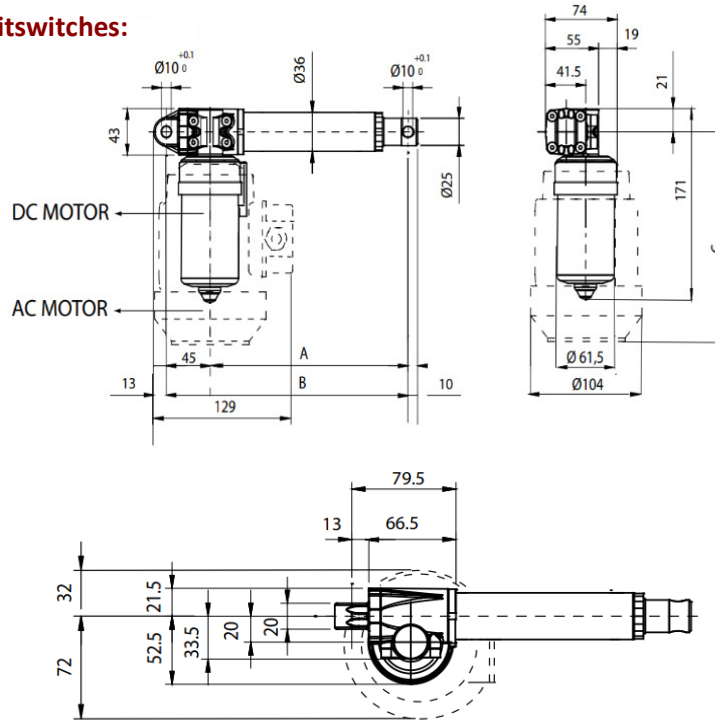
ALI 2 - Model

BirCraft

GEARED MOTORS - LINEAR ACTUATORS - CONTROLS

- Over 40 Years of Supplying Africa -

ALI2 Version without limitswitches:



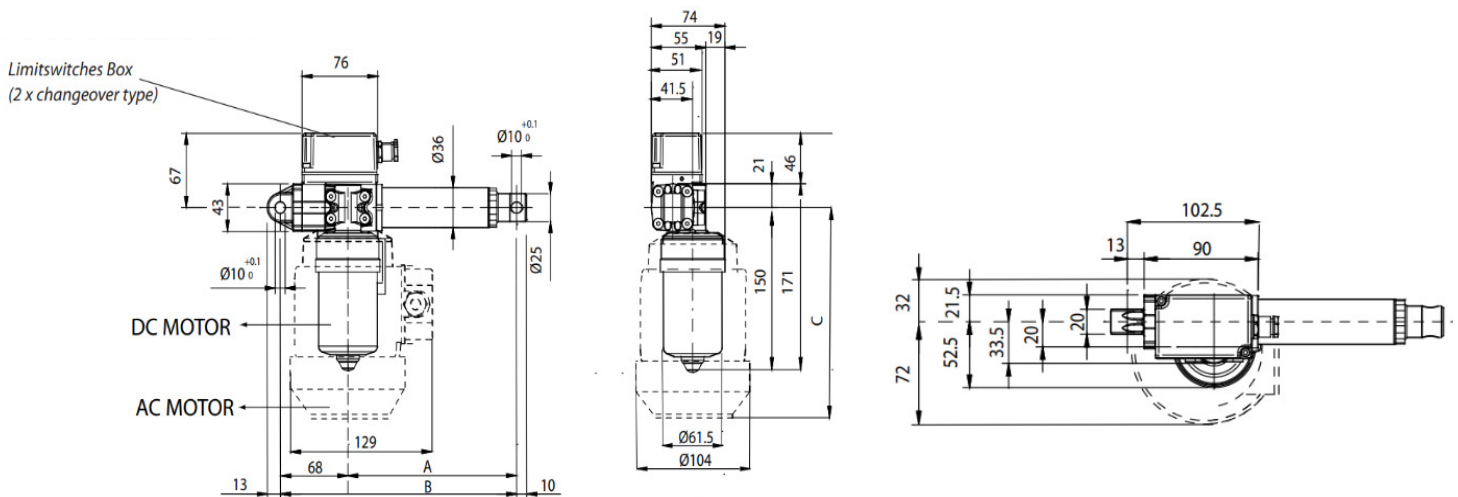
DIMENSION	STROKE < TO 320 MM	STROKE > 320MM
A	70 + stroke	80 + stroke
B	115 + stroke	125 + stroke
C with brake	220.5	
C without brake	182.5	

With safety nut "G" = + 30 mm

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

Bellows + 20mm (for FCM limitswitches, please contact our Sales Department)

ALI2-F Version with limitswitches:



DIMENSION	STROKE < TO 320 MM	STROKE > 320MM
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, please contact our Sales Department)

Linear Actuators

ALI 2 - Model

BirCRAFT

GEARED MOTORS - LINEAR ACTUATORS - CONTROLS

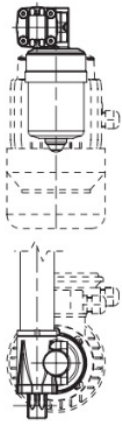
- Over 40 Years of Supplying Africa -

REAR ENDS

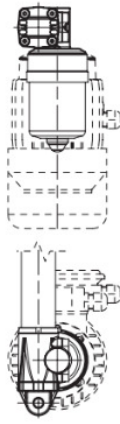
MOTOR POSITION

E-BOX POSITION

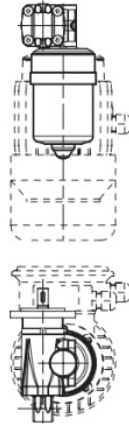
LIMIT SWITCHES POSITION



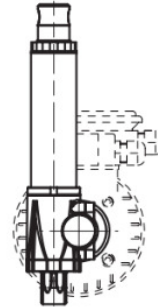
P1 Standard



P2 Rotated 90°



M0



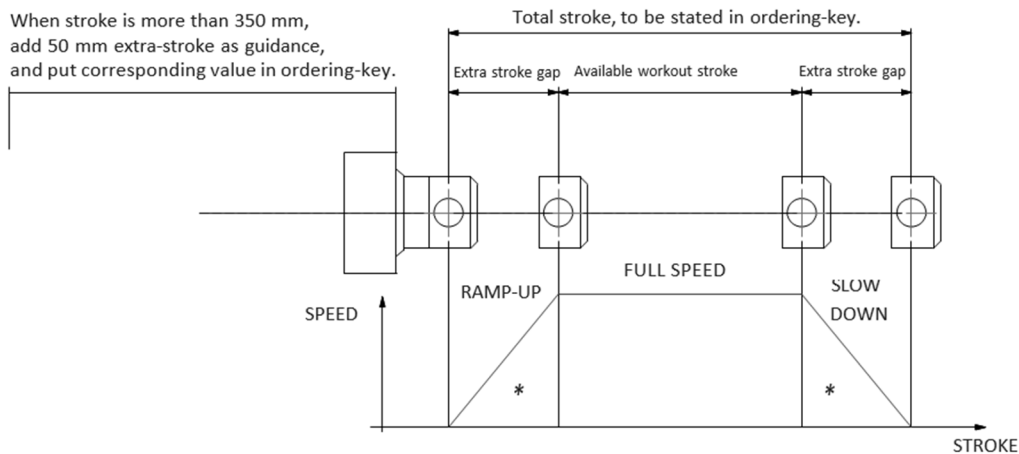
1 Standard



FC1 (Standard) M0

Stroke Setup:

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



WARNING:

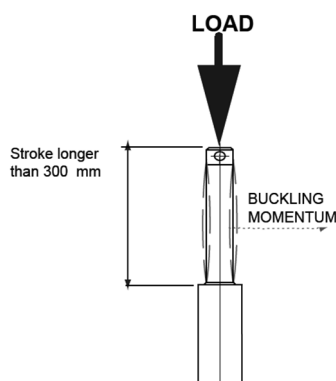
SPEED-TIMING ALONG STROKELENGTH:

Ramps are extremely important when speed is > 40mm/s Inverter or PWM drive recommended!

* The more speed raises the more extra stroke must raise too

Buckling:

When stroke is longer than 300 mm, BUCKLING can be a risk Please check mounting with our Sales Department.



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, please contact our Sales Department.

Ordering Key:

ALI2 / 0250 / M01 / CA-400/50-T-50-4-0,09 / AB / M0 / 1 / E01 / 2FC1 / POT01A / FC1 / P1 / A1

MODEL: _____

ALI2 / ALI2-F / ALI2-VRS /
ALI2-F- VRS / ALI2-FCM

STROKE: _____

es. 250 mm = 0250

VERSION: _____

M08 / M09 / M10 / M11 / M12 / M13 /
M14 (version C.C.) / M01 / M02 / M03 / M04 / M05 /
M06 / M07 / M08 M09 / M10 (version C.A)

MOTOR: _____

Advise only if with motor:

A.C: version, voltage, type, size, n°pole, power

D.C.: version, voltage, size, Rpm

AC MOTOR OPTIONS: _____

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: _____

MO

E-BOX POSITION: _____

1

ENCODER: _____

None

LIMITSWITCHES: _____

2FC1

POTENTIONMETER: _____

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 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 ON THE BIRCRAFT WEBSITE.

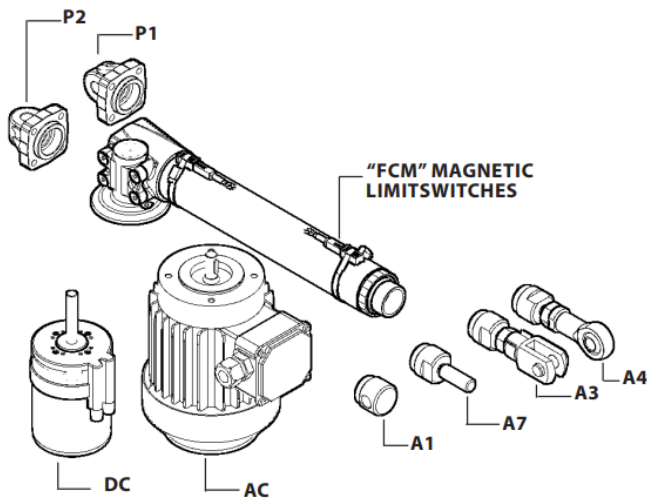
Linear Actuators

ALI 2 - Model

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Notes:

"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

