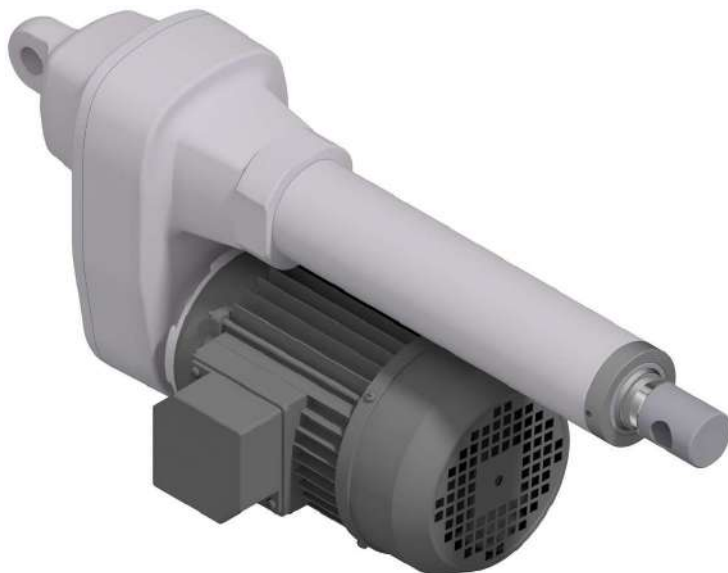




ALI-5P

Industrial Linear Actuator

- Three phase or single phase AC motor
- Cross gears (ALI5-P)
- Belt drive (ALI5-PB)
- 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) a +30°C
- Limit switch, potentiometer, encoder on request
- At-Ex II 3 D T4 version (AC motor) on request

ALI5-P (Vac 3-phase)				
Fmax (N)	Speed (mm/s)	Version	Motor size	Motor power (KW)
2700 *	113	M11	IEC71	0.75 2 poles
4000 *	57	M12	IEC71	0.55 4 poles
6600	28	M13	IEC71	0.55 4 poles
15000	14	M14	IEC71	0.55 4 poles
15000	9	M15	IEC71	0.37 4 poles
15000	5	M16	IEC71	0.25 4 poles

ALI 5-PB VRS (Vac 3-phase)				
Fmax (N)	Speed (mm/s)	Version	Motor size	Motor power (KW)
3600 *	233	M61	IEC80	1.1 2 poles
3800 *	194	M62	IEC80	1.1 2 poles
4300 *	117	M63	IEC80	0.75 4 poles
4500 *	97	M64	IEC80	0.55 4 poles
4500 *	49	M65	IEC71	0.25 4 poles

* When speed is more than 30 mm/s and/or strokes longer than 350mm, check the stroke setup section.

With single-phase motors performances are 20% lower than the three-phase motor.

→ The brake motor is strongly recommended

Before operating an actuator make sure you read and understand basic operational instructions shown on user manuals, available from our sales office.

This document displays most typical standard features and setups.

Actuators must not come to a mechanical stroke-end / mechanical lock to avoid failures.

Consider limit switches (MODEL ALI5-F or ALI5-FCM) or put them on a machine / frame.

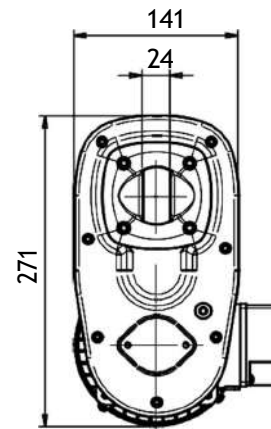
Technical drawing of the 266 brake motor assembly, showing front and side views with dimensions.

Front View Dimensions:

- Overall width: 335 + stroke
- Top flange width: 25
- Top flange thickness: 27
- Top flange outer diameter: $\varnothing 20^{+0.1}_0$
- Top flange inner diameter: $\varnothing 20^{+0.1}_0$
- Top flange height: 131
- Top flange mounting hole diameter: 3
- Top flange mounting hole offset: 50
- Top flange mounting hole offset: 44
- Top flange mounting hole offset: 182
- Top flange mounting hole offset: 218
- Top flange mounting hole offset: 266 brake motor

Side View Dimensions:

- Overall height: 70.5
- Overall height: 109
- Overall height: 141
- Overall height: 170
- Overall height: 200
- Overall height: 230
- Overall height: 260
- Overall height: 290
- Overall height: 320
- Overall height: 350
- Overall height: 380
- Overall height: 410
- Overall height: 440
- Overall height: 470
- Overall height: 500
- Overall height: 530
- Overall height: 560
- Overall height: 590
- Overall height: 620
- Overall height: 650
- Overall height: 680
- Overall height: 710
- Overall height: 740
- Overall height: 770
- Overall height: 800
- Overall height: 830
- Overall height: 860
- Overall height: 890
- Overall height: 920
- Overall height: 950
- Overall height: 980
- Overall height: 1010
- Overall height: 1040
- Overall height: 1070
- Overall height: 1100
- Overall height: 1130
- Overall height: 1160
- Overall height: 1190
- Overall height: 1220
- Overall height: 1250
- Overall height: 1280
- Overall height: 1310
- Overall height: 1340
- Overall height: 1370
- Overall height: 1400
- Overall height: 1430
- Overall height: 1460
- Overall height: 1490
- Overall height: 1520
- Overall height: 1550
- Overall height: 1580
- Overall height: 1610
- Overall height: 1640
- Overall height: 1670
- Overall height: 1700
- Overall height: 1730
- Overall height: 1760
- Overall height: 1790
- Overall height: 1820
- Overall height: 1850
- Overall height: 1880
- Overall height: 1910
- Overall height: 1940
- Overall height: 1970
- Overall height: 2000

[illegible]

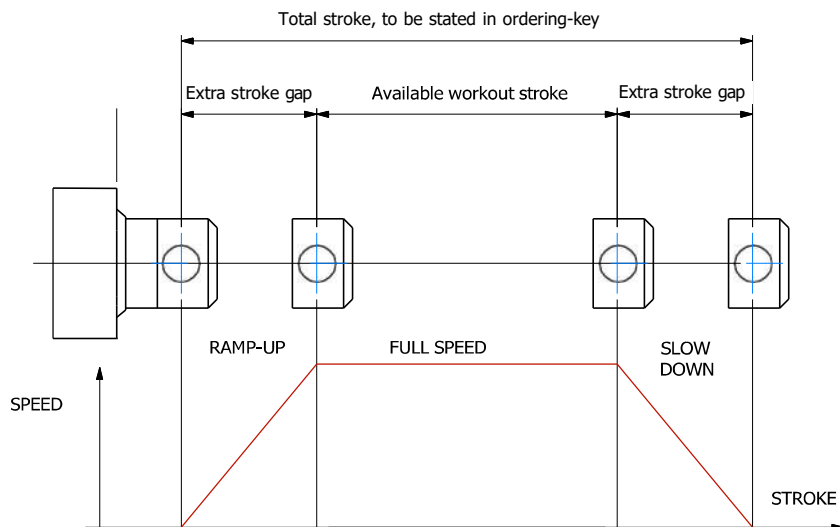
P1 (standard)

P2 (rotated 90°)

STROKE SETUP

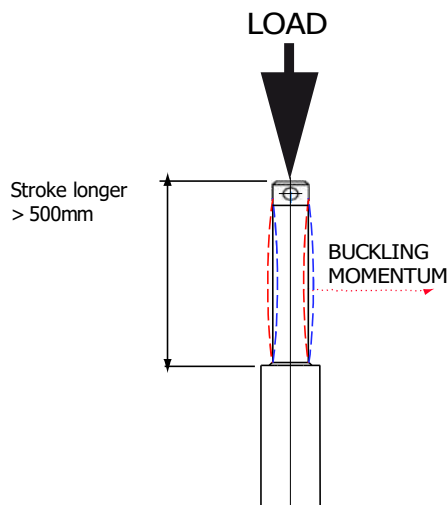
Useful tips for handling strokes and avoiding run-on-block collision.

- 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 rises the more extra stroke has to rise 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 the load is low, can generate significant buckling momentum, as sketch shows. This happens when actuator is in its all-opened position: that's the reason why we recommend 100 mm extra stroke. Push tube will have this 100 mm-portion always inside the overture, improving guidance against buckling.

For more information on this, contact our office.

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GPS Coordinates: S 25.98115° / E 028.06869°

ORDERING KEY EXAMPLE

MODEL _____ **ALI5-P/0250/M16/AC-400/50-T-71-4-0,25/AB/1/E06/2FCM0/POT01A/P1/A1/**

ALI5-P / ALI5-PB VRS / ALI5-P FCM / ALI5-P FCI

STROKE _____
es. 250 mm = 0250

VERSION _____
M11 / M12 / M13 / M14 / M15 / M16 (ALI5-P) M61 /
M62 / M63 / M64 / M65 (ALI5-PB)
M00 = Not standard speed
Flanged version = advice reduction ratio and screw pitch

MOTOR _____
AC version, voltage, type, size, no. of poles, power
With motor flange only put 0
With special motor flange put: PD

AC MOTOR OPTIONS _____
Motor flange: for motor flange version only advise size - i.e. For IEC71 B14 put 71B14
Protection Degree: IP65, for self-brake motor IP54 standard
Brake type: for brake motors only (es. FECA)
Options: Advise if needed (es. AB 2'shaft)

E-BOX POSITION _____
1

ENCODER _____
Options pg.76 _____ None: Leave blank

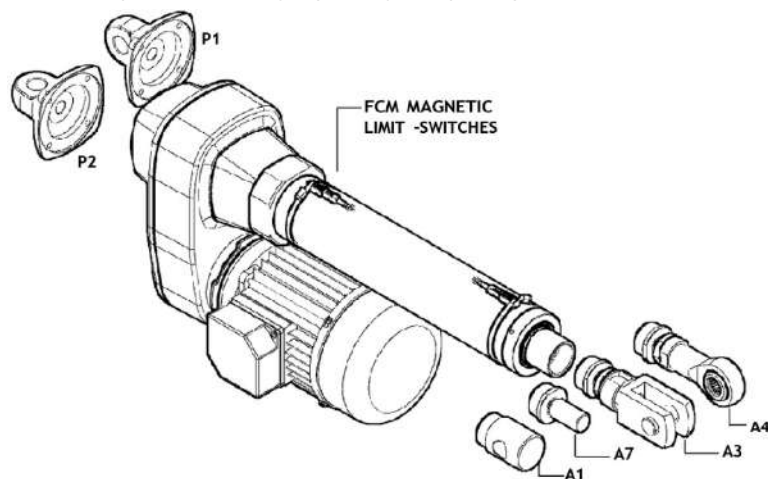
LIMIT-SWITCHES _____
None: Leave blank

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-P = See pictures
ALI5-P stroke > 500 = + 20 mm
ALI5-P-FCM stroke < 500 = + 40 mm
ALI5-P-FCM stroke > 500 = + 60 mm
ALI5-P-FCI stroke < 500 = + 30 mm
ALI5-P-FCI stroke > 500 = + 50 mm
ALI5-P with safety nut "G" = + 50 mm
ALI5-P with anti-rotation device "L" = + 15 mm
ALI5-P with bellows = + 25 (excluding FCM and FCI version)

