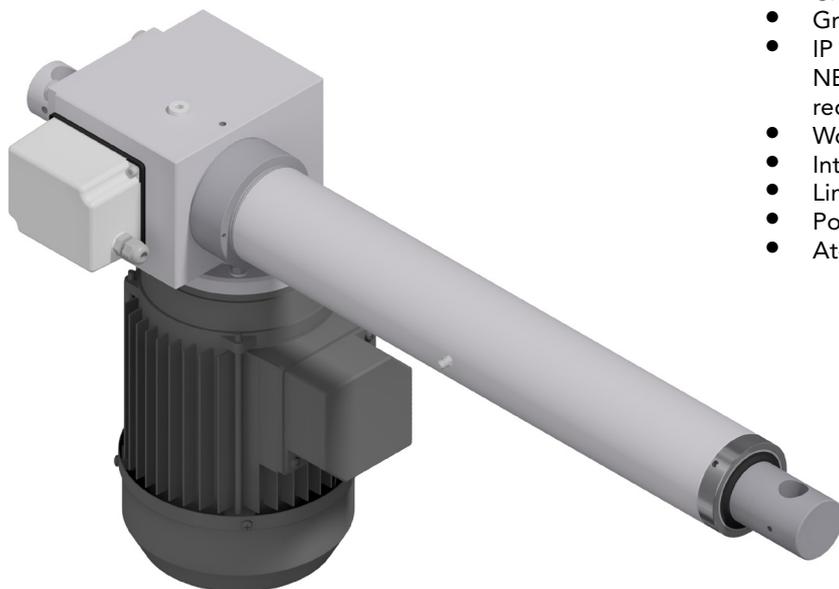


- AC motor, flange B14 - CE
- Worm gearbox
- Acme lead screw or ballscrew (VRS)
- Chrome plated steel push rod
- Grease Lubricated
- IP 55, tested according to rule CEI EN 60529  
NB: Only for brake motors Standard IP54, IP65 on request
- Working temperature range -10°C +60°C
- Intermittent duty S3 30% (5 min) a 30°C
- Limit switches on request
- Potentiometer and encoder on request
- At-Ex II 3 D T4 version (A.C.motor) on request



AV3 (Vac 3-phase)				
Fmax (N)	Speed (mm/s)	Version	Motor size	Motor power (KW)
13000 *	55	M01	IEC90	3 2 poli
20000	30	M02	IEC90	3 2 poli
25000	20	M03	IEC80	1.5 2 poli
25000	10	M04	IEC80	0.75 4 poli
25000	5	M05	IEC80	0.75 4 poli

AV3 VRS (ballscrew) (Vac 3-phase)				
Fmax (N)	Speed (mm/s)	Version	Motor size	Motor power (KW)
8000 *	45	M01	IEC80	0.75 2 poli
13000	22	M02	IEC80	0.55 4 poli
25000	15	M03	IEC80	0.75 2 poli
25000	7	M04	IEC80	0.55 4 poli

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

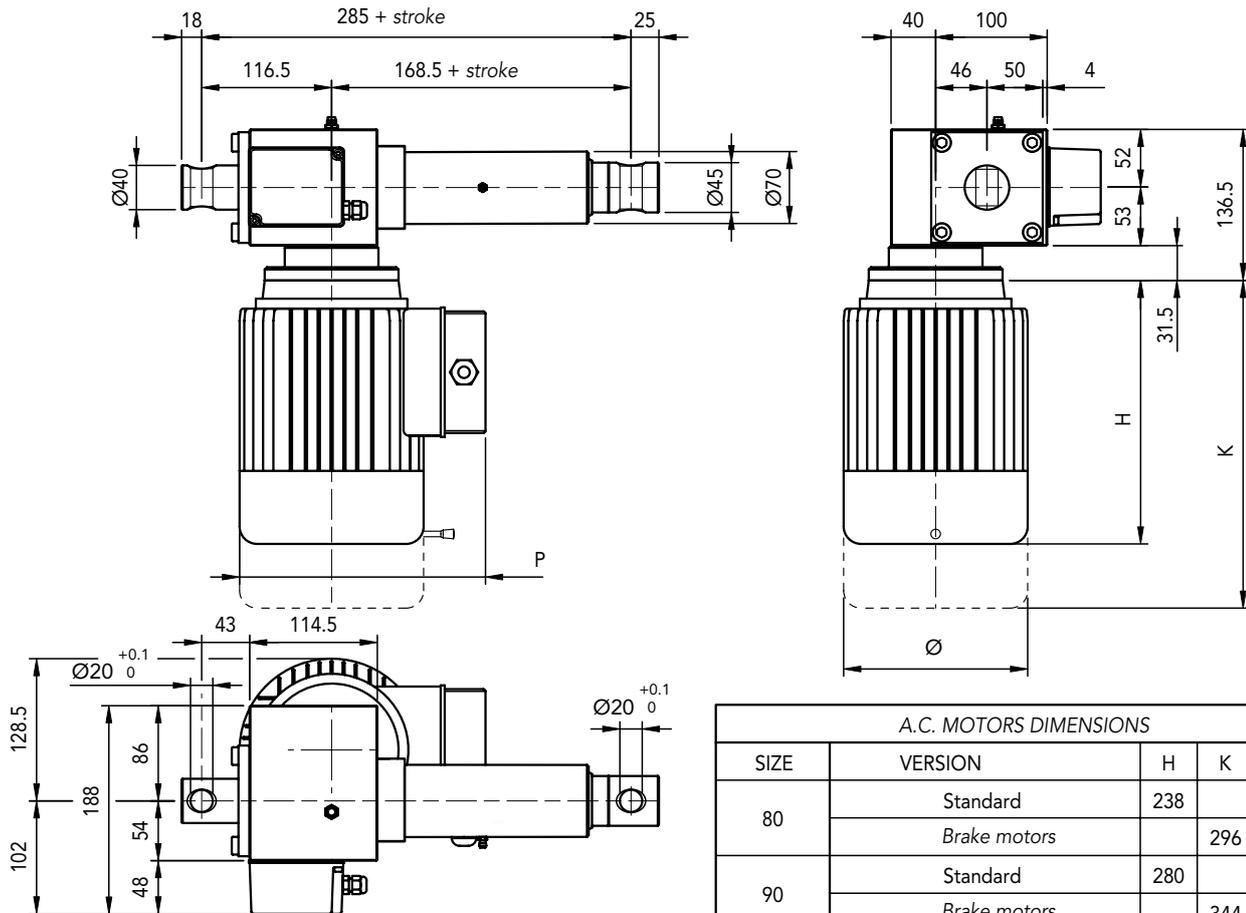
With single-phase motors type M (see motor choice guideline in paragraph ACCESSORIES) performances are 20% lower than the three-phase motor.

→ The brakemotor is strongly recommended

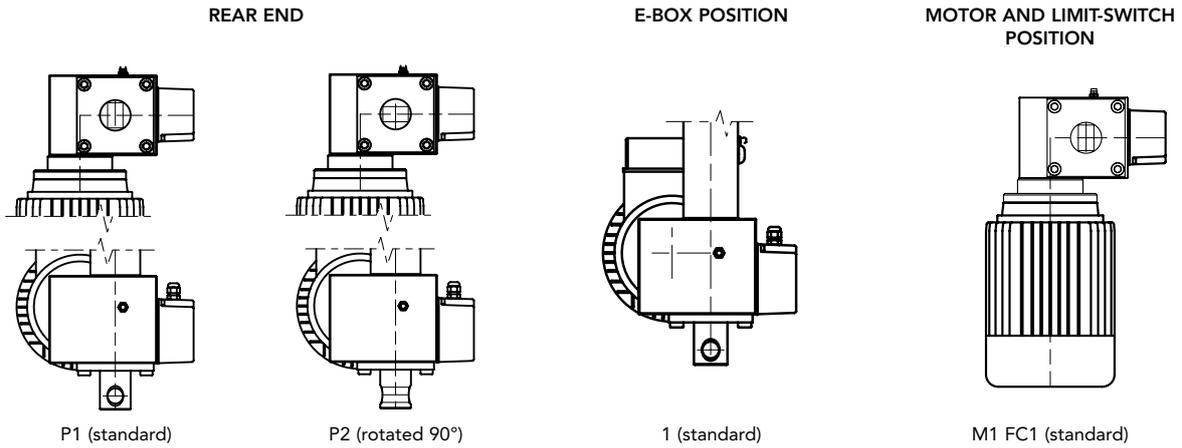
BEFORE OPERATING ACTUATOR MAKE SURE YOU READ AND UNDERSTOOD BASIC OPERATIONAL INSTRUCTIONS SHOWN ON USERMANUALS, AVAILABLE FROM WEBSITE.

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 AV3-F or AV3-FCM) OR PUT THEM ON MACHINE/FRAME.



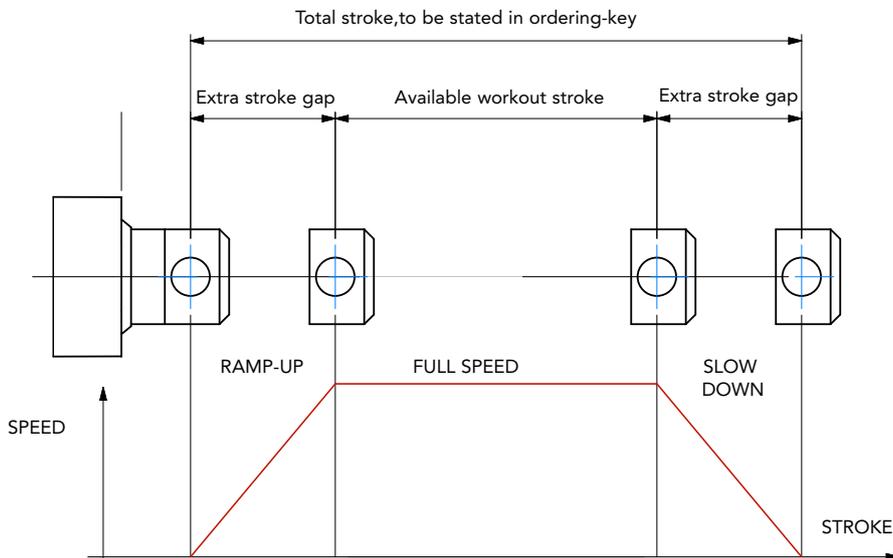
A.C. MOTORS DIMENSIONS					
SIZE	VERSION	H	K	Ø	P
80	Standard	238		165	220
	Brake motors		296		
90	Standard	280		182	251
	Brake motors		344		



## STROKE SETUP

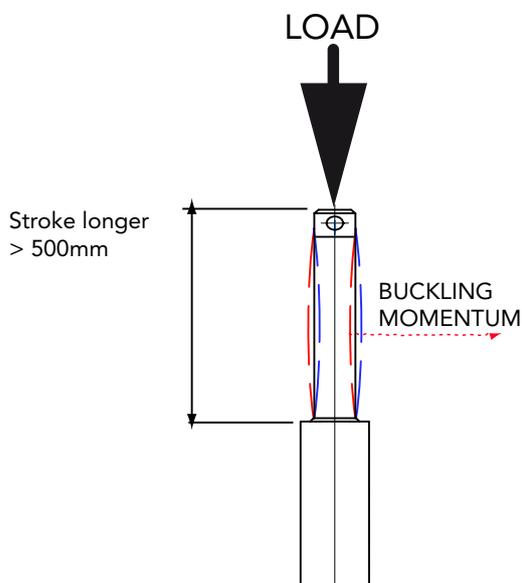
Useful tips for handling stroke and avoid run-on-block collision.

- 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.

AV3/0250/M05/CA-400/50-T-80-4-0,75/AB/M1-FC1/1/E06/2FC1/POT01A/P1/A1/

**MODEL** \_\_\_\_\_  
 AV3 \_\_\_\_\_ AV3-VRS \_\_\_\_\_

**STROKE** \_\_\_\_\_  
 es. 250 mm = 0250

**VERSION** \_\_\_\_\_  
 M01 / M02 / M03 / M04 / M05  
 M00 = Not standard speed  
 Flanged Version = Rpm, indicate reduction ratio and screw pitch

**MOTOR** \_\_\_\_\_  
 Advise only if with motor: 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 IEC80 B14 put 80B14  
 Protection Degree: IP65, for selfbrake motor IP54 standard  
 Brake type: for brakemotors only (es. FECA)  
 Options: Advise if needed (es. AB 2'shaft)

**MOTOR AND LIMIT SWITCHES POSITION** \_\_\_\_\_  
 M1-FC1 \_\_\_\_\_ None: Leave blank

**E-BOX POSITION** \_\_\_\_\_  
 1 \_\_\_\_\_ No Motor: Leave blank

**ENCODER** \_\_\_\_\_  
 Options pg.76 \_\_\_\_\_ None: Leave blank

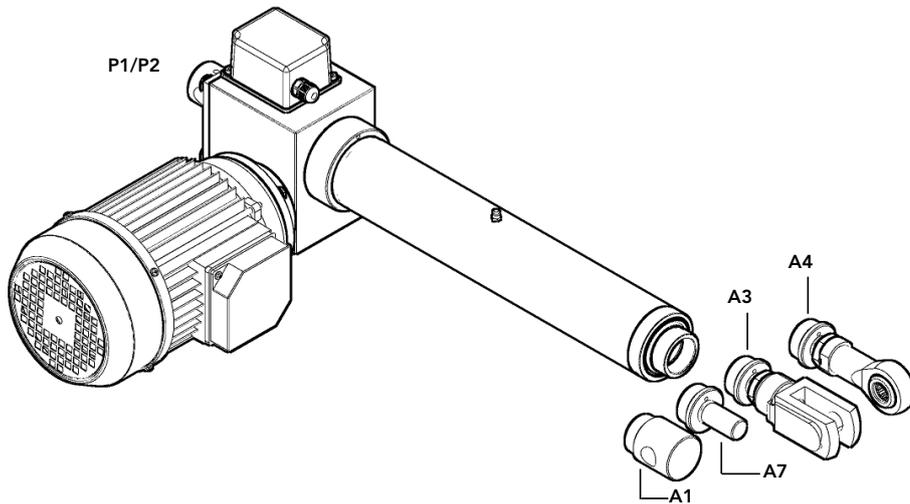
**LIMIT SWITCHES** \_\_\_\_\_  
 None: Leave blank

**POTENTIOMETER** \_\_\_\_\_  
 POT01A (1Kohm) \_\_\_\_\_ POT10A (10Kohm) \_\_\_\_\_ None: Leave blank

**REAR END** \_\_\_\_\_  
 P1 = Eyelet (standard) \_\_\_\_\_ P2 = Eyelet (90°)

**FRONT END** \_\_\_\_\_  
 A1 = Eyelet (standrad) \_\_\_\_\_ A4 = Rod end \_\_\_\_\_ A3 = Yoke + Clip \_\_\_\_\_ A7 = M20 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

AV3 = see picture  
 AV3 with safety nut "G" = + 40 mm  
 AV3-VRS = + 20 mm  
 AV3 with Bellows = + 25mm

