



# AM servo-actuation series



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## CONNECT YOUR MOTOR AND EXPERIENCE A NEW KIND OF LINEAR MOTION

*MecVel creates a range of "hybrids" between linear actuators and servo actuators, giving shape to a kind of product perfect for the latest generation of brushless and stepper motors, designed in detail to ensure a constant and optimal control of position, speed and force reached during each linear movement*

Since 1987, MecVel develops and manufactures electric linear actuators, constantly updated according to market requests, tailored by a customization service with the aim to meet each customer need.

Thanks to years of experience and technical knowledge, in fact, the company is able to offer complete solutions for different kinds of applications.

The AM line, in particular, has been studied for those applications requiring high speed even with medium/high load, but also more particular movements if compared to the classic ON/OFF for which linear actuators are normally used.

These products, in fact, act as a motorized arm, dedicated to perform a really precise handling, where all the power is provided and adjusted according to specific needs, in order to reach the best result.

This also through the use of ball screws, which ensure high efficiency and durability, maximum wear resistance and further reduction of friction and of energy consumption.

The standard version is designed for brushless motor with square flange, but flanges for adaptation are available on request.

The main suitable motors are:

- Stepper motors: in case of low speeds (<2000-3000 rpm), to allow "step" movements (reaching of the preset position, control of the achieved position and maintenance of this position)
- Brushless/servo motors: for higher speeds if compared to the ones supported by stepper motors, as they offer a lower mechanical resistance, avoiding the possibility of sparks formation together with the increase of rotation speed, and reducing consistently the maintenance required. They are the optimal solution in case of high speeds or important accelerations, and the AM line can be adapted to these conditions quickly and efficiently

Some industrial fields to which this series is intended are: packaging, textile, robotics and automation in general, demonstrating the important technological development reached, and wherever the duty cycle is divided into specific phases.

Different applications have been realized in the food industry, for example for the positioning of measuring sensors on automatic machines for the handling of bottles, and in the automotive/defense industry, to move the steering wheel on vehicles (kind of movement applicable also to naval and aeronautics branches).

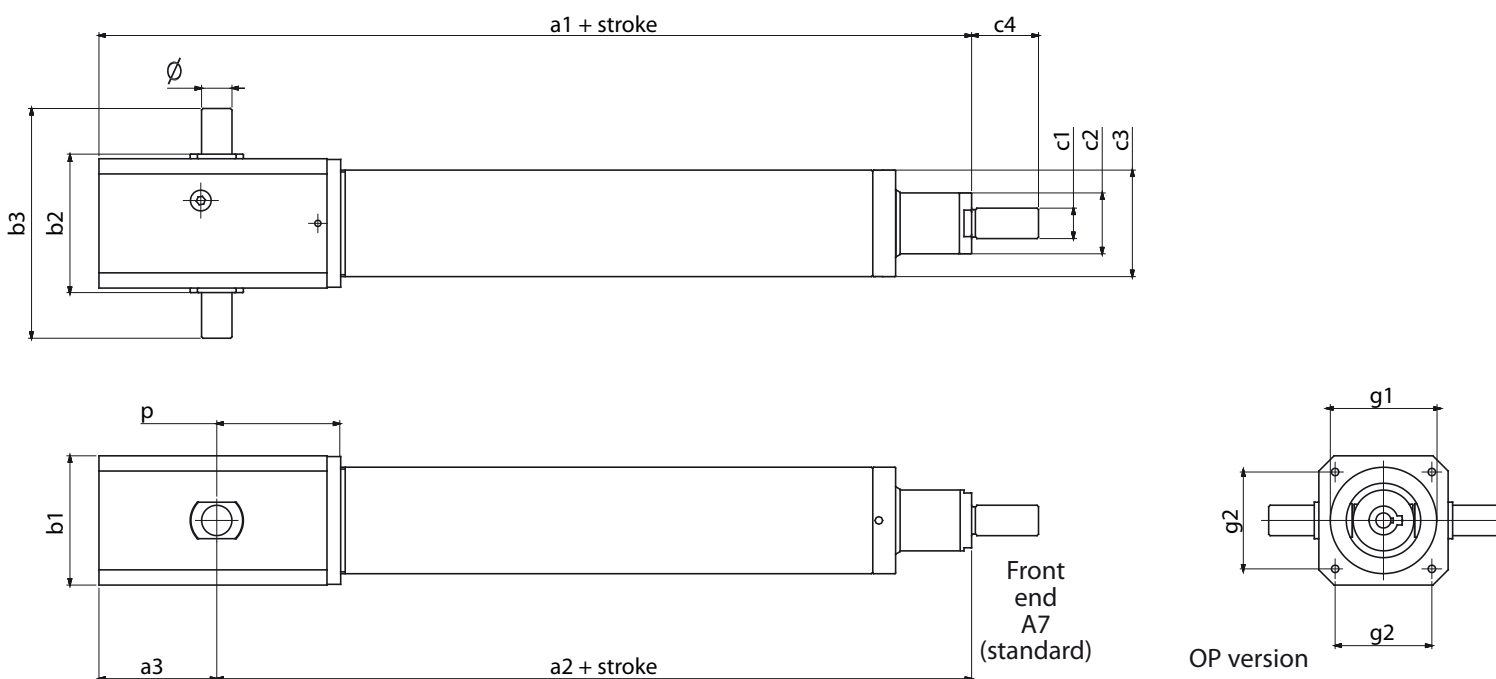
Moreover this line has at disposal a range of special paintings dedicated to camouflage it, preserve it from atmospheric agents and make it suitable for the food industry.

MecVel, in fact, offers optimal solutions regarding the protection of products involved in harsh environments and wherever is required to extend both the product and the whole application life.

Then the electric system proposed by the company ensures excellent performance if compared to hydraulic and pneumatic ones, as it has easy and essential connections, avoids pumps, valves and pipes (excluding the risk of contamination due to oil leaks), provides power only when required, allows self-locking static conditions and works with high temperatures, dust and vibrations with minimum noise, low wear and little maintenance.

To remember also the quality-price ratio that characterizes these products that, even if really closer to servo actuators in terms of performance, have reduced costs, positioning themselves in the market in a very competitive way.

## DIMENSIONS



	a1	a2	a3	b1	b2	b3	c1	c2	c3	c4	g1	g2	p	$\phi$
<b>AM2</b>	330	250	80	65	71	112	M12	$\phi 25$	$\phi 36$	35	$\phi 50$	50	40	14
<b>AM4</b>	335	250	85	65	71	131	M12	$\phi 30$	$\phi 50$	34	$\phi 60$	50	40	20
<b>AM5</b>	428	350	78	85	91	171	M20	$\phi 40$	$\phi 70$	44	$\phi 70$	64	81,5	30

## PERFORMANCE

MODEL	VRS BALL SCREW	LOAD WITH 150 MM/S AND APPROX 4000 H	MAX LOAD
<b>AM2</b>	14x04	1.000 N	5.000 N
<b>AM4</b>	16x05	1.500 N	10.000 N
<b>AM4</b>	16x10	3.000 N	10.000 N
<b>AM5</b>	25x10	3.500 N	15.000 N

⚠ *These values must be intended as standard/typical references.  
Further performances are available depending on the motor fitted by the customer.  
Contact MecVel to require the single data of the product according to the kind of application and its technical specifications.*

## ORDERING KEY

AM5 - VRS / 0200 / 10 / PD / CF / A7 / FCM / DIS

**MODEL:** \_\_\_\_\_

AM2-VRS

AM4-VRS

AM5-VRS

*Parallel motor version available on request*

**STROKE (mm):** \_\_\_\_\_

es. 200 mm = 0200

**SCREW PITCH:** \_\_\_\_\_

**MOTOR FLANGE:** \_\_\_\_\_

**PLATE END:** \_\_\_\_\_

CF: flange

OP: swivelling

**FRONT END:** \_\_\_\_\_

A7: standard

A3: yoke + clip

A4: rod end

**OPTIONS:** \_\_\_\_\_

A: stainless steel version

B: bellows boot

FCM: mechanical limit switches

L: anti-rotation device

**VARIANTS:** \_\_\_\_\_

n.º drawing

