



AM2



MecVel S.r.l. - Via Due Portoni 23 - 40132 Bologna - ITALY

Tel +39 051 4143711 - Fax +39 051 404567

info@mecvel.com - www.mecvel.com



CONNECT YOUR MOTOR AND EXPERIENCE

A NEW KIND OF LINEAR MOTION

MecVel creates a "mix" between a linear actuator and a servo actuator, creating a product perfect for the latest generation of brushless or stepper motors, studied in details to ensure a constant and optimal control of position, speed and force during the whole handling.

Since 1987 MecVel develops and manufactures electric linear actuators, constantly updated according to market requests, designed and customized to meet all customer needs. Thanks to years of experience and technical knowledge MecVel is able to offer complete solutions for all kind of applications, also thanks to the role of new technologies applied.

AM2 in particular is dedicated to those applications where are required high speed with medium/low load, but even more particular movements – compared to the classic ON/OFF to which linear actuators are normally used. AM2, in fact, acts as motorized arm, able to produce a precise and constantly controlled handling.

The main suitable motors are:

- Stepper motors: in case of low speed (<2000-3000 rpm), to allow "step" and defined movements (the reaching of the preset position, the control of the achieved position and then the maintenance of this position)
- Brushless/servo motors: for higher speed 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 ideal solution in case of high speed or important acceleration, as this linear actuator can adapt itself to these conditions quickly and efficiently, providing a constant monitoring of the position reached

Some contexts of use: automatic machines, packaging and textile fields, machine tools, where the duty cycle is divided into phases and industrial automation in general, but also robotics, demonstrating the important technological development applied to this product. Different applications have already been realized: for the food industry, for example for the positioning of measuring sensors on automatic machines for the handling of bottles, and in the defense industry, for example for the management of the steering wheel (kind of movement also applicable to the naval branch, and for the control of flaps in aeronautics).

Critical aspects typical of these fields are fully resolved with AM2, together with a full range of special paintings dedicated to camouflage and protect it, but also make it suitable for the work in the food industry.

MecVel, in fact, offers an optimal solution even regarding the protection of products involved in the toughest contexts, and wherever it's needed to prevent the premature destruction of the products surfaces: a complete formulation, able to react also against the damaging effects of the working environment, and to resist at the exposure to extremely aggressive agents, in order to extend the life of the application and preserve all the elements part of it.

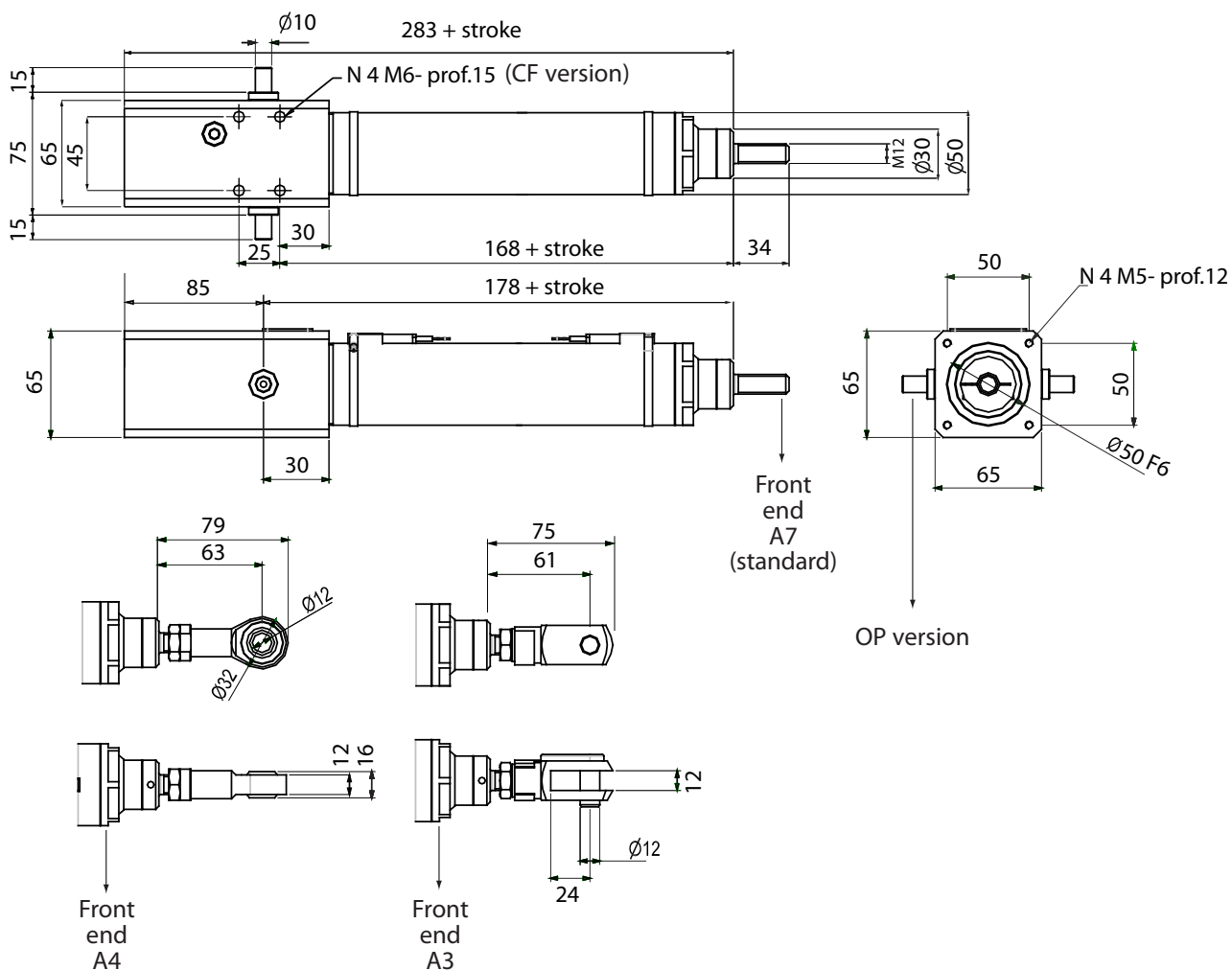
The electric system proposed by MecVel, furthermore, is able to provide excellent performance compared to hydraulic and pneumatic systems: this, in fact, has easy and essential connections, avoids pumps, valves and pipes, excluding the risk of contamination due to of oil leaks. Moreover it provides power only when required, allows self-locking static conditions and can work with high temperatures, dust and vibrations with minimum noise, low wear and low maintenance.

To remember also the great quality-price ratio that characterizes AM2 that, even if really closer to a servo actuator in terms of performance, can reduce costs, positioning itself on the market with a very competitive price – if compared to these systems.

The main technical features of AM2 can be summarized in:

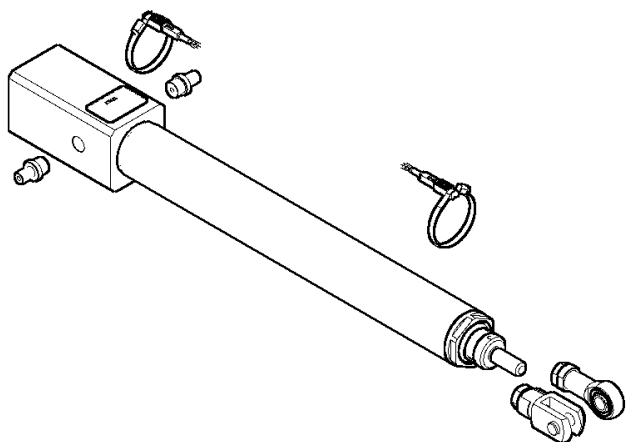
- Standard: brushless motor with square flange, size 64 (flanges for adaptation on request)
- VRS: 16x5 ball screw for high performance and durability, wear resistance, reduction of friction and of energy consumption
- Magnetic limit switches for the control of the stroke long the whole push rod (on request)
- Handling of load up to 10.000 N

DIMENSIONS



AM2 technical features

VRS ball screw		
Diameter x pitch	[mm]	16x5
Performance		
Direct motor-spindle connection		
Stroke for one motorshaft turn	[mm]	5
Max speed (at 2000 rpm)	[mm/s]	165
Force parameter (N of thrust for 1 Nm torque)	[N]	1100
Max force	[N]	10000



ORDERING KEY

AM2 - VRS / 0200 / 5 / PD / CF / A7 / FCM / DIS

MODEL: _____
AM2-VRS

STROKE (in mm): _____
es. 200 mm = 0200

SCREW PITCH: _____

MOTOR FLANGE: _____

PLATE END: _____
flange: CF
swivelling: OP

FRONT END: _____
A7: standard
A3: yoke + clip
A4: rod end

OPTIONS: _____
A: stainless steel version
B: bellows boot
L: anti-rotation device
FCM: mechanical limit switches

VARIANTS: _____
n.° drawing