#### PROGRESSIVE CAVITY PUMPS FOR THE WINE INDUSTRY

#### PRESSING - TRANSFER OF PRESSED GRAPES, MASH, MUSTS AND WINE —



MC - MCR series



#### FILLING AND EMPTYING OF BARRELS



#### **BOTTLING - FILTRATION - REFRIGERATION**





MAE series equipped with electric panel and motor integrated inverter. Thanks to the HMI control panel and the measurement sensors integrated into the machine (optional), operation can be automated.

#### Available sensors:

- Flow switch to prevent the pump from dry running
- Pressure sensor with settable parameters, to detect discharge over-pressures or to stabilize the pump operating pressure. Pump speed is modulated by the PLC in the inverter.
- Flow meter in discharge to keep the flow rate delivered by the pump constant as the system conditions change. The pump speed is modulated by the PLC in the inverter.

All sensors are available with IO-LINK® communication protocol.



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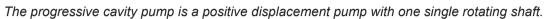
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# PROGRESSIVE CAVITY PUMPS





A stainless steel rotor and a rubber stator are the main pumping components. The rotor is a circular section single screw. The rubber stator is vulcanized inside a steel pipe. Renowned for their versatility, different models are available in a choice of AISI 304, 316 stainless steel. Motorisation: direct motor, geared motor, variable speed motor, motor and pulley, gear

The progressive cavity pumps can handle almost any kind of fluid up to 800.000 cps., including abrasive liquids and suspensions with solids. The pumping action is delicate, without sudden pulsation and the flow rate is proportional to the rotational speed.

#### **MOUNTING ARRANGEMENT**





Double grease lubricated bearings for drive via a flexible



# Close coupled with shaft directly coupled to the drive.

#### **EXECUTIONS**

### MA series - Foodstuffs execution

Pumps for foodstuffs with a large suction chamber. Wetted parts are polished stainless steel with DIN threaded hygienic connections.



#### MIN series



#### MI series - Industrial execution

Sturdy industrial pumps suitable for heavy duty requirements. Cast suction chamber and flanged connections.

#### MC series - Features a hopper and a pre-feeding screw

Version with a hopper equipped with pre-feeding auger screw suitable for viscous products that do not flow easily through pipes. The top part is equipped with a rectangular flange to which any type of conveyance system can be connected.

#### MCN series



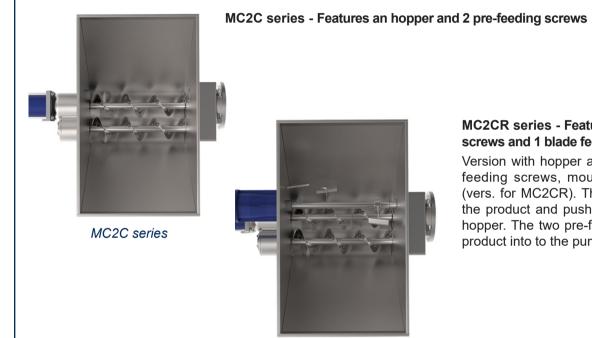




# MCRN series

#### MCR series -Features a hopper, a pre-feeding screw and a vane crusher

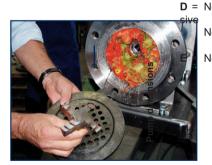
Version with hopper, pre-feeding screw and vane crusher, suitable for dense products in lumps, pieces or that tend to form a bridge around a normal screw feeder. The vane crusher is driven by an independent geared motor, to crush the product to be pumped, breaking down any large lumps and pushing them into the pre-feeding screw.



## MC2CR series

## MC2CR series - Features an hopper, 2 pre-feeding screws and 1 blade feeder

Version with hopper and double synchronised prefeeding screws, mounted below a vane crusher (vers. for MC2CR). The vane crusher blades chop the product and push it towards the bottom of the hopper. The two pre-feeding screws then push the Standard product into to the pump stator.





**MAV** series - Vertical execution

MAV Series pumps are intended for product transfer and drum or container

emptying applications, in which the suction port is plunged directly into the product. As standard, MAV pumps have a suction to discharge port dimension of 1100 - 1400 mm according to the pump size. It can be mounted on a

vertical trolley, with a choice of either a manual sliding or an alternative

pneumatic lift and lower system (up to size MAV 70-L).

**D** = Not very abra-

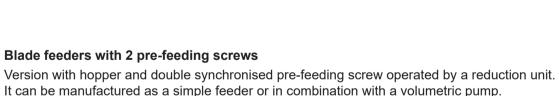
MAV series

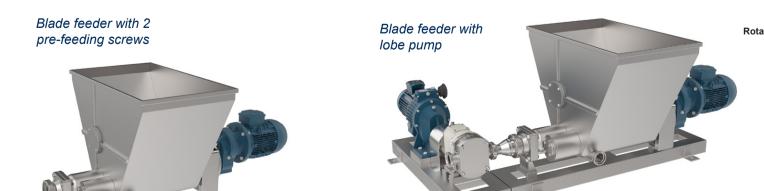
Not very viscous

## MCN series with CRUSHING BLADES

**TECHNICAL DATA** 

Progressive cavity pump with crushing blades. The right solution designed for crushing products containing soft or fibrous components (fruit and vegetables). The great advantage of this device is to avoid the need for macerating equipment after the pump.





Flow rates up to 200 m3/h Maximum operating pressure 24 bar up to 100°C \*

#### Mechanical seals:

Single internal mechanical seal Single external mechanical seal Double flushed mechanical seal Cooled packed gland seal

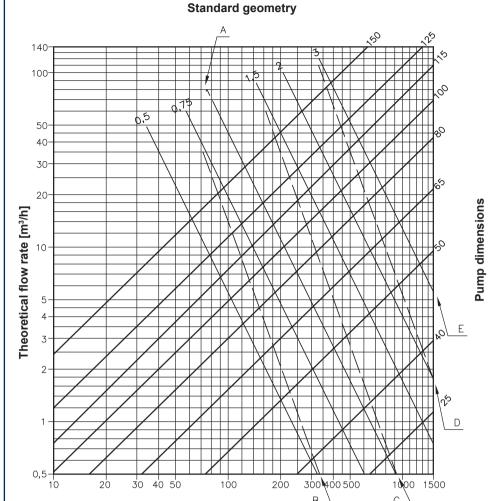
\* To be checked according to the elastomer type.

#### Stator materials

# GA - NBR black

- GB EPDM
- GD FKM rubber Fluoroelastomer
- GE HYPALON rubber
- GF NBR white
- GG NATURAL rubber
- GJ HYDRO-TREATED NITR. rubber
- GL -SBR SCA972
- GM EPDM (white rubber)

#### DIAGRAM FOR SINGLE SCREW PUMP SELECTION



A = Rotor/stator delivery speed in m/sec

**B** = Very abrasive

Very viscous

**C** = Moderately abrasive

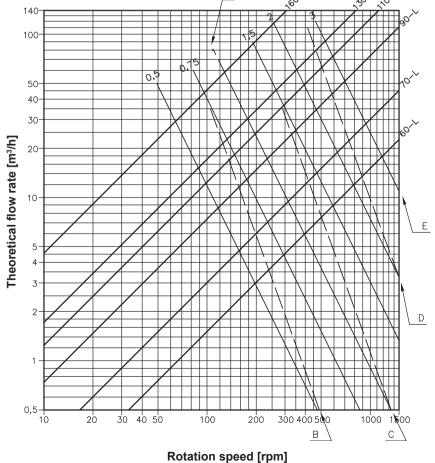
Moderately viscous

Rotation speed [rpm]

**E** = Not abrasive

**D** = Not very abrasive

Not very viscous — — —



Standard geometry