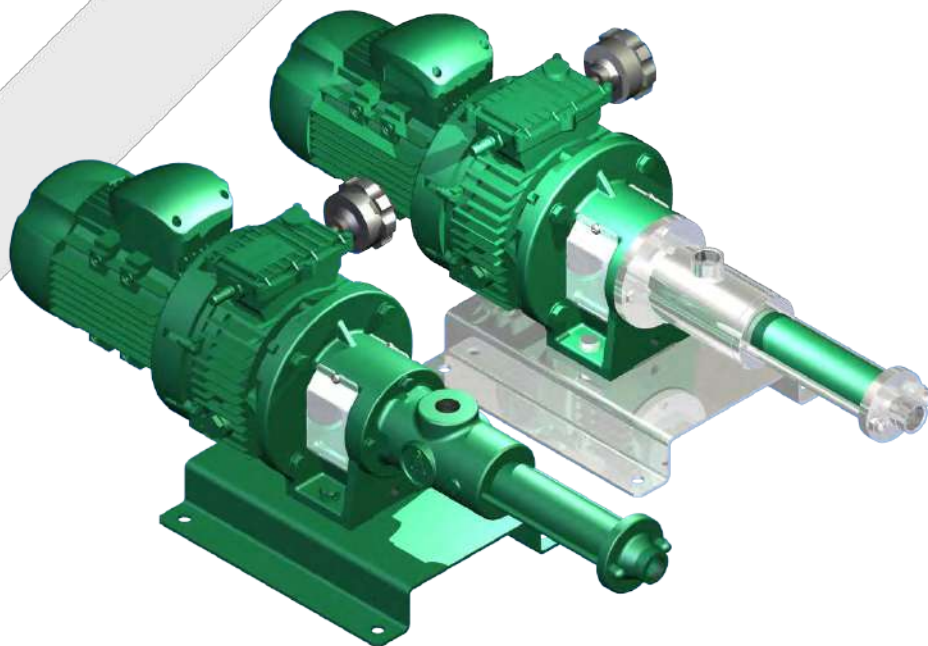




NORTH RIDGE PUMPS

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MN PROGRESSIVE CAVITY DOSING PUMPS

APPLICATION FIELDS



Sewage treatment

Dirty waste water, primary, secondary, digested, dewatered sludge, flocculants, lime milk.



Chemical and petrochemical industry

Resin, reagent, sulphate, caustic soda, acids, crude oil sludge, biodiesel, tracer dyes.



Marine

Oil sludge, bilge water, sea water.

Winery

Grapes, must, grape paste, wine.



Beverage

Fruit juice pulp, liquors, beer, fruit paste.



Oil industry

Oil, tracer dyes, olive mass.



Paint and coat industry

Colour, solvent, ink paste, pigment, paint.



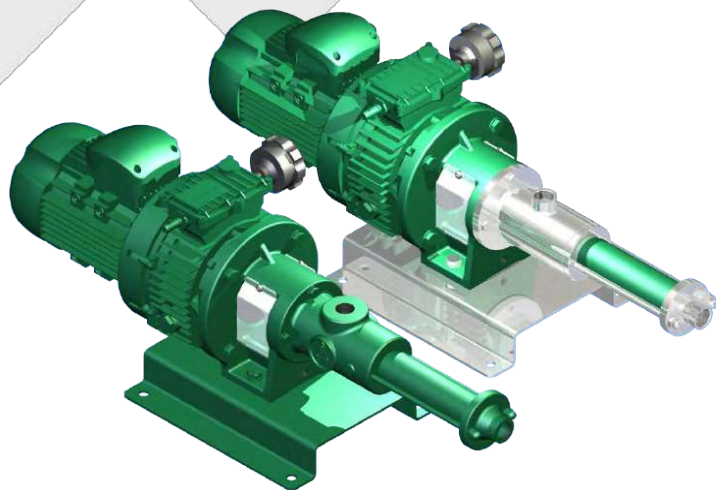


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MN PROGRESSIVE CAVITY DOSING PUMPS



FEATURES

The MN Series of pumps are specifically designed to provide a precise metered flow rate for maximum control.

A helical rotor within the pump head creates extremely low pulsations, and is exceptional at providing flows of viscous shear-sensitive fluids such as paint, pigments, slurries, creams, shampoo, mayonnaise or polymers consistently without any loss of pressure.

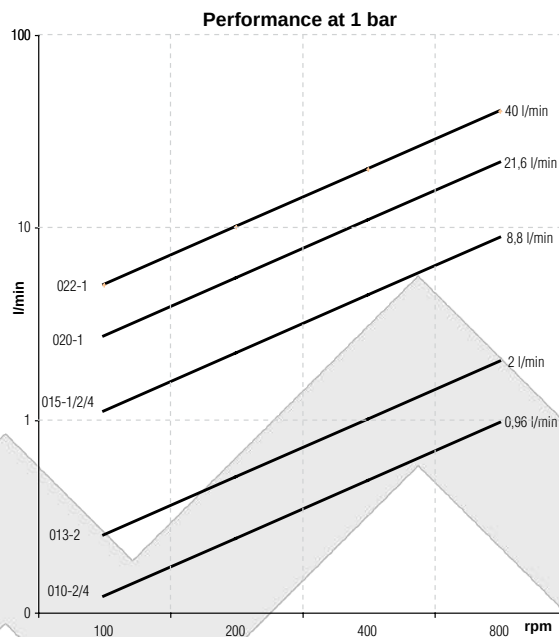
It is a compact pump enabling the smooth pumping of any product without pulsation, and low shear to ensure that any fluid handled isn't altered or damaged.

Thanks to their design, they not only prime large distances but can also reverse flow for the emptying of hoses or tanks. They are perfect for the precision metering of viscous or dense fluids which may contain solids in suspension up to 1,000,000cps.

VERSIONS

Cast iron GG25
Stainless steel AISI 316 / CF8M
Duplex Stainless Steel
Polypropylene

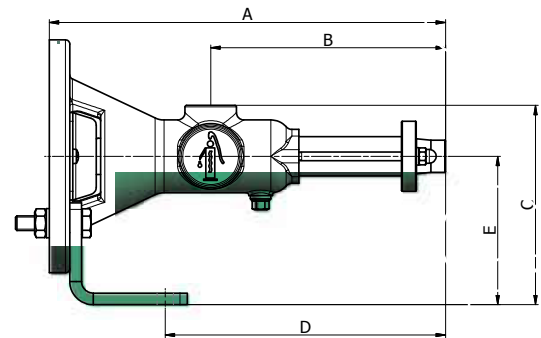
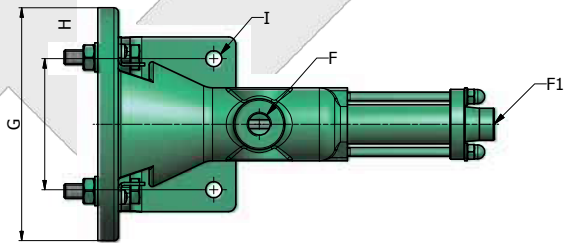
Model	l/min at 1 bar	bar MAX	RPM MAX
010-2	1,2	12	1000
010-4	1,2	24	1000
013-2	2,5	12	1000
015-1	11	6	1000
015-2	11	12	1000
015-4	11	24	1000
020-1	27	6	1000
022-1	50	6	1000





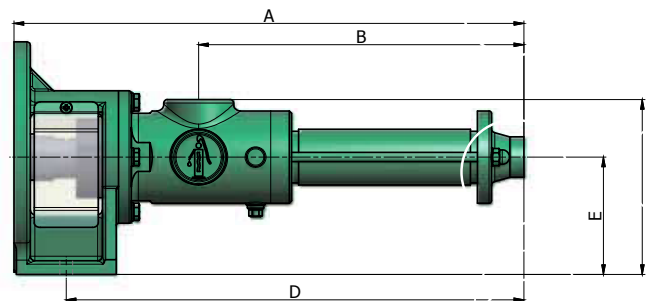
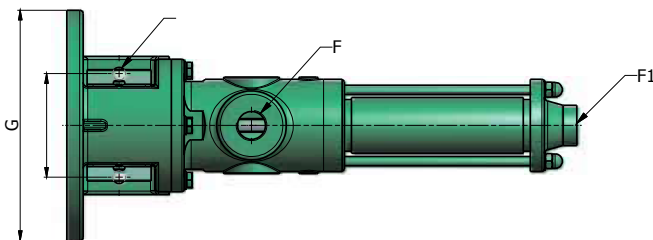
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MN PROGRESSIVE CAVITY DOSING PUMPS: DIMENSIONS **MN**



DIMENSIONS CLOSE COUPLING MN DOSING PUMPS

MODEL	A	B	C	D	E	F	F1	G	H	I	Kg
010-2	270	160	137	191	102	3/8"	3/8"	160	90	11	4,5
010-4	350	240	152	271	102	3/8"	3/8"	160	90	11	4,7
013-2	314	204	152	235	102	3/4"	3/8"	160	90	11	5



DIMENSIONS CLOSE COUPLING MN DOSING PUMPS

MODEL	A	B	C	D	E	F	F1	G	H	I	Kg
015-1	353	194	152	308	102	3/4"	3/4"	200	90	11	9,5
015-2	439	280	152	394	102	3/4"	3/4"	200	90	11	10
015-4	599	440	152	554	102	3/4"	3/4"	200	90	11	10,5
020-1	386	227	152	341	102	3/4"	3/4"	200	90	11	11
022-1	473	314	152	427	102	1 1/2"	1"	200	90	11	12,5



NORTH RIDGE PUMPS

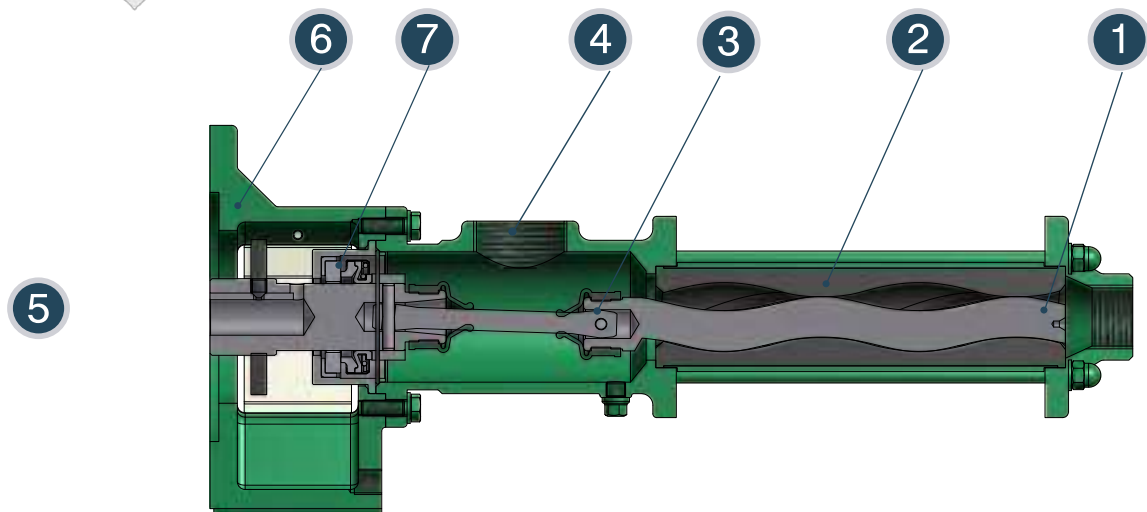
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FEATURES

Screw pump due to the small dimensions of the high, allow the pumping of the product without pulsation and keep the fluid unaltered without damage it. Accept the presence of solid parts and can be suitable to pump fluid with viscosity up to 1,000,000 cps.

PUMP COMPONENTS



1

ROTOR

The rotor is screw shaped, rotating in a circular motion within the stator, enabling the smooth pumping of fluid. The pressure generated by the pump is dependent on the number of stages with each stage adding up to 6 bar pressure.

There are two types of rotors used within pumps: standard and long-step/elongated design that enables pump capacity to double thereby increasing pump performance.

Materials:

steel C40 chromed
stainless steel 304
stainless steel 316
stainless steel 304 HCP
stainless steel 316 HCP

nitride steel
hardened steel
ceramic steel
DUPLEX



LONG STEP TYPE



STANDARD ROTOR



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2 STATOR

It is the fixed part of vulcanized rubber, contained or less on the metal tube, shaped like a circular screw quarry where the rotor rotates. Maximum working temperature up to 150 °C.

Rubber type:

NBR
EPDM
H-NBR
PTFE

NBR food grade
EPDM food grade
FKM
NATURAL
and other on request

3 TRANSMISSION AND JOINT

This supports and transfers the radial axial forces and torque transmitted from the drive to the rotor.

Rubber type:

stainless steel 316
steel C40
stainless steel 304

DUPLEX
stainless steel 630
hardened steel 420B

Tips:

Pin joint
Cross joint

Omcocinetic joint
Open pin joint

4 PUMP BODY

This part is fixed and secured tightly within the casing to enable the rotor to rotate within it. It forms tightly around the rotor enabling the pump to create suction, as it creates a seal forming pockets across its length wherever it's in contact with the rotor.

It's manufactured from vulcanised rubber, and housed inside a tube-shaped metal enclosure. Its internal shape is screw shaped which enables the rotor to rotate within it. It has a maximum working temperature of 150°C and is available in a variety of elastomers to suit the fluid.

Materials:

cast iron G25 UNI 5007
stainless steel 304 / 316
carbon steel
DUPLEX
CIP on request

5 PUMP SPEED CONTROL

These are the devices that control pump speed and are located between the motor and pump head. A variety of technologies can be used to alter pumping speed from a gearbox, mechanical hand variator or inverter, to a direct connection to the motor if operating at full speed.

6 COUPLING

There are two coupling types available: close coupled where the pump is connected directly to the motor and long coupled where a gearbox or bearing housing is added in between the pump head and motor. It's also mounted on a stainless steel baseplate for added support.

7 SEAL

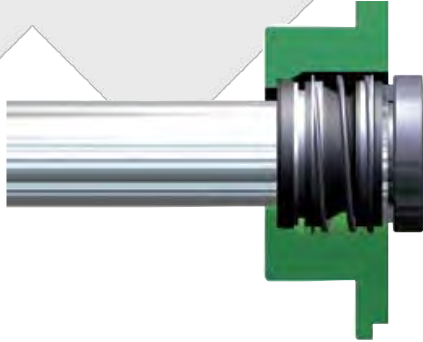
The seal is located at the rear of the pump casing, housing the connection between the pump and the motor or gearbox. It prevents fluid escaping from the pump head, and its material and design varies according to the fluid being pumped.



NORTH RIDGE PUMPS

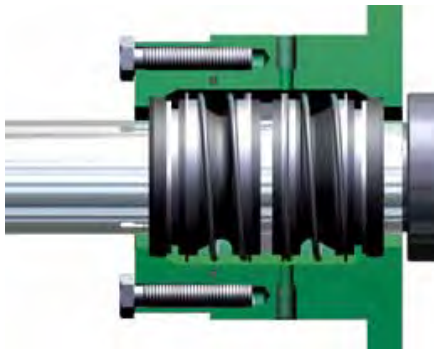
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MECHANICAL SEAL

The mechanical seal is made from two parts - stationary and rotating, connected via an elastomer or metallic spring. The two faces in contact are designed to produce very low friction, and handle fluids which may be viscous or contain solids, at pressures up to 25 bar.



DOUBLE MECHANICAL SEAL "BACK TO BACK"

When a double mechanical seal is used, the faces of the seal are not in contact with the fluid. The seal housing is filled with a liquid known as a flushing liquid which must be compatible with the main fluid being pumped.

The flushing liquid is pressurised at approximately 1 bar higher than the fluid in the casing. It enables the pump to handle solids which may be abrasive, or liquids which may be volatile or aggressive in nature. The seal mechanism is designed to handle pressures up to 25 bar.