

For demanding hygienic conveying and dosing in the food & beverage-, pharmaceutical and cosmetics industry

Hygienic Progressing Cavity Pumps

WANGEN MX



The WANGEN MX progressing cavity pump precisely fulfills the demanding requirements of the food, pharma and cosmetics industries. State-of-the-art design features allow excellent ease of cleaning and maintenance. Therefore, the pump is available with all common certificates. And thanks to its great pressure stability, the MX can also be used in many ways in the chemical, paint and paper industries, among others.



Designation Size Model

Size: Drive shaft diameter

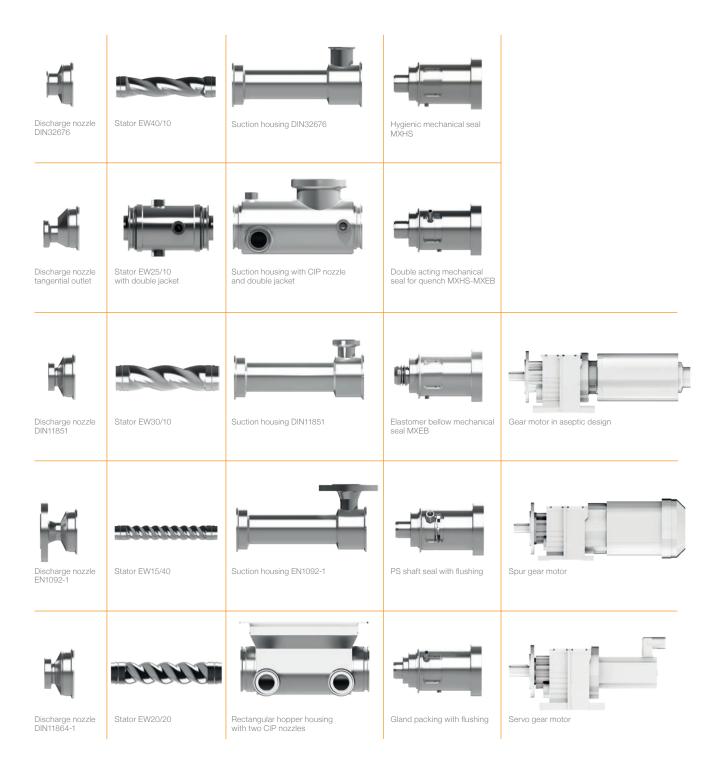
Models: Suction, submergible, hopper,

follower plate versions



Modular design

The modular design of the MX makes it suitable for numerous applications and extremely easy to maintain. The wide variety of components enable the pump to be modified in the optimum way to suit customers' specific applications.

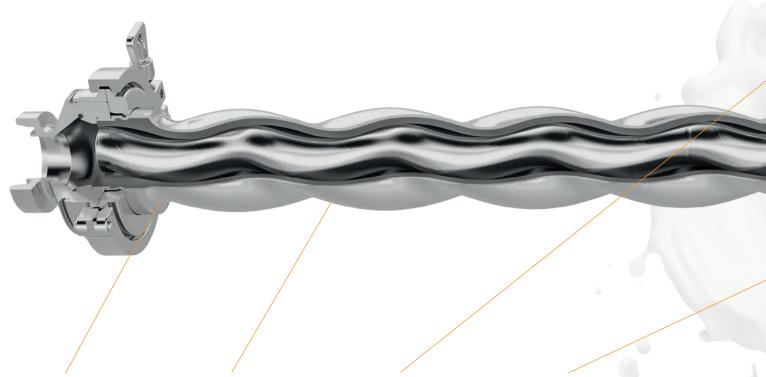


Example: MX20S

Design characteristics

Advantages

- 1. 10 bar per pressure stage thanks to EvenWall® technology
- 2. Compact assembly length at high pressures
- 3. Low-impact product delivery
- 4. Quick and easy to clean
- 5. Captive connecting elements
- 6. Modular design
- 7. Outstanding stability under pressure



Modular design (various pump assemblies can be adapted) Stators in EvenWall® design (uniform elastomer wall thickness)

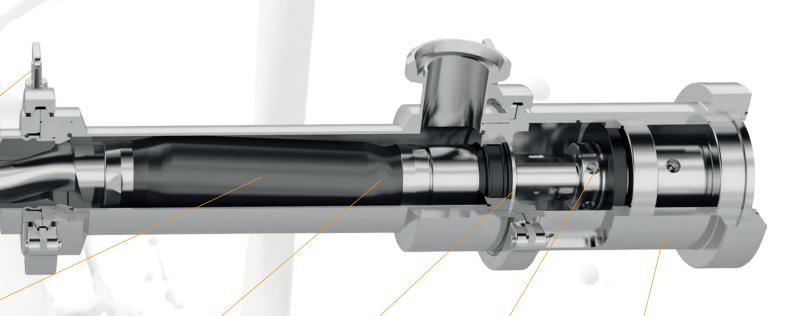
Fast disassembly and assembly by means of clamping closures

Cardan joint, covered with hygienic collar



Characteristics

- Compatible with CIP and SIP
- Hygienic design
- Design with minimal dead space
- Extremely easy to service
- Intelligent interfaces



Non-slip cylindrical connection elements prevent the unintentional loosening of pump components Spacious sealing chamber for all seal assemblies

Wear parts can be replaced quickly via a separation point opposite the product Robust and splashresistant bearing housing enables a fully assembled "standby pump" to be fitted even without a drive

Follower plate version



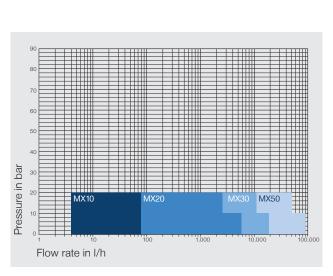
Pump size	Maximum completely free passage (mm)	Flowrate (I/h)	Maximum differential pressure (bar)
10	6	1 to 75	20
20	22	5 to 5.600	20
30	48	50 to 20.000	20
50	76	500 to 100.000	20

Application

- Drum and hopper drained via follower plate
- Low-impact delivery of products containing solids

Features

- Self-priming pump
- Short assembly length
- Uniform metering with low pulsation









Pump size	Maximum completely free passage (mm)	Flowrate (I/h)	Maximum differential pressure (bar)
20	22	5 to 5.600	40
30	48	50 to 20.000	80
50	76	500 to 100.000	60



Application

- Highly viscous to airtight media
- Suitable for media with a high solids content
- Metering and transferring applications

Features

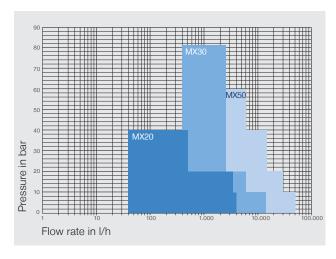
- Conical screw conveyor ensures optimum emptying of the hopper floor
- Position of the mechanical seal ensures excellent cleanability
- Well-designed separation points for easy disassembly
- Trough shape prevents deposits from forming on the hopper walls
- Additional extension hopper can be adapted
- Reliable delivery of the medium to the pump assembly thanks to stable screw conveyor shortly before the pump assembly
- Overfeeding in the pump tunnel ensures efficient conveying

Example MX50R: Baked goods industry

Medium: dough Flow rate: 5,800 l/h 6 bar Pressure:

Viscosity:





Details based on a medium with a viscosity of 1 mPas and a density of 1.0 kg/dm³



Pump size	Maximum completely free passage (mm)	Flowrate (I/h)	Maximum differential pressure (bar)
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20	22	5 to 5.600	40
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50	76	500 to 100.000	60

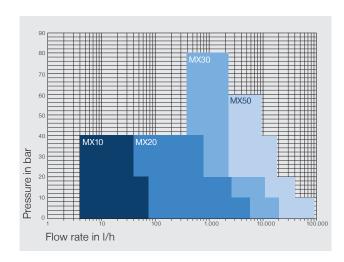


Application

- Metering and transferring applications
- Suitable for aqueous to highly viscous media
- Low-impact delivery of products containing solids

Features

- Vertical and horizontal configuration possible
- Can be used regardless of the direction of rotation
- Self-priming pump to 0.8 bar absolute
- Available as a mobile or stationary pump
- CIP and SIP cleaning possible
- Ability to control the temperature of the entire pump
- Short assembly length



Details based on a medium with a viscosity of 1 mPas and a density of 1.0 $\,\mathrm{kg/dm^3}$



Example MX20S: Pet food industry

Medium: Meat Slurry
Flow rate: 78 l/h
Pressure: 10 bar
Viscosity: 1,500 mPas



Example MX20S: Confectionary industry

Medium: fat / fruit puree

Flow rate: 450 l/h Pressure: 7 bar

Viscosity: 70,000 mPas



Example MX50S: Food industry

Medium: Dairy products
Flow rate: 300 – 3,000 l/h

Pressure: 30 bar

Viscosity: 1,300 mPas





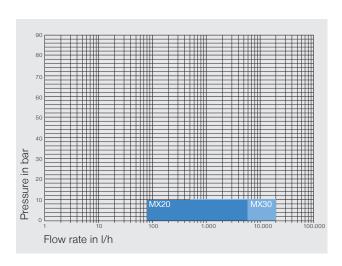
Pump size	Maximum completely free passage (mm)	Flowrate (I/h)	Maximum differential pressure (bar)
20	22	5 to 5.600	10
30	48	50 to 20.000	10

Application

- Metering and transferring applications
- Suitable for aqueous to highly viscous media
- Low-impact delivery of products containing solids

Features

- Easy to drain drums, mixers, agitators and big bags
- Short assembly length
- Cassette design with minimal dead space
- Uniform metering with low pulsation
- Quick and easy to clean







Options and Materials

Double jacket for tempering



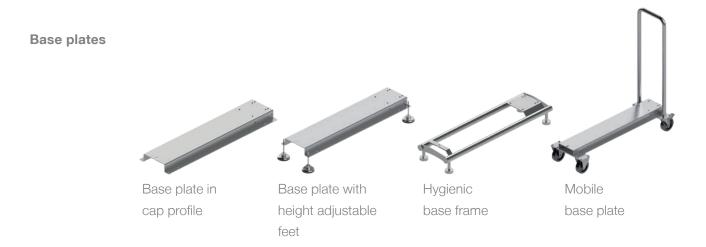
Pump assembly with double jacket



Suction housing with double jacket



Hopper housing with double jacket



Materials

Materials in contact with the product:

1.4571, 1.4404, 1.4301

Elastomer parts:

Elastomers in different qualities, with conformity FDA 21 CFR 177.2600 and EU 1935/2004

Connections:

DIN11851, DIN32676, DIN11864-1, DIN11864-2, DIN11864-3, DIN EN1092-1



The MX Pumps in Use







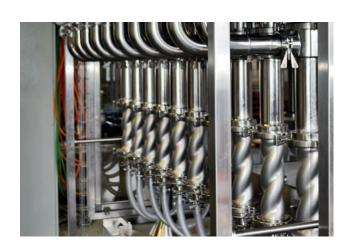


























WANGEN PUMPEN is certified to:

ISO 9001 (Quality management) ISO 14001 (Environmental management) ISO 45001 (Occupational safety and health protection)

Represented by:



"The Benefit of Experience"

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