



# **Progressive Cavity Pumps**









### Group D

seepex pumps, group D, are used to meter and dose small fluid capacities in nearly all industries. They can deliver thin to highly viscous liquids, as well as corrosive and solids laden chemicals. The repeatable accuracy has  $\leq 1\%$  fluctuation. Available in five (5) capacities and three (3) pressure ranges, flow rates range from 0.1-1,000 l/h at 6,12 or 24 bars differential pressure.

> Stator adapter in stainless steel. facilitates the use of

all sizes with only

one housing and drive unit.

The modular construction of the group  ${\bf D}$ pumps allows easy change-out of the rotor, stator and other wetted parts. The range D consists of six (6) interchangeable designs in block design, as seen on page 4 and 5. The construction features of the range MD with 316 stainless steel housings are shown in detail, below.

Rotor in 6L and conventional

information ADV, page 4f. Options, materials

geometry,

and coating information TYP, item 14-16.

# Design of range MD

Pressure branch 316ss, 1/2" connections to DIN ISO 228 or NPT, variants and materials as in information TYP, item 6-8.

> Tie rods and screw connections in stainless steel to fix the stator.

Stators are available in 6L or conventional geometry. For the advantages of each information ADV, page 4f. Stators are vulcanized in the tube with a collar on both ends to prevent leakage and penetration of the product between the rubber-metal bonding information ADV, page 11. For options and materials selection information TYP, item 17 and 18.

#### in stainless steel, 1" connection to DIN ISO 228 or NPT, can be rotated in 90° increments, with drain

Suction housing

plug, available with gauge or flushing connections information TYP, item 6-8.

2.01e

The standard shaft seal is a single acting rubber bellow mechanical seal. Alternatively, a double acting mechanical seal or packed stuffing box are available. Please reference *information TYP*, *item* 19-21 and *information SEA* for the lantern connection of pump and drive. A plug-in shaft connection between pump and drive provides for quick replacement of rotating parts and seals. The plug-in shaft pin and splash ring seals and secures the connection and protects the bearing from contamination *information ADV*, page 8.

> Geared motors, mechanical variable speed drives or drives with frequency control from established global suppliers can be direct flanged to the pump without additional couplings information ADV, page 6.

Lantern for connection of pump and drive.

The coupling rod has two (2) pin joints with hardened and wear resistant components, easily assembled, grease lubricated and positively sealed with elastomer sleeves and two (2) holding bands. For options and materials *information TYP*, *item* 9-13.

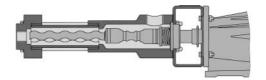
The plug-in shaft connects the drive shaft and the joint. It functions as a replaceable shaft sleeve information TYP, item 22 and 23.

## Table of ranges

Range MD

The pumps of range **MD** are available with housings made of plastic (RCH1000) or stainless steel (on page 2 and 3).

For the metering of chemically aggressive fluids, Hastelloy C (2.4610) or titanium (3.7035) wetted parts are available.

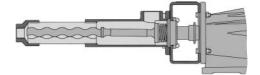


Range MDP

The pumps of the new range **MDP** have stainless steel housings with threaded connections to accommodate the stator.

The special feature is the one piece, jointless and wear-resistant rotating unit made of plastic, patent pending.

In combination with stators made of PTFE, the pumps can be used for the first time to pump and meter carbonaceous medias including colors, polymers, lacquers, solvents, softening agents, etc.

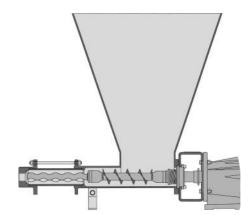


Range MDT

The pumps of range **MDT** have an open hopper with a cylindrical compression zone.

Medias with poor ability to flow are delivered into the pumping elements with the auger on the coupling rod.

Optimal filling of the chambers is achieved by the induction action in the compression zone.

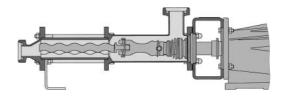


Range MDC

The pumps of range **MDC** are equipped with the new **seepex** CIP-able joints. They meet the most rigid requirements of cleanliness and corrosion resistance.

This is achieved through the special design of the rotor and plug-in shaft heads and the coupling rod. They are easily disassembled without special tools.

Pumps of group MDC carry the 3A Sanitary Symbol Council Authorization *information CS*, *page 5*.

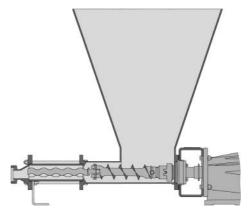


### Range MDTC

The pumps of range **MDTC** have an open hopper with a cylindrical compression zone. Goods with poor ability to flow are delivered into the pump elements by the auger on the coupling rod.

Optimal filling of the chambers is achieved by induction action in the compression zone.

The pumps of the range **MDTC** are equipped with the open joints of range **MDC** and are in accordance with the 3A Sanitary Standards.

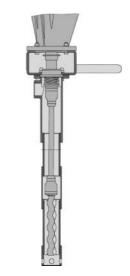


#### Range MDF

The pumps of range **MDF** are used to empty open and closed drums with 2" bung holes.

The positive pressure on the suction side makes it possible to empty drums with viscous and pasty medias.

With a handle attached, the pump can be easily carried.

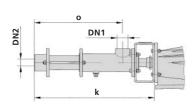


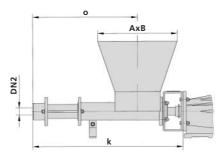
# Dimensions

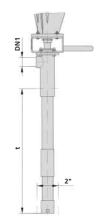
### Range MD

Range MDT

Range MDF







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							Fitting dimensions		Feed hopper	
Range	MD plastic body	MD/MDP 316ss body	MDC	MDT	MDTC	MDF	MD/MDT/MDF ISO 228	MDC/MDTC ISO 11851	MDC/MDTC	
Size								or Triclamp		
Pressure stage	o k	o k	o k	o k	o k	t	DN1 DN2	DN1 DN2	A B	
0015-24	227 322	211 306	254.5 346.4	260 394	282.5 418.4	970	G 1 " G 1/2 "	25/1" 20/3/4"	360 300	
003 - 12 003 - 24	227 322 	211 306 288 383	254.5 346.4 331.5 423.4	260 394 337 471	282.5 418.4 359.5 495.4	970 —	G 1 "G 1/2" G 1 "G 1/2"	25/1" 20/3/4" 25/1" 20/3/4"	360 300 360 300	
006 - 12 006 - 24	250 345 	245 340 355 450	288.5 380.4 398.5 490.4	292 430 402 540	316.5 452.4 426.5 562.4	1000	G 1 " G <sup>1</sup> /2 " G 1 " G <sup>1</sup> /2 "	25/1" 20/ <sup>3</sup> /4" 25/1" 20/ <sup>3</sup> /4"	360 300 360 300	
012 - 12 012 - 24	270 365	265 360 395 490	308.5 400.4	312 448 442 578	336.5 472.4 	1000	G 1 "G 1/2" G 1 "G 1/2"	25/1" 20/ <sup>3</sup> /4" 25/1" 20/ <sup>3</sup> /4"	360 300 360 300	
025-6L	270 365	265 360	308.5 400.4	312 448	336.5 472.4	1000	G 1 " G 1/2 "	25/1" 20/3/4"	360 300	

All weights and dimensions are subject to change without notice.

Note: mm/25.40 CIP connection 20/3/4" inch dimension



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