

# CFD continuous flow mono-component dispenser



TR300



MRC500



OEM



Station



*The CFD is a highly accurate volumetric dispenser based on eccentric screw pump system. The CFD is highly versatile capable of dispensing low-viscosity, high-viscosity and filled materials.*



## Advantages

- Extremely accurate and repeatable
- Mechanically and chemically compatible with many materials
- Suitable for low- and high-viscosity materials
- Long life span of rotor & stator
- Simple setting of the dispensing parameters via numerical controller
- Easy cleanup and purge



## Features

- Broad flow range
- 2 motor sizes, 5 pump sizes and 9 rotor/stator sizes
- Rotor available in hard chrome plated or DLC coated
- Different elastomers for stator
- Housing in stainless steel or PEEK
- Flow rate is directly proportional to drive speed

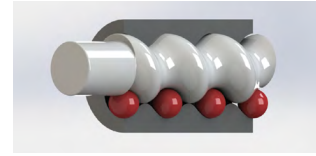


## Options

- Standardized robot platforms: OEM300, OEM500, MRC500 and TR300
- Several motor and interface options
- Material supply such as barrel, bucket, cartridge
- Material processing such as degassing, pre-heating, homogenization

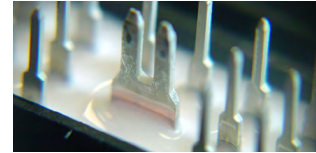
## Working principle

The motor directly drives a rotor with one or more helical windings eccentrically within an elastomer stator. The eccentric movement of the rotor creates a series of cavities that push the material through the pump. The stator's complex geometry provides consistent displacement at any phase of rotation, so the flow does not pulsate.



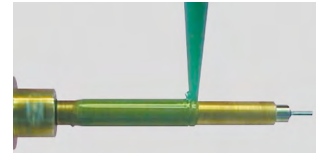
## Typical dispensing applications

- Potting and honeycomb potting
- Dot and line dispensing
- Glob-top dispensing
- Dripping
- Lubrication



## Typical dispensing material

- Sealants such as silicone, MS-polymer, polyurethane, methylmethacrylat
- Adhesive such as anaerobic glue, epoxy resin, UV-Acrylat, dispersion glue
- Gap fillers
- Thermal conductive paste
- Solvent-based medium
- Grease and oil
- Icing and dairy products
- Metal filled pastes e.g. brazing and silver paste



## CFD technical specifications

The CFD dispensers are available in several volume and flow rate sizes. The rotors, stators and pump housings are available in a variety of materials to provide mechanical and chemical compatibility with a broad range of materials. Lastly, customers can choose from several motors, controls interfaces and mechanical connections such as Luer Lock, threaded and many more.

Dispenser type	Dispensing volume/turn	Flow rate 3 to 80 rpm	Min. dispensing volume	Max. input pressure	Max. dispensing pressure
CFD-1-0.003	0.003ml/turn	*0.009-0.24ml/min	*<1µl	*6 bar	*25 bar
CFD-1-0.01	0.01ml/turn	*0.03-0.8ml/min	*1µl	*6 bar	*25 bar
CFD-1-0.05	0.05ml/turn	*0.15-4.0ml/min	*5µl	*6 bar	*20 bar
CFD-2-0.14	0.14ml/turn	*0.42-11.2ml/min	*14µl	*6 bar	*20 bar
CFD-2-0.53	0.53ml/turn	*1.59-42.4ml/min	*53µl	*6 bar	*20 bar
CFD-3-0.35	0.35ml/turn	*1.05-28.0ml/min	*35µl	*6 bar	*20 bar
CFD-4-1.1	1.1ml/turn	*3.3-88.0ml/min	*0.11ml	*6 bar	*20 bar
CFD-5-2.0	2ml/turn	*6.0-160.0ml/min	*0.2ml	*6 bar	*20 bar
CFD-5-9.5	9.5ml/turn	*28.5-760.0ml/min	*1.0ml	*6 bar	*20 bar

\*depends on material to be dispensed

## CBD continuous flow two-component dispenser

For two-component materials, any CFD sizes can be combined to suit a wide range of mixing ratios. The combined unit (CBD) mixes materials using a choice of static or dynamic mixer.