



product data sheet

# 2-component Dispenser ViscoDuo-VM

## Description



The 2-component dispenser ViscoDuo-VM is a valveless dosing system for static mixing applications based on the proven progressive cavity technology. The product is well suited for highly accurate dosing processes by its volumetrically precise dosing principle. With the series ViscoDuo-VM users get access to a newly developed modular component structure with the possibility of 2-component dosing system-configuration, maintenance and parts replacement at module level. An enhanced pump connection principle and a dedicated mounting kit for front side mounting allow easy and precise installation into production lines. The selected mixing head geometry allows a direct connection of the dispenser to the mixing head and guarantees with minimized dead space a maximum of process accuracy. The components to be mixed are dosed purely volumetrically and directly from the dispenser via the mixing head into the static mixing tube. The mixing of material components is carried out downstream of the mixing head in the mixing tube only. Thus, the risk of material curing in the mixing head is eliminated. The dispensers are based on the ViscoTec RD-EC type with the performance features for easy cleaning (Easy Clean) and enhanced access to the pump interior.

- purely volumetric dosing principle with constant dosing volume even with varying viscosity and material density e.g. during lot of changes
- processing of low up to high-viscosity materials, also from low up to high filling rates
- dispenser and mixing head segments able to be combined in size by modular component structure
- standard configuration of the mixing head segments with pressure sensors for online process monitoring, sensors are integrated dead space free
- easy assembly / disassembly of the components by newly developed pump connection principle
- selection of mechanical mixer interfaces according to process requirements
- accurate dosing process with direct linearity of dispenser speed and dosing volume
- programmable setting of mixing ratio, dosing rate and dispensing volume via speed control of the dispenser, programmable suck back option

## Application

- static mixing of 2-component fluids with identical or different viscosities
- possible use for potting, point dose or bead application
- suitable for 2-component adhesives on the basis of epoxy resins (EP), polyurethanes (PU), silicones (SI), methyl methacrylates (MMA), modified silane (MS)
- application of highly filled thermal pastes and gap fillers
- two-component coating systems, colour paste mixtures

## Technical data

mixing ratio	100:100 to 100:1*				
typ	4RD6-EC	3RD8-EC	3RD10-EC	3RD12-EC	2RD12-3D-EC
dosing volume	~ 0.12 ml/rev.	~ 0.35 ml/rev.	~ 1.1 ml/rev.	~ 1.7 ml/rev.	~ 5.0 ml/rev.
volume flow	1.2 - 15 ml**	3.5 - 43.75 ml**	11 - 137.5 ml**	17 - 212.5 ml**	50 - 625 ml**
dosing accuracy	+/- 1 %***				
smallest dosing shot	0.005 ml*	0.02 ml*	0.05 ml*	0.1 ml*	0.3 ml*
operating temperature**	+10° to +80° C				
material temperature	-20° to +80° C*				
max. speed	125 rpm*				
max. perm. torque	8 Nm				
max. dosing pressure	30 bar*				
max. input pressure	20 bar*				

\*depends on mixing ratio, material and used static mixer

\*\*Volume flow depends on viscosity and primary pressure

\*\*\*Volumetric dosing as absolute deviation in relation to one dispenser revolution.  
Depends on the viscosity of the dosing medium.

## Product information

### Scope of delivery

- ViscoDuo -VM - assembled with dispensers, mixing head segments, pressure sensors, mounting kit
- drive units with integrated programming control
- operating and maintenance instructions, parts list

### Additional components

- 2-component dosing controller ViscoDos-4000-2K Touch
- monitoring unit for material feed
- product feeding systems / product treatment systems

## Examples

