

OVERVIEW OF MICRO VALVE SMLD CONFIGURATION AND VARIANTS

1 BASIC VALVE TYP

The micro valves SMLD are available in two sizes. Further information can be found in the ordering matrix.

Variants	Use
SMLD 300 	Screening with highest resolution, smallest size, small dispensing volumes, low-viscosity media Minimal screening 4.5 mm with special coil package 4 mm, Inner volume 25 µl
SMLD 300G 	Low- and high-viscosity media, small and large dispensing volumes Minimal screening 6 mm Inner volume 65 µl Can be combined with heated valve holder

3 OUTLET

Our micro valves are designed that they dispense contactless directly from the valve nozzle. For part of the applications, it is desired to fasten tubes, cannulas, etc. directly to the valve outlet. For this, there are numerous outlet adapters with standard threads available.

Variants	Use
Jet 	Precise free-jet dispensing, directly from the valve nozzle
Outlet adapter 	For connecting attachment nozzles, pipettes and tubes to the valve output Outlet adapter only in connection with the "thread" type fastening

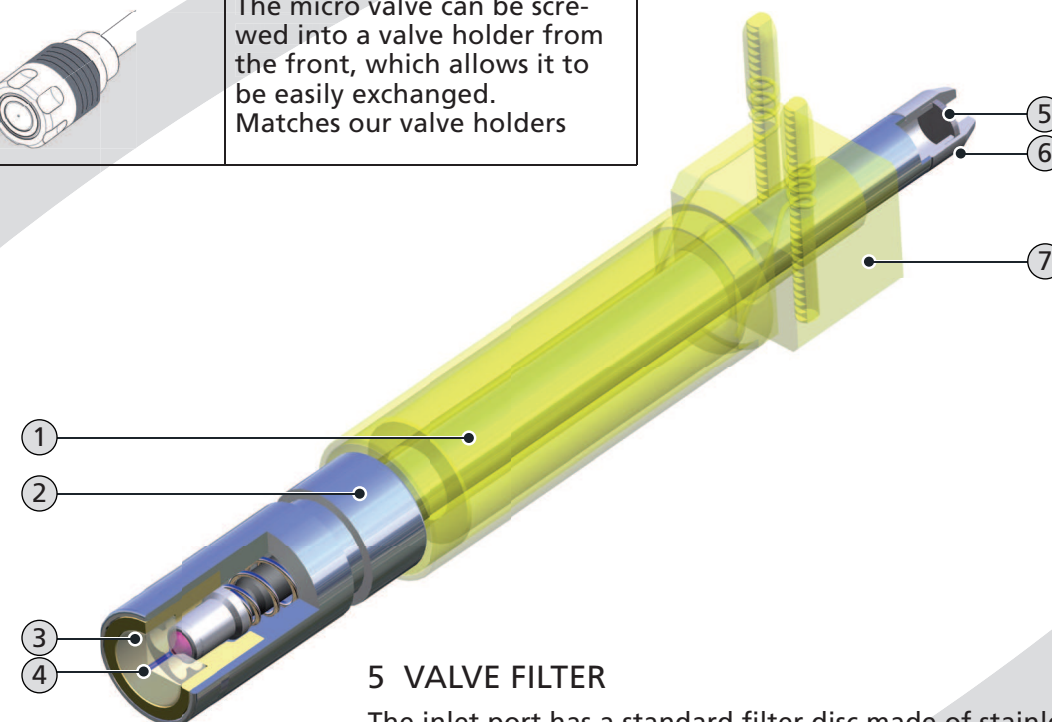
4 NOZZLE DIAMETER / VALVE TRAVEL

The nozzle diameter and valve travel are important influential parameters for drop formation and the dispensing volume. Depending on the desired dispensing result, corresponding combinations can be selected.

2 FASTENING

There are two standard variants available for fastening the micro valves.

Variants	Use
Cylinder 	Screening with highest resolution, small size
Thread 	The micro valve can be screwed into a valve holder from the front, which allows it to be easily exchanged. Matches our valve holders



5 VALVE FILTER

The inlet port has a standard filter disc made of stainless wire fabric built in. This filter protects the inside of the micro valve from harmful particles. A large-area filter with a finer grain is recommended upstream for the basic cleaning of the dispensing medium.

Variants	Use
With filter 	Low-viscosity, filterable media
Without filter 	Highly viscous or non-filterable media (E.g. certain types of grease or reagents)

6 INLET

Two different inlet ports are available. The greatest possible flexibility is offered by the manifold connection. In combination with our valve holders, a multitude of inlet adapters with standard threads can be used.

Variants	Use
Manifold 	Matches our valve holders, installation in distributor systems with O-ring seal
Barbed Tube connector 	The tube is stuck directly onto the micro valve.

7 VALVE COIL

The valve coils are removable and are available in different variants. They are optimized for very fast switching times and are extremely small.

Variants	Use
Single coil 	With solder connections, suitable for installation on printed circuit boards or for customer-specific wiring.
Single coil with wire 	With a 300 mm wire, end tinned or with plug, the plug matches our cable sets.
Coil package 	Coil packages for multi-channel systems on printed circuit board in various designs.