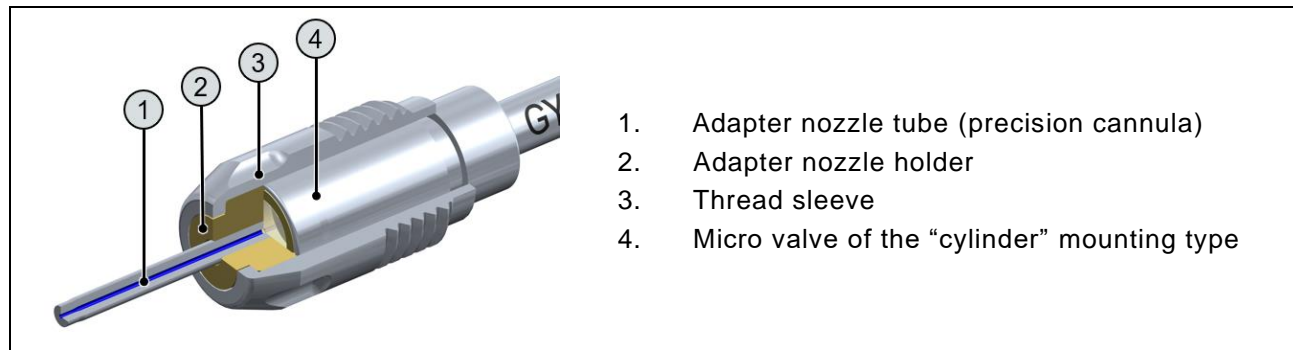


## ADAPTER NOZZLE

To achieve best results with our valves, contactless dispensing is carried out directly from the sapphire nozzle. For certain media and other

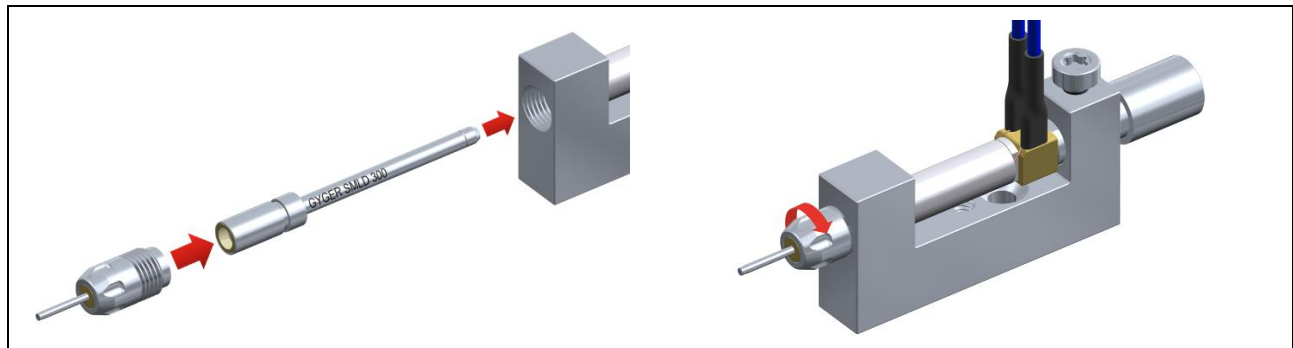
applications, an elongated, needle-shaped nozzle can be used.

## ASSEMBLY AND INSTALLATION



The adapter nozzles consist of a precision cannula, which is fastened in a holder with a threaded sleeve. The materials of the adapter nozzle are exclusively stainless steel and PEEK. This unit can simply be placed over the valve and screwed into the valve holder.

The nozzle tube is centered exactly in front of the valve nozzle and allows a nearly dead-volume free connection. When the adapter nozzle is tightened, the special shape of the parts creates a reliable seal to the valve.

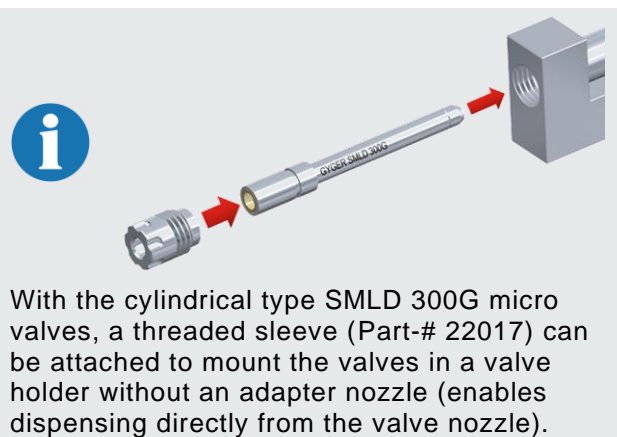


Similar to the assembly, the adapter nozzles can be unscrewed and disconnected from the valve at any time (e.g. for cleaning in an ultrasonic bath).

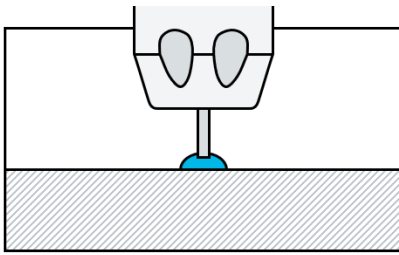
The best way to remove the valve is to use tweezers to pull it out of the valve holder.



The adapter nozzles should be tightened with a maximum torque of 20 Ncm.

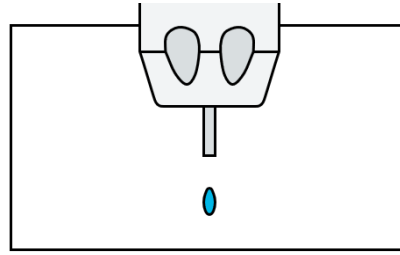


## APPLICATION AREAS



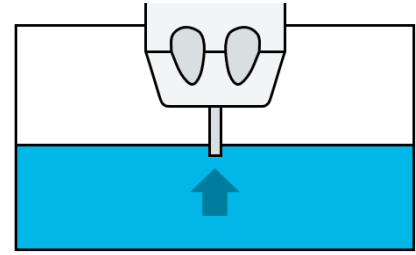
### Semi-Touch

The semi-touching application is suitable if the media drop needs to be gently placed or if the tearing of a drop is not achieved in contactless dispensing (e.g. special pasty media).



### Jet and «Slow Drop»

Contactless jetting is also possible. If larger drops ( $\mu\text{l}$  range) are required to be placed, we recommend a large adapter nozzle in combination with a small valve nozzle.



### Aspiration

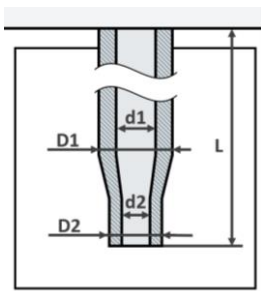
Certain applications require media to be aspirated or pipetted (pick and drop). Also in the aspiration mode, the precision of the SMLD microvalves allow a controllable media intake down to the nl range.

## ADAPTER NOZZLE VARIANTS

The adapter nozzles are available in two basic types: cylindrical or tapered end. The adapter nozzle is defined by three main parameters; Outside- $\varnothing$  (D), Inside- $\varnothing$  (d) and the

nozzle length (L). The available variants are listed below. We are happy to produce other variants on request.

### Tapered end build type



All values in mm

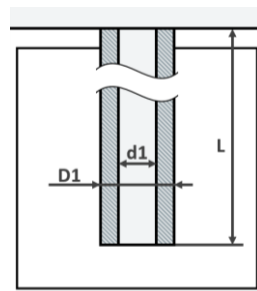
#### SMLD 300

Part-#	D1	d1	D2	d2	L
21691	0.79	0.2	0.74	0.15	15

#### SMLD 300G

Part-#	D1	d1	D2	d2	L
21278	0.60	0.19	0.50	0.10	20
24060	0.79	0.20	0.74	0.15	15
25107	0.79	0.20	0.74	0.15	20

### Cylindrical build type



All values in mm

#### SMLD 300G

Part-#	D1	d1	L
24405	0.79	0.10	2.4
19392	0.30	0.15	2.4
21220	0.30	0.15	10
25101	0.60	0.19	2.4
21275	0.60	0.19	20
19394	0.50	0.30	2.4
21117	0.50	0.30	6.0
25103	0.50	0.30	20
21303	0.50	0.30	22
24357	0.80	0.60	15
24354	1.20	0.80	15

#### SMLD 300

Part-#	D1	d1	L
21023	0.30	0.15	2.4
20580	0.30	0.15	10
21534	0.30	0.15	15
21690	0.79	0.20	15
19391	0.50	0.30	10

Depending on the task, the associated valve with the same or smaller nozzle diameter is selected.



Adapter nozzles can only be used with micro valves of the «cylinder» mounting type!