

# Miniature dosing devices

Metering units for use in hand-held drilling machines or (mobile) robotics applications, especially for fuselage production in aircraft construction. The metering units have an integrated tank. The process requires neither a pump nor internal electronics and, with its compact design, is characterized by maximum reliability combined with the best possible economy.

#### Product overview









	HCS 7ml AL	HCS INT 1	HCS INT 2000 16,5ml	HCS INT 2000 16,5m ZG
Lubricant quantity per cycle	1, 2 or 4 ml per minute (exchangeable throttle insert)	max. 1 ml per spraying cycle; lubricant and spray air quantity independently adjustable	0,00825 ml per spraying cycle	0,00825 ml per spraying cycle
Spray cycle duration	continuous spraying process (no cycle)	0,1 - 180 sec (external control)	2 - 4 sec (external control)	adjustable from 0.1 - 5 seconds (integrated timing element)
Tank capacity	7 ml, self-refilling from external tank	1 ml, self-refilling from external tank;	16.5 ml spring-loaded reservoir (for 2000 cycles)	16.5 ml spring-loade reservoir (for 2000 cycles)
		option: 32 ml spring- loaded reservoir	. ,	. , ,

### Operating principle

Our miniature dosing units generate an air-liquid mixture that is sprayed continuously or in cycles with adjustable duration. In the *HCS 7ml AL*, dosing can be adjusted to 1, 2 or 4 ml/min with an exchangeable throttle insert. The *HCS INT 1* offers the greatest possible flexibility: cycle duration, air volume flow and lubricant quantity can be set individually. The two *HCS INT 2000 16.5ml* each deliver exactly 0.00825 ml per spray cycle, with variable cycle duration. The metering units can be used for both internal and external lubricant delivery.



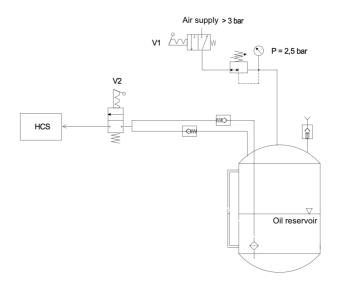
### Characteristics

- compact design and low weight
- pneumatic control
- spring-loaded tank allows operation in any orientation
- reliable and maintenance-free

### Filling device

The filling device guarantees bubble-free filling of the HCS INT metering units with filtered lubricant





## Spring-loaded tank

For the HCS INT 1, we offer an optional 32 ml tank which, thanks to its spring loading, guarantees a position-independent and bubble-free supply of oil. It can be filled with our filling device.

