

## Vacuum actuator series VAQ

- Operated by vacuum only.
- The extension and the retraction movements are automatically actuated.
- The stroke is self-adjusting.
- Option VAQN for anti-rotation rod.
- The suction cup **1** must be ordered separately.



VAQ1820



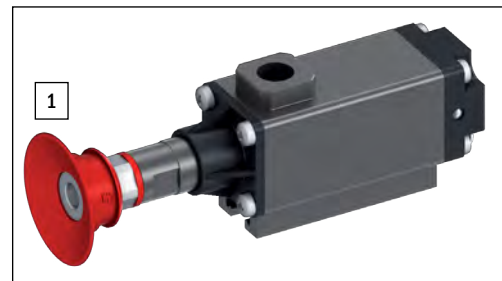
VAQ1840



VAQN1820



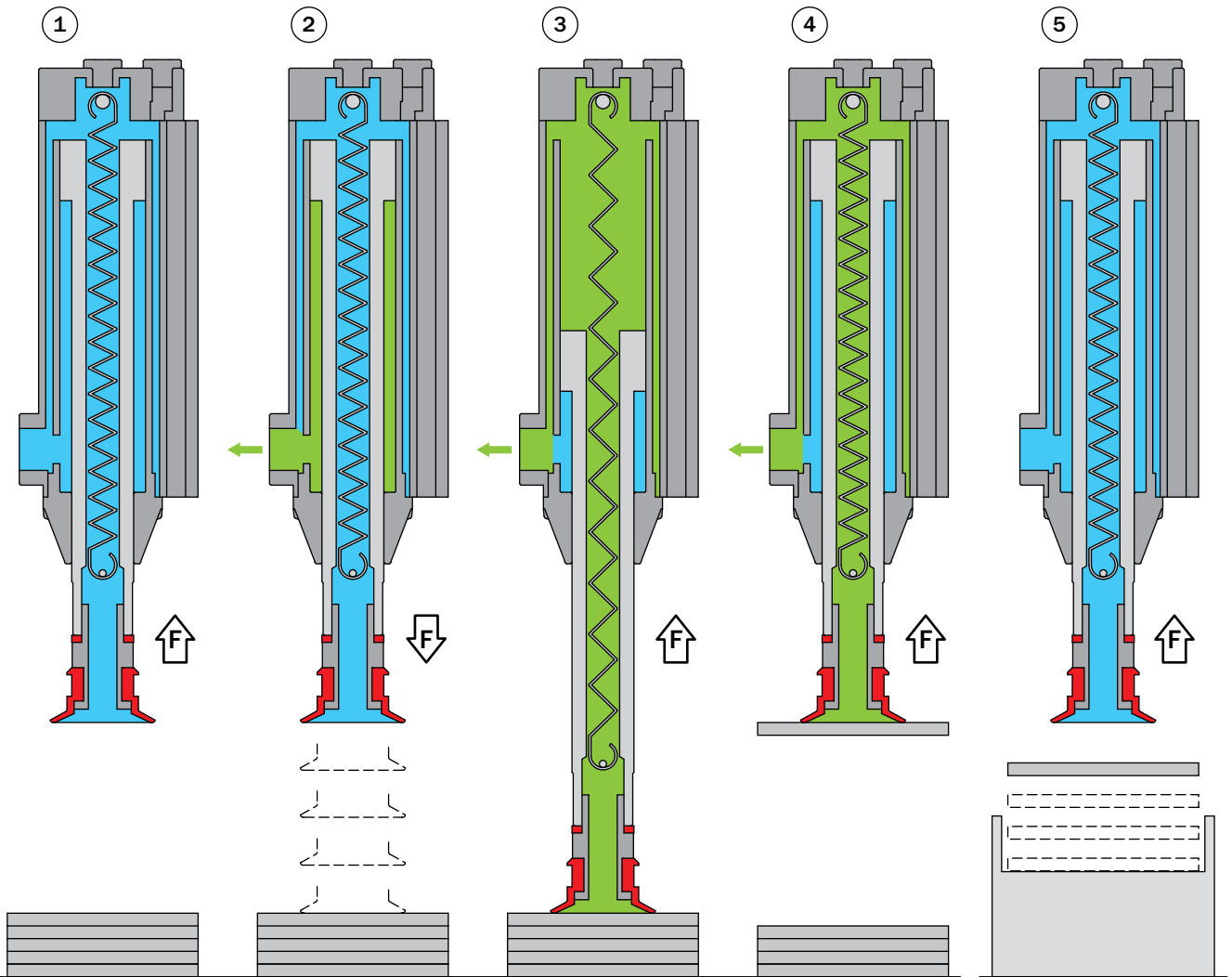
VAQN1840



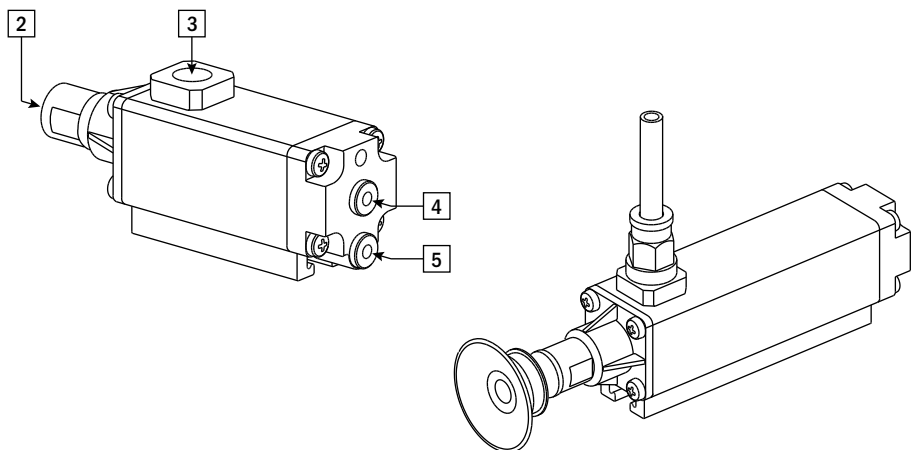
	VAQ1820	VAQ1840	VAQN1820	VAQN1840
Medium	Vacuum -4.3 -- -14.5 psi			
Temperature range	50 - 104°F			
Retraction force at -0.6 bar	10 N			
Maximum recommended load	5 N			
Total stroke	25 mm	55 mm	25 mm	55 mm
Stroke with full force	20 mm	40 mm	20 mm	40 mm
Weight	90 g	125 g	105 g	145 g
Price	\$99.00	\$107.00	\$129.00	\$140.00

**Working principle**

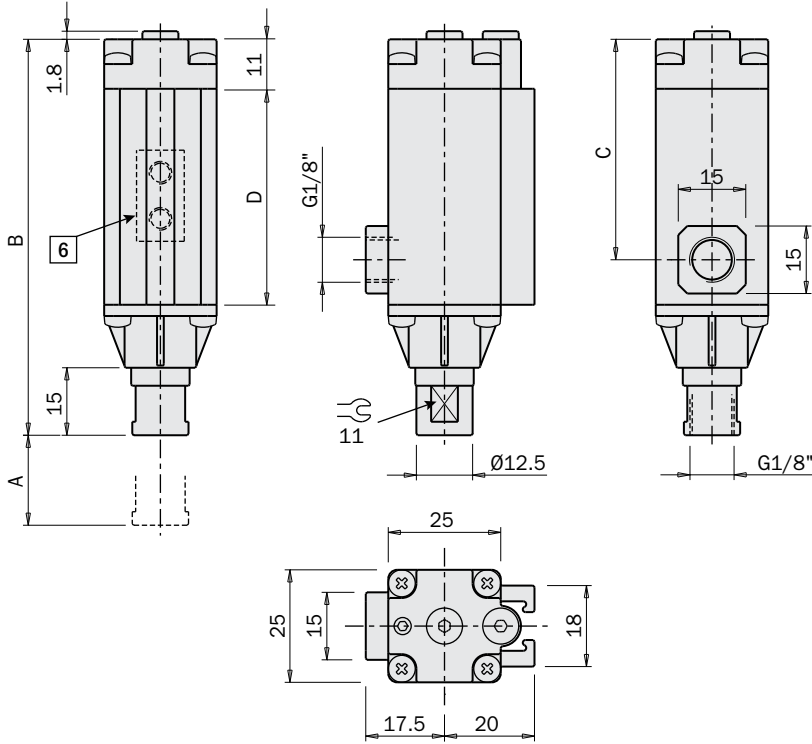
- 1- Without vacuum, the rod is retracted by the spring force.
  - 2- When vacuum is applied, the pressure under the piston is lower than the pressure over the piston and the rod travels forward.
  - 3- The pressures invert as soon as the vacuum cup makes contact with an object.
  - 4- Thus the rod retracts immediately, lifting the object.
  - 5- When the vacuum is removed, the object is released, but the spring holds the rod retracted.
- (Acurately, instead of removing vacuum, a pressure impulse can be provided by the air port over the piston).



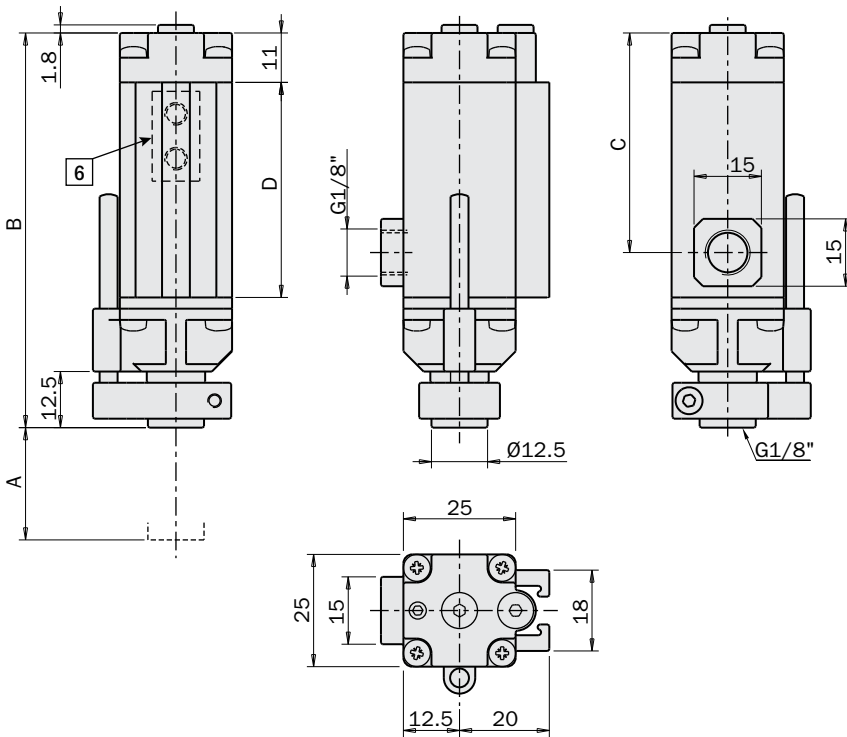
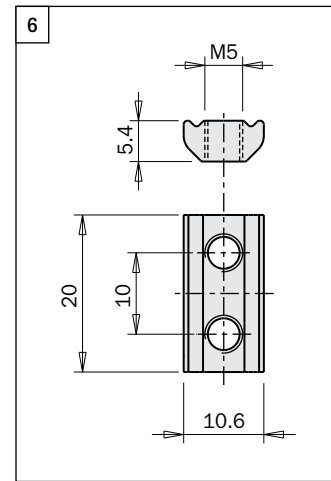
- 2 Female thread for suction cup
- 3 Vacuum supply port
- 4 Pressure impulse connection
- 5 Vacuum sensor connection



**Dimensions (mm)**



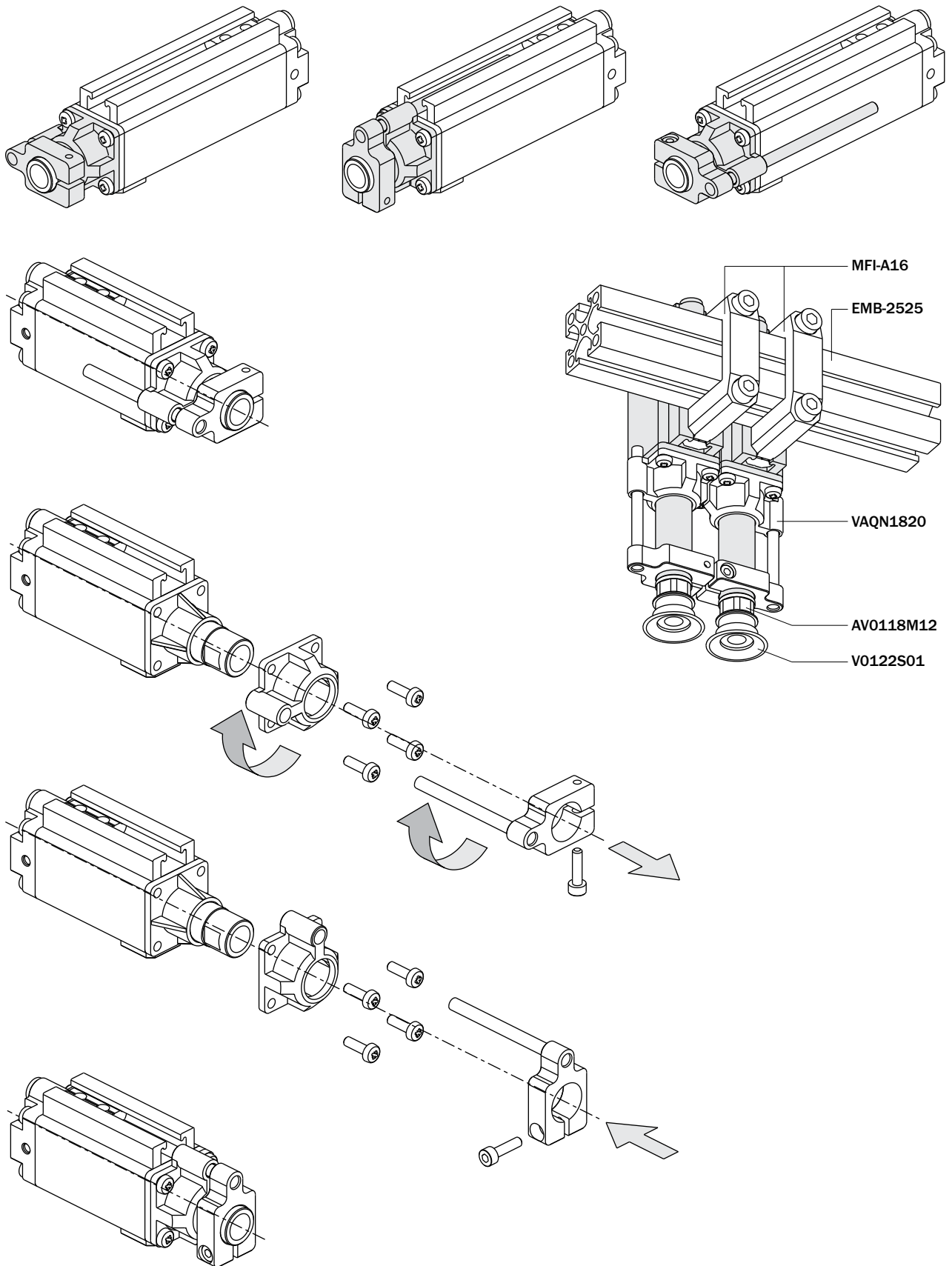
	VAQ1820 VAQN1820	VAQ1840 VAQN1840
A	20	40
B	88	119
C	49	80
D	48	79



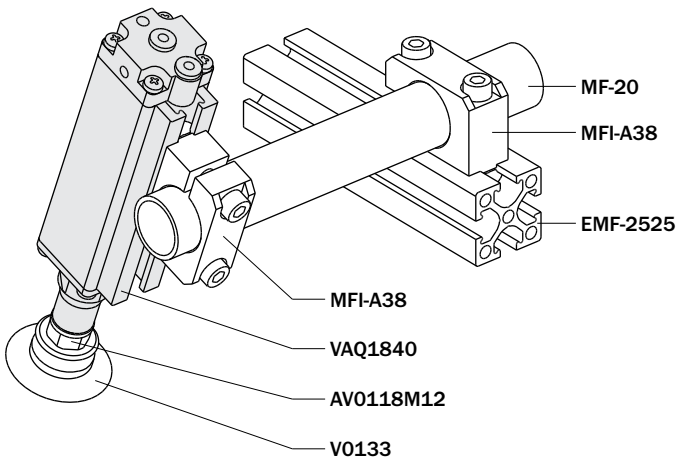
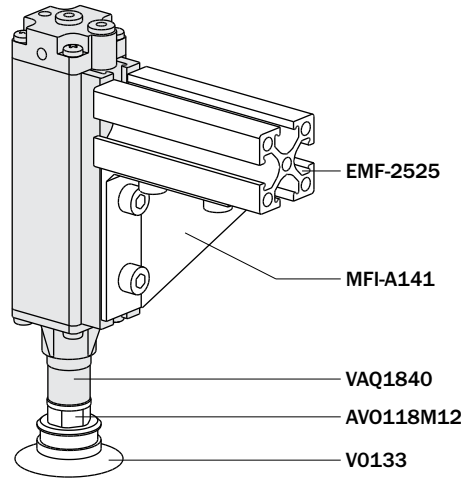
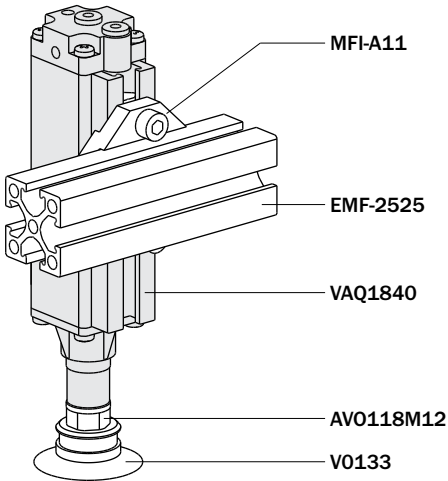
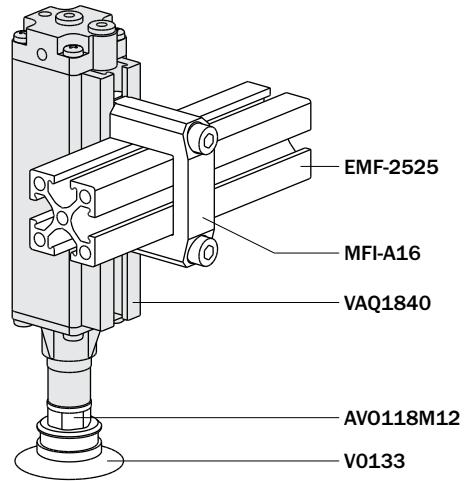
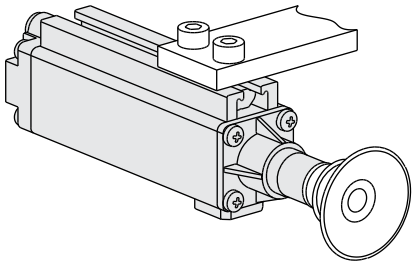
FIRST ANGLE PROJECTION

**Accessories**

The anti-rotation device can be positioned on 3 sides, based on the space available.

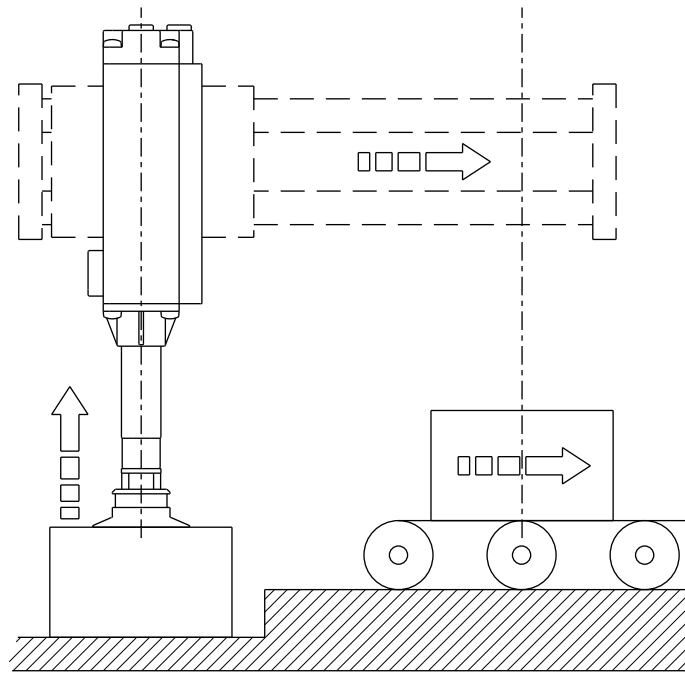


## Fastening



**Application example**

Picking and placing at different levels.



**Application example**

Bag opening in packaging machines.

