

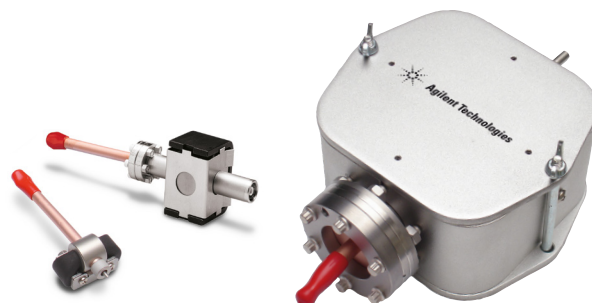
## Miniature and small Vaclon pumps

Agilent offers a wide variety of small size ion pumps, designed for electron device and detector applications.

The Miniature Vaclon pump is a diode configuration and provides approximately 0.2 L/s of nitrogen pumping speed. The 2 L/s model is a modified diode configuration to enhance starting at low pressure.

The 10 L/s pump is a noble gas optimized diode configuration with high efficiency for residual gases, such as hydrogen. The pumping speed for noble gases is about 20% of the nominal speed.

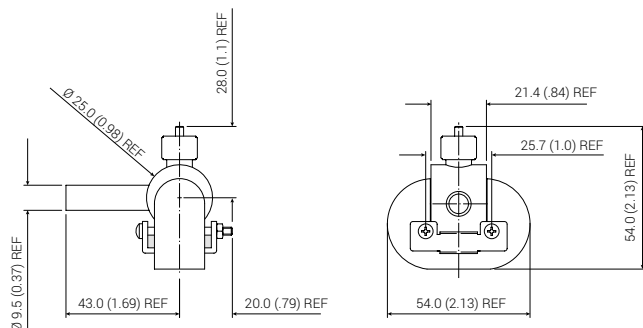
Pumps that are processed are baked to 400 °C and pinched off under vacuum, which allows the vacuum integrity to be verified by the user just before use. Non-processed pumps are tested to ensure they have no vacuum leaks and minimum leakage current.



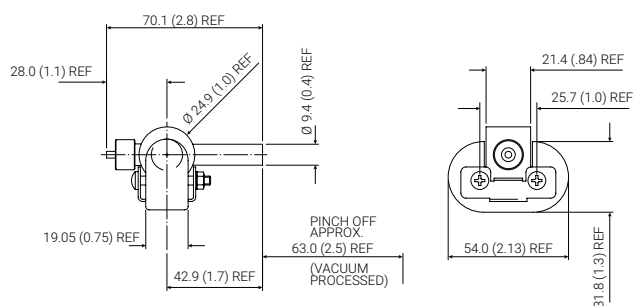
## Modified and customized versions

Modified versions of standard pumps can be provided when different inlet tube lengths, angles, and diameters are required. These pumps can also be customized with different high voltage feedthroughs, body geometries, and pumping cell arrangements. Special testing procedures can be quoted for customers who have specific requirements in this area.

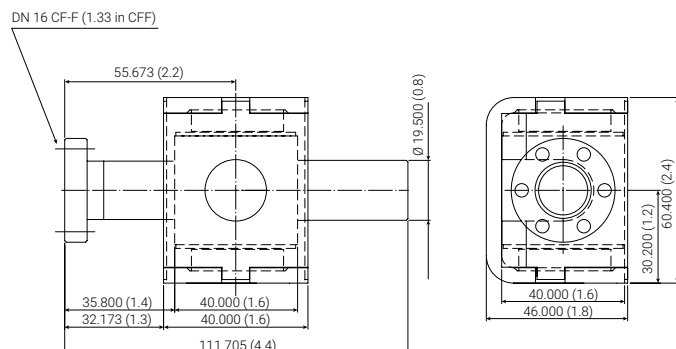
Miniature pump (90 deg. config.)



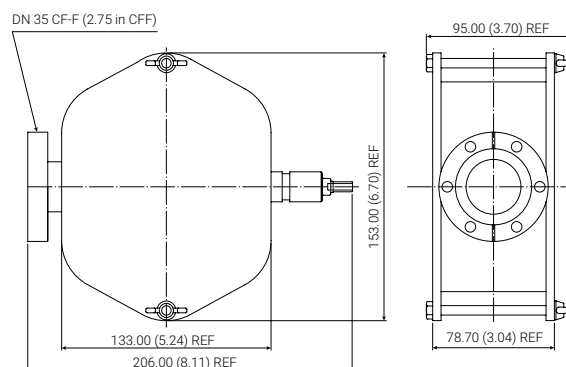
Miniature pump (180 deg. config.)



## 2 L/s pump



## 10 L/s pump



The miniature and 2 L/s pumps are available with copper or stainless steel inlet tubes in 90 or 180 degree configurations, relative to the high-voltage feedthrough.

Dimensions: millimeters (inches)

## Ordering Information

| Description                                                                                                                                 | Weight kg (lb) | Part number |
|---------------------------------------------------------------------------------------------------------------------------------------------|----------------|-------------|
| Miniature pump                                                                                                                              |                |             |
| With 3/8 inch od 180° stainless steel tube                                                                                                  | 0.5 (1.0)      | 9130038     |
| With 3/8 inch od 90° stainless steel tube                                                                                                   | 0.5 (1.0)      | 9130041     |
| With 3/8 inch od 180° copper tube, vacuum processed                                                                                         | 0.5 (1.0)      | 9130049     |
| With 3/8 inch od 90° copper tube, vacuum processed                                                                                          | 0.5 (1.0)      | 9130050     |
| Magnet for miniature pump                                                                                                                   | 0.5 (1.0)      | 9130042     |
| HV cable, 2.4 m (8 ft), Kings 10 kV (SHV) connector on controller side, for mini Vaclon pumps                                               | 0.9 (2.0)      | 9240122     |
| <b>2 L/s pump</b>                                                                                                                           |                |             |
| With 3/4 inch od 180° stainless steel tube                                                                                                  | 0.9 (2.0)      | 9190521     |
| With 3/4 inch od 180° copper tube, vacuum processed                                                                                         | 0.9 (2.0)      | 9190522     |
| With 3/4 inch od 180° stainless steel tube, vacuum processed                                                                                | 0.9 (2.0)      | 9190523     |
| With 3/4 inch od 90° stainless steel tube, tee style                                                                                        | 0.9 (2.0)      | 9190524     |
| With DN 16 CF-F (1.33 in CFF) 180° vacuum processed                                                                                         | 0.9 (2.0)      | 9190520     |
| Magnet for 2 L/s pump                                                                                                                       | 0.9 (2.0)      | 9190038     |
| HV bakeable cable, radiation resistant, Kings (SHV), 4 m (13 ft) with interlock for 2 L/s pump                                              | 0.9 (2.0)      | 9290706     |
| HV bakeable cable, radiation resistant, Fischer, 4 m (13 ft) with interlock for 2 L/s pump                                                  | 0.9 (2.0)      | 9290705     |
| <b>10 L/s pump</b>                                                                                                                          |                |             |
| 10 L/s Vaclon pump, vacuum processed, with DN 40 CF-F (2.75 in CFF)                                                                         | 3.6 (8.0)      | 9195005     |
| Magnet assembly for 10 L/s Vaclon pump                                                                                                      | 5.0 (11.0)     | 9110030     |
| HV cable, 3 m (10 ft), Kings 10 kV (SHV) connector on controller side, Varian diode feedthrough on pump side, bakeable, radiation resistant | 0.9 (2.0)      | 9240741     |
| HV bakeable Cable, 4 m (13 ft), Fischer connector on controller side, old Varian diode feedthrough on pump side, radiation resistant        |                | 9290712     |

Magnets must be ordered separately.

See Pages 68-69 for IPCMini controller, cables, and accessories.