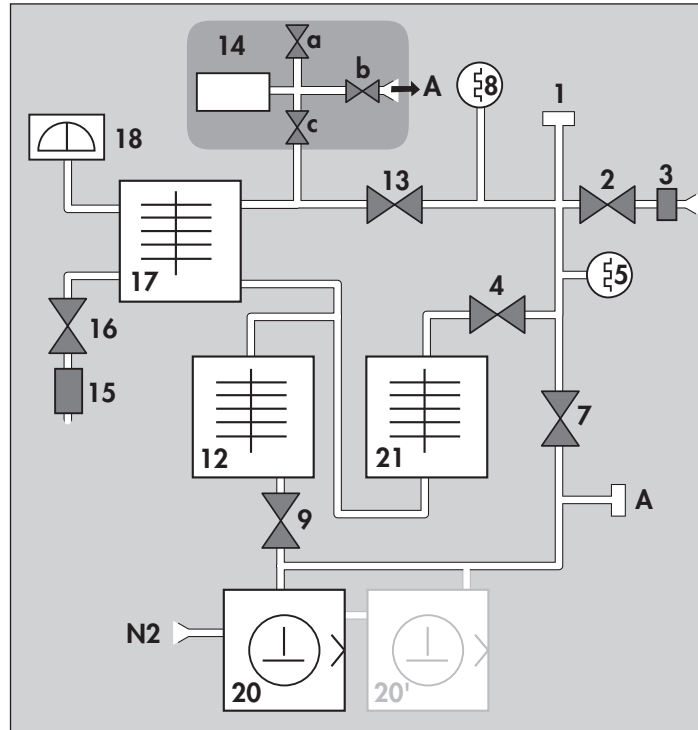


## ASM 192 T2D+

### Detector operating principle

#### Vacuum circuit



- |   |  |
|---|--|
| 1. Detector inlet port                      | 15. Connector for long distance sniffer                    |
| 2. Inlet vent valve                         | 16. Sniffer valve  |
| 3. Vent filter connector                    | 17. Hybrid turbomolecular pump (TMP 5154)                  |
| 4. Roughing valve                           | 18. Analyzer cell  |
| 5. Inlet pressure gauge (PI1)               | 20. Dry primary roughing pump (ACP 20/28)                  |
| 7. By-pass valve                            | 20'. Optional second dry primary roughing pump (ACP 20/28) |
| 8. Detection pressure gauge (PI3)           | 21. Roughing turbomolecular pump (ATP 100)                 |
| 9. Exhaust valve                            |  |
| 12. Roughing molecular drag pump (MDP 5006) |  |
| 13. Detection valve                         |  |
| 14. Calibrated leak module                  |  |

#### Pumping capacities

27 m<sup>3</sup>/h (16 cfm) roughing (dry primary pump ACP 20/28) or 54 m<sup>3</sup>/h (32 cfm) + 100 l/s (turbomolecular pump ATP 100). Helium pumping speed at inlet port: 20 l/s.

#### Test capacities

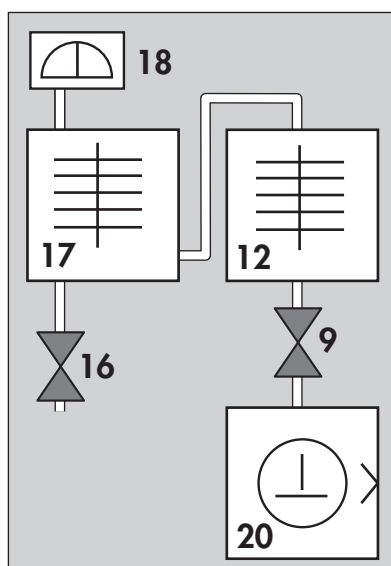
Short test cycle on big volumes.  
Quick response time on big volumes.  
Auto-calibration with integrated calibrated leak.

## ASM 192 T2D+ Detector operating principle

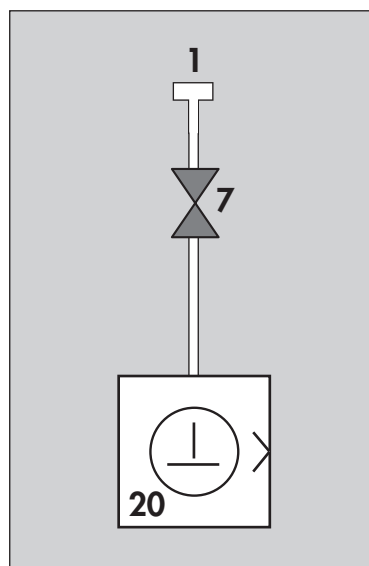
**Note:** Only operational parts are represented.

### Operation in vacuum test mode

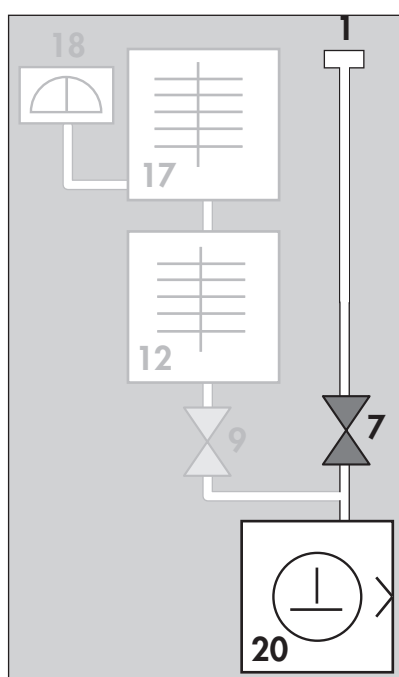
① Stand by



② Primary roughing



③ Gross leak test mode  
3 mbar < Inlet Pressure < 30 mbar



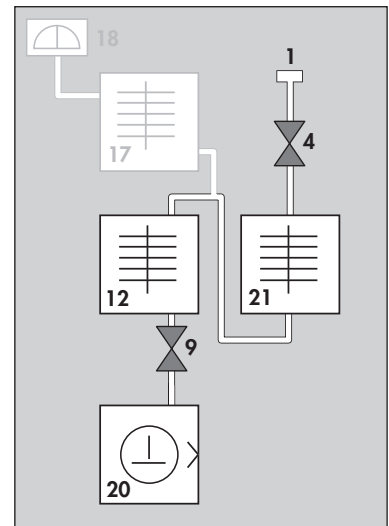
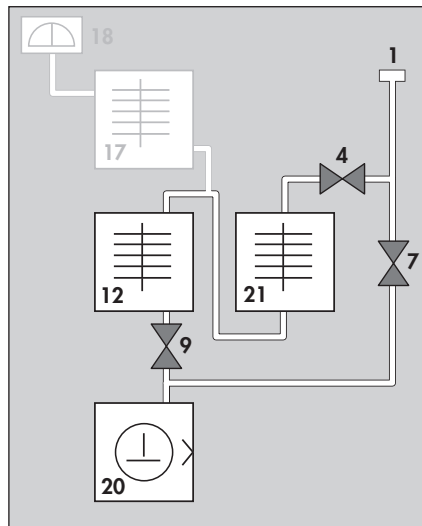
## ASM 192 T2D+

### Detector operating principle

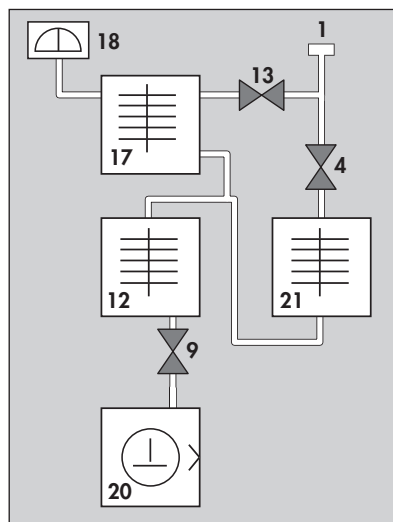
#### ④ Normal test mode

$5 \cdot 10^{-1}$  mbar < Inlet Pressure < 3 mbar

$2 \cdot 10^2$  mbar < Inlet Pressure <  $5 \cdot 10^1$  mbar

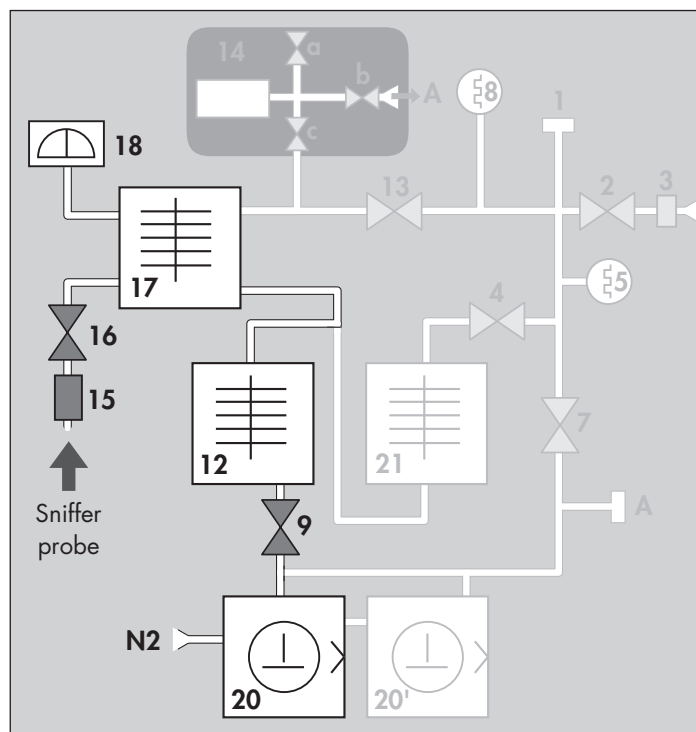


#### ⑤ High Sensitivity test mode inlet pressure < $2 \cdot 10^2$ mbar



## ASM 192 T2D+ Detector operating principle

Operation in  
sniffing mode  
(LDS)



## Operation in internal calibration mode

[illegible]

## ASM 192 T2D+

### Detector operating principle

#### Operation in internal calibration mode

- ③ Venting of calibrated leak  
The leak is returned to atmospheric pressure.

