

MOTT HIGH PURITY POINT-OF-USE PURIFIERS

TEESING

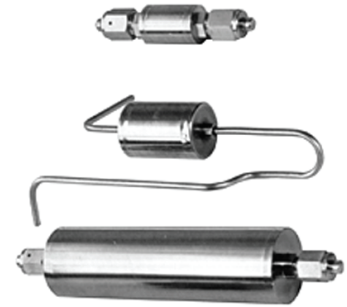
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mott
MISSION CRITICAL PRECISION

GAS PURIFIERS <100 PPT FOR LOW FLOW RATES

HIGHEST STANDARD OF PURITY

Mott's point-of-use purifiers are designed for high purity and ultra high purity applications that require impurity levels in process gases to be 100 PPT or less, Mott's point-of-use purifiers accommodate various flow rates across six different models and uphold the highest standard of purity for gas delivery systems.



APPLICATIONS

- » Semiconductor process equipment
- » Weld gas/purge gas
- » Pharmaceutical production
- » Analytical equipment
- » Annealing cover gas
- » Solar and energy
- » Other emerging technologies

FEATURES

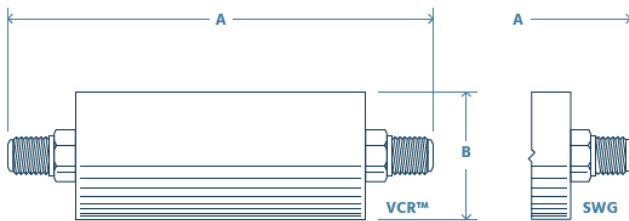
- » 316L stainless steel construction
- » Nominal flow rates from 0.3 to 20 slpm
- » Maximum flow rates from 4.5 to 300 slpm
- » Integral Particle Filtration
- » Simple installation

OPTIONS

- » Inlet/outlet fittings
- » Inlet/outlet valves
- » Sub-micron particle filtration
- » Face-to-face matching

OPERATING CONDITIONS

- » Max Operating Pressure
 - 250 PSIG (17.24 BAR) vessels only
 - 150 PSIG (10.34 BAR) in-line and panel purifiers
- » Max Operating Temperature
 - 400°C applicable to heated vessels in in-line and panel purifiers
- » Nominal Flow Rate
 - 0.3 slpm to 20.0 slpm depending on vessel size
- » Max Flow Rate
 - 4.5 slpm to 300 slpm depending on vessel size



SPECIFICATIONS

| | |
|------------------------------------|---|
| Material: | 316L stainless steel |
| Flexible Sizes and Configurations: | Six different vessel sizes, inlet/outlet fittings and valves, face-to-face matching available |
| Filtration: | 0.1 µm standard, optional 0.003 µm |
| Outlet Purity: | <100 PPT |
| Pressure Drop: | <2 psid |
| Wetted Surfaces: | Electro-polished, <10Ra, 316L stainless steels |

| Model | Units | Dimensions | | | Flow slpm | | |
|-------|-------|------------|-------|------|-----------|--------|--------|
| | | A | | B | Nominal | Max FP | Max CR |
| | | VCR™ | SWG | | | | |
| 050 | mm | 84.0 | 72.1 | 25.4 | 0.3 | 1.5 | 4.5 |
| | inch | 3.3 | 2.84 | 1.0 | | | |
| 125 | mm | 84.0 | 72.1 | 38.0 | 1.0 | 5.0 | 15.0 |
| | inch | 3.3 | 2.84 | 1.5 | | | |
| 250 | mm | 122.0 | 110.2 | 38.0 | 2.0 | 10.0 | 30.0 |
| | inch | 4.8 | 4.34 | 1.5 | | | |
| 600 | mm | 160.0 | 148.3 | 51.0 | 6.0 | 30.0 | 90.0 |
| | inch | 6.3 | 5.84 | 2.0 | | | |
| 01K | mm | 224.0 | 211.8 | 51.0 | 10.0 | 50.0 | 150.0 |
| | inch | 8.8 | 8.34 | 2.0 | | | |
| 02K | mm | 317.0 | 305.8 | 64.0 | 20.0 | 100.0 | 300.0 |
| | inch | 12.5 | 12.04 | 2.5 | | | |

- » Custom designs and fittings available
- » Max flow rates are at 150 psig gas pressure
- » Nominal flow rates are based on 1 year service life
- » Weights range from 1 to 10 lbs based on size and fill material

FILLS

| Class | Available Product | Gases Purified | Impurities Removed | Purity | Heated | Regen |
|-----------|-------------------|--|--|----------|--------|-------|
| C | V | Ar, He, Kr, Ne, Xe, N ₂ , H ₂ | CO, CO ₂ , H ₂ , H ₂ O, NMHC, O ₂ | <100 PPT | No | Yes |
| CA | V | Ar, He, Kr, Ne, Xe, N ₂ , H ₂ | CO, CO ₂ , H ₂ , H ₂ O, NMHC, O ₂ | <100 PPT | No | Yes |
| F | V | C ₂ F ₆ , C ₃ F ₈ , C ₄ F ₈ , CClF ₃ , CCl ₂ F ₂ , CCl ₄ , CF ₄ , CHClF ₂ , CHF ₃ , CH ₃ F | CO, CO ₂ , H ₂ , H ₂ O, NMHC, O ₂ | <100 PPT | No | No |
| H | I, P | H ₂ | CO, CO ₂ , H ₂ O, N ₂ , O ₂ | <100 PPT | Yes | No |
| N | I, P | N ₂ , N ₂ /Noble gas mix | CO, CO ₂ , H ₂ , H ₂ O, O ₂ , THC | <100 PPT | Yes | N/A |
| O | I, P | CDA, O ₂ | CO, H ₂ , THC | <100 PPT | Yes | N/A |
| OX | V, I, P | CDA, O ₂ | CO ₂ , H ₂ O, NHMC, Amines, NOx | <100 PPT | No | Yes |
| R | I, P | Ar, He, Kr, Ne, Xe | CO, CO ₂ , H ₂ , H ₂ O, N ₂ , O ₂ , THC | <100 PPT | Yes | No |
| T | V | BCl ₃ , BF ₃ , Cl ₂ , ClF ₃ , F ₂ , HBr, HCl, HF, NF ₃ , SF ₄ , WF ₆ | H ₂ O | <100 PPT | No | No |
| W | V, I, P | Ar, He, Kr, Ne, Xe, N ₂ | H ₂ O | <100 PPT | No | Yes |
| Y | V | AsH ₃ , B ₂ H ₆ , CH ₄ , D.C.S.(SiH ₂ Cl ₂), Ge ₂ H ₆ , GeH ₄ , H ₂ Se, NH ₃ , PH ₃ , SF ₆ , SiH ₄ , Si ₂ H ₆ , DMHZ, Hydride/Carrier gas mix | CO ₂ , H ₂ O, O ₂ | <100 PPT | No | Yes |
| V | V, I, P | Ar, He, Kr, Ne, Xe, N ₂ | O ₂ | <100 PPT | Yes/No | Yes |

» V=Vessel only, I=In-line, P=Panel