

# MOTT HIGH PURITY MICRO-BULK PURIFIERS

TEESING

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MISSION CRITICAL PRECISION

## GAS PURIFIERS <100 PPT FOR MODERATE FLOW RATES

### HIGHEST STANDARD OF PURITY

Mott's micro-bulk purifiers offer moderate flow rates, serving high purity and permanently installed gas delivery systems. Whether a micro-bulk gas purifier, pressure regulator station, or flow control panel, Mott's micro-bulk purifier solutions are designed to meet the specific requirements of any gas delivery system by allowing for customization of critical features.



### APPLICATIONS

- » High production rate weld gas/purge gas
- » Pharmaceutical production
- » Glove box purge gas
- » Additive manufacturing
- » Annealing cover gas
- » Moderate volume high and ultra high purity applications

### FEATURES

- » 316L stainless steel construction
- » Nominal flow rates from 100 to 1200 slpm
- » Powder coated steel enclosure
- » Pressure to 20.5 MPa
- » Full integrated PLC control
- » Touchscreen HMI

### OPTIONS

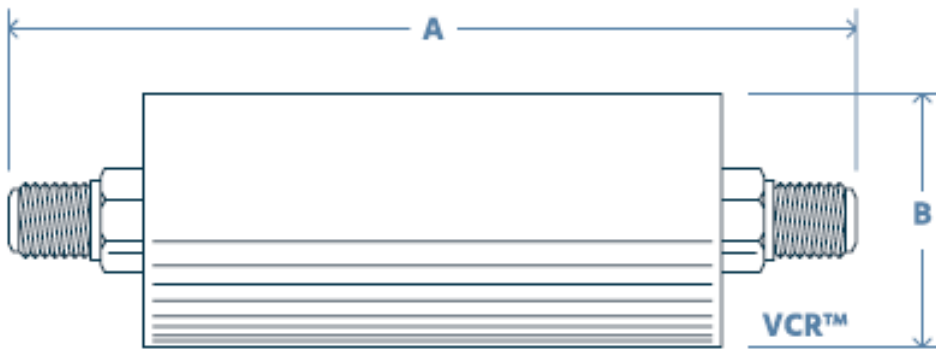
- » Inlet/outlet fittings
- » Flow indication
- » Bypass valve
- » Air-operated or manual valve options
- » 100-120/220-240VAC 50/60Hz input power options
- » Face-to-face matching

### OPERATING CONDITIONS

- » Max Operating Pressure  
250 PSIG (17.24 BAR) vessels only
- » Max Operating Temperature  
400°C
- » Nominal Flow Rate  
0.3 slpm to 20.0 slpm
- » Max Flow Rate  
4.5 slpm to 300.0 slpm

### SPECIFICATIONS

Material:	316L stainless steel with powder coated steel enclosure
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:	<1 ATM
Wetted Surfaces:	Electro-polished, <10Ra, 316L stainless steels



## SIZES

		Dimensions		Flow slpm		
Model	Units	A	B	Nominal	Max FP	Max CR
975	mm	202.0	76.0	7.0	60.0	100.0
	inch	7.94	3.0			
977	mm	254.0	76.0	10.0	120.0	200.0
	inch	10.0	3.0			
05K	mm	62.0	76.0	43.0	200.0	400.0
	inch	18.20	3.0			
07K	mm	440.0	102.0	60.0	500.0	700.0
	inch	17.30	4.0			
08K	mm	864.0	102.0	120.0	560.0	850.0
	inch	34.0	4.0			
50K	mm	701.0	152.0	225.0	1000.0	1500.0
	inch	27.60	6.0			

» Custom designs and fittings available

» Nominal flow rates are based on 1 year service life at 5Ns inlet purity

» Max flow rates are at 150 psig gas pressure

» Weights range from 1 to 10 lbs based on size and fill material

## FILLS

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