

molbloc-L ranges with low pressure and downstream calibrations

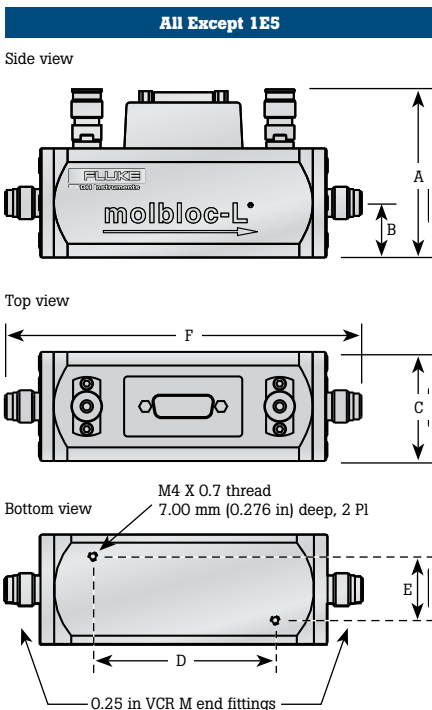
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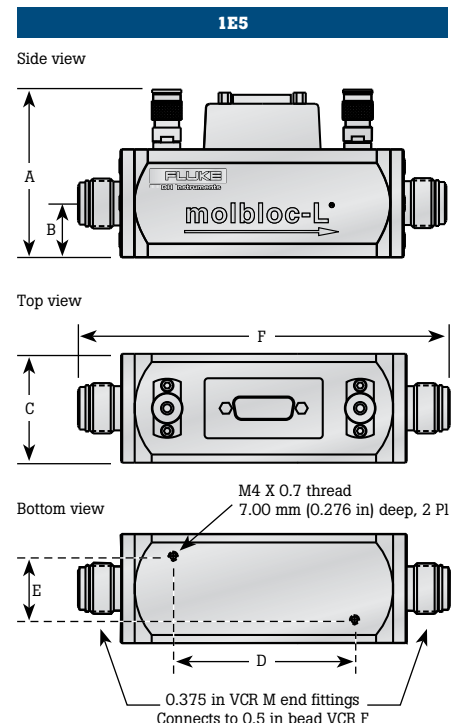
| | | molbloc size and full scale flow (sccm @ 0 °C) | | | | | | | | | | |
|----------------|------------------------------------|--|-----|---------|-----------|-----------|------------|-------------|--------------|---------------|---------------|-----------------|
| | | Size | | | | | | | | | | |
| Gases | | 1E1 | 5E1 | 1E2 | 2E2 | 5E2 | 1E3 | 5E3 | 1E4 | 3E4 | 1E5 | |
| Inert | Nitrogen | N ₂ | 10 | 50 | 100 | 200 | 500 | 1000 | 5000 | 10000 | 30000 | 100000 |
| | Argon | Ar | 10 | 50 | 100 | 200 | 500 | 1000 | 5000 | 10000 | 30000 | 80000 |
| | Helium | He | 10 | 50 | 100 | 200 | 500 | 1000 | 5000 | 10000 | 30000 | 100000 |
| | Sulfur hexafluoride | SF ₆ | 10 | 50 | 100 | 200 | 500 | 1000 | 2000 500 | 6000 1000 | 6000 4000 | — |
| | Xenon | Xe | 10 | 40 | 80 | 150 | 400 | 800 | 3500 500 | 8000 | 11000 3000 | 30000 20000 |
| Flammable | Butane | C ₄ H ₁₀ | 20 | 100 | 130 30 | 270 50 | 670 140 | 2300 | 2200 1400 | 7000 3000 | — — | — |
| | Ethane | C ₂ H ₆ | 20 | 100 | 200 | 400 | 1000 | 2000 | 6000 1000 | 18000 2000 | 18000 6000 | 60000 50000 |
| | Ethylene | C ₂ H ₄ | 16 | 18 | 160 | 320 | 800 | 1600 | 7000 1000 | 16000 | 20000 5000 | 70000 40000 |
| | Hydrogen | H ₂ | 20 | 100 | 200 | 400 | 1000 | 2000 | 10000 | 20000 | 60000 | 200000 |
| | Methane | CH ₄ | 16 | 80 | 160 | 320 | 800 | 1600 | 8000 | 16000 | 40000 5000 | 120000 40000 |
| | Propane | C ₃ H ₈ | 20 | 100 | 200 | 400 | 1000 | 2000 | 3000 1000 | 10000 2000 | 10000 7000 | — |
| Fluoro-carbons | Carbon tetrafluoride | CF ₄ | 10 | 50 | 100 | 200 | 500 | 1000 | 4000 600 | 10000 | 12000 3000 | 36000 25000 |
| | Hexafluoroethene | C ₂ F ₆ | 10 | 50 | 100 | 200 | 500 | 1000 | 2000 600 | 6000 1200 | 6000 4000 | — |
| | Trifluoromethane | CHF ₃ | 10 | 50 | 100 | 200 | 500 | 1000 | 4000 600 | 10000 | 12000 4000 | 38000 30000 |
| Other | Air | Air | 10 | 50 | 100 | 200 | 500 | 1000 | 5000 | 10000 | 30000 | 100000 |
| | Carbon dioxide | CO ₂ | 10 | 50 | 100 | 200 | 500 | 1000 | 5000 | 10000 | 20000 4000 | 60000 30000 |
| | Carbon monoxide | CO | 10 | 50 | 100 | 200 | 500 | 1000 | 5000 | 10000 | 30000 | 100000 |
| | Nitrous oxide | N ₂ O | 10 | 50 | 100 | 200 | 500 | 1000 | 5000 | 10000 | 20000 4000 | 60000 30000 |
| | Octafluorocyclobutane ¹ | C ₄ F ₈ | 15 | 60 9 | 65 17 | 130 34 | 330 85 | 1100 175 | 1050 840 | 3400 1700 | — — | — |
| | Oxygen | O ₂ | 10 | 50 | 100 | 200 | 500 | 1000 | 5000 | 10000 | 30000 | 80000 |

See page 2 for footnotes.

molbloc-L dimensions



| | 5E3 and lower | 1E4,3E4 | 1E5 |
|----------|---------------------------|---------------------------|---------------------------|
| A | 58.50 mm (2.303 in) | 74.50 mm (2.933 in) | 74.50 mm (2.933 in) |
| B | 16.00 mm (0.630 in) | 24.00 mm (0.945 in) | 24.00 mm (0.945 in) |
| C | 32.00 mm (1.260 in) sq | 48.00 mm (1.890 in) sq | 48.00 mm (1.890 in) sq |
| D | 68.84 mm (2.750 in) | 80.00 mm (3.150 in) | 80.00 mm (3.150 in) |
| E | 19.06 mm (0.750 in) | 28.00 mm (1.102 in) | 28.00 mm (1.102 in) |
| F | 124.00 mm (4.881 in) | 157.00 mm (6.181 in) | 164.00 mm (6.458 in) |



End views

molbloc-L ranges with high pressure calibrations

| | | molbloc size and full scale flow (sccm @ 0 °C) | | | | | | | | | | |
|-----------------------|------------------------------------|--|-----|-----------|-----------|------------|-------------|-------------|---------------|---------------|----------------|------------|
| | | Size | | | | | | | | | | |
| Gases | | 1E1 | 5E1 | 1E2 | 2E2 | 5E2 | 1E3 | 5E3 | 1E4 | 3E4 | 1E5 | |
| Inert | Nitrogen | N ₂ | 20 | 100 | 200 | 400 | 1000 | 2000 | 10000 | 20000 | 40000 7500 | N/A |
| | Argon | Ar | 20 | 100 | 200 | 400 | 1000 | 2000 | 10000 | 17000 | 35000 6000 | N/A |
| | Helium | He | 20 | 100 | 200 | 400 | 1000 | 2000 | 10000 | 20000 | 65000 | N/A |
| | Sulfur hexafluoride | SF ₆ | 25 | 100 15 | 120 30 | 250 50 | 600 150 | 2000 300 | 2000 1400 | 6200 2800 | – – | N/A N/A |
| | Xenon | Xe | 20 | 100 | 150 | 350 | 650 | 1700 | 3350 950 | 11000 1900 | 11000 5700 | N/A |
| Flammable | Butane ² | C ₄ H ₁₀ | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| | Ethane | C ₂ H ₆ | 40 | 200 | 350 50 | 700 100 | 1800 200 | 4000 | 6000 2300 | 20000 4500 | 20000 13800 | N/A N/A |
| | Ethylene | C ₂ H ₄ | 40 | 200 | 350 | 700 | 1800 | 4000 | 7000 2000 | 22000 4000 | 22000 12700 | N/A |
| | Hydrogen | H ₂ | 40 | 200 | 400 | 900 | 2000 | 4500 | 22000 | 45000 | 130000 | N/A |
| | Methane | CH ₄ | 35 | 175 | 350 | 700 | 1700 | 3500 | 13000 2000 | 33000 | 42000 12000 | N/A |
| | Propane | C ₃ H ₈ | 50 | 200 25 | 200 50 | 400 100 | 1000 250 | 3500 500 | 3500 2600 | 11000 5400 | – – | N/A |
| Fluoro-carbons | Carbon tetrafluoride | CF ₄ | 20 | 100 | 200 | 400 | 1000 | 2000 | 3700 1200 | 12000 2400 | 12000 7300 | N/A |
| | Hexafluoroethene | C ₂ F ₆ | 25 | 100 15 | 120 30 | 250 50 | 600 150 | 2000 300 | 1800 1500 | 6000 3000 | – – | N/A |
| | Trifluoromethane | CHF ₃ | 25 | 125 | 240 30 | 450 60 | 1200 150 | 2500 | 4000 1500 | 12000 3000 | 12000 8800 | N/A |
| Other | Air | Air | 20 | 100 | 200 | 400 | 1000 | 2000 | 10000 | 20000 | 40000 7200 | N/A |
| | Carbon dioxide | CO ₂ | 25 | 125 | 250 | 500 | 1250 | 2500 | 6600 1400 | 20000 2500 | 40000 8800 | N/A |
| | Carbon monoxide | CO | 20 | 100 | 200 | 400 | 1000 | 2000 | 10000 | 20000 | 40000 7500 | N/A |
| | Nitrous oxide | N ₂ O | 25 | 125 | 250 | 500 | 1250 | 2500 | 11000 1500 | 20000 3000 | 20000 9000 | N/A |
| | Octafluorocyclobutane ² | C ₄ F ₈ | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| | Oxygen | O ₂ | 20 | 100 | 200 | 400 | 1000 | 2000 | 10000 | 20000 | 40000 6500 | N/A |

A bold value indicates that the maximum flow is limited by the maximum Reynolds number value of 1 200 which is reached before the normal differential pressure range is reached. In that case, the second value gives the minimum flow for which measurement uncertainty (accuracy) is equal to the nominal uncertainty specification. Divide the second value by 10 when using molbox RPM micro-range option.

Where there is no value in the field (–), this indicates that the maximum Reynolds number is reached before the differential pressure reaches 5 kPa (1 kPa in the case of the 1E5 molbloc), therefore calibration with that gas is not useful.

¹ Due to low vapor pressure, only downstream calibration type is available.

² The operating pressure range is greater than the vapor pressure value for this gas.

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