

# RESERVOIR

# FAST | ACCURATE | ACCREDITED

# LEAK STANDARD

# MATRIX



CM51L-71111V0/1

## LEAK RATE EXPONENT

+2 to -10 = Specifies Leak Rate Decade Range

## CALIBRATION POINTS

1 = Single Pressure Calibration

# = Additional Calibration Points

## EXHAUST

A = Into Atmosphere (760 Torr)

V = Into Vacuum (<100 mTorr)

## PREFIX

# CM51L-71111V0/1

## LEAK ELEMENT

5 = Micro Tube Capillary

3 = Micro Tube Permeation

## ISOLATION VALVE

0 = None

1 = Manual Valve

2 = Solenoid Valve, 24 VDC

3 = Zero-Volume Valve, Manual

4 = Bakable Valve

5 = Zero-Volume Valve, Pneumatic

6 = Pneumatic Iso Valve, 3-Way

## OPTIONS

0 = None

G = Pressure Gauge

X = Special



## LEAK RATE UNIT

/1 = Atm.cc/sec

/2 = Std.cc/sec

/3 = sccm

/4 = mbar.L/sec

/5 = Torr/L/sec

/6 = Pa.m3/sec

/7 = Oz/year

/8 = Gr/year

/9 = Mol/sec

/B = Std.cc/hr

/C = CFM

## GAS

1 = Helium (He)

2 = Air

3 = Argon (Ar)

4 = Nitrogen (N<sub>2</sub>)

5 = Carbon Dioxide (CO<sub>2</sub>)

6 = Nitrus Oxide (N<sub>2</sub>O)

7 = Helium 3 Isotope (He<sup>3</sup>)

8 = Carbon Monoxide (CO)

9 = Oxygen

A = R-12 Refrigerant

B = R-22 Refrigerant

C = Hydrogen (H<sub>2</sub>)

D = Deuterium (D<sub>2</sub>)

E = Sulfur Hexafluoride (SF<sub>6</sub>)

F = Neon (Ne)

G = Xenon (Xe)

H = R-134a Refrigerant

J = Methane (CH<sub>4</sub>)

K = Krypton (Kr)

L = R-404a Refrigerant

M = R-290 Refrigerant

O = Carbon Monoxide (CO)

P = R-407c Refrigerant

R = R-410 Refrigerant

S = Ammonia (NH<sub>3</sub>)

T = Halon 1301

## LEAK RATE MANTISSA

X = Any Value Within Range

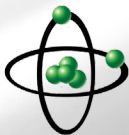
L = Low (1 - 3)

M = Mid (4 - 6)

H = High (7 - 9)

1.0 - 9.0 = Specific Values

(Can specify values out to 1 or 2 decimal places, i.e. 1.2 or 1.25)



## RESERVOIR

0 = None

1 = Laco Reservoir (115 cc)

2 = 300 cc DOT

4 = 150 cc DOT

5 = Dual Reservoir

6 = 1000 cc DOT

7 = 500 cc DOT

## CONNECTION

0 = NW 16 Flange

1 = NW 25 Flange

2 = NW 40 Flange

3 = 1 1/8" OD Tube

4 = 3/4" OD Tube

5 = 1/4" Male VCR

6 = 1/4" Swagelock

7 = 1/8" FNPT

8 = 1/4" MNPT

9 = 10-32 Male with O-ring

A = 3/8" OD Tube

B = 1/8" MNPT

C = 1/4" FNPT

D = Universal Sniffer Probe Adaptor

E = 2.75" Con-Flat (CF) Flange

J = 1.33" Mini Con-Flat (CF) Flange

# LACO TECHNOLOGIES

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# LEAK STANDARD

## MATRIX

### LEAK RATE EXPONENT

+2 to -10 = Specifies Leak Rate Decade Range

### CALIBRATION POINTS

1 = Single Pressure Calibration  
# = Additional Calibration Points

### EXHAUST

A = Into Atmosphere (760 Torr)  
V = Into Vacuum (<100 mTorr)

### INLET PRESSURE

# = Pressure Value Applied at Inlet  
(Leave blank if no inlet pressure is specified)

### FLOW

T = Total Flow  
P = Partial Flow  
(Use only if gas concentration is not 100%)

### PREFIX

# CM51M-410SDA0/1/1-3/10T

### LEAK ELEMENT

5 = Micro Tube Capillary  
3 = Micro Tube Permeation

### GAS

- 1 = Helium (He)
- 2 = Air
- 3 = Argon (Ar)
- 4 = Nitrogen (N<sub>2</sub>)
- 5 = Carbon Dioxide (CO<sub>2</sub>)
- 6 = Nitrus Oxide (N<sub>2</sub>O)
- 7 = Helium 3 Isotope (He<sup>3</sup>)
- 8 = Carbon Monoxide (CO)
- 9 = Oxygen
- A = R-12 Refrigerant
- B = R-22 Refrigerant
- C = Hydrogen (H<sub>2</sub>)
- D = Deuterium (D<sub>2</sub>)
- E = Sulfur Hexafluoride (SF<sub>6</sub>)
- F = Neon (Ne)
- G = Xenon (Xe)
- H = R-134a Refrigerant
- J = Methane (CH<sub>4</sub>)
- K = Krypton (Kr)
- L = R-404a Refrigerant
- M = R-290 Refrigerant
- O = Carbon Monoxide (CO)
- P = R-407c Refrigerant
- R = R-410 Refrigerant
- S = Ammonia (NH<sub>3</sub>)
- T = Halon 1301

### LEAK RATE MANTISSA

X = Any Value Within Range  
L = Low (1 - 3)  
M = Mid (4 - 6)  
H = High (7 - 9)  
1.0 - 9.0 = Specific Values  
(Can specify values out to 1 or 2 decimal places, i.e. 1.2 or 1.25)

### ISOLATION VALVE

0 = None  
1 = Manual Valve  
2 = Solenoid Valve, 24 VDC  
3 = Zero-Volume Valve, Manual  
4 = Bakable Valve  
5 = Zero-Volume Valve, Pneumatic  
6 = Pneumatic Iso Valve, 3-Way

### INLET CONNECTION

0 = No Inlet Connection  
A = 1/8" FNPT  
B = 1/8" MNPT  
C = 1/4" FNPT  
D = 1/4" MNPT  
E = 1/4" Male VCR  
F = 1/4" Swagelock  
J = NW 16 Flange  
K = NW 25 Flange  
L = NW 40 Flange  
N = 1.33" Mini Con-Flat (CF) Flange  
S = Push-in, 1/4"

### OPTIONS

0 = None  
G = Pressure Gauge  
X = Special

### OUTLET CONNECTION

0 = NW 16 Flange  
1 = NW 25 Flange  
2 = NW 40 Flange  
5 = VCR4 Male  
6 = 1/4" Swagelock  
7 = 1/8" FNPT  
8 = 1/4" MNPT  
9 = 10-32 Male with O-ring  
B = 1/8" MNPT  
C = 1/4" FNPT  
D = Universal Sniffer Probe Adaptor  
E = 2.75" Con-Flat (CF) Flange  
J = 1.33" Mini Con-Flat (CF) Flange  
L = Straight Thread, M8 Bolt Male

### GAS CONCENTRATION

# = Concentration Percentage  
(Use only if gas concentration is not 100%)

### PRESSURE UNIT

1 = PSIA - Absolute  
2 = PSIG - Relative  
3 = Atm - Absolute  
4 = Torr - Absolute  
5 = mTorr - Absolute  
6 = Microns - Absolute  
7 = Bar - Absolute  
8 = mbar - Absolute  
9 = Pascal - Absolute  
A = Kpa - Absolute  
B = InHg - Absolute  
C = InHg - Relative  
D = InWater - Relative  
E = mmHg - Absolute  
M = MPa - Relative  
(Leave blank if no inlet pressure is specified)

### LEAK RATE UNIT

1 = Atm.cc/sec  
2 = Std.cc/sec  
3 = sccm  
4 = mbar.L/sec  
5 = Torr/L/sec  
6 = Pa.m3/sec  
7 = Oz/year  
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