

To blend two or three gases in homogeneous infinitely variable concentrations, directly at the end use point, this *Model G* gas proportioner is unsurpassed in convenience and economy.

Gas proportioners pay for themselves since they eliminate the need for expensive custom blended gas mixtures.

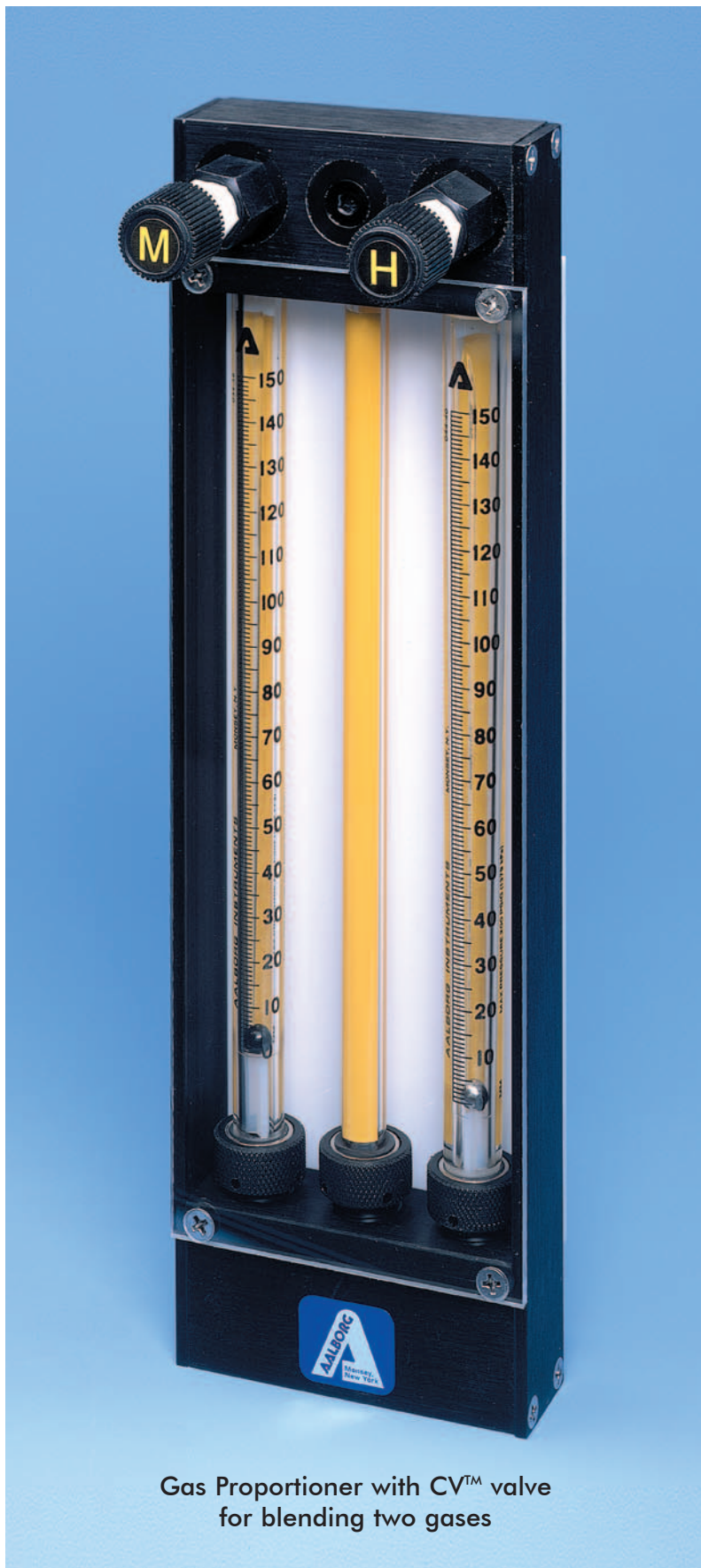
They lend flexibility and economy to the utilization of component gas cylinders and "piped-in" supply lines.

Another advantage in laboratory investigations is the freedom to reproducibility increase or decrease concentrations during the course of an experiment.

The flow rates are not affected by downstream pressure variations as long as back pressures do not approach or exceed the input pressure. Input pressures of up to 200 psig (13.8 bars) can be used; however, customers very often find 50 psig (3.45 bars) a convenient setting to work with.

design features

- ✓ Blending of two or three gases with gas proportioners obviates the need for:
 - ✓ ORDERING FIXED GAS MIXTURES.
 - ✓ CONTAMINATION FROM REUSABLE GAS CYLINDERS.
 - ✓ POTENTIALLY INACCURATE MIXTURES BY GAS SUPPLIERS.
- ✓ Rib-guided or fluted metering tubes facilitate stable, accurate readings.
- ✓ OPTIGRAD™ scales minimize parallax and eye fatigue.
- ✓ Interchangeability of flow tubes and floats.
- ✓ Simple means of panel mounting.



Gas Proportioner with CV™ valve for blending two gases

G

GAS PROPORTIONERS BACK PRESSURE COMPENSATED

BUILT-IN VALVES

Meters are available with built-in needle valves (CV™), high precision metering valves (MFV™) with “non-rising stems”, or with no valves.

The higher cost of MFV™ valves is justified whenever high sensitivity control and resolution are desirable particularly in conjunction with metering tubes of very low flow rates.

flow tubes

- ✓ Precision fabricated from heavy walled, shock resistant borosilicate glass.
- ✓ Bores are uniformly tapered or formed with internal “rib-guides” or flutes.
- ✓ Floats are retained by TFE plugs.
- ✓ Self cleaning.
- ✓ Low differential pressures that stay independent of flow rate changes.

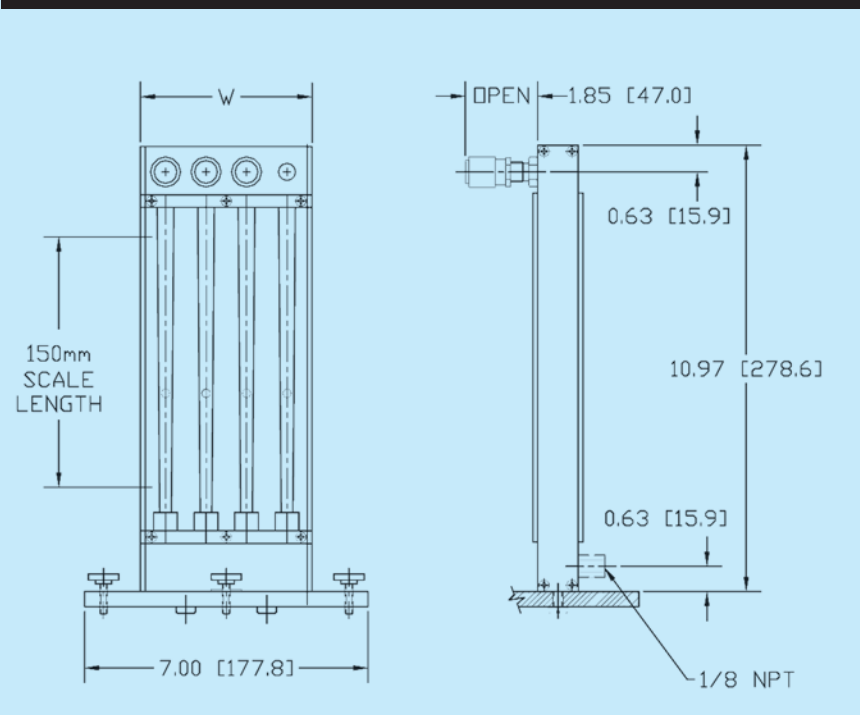
TYPICAL FLOW CAPACITIES AT 50 psig/3.5 BARS INLET PRESSURE

FLOWTUBE NUMBER	AIR [sml/min]	FLOWTUBE NUMBER	AIR [sml/min]
042-15G	83	092-04G	5528
032-41G	191	102-05G	9294
062-01G	324	034-39G	19767
112-02G	1086	044-40G	49374
082-03G	2008		

DIMENSIONS FOR G STYLE METERS

WIDTH (W)		
SCALE LENGTH	2 CHANNEL	3 CHANNEL
150mm	3.24	4.24

DIMENSIONS



SPECIFICATIONS STANDARD COMPONENT

FLOW TUBE ACCURACY ±2% of full scale reading, from 10 to 100% of scale.
Conforming to ISA RP. 16-1.2.3. Specification 2-S-10.

COMPONENT FLOW TUBE REPEATABILITY
±0.25%. Typical calibration curves for air at 50 psig/3.5 bars using glass floats are available. Consult the company on the availability of calibration data for non-hazardous gases and special individual calibrations.

MAX OPERATING PRESSURE 200 psig/13.8 bars.

MAX OPERATING TEMPERATURE 250° F/121° C.

MATERIALS OF CONSTRUCTION

FLOW TUBES	Heavy walled borosilicate glass.
CHOICE OF MOUNTING FITTINGS IN CONTACT WITH GASES	a) Aluminum, black anodized. b) 316 stainless steel.
SIDE PANELS	Aluminum, black anodized.
FRONT SHIELD	Clear polycarbonate.
BACK PLATE	1/8" thick white acrylics.
O-RINGS AND PACKING	Buna-N® o-rings in aluminum model. Viton-A® o-rings in stainless steel meters. OPTIONAL Viton®, PTFE/Kalrez®.
CONNECTIONS	1/8" NPT female inlet and outlet connections.
OPTIONAL	Hose and compression fittings are available.

Bench mounting acrylic tripod bases are optional.

Ordering information see page 22.



EXAMPLE

G	G STYLE METERS	
CODE	TUBE QUANTITIES	
2	TWO CHANNEL METER (TWO TUBES AND ONE MIXING TUBE)	
3	THREE CHANNEL METER (THREE TUBES AND ONE MIXING TUBE)	
CODE	SIZE	
1	150 mm	
CODE	MATERIAL	
A	ALUMINUM	
S	STAINLESS	
CODE	VALVE	
5	MFV (HIGH PRECISION) OUTLET	
6	CV OUTLET (STANDARD CARTRIDGE)	
CODE	SEALS	
V	VITON® STD ON STAINLESS METERS	
B	BUNA® STD ON BRASS AND ALUMINUM	
E	EPR	
T	PTFE	
CODE	FITTINGS	
A	1/8" FNPT	
B	1/4" FNPT	
C	1/8" HOSE NIPPLE	
D	1/4" HOSE NIPPLE	
E	1/8" COMPRESSION	
F	1/4" COMPRESSION	
H	VCR	
CODE	MANIFOLD	
0	NONE	

G					—					TUBE
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Optional Accessories

TPG-Tripod for 2 channel gas proportioner.
TPH-Tripod for 3 channel gas proportioner.

Select tube from the following tables:

Typical Flow Capacities on page 21.
 Tables 6 and 8 from pages 37 to 38.