

### GASCAL CALIBRATION GAS



COMPRESSED GAS, N.O.S.  
(4% CO<sub>2</sub>, 16% O<sub>2</sub>,  
BAL. N<sub>2</sub>)

### GASREG REGULATOR



#### GASCAL and GASCAL2

Composition: GASCAL: 4% Carbon Dioxide, 16% Oxygen, balance Nitrogen

GASCAL2: 8% Carbon Dioxide, 21% Oxygen, balance Nitrogen

Cylinder Type:

ED

Valve Connection:

CGA-973 works with GASREG regulator

Accuracy:

±0.03% absolute

Stability Guaranteed:

3 years

Cylinder Pressure:

2200 psig

Gas Volume:

560 liters

Cylinder Recycling:

Cylinder Recycling Program available. Contact [support@biopac.com](mailto:support@biopac.com) to receive instructions for returning a cylinder; delivery paid by sender and recycling covered by manufacturer.

#### GASREG

Use the non-corrosive, two stage regulator with flow control with the GASCAL Calibration Gas Cylinder.

This regulator is used to inject calibration gases into the GASSYS2/GASSYS3 or AFT15 chambers to create the secondary calibration points for a proper gas calibration of O<sub>2</sub> and CO<sub>2</sub> sensors.

- The initial case (for the primary calibration points) is the chamber flooded with ambient air (20.95% Oxygen, 0.04% Carbon Dioxide and balance Nitrogen).
- The secondary case (for the secondary calibration points) is using the GASCAL with GASREG to inject a calibrated gas mixture into the chamber.
- The chamber will be flooded with this mixture from GASCAL or GASCAL2.

GASCAL is a tank containing 4% carbon dioxide, 16% oxygen and balance (80%) nitrogen.

GASCAL2 is a tank containing 8% carbon dioxide, 21% oxygen and balance (71%) nitrogen.

Use 3.2 mm ID tubing to run from GASREG output to the chamber and seal the 3.2 mm ID tube to the input port of the chamber, during calibration.

Wait for the chamber to be flooded, typically about 1-2 minutes.

Put regulator at 10 psi and open up the flow valve.

After flooding, then largely close the flow valve, but keep some small flow during the calibration of secondary point, to maintain positive pressure in the chamber.

The chamber needs to be flooded prior to attempting to calibrate for secondary points.

After secondary calibration, shut down the tank by closing the main valve.

**See also:** [AFT16 Regulator Barb Interface Kit](#) for interfacing the GASCAL+GASREG combination to an AFT15 mixing chamber to calibrate the O<sub>2</sub>100C or CO<sub>2</sub>100C amplifier modules.

[AFT17 Regulator Barb Interface](#) to inject calibration gases into the RX-GAS3 Calibration Chamber to calibrate the GASSYS3 Gas Analysis System.