

# Proportional Gas Mixers

Gas Equipment 

|                    |                 |                        |                                  |                            |
|--------------------|-----------------|------------------------|----------------------------------|----------------------------|
| <b>Quick Specs</b> | <b>Gases</b>    | <b>Flow Range</b>      | <b>Required Inlet Pressure</b>   | <b>Case Material</b>       |
|                    | Argon           | 10–180 scfh            | 105–115 psig                     | Painted aluminum           |
|                    | CO <sub>2</sub> | 4.8–85 lpm             | 7.3–7.9 bar                      | <b>Dimensions</b>          |
|                    | Helium          | <b>Outlet Pressure</b> | 724–793 kPa                      | 5.375 x 7.375 x 10.125 in. |
|                    | Hydrogen        | 50 psig                | <b>Inlet Filters</b>             | (137 x 187 x 257 mm)       |
| Oxygen             | 3.5 bar         | 60 micron nominal      | <b>Net Weight</b> 8 lb. (3.6 kg) |                            |
|                    |                 | 344.7 kPa              | (mixer protection only)          |                            |

**Efficient. Economical. Precise.**



299-006-1C gas mixer shown.

**Accurate, on-site shield gas mixing.** Various welding processes require different gas mixes for the best results. Our proportional gas mixers are accurate and allow custom mixtures for optimal welds.

**No stocking or handling of premixed gases** saves time and money, and reduces the number of cylinders that need to be stored.

**Reduces setup time.** No need to change cylinders, regulators, flow control devices or hoses when switching from one range of mixed gas to another.

**Ideal for education and training.** Operators can quickly see the effect of various gas mixtures on weld appearance, quality and penetration.

**Easy operation.** Simply set the dials for the desired mix and flow. Mixers are mechanical, no electricity is required.

**Serves from one to five welding stations with a single mixer.** Delivers accurate mixtures at flows ranging from 10 to 180 scfh.

**No gas separation.** Premixed gases can separate (stratify) after sitting for long periods of time. Our accurate proportional gas mixers eliminate that risk.

**Built-in flow control** eliminates the need for additional flow control devices when used in single-station applications.

**Versatile.** Convenient conversion charts printed on the top of the mixer cabinet help guide proper use with other gases.



Warranted for one year, parts and labor.



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## Specifications (Subject to change without notice.)

| Stock Number | Gases           | Adjustment % Range | Inlet Connections    | Conversion Tables*   |
|--------------|-----------------|--------------------|----------------------|--|
| 299-006-1C   | Argon           | 0–100%             | 5/8"-18 RH Internal  | Argon/helium<br>Argon/oxygen<br>CO <sub>2</sub> /oxygen                      |
|              | CO <sub>2</sub> | 100–0%             |                      |  |
| 299-006-3C   | Argon           | 0–100%             | 5/8"-18 RH Internal  | Argon/CO <sub>2</sub><br>Argon/oxygen<br>CO <sub>2</sub> /oxygen             |
|              | Helium          | 100–0%             |                      |  |
| 299-011-1C** | Argon           | 50–100%            | 5/8"-18 RH Internal  | Argon/helium<br>Nitrogen/hydrogen<br>Argon/oxygen<br>Argon/CO <sub>2</sub>   |
|              | Hydrogen        | 50–0%              | 9/16"-18 LH Internal |  |
| 299-014-1C   | Argon           | 80–100%            | 5/8"-18 RH Internal  | Argon/CO <sub>2</sub><br>Argon/hydrogen<br>Argon/helium<br>Nitrogen/hydrogen |
|              | Oxygen          | 20–0%              |                      |  |

\*Tables provide information needed to use the mixers with alternative gases. \*\*±2% accuracy at 95–100% argon setting.

## Accessories



### Single Hose for Inert Gas 7294-1

For use with argon/nitrogen (30-150-580) regulator only. Black 6-foot (1.8 m) hose with 1/4-inch (6 mm) diameter and 5/8"-18 RH male connections. *Not for use with hydrogen or oxygen regulators.*



**30-150-580 Regulator**  
Medium-duty argon/nitrogen regulator. 0–150 psig.



**30-100-350 Regulator**  
Medium-duty hydrogen regulator. 0–100 psig.



**30-100-540 Regulator**  
Medium-duty oxygen regulator. 0–100 psig.

| System Selector Guide | Proportional Gas Mixer | Inert Gas Hoses Required | Regulator 1 | Regulator 2 |
|-----------------------|------------------------|--------------------------|-------------|-------------|
|                       | 299-006-1C             | 2                        | 30-150-580  | 30-150-580  |
|                       | 299-006-3C             | 2                        | 30-150-580  | 30-150-580  |
|                       | 299-011-1C             | 1                        | 30-150-580  | 30-100-350* |
|                       | 299-014-1C             | 1                        | 30-150-580  | 30-100-540* |

\*Inert gas hose NOT for use with hydrogen (30-100-350) or oxygen (30-100-540) regulators.

## Ordering Information

| Equipment and Accessories | Stock No.  | Description   | Qty.  | Price |
|---------------------------|--|---|---|-------|
| Proportional Gas Mixer    | 299-006-1C<br>299-006-3C<br>299-011-1C<br>299-014-1C | Argon/CO <sub>2</sub><br>Argon/helium<br>Argon/hydrogen<br>Argon/oxygen | See specification chart above for other gases |       |
| Hoses                     | 7294-1   | Single hose for use with inert gas                                      |   |       |
| Regulators                | 30-150-580   | Medium-duty for argon/nitrogen  |   |       |
|                           | 30-100-350   | Medium-duty for hydrogen  |   |       |
|                           | 30-100-540   | Medium-duty for oxygen  |   |       |

Date:

Total Quoted Price:

Distributed by:

