

# LifeGuard™ Safety Hose

## Model LG

LifeGuard all-metal pigtails permit gas users to safely transfer compressed gases or liquids. The pigtail design protects against the hazardous effects of high-pressure hose rupture, pull-apart and failure. For safety purposes, Air Liquide requires this safety hose design in all U.S. fill plants.

LifeGuard utilizes a unique, patent-pending design that eliminates the potential for disaster through use of an internal compression spring device connected to specially designed, normally unseated valves located on each end of the spring. In the event of hose separation, stretching to the point of an unsafe condition or coupling-to-hose separation, the valves are released and then instantly seat, stopping the flow in both directions.

Model LG features a double overbraid, with NPTF end fittings heliarc-welded to both the convoluted stainless steel inner liner and the overbraid. They are available in various lengths, with or without safety loops (tethers), and a variety of end fittings including CGA-installed.

### Benefits/Features

Patented design stops flow in both directions if hose fails.

All hoses cleaned for oxygen service.

Passive system with no need of human interaction to engage.

Inherent dangers from hazardous spills and hose whipping are eliminated.

Stainless steel construction for excellent diffusion resistance.

Safety loop models feature tethers on both ends, adding a double safety system to secure hose and prevent hose whipping at high pressures.

Product is identified with I.D. tags for pressure rating, part number and date of manufacture.

### Specifications

**Operating Pressure:**  
3500 psig (241 bar) maximum

**Diameter:**  
¼" Hoses: 0.25" nominal ID, 0.64" nominal OD  
½" Hoses: 0.50" nominal ID, 1.02" nominal OD

**End Fittings:** See table below

**Length:** See table below

**Overbraid:** Double-braided

**Approximate Weight:**  
¼" Hoses: 0.26 lbs. per foot  
½" Hoses: 0.87 lbs. per foot

### Materials of Construction

**End Fittings:** Type 316 Stainless Steel

**Internal Safety Cable:** Monel®

**Internal Valve, Retainer, Snap Ring:** Brass

**Innercore:** Type 316 Stainless Steel

**Overbraid:** Type 304 Stainless Steel

**Safety Loops:** 7 x 7 Galvanized Steel



Double Braid All-Metal Construction



Integrated cable restraint (tethers) on each end standard with safety loop models only.



Open Flow (valves open)



Coupling Ejection (valves seated)

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### Model LGN – ¼" Hoses

| Model Number                  |                             | Length |             |
|-------------------------------|-----------------------------|--------|-------------|
|                               |                             | inches | centimeters |
| ¼" NPT Female x ¼" NPT Female | ¼" NPT Male x ¼" NPT Female |        |             |
| QLGN024                       | QLGN024MF                   | 24     | 61          |
| QLGN036                       | QLGN036MF                   | 36     | 91          |
| QLGN048                       | QLGN048MF                   | 48     | 122         |
| QLGN060                       | QLGN060MF                   | 60     | 152         |
| QLGN072                       | QLGN072MF                   | 72     | 183         |

### Model LGN8 – ½" Hoses

| Model Number                  | Length |             |
|-------------------------------|--------|-------------|
|                               | feet   | centimeters |
| ½" NPT Female x ½" NPT Female |        |             |
| QLGN83                        | 3      | 91          |
| QLGN86                        | 6      | 183         |
| QLGN810                       | 10     | 305         |
| QLGN815                       | 15     | 457         |
| QLGN820                       | 20     | 610         |

### Model LG – ¼" Hoses with Safety Loops (Tethers)

| Model Number*                 |                             | Length |             |
|-------------------------------|-----------------------------|--------|-------------|
|                               |                             | inches | centimeters |
| ¼" NPT Female x ¼" NPT Female | ¼" NPT Male x ¼" NPT Female |        |             |
| QLG024                        | QLG024MF                    | 24     | 61          |
| QLG036                        | QLG036MF                    | 36     | 91          |
| QLG048                        | QLG048MF                    | 48     | 122         |
| QLG060                        | QLG060MF                    | 60     | 152         |
| QLG072                        | QLG072MF                    | 72     | 183         |

\*Optional CGA Connection: To order a pigtail with a single CGA connection installed, add the appropriate Compressed Gas Association connection number at the end of the part number and indicate S for stainless steel or B for brass CGA construction (i.e. QLG036-580B). Please order by complete model number.