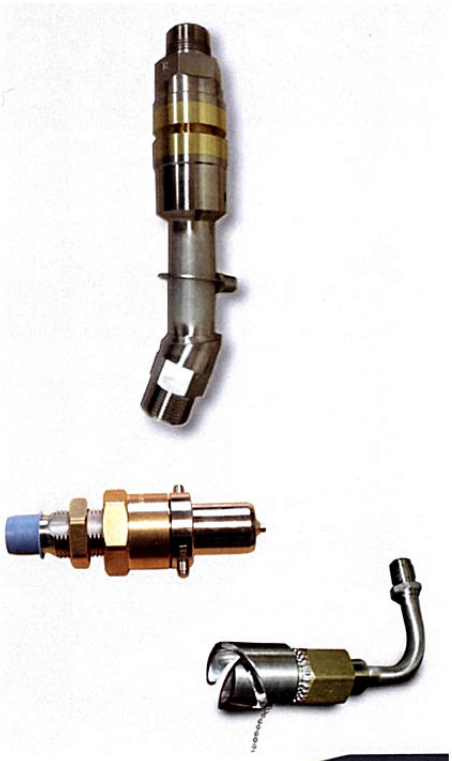
Subsidiary of Superior Holding, LLC

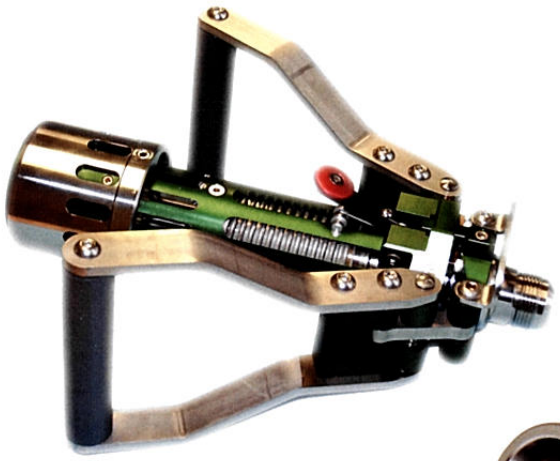
**Macro Technologies, LLC**

## LNG FUELING COMPONENTS

CryoMac2™ LNG Fueling Nozzles
LNG Tank Receptacles
Fueling Caps
Breakaway Couplings
Cryogenic Hoses
Quick Disconnect Vents/Fill



## COMPONENTS FOR LNG FUELING SYSTEMS



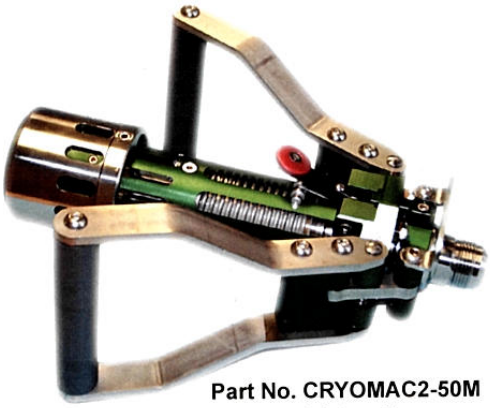




Industrial Hospital Specialty Engineering

# LNG FUELING COMPONENTS

CryoMac2™



Part No. CRYOMAC2-50M
*(pictured)*

CRN #OH15845.5

### CryoMac2™ 50M LNG Fueling Nozzle
*(patent pending)*

| PART NUMBER | DESCRIPTION |
|---|---|
| CRYOMAC2-50M | Nozzle, 50 GPM Fueling, 1" Male JIC |
| CRYOMAC2-50M-S | Nozzle, 50 GPM Fueling, 1" Male JIC short handle version |

CryoMac2™ 50M Features:

- ***Safer!*** When the handles are pulled back to remove the Nozzle, the "center section" reaches a positive stop. This lets the operator know where to stop to vent the gases that are trapped between the Nozzle and the Receptacle. Just a few seconds makes the safety difference!
- ***More "User Friendly"*** Lighter weight, easier to slide onto the receptacle, and less icing issues. No clamps to catch when removing!
- ***Less Ice issues*** Non-metallic bearings and air gaps are used.
- ***Easier to Service*** End Seal, Poppet, Poppet Seal, Poppet Seat and Nozzle End, can all be serviced easily. No "clamp dogs" to replace.
- ***No Tie Rods*** to adjust after service reduced maintenance time.
- ***Reasonable Cost*** Designed for reliability and manufacturability.
- ***Short handle version available*** for fueling vehicles with space constraints and limited clearance

### LNG Tank Receptacle

| PART NUMBER | DESCRIPTION |
|---|---|
| 13620 | LNG Male, Fueling, 50 GPM, 3/4 NPT Fe. |
| 13705 | LNG Male, Fueling, 50 GPM, 90 deg. 3/4 Flareless |
| 13990 | LNG Male, Fueling, 50 GPM, M30 x 1.5 |
| 14120 | LNG Male, Fueling, 50 GPM, 3/4 Flareless |
| 14405 | LNG Male, Fueling, 50 GPM, 37 deg. SAE Male |



Part No. 13620

Receptacle Features:

- Available with NPT and tube end fittings
- Max internal pressure 300 PSIG/20.7 Bar (while fueling)
- Max system pressure 550 PSIG/38 Bar (static)
- 100% pressure tested

# LNG FUELING COMPONENTS



Part No. 11910

## Cryogenic Hose for LNG Fueling

| PART NUMBER | DESCRIPTION |
|---|---|
| 11910-072 | 72" Cryogenic Hose, for use with LNG 50 GPM Nozzles |
| 11910-120 | 120" Cryogenic Hose, for use with LNG 50 GPM Nozzles |
| 11910-144 | 144" Cryogenic Hose, for use with LNG 50 GPM Nozzles |
| 11910-180 | 180" Cryogenic Hose, for use with LNG 50 GPM Nozzles |

Cryogenic Hose Features:

- LNG fueling hose for use with LNG 50 GPM Nozzles
- All stainless steel construction with braid armor allows hose to remain flexible while still offering superior durability
- 100% pressure tested
- 37° Female SAE flare connection, 1" OD tube size (both ends)
- Safe for cryogenic temperatures between -320°F to 500°F
- Rated up to 450 PSIG/31 Bar working pressure

Part No. CHB-440-440



## LNG Vent Hose

| PART NUMBER | DESCRIPTION |
|---|---|
| CHB-440-440-*XXX* | Cryogenic hose assembly, 1,100 PSI service |
| *XXX=length in inches* | |
| *Example: 10 foot assembly part number is "CHB-440-440-120"* | |

LNG Vent Hose

- Stainless steel body
- Brass ends mate with 5/8 Tube 45° SAE flare connection,
- ø0.8750-14 (UNF THD., both ends)
- 100% pressure tested
- Working temperature range -350°F to 1500°F
- Rated up to 1100 PSIG/75.8 Bar working pressure

## LNG Male Fueling Cap

| PART NUMBER | DESCRIPTION |
|---|---|
| 13665 | Cap for Fueling Receptacle |

LNG Male Fueling Cap Features:

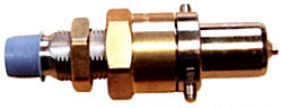
- The only cap on the market that limits the intrusion of contamination into the LNG Receptacle.
- Safely securely seals the LNG receptacle with an O-ring seal and filtered breather.
- Positively locks on to the LNG Receptacle.
- Aluminum body, unlike rubber caps the aluminum finish will not stain or mark
- Lanyard included, prevents misplaced caps




Part No. 13665

Industrial Hospital Specialty Engineering

# LNG FUELING COMPONENTS



Part No. 12895

## LNG Male QDV

| PART NUMBER | DESCRIPTION |
|---|---|
| 12895 | LNG Male QDV, 10 GPM/Vent, Bulkhead, 3/8 NPT Conn. |
| 14000 | LNG Male QDV, 10 GPM/Vent, M20 x 1.5 Bulkhead |
| 14410 | LNG Male QDV, 37 degree SAE Male |



Part No. 11175

## LNG Female QDV

| PART NUMBER | DESCRIPTION |
|---|---|
| 11175 | LNG Female, QDV, 10 GPM/Vent, 90deg. Tube |
| 13775 * | LNG Female, QDV, 10 GPM/Vent, Short Str. Handle |
| 13785 * | LNG Female, QDV, 10 GPM/Vent, Long Str. Handle |

**Cryogenic Swivel (Part No. 9551-3) required*

LNG QDV Vent Features:

- Over 100,000 in service worldwide
- LNG vent/fill connection, handles both LNG Vent Gas and LNG Liquid.
- Max internal pressure 300 PSIG/20.7 Bar (while fueling)
- Max system pressure 550 PSIG/38 Bar (static)
- Dust cap included
- 100% pressure tested

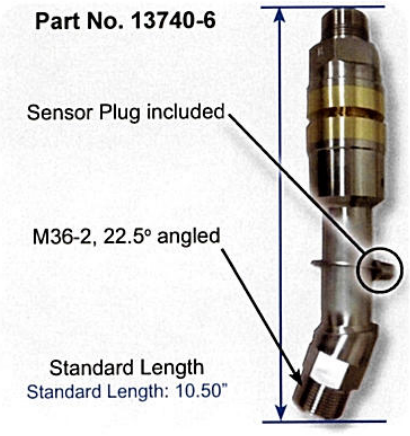
**Cryogenic Swivel**
**Part No. 9551-3**



## Fill Hose Breakaway Coupling

| Part No. Prefix | Dash # | Style | Length |
|---|---|---|---|
| 13740 (Includes 1/4" MNPT Sensor Plug) | -2 | 1" tube size, SAE 37°, 22.5° angled | Standard (10.50") |
| | -4 | 1" tube size, SAE 37°, 22.5° angled | Short (7.25") |
| 14390 (Does *not* include Sensor Plug) | -6 | M36-2, 22.5° angled | Standard (10.50") |
| | -8 | M36-2, 22.5° angled | Short (7.25") |

**Part No. 13740-6**




**Part No. 14390-8**




Breakaway Coupling Features:

- Engineered to automatically shut-off flow of LNG in case vehicle drives away from station with nozzle still connected.
- Helps to prevent damage to the fueling station if hose and nozzle are forcefully pulled from station
- LNG compatible, operating temperature -320°F to 140°F
- Rated up to 250 PSIG /17.2 Bar max fueling pressure (connected); 500 PSIG/35 Bar static (disconnected)

*Breakaway couplings listed are installed between the LNG dispenser and fueling hose, for Vent Hose Breakaway information please visit our website.*