

Carbon Dioxide

Ratermann Manufacturing, Inc. carries a wide variety of carbon dioxide products.



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ASSORTED FLEXIBLE TUBING, FITTINGS, AND REELS FOR ALL CO₂ REQUIREMENTS

POLYETHYLENE TUBING

Vent Hose

White polyethylene tubing,
1/2" O.D. x .062" wall, 135
PSIG W.P. – 100 ft. coil



Part # **BEV-VT12WP**

Clear Braided Tubing Series 1100

FDA rated.

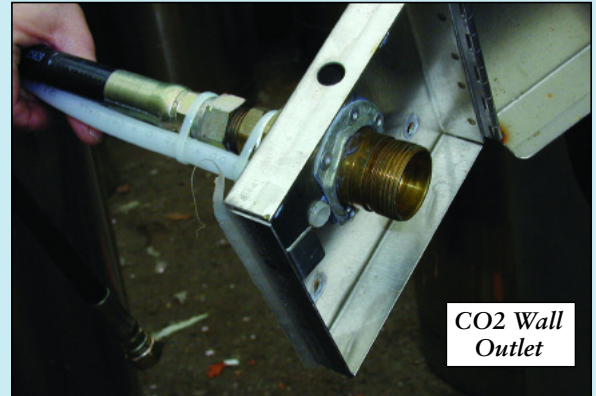


Clear Braided Tubing Series 1100

Part #	Description
BEV-VH14CB	1/4" I.D. 300 ft. coil
BEV-VH38CB	3/8" I.D. 300 ft. coil
BEV-VH12CB	1/2" I.D. 300 ft. coil



Wall Box Nipple with 6-Hole Flange



CO₂ Wall Outlet

Part # **BEV-WBNIPPLE**

CO₂ Wall Outlet

Part #	Description
BEV-WMBOX	Box Fill Flush Mount

Bulk Crimp Couplings

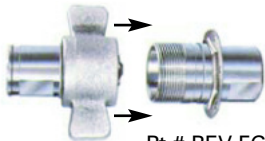
Part #	Description
BEV-BCC	1/2" Hose x -10 (5/8) Female JIC Flare End

Crimping System

Part #	Description
BEV-CRIMPER	Crimper & Stand-Up Frame
BEV-HANDPUMP	Dual Stage Hand Pump for Crimper w/ .670 Die for 1/2" Hose

FITTINGS

Fill Gun Quick Connector / Dry Break Wing Nut Style



Part # **BEV-FGQC**

Pt # BEV-FGQC connects to above fitting.

(Standard Buna-N seals are rated to -40° F. Contact Ratermann for information on parts with special order seals rated below -40° F.)

90 Degree Live Swivel for Connection to Hose Reel

(Plated steel construction and -60°F low-temp Buna-N seals, and FDA grease.)

1/2" Male Pipe x
1/2" Female Pipe

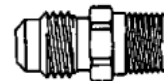
Part # **BEV-LS90M12F12**

Brass Adapters



Part #	Description
BEV-58M58MJIC	5/8" Male JIC x 5/8" Male NPT
BEV-12M12MJIC	1/2" Male JIC x 1/2" Male NPT

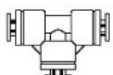
Brass Adapters



Part #	Description
BEV-58M34M	5/8" Male JIC x 3/4" Male NPT
BEV-58M12M	5/8" Male JIC x 1/2" Male NPT
BEV-58M38M	5/8" Male JIC x 3/8" Male NPT
BEV-12M34M	1/2" Male JIC x 3/4" Male NPT
BEV-12M12M	1/2" Male JIC x 1/2" Male NPT
BEV-12M38M	1/2" Male JIC x 3/8" Male NPT

Plastic Push-to-Connect Fittings for CO₂ Vessel Venting – 1/2" Tube O.D.

Union Tee
Pt # **BEV-UT**



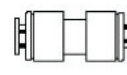
Stem Adapter
Pt # **BEV-SA**



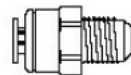
Union Elbow
Pt # **BEV-UE**



Union Connector
Pt # **BEV-UC**



Male Connector
Pt # **BEV-MC**



CO₂ HOSE PRODUCTS

SERIES 2520 BLUE ARCTIC RUBBER HOSE

A Lightweight, yet durable rubber hose manufactured specially for the demands of CO₂



"Blue Arctic" Series 2520 transfer hose is manufactured specifically for the demanding requirements of CO₂ liquid and vapor transfer. "Blue Arctic" outperforms other types of hose that have traditionally been used in connection to tanks and trailers. Unlike rubber hydraulic hose that is constructed with carbon steel reinforcing, "Blue Arctic" is reinforced with stainless steel braids to resist carbonic acid – the result of CO₂ and moisture combination. In addition, our pricked cover solves the problem of bubbling that the covers of hydraulic hoses have experienced. "Blue Arctic" hose will be dramatically more flexible in CO₂ transfer than standard rubber hoses due to a specially blended tube rated to minus 65° F. The two-braid construction also offers much better kink resistance than comparable single braid products.

SPECIFICATIONS

Liquid / Vapor CO₂ Transfer Hose

Tube Special Neoprene blend rated for -65° F
Reinforcement Two stainless steel braids
Cover Special Neoprene blend. Black with blue Mylar
Temperature -65° F to +180° F
Pressure Range 450 PSIG
Branding Blue Mylar
Sizes 1", 1 1/2", and 2"
CGA Fittings Brass sleeve, nut, and dust caps available
Other Fittings Available Female NPT brass bar-stock fitting with aluminum crimp collar

Part #	I.D. (In.)	O.D. (In.)	Max WP PSIG	Min Burst PSIG	Weight Per Foot
CTH1	1	1.58	450	2250	0.83
CTH15	1 1/2	2.08	450	2250	1.19
CTH2	2	2.60	450	2250	1.90

HOSE REEL FOR THERMOPLASTIC HOSES

Hose Reel to be Installed on Liquid CO₂ Delivery Vehicles

BEV-REEL with 1/2" full-flow Super Swivel with low temp Buna seal and FDA grease. Spring retractable heavy duty painted reel will handle up to 100 feet of 1/2" hose. 3000 PSIG Rated.



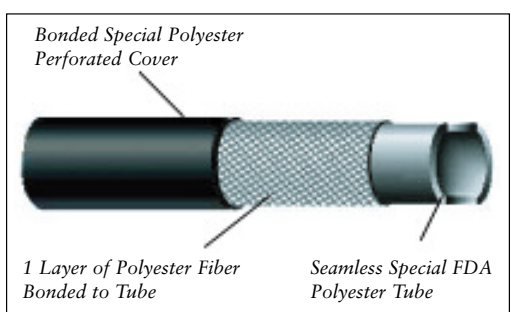
Part # BEV-REEL

THERMOPLASTIC HOSE FOR CO₂ & BEVERAGE APPLICATIONS

A fabric reinforced thermoplastic hose providing dynamic flexibility at extreme low temperatures

Ratermann Manufacturing, Inc. manufactures the world's finest high-pressure thermoplastic hose. **Series BEV** Low-Temp hose outperforms all other hose products intended for the transfer of liquid carbon dioxide.

Series BEV is constructed using a special FDA grade polyester core compound, polyester reinforcing, and a special perforated gray polyester cover. All layers are bonded. Unlike standard thermoplastic SAE 100R7 spec hoses that become stiff and unwieldy



Ratermann Series BEV construction provides a flexible FDA grade hose even at very low temperatures.

when transferring low-temperature liquids, Series BEV remains flexible in liquid transfer as low as -65°F. The perforated cover avoids bubbling, a common problem with many thermoplastic hoses.

Series BEV is available on full 250 foot reels and along with the crimping system and bulk crimp couplings, is ideal for field fabrication. Coupled lengths are also available, including fill hose assemblies with vent hose attached. Use **Series BEV** for supply hose on reels installed on delivery vehicles and for connection from fill box to liquid cylinders.

SERIES BEV FDA GRADE LOW-TEMP HOSE SPECIFICATIONS

Series # BEV
I.D. Inches (In.) 1/2"
Maximum O.D. Inches 0.818"
Maximum WP PSI (Bar) 4700 LT
Minimum Bend Radius 3.0"
Weight Per 100 17.0 Lbs.
Maximum Temperature 16° F

Note: Other sizes of hose and couplings available.

Complete Assemblies

Part #	Description
BEV-10058FJIC	1/2" x 100 ft. w/ 5/8" FJIC Swivel Ends
BEV-7558FJIC	1/2" x 75 ft. w/ 5/8" FJIC Swivel Ends
BEV-6558FJIC	1/2" x 65 ft. w/ 5/8" FJIC Swivel Ends
BEV-5058FJIC	1/2" x 50 ft. w/ 5/8" FJIC Swivel Ends
BEV-3058FJIC-VT	1/2" x 30 ft. w/ 5/8" FJIC Swivel Ends, and polyethylene vent tube attached
BEV-2558FJIC-VT	1/2" x 25 ft. w/ 5/8" FJIC Swivel Ends, and polyethylene vent tube attached
BEV-1558FJIC-VT	1/2" x 15 ft. w/ 5/8" FJIC Swivel Ends, and polyethylene vent tube attached
BEV-1058FJIC-VT	1/2" x 10 ft. w/ 5/8" FJIC Swivel Ends, and polyethylene vent tube attached
BEV-558FJIC-VT	1/2" x 5 ft. w/ 5/8" FJIC Swivel Ends, and polyethylene vent tube attached

BEVERAGE MANIFOLD ACCESSORIES**Automatic Manifold for beverage gases**

Fountain and keg service are the profit center of many bars, restaurants, and concession stands. When CO₂ cylinders run dry, so do the drinks that are being served. This will almost always occur during peak serving times. This unit allows for uninterrupted gas service which eliminates all down time between cylinder changeouts and flat drinks. The unit is compact and works with standard beverage regulators and is the ideal alternative to costly bulk supply systems.

* Regulator not included

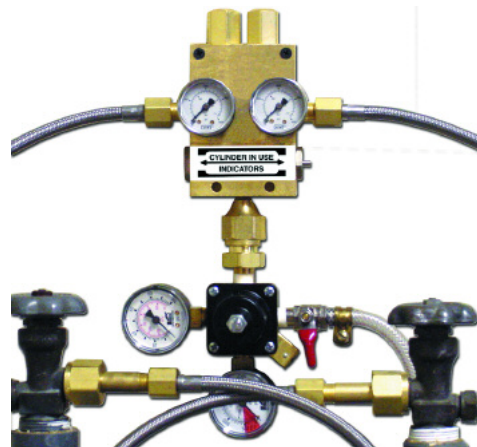
For Regulators see page 12A-7

Beverage Manifold 100 PSI Switch Over

Part #	Description	Switch Over Pressure
MAN-BEV-2-100	100 PSI Manifold – 2 cylinder	100 psi
MAN-BEV-4-100	100 PSI Manifold – 4 cylinder	100 psi
MAN-BEV-6-100	100 PSI Manifold – 6 cylinder	100 psi

Beverage Manifold 200 PSI Switch Over

Part #	Description	Switch Over Pressure
MAN-BEV-2-200	200 PSI Manifold – 2 cylinder	200 psi
MAN-BEV-4-200	200 PSI Manifold – 4 cylinder	200 psi
MAN-BEV-6-200	200 PSI Manifold – 6 cylinder	200 psi

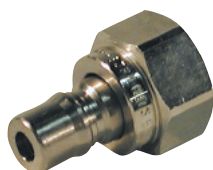


Alarm (optional) –
Part # MAN-RASO

**Proportional Gas Mixer
for Beverage Gases** –
Part # MAN-PGM-1

CO₂ PLUG & SOCKET

**Quick Disconnect
for CO₂ Tank!**



Male
Pt # CO2-MC

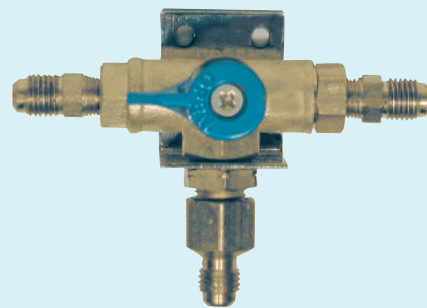


Female
Pt # CO2-FQ

**LOW PRESSURE
CHANGEOVER
VALVE**

**Keep backup supply
ready for fast
changeover.**

- Has 1/4" male flare back check inlets, and 1/4" male flare outlet.
- Requires two CO₂ regulators.



Part #	Description
CO2-CV	Changeover Valve

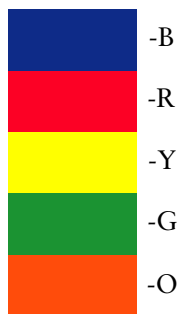
**CARRY HANDLES
FOR ALUMINUM
CYLINDER**

Plastic Carry Handle to protect valves. Available to fit Catalina® and Luxfer® brand aluminum cylinders.



*Additional Colors
Available*

Replace (BK)
in Part # with
Color Code



Part #	Description
CCH-AC-BK	Catalina® Style Carry Handle – Black
CCH-AL-BK	Luxfer® Style Carry Handle – Black
CCH-AS-HBK	Thread On Style Carry Handle – Black

CYLINDER BOOT

Round Bottom Cylinder
Diameter Boot

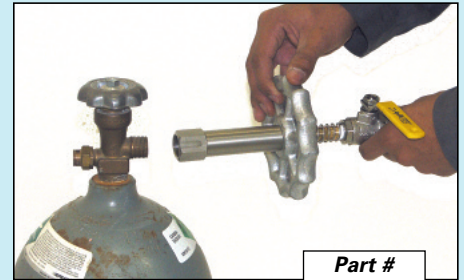


Part # CO2-CDB-07

Part #	Description
CO2-CDB-07	7.25" Cylinder Boot, Octagonal Rim for Aluminum Cylinders
CO2-CDB-R7	7.25" Cylinder Boot, Round Rim for Aluminum Cylinders
CO2-CDB-08	8" Cylinder Boot, Octagonal Rim for Aluminum Cylinders
CO2-CDB-7LP	7.25" Boot for Steel Cylinders
CO2-CDB-8204LP	8"/204mm Boot for Steel Cylinders

QUICK FILL CONNECTOR FOR CO2

Easy
Connecting
and
Disconnecting
from Cylinder



Part #
QF-SH320

Part #	Description
QF-SH320	Carbon Dioxide - Hand Spin On

CYLINDER BOOT

Cylinder Boot

The Cylinder Boot is made out of black molded plastic.

Slip onto round bottom CO² tanks to convert to upright standing cylinders.



Allows most older, round bottom cylinders to free stand

Part #	Description
CO2-C8	Molded Plastic Boot

ALUMINUM CYLINDER CARRY HANDLES

Plastic Valve Protection Carry Handles are available to fit Catalina® and Luxfer® brand aluminum cylinders. We stock carry handles and retaining rings for both manufacturers cylinders. For 15 and 20 lb. Aluminum cylinders. Can be installed without removing valve.



Part #	Description
CCH-AL-H	Luxfer Carry Handle
CCH-AL-R	Luxfer Retainer Ring
CCH-AC-H	Catalina Carry Handle
CCH-AC-R	Catalina Retainer Ring

CYLINDER SAFETY CONVERSION KIT

Handle and snap ring with steel cylinder adapter. Allows addition of plastic carrying handle to steel cylinders. Valve must be removed to install handle.

(Adapter comes with set screws.)

Part #	Description
CCH-118	Conversion Kit 1.9"



RETAINING RING PLIER

For all cylinder handle retaining rings.

Part #	Description
CCH-P1	Retaining Ring Plier

CARBON DIOXIDE SEALS

CO² Valve Conversion Kit



Part # CC-1Kit

Converts in 2 Minutes!

For aligning and tapping special thread into valve outlet, so that the Ring-Seal 3 piece insert Unit can be screwed in.

The kit makes this simple and easy, **while the valve stays on the cylinder.** The chips are blown out by the gas in the cylinder.

Kit includes:

- Special Drill (needed only on some valves)
- Special Tap
- Guide Collar
- Grip Nut
- Ring Grip Wheel
- Special Tag Handle
- Allen Driver
- Thread Chaser

CO² Plug



CO² Dust Cover

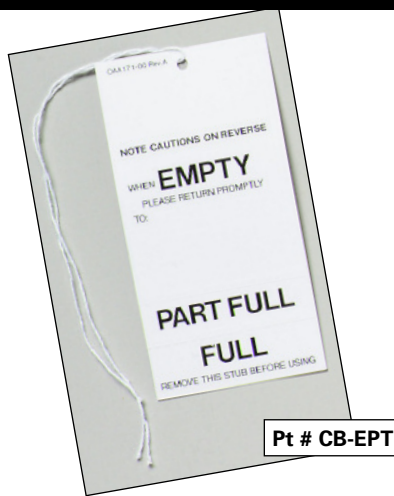
Additional Colors Available

Add Color Choice to Part Number i.e. PM-C12-YPK1000



Description	Part # for 1000	Part # for 100
Dust Cover and Strap for CO2	PM-C12PK1000	PM-C12PK100

SMALL CYLINDER STATUS TAGS



Pt # CB-EPT



Economy Paper Tags

Economy Paper Tags

Description	Part # for 1,000	Part # for 100
String Tie	CB-EPTPK1000	CB-EPTPK100
Elastic Tie	CB-1EPTIPK1000	CB-1EPTIPK100

Cylinder Connections

For Permanent Leak Proof Cylinder Connection

CARBON DIOXIDE

- Hand Tite Lasts for Life of Valve
- Self-Sealing Connections Designed for Leak-Proof Dependability
- No Service Calls



Grip-Nut 103N
Part # CC1-Nut



Stems - 103 SF
2 1/2" - 1/4" pipe
Part # CC1-Stem



Seals - Unattachable UBC Units
Part # CC-2



Seals - Permanent ABC Units
Part # CC-1

TEFLON SEALS

For CO2



Teflon Seal



Description	Part # for 100	Part # for 10
Teflon Seals for CO2	CO2-TWSEALPK100	CO2-TWSEALPK10

CO2 REGULATORS

Carbon Dioxide

Section

12A

DRY ICE MACHINE FOR HIGH PRESSURE TANKS

Dry Ice, on Demand, as you Need it.

You will need a Siphon cylinder of Liquid CO2. (High Pressure Tank).

Attach to the 0 to 70 lb (high pressure) Dip Tube/Siphon CO2 Cylinder using an Adjustable wrench. Open the cylinder valve and direct the nozzle into the Dry Ice Bag (sold separately).

Another way to use your dry ice, is to spread a couple layers of newspaper on a hard surface. Dump the Dry Ice from the bag or container onto the newspaper. Wrap your dry ice like a burrito in the newspaper and tape it shut. Place in cooler.

Makes Dry Ice snow at the rate of 1 lb. every two minutes.



Part # DIM-HP1

DRY ICE MACHINE FOR CRYOGENIC DEWARs

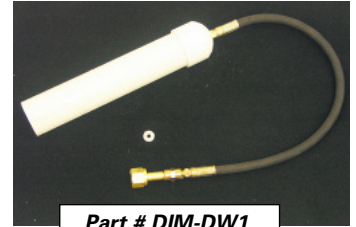
Dry Ice, on Demand, When you Need it.

You will need a Dewar (350psi Cryotank) of Liquid CO2.

Attach to the Liquid outlet of your Bulk CO2 tank using an Adjustable wrench. Open the cylinder valve and direct the nozzle into the Dry Ice Bag (sold separately).

One way to pack dry ice is by packing it into a small cardboard box. Pack it down with a 2x4, and tape it shut. Put the cardboard box into your cooler or insulated container.

Makes Dry Ice snow at the rate of 1 + lbs. every two minutes.



Part # DIM-DW1

DRY ICE ACCESSORIES

Catch / Storage Bag Pt # DIM BAG This is a dual purpose bag designed to be use as a "Catch" bag for your Dry Ice increasing efficiency and which can also be used to store your dry ice maker when you are not using it. Two layers of Heavy Duty "Duck" canvas that allow CO2 Gas to escape while holding dry ice inside. • 16" wide by 26" long, with draw string.

SODA REGULATOR

For Single Cylinder Use – No Shutoff Valve

0-160 P.S.I.



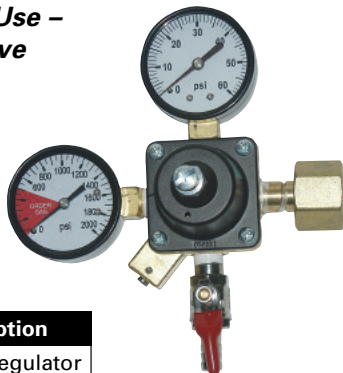
Soda Regulator

Part #	Description
BEV-RG320-160S	Soda Regulator

BEER REGULATOR

For Single Cylinder Use – Includes Shutoff Valve

0-60 P.S.I.



Beer Regulator

Part #	Description
BEV-RG320-60B	Beer Regulator

HIGH PRESSURE CYLINDER CAPS

Number of threads per inch for **Fine** is 11 threads to an inch and **Coarse** is 7 threads to an inch.

Cap I.D. is 3 1/4"



Caps Painted Black
6 1/2" – 3 1/8-11



Caps Unpainted
6 1/2" – 3 1/8-11

Unpainted

Part #	Description
8FRNP	Fine Thread
8CRNP	Coarse Thread

Painted – Fine Thread
Most Common

Part #	Color
8FRNP-08	White
8FRNP-02	Black
8FRNP-06	Gray

Painted – Coarse Thread

Part #	Color
8CRNP-08	White
8CRNP-02	Black
8CRNP-06	Gray

THERMOPLASTIC PIGTAILS

CO2 THERMOPLASTIC LOW-TEMP PIGTAILS



3000 PSIG MAWP Rated –
Plated Carbon Steel End Fittings

These pigtails are constructed with a Polyester low temperature tube and cover. Each assembly is tested to 1 1/2 times MAWP. Branded with part number, size and MAWP. Meets SAE 100R7 specifications.

Style Specifications

Not recommended for oxygen service.
Meets SAE 100R7 specs

Liner: Low temperature Polyester

Reinforcement: Polyester braid

Cover: Pin-pricked Polyester

Temperature: -65° F to +212° F

OUTLET



1/4" NPT Female

INLET

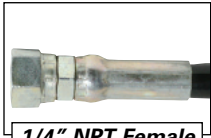


1/4" NPT Female

Standard Hose

Hose Length	Part #
24"	TPL-24F14
36"	TPL-36F14
48"	TPL-48F14
72"	TPL-72F14

OUTLET



1/4" NPT Female

INLET



1/4" NPT Male

Standard Hose

Hose Length	Part #
24"	TPL-24F14M14
36"	TPL-36F14M14
48"	TPL-48F14M14
72"	TPL-72F14M14

OUTLET



1/4" NPT Male

INLET

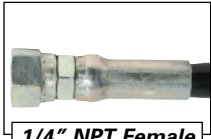


1/4" NPT Male

Standard Hose

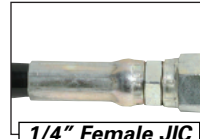
Hose Length	Part #
24"	TPL-24M14
36"	TPL-36M14
48"	TPL-48M14
72"	TPL-72M14

OUTLET



1/4" NPT Female

INLET



1/4" Female JIC
37 Swivel

Standard Hose

Hose Length	Part #
24"	TPL-24F14FJIC14S
36"	TPL-36F14FJIC14S
48"	TPL-48F14FJIC14S
72"	TPL-72F14FJIC14S

OUTLET



1/4" NPT Male

INLET



1/4" Female JIC
37 Swivel

Standard Hose

Hose Length	Part #
24"	TPL-24M14FJIC14S
36"	TPL-36M14FJIC14S
48"	TPL-48M14FJIC14S
72"	TPL-72M14FJIC14S

CUSTOM LENGTH HOSE - THERMOPLASTIC LOW-TEMP PIGTAILS

**Custom length hoses are not returnable for either credit or refund.*

ORDER CUSTOM LENGTH HOSE

Teflon
Hose

With or Without
Armor Casing

Length Hose

Inches

Pt # _____ IN

All hoses are
cleaned for
Oxygen Service

INLET

Choose Your Hose End Pt #

1/4" NPT Male Pt # M14

1/4" NPT Female Pt # F14

1/4" NPT Swivel Female Pt # F14S

1/4" Female JIC 37 Swivel Pt # FJIC14S

OUTLET

Choose Your Hose End Pt #

1/4" NPT Male Pt # M14

1/4" NPT Female Pt # F14

1/4" NPT Swivel Female Pt # F14S

1/4" Female JIC 37 Swivel Pt # FJIC14S

TPL - _____ - IN - _____