## **40A** | **RATERMANN** Beverage



# RATERMANN DEVELCE

BEVERAGE, BREW & CARB PRODUCTS & PARTS CATALOG

http://www.bevsupplies.com/

1-800-264-7793

March 2017





Composite Piping for CO2, Nitrogen and Argon Gas see page 40A-12



**Beverage Carbonation Tanks** see pages 40A 2-6 PARTS FOR INSTALLATION & REPAIR FOR SODA, BEER, AND WINE. full offering inside









**SUPPORTED** 



## CO2 TANKS FOR BEVERAGE CARBONATIONS

Ratermann Manufacturing, Inc. is excited to introduce a full line of beverage cabonation tanks for CO2. Like all of the products we carry, our tanks are backed by our reliable service. We want to provide you with a package you can feel 100% confident in.

#### **TESTED AND SUPPORTED**

At Ratermann, we provide a guaranteed quality control system that double checks every outgoing order. We fill test and NER test each easyCarb tank before it is shipped to ensure you are receiving a quality product. Ratermann's live support team is available to assist you with any questions or needs before, during and after your buying process.

#### **QUALITY YOU CAN COUNT ON**

"Our responsibility is to supply our customers with a bev-carb package that they can feel 100% confident in; a package that will work as it is designed. We want our customers to know our support doesn't stop after the tank is sold, our support is always there for them."

- Brent Lockhart vice president



For More Information on our easyCarb Tanks please give us a call at 1.800.264.7793 RMIORDER.COM

## BEVERAGE CARBONATION SYSTEMS easyCarb 300, 450, 550 & 750HF

## ONLY EASYCARB OFFERS:

- High quality fittings and components; less threaded connection – reduce risk of leaks from loosened fittings
- Simplified plumbing and fewer parts cleaner look, less potential for leaks and easier to maintain
- Easy to read, color coded tank and line pressure gauges – highlight normal operating ranges
- Bold labeling on tank and line pressure gauges – makes it simple for technicians and customers to identify the correct gauge
- Optional better heater design

## Valuable options to customize your tanks!

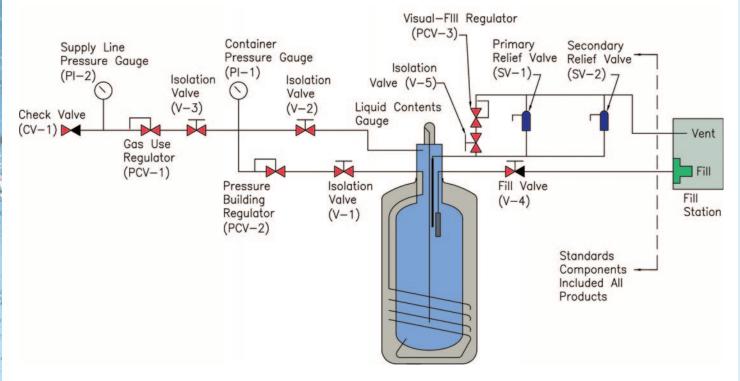
- All models available with 6-inch legs
- Optional Vent Fill feature available for all models
- Optional 120 volt and 240 volt electrical heaters available on EC550 models
- 120 volt adds 20 lbs/hr continuous flow
- 240 volt adds 40 lbs/hr continuous flow



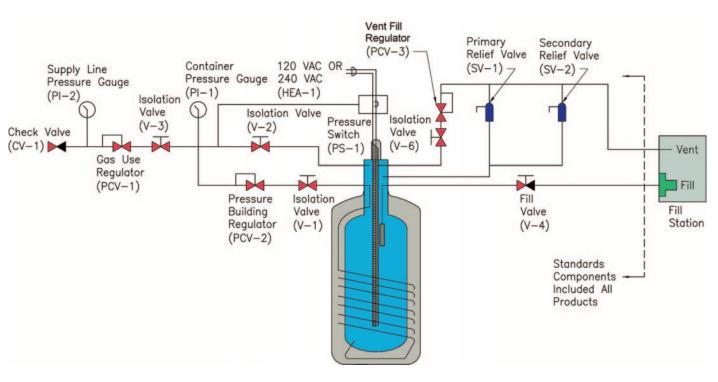
easyCarb 300, 450, 550, 750HF	reliably Part Number	TWBC-300	TWBC-450	TWBC-550	TWBC-HF750
Specifications	RATERMANN Model	EC300	EC450	EC550	EC750HF
Dimension					
Diameter	in. (mm)	20 (508)	20 (508)	22 (559)	26 (660)
Height	in. (mm)	49.4 (1255)	64.6 (1641)	68.2 (1733)	70.5 (1791)
Height with legs	in. (mm)	53.6 (1361)	68.8 (1748)	72.4 (1838)	74.0 (1874)
Weight					
Empty lbs. (kg) (Nominal)		270 (122)	309 (140)	410 (186)	348 (158)
Capacity					
Gross Volume	gal (liter)	34 (129)	50 (190)	65 (247)	93 (351)
Net Storage Volume	gal (liter)	32 (121)	47 (179)	61 (230)	83 (316)
Liquid lbs. (kg) CO2 Saturat	ed @ 125 psig (8.6 bar)	301 (137)	447 (203)	575 (261)	789 (358)
Liquid lbs. (kg) CO2 Saturat	ed @ 300 psig (20 bar)	279 (127)	409 (186)	522 (237)	717 (325)
Flow Rates					
Peak Demand	lb/hr (kg/hr)	5 (2.3)	12.0 (5.4)	20 (9.0)	40 (18.0)
Continuous	lb/hr (kg/hr)	2 (0.9)	7.0 (3.2)	10.0 (4.5)	15.0 (6.8)
Minimum Usage (no venting)					
Liquid	lb/day (kg/day)	2.5 (1.13)	2.7 (1.22)	2.9 (1.32)	3.0 (1.4)
Pressure Building System					
Standard Operating Pressur	e psig (bar)	125 (8.6)	125 (8.6)	125 (8.6)	N/A
Economizer Circuit System					
Standard Operating Pressur	e psig (bar)	N/A	N/A	N/A	140 (8.6)
Safety Device Setting					
Primary Relief Valve	psig (bar)	300 (20.7)	300 (20.7)	300 (20.7)	300 (20.7)
Secondary Relief Valve	psig (bar)	450 (31.0)	450 (31.0)	330 (22.8)	450 (310)

▲ WARNING: Products in this catalog can expose you to chemicals including lead which is known to the State of California to cause cancer, birth defects or reproductive harm. For more information, go to https://www.p65warnings.ca.gov

#### Model EC300, EC450 & EC550 Flow Diagram



## Model EC550 and EC750HF with Optional Heater Flow Diagram



## **Meet the easyCarb 750HF**

Convenient, simple and durable, the new easyCarb HF is designed to make your job easier. Featuring superior dimensions and intelligent design, this model redefines performance.

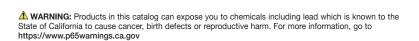
#### **Maximize Your Fill, Minimize Your Cost**

- The EC750HF model meets the demand of high flow and high volume customers.
- New faster fill design.
- New and improve Optional Vent-Fill feature.

## easyCarb offers:

- High quality fittings and components; less threaded connection reduce risk of leaks from loosened fittings.
- Simplified plumbing and fewer parts cleaner look, less potential for leaks and easier to maintain.
- Easy to read, color coded tank and line pressure gauges highlight normal operating ranges.
- Bold labeling on tank and line pressure gauges makes it simple for technicians and customers to identify the correct gauge.
- Optional better heater design.

easyCarb 750HF Specifications	reliably RATERMAN	Part Number Model	TWBC-HF750 EC750HF
Dimension			
Diameter		in. (mm)	26 (660)
Height		in. (mm)	70.5 (1791)
Height with legs		in. (mm)	74.0 (1874)
Weight			
Empty lbs. (kg) (Nomir	nal)		348 (158)
Capacity			
Gross Volume		gal (liter)	93 (351)
Net Storage Volume		gal (liter)	83 (316)
Liquid lbs. (kg) CO2 Sa	turated @ 125 psig	(8.6 bar)	789 (358)
Liquid lbs. (kg) CO2 Sa	turated @ 300 psig	(20 bar)	717 (325)
Flow Rates			
Peak Demand		lb/hr (kg/hr)	40 (18.0)
Continuous		lb/hr (kg/hr)	15.0 (6.8)
Minimum Usage (no ven Liquid		lb/day (kg/day)	3.0 (1.4)
Pressure Building System Standard Operating Pr	1	psig (bar)	N/A
Economizer Circuit Syste Standard Operating Pr	m	psig (bar)	140 (8.6)
Safety Device Setting Primary Relief Valve		psig (bar)	300 (20.7)
Secondary Relief Valve		psig (bar)	450 (310)



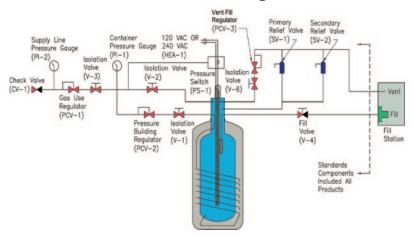




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## **BEVERAGE CARBONATION SYSTEMS easyCarb**

#### **EC750HF Flow Diagram**





To find more info on Cryogenic Liauid **Cylinders** see **Sections** 29A, 30A



## reliably

easyCarb 300	
Part #	Description
TWBC-300	easyCarb 300 lb
TWBC-300-VF	easyCarb 300 lb with Vent Fill
TWBC-300LE	easyCarb 300 lb with Legs
TWBC-300LE-VF	easyCarb 300 lb with Vent Fill and Legs

#### easyCarb 450

Part #	Description
TWBC-450	easyCarb 450 lb
TWBC-450-VF	easyCarb 450 lb with Vent Fill
TWBC-450LE	easyCarb 450 lb with Legs
TWBC-450LE-VF	easyCarb 450 lb with Vent Fill and Legs

#### easyCarb 550

Part #	Description
TWBC-550	easyCarb 550 lb
TWBC-550-VF	easyCarb 550 lb with Vent Fill
TWBC-550LE	easyCarb 550 lb with Legs
TWBC-550LE-VF	easyCarb 550 lb with Vent Fill and Legs

#### easyCarb 750HF

Part #	Description
TWBC-HF750	easyCarb High Flow 750 lb
TWBC-HF750-VF	easyCarb High Flow 750 lb with Vent Fill
TWBC-HF750LE	easyCarb High Flow 750 lb with Legs
TWBC-HF750LE-VF	easyCarb High Flow 750 lb with Vent Fill and Legs

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## Optional Carbon Dioxide Delivery Systems for easyCarb Tanks 300, 450, 550 and 750HF

## **Mobile Transfer Unit**



**Optional** Fill Box

> See 40A-45



This Fill Box allows ability to run the fill and vent lines any time in any direction along the outer building of the restaurant / facility without any interruption to the operations.

**Optional** 3 x V-Shape Leg with Shipping Ring available











## **CARBON DIOXIDE PRODUCTS** Composite Piping

Duratec is an innovative compressed air and inert gas distribution system ideally suited for the demanding food and beverage industry and hospitality sector. Meeting NSF and FDA requirements, Duratec is a completely clean pipe and fitting system. Designed to be absolutely leak-proof, installed guickly and easily, and maintained cost effectively, Duratec saves you time and money.

Traditional metallic compressed air and inert gas systems are a main cause of unnecessary energy use and excessive wear and tear on equipment. The culprits? Corrosion and leakage at pipe joints and fitting connections which often go undetected until they're discovered during a detailed system audit.

Engineered to outperform traditional metal piping systems, Duratec pipe comes in long 100 foot or 300 foot coils, which significantly reduces the number of joints in your system. The Duratec system is secured with durable nickel-plated brass and stainless steel adapter fittings. All fittings feature double o-ring seals to ensure long term joint integrity.

#### **Applications**

- Inert Gas Distribution
- CO2 Distribution
- Microbulk Inert Gas Delivery Systems
- Valve Actuation Control Systems







- 1/2", 3/4" and 1" sizes
- Operating Pressures 200psi at 73°F, 160psi at 140°F



**NOTE:** 3/8" size Tubing is **Not** PE-RT material and not FDA compliant. 3/8" size is HDPE material.

#### **FEATURES & BENEFITS**

Duratec reduces costs on a typical installation not only for materials but also for labour and transportation costs when compared to traditional materials. How? Duratec's lightweight construction and simple assembly procedures which include:

**Ease of Handling** Duratec is 75% lighter than the equivalent diameter of copper and SCH 40 carbon steel.

not required. All joints have double o-ring seals and can be quickly assembled or disassembled. Easy on-site modifications and repairs can be made.

**Quick Installation** No special training or equipment is required to complete a Duratec system.

Fewer Fittings Duratec pipe comes in convenient 100 ft. and 300 ft. coils eliminating several joints and the need for threading, or soldering.

Flexible Yet Rigid Due to its composite structure, Duratec pipe can be easily bent by hand and will maintain its desired shape. This unique feature allows for straight, professional looking installation and eliminates sagging.

#### **LOWER OPERATING COSTS**

Due to Duratec's advantages over metal systems, it costs you less time, labour and money to keep a Duratec system in optimal condition.

Pressure loss means money loss Metal systems can lose pressure due to pin-hole leaks and leakage at connections, all of which result in increased energy costs. Duratec's high-quality construction, on the other hand, guarantees consistent pressure for years to come.

**Smooth Interior** Less friction means lower pressure drops and higher flow rates. This may allow for smaller pipe sizes to be used.

**Quick Removable Connections** Threading is

**Clean** All Duratec pipe is packaged in cardboard boxes preventing contamination before use. The smooth PE-RT inner layer cannot rust, corrode or

superior to traditional metal piping systems.

Duratec is designed not to rust, scale or pit. Once

properly selected for the application and correctly

of maintenance-free service because they are:

**Corrosion Resistant** Duratec's tough outer

PE-RT (Polyethylene of Raised Temperature) layer

protects it against corrosion and deterioration and

meets stringent NSF and FDA requirements and is

unaffected by inert gases. With a choice of longlast-

ing nickel-plated brass fittings or 316 stainless steel

adapters, the system provides long-term performance

ensures long service life even in the most aggressive manufacturing environments. Its inner PE-RT layer

installed, Duratec Airline Systems will provide years

**EXTENDED LIFE** 

THE PERFORMANCE

OF PLASTIC WITH THE

STRENGTH OF METAL

form loose scale. Clean air remains clean throughout the life of the system. **Safe** Duratec's unique composite construction

means that accidental impact or puncture of the pipe results in a safe, ductile mode of failure. Duratec pipe has been third-party tested and certified to stringent OSHA safety requirements, standards that guarantee safety comes first.

Duratec pipe and fittings provide top-notch performance. Rated for long term continuous operating pressures of 200psi at 73°F and 160psi at 140°F, Duratec pipe and fitting assemblies are also capable of sustaining quick burst pressures in excess of 800psi. This built-in safety factor ensures system performance and provides peace of mind for designers and facility managers.

Call or See Main Catalog Section 22A for All Parts & Accessories

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## **Composite Pipe**

## for CO2, Nitrogen and Argon Gas Working Pressure 200 PSI at 73°



#### **Duratec Airline - Composite Pipe**

Part #	Description
CMP-12-100	1/2" x 100 Foot Coil
CMP-12-300	1/2" x 300 Foot Coil
CMP-34-100	3/4" x 100 Foot Coil
CMP-34-300	3/4" x 300 Foot Coil
CMP-1-100	1" x 100 Foot Coil
CMP-1-300	1" x 300 Foot Coil

## **General Reference for Pipe Sizing**

Pipe Size	Standard Cubic Foot per Minute Needed	Pressure Drop per 100 Foot Length
1/2 Inch 1/2 Inch	0-11 cu. ft. per minute  Max 20 cu. ft. per minute	.6 PSI per 100 ft. length 2. PSI per 100 ft. length
3/4 Inch 3/4 Inch	0-30 cu. ft. per minute Max 50 cu. ft. per minute	.3 PSI per 100 ft. length 1. PSI per 100 ft. length
1 Inch 1 Inch	0-50 cu. ft. per minute Max 100 cu. ft. per minute	.3 PSI per 1,000 ft. length 1. PSI per 1,000 ft. length

Duratec uses a unique and cost-effective D1 nickel-plated brass insert fitting for easy connections. All Duratec fittings are protected with a corrosion-resistant, industrial-strength nickel plating and include double o-ring seals ensuring joint integrity. Select fittings are also available in 316 stainless steel.



Pipe End x Male Thread Adapter

Part #	Description
CMP-MTA1212	1/2" Pipe x 1/2" MPT
CMP-MTA3434	3/4" Pipe x 3/4" MP
CMP-MTA0101	1" Pipe x 1" MPT



Duratec Airline - 90 Degree Pipe Elbow

Part #	Description
CMP-90E12	1/2" Pipe x 1/2" Pipe
CMP-90E34	3/4" Pipe x 3/4" Pipe
CMP-90E01	1" Pipe x 1" Pipe



Duratec Airline – Composite Pipe All Around Pipe Tee

Part #	Description
CMP-TEE12	1/2" x 1/2" x 1/2"
CMP-TEE34	3/4" x 3/4" x 3/4"
CMP-TEE01	1" x 1" x 1"



**Duratec Airline** – **Stainless Steel Adapters** Pipe End x Male Thread Adapter

-	-
Part #	Description
CMP-MTASS1212	1/2" Pipe x 1/2" MPT
CMP-MTASS3434	3/4" Pipe x 3/4" MPT
CMP-MTASS0101	1" Pipe x 1" MPT



Part #	Description
CMP-90EFTWB1212	1/2" Pipe x 1/2" Pipe

#### Duratec Airline - Wall Bracket Multiport

Part #	Description
CMP-TWBM34F12	3/4" MPT Inlet x 1/2" FPT Outlet



Part #	Description
CMP-RT341212	3/4" x 1/2" x 1/2"
CMP-RT343412	3/4" x 3/4" x 1/2"
CMP-RT341234	3/4" x 1/2" x 3/4"
CMP-RT010112	1" x 1" x 1/2"
CMP-RT013434	1" x 3/4" x 3/4"
CMP-RT010134	1" x 1" x 3/4"

**Call or See Main Catalog Section 22A** for All Parts & Accessories



#### Duratec Airline -**Composite Pipe Coupling**

Part #	Description
CMP-C12	1/2"
CMP-C34	3/4"
CMP-C01	1"

#### Duratec Airline -**Composite Pipe Reducing Coupling**

Part #	Description
CMP-RC3412	3/4" x 1/2"
CMP-RT0134	1" x 3/4"

Duratec Airline -**Composite Pipe Caps** 

Part #	Description
CMP-CAP12	1/2"
CMP-CAP34	3/4"
CMP-CAP01	1"

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## Food Grade LCO2 Transfer Hose for CO2 & Beverage Applications NSF 51 Rated

## RATERMANN'S LCO2 compatible hose will help you meet your FOOD SAFETY MODERNIZATION ACT (FSMA) requirements.

Our thermoplastic hose is specially designed for the transfer of liquid and gaseous carbon dioxide (CO2) for beverage applications. It is commonly used on small bulk delivery trucks as well as flexible lines from the restaurant wall-box to the liquid cylinders. The hose is specially formulated to perform well in temperatures as low as -40°F, and the proprietary core tube is plasticizer free and FDA compliant. Our unique bonding process guarantees excellent kink resistance, and the proprietary "Tuff-Skin" cover provides for superior handling and abrasion resistance.

#### **Specifications**

Nominal I.D.: Maximum Working Pressure: 1/2 inch 2,000 PSI

1/2 inch 2,000 P: 13 mm 138 bar **Maximum O.D.: Weight:** 

#### Minimum Bend Radius:

3.0 inches 76 mm



NSF 51 Rated Carbon Dioxide – Food Grade Hose Pt # BEV-F-

Part #	Description
BEV-F-250R	1/2" ID Food Grade Hose 250 feet
BEV-F-1200FJIC58	1/2" ID Food Grade Hose 100 ft. 5/8 Female JIC Ends
BEV-F-900FJIC58	1/2" ID Food Grade Hose 75 ft. 5/8 Female JIC Ends
BEV-F-780FJIC58	1/2" ID Food Grade Hose 65 ft. 5/8 Female JIC Ends
BEV-F-600FJIC58	1/2" ID Food Grade Hose 50 ft. 5/8 Female JIC Ends
BEV-F-1200M12	1/2" ID Food Grade Hose 100 ft. 1/2 Male NPT Ends
BEV-F-900M12	1/2" ID Food Grade Hose 75 ft. 1/2 Male NPT Ends
BEV-F-780M12	1/2" ID Food Grade Hose 65 ft. 1/2 Male NPT Ends
BEV-F-600M12	1/2" ID Food Grade Hose 50 ft. 1/2 Male NPT Ends
	<u> </u>



Part #	Description
BEV-F-VT360FJIC58	1/2" ID Food Grade Hose 30 ft. 5/8" F JIC Ends with Vent Tube
BEV-F-VT300FJIC58	1/2" ID Food Grade Hose 25 ft. 5/8" F JIC Ends with Vent Tube
BEV-F-VT180FJIC58	1/2" ID Food Grade Hose 15 ft. 5/8" F JIC Ends with Vent Tube
BEV-F-VT120FJIC58	1/2" ID Food Grade Hose 10 ft. 5/8" F JIC Ends with Vent Tube
BEV-F-VT60FJIC58	1/2" ID Food Grade Hose 5 ft. 5/8" F JIC Ends with Vent Tube

#### **Polyethylene Beverage Hose**

NSF-51 listed Polyethylene reinforced tube, with EVA Copolymer Cover



Ideal for Product Lines

#### **Polyethylene Beverage Hose**

Part #	I.D.	Working Pressure at 70° F	Roll Size	
BVT-P14-500	1/4"	300 PSI	500′	
BVT-P38-300	3/8"	300 PSI	300'	
BVT-P12-300	1/2"	250 PSI	300'	

## **UV Stabilized Polyethylene Beverage Hose**

NSF-51 listed materials, Specially formulated for superior UV resistance to microbial growth in outdoor or direct sunlight installations.

NSF-51



Reduce Microbial and Algae growth

**UV Stabilized Polyethylene Beverage Hose** 

Part #	I.D.	Working Pressure at 70° F	Roll Size	
BVT-PXUV14-500	1/4"	300 PSI	500'	
BVT-PXUV38-300	3/8"	300 PSI	300'	
BVT-PXUV12-300	1/2"	250 PSI	300'	

## **UV Resistant Polyethylene Beverage Hose**

NSF-51 listed, Barrier protected hose provides optimum in UV and weather resistance



Outdoor Gas / Beverage Line

#### UV Resistant Polyethylene Beverage Hose

Part #	I.D.	Working Pressure at 70° F	Roll Size	
BVT-PUV14-500	1/4"	300 PSI	500'	
BVT-PUV38-300	3/8"	300 PSI	300'	

#### **Precision Cutter**

- Saves time cutting tubes and hoses
- Special V-block ensures straight clean cut
- Cuts 1/4" to over 1" OD
- Even cuts Kevlar Lined Hoses.

Part #	Description
BVT-CUTTER	Precision Tube Cutter
BVT-CUTTER-RB	Replacement Blade
BVT-CUTTER-HLST	Belt Holster for Cutter
DV1-CUTTEN-HL31	Deit Hoister für Cutte



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## **CARBON DIOXIDE PRODUCTS** Push-in Tube Fittings

## **Push-In Tube Fittings**

## **PROVIDES QUICK & CONVENIENT ASSEMBLY**

Products are manufactured from safe, non-toxic materials meeting the requirements of the US FDA, ANSI/NSF-51, 61, and SK Zert.

Do not use this product where the ambient temperature or fluid temperature may exceed 180°F.

Maximum operating pressure -40°F to 68°F is 230 PSI / 149°F is 150 PSI.

#### Fittings listed fit the following tubings:

- 1/4" O.D. fits 08H05-154
- 5/16" O.D. fits 08H05-247
- 3/8" O.D. fits 08H05-115
- 1/2" O.D. fits 08H05-116



ELBOW		
Part #	Description	
PI-90-OD140D14	1/4" O.D. x 1/4" O.D.	
PI-90-OD140D38	1/4" O.D. x 3/8" O.D.	
PI-90-OD38OD38	3/8" O.D. x 3/8" O.D.	
PI-90-OD38OD12	3/8" O.D. x 1/2" O.D.	
PI-90-OD12OD12	1/2" O.D. x 1/2" O.D.	



TEE	
Description	
1/4" O.D. (ALL)	
3/8" x 3/8" x 1/4" O.D.	
3/8" O.D. (ALL)	
1/2" x 1/2" x 3/8" O.D.	
1/2" O.D. (ALL)	



PUSH-IN	SHUTOFF	
Part #	Description	
PI-SO-OD14	1/4" O.D.	
PI-SO-OD38	3/8" O.D.	
PI-SO-OD12	1/2" O.D.	



PUSH-IN SHUTOFF		
	Part #	Description
	PI-SO-M380D38	3/8" MPT x 3/8" O.D.



END STOP	
Part #	Description
PI-ES-OD14	1/4" O.D.
PI-ES-OD38	3/8" O.D.
PI-ES-OD12	1/2" O.D.



CROSS		
Part #	Description	
PI-X-OD14	1/4" O.D. (ALL)	
PI-X-OD38	3/8" O.D. (ALL)	
PI-X-OD12	1/2" O.D. (ALL)	



Part #	Description
PI-A-M140D14	1/4" MPT x 1/4" O.D.
PI-A-M140D38	1/4" MPT x 3/8" O.D.
PI-A-M380D38	3/8" MPT x 3/8" O.D.
PI-A-M380D12	3/8" MPT x 1/2" O.D.
PI-A-M120D38	1/2" MPT x 3/8" O.D.
PI-A-M120D12	1/2" MPT x 1/2" O.D.

MALE PIPE ADAPTER



FEMALE PIPE &	
FEMALE FLARE	
ADAPTERS	

Part #	Description
PI-A-F140D14	1/4" FPT x 1/4" O.D.
PI-A-F140D38	1/4" FPT x 3/8" O.D.
PI-A-FFL140D14	1/4" FFL x 1/4" O.D.
PI-A-FFL140D38	1/4" FFL x 3/8" O.D.
PI-A-FFL380D38	3/8" FFL x 3/8" O.D.



UNION		
Part #	Description	
PI-U-OD140D14	1/4" O.D. x 1/4" O.D.	
PI-U-OD14OD38	1/4" O.D. x 3/8" O.D.	
PI-U-OD5160D38	5/16" O.D. x 3/8" O.D.	
PI-U-OD38OD38	3/8" O.D. x 3/8" O.D.	
PI-U-OD38OD12	3/8" O.D. x 1/2" O.D.	
PI-U-OD12OD12	1/2" O.D. x 1/2" O.D.	



-	
Part #	Description
PI-Y-OD14	1/4" O.D. (ALL)
PI-Y-OD516	5/16" O.D. (ALL)
PI-Y-OD38	3/8" O.D. (ALL)
PI-Y-0D380D120D12	3/8" x 1/2" x 1/2" O.D.
PI-Y-OD12	1/2" O.D. (ALL)



MALE FLAKE ADAPTEK		
Part #	Description	
PI-A-MFL140D14	1/4" MFL x 1/4" O.D.	
PI-A-MFL140D38	1/4" MFL x 3/8" O.D.	
PI-A-MFL5160D38	5/16" MFL x 3/8" O.D.	
PI-A-MFL380D38	3/8" MFL x 3/8" O.D.	
PI-A-MFL120D12	1/2" MFL x 1/2" O.D.	



BULKHEAD ADAPTER	
Part #	Description
PI-BHA-OD38	3/8" O.D.
PI-BHA-OD12	1/2" O.D.

## **CARBON DIOXIDE PRODUCTS** Stainless Steel Hose Barb Fittings



STRAIGHT	
Part #	Tube I.D. Size
BFTSS-B18B18	1/8"
BFTSS-B18B14	1/8" x 1/4"
BFTSS-B316B316	3/16" x 3/16"
BFTSS-B316B14	3/16" x 1/4"
BFTSS-B316B38	3/16" x 3/8"
BFTSS-B14B14	1/4"
BFTSS-B14B14-TH	1/4" Thinwall
BFTSS-B14B516	1/4" x 5/16"
BFTSS-B14B516-TH	1/4" x 5/16" Thinwall
BFTSS-B14B12	1/4" x 1/2"
BFTSS-B14B12-TH	1/4" x 1/2" Thinwall
BFTSS-B516B516	5/16"
BFTSS-B516B38	5/16" x 3/8"
BFTSS-B14B38	1/4" x 3/8"
BFTSS-B14B38-TH	1/4" x 3/8" Thinwall
BFTSS-B38B38	3/8"
BFTSS-B38B38-TH	3/8" Thinwall
BFTSS-B38B12	3/8" x 1/2"
BFTSS-B38B12-TH	3/8" x 1/2" Thinwall
BFTSS-B12B12	1/2"
BFTSS-B12B12-TH	1/2" Thinwall
BFTSS-B34B34	3/4"



Ba	rb	to	Barb

Tube I.D. Size
1/4" Barb A = 1-1/4"
1/4" Barb Thinwall A = 1"
5/16" Barbs A = 2"
3/8" Barbs A = 2"
3/8" Barbs Thinwall A = 1-1/4"
1/2" Barbs A = 3"
1/2" Barbs Thinwall A = 2-1/8"



Part #	Tube I.D. Size
BFTSS-TEEB14	1/4" (ALL)
BFTSS-TEEB14-TH	1/4" (ALL) Thinwall
BFTSS-TEEB14B38	1/4" (1&2) x 3/8" (3)
BFTSS-TEEB14B38-TH	1/4" (1&2) x 3/8" Thinwall
BFTSS-TEEB516B516	5/16" (ALL)
BFTSS-TEEB516B516-TH	5/16" (ALL) Thinwall
BFTSS-TEEB38B14	3/8" (1&2) x 1/4" (3)
BFTSS-TEEB38B14-TH	3/8" (1&2) x 1/4" Thinwall
BFTSS-TEEB38	3/8" (ALL)
BFTSS-TEEB38-TH	3/8" (ALL) Thinwall
BFTSS-TEEB38B12	3/8" (1&2) x 1/2" (3)
BFTSS-TEEB38B12-TH	3/8" (1&2) x 1/2" (3) Thinwall
BFTSS-TEEB12B14	1/2" (1&2) x 1/4" (3)
BFTSS-TEEB12B38	1/2" (1&2) x 3/8" (3)
BFTSS-TEEB12B38-TH	1/2" (1&2) x 3/8" Thinwall
BFTSS-TEEB12	1/2" (ALL)
BFTSS-TEEB12-TH	1/2" (ALL) Thinwall
BFTSS-TEEB34	3/4" (ALL)



## **U-BEND WITH MANIFOLD**

#### **Two Barbs to Barb**

Part #	Tube I.D. Size
BFTSS-UMB14BM14	1/4" Barbs x 1/4" Barb Man. A =1-3/8"
BFTSS-UMB14BM14-TH	1/4" Barbs x 1/4" B Thinwall A =1"
BFTSS-UMB14BM38	1/4" Barbs x 3/8" Barb Man. A =1-1/2"
BFTSS-UMB516BM516	5/16" Barbs x 5/16" Barb Man. A = 2-1/4"
BFTSS-UMB38BM14	3/8" Barbs x 1/4" Barb Man. A = 2-1/2"
BFTSS-UMB38BM38	3/8" Barbs x 3/8" Barb Man. A =1-5/8"
BFTSS-UMB38BM38-TH	3/8" B x 3/8" B Thinwall A = 1-5/8"
BFTSS-UMB38BM12	3/8" Barbs x 1/2" Barb Man. A = 2"
BFTSS-UMB12BM38	1/2" Barbs x 3/8" Barb Man. A = 2-1/4"
BFTSS-UMB12BM12	1/2" Barbs x 1/2" Barb Man. A = 2-1/4



#### CROSS Part # Tube I.D. Size BFTSS-XB14 1/4" BFTSS-XB38 3/8"



Tube I.D. Size
1/4"
1/4" Thinwall
5/16"
3/8"
3/8" Thinwall
1/2"

#### 90° Leg Angle

Part #	Tube I.D. Size
BFTSS-YTEEB14	1/4" A = 1-1/8"
BFTSS-YTEEB14-TH	1/4" Thinwall A = 1-1/8"
BFTSS-YTEEB38	3/8" A = 11/4"
BFTSS-YTEEB38-TH	3/8" Thinwall A = 1-1/4"



I	ELBOW	
١	Part #	Tube I.D. Size
	BFTSS-90RB14	1/4"
	BFTSS-90RB14-TH	1/4" Thinwall
	BFTSS-90RB14B516	1/4" x 5/16"
	BFTSS-90RB38	3/8"
	BFTSS-90RB38-TH	3/8" Thinwall
	BFTSS-90RB14B38	1/4" x 3/8"
	BFTSS-90RB14B38-TH	1/4" x 3/8" Thinwall
	BFTSS-90RB12	1/2"
	BFTSS-90RB12-TH	1/2" Thinwall
	BFTSS-90RB12B38	1/2" x 3/8"



#### 90° SWIVEL ADAPTER

#### **Barb to Female Flare**

Part #	Tube I.D. Size
BFTSS-90B14FLN14	1/4 B to 1/4 FFL
BFTSS-90B14FLN38	1/4 B to 3/8 FFL
BFTSS-90B14FLN12	1/4 B to 1/2-16 FFL
BFTSS-90B38FLN14	3/8 B to 1/4 FFL
BFTSS-90B38FLN38	3/8 B to 3/8 FFL
BFTSS-90B38FLN12	3/8 B to 1/2 FFL
BFTSS-90B12FLN38	1/2 B to 3/8 FFL
BFTSS-90B12FLN12	1/2 B to 1/2 FFL

#### 45° SWIVEL ADAPTER

#### **Barb to Female Flare**

Part #	Tube I.D. Size
BFTSS-45B14FLN14	1/4 B to 1/4 FFL

## **CARBON DIOXIDE PRODUCTS** Stainless Steel Hose Barb Fittings





Part # BFT-FS-BS14

#### FLARE SWIVEL SETS

Part #	Description
BFT-FS-N14	1/4" Flare Nut
BFT-FS-BS18	1/8" Stem for 1/4" Nut
BFT-FS-BS532	5/32" Stem for 1/4" Nut
BFT-FS-BS14	1/4" Stem for 1/4" Nut



#### SWIVEL ROUNDED ELBOWS

Part #	Description
BFTSS-90RB14FLN14	90° Elbow 1/4 Barb x 1/4 Flare Swivel
BFTSS-90RB38FLN14	90° Elbow 3/8 Barb x 1/4 Flare Swivel





## BEER NUT AND TAILPIECE

#### **Nickle Plated**

Part #	Description
BFTN-BRN78	7/8"-14 Hex Beer Nut
BFTN-BRNT14	1/4" Tailpiece for Beer Nut
BFTN-BRNT38	3/8" Tailpiece for Beer Nut
BFTN-BRNT12	1/2" Tailpiece for Beer Nut



SWIVEL TEE	
Part #	Description
BFTSS-TEEB14FLN14	1/4 Barb x 1/4 Flare Swivel



SWIVEL TEE		
Part #	Description	
BFTSS-TEEB14FLN14SD	1/4 Barb with 1/4 Side Flare Swivel	



#### 90° ELBOW

#### **Barb to Male Pipe**

Part #	Description
BFTSS-90B14M18	Elbow, 1/4 Barb x 1/8 M NPT
BFTSS-90B14M14	Elbow, 1/4 Barb x 1/4 M NPT
BFTSS-90B14M38	Elbow, 1/4 Barb x 3/8 M NPT
BFTSS-90B38M14	Elbow, 3/8 Barb x 1/4 M NPT
BFTSS-90B38M38	Elbow, 3/8 Barb x 3/8 M NPT
BFTSS-90B38M12	Elbow, 3/8 Barb x 1/2 M NPT
BFTSS-90B12M12	Elbow, 1/2 Barb x 1/2 M NPT



FLARE CAP	
Part #	Description
BFT-FCAP14	1/4" Flare Can



#### ADAPTER

#### Barb to Male Pipe

Part #	Description
BFTSS-B14M18	1/4 Barb x 1/8 M NPT
BFTSS-B14M14	1/4 Barb x 1/4 M NPT
BFTSS-B14M38	1/4 Barb x 3/8 M NPT
BFTSS-B38M18	3/8 Barb x 1/8 M NPT
BFTSS-B38M14	3/8 Barb x 1/4 M NPT
BFTSS-B38M38	3/8 Barb x 3/8 M NPT
BFTSS-B38M12	3/8 Barb x 1/2 M NPT
BFTSS-B12M14	1/2 Barb x 1/4 M NPT
BFTSS-B12M38	1/2 Barb x 3/8 M NPT
BFTSS-B12M12	1/2 Barb x 1/2 M NPT
BFTSS-B34M34	3/4 Barb x 3/4 M NPT



#### **NYLON FLARE WASHERS**

Part #	Description
BFT-GASKFL14-PK25	1/4" Flare Nylon Washer

## **CARBON DIOXIDE PRODUCTS** Push-in Tube Fittings Stepless Clamps

## **STEMS FIT INTO OTHER PUSH-IN FITTINGS**



Part #	Description
PI-R-ST380D14	3/8" Stem x 1/4" O.D.
PI-R-ST120D38	1/2" Stem x 3/8" O.D



#### **MALE PIPE ADAPTER**

Part #	Description
PI-A-ST14M14	1/4" Stem x 1/4" MPT
PI-A-ST38M14	3/8" Stem x 1/4" MPT
PI-A-ST38M38	3/8" Stem x 3/8" MPT
PI-A-ST12M38	1/2" Stem x 3/8" MPT
PI-A-ST12M12	1/2" Stem x 1/2" MPT

#### **ELBOW**

Part #	Description
PI-90-ST140D14	1/4" Stem x 1/4" O.D.
PI-90-ST380D14	3/8" Stem x 1/4" O.D.
PI-90-ST380D38	3/8" Stem x 3/8" O.D.
PI-90-ST12OD12	1/2" Stem x 1/2" O.D.

## **BARBED END ADAPTS BRAIDED TUBING TO BE COMPATIBLE WITH PUSH-IN FITTINGS**



#### **STRAIGHT BARB TO STEM**

Part #	Description
PI-A-ST14B14	1/4" B x 1/4" Stem
PI-A-ST38B14	1/4" B x 3/8" Stem
PI-A-ST38B516	5/16" B x 3/8" Stem
PI-A-ST516B38	3/8" B x 5/16" Stem
PI-A-ST38B38	3/8" B x 3/8" Stem
PI-A-ST12B38	3/8" B x 1/2" Stem
PI-A-ST38B12	1/2" B x 3/8" Stem
PI-A-ST12B12	1/2" B x 1/2" Stem



#### **CHECK VALVE**

Part #	Description
PI-CV-OD14	1/4" O.D. Tube
PI-CV-OD38	3/8" O.D. Tube
PI-CV-OD12	1/2" O.D. Tube



#### **ELBOW BARB TO STEM**

Part #	Description
PI-90-ST14B14	1/4" B x 1/4" Stem
PI-90-ST38B14	1/4" B x 3/8" Stem
PI-90-ST38B38	3/8" B x 3/8" Stem



#### **PLUG STEM**

Part #	Description
PI-PLUG-ODST14	1/4" O.D. Stem
PI-PLUG-ODST38	3/8" O.D. Stem
PI-PLUG-ODST12	1/2" O.D. Stem

#### **LOCK OUT CLIP**

Part #	Description
PI-LOC-OD14	1/4" O.D. Tube
PI-LOC-OD38	3/8" O.D. Tube
PI-LOC-OD12	1/2" O.D. Tube

## **Stainless** Steel **Stepless Clamps**







- Manufactured of 304 grade stainless steel for extended durability and increased corrosion resistance
- Tongue-in-groove design provides uniform pressure and gapless leak-free seal
- Burr-free edges to protect parts and to prevent injury during assembly
- The clamp ears adjustable crimp range compensates for component tolerances and applied pressure

#### Stainless Steel Stanless Clamps

Stainless Steel St	epless Clam	ps
Part Number Pack of 25	Range	Clamp Index
CL-SLSS-6.5-PK25	.209256	-
CL-SLSS-7.0-PK25	.228276	-
CL-SLSS-8.0-PK25	.268315	-
CL-SLSS-8.7-PK25	.276343	Α
CL-SLSS-9.5-PK25	.307374	-
CL-SLSS-10.0-PK25	.327394	-
CL-SLSS-10.5-PK25	.346413	В
CL-SLSS-11.3-PK25	.378445	D
CL-SLSS-11.8-PK25	.398465	-
CL-SLSS-12.3-PK25	.386484	С
CL-SLSS-12.8-PK25	.406504	-
CL-SLSS-13.3-PK25	.425524	E
CL-SLSS-14.0-PK25	.453551	F
CL-SLSS-14.5-PK25	.472571	Q
CL-SLSS-15.3-PK25	.504602	-
CL-SLSS-15.7-PK25	.520618	G
CL-SLSS-16.2-PK25	.539638	М
CL-SLSS-17.0-PK25	.571669	Н
CL-SLSS-17.5-PK25	.591689	-
CL-SLSS-18.5-PK25	.602728	J
CL-SLSS-19.8-PK25	.654780	K
CL-SLSS-21.0-PK25	.701827	I
CL-SLSS-22.6-PK25	.764890	L
CL-SLSS-23.5-PK25	.799925	-

#### SS Stepless Clamps continued

Part Number Pack of 25	Range	Clamp Index
CL-SLSS-24.1-PK25	.823949	-
CL-SLSS-25.6-PK25	.882 - 1.008	-
CL-SLSS-27.1-PK25	.941 - 1.067	-
CL-SLSS-28.6-PK25	1.00 - 1.126	Р
CL-SLSS-30.1-PK25	1.06 - 1.185	-
CL-SLSS-31.6-PK25	1.12 - 1.244	-
CL-SLSS-33.1-PK25	1.18 - 1.303	-
CL-SLSS-34.6-PK25	1.24 - 1.362	-
CL-SLSS-36.1-PK25	1.30 - 1.421	-
CL-SLSS-37.6-PK25	1.35 - 1.480	-
CL-SLSS-38.1-PK25	1.37 - 1.500	-
CL-SLSS-39.6-PK25	1.43 - 1.559	-
CL-SLSS-41.0-PK25	1.49 - 1.614	-
CL-SLSS-42.5-PK25	1.55 - 1.673	-
CL-SLSS-44.0-PK25	1.61 - 1.732	-
CL-SLSS-45.5-PK25	1.67 - 1.791	-
CL-SLSS-47.0-PK25	1.72 - 1.850	-
CL-SLSS-48.5-PK25	1.78 - 1.909	-
CL-SLSS-50.0-PK25	1.84 - 1.969	-
CL-SLSS-51.5-PK25	1.90 - 2.028	-
CL-SLSS-52.2-PK25	1.93 - 2.055	-
CL-SLSS-53.0-PK25	1.96 - 2.087	-
CL-SLSS-54.5-PK25	2.02 - 2.146	-
CL-SLSS-56.0-PK25	2.08 - 2.205	-

## Brass Check Valve



Part #	Description
BFT-CVM14MFL14	Brass Check Valve, 1/4 M NPT x 1/4 M Flare

▲ WARNING: Products in this catalog can expose you to chemicals including lead which is known to the State of California to cause cancer, birth defects or reproductive harm. For more information, go to https://www.p65warnings.ca.gov

## CO2 THERMOPLASTIC LOW-TEMP PIGTAILS 2,750 PSIG MAWP Rated

#### Hoses for the Following Gases



**2750 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 For Part # Polyester QF-SH320 Temperature: Fill Tool -65° F to +212° F Parts see 40A-29 ▲ WARNING: Products in this catalog can expose you to chemicals

including Lead which is known to the State of California to cause cancer

birth defects or reproductive harm. For more information, go to

## Ratermann Mfg. **TPL Family of Hoses**

#### **OUTLET**





**OUTLET** 

#### **INLET**



1/4" NPT Female

INLET

1/4" NPT Male

#### **Standard Hose** without Armor Casing

1/4" NPT Female x 1/4" NPT Female

Hose <b>Length</b>	Part #
24"	TPL-24F14
36"	TPL-36F14
48"	TPL-48F14
72"	TPL-72F14

#### 1/4" NPT Female x 1/4" NPT Male

.,	Telliale X 1/4	.,
Hose <b>Length</b>	Part #	
24"	TPL-24F14M14	
36"	TPL-36F14M14	_
48"	TPL-48F14M14	
72"	TPL-72F14M14	_

1/4"	NPT	Male x 1/4"	NPT	Male
Hose Leng		Part #		
24"		TPL-24M14		
36"		TPL-36M14		
48"		TPL-48M14		
72"		TDI _72M1/		

## OUTLET

1/4" NPT Female



1/4" NPT Male

OUTLET

1/4" NPT Female

**OUTLET** 

1/4" NPT Male



1/4" NPT Male

#### INLET



1/4" NPT Female JIC 37 Swivel

**INLET** 

1/4" NPT Female JIC

## 1/4" NPT Female x 1/4" NPT Female JIC 37 Swivel

ш	Hose <b>Length</b>	Part #
	24"	TPL-24F14FJIC14S
	36"	TPL-36F14FJIC14S
	48"	TPL-48F14FJIC14S
	72"	TPL-72F14FJIC14S

1/4" NPT Male x 1/4" NPT Female JIC 37 Swivel

Hose <b>Length</b>	Part #
24"	TPL-24M14FJIC149
36"	TPL-36M14FJIC145
48"	TPL-48M14FJIC149
72"	TPL-72M14FJIC149

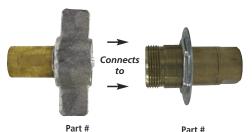
37 Swivel

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## **Fill Gun Quick** Connector / **Dry Break** Wing Nut Style

https://www.p65warnings.ca.gov

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



Description BEV-QCWNC CO2 Quick Connect Fill Wing Nut Coupler CO2 Quick Connect Fill Nipple with Flange **BEV-QCNF** 

BEV-QCWNC

## **Hose Reel for Thermoplastic**

**Hose Reel to be Installed on Liquid CO2 Delivery Vehicles** 



Part # BEV-REEL

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. 2000 PSIG Rated

▲ WARNING: Products in this catalog can expose you to chemicals including lead which is known to the State of California to cause cancer, birth defects or reproductive harm. For more information, go to https://www.p65warnings.ca.gov

Part #

**BEV-QCNF** 

## CO2 Transfer Hoses 450 PSIG MAWP CO2 Pump



#### A lightweight, yet durable rubber hose manufactured specially for the demands of Carbon Dioxide

See

below

to Order

Custom

Length

Hoses

Transfer hoses are manufactured specifically for the demanding requirements of CO2 liquid and vapor transfer. Unlike rubber hydraulic hose that is constructed with carbon steel reinforcing, these hoses are 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. These hoses 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		
<b>Liquid / Vapor CO2</b>	Transfer	Hose

Tube Special Neoprene blend rated for -65° F **Reinforcement** Two stainless steel braids

Cover Special Neoprene blend. Black with blue Mylar

**Temperature**  $-65^{\circ}$  F to  $+180^{\circ}$  F Pressure Range 450 PSIG MAWP

Branding Blue Mylar

**CGA Fittings** Brass sleeve, nut, and dust caps available Other Fittings Available Female NPT brass bar-stock

fitting with aluminum crimp collar

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Part #	I.D. (In.)	O.D. (ln.)	Max WP PSIG	Min Burst PSIG	Weight Per Foot
CTH1	1	1.58	450	2250	0.83
CTH112	1 1/2	2.08	450	2250	1.19
CTH2	2	2.60	450	2250	1.90

#### **CO2 Transfer Hoses – 450 PSIG MAWP**

Female NPT x Female NPT

1" I.D. - 1" FNPT x 1" FNPT

Hose Length	Part #	
10'	CTH-1ID-F1BH120	
20'	CTH-1ID-F1BH240	

1 1/2" I.D. - 1 1/2" FNPT x 1 1/2" FNPT

Hose Length	Part #
10'	CTH-112ID-F112BH120
20'	CTH-112ID-F112BH240

2" ID - 2" FNPT x 2" FNPT

_		
	Hose Length	Part #
	10'	CTH-2ID-F2BH120
	20'	CTH-2ID-F2BH240

#### **CO2 Connections**

1" Carbon Dioxide Connection

Hose Length	Part #
10'	CTH-1ID-CGA320BH120
20′	CTH-1ID-CGA320BH240

1 1/2" Carbon Dioxide Connection

Hose Length	Part #
10′	CTH-112ID-CGA320BH120
20′	CTH-112ID-CGA320BH240

2" I.D. - Carbon Dioxide Connection

Hose Length	Part #
10'	CTH-2ID-CGA320BH120
20′	CTH-2ID-CGA320BH240

## **Carbon Dioxide Hose End Assembly**

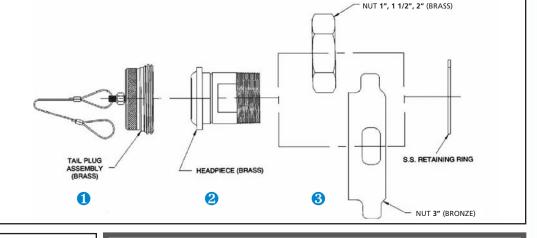
Part Number	Size
BHEA-CO2-100	1"
BHEA-CO2-150	1 1/2"
BHEA-CO2-200	2"

#### **Complete Unit Includes:**

**Dust Plug Assembly** Head Piece



Nut



#### **Carbon Dioxide Pump**

Positive Displacement Pumps and Oil-Free Gas Compressors for Liquid CO2 **Applications** 



Part # CO2P-114-BPM3H

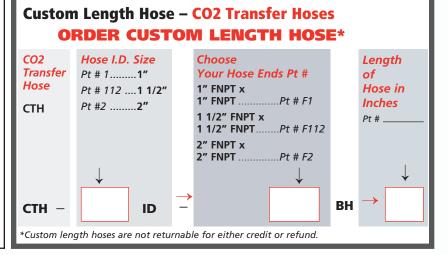
• Bulk Transfer

• Truck & Transport • Railcar Unloading

Vapor Recovery

Carbon Dioxide Pump 1 1/4" on a base plate with Motor.

▲ WARNING: Products in this catalog can expose you to chemicals including lead which is known to the State of California to cause cancer, birth defects or reproductive harm. For more information, go to https://www.p65warnings.ca.gov



## CO2 ACCESSORIES Automatic Changeover Manifold Ball Valves

#### **Utilizes Two Compensating Regulators**

This Automatic Changeover Utilizes two compensating regulators to insure a seamless changeover from empty cylinder to full cylinder.

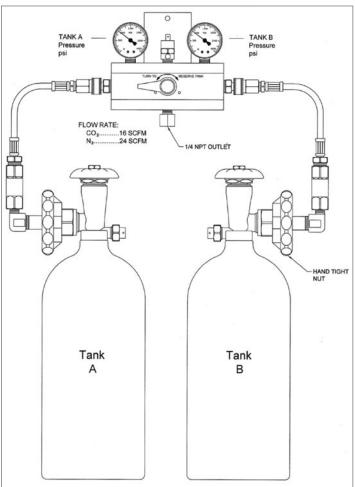
#### Features:

- For use with all inert gases
- Accurate and stable
- Changeover utilized two patented compensating regulators ensuring accuracy
- Smooth and silent changeover
- Quick and simple installation
- Durable and compact
- Ideal application for: Beverage Industry (fountain and keg service); Welding (uninterrupted shield gas flow for automated systems); Laboratory (ideal for application requiring a stable constant flow without interruption)

#### Specifications:

Max Inlet PSIG 3,000 PSIG

5" W x 10" H x 2" D Outlet Pressure 125 PSI - 170 PSI



Typical Setup: Can be used with manifolds on either side or on both inputs



Part #	Description
MAN-ACDR	Automatic Changeover Manifold
MAN-ACDR-320-24	Automatic Changeover Manifold, with 24" Pigtails for Carbon Dioxide
MAN-ACDR-320-36	Automatic Changeover Manifold, with 36" Pigtails for Carbon Dioxide
MAN-ACDR-580-24	Automatic Changeover Manifold, with 24" Pigtails for Inert
MAN-ACDR-580-36	Automatic Changeover Manifold, with 36" Pigtails for Inert

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#### **Ball Valves, Carbon Steel with Vented Ball**



Description

1/4" F NPT

3/8" F NPT

1/2" F NPT

3/4" F NPT

1" F NPT

#### Features:

- Forged Construction
- Raised Handle Stops
- Blowout proof stem design
- Adjustable packing gland
- Zinc phosphate corrosion protection
- Stainless Steel Ball and Stem
- Vented Ball
- 2,000 PSIG

▲ WARNING: Cancer and Reproductive Harm – www.P65Warnings.ca.gov For further information on Proposition 65, please go to www.oehha.ca.gov/proposition-65

Part #

ABV-C14-SV-SSBS

ABV-C38-SV-SSBS

ABV-C12-SV-SSBS

ABV-C34-SV-SSBS

ABV-C1-SV-SSBS

## **CO2 CYLINDER ACCESSORIES** Automatic Changeover – CO2 & Inert

## **Completely Automatic**

This is a completely automatic gas cylinder changeover system that is non-electric, foolproof and designed for easy installation and everlasting performance.

#### **Installation Made Easy**

- Simply fasten the Changeover to a wall with the outlet about 10" above the gas cylinders to be uses.
- Connect your regulator inlet to the outlet of the changeover.
- Connect the hoses to the cylinders being

After Installation, simply turn on the cylinders (or bank of cylinders) that will be used FIRST. This locks in this bank of cylinders.

Then turn on the other bank of cylinders which will be used SECOND. The automatic Changeover will automatically switch to this side when the pressure in the First bank drops to 185 psi (+/- 15 psi).

#### **Materials of Construction**

Valve Body - 7075-T6 Aluminum Spool Valves - Brass, Nickel Plated O-Rings – EPDM

#### Weight & Dimensions

3"W x 5.5"H x 1.25"D - 5 lbs.

#### **Inlet Pressure**

3000 psig max

#### **Changeover Pressure**

185 psig +/- 15 psig

#### Flow Rates

@ 2000 psig inlet: 2625 cfh @ 250 psig inlet: 525 cfh

#### CO2 Auto Changeovers\*

Part #	Description
ACM-320-2	CGA 320 Auto Changeover, 2 Cylinders
ACM-320-4	CGA 320 Auto Changeover, 4 Cylinders
ACM-320-6	CGA 320 Auto Changeover, 6 Cylinders
	g

#### Inert Auto Changeovers\*

Part #	Description
ACM-580-2	CGA 580 Auto Changeover, 2 Cylinders
ACM-580-4	CGA 580 Auto Changeover, 4 Cylinders
ACM-580-6	CGA 580 Auto Changeover, 6 Cylinders





**Inert Auto Changeovers** Pigtail Length: 48 Inches Part # ACM-580-4

#### **REGULATOR OPTIONS**

Part #	Description
BEV-RG320-160S	0-160 PSI CO2 Soda Regulator, Dual Gauge
BEV-RG320-60B	0-60 PSI CO2 Beer Regulator, Dual Gauge
BEV-RGS320-60B	0-60 PSI CO2 Beer Regulator, Single Gauge
BEV-RG580-160B	0-160 PSI Nitrogen Beer Regulator, Dual Gauge



\* 20 year manufacturer warranty on these CO2 and Inert Automatic Changeovers

▲ WARNING: Products in this catalog can expose you to chemicals including lead which is known to the State of California to cause cancer, birth defects or reproductive harm. For more information, go to https://www.p65warnings.ca.gov

Rev: 2/24/20

40A-21

#### **Semi-Automatic Switchover Manifold**

Prevents downtime by automatically switching gas supply from the primary cylinder bank to the reserve cylinder bank. The user resets the primary bank by turning the knob. Manual adjustment of the individual regulators is not required.

#### Features:

- Wall mounting Panel
- Maximum inlet pressure 3000 PSIG
- Delivery pressure 0 125 PSIG
- Inlet/Outlet 1/4 NPT
- Includes Post Sintered stainless steel braided pigtails.
- CGA Nut and Nipples with Check Valves

#### **Optional Accessory**

• High Pressure Alarm System, 3000 PSIG Pt # MSO-SA-ALARMHP

Post sintered hoses are included as standard. Other hose options are available upon request.





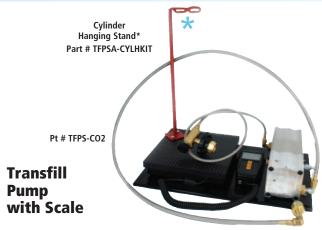
## **Ratermann Mfg. Semi-Automatic Switchover Manifolds**



MSO-SA Model		2 Cylinder Manifold Part #	4 Cylinder Manifold <b>Part</b> #	6 Cylinder Manifold Part #	
Gas Service	CGA	PSI Range	2	4	6
Carbon Dioxide	320	125 PSI	MSO-SA-320-2	MSO-SA-320-4	MSO-SA-320-6
Air-Breathing	346	125 PSI	MSO-SA-346-2	MSO-SA-346-4	MSO-SA-346-6
Hydrogen	350	125 PSI	MSO-SA-350-2	MSO-SA-350-4	MSO-SA-350-6
Medical Mixtures	500	125 PSI	MSO-SA-500-2	MSO-SA-500-4	MSO-SA-500-6
Oxygen	540	125 PSI	MSO-SA-540-2	MSO-SA-540-4	MSO-SA-540-6
Inert	580	125 PSI	MSO-SA-580-2	MSO-SA-580-4	MSO-SA-580-6
Air-Industrial	590	125 PSI	MSO-SA-590-2	MSO-SA-590-4	MSO-SA-590-6

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## CO2 ACCESSORIES Transfill Pump with Scale Dry Ice Machine



#### **Features**

- Liquefied Carbon Dioxide and Nitrous Oxide fill station
- Complete system, includes pump, scale and hose sets
- Excellent for on-demand filling of customers cylinders
- Patented double-ended pump with 9:1 ratio, fills at rate of 4 lbs. per minute
- Momentary fill button ensures operator attention
- "Economizer" fill valve bleeds pressure to cylinder while maintaining pressure in pump
- Lube free operation
- Powered by shop air or remaining pressure in spent cylinders

#### **Specifications**

Part Number: TFPS-CO2 Drive Air Required: 90-140 psi

Drive Ratio: 9:1 Fill Rate: 4 lbs/min

Pump: Liquid gases only

Design: Aluminum Body – Heat Treated Stainless Steel Piston

#### **Transfill Pump with Scale and Accessories**

Part #	Description
TFPS-CO2**	Transfill Pump with Scale
Part #	Accessory Descriptions
TFPSA-CYLHKIT	Cylinder Hanging Stand* for filling small cylinders (shown above)
TFPSA-PINACO2	Pin Valve Depressor
TFPSA-PO	Pump Only

\*\*Drive Air Kits

In order for Pt # TFPS-CO2 to function properly, it requires to drive it with another CO2 Cylinder or compressed air.

**Applications** 

• HVAC service cylinders

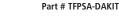
• Nitrous Oxide cylinders

• Class 2 fire extinguishers

• Paintball cylinders

Please choose one of the following options – Pt # TFPSA-DAKIT or Pt # TFPSA-DAKITCO2





**Drive Air Kits** 

tion
Kit
e Air Kit



▲ WARNING: Products in this catalog can expose you to chemicals including Lead which is known to the State of California to cause cancer, birth defects or reproductive harm. For more information, go to https://www.p65warnings.ca.gov

## **Dry Ice Machine for Cryogenic Liquid Cylinders**

You will need a Liquid Cylinder (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

## RY ICE ON DEMAND, AS YOU NEED IT

## **Dry Ice Machine for High Pressure Tanks**

CO2 tank needs to be a liquid withdrawal tank that has a dip tube inside the tank so liquid comes out to produce dry ice.

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

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## **Dry Ice Bag Accessory**

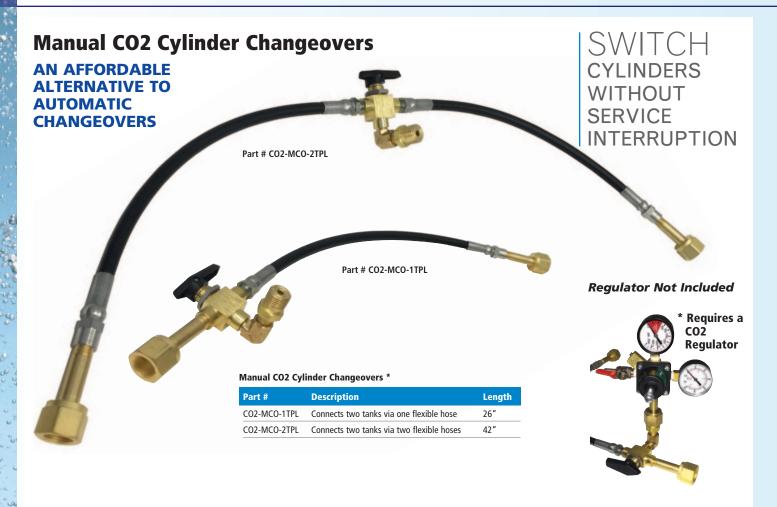
#### Catch/Storage Bag Part # DIM-BAG

This is a dual purpose bag designed to be used 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.



Part # DIM-BAG



## **Low Pressure Changeover Valve**

#### **SWITCH CYLINDERS** WITHOUT SERVICE **INTERRUPTION**

LOW COST ALTERNATIVE TO HIGH PRESSURE AND **AUTO CHANGEOVERS** 

Connect valve to the low pressure outlets of two regulators via beverage tubing and 1/4" MFL fittings.





#### **Low Pressure Changeover Valve**

Part #	Description
CO2-CV	Low Pressure Changeover Valve
CO2-CV-E	Economy Low Pressure Changeover Valve

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Part # CO2-CV

## Nitrogen Beer & Beer Regulators Soda Regulators



For Single Cylinder Use – Includes Shutoff

Valve

0-60 P.S.I.

## Nitrogen Beer Regulator 0-100 PSI Part # Description

BEV-RG580-100B Nitrogen Beer Regulator 0-100 PSI

#### Nitrogen Beer Regulator 0-60 PSI

Part #	Description
BEV-RG580-60B	Nitrogen Beer Regulator 0-60 PSI

#### Nitrogen Beer Regulator 0-160 PSI

Part #	Description
BEV-RG580-160B	Nitrogen Beer Regulator 0-160 PSI



BEV-RG580-160B



Part #

BEV-RG320-60B

Description

Beer Regulator

## Soda Regulator

For Single Cylinder Use – No Shutoff Valve

0-160 P.S.I.

#### Soda Regulator

Part #	Description
BEV-RG320-160S	Soda Regulator

#### **Replacement Gauge for CO2 Regulator**

Part #	Description
BEV-PG2LH14-2000	2" Dial, 0-2000 PSI
	1/4" LH (left hand)





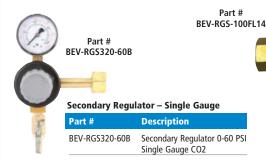
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## **Secondary Regulators** Cylinder Valve Sizing Chart for Steel & Aluminum

## **Secondary Regulators**

#### **Secondary Regulator**

Part #	Description
BEV-RGS-100FL14	Secondary Regulator 0-100
BEV-RGS-160FL14	Secondary Regulator 0-160
BEV-RGS-60FL14	Secondary Regulator 0-60



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## **Economy Replacement** Gauges

For more Gauges see page 40A-35

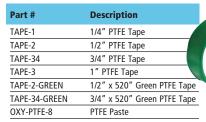


#### Low Mount Economy Gauges

	, ,
Part #	Description
PG-ELM-30	Low Mount Economy Gauge 0-30 PSI
PG-ELM-60	Low Mount Economy Gauge 0-60 PSI
PG-ELM-100	Low Mount Economy Gauge 0-100 PSI
PG-ELM-160	Low Mount Economy Gauge 0-160 PSI
PG-ELM-300	Low Mount Economy Gauge 0-300 PSI

## PTFE Paste & Tape Oxygen Safe, Chemically Inert & Odor Free

FORMULA-8 is used by thousands of welding and general supply companies and equipment manufacturers worldwide.





Gauge **Protector** 



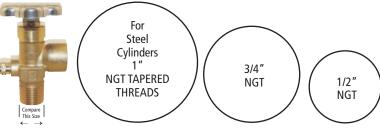
**Gauge Protector Boot** 

Part #	Description	
GP-BT	Gauge Protector Boot	

#### **VALVE SIZING CHART**

Place Valve Thread End of Valve to Match Up to Diameter on the Chart

#### STEEL CYLINDER GUIDE



**Typical Steel Cylinder Sizes** Thread Size D & E Steel Medical Tank, CO<sup>2</sup> 2-1/2#, 5#, 10# ..... 80 cu. ft. - 330, CO<sup>2</sup> 20#, 30#, 40 cu. ft., 50 lb. CO<sup>2</sup> Most other Cap Style Tank .......3/4"

This guide is for a typical valve. All Rights Reserved 2013 Not all valve and thread sizes are included. Please use this as a general guide.

#### **ALUMINUM CYLINDER GUIDE**



Typical Valve Aluminum Cylinder Medical Aluminum Cylinder Mw-M4, M6, M7, M9, D, E – 2-1/2# CO<sup>2</sup> .......750" CO2 50 lb. thru 5 lb.....

All Rights Reserved 2015 This guide is for a typical valve. Not all valve and thread sizes are included. Please use this as a general guide.

## **GSV Series: CGA 320 CO2 Cylinder Valves – 3,000 PSI**



#### GSV SERIES VALVES ARE MANUFACTURED WITH A DURABLE FORGED BRASS BODY AND PRECISELY MACHINED INTERNAL COMPONENTS TO PROVIDE YEARS OF TROUBLE FREE SERVICE



New # SHW-GSV32061-32 Old Pt # SHW-GV32061-32

New # SHW-GSV32041-28

Old Pt # SHW-GV32041-28

3/4" NGT Tapered Thread, Brass

New Part #	Old Part #	Safety
SHW-GSV32060	SHW-GV32060	NO SAFETY
SHW-GSV32061-28	SHW-GV32061-28	3000 PSI
SHW-GSV32061-32	SHW-GV32061-32	3360 PSI
SHW-GSV32061-35	SHW-GV32061-35	3775 PSI
SHW-GSV32061-38	SHW-GV32061-38	4000 PSI

3/4" NGT Tapered Thread, Chrome

New Part #	Old Part #	Safety
SHW-GSVA32061-28	SHW-GVA32061-28	3000 PSI
SHW-GSVA32061-32	SHW-GVA32061-32	3360 PSI
SHW-GSVA32061-35	SHW-GVA32061-35	3775 PSI
SHW-GSVA32061-38	SHW-GVA32061-38	4000 PSI



New Part #	Old Part #	Safety
SHW-GSV32040	SHW-GV32040	NO SAFETY
SHW-GSV32041-28	SHW-GV32041-28	3000 PSI
SHW-GSV32041-32	SHW-GV32041-32	3360 PSI
SHW-GSV32041-35	SHW-GV32041-35	3775 PSI
SHW-GSV32041-38	SHW-GV32041-38	4000 PSI

1" NGT Tapered Thread, Brass

New Part #	Old Part #	Safety
SHW-GSV32081-28	SHW-GV32081-28	3000 PSI
SHW-GSV32081-32	SHW-GV32081-32	3360 PSI
SHW-GSV32081-35	SHW-GV32081-35	3775 PSI
SHW-GSV32081-38	SHW-GV32081-38	4000 PSI

#### 1-1/8" UNF Straight Thread, Brass with Lexan Handwheels

New Part #	Old Part #	Safety
SHW-GSV32051-28LX	SHW-GV32051-28LX	3000 PSI
SHW-GSV32051-32LX	SHW-GV32051-32LX	3360 PSI
SHW-GSV32051-35LX	SHW-GV32051-35LX	3775 PSI
SHW-GSV32051-38LX	SHW-GV32051-38LX	4000 PSI



New Part #	Old Part #	Safety
SHW-GSV32051-28LX-75	SHW-GV32051-28LX-75	3000 PSI
SHW-GSV32051-32LX-75	SHW-GV32051-32LX-7	3360 PSI
SHW-GSV32051-35LX-75	SHW-GV32051-35LX-75	3775 PSI
SHW-GSV32051-38LX-75	SHW-GV32051-38LX-75	4000 PSI

5/8" UNF Straight Thread, Brass with Lexan **Handwheels** 

Old Part #	Safety
SHW-GV32051-28LX-62	3000 PSI
SHW-GV32051-32LX-62	3360 PSI
SHW-GV32051-35LX-62	3775 PSI
SHW-GV32051-38LX-62	4000 PSI
	SHW-GV32051-28LX-62 SHW-GV32051-32LX-62 SHW-GV32051-35LX-62

▲ WARNING: Cancer and Reproductive Harm – www.P65Warnings.ca.gov



New # SHW-GSV32061-32-7 Old Pt # SHW-GV32061-32-7



New # SHW-GSV32081-28 Old Pt # SHW-GV32081-28



New # SHW-GSV32051-28 Old Pt # SHW-GV32051-28

#### 3/4" NGT +4 Over Size Tapered Thread, Brass

New Part #	Old Part #	Safety
SHW-GSV32061-28-4	SHW-GV32061-28-4	3000 PSI
SHW-GSV32061-32-4	SHW-GV32061-32-4	3360 PSI
SHW-GSV32061-35-4	SHW-GV32061-35-4	3775 PSI
SHW-GSV32061-38-4	SHW-GV32061-38-4	4000 PSI

#### 3/4" NGT +7 Over Size Tapered Thread, Brass

New Part #	Old Part #	Safety
SHW-GSV32061-28-7	SHW-GV32061-28-7	3000 PSI
SHW-GSV32061-32-7	SHW-GV32061-32-7	3360 PSI
SHW-GSV32061-35-7	SHW-GV32061-35-7	3775 PSI
SHW-GSV32061-38-7	SHW-GV32061-38-7	4000 PSI

#### 3/4" NGT +7 Over Size Tapered Thread, Chrome

New Part #	Old Part #	Safety
SHW-GSVA32061-28-7	SHW-GVA32061-28-7	3000 PSI
SHW-GSVA32061-32-7	SHW-GVA32061-32-7	3360 PSI
SHW-GSVA32061-35-7	SHW-GVA32061-35-7	3775 PSI
SHW-GSVA32061-38-7	SHW-GVA32061-38-7	4000 PSI

#### 1" NGT Tapered Thread, Chrome

Part # Safet	y
V-GVA32081-28 3000	PSI
<i>V</i> -GVA32081-32 3360	PSI
<i>V</i> -GVA32081-35 3775	PSI
<i>V</i> -GVA32081-38 4000	PSI
	Part #         Safet           V-GVA32081-28         3000           V-GVA32081-32         3360           V-GVA32081-35         3775           V-GVA32081-38         4000

#### 1-1/8" UNF Straight Thread, Brass

New Part #	Old Part #	Safety
SHW-GSV32051-28	SHW-GV32051-28	3000 PSI
SHW-GSV32051-32	SHW-GV32051-32	3360 PSI
SHW-GSV32051-35	SHW-GV32051-35	3775 PSI
SHW-GSV32051-38	SHW-GV32051-38	4000 PSI

#### 3/4" UNF Straight Thread, Brass

New Part #	Old Part #	Safety
SHW-GSV32051-28-75	SHW-GV32051-28-75	3000 PSI
SHW-GSV32051-32-75	SHW-GV32051-32-75	3360 PSI
SHW-GSV32051-35-75	SHW-GV32051-35-75	3775 PSI
SHW-GSV32051-38-75	SHW-GV32051-38-75	4000 PSI

#### **Gas Tight Brass Plug & Chain Assemblies for CGA 320**

• Gas tight one piece plug and chain

Part No.	CGA No.	Description	Gas Tight Seal	S. S	U
FIT-OPC-320	320	Carbon Dioxide-RH-Internal	3000 P.S.I.G.	•	

#### Replacement **Safety Reliefs**

New # SHW-GSV32051-28LX Old Pt # SHW-GV32051-28LX

Part Number	Description	
SHW-P625-19N9-28	Sherwood GV Series	Plug Style Safety 3000 PSI
SHW-P625-19N9-32	Sherwood GV Series	Plug Style Safety 3360 PSI
SHW-P625-19N9-35	Sherwood GV Series	Plug Style Safety 3775 PSI
SHW-P625-19N9-38	Sherwood GV Series	Plug Style Safety 4000 PSI

Replacement fusible plugs also available. Old cap style available upon request. Call Customer Service for details.

## **Cylinder Siphon Tubes**

Siphon tubes are constructed from 3/8" type "K" copper tube. Each tube is fitted with a 1/4" male NPT brass fitting for easy attachment to most brass valves on the market today. Standard length is 53" OAL to fit most 250-300 cu. ft. cylinders. All ends are cut at 45° angle to allow for unrestricted flow.

Stainless Steel siphon tubes are available for higher purity gases. Custom sizes are available upon request. Call Customer Service for details.

▲ WARNING: Cancer and Reproductive Harm – www.P65Warnings.ca.gov



Cylinder Siphon Tubes

#### CST-S Standard Siphon Tube, 53" OAL Standard Siphon Tube, 48" OAL CST-C CST-C26 Standard Siphon Tube, 26" OAL

Rev: 3/9/20

## CO2 PRODUCTS Carbon Dioxide and Gas Purification

#### **Improve Carbonation**

Advanced technology now provides a filter for both solid particulate and oil mist reduction. The excellent specifications for solid particulate reduction, oil aerosols and vapor reduction translate into increased carbonation and efficiency. Provides 40 times more solid particulate holding capacity than conventional filters.

Applications include beverage carbonation and brewing operations, gas packaging, injection molding, processing, medical uses, refrigeration / chilling systems and a host of others to meet your needs.

Our modular filter design means less than half of the installation time of conventional systems plus reduced maintenance over years of use. This unique system utilizes nylon construction and will withstand high pressure – yet maintain a low pressure drop. And you'll appreciate our filter performance guarantee to enhance many years of dependable use under the most rigorous conditions.

#### Applications:

- CO2 & GAS PURIFICATION
- Beer & Beverage Carbonation
- Bottling and brewing
- Gas Packaging
- Chilling, Quick Freezing & Refrigeration
- Fire Extinguishers
- Medical & Surgical Uses
- Critical Instrumentation
- Industrial CO2 Laser Cutting & Welding
- Blending, Foaming & Injection Molding
- Micro-Elements
- Ceramics Processing
- Holography

#### Benefits:

- One Filter does it all
- No pre filter required
- Low pressure drop
- Increase Carbonation

#### Features:

- Ultra High Porosity Carbon with Micro-Structure
- Nylon construction withstands high pressure
- Modular filter design for up to 80% less installation time!
- 40 times more solid particulate holding capacity than conventional filters!

#### Specified to:

- Provide 100% 0.5-1 Micron Solid Particulate Reduction
- Provide 100% Oil Aerosols and Vapor Reduction at 61 mg/m<sup>3</sup>
- Increase Carbonation



Part #	Description
PFS-CO2	Purification System
PFS-CO2-RC	Replacement Cartridge

#### Materials of Construction:

Filter Media Hollow Carbon Housing Polypropylene

Head Proprietary reinforced nylon

#### Cartridge Specifications and Performance Data

Maximum

Dimensions 14" x 9" x 23"

Micron Rating 0.5Initial  $\Delta P$  (psi) at Flow Rate

(gpm) 8 psi @ 150 scfm

Temperature

Rating 40° to 100° F

COMPLETE LINE OF CARBON DIOXIDE DELIVERY HOSES...

Call Customer Service at 1-800-264-7793 to Fill Your Hose Needs for Your Application.

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## **CO2 CYLINDER ACCESSORIES** Quick Fill CO2 Connectors





O-Ring for CC1-STEM Part # CC1-STEM-OR



Seals - Permanent **ABC** Units Part # CC-1



Economy Seal Part # CC-P1



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



Grip-Nut 103N Part # CC1-NUT



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

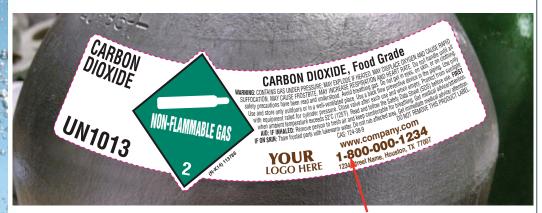
## Replacement Parts for Pt # QF-SH320 -



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Part # QF-SH320-BIR

## **Carbon Dioxide Cylinder Shoulder Labels All Labels are GHS Compliant** For Custom Imprint Labels... to Promote Your Brand

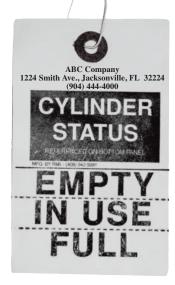


#### **Add your Custom Imprint** information here.

Cylinder Shoulder Labels (CO2 & Blended Gas)

Part #	Description	On Roll	Gas Type	UN#
GCS-CD-XXX-PK500	Shoulder Label	500	Carbon Dioxide	UN1013
GCS-CG75AR25CO2-XXX-PK500	Shoulder Label	500	Compressed Gases NOS (75% Argon, 25% CO2)	UN1956
GCS-CD-BEV-XXX-PK500	Custom Shld Label	500	Carbon Dioxide Beverage Grade	UN1013
GCS-CD-FG-XXX-PK500	Shoulder Label	500	Carbon Dioxide (Food Grade)	UN1013
GCS-CD-FGBEV-XXX-PK500	Custom Shld Label	500	CO2, Food Grade & Beverage Grade	UN1013
GCS-CG-BG60CD40NI-XXX-PK500	Shoulder Label	500	Beer Gas Com Gases NOS (60% CO2, 40% Nitrogen)	UN1956
GCS-CG-BG75NI25CD-XXX-PK500	Custom Shld Label	500	Beer Gas Com Gas NOS (75% Nitrogen, 25% CO2)	UN1956
GCS-CG-BGFG60CD40NI-XXX-PK500	Custom Shld Label	500	Beer Gas Food Grade (60% CO2, 40% Nitrogen)	UN1956
GC3-CG-DGI G00CD40INI-XXX-FK300	Custom sind Laber	300	beer das rood drade (ou /0 CO2, 40 % Nitrogen)	

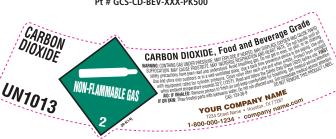
**Carbon Dioxide Cylinder Status Tags** 



Sample of Company **Information Imprint** Pt # CB-C2PFFTI



Carbon Dioxide, Beverage Grade Pt # GCS-CD-BEV-XXX-PK500



Carbon Dioxide, Food Grade & Beverage Grade Pt # GCS-CD-FGBEV-XXX-PK500



Beer Gas, Compressed Gases NOS (60% CO2, 40% Nitrogen) Pt # GCS-CG-BG60CD40NI-XXX-PK500



Compressed Gases NOS (75% Argon, 25% CO2) Pt # GCS-CG75AR25CO2-XXX-PK500

## USE CGA **DUST COVERS AND** THREAD PROTECTORS

**Use CGA Dust Cover and Thread Protectors in your** procedures - to keep dust and dirt out of the valves along with using valve shrink wrap for a package delivered that customer knows the product has not been used or tampered with.

## **Flexible Thread Protector** for CO<sub>2</sub>

• Male Thread Valves



CGA 320 Dust Cap - Red Pt # PM-2PK1000 Pt # PM-2PK100



## Ridgid Plastic with Pull Tab for CO2

• Provides thread protection





CGA 320 Male Cover - Blue Pt # PF-HB1PK1000 Pt # PF-HB1PK100





CGA 320 Male Cover - Red Pt # PF-H1PK1000 Pt # PF-H1PK100

## **Dust Cap with Strap**

Fits all CO2 tank valves. Eliminates cap and chain. Protects threads and holds washer.







CGA 320 Dust Cap - Yellow Pt # PM-C12-YPK1000 Pt # PM-C12-YPK100

CGA 320 Dust Cap - Green Pt # PM-C12-GRPK1000 Pt # PM-C12-GRPK100







CGA 320 Dust Cap - Blue Pt # PM-C12-BPK1000 Pt # PM-C12-BPK100

**CGA Plugs are available in** Packs of 1,000 (PK1000) and Packs of 100 (PK100)

Note: All colors shown are printed representations. Actual colors may vary.

## **CO2 CYLINDER ACCESSORIES** Carry Handles for Aluminum Cylinders

#### PROTECTS THE VALVE AND AIDS IN THE TRANSPORTATION OF THE CYLINDER

• KIDDE NECK = 2-3/16" diameter • LUXFER NECK = 2-3/8" diameter • CATALINA NECK = 2-5/8" diameter



Catalina® Style Pt # CCH-AC-BK AC Style: OD = 3-7/8", ID = 2-3/4"

Luxfer® Style Pt # CCH-AL-BK AL Style: OD = 3-7/8", ID = 2-1/2"



Note: All colors shown are printed representations. Actual colors may vary.

#### **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.

For 15 & 20 lb. Aluminum Cylinders

Part #	Description
CCH-AC-xx	Catalina® Style Carry Handle
CCH-AC-R	Retaining Ring for Catalina® Style Carry Handles
CCH-AL-xx	Luxfer® Style Carry Handle
CCH-AL-R	Retaining Ring for Luxfer® Style Carry Handles
CCH-AS-xx	Thread On Style Carry Handle

#### Ordering Information:

Replace xx in the part number with the color codes below Black - BK, Blue - B, Red - RR, Yellow - Y, Green - GR,

## **Kidde Style Aluminum Cylinder Carry Handles**



## **Premium Carry Handles**



AC Style: OD = 3-7/8", ID = 2-3/4" AL Style: OD = 3-7/8", ID = 2-1/2"

#### **Premium Carry Handles**

Part #	Description
CHP-AC-BK	Catalina Style Cylinder Premium Carry Handle and Retaining Ring, Black
CHP-AL-BK	Luxfer Style Cylinder Premium Carry Handle and Retaining Ring, Black



AC Style: OD = 3-7/8", ID = 2-3/4"

#### **Premium Carry Handles that Pass DOT Drop Test**

Part #	Description
CHPDT-AC-BK	Catalina style Cylinder Premium Carry Handle Passes DOT Drop Test and Retaining Ring, Black

#### **Installing Carry Handles** for Aluminum Cylinder







3

## **CO2 CYLINDER ACCESSORIES** Steel Cylinder Accessories



Handle & snap ring with steel cylinder adapter. Allows addition of plastic carrying handle to steel cylinders.

(Adapter comes with set screws.)

> Part # Description CCH-118 Conversion Kit 1.9"













Description	Part # for Pack of 100	Part # Pack of 10	
PTFE Seals for CO2	CO2-TWSEALPK100	CO2-TWSEALPK10	
FIBRE, 320/330	PH-320WFPK100	PH-320WFPK10	_

Part # for Pkg. of 1000

CB-EPTPK1000

CB-1EPTIPK1000

Description

String Tie

Elastic Tie

Part # for Pkg. of 100

(Pt # CB-EPTPK100)

(Pt # CB-1EPTIPK100)

Pt # CB-EPT

The String Tie does not

stretch or loop around

the cylinder.

## **Cylinder Boots**

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

> **Molded Plastic** Cylinder Boot, 8" Diameter Part # CO2-C8



Octagonal **Steel Cylinders** with round bottom Part # CO2-CDB-SO7



**Round Rim Aluminum Cylinders** with flat bottom Part # CO2-CDB-AR7

Diameter	Rim	Cylinder Type
7.25" Dia	Octagonal	Aluminum Cylinders (flat bottom)
7.25" Dia	Round Rim	Aluminum Cylinders (flat bottom)
7.25" Dia	Octagonal	Steel Cylinders (round bottom)
7.25" Dia	Round Rim	Steel Cylinders (round bottom)
8" Dia	Octagonal	Aluminum Cylinders (flat bottom)
8" Dia	Round Rim	Steel Cylinders (round bottom)
8" Dia	Round Rim	Older, Round bottoms to free stand
	7.25" Dia 7.25" Dia 7.25" Dia 7.25" Dia 8" Dia 8" Dia	7.25" Dia Octagonal 7.25" Dia Round Rim 7.25" Dia Octagonal 7.25" Dia Round Rim 8" Dia Octagonal 8" Dia Round Rim

## **High Pressure Cylinder Caps**



Caps Painted Black 6 1/2" - 3 1/8-11

**INSIDE CAP** 

**THREADS** 

Fine Thread: 11 threads

to an inch

Coarse

Thread:

7 threads to an inch. Cap I.D. is 3 1/4

**CYLINDER** 



**Caps Unpainted** 6 1/2" - 3 1/8-11

#### **MOST COMMON** Fine Thread

Unpainted **High Pressure Cylinder Caps** 

-		
Part #	Description	
8FRNP	Fine Thread	
8CRNP	Coarse Thread	

#### Painted - Fine Thread

	Part #	Color
•	8FRNP-08	White
•	8FRNP-02	Black
•	8FRNP-06	Gray
•	8FRNP-MGR	Green Medical

#### Painted – Coarse Thread

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

▲ WARNING: Products in this catalog can expose you to chemicals including lead which is known to the State of California to cause cancer, birth defects or reproductive harm. For more information, go to https://www.p65warnings.ca.gov

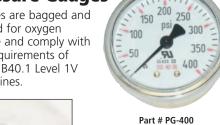


## **Cylinder Cap and Regulator Inlet Nut Wrench**



**Dewar Rear Mount Pressure Gauges** 

Gauges are bagged and tagged for oxygen service and comply with the requirements of ASME B40.1 Level 1V clean lines.



Packaged Gauge



Part # RL2.0-TWIST

#### 1/4" NPT Rear Mount Pressure Gauges

Part #	PSI	Description	
PG-60	0-60 PSI	2" Dial, ¼" NPT Rear Mount Pressure Gauges	
PG-100	0-100 PSI	2" Dial, ¼" NPT Rear Mount Pressure Gauges	
PG-400	0-400 PSI	2" Dial, ¼" NPT Rear Mount Pressure Gauges	
PG-600	0-600 PSI	2" Dial, ¼" NPT Rear Mount Pressure Gauges	
RL2.0-TV	VIST	Replacement Lens, 2" Face, Twist On	

**Stainless Steel Gauges** 

These stainless steel gauges with their rugged construction provide resistance to the most corrosive media and environments. The gauges feature 316 stainless steel wetted parts and 304 stainless steel case and crimped ring, and can be liquidfilled in the field.



#### Standard Ranges / PSI & Part # - Gauge Stainless Steel

Press. Scale / PSI	Part #	Description
30"-0-30 psi	PG-SS3030	Lower Mount – 30"-0-30 psi
30"-0-60 psi	PG-SS3060	Lower Mount – 30"-0-60 psi
15 psi	PG-SS15	Lower Mount – 15 psi
30 psi	PG-SS30	Lower Mount – 30 psi
60 psi	PG-SS60	Lower Mount – 60 psi
100 psi	PG-SS100	Lower Mount – 100 psi
200 psi	PG-SS200	Lower Mount – 200 psi
400 psi	PG-SS400	Lower Mount – 400 psi
600 psi	PG-SS600	Lower Mount – 600 psi
1000 psi	PG-SS1000	Lower Mount – 1000 psi
2000 psi	PG-SS2000	Lower Mount – 2000 psi
3000 psi	PG-SS3000	Lower Mount – 3000 psi
5000 psi	PG-SS5000	Lower Mount – 5000 psi
10000 psi	PG-SS10000	Lower Mount – 10000 psi

#### Steel – **Painted** Gauges

These Gauges have a Painted Steel Case and are 1/4" Male NPT with Lower Mount and Dual Scale Dial.



Part # PGSP-LM60

#### 2" Diameter Gauge, Gold Painted Steel

Part #	PSI Range
PGSP-LM30R	0-30 PSI with Red Line
PGSP-LM60	0-60 PSI
PGSP-LM100	0-100 PSI
PGSP-LM200	0-200 PSI
PGSP-LM300	0-300 PSI
PGSP-LM400	0-400 PSI
PGSP-LM600	0-600 PSI
PGSP-LM1500	0-1500 PSI
PGSP-LM3000	0-3000 PSI
PGSP-LM4000	0-4000 PSI
PGSP-LM6000	0-6000 PSI

#### See page 32A-3 for **Nitrile Latex-Free Gloves**

#### 1 1/2" Diameter Gauge, Painted Steel

Part #	PSI Range
PGSP-LM30R15	0-30 PSI with Red Line
PGSP-LM10015-GR	0-100 PSI – Green Case
PGSP-LM20015-GR	0-200 PSI – Green Case
PGSP-LM40015-RD	0-400 PSI – Red Case
PGSP-LM400015-GR	0-4000 PSI – Green Case



Part # PGSP-LM10015-GR



Part # PGSP-LM40015-RD

## **Brass – Dual Scale Gauges**

These Gauges have a Brass Case and are 1/4" Male NPT with lower mount, dual scale.

#### 2" Diameter Dual Scale Gauge

Part #	PSI Range
PG-LM30R	0-30 PSI w/ Red Line
PG-LM100	0-100 PSI
PG-LM200	0-200 PSI
PG-LM400	0-400 PSI
PG-LM600	0-600 PSI
PG-LM3000	0-3000 PSI
PG-LM4000	0-4000 PSI



2 1/2" Diameter Dual Scale Gauge

Part #	PSI Range
PG-LM3025R	0-30 PSI w/ Red Line
PG-LM10025	0-100 PSI
PG-LM20025	0-200 PSI
PG-LM40025	0-400 PSI
PG-LM60025	0-600 PSI
PG-LM300025	0-3000 PSI
PG-LM400025	0-4000 PSI
PG-LM600025	0-6000 PSI



- Stainless Steel Case & **Crimp Ring**
- Field Liquid-Fillable
- Welded Connection on 2 1/2" Size
- Cleaned for Oxygen Service

Certified Gauges Available, Call for **Details** 

Part # PG-LM40025

## Brass – Single Scale Gauges

These Gauges have a Brass Case and are 1/4" Male NPT with lower mount, single scale.



2" Diameter Single Scale Gauge

Part #	PSI Range
PG-LMS30R	0-30 PSI with Red Line
PG-LMS100	0-100 PSI
PG-LMS200	0-200 PSI
PG-LMS400	0-400 PSI
PG-LMS4000	0-4000 PSI

#### 2 1/2" Diameter Single Scale Gauge

Part #	PSI Range
PG-LMS3025R	0-30 PSI with Red Line
PG-LMS10025	0-100 PSI
PG-LMS20025	0-200 PSI
PG-LMS40025	0-400 PSI
PG-LMS60025	0-600 PSI
PG-LMS400025	0-4000 PSI

▲ WARNING: Products in this catalog can expose you to chemicals including lead which is known to the State of California to cause cancer, birth defects or reproductive harm. For more information, go to https://www.p65warnings.ca.gov

## TAMPER EVIDENT **SOLUTIONS FOR BEVERAGE CO2**



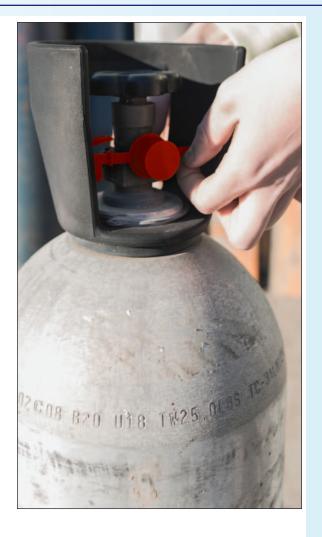
**Beverage Grade CO2** Valve Wrap - Imprint **White Material** 

Pt # SW-CO2-BG-PK200



Food Grade CO2 Valve Wrap - Imprint **White Material** 

Pt # SW-CO2-FG-PK200



## TAMPER EVIDENT **CGA-320 DUST COVER**







Tightening the strap down



Breaking tamper evident seal - removing dust cover

#### **Tamper Evident CGA-320 Dust Cover**

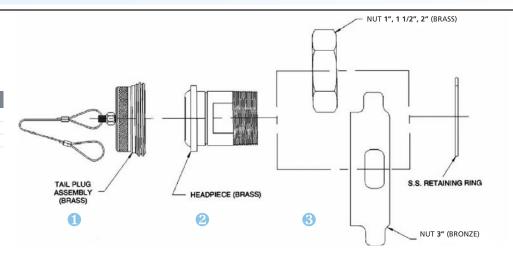
Part #	Description
HP-WQP320PK100	Tamper Evident CGA-320 Dust Cover, Red - Pack of 100
HP-WQP320PK1000	Tamper Evident CGA-320 Dust Cover, Red - Pack of 1,000

## Carbon Dioxide Hose End Assembly

Part Number	Size
BHEA-CO2-100	1"
BHEA-CO2-150	1 1/2"
BHEA-CO2-200	2"

#### **Complete Unit Includes:**

- Dust Plug Assembly
- 2 Head Piece
- **8** Nut



## Tail Dust Plug Assembly CO2 Brass

#### Material

Brass Bar per ASTM-B16, with Stainless Steel Safety Cable



Part Number	Size
BH-DP-100-CO2	1"
BH-DP-150-CO2	1 1/2"
BH-DP-200-CO2	2"
BH-DP-300-CO2	3"

#### Head Piece Carbon Dioxide (Brass)

# B NPT



#### Materials

Forged Brass per ASTM B283 for 1" and 1 1/2" sizes Brass Bar per ASTM B16 for 2", 3" and 4" sizes

			А		В		Wrench C	-Flats
Part Number	Size	NPT	Inches	MM	Inches	MM	Inches	MM
HPT-CO2-100	1"	1-11 1/2	2.625	66.7	1.500	38.1	1.187	30.1
HPT-CO2-150	1 1/2"	1 1/2-11 1/2	2.750	69.9	2.085	53.0	1.687	42.8
HPT-CO2-200	2"	2-11 1/2	3.156	80.2	2.875	73.0	2.125	54.0
HPT-CO2-300	3"	3-8	4.187	106.3	4.250	108.0	3.250	82.6

#### 1", 1 1/2", and 2" Hose Nut Carbon Dioxide (Brass)

Material

Brass Bar per ASTM B16



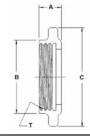


			Hex					
		"T"	Α	Α		В		
Part Number	Size	Thread Size	Inches	MM	Inches	MM	Materials	
BHN-CO2-100	1"	1 11/16-6 Acme	1.10	28.0	2 1/4	57.2	Brass	
BHN-CO2-150	1 1/2"	2 1/4-6 Acme	1.10	28.0	2 3/4	69.9	Brass	
BHN-CO2-200	2"	3 3/16-6 Acme	1.25	31.8	3 3/4	95.3	Brass	
BHN-CO2-100L	1"	1 11/16-6 Acme	1.10	28.0	2 3/4	69.9	Brass	

#### 3" Hose Nut Carbon Dioxide (Cast High Strength Magnesium Bronze)

Material

Cast High Strength Magnesium Bronze per ASTM B584



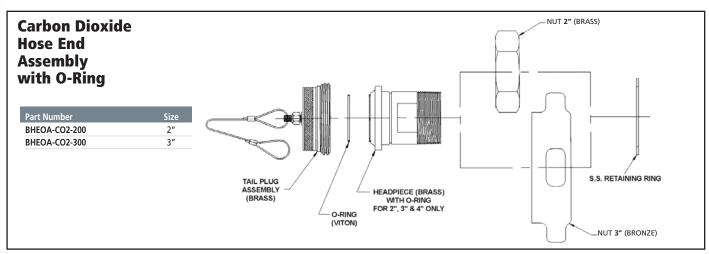
		"T"	A		В		С	
Part Number	Size	Thread Size	Inches	MM	Inches	MM	Inches	MM
BHN-CO2-300-HS	3"	4 1/2-6 Acme	1.50	38.1	5	127.0	6.75	171.5

#### Retaining Rings for Hose End Assemblies



Part Number	Size	Inches	MM	Inches	MM	Inches	MM	Material
BHRR-100	1"	1.214	30.84	.050	1.27	.078	1.98	Stainless Steel
BHRR-150	1 1/2"	1.819	46.20	.062	1.57	.125	3.18	Stainless Steel
BHRR-200	2"	2.197	55.80	.078	1.98	.125	3.18	Stainless Steel
BHRR-300	3"	3.552	90.22	.120	3.048	.187	4.75	Zinc Plated Steel

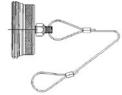
Rev: 5/19/20



#### **Tail Dust Plug Assembly CO2 Brass**

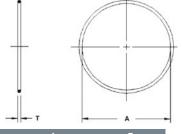
Material

Brass Bar per ASTM-B16, with Stainless Steel Safety Cable



Part Number	Size
BH-DP-200-CO2	2"
BH-DP-300-CO2	3"

## **O-Ring for Head Piece** with **O-Ring Option** (Viton)

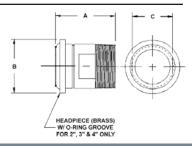


		A	١	T		
Part Number	Size	Inches	MM	Inches	MM	
HPT-OR200	2"	1.989	50.52	.063	1.78	
HPT-OR300	3″	2.987	75.87	.094	2.62	

#### **■** Head Piece Carbon Dioxide with O-Ring Groove

Materials

Brass Bar per ASTM B16



			1	4	В		С	
Part Number	Size	NPT	Inches	MM	Inches	MM	Inches	MM
HPTO-CO2-200	2"	2-11 1/2	3.156	80.2	2.875	73.0	2.125	54.0
HPTO-CO2-300	3"	3-8	4.187	106.3	4.250	108.0	3.250	82.6

#### 2" Hose Nut **Carbon Dioxide** (Brass)

Material

Brass Bar per ASTM B16





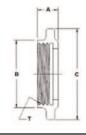
		"T"	Hex A B				
Part Number	Size	Thread Size	Inches	MM	Inches	MM	Materials
BHN-CO2-200	2"	3 3/16-6 Acme	1.25	31.8	3 3/4	95.3	Brass

#### 3" Hose Nut **Carbon Dioxide** (Cast High Strength

**Magnesium Bronze**)

Material

Cast High Strength Magnesium Bronze per ASTM B584

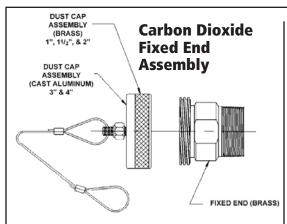


		"T" A		4		В	С	
Part Number	Size	Thread Size	Inches	MM	Inches	MM	Inches	MM
BHN-CO2-300-HS	3"	4 1/2-6 Acme	1.50	38.1	5	127.0	6.75	171.5

#### Retaining Rings for **Hose End Assemblies**



		Į.	4	1			4	
Part Number	Size	Inches	MM	Inches	MM	Inches	MM	Material
BHRR-200	2"	2.197	55.80	.078	1.98	.125	3.18	Stainless Steel
BHRR-300	3″	3.552	90.22	.120	3.048	.187	4.75	Zinc Plated Steel

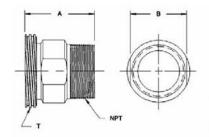


Part Number	Size	Dust-Cap Material
FEA-CO2-100	1"	Brass
FEA-CO2-150	1 1/2"	Brass
FEA-CO2-200	2"	Brass
FEA-CO2-300	3″	Cast Aluminum

## Carbon Dioxide Fixed End Brass

#### Materials

Forged Brass per ASTM B283 for 1" and 1 1/2" sizes Brass Bar per ASTM B16 for 2", 3" and 4" sizes



						Wrench-	Flats
			"T"	A		В	
Part Number	Size	NPT	Thread-Size	Inches	MM	Inches	MM
FE-CO2-100	1″	1-11 1/2	1.687-6 Acme	2.500	63.5	1.375	34.9
FE-CO2-150	1 1/2"	11/2-11 1/2	2.250-6 Acme	2.500	63.5	2.000	50.8
FE-CO2-200	2"	2-11 1/2	3.187-6 Acme	3.000	76.2	2.500	63.5
FE-CO2-300	3"	3-8	4.500-6 Acme	4.062	103.2	3.625	92.1

## Carbon Dioxide Dust Cap Assembly

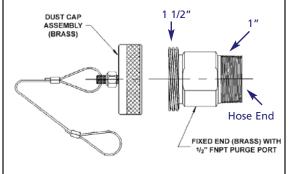


#### Materials

Brass Bar per ASTM B16, with Stainless Steel Safety Cable for 1", 1 1/2" and 2" sizes Aluminum Bar per ASTM B-221, with Stainless Steel Safety Cable for 3" and 4" sizes

Part Number	Size	Material
BH-DCA-100-CO2	1"	Brass
BH-DCA-150-CO2	1 1/2"	Brass
BH-DCA-200-CO2	2"	Brass
BH-DCA-300-CO2	3″	Aluminum

## Carbon Dioxide Fixed End Assembly with 1/2" FNPT Purge Ports

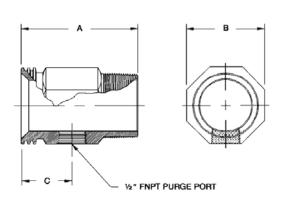


		Dust-Cap
Part Number	Size	Material
FEPPA-CO2-100	1"	Brass
FEPPA-CO2-150	1 1/2"	Brass

# Carbon Dioxide Fixed End with 1/2" FNPT Purge Ports (Brass)

Materials

Brass Bar per ASTM B16



						Wrenc	:h-Flats		
			"T"	l l	4		В	C	
Part Number	Size	NPT	Thread Size	Inches	MM	Inches	MM	Inches	MM
FEPP-CO2-100	1"	1-11 1/2	1.687-6 Acme	4	101.6	1 3/4	44.5	2 7/16	61.9
FEPP-CO2-150	1 1/2"	1 1/2-11 1/2	2.250-6 Acme	4	101.6	2 3/8	60.3	2 7/16	61.9

#### Carbon Dioxide Dust Cap Assembly



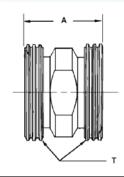
#### Materials

Brass Bar per ASTM B16, with Stainless Steel Safety Cable for 1" and 1 1/2" sizes

Part Number	Size	Material
BH-DCA-100-CO2	1"	Brass
BH-DCA-150-CO2	1 1/2"	Brass

Male to Male Adapter to Connect Two or More Lengths of Hoses (Brass)

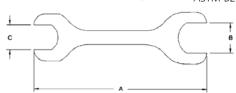




		A		"T"	Wrench-Fla		
Part Number	Size	Inches	MM	Thread-Size	Inches	MM	
BMA-100-CO2	1"	3.375	85.7	1.687-6 Acme	1.375	34.9	
BMA-150-CO2	1 1/2"	3.375	85.7	2.250-6 Acme	2.000	50.8	
BMA-200-CO2	2"	3.375	85.7	3.187-6 Acme	2.500	63.5	
BMA-300-CO2	3"	3.375	85.7	4.500-6 Acme	3.625	92.1	
BMA-150/200-CO2	2"-1 1/2"	3.375	85.7	3.187-6 Acme 2.250-6 Acme	2.500	63.5	
BMA-100/150-CO2	1 1/2"-1"	3.375	85.7	2.250-6 Acme 1.687-6 Acme	2.000	50.8	

## **Open End Wrenches** (Aluminum Anodized)

Material – Cast Aluminum per ASTM B26

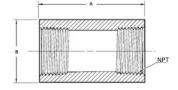


		Α			3	C	
Part Number	Fits	Inches	MM	Inches	MM	Inches	MM
BFAW-100/150-NUT	1" & 1 1/2" Nut	16	406.4	2 3/4	69.9	2 1/4	57.2
BFAW-100/150-FXE	1" & 1 1/2" FE*	16	406.4	1 3/8	34.9	2	50.8
BFAW-100/200-FXE	1" & 2" FE*	16	406.4	1 3/8	34.9	2 1/2	63.5
BFAW-100/200-NUT	1" & 2" Nut	20	508.0	2 1/4	57.2	3 3/4	95.3
BFAW-200NUT200FXE	2" Nut / 2" FE*	20	508.0	3 3/4	95.3	2 1/2	63.5
BFAW-150/200-NUT	1 1/2" & 2" Nut	20	508.0	3 3/4	95.3	2 3/4	69.9

<sup>\*</sup> FE = Fixed End

#### **Full Coupling to Adapt NPT Male Hoses** (304 Stainless Steel)

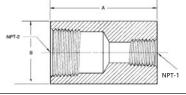
Material – Type 304 Stainless Steel per ASTM A276



	Hose		,	4	E	3
Part Number	Size	NPT	Inches	MM	Inches	MM
BFC-F1	1″	1-11 1/2	1.937	49.2	1.562	39.7
BFC-F12	1 1/2"	1 1/2-11 1/2	2.125	54.0	2.188	55.6
BFC-F2	2"	2-11 1/2	2.50	63.5	2.75	69.9

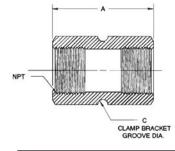
#### **Reducing Couplings to Adapt NPT Male Hoses** (304 Stainless Steel)

Material – Type 304 Stainless Steel per ASTM A276



		Hose			l l	A		В
RRC-F1F112 1 1/2" 1-11 1/2 1 1/2-11 1/2 2 125 54.0 2 188 5	Part Number	Size	NPT 1	NPT 2	Inches	MM	Inches	MM
BRETHTIE 1 1/2 1 11 1/2 1 1/2 1 1/2 2.125 31.0 2.100 3	BRC-F1F112	1 1/2"	1-11 1/2	1 1/2-11 1/2	2.125	54.0	2.188	55.6
<b>BRC-F112F2</b> 2" 1 1/2-11 1/2 2-11 1/2 2.50 63.5 2.75 6	BRC-F112F2	2"	1 1/2-11 1/2	2-11 1/2	2.50	63.5	2.75	69.9

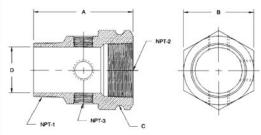
#### Hex Brass Coupling to Adapt Tanks for Fixed End Material – Brass per ASTM B16





	Hose		A		В		С	
Part Number	Size	NPT	Inches	MM	Inches	MM	Inches	MM
BCH-F1	1"	1-11 1/2	2.50	63.5	1.75 Hex	44.5	1.72	43.7
BCH-F112	1 1/2"	1 1/2-11 1/2	2.50	63.5	2.50 Hex	63.5	2.47	62.7
BCH-F2	2"	2 -11 1/2	2.50	63.5	3.00 Hex	76.2	2.97	73.7

## **Hex Brass Bushing with 3 Purge Ports to Adapt Trailers for Fixed End**



Material – Brass per ASTM B16 shipped complete with two 1/2" Brass Pipe Plugs	Material – Brass	per ASTM B16 shipr	ped complete with two	1/2" Brass Pipe Plugs
---	------------------	--------------------	-----------------------	-----------------------

			NPT		А		В		С		D	
Pt Number	Size		2		Inches	MM	Inches	MM	Inches	MM	Inches	MM
BCH-PP-F112M112	1 1/2"	1 1/2-11 1/2	1 1/2-11 1/2	1/2-14	4.250	107.9	2.500*	63.5	2.47	62.7	1.50	38.1
BCH-PP-F2M112	2"	2-11 1/2	1 1/2-11 1/2	1/2-14	4.250	107.9	2.500*	63.5	2.47	62.7	1.50	38.1
BCH-PP-F2M2	2"	2-11 1/2	2-11 1/2	1/2-14	4.250	107.9	3.000*	76.2 *Hex	2.97	73.7	2.00	50.8

#### **Carbon Dioxide Specifications**

Service Pressure: 1800psi/124bar

Specification: DOT-3AL & TC-3ALM designed

ISO design cylinders are available

Alloy: Manufactured from high strength aluminum alloy 6061-T6

Threads: 5LB & larger supplied with

> 1.125-12 UNF thread, all others with .750-16 UNF thread

Other thread sizes available

upon request

**Markings:** As required by specification,

inclusive of tare weight

Additional markings available

upon request

Standard finish is brushed body Finish:

with unpainted crown

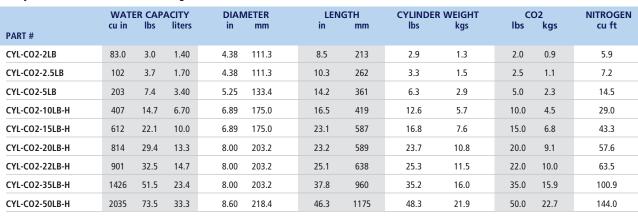
**Graphics:** Logos or labels in silkscreen or

Duragrafix available upon request



NOTE: Cylinders have D.O.T. approval to be filled with several gases including NITROGEN, BLENDED GAS, etc. Check with your local filler or welding supply. Fillable up to 1800 PSI

#### CO2 Cylinders - Aluminum 1800 PSI Working Pressure



10 LB thru 50 LB come with Carry Handles.

▲ WARNING: Cancer and Reproductive Harm – www.P65Warnings.ca.gov

## **Cylinder Painting and Stamping** for Easy Identification

Call us today to have your cylinders PAINTED and STAMPED for easy identification.

- 1 Choose Your Style & Color
- 2 Choose Your Stamp Use any combination of letters and numbers



## **ALUMINUM INDUSTRIAL CYLINDERS** Industrial & Specialty Gas

## **Aluminum Industrial Cylinders**

Preferred cylinder package for specialty gas, exotic gas and high-purity gas mixtures.

#### Features

- Lightweight, high strength 6061-T6 alloy
- Corrosion-resistant interior and exterior
- Stringent internal cleaning process ensures compliance with customer specifications
- Available with straight or tapered threads
- Uses Industrial CGA540, 580 or comparable valve, sold
- Wide color range available, including a durable, brushed

#### Manufactured to DOT and TC requirements

- U.S. Department of Transportation (DOT) 3AL
- Transport Canada (TC) 3ALM
- Every cylinder inspected and tested by DOT- and TC-authorized independent agency
- Cycle-tested in excess of 100,000 cycles at service
- Minimum burst pressure tested to 2.5 times service pressure without failure



Note: Cylinder colors may vary from photo.

## **Industrial and Specialty Gas Cylinders – Aluminum**

PART #	Serv Pres PSI			ater pacity LITERS	Dia:	meter MM	Len IN	igth MM		nder ight KGS	Ox; LBS	ygen KGS	Nitrogen CU. FT.
CYL-I4	2216	153	1.5	0.7	3.21	81.5	8.7	221	1.7	0.8	4.0	113	3.7
CYL-I6	2216	153	2.3	1.0	3.21	81.5	11.8	300	2.3	1.0	6.0	170	5.6
CYL-I22	2216	153	8.5	3.9	5.25	133.4	16.3	414	8.2	3.7	22.0	623	20.4
CYL-I24	2015	139	10.2	4.6	4.38	111.3	25.4	645	7.8	3.5	24.0	680	22.0
CYL-I33	2216	153	13.0	5.9	6.89	175.0	15.3	388	13.8	6.3	33.7	954	31.2
CYL-I48	2216	153	18.6	8.4	5.25	133.4	32.2	818	15.2	6.9	48.2	1365	44.6
CYL-160	2216	153	23.2	10.5	7.25	184.2	22.9	582	22.3	10.1	60.0	1699	55.4
CYL-190	2216	153	34.7	15.7	7.25	184.2	32.6	828	30.4	13.7	90.0	2549	82.9
CYL-I122	2216	153	47.1	21.4	8.00	203.2	36.2	919	40.3	17.9	122.0	3455	113.0
CYL-I20L	2900	200	44.1	20.0	8.00	203.2	36.9	937	49.5	22.5	149.0	4219	137.0
CYL-I150	2015	139	63.7	28.9	8.00	203.2	47.2	1198	49.2	22.3	150.0	4248	138.8
CYL-1265	2216	153	102.2	46.4	9.80	248.9	51.7	1313	84.7	38.4	265.0	7503	245.0

▲ WARNING: Products in this catalog can expose you to chemicals including Lead which is known to the State of California to cause cancer, birth defects or reproductive harm. For more information, go to https://www.p65warnings.ca.gov

# 20 lb. Cylinder Storage / Transportation Racks

#### **FEATURES:**

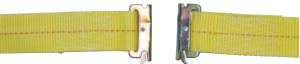
- Meets DOT Regulations for safe and efficient storage and transportation of compressed gases when used with E-Track Strap
- Rigid welded frames construction
- Racks are forkliftable from front or side and are stackable
- E-Track Sides to use with Logistics E-Track Straps



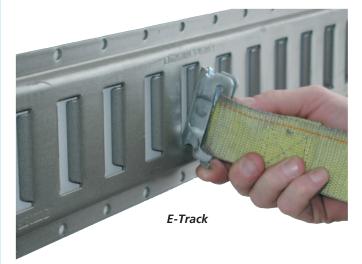
#### 20 lb. Cylinder Storage / Transportation Racks

Part #	Description	Overall Dimensions	<b>Empty Rack Weight</b>
CSC-STR20-16	16-Cylinder Stackable	36"D x 37"W x 36"H	152 lbs.
TSK-E4-012	E-Track Strap – 4 foot long		





## **E-Track & E-Track Restraints**

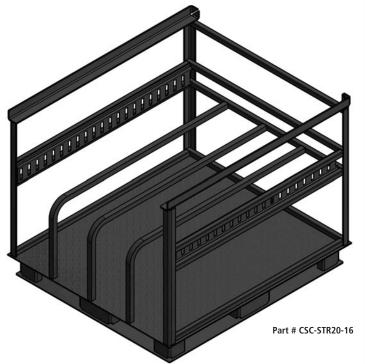


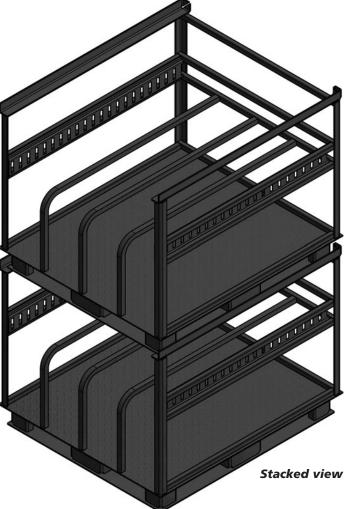
**E-Track & E-Track Restraints** 

Part #	Description
TSK-E12	12' E-Track Strap, Standard
TSK-E20	20' E-Track Strap, Standard

**E-Track Sections for Truck Trailers** 

Part #	Description
TS-ETRACK	10' Sections
TS-ETRACK60	5' Sections
TS-ENDCAP	End Cap





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## **Dry Ice Poly Boxes**

## **Dry Ice Poly Boxes**

Dry ice poly boxes provide a wide variety of USDA approved insulated dry ice storage boxes for use with dry ice pellets, discs, slices or blocks. Our line of high-quality polyethylene storage containers are designed specifically for holding and transporting items that require dry ice or wet ice. The boxes are built to withstand the extreme cold temperatures of dry ice while retaining the durability needed for everyday operation.



#### **FEATURES**

- Made of double-wall polyethylene that is filled with urethane foam insulation
- Virtually unbreakable in daily operations
- Lightweight and durable for easy mobility
- Maintains critical temperatures for your laboratory specific materials
- Ideal for CO2 cleaning, frozen food, medical & laboratory applications
- Casters are available for easy maneuverability
- Hinged lids with latches
- Available with or without drains
- Optional casters available on some models



Part # TM-TSP-11 with casters (sold separately)



Part # TM-TSP-04



Part # TM-TSP-19

Part #	External Dimensions	Internal Dimensions	Approximate Empty Weight	Dry Ice Block	Volume	Dry Ice Pellet Capacity
TM-TSP-04	26" x 16" x 33"	22" x 12" x 26"	43 lbs.	4 Blocks	4 CF	208 lbs.
TWI-TSP-04	66.04 x 40.64 x 83.82 cm	55.88 x 30.48 x 66.04 cm	19.5 kg		.116 m³	
TM-TSP-11	40" x 28" x 43"	35.5" x 21" x 24"	110 lbs.	12 Blocks	11 CF	520 lbs.
TIVI-TSP-TT	101.6 x 71.12 x 109.22 cm	90.17 x 53.34 x 60.96 cm	49.9 kg		.320 m³	
TM-TSP-13	36.5" x 36.5" x 33.75"	30.5" x 30.5" x 24"	130 lbs.	18 Blocks	13 CF	675 lbs.
	92.71 x 92.71 x 86.36 cm	77.47 x 77.47 x 60.96 cm	58.98 kg		.378 m³	
TM TCD 10	47.5" x 43" x 31.5"	41.5" x 37" x 21.5"	165 lbs.	24 Blocks	19 CF	990 lbs.
TM-TSP-19	120.65 x 109.22 x 80.01 cm	105.41 x 93.98 x 54.61 cm	74.84 kg		.553 m³	
TM TCD 27	47.5" x 43" x 39.75"	41.5" x 37" x 30"	204 lbs.	36 Blocks	27 CF	1,400 lbs.
TM-TSP-27	120.65 x 109.22 x 100.97 cm	105.41 x 93.98 x 76.20 cm	92.53 kg		.786 m³	
TM-TSP-30	47.5" x 43" x 41.5"	41.5" x 37" x 31"	220 lbs.	36 Blocks	30 CF	1,450 lbs.
	120.65 x 109.22 x 109.95 cm	107.95 x 93.98 x 78.74 cm	99.79 kg		.873 m³	
TM-TSP-34	56.75" x 46.75" x 36"	51" 41" x 28"	200 lbs.	40 Blocks	34 CF	1,800 lbs.
	144.15 x 118.75 x 91.44 cm	129.54 x 104.14 x 71.12 cm	90.72 kg		.9894 m³	

## **Standard Surface Mount Fill Box**



Complete with CO2 Fill Nipple, 3/8" vent elbow and lockable catch or turnkey thumb lock.

Part Number	Connection
FB-SUR-58	5/8" Flare
FB-SUR-12	1/2" FPT
FB-SUR-34	3/4" FPT

#### **CO2 Fill Box Overview**

- Durable 16 Gauge 304 Stainless Steel Construction
- Surface or Flush (recessed) **Mount Fill Boxes**
- **Extension Boxes for Fill** Lines Installed on Exterior **Building Walls**
- Field Replaceable CO2 Fill Plates
- Lockable or Keyless Fill Box Closures
- Available CO2 Nipples:
  - 5/8" Flare x Liquid CO2 Fill Nipple
  - 1/2" FPT x Liquid CO2 Fill Nipple
  - 3/4" FPT x Liquid CO2 Fill Nipple

#### "Classic" Flush Mount Fill Box



Hidden from view, this recessed fill box makes for an architecturally pleasing installation, while allowing easy access for fill and maintenance.



Part Number	Connection
FB-FLS-58	5/8" Flare
FB-FLS-12	1/2" FPT
FB-FLS-34	3/4" FPT
	.,

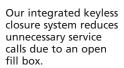


## **Standard Surface Mount Fill Box with Removable Plate**

The removable plate makes for an easier installation or quick CO2 Fill Nipple replacement.

Part Number	Connection
FB-SUR-RP-58	5/8" Flare
FB-SUR-RP-12	1/2" FPT

## **Keyless Standard** Surface Mount **Fill Box**





Part Number	Connection
FB-SURKL-58	5/8" Flare
FB-SURKL-12	1/2" FPT
FB-SURKL-34	3/4" FPT

## **Flush Mount Conversion Plate**

This stainless steel plate is used to convert a "Classic" Flush Mount to a Standard Surface Mount Fill Box installation (fill box sold separately).



## Surface Mount Cover Plate NOT SHOWN

A stainless steel plate that covers the opening left by a Standard Surface Mount Fill Box that has been removed.

Part Number	Description
FB-FLS-CONPLT	Flush Mount Conversion Plate
FB-SUR-COVPLT	Surface Mount Cover Plate

## **Standard Surface Mount Fill** Box **Extension** Kit



This fill box combination allows the ability to run the fill and vent lines in any direction along the outer building wall. The kit includes the Standard Surface Mount Fill Box, 1/2" 90° Fitting and mounting screws.

## Standard Surface **Mount Fill Box Extension Only**

Compatible with the Standard Surface Mount Fill Box (Part # FB-SUR-12 sold separately). The 1/2" 90° Fitting and mounting screws are included.



Part Number	Description
FB-EXKIT-SUR-12	Standard Surface Mount Fill Box Extension Kit
FB-EX-SUR	Standard Surface Mount Fill Box Extension Only

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# reliably RATERMANN

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Bulkhead Adapter	21D 21D-4 21D-21 21D 20-22 21D-7 7-11, 18-22 21D 13-16 21D-17 21D-17 21D-6 21D-9 21D-16
Bulkhead Adapter	21D 21D-4 21D-21 21D 20-22 21D-7 7-11, 18-22 21D 13-16 21D-17 21D-6 21D-9 21D-16 21D-5
Bulkhead Adapter	21D 21D-4 21D-21 21D 20-22 21D-7 7-11, 18-22 21D 13-16 21D-17 21D-16 21D-9 21D-16 21D-5 21D-3 21D 18-19
Bulkhead Adapter	21D 21D-4 21D-21 21D 20-22 21D-7 7-11, 18-22 21D 13-16 21D-17 21D-16 21D-9 21D-16 21D-5 21D-3 21D 18-19 21D 23-26
Bulkhead Adapter	21D 21D-4 21D-21 21D 20-22 21D-7 7-11, 18-22 21D 13-16 21D-17 21D-16 21D-5 21D-3 21D 18-19 21D 23-26 21D-11
Bulkhead Adapter	21D 21D-4 21D-21 21D 20-22 21D-7 7-11, 18-22 21D 13-16 21D-17 21D-16 21D-9 21D-16 21D-5 21D-3 21D 18-19 21D 18-19 21D 18-19 21D 18-19 21D 123-26 21D-11
Bulkhead Adapter	21D 21D-4 21D-21 21D-20-22 21D-7 7-11, 18-22 21D 13-16 21D-17 21D-16 21D-9 21D-16 21D-5 21D-3 21D 18-19 21D 23-26 21D-11 21D-24 21D-10
Bulkhead Adapter	21D 21D-4 21D-21 21D-22 21D-7 7-11, 18-22 21D-17 21D-17 21D-6 21D-9 21D-16 21D-5 21D-3 21D 18-19 21D 23-26 21D-11 21D-24 21D-10 21D 12-13
Bulkhead Adapter	21D 21D-4 21D-21 21D 20-22 21D-7 7-11, 18-22 21D 13-16 21D-17 21D-6 21D-9 21D-16 21D-5 21D-3 21D 18-19 21D 23-26 21D-11 21D-24 21D-10 21D 23-24 21D-10 21D 21-24 21D-10 21D 12-13 21D 12-13
Bulkhead Adapter Bulkhead Connector Cap — Connector Connector	21D 21D-4 21D-21 21D 20-22 21D-7 7-11, 18-22 21D 13-16 21D-17 21D-6 21D-9 21D-16 21D-5 21D-3 21D 18-19 21D 23-26 21D-11 21D-24 21D-10 21D 12-13 21D 27-28 21D-13, 21
Bulkhead Adapter	21D 21D-4 21D-21 21D 20-22 21D-7 7-11, 18-22 21D 13-16 21D-17 21D-6 21D-9 21D-16 21D-5 21D-13 21D 18-19 21D 23-26 21D-11 21D-24 21D-10 21D 12-13 21D 27-28 21D-13, 21 10A-16 6A-3, 14
Bulkhead Adapter	21D 21D-4 21D-21 21D-22 21D-7 7-11, 18-22 21D 13-16 21D-17 21D-6 21D-9 21D-16 21D-5 21D-13 21D 18-19 21D 23-26 21D-11 21D-24 21D-10 21D 12-13 21D 27-28 21D-13, 21 10A-16 6A-3, 14 5A-5
Bulkhead Adapter	21D 21D-4 21D-21 21D-22 21D-7 7-11, 18-22 21D 13-16 21D-17 21D-6 21D-9 21D-16 21D-5 21D-13 21D 18-19 21D 23-26 21D-11 21D-24 21D-10 21D 12-13 21D 27-28 21D-13, 21 10A-16 6A-3, 14 5A-5