

Description

BECSys CO₂ Feed Systems provide a rugged and reliable solution to pH control in aquatics facilities. CO₂ is recognized as a safe and easy-to-use method for pH control.

The BECSys CO₂ Feeder comes in two sizes of adjustable flow control:

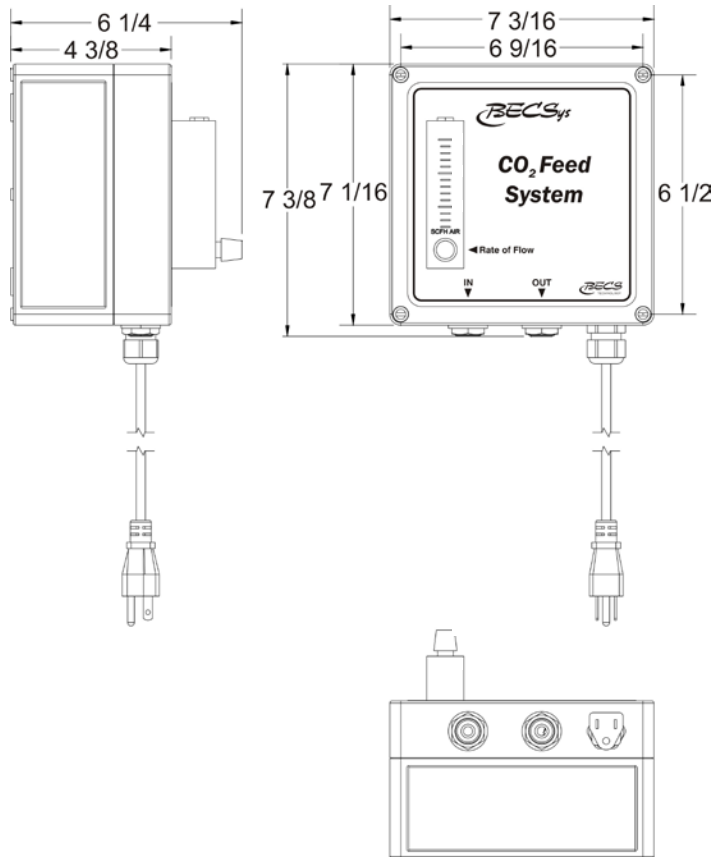
- 5-50 SCFH
- 20-200 SCFH

There are also two injection methods available: diffuser or venturi eductor. The diffuser assembly is simple and effective. A check valve is included to prevent CO₂ tanks from filling with pool water as the CO₂ is depleted. The venturi eductor assembly is ideal for more demanding applications, requiring minimal maintenance. Internal mixing vanes assure optimal delivery of CO₂ into pool water with maximum gas-to-water transfer efficiency.

A full line of accessories is also available for the BECSys CO₂ Feed System including regulators, heaters and tank switchover units.



NSF Recreational Water
CCS-145.30



Features

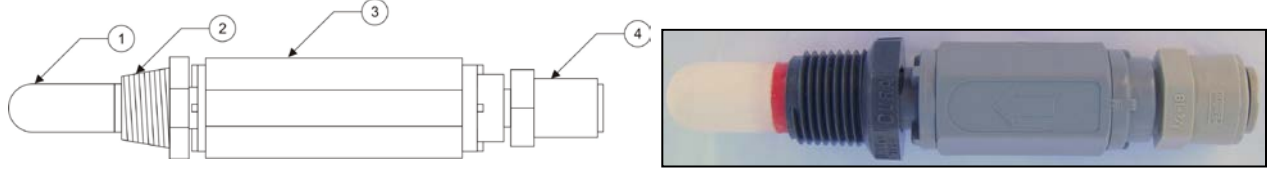
- NEMA housing
- 3/8" tubing included (10')
- 3/8" press fittings
- Two models available
 - 5-50 SCFH
 - 20-200 SCFH
- Two CO₂ injection technologies
 - Diffuser
 - Venturi eductor
- 230 VAC version also available

Certifications

- NSF Certified and Listed to NSF/ANSI Standard 50
- Europe/CE: CENELEC EN61010-1
 - European Community Low Voltage Directive 73/23/EEC

Diffuser Assembly

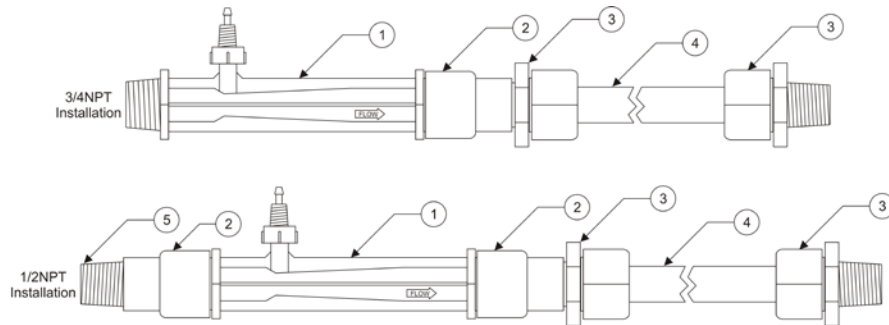
- Micro porous polyethylene diffuser, reinforced with stainless steel pin
- Diffuser bushing with 1/2" NPT Process connection
- Check-valve included in assembly
- Push fitting for 3/8" OD tubing



Diffuser Assembly (Part Number 2210326)		
Item	Part Number	Description
1	2220578	Reinforced Diffuser
2	2220353	Diffuser Bushing, 1/2" NPT
3	8060792	Check Valve, 1/4NPT
4	8060757	1/4NPT Straight Adapter, 3/8 Tube

Eductor Assembly

- High-efficiency, venturi-type, differential pressure injector
- Internal mixing vanes; Integral check valve
- Trouble-free operation; no moving parts
- Includes parts for either 3/4NPT or 1/2NPT installation
- Requires side stream with a consistent positive differential in pressure of at least 5 PSI
 - If this cannot be accomplished, a booster pump delivering 30 PSI at 8.5 GPM can be used



Eductor Assembly (Part Number 2210327)		
Item	Part Number	Description
1	8060795	Eductor
2	8060796	3/4NPT x 1/2NPT Reducer Coupling (2)
3	8060797	Compression Fitting, 1/2NPT x 5/8 Tube (2)
4	8060802	5/8 OD Tubing, 15 ft
5	8060541	Pipe Nipple, 1/2NPT x Close



Specifications	
Physical	
Enclosure Material	Glass Reinforced Polycarbonate, NEMA 4X (IP66)
Overlay Material	UV Stabilized Polyester
Input Power Cord (110VAC only)	SJTW Type, 6' length
Enclosure Dimensions	Width: 7.17" Height: 7.09" Depth: 4.37"
Environmental	
Storage Temperature	-30 to 60 °C (-20 to 140 °F)
Ambient Operating Temperature	-18 to 40 °C (0 to 104 °F)
Input Pressure	Do not exceed 50 psi
Ambient Humidity	95% non condensing maximum
Electrical	
Voltage	115/230 VAC, 50/60 Hz
Phase	Single
Current	0.1 amps full load

Ordering/Specification Guide		
Part Number	Description & Options	
2100298-	5 – 50 SCFH CO ₂ Feeder	
↓	Injector Type	
	D Diffuser Assembly	
	E Eductor Assembly	
	↓	Input Voltage
		1 115 VAC Input Power
2 230 VAC Input Power		
2100298-D1	Sample Part Number 5-50 SCFH CO ₂ Feeder with diffuser assembly for 115 VAC input power	
Part Number	Description & Options	
2100299-	20 – 200 SCFH CO ₂ Feeder	
↓	Injector Type	
	D Diffuser Assembly	
	E Eductor Assembly (recommended)	
	↓	Input Voltage
		1 115 VAC Input Power
2 230 VAC Input Power		
2100299-E1	Sample Part Number 20-200 SCFH CO ₂ Feeder with eductor assembly for 115 VAC input power	

Accessories

Single Tank Regulator

- BECS PN: 9680043
- Forged brass body and housing cap
- 2" gauges
- Stem type seat mechanism
- Diaphragm: 1 3/4"
- Delrin cap bushing for smooth adjustments
- External self-reseating relief valve (not designed to protect downstream apparatus)
- Sintered inlet filter
- Inlet fitting: CGA 320
- Weight: 2 lb 15 oz
- Maximum inlet: 3000 PSIG
- Delivery Range: 4-80 PSIG



Regulator – PN 9680043

Heater

- Two versions available: 120VAC and 240VAC
 - 120VAC, 60 Hertz, single phase
 - PN: 9680045
 - 240VAC, 60 Hertz, single phase
 - PN: 9680046
- Case: Aluminum
- Expansion Chamber: Solid Brass
- Dimensions: 2" Diameter, 6" Overall length
- Fittings: Solid Brass for CO2 cylinders, CGA 320
- Power Consumption: 100 Watts
- Capacity: 90 scfh



120VAC Heater
PN 9680045



240VAC Heater
PN 9680046

Manual CO₂ Tank Switchover

- BECS PN: 2210343
- Dual tank manual switchover
- Includes pressure regulator with gauges



CO2 Dual Tank Switchover
PN 2210343



Automatic CO₂ Tank Switchover

- Dual Tank: BECS PN: 9680044
- Four Tank: BECS PN: 9680051
- Six Tank: BECS PN: 9680052
- Automatically switches to full CO₂ tank(s) when the tank(s) in use become empty
- Cylinder in use indicator
- Output is unregulated; requires Single Tank Regulator (9680043)
- Inlet Pressure: 3000 psig max
- Changeover Pressure: 185 psig +/- 15 psig
- Flow Rate: 2625 cfh @2000 psig inlet, 525 cfh @250 psig inlet



Automatic Dual CO₂ Tank Switchover
PN 9680044