

# ECONO-CYL™

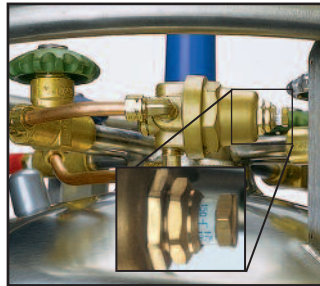
VERTICAL GAS LIQUID CYLINDERS

New for 2016!

Introducing the Econo-Cyl™ Liquid Cylinder from Chart. The Econo-Cyl offers a thick stainless steel outer jacket, an all-metal shock absorbing footring, color-coded valve handles, and color-coded safeties. Built with our legendary Composite Super Insulation™ and Chart Vacuum Technology®, the Econo-Cyl provides maximum gas utilization for your customers. The most popular models have been streamlined – making them the preferred choice in economical transportable liquid cylinders.



The Roto-Tel™ gauge features an easy-to-read dial liquid level indicator with swivel head design.



MCR Models have a combination pressure control regulator with an exclusive, calibrated micrometer adjusting screw.



Choice of round or square caster base on the 230 models.

## PRODUCT HIGHLIGHTS

- Ideal for liquid nitrogen, oxygen, argon, CO<sub>2</sub> or nitrous oxide
- All stainless steel inner and outer cylinder construction
- Thick, dent-resistant outer shell
- Four handling ring supports with large one-inch pipe size ring
- 4” galvanized casters on 230 models
- Integrated pull handle on 230 square base model
- Color-coded valve handles and name tags for easy identification of the plumbing functions
- Roto-Tel™ Liquid Level Gauge System
- Five-year vacuum warranty



Innovation. Experience. Performance.™

# ECONO-CYL™

## VERTICAL GAS LIQUID CYLINDERS

Specifications		Footring		Caster Base	
MODEL		180	200	230 RB	230 SB
	Pressure	HP	HP	HP	HP
PBER	Part Number	14880547	14880555	14880563	14880571
<b>CAPACITY<sup>(1)(2)</sup></b>					
Liquid (Gross)	(liters)	196	209	240	240
Liquid (Net)	(liters)	185	196	230	230
Gas (N <sub>2</sub> )	ft <sup>3</sup> / Nm <sup>3</sup>	3,864/102	4,072/108	4,734/124	4,734/124
Gas (O <sub>2</sub> )	ft <sup>3</sup> / Nm <sup>3</sup>	4,843/127	5,048/133	5,930/156	5,930/156
Gas (Ar)	ft <sup>3</sup> / Nm <sup>3</sup>	4,709/124	4,932/130	5,763/151	5,763/151
Gas (CO <sub>2</sub> )	ft <sup>3</sup> / Nm <sup>3</sup>	3,766/99	4,011/105	4,614/121	4,614/121
Gas (N <sub>2</sub> O)	ft <sup>3</sup> / Nm <sup>3</sup>	3,574/94	3,810/100	4,378/115	4,378/115
<b>PERFORMANCE<sup>(3)</sup></b>					
NER (N <sub>2</sub> )	% per day	1.9	1.85	1.8	1.8
NER (O <sub>2</sub> - Ar)	% per day	1.3	1.2	1.2	1.2
NER (CO <sub>2</sub> - N <sub>2</sub> O)	% per day	0.5	0.5	0.5	0.5
Gas Flow (N <sub>2</sub> , O <sub>2</sub> , Ar)	SCFH/Nm <sup>3</sup> /hr	350/9.2	400/10.5	400/10.5	400/10.5
Gas Flow (CO <sub>2</sub> , N <sub>2</sub> O)	SCFH/Nm <sup>3</sup> /hr	110/2.9	110/2.9	110/2.9	110/2.9
<b>DIMENSIONS &amp; PRESSURE RATINGS</b>					
Relief Valve Setting	psig / barg	350 / 24	350 / 24	350 / 24	350 / 24
DOT Rating		4L292	4L292	4L292	4L292
Diameter <sup>(4)</sup>	in / cm	20 / 50.8	20 / 50.8	26 / 66.0	26 / 66.0
Height <sup>(5)</sup>	in / cm	64.3/163.3	66.6/169.2	57.2/145.3	56.8/144.3
Tare Weight	lb / kg	288/130	305/138	360/163	393/178
Full Weight (N <sub>2</sub> )	lb / kg	568/257	603/273	703/318	736/333
(O <sub>2</sub> )	lb / kg	689/312	732/332	851/386	884/400
(Ar)	lb / kg	775/351	824/373	956/433	989/448
(CO <sub>2</sub> )	lb / kg	719/326	764/346	888/402	921/417

(1) Gas capacities at DOT4L limits. See manual for details.

(2) All models are available with permanently installed CGA fittings for medical applications. Contact Customer Service for details.

(3) Ambient conditions: 68°F/20°C and 50% relative humidity

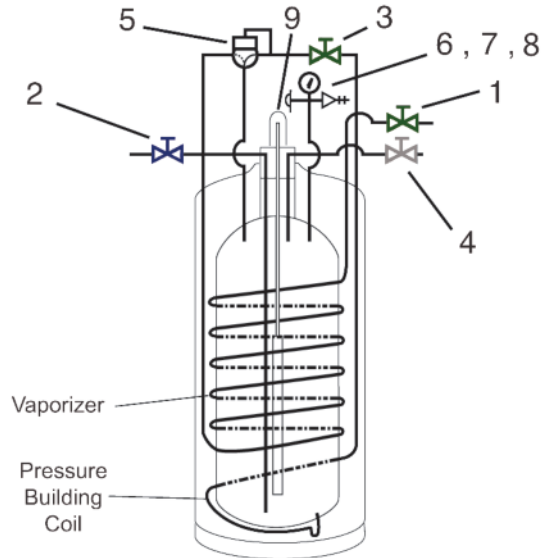
(4) Dimension of square caster base: 27-3/4" W x 28-3/4" D.

(5) Dimensions are measured from the floor to the top of the sight gauge protector.

Note: All caster base models are available with galvanized casters.

RB = Round Base    SB = Square Base

NER = Nominal Evaporation Rate



### Nomenclature

1. Gas Use Valve
2. Fill / Liquid Valve
3. Pressure Building Valve
4. Vent Valve
5. Combination Pressure Building Regulator
6. Pressure Gauge
7. Pressure Relief Valve
8. Rupture Disk
9. Liquid Level Gauge