



**Taylor-Wharton**  
Equipping The Hydrogen Infrastructure

# Taylor-Wharton

## Liquid Cylinders

**TPED**



Innovative. Convenient. Reliable.

# Liquid Cylinders

Superior products...outstanding solutions.  
Wherever you need them.

Trust the experts for unsurpassed value, quality and service – world-wide. Our extensive product line offers everything you need to transport, store and dispense liquefied gases.

Portable and vacuum-insulated, our vast array of models will fit your needs and store your contents safely and securely every time. Best of all, these products come from Taylor-Wharton, the leader in quality cryogenic liquid cylinders.

Our extensive line-up includes reliable features that ensure excellent performance:

- Full Circle Shock-Mount Ring
- Polished Heavy Duty Outer Body
- Innovative Non-Binding Contents Gauge
- Reinforced Lateral Head Support
- Color-Coded Relief Valves for Different Pressure Settings
- 5-Year Warranty on Vacuum

## Liquid Withdraw

Low pressure XL™70LP, XL™126LP, XL™186LP, XL™189LP and XL™250LP Liquid Nitrogen or Liquid Oxygen

### Features

- Rugged, easy to maneuver and versatile
- Designed for low pressure filling, storing and dispensing
- Simple, quick liquid withdrawal
- Sizes for every need, from small volume to frequent usage
- Oxygen service and pressure-building capabilities available

(1) Vented N.E.R based on usable liquid capacity.

MODEL NO.		XL™ 70LP	XL™ 126LP	XL™ 186LP	XL™ 189LP	XL™ 250LP
<b>Capacity</b>						
<b>Liquid (gross)</b>	(liters)	70	126	186	189	250
<b>Liquid (net)</b>	(liters)	67	120	180	181	240
<b>Performance</b>						
<b>NER(note 2) (N2)</b>	(% per day)	4.2	2.20	1.30	1.40	1.40
<b>NER (O2 - Ar)</b>	(% per day)	2.63	1.38	0.81	0.88	0.88
<b>NER (CO2)</b>	(% per day)	NA	NA	NA	NA	NA
<b>Relief Valve Setting</b>	(bar)	1.5	1.5	1.5	1.5	1.5
<b>Code</b>		TPED	TPED	TPED	TPED	TPED
<b>Rupture Disc Setting</b>	(bar)	12	12	12	12	12
<b>Dimensions</b>						
<b>Tank Diameter</b>	(mm)	508	508	508	660	660
<b>Type of Base</b>		Round	Round	Round	Round	Round
		Caster	Caster	Caster	Caster	Caster
<b>Tank Height</b>	(mm)	1,100	1,370	1,720	1,280	1,470
<b>Tank Empty Weight</b>	(kg)	71	82	115	116	149
<b>Maximum Product Weight (note 3 &amp; 4)</b>						
<b>N2</b>	(kg)	54	97	145	146	194
<b>O2</b>	(kg)	77	137	206	207	274
<b>Ar</b>	(kg)	NA	NA	NA	NA	NA
<b>CO2</b>	(kg)	NA	NA	NA	NA	NA
<b>Gas Withdrawal Rate</b>						
<b>N2</b>	(m3/hr)	NA	NA	NA	NA	NA
<b>O2</b>	(m3/hr)	NA	NA	NA	NA	NA
<b>Ar</b>	(m3/hr)	NA	NA	NA	NA	NA

(1) Specifications subject to change without notice. (2) NER: Normal Evaporation Rate. (3) Weight of product saturated pressure @ 1 bar: N2, O2 and Ar. (4) Weight of product saturated pressure @ 8 bar: CO2



# GL- Series (TPED)



## Gas and Liquid Withdrawal

Medium pressure  
XL™180MP and XL™193MP  
Liquid or Gaseous Nitrogen,  
Oxygen, Argon

- Worry-free, over-the-road transport
- Hard working, tough construction
- Automatic pressure-building and economizer circuits
- Low-loss holding capabilities – conserve during low demand periods

(1) Vented N.E.R based on usable liquid capacity.

(2) Container pressure at or above factory pressure/economizer regulator setting.

(3) Regulator has a pressure delta of 20 psig (1.4 bar/138 kPa).

MODEL NO.		XL™ 180MP	XL™ 193MP
<b>Capacity</b>			
<b>Liquid (gross)</b>	(liters)	180	193
<b>Liquid (net)</b>	(liters)	169	181
<b>Performance</b>			
<b>NER(note 2) (N2)</b>	(% per day)	1.9	1.8
<b>NER (O2 - Ar)</b>	(% per day)	1.2	1.1
<b>NER (CO2)</b>	(% per day)	NA	NA
<b>Relief Valve Setting</b>	(bar)	16	16
<b>Code</b>		TPED	TPED
<b>Rupture Disc Setting</b>	(bar)	25	25
<b>Dimensions</b>			
<b>Tank Diameter</b>	(mm)	508	508
<b>Type of Base</b>		Round	Round
		Footring	Footring
<b>Tank Height</b>	(mm)	1,524	1,600
<b>Tank Empty Weight</b>	(kg)	133	139
<b>Maximum Product Weight (note 3 &amp; 4)</b>			
<b>N2</b>	(kg)	136	146
<b>O2</b>	(kg)	193	207
<b>Ar</b>	(kg)	236	253
<b>CO2</b>	(kg)	NA	NA
<b>Gas Withdrawal Rate</b>			
<b>N2</b>	(m3/hr)	9.2	9.2
<b>O2</b>	(m3/hr)	9.2	9.2
<b>Ar</b>	(m3/hr)	9.2	9.2

(1) Specifications subject to change without notice. (2) NER: Normal Evaporation Rate. (3) Weight of product saturated pressure @ 1 bar: N2, O2 and Ar. (4) Weight of product saturated pressure @ 8 bar: CO2

# HP- Series (TPED)

## Gas and Liquid Withdrawal

High pressure XL™176HP, XL™208HP, and XL™247HP Liquid or Gaseous Nitrogen, Oxygen, Argon, Carbon Dioxide, Nitrous Oxide

- Ideal for handling a wide variety of gases or liquefied gases
- Automatic dual pressure building/ economizer regulator
- Equipped with an internal vaporizer
- State-of-the-art safety features

(1) Vented N.E.R based on usable liquid capacity.

(2) Container pressure at or above factory pressure/economizer regulator setting.

(3) Regulator has a pressure delta of 20 psig (1.4 bar/138 kPa).

Specifications subject to change without notice.

MODEL NO.		XL™ 176HP	XL™ 208HP	XL™ 247HP
<b>Capacity</b>				
<b>Liquid (gross)</b>	(liters)	176	208	247
<b>Liquid (net)</b>	(liters)	165	198	240
<b>Performance</b>				
<b>NER(note 2) (N2)</b>	(% per day)	2.2	1.9	2.8
<b>NER (O2 - Ar)</b>	(% per day)	1.4	1.2	1.7
<b>NER (CO2)</b>	(% per day)	0.75	0.75	1.3
<b>Relief Valve Setting</b>	(bar)	24	24	24
<b>Code</b>		TPED	TPED	TPED
<b>Rupture Disc Setting</b>	(bar)	36	36	36
<b>Dimensions</b>				
<b>Tank Diameter</b>	(mm)	508	508	660
<b>Type of Base</b>		Round	Round	Round
		Footring	Footring	Caster
<b>Tank Height</b>	(mm)	1,524	1,650	1,470
<b>Tank Empty Weight</b>	(kg)	151	164	201
<b>Maximum Product Weight (note 3 &amp; 4)</b>				
<b>N2</b>	(kg)	133	160	194
<b>O2</b>	(kg)	188	226	274
<b>Ar</b>	(kg)	230	276	335
<b>CO2</b>	(kg)	188	226	274
<b>Gas Withdrawal Rate</b>				
<b>N2</b>	(m3/hr)	9.2	9.2	9.2
<b>O2</b>	(m3/hr)	9.2	9.2	9.2
<b>Ar</b>	(m3/hr)	9.2	9.2	9.2

(1) Specifications subject to change without notice. (2) NER: Normal Evaporation Rate. (3) Weight of product saturated pressure @ 1 bar: N2, O2 and Ar. (4) Weight of product saturated pressure @ 8 bar: CO2



# Accessories



## Transfer Hoses

- Flexible, stainless steel construction in a variety of handy lengths

PART/MODEL NO.			
Nitrogen and Argon LIQUID or VENT Connection			
CGA 295	4 ft. (1.2m)	3/8 in. NPT	1700-9C65
CGA 295	6 ft. (1.8m)	3/8 in. NPT	1700-9C65
Nitrogen and Argon USE Connection			
CGA 580	6 ft. (1.8 m)	3/8 in. NPT	GL50-8C51
Oxygen LIQUID or VENT Connection			
CGA 440	6 ft. (1.8 m)	3/8 in. NPT	GL50-8C53
Oxygen USE Connection			
CGA 540	6 ft. (1.8 m)	3/8 in. NPT	GL50-8C56
Carbon Dioxide LIQUID or Gas USE Connection			
CGA 320	6 ft. (1.8 m)	3/8 in. NPT	HP50-8C51
Carbon Dioxide Gas VENT Connection			
CGA 295	4 ft. (1.2m)	3/8 in. NPT	1700-9C65
CGA 295	6 ft. (1.8m)	3/8 in. NPT	1600-9C65

Specifications subject to change without notice.

## Cryogenic Phase Separators

- Minimizes hazardous splashing and vaporization in 3 sizes to accommodate liquid transfer



PART/MODEL NO.	
2 3/4 in. x 1 3/8 in. OD (3/8 in. NPT)	
(70 mm x 35 mm)	1193-8C80
1 1/4 in. x 1 in. OD (3/8 in. NPT)	
(32 mm x 25.4 mm)	1193-8C82
1 1/4 in. x 1/2 in. OD (1/8 in. NPT)	
(32 mm x 12.7 mm)	1193-8C83

Specifications subject to change without notice.

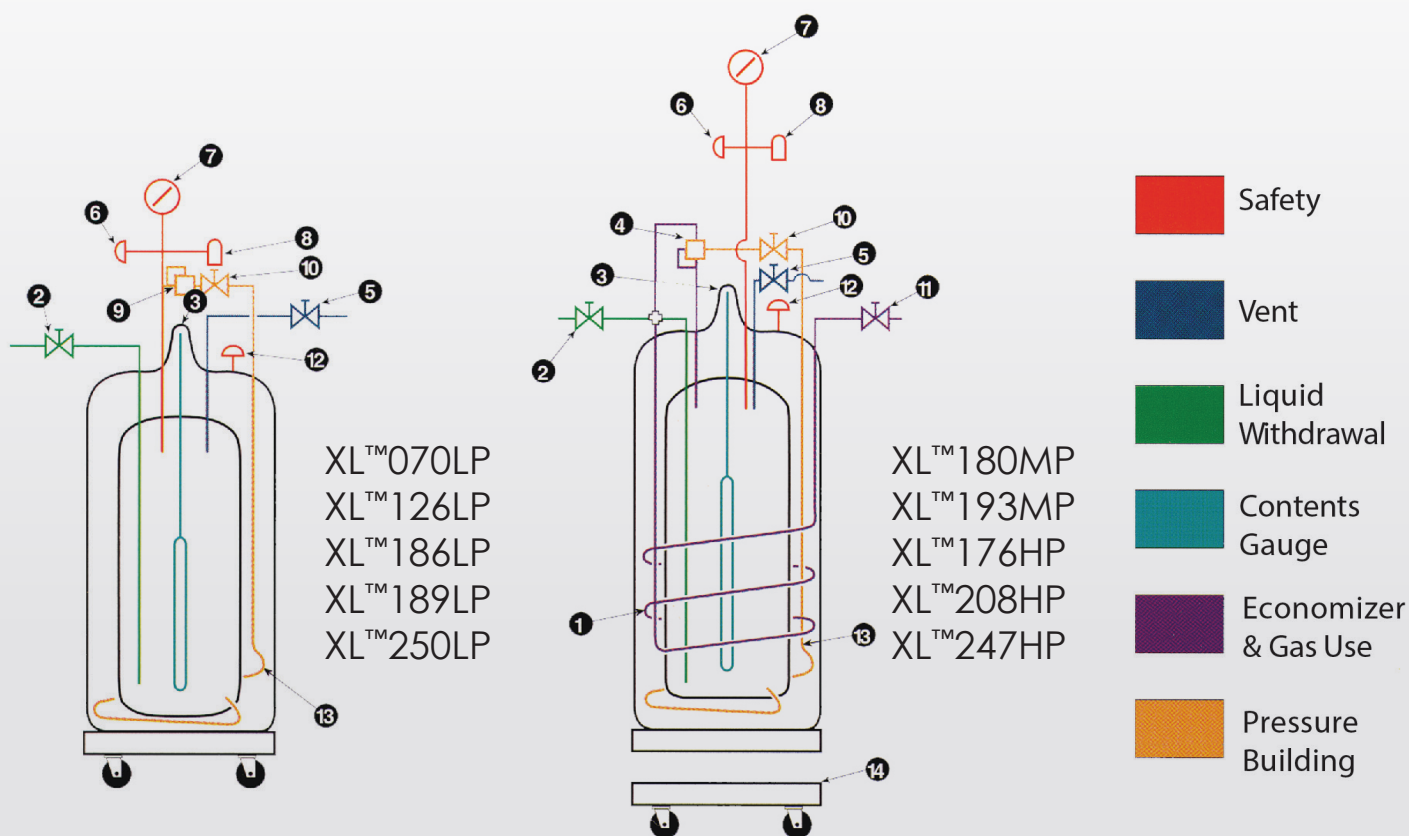
## External Heat Exchanger

- Increases the gaseous delivery rate
- Easy to connect

PART/MODEL NO.	
External Heat Exchanger	VP50-7C10

Specifications subject to change without notice.

# Liquid Cylinders Flow Diagram



- |  |                                |
|--|--------------------------------|
| 1. Vaporizer                                   | 9. Pressure Building Regulator |
| 2. Liquid Fill/Withdrawal Valve                | 10. Pressure Building Valve    |
| 3. Contents Gauge                              | 11. Gas Withdrawal (USE) Valve |
| 4. Dual Pressure Building/Economizer Regulator | 12. Vacuum Bursting Disc       |
| 5. Vent Valve                                  | 13. Pressure Building Coil     |
| 6. Inner Containing Bursting Disc              |                                |
| 7. Pressure Gauge                              |                                |

# Cryogenic Solutions. Everywhere.

World Wide Locations - Multi-Lingual Staff  
Customized Solutions - Superior Products  
Quality - Innovation - Value

THE  
ORIGINAL  
INNOVATORS OF CRYOGENIC  
EQUIPMENT



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Equipping The Hydrogen Infrastructure

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