

### **Taylor-Wharton**

## INNOVATIVE. CONVENIENT. RELIABLE.



Liquid Cylinders Brought to you by the industry leader

## LIQUID CYLINDERS

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

Trust the experts for unsurpassed value, quality and service – worldwide. 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<sup>®</sup> 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

## Meet our latest models...

## **L** Series

### **Liquid Withdrawal**

#### Low pressure XL-160 and XL-240

Liquid Nitrogen or Liquid Oxygen

- 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



Part/Model No.	XL-160	XL-240
Dimensions		
Diameter in. (mm)	20 (508)	26 (660)
Height in. (mm)	57 5/8 (1464)	59 1/2 (1511) <sup>4</sup>
Weight		
Empty lb. (kg) (Nominal)	197 (89)	N/A
5 Caster Base lb. (kg)	N/A	375 (170)
4 Caster Base (square base)	N/A	445 (202kg)
Maximum Liquid Capacity (liters)	163	250
Usable Liquid Capacity (liters)	160	240
Normal Evaporation Rate <sup>1</sup> % Capac	ity/Day	
Oxygen	N/A	0.9%
Nitrogen	1.3%	1.4%
Argon	N/A	N/A
Carbon Dioxide	N/A	N/A
Nitrous Oxide	N/A	N/A
Dual Pressure Building/Economizer	Regulator <sup>3</sup>	
Pressure Building Setting	N/A	15 psig⁵
Fressure building Setting	N/A	(1 bar/103 kPa)
Economizer Setting	N/A	N/A
Economizer Setting	N/A	N/A
Design Specification		
TC N/A	4LM	4LM
DOT	4L	4LM
Rated DOT Service Pressure	100 psig	100 psig
Safety Devices		
Pressure Relief Valve	22 psig	22 psig
	(1.5 bar/152 kPa)	(1.5 bar/152 kPa
Inner Container Bursting Disc	176 psig	176 psig
	(12 bar/1213 kPa)	(12 bar/1213 kPa
Weight of Contents Based on DOT-	Rated Service Pressure	
Oxygen lb. (kg)	N/A	563 (255)
Nitrogen lb. (kg)	259 (117)	394 (179)
Argon	N/A	N/A
Carbon Dioxide	N/A	N/A
Nitrous Oxide	N/A	N/A

- (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) (4) 5-caster base used for weight and height measure. For 4-caster base square base with handle,
- add approx. 70 lb (32 kg) and ½ inch (12.7 mm)
- (5) L-240 available with or without pressure building capabilities. L240-0C04 for oxygen service employs a single action regulator set at 90 psig (6 bar/621 kPa)

Specifications subject to change without notice.

## **GL** Series

### **Gas and Liquid Withdrawal**

Medium pressure XL-45, XL-50, XL-65

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



Part/Model No.	XL-45	XL-50	XL-65
Dimensions			
Diameter in. (mm)	20 (508)	20 (508)	26 (660)
Height in. (mm)	61 3/8 (1559)	64 3/8 (1641)	59 ½ (1511) <sup>4</sup>
Weight			
Empty lb. (kg) (Nominal)	255 (116)	270 (122)	N/A
5 Caster Base lb. (kg)	N/A	N/A	375 (170)
4 Caster Base lb. (kg)	N/A	N/A	445 (202)
Maximum Liquid Capacity (liters)	180	193	250
Usable Liquid Capacity (liters)	169	181	240
Normal Evaporation Rate <sup>1</sup> % Capac	tity/Day		
Oxygen	1.2%	1.1%	0.9%
Nitrogen	1.9%	1.8%	1.4%
Argon	1.2%	1.1%	0.9%
Carbon Dioxide	N/A	N/A	N/A
Nitrous Oxide	N/A	N/A	N/A
Gas Withdrawal Rate <sup>2</sup> @ NTP (STP)			
Oxygen cfh (cu. m/h)	350 (9.2)	350 (9.2)	350 (9.2)
Nitrogen cfh (cu. m/h)	350 (9.2)	350 (9.2)	350 (9.2)
Argon cfh (cu. m/h)	350 (9.2)	350 (9.2)	350 (9.2)
Carbon Dioxide	N/A	N/A	N/A
Nitrous Oxide	N/A	N/A	N/A
Dual Pressure Building/Economizer			
	125 psig	125 psig	125 psig
Pressure Building Setting	(8.6 bar/862 kPa)	(8.6 bar/862 kPa)	(8.6 bar/862 kPa
	145 psig	145 psig	145 psig
Economizer Setting	(10 bar/1000 kPa)	(10 bar/1000 kPa)	(10 bar/1000 kPa
Design Specification	(	(************************	(
TC N/A	4LM	4LM	4LM
DOT	4L	4L	4L
Rated DOT Service Pressure	200 psig	200 psig	200 psig
Safety Devices	200 psig	200 p3ig	200 p3ig
Pressure Relief Valve	230 psig	230 psig	230 psig
	(16 bar/1586 kPa)	(16 bar/1586 kPa)	(16 bar/1586 kPa
Inner Container Bursting Disc	360 psig	360 psig	360 psig
	(24.8 bar/248 kPa)	(24.8 bar/248 kPa)	(24.8 bar/248 kPa
Weight of Contents Based on DOT-			
Oxygen lb. (kg)	388 (176)	416 (189)	539 (244)
Nitrogen Ib. (kg)	273 (127)	293 (133)	80 (172)
Argon Ib. (kg)	471 (214)	505 (229)	655 (279)
Carbon Dioxide	N/A	N/A	N/A
Nitrous Oxide	N/A	N/A	N/A
Gaseous Capacity Based on DOT-R			19/7
Oxygen cu. ft. (cu. m)	4688 (123)	5025 (132)	6511 (171)
Nitrogen cu. ft. (cu. m)	3771 (99)	4043 (106)	5244 (139)
Argon cu. ft. (cu. m)	4558 (120)	4884 (128)	6335 (166)
Carbon Dioxide	4538 (120) N/A	N/A	N/A
	LN/ A	1 N/ / 1	IN/ A

(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.

## **HP** Series

### Gas and Liquid Withdrawal

High pressure XL-45HP, XL-50HP, XL-55HP, XL-65HP

Liquefied 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

Nitrous Oxide cu. ft. (cu. m)



Part/Model No.	XL-45HP	XL-50HP	XL-55HP	XL-65HP
Dimensions	00 (500)	00 (500)	00 (500)	0.4.4.4.0
Diameter in. (mm)	20 (508)	20 (508)	20 (508)	26 (660)
Height in. (mm)	61 3/8 (1559)	64 3/8 (1641)	69 7/6 (1764)	59 1/2 (1511) <sup>4</sup>
Weight				
Empty lb. (kg) (Nominal)	272 (123)	284 (129)	287 (130)	465 (211)
5 Caster Base lb. (kg)	N/A	N/A	N/A	465 (211)
4 Caster Base lb. (kg)	N/A	N/A	N/A	535 (243)
Maximum Liquid Capacity (liters)	176	188	208	247
Usable Liquid Capacity (liters)	165	176	198	240
Normal Evaporation Rate <sup>1</sup> % Capac	ity/Day			
Oxygen	1.4%	1.2%	1.2%	1.0%
Nitrogen	2.2%	2.0%	1.9%	1.6%
Argon	1.4%	1.2%	1.2%	1.0%
Carbon Dioxide	0.75%	0.75%	0.75%	0.75%
Nitrous Oxide	0.75%	0.75%	0.75%	0.75%
Gas Withdrawal Rate <sup>2</sup> @ NTP (STP)				
Oxygen cfh (cu. m/h)	350 (9.2)	350 (9.2)	350 (9.2)	350 (9.2)
Nitrogen cfh (cu. m/h)	350 (9.2)	350 (9.2)	350 (9.2)	350 (9.2)
Argon cfh (cu. m/h)	350 (9.2)	350 (9.2)	350 (9.2)	350 (9.2)
Carbon Dioxide cfh (cu. m/h)	150 (3.9)	150 (3.9)	150 (3.9)	150 (3.9)
Nitrous Oxide cfh (cu. m/h)	110 (2.9)	110 (2.9)	110 (2.9)	110 (2.9)
Dual Pressure Building/Economizer		110 (2.7)	110 (2.7)	110 (2.7)
Dual Tressure Building/Economizer	300 psig	300 psig	300 psig	300 psig
Pressure Building Setting	1 0			1 -
	(20.7 bar/2068 kPa)	(20.7 bar/2068 kPa)	(20.7 bar/2068 kPa)	(20.7 bar/2068 kPa)
Economizer Setting	320 psig	320 psig	320 psig	320 psig
	(22 bar/2206 kPa)	(22 bar/2206 kPa)	(22 bar/2206 kPa)	(22 bar/2206 kPa)
Design Specification				
TC N/A	4LM	4LM	4LM	4LM
DOT	4L	4L	4L	4L
Rated DOT Service Pressure	292 psig	292 psig	292 psig	292 psig
Safety Devices				
Pressure Relief Valve	350 psig	350 psig	350 psig	350 psig
	(24 bar/2413 kPa)	(24 bar/2413 kPa)	(24 bar/2413 kPa)	(24 bar/2413 kPa)
Inner Container Bursting Disc	525 psig	525 psig	525 psig	525 psig
	(36 bar/3620 kPa)	(36 bar/3620 kPa)	(36 bar/3620 kPa)	(36 bar/3620 kPa
Weight of Contents Based on DOT-	Rated Service Pressure			
Oxygen lb. (kg)	360 (163)	385 (175)	458 (208)	505 (229)
Nitrogen lb. (kg)	252 (114)	296 (122)	298 (135)	353 (160)
Argon lb. (kg)	438 (199)	467 (212)	518 (235)	614 (279)
Carbon Dioxide lb. (kg)	387 (176)	414 (188)	458 (208)	516 (234)
Nitrous Oxide lb. (kg)	368 (167)	393 (177)	435 (197)	543 (246)
Gaseous Capacity Based on DOT-R		NTP (STP)		
Oxygen cu. ft. (cu. m)	4350 (114)	4651 (122)	5146 (135)	6100 (160)
Nitrogen cu. ft. (cu. m)	3479 (91)	3712 (98)	4112 (108)	4871 (128)
Argon cu. ft. (cu. m)	4236 (111)	4516 (119)	5012 (132)	5938 (156)
Carbon Dioxide cu. ft. (cu. m)	3383 (89)	3619 (89)	4003 (105)	4511 (119)
	2014 (04)		270 ( (100)	E 440 (4 40)

3429 (90)

3211 (84)

- (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
- (4) 5-caster base used for weight and
- height measure. For 4-caster base square base with handle, add approx. 70 lb (32 kg) and ½ inch (12.7 mm)

Specifications subject to change without notice.

5419 (142)

3796 (100)

## **VHP** Series

#### Gas and Liquid Withdrawal Very High Pressure XL-50VHP

Liquefied or Gaseous Nitrogen, Oxygen, Argon, Carbon Dioxide

- Offers all the unique features of our HP models and more
- Increased maximum allowable working pressure of 500 psig (34 bar).
- Ideal for laser cutting and other high pressure applications

Part/Model No.	XL-50VHP			
Dimensions	XE-30 VIII			
Diameter in. (mm)	20 (508)			
Height in. (mm)	64 3/4 (1559)			
Weight				
Empty Ib. (kg) (Nominal)	310 (141)			
Maximum Liquid Capacity (liters)	188			
Usable Liquid Capacity (liters)	176			
Normal Evaporation Rate <sup>1</sup> % Capacity/Day				
Oxygen	1.5%			
Nitrogen	2.2%			
Argon	1.5%			
Carbon Dioxide	0.80%			
Nitrous Oxide	N/A			
Gas Withdrawal Rate <sup>2</sup> @ NTP (STF	)			
Oxygen cfh (cu. m/h)	350 (9.2)			
Nitrogen cfh (cu. m/h)	350 (9.2)			
Argon cfh (cu. m/h)	350 (9.2)			
Carbon Dioxide cfh (cu. m/h)	150 (3.9)			
Nitrous Oxide cfh (cu. m/h)	N/A			
Dual Pressure Building/Economizer Regulator <sup>3</sup>				
Pressure Building Setting	400 psig			
	(28 bar/2758 kPa)			
Economizer Setting	420 psig			
	(29 bar/2896 kPa)			
Design Specification				
TC N/A	N/A			
DOT	4L			
Rated DOT Service Pressure	412 psig			
	(28.4 bar/2841 kPa)			
Safety Devices	E00 and a			
Pressure Relief Valve	500 psig			
	(34 bar/3447 kPa)			
Inner Container Bursting Disc	750 psig (52 bar/5171 kPa)			
Weight of Contents Based on DO				
Oxygen lb. (kg)	364 (165)			
Nitrogen Ib. (kg)	240 (109)			
Argon Ib. (kg)	443 (201)			
Carbon Dioxide lb. (kg)	381 (173)			
Nitrous Oxide lb. (kg)	N/A			
Gaseous Capacity Based on DOT-R				
Oxygen cu. ft. (cu. m)	4397 (116)			
Nitrogen cu. ft. (cu. m)	3312 (87)			
Argon cu. ft. (cu. m)	4285 (113)			
Carbon Dioxide cu. ft. (cu. m)	3330 (88)			
Nitrous Oxide cu. ft. (cu. m)	N/A			



## Accessories

#### Make your tanks work even harder for you

### 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. (1.2 m)	3/8 in. NPT	1700-9C65	
CGA 295	6 ft. (1.8 m)	3/8 in. NPT	1600-9C66	
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. (1.2 m)	3/8 in. NPT	1700-9C65	
CGA 295	6 ft. (1.8 m)	3/8 in. NPT	1600-9C65	

### Cyrogenic Phase Separators

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



Part/Model No.		
2 ¾ in. x 1 3/8 in. OD (3/8 in. NPT)	1193-8C80	
(70 mm x 35 mm)	1175-0000	
1 ¼ in. x 1 in. OD (3/8 in. NPT)	1193-8C82	
(32 mm x 25.4 mm)	1175-0002	
1 ¼ in. x ½ in. OD (1/8 in. NPT)	1193-8C83	
(32 mm x 12.7 mm)	1175-0005	

### External Heat Exchanger

- Increases the gaseous delivery rate
- Easy to connect



Specifications subject to change without notice.

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

> pressure/economizer regulator setting

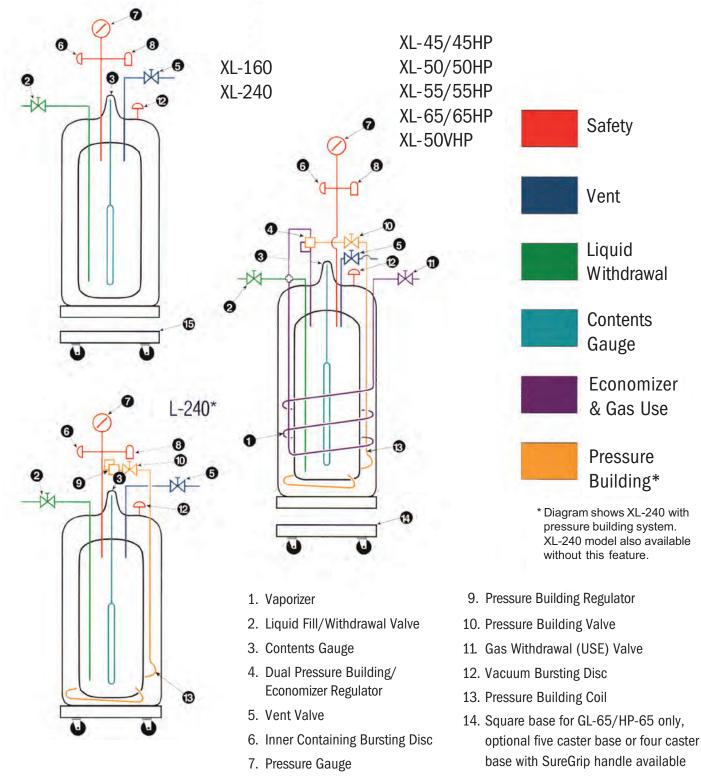
psig (1.4 bar/138 kPa)

capacity(2) Container pressure at or above factory

(3) Regulator has a pressure delta of 20

VP50-7C10

## FLOW DIAGRAM



8. Pressure Relief Valve

15. Five caster base for XL-240



Pricing on any accessories shown can be found by keying the part number into the search box on our website. The specifications listed in this brochure are subject to change by the manufacturer and therefore cannot be guaranteed to be correct. If there are aspects of the specification that must be guaranteed, please provide these to our sales team so that details can be confirmed.

### www.wolflabs.co.uk

Tel : 01759 301142 Fax : 01759 301143 sales@wolflabs.co.uk

Please contact us if this literature doesn't answer all your questions.