

Series Number:

4600

Series 4600 Pressure Vessel Systems

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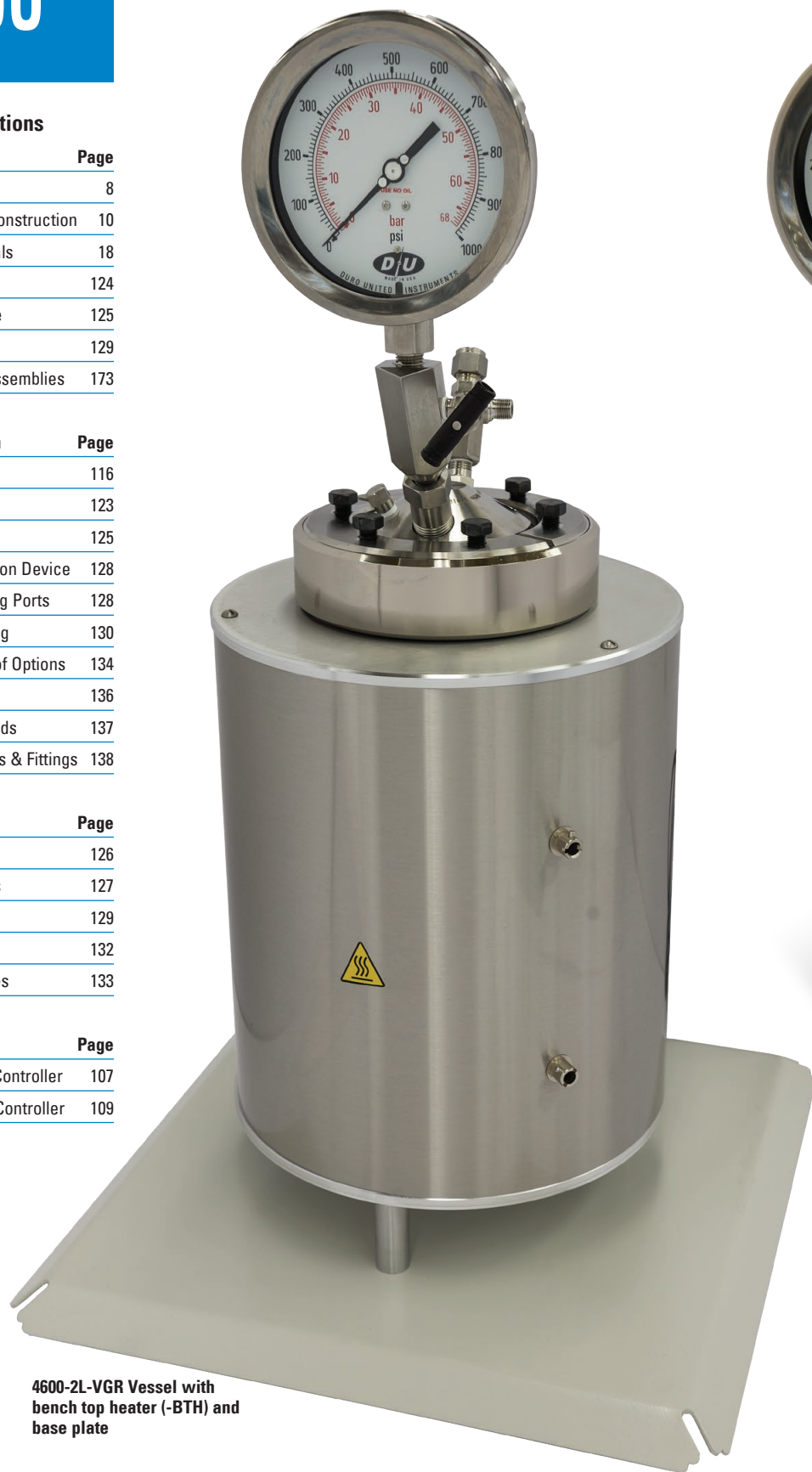
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4600-2L-VGR Vessel with bench top heater (-BTH) and base plate



4600-2L-VGR Vessel, Moveable Head

Series 4600 Ordering Guide

An example order number for a vessel in this series is: **4600-1L-T-SS-VGR-2000**

A composite identification number to be used when ordering a 4600 Series Pressure Vessel System can be developed by combining individual symbols from the separate sections below. For more information on how to use this ordering guide, please see page 27.

A Vessel Rating	
-No Symbol	Standard rating, 1900 psi at 350 °C (1 & 2 Liter Vessels)
-HP	High pressure rating, 2900 psi at 350 °C (970 & 1900 mL Vessels)

B Vessel Volume	
-1000mL	1000 mL, 4" ID (standard rating only)
-2000mL	2000 mL, 4" ID (standard rating only)
-970mL	970 mL, 3.75" ID (high pressure rating only)
-1900mL	1900 mL, 3.75" ID (high pressure rating only)

C Head Mounting Style	
-No Symbol	Moveable Head (Standard configuration)
-FH	Fixed Head

D Gasket / Maximum Temperature	
-T	PTFE Flat Gasket, 350 °C
-OV	FKM O-ring, 225 °C
-OK	FFKM O-ring, 300 °C
-FG	Flexible Graphite Flat Gasket, 350 °C

E Vessel Material of Construction	
-SS	T316 Stainless Steel
-C20	Alloy 20
-MO	Alloy 400
-IN600	Alloy 600
-IN625	Alloy 625
-HB	Alloy B-2 / B-3
-HC	Alloy C-276
-NI	Nickel 200
-TI2	Titanium Grade 2
-TI4	Titanium Grade 4
-ZR702	Zirconium Grade 702
-ZR705	Zirconium Grade 705

See page 10 or 24 for complete list of available alloys.

F Head Configuration	
-RD	Rupture disc port with rupture disc assembly & disc
-1/8	One head opening, 1/8" NPT port, plugged
-1/4	One head opening, 1/4" NPT port, plugged
-B	One head opening, "B" socket
-VGR	Valve on gage adapter, pressure gage, rupture disc assembly, & thermocouple w/thermowell
-NS	Non-standard, custom head opening

G Optional Fittings & Custom Options (List all needed)	
-VD	Single valve on head w/ dip tube (VGR Required)
-DVD	Double valve assembly on head w/ dip tube (VGR Required)
-SC	Serpentine cooling coil
-BDV	Bottom drain valve
-4310B	Gage block assembly (for head with "B" socket opening)
-CAD	Internal Catalyst Addition Device
-XCAD	External Catalyst Addition Device
-SCP	Solids Charging Port (Ball Valve)
-RC	Reflux Condenser
-RTC	Reflux/Take-Off Condenser
-WJ	Welded Jacket

H Pressure Gage Option (VGR and Gage Block only)	
-No Symbol	None
-3000	3000 psi / 207 bar
-2000	2000 psi / 138 bar
-1000	1000 psi / 69 bar
-600	600 psi / 40 bar
-200	200 psi / 14 bar
-100	100 psi / 7 bar

I Stand and Heater Options	
-No Symbol	None
-BTH	Bench top heater with base plate (moveable head only)
-BTS	Bench top stand (moveable or fixed head)
-FC	Floor cart (moveable head only)
-FS	Floor stand (moveable or fixed head)
-FSP	Floor stand with pneumatic lift (fixed head only)

J Controller	
-No Symbol	None
-4838	PID Control, Ramp & Soak Programming, and Data logging with Software (RS-485 to USB cable not included). For use with one additional display module.
-4848	PID Control, Ramp & Soak Programming, and Data logging with Software. (RS-485 to USB cable not included). For use with up to three additional display modules.

See Chapter 6 for complete list of Controller options.

K Controller Options	
-PDM	Pressure Display Module
-HTM	High Temperature Cut Off Module
-ETLM	External Temperature Limit Module
-SVM	Solenoid Valve Module (for cooling control)
-A1925E4	RS-485 to USB Converter (required for data logging)
-A1925E6	RS-485 to USB Converter, isolated
-A3504HC	SpecView Software Package

L Electrical Supply for Heater and/or Controller	
-No Symbol	None
-115	115V Heater
-230	230V Heater

M Certifications	
-ASME	ASME Documentation
-CE	CE Documentation
-P	Parr Certification