

## **HPLC & UHPLC**

# Vanquish Column Compartments

## LC that takes your productivity to new heights

#### Vanquish platform benefits

- · Precision and reproducibility to meet every application demand
- Widest portfolio of detection technologies
- Reduced maintenance, and easier set-up with Thermo Scientific™ Viper™ Fingertight Fittings
- Dedicated solutions for exceptional LC-MS performance

#### Keywords

Vanquish Horizon, Vanquish Flex, Vanquish Core, Vanquish Duo, HPLC, UHPLC, forced air, still air, Column ID tag, Vanquish Column Compartment



## Hosting the LC column means more than simply "Hold and heat"

Temperature determines retention, selectivity and efficiency in your chromatography performance. Thermo Scientific™ Vanquish™ HPLC and UHPLC systems pave the way to maximum efficiency and resolution by delivering exceptional temperature control.

- Perfectly align your eluent and column temperature with unique active pre-heating
- Boost your separation speed and resolution with still air thermostatting for utmost efficiency
- Enjoy seamless method transfer by choosing between forced air and still air thermostatting to mimic other column thermostats
- Extend your workflow capabilities with up to three independent column compartments and multiple switching valves
- Track your column records with a column ID system that is fully integrated into Thermo Scientific<sup>™</sup> Chromeleon<sup>™</sup> Chromatography Data System (CDS) software

### **Specifications**

	Column Compartment H	Column Compartment C	
Operating principle	Still air and forced air		
Temperature range	5-120 °C in 0.1 °C increments (max. 18 °C below ambient)	5-85 °C in 0.1 °C increments (max 18 °C below ambient)	
Temperature stability	±0.05 °C		
Temperature accuracy	±0.5 °C (up to 80 °C)		
Heating performance	From 20 °C to 50 °C ( $\pm$ 1 °C) in <15 min From 25 °C to 40 °C ( $\pm$ 1 °C) in 5 min		
Cooling performance	From 50 °C to 20 °C (±1 °C) in <15 min		
Capacity	2 column slots		
Column slot dimension	387 mm × 25 mm		
Temperature zones	1 per device (up to 3 zones in stacked configuration)		
Column capacity	2 x max. 300 mm w/ pre-heater or guard column, max. column i.d.: 10 mm		
Column ID	Up to 4 column ID tags		
Valves	Up to 2 valves: 2-position/6-port, 6-position/7-port		
Pre-heater	Yes, active and passive	Yes, active (optional) and passive	
Post-column cooler	Yes	No	
Pressure range	5-151 MPa, (50-1517 bar, 700-22,000 psi)	2-70 MPa (20-700 bar, 290-10100 psi)	
Wetted parts	Titanium, Ceramics, MP35N	Titanium, Ceramics, SST	
Biocompatible	Yes; pH range 2–12, chloride concentration up to 1 mol/L	No; pH range 1–13, chloride concentration up to 0.1 mol/L	
Normal-Phase compatible	Yes. Column switching with normal-phase compatible valves (see below)		
Safety features	2 doors, fluid leak sensors, fast-cool button		
PC connection	USB 2.0		
GLP	Predictive Performance functions for scheduling maintenance procedures based on the actual operating and usage conditions of the column compartment. All system parameters logged in the Chromeleon CDS audit trail.		
Environmental conditions	Operation: 5-35 °C, 20-80% RH (non condensing), max. 2000 m above sea-level Storage: -20-45 °C, max. 60% RH (non condensing)		
Power requirements	100-240 V AC, 50/60 Hz, max. 310 W/330 VA		
Dimensions (h $\times$ w $\times$ d)	700 × 111 × 422 mm (27.6 × 4.4 × 16.6 in.)		
Weight	14 kg (30.9 lbs)		

### **Specifications**

	Active pre-heater	Post-column cooler
Operating principle	Active	Passive
Temperature range	40-120 °C (5 °C above ambient)	40-80 °C
Temperature stability	±0.5 °C	
Temperature accuracy	±2 °C	±2 °C (up to 80 °C)
Heating performance	80 °C at 2.5 mL/min 120 °C at 1 mL/min (water/acetonitrile (50/50, v/v))	_
Cooling performance	_	Down to 50 °C at 2 mL/min and 120 °C column temperature (water/acetonitrile (50/50, v/v))
Capacity	2 for each column compartment (Post-column cooler not available for Column Compartment C)	



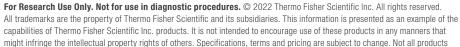
#### Ordering information

Description	Part number
Optional modules	
Column Compartment H	VH-C10-A-03
Column Compartment C	VC-C10-A-03
Accessories	
Biocompatible Active pre-heater, 0.1 × 380 mm, MP35N	6732.0110
Biocompatible Passive pre-heater, 0.1 × 530 mm, MP35N	6732.0174
Biocompatible Active pre-heater, 0.1 × 610 mm, MP35N	6732.0150
Biocompatible Passive pre-heater, 0.1 × 680 mm, MP35N	6732.0184
Passive pre-heater, 0.18 × 530 mm, SST	6732.0170
Post-column cooler, 1 µL, 0.1 × 240 mm, MP35N	6732.0510
Post-column cooler, 1 $\mu$ L, 0.1 $\times$ 590 mm, MP35N	6732.0520
Column-ID Tag, 2 pcs	6732.0610
Column holder kit	6732.1904
Biocompatible 2-position/6-port column switching valve (150 MPa)	6036.2520
Biocompatible 6-position/7-port column switching valve (150 MPa)	6036.2530
Biocompatible 2-position/6-port column switching valve (70 MPa)	6230.1520
Biocompatible 6-position/7-port column switching valve (70 MPa)	6230.1530
Normal-Phase compatible 6-position/7-port column switching valve (70 MPa)	6230.2530
Conversion Kit for left or mid installation of Vanquish TCC	6732.0007

For more information on Vanquish Column Compartments click <a href="here">here</a>



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