

Agilent 1290 Infinity Thermostatted Column Compartment

Features, Specifications and Ordering Details



Precise column thermostatting with maximum application flexibility

The Agilent 1290 Infinity Thermostatted Column Compartment facilitates precise column thermostatting over a temperature range from 10 °C below ambient up to 100 °C, providing infinite flexibility for optimizing the speed and selectivity of a separation. Ultra high pressure valves enable a wide range of solutions such as dual or multicolumn selection, sample preparation, or alternating column regeneration. The 1290 Infinity TCC is also the basis for multimethod solutions, and can be used together with an Agilent 1290 Infinity LC and Agilent 1260 Infinity LC systems as well as with existing Agilent 1200 Series LC and RRLC or even Agilent 1100 Series LC systems.

Features

- \bullet Temperature precision specification of \pm 0.05 °C for repeatable retention times and peak areas
- Maximum application flexibility through Peltier cooling and heating for two independent temperature zones from 10 °C below ambient up to 100 °C
- Low dispersion optimized for low internal volume contribution
- Spacious column racks provide room for three 30-cm columns or two shorter columns
- Ultra high pressure valves for many applications such as alternating column regeneration, sample preparation, and dual or multicolumn selection
- Unique pull-out and Quick Change Valve design for easy plumbing and valve exchange
- Clustering of up to three 1290 Infinity TCC modules for maximum flexibility for multimethod applications such as automated method development
- Further features include a door-open sensor, improved thermal insulation, a leak funnel, and a capillary guide



Specifications – Agilent 1290 Infinity Thermostatted Column Compartment

Temperature range	10 °C below ambient to 100 °C
Temperature stability	± 0.05 °C
Temperature accuracy	\pm 0.8 °C, with calibration \pm 0.5 °C
Temperature zones	2 (single TCC) 4 (dual-TCC cluster) 6 (triple-TCC cluster) Individual standby temperatures definable for cluster configurations!
Column capacity	2 columns of 300 mm length with individual solvent heating 3 columns of 300 mm length in series 4 columns of 100 mm length each with individual low dispersion heat exchanger 6 columns (max. 300 mm) with triple-TCC clustering and column selection valves 8 columns (max. 100 mm) with dual-TCC clustering and column selection valves
Heat-up/cool-down time	5 minutes from ambient to 40 °C 10 minutes from 40 °C to 20 °C
Internal volume	With low dispersion heat exchangers: 1.6 µL for heating 1.5 µL for optional post-column cooler With standard heat exchangers: 3 µL left heat exchanger 6 µL right heat exchanger
Valve options	Optionally integrated Quick-change valve drive with radio frequency identification of optional valve heads with different pressure ratings: 2-position/6-port (up to 1,200 bar), 2-position/10-port (up to 1,200 bar), 8-column selection valve-kit (up to 1,200 bar).
Communications	Controller-area network (CAN), RS 232, APG remote: ready, start, stop, and shut-down signals
Safety and maintenance	Extensive diagnostics, error detection and display (through an Instant Pilot control module and an Agilent LabAdvisor), leak detection, safe leak handling, and a leak output signal for shutdown of the pumping system. Low voltages in the main maintenance areas. Door-open sensor.
GLP	Column identification module for GLP documentation of column type. Valves carrying RFID-tags with serial number, pressure rating, number of switches and valve type.
Housing	All materials recyclable
Dimensions (h x w x d)	140 × 410 × 435 mm, (5.5 × 16 × 17 in)

^{*} Specifications are valid for distilled water at ambient temperature (25 °C) setpoint a 40 °C and a flow range from 0.1 to 5.0 mL/min, for the temperature range above 80 °C. The specifications are valid for a flow range from 0.1 to 2.5 mL/min.

Ordering Details – Agilent 1290 Infinity Thermostatted Column Compartment

Description	Product number
Agilent 1290 Infinity Thermostatted Column Compartment	G1316C
Installed valve drive for flexible installation of separately available valve heads	G1316C #058

