

1.1.5.1 Quaternary solvent manager-R

The quaternary solvent manager-R (QSM-R) is a low-pressure mixing, high-pressure pump. It provides steady (pulse-free) solvent flow at analytical flow rates to 5 mL/min at 65,500 kPa (655 bar, 9500 psi). The quaternary solvent manager can pump four degassed solvents simultaneously using a gradient proportioning valve (GPV) to dynamically create a specified composition.

1.1.5.2 Sample manager flow through needle-R

The sample manager flow through needle-R (SM FTN-R) uses a direct-injection mechanism to inject samples drawn from plates and vials onto a chromatographic column. Optional extension loops, installed between the sample needle and the injection valve, can increase the injection volume beyond that of the sample needle. The sample manager flow through needle can also dilute samples using the auto-dilution option.

Note: The 50 μ L extension loop is included in the standard configuration.

1.1.5.3 30-cm column heater and 30-cm column heater/cooler (optional)

The 30-cm Column Heater (30-cm CH) and 30-cm Column Heater/Cooler (30-cm CHC) are the standard column heating and column heating/cooling modules that manage and maintain column temperature for ACQUITY Arc systems. Except for the 30-cm CHC module's cooling capability and the additional components required to support this capability, the modules are identical.

The 30-cm CH module can control compartment temperatures from 5 °C above the ambient temperature to 65 °C. Compartment temperature set points range from 20 to 65 °C. The 30-cm CHC module can control compartment temperatures as high as 65 °C. It is capable of heating from 5 °C above the ambient temperature to 65 °C, and of cooling to 15 °C below the ambient temperature or 4 °C.

The base configuration of both modules includes a passive preheater that helps achieve the column's set-point temperature within the column compartment. Both modules support the column-selection valve option that provides automated column switching to method conditions. The 30-cm CH and 30-cm CHC column compartment accommodates LC columns with dimensions up to 7.8-mm internal diameter (ID), and 30-cm long.

Restrictions:

- You cannot use the 30-cm CH or 30-cm CHC module in conjunction with the optional 30-cm column heater with active preheater module (CH-30A).
- You cannot use the 30-cm CH or 30-cm CHC module's passive preheater in concert with the optional column-selection valve.

1.1.5.4 30-cm column heater-active (optional)

A standard, active preheater (APH) assembly heats the incoming solvent before it enters the column, optimizing thermal performance and minimizing dispersion. The CH-30A module can control compartment temperatures from 5 °C above the ambient temperature to 90 °C.