

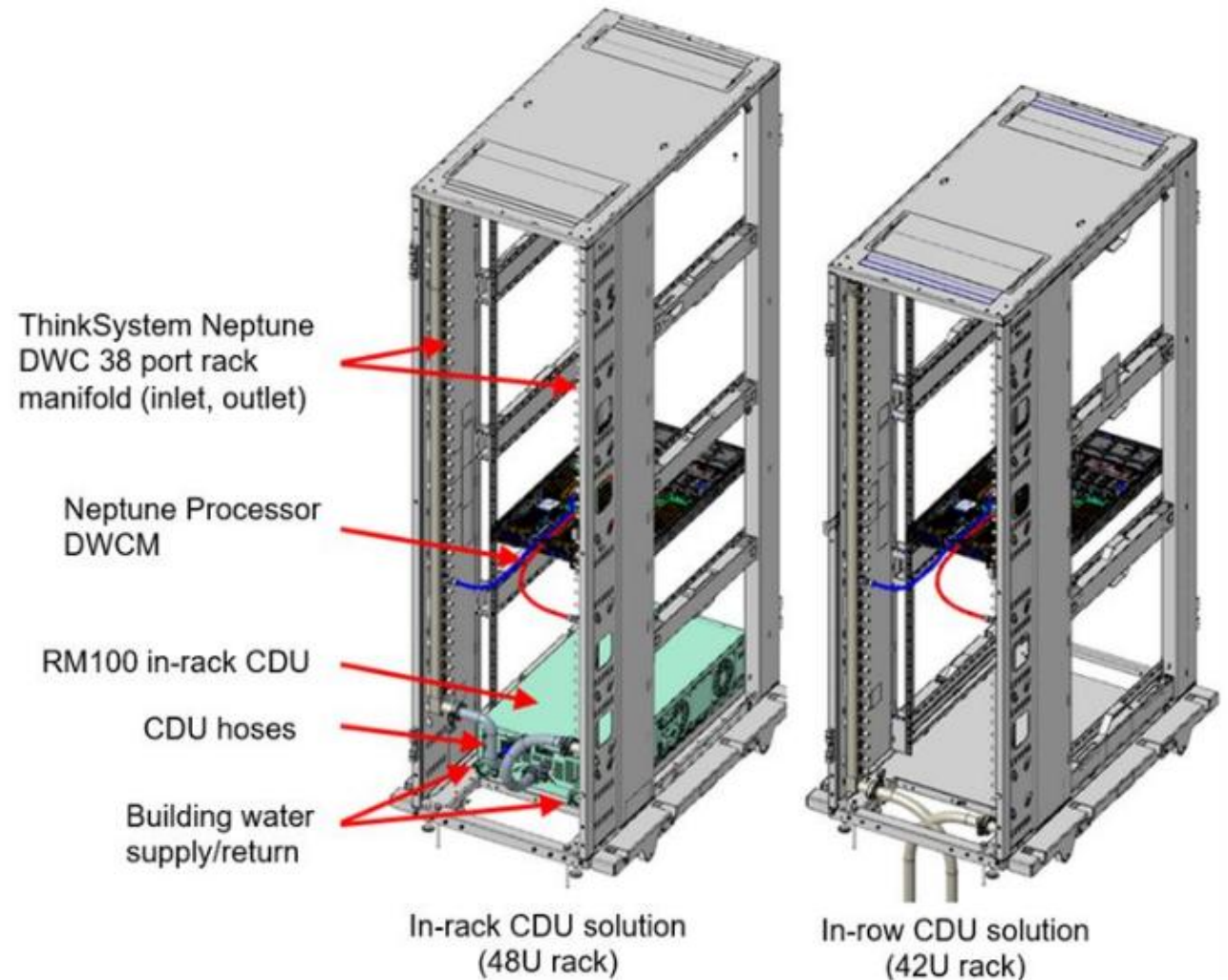
# Neptune Liquid Cooling rack

Rack, manifold, and coolant distribution unit

Lenovo

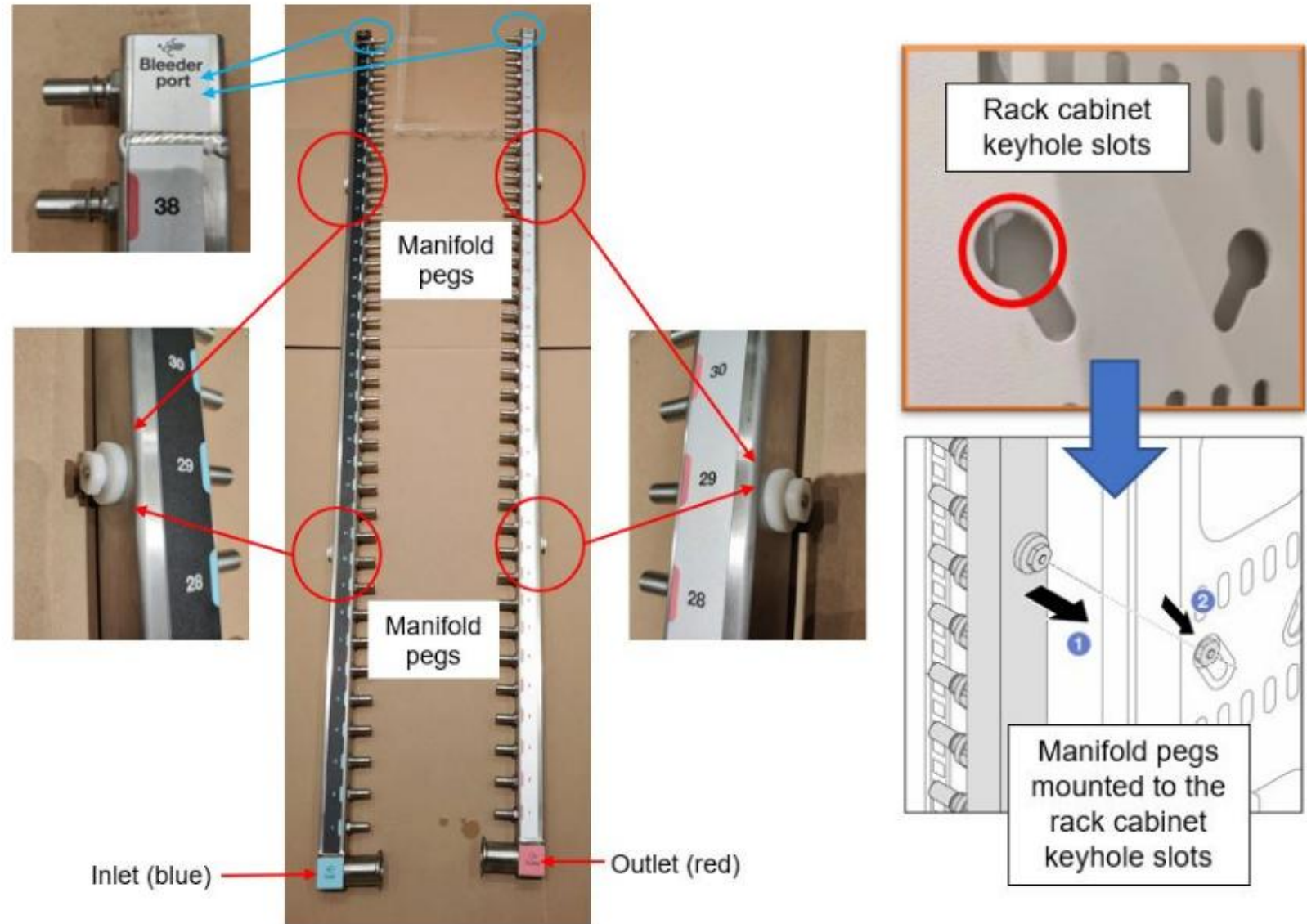
## Liquid cooling system in a rack

The major components of the Neptune Liquid Cooling rack are as follows: a Direct Water Cooling Module (DWCM), a coolant distribution unit (CDU), and a rack manifold.



# ThinkSystem Neptune Direct Water Cooling 38-port rack manifold

The ThinkSystem Neptune Direct Water Cooling (DWC) 38-port rack manifold is mounted vertically at the rear of the 42U or 48U Heavy Duty Rack Cabinet. The inlet manifold provides cold coolant, and the outlet manifold receives the heated coolant. The manifolds have quick-disconnect couplings for each server in the rack. At the top of each manifold is a bleeder port, which can be connected to a bleeder kit to drain the coolant or push air out of the manifold.





## RM100 in-rack coolant distribution unit

The RM100 in-rack coolant distribution unit (CDU) can provide 100 kW of cooling capacity within the rack cabinet. It is a 4U device to be installed at the bottom of the 42U or 48U Heavy Duty Rack Cabinets. The CDU can be ordered using the CTO process in the configurators using machine type 7DBLCTOLWW and feature code BRL4. Refer to the [in-rack CDU Operation and Maintenance Guide](#) for details and exact CDU specifications.



Rear side



Front side

## DWC PSU manifold

The DWC PSU manifold is a 42U manifold designed for ThinkSystem SD series DWC trays with DWC PSUs.

A DWC PSU manifold includes 18 water inlet quick connects (labeled blue) and 18 water outlet quick connects (labeled red).

