

BRAND NAME or EQUIVALENT (\$100,000 and below)

Huber Unistat 905w circulator or equivalent

Specifications:

1. HYDROSTATICALLY SEALED operation to minimize fumes and loss of the heat transfer fluid; allows fluids to be used safely above flash points without fear of ignition and residue from oil vapors (UNIQUE)
2. Compatibility with Huber DW-Therm M90 thermal fluid or other fluid which is better or equivalent to it in the temperature range, volatility, viscosity at -80 C and toxicity (UNIQUE)
3. Availability of COTS add-on booster pumps, controlled by the main unit, to increase pressure by up to 1.5 bar in case of a large pressure drop (not common)
4. Temperature stability 0.01 C at -10 C (not common)
5. Temperature range -90 C to 200 C (not common)
6. Cooling power (with ethanol), not less than:
 - a. at -40°C 4 kW
 - b. at -60°C 2,5 kW
 - c. at -80°C 0,7 kW
 - d. at -85°C 0,35 kW
7. Water cooling to reduce heat load on the room HVAC/dust level;
8. Mains voltage not to exceed 208 V for connectivity on site;
9. Noise level 53 dB(A) +/- 1.5 dB
10. Variable-speed pump with pressure sensors and soft start to reduce hydraulic shock – provides higher flow rates
11. Fluid fill volume less than 10 liters
12. Computer interface (RS-232, USB or Ethernet)
13. Caster-mounted base with brakes