

HYDRONIC PUMPS

1. GENERAL

1.1 Scope

- .1 Install City supplied pumps P-5, P-6 and P-14.
- .2 Remove and existing DHW circulation pump and return to City.
- .3 Install new DHW circulation pump P-15 in basement near new indirect hot water tanks.

1.2 Submittals

- .1 Submit with Shop Drawings certified pump curves showing pump performance characteristics with pump and system operating point plotted. Include NPSH curve when applicable. Show pump weights, motor and pump operating or efficiencies and electrical power characteristics.

1.3 Quality Assurance

- .1 Pumps shall be aligned by qualified millwright and alignment certified.
- .2 Ensure pumps operate at specified system fluid temperatures without vapour binding and cavitation, are non-overloading in parallel or individual operation, operate within 25% of midpoint of published maximum efficiency curve.
- .3 Motors shall be high efficiency only as per NEMA Standards.

2. PRODUCTS

2.1 General

- .1 Statically and dynamically balance rotating parts.

2.2 In-Line Circulator

- .1 Replace existing hot water circulator pump with new identical pump, Grundfos UP 26-64F, 120V/1/60

3. EXECUTION

3.1 Installation

- .1 Provide air cock and drain connection on horizontal pump casings.
- .2 Decrease from line size, with long radius reducing elbows or reducers. Support piping adjacent to pump such that no weight is carried on pump casings. Provide supports under elbows on pump suction and discharge line sizes 100 mm and over.
- .3 Check and align pumps prior to start-up.

END OF SECTION