

523. TWO-POINT TIME -MODULATED PRESSURE REDUCING VALVES

To facilitate pressure management, the tender may call for supply and installation of two-point time-modulated pressure reducing valves as indicated on the drawings and in the Bill of Quantities.

The time modulated Pressure Reducing Valves shall comprise a main valve and a pilot control system. The valve gate shall comprise a horizontally mounted resilient disc moving upward to open the valve and downward on a seat so as to close the valve. It shall be held in place by a diaphragm assembly and spring, accessible from above via a removable cover. Opening, closing and throttling shall be achieved through the connection of upstream, cover chamber and downstream compartments of the valve through appropriate restrictions and throttling controls.

The throttling control shall be capable of being adjusted automatically from outside of the valve at a minimum of two outlet pressures through a time based modulator such that both the pre-set time of adjustment of outlet pressures and the outlet pressures themselves can be changed if circumstances require it. The time modulating device shall be an encapsulated, self-contained, watertight device inclusive of a power pack. The power pack shall have a minimum guaranteed usable life of two years. Means of replacing battery pack and adjusting time and pressures shall be straight forward.

Working Conditions

Fluid: treated water.

Minimum operating pressure: 0,7 bar.

Maximum operating pressure: 25 bar.

Maximum temperature: 70°C

If included, a Tenderer shall be specifically required with his tender to have supplied full technical details of the valves and PRV controllers he proposes to supply and install. If the Engineer deems the valves and controllers proposed to be appropriate he will accept the offer. If however the Engineer considers the offer to be inappropriate he will reject the offer from the Tenderer and instruct him instead as to the acceptable manufacturer(s) of these items. Should a financial offer from a Tenderer in this regard be obviously underpriced then the cost of supplying an appropriate valve and controller shall be fully to the account of the Contractor.