

6.2 General specifications DN 15L-50H

1 Pressure independent flow control valve Nexus Valve Vivax

1.1. The contractor must install the pressure independent control valves where indicated in drawings.

2. Function

- 2.1. The valve must be usable with/or without actuator, either as a dynamic flow limiter or a pressure independent control valve.
- 2.2. The positioning of valve housing with thermo-electric actuator must be possible in any direction (360°).
- 2.3. Flushing through valve with the flow control device removed from the housing must be possible.
- 2.4. Direct flow measuring must be possible at all times with an accuracy tolerance of within $\pm 3\%$.
- 2.5. The pre-setting of the valve must have no effect on the valve authority.
- 2.5. Maximum flow setting must be externally adjustable.
- 2.6. The valve must have no requirement for straight up- or downstream piping.

3. Valve Body

- 3.1. The valve body must be made of hot stamped DR brass CW602N CuZn36Pb2As.
- 3.2. The pressure rating must be no less than PN25.
- 3.3. A flow arrow must be indicated on the valve body.
- 3.4. Flow pre-setting, actuator and the measuring points must be positioned on the same side of the housing.
- 3.5. Flow measuring through the measuring points must be possible in all valve directions (360°).

4. Flow regulation unit

- 4.1. The flow regulation unit must consist of glass-reinforced polyphenylene sulphide.
- 4.2. The flow regulation unit must be of flow control device type for easy accessibility, system flushing, replacement or maintenance.
- 4.3. The flow regulation unit must be easily identifiable and color-coded.
- 4.4. Flow measurement must be done across a flow control device comprising an integrated Fluctus nozzle.

5. Actuator

- 5.1. The thermo-electric actuator must be rated IP54 (waterproof).
- 5.2. The electromechanical actuator must be rated IP40.
- 5.3. Actuator must be driven by 24 V or 230 V operating voltage.
- 5.4. Actuator must use full stroke providing full authority.
- 5.5. Actuator must have visible indication of stroke position.