

CLAIMS

1. A valve for adjusting a fluid flow, said valve comprising:
 - a valve body,
 - a flow path extending through the valve body, the flow path having an inlet and an outlet located downstream of the inlet, wherein the flow path is configured to guide a flowing liquid from the inlet to the outlet,
 - a flow adjustment arrangement located in the valve body between the inlet and the outlet, for adjusting the flow of liquid from the inlet to the outlet,
 - wherein liquid upstream of said flow adjustment arrangement but downstream of said inlet has an upstream pressure, and liquid downstream of said flow adjustment arrangement but upstream of said outlet has a downstream pressure,
 - a stationary differential pressure sensor configured to measure a pressure difference between said upstream pressure and said downstream pressure, and
 - a pair of pressure ports for enabling temporary connection of a non-stationary differential pressure sensor for measuring the pressure difference between said upstream pressure and said downstream pressure.
2. The valve according to claim 1, wherein said stationary differential pressure sensor has a first pressure sensing area in fluid communication with the first measuring channel, and a second pressure sensing area in fluid communication with the second measuring channel, wherein the first pressure sensing area senses said upstream pressure and the second pressure sensing area senses said downstream pressure.
3. The valve according to claim 2, wherein the pair of pressure ports comprises:
 - a first pressure port for accessing a first measuring channel of the valve, the first measuring channel being in fluid communication with the flow path upstream of said flow adjustment arrangement but downstream of said inlet, and
 - a second pressure port for accessing a second measuring channel of the valve, the second measuring channel being in fluid communication with the flow path downstream of said flow adjustment arrangement but upstream of said outlet.

4. The valve according to claim 3, comprising a first measuring nipple and a second measuring nipple, wherein said first pressure port and said first measuring channel are provided in said first measuring nipple, wherein said second pressure port and said second measuring channel are provided in said second measuring nipple.
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5. The valve according to claim 4, wherein the first measuring nipple has a first opening enabling liquid upstream of the flow adjustment arrangement to enter the first measuring channel and a second opening enabling the entered liquid to exit the first measuring nipple and come into contact with the first pressure sensing area.
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6. The valve according to any one of claims 4-5, wherein the second measuring nipple has a first opening enabling liquid downstream of the flow adjustment arrangement to enter the second measuring channel and a second opening enabling the entered liquid to exit the second measuring nipple and come into contact with the second pressure sensing area.
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7. The valve according to any one of claims 4-6, wherein the stationary differential pressure sensor is interposed between the first and the second measuring nipple.
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8. The valve according to any one of claims 4-7, wherein at least a portion of each one of the first and second measuring nipples project away from the valve body, wherein the stationary differential pressure sensor is fixed in the valve body.
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9. The valve according to any one of claims 4-7, wherein at least a portion of each one of the first and second measuring nipples project away from the valve body, wherein the stationary differential pressure sensor is fixed to the projecting portions of the first and second measuring nipples.
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10. The valve according to any one of claims 1-4, wherein the stationary differential pressure sensor is integrated into said valve body.
11. The valve according to claim 10, comprising a wall arranged in said valve body, said wall having a cavity holding said stationary differential pressure sensor, a first aperture

providing a pressurized communication between the stationary differential pressure sensor and liquid at said upstream pressure, and a second aperture providing a pressurized communication between the stationary differential pressure sensor and liquid at said downstream pressure.

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12. The valve according to any one of claims 1-11, wherein the flow adjustment arrangement comprises a valve plug and valve seat, wherein the valve plug is movable relative to the valve seat for adjusting the flow.
- 10 13. The valve according to any one of claims 1-12, wherein the pressure difference between liquid at said upstream pressure and liquid at said downstream pressure mainly corresponds to a liquid pressure drop over said flow adjustment arrangement.
- 15 14. A method for use in connection with the valve according to any one of claims 1-13 for determining the measurement accuracy of the stationary differential pressure sensor, the method comprising:
 - measuring, by means of the stationary differential pressure sensor, the differential pressure over said flow adjustment arrangement,
 - inserting through the pair of pressure ports measuring devices connected to a non-stationary differential pressure sensor,
 - 20 - measuring, by means of the non-stationary differential pressure sensor, the differential pressure over said flow adjustment arrangement in order to determine the accuracy of the measurement provided by the stationary differential pressure sensor.
- 25 15. A method for use in connection with the valve according to any one of claims 1-13 for calibrating the stationary differential pressure sensor, the method comprising:
 - measuring, by means of the stationary differential pressure sensor, the differential pressure over said flow adjustment arrangement,
 - inserting through said pair of pressure ports measuring devices connected to a non-stationary differential pressure sensor,
 - 30 - measuring, by means of the non-stationary differential pressure sensor, the differential pressure over said flow adjustment arrangement,

- comparing the measurements of the stationary differential pressure sensor and the non-stationary differential pressure sensor,
- calibrating the stationary differential pressure sensor based on the comparison.