# FLOVAL PHOENIX PRESSURE RELIEF / SUSTAINING VALVE

## 1. INTRODUCTION

The FLOVAL PHOENIX PRESSURE RELIEF/SUSTAINING VALVE INSTALLATION & OPERATING INSTRUCTIONS.

## 2. DESCRIPTION

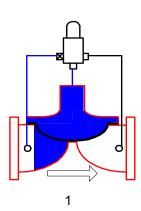
The Floval Phoenix Pressure Relief/sustaining valve with pilot continuously monitors the upstream pressure. When the upstream pressure reach the pre-set pressure, the valve will open to relief the excess pressure downstream. The valve will modulate to maintain the pre-set upstream pressure regardless of varying flow rates. The valve will only close when the upstream pressure drops below the pre-set pressure.

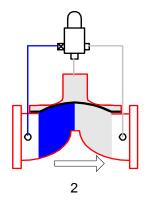
## 3. PRESSURE RELIEF / SUSTAINING VALVE:

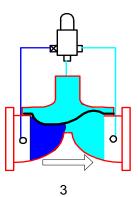
#### 3.1 OPERATION PRINCIPAL

The standard pressure relief valve is fitted with the following:

- X Upstream to pilot valve with pressure reducing pilot and pressure gauge.
- X Pilot valve bottom port to main valve bonnet.
- X pilot valve outlet to main valve downstream port







The Floval Pressure Relief / Sustaining Valve operates as follows:

- 1. The pilot valve senses the upstream pressure lower than preset pressure. The pilot valve remains closed and the main valve is closed.
- 2. Upstream pressure reach preset pressure: The pilot valve opens and vents the pressure in the valve bonnet to the down stream. The main valve opens.
- 3. The pilot valve modulates according to the upstream pressure: With an increase in the upstream pressure, the pilot valve passages also increases, allowing a faster drainage from the valve bonnet main valve opens to reduce upstream pressure. With a decrease in the upstream pressure, the pilot valve passages also decreases, allowing a slower drainage from the valve bonnet main valve closes to increase upstream pressure.

#### 3.2 VALVE SETTING PROCEDURE

- Pilot: Preset.
  - Clockwise adjustment will increase relief pressure.
- Needle valve on pilot: Closed & 2 turns open