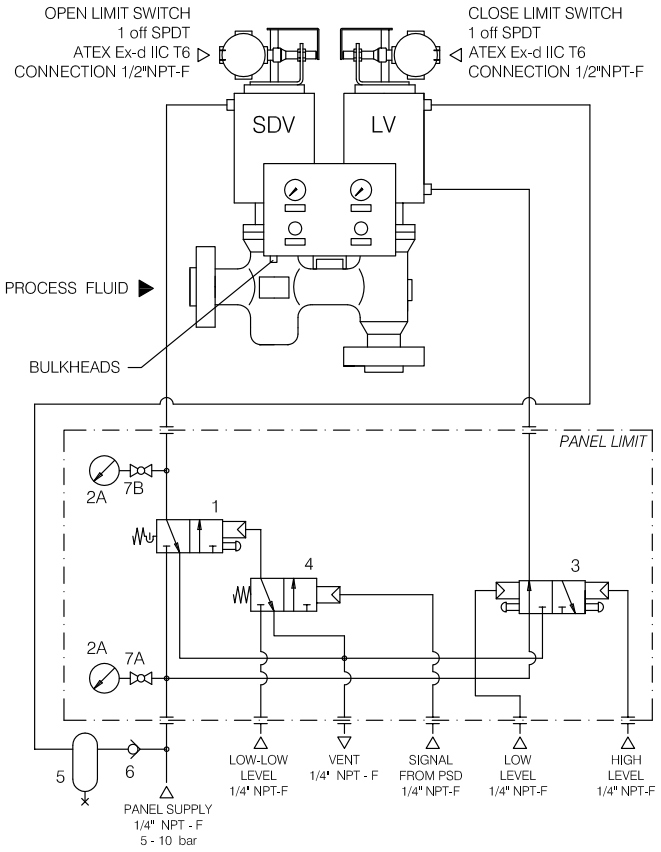
Liquid Discharge Valve

Liquid discharge valve

Operating Diagram Example with Pneumatic valves



General Description

It is a special control system designed for the liquid discharge for the Oil & Gas industry.
This system is a combination of a gate and angle globe type valves, which can be supplied even loose, mainly installed downstream of the separators for discharging the liquid (mainly water) in excess.
The most requested configuration is called "solid block", which provides the coupling of the shut down valve and the control valve in a single block. The valves have integral single-acting actuator and can be manufactured either with the body in carbon steel or stainless steel.
Their field performances is guaranteed by the tungsten carbide seat that ensure a high wear resistance and by the on-off gate which guarantees no leakage.
They are normally coupled to a control panel that can be customized with limit switches, solenoid or pneumatic valves, pressure gauges, counter-strokes and other accessories to meet any customer's requirement.
The materials, the sizes and the available connections allow interchangeability with the valves already in the field. All these control valves are PED certified.

Typical Applications

HydroPneumatic liquid discharge valves are typically the perfet solution for:

- Gas separators for liquid blow-down

Installation

- Onshore and offshore

Features

- ANSI design
- Custom design (gate & gate, gate & needle)
- Wear resistan Trim
- Customized end to end dimensions
- Extensive Range of Body/Trim Materials
- Pressure rating up to ANSI 2500
- Flanged from 1" through 2" ANSI (other ends connection available upon request)
- Actuation: single acting Pneumatic or Hydraulic
- Equipped with limit switches and Control Panels with Relais and Solenoid Valves as per Customers' specification

Benefits

- One single body for a compact design
- Heavy duty design to withstand service life with high thickness wall
- Suitable for contaminated and corrosive fluids and high sand content
- Resistant against high pressure drops
- High seat tightness
- Fluid control with guaranteed fixed Cv value to be selected upon needs
- High calibration
- Flashing resistance

Operating Diagram Example

Item	Description
7	Ball Valve - 1/4" NPT - 1000 PSI
6	Check Valve
5	Volume Bottle
4	3 Way 2 Pos. - Pneum. Relay Auto reset
3	3 Way 2 Pos. - Double Act. Pneum. Relay
2	Pressure Gauge 0-25 bar
1	3 Way 2 Pos. - Pneum. Relay W/Manual reset
SDV	Shut Down Valve - Gate Valve
LV	Level Valve - Synapta Valve - Orifice D. 4mm

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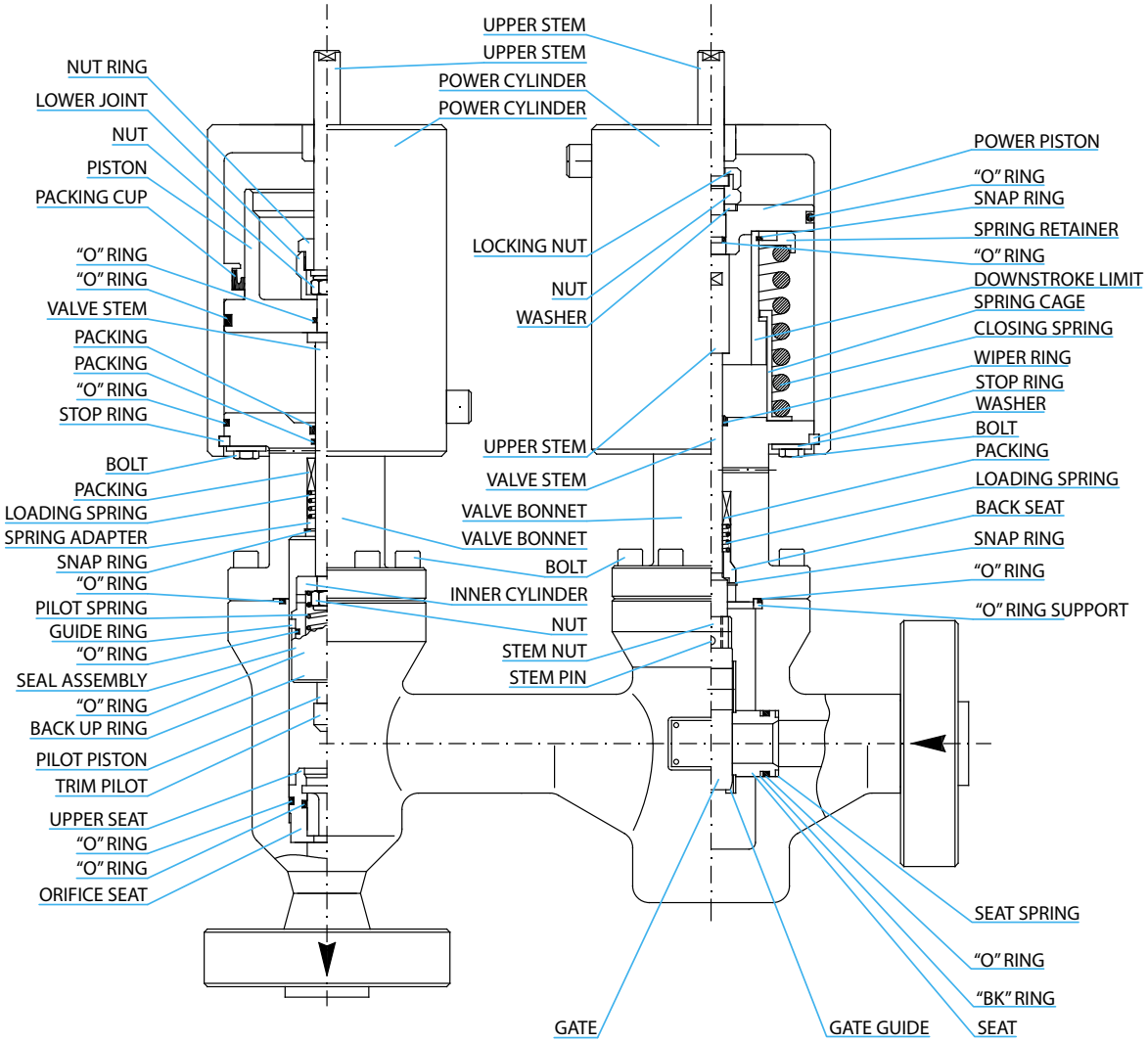
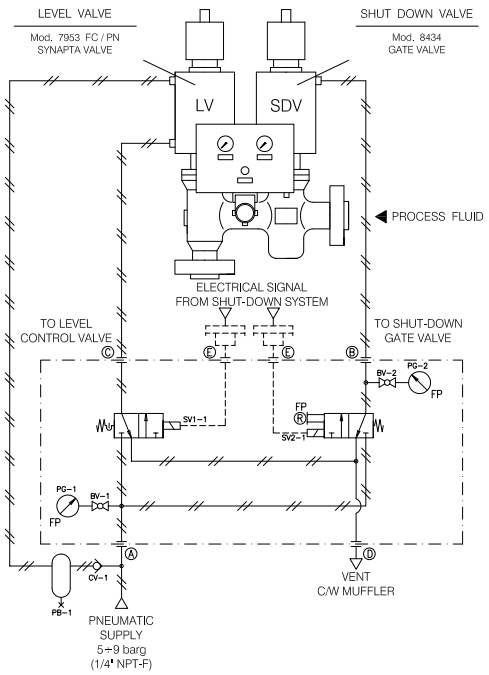
Performance data



Operating Diagram Example with SOVs



Operating Diagram Example

Item	Description
SV2	Solenoid Vave 3/2 W/Manual reset
SV1	Solenoid Vave 3/2 Spring return
PG	Pressure Gauge
PB	Pneumatic Bottle
CV	Check Valve
BV	Ball Valve

Pneumatic / Electrical Connections

Item	Description
E	Electrical Signals from Shut Down System
D	Vent C/W Muffler
C	Pneumatic Pressure to Level Control Valve Actuator
B	Pneumatic Pressure to Shut-Down Gate Valve Actuator
A	Pneumatic Supply

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