



GT

GIOTECH

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Model	LC 25 AP		
Connection	DN 25x DN 25		
Pmax	25 Bar	P Out	BS (0.1 / 0.6 bar)
Cg	90		MD (0.5 / 2 bar)
			AT (2 / 6 bar)

Capacity Table Nm ³ /h													
P Out (mbar)	P Inlet (Bar)												
	0,5	1	1,5	2	2,5	3	4	6	10	12	16	19	25
100	50	100	120	160	180	220	240	320	460	520	520	520	520
300	50	100	120	160	180	220	240	320	460	520	520	520	520
500	-	100	130	160	180	220	240	320	460	520	520	520	520
1000	-	-	140	180	200	240	360	380	540	580	580	580	580
2000	-	-	-	-	200	240	360	380	540	580	580	580	580
4000	-	-	-	-	-	-	-	380	540	580	580	580	580

ISSUES TO BE CONSIDERED BEFORE REGULATOR STARTUP

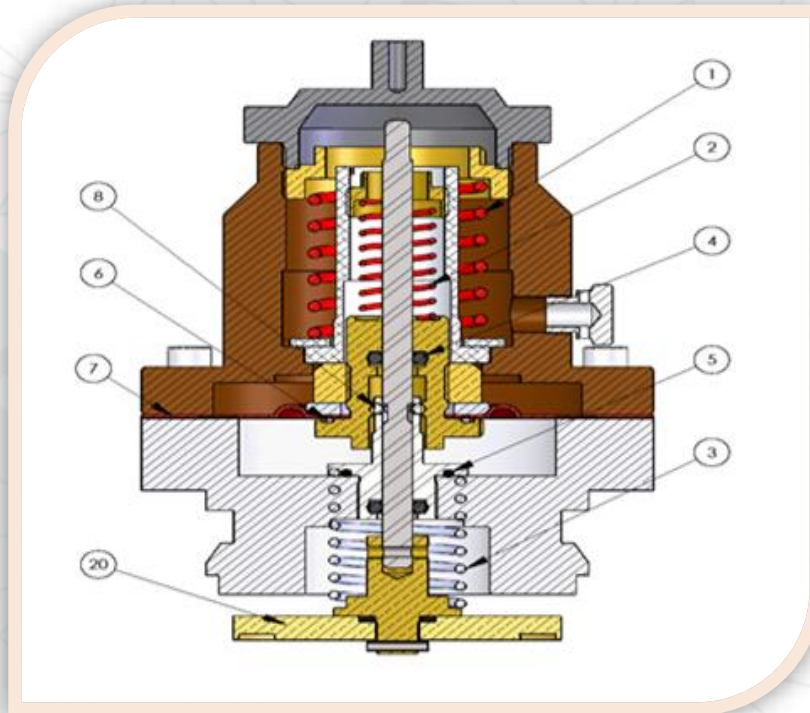
- ✓ Make sure that the regulator is protected against environmental conditions (rain, moisture, etc.).
- ✓ Regulator connections and directions should be checked.
- ✓ Shut off valve and regulator sensing line connections connections should be checked.
- ✓ Shut off valve and regulator sensing line connections must be 5 x DN from the outlet flange of regulator body.
- ✓ Check the dimentions of connection pipes co if the gas velocity inside of the regulator outlet pipe should not exceed 90 m / s. (If it passes, the regulator starts oscillating due to turbulence and cannot reach the desired capacity.)
- ✓ Existed manometer and valve on inlet and outlet pipe is needed for maintance and commission process

STARTUP OF SPRING LOAD REGULATORS

- ✓ Turn on the inlet valve of the line slowly and pressurizes pipeline up to the entrance of regulator
- ✓ Set up the SoV as told on next page
- ✓ Check to outlet pressure and if the outlet pressure is not at the set point, it is brought to the desired pressure by the adjustment the spring by a tool
- ✓ Turn on the valve which is installed after the regulatör and let the gas flow slowly up to devices on pipeline

SET UP the SHUT OFF VALVE

- ✓ The part of resetting is must be disassembled by turning it counterclockwise from the top cover part of the Shut off valve (SoV)
- ✓ Before take the part out see the small size of thread on part and after take out please screw that small thread to shaft which is installed inside of Sov cover
- ✓ As soon as the crown part touches the top cover of the SSV, it will begin to pressurize the inside of the regulator as it will move the SSV plug connected to the crown shaft part in the opening direction.
- ✓ After this moment , the outlet pressure must be monitored on the pressure gauge of outlet line.
- ✓ Where the outlet pressure reach at setting point please pull the set up part directly to yourself up to hear the locking sound from the SOV and than SOV will be setted up and will let the flow the fluid



PROBLEMS OF REGULATORS WHICH CAN BE HAVE WHILE OPERATING

1. Increasing of outlet Pressure

2. Decreasing of Outlet Pressure

3. Oscillating Problem

4. Leakage Problem

5. Set up problem with SoV

1. Increasing of Outlet Pressure

- ✓ When the flow stops, if the outlet pressure is higher than the set value, it is observed that there is an internal leakage problem in the regulator.
- ✓ At least one of the following parts or parts is found to be damaged and all of these parts must be checked respectively;

1. Regulator PAD

2. Regulator Seat

3. Balancing Parts

4. PAD O-ring

- ✓ First remove the bolts around the bottom cover.
- ✓ The PAD inside must be removed and the Pad need to be checked.
- ✓ Check the Regulator Seat surface if there is any damage or dirty parts than u may get it clean or change the part
- ✓ If all other 2 parts don't have problem that means the problem inside of Balancing part ;(some model has O-ring and some has Balancing diapfram please contact with supplier)

2. Decreasing of Outlet Pressure

- ✓ Check whether Shut-Off Valve (SoV) is fully installed. (SoV may be left in the pre-fill position or forgotten.)
- ✓ Make sure that the regulator inlet valve is fully open.
- ✓ Make sure that the diameter of the regulator is selected correctly
- ✓ Check SoV main Shaft if broken or not and if its on right position too

3. Oscillating Problem:

- ✓ Check the regulator sensing line dimentions and position.
- ✓ After checking regulatör sensing line u may install a needel valve and u have to set the position of needle valve while there is gas flow.
- ✓ Check the pipe dimentions of regulator outlet if there is enough space between gas device and regulator.

4. Leakage Problem:

- ✓ Make a Buble test first and see the leakage form regülatör ;if its from a connection or diapfram.
- ✓ If the problem is with Diapfram than ,the spring cover of the regulator should be removed, the spring adjustment screw in it should be removed and the main membrane spring should be removed.
- ✓ Remove the bolts of the top cover and remove the top cover and membrane support part.
- ✓ Remove the relief spring nut on the main membrane group coming out and remove the main membrane group and check for any damage.
- ✓ All rubber parts and O-rings must be replaced with new ones.
- ✓ Same way should be followed for SoV Diapfram too.

5. Set up Problem with SoV:

- ✓ Check the sensing line of SoV if dimentions are right or not.
- ✓ Check the minumu setting and maksimum setting springs if broken or not.
- ✓ Check the beaings of Sov Shaft.
- ✓ Before Set up the Sov , open a valve from outlet pipeline to reliase the high pressure which can have when the outlet pipeline is too short

ADVISED INSTALLATION QUEUE

- a) It's advised to constitute upwards installation schema when assembly the Lucca series regulators to installation station.
- b) Existed manometer and valve on inlet and outlet pipe is needed for maintance and commission process.
- c) When needed discharge the pressure it's exited regulators outlet pipe.
- d) Assembling a relief valve on outlet pipe protect the regulator aganist the high pressure which based on any trouble.
- e) Assembly a filter on regulators inlet pipe, supplies regulators best work performance.

MONITOR OPERATION

- a) The monitor is used as safety device in gas pressure reduction systems. The purpose of device is to protect overpressure.
- b) The monitor comtrols downstream pressure at teh same point as the main regulator and is set a little higher than the latter. Under normal duty the monitor is fully open as it detects a pressure value lower than its set valu.
- c) If due to any regulator fault set pressure increases , when it exceeds the tolerated level the monitor system comes into operation sets pressure to its set pressure value.