

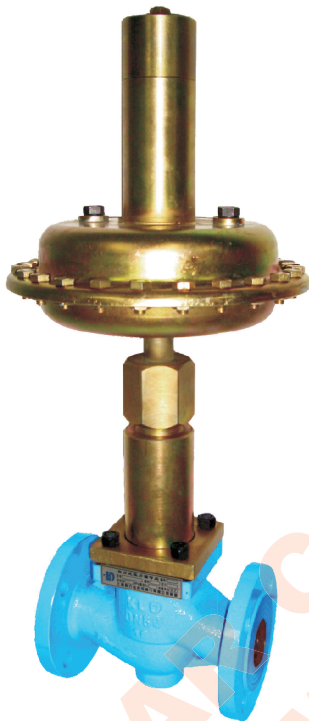


LPI14

Self-Operated Differential Pressure Control Valve



Code	Actuator	Action	Air Fail Position	Control	Structure	Body Material	Sealing Material	Core Material	Connection	DN	PN
LPI11-	0 Others	0 Others	1 Normally Open 2 Normally Close 0 Others	B Self-regulating 0 Others	7 Normal 0 Others	A CF3M B CF8M C CF8 D WCB I CF3 L CE3MN 2 Ti 5 WCC 0 Others	P PTFE Y FEP(F46) R BODY S Stellite 3 Gr 4 WC 0 Others	A CF3M B CF8M C CF8 I CF3 L CE3MN 2 Ti 0 Others	1 Flange 0 Others		



Overview

LPI14 self-operated differential pressure control valve is composed of the control valve, actuator and a spring used for pressure setting.

It is suitable for controlling differential pressure in the pipes of non-corrosive liquids, gases and steams. when the differential pressure rises, the control valve is closed/open.

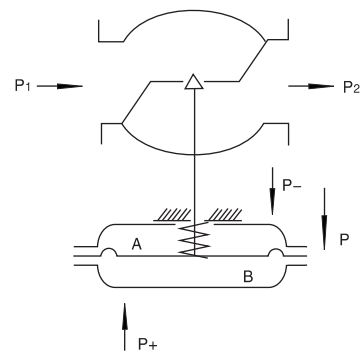
The main features are as follows:

1. It has the pressure balancing function with high sensitivity.
2. Low noise, reliable performance, free of maintenance.
3. The standard modular design is adopted.
4. Various combined controls can be carried out through the assemblies.

Working Principle

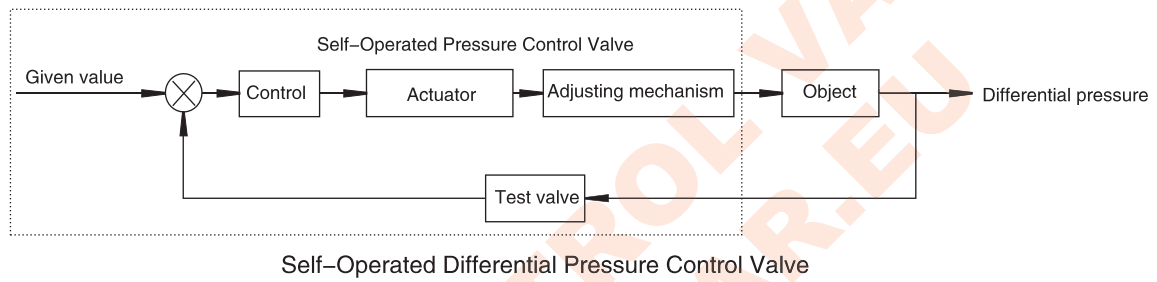
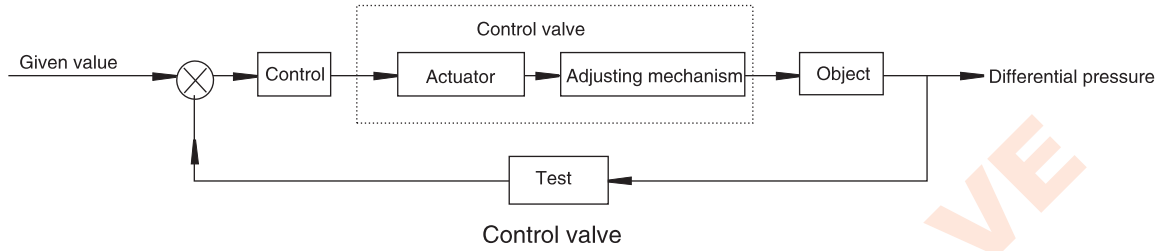
After throttling by the valve, the process medium enters the controlled equipment. The differential pressure of the controlled equipment is introduced into the upper and lower diaphragm chambers and produces thrust in the upper and lower diaphragm chambers that balances the reacting force of the spring, so as to determine relative positions of the plug and seat, which determine the differential pressure valve ΔP . When the differential pressure changes, the balance of forces is destroyed and the plug is driven to move, and the movement of the plug changes flow coefficient of the valve, i.e., the differential pressure is controlled to be the set value. This is the working principle of differential pressure control.

When it is necessary to change the set value of differential pressure, please adjust the adjusting nut.





The difference between the self-operated flow regulating valve and control valve



Self-Operated Differential Pressure Control Valve

Main technical parameters

DN	15	20	25	32	40	50	65	80	100	125	150	200	250
KV	3.2	5	8	12.5	20	32	50	80	125	190	280	420	500
PN	1.6、4.0												
Pressure setting range	5~25、10~60、20~100、50~150、100~250、200~500、450~1000												
Pressure balance devices	Bellows									Cage			
Allowable differential pressure (MPa)	2.5			2.0			1.6		1.5		1.0		
Medium temperature	Gas ≤ 80°C, Liquid ≤ 140°C, With tank ≤ 350°C												
Characteristics	Quick opening												
Connection	JIS B2201-1984, ANSI B16.5-1981, GB/T 9112-9124-2000												
Signal interface	M14 × 1.5												
Accuracy	± 5												
Leakage	Metal seal		Single-seat:IV, Cage:III										
	Soft seal		DN15-50			DN65-125			DN150-250				
			10Bubble/min			20Bubble/min			40Bubble/min				

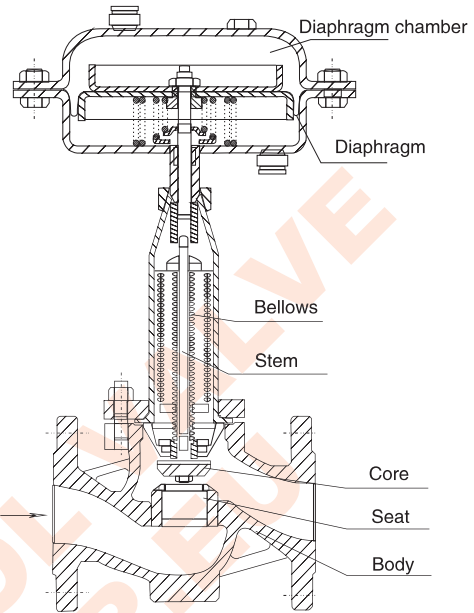
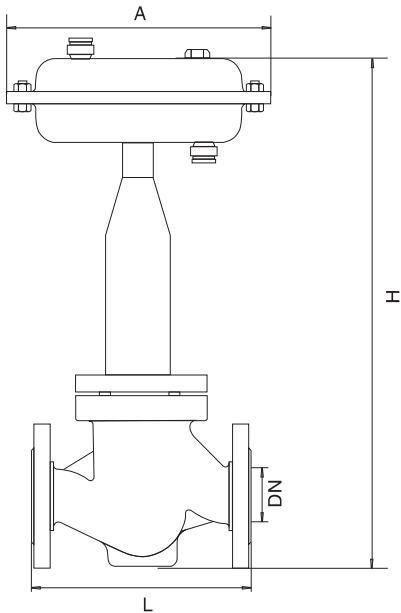


LPI14 Self-Operated Differential Pressure Control Valve



Dimensions and Weight

Exploded View



mm

DN	15	20	25	32	40	50	65	80	100	125	150	200	250	
Face-to-face	140	160	180	200	230	290	310	350	400	451	543	673		
Height	390						450	520	625	725	895			
0.05~0.25	Height	610						685	740	990	1120	1260		
	Membrane head													
	Weight(KG)	21	215	225	29	295	32	46	51	65	135	185	425	485
0.1~0.6	Height	610						685	740	990	1120	1260		
	Membrane head													
	Weight(KG)	16	165	175	24	245	27	46	51	65	135	185	425	485
0.2~1.0	Height	610						685	740	990	1120	1260		
	Membrane head													
	Weight(KG)	16	165	175	24	245	27	46	51	65	135	185	425	485
0.5~1.5	Height	610						685	740	990	1120	1260		
	Membrane head													
	Weight(KG)	16	165	175	24	245	27	46	51	65	135	185	425	485
1.0~2.5	Height	610						685	740	990	1120	1260		
	Membrane head													
	Weight(KG)	16	165	175	24	245	27	46	51	65	135	185	425	485
2.0~5.0 4.5~10	Height	610						685	740	990	1120	1260		
	Membrane head													
	Weight(KG)	16	165	175	24	245	27	46	51	65	135	185	425	485