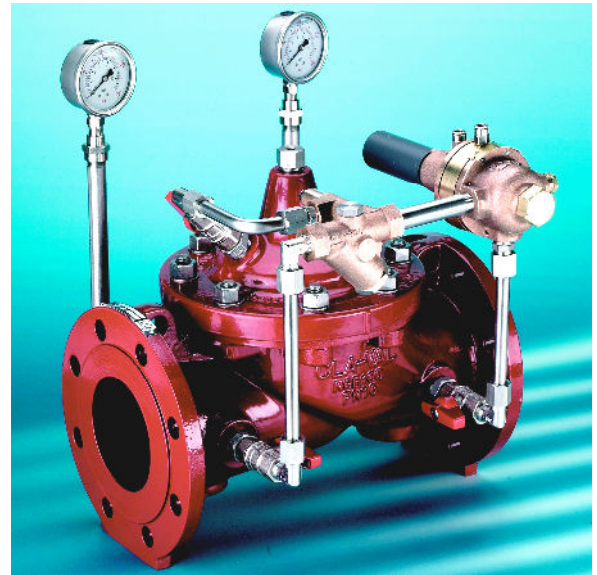


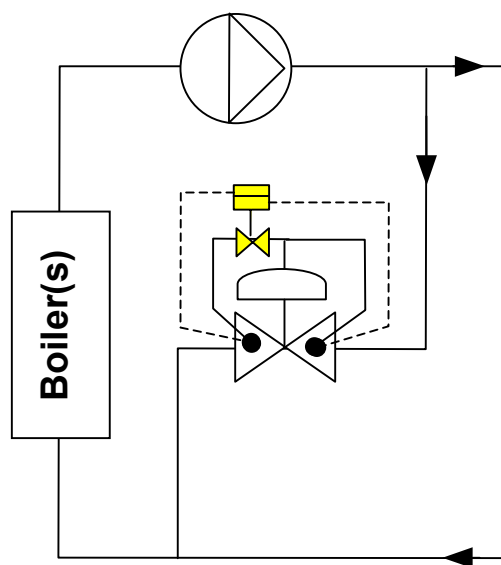
Cla-Val model 250-01KC is hydraulically operated, **pilot controlled, modulating valve** designed to be fitted on a typical by-pass and maintain a pre-determined pressure differential allowing “unwanted” water to “spill” from the flow pipe to return pipe. The valve tends to open on an increase in differential pressure and close on a decrease in differential pressure. The main control valve is **internally pressure balanced** and consequently can **Close-off tightly** against extremely high pumps heads.

Size range 1 1/4" – 28" (32mm - 700mm)

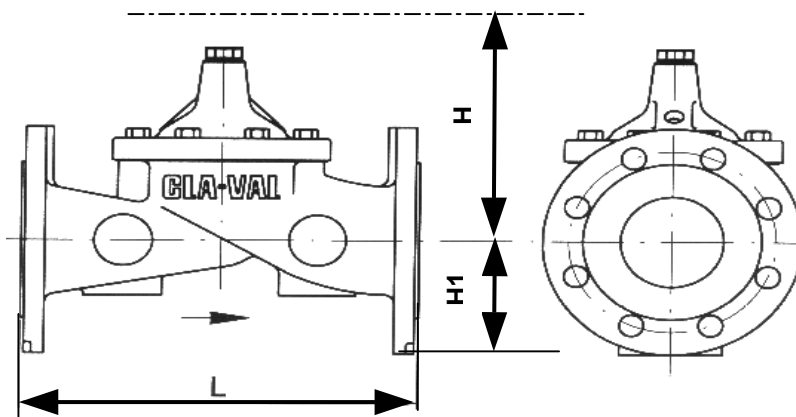
- Internally pressure balanced
- Extremely accurate control of set-point
- High quality materials
- Minimum dimensions above and below the centre-line
- 3 year warranty



By-Pass for Boilers



In this application, the differential pressure controller is sensing the pressure difference between flow and return pipes of a heating system where 2-way temperature control valves etc. are fitted. the water flow rate in the system is, therefore, variable, although the pump is constant speed. As the valve(s) close down, there is an increase in the head developed by the pump causing an increase in the pressure difference between flow and return pipes. This increase is sensed by the differential pressure controller, which modulates to a more open position, allowing “unwanted surplus” water to by-pass to the return pipe and, in so doing, brings the pressure difference back to the set value. Conversely, as Valves etc. open again, the pressure difference sensed decreases and the controller closes accordingly. It is usual to set the controller to control a value about 10% above the operating point of the system at the design conditions.



NOTE

H = Maximum dimension including ancillary pipe-work

L = Face to Face dimensions are based on standard Flanged PN16 (BS4504) connections

Temperature limits: -40°C to 121°C (Dependant on materials).

DIMENSIONS (Common sizes)

Valve type	Size [mm]	Kv [m ³ /h]	L [mm]	H [mm]	H1 [mm]	Weight [Kg]
Standard Series NGE 250-01KC						
	50	32	230	255	82.5	15
	65	43	290	295	93	20
	80	58	310	300	100	25
	100	119	350	390	110	40
	150	209	480	480	142.5	70
	200	479	600	585	170	120
	250	799	730	700	200	190
	300	1292	850	875	228	330
High Capacity Series 250GE-01KC						
	40	28	215	251	75	13
	50	47	254	285	82.5	20
	65	72	280	320	93	25
	80	101	305	345	100	30
	100	173	381	450	110	50
	150	400	508	540	142.5	95
	200	666	645	645	170	170
	250	1076	756	780	200	310
	300	1490	864	905	228	470

* The flow coefficient (Kv) expressed as m³/h is the flow (water temp. At 20 °c) which produces a 1 bar pressure `drop across the wide open valve.

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