

Differential Pressure Controls

TD56-2



Clorius
Controls A/S

- ensures reliable control
of heating, cooling and
ventilation systems
since 1902.



Differential Pressure Controls

Application

The function of the TD-controls is to reduce the high and fluctuating pump head in district heating systems and other large distribution networks to a suitable and, under all circumstances, a constant differential pressure.

Characteristics

- Exact regulating accuracy
- Nominal pressure PN 16 / PN 25
- Self-acting
- Easy to use and install.

Design

The differential pressure controller is a self acting unit consisting of:

- Valve, with pressure balanced cone
- 1, 2 or 3 springs
- Diaphragm housing
- One capillary tube on each side of the actuator diaphragm housing.

Function

The TD-controls are primarily for use in water systems where they maintain a constant differential pressure across 2 points and ensure stable flow conditions.

With the lower pressure connected to the valve side of the diaphragm and the higher pressure to the other side; the differential pressure across the diaphragm will be balanced by the force exerted by the spring or weight.

Any change in the differential pressure will cause the diaphragm and the valve mechanism to move up or down to restore the set condition.

Adjustment of the differential pressure setting is made by rotating the setpoint adjuster clockwise or anti-clockwise until the desired set point is reached.



Type TD56-2

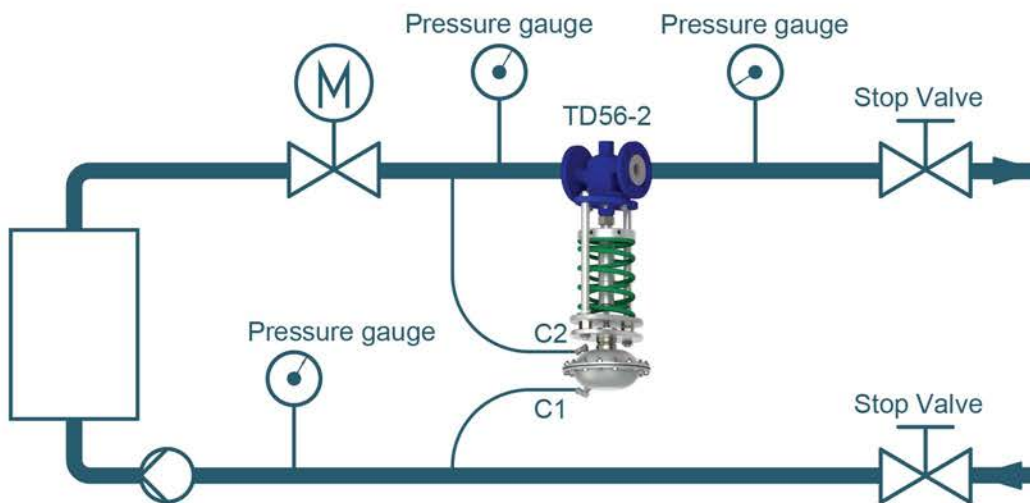
Specifications

Type	Flange connection DN in mm	k_{vs} -value m ³ /h	Lifting height mm	Weight kg
15 TD56-2	15	4	7.5	21
20 TD56-2	20	6.3	7.5	23
25 TD56-2	25	10	9	24
32 TD56-2	32	16	10	27
40 TD56-2	40	25	11	29
50 TD56-2	50	35	11.5	33
65 TD56-2	65	58	14.5	38
80 TD56-2	80	80	16	55

Set point range	bar	0.2 - 0.8	0.6 - 1.3	1 - 2.5	2 - 5



Installation example



The medium flows through the free area between the seat and cone in the direction indicated by the arrow on the valve body. The high pressure line is connected to the diaphragm housing via C1 and the low pressure line to the diaphragm housing via C2. Any change of differential pressure across the diaphragm which

is connected to the valve mechanism – above or below the set point will cause the diaphragm to change its position. If higher than set pressure the valve will move towards closed position, if lower than set pressure the valve will move towards open position, until the system is once again in balance.

Complete control systems

Clorius Controls offers a complete range of tested and reliable equipment for control of heating, cooling and ventilation systems, all with the purpose of achieving the highest reliability and saving energy.

Specialists in selected areas



Maritime industry



Controllers

Clorius Controls offers a wide range of electronic controllers for heating, cooling and ventilation systems. The controllers are available for systems in the maritime industry, general industry, institutions and residences. Clorius Controls offers controllers for simple stand-alone solutions or for larger BMS-plants.

Control valves

Clorius valves are simple and reliable for regulation of temperature and pressure differences in heating, cooling and ventilation systems for maritime industry, general industry, institutions and residences.



Electric valve actuators

Clorius Controls offers a large program of conventional regulation actuators and analogue actuators. This includes special actuators for maritime use, which are designed to withstand vibrations.



Industry and Building Automation

Thermostats

Self-acting thermostats from Clorius Controls are direct-acting and available with sensors for air or liquids. They are also available as safety thermostats for the protection of secondary pipe installations.



Pressure controls

The controllers from Clorius Controls lower large and variable pump pressure to stabilize the flow in the plant.



Clorius control valves and other products can be supplied with certificates of approval from recognized classification societies.



Our quality control system is ISO 9001:2008 certified.

Vendor:



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