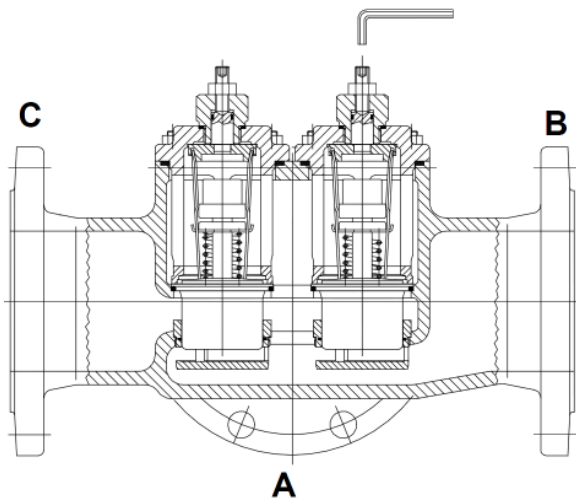


AKO Temperature Regulator selfactuated

BT 227.0421-GB



AKO Three-Way-Temperature Regulator
Type Series 227.0421 with manual override
Deliverable sizes: 40, 50, 80, 100, 150 mm



Technical Data:

Material:	
- Body	1.4308 / CF8M (DN150)
- Inner Parts	SS / Brass
Thermostat	237.0120-xxx-0
Sealing Kit	NBR
Operating Pressure	up to 16 bar
adm. Differential Pressure	up to 16 bar
Nominal Pressure	PN 16
Connection	Flange EN 1092-1 type B

Manual override for the mechanical opening of the cooling path in case of any failure of the thermostat.

The emergency adjustment is not to be used to adjust the set point when the thermostat is working properly!

Installation:

The installation can be done selectively as follows:

as divider

path A: from motor
path B: to bypass
path C: to cooler

as mixing valve

path C: from cooler
path B: from bypass
path A: to motor

The paths have been marked on the connections.

The temperature regulator may be installed in all position.

Deliverable temperature ranges				
05 -15 °C	35 - 43 °C	57 - 66 °C	74 - 82 °C	93 -103 °C*
14 - 26 °C	37 - 47 °C	60 - 69 °C	77 - 85 °C	102-113 °C*
20 - 30 °C	39 - 50 °C	62 - 71 °C	79 - 88 °C	
27 - 37 °C	43 - 54 °C	66 - 74 °C	82 - 93 °C	
29 - 40 °C	51 - 60 °C	68 - 78 °C	85 - 96 °C*	
32 - 41 °C	54 - 63 °C	71 - 79 °C	88 - 99 °C*	

Max. continuous temperature 25°C above fully open temperature.

*maximal operating temperature 120°C

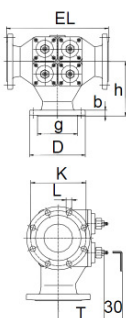
Application

AKO Temperature Regulators are suitable for the stabilization of temperatures of media (e. g. water, oils, etc.) and are even applicable as dividing units or mixing valves. Depending on their construction they are distinguished by their low need of maintenance, particular operating convenience and resistance to pressure. A replacement of inner parts is possible on the spot without having to remove the regulating valve from the piping. A faulty assembly can be excluded. The temperature regulators could be assembled in each fitting position.

Function

AKO Temperature Regulators are being equipped with easily replaceable internal wax-filled thermostats that absorb the temperature of the medium surrounding them at the measurement point namely into expansion and thus a change in path or length (the valve stroke). AKO Temperature Regulators do not require any auxiliary energy. At rising temperature and on excess of the opening temperature, the tube slider is being lifted off on the valve seat and opening path A to C, with the path A to B locking simultaneously in the same ratio. The change is being performed in proportion to the change of temperature of the passing medium.

Manual Override: In order to meet the security demands of the classification societies for great safety, the manual override was installed. It is not intended for setting the temperature when the regulating valve runs automatically. The manual resetting facility makes it possible to use the control valve as a manual change-over valve. The taper can be brought into any desired position by means of an adjusting screw, so that any operating temperature can be set by observing the thermometer.



order-no.	DN	D [mm]	g [mm]	b [mm]	h [mm]	T [mm]	EL [mm]	K [mm]	L [mm]	pieces of thermostats	weight [kg]	KVs [m³/h]
227.0421-040	40	155	88	20	102	172	178	110	4x18	1	16,5	24,64
227.0421-050	50	165	102	23	150	165	225	125	4x18	1	19,0	38,80
227.0421-080	80	209	138	28	171	138	267	160	8x18	2	35,0	85,95
227.0421-100	100	254	158	31	217	155	403	180	8x18	4	59,0	156,70
227.0421-150	150	285	212	26	254	417	489	240	8x22	8	102,0	311,0

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