

Zone valve 169 44 16 ZV Specifications and Dimensions

Tender specification:

Oventrop electrothermal actuator, with auxiliary switch, valve adapter M 30 x 1.5, First-Open function and stroke index.

Model: 24 V, closed with current off
Item no.: 101 24 96

Performance data:

Operating voltage: 24 V AC/DC, +20%/-10%
Starting current: 0.25 A for a maximum of 2 min.
Current: 0.075 A
Closing/opening time: about 3 min.
Stroke: 0.157 in.
Operating power: > 90 W
Auxiliary switch, switching current: 24 V AC: 5 (1) A
24 V DC: 3 (1) A
Protection: IP 54 in any position
Fluid temperature: 32 °F up to 212 °F
Storage temperature: -13 °F up to +140 °F
Ambient temperature: +32 °F up to +140 °F
Connection cable/ length of cable: 2 x 0.0012 in.²/39.4 in.

Installation and fitting:

It is recommended that the control circuit should be fused. Connection cables must not be laid alongside hot pipework as excessive heat will accelerate the ageing of the cable insulation.

A safety transformer according to EN 61558-6 (Europe) or class II FCC-quality proofed (North America) must always be used.

When choosing the switching contacts and the network fuses, the start up load of the heating element must be taken into consideration. The loss of potential may not exceed 10 % so that the indicated operating time is kept.

Oventrop electrothermal actuators can be installed in any position but the vertical installation with the functional display pointing upwards as well as the horizontal installation are recommended. When installing it in vertical downward position, special circumstances (e.g. dirty water) can reduce service life.

Function:

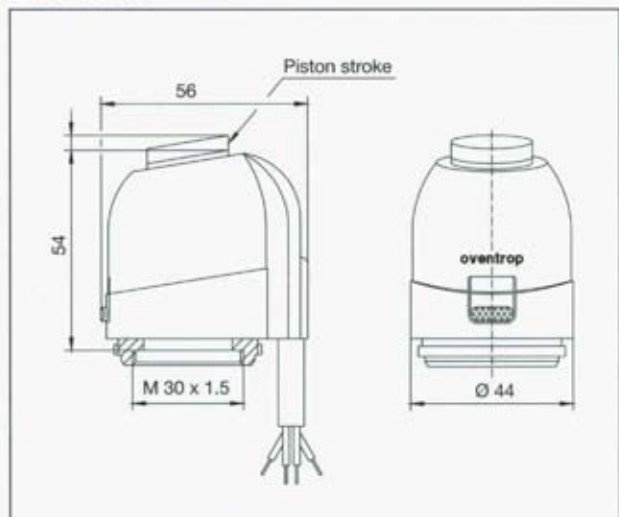
The actuators work with an expansion type working element which is heated electrically. It is silent in operation with low current consumption.

The auxiliary switch may be used for the operation of an electric pump. As from a piston stroke of 0.079 in., the switch is closed.

Owing to the First-open function, the Oventrop actuators are supplied opened with current off. This way, heating operation during construction is guaranteed even if electric cabling of the individual room temperature control has not yet been finished. When the system is put into operation, the First-open function is released automatically when voltage is applied (for more than 6 min.) and the actuator is ready for operation. The functional display (allround display) shows whether the valve is opened or closed.



Dimensions:

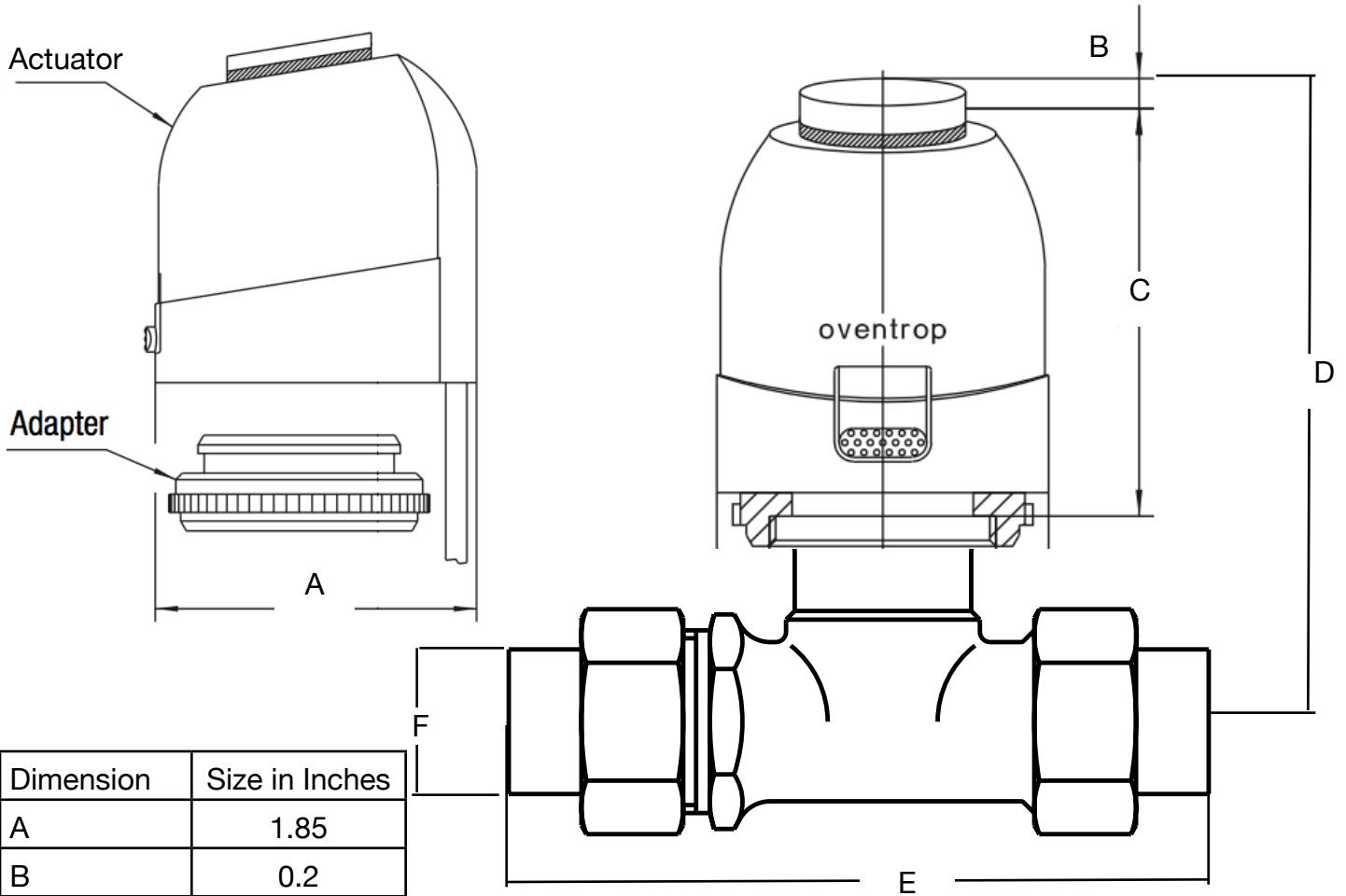
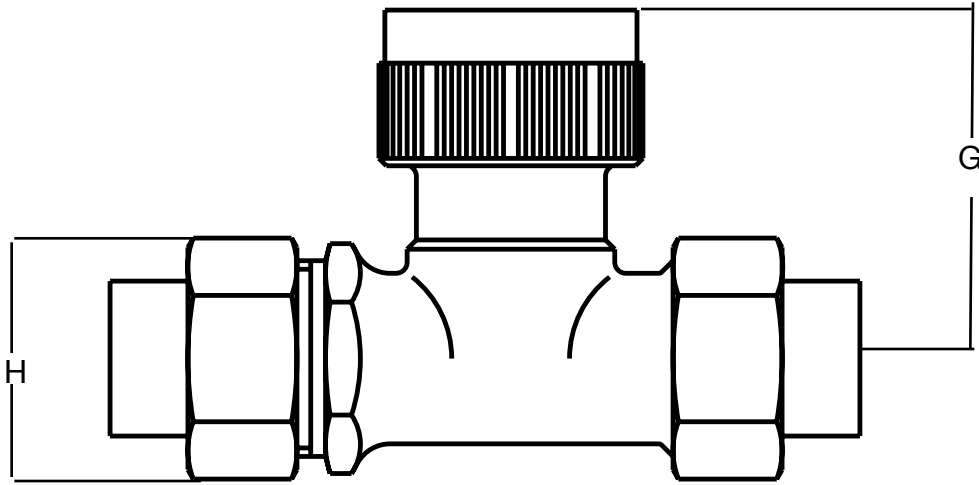


Length of cable:

Calculation of the maximum length of the cable (copper cable) with a nominal voltage of 24 V:

$$L = K \times A / n$$

- A Cross section of the cable in inches²
- n Number of actuators
- K Constant (569,383.33 ft/in.²)
- L Length of cable in inches



Dimension	Size in Inches
A	1.85
B	0.2
C	2.125
D	3.5
E	4.75
F	3/4
G	2.225
H	1.61

Flow Characteristics
CV: 1.28 gpm

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