

#### Tender specification:

Oventrop electromotive actuator LON “Aktor M ST LON” for the direct connection to LonWorks® networks. Power is supplied through the bus using Link-Power technology so that a separate power supply is not needed. The actuator automatically adjusts to neutral point and features an integrated binary entry. The bus and the binary entry are connected via a 4-core cable.

#### Models:

Models:	Item no.:
“OVLONH” Connection thread M 30 x 1.5	1157065
“OVLOND” with adapter for radiators with integrated distributor with squeeze connection and M 23.5 x 1.5	1157075

#### Technical data:

Power supply:	via Link-Power network (SELV), nom. 48 V DC (41.0 V - 42.4 V)
Power consumption:	< 480 mW (< 10 mA)
Number per line segment:	maximum of 64 actuator nodes
Type of network:	LP/FT (78 kbps)
Transceiver:	LPT 10
Binary entry:	1 parametric binary entry (max. connectable total cable length 5 m) Signal voltage: 5 V DC Input impedance: 10 kΩ
Max. piston stroke:	4.5 mm
Control piston stroke:	2.6 mm - 4.0 mm
Resolution:	8 Bit (256 steps)
Operating power:	> 90 N
Floating time:	about 30 s/mm
Protection:	IP 44 according to EN 60529
Protective system:	III according to EN 60730
Electromagnetic compatibility:	according to EN 50082-2, EN 50081-1
Max. fluid temperature:	+100 °C
Ambient temperature:	-5 °C up to +45 °C, not condensing
Storage temperature:	-25 °C up to +70 °C, not condensing
Connecting cable:	J-Y(St)Y 2 x 2 x 0.6, close connection, 1 m long

#### Installation:

Installation must only be carried out by a qualified tradesman who has detailed knowledge of LonWorks®. The connecting cable must not come into contact with the hot radiator or pipe as excessive heat will accelerate the ageing of the cable insulation.

The Oventrop electromotive actuators LON can be installed in any position, except for vertical downward position.

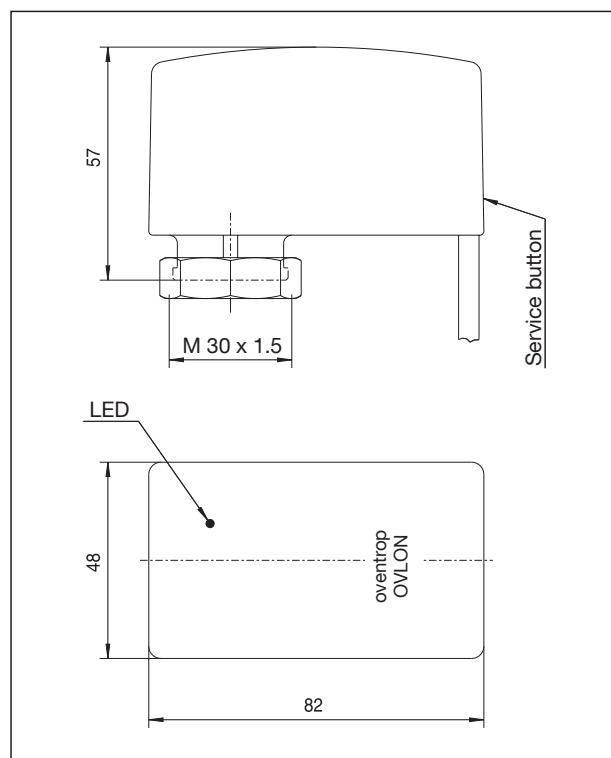
The electric connection is carried out via the bus clamp. Connect the red lead to plus and the black lead to minus. The binary entry is connected to the yellow and white lead.

The actuator is preloaded with the application software so that programming of the application programme is not necessary when putting the actuator into operation.

The actuator uses standard network variables and can thus be integrated into each LonWorks® network with Twisted-Pair wiring (LP/FT).



“Aktor M ST LON”



Dimensions

#### Application:

In combination with Oventrop valves and the corresponding temperature controllers, the Oventrop electromotive actuators LON allow for precise individual room temperature control. Depending on the layout of the pipework, it is possible to control a number of radiators (zones) with one control valve only.

Within LonWorks® networks, the electromotive actuators are used for heating, ventilation and air-conditioning. In combination with conventional radiators, radiators with integrated distributor, distributors/collectors for surface heating systems, radiant ceiling systems, chilled ceiling systems and induction air systems, the actuators allow for room temperature control.

The electromotive actuators LON can be combined with the following Oventrop valves:

- all thermostatic radiator valves (except for valves “ADV 9/ ADV 6” and “KTB”)
- Distributors/collectors for surface heating systems (please observe ambient temperature within the cabinet)
- Regulating valves “Cocon 2TZ”
- Pressure independent control valves “Cocon QZT”
- Regulating valves “Hycoco ETZ/HTZ”
- Three-way diverting and mixing valves

#### Note:

The actuator is preloaded with optimised characteristic lines for use with different valves. The choice of the corresponding valve type and the characteristic line involved is made via a configuration network variable with the help of a software tool. Setting of the valve type has to be carried out carefully as a trouble-free function is no longer given in case of improper application.

The integrated binary entry can, for instance, be connected to a window contact or a dew point sensor. The signal of the binary entry can be read-out via the LonWorks® network and can also be processed internally (compulsory setting) if required.

#### Initialisation:

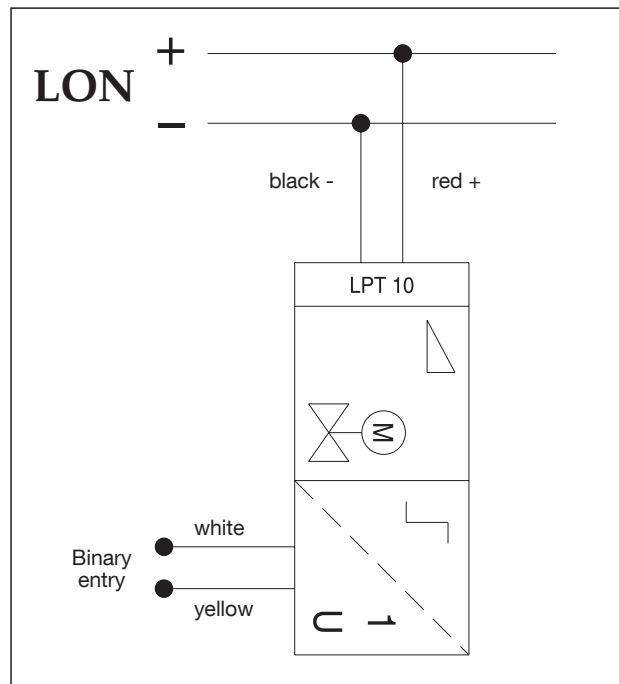
Reading of the Neuron®-ID is carried out by pressing the service button with the LED lighting up shortly. Binding of the standard network variables and configuration of the project specific data is made via a software tool.

#### Accessory:

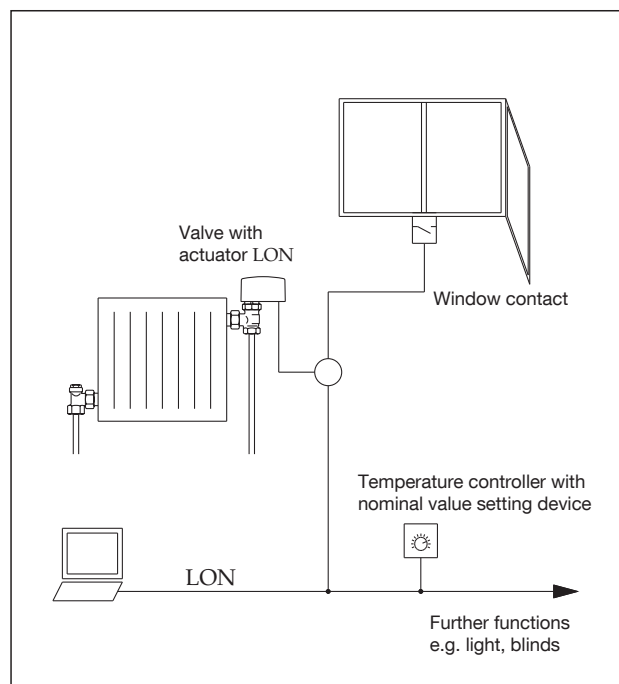
Application programme LON

#### Item no.:

1156051



Wiring diagram



System illustration

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Subject to technical modifications without notice.

Product range 1  
ti 132-EN/10/MW  
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