



HYDROFIRE ΕΠΕ

Buildings - Industry - Marine – Waterworks
 END OF AG. PANTELEIMONOS Str. (ELEONAS)
 GR-12241 EGALEO,

Tel.: +30 210 3412 749-750 Fax: +30 210 3412 406
www.hydrofire.gr, email: info@hydrofire.gr



oventrop

“Aktor M” Electromotive actuators

Technical information

Tender specification:

Oventrop electromotive actuators for steady control. The actuator can be used for two point, three point or proportional control (0-10 V), with squeeze connection and position feedback signal 0-10 V.

Models:

24 V, steady control with 0-10 V or switching as two or three point control. Type of characteristic line (linear, equal percentage) adjustable. With enclosed adapter for Oventrop valves.

Item no.:

1158010

Same actuator as item no. 1158010 but without enclosed adapter

1158011

Technical data:

Operating current:	24 V \pm 5%
Power consumption:	4.9 W during operation 8.7 W in final lift position
Drive:	0 - 10 V
Max. piston stroke:	10 mm
Operating power:	500 N
Floating time:	7.5 / 15 s / mm
Protection:	IP 54 according to EN 60529
Max. fluid temperature:	120 °C
Ambient temperature:	-10 °C up to +55 °C
Storage temperature:	-10 °C up to +55 °C
Connecting cable:	5 x 0.5 mm ²

Installation:

The connecting cable must not come into contact with the hot pipe as excessive heat will accelerate the ageing of the cable insulation.

Electrical connection must be carried out in accordance with the requirements of the local Electricity Board.

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

Depending on the wiring (see connection diagrams), the actuators item no. 1158010/11 can be used as two point, three point or 0-10 V actuator.

Application:

The actuators can be combined with the following Oventrop valves:

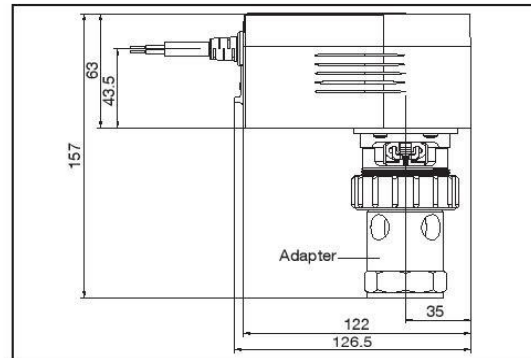
Item no. 1158010:
 “Cocon QTR/QFC” DN 40 and DN 50
 Item no. 1158011:
 Two-way valves item no. 11308.. and 16708 DN 15-DN 50

Function:

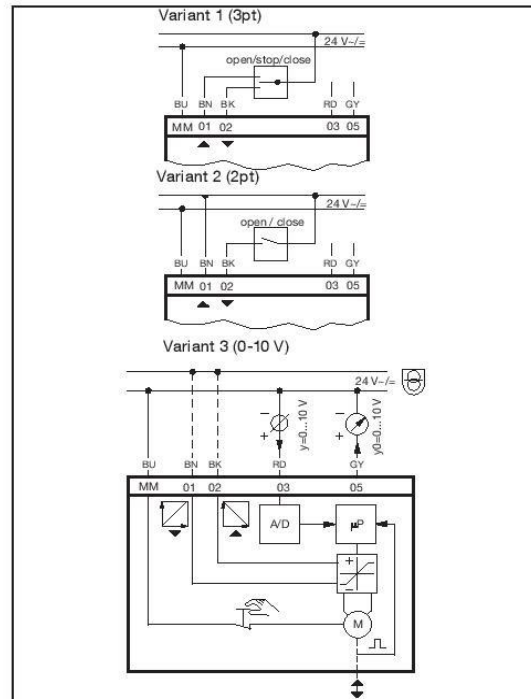
- Synchronous motor with activation and switch off technology
- Electronic recognition of the limit of travel via timer
- Maintenance-free gear with magnetic coupling
- Gear release for manual positioning of the valve. To do so, activate the lateral sliding switch and set the actuator to the required position with the help of the enclosed key.



Actuator



Dimensions with mounted adapter



Connection diagrams item no.1158010/11



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Tender specification:

Oventrop electromotive actuators for steady control. The actuator can be used for two point, three point or proportional control, with squeeze connection and position feedback signal 0-10 V.

1158020: 0(2)..10 V=
 1158021/22: 0(2)..10 V= or 0(4)..20 mA

With enclosed adapter for Oventrop valves.

Models:

24 V, steady control with 0(2)-10 V or switching as three point control. Linear characteristic line. **Item no.:** 1158020

24 V, steady control with 0(2)-10 V or 0(4)-20 mA or switching as two or three point control. Linear characteristic line. **Item no.:** 1158021

24 V, steady control with 0(2)-10 V or 0(4)-20 mA or switching as two or three point control. Linear characteristic line. **Item no.:** 1158022

Technical data:

Item no. 1158020:
 Operating current: 24 V ~; 50/60 Hz
 Power consumption: 4.8 W during operation and in final lift position
 Drive: 0 (2)- 10 V
 Max. piston stroke: 20 mm
 Operating power: 800 N
 Floating time: 9 s / mm
 Protection: IP 54 according to EN 60529
 Max. fluid temperature: 120 °C
 Ambient temperature: 0 up to 50 °C
 Storage temperature: 0 up to 50 °C
 Actuator: reversible synchronous motor

Item no. 1158021/22:
 Operating current: 24 V ~; 50/60 Hz
 Power consumption: 26 W during operation and in final lift position
 Drive: 0(2) – 10 V or 0(4) – 20 mA
 Max. piston stroke: 20 mm
 Operating power: 1000 N
 Floating time: 2 s / mm
 Emergency setting time: 1 s / mm
 Protection: IP 54 according to EN 60529
 Max. fluid temperature: 120 °C
 Ambient temperature: 0 up to 50 °C
 Storage temperature: 0 up to 50 °C
 Actuator: brushless direct current motor

Installation:

The connecting cable must not come into contact with the hot pipe as excessive heat will accelerate the ageing of the cable insulation.

Electrical connection must be carried out in accordance with the requirements of the local Electricity Board.

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

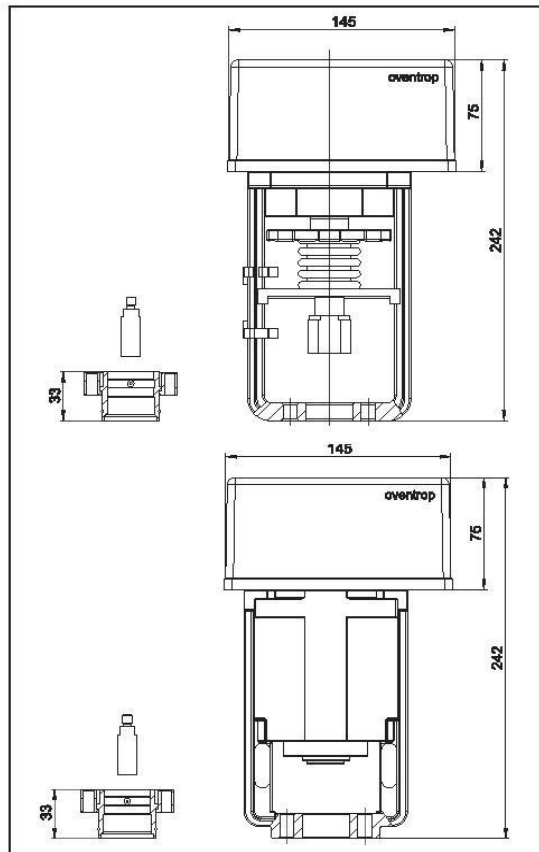
Depending on the wiring (see connection diagrams), the actuators item no. 1158020/21/22 can be used as two point, three point or 0(2)-10V or 0(4)- 20 mA actuator.



Item no. 1158020 and adapter



Item no. 1158021/22 and adapter



Dimensions of actuators and connections sizes of adapter



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„Aktor M“ Elektromotorische Stellantriebe

Application:

The actuators can be combined with the following Oventrop valves:

“Cocon QTR/QFC“ DN 40 up to DN 100

Function:

- electronic switching operation depending on the motive force
- compensation of external interferences by dynamic hysteresis
- linear characteristic line
- valve blocking function, short stroke lift if the actuator has not moved within 24 h (optionally adjustable)
- automatic piston stroke adaptation by initialization
- manual setting of item numbers 1158021/22 by removing the cover and by setting the actuator to the required position with the help of a 4 mm Allen key
- maintenance-free

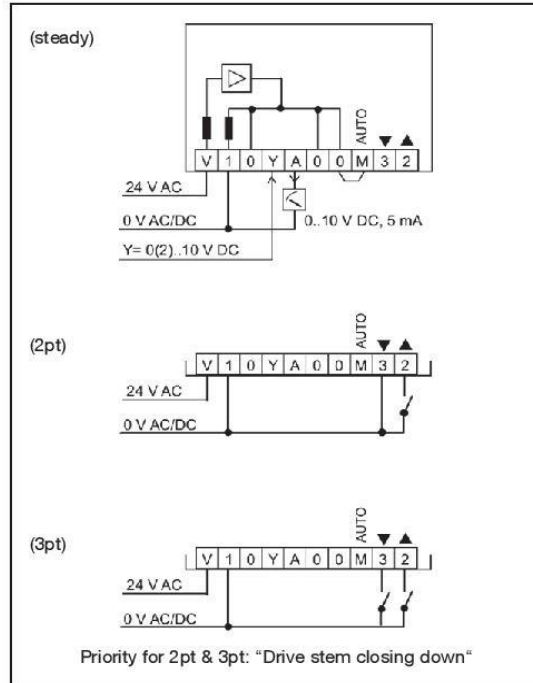
LED display:

Item no. 1158020:

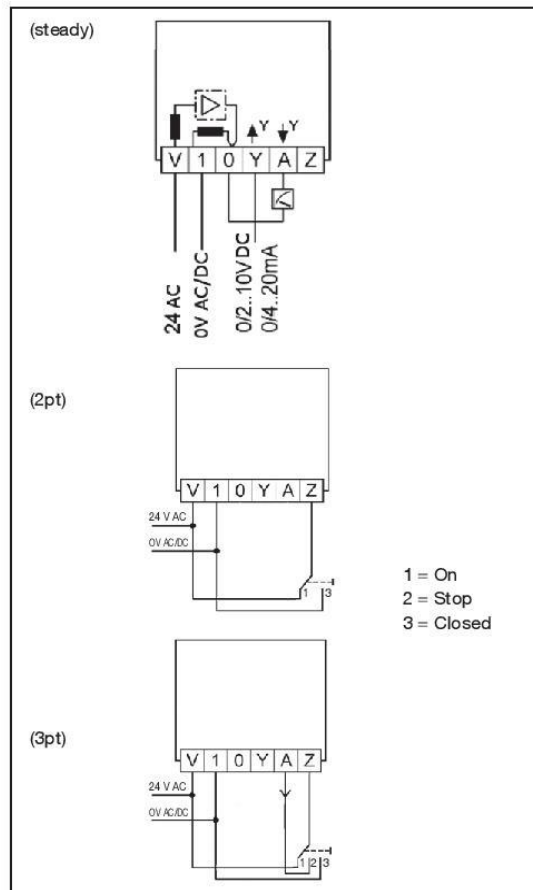
- | | |
|--------------------------|--|
| Permanent light: | Normal operation |
| Slow flashing: | Initialization run or partial initialization after power failure |
| Irregular fast flashing: | Valve is blocked or manual setting |
| Off: | Power supply interrupted or actuator fuse defective |

Item no. 1158021/22:

- | | |
|------------------|--------------------------------|
| Permanent light: | Normal operation |
| Short flashing: | Malfunction / reverse polarity |
| Long flashing: | Initialization run |



Connection diagrams item no. 1158020



Connection diagrams item no. 1158021/22



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Oventrop electromotive actuators for steady control. The actuator can be used for two point, three point or proportional control (0-10 V or 4-20 mA), with squeeze connection and position feedback signal 0-10 V.

With enclosed adapter for Oventrop valves.

Models:

24 V, steady control with 0-10 V or 4-20 mA or switching as to or three point control. Type of characteristic line (linear, square-law, equal percentage) adjustable.

24 V, steady control with 0-10 V or 4-20 mA or switching as to or three point control. Type of characteristic line (linear, square-law, equal percentage) adjustable.

With spring return.
Valves opening with current “off”

24 V, steady control with 0-10 V or 4-20 mA or switching as to or three point control. Type of characteristic line (linear, square-law, equal percentage) adjustable.

With spring return.
Valves closing with current “off”

Item no.:

1158030

1158031

1158032

Technical data:

Item no. 1158030:

Operating current: 24 V +/-
Power consumption: 10 W during operation
18 W in final lift position

Drive: 0-10 V or 4-20 mA

Max. piston stroke: 40 mm

Operating power: 2500 N

Floating time: 2 / 4 / 6 s / mm

Protection: IP 66 according to EN 60529

Max. fluid temperature: 120 °C

Ambient temperature: -10 °C up to +55 °C

Storage temperature: -10 °C up to +55 °C

Item no. 1158031/32:

Operating current: 24 V +/-

Power consumption: 10 W during operation
20 W in final lift position

Drive: 0-10 V or 4-20 mA

Max. piston stroke: 40 mm

Operating power: 2000 N

Floating time: 2 / 4 / 6 s / mm

Protection: IP 66 according to EN 60529

Max. fluid temperature: 120 °C

Ambient temperature: -10 °C up to +55 °C

Storage temperature: -10 °C up to +55 °C

Number of spring returns: > 4000

Installation:

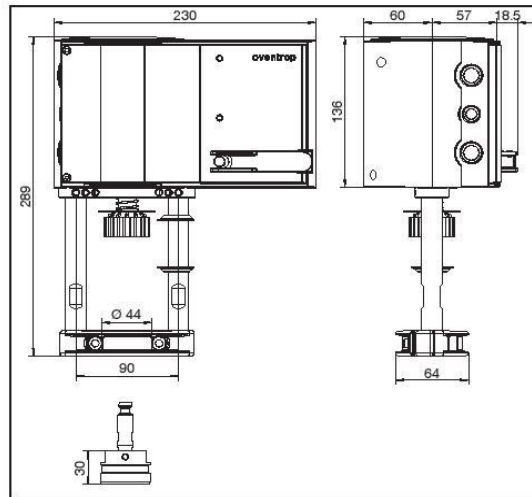
The connecting cable must not come into contact with the hot pipe as excessive heat will accelerate the ageing of the cable insulation. Electrical connection must be carried out in accordance with the requirements of the local Electricity Board.

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

Depending on the wiring (see connection diagrams), the actuators item no. 1158030/31/32 can be used as two point, three point or 0-10 V or 4-20 mA actuator.



Actuator and adapter



Dimensions of actuators and connection sizes of adapter



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Application:

The actuators can be combined with the following Oventrop valves:

“Cocon QFC” DN 125 up to DN 200
 Two-way valves item no. 11308.. and 16708.. DN 65 up to DN 150

Function:

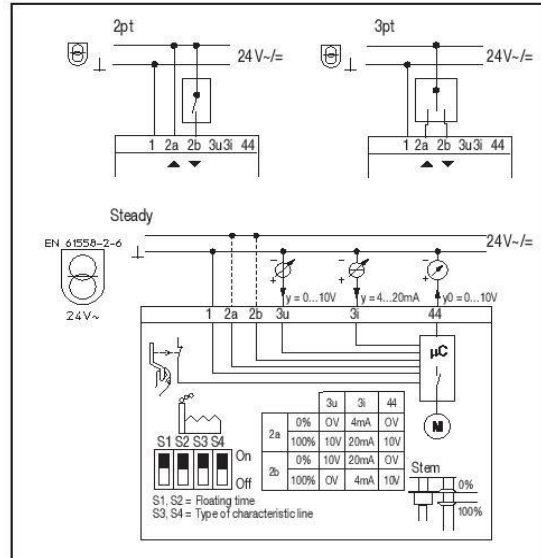
- electronic switching operation depending on the motive force
- automatic recognition of the input control signal
- setting of the characteristic line at the actuator (linear, square-law, equal percentage)
- automatic adaptation
- free choice of mode of operation
- choice of characteristic line
- setting of floating time via coding switch
- the actuator can be set manually with the crank handle
- reinitialization is triggered with the crank handle

LED display:

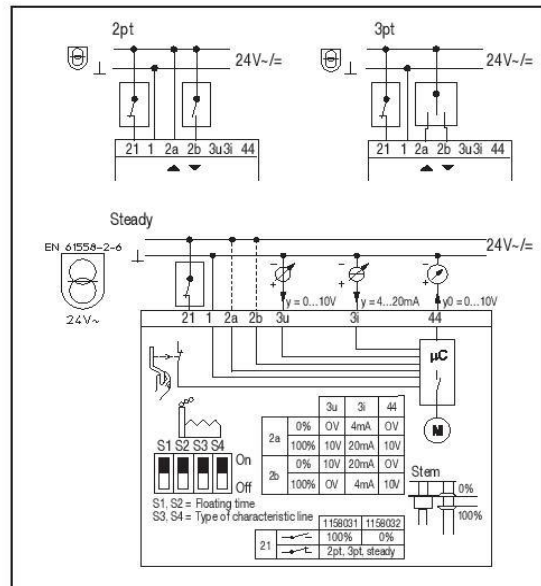
- Both LEDs flash red: Initialization
- One LED flashes green: A piston stroke is carried out by the actuator, direction according to LED
- One LED glows green: Idle position, last direction of travel according to LED
- One LED glows red: Final position, valve position according to LED
- Off: No power supply or no activation in three point mode

Accessories:

- Connection module 230 V 1158033
- For the connection of the 24 V actuators “Aktor M”, item no. 1158030/31/32 to the 230 V supply voltage.
- Module for plug-in connection to the actuator.



Connection diagrams item no. 1158030



Connection diagrams item no. 1158031/32

Subject to technical modifications without notice.
 Product range 3
 ti 315-EN/10/MW
 Edition 2017