

TG ELECTRONICS

TONHE

**Tonhe A 20-S Series
Timer Controlled shut off Valve**



Application

- Water meter , water leak detection system and water treatment etc equipment
- HAV and fire works. Automatic drain system
- Irrigation ect small control equipment

TG ELECTRONICS

Blåbærdalen 30 6518 Kristiansund

Tele:+47 91795392

e-post: post@tgelectronics.no www.tgelectronics.no

Technical Parameters:

Product size	□NPT/BSP 1/2" □NPT/BSP 3/4" □NPT/BSP 1" □NPT/BSP 1 1/4" (Optional)
Maximum working pressure	1.3 MPa
Circulation medium	Fluid, air
Valve open /closed time	≤ 7 seconds
Rated voltage	□AC/DC9-24V □AC110-230V (Optional)
Keeping valve open time	0 H : 0M :0S --99 H 59
Keeping valve closed time	0 H : 0M :0S --99 H 59
Working current	≤500MA
Stall current setting	0-599mA
Life time	100000 times
Valve Body material	□Brass □Nickel plated Brass □304 Stainless steel (Optional)
Actuator material	Engineering Plastics
Sealing material	EPDM & PTFE
Actuator rotation	90°
Max. torque force	4N.M
Cable Length	0.5m,1.5m (Optional)
Environment temperature	-15℃~50℃
Liquid temperature	2℃~90℃
Manual override	No
Indicator	Yes
Protection class	IP67

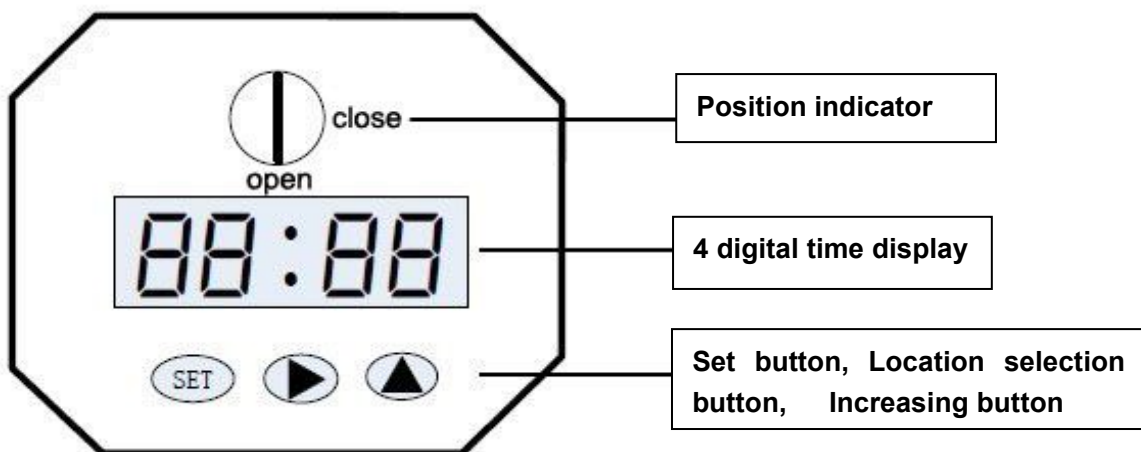
1 Parameter specifies

Working voltage :AC110-230V/AC/DC9-24V

The time for keeping valve open :0 H : 0M :0S --99 H 59 M 59 S

The time for keeping valve closed : 0 H : 0M :0S --99 H 59 M 59 S

2 Timer specification

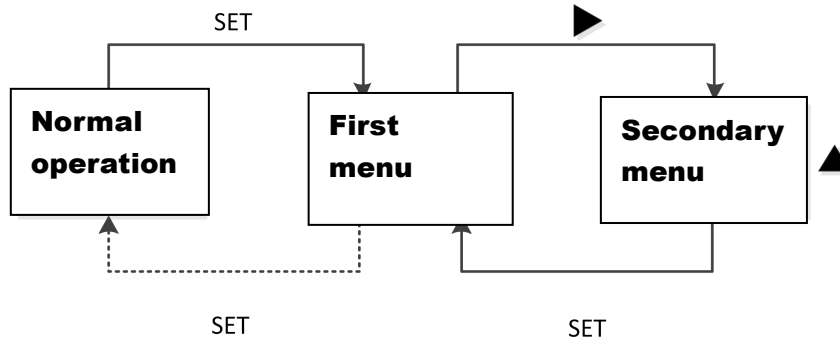


3 Operation instruction

Actuator parameter setting have two menu structures on below:

Function code (first menu),

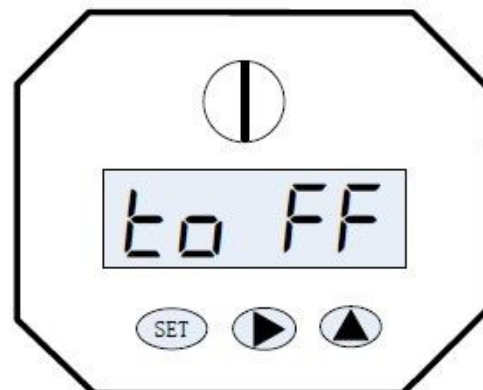
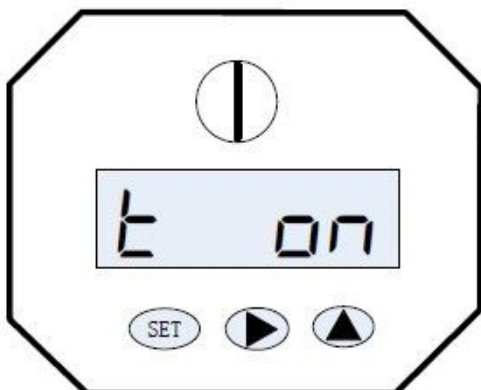
The setting parameters of function code (secondary menu)



Picture 0 Secondary menu operation menu


Function code	Content	Value	Unit	Remarks
t on	valve keeping open time	00:00:00 – 99:59:59	H:M:S	
toFF	valve keeping closed time	00:00:00 – 99:59:59	H:M:S	
PonS	Power -on Action	On/oFF		
Prot	Stall current setting	0-599	MA	When the current is bigger than the setting value 1.6S, the motor will stop working , and the display will show Err.


Parameter function control table



Picture 1

picture 2

1 Press  2 seconds and enter to fist menu, the screen display picture 1 text (t on) , indicating enter to set the valve keeping open state .




Press  again, the screen display picture 2 text (t o FF) ,indicating enter to set the valve keeping closed state .




Picture 3





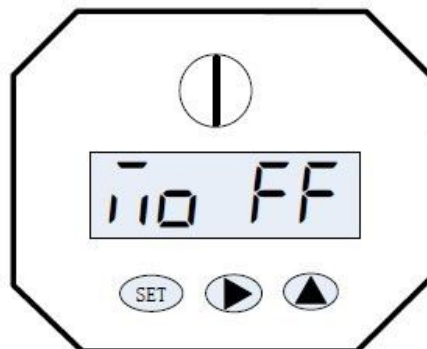
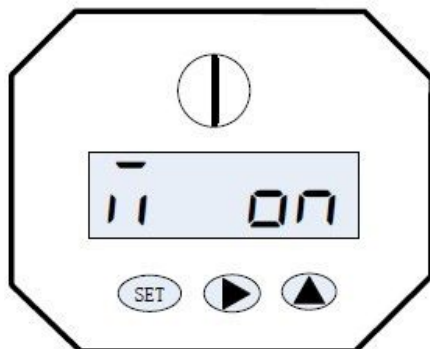
picture 4

2 Press then the  after entering the stetting state , showing the valve keeping time for setting (Set the valve keeping open time on the valve keeping open state . Set the valve keeping closed time on the valve keeping closed state.) . Select flashing bit by pressing , and change the numerical by pressing  .

When " : " is flashing , indicate setting "HS (hours) :MS(minutes)", and change the flashing fit by pressing  .



When the " : " is bright , indicate setting " MS(minutes) :SS(seconds) " .
The data will be deposited in the valve controller after completing the setting .



Press  when finish setting , will return fist menu , press  again , enter to next fist menu to set parameters .



Picture 5

picture 6

3 Press the  &  , the screen display picture 5 , indicating open the valve manually.

Press the  &  , the screen display picture 6, indicating closed the valve manually .

Exit manual mode to press the  &  or  &  . And go the power -on action .



Picture 7



picture 8

4 On the normal working state, the displayed time is valve keeping time.(e.g. Valve keeping open time is 10 S, will count down 10S)

The " : " is flashing , indicating the "HS (hours) : MS(minutes)" .

The " : " is bright, indicating the " MS(minutes) : SS(seconds) " .

4 Stalling protection function

When the actuator is detected stalling, it will run in reverse direction .when reach to the open or closed position , and do the close or open action again , meanwell displaying flashed **0000-0001** on screen (indicating the current retrying times) . If it fail at third retrying , the valve will stop running and display ERRL on the screen .