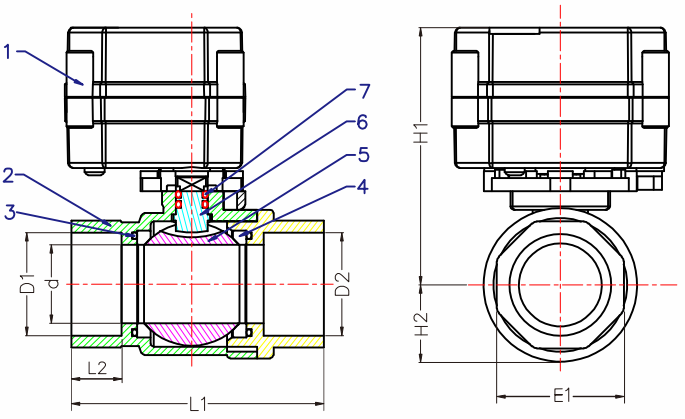
COVNA®
VALVE

Main Parts Materials

NO.	Nane	material
1	Actuator	PPO AT20/AT100
2	Body Cover	BRASS
3	O–Ring	EPDM
4	Sealing	PTFE
5	Ball	BRASS
6	Stem	BRASS
7	O–Ring	EPDM

Outline Size Dimension

Size	T15(1/2")	T20(3/4")	T25(1")
D1/D2	1/2"	3/4"	1"
d1	15	20	25
L1	63	72	81
L2	14	17	18
E1	25	31	38
H1	83	87	95
H2	17	20	24



Technical Parameters

Product Specifications	DN15, DN20, DN25 (Optional)
Max. Working Pressure	1.0MPa
Circulation Medium	Water, Air
Rated Voltage	AC/DC 110-230V, DC9-24V (Optional)
Working Current	≤ 80mA
Open/Close Time	≤ 7S
Life Time	100,000 Times
Valve Material	Brass, SS304, SS316 (Optional)
Actuator Material	Engineering Plastics
Ambient Temperature	-15°C-50°C
Liquid Temperature	2°C-90°C
Manual Override	NO
Keeping Valve Open Time	0H:0M:0S-99H:59M:59S
Indicator	YES
Sealing Material	SEPDM

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VALVE

Main Parts Materials

NO.	Nane	material
1	Actuator	PPO AT20/AT100
2	Body Cover	STAINLESS STEEL 304
3	O–Ring	EPDM
4	Sealing	PTFE
5	Ball	STAINLESS STEEL 304
6	Stem	STAINLESS STEEL 304
7	O–Ring	EPDM

Outline Size Dimension

Size	T15(1/2")	T20(3/4")	T25(1")
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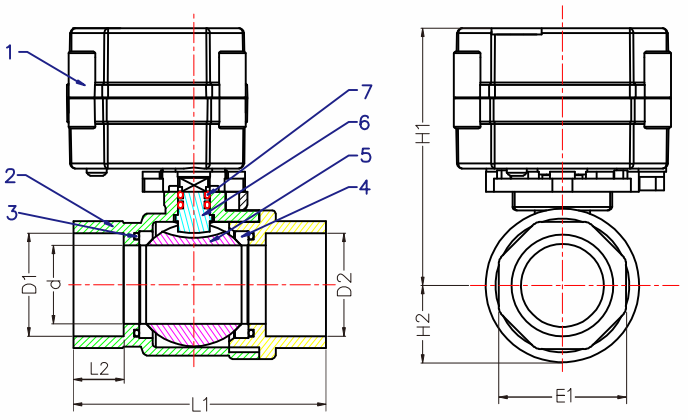

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Indicator	YES
Sealing Material	SEPDM

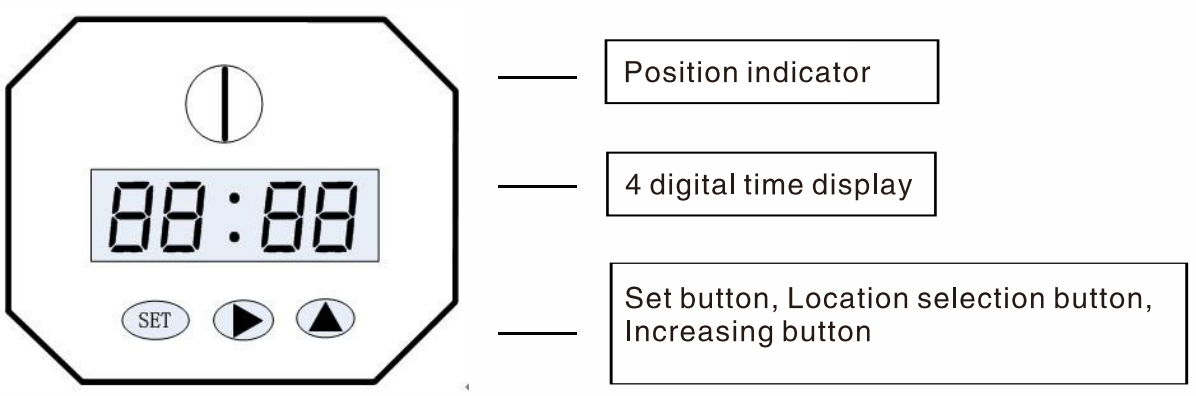
Parameter specifies

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

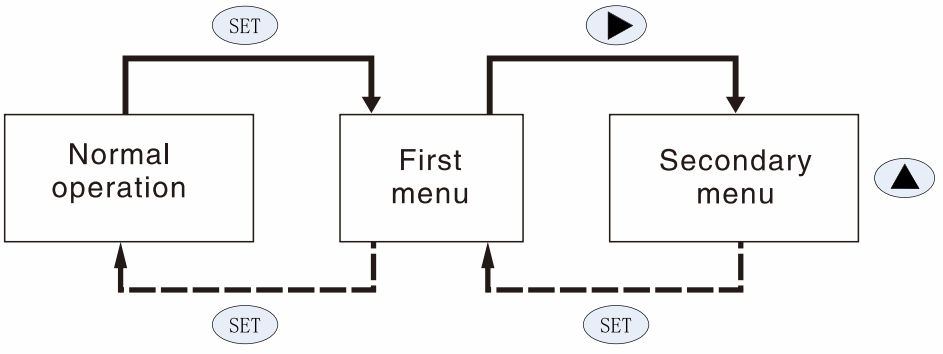
Timer specification



Operation instruction

Actuator parameter setting have twomenu structures on below:
Function code (firstmenu),

The setting parameters of function code (secondarymenu)



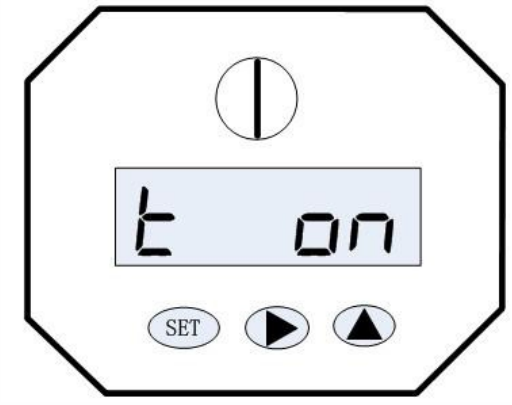
Picture 0 Secondarymenu operationmenu

Function code	Content	Value	Unit	Remarks
T ON	valve keeping open time	00:00:00–99:59:59	H:M:S	–
T OFF	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 isbigger than the settingvalue 1.6S, the motor will stop working , and thedisplay will show Err.

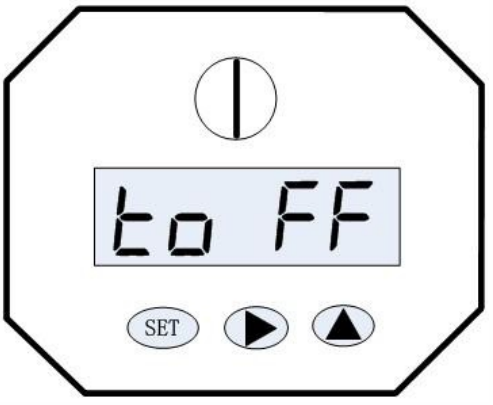
Parameter function control table

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

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



Picture 1



picture 2

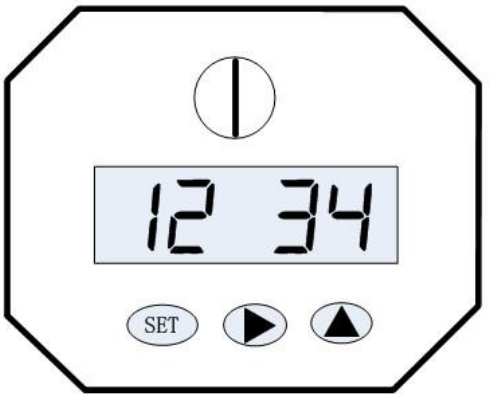
② Press then ▶ the after entering the stetting state , showing the valve keeping time for setting (Set the valve keeping open time on the valve keeping open state . Set the valve keeping closed time on the valve keeping closed state.) . Select flashing bit by pressing , ▶ and change the numerical by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

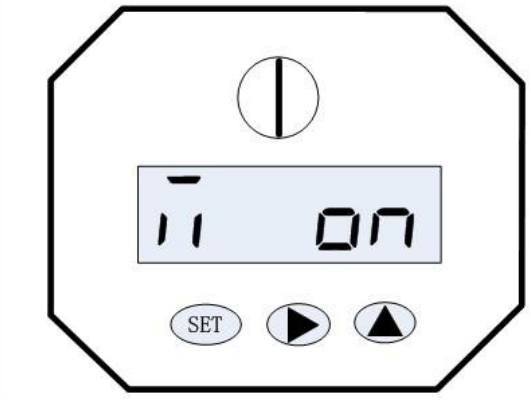
Press SET when finish setting , will return fist menu , press SET again , enter to next fist menu to set parameters .



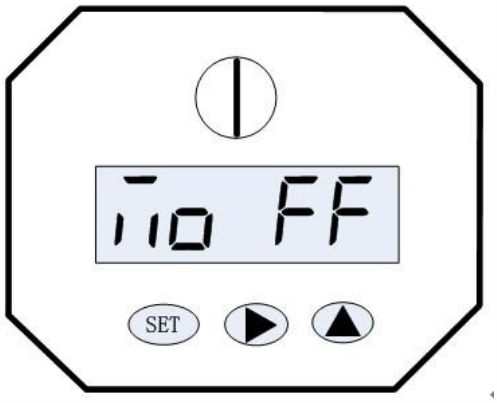
Picture 3

picture 4

③ Press the SET & ▶ , the screen display picture 5 , indicating open the valve manually.
Press the SET & ▲ , the screen display picture 6, indicating closed the valve manually .
Exit manual mode to press the SET & ▶ or SET & ▲ . And go the power –onaction .



Picture 5



picture 6

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) " .

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 , meanwhile 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 .

Common faults and inspection, troubleshooting

Fault Resolution	Possible Causes	Solution
The valve body does not operate after power is applied, The display is on.	Valve body on / off hold time is not reached	Check whether the display on / off hold time is too long and enter the level menu to shorten the time
	The body has debris jammed or blocked	Check whether the display shows ERR1, if any display please clean up sediment
	Water pressure is higher than valve body torque	Go to the primary menu Prot, increase the current to increase the torque
The valve body does not operate after power is applied, The display is off.	no power on	Check if the line is powered on
	There's water in the actuator, Circuit board short circuit	Contact the salesperson
	Not used in the normal voltage range, the circuit board burned	Contact the salesperson
The valve body does operate after power is applied, the timer can not be set.	Internal button failure	Contact the salesperson