# **Welcome to HEARKEN** — Actuators and Controls

**HEARKEN** 

**BROCHURE** 

WEB WECHAT

> Hearken Here We Can

### The Trusted, Passionate and focused Partner in Valve Automation

At HEARKEN FLOW, The founding principle of Hearkenflow is simple: to Listen our customers needs first, to develop the innovative valve actuators solutions, to meet the unique needs of our customers, Along the way, To help our customers to solve the problems in Valve Automation. We are growing our brand in Pneumatic and Electric Actuators, Accessories..



**Experienced team** 



Large inventory



Convenient consultation













#### WHY WE ARE DIFFERENT

We offer a complete valve automation solution by the applications experience and customization capabilites, with an experienced support team to guide you in selection, installation, and project support.In addition we maintain an extensive supply of product inventory on hand so that we can quickly fulfill orders and reduce wait times. Our sales and support staff are readily available and accessible so that customers get the answers they need quickly.

#### THE TARGET WE ARE PURSUING







High-quality

low cost

Reliable solution

- To built A strong Reputation in Providing Quality, Cost Effective, Reliable And Robust Performance Solutions for Valve Automation,
- Inclued Pneumatic Actuators, Electrically Actuators, Actuated Valves.



#### **COMMITMENT TO QUALITY**

At HEARKEN FLOW means performance, All products manufactured by HEARKEN FLOW are warranted against defects in material and workmanship for a period of 18months from the day of startup. Each of our products are tested at the factory. we are confident that our products meet or exceed all applicable standards before they ever leave our facility. We are an ISO 9001-2008 certified company. Our Valve Actuators Has Applied for SIL3 Certificate, ATEX Certificate, CE, Explosion-proof Certificate, IP68 Weather proof etc....



# **HEA Series Electric Actuator** — Quarter-Turn Design

## Description

HEA Series Quarter-Turn Electric Actuator is used for controlling 0~270 degree Rotation valves and other similar products, such as butterfly valve, ball valve, damper, flapper valve, cock valve etc... It widely applies to petroleum, chemical, water treatment, shipping, peper, making, power plant and other industries.

Drived by 380V/220V/110VAC OR 24V/110VDC Power,Inputs 4~20mA Or 0~10 VDC control signal, Moves valve to the right position, and achieve to automatic control. The Maximum output toque is 2000 N.m

## Main Product features



Designed for small quarter-turn applications.

Protection class to IP67, NEMA4 and 6

The Actuator can automate the valves requiring up to 270 degree rotation. To help protect the components and extend the actuator's life, an anti-condensation A thermal protector is provided to protect the motor from over heating.

#### Performance features



Function	On/Off or Modulating					
Material						
Housing	Aluminum alloy, epoxy powder coated					
Gear	Steel / aluminum bronze					
Screws	Stainless steel					
Indicator Cover	Polycarbonate					
Shaft / Adaptor	Alloy steel					
Seal	NBR					
Lubrication	Aluminum based grease					
Technical Data						
Power Supply	24VDC, 110VAC, 220VAC					
Motor	Squirrel cage asynchronous motor					
Limit Switch	SPDT, 250VAC10A, each for Open and Close positions					
Rotation	90o ( $\pm$ 10o) other rotation on request					
Manual Operation	Mechanical handle standard					
Conduit Entry	2 x M18					
Operating Temp	-20oC to +70oC					
Ambient Humidity	Max. 90% RH					
Vibration Tested	XYZ10g, 0.2~34Hz, 30 minutes					
Mounting	ISO5211					
Torque Output	30 Nm to 1000 Nm (2000 Nm on request)					
Self-locking device	Self-locking by worm and worm gear					

#### Standard & Technical datas

Indicator	Dome Type( Option: LED Light Inside)
Ambient Temp	-20°C~+70°C
Limit Switches	2 open/close+dry contact 2 open/close
Manual Operation	Hex key (Option: Handwheel)
Lubrication	Aluminum base grease(EP type)
Surface Treatment	Anodizing



## Testing For All Actuators ( )





All actuators manufactured by HEARKEN are individually tested, Testing is carried out to check the leakage in both internal and external, The angle of rotation and Torque values. All bodies are stamped with year, month of production, size and serial number.



#### Options Available



Space Heater, 5W 10K (110/220VAC/24VDC)\*

Stall Protection, internal overheating protection, open @ 120oC / close @ 97oC ( $\pm$  5oC)\*

Position Feedback Potentiometer (1K ... 10K)\*

Position Feedback Sensor with Current output (4... 20mA)\*

Proportional Control Unit for modulating control (input/output signal,  $4\dots 20$  mA,  $1\dots 5$  VDC,  $1\dots 10$ VDC)\*

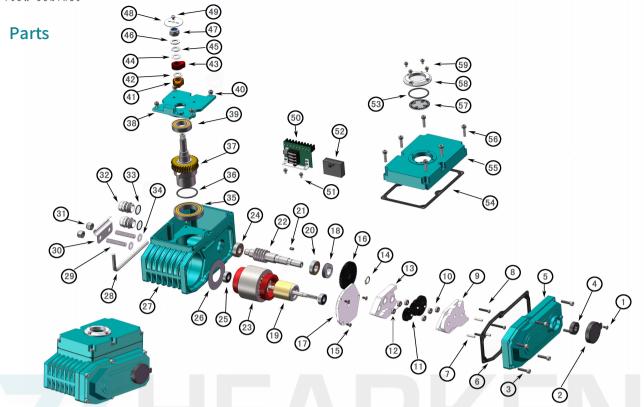
Field control unit

(Local control open/stop/close switch, Local/remote control switch)\*

Power Failure Self Reset

Enclosure	Waterproof Level IP67,NEMA4 and 6
Power Supply	AC110/220V 1PH $\pm$ 10% 50/60HZ.DC24V
Travel Angle	90°±5°(Extension up to 270°)
Self Locking	Provide self locking by worm gear
Conduit entries	2PF 1/2''(Option:M20x1.5,NPT1/2'')
External Coating	Dry powder, epoxy polyester





NO.	Qty	Part name				
1	1	Cross bolt(component)				
2	1	Dustproof end plug				
3	6	Anti-break off hex type socket screw				
4	1	Oil seal				
5	1	Electric fitting:front cap				
6	1	O-ring				
7	3	Cross bolt(component)				
8	3	Cross bolt(component)				
9	1	Electric fitting:speed-down case body				
10	3	Bearing				
11	3	Electric fitting.reduction gear component				
<b>1</b> 2	3	Bearing				
13	1	Electric fitting:speed-down case 1				
14	1	Axis shield ring				
<b>1</b> 5	3	Cross bolt(component)				
<b>1</b> 6	1	Gear on womm				
17	1	Insulating division board				
18	1	Locknut				
19	1	Electromotor rotor				
20	1	Bearing				
21	1	Flat key				
22	1	Worm screw				
23	1	Electromotor stator				
24	1	Bearing				
<b>2</b> 5	1	Bearing				
26	1	Insulating division board				
27	1	Electric ftting:case body				
28	1	Allen wrench				
29	2	Limit bolt				
30	1	handle holder				

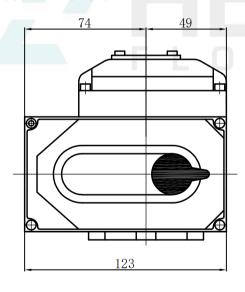
NO.	Qty	Part name						
31	2	Hexagonal nut						
32	2	Waterproof cable joint						
33	2	O-ring						
34	2	gasket						
35	1	Bearing						
36	1	Oil seal						
37	1	Worm wheel						
38	1	Electric fitting:inner cap						
39	1	Bearing						
40	4	Cross bolt(component)						
41	1	Stroke dog						
42	1	gasket						
43	1	Stroke dog						
44	1	gasket						
45	1	gasket						
46	1	gasket						
47	1	Cross bolt(component)						
48	1	Dial						
<b>4</b> 9	1	Cross bolt						
50	1	Connecting terminal						
51	2	Cross bolt						
52	1	Electric capacitor						
<b>5</b> 3	1	Viewing glass						
54	1	O-ring						
55	1	Electric fitting:top cap						
56	4	Anti-break off hex type socket screw						
57	1	O-ring						
<b>5</b> 8	1	Indication window hood						
<b>5</b> 9	4	Intemal hexangular fillister head screw						

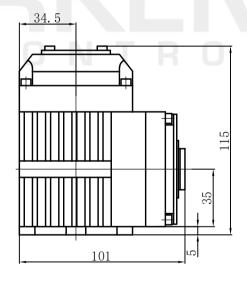


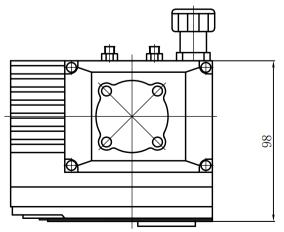
# Technical Parameter and Specifications (On/Off or Modulating Version)

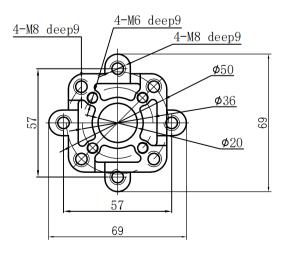
	Max Output		Drive Shaft(mm)				Motor (W)	Single-phsae		El 0:
	Torque (N.M)		Square	Deep	Round	Deep	220V/ 24VDC	rated current(A) 220VAC / 24VDC	Weight (kg)	Flange Size
HEV003	HEA003 30N.m	10/10	9X9	13.5	Ø12.6	26	6	0.24/1	2.1	F03/F05
HEAUU3			11X11	15.5	012.0					
HEA005	50N.m	30/13	11X11	15.5	Ø12.6	26	10	0.24/3	3.6	F05/F07
HEAUUS	3011.111	30/13	14X14	18						
HEA008		30/13	11X11	15.5	Ø15.78	26	12	0.25/3.5	3.6	F05/F07
HEAUU8	80 N.m		14X14	18						
HEA010		30/13	14X14	18	Ø15.78 Ø18.95	28	20	0.32/4	4.6	F05/F07
HEAUIU	100N.m		17X17	22.5						
HEA015	.5 150N.m 30/13	20/12	14X14	18	Ø18.95	28	25	0.35/5	4.6	F05/F07
HEAUIS		30/13	17X17	22.5						
HEA020	200N.m	30/13	22X22	26	Ø22.13	45	40	0.5/6	8.9	F07/F10
HEA020	200N.m	30/13	27X27	32.5	Ø31.65	45	40	0.5/6	14.3	F10/F12
HEA040	400N.m	30/13	22X22	26	Ø22.13	45	45	0.55/9	8.9	F07/F10
HEA040	400N.m	30/13	27X27	32.5	Ø31.65	45	45	0.55/9	14.3	F10/F12
HEA060	600N.m	30/13	22X22	26	Ø22.13	45	90	0.9/9	9.3	F07/F10
HEA060	600N.m	30/13	27X27	32.5	Ø31.65	45	90	0.9/9	14.3	F10/F12
HEA080	800N.m	45/20	27X27	32.5	Ø31.65	45	120	1.5/13	14.3	F10/F12
HEA100	1000N.m	45/20	27X27	32.5	Ø31.65	45	120	1.5/13	14.5	F10/F12
HEA200	2000N.m	60/23	27X27	32.5	Ø31.65	45	180	1.8/15	14.5	F10/F12

## **HEA003 Dimension in mm**



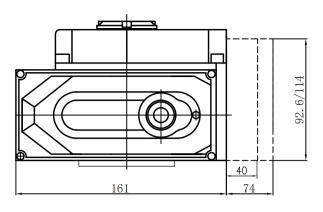


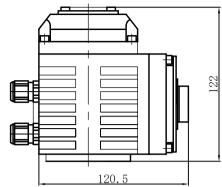


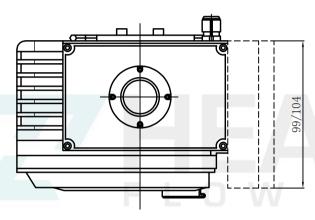


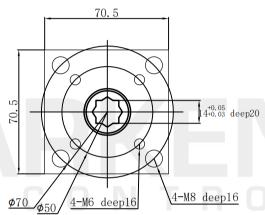


# HEA005/HEA008 Dimension in mm

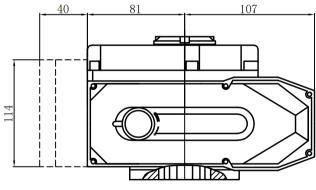


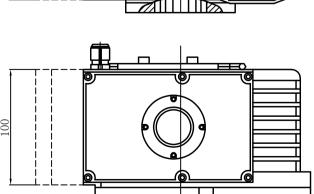


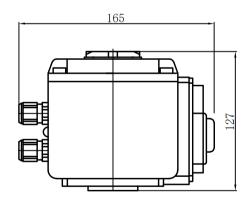


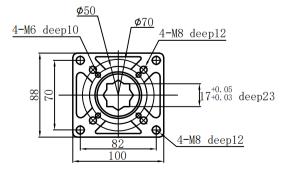


# HEA010/HEA015 Dimension in mm



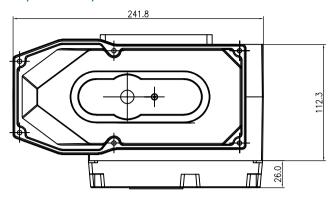


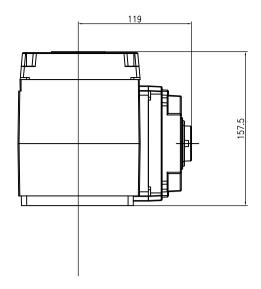


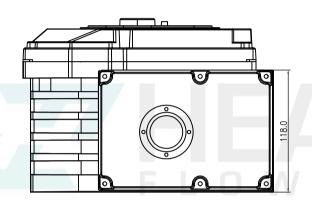


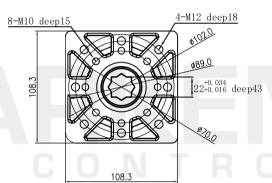


# HEA020/HEA040/HEA060 Dimension in mm

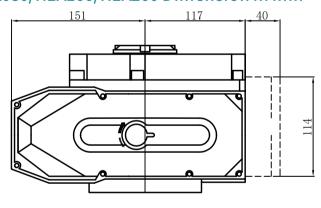


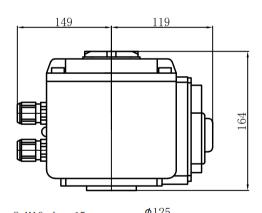


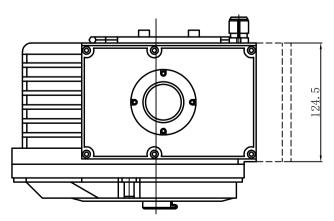


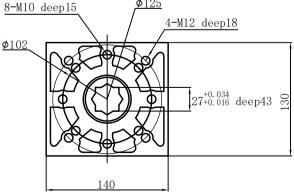


# HEA080/HEA100/HEA200 Dimension in mm



















WECHAT

# We learn to speak in three years, But it takes a lifetime to learn to "HEARKEN"





Manufactures a wide range of Pneumatic actuators, electric actuators and accessories of Limit switchbox, Solenoid valve, Manual override, E/P positioner for quarter Multi-turn valves..

- (086) 150 5899 3098 (Whatsapp/Wechat)
- (086) 577 88875391
- **(086)** 577 88875392

**@** Website:

www.hearkenflow.com www.hearkenvalve.com

- **!** Factory Add:
  - No.6 Qinyuan Road, Zhuao Village, Yongjia County, Wenzhou City, Zhejiang Province, China