

Welcome to **HEARKEN**

Actuators and Controls

**Hearken
Here We
Can**

The Trusted, Passionate and focused Partner in Valve Automation

At HEARKEN FLOW, The founding principle of Harkenflow 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 capabilities, 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



- To built A strong Reputation in Providing Quality, Cost Effective , Reliable And Robust Performance Solutions for Valve Automation,
- Included 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....

Electric Actuated Ball Valves

— 3-piece Stainless Steel ,Full Port



Technical Data			
Test Pressure	Shell Test	9	MPA
	Tightness Test	7.5	
	Gas-Tightness Test	0.8	
Max Working temperature		-20°C~+160°C	
Applicable Medium:Water,Oil,Gas,Acid			

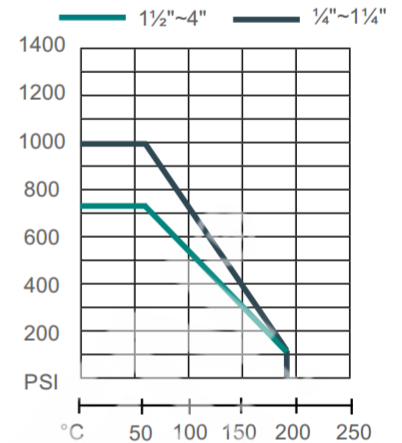
Main Product Features

- Direct mount ISO5211 Full Port stainless steel ball valve
- 3-piece swing out body designed for easy maintenance
- 1000 PSI working pressure at 100°F (38°C)
- Visual valve position indicator
- Heavy duty motors with overload protection
- Thermostatically controlled anti-condensation heater
- Manual override with end of travel mechanical stops
- Two auxiliary limit switches included with on-off units

Performance Features

Electric Actuator

Function	On/Off/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, 250VAC 10A, each for Open and Close positions
Rotation	90° (±10°) other rotation on request
Manual Operation	Mechanical handle standard
Conduit Entry	2xM18
Operating Temp	-20°C to +70°C
Ambient Humidity	Max. 90%RH
Vibration Tested	XYZ10g, 0.2~34Hz, 30minutes
Mounting	ISO5211
Torque Output	30Nm to 1000Nm (2000Nm on request)
Self-locking device	Self-locking by worm and worm gear



Ball Valves

No.	PARTS	MATERIAL		
1	Cap	CF8M	CF8	WCB
2	Gasket	PTFE		R-PTFE
3	Ball Seat	PTFE		R-PTFE
4	Ball	SS316		SS304
5	Thrust Washer	PTFE		R-PTFE
6	O-Ring		VITON	
7	Stem Packing	PTFE		R-PTFE
8	Gland		SS304	
9	Spring Washer		SS304	
10	Stop Nut		SS304	
11	Stop Washer		SS304	
12	Gland		SS304	
13	Handle	SS304		SS201
14	Stem Nut	SS304		SS201
15	Body	CF8M	CF8	WCB
16	Pin		SS201	
17	Anti-Static Device	SS316		SS304
18	Stem	SS316		SS304
19	Locking Device	SS304		SS201
20	Handle Cover		PLASTIC	



Wiring Diagram A/D

Model	Torque	Cycle Time DC/AC	Rated Current DC/AC	Drive Motor DC/AC	Weight	Special Function	Control Signal	Ball Valve Diameter, NPT (DN)	Voltage Options
HEA003	30N · M	10S/10S	2.0A,0.3A	8W	2.1Kg	On-off light	Light Indicator	1/2" to 3/4" (15-20)	DC: 24V AC: 220V
HEA005	50N · M	15S/30S	2.4A,0.24A	10W	3.6Kg	On-off light	Light Indicator	1" (25)	
HEA008	80N · M	15S/30S	2.5A,0.25A	10W	3.6Kg	On-off light	Light Indicator	1-1/4" to 1-1/2" (32-40)	
HEA010	100N · M	15S/30S	3.5A,0.35A	15W	4.6Kg	On-off light	Light Indicator	1-1/2" to 2" (40-50)	
HEA015	150N · M	15S/30S	3.7A,0.37A	15W	4.6Kg	On-off light	Light Indicator	2-1/2" (65)	
HEA020	200N · M	15S/30S	6.0A,0.48A	45W	8.9Kg	On-off light	Light Indicator	3" (80)	
HEA040	400N · M	15S/30S	6.0A,0.5A	60W	8.9Kg	On-off light	Light Indicator	3" (80)	
HEA060	600N · M	15S/30S	9A,0.92A	90W	9.3Kg	On-off light	Light Indicator	4" (100)	
HEA080	800N · M	22S/45S	12A,1A	180W	14.3Kg	On-off light	Light Indicator	5" to 6" (125-150)	
HEA100	1000N · M	22S/45S	12A,1A	180W	14.5Kg	On-off light	Light Indicator	5" to 6" (125-150)	
HEA200	2000N · M	22S/45S	15A,1.5A	200W	14.5Kg	On-off light	Light Indicator	8" (200)	




Wiring Diagram A/D

Model	Torque	Cycle Time DC/AC	Rated Current DC/AC	Drive Motor DC/AC	Weight	Special function	Control Signal	Ball Valve Diameter, NPT (DN)	Voltage Options
HEA003	30N · M	10S/10S	2.0A,0.3A	8W	2.1Kg	Passive contact	Contact Signal	1/2" to 3/4" (15-20)	DC: 24V AC: 220V
HEA005	50N · M	15S/30S	2.4A,0.24A	10W	3.6Kg	Passive contact	Contact Signal	1" (25)	
HEA008	80N · M	15S/30S	2.5A,0.25A	10W	3.6Kg	Passive contact	Contact Signal	1-1/4" to 1-1/2" (32-40)	
HEA010	100N · M	15S/30S	3.5A,0.35A	15W	4.6Kg	Passive contact	Contact Signal	1-1/2" to 2" (40-50)	
HEA015	150N · M	15S/30S	3.7A,0.37A	15W	4.6Kg	Passive contact	Contact Signal	2-1/2" (65)	
HEA020	200N · M	15S/30S	6.0A,0.48A	45W	8.9Kg	Passive contact	Contact Signal	3" (80)	
HEA040	400N · M	15S/30S	6.0A,0.5A	60W	8.9Kg	Passive contact	Contact Signal	3" (80)	
HEA060	600N · M	15S/30S	9A,0.92A	90W	9.3Kg	Passive contact	Contact Signal	4" (100)	
HEA080	800N · M	22S/45S	12A,1A	180W	14.3Kg	Passive contact	Contact Signal	5" to 6" (125-150)	
HEA100	1000N · M	22S/45S	12A,1A	180W	14.5Kg	Passive contact	Contact Signal	5" to 6" (125-150)	
HEA200	2000N · M	22S/45S	15A,1.5A	200W	14.5Kg	Passive contact	Contact Signal	8" (200)	



Wiring Diagram B

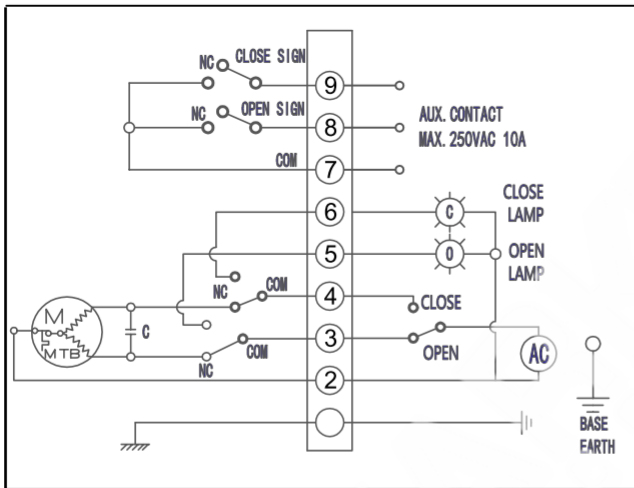
Model	Torque	Cycle Time DC/AC	Rated Current DC/AC	Drive Motor DC/AC	Weight	Special function	Control Signal	Ball Valve Diameter, NPT (DN)	Voltage Options
HEA005	50N · M	15S/30S	2.4A,0.24A	10W	4.1Kg	1K, 5K potentiometer	Opening signal	1" (25)	AC: 220V
HEA008	80N · M	15S/30S	2.5A,0.25A	10W	4.1Kg	1K, 5K potentiometer	Opening signal	1-1/4" to 1-1/2" (32-40)	
HEA010	100N · M	15S/30S	3.5A,0.35A	15W	5.1Kg	1K, 5K potentiometer	Opening signal	1-1/2" to 2" (40-50)	
HEA015	150N · M	15S/30S	3.7A,0.37A	15W	5.1Kg	1K, 5K potentiometer	Opening signal	2-1/2" (65)	
HEA020	200N · M	15S/30S	6.0A,0.48A	45W	9.4Kg	1K, 5K potentiometer	Opening signal	3" (80)	
HEA040	400N · M	15S/30S	6.0A,0.5A	60W	9.4Kg	1K, 5K potentiometer	Opening signal	3" (80)	
HEA060	600N · M	15S/30S	9A,0.92A	90W	9.8Kg	1K, 5K potentiometer	Opening signal	4" (100)	
HEA080	800N · M	22S/45S	12A,1A	180W	14.8Kg	1K, 5K potentiometer	Opening signal	5" to 6" (125-150)	
HEA100	1000N · M	22S/45S	12A,1A	180W	15.0Kg	1K, 5K potentiometer	Opening signal	5" to 6" (125-150)	
HEA200	2000N · M	22S/45S	15A,1.5A	200W	15.0Kg	1K, 5K potentiometer	Opening signal	8" (200)	



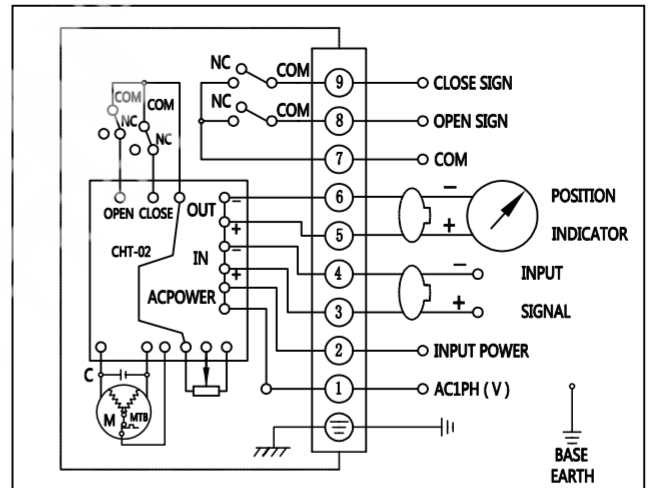
Wiring Diagram B

Model	Torque	Cycle Time DC/AC	Rated Current DC/AC	Drive Motor DC/AC	Weight	Special function	Control Signal	Ball Valve Diameter, NPT (DN)	Voltage Options
HEA005	50N · M	15S/30S	2.4A,0.24A	10W	4.1Kg	Proportional Control	4-20mA	1" (25)	AC: 220V
HEA008	80N · M	15S/30S	2.5A,0.25A	10W	4.1Kg	Proportional Control	4-20mA	1-1/4" to 1-1/2" (32-40)	
HEA010	100N · M	15S/30S	3.5A,0.35A	15W	5.1Kg	Proportional Control	4-20mA	1-1/2" to 2" (40-50)	
HEA015	150N · M	15S/30S	3.7A,0.37A	15W	5.1Kg	Proportional Control	4-20mA	2-1/2" (65)	
HEA020	200N · M	15S/30S	6.0A,0.48A	45W	9.4Kg	Proportional Control	4-20mA	3" (80)	
HEA040	400N · M	15S/30S	6.0A,0.5A	60W	9.4Kg	Proportional Control	4-20mA	3" (80)	
HEA060	600N · M	15S/30S	9A,0.92A	90W	9.8Kg	Proportional Control	4-20mA	4" (100)	
HEA080	800N · M	22S/45S	12A,1A	180W	14.8Kg	Proportional Control	4-20mA	5" to 6" (125-150)	
HEA100	1000N · M	22S/45S	12A,1A	180W	15.0Kg	Proportional Control	4-20mA	5" to 6" (125-150)	
HEA200	2000N · M	22S/45S	15A,1.5A	200W	15.0Kg	Proportional Control	4-20mA	8" (200)	

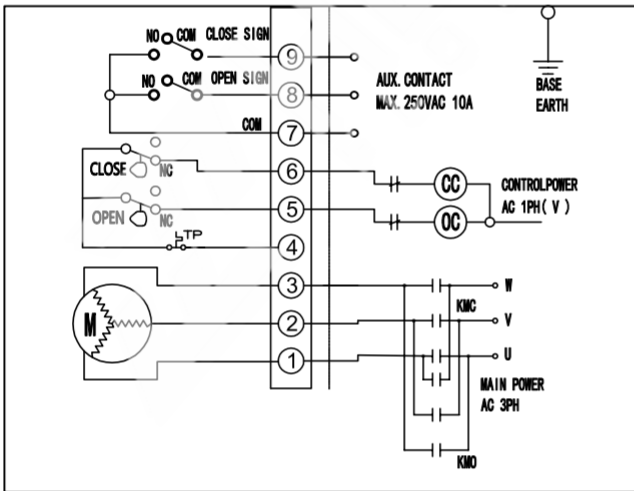
Type A : 220v AC on-off passive type



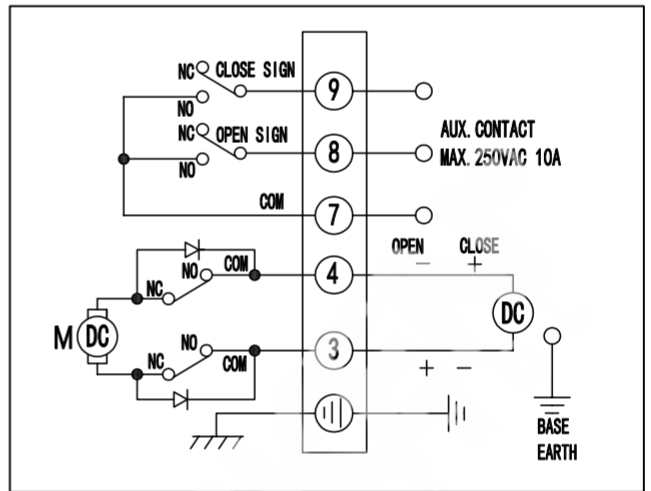
Type B : Modulating type 220V



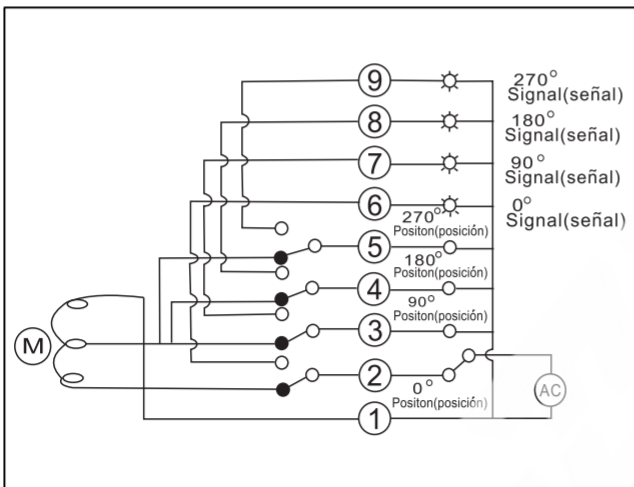
Type C : 380V 50/60 HZ on-off type



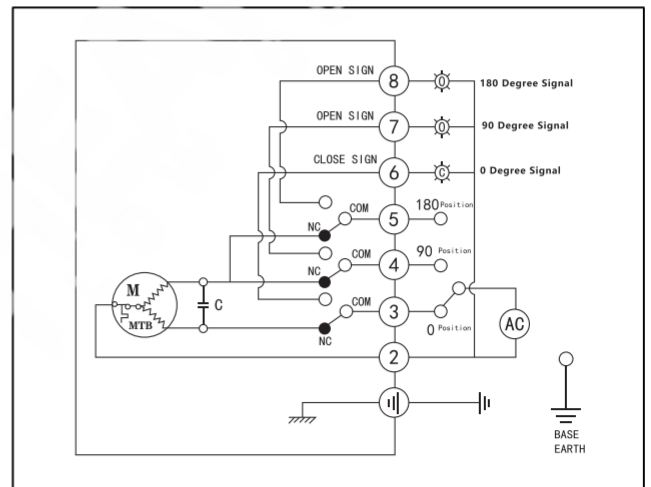
Type: D 24v DC on-off passive type



Type E : Wiring Diagram For 0,90,180,270 Degree



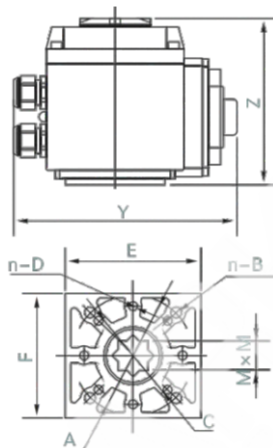
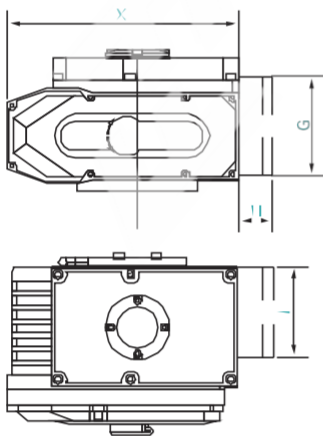
Type F: Wiring Diagram For 0,90,180, Degree



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

Model	Max Output Torque(N.m)	Operating Time 90°(Sec.) 220VAC/24VDC	Drive Shaft(mm)				Motor(W) 220V/24VDC	Single-phase rated current(A) 220VAC/24VDC	Weight(kg)
			Square	Deep	Round	Deep			
HEA003	30N.m	10/10	9X9	13.5	12.6	26	8	0.3/2	2.1
			11X11	15.5					
HEA005	50N.m	30/15	11X11	15.5	Ø12.6	26	10	0.24/2.4	3.6
			14X14	18					
HEA008	80N.m	30/15	11X11	15.5	Ø15.78	26	10	0.25/2.5	3.6
			14X14	18					
HEA010	100N.m	30/15	14X14	18	Ø15.78 Ø18.95	28	15	0.35/3.5	4.6
			17X17	22.5					
HEA015	150N.m	30/15	14X14	18	Ø18.95	28	15	0.37/3.5	4.6
			17X17	22.5					
HEA020	200N.m	30/15	22X22	26	Ø22.13	45	45	0.48/6	8.9
HEA040	400N.m	30/15	22X22	26	Ø28.48	45	60	0.5/6	8.9
HEA060	600N.m	30/15	27X27	32.5	Ø31.65	45	90	0.92/9	9.3
HEA080	800N.m	45/22	27X27	32.5	Ø31.65	45	180	1/12	14.3
HEA100	1000N.m	45/22	27X27	32.5	Ø31.65	45	180	1/12	14.5
HEA200	2000N.m	45/22	27 X27	32.5	Ø31.65	45	200	1.5/15	14.5

Dimension in mm



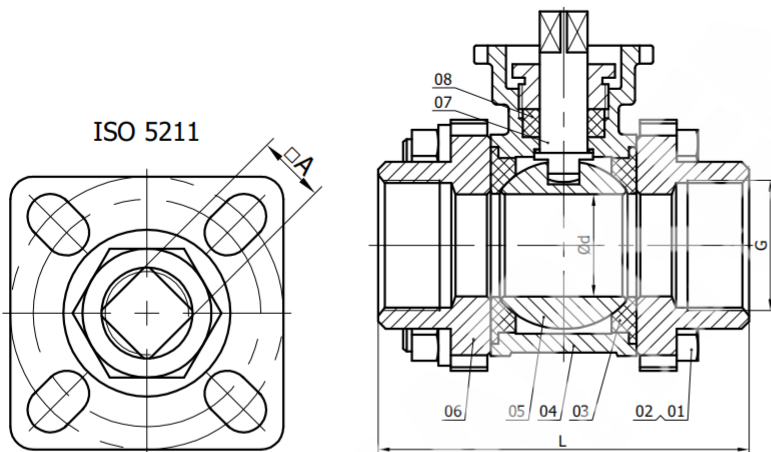
ISO5211 Mounting Interfac

MODEL	X	Y	Z	A	N-B	C	N-D	E	F	G	H	I	MXM
HEA003	123	101	115	Ø50	4-M8	Ø36	4-M6	55	55	114		150	9X9 11X11
HEA005	161	120.5	125	Ø70	4-M8	Ø50	4-M6	66	66	114	40	150	11X11
													14X14
HEA008	188	145	127	Ø70	4-M8	Ø50	4-M6	100	90	114	40	150	11X11
													14X14
HEA010	188	145	127	Ø70	4-M8	Ø50	4-M6	100	90	114	40	150	14X14
													17X17
HEA015	188	145	127	Ø70	4-M8	Ø50	4-M6	100	90	114	40	150	14X14
HEA020	233	170	153	Ø102	4-M12	Ø70	4-M10	140	130	114	40	150	17X17
HEA040	233	170	153	Ø102	4-M12	Ø70	4-M10	140	130	114	40	150	22X22
HEA060	233	170	153	Ø102	4-M12	Ø70	4-M10	140	130	114	40	150	22X22
HEA080	268	255	164	Ø125	4-M12	Ø102	4-M10	140	130	114	40	150	27X27
HEA100	268	255	164	Ø125	4-M12	Ø102	4-M10	140	130	114	40	150	27X27

HEA200
On Request
Electric Rotary Actuator With
Proportional



Basic Ball Valve Outline Dimension (Unit:mm)



No.	Description	Material
08	Packing	PTFE
07	Stem	304/316
06	Bonnet	304/316
05	Ball	304/316
04	Body	304/316
03	Seat	PTFE
02	Nut	304/316
01	Bolt	304/316

3 Piece Screwed with electric actuator

in	mm	Actuator	L mm	d mm	G mm	(A)Adaptor mm	ISO5211	Weight KG
1/2	15	HEA003	70	15	NPT	9	F03/F04	2.75
3/4	20	HEA003	79	20	NPT	9	F03/F04	2.86
1	25	HEA005	87	25	NPT	11	F04/F05	4.7
1 1/4	32	HEA008	101	32	NPT	11	F04/F05	5.15
1 1/2	40	HEA010	110	38	NPT	14	F05/F07	6.64
2	50	HEA010	125	49	NPT	14	F05/F07	7.42
2 1/2	65	HEA015	155	65	NPT	17	F07/F10	
3	80	HEA020	185	76	NPT	17	F07/F10	

