

# HANTS®

## ELECTRIC ACTUATOR



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# About HANTS

HANTS, found since 1986, is the market leading actuator manufacturer and flow control company that operates in any market where the flow of liquids needs to be controlled. It has established manufacturing facilities, a global network of local offices and agents who can truly provide a worldwide service. We are professional manufacturer of Electric Actuator with ball valve, butterfly valve, and gate valve for automation facility to provide high quality and superior engineers team giving the best & technical service.



Filter system in National university in Taiwan

We have grown very quickly over the past 10 years. This explosive growth is the result of HANTS having the right products for today's market. This is due in fact that we have listened to our customers and designed and manufactured products that they want and needed. With this in mind we expect to have our customers's confidence in using HANTS electrical actuator in quarter turn automation industry. We continue our efforts to expand our product line through customer / market input and HANTS professional design team.

As HANTS grows we realize that we have a commitment to live up to. This commitment is to our customers that we continue to provide the highest standard of quality that can be achieved, and the most innovative automation products on the market today.



Filter system for waterworks in Guangzhou



Heating System



Frozen system



Filter system



Steam system for boiler use



HAVC



Water treatment system

## Design & Structure

\* HANTS actuators with the inward controller are suitable for Temperature, humidity, flow rate, or PH value monitor are all complying with Electromagnetic Testing regulation.

\* Base part conforms to standard ISO 5211 flange connection, using movable case connection between actuator and valve that easily install for any different sizes of valves.

\* Body has complied with IP66 waterproof level and dustproof design. Specially, the upper cover is made by PC material that allows durability use in outside installation facility. Also, it is excellent for resisting crack or broken that may caused water pervaded into actuator in a long term use.

\* Metal hole for wiring prevents water pervaded into actuator.

\* HANTS actuator with electro circuit design made wiring easily.

\* Worm gear structure with self-locking mechanism is able to prevent backlash pressure in piping and stabilize motor performance to control valve open/close precisely.

\* Providing multiple levels switch or special controlling request.



Integrated upper cover



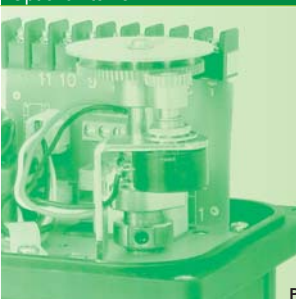
Whole covering Design



Wire plug in hole



## Optional Items



Potentiometer (1 kΩ feedback single)



Extra Aux cams



Stand



Heater

Potentiometer : Potentiometer installed is able to transfer 1 KΩ single to PLC used as a position transducers.

Two Aux cams : Aux cams are two nuts installed in a shaft in order to control ON/OFF button on limit switch by rotating the shaft . (When one aux cam on shaft touches ON button of limit switch, the valve is open.)

Stand : Stand mainly protect actuator stabilized during operation and keep higher ( 60°C or higher) or lower temperature( - 5°C or even lower) away from piping.

Heater : The heater keeps inner of actuator dry using in humid or frozen facility.

## MODULATING

Providing multiple input-signal function which is able to control Temperature, humidity, or flow rate for choice. By inward controller, it makes performance more precise and stable. Besides, it has adjusting angle function design to make Open/Close easier. All of parts are made in Japan



Temp. controller



Wire connection

Switched Input Signal

Open/Close manual button

Signal break down Alarm

Closing active light

Open active light

Adjusting the open/close position

## IC board design with electric wire connection

Power supply : AC220V

Input Signal : 4 ~ 20mA · 2 ~ 10mA · 0 ~ 20mA · 1 ~ 10mA · 2 ~ 10V · 1 ~ 5V · 0 ~ 10V · 0 ~ 5V

Sensitivity : 1.5%

Input Resistance : 500Ω

Alarm Signal - It allows reinforce running to do maintenance when the alarm signal lights on.

Remark: To avoid using actuator in an atmosphere containing corrosive or explosive gases, and high frequency glitch. ( Working Temp. 0~50°C, 50~85%RH)

With V Type ( V steel ball) Linear Flow valve installed, it can be made more precise to control system, stabilize media in piping for the best performance.



Potentiometer (made in Japan)

## Actuator model choice

- To ensure actual torque request with adding a safety coefficient value. Then, choose a proper actuator model. Ex. Ball valve 10 N-m \* 150%(safety coefficient) = 15N-m ; Butterfly valve: 10N-m\* 4 (safety coefficient)= 40N-m  
*The torque above is for your reference. It must be considered different media use.*
- To ensure valve comply with ISO 5211 regulation.
- Driver setting position ( ON/OFF Type --- ensure the OPEN position) ; ( Modulating Type---- Ensure Close position).
- When working Pressure is more than 10kgf/cm2, we suggest bigger torque of actuator model.

### Electric Actuator "ON/OFF" Type

Model	Consecutive Running	Torque (Nm)	Running Time (sec/90°)	Power (W)220V AC	Manual control	Weight (Kg)	Mounting Flanged ISO 5211	Drive Sockets (mm)	Weatherproof
H7	X	7	15	5	X	0.9	X	X	IP66
H10	O	10	30	5	X	0.9	X	X	IP66
H13	O	13	45	5	X	0.9	X	X	IP66
H16	O	16	50	5	X	0.9	X	X	IP66
H20	O	20	90	5	X	0.9	X	X	IP66
H15	X	15	7	25	X	1.7	F04	9	IP66
H23	O	23	30	10	X	1.7	F04	9	IP66
H18	X	18	7	25	X	1.7	F05/F07	9 · 11	IP66
H35	O	35	30	10	X	1.7	F05/F07	9 · 11	IP66
H45	O	45	50	10	O	2.7	F05/F07	11 · 14	IP66
H48	X	48	30	25	O	2.7	F05/F07	11 · 14	IP66
H70	X	70	7	35	O	2.7	F05/F07	11 · 14	IP66
	O	70	75	10	O	2.7	F05/F07	14 · 17	IP66
H115	X	115	15	35	O	2.7	F05/F07	14 · 17	IP66
H150	X	150	8	185	O	5.8	F07/F10	17 · 19	IP66
H220	X	220	40	80	O	5.8	F07/F10	17 · 19	IP66
H240	X	240	80	80	O	5.8	F07/F10	17 · 19 · 22	IP66
H400	90 degree X	400	8	280	O	18.5	F10/F12	19 · 22 · 27	IP66
H680	90 degree X	680	35	280	O	18.5	F10/F12	19 · 22 · 27	IP66
H1000	90 degree X	1000	35	280	O	22	F10/F12	22 · 27	IP66

### Electric Actuator "Modulating Type"

Model	Consecutive Running	Torque (Nm)	Running Time (sec/90°)	Power (W)220V AC	Manual control	Weight (Kg)	Mounting Flanged ISO 5211	Drive Sockets (mm)	Weatherproof
MH20	O	20	30	10	X	1.7	F04	9	IP66
MH32	O	32	30	10	X	1.7	F05/F07	9 · 11	IP66
MH42	O	42	50	10	O	2.7	F05/F07	11 · 14	IP66
MH67	O	67	75	10	O	2.7	F05/F07	14 · 17	IP66
MH200	X	200	40	80	O	5.8	F07/F10	17 · 19 · 22	IP66
MH220	X	220	80	80	O	5.8	F07/F10	17 · 19 · 22	IP66

### Torque unit conversion table

Unit	British Units			Metric Units			International Standard Metric Units		
	ozf.in	lbf.in	lbf.ft	gf.cm	kgf.cm	kgf.m	mN-m	cN.m	N.m
1 ozf.in	1	0.0625	0.005	72	0.072	0.0007	7.062	0.706	0.007
1 lbf.in	16	1	0.083	1152.1	1.152	0.0115	113	11.3	0.113
1 lbf.ft	192	12	1	13826	13.83	0.138	1356	135.6	1.356
1 gf.cm	0.014	0.0009	0.00007	1	0.001	0.00001	0.098	0.01	0.0001
1 kgf.cm	13.89	0.868	0.072	1000	1	0.01	98.07	9.807	0.098
1 kgf.m	1389	86.8	7.233	100000	100	1	9807	980.7	9.807
1 mN.m	0.142	0.009	0.0007	10.2	0.01	0.0001	1	0.1	0.001
1 cN.m	1.416	0.088	0.007	102	0.102	0.001	10	1	0.01
1 N.m	14.16	0.881	0.073	10197	10.2	0.102	1000	100	1

### Pressure unit conversion table

Bar	Kg/cm2	Lb/in2 (psi)	Torr At 0°C		Torr At 15°C		
			ATM				
1	1.0204	14.51	0.9869	750.55	29.55	10.213	33.51
0.98	1	14.22	0.9672	735.5	28.96	10.009	32.84
0.0689	0.07031	1	0.068	51.71	2.036	0.7037	2.309
1.0133	1.034	14.706	1	760.52	29.94	10.35	33.95
1.3324	1.3595	19.34	1.3149	1000	39.37	13.61	44.64
0.03384	0.03453	0.4912	0.0334	25.4	1	0.3456	1.134
0.09791	0.09991	1.421	0.09663	73.49	2.893	1	3.281
0.02984	0.03045	0.4331	0.02945	22.4	0.8819	0.3048	1



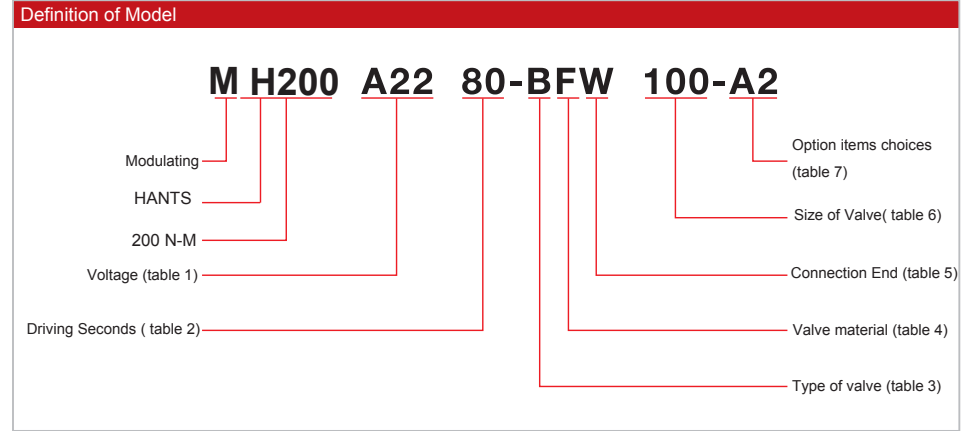
H400-A22-8-BFW--



H150-A22-8-BAW--



H150-A22-8-BPW--



The yellow color marked below are suitable for butterfly valve.

### Voltage (table 1)

D12	DC12V
D24	DC24V
A24	AC24V
A11	AC110V
A22	AC220V

### Driving Seconds (table 2)

Please refer to their Specification

### Type of valve (table 3)

2	2WAY
3	3WAY
4	4WAY
5	5WAY
B	Butterfly valve
V	V-port ball valve

### Valve material (table 4)

S	SUS
B	BRASS
F	FC20
P	PVC
A	ADC12
W	WCB

### Connection End (table 5)

T	Threaded(BSPT)
F	Flanged(JIS10K)
W	Wafer
S	Socket

### Size of Valve (table 6)

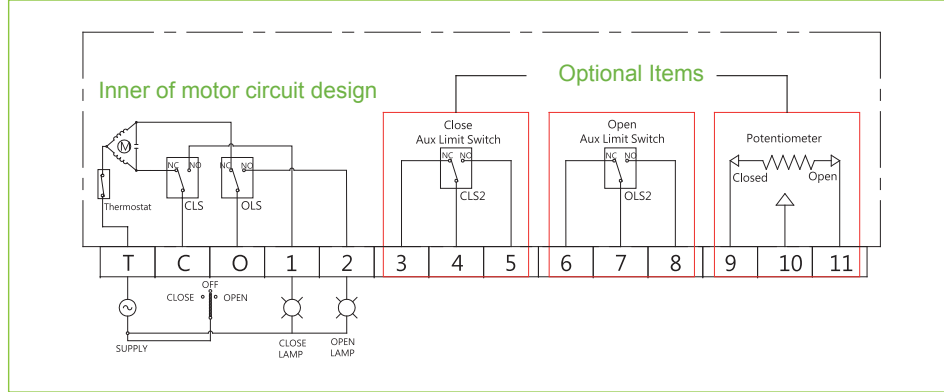
15	1/2"
20	3/4"
25	1"
32	1-1/4"
40	1-1/2"
50	2"
65	2-1/2"
80	3"
100	4"
125	5"
150	6"
200	8"
250	10"
300	12"

### Option items choices (table 7)

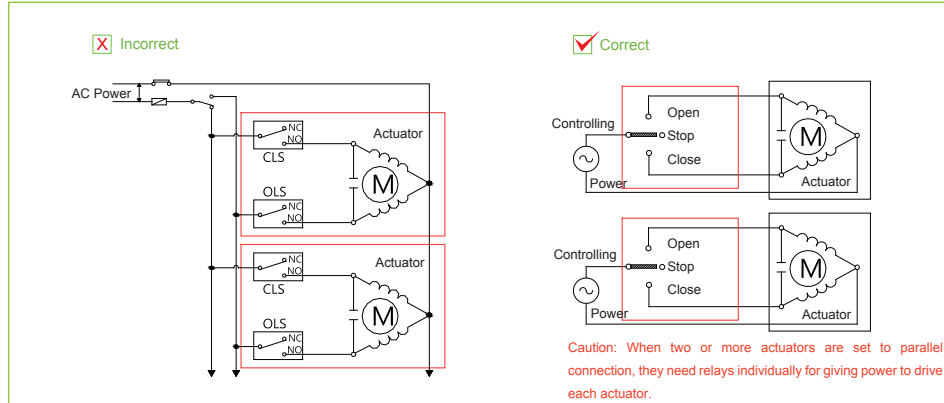
A1	Auxiliary (close)
A2	Auxiliary (open/close)
1K	Feedback (1Q)
H	with a stand

# Circuit illustration

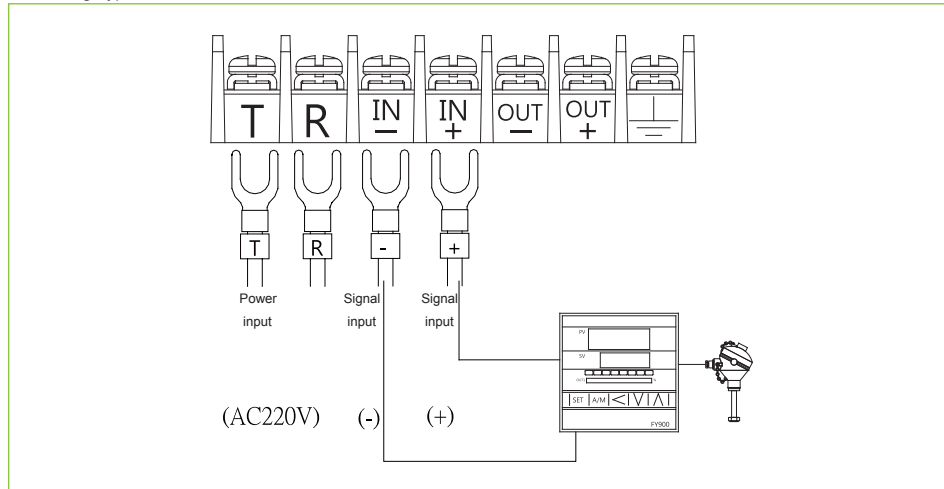
ON/OFF Type circuit



Parallel circuit design

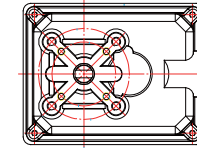
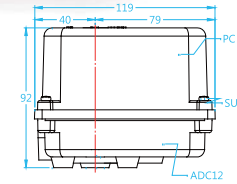
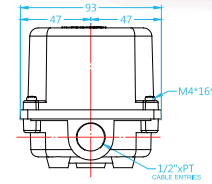


Modulating Type circuit

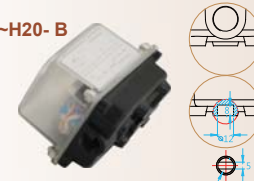


# H7~H20

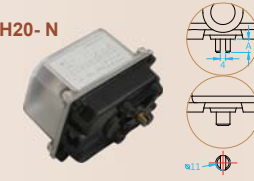
series



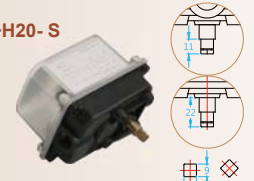
H7~H20- B



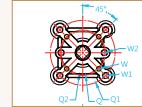
H7~H20- N



H7~H20- S



Mounting Flanged



Model	Q	Q1	Q2	W	W1	W2	A
H7-H20-S	42	60	/	M5	M6	/	/
H7-H20-B	42	60	/	M5	M6	/	/
H7-H20-N	/	/	40	/	/	M6	10
H7-H20-NH	/	/	40	/	/	M6	51.5

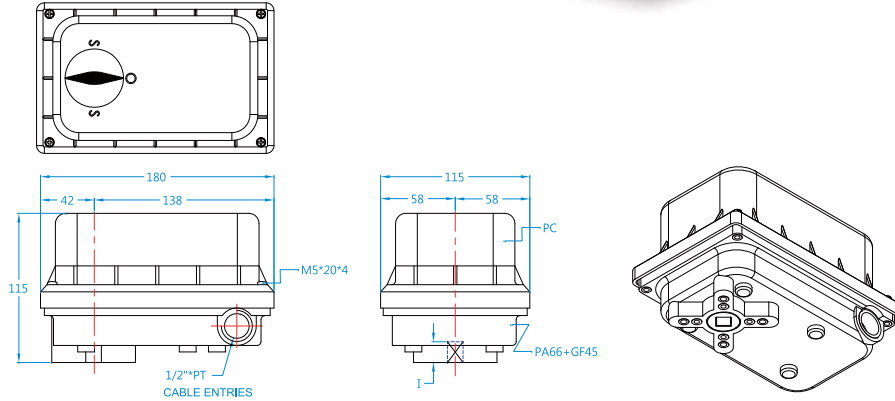
Model No.	H7-X-A22-15	H10-X-A22-30	H13-X-A22-45	H16-X-A22-50	H20-X-A22-90
Torque Rating (N-M)	7	10	13	16	20
Voltage supply (50/60Hz)	AC220V ±10%	AC220V ±10%	AC220V ±10%	AC220V ±10%	AC220V ±10%
Control Signal	ON-OFF	ON-OFF	ON-OFF	ON-OFF	ON-OFF
Running Current	0.1A	0.1A	0.1A	0.1A	0.1A
Timing Nominal Driving 90° rotation to open	50Hz	50Hz	50Hz	50Hz	50Hz
close gate of valve	16sec	31sec	46sec	51sec	91sec
	15sec	30sec	45sec	50sec	90sec
Motor Power	5W	5W	5W	5W	5W
Performance Operation	Non consecutive running	Consecutive running	Consecutive running	Consecutive running	Consecutive running
Insulation level	E class				
Waterproof level	IP66				
Storage Temp. Range	-10°C to 50°C				
Operating Humidity Range	5 to 90% RH				
Electrical connection	1/2" cable connector				
Diameter of cable	1.25mm				
Optional Items	Auxiliary switches 2(SPDT) / Potentiometer 1KΩ				

AC110V, AC24V, and DC24V for choices



# H15~H48

series



Unit [mm]

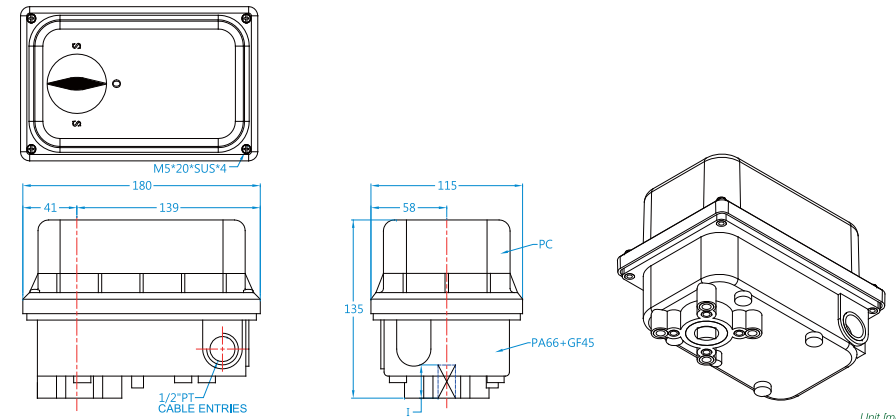
Model	Q	Q1	ISO Flange	W	W1	CH	I	N.W.
H15	∅42	∅60	F04	M5	M6	9	14	1.7kg
H18								
H35	∅50	∅70	F05/F07	M6	M8	9.11	14	1.7kg
H45								

Model	H15A2207	H23A2230	H18A2207	H35A2230	H48A2230	MH20A2230	MH32A2230
Torque Rating (Nm)	15	23	18	35	48	20	32
Supply Voltage 50/60Hz	AC220V ±10%	AC220V ±10%	AC220V ±10%	AC220V ±10%	AC220V ±10%	AC220V ±10%	AC220V ±10%
Control Signal	ON-OFF	ON-OFF	ON-OFF	ON-OFF	ON-OFF	0/4~20mA, 1/2~10mA, 0/2-10Vdc	
Max Inrush Current (A)	0.3	0.2	0.3	0.2	0.4	0.2	0.2
Running Current (A)	0.2	0.15	0.2	0.15	0.3	0.15	0.15
Timing Nominal Driving (50 Hz)	8sec	36sec	8sec	36sec	36sec	36sec	36sec
Timing Nominal Driving (60 Hz)	7sec	30sec	7sec	30sec	30sec	30sec	30sec
Moto Power (W)	25	10	25	10	25	10	10
Duty cycle	60%	S1	60%	S1	60%	S1	S1
Duty cycle(Remark)	S1: Continuous duty. 60%:O-15min-CO-10min-CO (Non Continuous duty).						
Motor protection	E class insulation						
Enclosure protection	IP66						
Storage Temperature Range	-10°C to 50°C						
Operating Humidity Range	90%RH Max. (non-condensing)						
Electrical Connection	1/2" PT cable connector, screw terminals						
Cable	1.25mm						
Optional Items	Auxiliary switches 2 (SPDT) / Potentiometer 1KΩ / Heater			4~20mA Feedback			
Net Weight ±0.3(kg)	1.8	1.8	1.8	1.8	1.8	2	2

S1 - Continuous duty. The motor works at a constant load for enough time to reach temperature equilibrium

# H45~H115

series



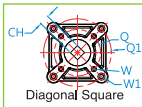
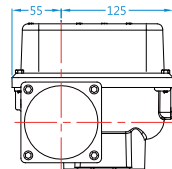
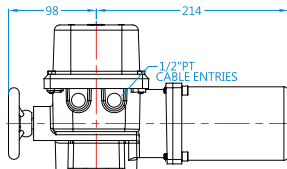
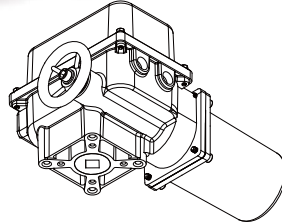
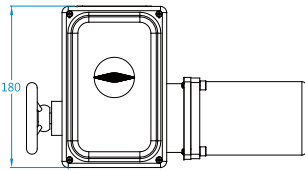
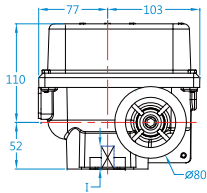
Unit [mm]

Model	Q	Q1	ISO Flange	W	W1	CH	I	N.W.
H45								
H70	∅50	∅70	F05 / F07	M6	M8	11.14	25	2.7kg
H115						.17		

Model	H45A2250	H70A2207	H70A2275	H115A2215	MH42A2250	MH67A2275
Torque Rating (Nm)	45	70	70	115	42	67
Supply Voltage 50/60Hz	AC220V ±10%	AC220V ±10%	AC220V ±10%	AC220V ±10%	AC220V ±10%	AC220V ±10%
Control Signal	ON-OFF	ON-OFF	ON-OFF	ON-OFF		
Max Inrush Current (A)	0.3	0.5	0.3	0.5	0.3	0.3
Running Current (A)	0.2	0.3	0.2	0.3	0.2	0.2
Timing Nominal Driving (50 Hz)	60sec	8sec	95sec	16sec	60sec	95sec
Timing Nominal Driving (60 Hz)	50sec	7sec	75sec	15sec	50sec	75sec
Moto Power (W)	10	35	10	35	10	10
Duty cycle	S1	60%	S1	60%	S1	S1
Duty cycle(Remark)	S1: Continuous duty. 60%:O-15min-CO-10min-CO (Non Continuous duty).					
Motor protection	E class insulation					
Enclosure protection	IP66					
Storage Temperature Range	-10°C to 50°C					
Operating Humidity Range	90%RH Max. (non-condensing)					
Electrical Connection	1/2" PT cable connector, screw terminals					
Cable	1.25mm					
Optional Items	Auxiliary switches 2 (SPDT) / Potentiometer 1KΩ / Heater			4~20mA Feedback		
Net Weight ±0.3(kg)	2.7	3	2.7	3.2	3	3

# H150~H240

Worm gear structure series



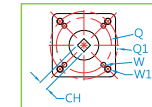
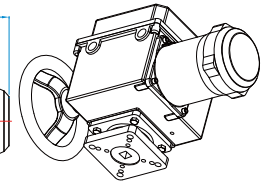
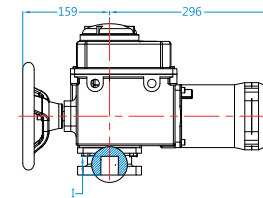
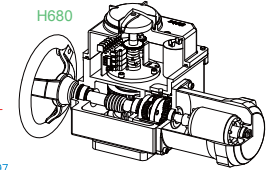
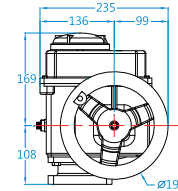
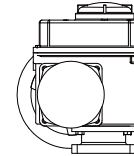
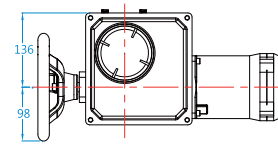
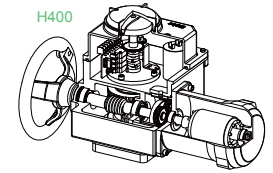
Model	Q	Q1	ISO Flange	W	W1	CH	I	N.W.
H150								
H220	Ø70	Ø102	F07 / F10	M8	M10	14,17, 19,22	40	5.8kg
H240								

Worm gear structure with self-locking mechanism is able to prevent backlash pressure in piping and stabilize motor performance to control valve open/close precisely.

Model	H150A2208	H220A2240	H240A2280	MH200A2240	MH220A2280
Torque Rating (Nm)	150	220	240	200	220
Supply Voltage 50/60Hz	AC220V ±10%	AC220V ±10%	AC220V ±10%	AC220V ±10%	AC220V ±10%
Control Signal	ON-OFF	ON-OFF	ON-OFF	0/4~20mA , 1/2~10mA , 0/2-10Vdc	
Max Inrush Current (A)	2	0.6	0.6	0.6	0.6
Running Current (A)	1	0.5	0.5	0.5	0.5
Timing Nominal Driving (50 Hz)	9sec	50sec	100sec	50sec	100sec
Timing Nominal Driving (60 Hz)	8sec	40sec	80sec	40sec	80sec
Moto Power (W)	185	80	80	80	80
Duty cycle	60%	75%	75%	75%	75%
Duty cycle(Remark)	60%:O-15min-CO-10min-CO(Non Continuous duty)75%:O-75min-CO-25min-CO				
Motor protection	E class insulation				
Enclosure protection	IP66				
Storage Temperature Range	-10°C to 50°C				
Operating Humidity Range	90%RH Max. (non-condensing)				
Electrical Connection	1/2" PT cable connector, screw terminals				
Cable	1.25mm				
Optional Items	Auxiliary switches 2 (SPDT) / Potentiometer 1KΩ / Heater		4~20mA Feedback		
Net Weight ±0.3(kg)	5.8	5.8	5.8	6	6

# H400/H1000

Worm gear structure series



Model	Q	Q1	ISO Flange	W	W1	CH	I	N.W.
H400	Ø102	Ø125	F10/F12	M10	M12	17,19 22,27	50	18.5kg
H680								

Worm gear structure with self-locking mechanism is able to prevent backlash pressure in piping and stabilize motor performance to control valve open/close precisely.

Model	H400A2208	H680A2235	H1000A2235
Torque Rating (Nm)	400	680	1000
Supply Voltage 50/60Hz	AC220V ±10%	AC220V ±10%	AC220V ±10%
Control Signal	ON-OFF	ON-OFF	ON-OFF
Max Inrush Current (A)	2.8	2.6	3
Running Current (A)	1.8	1.7	2
Timing Nominal Driving (50 Hz)	9sec	37sec	37sec
Timing Nominal Driving (60 Hz)	8sec	35sec	35sec
Moto Power (W)	280	280	280
Duty cycle	60%	60%	60%
Duty cycle(Remark)	60%:O-15min-CO-10min-CO (Non Continuous duty)		
Motor protection	E class insulation		
Enclosure protection	IP66		
Storage Temperature Range	-10°C to 50°C		
Operating Humidity Range	90%RH Max. (non-condensing)		
Electrical Connection	1/2" PT cable connector, screw terminals		
Cable	1.25mm		
Optional Items	Auxiliary switches 2 (SPDT) / Potentiometer 1KΩ / Heater		
Net Weight ±0.3(kg)	18.5	18.5	22



# BFW

H45~H680 series

Applicative units for: Water treatment, HVAC, Rain water utilization...etc.

Working Pressure: 0.98Mpa (10kgf/cm<sup>2</sup>)

Working Temp.: 10°C ~ 100°C

Connection: Wafer type

Suitable actuator: H45~H680 model



H115-BFW

H150-BFW

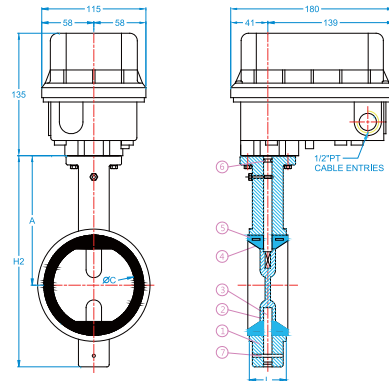
H400-BFW

ITEM	PARTS	MATERIAL
1	BODY	FC20 / CF8 / CF8M
2	DISC	SCS13 / SCS14
3	STEM	SUS304
4	IRON RING	GCD450
5	SEAT	NBR / EPDM / VITON
6	O-RING	NBR
7	SPRING PIN	CARBON STEEL

# H45~H115

BFW series

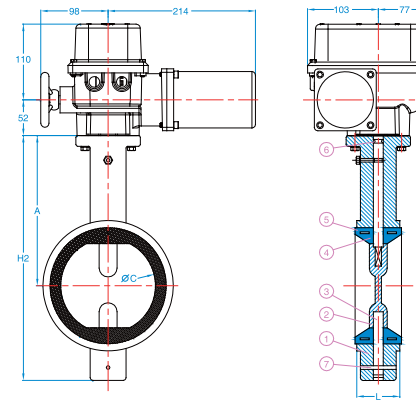
Unit [mm] [kg]							
IN	SIZE	L	H2	A	C	N.W.±1	
2	50	43	201	136	56	5	
2 1/2	65	46	224	146	66	5.3	
3	80	46	240	152	84	5.8	



Model No.	H45A2250-BFW--	H70A2275-BFW--	H115A2215-BFW--	MH42A2250-BFW--	MH67A2275-BFW--
Size range	DN50 to DN65	DN50 to DN80	DN50 to DN80	DN50 to DN80	DN50 to DN80
Voltage supply (50/60Hz)	AC220V ±10%	AC220V ±10%	AC220V ±10%	AC220V ±10%	AC220V ±10%
Control Signal	ON-OFF	ON-OFF	ON-OFF	0/4~20mA, 1/2~10mA, 0/2-10Vdc	0/2-10Vdc
Running current	0.2A	0.2A	0.3A	0.2A	0.2A
Timing Nominal Driving	50Hz	60 sec	95 sec	16sec	60 sec
quarter turn to open / close gate of valve	60Hz	50sec	75sec	15sec	95 sec
Motor Power	10W	10W	35W	10W	10W
Performance Operation	Consecutive running	Consecutive running	Non Consecutive running	Consecutive running	Consecutive running
Insulation level	E class				
Waterproof level	IP66				
Storage Temp. Range	-10°C to 50°C				
Operating Humidity Range	5 to 90% RH				
Electrical connection	1/2" cable connector				
Diameter of cable	1.25mm				
Optional items	Auxiliary switches 2(SPDT) / Potentiometer / 1 KΩ		4~20mA Feedback		

# H150~H240

BFW series

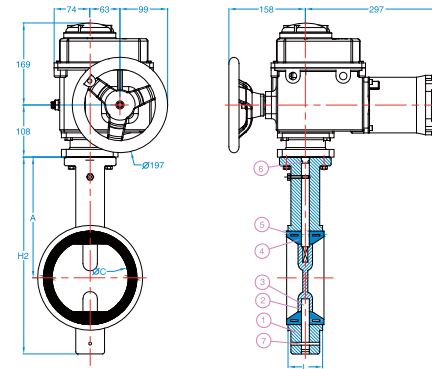


Unit [mm] [kg]							
IN	SIZE	L	H2	A	C	N.W.±1	
4	100	52.4	288	171	105	10.8	
5	125	55.6	314	184	125	12	
6	150	55.6	340	196	149	13	
8	200	60	402	226	202	19.5	

Model No.	H150A2208-BFW--	H220A2240-BFW--	H240A2280-BFW--	MH200A2240-BFW--	MH220A2280-BFW--
Size range	DN100 to DN150	DN100 to DN150	DN100 to DN200	DN100 to DN150	DN100 to DN150
Voltage supply 50/60Hz	AC220V ±10%	AC220V ±10%	AC220V ±10%	AC220V ±10%	AC220V ±10%
Control Signal	ON-OFF	ON-OFF	ON-OFF	4~20mA / 2-10V	4~20mA / 2-10V
Running current	1A	1.5A	1.5A	1.5A	1.5A
Timing Nominal Driving	50Hz	10sec	42sec	82sec	42sec
quarter turn to open / close gate of valve	60Hz	8sec	40sec	80sec	40sec
Motor Power	180W	40W	40W	40W	40W
Performance Operation	Non consecutive running	Consecutive running	Non consecutive running	Consecutive running	Consecutive running
Insulation level	E class				
Waterproof level	IP66				
Storage Temp. Range	-10°C to 50°C				
Operating Humidity Range	5 to 90% RH				
Electrical connection	1/2" cable connector				
Diameter of cable	1.25mm				
Optional items	Auxiliary switches 2(SPDT) / Potentiometer 1KΩ			4~20mA Feedback	

# H400~H680

BFW series



Unit [mm] [kg]							
IN	SIZE	L	H2	A	C	N.W.±1	
8	200	60	402	226	202	33	
10	250	68	468	258	250	43	
12	300	78	544	293	299	53	
14	350	78	588	318	328	68	

Model No.	H400A2208-BFW--	H680A2235-BFW--	MH680A2235-BFW--
Size range	DN200 to DN300	DN200 to DN350	DN200 to DN350
Voltage supply 50/60Hz	AC220V ±10%	AC220V ±10%	AC220V ±10%
Control Signal	ON-OFF	ON-OFF	4~20mA / 2-10V
Running current	1.8A	1.7A	1.7A
Timing Nominal Driving	50Hz	9sec	37sec
quarter turn to open / close gate of valve	60Hz	8sec	35sec
Motor Power	280W	280W	280W
Performance Operation	Non consecutive running	Non consecutive running	consecutive running
Insulation level	E class		
Waterproof level	IP66		
Storage Temp. Range	-10°C to 50°C		
Operating Humidity Range	5 to 90% RH		
Electrical connection	1/2" cable connector		
Diameter of cable	1.25mm		
Optional items	Auxiliary switches 2(SPDT) / Potentiometer 1KΩ		4~20mA Feedback

# BAW

## H45~H680 Anti-Frost type series

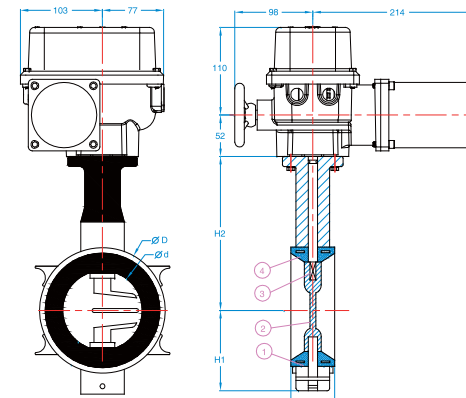
Applicative units for: HVAC, Air condition system...etc  
 Working Pressure: 0.98Mpa (10kgf/cm<sup>2</sup>)  
 Working Temp. -15°C~100°C  
 Connection: Wafer Type  
 Suitable actuator: H45~H680 model



H115-BAW

H150-BAW

ITEM	PARTS	MATERIAL
1	BODY	ALUMINUM DIECAST ALLOY
2	DISC	STAINLESS STEEL TYPE 316
3	STEM	STAINLESS STEEL TYPE 420J2
4	SEAT	NBR / EPDM



# H150~H240

## BAW series

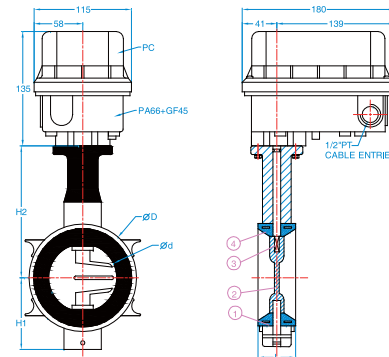
Unit [mm]							[kg]
IN	SIZE	∅d	∅D	L	H1	H2	N.W ±1
4	100	101	147	52	98	167	8.5
5	125	126	178	56	115	191	9.5
6	150	150	207	56	131	202	11
8	200	196	253	60	163	227	22

Model No.	H150A2208-BAW-	H220A2240-BAW-	H240A2280-BAW-	MH200A2240-BAW-	MH220A2280-BAW-
Size range	DN100 to DN150	DN100 to DN150	DN100 to DN200	DN100 to DN150	DN100 to DN150
Voltage supply 50/60Hz	AC220V ±10%	AC220V ±10%	AC220V ±10%	AC220V ±10%	AC220V ±10%
Control Signal	ON-OFF	ON-OFF	ON-OFF	4~20mA / 2-10V	4~20mA / 2-10V
Running current	1A	1.5A	1.5A	1.5A	1.5A
Timing Nominal Driving quarter turn to open / close gate of valve	50Hz	10sec	42sec	42sec	83sec
	60Hz	8sec	40sec	80sec	80sec
Motor Power	180W	40W	40W	40W	40W
Performance Operation	Non consecutive running	Consecutive running	Consecutive running	Consecutive running	Consecutive running
Insulation level	E class				
Waterproof level	IP66				
Storage Temp. Range	-10°C to 50°C				
Operating Humidity Range	5 to 90% RH				
Electrical connection	1/2" cable connector				
Diameter of cable	1.25mm				
Optional Items	Auxiliary switches 2(SPDT) / Potentiometer 1KΩ			4~20mA Feedback	

# H45~H115

## BAW series

Unit [mm]							[kg]
IN	SIZE	∅d	∅D	L	H1	H2	N.W ±1
1 1/2	40	45	80	35	61	132	4
2	50	52	91	43	66	138	4
2 1/2	65	65	111	46	72	151	4.5
3	80	80	127	46	85	156	4.8

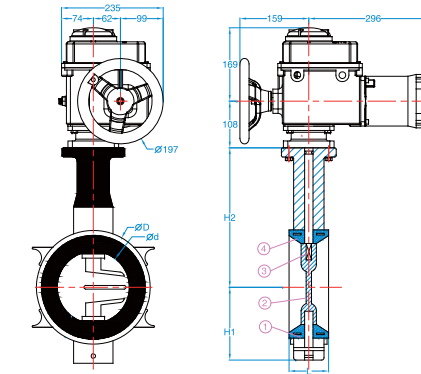


Model	H45A2250-BAW-	H70A2207-BAW-	H70A2275-BAW-	H115A22115-BAW-	MH42A2250-BAW-	MH67A2275-BAW-
Size range	DN50 to DN65	DN40	DN50 to DN80	DN50 to DN80	DN50 to DN80	DN50 to DN80
Voltage supply (50/60Hz)	AC220V ±10%	AC220V ±10%	AC220V ±10%	AC220V ±10%	AC220V ±10%	AC220V ±10%
Control Signal	ON-OFF	ON-OFF	ON-OFF	ON-OFF	0/4~20mA, 1/2~10mA, 0/2-10Vdc	0.2A
Running current	0.2A	0.3A	0.2A	0.3A	0.2A	0.2A
Timing Nominal Driving quarter turn to open / close gate of valve	50Hz	60sec	8sec	95sec	16sec	60sec
	60Hz	50sec	7sec	75sec	15sec	50sec
Motor Power	10W	35W	10W	35W	10W	10W
Performance Operation	Consecutive running	Non Consecutive running	Consecutive running	Non Consecutive running	Consecutive running	Consecutive running
Insulation level	E class					
Waterproof level	IP66					
Storage Temp. Range	-10°C to 50°C					
Operating Humidity Range	5 to 90% RH					
Electrical connection	1/2" cable connector					
Diameter of cable	1.25mm					
Optional Items	Auxiliary switches 2(SPDT) / Potentiometer 1 KΩ			4~20mA Feedback		

# H400~H680

## BAW series

Unit [mm]							[kg]
IN	SIZE	∅d	∅D	L	H1	H2	N.W ±1
8	200	196	253	60	163	227	40
10	250	248	313	68	202	280	41
12	300	297	368	78	232	312	46.5



Model No.	H400A2208-BAW-	H680A2235-BAW-	MH680A2235-BAW-
Size range	DN200 to DN300	DN200 to DN350	DN200 to DN350
Voltage supply 50/60Hz	AC220V ±10%	AC220V ±10%	AC220V ±10%
Control Signal	ON-OFF	ON-OFF	4~20mA / 2-10V
Running current	1.8A	1.7A	1.7A
Timing Nominal Driving quarter turn to open / close gate of valve	50Hz	9sec	37sec
	60Hz	8sec	35sec
Motor Power	280W	280W	280W
Performance Operation	Non consecutive running	Non consecutive running	Consecutive running
Insulation level	E class		
Waterproof level	IP66		
Storage Temp. Range	-10°C to 50°C		
Operating Humidity Range	5 to 90% RH		
Electrical connection	1/2" cable connector		
Diameter of cable	1.25mm		
Optional Items	Auxiliary switches 2(SPDT) / Potentiometer 1KΩ		4~20mA Feedback

# BPW

## H45~H240 series

Applicative units for: Chemical industry, Pure water system ...etc

Working Pressure: 0.98Mpa (10kgf/cm<sup>2</sup>)

Working Temp. Depending on fluid consistency

Connection: Wafer Type

Suitable actuator: H45~H240 model



H45-BPW



H115-BPW

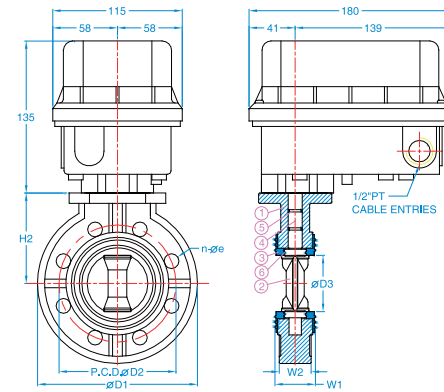


H150-BPW

ITEM	PARTS	MATERIAL
1	BODY	PVC/PP/PVDF
2	DISC	PVC/PP/PVDF
3	STEM SEAL	EPDM/FPM
4	STEM	SUS410
5	O-RING	EPDM / FPM
6	O-RING	EPDM / FPM

Unit (mm)

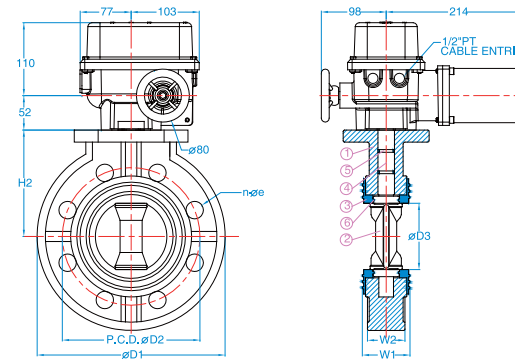
IN	SIZE	D1	D2			øD3	H2	W1	W2	n			øe		
			JIS	ANSI	DIN					JIS	ANSI	DIN	JIS	ANSI	DIN
2	50	165	120	120.4	125	56.5	103	42	35	4	4	4	19	19	18
2½	65	185	140	139.4	145	70	113	46	37	4	4	4	19	19	18
3	80	200	150	152.4	160	79	115	46	37	8	4	8	19	19	18
4	100	229	175	190.5	180	103	135	56	47	8	8	8	19	19	18
5	125	256	210	216	210	130	150	66	50	8	8	8	23	22	18
6	150	285	240	241.5	240	151	177	71	62	8	8	8	23	22	23
8	200	343	290	298.5	290	200	210	87	68	12	8	8	23	23	23



# H45~H115

BPW series

Model No.	H45A2250-BPW--	H70A2275-BPW--	H115A2215-BPW--	MH42A2250-BPW--	MH67A2275-BPW--
Size range	DN50 to DN65	DN50 to DN80	DN50 to DN80	DN50 to DN80	DN50 to DN80
Voltage supply 50/60Hz	AC220V ±10%	AC220V ±10%	AC220V ±10%	AC220V ±10%	AC220V ±10%
Control Signal	ON-OFF	ON-OFF	ON-OFF	0/4~20mA , 1/2~10mA , 0/2-10Vdc	0/4~20mA , 1/2~10mA , 0/2-10Vdc
Running Current	0.2A	0.2A	0.3A	0.2A	0.2A
Timing Nominal Driving quarter turn to open / close gate of valve	50Hz	60sec	95sec	16sec	60sec
	60Hz	50sec	75sec	15sec	50sec
Motor Power	10W	10W	35W	10W	10W
Performance Operation	Consecutive running	Consecutive running	Non consecutive running	Consecutive running	Consecutive running
Insulation level	E class				
Waterproof level	IP66				
Storage Temp. Range	-10℃ to 50℃				
Operating Humidity Range	5 to 90% RH				
Electrical connection	1/2" cable connector				
Diameter of cable	1.25mm				
Optional Items	Auxiliary switches 2(SPDT) / Potentiometer 1KΩ			4~20mA Feedback	



# H150~H240

BPW series

Model No.	H150A2208-BPW--	H220A2240-BPW--	H240A2280-BPW--	MH200A2240-BPW--	MH220A2280-BPW--
Size range	DN100 to DN150	DN100 to DN150	DN100 to DN200	DN100 to DN150	DN100 to DN150
Voltage supply 50/60Hz	AC220V ±10%	AC220V ±10%	AC220V ±10%	AC220V ±10%	AC220V ±10%
Control Signal	ON-OFF	ON-OFF	ON-OFF	0/4~20mA , 1/2~10mA , 0/2-10Vdc	0/4~20mA , 1/2~10Vdc
Running Current	1A	0.5A	0.5A	0.5A	0.5A
Timing Nominal Driving quarter turn to open / close gate of valve	50Hz	9sec	50sec	100sec	50sec
	60Hz	8sec	40sec	80sec	40sec
Motor Power	185W	80W	80W	80W	80W
Performance Operation	Non consecutive running	Consecutive running	Consecutive running	Consecutive running	Consecutive running
Insulation level	E Class				
Waterproof level	IP66				
Storage Temp. Range	-10℃ to 50℃				
Operating Humidity Range	5 to 90% RH				
Electrical connection	1/2" cable connector				
Diameter of cable	1.25mm				
Optional Items	Auxiliary switches 2(SPDT) / Potentiometer 1KΩ			4~20mA Feedback	

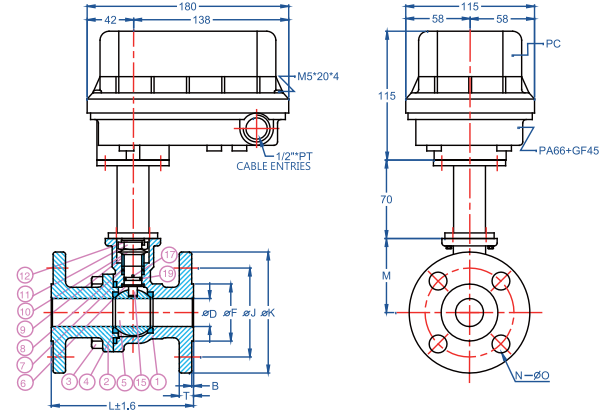
# 2SF

H45~H680 series



# H15~H35

2SF series



Model No.	H15A2207-2SF---H	H23A2230-2SF---H	H18A2207-2SF---H	H35A2230-2SF---H	MH20A2230-2SF---H	MH32A2230-2SF---H
Size range	DN15 to DN20	DN15 to DN20	DN25 to DN32	DN25 to DN32	DN15 to DN20	DN25
Voltage supply 50/60Hz	AC220V ±10%	AC220V ±10%	AC220V ±10%	AC220V ±10%	AC220V ±10%	AC220V ±10%
Control Signal	ON-OFF	ON-OFF	ON-OFF	ON-OFF	4~20mA / 2-10V	4~20mA / 2-10V
Running Current	0.2A	0.15A	0.2A	0.15A	0.15A	0.15A
Timing Nominal Driving quarter turn to open / close gate of valve	50Hz	8sec	36sec	8sec	36sec	36sec
	60Hz	7sec	30sec	7sec	30sec	30sec
Motor Power	25W	10W	25W	10W	10W	10W
Performance Operation	Non consecutive running	Consecutive running	Non consecutive running	Consecutive running	Consecutive running	Consecutive running
Insulation level	E class					
Waterproof level	IP66					
Storage Temp. Range	-10°C to 50°C					
Operating Humidity Range	5 to 90% RH					
Electrical connection	1/2" cable connector					
Diameter of cable	1.25mm					
Optional Items	Auxiliary switches 2(SPDT) / Potentiometer 1KΩ				4~20mA Feedback	

ITEM	PARTS	MATERIAL
1	BODY	CF8M
2	END CAP	CF8M
3	HEX BOLT	SUS304
4	SEAT	RPTFE
5	BALL	SUS316
6	THRUST WASHER	PTFE
7	GASKET	PTFE
8	GLAND PACKING	PTFE
9	GLAND	SUS304
10	DISC SPRING	SUS301
11	GLAND NUT	SUS304
12	TAB WASHER	SUS304
15	STEM	SUS316
17	ANTI STATIC(optional)	SUS304
19	O-RING	VITON

Unit [mm] . JIS10K

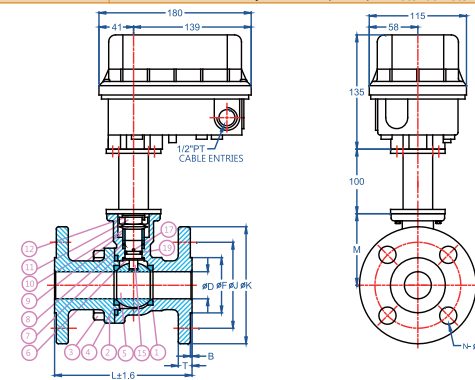
SIZE	∅D	L	∅F	∅J	∅K	T	N	∅O	B	M	N.W. <sub>a1</sub>	
DN15	1/2"	15	108	52	70	95	12	4	15	1	46	3.5kg
DN20	3/4"	20	118	58	75	100	14	4	15	1	50.5	4kg
DN25	1"	25	127	70	90	125	14	4	19	1	56.5	5.5kg
DN32	1 1/4"	32	140	80	100	135	16	4	19	2	60	7kg
DN40	1 1/2"	40	165	85	105	140	16	4	15	2	80	8.7kg
DN50	2"	50	178	100	120	155	16	8	19	2	86	11.5kg
DN65	2 1/2"	65	190.5	116	140	175	18	8	19	2	101	12kg

Unit [mm] . ANSI 150

SIZE	∅D	L	∅F	∅J	∅K	T	N	∅O	B	M	N.W. <sub>a1</sub>	
DN15	1/2"	15	108	35	60.5	89	11.5	4	16	1.6	48	4kg
DN20	3/4"	20	117	43	70	98	11.5	4	16	1.6	53	4.5kg
DN25	1"	25	127	51	79.5	108	11.5	4	16	1.6	59	5.5kg
DN32	1 1/4"	32	140	64	89	117	12.7	4	16	1.6	71	6.3kg
DN40	1 1/2"	40	165	73	98.5	127	14.3	4	16	1.6	76	8.7kg
DN50	2"	50	178	92	120.5	152	15.9	4	19	1.6	85	11.5kg
DN65	2 1/2"	65	190	105	139.5	178	17.8	4	19	1.6	93.5	12kg

# H45~H115

2SF series



Model No.	H45A2250-2SF---H	H70A2207-2SF---H	H70A2275-2SF---H	H115A2215-2SF---H	MH42A2250-2SF---H	MH67A2275-2SF---H
Size range	DN40	DN40 to DN50	DN40 to DN50	DN40 to DN65	DN40	DN40 to DN50
Voltage supply 50/60Hz	AC220V ±10%	AC220V ±10%	AC220V ±10%	AC220V ±10%	AC220V ±10%	AC220V ±10%
Control Signal	ON-OFF	ON-OFF	ON-OFF	ON-OFF	4~20mA / 2-10V	4~20mA / 2-10V
Running Current	0.2A	0.3A	0.2A	0.3A	0.2A	0.2A
Timing Nominal Driving quarter turn to open / close gate of valve	50Hz	60sec	8sec	95sec	16sec	60sec
	60Hz	50sec	7sec	75sec	15sec	50sec
Motor Power	10W	35W	10W	35W	10W	10W
Performance Operation	Consecutive running	Non consecutive running	Consecutive running	Non consecutive running	Consecutive running	Consecutive running
Insulation level	E class					
Waterproof level	IP66					
Storage Temp. Range	-10°C to 50°C					
Operating Humidity Range	5 to 90% RH					
Electrical connection	1/2" cable connector					
Diameter of cable	1.25mm					
Optional Items	Auxiliary switches 2(SPDT) / Potentiometer 1KΩ				4~20mA Feedback	

# 3ST

H15~H115 3WAY series

Applicative units for: Heating system, heated piping system...etc

Working Pressure: 0.98Mpa (10kgf/cm<sup>2</sup>)

Working Temp.: -20°C~160°C

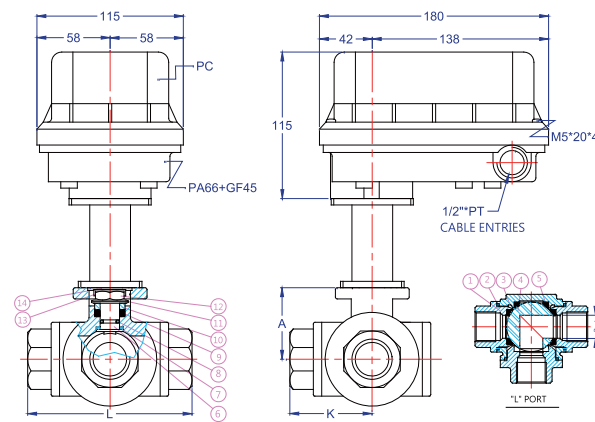
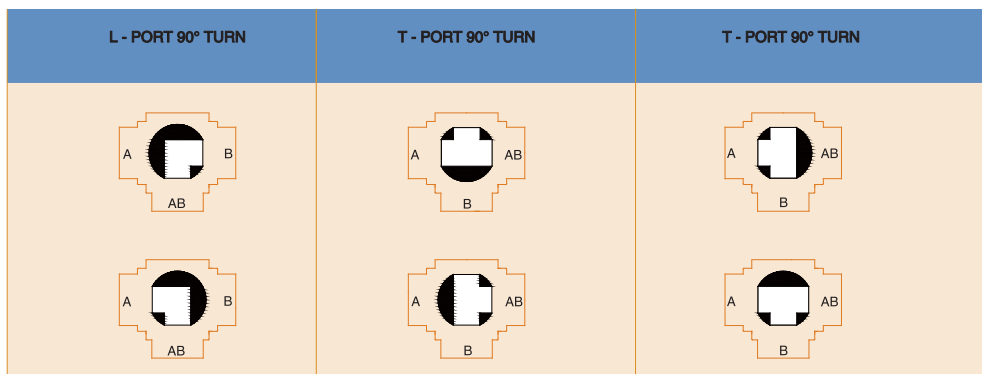
Connection: Threaded End



H15-3ST

H70-3ST

ITEM	PARTS	MATERIAL
1	END CAP	A351 Gr.CF8M
2	GASKET	PTFE
3	BODY	A351 Gr.CF8M
4	BALL	SS 316
5	SEATS	TFM
6	STEM	SS 316
7	THEUST WASHER	RPTFE
8	O-RING	VITON
9	STEM PACKING	PTFE
10	GLAND	SS 304
11	DISK WASHER	SS 301
12	STEM NUT	SS 304
13	NUT STOP	SS 304
14	SPACE WASHER	SS 304

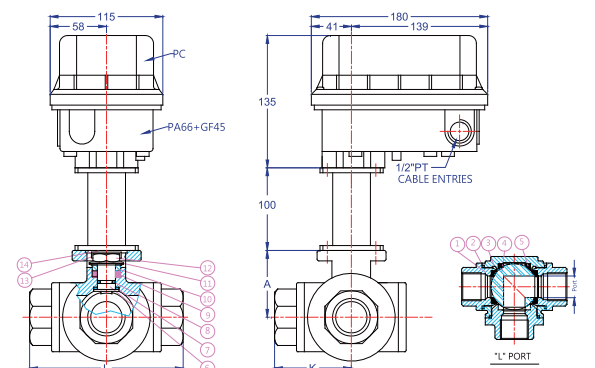


## H15~H35

3ST series

FULL STANDARD PORT		Unit [mm]			
PORT	PORT	A	K	L	N.W (kg)
3/8"	1/2"	37	36	72	12 2.8
1/2"	3/4"	42	41.5	83	15 3
3/4"	1"	48.5	49.5	99	20 3.5
1"	1 1/4"	55.4	56	112	25 4.2

Model No.	H15A2207-3ST---H	H23A2230-3ST---H	H18A2207-3ST---H	H35A2230-3ST---H
Size range (Standard port)	DN15 to DN20	DN15 to DN20	DN20 to DN25	DN20 to DN25
Voltage supply 50/60Hz	AC220V ±10%	AC220V ±10%	AC220V ±10%	AC220V ±10%
Control Signal	ON-OFF	ON-OFF	ON-OFF	ON-OFF
Running Current	0.2A	0.15A	0.2A	0.15A
Timing Nominal Driving quarter turn to open / close gate of valve	50Hz	8sec	36sec	8sec
	60Hz	7sec	30sec	7sec
Motor Power	25W	10W	25W	10W
Performance Operation	Non consecutive running	Consecutive running	Non consecutive running	Consecutive running
Insulation level	E class			
Waterproof level	IP66			
Storage Temp. Range	-10°C to 50°C			
Operating Humidity Range	5 to 90% RH			
Electrical connection	1/2" cable connector			
Diameter of cable	1.25mm			
Optional Items	Auxiliary switches 2(SPDT) / Potentiometer 1KΩ			



## H45~H115

3ST series

FULL STANDARD PORT		Unit [mm]			
PORT	PORT	A	K	L	N.W (kg)
1"	1 1/4"	55.4	56	112	25 6
1 1/4"	1 1/2"	63	62.5	125	32 7
1 1/2"	2"	73.4	74.5	149	38 9

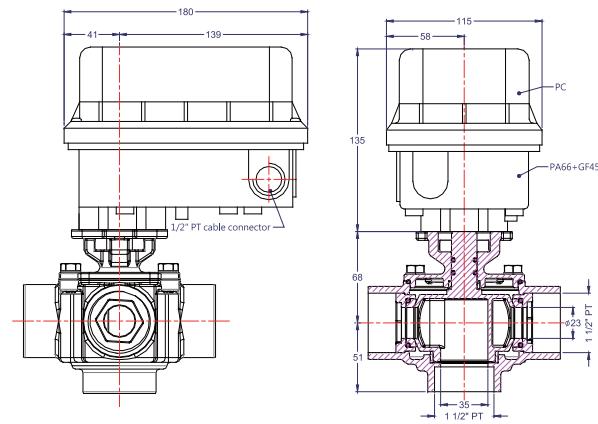
Model No.	H45A2250-3ST---H	H70A2207-3ST---H	H70A2275-3ST---H	H115A2215-3ST---H
Size range (Standard port)	DN32 to DN40	DN32 to DN40	DN40 to DN50	DN40 to DN50
Voltage supply 50/60Hz	AC220V ±10%	AC220V ±10%	AC220V ±10%	AC220V ±10%
Control Signal	ON-OFF	ON-OFF	ON-OFF	ON-OFF
Running Current	0.2A	0.3A	0.2A	0.3A
Timing Nominal Driving quarter turn to open / close gate of valve	50Hz	60sec	8sec	95sec
	60Hz	50sec	7sec	75sec
Motor Power	10W	35W	10W	35W
Performance Operation	Consecutive running	Non consecutive running	Consecutive running	Non consecutive running
Insulation level	E class			
Waterproof level	IP66			
Storage Temp. Range	-10°C to 50°C			
Operating Humidity Range	5 to 90% RH			
Electrical connection	1/2" cable connector			
Diameter of cable	1.25mm			
Optional Items	Auxiliary switches 2(SPDT) / Potentiometer 1KΩ			

# 3Q5W

series



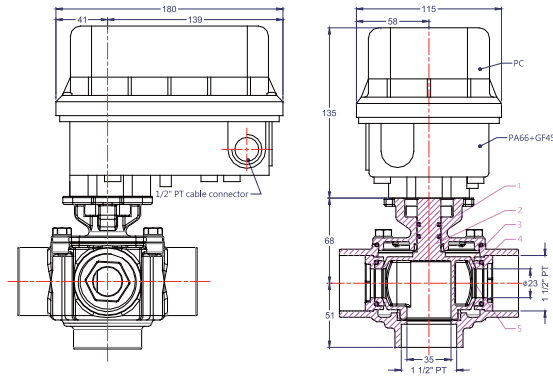
ITEM	PARTS	MATERIAL
1	BODY	CF8
2	STEM	SCS13
3	BALL	SUS304
4	O-RING	NBR
5	SEAT	TEFLON



(mm)	DN40
50/60Hz	AC220V ±10%
	ON-OFF (Three modes of functional indicators)
	0.5A
	0.3A
(50Hz)	Filter → Backwash :31SEC , Backwash → Rinse :24SEC
(60Hz)	Filter → Backwash :30SEC , Backwash → Rinse :23SEC
	35W
	60%
	60%-O-15min-CO-10min-CO (Performing in circulated )
	E class insulation
	IP66
	-10°C to 50°C
	90%RH Max. (non-condensing)
	1/2" PT cable connector, screw terminals
	1.25mm
	Heater
±1 (kg)	6

# H70

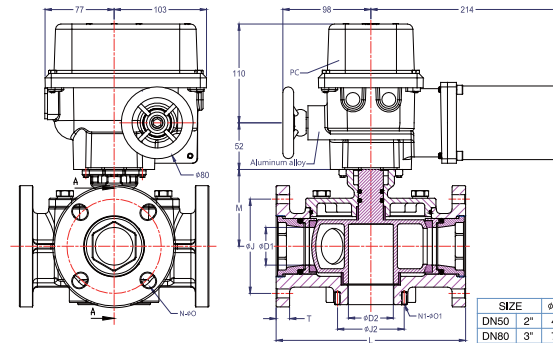
3Q5W series



(mm)	DN40
50/60Hz	DC24V / AC220V ±10%
	ON-OFF (Three modes of functional indicators)
<b>Maximum Current</b>	1.5A
	1A
Performed Time (50Hz)	Filter → Backwash :51SEC , Backwash → Rinse :38.5SEC
Performed Time (60Hz)	Filter → Backwash :50SEC , Backwash → Rinse :37.5SEC
Output power, voltage, current	18W , DC24V , 1A
<b>Duty cycle</b>	60%
<b>Duty cycle (Remark)</b>	60%-O-15min-CO-10min-CO (Performing in circulated )
	E class insulation
	IP66
	-10°C to 50°C
	90%RH Max. (non-condensing)
	1/2" PT cable connector, screw terminals
	1.25mm
	Heater
±1 (kg)	6

# H115

3Q5W series



(mm)	DN50 / DN80
50/60Hz	AC220V ±10%
	ON-OFF (Three modes of functional indicators)
	0.6A
	0.5A
(50Hz)	Filter → Backwash :87SEC , Backwash → Rinse :67SEC
(60Hz)	Filter → Backwash :80SEC , Backwash → Rinse :60SEC
	80W
	75%
	75%-O-75min-CO-25min-CO (Performing in circulated )
	E class insulation
	IP66
	-10°C to 50°C
	90%RH Max. (non-condensing)
	1/2" PT cable connector, screw terminals
	1.25mm
	Heater
±1 (kg)	DN50:17 / DN80:43

# H220

3Q5W series  
connection: 2" JIS5K  
3" JIS10K

# 2PF

H7~H115 series

Applicative units for: Chemical industry, Pure water system..etc.

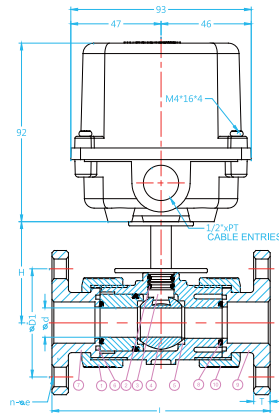
Working Pressure: 0.98Mpa (10kgf/cm<sup>2</sup>)

Working Temp. Depending on fluid

Connection: Flange end



NO	PART NAME	MATERIAL
1	BODY	UPVC . PP . PVDF
2	STEM O-RING	EPDM
3	STEM	UPVC . PP . PVDF
4	BALL	UPVC . PP . PVDF
5	SEAT SEAL	PTFE
6	CARRIER O-RING	EPDM
7	SEAL CARRIER	UPVC . PP . PVDF
8	UNION O-RING	EPDM
9	END CONNECTOR	UPVC . PP . PVDF
10	UNION NUT	UPVC . PP . PVDF



# H7~H20

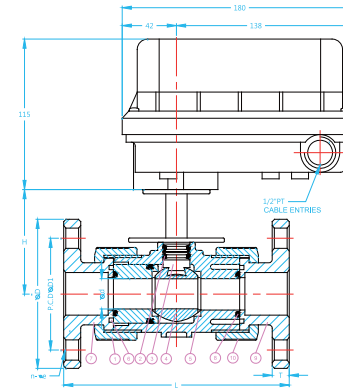
2PF series

SIZE	mm	JIS			DIN			H	d
		D1	L	n-øø	D1	L	n-øø		
1/2"	DN15	70	143	4-15	65	130	4-14	59	13
3/4"	DN20	75	172	4-15	75	150	4-14	59	18

Model	H7 A2215-2PF--	H10 A2230-2PF--
Size range	DN15 to DN20	DN15 to DN20
Voltage supply (50/60Hz)	AC220V ±10%	AC220V ±10%
Control Signal	ON-OFF	ON-OFF
Running Current	0.1A	0.5A
Timing Nominal Driving quarter turn to open / close gate of valve	50Hz	16sec
	60Hz	15sec
Motor Power	5W	5W
Performance Operation	Non Consecutive unning	Consecutive running
Insulation level	E class	
Waterproof level	IP66	
Storage Temp. Range	-10°C to 50°C	
Operating Humidity Range	5 to 90% RH	
Electrical connection	1/2" Cable connector	
Diameter of cable	1.25mm	
Optional Items	Auxiliary switches 2(SPDT)/Potentiometer	

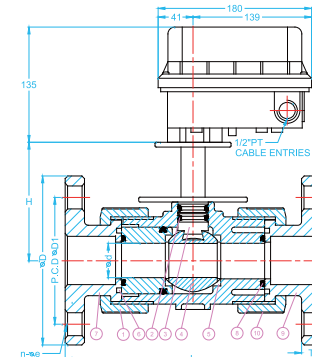
# H18~H45

2PF series



SIZE	mm	JIS						DIN			H	d	T
		D	D1	L	n-øø	D	D1	L	n-øø				
1"	DN25	125	90	187	4-19	115	85	160	4-14	87.5	23	14	
1 1/4"	DN32	135	100	190	4-19	140	100	180	4-18	90	30	16	
1 1/2"	DN40	140	105	212	4-19	150	110	200	4-18	91	38	16	

Model No.	H18A2207-2PF--	H35A2230-2PF--	H48A2230-2PF--	MH32A2230-2PF--
Size range	DN25 to DN32	DN25 to DN32	DN25 to DN40	DN25 to DN32
Voltage supply	50/60Hz AC220V ±10%	AC220V ±10%	AC220V ±10%	AC220V ±10%
Control Signal	ON-OFF	ON-OFF	ON-OFF	4~20mA / 2-10V
Running Current	0.2A	0.15A	0.3A	0.15A
Timing Nominal Driving quarter turn to open / close gate of valve	50Hz	8sec	36sec	36sec
	60Hz	7sec	30sec	30sec
Motor Power	25W	10W	25W	10W
Performance Operation	Non consecutive running	Consecutive running	Non consecutive running	Consecutive running
Insulation level	E class			
Waterproof level	IP66			
Storage Temp. Range	-10°C to 50°C			
Operating Humidity Range	5 to 90% RH			
Electrical connection	1/2" cable connector			
Diameter of cable	1.25mm			
Optional Items	Auxiliary switches 2(SPDT) / Potentiometer 1KΩ			4-20mA Feedback



SIZE	mm	JIS						DIN			H	d	T
		D	D1	L	n-øø	D	D1	L	n-øø				
1 1/2"	DN40	140	105	212	4-19	150	110	200	4-18	91	38	16	
2"	DN50	155	120	234	4-19	165	125	230	4-18	102	48	16	
2 1/2"	DN65	175	140	259	4-19	185	145	290	4-18	88	61	18	

Model No.	H45A2250-2PF-	H70A2207-2PF--	H70A2275-2PF--	H115A2215-2PF--	MH42A2250-2PF--	MH67A2275-2PF--
Size range	DN40 to DN50	DN40 to DN50	DN40 to DN50	DN40 to DN65	DN40 to DN50	DN40 to DN50
Voltage supply	50/60Hz AC220V ±10%	AC220V ±10%	AC220V ±10%	AC220V ±10%	AC220V ±10%	AC220V ±10%
Control Signal	ON-OFF	ON-OFF	ON-OFF	ON-OFF	0/4~20mA , 1/2~10mA , 0/2-10Vdc	AC220V ±10%
Running Current	0.2A	0.3A	0.2A	0.3A	0.2A	0.2A
Timing Nominal Driving quarter turn to open / close gate of valve	50Hz	60sec	8sec	95sec	16sec	60sec
	60Hz	50sec	7sec	75sec	15sec	50sec
Motor Power	10W	35W	10W	35W	10W	10W
Performance Operation	Consecutive running	Non consecutive running	Consecutive running	Non consecutive running	Consecutive running	Consecutive running
Insulation level	E class					
Waterproof level	IP66					
Storage Temp. Range	-10°C to 50°C					
Operating Humidity Range	5 to 90% RH					
Electrical connection	1/2" cable connector					
Diameter of cable	1.25mm					
Optional Items	Auxiliary switches 2(SPDT) / Potentiometer 1KΩ					4-20mA Feedback

# 2PS

H7~H115 series

Applicative units for: Chemical industry, Pure water system..etc.

Working Pressure: 0.98Mpa (10kgf/cm<sup>2</sup>)

Working Temp. Depending on fluid

Connection: female thread; socket

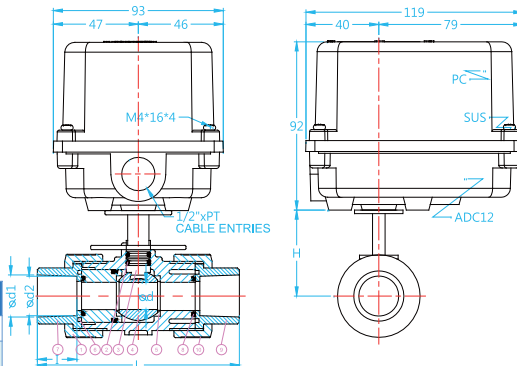
Suitable actuator: H7~ H115 model



NO	PART NAME	MATERIAL
1	BODY	UPVC . PP . PVDF
2	STEM O-RING	EPDM
3	STEM	UPVC . PP . PVDF
4	BALL	UPVC . PP . PVDF
5	SEAT SEAL	PTFE
6	CARRIER O-RING	EPDM
7	SEAL CARRIER	UPVC . PP . PVDF
8	UNION O-RING	EPDM
9	END CONNECTOR	UPVC . PP . PVDF
10	UNION NUT	UPVC . PP . PVDF

# H7~H20

2PS series

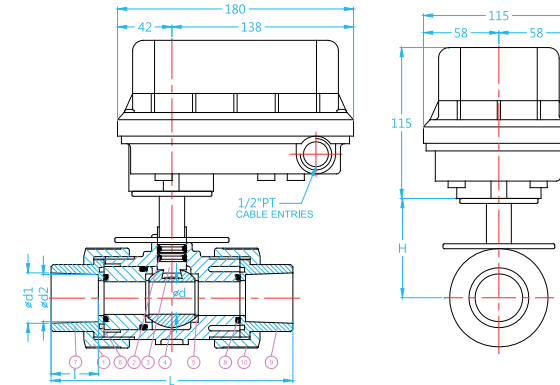


SIZE	mm	d1	JIS d2	I	d1	DIN d2	I	H	d	L
1/2"	DN15	22.30	21.70	22.22	20.3	20.1	16	59	13	112
3/4"	DN20	26.30	25.70	25.40	25.3	25.1	19	59	18	132

Model	H7A2215-2PS--	H10A2230-2PS--
Size range	DN15 to DN20	DN15 to DN20
Voltage supply (50/60Hz)	AC220V ±10%	AC220V ±10%
Control Signal	ON-OFF	ON-OFF
Running Current	0.1A	0.5A
Timing Nominal Driving quarter turn to open / close gate of valve	50Hz	16sec
	60Hz	15sec
Motor Power	5W	5W
Performance Operation	Non Consecutive unning	Consecutive running
Insulation level	E	
Waterproof level	IP66	
Storage Temp. Range	-10°C to 50°C	
Operating Humidity Range	5 to 90% RH	
Electrical connection	1/2" Cable connector	
Diameter of cable	1.25mm	
Optional Items	Auxiliary switches 2(SPDT) /Potentiometer	

# H18~H45

2PS series

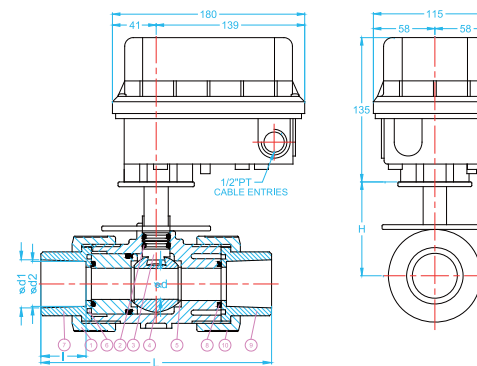


SIZE	mm	JIS d1	JIS d2	I	DIN d1	DIN d2	I	H	d	L
1"	DN25	32.33	31.67	28.6	32.3	32.1	22	87.5	23	144
1 1/4"	DN32	38.43	37.57	31.75	40.3	40.1	26	90	30	167
1 1/2"	DN40	48.46	47.54	34.9	50.3	50.1	31	91	38	172

Model No.	H18A2207-2PS--	H35A2230-2PS--	H48A2230-2PS--	MH32A2230-2PS--
Size range	DN25 to DN32	DN25 to DN32	DN25 to DN40	DN25 to DN32
Voltage supply	50/60Hz AC220V ±10%	AC220V ±10%	AC220V ±10%	AC220V ±10%
Control Signal	ON-OFF	ON-OFF	ON-OFF	4~20mA / 2-10V
Running Current	0.2A	0.15A	0.3A	0.15A
Timing Nominal Driving quarter turn to open / close gate of valve	50Hz	8sec	36sec	36sec
	60Hz	7sec	30sec	30sec
Motor Power	25W	10W	25W	10W
Performance Operation	Non consecutive running	Consecutive running	Non consecutive running	Consecutive running
Insulation level	E class			
Waterproof level	IP66			
Storage Temp. Range	-10°C to 50°C			
Operating Humidity Range	5 to 90% RH			
Electrical connection	1/2" cable connector			
Diameter of cable	1.25mm			
Optional Items	Auxiliary switches 2(SPDT) / Potentiometer 1KΩ			4~20mA Feedback

# H45~H115

2PS series



SIZE	mm	JIS d1	JIS d2	I	DIN d1	DIN d2	I	H	d	L
1 1/2"	DN40	48.46	47.54	34.9	50.3	50.1	31	91	38	172
2"	DN50	60.56	59.44	38.10	63.3	63.1	38	102	46	206
2 1/2"	DN65	76.60	75.87	60.7	-	-	-	88	61	273

Model No.	H45A2250-2PS--	H70A2207-2PS--	H70A2275-2PS--	H115A2215-2PS--	MH42A2250-2PS--	MH67A2275-2PS--
Size range	DN40 to DN50	DN40 to DN50	DN40 to DN50	DN40 to DN65	DN40 to DN50	DN40 to DN50
Voltage supply	50/60Hz AC220V ±10%	AC220V ±10%	AC220V ±10%	AC220V ±10%	AC220V ±10%	AC220V ±10%
Control Signal	ON-OFF	ON-OFF	ON-OFF	ON-OFF	4~20mA / 2-10V	4~20mA / 2-10V
Running Current	0.2A	0.3A	0.3A	0.2A	0.2A	0.2A
Timing Nominal Driving quarter turn to open / close gate of valve	50Hz	60sec	8sec	95sec	16sec	60sec
	60Hz	50sec	7sec	75sec	15sec	50sec
Motor Power	10W	35W	10W	35W	10W	10W
Performance Operation	Consecutive running	Non consecutive running	Consecutive running	Non consecutive running	Consecutive running	Consecutive running
Insulation level	E class					
Waterproof level	IP66					
Storage Temp. Range	-10°C to 50°C					
Operating Humidity Range	5 to 90% RH					
Electrical connection	1/2" cable connector					
Diameter of cable	1.25mm					
Optional Items	Auxiliary switches 2(SPDT) / Potentiometer 1KΩ					4~20mA Feedback

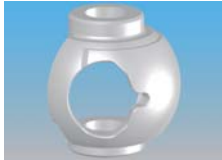


Applicative units for: Steam system, boiler facility... etc

Working pressure: 0.98Mpa (10kgf/cm<sup>2</sup>)

Working Temp.:10℃~160℃

Connection: Flanged end



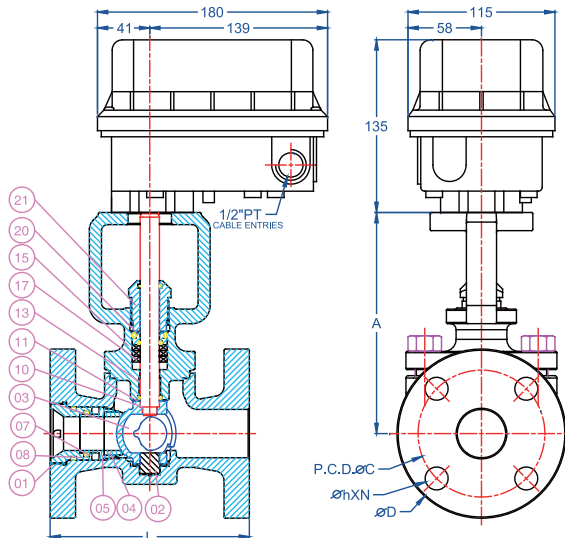
V-PORT



Model No.	H45A2250-VYF--	H70A2275-VYF--	MH67A2275-VYF--
Size range	DN25.DN40.DN50	DN25.DN40.DN50	DN25.DN40.DN50
Voltage supply <small>50/60Hz</small>	AC220V ±10%	AC220V ±10%	AC220V ±10%
Control Signal	ON-OFF	ON-OFF	4~20mA / 2-10V
Running Current	0.2A	0.3A	0.2A
Timing Nominal Driving quarter turn to open close gate of valve	50Hz	60sec	95sec
	60Hz	50sec	75sec
Motor Power	10W	10W	10W
Performance Operation	Consecutive running	Consecutive running	Consecutive running
Insulation level		E class	
Waterproof level		IP66	
Storage Temp. Range		-10℃ to 50℃	
Operating Humidity Range		5 to 90% RH	
Electrical connection		1/2" cable connector	
Diameter of cable		1.25mm	
Optional Items	Auxiliary switches 2(SPDT) / Potentiometer 1KΩ		4~20mA Feedback

FLANGE:JIS 10K		VPA:STEAM					
N	SIZE	∅C	∅D	∅h*N	L	A	N.W.±1
1	25	90	125	∅19*4	127	178	9.5
1½	40	105	140	∅19*4	165	183	12
2	50	120	155	∅19*4	178	189	12.5

ITEM	PARTS	MATERIAL
1	BODY	FC25
2	BALL SEAT	BC
3	BALL	SCS13
4	SEAT	PTFE+GRAPHITE
5	SEAT RING	SUS304
7	O-RING	VITON
8	STAY RING	SUS304
10	STEM	SUS304
11	WASHER	BC
13	SLEEVE	PTFE+AL
15	BONNET	FC25
17	GLAND PACKING	ASB+TFE
20	WASHER	SUS304
21	GLAND FLANGE	BC
22	BOLT	SUS304



## Memo