



Highly reliable shutdown valve with integrated motor/hydraulic pump and large flow rate even with low pressure (202 to 449m<sup>3</sup>/h (ANR))

## Fluid operated 2-position cutoff valve **HS Series**

- NC (normally closed)
- City gas/LPG
- Port size: 50A (JIS flange)/80A (JIS flange)

**RoHS**

### Features

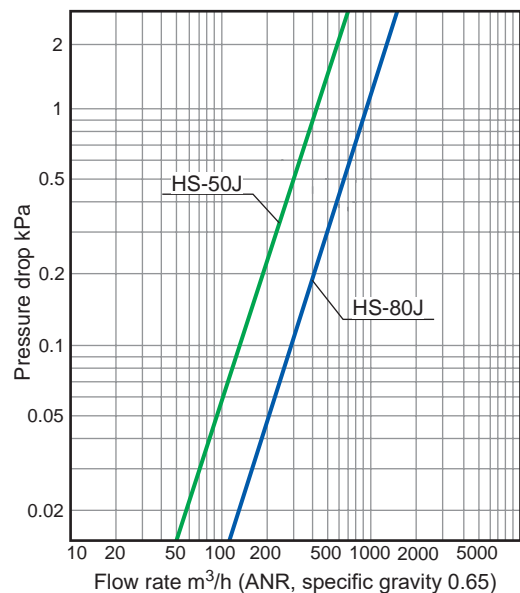
- Reliable and long service-life actuator with integrated motor and hydraulic pump
- Excellent performance in safe gas cutoff
- Indicator for checking valve open/close state
- Lightweight aluminum body
- Supplied terminal box makes wiring easier.

### Specifications

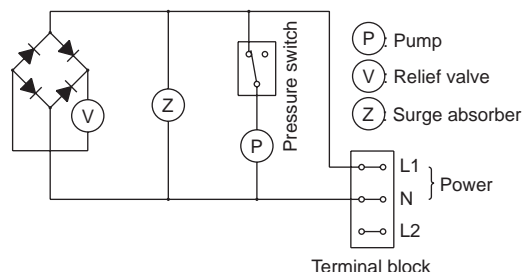
Item	HS-50J	HS-80J
Working fluid	City gas/LPG (hydrogen gas *1)	
Working pressure MPa	0 to 0.18	0 to 0.06
Flow rate <small>Specific gravity of city gas 0.65 ΔP=0.25MPa</small> m <sup>3</sup> /h (ANR)	202	449
Cv	135	300
Rated voltage V	100 AC ±10% 200 AC ±10%	
Frequency Hz	Common in 50 and 60	
Power consumption (apparent power)VA	120 (100 VAC), 115 (200 VAC)	
	When valve is opening	
	When valve is held open	
Ambient temperature °C	-15 to +60 (no freezing)	
Opening time s	30 or less (ambient temperature 0 to 60°C with rated voltage)	
Closing time s	1.0 or less	
Frequency cycles/min	4 or less	
Mounting orientation	Vertical direction with the actuator up or horizontal direction with the terminal box side of actuator up	
Connection	Flange (JIS10KRF)	
Port size	50A	80A
Weight kg	13	17
Proof pressure MPa	0.6	
Degree of protection	IP54 (IP21 or equivalent with HP terminal box)	

\* 1: Only the option for hydrogen gas as the working fluid can be used.

### Flow characteristics



### Electric circuit Fig.



\* The contact of pressure switch indicates that the valve is closed.

### Reference: Conversion coefficient

Converted flow rate = (flow rate in table) x (coefficient)

Gas	City gas (13A)	Propane	Butane	Hydrogen gas *1
Specific gravity (air = 1)	0.65	1.6	2.0	0.07
Coefficient	1.0	0.63	0.57	3.04

## How to order

Model No. **HS - 50J - E ZZ H2 - AC100V**

Model No.

① Port size

② Terminal box

\*1

③ Micro switch

④ Outdoor type

\*1

⑤ Working fluid

⑥ Voltage

Code	Description
<b>① Port size</b>	
<b>50J</b>	JIS Flange 50A
<b>80J</b>	JIS Flange 80A

<b>② Terminal box</b>	
<b>Blank</b>	None
<b>3M</b>	HP terminal box (G1/2)

<b>③ Micro switch</b>	
<b>Blank</b>	Without micro switch
<b>E</b>	With valve closing confirmation micro switch

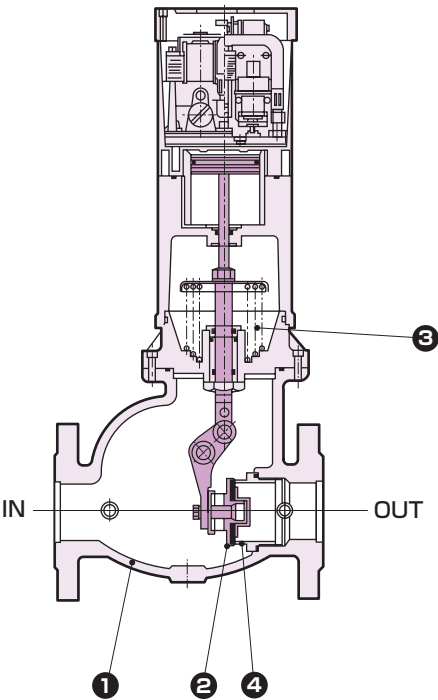
<b>④ Outdoor type</b>	
<b>Blank</b>	Standard
<b>ZZ</b>	Outdoor type

<b>⑤ Working fluid</b>	
<b>Blank</b>	Standard
<b>H2</b>	Working fluid: With hydrogen gas/hydrogen nameplate

<b>⑥ Voltage</b>	
<b>AC100V</b>	100 VAC 50/60 Hz
<b>AC200V</b>	200 VAC 50/60 Hz

\*1: When "ZZ" is selected for ④ Outdoor type specifications, a round terminal box is automatically included and "3M" is not available for the ② terminal box.

Internal structure/material

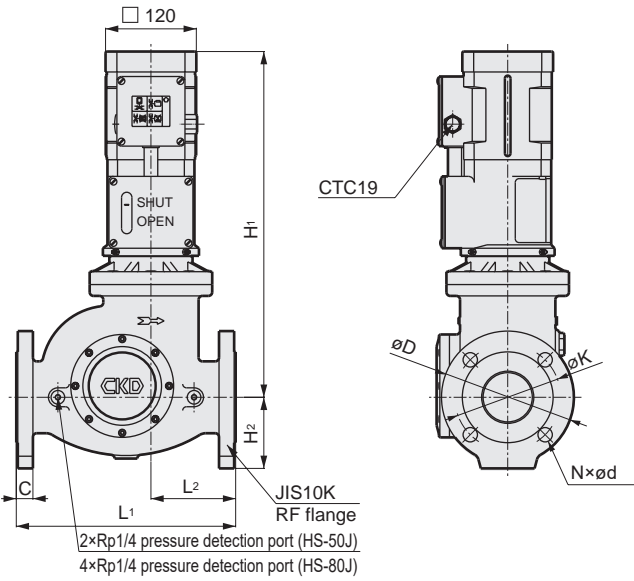


Cannot be disassembled

Part No.	Part name	Material
1	Body	Aluminum
2	Valve disc	Nitrile rubber
3	Spring	Piano wire
4	Valve seat	Aluminum

Dimensions

● HS-50J/80J



Code Model No.	H <sub>1</sub>	H <sub>2</sub>	L <sub>1</sub>	L <sub>2</sub>	C	øD	øK	N-ød
HS-50J	434	82	230	83	20	155	120	4x19
HS-80J	465	100	310	112	22	185	150	8x19