

Equivalent to "DIN3394" group B For double shut-off compliant with low pressure (5 kPa) specifications

Gas shut-off valve (quick open) DSG Series

- NC (open when energized)
- City gas/natural gas/LPG
- Port size: Rp1/2, Rp3/4, Rp1

RoHS CAD

Features

- Japan Gas Appliances Inspection Association (JIA) certified product (relevant model No.: DSG-15-AC100V, AC200V, DSG-20-AC100V, AC200V, DSG-25-AC100V, AC200V. * Option products are not compliant.)
- The DC driven actuator with rectifier has eliminated noise and coil burnout for safety.
- Built-in strainer for a structure that stops foreign matter such as dust in front of the valve during piping.
- Equipped with JIS standard conduit thread, making electrical wiring easy.

Applications

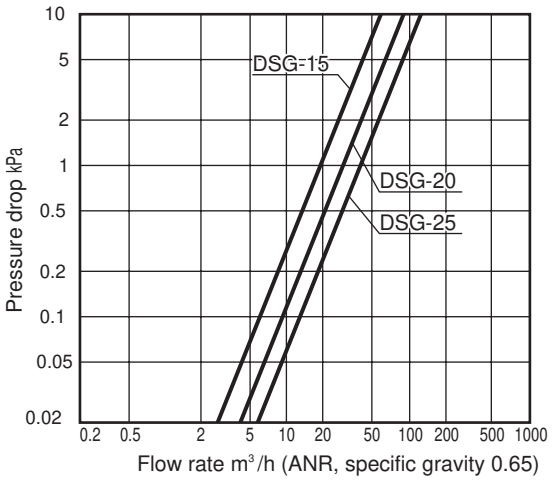
- Gas boilers
- Industrial furnaces
- Gas absorption water coolers/heaters
- Drying furnaces
- Hydrogen-related devices (only working fluid is hydrogen gas option)
- Other

Specifications

Item	DSG-15	DSG-20	DSG-25
Working fluid	City gas/LPG (Hydrogen * 1)		
Working pressure kPa	0 to 5		
Flow rate (Specific gravity of city gas 0.65 △P=0.25kPa) m^3/h (ANR)	9.8	15.0	20.0
Cv	6.6	10.1	13.4
Rated voltage V	100 AC$^{+10\%}_{-15\%}$ 200 AC$^{+10\%}_{-15\%}$		
Frequency Hz	Common to 50 and 60		
Power consumption (apparent power) VA	16		
Ambient temperature °C	−20 to +60 (no freezing)		
Opening time s	0.5 or less		
Closing time s	1.0 or less		
Frequency cycles/min.	30 or less		
Mounting orientation	Vertical direction with the coil on top or horizontal direction with the coil horizontal		
Connection	Screw-in (Rp)		
Port size	1/2	3/4	1
Weight kg	1.0	1.2	1.2
Proof pressure MPa	0.1		
Degree of protection	IP51 or equivalent (IP21 or equivalent with HP terminal box)		

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

Flow Rate Characteristics



Reference: conversion factor

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

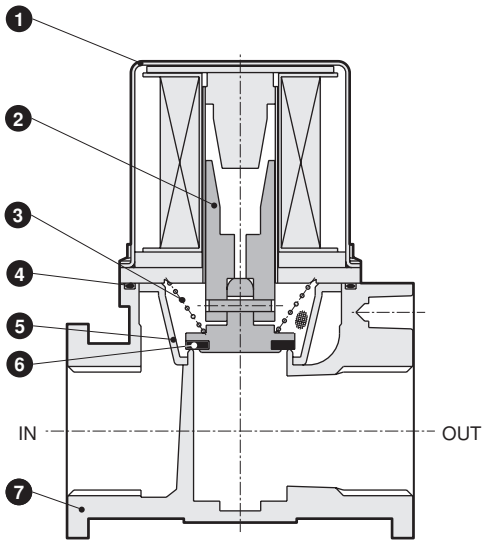
How to order

DSG - 15 - Y - AC100V

- DSG — Model No.
- 15 — Ⓐ Port size
- Y — Ⓑ Option
- AC100V — Ⓒ Voltage

Code	Description
Ⓐ Port size	
15	Rp1/2
20	Rp3/4
25	Rp1
Ⓑ OptionOption	
Blank	Standard
Y	With flow rate adjustment
3M	With HP terminal box(G1/2)
P	With pressure detection port
H2	Working fluid: Hydrogen gas
Ⓒ Voltage	
AC100V	100 VAC 50/60 Hz
AC200V	200 VAC 50/60 HZ

Internal structure and parts list

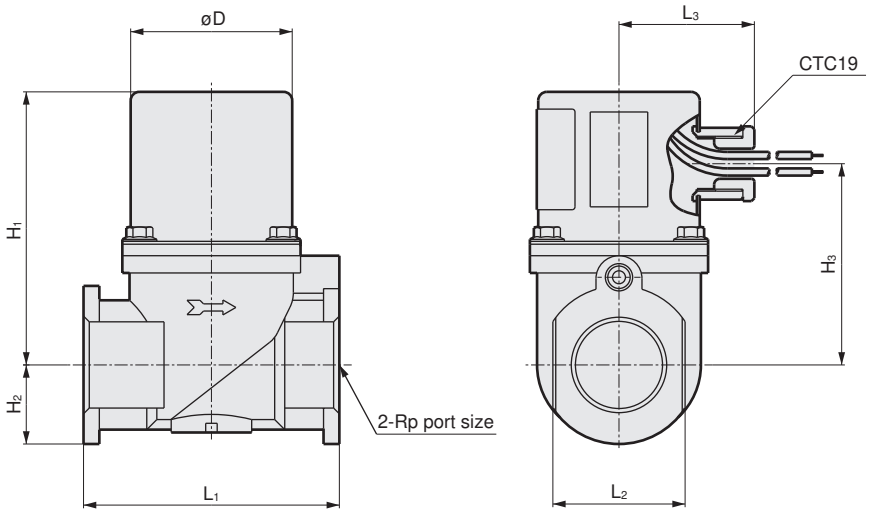


Cannot be disassembled

No.	Part name	Material
1	Bonnet	Steel
2	Plunger	Stainless steel
3	Spring	Stainless steel wire
4	O-ring	Nitrile rubber
5	Strainer	Resin
6	Valve disc	Nitrile rubber
7	Body	Aluminum die-casting

Dimensions CAD

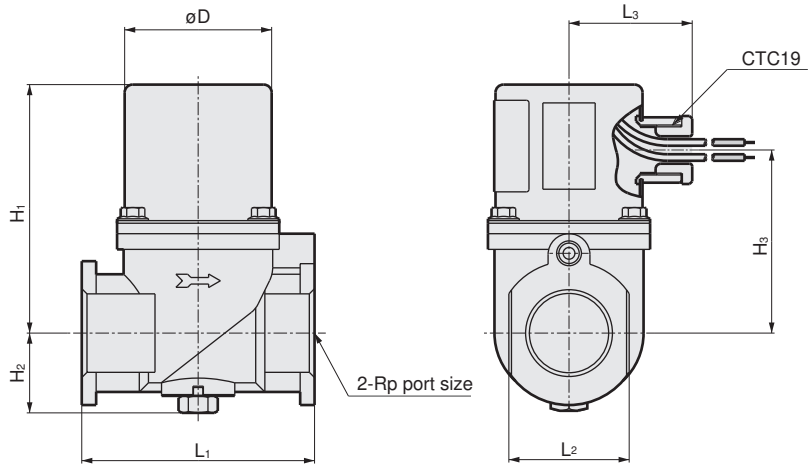
● Standard
DSG-15 to 25



Code / Model No.	Port size	H1	H2	H3	L1	L2	L3	øD
DSG-15	1/2	91	17.5	67	69	32	47	56
DSG-20	3/4	95	27.5	71	89	46	47	56
DSG-25	1	95	27.5	71	89	46	47	56

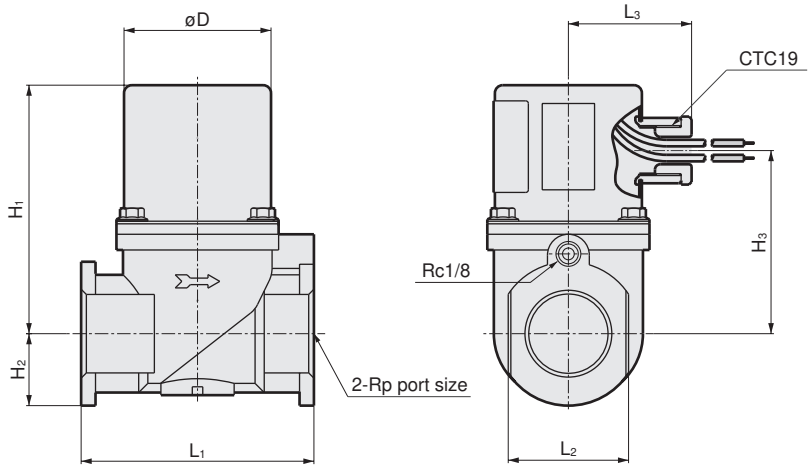
Optional dimensions

● With flow rate adjustment
DSG-15 to 25-Y



Code / Model No.	Port size	H1	H2	H3	L1	L2	L3	øD
DSG-15-Y	1/2	91	24	67	69	32	47	56
DSG-20-Y	3/4	95	30.5	71	89	46	47	56
DSG-25-Y	1	95	30.5	71	89	46	47	56

● With pressure detection port
DSG-15 to 25-P



Code / Model No.	Port size	H1	H2	H3	L1	L2	L3	øD
DSG-15-P	1/2	91	17.5	67	69	32	47	56
DSG-20-P	3/4	95	27.5	71	89	46	47	56
DSG-25-P	1	95	27.5	71	89	46	47	56