



For double cutoff compliant with low pressure (5 kPa) specifications

Gas cutoff valve (quick open) **DSG Series**

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



Features

- Japan Gas Component Inspection Association (JIA) type certified product
Applicable models:
DSG-15-AC100V, AC200V
DSG-20-AC100V, AC200V
DSG-25-AC100V, AC200V
*Optional products are not supported.
- 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

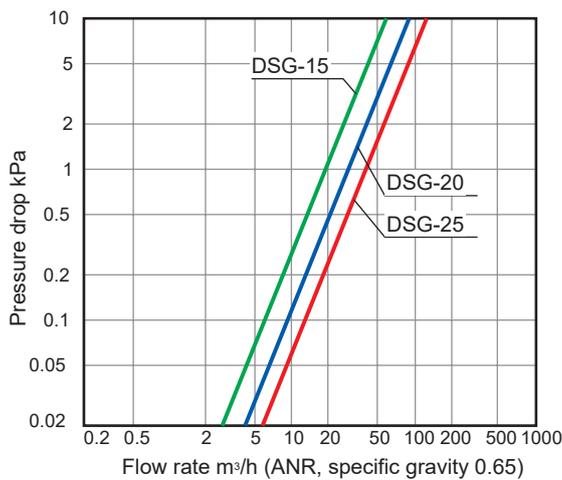
- Gas boilers
- Industrial furnaces
- Gas absorption water coolers/heaters
- Drying furnaces
- Hydrogen-related devices (only hydrogen gas option is used as the working fluid)
- Other

Specifications

Item	DSG-15	DSG-20	DSG-25
Working fluid	City gas/LPG (hydrogen gas *1)		
Working pressure kPa	0 to 5		
Flow rate ^{Specific gravity of city gas 0.65} _{△P=0.25MPa} 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 option for hydrogen gas as the working fluid can be used.

Flow characteristics



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

DSG - **15** - **Y** **H2** - **AC100V**

Model No.

1 Port size

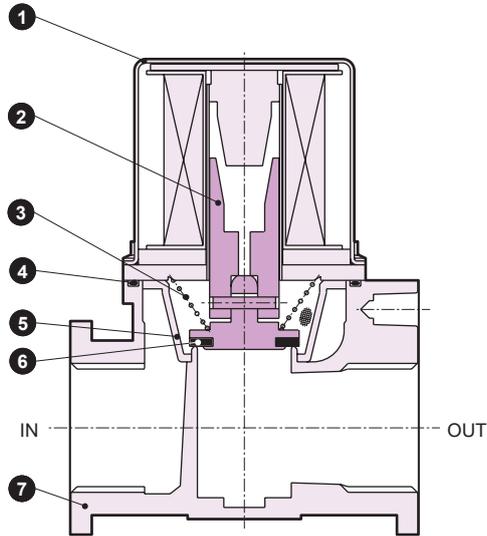
2 Option

3 Hydrogen compatible option

4 Voltage

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

Internal structure/material

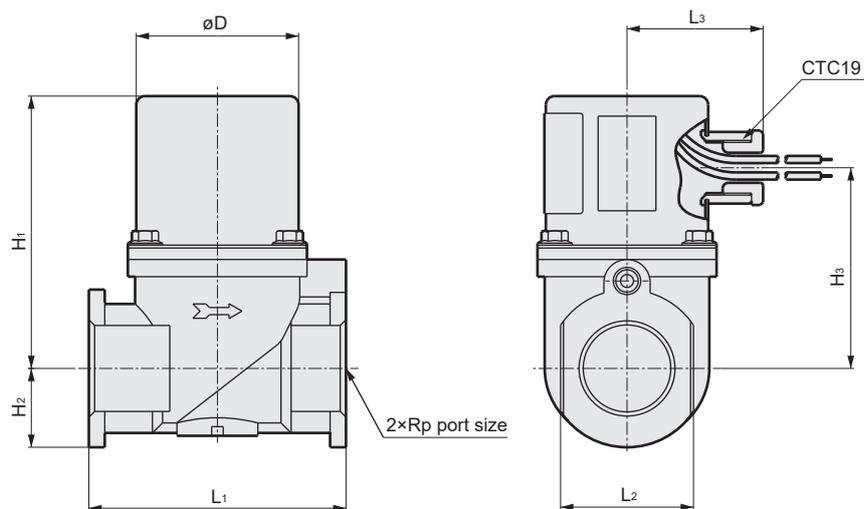


Cannot be disassembled

Part 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

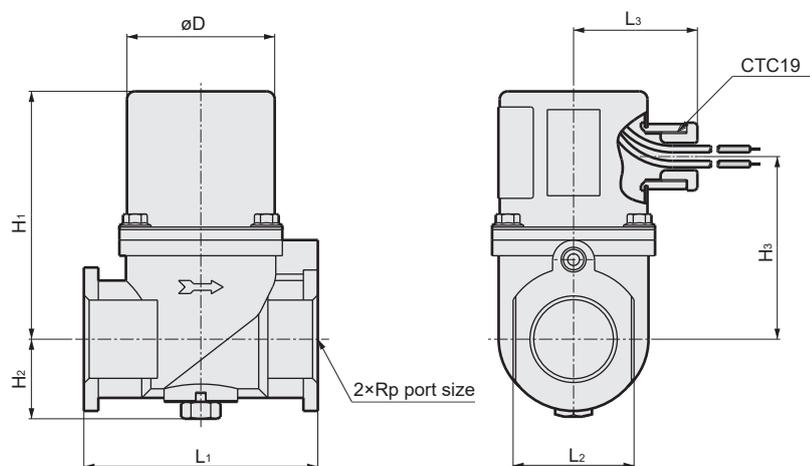
- Standard
DSG-15 to 25



Code Model No.	Port size	H ₁	H ₂	H ₃	L ₁	L ₂	L ₃	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

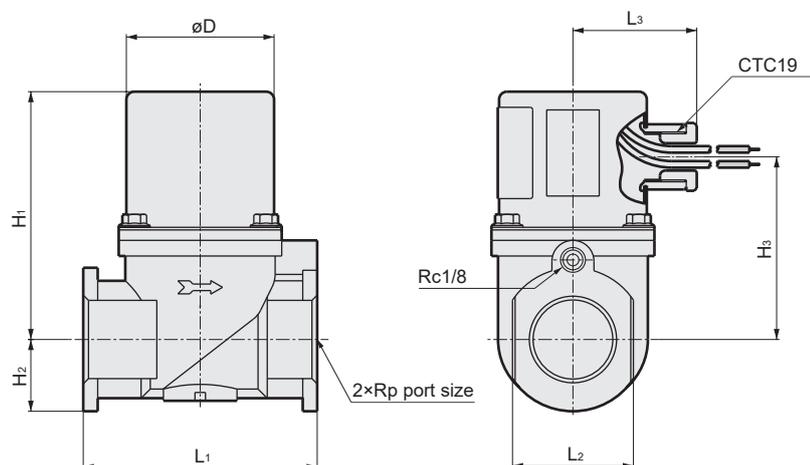
Optional dimensions

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



Code Model No.	Port size	H ₁	H ₂	H ₃	L ₁	L ₂	L ₃	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	H ₁	H ₂	H ₃	L ₁	L ₂	L ₃	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



For double cutoff valve compliant with low pressure (5 kPa) specifications

Gas double cutoff valve (quick open) DSG-W Series

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



Features

- 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.

Applications

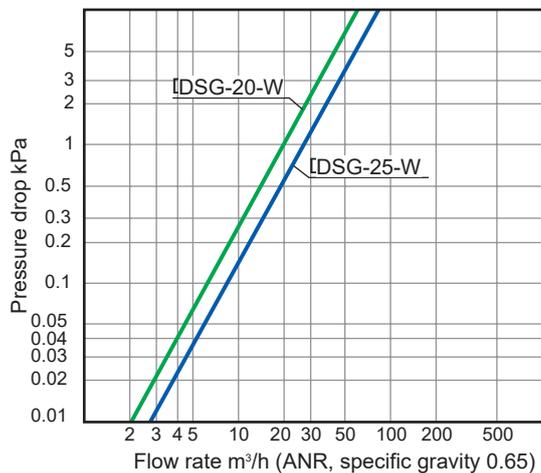
- Gas boilers
- Industrial furnaces
- Gas absorption water coolers/heaters
- Drying furnaces
- Hydrogen-related devices (Only the option for hydrogen gas as the working fluid can be used.)
- Other

Specifications

Item	DSG-20-W	DSG-25-W
Working fluid	City gas/LPG (hydrogen gas *1)	
Working pressure kPa	0 to 5	
Flow rate $\frac{\text{Specific gravity of city gas } 0.65}{\Delta P=0.25\text{Pa}}$ m ³ /h (ANR)	10.5	14.0
Cv	7.0	9.4
Rated voltage V	100 AC ^{+10%} _{-15%}	200 AC ^{+10%} _{-15%}
Frequency Hz	Common to 50 and 60	
Power consumption (apparent power) VA	16 x 2	
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	3/4	1
Weight kg	2.0	2.0
Proof pressure MPa	0.1	
Degree of protection	IP 21 or equiv.	

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

Flow characteristics

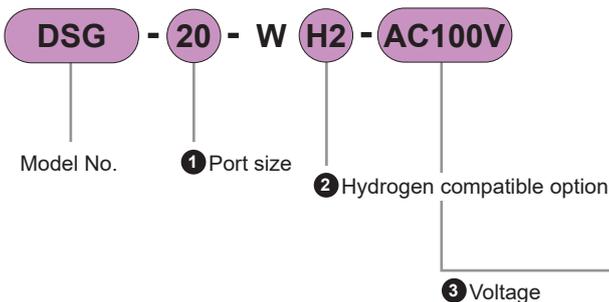


Reference: Conversion coefficient

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

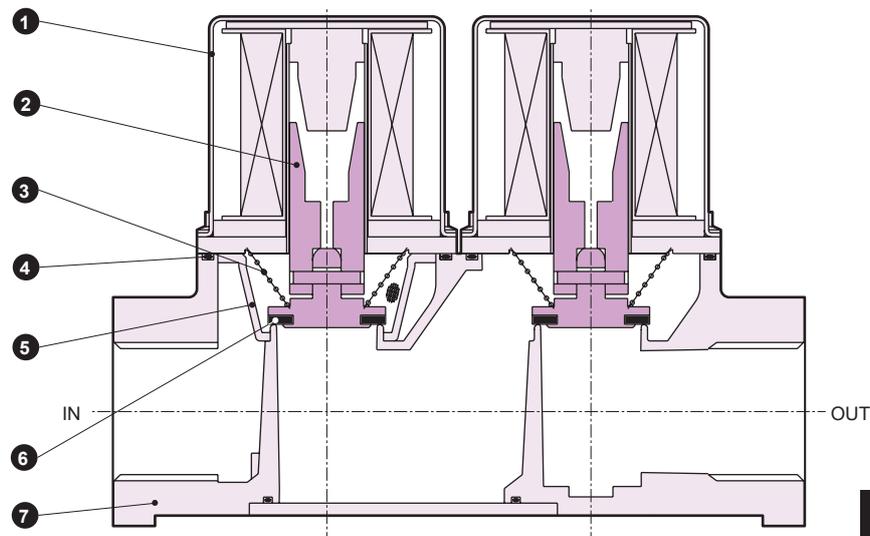
Gas	City gas (13A)	Propane	Butane	Hydrogen gas *1
Specific gravity (air = 1)	0.65	1.6	2.0	0.07
Coefficient	1.0	0.63	0.57	3.04

How to order



Code	Description
① Port size	
20	Rp3/4
25	Rp1
② Hydrogen compatible option	
Blank	Standard 
H2	Working fluid: Hydrogen gas 
③ Voltage	
AC100V	100 VAC 50/60 Hz
AC200V	200 VAC 50/60 Hz

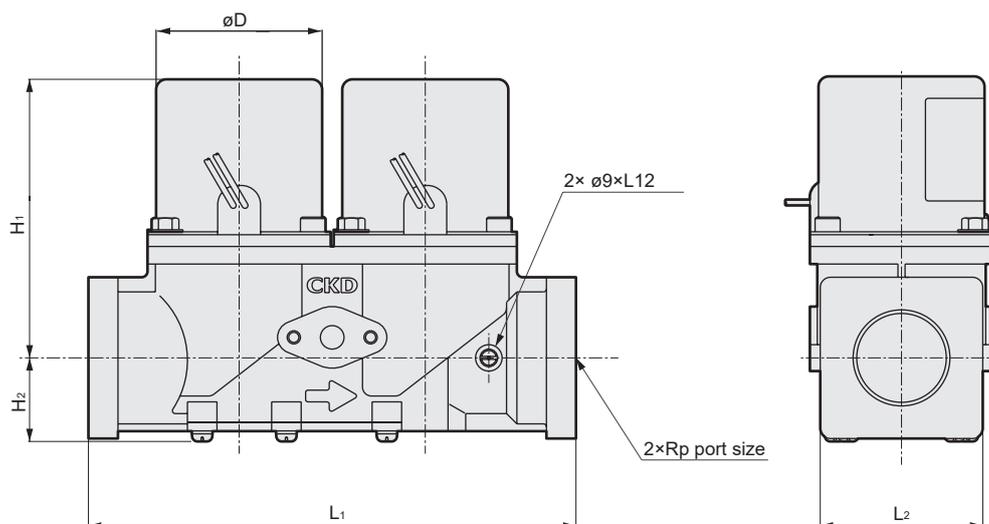
Internal structure/material



Part 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

● DSG-20/25-W



Code Model No.	Port size	H ₁	H ₂	L ₁	L ₂	øD
DSG-20-W	3/4	95	28.5	165	55	56
DSG-25-W	1	95	28.5	165	55	56