



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

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

- City gas/natural gas/LPG
- Port size: Rp1/2, Rp3/4, Rp1



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.
- Dust-proof and drip-proof

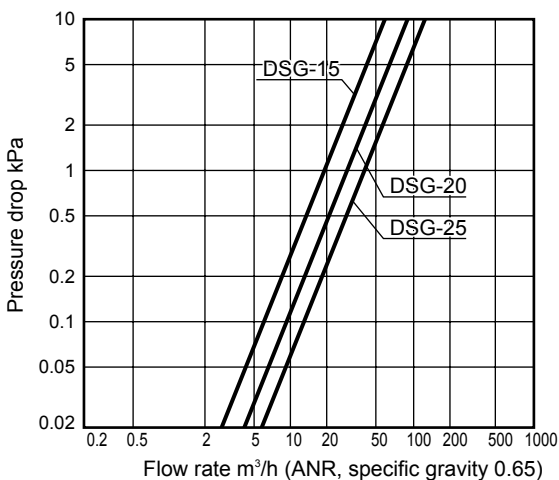
Main applications

- Gas boilers
- Industrial furnaces
- Gas absorption water coolers/heaters
- Drying furnaces
- Others

Specifications

Descriptions	DSG-15	DSG-20	DSG-25
Working fluid	City gas/natural gas/LPG		
Working pressure kPa	0 (≈0 psi, 0 bar) to 5 (≈0.7 psi, 0.05 bar)		
Flow rate <small>Specific gravity of natural gas 0.65 ΔP = 0.25 kPa</small> 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 (-4°F) to +60 (140°F) (no freezing)		
Opening time s	0.5 or less		
Closing time s	1.0 or less		
Frequency Cycle/min.	30 or less		
Mounting orientation	Vertical direction with the coil up 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 (≈15 psi, 1 bar)		

Flow characteristics



Reference: conversion coefficient

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

Gas type	Natural gas (13A)	City gas (6B.6C)	Propane	Butane	Butane-air (6A)
Specific gravity (air = 1)	0.65	0.54	1.6	2.0	1.25
Coefficient	1.0	1.09	0.63	0.57	0.72

How to order

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

Model No.

A Port size

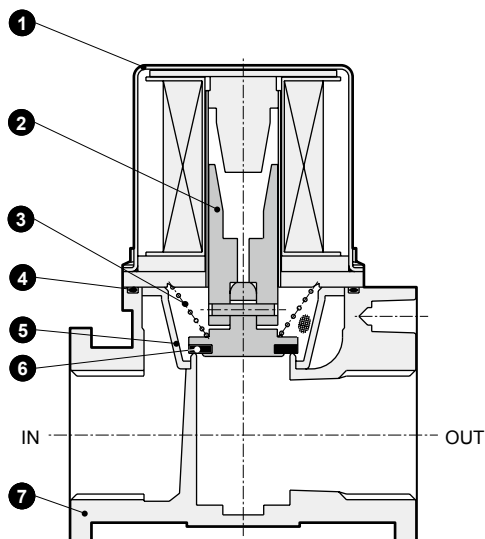
B Option

C Voltage

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

- EXA
- FWD
- HNB/G
- USB/G
- FAB/G
- FGB/G
- FVB
- FWB/G
- FHB
- FLB
- AB
- AG
- AP/
AD
- APK/
ADK
- DryAir
- EX-
XPLNprf
- XPLNprf
- HVB/
HVL
- S[◇]B/
NAB
- LAD/
NAD
- Water-
Rela
- NP/NAP/
NVP
- SNP
- CHB/G
- MXB/G
- Other
valves
- SWD/
MWD
- DustColl
- CVE/
CVSE
- CCH /
CPE/D
- LifeSci
- Gas-
Combus**
- Auto-
Water
- SpecFld
- Custom
- Ending

Internal structure and parts list

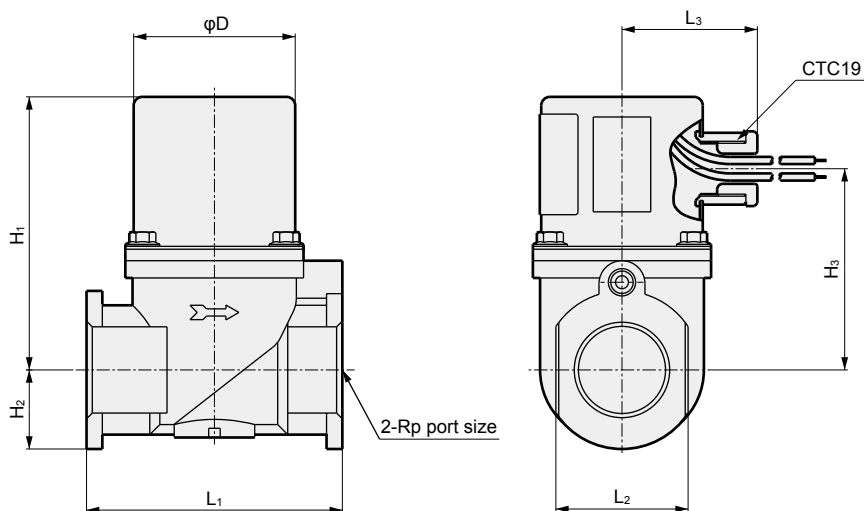


No.	Part name	Material
1	Bonnet	Steel
2	Plunger	Stainless steel
3	Spring	Stainless steel wire
4	O-ring	Nitrile rubber
5	Strainer	Resin
6	Valve disc	Nitrile rubber
7	Body	Aluminum die-casting

Dimensions



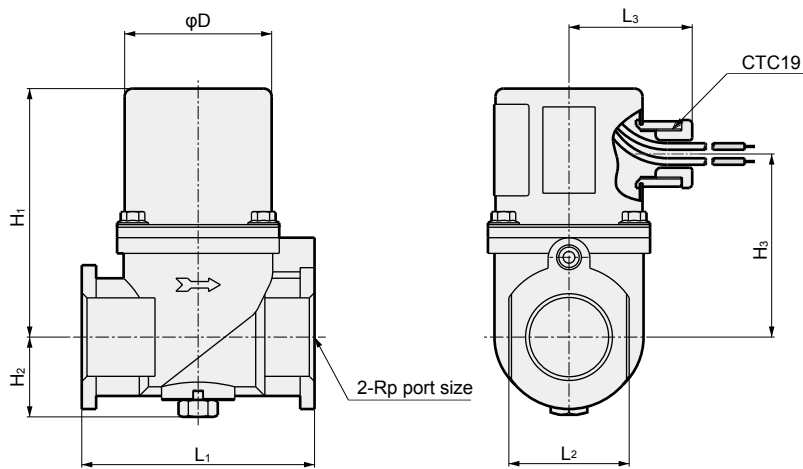
- Standard DSG-15 to 25



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

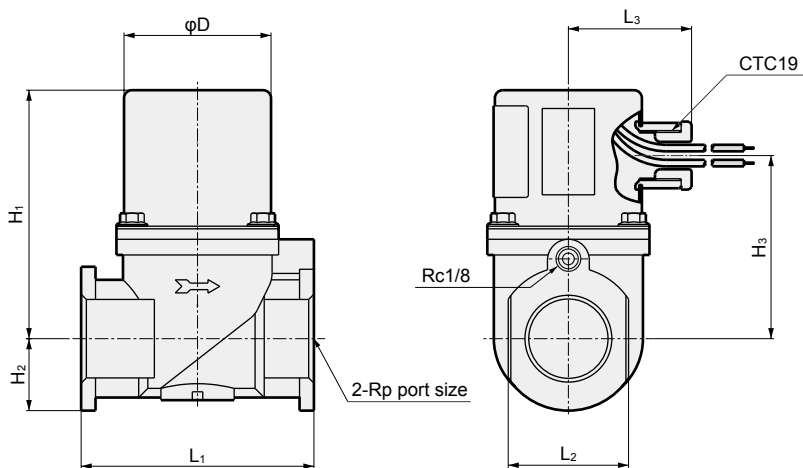
Optional dimensions

- 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	φD
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	φD
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

- EXA
- FWD
- HNB/G
- USB/G
- FAB/G
- FGB/G
- FVB
- FWB/G
- FHB
- FLB
- AB
- AG
- AP/
AD
- APK/
ADK
- DryAir
- EX-
XPLNprf
- XPLNprf
- HVB/
HVL
- S[◇]B/
NAB
- LAD/
NAD
- Water-
Rela
- NP/NAP/
NVP
- SNP
- CHB/G
- MXB/G
- Other valves
- SWD/
MWD
- DustColl
- CVE/
CVSE
- CCH /
CPE/D
- LifeSci
- Gas-
Combus
- Auto-
Water
- SpecFld
- Custom
- Ending



Equivalent to "DIN3394" group B
For double cutoff valve compliant with low pressure (5 kPa) specifications

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

- City gas/natural 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.

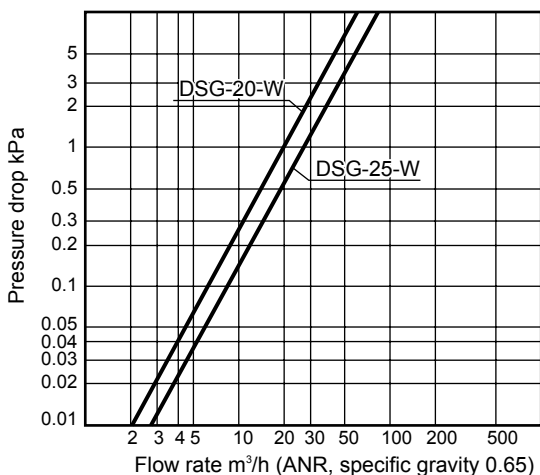
Main applications

- Gas boilers
- Industrial furnaces
- Gas absorption water coolers/ heaters
- Drying furnaces
- Others

Specifications

Descriptions	DSG-20-W	DSG-25-W
Working fluid	City gas/natural gas/LPG	
Working pressure	kPa 0 (≈0 psi, 0 bar) to 5 (≈0.7 psi, 0.05 bar)	
Flow rate	10.5	14.0
<small>Specific gravity of natural gas 0.65 ΔP = 0.25 kPa</small> m ³ /h(ANR)		
Cv	7.0	9.4
Rated voltage	100 AC ^{+10%} _{-15%}	200 AC ^{+10%} _{-15%}
Frequency	Common to 50 and 60	
Power consumption (apparent power)	16×2	
Ambient temperature	°C -20 (-4°F) to +60 (140°F) (no freezing)	
Opening time	s 0.5 or less	
Closing time	s 1.0 or less	
Frequency	Cycle/min. 30 or less	
Mounting orientation	Vertical direction with the coil up 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 (≈15 psi, 1 bar)	

Flow characteristics



Reference: conversion coefficient

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

Gas type	Natural gas (13A)	City gas (6B.6C)	Propane	Butane	Butane-air (6A)
Specific gravity (air = 1)	0.65	0.54	1.6	2.0	1.25
Coefficient	1.0	1.09	0.63	0.57	0.72

How to order

DSG - **20** - **W** - **AC100V**

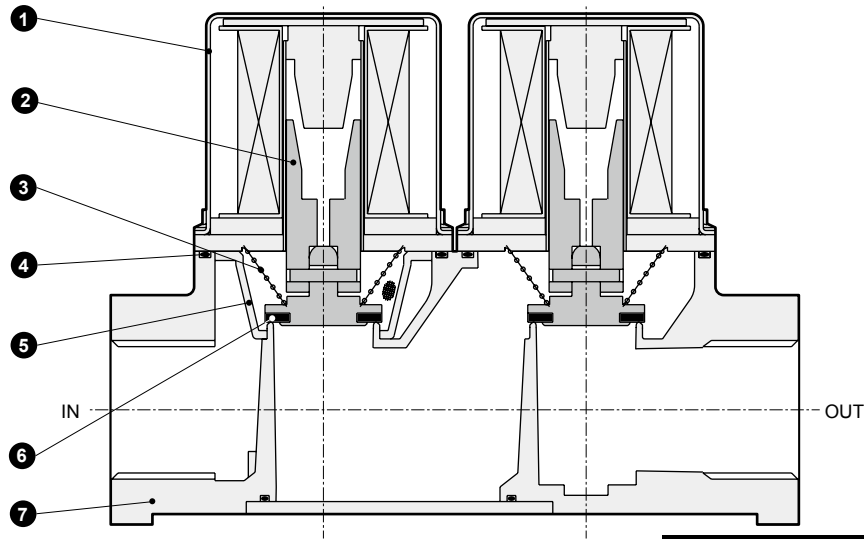
Model No.

A Port size

B Voltage

Code	Content
A Port size	
20	Rp3/4
25	Rp1
B Voltage	
AC100V	100 VAC 50/60 Hz
AC200V	200 VAC 50/60 Hz

Internal structure and parts list

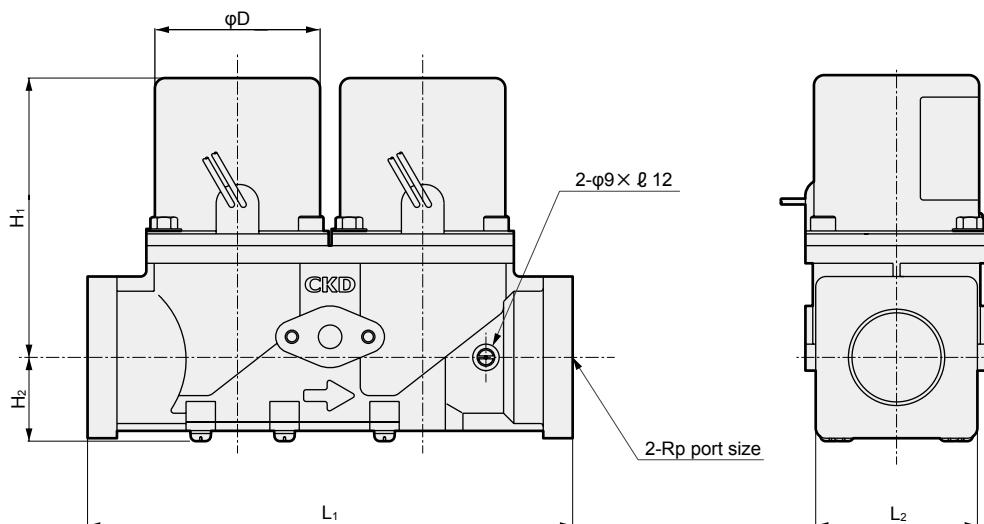


Cannot be disassembled

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

● DSG-20/25-W



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

EXA
FWD
HNB/G
USB/G
FAB/G
FGB/G
FVB
FWB/G
FHB
FLB
AB
AG
AP/
AD
APK/
ADK
DryAir
EX-
XPLNprf
XPLNprf
HVB/
HVL
S B/
NAB
LAD/
NAD
Water-
Rela
NP/NAP/
NVP
SNP
CHB/G
MXB/G
Other
valves
SWD/
MWD
DustColl
CVE/
CVSE
CCH /
CPE/D
LifeSci
Gas-
Combus
Auto-
Water
SpecFld
Custom
Ending