



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

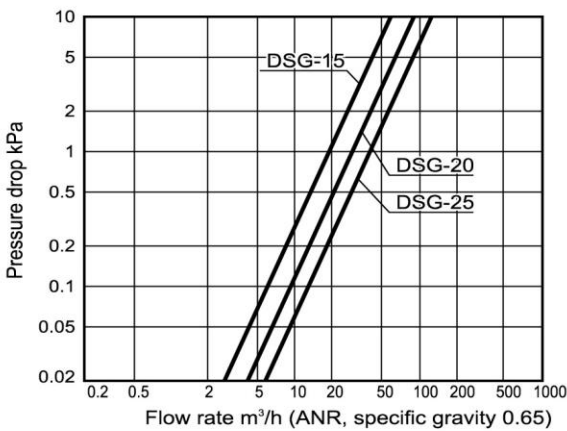
Main applications

- 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	0 (≈0 psi, 0 bar) to 5 (≈0.7 psi, 0.05 bar)		
Flow rate <small>Specific gravity of natural gas 0.65</small> $\Delta P = 0.25 \text{ kPa}$ $\text{m}^3/\text{h}(\text{ANR})$	9.8	15.0	20.0
Cv	6.6	10.1	13.4
Rated voltage	100 AC $^{+10\%}_{-15\%}$		200 AC $^{+10\%}_{-15\%}$
Frequency	Common to 50 and 60		
Power consumption (apparent power)	16		
Ambient temperature	-20 (-4°F) to +60 (140°F) (no freezing)		
Opening time	0.5 or less		
Closing time	1.0 or less		
Frequency	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	1.0	1.2	1.2
Proof pressure	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



DSG Series

How to order

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

SpecFid

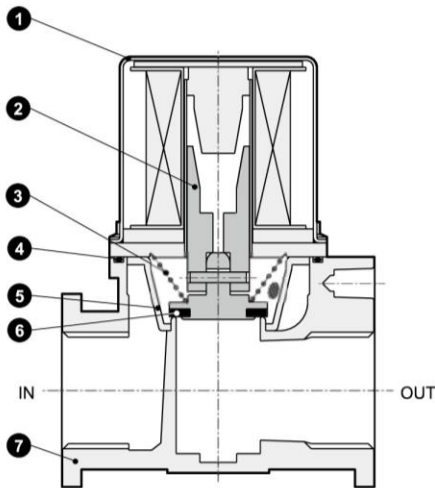
Custom

Ending



DSG Series

Internal structure and parts list

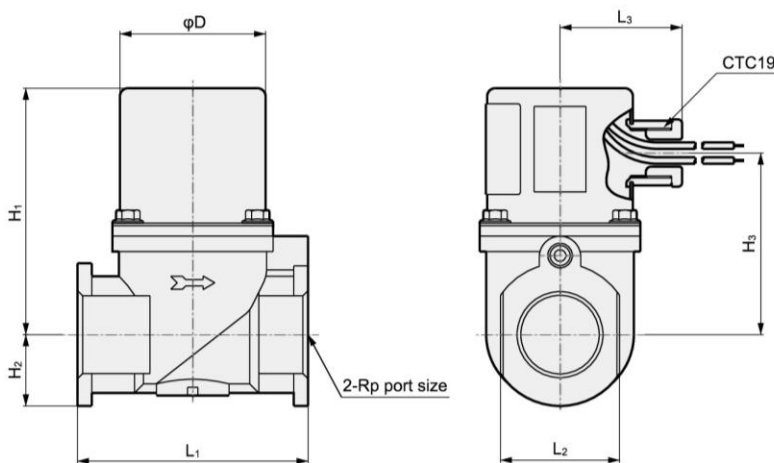


No.	Part name	Material
1	Bonnet	Steel
2	Plunger	Stainless steel
3	Spring	Stainless steel wire
4	O-ring	Nitrile rubber
5	Strainer	Resin
6	Valve disc	Nitrile rubber
7	Body	Aluminum die-casting

Dimensions



● Standard
DSG-15 to 25



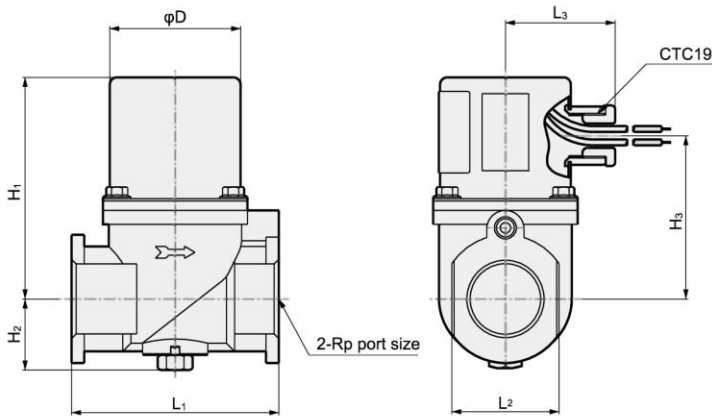
Code	Port size	H ₁	H ₂	H ₃	L ₁	L ₂	L ₃	φD
Model No.								
DSG-15	1/2	91	17.5	67	69	32	47	56
DSG-20	3/4	95	27.5	71	89	46	47	56
DSG-25	1	95	27.5	71	89	46	47	56



DSG Series
Dimensions

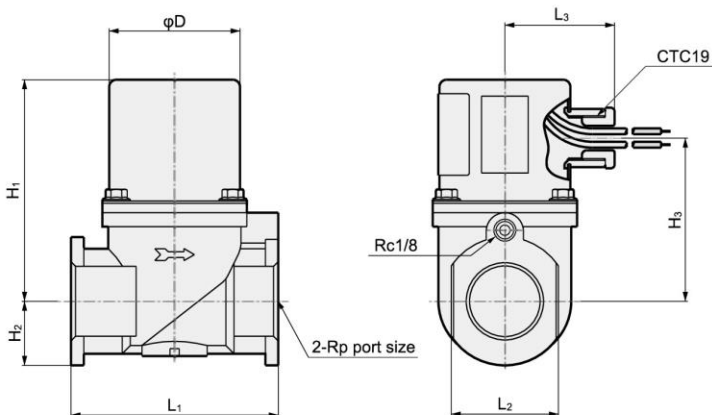
Optional dimensions

- 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.

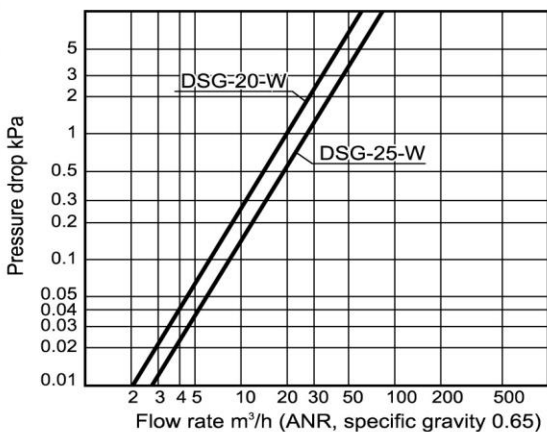
Main applications

- 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	0 (≈0 psi, 0 bar) to 5 (≈0.7 psi, 0.05 bar)	
Flow rate <small>Specific gravity of natural gas 0.65 △P = 0.25 kPa</small>	10.5	14.0
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	-20 (-4°F) to +60 (140°F) (no freezing)	
Opening time	0.5 or less	
Closing time	1.0 or less	
Frequency	Cycle/min.	
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	2.0	2.0
Proof pressure	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

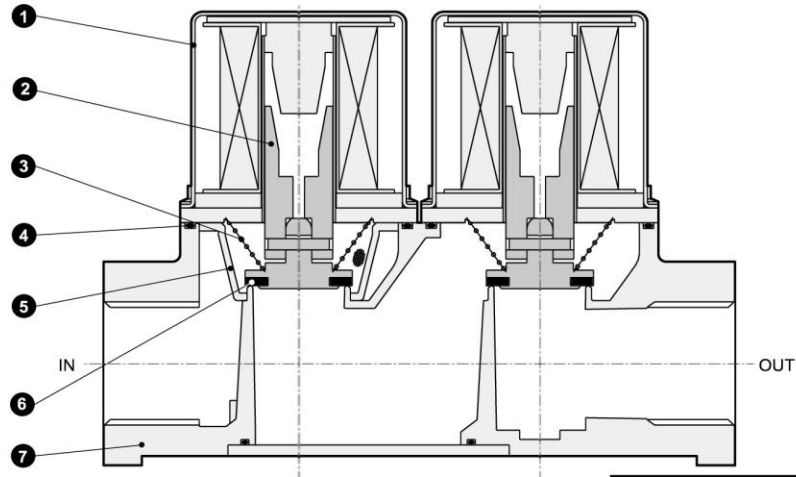
Code	Content
A Port size	
20	Rp3/4
25	Rp1
B Voltage	
AC100V	100 VAC 50/60 Hz
AC200V	200 VAC 50/60 Hz



DSG-W Series

Internal structure and dimensions

Internal structure and parts list

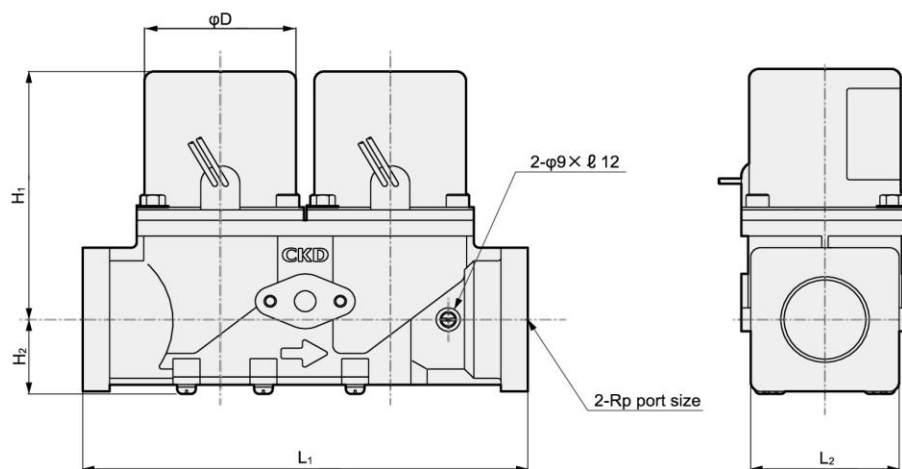


Cannot be disassembled

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