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" groups A and B
For double cutoff compliant with intermediate pressure (7 kPa) specifications

# Gas cutoff valve (quick open)  MN Series

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

RoHS

## 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.
● 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 | | MN-15 | MN-20 | MN-25 |
|---|---|---|---|---|
| Working fluid | | City gas/natural gas/LPG | | |
| Working pressure | kPa | 0 (≈0 psi, 0 bar) to 7 (≈1 psi, 0.07 bar) | | |
| Flow rate Specific gravity of natural gas 0.65 $\triangle P = 0.25$ kPa | m³/h(ANR) | 9.7 | 10.4 | 18.6 |
| Cv | | 6.5 | 7.0 | 12.5 |
| Rated voltage | V | 100 AC $^{+10\%}_{-15\%}$  200 AC $^{+10\%}_{-15\%}$ | | |
| Frequency | Hz | Common to 50 and 60 | | |
| Power consumption (apparent power) | VA | 26 | | |
| 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 | | |
| Flow rate adjustment | % | 30 to 100 | | |
| Mounting orientation | | Vertical direction with the coil on top | | |
| Connection | | Screw-in (Rp) | | |
| Port size | | 1/2 | 3/4 | 1 |
| Weight | kg | 0.7 | 1.4 | 1.5 |
| Proof pressure | MPa | 0.1 (≈15 psi, 1 bar) | | |

## Flow characteristics
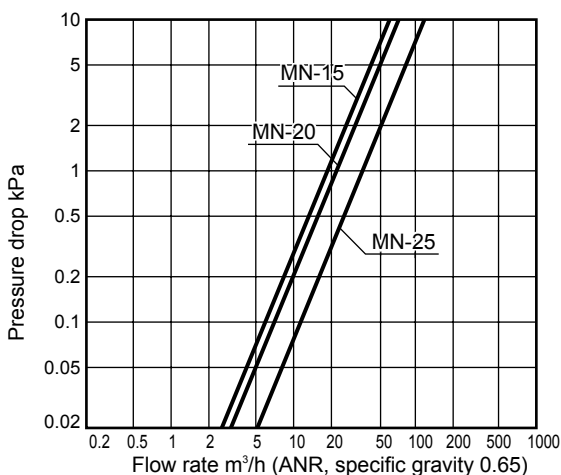


## Reference: conversion coefficient

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

MN - 15 - AC100V

Model No.  ⒶPort size  ⒷVoltage

| Code | Content |
|---|---|
| Ⓐ **Port size** | |
| 15 | Rp1/2 |
| 20 | Rp3/4 |
| 25 | Rp1 |
| Ⓑ **Voltage** | |
| AC100V | 100 VAC 50/60 Hz |
| AC200V | 200 VAC 50/60 Hz |

CKD

## Internal structure and parts list
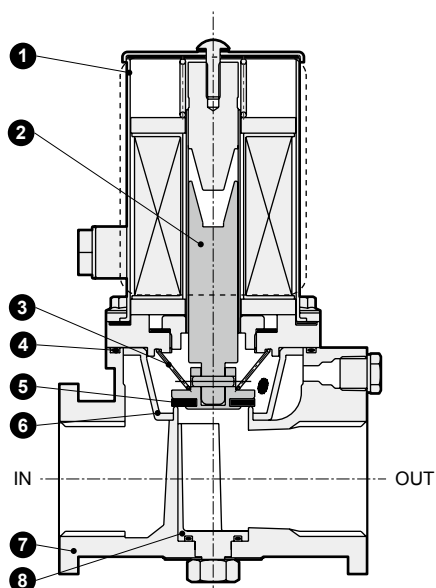
### Cannot be disassembled

| No. | Part name | Material |
|---|---|---|
| 1 | Bonnet | Steel |
| 2 | Plunger | Stainless steel |
| 3 | Spring | Stainless steel wire |
| 4 | O-ring | Nitrile rubber |
| 5 | Valve disc | Nitrile rubber |
| 6 | Strainer | Resin |
| 7 | Body | Aluminum die-casting |
| 8 | Flow rate adjusting cock | Aluminum die-casting |

## Dimensions

● MN-15 to 25
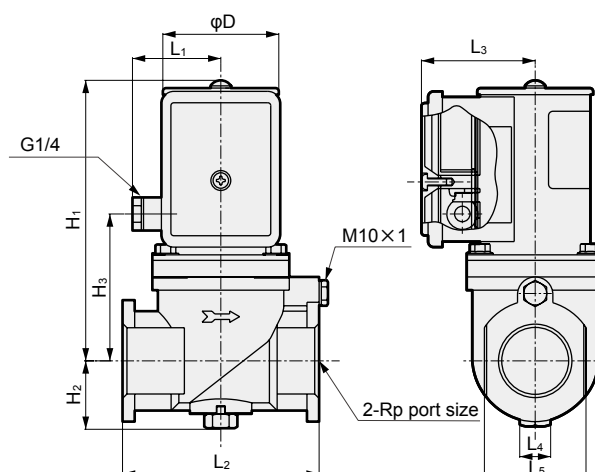
| Code / Model No. | Port size | H₁ | H₂ | H₃ | L₁ | L₂ | L₃ | L₄ | L₅ | φD |
|---|---|---|---|---|---|---|---|---|---|---|
| MN-15 | 1/2 | 122 | 24 | 61.5 | 40.0 | 69 | 52 | 13 | 32 | 52 |
| MN-20 | 3/4 | 126 | 30.5 | 65.5 | 40.0 | 89 | 52 | 13 | 46 | 52 |
| MN-25 | 1 | 126 | 30.5 | 65.5 | 40.0 | 89 | 52 | 13 | 46 | 52 |