Resin solenoid valve for automatic watering

# **GSV** resin solenoid valve

- For watering of greenbelts, protected horticulture, parks, and urban greenery
- Continuously energized, latch
- Pilot operated diaphragm

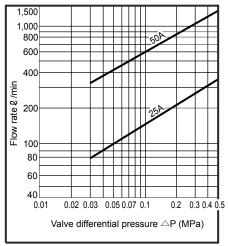
## **Main applications**

- Irrigation and watering for protected horticulture
- Watering of parks and urban greenery
- Watering of gardens and indoor and outdoor plantings

## Overview

- Lightweight and low cost with a resin body
- Molded coil with excellent water resistance
- Diluted agricultural chemicals and liquid fertilizers can also be used \*
- Equipped with a self-cleaning filter for pilot flow path protection
- Low water hammer
- Capable of battery control with a latch coil

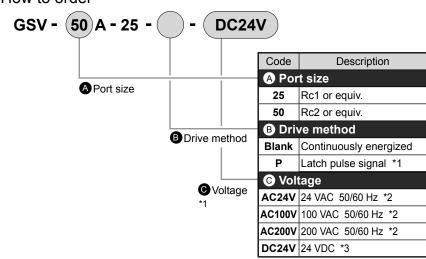
#### Flow characteristics



## Specifications

Item	GSV-25A-25	GSV-50A-25		
Working fluid	Water/agricultural water/diluted agricultural chemicals/liquid fertilizers, etc.  * Limited to fluids that will not cause corrosion of the wetted part materials.			
Max. working pressure MPa	0.5 (≈73 psi, 5 bar)			
Working pressure differential MPa	0.03 (≈4.4 psi, 0.3 bar) to 0.5 (≈73 psi, 5 bar)			
Proof pressure (water pressure) MPa	1.5 (≈220 psi, 15 bar)			
Fluid temperature °C	4 (39.2°F) to 40 (104°F) (no freezing)			
Ambient temperature °C	0 (32°F) to 50 (122°F)			
Valve seat leakage cm³/min	0.1 or less (water)			
Orifice size mm	25	50		
Cv	10.4	42		
Mounting orientation	Mount with coil on top.			
Port size	Rc1 or equiv.	Rc2 or equiv.		
Drive method/voltage	Continuously energized: 24 VDC, 24/100/200 VAC (50/60 Hz) Latch pulse signal: P (voltage selection unnecessary) *1			
Weight kg	1	1.6		
Rated voltage	24 VDC, 24/100/200 VAC (50/60 Hz), P type *1			
Power consumption W	AC/2.5, DC type/3			
Thermal class	Class 130 (B) (JIS C 4003)			
Leakage current mA 6 or less/24 VAC, 1.9 or less/100 VAC, 0.7 or less/200 VAC, 4				

## How to order



- \*1 P type is dedicated for use with controllers manufactured by CKD.
  - The voltage of the model No. is not required when placing an order.
  - Applicable controller
  - · RSC-S5, RSC-G series
  - · RSC-1WP, RSC-2WP
- \*2 The AC coils are all equipped with rectifying surge suppressors. (Half-wave)
- \*3 The 24 VDC type is equipped with a surge suppressor device.

Outdoor

Ending

HNB/G

**EXA** 

**FWD** 

USB/G

FAB/G FGB/G

FVB FWB/G

**FHB** FLB

AB

AG

AP/ ΑD 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

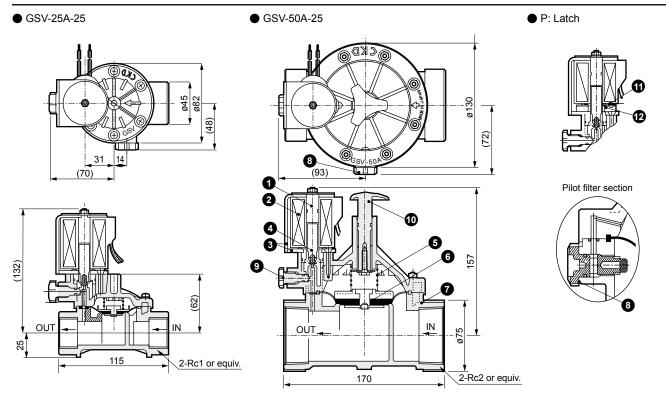
Custom

1058

#### Internal structure and dimensions

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- Lead wire length: 700 mm



No.	Part name	Material	No.	Part name	Material
1	Core assembly	SUS430	7	Body	PP
2	Coil	-	8	Pilot filter	PP, SUS
3	Core A/B	SUS430	9	Manual operation needle	PP
4	Plunger	K-M31	10	Flow rate adjusting handle	PP
5	Spring	SUS304	11	Ring plate	SUS430 (latch only)
6	Diaphragm assembly	NBR, PP, SUS	12	Magnet	DPM-2 (latch only)

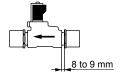
(Note) Components of No. 11, 41 to 10 are the wetted parts.

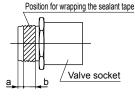


# Precautions for valve socket piping

- \* Always read the precautions in the instruction manual before starting use.
- \* GSV, GSV2 types : Observe the common precautions.

Securely wrap sealant tape around the threaded part of the valve socket 5 times (50 A) or 3 times (25 A) and screw the socket in until the dimension of the part below the screw head is 8 to 9 mm, as shown below. Screwing the bolt too far in will cause damage. Do not use metal nipples.





Bore	Dimer	sions	Tightening torque N⋅m	
size	а	b	torque N·m	
25A	5	15	5.9	
50A	7	17	9.3	

\* When the piping is long (100 m or more), set the working pressure lower by approximately 20% to prevent water hammer from occurring.

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

Cas

Gas-Combus

Auto-Water

Outdoor SpecFld

Custom

Ending