

# MSUS series Low flow



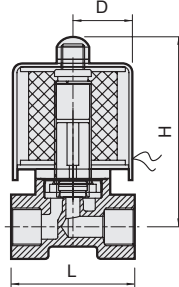
## 2/2 WAY N.C., N.O. PLUNGER TYPE SOLENOID VALVE

mindman

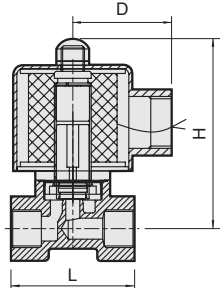
2 way normally closed / normally open solenoid valve.  
Available fluid: Water, air, steam, gas, light oil & vacuum.



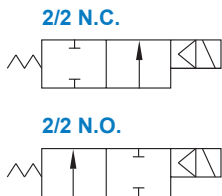
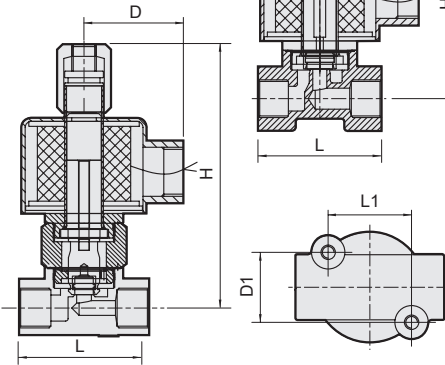
MSUS-6~8



MSUS-10



MSUS-\*-NO



### Specification

- Direct acting, conduct and normally closed / normally open
- Able to be operated under no differential pressure.
- Acceptable for customization Viton (130°C), Silicone (130°C) and EPDM (130°C) for seal plug.
- AC voltage tolerance:  $\pm 10\%$   
DC voltage tolerance:  $\pm 1\%$

### Material

Parts name	MSUS	MSUS-NO
Body	Stainless steel #304 (option #316)	
Coil	Special copper wire (H class)	
Core	Stainless steel	
Tube	Stainless steel	
Spring	Stainless steel	
Plug	PTFE, NBR	Viton
O-ring	PTFE, NBR	NBR

### Caution

- Before pipelining, the pipe line must be very clean without any contaminants or impurity.
- To extend the lifetime, Y-line filter should be installed in the front end of solenoid valve.
- It should be installed horizontally; vertical installation is not advisable.

### Not for fluid of

- Liquid when heat, solid when cool.
- Corrosive fluid.
- N.C.: Viscosity over 50 cst.
- N.O.: Viscosity over 20 cst.

### Order example

MSUS - 8 - NO - □ - G - AC110 - G

MODEL

PORT SIZE

Blank: Normally closed  
NO: Normally open

FLUID

VOLTAGE

PORT THREAD

6: 1/8"  
8: 1/4"  
10: 3/8"

T: Steam  
G: Gas  
LO: Light oil (\*2)  
VA: Vacuum  
W: Water, air

AC220V(50/60)Hz  
AC110V(50/60)Hz  
DC24V

Blank: Rc thread  
G: G thread  
NPT: NPT thread

Blank: Standard coil  
D: DIN terminal (under 130°C)(\*1)

\*1. Please order according to the specification sheet.

\*2. Note, if diesel fuel or gasoline.

	Model	DIN	Port size	CV	Orifice (mm)	Fluid temp. °C	Operating pressure range (MPa) (*1)					Vacuum	Dimensions (mm)						Weight (kg)
							Water	Air	Steam	Light oil	Gas		L	H	D	L1	D1	M	
NC	MSUS-6		Rc1/8"	0.23	2.5	-5~+185	0~0.7	0~0.7	0~0.7	0~0.7	0~0.7	0~10 <sup>-3</sup> Torr	41	68	21.5	23	19.3	M4×0.7	0.34
	MSUS-8		Rc1/4"	0.23	2.5	-5~+185	0~0.7	0~0.7	0~0.7	0~0.7	0~0.7	0~10 <sup>-3</sup> Torr	41	68	21.5	23	19.3	M4×0.7	0.33
	MSUS-10	•	Rc3/8"	0.58	4.0	-5~+185	0~1	0~1	0~1	0~1	0~1	0~10 <sup>-3</sup> Torr	53	83	48	20	21	M5×0.8	0.54
NO	MSUS-6-NO		Rc1/8"	0.23	2.5	-5~+130	0~0.7	0~0.7	0~0.7	0~0.7	0~0.7	0~10 <sup>-3</sup> Torr	41	87	21.5	23	19.3	M4×0.7	0.34
	MSUS-8-NO		Rc1/4"	0.23	2.5	-5~+130	0~0.7	0~0.7	0~0.7	0~0.7	0~0.7	0~10 <sup>-3</sup> Torr	41	87	21.5	23	19.3	M4×0.7	0.33
	MSUS-10-NO	•	Rc3/8"	0.58	4.0	-5~+130	0~1	0~1	0~0.7	0~0.7	0~1	0~10 <sup>-3</sup> Torr	53	105	48	20	21	M5×0.8	0.54

\*1. When the fluid is steam or light oil, the plug material is PTFE; When the fluid is gas or vacuum, the plug material is NBR. When the fluid is water or air, the plug material is PTFE or NBR.

\*2. Connect air source to outlet port for vacuum application.

\*3. Please consult your sales representative for waterproof coils and other customization requirement.

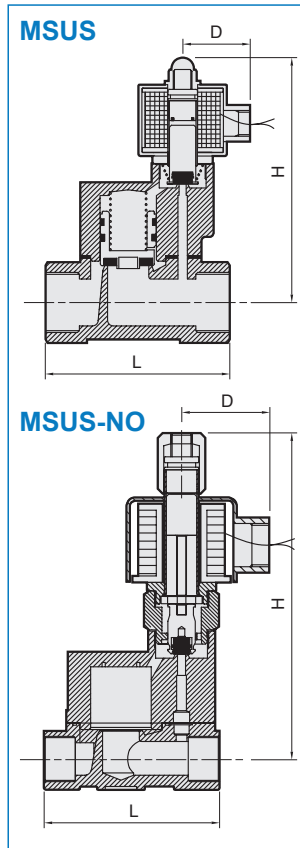
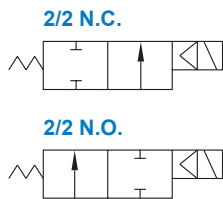
# MSUS series High flow



## 2/2 WAY N.C., N.O. PISTON TYPE SOLENOID VALVE

mindman

2 way normally closed / normally open solenoid valve.  
Available fluid: Water, air, steam & light oil.



### Specification

- MSUS series is multiplex acting, piston guide, conductive normal close / normal open.
- Acceptable for customize Viton , Silicone and EPDM for seal plug.
- AC voltage tolerance:  $\pm 10\%$ ,  
DC voltage tolerance:  $\pm 1\%$

### Material

Parts name	MSUS	MSUS-NO
Body	Stainless steel #304 (option #316)	
Coil	Special copper wire (H class)	
Tube	Stainless steel	
Spring	Stainless steel	
Core	Stainless steel	
Plug	PTFE (Teflon)	Viton
Piston spring	Stainless steel	
Piston	Stainless steel	
Piston plug	PTFE (Teflon)	

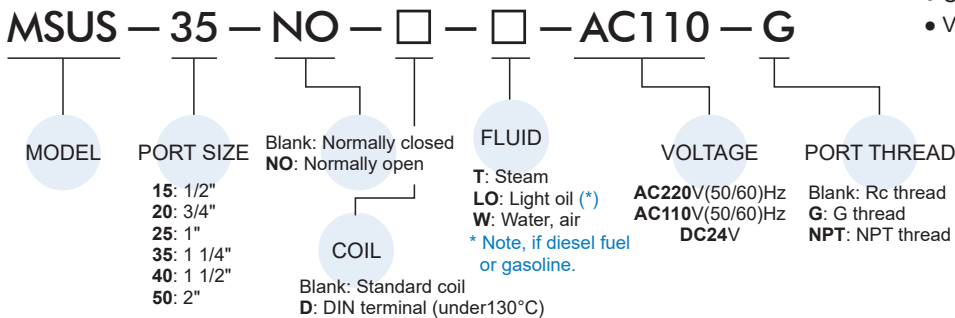
### Caution

- Min pressure to open (N.C.): over 0.05~0.1 MPa  
Min pressure to close (N.O.): over 0.05~0.1 MPa
- Before pipelining, the pipe line must be very clean without any contaminants or impurity.
- To extend the lifetime, Y-line filter should be installed in the front end of solenoid valve.
- It should be installed horizontally; vertical installation is not advisable.

### Not for fluid of

- Liquid when heat, solid when cool.
- Corrosive fluid.
- Viscosity over 20 cst.

### Order example



	Model	DIN	Port size	CV	Orifice (mm)	Fluid temp. °C	Operating pressuer range (MPa)				Dimensions (mm)			Weight (kg)
							Water	Air	Steam	Light oil	L	H	D	
NC	MSUS-15	•	Rc1/2"	4	17	-5~+185	0.05~1	0.05~1	0.05~1	0.05~1	84	115	48	1.38
	MSUS-20	•	Rc3/4"	6	17	-5~+185	0.05~1	0.05~1	0.05~1	0.05~1	84	120	48	1.43
	MSUS-25	•	Rc1"	12	22	-5~+185	0.05~1	0.05~1	0.05~1	0.05~1	98	132	48	1.88
	MSUS-35	•	Rc1 1/4"	18	30	-5~+185	0.1~1	0.1~1	0.1~1	0.1~1	123	142	48	2.62
	MSUS-40	•	Rc1 1/2"	22	30	-5~+185	0.1~1	0.1~1	0.1~1	0.1~1	123	146	48	2.72
	MSUS-50	•	Rc2"	48	50	-5~+185	0.1~1	0.1~1	0.1~1	0.1~1	167	173	48	5.45
NO	MSUS-15-NO		Rc1/2"	4	17	-5~+130	0.05~1	0.05~1	0.05~1	0.05~0.8	84	147	48	1.52
	MSUS-20-NO		Rc3/4"	6	17	-5~+130	0.05~1	0.05~1	0.05~1	0.05~0.8	84	151	48	1.58
	MSUS-25-NO		Rc1"	12	22	-5~+130	0.05~1	0.05~1	0.05~1	0.05~0.8	98	162	48	2.0
	MSUS-35-NO		Rc1 1/4"	18	30	-5~+130	0.1~1	0.1~1	0.1~1	0.05~0.8	123	173	48	2.8
	MSUS-40-NO		Rc1 1/2"	22	30	-5~+130	0.1~1	0.1~1	0.1~1	0.05~0.8	123	175	48	2.9
	MSUS-50-NO		Rc2"	48	50	-5~+130	0.1~0.8	0.1~0.8	0.1~0.8	0.05~0.8	167	203	48	5.7

\* Please consult your sales representative for waterproof coils and other customization requirement.