MSUS series Low flow

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

mindman

Selection table

MU* Reference table

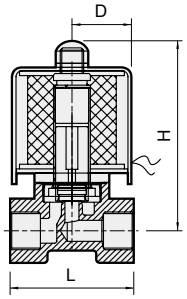
Seal material

Caution for safety
(Read before installing)

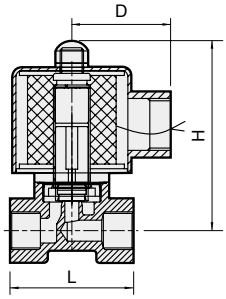
2 way normally closed / normally open solenoid valve.
Available fluid: Water, air, steam, gas, light oil & vacuum.



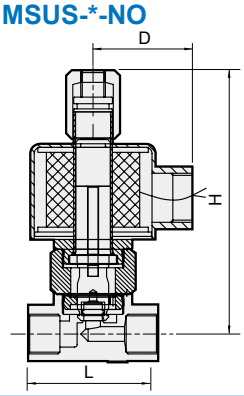
MSUS-6~8

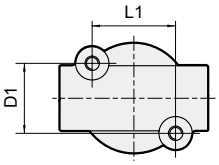


MSUS-10

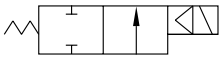


MSUS-*-NO

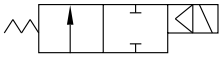




2/2 N.C.



2/2 N.O.



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: ±10%
  DC voltage tolerance: ±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.
- The temperature over 130°C, the waterproof coil casing is prone to deformation.

Order example

MSUS — 8 — NO — □ — G — AC110 — G

- MODEL
- PORT SIZE
  6: 1/8"
  8: 1/4"
  10: 3/8"
- Blank: Normally closed
  NO: Normally open
- COIL
  Blank: Standard iron shell coil
  D: DIN terminal (under 130°C) (*1)
  I: Waterproof terminal (under 130°C) (*1)
- FLUID
  T: Steam
  G: Gas
  LO: Light oil (*2)
  VA: Vacuum
  W: Water, air
- VOLTAGE
  AC220V(50/60)Hz
  AC110V(50/60)Hz
  DC24V
- PORT THREAD
  Blank: Rc thread
  G: G thread
  NPT: NPT thread

*1. Please order according to the specification sheet.
*2. Note, if diesel fuel or gasoline.

	Model	D / I coil	Port size	CV	Orifice (mm)	Fluid temp.°C	Operating pressuer range (MPa) (*1)					Vacuum Torr	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	$0\sim10^{-3}$	41	68	21.5	23	19.3	M4×0.7	0.34
NC	**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	$0\sim10^{-3}$	41	68	21.5	23	19.3	M4×0.7	0.33
NC	**MSUS-10**	●	Rc3/8"	0.58	4.0	-5~+185	0~1	0~1	0~1	0~1	0~1	$0\sim10^{-3}$	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	$0\sim10^{-3}$	41	87	21.5	23	19.3	M4×0.7	0.34
NO	**MSUS-8-NO**		Rc1/4"	0.23	2.5	-5~+130	0~0.7	0~0.7	–	0~0.7	0~0.7	$0\sim10^{-3}$	41	87	21.5	23	19.3	M4×0.7	0.33
NO	**MSUS-10-NO**	●	Rc3/8"	0.58	4.0	-5~+130	0~1	0~1	–	0~0.7	0~1	$0\sim10^{-3}$	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. When the plug material is NBR, the Fluid temp. is -5~+80°C.
*2. Connect air source to outlet port for vacuum application.
*3. Please consult your sales representative for other customization requirement.

MSUS series High flow

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

mindman

Selection table

MU* Reference table

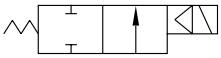
Seal material

Caution for safety
(Read before installing)

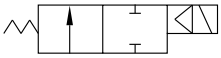
2 way normally closed / normally open solenoid valve.
Available fluid: Water, air, steam & light oil.



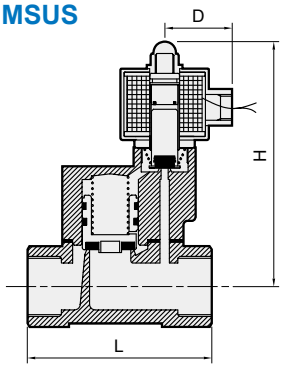
2/2 N.C.



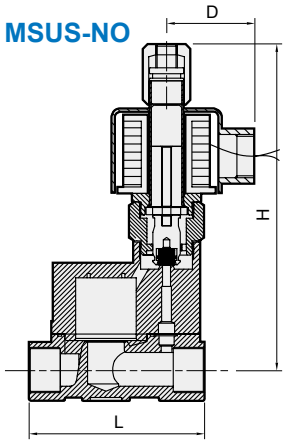
2/2 N.O.



MSUS



MSUS-NO



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: ±10%, DC voltage tolerance: ±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.
- The temperature over 130°C, the waterproof coil casing is prone to deformation.

Order example

MSUS — 35 — NO — □ — W — AC110 — G

- **MODEL**
- **PORT SIZE**
  15: 1/2"
  20: 3/4"
  25: 1"
  35: 1 1/4"
  40: 1 1/2"
  50: 2"
- Blank: Normally closed
  NO: Normally open
- **COIL**
  Blank: Standard iron shell coil
  D: DIN terminal (under 130°C) (*1)
  I: Waterproof terminal (under 130°C) (*1)
- **FLUID**
  T: Steam
  LO: Light oil (*2)
  W: Water, air
- **VOLTAGE**
  AC220V(50/60)Hz
  AC110V(50/60)Hz
  DC24V
- **PORT THREAD**
  Blank: Rc thread
  G: G thread
  NPT: NPT thread

*1. Please order according to the specification sheet.
*2. Note, if diesel fuel or gasoline.

	Model	D / I coil	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	–	0.05~0.8	84	147	48	1.52
	MSUS-20-NO	●	Rc3/4"	6	17	-5~+130	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	–	0.05~0.8	98	162	48	2.0
	MSUS-35-NO	●	Rc1 1/4"	18	30	-5~+130	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	–	0.05~0.8	123	175	48	2.9
	MSUS-50-NO	●	Rc2"	48	50	-5~+130	0.1~0.8	0.1~0.8	–	0.05~0.8	167	203	48	5.7

* Please consult your sales representative for other customization requirement.