



Weir diaphragm valve Air operated

# SWD Series

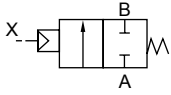
● Connection: ISO ferrule



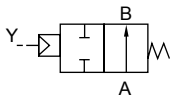
- EXA
- FWD
- HNB/G
- USB/G
- FAB/G
- FGB/G
- FVB
- FWB/G
- FHB
- FLB
- AB
- AG
- AP/AD
- APK/ADK
- DryAir
- EX-XPLNprf
- XPLNprf
- HVB/HVL
- SAB/NAB
- LAD/NAD
- Water-Rela
- NP/INAP/NVP
- SNP
- CHB/G
- MXB/G
- Other valves
- SWD/MWD**
- DustColl
- CVE/CVSE
- CCH/CPE/D
- LifeSci
- Gas-Combus
- Auto-Water
- SpecFld
- Custom
- Ending

## JIS symbol

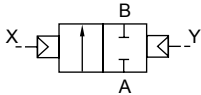
● NC



● NO



● Double acting

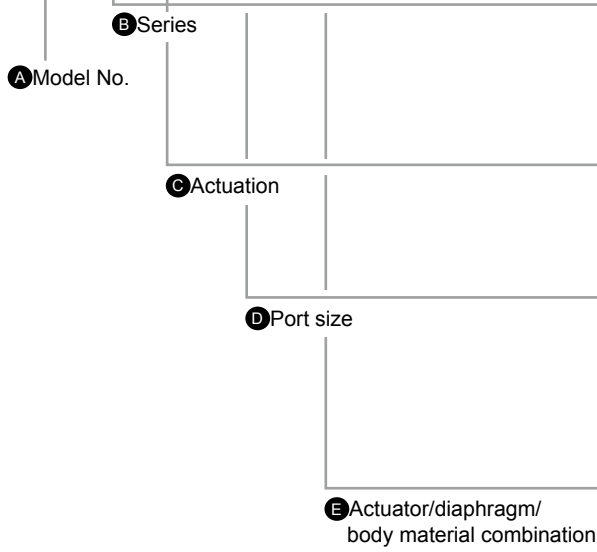
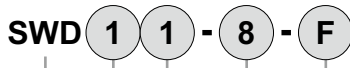


## Specifications

1 MPa ≈ 145.0 psi, 1 MPa = 10 bar

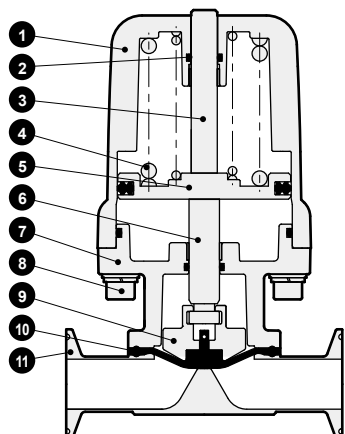
Descriptions		SWD*1	SWD*2	SWD*3
Actuation		NC	NO	Double acting
Working fluid		Water, pure water, chemical liquids (fluids that do not corrode wetted part materials)		
Fluid temperature		5 (41°F) to 90 (194°F) (during steam sterilization 130 (266°F))		
Proof pressure		2.0 (≈290 psi, 20 bar)		
Working pressure		0 (≈0 psi, 0 bar) to 0.6 (≈87 psi, 6 bar)		
Valve seat leakage		0 (water pressure)		
Ambient temperature		0 (32°F) to 60 (140°F)		
Frequency		20 Cycle/min.		
Operating port		Rc1/8		
Operating pressure	SWD1*-8	0.35 (≈51 psi) to 0.7 (≈100 psi)	0.25 (≈36 psi) to 0.35 (≈51 psi)	0.2 (≈29 psi) to 0.3 (≈44 psi)
	SWD1*-10			
	SWD2*-15			
	SWD3*-25			
	SWD4*-40			
Cv	SWD1*-8	2.3		
	SWD1*-10	2.6		
	SWD2*-15	4.5		
	SWD3*-25	13		
	SWD4*-40	27		
Material	Diaphragm	PTFE/EPDM		
	Body	SUS316L (buff polishing #400 or equiv., electrolytic polishing)		
	Actuator	ADC12 (fluoro resin coating)		

## How to order



		A Model No.			
		SWD1	SWD2	SWD3	SWD4
Code	Content				
<b>B Series</b>					
1	Size 1	●			
2	Size 2		●		
3	Size 3			●	
4	Size 4				●
<b>C Actuation</b>					
1	NC	●	●	●	●
2	NO	●	●	●	●
3	Double acting	●	●	●	●
<b>D Port size</b>					
8	Clamp fitting 8A	●			
10	Clamp fitting 10A	●			
15	Clamp fitting 15A		●		
25	Clamp fitting 25A (1S)			●	
40	Clamp fitting 40A (1.5S)				●
<b>E Actuator/diaphragm/body material combination</b>					
	Actuator	Diaphragm	Body		
F	ADC12	PTFE/EPDM	SUS316L	●	●

### Internal structure and parts list

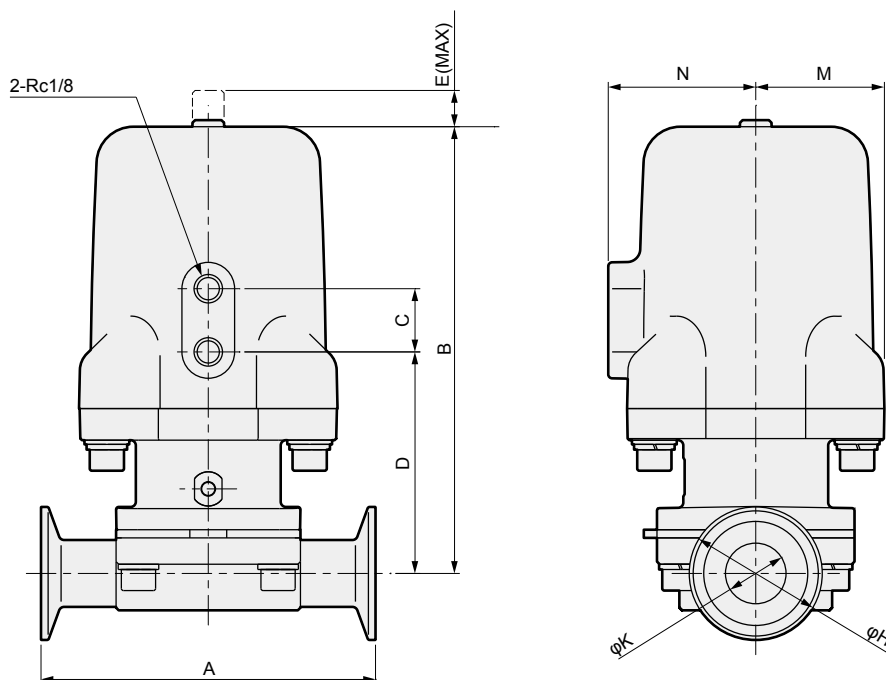


No.	Part name		Material
1	Cylinder guard	ADC12	Aluminum die-casting
2	O-ring	FKM	Fluoro rubber
3	Indicator	SUS304	Stainless steel
4	Spring	SUS304 (or SWP)	Stainless steel
5	Piston	A2017	Aluminum
6	Piston rod	SUS304	Stainless steel
7	Rod cover, yoke	ADC12	Aluminum die-casting
8	Hexagon socket head cap screw	SUS304, SUSXM7	Stainless steel
9	Compressor	SCS13	Stainless steel
10	Diaphragm	PTFE, EPDM, SUS303, SUS304	Fluoro resin, ethylene propylene rubber, stainless steel
11	Body	SUS316L	Stainless steel

\* For repair parts, refer to page 774.  
Wetted parts material are of two types: PTFE (diaphragm), SUS316L (body).

### Dimensions

● SWD



Model No.	A	B	C	D	E	H	K	M	N
SWD1*-8-F	90	99.5	22	60	7	34	10.5	32	40
SWD1*-10-F	90	101	22	61.5	7	34	14	32	40
SWD2*-15-F	108	130	22	73	8.5	34	17.5	38	46.5
SWD3*-25-F	127	170	24	84	12.5	50.5	23	51	56
SWD4*-40-F	159	212	28	97	16.5	50.5	35.7	57	66

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



Weir diaphragm valve Manual

# MWD Series

● Connection: ISO ferrule

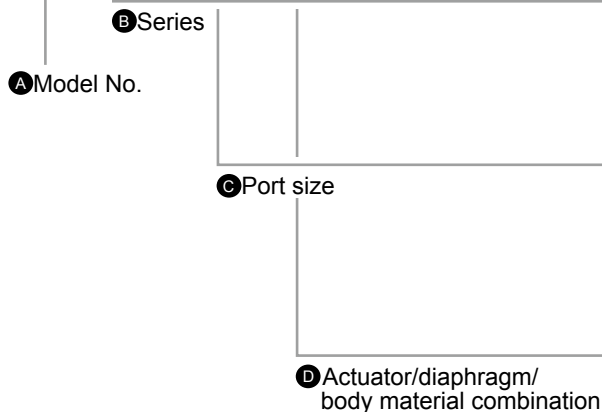


## Specifications

Descriptions		MWD10-8	MWD10-10	MWD20-15	MWD30-25	MWD40-40
Working fluid		Water, pure water, chemical liquids (fluids that do not corrode wetted part materials)				
Fluid temperature °C		5 (41°F) to 90 (194°F) (during steam sterilization 130 (266°F))				
Proof pressure MPa		2.0 (≈290 psi, 20 bar)				
Working pressure MPa		0 (≈0 psi, 0 bar) to 0.6 (≈87 psi, 6 bar)				
Valve seat leakage cm <sup>3</sup> /min		0 (water pressure)				
Ambient temperature °C		0 (32°F) to 60 (140°F)				
Cv		2.3	2.6	4.5	13	27
Operating section	Operating torque N·m	0.7 to 1.1	0.7 to 1.1	1.0 to 1.5	1.7 to 3.0	3.0 to 4.0
Material	Diaphragm	PTFE/EPDM				
	Body	SUS316L (buff polishing #400 or equiv., electrolytic polishing)				
	Actuator	A5056 (fluoro resin coating)				

## How to order

MWD **1** 0- **8** - **F**



### A Model No.

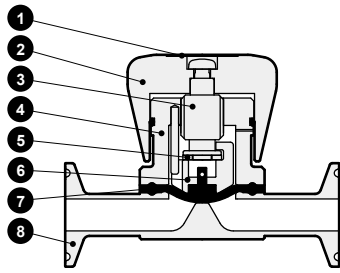
MWD1	MWD2	MWD3	MWD4
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Code	Content	MWD1	MWD2	MWD3	MWD4
<b>B Series</b>					
1	Size 1	●			
2	Size 2		●		
3	Size 3			●	
4	Size 4				●

<b>C Port size</b>					
8	Clamp fitting 8A	●			
10	Clamp fitting 10A	●			
15	Clamp fitting 15A		●		
25	Clamp fitting 25A (1S)			●	
40	Clamp fitting 40A (1.5S)				●

<b>D Actuator/diaphragm/body material combination</b>					
	Actuator	Diaphragm	Body		
F	A5056	PTFE/EPDM	SUS316L	●	●

### Internal structure and parts list



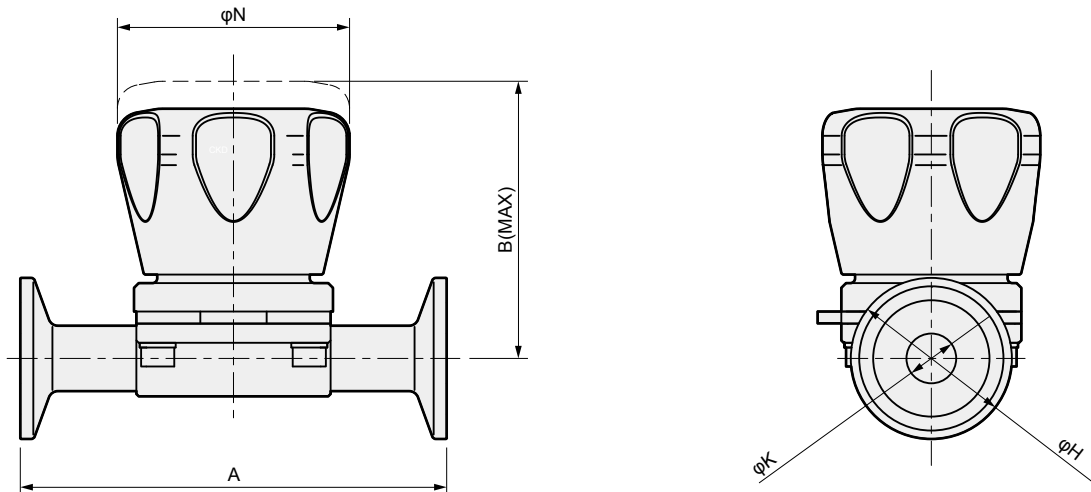
No.	Part name	Material	
1	Indicator	PET	Polyethylene terephthalate
2	Handle	A5056	Aluminum
3	Rod	SUS304	Stainless steel
4	Bonnet	A5056	Aluminum
5	Bearing	-	-
6	Compressor	SCS13	Stainless steel
7	Diaphragm	PTFE, EPDM, SUS303, SUS304	Fluoro resin, ethylene propylene rubber, stainless steel
8	Body	SUS316L	Stainless steel

\* For repair parts, refer to page 774.

Wetted parts material are of two types: PTFE (diaphragm), SUS316L (body).

### Dimensions

● MWD



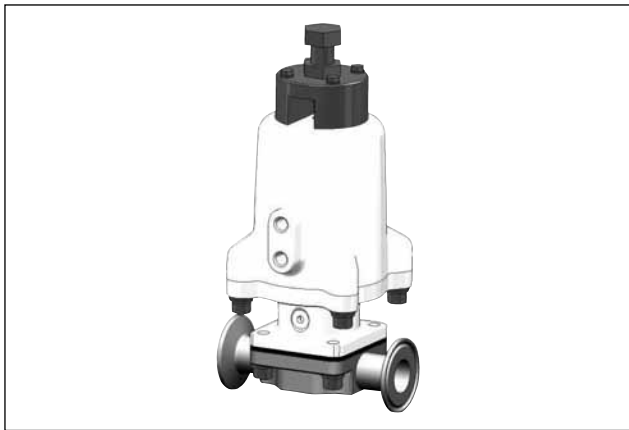
Model No.	A	B	H	K	N
MWD10-8-F	90	58.5	34	10.5	49
MWD10-10-F	90	60.7	34	14	49
MWD20-15-F	108	71.5	34	17.5	59
MWD30-25-F	127	88.7	50.5	23	69
MWD40-40-F	159	107.6	50.5	35.7	89

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 $\diamond$ 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

- EXA
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- DryAir
- EX-  
XPLNprf
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- SAB/  
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- LAD/  
NAD
- Water-  
Rela
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NVP
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- CHB/G
- MXB/G
- Other  
valves
- SWD/  
MWD**
- DustColl
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CVSE
- CCH /  
CPE/D
- LifeSci
- Gas-  
Combus
- Auto-  
Water
- SpecFld
- Custom
- Ending

## Custom order product (1S, 1.5S)

### With opening adjustment mechanism



### With open/close switch



## How to order repair parts

SWD - 1 PE

Model No.

A Series

Code	Content
<b>A Series</b>	
1	Size 1
2	Size 2
3	Size 3
4	Size 4

\* SWD, MWD common model No.

