

Compact 2/3 Port Solenoid Valves

Compact Direct Operated 2 Port Solenoid Valve **VDW**



- For air, medium vacuum, water
- Body materials: Aluminum, Resin (PPS), C37, Stainless steel
- With One-touch fittings (Resin body)
- IP65

Series	Valve type	Port size	Orifice diameter
VDW10/20	N.C.	ø3.2, ø4, ø6, M5, 1/8	ø1 to ø3.2

Compact Direct Operated 2/3 Port Solenoid Valve for Water and Air **VDW**



Series	Valve type	Port size	Orifice diameter [mmø]
VDW200/300	C.O.	M5 to 1/4 (8A)	1 to 4

Compact/Lightweight 2 Port Solenoid Valve for Water and Air **VDW-XF**



- Compact, lightweight resin body (PPS)
- IP65
- Power consumption: 3 W (Standard), 0.5 W (With power-saving circuit)

Series	Valve type	Port size	Orifice diameter [mmø]
VDW30/40-XF	N.C.	P7, P8 (Quick fastener) ø4, ø6, ø8, ø10	1 to 6

High Speed 2 Port Valve **SX10**



- High-speed response ON: 0.45 ms
OFF: 0.4 ms (±0.05 ms)
- Long service life: 5 billion cycles or more
- High frequency: 1200 Hz
- Width: 9 mm
- Low power consumption: 4 W

Series	Flow rate	Power consumption [W]	Max. operating frequency [Hz]
SX10	50	80	1200
		40	1000
		10	550
		4	350
SX10	100	80	650
		40	550
		10	300
		4	200
SX10	150	80	600
		40	500
		10	250
		4	150

Pilot Operated 2 Port Solenoid Valve for Dry Air **VQ**



- High-frequency operation is possible: High-speed response 7 ms or less (VQ20), 20 ms or less (VQ30)
- Easy piping with One-touch fittings
- The dust-tight, water-jet-proof enclosure (IP65) is compatible with the DIN terminal type.
- Applications: Air-blow, Blow-off of workpieces, etc.
- Manifold type no.: VV2Q22, VV2Q32

Series	Valve type	Port size	Orifice diameter [mmø]
VQ20	N.C.	ø6 to ø12	3.4
VQ30	N.C.	ø6 to ø12	4.8

Compact 2/3 Port Solenoid Valves

Compact Direct Operated 2/3 Port Solenoid Valve for Chemical Liquids **LVM**



- Materials of wetted parts Body/plate: PEEK
Diaphragm: Choice of EPDM, FKM, Kalrez®
- Service life: 10 million cycles or more (Based on SMC's test conditions)

Series	Valve structure	Valve type	Orifice diameter [mmø]
LVM09/090	Diaphragm type direct operated poppet (Rocker type)	N.C./N.O./Universal	1.1
LVM11	Diaphragm type direct operated poppet	N.C.	1.5
LVM10/100	Diaphragm type direct operated poppet (Rocker type)	N.C./N.O./Universal	1.4
LVM15/150			1.6
LVM20/200			2

Direct Operated 2/3 Port Isolated Valve **LVMK20/200**



- Low particle generation, Oil-free, Metal-free
- Fluids: Air, Water, Deionized water, Diluent, Cleaning fluid
- Isolated structure: The solenoid drive body is separated from the fluid area by a block seal.
- Easy piping
- Minimal dead space
- Flow adjustment is not required.

Series	Valve type	Piping direction	Fluid contact material
LVMK	N.C. Universal	Bottom ported Side ported	Body: PPS Seal: EPDM, FKM

Diaphragm Valve for Ultra High Purity **AZ**



- Cleaned for high purity semiconductor applications and clean room assembled
- Helium leak tested
- SEMI Standards compliant
- User-friendly forged body

Series	Type	Body material	Connection type	Connection size
AZ	Air operated type	316L SS	Face seal	1/4", 3/8", 1/2"
AZ	Manually operated type		Tube weld	1/4", 3/8", 1/2"

Normal Close High Vacuum Solenoid Valve **XSA**



- Minimum operating pressure: 1×10^{-6} Pa (abs)
- Leakage: Internal 1.3×10^{-9} Pa·m³/s, External 1.3×10^{-11} Pa·m³/s
- 2 types of fittings are available.
- Power consumption: Max. 25% reduction
- Weight: Max. 18% lighter (0.5 kg → 0.41 kg)

Series	Valve type	Fluid	Piping	Port size
XSA	Normally closed	Air, Inert gas	Face seal fitting Compression fitting	1/4B, 3/8B