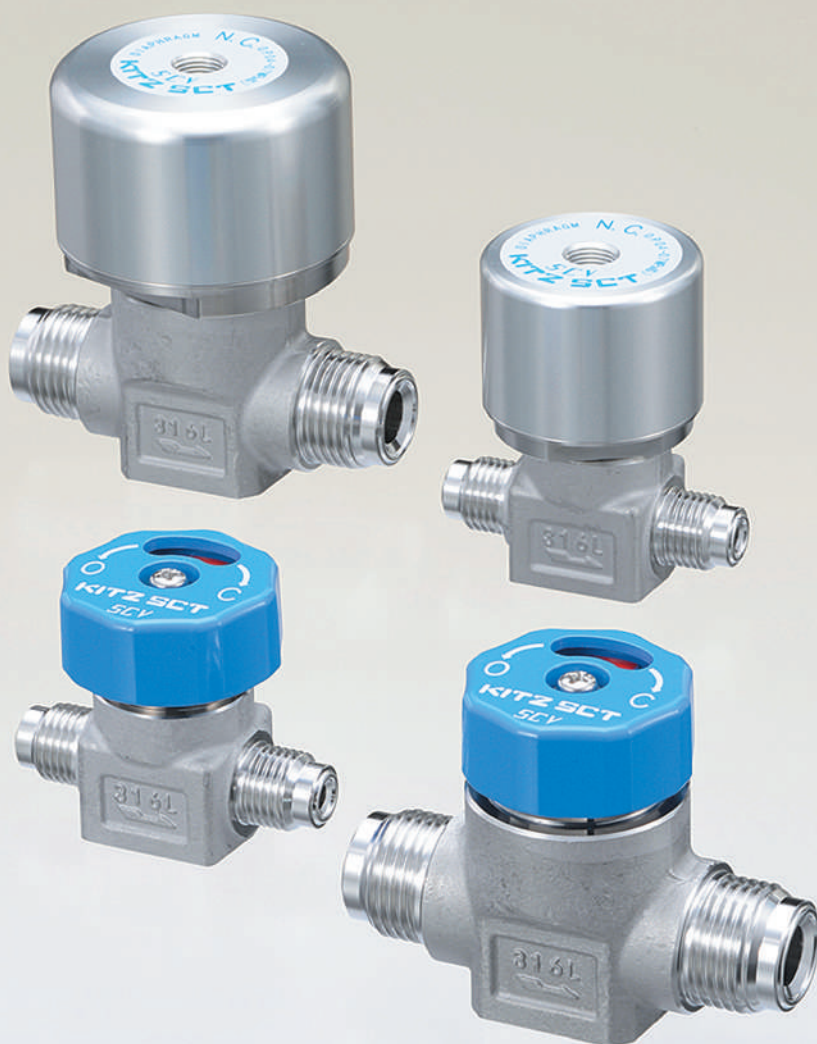


UHP Valves, Fittings & System Integrate

KITZ SCT

XD Series

Diaphragm Valve



Features

- Developed in pursuit of minimizing the weight and the footprint of valve while maintaining the same performance with our legacy diaphragm valve series.
- For ultra high purity application, efficient purging design and minimal particle generation

Specifications

Size		XD4 (1/4")	XD8 (1/2")	XD12 (3/4")	Grade	STD	EP	SEP
Cv		0.27	0.7	1.7	Body Material	SUS316L		SUS316LE (Double melt material)
Maximum Operation Pressure		142psig(0.98 MPa(G))			Surface Roughness	≤ Rz 126 μin(3.2 μm) ≤ Ra 20 μin(0.5 μm)	≤ Rz 28 μin(0.7 μm) ≤ Ra 5 μin(0.13 μm)	
Wetted Area Volume		0.083in ³ (1.36cm ³)	0.445in ³ (7.3cm ³)	2.11in ³ (34.6cm ³)	Polish	Mechanical Polished	Electro Polished	
Fluid Temperature	PCTFE	-10°C~80°C			Cleaning	Degreasing + Precision Cleaning		
	PI / PFA	-10°C~150°C			Packaging	Single bagged Package	Double bagged Package	
Atmospheric Temperature		-10°C~60°C			Body	SUS316L , SUS316LE		
Leak Rates	Across the Seat He Leak Test Rates	≤ 1 × 10 ⁻⁹ sccs (≤ 1 × 10 ⁻¹⁰ Pa · m ³ /s)			Seat	PCTFE, PI, PFA		
	Inboard He Leak Test Rates	≤ 1 × 10 ⁻⁹ sccs (≤ 1 × 10 ⁻¹⁰ Pa · m ³ /s)			Diaphragm	Cobalt alloy		
Actuation Pressure(Pneumatic)		58 - 102psig(0.4 - 0.7 MPa(G))						
Cycle Life *1	Manual Valve	100,000 cycles	30,000 cycles					
	Pneumatic Valve	4 million cycles	300,000 cycles					

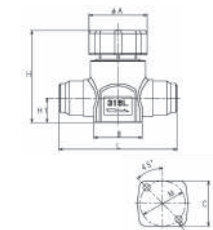
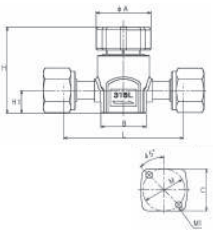
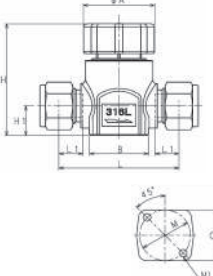
*1 Test Condition / Gas : N2 Pressure : 142psig (0.98 MPa(G))

Product Code Table

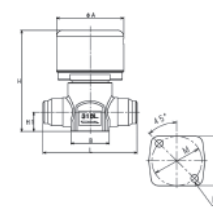
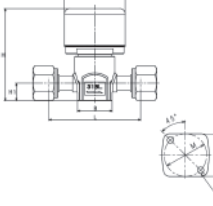
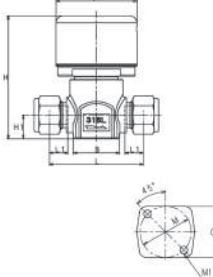
Model	Size	Operation	Valve Shape	Connection	Seat Material	Handle Color	Grade + Body Material
XD	4	M	S	V	C		EP-316L
XD: XD Type Diaphragm Valve	4: 1/4" 6: 3/8" 8: 1/2" 12: 3/4"	M: Manual Valve C: Normally closed	S: Straight	V: CVC male VF: CVC female S: Compression	C: PCTFE A: PFA P: PI	Not Shown: Blue (Standard) RD: Red GR: Green SL: Silver BK: Black YE: Yellow BR: Brown WH: White	STD-316L: Mechanical Polished+SUS316L EP-316L: Electro Polished+316L SEP-316LE: Electro Polished+316LE *

* SEP-316LE : 1/4", 1/2" are available

Manual

Model	Model	Connection	L	L1	H	H 1	A	B	C	M	M 1
	XD4MS-V□	1/4" CVC Male	2.24 (57.0)	—	1.93 (49.0)	0.43 (11.0)	1.50 (38.0)	1.10 (28.0)	0.98 (25.0)	1.00 (25.4)	2-M5 Depth 0.20 (5.0)
	XD8MS-V□	1/2" CVC Male	3.03 (77.0)	—	2.38 (60.0)	0.63 (16.0)	1.50 (38.0)	1.24 (31.5)	1.10 (28.0)	1.10 (28.0)	2-M5 Depth 0.20 (5.0)
	XD12MS-V□	3/4" CVC Male	4.21 (107.0)	—	3.27 (83.0)	0.91 (23.0)	1.50 (38.0)	1.89 (48.0)	1.81 (46.0)	1.38 (35.0)	2-M5 Depth 0.31 (8.0)
	XD4MS-VF□	1/4" CVC Female	2.78 (70.6)	—	1.93 (49.0)	0.43 (11.0)	1.50 (38.0)	1.10 (28.0)	0.98 (25.0)	1.00 (25.4)	2-M5 Depth 0.20 (5.0)
	XD8MS-VF□	1/2" CVC Female	3.27 (83.0)	—	2.38 (60.0)	0.63 (16.0)	1.50 (38.0)	1.24 (31.5)	1.10 (28.0)	1.10 (28.0)	2-M5 Depth 0.20 (5.0)
	XD12MS-VF□	3/4" CVC Female	7.06 (179.2)	—	3.27 (83.0)	0.91 (23.0)	1.50 (38.0)	1.89 (48.0)	1.81 (46.0)	1.38 (35.0)	2-M5 Depth 0.31 (8.0)
	XD4MS-S□	1/4" Compression	1.89 (48.0)	—	1.93 (49.0)	0.43 (11.0)	1.50 (38.0)	1.10 (28.0)	0.98 (25.0)	1.00 (25.4)	2-M5 Depth 0.20 (5.0)
	XD6MS-S□	3/8" Compression	2.52 (64.0)	—	2.38 (60.0)	0.63 (16.0)	1.50 (38.0)	1.24 (31.5)	1.10 (28.0)	1.10 (28.0)	2-M5 Depth 0.20 (5.0)
	XD8MS-S□	1/2" Compression	2.52 (64.0)	0.31 (7.9)	2.38 (60.0)	0.63 (16.0)	1.50 (38.0)	1.24 (31.5)	1.10 (28.0)	1.10 (28.0)	2-M5 Depth 0.20 (5.0)
	XD12MS-S□	3/4" Compression	4.96 (126.0)	0.50 (12.7)	3.27 (83.0)	0.91 (23.0)	1.50 (38.0)	1.89 (48.0)	1.81 (46.0)	1.38 (35.0)	2-M5 Depth 0.31 (8.0)

Pneumatic

Model	Model	Connection	L	L1	H	H 1	A	B	C	P	M	M 1
	XD4CS-V□	1/4" CVC Male	2.24 (57.0)	—	2.54 (64.0)	0.43 (11.0)	1.56 (39.7)	1.10 (28.0)	0.98 (25.0)	Rc1/8	1.00 (25.4)	2-M5 Depth 0.20 (5.0)
	XD8CS-V□	1/2" CVC Male	3.03 (77.0)	—	3.31 (84.0)	0.63 (16.0)	2.17 (55.0)	1.24 (31.5)	1.10 (28.0)	Rc1/8	1.10 (28)	2-M5 Depth 0.20 (5.0)
	XD12CS-V□	3/4" CVC Male	4.21 (107.0)	—	5.79 (147.0)	0.91 (23.0)	2.17 (55.0)	1.89 (48.0)	1.81 (46.0)	Rc1/8	1.38 (35.0)	2-M5 Depth 0.31 (8.0)
	XD4CS-VF□	1/4" CVC Female	2.78 (70.6)	—	2.54 (64.0)	0.43 (11.0)	1.56 (39.7)	1.10 (28.0)	0.98 (25.0)	Rc1/8	1.00 (25.4)	2-M5 Depth 0.20 (5.0)
	XD8CS-VF□	1/2" CVC Female	3.27 (83.0)	—	3.31 (84.0)	0.63 (16.0)	2.17 (55.0)	1.24 (31.5)	1.10 (28.0)	Rc1/8	1.10 (28)	2-M5 Depth 0.20 (5.0)
	XD12CS-VF□	3/4" CVC Female	7.06 (179.2)	—	5.79 (147.0)	0.91 (23.0)	2.17 (55.0)	1.89 (48.0)	1.81 (46.0)	Rc1/8	1.38 (35.0)	2-M5 Depth 0.31 (8.0)
	XD4CS-S□	1/4" Compression	1.89 (48.0)	0.31 (7.9)	2.54 (64.0)	0.43 (11.0)	1.56 (39.7)	1.10 (28.0)	0.98 (25.0)	Rc1/8	1.00 (25.4)	2-M5 Depth 0.20 (5.0)
	XD6CS-S□	3/8" Compression	2.52 (64.0)	0.50 (12.7)	3.31 (84.0)	0.63 (16.0)	2.17 (55.0)	1.24 (31.5)	1.10 (28.0)	Rc1/8	1.10 (28)	2-M5 Depth 0.20 (5.0)
	XD8CS-S□	1/2" Compression	2.52 (64.0)	0.50 (12.7)	3.31 (84.0)	0.63 (16.0)	2.17 (55.0)	1.24 (31.5)	1.10 (28.0)	Rc1/8	1.10 (28)	2-M5 Depth 0.20 (5.0)
	XD12CS-S□	3/4" Compression	4.96 (126.0)	0.56 (14.3)	5.79 (147.0)	0.91 (23.0)	2.17 (55.0)	1.89 (48.0)	1.81 (46.0)	Rc1/8	1.38 (35.0)	2-M5 Depth 0.31 (8.0)

* L1 dimension for compression fitting is the dimension of how far tube inserted from end of body.

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