





High Vacuum Equipment

Series Variations

Exhaust Line

Description	Model	Shaft seal system Valve type	Flange size	Material	Page
Aluminum High Vacuum Angle Valve <ul style="list-style-type: none"> • High fluorine resistance • Minimal outgassing • Minimal contamination from heavy metals 	XLA-2 XLAV-2 (With solenoid valves)	Bellows seal Single acting (N.C.)	16, 25, 40, 50, 63, 80 (KF[NW]/K[DN] ^{*1})	Body: Aluminum alloy Bellows: Stainless steel 316L	p. 11
	XLA XLAV (With solenoid valves)		100, 160 (KF[NW]/K[DN])		p. 35
	XLC-2	Bellows seal Double acting	16, 25, 40, 50, 63, 80 (KF[NW]/K[DN] ^{*1})		p. 15
	XLC-1		100, 160 (KF[NW]/K[DN])		p. 41
	XLF-2 XLFV-2 (With solenoid valves)	O-ring seal Single acting (N.C.)	16, 25, 40, 50, 63, 80 (KF[NW]/K[DN] ^{*1})	Body: Aluminum alloy Main part: Stainless steel, FKM ^{*2}	p. 18
	XLF XLFV (With solenoid valves)		100, 160 (KF[NW]/K[DN])		p. 49
	XLG-2	O-ring seal Double acting	16, 25, 40, 50, 63, 80 (KF[NW]/K[DN] ^{*1})	Body: Aluminum alloy Main part: Stainless steel, FKM ^{*2}	p. 22
	XLG-1		100, 160 (KF[NW]/K[DN])		p. 59
	XLD XLDV (With solenoid valves)	Bellows/ O-ring seal 2-Step Control	25, 40, 50, 63, 80, 100, 160 (KF[NW]/K[DN] ^{*1})	Body: Aluminum alloy Bellows: Stainless steel 316L Main part: Stainless steel, FKM ^{*2}	p. 69
	XLH	Bellows seal Manual	16, 25, 40, 50 (KF[NW])	Body: Aluminum alloy Bellows: Stainless steel 316L	p. 75
XLS	(Bellows balance) Single acting (N.C.)	16, 25 (KF[NW])	Body: Aluminum alloy Main part: Stainless steel, PFA, FKM ^{*2}	p. 77	
Aluminum One-touch Connection and Release High Vacuum Angle Valve <ul style="list-style-type: none"> • One-touch connection and release (No tools are required.) 	XLAQ	Bellows seal Single acting (N.C.)	16, 25, 40, 50 (KF[NW])	Body: Aluminum alloy Bellows: Stainless steel 316L	p. 88
	XLDQ	Bellows/ O-ring seal 2-Step Control	40, 50 (KF[NW])	Body: Aluminum alloy Bellows: Stainless steel 316L Main part: Stainless steel, FKM ^{*2}	p. 91
Stainless Steel High Vacuum Angle Valve <ul style="list-style-type: none"> • A precision casting, unified composition prevents accumulation of gas. • The XM series is interchangeable with the XL series, aluminum high vacuum angle valve. 	XMA	Bellows seal Single acting (N.C.)	16, 25, 40, 50, 63, 80 (KF[NW]/K[DN] ^{*1} /CF ^{*4})	Body: SCS13 (equivalent to stainless steel 304) Bellows: Stainless steel 316L	p. 100
	XMC XMC-1^{*3}	Bellows seal Double acting			p. 103
	XMD	Bellows/ O-ring seal 2-Step Control	25, 40, 50, 63, 80 (KF[NW]/K[DN] ^{*1} /CF ^{*4})	Body: SCS13 (equivalent to stainless steel 304) Bellows: Stainless steel 316L Main part: Stainless steel, FKM ^{*2}	p. 107
	XMH	Bellows seal Manual	16, 25, 40, 50 (KF[NW]/CF ^{*4})	Body: SCS13 (equivalent to stainless steel 304) Bellows: Stainless steel 316L	p. 111
Stainless Steel High Vacuum In-line Valve <ul style="list-style-type: none"> • Combination with the angle valve allows space saving. 	XYA	Bellows seal Single acting (N.C.)	25, 40, 50, 63, 80 (KF[NW]/K[DN] ^{*1})	Body: SCS13 (equivalent to stainless steel 304) Bellows: Stainless steel 316L	p. 100
	XYC XYC-1^{*3}	Bellows seal Double acting			p. 103
	XYD	Bellows/ O-ring seal 2-Step Control	25, 40, 50, 63, 80 (KF[NW]/K[DN] ^{*1})	Body: SCS13 (equivalent to stainless steel 304) Bellows: Stainless steel 316L Main part: Stainless steel, FKM ^{*2}	p. 107
	XYH	Bellows seal Manual		25, 40, 50 (KF[NW])	Body: SCS13 (equivalent to stainless steel 304) Bellows: Stainless steel 316L

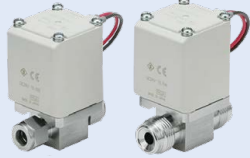

*1 Applicable to flange sizes over 63.

*2 Standard seal


*3 Applicable to flange sizes over 50.

*4 Only applicable to flange sizes 16, 40, and 63.


N₂ Gas/Air Supply Line

Description	Model	Fitting size Fitting type	Material	Page
Normal Close High Vacuum Solenoid Valve 	XSA	1/4, 3/8 (Face seal fitting/Compression fitting) 1/8, 1/4, 3/8 Female thread (Rc, NPT)	Body: Aluminum alloy Main part: Stainless steel, FKM (seal material)	p. 116
Smooth Vent Valve <ul style="list-style-type: none"> Valve / needle valve integrated construction –requires only 1/4 the piping space of previous models. Particulates significantly reduced through the use of a metal diaphragm in the sheet portion Flow of both initial air supply and main air supply can be adjusted. 	XVD	1/4 (For VCR®/Swagelok®)		p. 128


Vacuum Angle Valve with Release Valve

Description	Model	Shaft seal type Valve type	Flange size	Material	Page
Vacuum angle valve with release valve <ul style="list-style-type: none"> Prevents the reverse flow of oil through the roughing pump (rotary pump) into the chamber 	XLJ	O-ring seal Single acting (N.C.)	25-40 (KF[NW])	Body: Aluminum alloy Main part: Stainless steel, FKM (seal material)	p. 134

Slit Valve

Description	Model	Opening window size Height x width [mm]	Applicable wafer size	Number of axis	Material	Page
Slit Valve <ul style="list-style-type: none"> This product is suitable for the partition valve between the load lock chamber and the transfer chamber or between the transfer chamber and the process chamber in semiconductor equipment or other equipment.  <p style="text-align: center;">Non-Cassette type Cassette type</p>	XGT22	32 x 222	200 mm	Two axes bellows	Body: A5052 Gate: A6063 Bellows: AM350 Seal Material: FKM, Kalrez 4079	p. 144
		46 x 236				
	XGT31	50 x 336	300 mm	One axis bellows		

Transfer Line

Description	Model	Bore size [mm]	Port size	Material	Page
Rodless Cylinder for Vacuum <ul style="list-style-type: none"> Air cylinder for transfer in vacuum environments (1.3 x 10⁻⁴ Pa) 	CYV	15	5/16-24UNF	Body: Aluminum alloy Linear: Stainless steel O-ring: Fluororubber	p. 152
32		7/16-20UNF			