

## RPC Angle Valve

### REMOTE PLASMA CONTROL VALVE , SERIES V41

For upstream cleaning air inflow chamber in SEMI production system. Suitable for Etch, CVD process.



#### APPLICATIONS

- Semiconductor processing
- All CVD process (including MO, PE, HDP, LP and AP)
- Manufacturing of solar process
- All other cluster and inline vacuum systems

#### MAIN FEATURES

- Semi standard application (Semi E21- 94, Semi E24- 92, Semi- E21.1-1296)
- Particle free, provide extremely clean upstream air inflow chamber
- 1 million service life cycles
- High vacuum angle valve
- Pneumatic actuator, double action
- Smart and modularization design, easy maintenance

#### OPTIONS

- White hard anodized surface treatment
- Custom opening size available
- Various O-ring (Kalrez<sup>®</sup>, Chemraz<sup>®</sup> etc.)

#### Valve with pneumatic actuator

with solenoid valve  
with position indicator  
double action

DN	Ordering Number	
	hard anodized angle aluminum	hard anodized inline aluminum
mm		
16	V41-D-016-5-1-KAGZNEB-A	on request
25	V41-D-025-1-1-KAGZNCC-A	on request
40	V41-D-040-1-1-KAGZNDB-A	V41-D-040-1-1-KBGZNCB-A
Other size on request		

Specify control voltage

Actuator			Pneumatic
Leak rates		Stainless steel	$< 1 \times 10^{-9}$ mbar l/s
		Hard anodized aluminum	$< 1 \times 10^{-9}$ mbar l/s
Pressure range		Stainless steel	$1 \times 10^{-8}$ mbar to 2 bar
		Hard anodized aluminum	$1 \times 10^{-8}$ mbar to 1.2 bar
Differential pressure on the gate in opening direction			$\leq 1.2$ bar
Differential pressure on the gate in closing direction			$\leq 1.2$ bar
Differential pressure at the opening			$\leq 1$ bar
Life cycle until first service		Stainless steel	$> 300,000$
		Hard anodized aluminum	$> 100,000$
Temperature	Stainless steel	Valve body	$\leq 150^{\circ}\text{C}$
		Valve gate	$\leq 150^{\circ}\text{C}$
		Actuator	$\leq 120^{\circ}\text{C}$
	Hard anodized aluminum	Valve body	$\leq 150^{\circ}\text{C}$
		Valve gate	$\leq 150^{\circ}\text{C}$
		Actuator	$\leq 120^{\circ}\text{C}$
Material	Stainless steel	Valve body	AISI 304 (1.4301)
		Valve gate	AISI 304 (1.4301)
		Bonnet	AISI 304 (1.4301)
	Hard anodized aluminum	Valve body	EN AW-6061 (3.3211)
		Valve gate	EN AW-6061 (3.3211)
		Bonnet	EN AW-6061 (3.3211)
Surface treatment	Stainless steel	Valve body	Electro polishing
		Valve gate	Bare
		Bonnet	Electro polishing
	Hard anodized aluminum	Valve body	White hard anodization
		Valve gate	White hard anodization
		Bonnet	White hard anodization
Seal		Stainless steel	FKM (Viton®)
		Hard anodized aluminum	FFKM (Kalrez®9500)
Feed through		Stainless steel	Bellows
		Hard anodized aluminum	O-ring shaft
Solenoid valve			24V DC or on request
Position indicator		Type	Reed switch
		Voltage	12V/24V DC or on request
		Current	5-50 mA
		Connector	AMP 4P mate/D-Sub 9P male
Air pressure			3.0 - 6 bar
Mounting position			Any
Air failure			No
Compress air connection		Stainless steel	Quick connector OD 6mm /
		Hard anodized aluminum	4mm