

# VACUUM CHUCKS

## Model KVR-AV AUTO VALVE TYPE VACUUM CHUCK

### An epoch-making vacuum chuck that requires no masking!

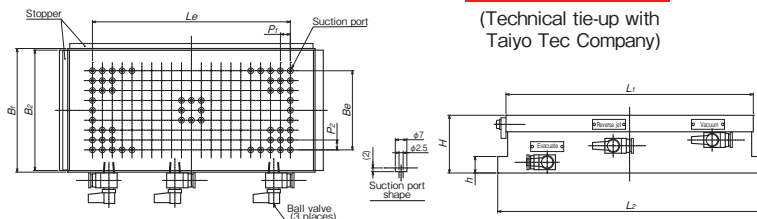
Vacuum system required additionally



KVR-AV1530

**Patented**

(Technical tie-up with Taiyo Tec Company)



#### [Application]

Nonferrous and nonmagnetic materials can be held and machined. These chucks are suitable for grinding plastics, aluminum, brass, stainless steel, ceramic and glass by machine tools. They can also be used for light duty cutting if workpieces can be held firmly.

#### [Features]

- No masking is required to reduce the setup time:  
Place a workpiece, apply grinding fluid and turn the valve. That is all required. Since the suction holes outside the workpiece are automatically closed, troublesome masking is not required and grinding can be started soon.
- Easy valve cleaning:  
An original modular design that causes little clogging due to sludge facilitates maintenance to reduce the running cost.
- Enhanced safety:  
An original construction is employed that closes the auto valve instantly should a workpiece move during grinding. This design causes no vacuum break and maintains a certain level of holding power.
- Dry operations supported:  
In dry grinding operations using no grinding fluid, the chuck can be used with minimum necessary masking only.

[mm (in.)]

Model	Nominal Size	Work Face				Suction Port Pitch		No. of Suction Ports	Mounting Face			Height H	Mass	Applicable Vacuum System
		B <sub>1</sub>	L <sub>1</sub>	B <sub>e</sub>	L <sub>e</sub>	P <sub>1</sub>	P <sub>2</sub>		B <sub>2</sub>	L <sub>2</sub>	h			
KVR-AV1018	100 (3.93) × 175 (6.89)	100 (3.93)	175 (6.89)	57.5 (2.26)	132 (5.20)	12 (0.47)	11.5 (0.45)	72	98 (3.86)	195 (7.68)	20 (0.79)	70 (2.75)	8kg / 17.6 lb	VPU-E10-AV
KVR-AV1530	150 (5.90) × 300 (11.8)	150 (5.90)	300 (11.8)	96 (5.67)	240 (9.45)			188	146 (5.75)	320 (12.6)			18kg / 39.7 lb	
KVR-AV2040	200 (7.87) × 400 (15.7)	200 (7.87)	400 (15.7)	144 (6.89)	348 (13.7)			388	196 (7.71)	420 (16.5)			30kg / 66.1 lb	
KVR-AV3060	300 (11.8) × 600 (23.6)	300 (11.8)	600 (23.6)	228 (8.97)	540 (21.2)			908	296 (11.6)	620 (24.4)			66kg / 145.5 lb	

\*KVR-AV1530, KVR-AV2040 and KVR-AV3060 have places where no suction ports are provided partially. \*Clamp parts are included.

## Model VPU-E-AV VACUUM SYSTEM DEDICATED TO AUTO VALVE TYPE VACUUM CHUCK

Dry/wet operations



VPU-E10-AV

#### [Application]

A vacuum system dedicated to the auto valve type vacuum chucks. The shuck side is evacuated continuously in order to effectively maintain the atmospheric pressure on the workpiece on the chuck work face.

#### [Features]

- A vacuum evacuation system, filter, vacuum tank and vacuum gage are incorporated neatly.
- Since connectors are provided, the pipes of vacuum and reverse jet required for control of the vacuum chuck can be connected easily.
- A difference in pressure over 80 kPa (600 mmHg) can be obtained continuously.

[mm (in.)]

Model	Evacuation Volume	Continuous Pressure	Suction Port	Compressed Air			Dimensions		Tank Capacity	Mass
				Pressure	Consumption	Supply port	Out Dia.	Height		
VPU-E10-AV	110N ℓ /min	(80 kPa (600 mmHg) or over)	3/8	500—600kPa (5—6kgf/cm <sup>2</sup> )	180N ℓ /min	1/4	φ277 (10.9)	425 (16.7)	15 ℓ	25kg / 55 lb

\*The capacity of a compressor to use must be 2.5 kW or over. φ12 hose, 10 m long, is included as an accessory.

#### Piping of vacuum system

