

# KVT series



## Features

- Rapid produce ultra-low temperature (-70°C) air.
- No need maintenance
- Excellent cooling effect for partly cooling and cooling inside panel.
- Can be utilized in all types of industry requiring cooling process.

## How to Order

KVT 45-60

①

②

### ① Series

KVT	Vortex cooler
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### ② Port size

45-60	Rc(PT)1/8
60-75	Rc(PT)1/4
700	Rc(PT)3/8
1000	Rc(PT)1/2

## Specifications

Model	PRESSURE	Lowest cooling air temperature	Maximum temperature difference	Minimum temperature flow	Maximum discharge flow	Compressed air consumption	Pipe size	Weight
KVT 45-60	4 bar [4.07 kgf/cm <sup>2</sup> ]	-37.3 °C	66 °C	166.67 L/min	233.33 L/min	~ 66 L/min	Ø8	100g
	6 bar [6.11 kgf/cm <sup>2</sup> ]	-43.8 °C						
	7 bar [7.13 kgf/cm <sup>2</sup> ]	-51.1 °C						
KVT 60-75	4 bar [4.07 kgf/cm <sup>2</sup> ]	-28.9 °C	58 °C	316.67 L/min	416.67 L/min	~ 100 L/min	Ø10	270g
	6 bar [6.11 kgf/cm <sup>2</sup> ]	-38.0 °C						
	7 bar [7.13 kgf/cm <sup>2</sup> ]	-43.1 °C						
KVT 700	4 bar [4.07 kgf/cm <sup>2</sup> ]	-19.9 °C	50 °C	383.33 L/min	566.67 L/min	~ 183 L/min	Ø12	570g
	6 bar [6.11 kgf/cm <sup>2</sup> ]	-30.4 °C						
	7 bar [7.13 kgf/cm <sup>2</sup> ]	-34.9 °C						
KTV 1000	4 bar [4.07 kgf/cm <sup>2</sup> ]	-15.4 °C	48 °C	416.67 L/min	633.33 L/min	~ 216 L/min	Ø16	970g
	6 bar [6.11 kgf/cm <sup>2</sup> ]	-27.5 °C						
	7 bar [7.13 kgf/cm <sup>2</sup> ]	-33.5 °C						

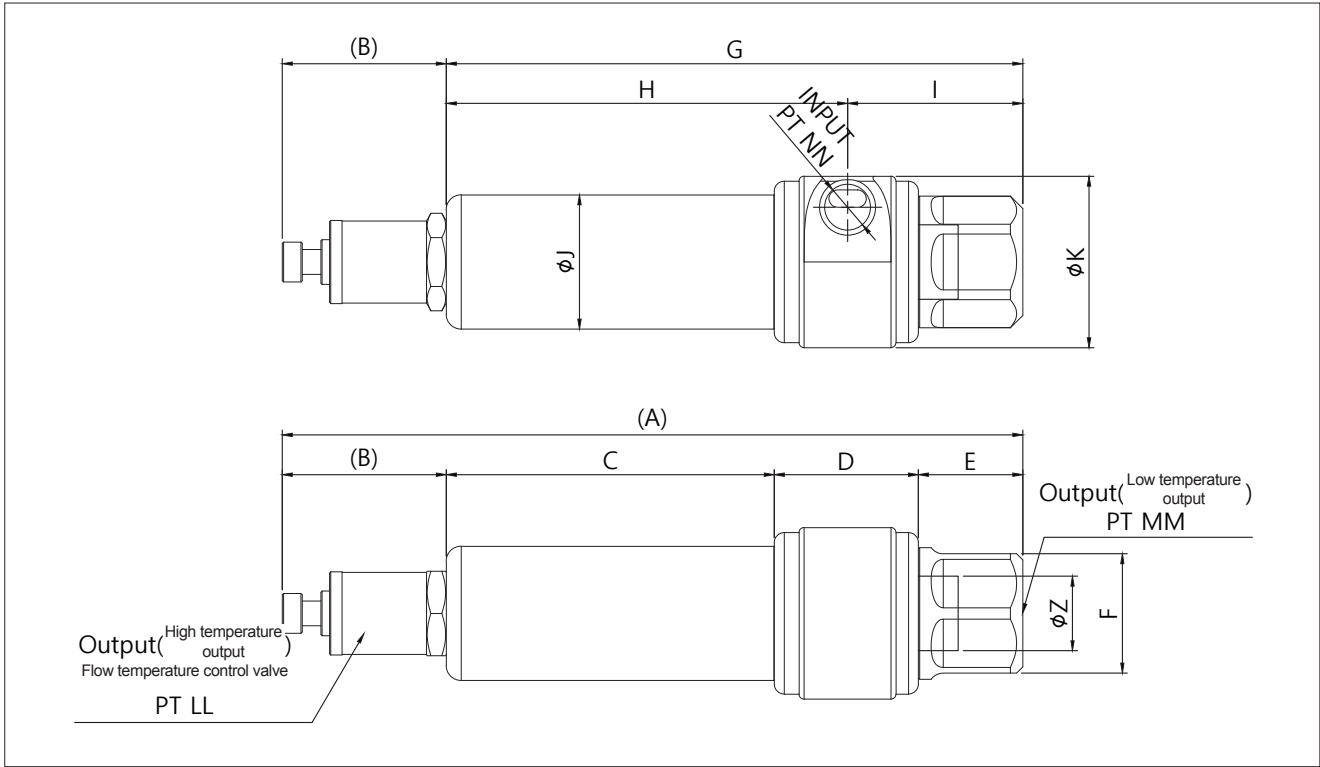
## Installation

- Lowest cooling air temperature measurement: Based on inlet air pressure of 7kg/cm<sup>2</sup> and temperature of +15 °C (measured at the trumpet-shaped tube inside the body)
- Hose joint: Within 1 m for KVT45-60; within 2 m for KVT60-75 & KVT-1000
- If the outlet temperature is below -10 °C, the moisture included in the compressed air may be frozen and cling to the pipeline or may be exhausted along with the cooling air, resulting in lower performance. (Use of dryer/filter for removing the moisture from the compressed air is recommended.)
- The outlet temperature is controlled with the regulator pressure and the temperature/flow rate control bolt of the noise suppressor. (clockwise: temperature ↑; counterclockwise: temperature ↓)
- The outlet temperature may vary depending on the outside temperature (the temperature of the inlet air).
- The temperature and flow rate shall be adjusted depending on the season and working environment.

## Applications

- Rapid cooling during CNC, metal cutting and other processing
- Temperature maintenance of NC machine and automatic control panel
- Rapid cooling of heat generated during cutting and grinding
- Rapid cooling of tools and chips during drill (hand mill) working, discharge of chips
- Cooling of heatproof clothes during smelting furnace working
- Cooling of mold
- Rapid cooling of plastic containers, etc. before and after mechanical processing
- Rapid cooling of laboratory water bath
- Temperature maintenance of electric/electronic panel
- Rapid cooling of electric/electronic panel during welding
- Rapid cooling of electric/electronic PCB

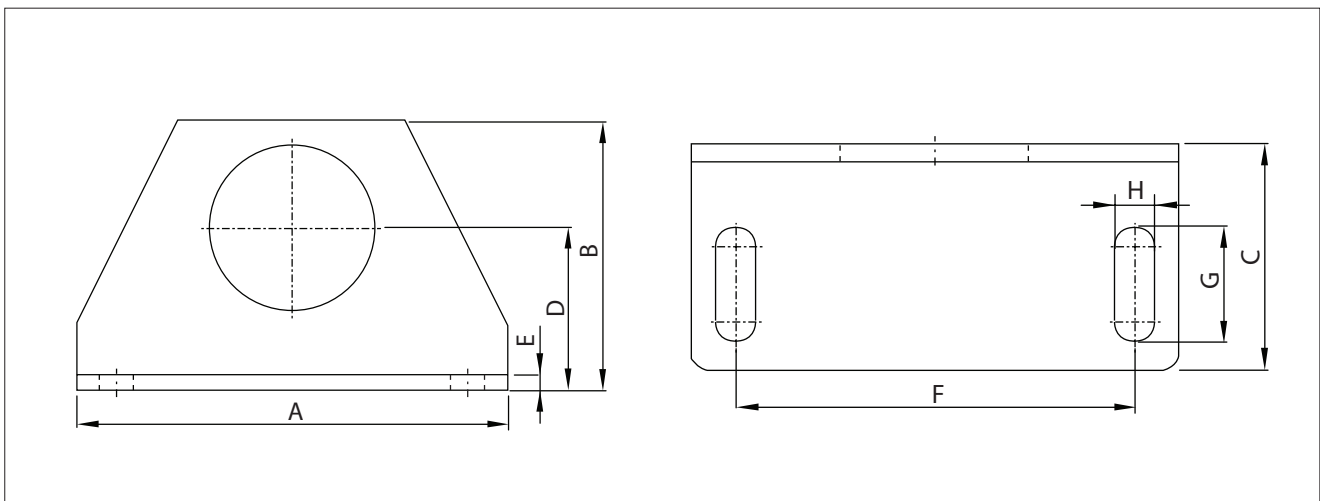
**Dimension**



Unit:mm

Model	A	B	C	D	E	F	G	H	I	J	K	Z	LL	MM	NN
KVT 45-60	173	30	98	24	21	23	143	113.5	29.5	20	30	16	1/4	1/4	1/8
KVT 60-75	213	45	103	39	26	32	168	123	45	29	44	20	1/2	3/8	1/4
KVT 700	245	53	107.5	49	35	38	191.5	133.5	58	44	59	25	3/4	1/2	3/8
KVT 1000	298	66	132	58	42	48	232	161.5	70.5	54	69	30	1	3/4	1/2

**Dimension-Bracket**



Unit:mm

Model	A	B	C	D	E	F	G	H	I
KVT 45-60	60	31	23	20	2	45	11.5	5.5	16.5
KVT 60-75	80	50	37	30	3	65	18.5	6.5	30.5
KVT 700	100	65	38	38	3	83	21.5	8.5	42.5
KVT 1000	120	78	45	45	3	100	24.5	8.5	52.5