

# BENCOR (Pty) Ltd.

Metering valves



## Throttle and shut-off valves type AV, AVT, and CAV

The throttle valves, types AVT, AV, and CAV, which can be completely blocked, are available in various sizes and belong to the flow valve group. Versions AV...E and CAV are screw-in valves. They generate a pressure drop between inlet and outlet to control the speed of cylinders in accumulator circuits, the flow in control circuits, or can function as a snubber to protect a pressure gauge).

The throttles, type AV.. throttle the flow via an annular gap i.e. a cone enters a valve seat hole (needle valve). Throttles, type CAV, create back-pressure by means of a slot with a constant width where the area of opening varies proportionally with the distance of the adjustment travel. Valves using this throttling principle are much less sensitive to contamination.



Additional versions are available with an integrated check valve to enable free flow in the opposite direction.

**Nomenclature:** Shut-off and throttle valve with or without by-pass check valve

**Design:** Individual valve for pipe mounting  
Screw-in valve

**Adjustability:** Manually adjustable (handle, adjusting knob)  
Tool adjustable

**p<sub>max</sub>:** 500 ... 630 bar

**Q<sub>max</sub>:** 50 l/min

### Basic types and general parameters

Basic type and size	Version	Flow Q <sub>max</sub> (l/min) <sup>1)</sup>	Oper. pressure p <sub>max</sub> (bar)	Connection size	Symbol
AV 2	valve for pipe	40	500	G 1/2	AV
AV 3	connection	100	400	G 3/4	AV.E
AV 2E		40	500	M 28 x 1,5	AVT
AV 3E	screw-in valve	100	400	M 40 x 1,5	CAV
AV 3RE		100	400	M 40 x 1,5	
AVT 6		12	630	6 mm	CAV..R
AVT 8	valve for pipe	25	630	8 mm	
AVT 12	connection	50	630	12 mm	
AVT 16		100	400	16 mm	CAV..V
CAV 1	screw-in valve	30	500	M 16 x 1,5	AV..R
CAV 2		50	500	M 20 x 1,5	AV..RE

<sup>1)</sup> This figures do apply with a back pressure of approx. 10 bar (throttled flow direction)

### Additional versions

- Shut-off valve AVM 6 with a short pipe at one end