

# Air Poppet Valves – Applications

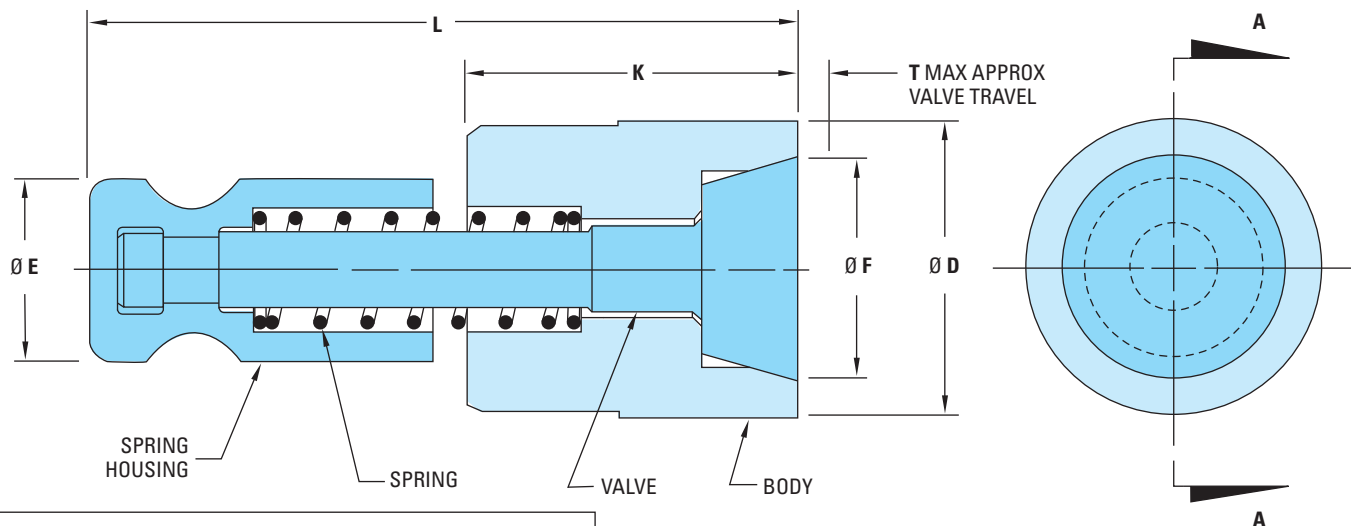
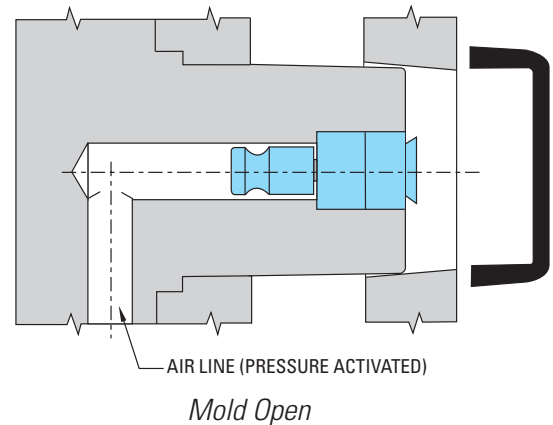
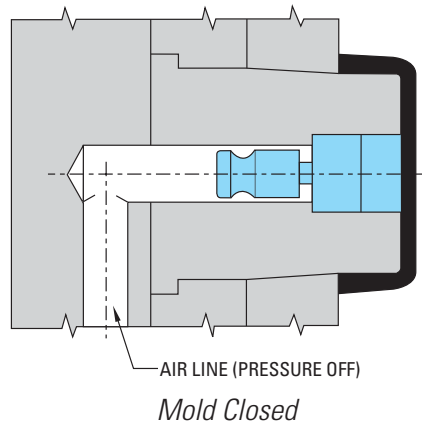
## Air Poppet Valves – VA Features and Benefits

- Prevents mold damage due to ejection problems with deep-draw or thin-walled parts
- More durable and precision-made than competitive units

These precision-engineered valves are designed to remedy the vacuum problem often encountered during the molding of deep-draw (e.g., buckets) or thin-walled parts. Air flow, timed to coincide with the ejection cycle, opens the valve to break the vacuum and facilitate part ejection. A precision-ground valve seat helps prevent flash from entering the assembly during injection. Each valve is matched to the body to further assure reliable performance.



### Typical Application



#### INFORMATION KEY:

**D** = Outside Diameter  
**E** = Housing Diameter  
**F** = Approx. Valve Diameter  
**G** = Hole Diameter  
**H** = Hole Diameter  
**K** = Body Length  
**L** = Overall Length  
**N** = Depth

**T** = Max Valve Travel

**Body Material:** Stainless Steel

**Body Hardness:** 53 ±3 HRC

**Valve Material:** Stainless Steel

**Valve Surface Treatment:** Titanium Nitrided

**Max. Temp:** 120°C (250°F)

**Operating Air Pressure:** 58 PSI min.

87 PSI max

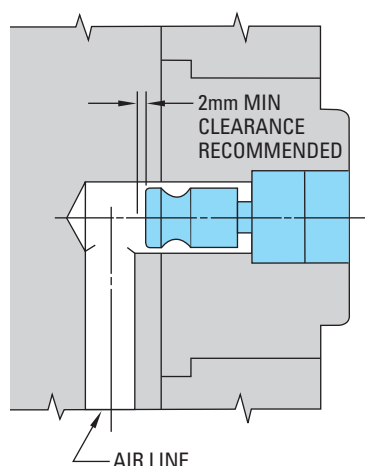
**Dimensions:** All dimensions are in mm

ITEM NUMBER	Ø D	Ø F (APPROX)	K BODY LENGTH	L OVERALL LENGTH	Ø E	T MAX TRAVEL
VA 01	8	6.6	11	24	6	1.2
VA 02	12	9.7	18	34	8	1.9
VA 03	18	14.8	22	45.5	12	2.5

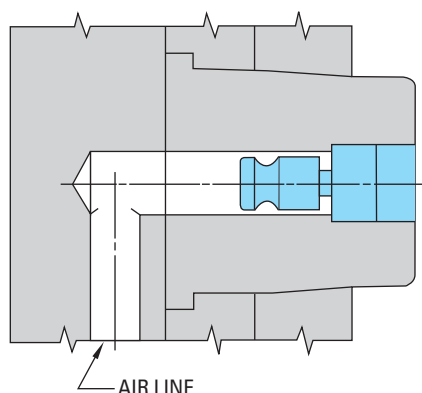
All dimensions shown are in mm.

# Air Poppet Valves – Typical Installations

## Typical Installations

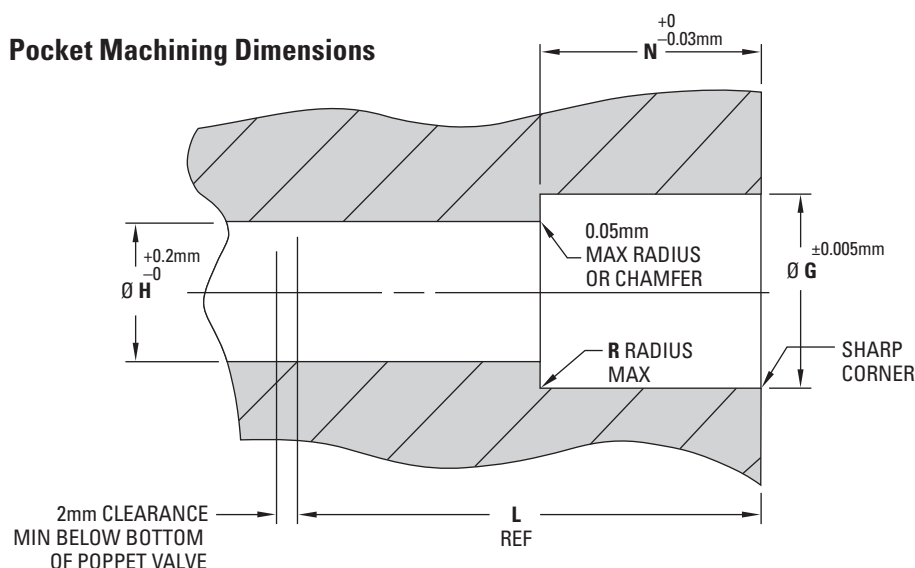


Standard 'A' Series Mold Base Installation (Ejector pins required for part ejection)



'X' Series Stripper Plate Mold Base Installation (Stripper plate required for part ejection)

## Pocket Machining Dimensions



ITEM NUMBER	Ø G	N DEPTH	Ø H	R	L REF
VA01	8	11	6.75	0.1	24
VA02	12	18	9	0.2	34
VA03	18	22	14	0.3	45.5

All dimensions shown are in mm.

### Quantity Discounts

8 to 15 valves	Less 3%
16 or more valves	Less 5%

Discounts apply to current net prices.  
Sizes may be combined on one order for quantity discounts.

## Installation Information

- Press-fit installation required.
- Maintain a close tolerance press fit, as specified. Too loose a fit could allow the Air Poppet Valve to move out of position, while too tight a press fit could interfere with the movement of the valve.

### NOTES:

1. Pressure to air line of Air Poppet Valve and machine ejection should be activated at the same time. This allows valve to relieve negative pressure build-up (vacuum) in the cavity during part ejection.
2. The air flow to the poppet valve must be fully relieved to the atmosphere after each cycle to ensure that the poppet valve closes before the next injection cycle. Material injected into a partially open poppet valve could cause damage to the valve and/or the mold. Control valves and limit switches to be supplied by moldmaker and/or molder.
3. The Air Poppet Valve should never be used as the sole means of part ejection. Material shrinkage and other factors will not allow it to be used as an alternative to ejector pins or stripper plates.
4. Do not position Air Poppet Valve directly under hot drop.