

# Check Valve 81073-A Series

## GENERAL DESCRIPTION

This simple and compact valve "checks" flow in one direction but allows flow in the opposite direction.

## SPECIFICATIONS

### Construction:

*Body* ..... Brass.  
*O-Ring* ..... Buna-N.  
**Approximate Shipping Weight:** ..... .03 Kg (1 oz.).  
**Dimensions:** ..... See Figure 1.  
**Operating Pressure:** ..... 0 to 17 bar (0 to 250 psi).  
**Proof Pressure:** ..... 69 bar (1000 psi).  
**Leakage:** ..... 0 at .07 to 17 bar  
 (1 to 250 psi) operating pressure.

### Models Available:

*81073-A1* ..... 1/8"-27 NPT  
*81073-A2* ..... 1/4"-18 NPT  
**Nominal Cracking Pressure:** ..... .07 bar (1 psi)  
**Operating Temperatures:** ..... -40 to 121° C.  
 (-40 to 250° F.).

**Control Medium:** ..... Air, Natural Gas, Nitrogen.  
**Filtration: (Minimum):** ..... 25 microns.  
**Moisture (Pressure Dewpoint):** ..... 8.3° C. (15° F.)  
 less than ambient temperature.

### Oil Content:

*(Natural Base)* ..... 0 ppm.  
*(Synthetic Base)* ..... 0 ppm.  
**Hydrogen Sulfide:** ..... 0 ppm.

## INSTALLATION

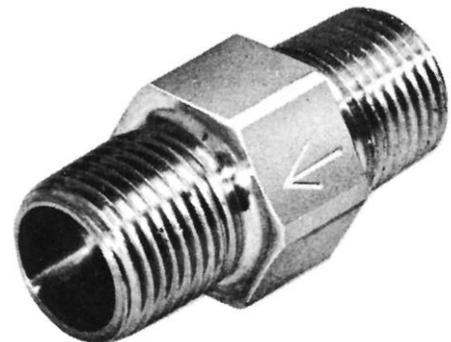
### Mounting:

The 81073-A Series Check Valve may be mounted in any position. Care should be taken to prevent any foreign matter from entering the ports during installation. Note arrow on valve for correct direction of flow.

### Connections:

The valve is available with either 1/8"-27 NPT or 1/4"-18 NPT connections. Tubing and fittings used to connect the sensor must be free of chips, dirt, moisture, or other foreign matter.

It is recommended that a non-hardening anti-seize type thread compound be applied to the second or third male thread in moderate amount. Do not allow any compound to be deposited inside the valve. Thread sealing tape is not recommended.



J.I.C. Symbol

## FEATURES:

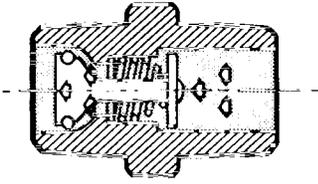
**SELF-CLEANING** . . . Poppet design is protected from larger foreign particles by the screening action of the spring.

**MAINTENANCE FREE** . . . No special seats requiring replacing or refacing. O-Ring absorbs the shock and automatically compensates for normal wear.

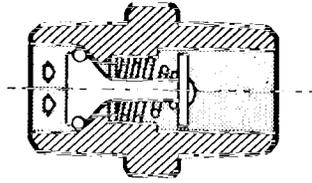
## ORDERING INFORMATION

Specify - Model No.

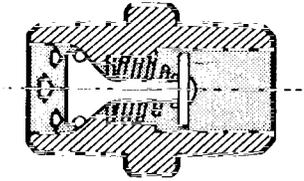
## OPERATION



Flow passes smoothly over poppet head with minimum turbulence.



O-Ring automatically establishes line of contact with spherical seat to cushion closing and ensure perfect seating.



O-Ring only seals. Full pressure is carried by metal to metal seat. Increasing pressure increases sealing efficiency.

## MAINTENANCE

This assembly must be replaced as a unit rather than being repaired in the field.

## DIMENSIONS

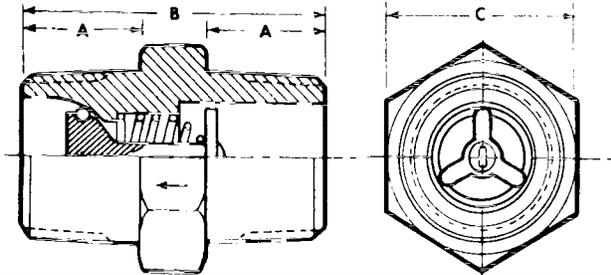


Figure 1

Model No.	Size	Dimensions, mm. (In.)			Pressure Drop Air/Gas
		A	B	C	
81073-A1	1/8-27 NPT	9.9 (25/64)	27 (1-5/64)	13 (1/2)	.345 bar @ .944 dm <sup>3</sup> /s (5 psi @ 2.0 scfm)
81073-A2	1/4-18 NPT	15 (19/32)	38 (1-1/2)	16 (5/8)	.345 bar @ 2.22 dm <sup>3</sup> /s (5 psi @ 4.7 scfm)

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