

DUAL-CHECK® PNEUMATIC CHECK VALVE



The patented Aladco® Dual-Check® valve is a parallel normally closed set of pilot operated check valves in a single package that is designed to stop and hold a cylinder in position in the event of loss of pressure. The tightly sealed ball checks in the Dual-Check® valves are used on pneumatic devices to prevent air from flowing from both sides of the device towards the ball checks upon loss of pressure from a directional control valve.

The Dual-Check® valve is available with both a vented manual override and without. **The vented manual override allows the user to exhaust both sides of the device simultaneously to minimize movement of the device as pressure is being relieved.** The 62 Dual-Check® valve series without the manual vent are suitable for clean-room environment.

A typical use of a Dual-Check® valve involves combining it with a directional control valve to stop a device upon loss of air pressure. With an appropriate combination of directional control valves and other pneumatic components, a cylinder position control system using a Dual-Check® valve can accommodate for both normal position control as well as rapid motion stoppage and position holding. Two example schematics are shown to illustrate potential uses of the Dual-Check® valve.

Aladco® highly recommends the use of spring centered 3 position 5 way centered vented valves for directional control with the use of Dual-Check® valves.

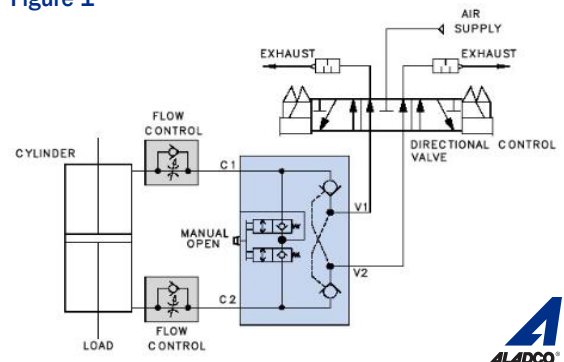
Features:

- Superior, self-cleaning ball & seat seal provides long product life
- Exceeds ANSI Class VI Leak Standard (bubble tight)
- Body is made of high strength, lightweight, anodized 6061 aluminum alloy
- Variety of porting options
- Designed for use with lubricated or non-lubricated air systems
- Tamper resistant with no required maintenance
- Prevents load drift and provides rapid stopping of load
- Ability to provide multiple position control
- Patented and Made in Waukesha, Wisconsin USA
- Standard 3-year warranty

Additional Notes:

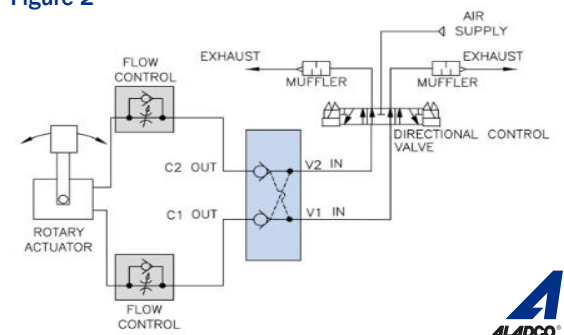
- MTTF is over 100 million cycles for Buna-N seals and over 40 million cycles for Viton® seals
- NPTF Ports conform to ASME B1.20.1-2013 Pipe Threads, General Purpose (Inch)
- BSPP (G) Ports conform to ISO 16030:2003: Pneumatic fluid power – Connections – Ports and stud ends
- Standard operating pressure is 15 to 150 psi
- Standard operating temperature 30° to 150°F
- Stainless steel 303 is no longer an available option for Dual-Check® configurations – please see our line of Clean-Check® pneumatic valves for stainless steel valve options

Figure 1



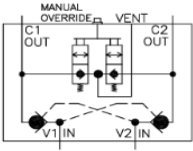
An example of a system using a Dual-Check® valve with vented manual override that will stop and prevent drift of the cylinder upon pressure loss or upon loss of power to directional control valve.

Figure 2

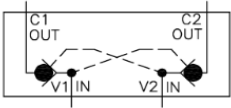


An example of a system using a Dual-Check® valve without manual vent will stop and prevent drift of the rotary actuator upon pressure loss or upon loss of power to directional control valve.

Dual-Check® Pneumatic Check Valve Specifications:



Model Type 60 & 61



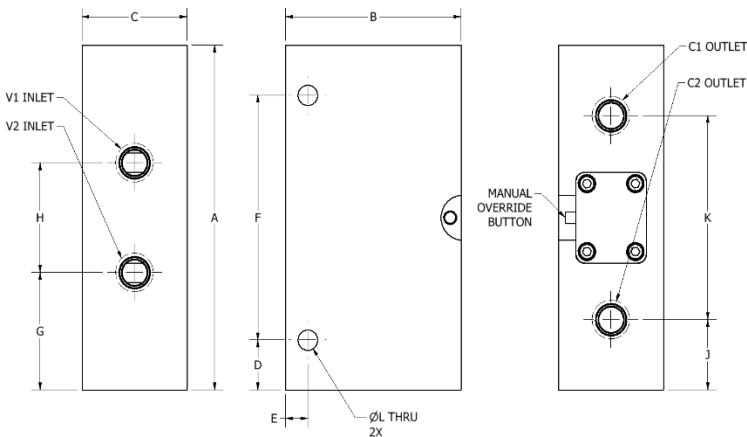
Model Type 62

DIMENSIONS & SPECIFICATIONS

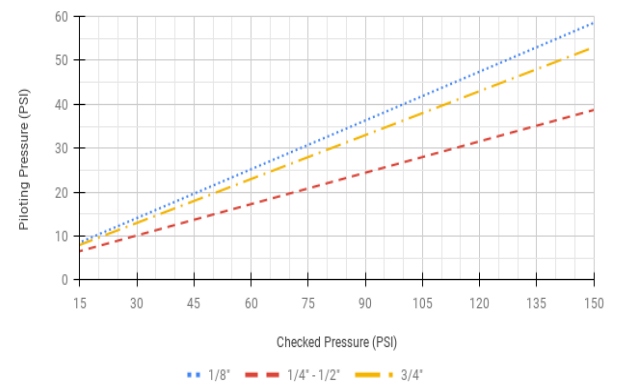
Inlet-Outlet Port Size	A	B	C	D	E	F	G	H	J	K	L	Cracking Pressure	CV	Pilot Ratio	Weight (AL)
1/8	3.38	1.75	1.00	0.69	0.25	2.00	1.17	1.03	0.68	2.02	0.22	2 - 4 psi	0.8	3:1	1.60
1/4	4.75	2.50	1.50	0.69	0.31	3.38	1.62	1.51	0.97	2.81	0.28	2 - 4 psi	1.7	4:1	1.50
3/8	4.75	3.00	1.50	0.69	0.44	3.38	1.62	1.51	0.97	2.81	0.28	2 - 4 psi	1.7	4:1	1.80
1/2	4.75	3.00	1.50	0.69	0.44	3.38	1.62	1.51	0.97	2.81	0.28	2 - 4 psi	1.7	4:1	1.80
3/4	5.20	3.00	1.50	0.60	0.32	4.00	1.73	1.75	0.76	3.68	0.28	2 - 4 psi	3.2	3:1	1.90

*All A-L dimensions in inches; weight in pounds

Disclaimer: Technical details subject to change without notice



Dual-Check® Piloting Pressure



Model Ordering Information:

MODEL TYPE

- 60** Dual-Check® - Extended Vented Manual Override Button, Standard
- 61** Dual-Check® - Flush Vented Manual Override Button, Standard
- 62** Dual-Check® - No Manual Vent, Assembled Per Order

INLET-OUTLET PORT SIZE

- | | |
|---|---|
| 12 1/8" NPTF Thread, Standard
*Unavailable in 60 series | 12 1/8G BSPP Thread, Standard
*Unavailable in 60 series |
| 25 1/4" NPTF Thread, Standard | 25 1/4G BSPP Thread, Standard |
| 38 3/8" NPTF Thread, Standard | 38 3/8G BSPP Thread, Standard |
| 50 1/2" NPTF Thread, Standard | 50 1/2G BSPP Thread, Standard |
| 75 3/4" NPTF Thread, Standard | 75 3/4G BSPP Thread, Standard |

NOTE Please select the appropriate thread type based on inlet outlet port selection

Model Number

XX XX XX X

SEAL TYPE

- 01** Buna-N Seals, Standard
- 02** Viton® Seals, Assembled Per Order

THREAD CLASS

- blank** UNF Threaded Ports, Standard **or**
- BSPP** G BSPP Threaded Ports, Standard

Model Examples:

Model 603801 is a Dual-Check® valve with 3/8" NPTF threaded Inlet-Outlet port, Buna-N seal, and an extended vented manual override button.
Model 613801BSPP is a Dual-Check® valve with 3/8G BSPP threaded Inlet-Outlet port, Buna-N seal, and a flush vented manual override button.

Manufacturer of Nu-Check®, Dual-Check®, Clean-Check® and Equa-Check® Pilot Operated Pneumatic Check Valves and Accu-Locator™ Shim Block Assemblies

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