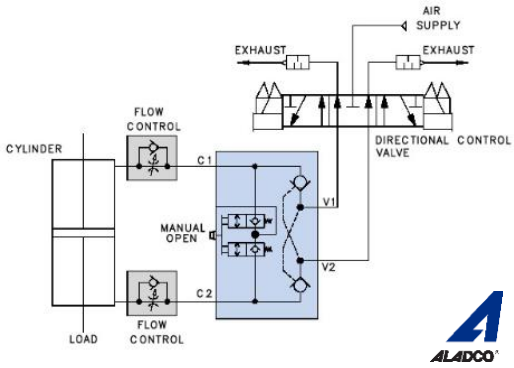
DUAL-CHECK® PNEUMATIC CHECK VALVE

The Dual-Check® valve, designed specifically for pneumatics, is a patented Aladco® product. It is the only parallel check valve that can be manually overridden with an internally plumbed air pilot or a single override button that releases both sides at once.

A typical use of a Dual-Check® valve involves combining it with a direction control valve to control air flow from both ports of a double acting cylinder. With an appropriate combination of direction control valves and other pneumatic components, a cylinder position control system using a Dual-Check® can handle both normal position control and standby or safety stop conditions. A combined valve system can have excellent fail-safe and assured control properties.

Applications can involve work holding, clamping and positioning, and moving parts or equipment components in a wide variety of manually operated and automated machinery. Specific circuit design and switching valve selection are application-dependent. Your Aladco® distributor or Aladco® can be contacted to provide assistance with answering application questions.

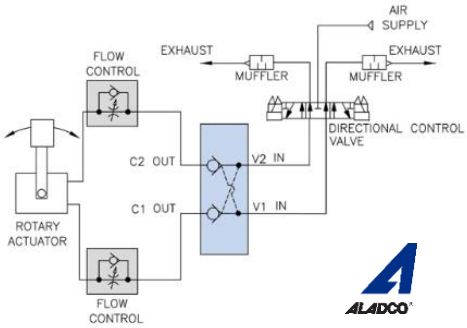


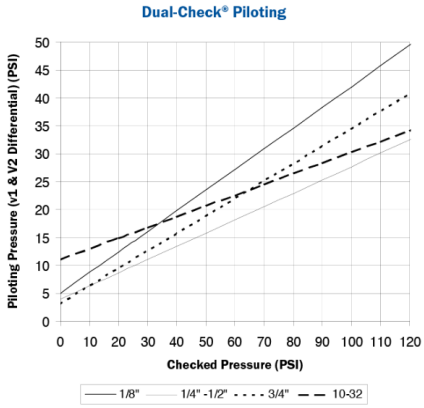
Features:

- Superior, self-cleaning ball 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

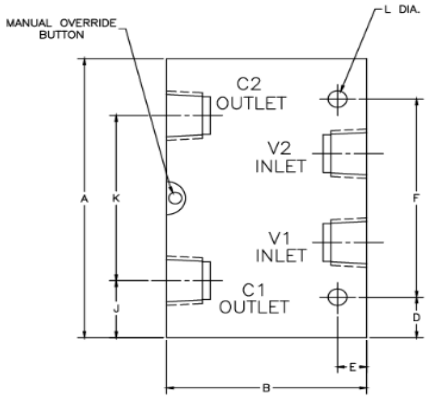
Additional Notes:

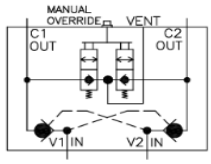
- Standard seal is Buna-N (30° to 250°F temperature range); Viton® (-15° to 400°F temperature range) is also an available option
- MTTF is over 100 million cycles for Buna-N seals and over 40 million cycles for Viton® seals
- NPTF Ports conform to ASME B1.20.1-2013 Pipe Threads, General Purpose (Inch)
- BSPP (G) and M5 Ports conform to ISO 16030:2003: Pneumatic fluid power – Connections – Ports and stud ends
- Operating pressure is 15 to 150 psi
- Operating temperature 30° to 150°F
- Stainless steel is no longer an available option for Dual-Check® configurations – please see our line of Clean-Check® pneumatic valves for stainless steel valve options



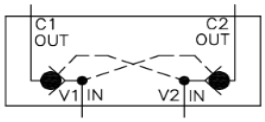


Dual-Check® Pneumatic Check Valve Dimensions





Model Types 60 & 61 Schematic



Model Type 62 Schematic

DIMENSIONS & SPECIFICATIONS																	
Port Size	A	B	C	D	E	F	G	H	J	K	L	Pilot Port	Cracking Pressure	CV	Pilot Ratio	Weight (AL)	Weight (SS)
#10-32	2.50	1.00	0.75	0.25	0.14	2.00	0.85	0.81	0.38	1.74	0.18	NA	2 - 4 psi	0.2	5.3:1	0.20	NA
1/8"	3.38	1.75	1.00	0.69	0.25	2.00	1.17	1.03	0.68	2.02	0.22	NA	2 - 4 psi	0.8	3:1	1.60	NA
1/4"	4.75	2.50	1.50	0.69	0.31	3.38	1.62	1.51	0.97	2.81	0.28	NA	2 - 4 psi	1.7	4:1	1.50	NA
3/8"	4.75	3.00	1.50	0.69	0.44	3.38	1.62	1.51	0.97	2.81	0.28	NA	2 - 4 psi	1.7	4:1	1.90	NA
1/2"	4.75	3.00	1.50	0.69	0.44	3.38	1.62	1.51	0.97	2.81	0.28	NA	2 - 4 psi	1.7	4:1	1.80	NA
3/4"	5.20	3.00	1.50	0.60	0.32	4.00	1.73	1.75	0.76	3.68	0.28	NA	2 - 4 psi	3.2	3:1	1.90	NA

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

Disclaimer: Technical details subject to change without notice

Model Ordering Information

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

INLET-OUTLET PORT SIZE

32	10-32 UNF Thread, Standard	**32**	M5 ISO Metric Thread, Standard
12	1/8" NPTF Thread, Standard	**12**	1/8G BSPP Thread, Standard
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**	3/4 NPTF 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 (Temp Range: 30° to 150° F), Standard
- **02 -** Viton® Seals (Temp Range: -15° to 400° F), Assembled Per Order

THREAD TYPE
- **blank** NPTF Threaded Ports, Standard
- **blank** UNF Threaded Ports, Standard
- **BSPP** G BSPP Threaded Ports, Standard
- **M5** ISO Metric 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 override button.
Model 603801BSPP is a Dual-Check® valve with 3/8" BSPP threaded Inlet-Outlet port, Buna-N seal, and an extended override button.

ALADCO®