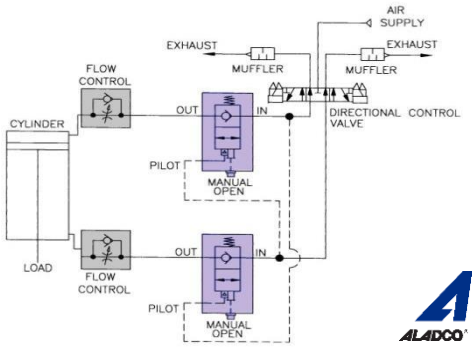
NU-CHECK® PNEUMATIC CHECK VALVE

The Nu-Check® valve, designed specifically for pneumatics, is a patented Aladco® product. It was the first check valve on the market with both manual and pilot release capabilities. The unique bubble-tight seal keeps devices in “checked” position. If pressure loss or fluctuation should occur, the valve prevents drifting. To release the seal, depress the manual override button or operate the pilot.

An Aladco® Nu-Check® valve is a normally closed check valve that can be either overridden by air piloting or manually to allow two-way flow. The tightly sealed Nu-Check® valves are used on pneumatic devices to stop air release when the device is stopped, which prevents drifting of the device and any attached load.

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

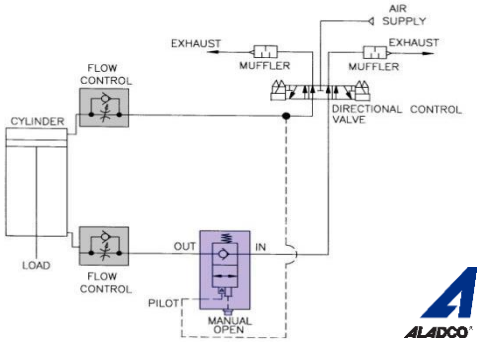


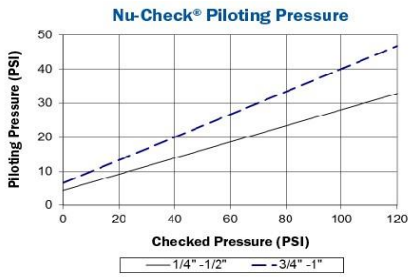
Features:

- 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
- Patented and Made in Waukesha, Wisconsin USA
- Standard 3-year warranty

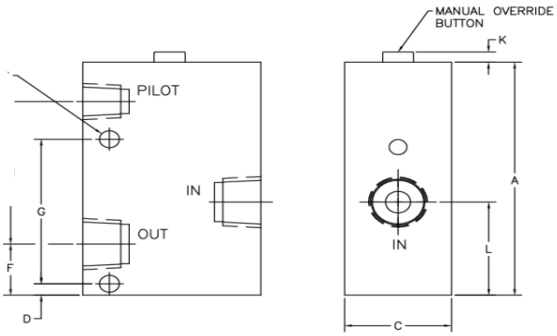
Additional Notes:

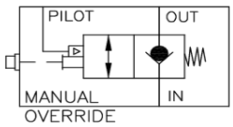
- Standard seal is Buna-N (30° to 250°F temperature range); Viton® (-15° to 400°F temperature range) is also an available option
- MTTF is over 100 million cycles for Buna-N seals and over 40 million cycles for Viton® seals
- NPTF Ports conform to ASME B1.20.1-2013 Pipe Threads, General Purpose (Inch)
- 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
- 10-32 and 1/8″ port sizes are no longer available as Nu-Check® options – please see our line of Clean-Check® pneumatic valves for compatible configurations
- Stainless steel is no longer an available option for Nu-Check® configurations – please see our line of Clean-Check® pneumatic valves for stainless steel valve options



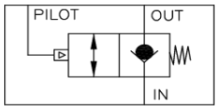


Nu-Check® Pneumatic Check Valve Dimensions





Model Types 30 & 31 Schematic



Model Types 32 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)
1/4"	3.83	2.00	1.50	0.20	0.38	0.84	2.38	2.36	0.28	0.17	1.53	1/4"	2 - 4 psi	1.7	4:1	1.00	NA
3/8"	3.83	2.50	1.50	0.20	0.38	0.84	2.38	2.36	0.28	0.17	1.53	1/4"	2 - 4 psi	1.7	4:1	1.30	NA
1/2"	3.83	2.50	1.50	0.20	0.38	0.84	2.38	2.36	0.28	0.17	1.53	1/4"	2 - 4 psi	1.7	4:1	1.30	NA
3/4"	5.35	3.00	2.00	2.00	0.38	1.00	2.00	3.77	0.28	0.23	2.53	1/4"	2 - 4 psi	4.0	3:1	2.80	NA
1"	5.35	3.00	2.00	2.00	0.38	1.00	2.00	3.77	0.28	0.23	2.53	1/4"	2 - 4 psi	4.0	3:1	2.70	NA

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

Disclaimer: Technical details subject to change without notice

Model Ordering Information

MODEL TYPE
- **30** Nu-Check® - Extended Override Button, Standard
- **31** Nu-Check® - Flush Override Button, Standard
- **32** Nu-Check® - No Manual Override, Assembled Per Order

INLET-OUTLET PORT SIZE

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
01	1" NPTF Thread, Standard	**01**	1G BSPP Thread, Standard

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

Model Number | XX | XX | XX | X | 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
- **BSPP** G BSPP Threaded ports, Standard

OPTIONAL SUFFIX
- **HP** High Pressure (350 PSI Max), Assembled Per Order
- **NCP** No Cracking Pressure, Assembled Per Order
- **VAC** Vacuum Valve, Assembled Per Order

Model Examples:

Model 303801BSPP is a Nu-Check® valve with 3/8" BSPP threaded Inlet-Outlet port, Buna-N seal, and an extended override button.
Model 303801 is a Nu-Check® valve with 3/8" NPTF threaded Inlet-Outlet port, Buna-N seal, and an extended override button.

ALADCO®