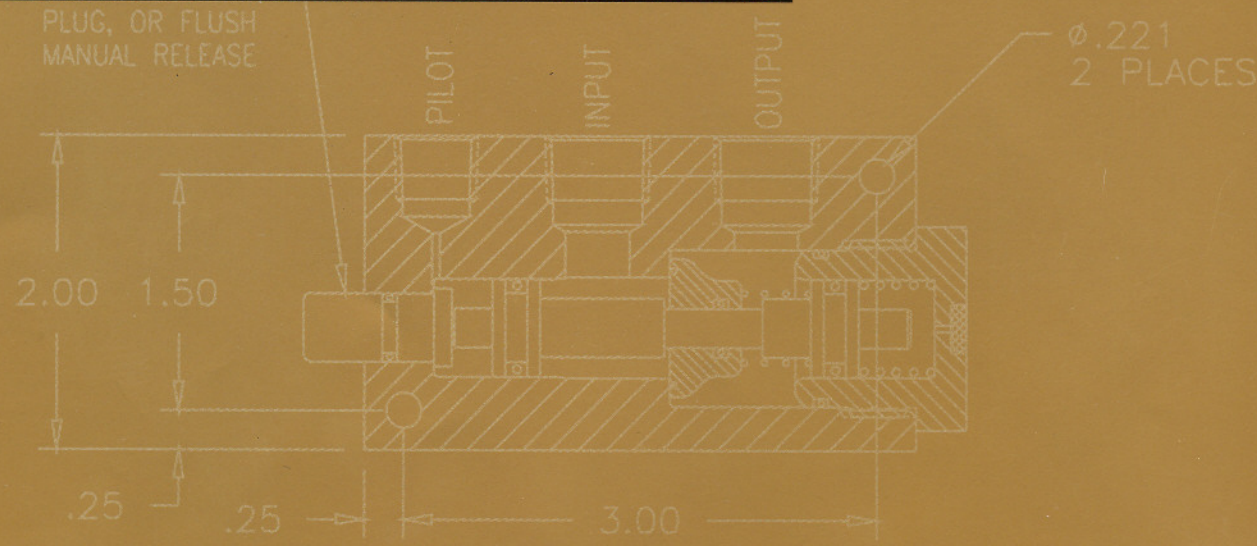
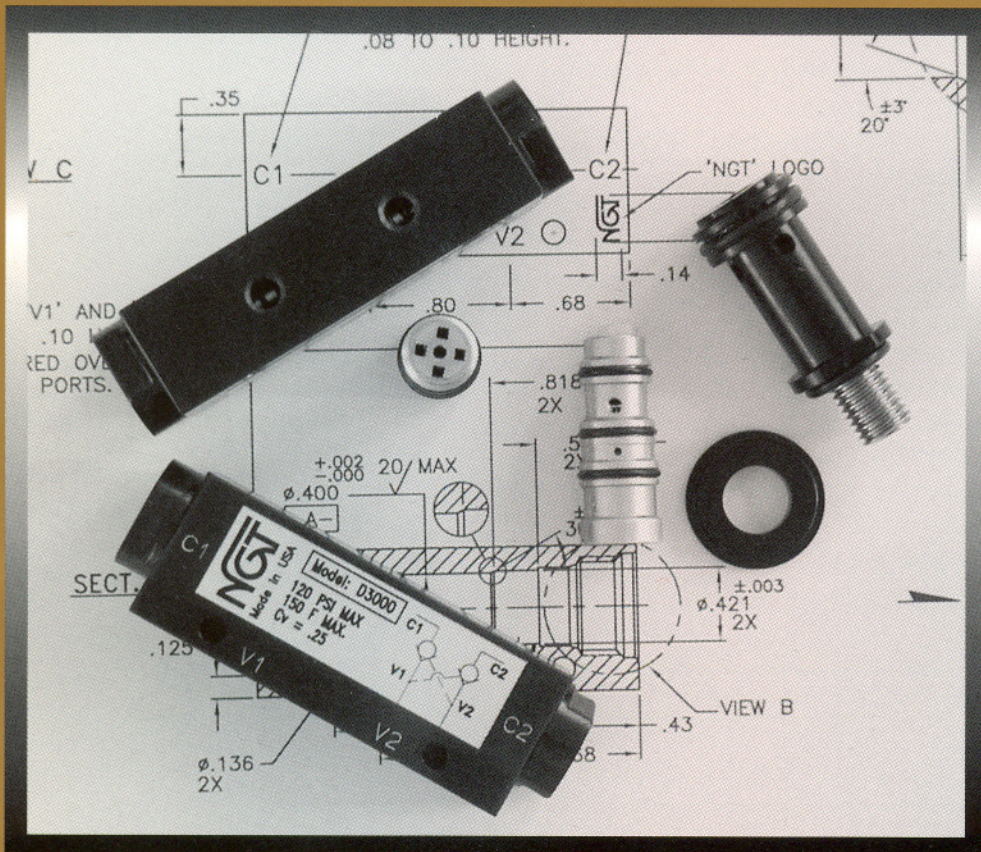


# NGT

## PNEUMATIC VALVES

NEW PRODUCTS NOW AVAILABLE



**FLOW CONTROLS • AUTO RELEASE • BSPP PORTS • EASY REPAIR • LONGER LIFE • SPECIALS**



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- 3) 1/4 & 3/8 NPTF - P.O. Check with Adjustable Pilot 'Quick Closing'
- 4) 1/4 & 3/8 NPTF - P.O. Checks with Swivel Mount
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## Balanced Poppet

Regular ball and poppet pilot check valves require large pilot pistons in order to open the main seat. The pilot piston force must overcome the force resulting from pressure trapped behind the main seat.

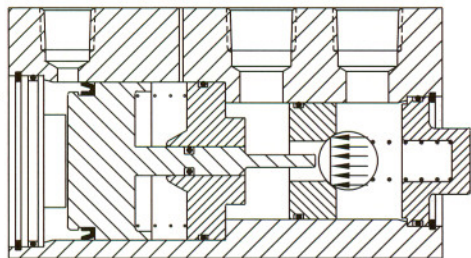
Large pilot pistons cause high operating forces that decrease the life of the valve. NGT's patented balanced design reduces the force required to open the valve.

A typical ball type or poppet type check valve with the same flow area as the balanced check will have 16 times the force required to open the

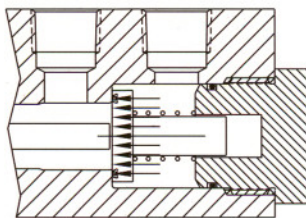
valve. Opening a valve seat with 44 lbf for 10 million cycles would cause significant wear, as opposed to 2.7 lbf for 10 million cycles. The air cushions on both ends of the pistons also help to reduce wear due to impact forces when the balanced piston shifts.

## Easy Repair

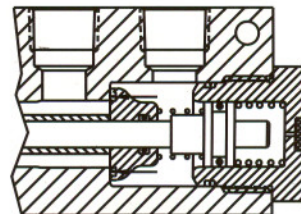
To repair, remove the endcap, insert a new cartridge and replace the endcap. This can be accomplished in a few seconds without removing the plumbing.



Ball Check



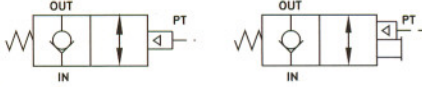
Poppet Check



Balanced Poppet Check

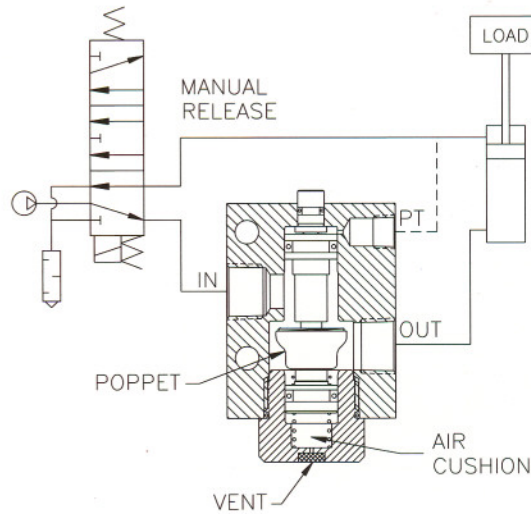
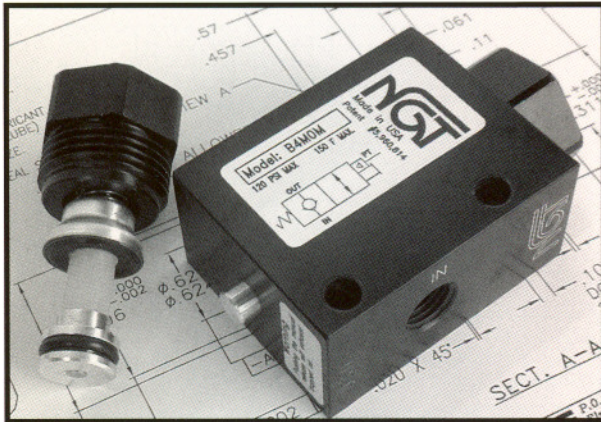
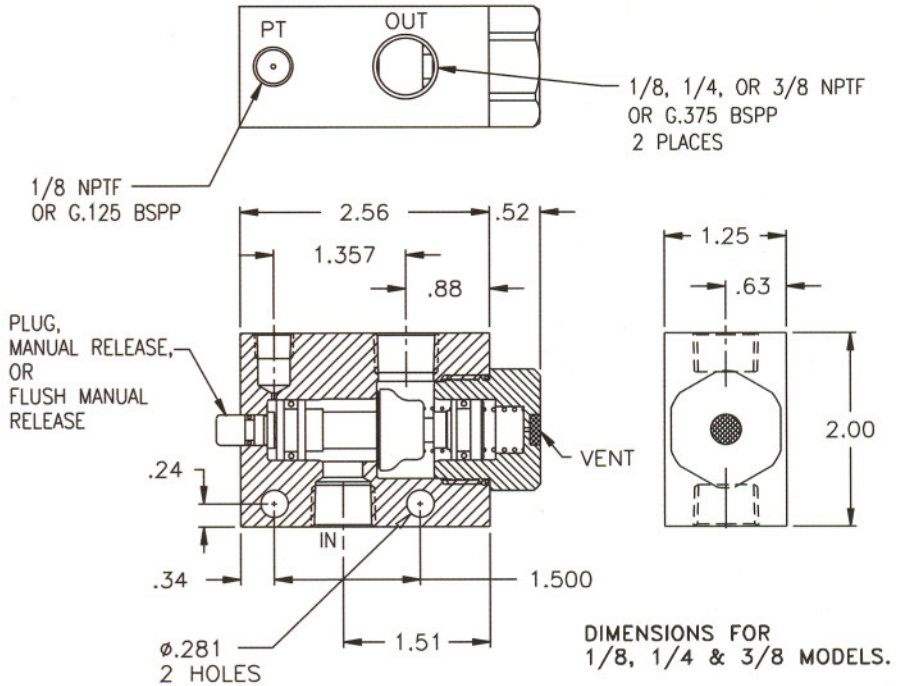
# 1/8, 1/4 & 3/8 NPTF & G3/8 BSPP Balanced Pilot Operated Check Valves

- New Faster Closing
- Optional Manual Release
- Bubble Tight Locking
- 316 Stainless Available
- 350° Degrees F
- G.375 BSPP In Stock



## Basic Operation:

Lock your pneumatic device in position when a pressure drop or total loss of pressure occurs. Manual release for exhausting trapped air before maintaining the system (OSHA requirement).



## Operating Data:

Max. Pressure : 120 psi  
 Min. Pilot Pressure: 40 psi  
 Temp Range: 30° - 150° F  
 30° - 350° F (Available)  
 Cycle Rate: 1 cycles/sec max.  
 Flow Capacity (Cv): 1.7 - (1/8 model)  
 2.6 - (1/4 & 3/8 models)  
 Cracking Pressure: 2 psi  
 Pilot Ratio: 2:1 (80 psi trapped pressure requires 40 psi to open the valve)  
 Service: Properly filtered and lubricated air or dry air

Model No.	1/8 NPTF	1/4 NPTF	3/8 NPTF	3/8 BSPP
No Manual Release	<b>B2M00</b>	<b>B4M00</b>	<b>B6M00</b>	<b>BG6M00</b>
Manual Release	<b>B2M0M</b>	<b>B4M0M</b>	<b>B6M0M</b>	<b>BG6M0M</b>
Flush Manual Release	<b>B2MFM</b>	<b>B4MFM</b>	<b>B6MFM</b>	<b>BG6MFM</b>
Replacement Cartridge & Spring	<b>BC400</b>			
For high temp seals, add (-V) to the model number (Example: B2M0M-V)				
Call for 316 Stainless 1/4 & 3/8 NPTF				



# 1/8, 1/4 & 3/8 NPTF & G3/8 BSPP Pilot Operated Check Valves with Flow Controls

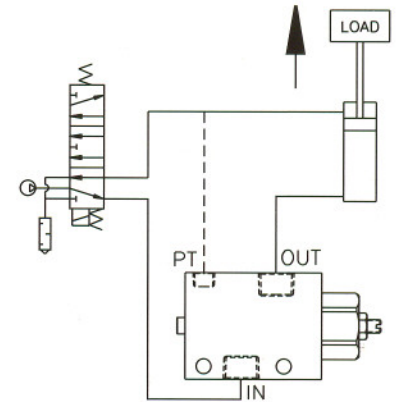
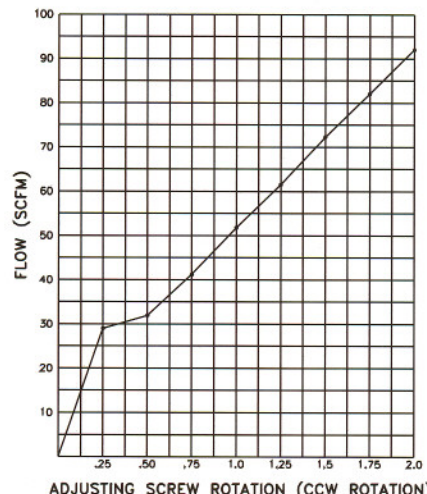
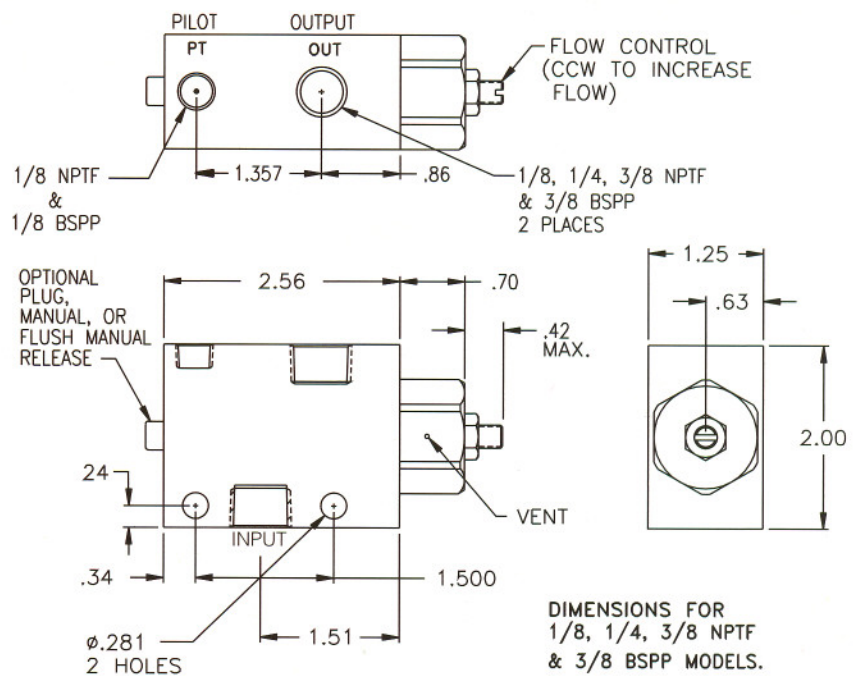
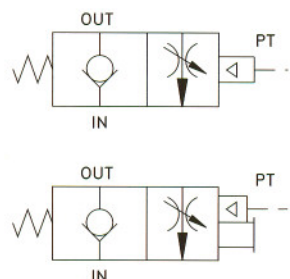
Fast Advance and Slow Retract - Avoid Crash Landings



- Flow Controls
- Optional Manual Release
- Bubble Tight
- Faster Closing
- Less Plumbing

## Basic Operation:

Hold position when a pressure drop or total loss of pressure occurs. Air is metered from the output to the input port. Manual release to exhaust trapped air before maintaining the system (OSHA requirement).



## Operating Data:

**Maximum Pressure:** 120 psi  
**Min. Pilot Pressure:** 40  
**Temp Range:** 30° - 150° F  
**Cycle Rate:** 1 cycles/sec. max.  
**Flow Capacity (CV)** 1.7 - (1/8 models)  
**Input to Output** 2.6 - (1/4 & 3/8 models)  
**Cracking Pressure:** 2 psi  
**Pilot Ratio:** 2:1 @ 80 psi - (80 psi @ output port requires 40 psi at the pilot port).  
**Service:** Properly filtered and lubricated air or dry air

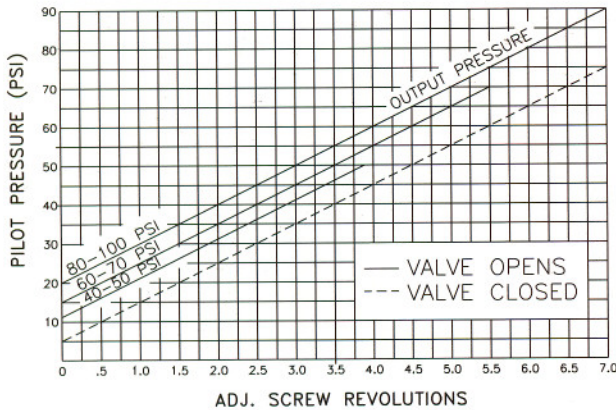
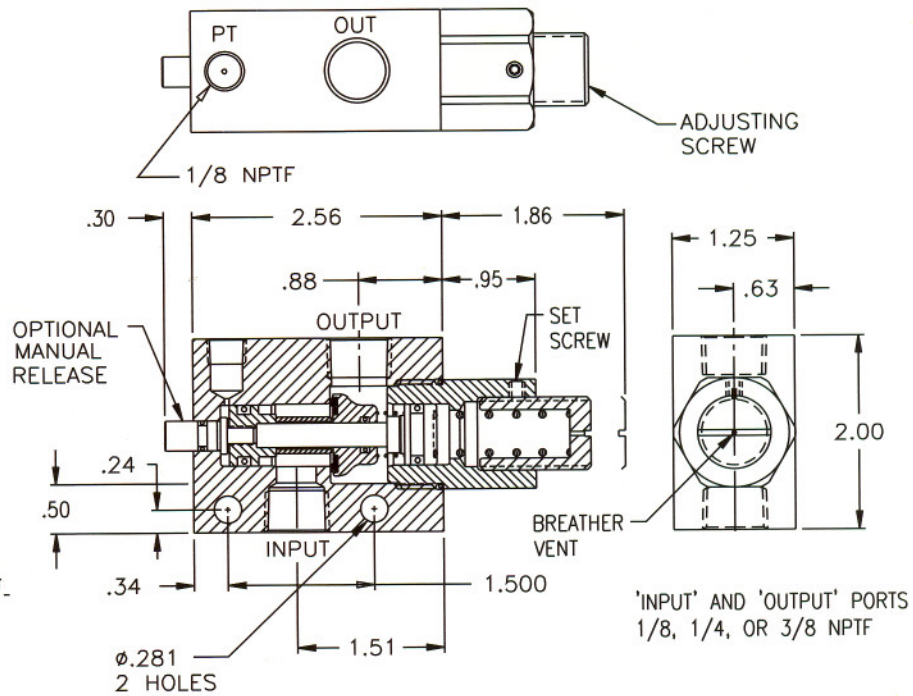
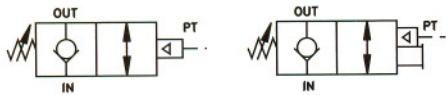
Model No.	1/8 NPTF	1/4 NPTF	3/8 NPTF	3/8 BSPP
No Manual Release	B2M00FL	B4M00FL	B6M00FL	BG6M00FL
Manual Release	B2M0MFL	B4M0MFL	B6M0MFL	BG6M0MFL
Flush Manual Release	B2MFMFL	B4MFMFL	B6MFMFL	BG6MFMFL
Replacement Cartridge & Spring	BC400			

# 1/4 & 3/8 NPTF Adjustable 'Quick Stop' Pilot-Operated Check Valves for Faster Stops

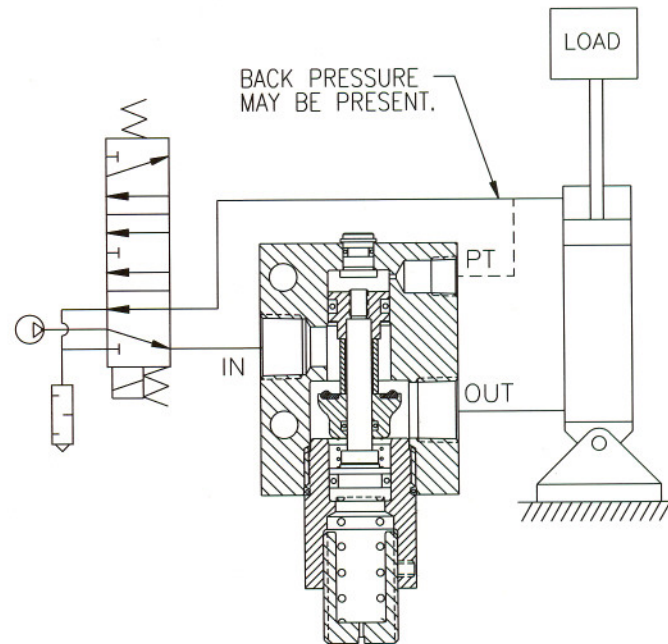
- Adjustable Pilot Pressure
- Faster Stops
- Seals Bubble Tight
- High Flow
- Manual Release Option

## Basic Operation:

Standard pilot-operated check valves will not close fast enough when back pressure is present in the pilot line. Increasing the spring pressure causes the valve to close at a higher pilot pressure or before all the air exhausts. This results in quicker stops.



EXAMPLE: With the output pressure or trapped pressure at 80 psi the pilot pressure to open the valve must be a minimum of 55 psi. The valve will close when the back pressure drops to 40 psi.



## Operating Data:

Pilot Pressure: 100 psi  
 Valve Pressure: 120 psi  
 Temp Range: 30° - 150° F  
 Flow Capacity (Cv): 2.6  
 Cracking Pressure: 2 psi  
 Service: Properly filtered and lubricated air or dry air

Model No.	1/4 NPTF	3/8 NPTF
No Manual Release	<b>B4M00-AD</b>	<b>B6M00-AD</b>
Manual Release	<b>B4M0M-AD</b>	<b>B6M0M-AD</b>
Flush Manual Release	<b>B4MFM-AD</b>	<b>B6MFM-AD</b>

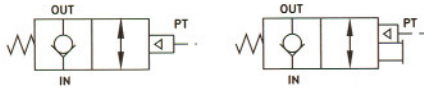


# 1/4, 3/8 & 1/2 NPTF Swivel Mount Pilot-Operated Check Valve

- *Optional Manual Release*
- *Bubble Tight Locking*
- *High Flow*
- *High Temp Available*
- *Direct Mounting*

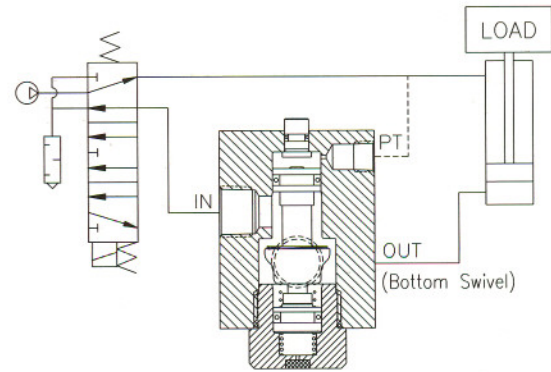
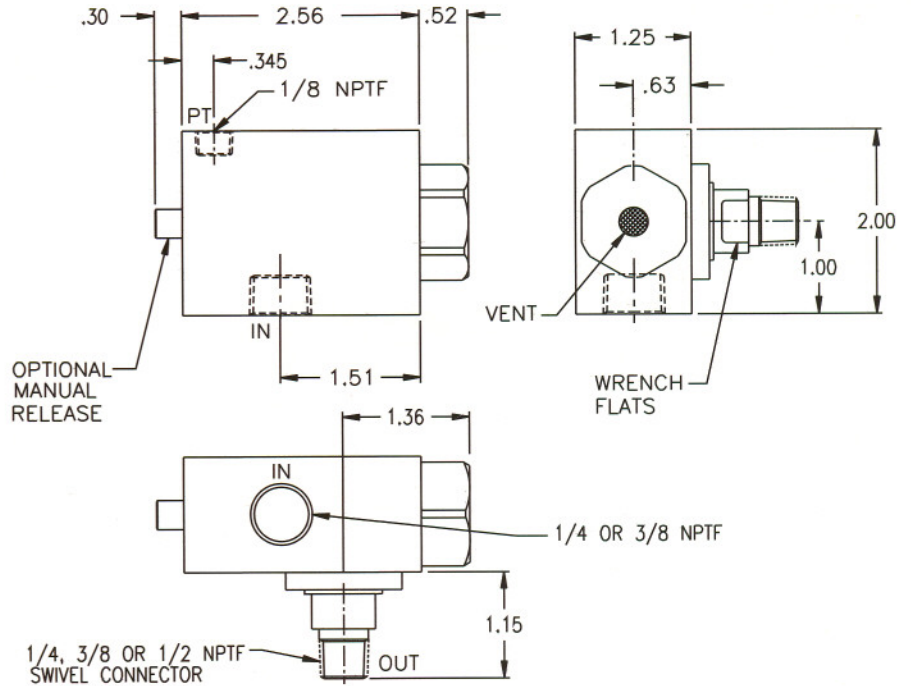
## Basic Operation:

Locks any pneumatic device in position when a pressure drop or total loss of pressure occurs. Manual release for exhausting trapped air before maintaining the system (OSHA requirement).



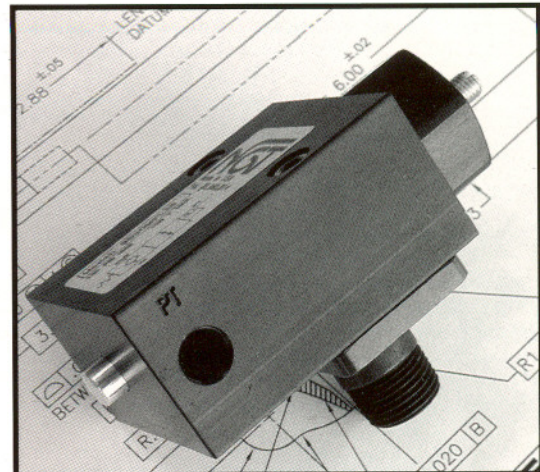
## Operating Data:

Max. Pressure :	120 psi
Min. Pilot Pressure:	40 psi
Temp Range:	30° - 150° F 30° - 350° F (Available)
Cycle Rate:	1 cycles/sec. max.
Flow Capacity (Cv):	2.6 - (1/4 & 3/8 models)
Cracking Pressure:	2 psi
Pilot Ratio:	2:1 @ 80 psi
Service:	Properly filtered and lubricated air or dry air



Model No.			
1/4 NPTF Input Port			
	1/4 Swivel (Output)	3/8 Swivel (Output)	1/2 Swivel (Output)
No Manual Release	<b>B4S00-25</b>	<b>B4S00-38</b>	<b>B4S00-50</b>
Manual Release	<b>B4S0M-25</b>	<b>B4S0M-38</b>	<b>B4S0M-50</b>
Flush Manual Release	<b>B4SFM-25</b>	<b>B4SFM-38</b>	<b>B4SFM-50</b>

Model No.			
3/8 NPTF Input Port			
	1/4 Swivel (Output)	3/8 Swivel (Output)	1/2 Swivel (Output)
No Manual Release	<b>B6S00-25</b>	<b>B6S00-38</b>	<b>B6S00-50</b>
Manual Release	<b>B6S0M-25</b>	<b>B6S0M-38</b>	<b>B6S0M-50</b>
Flush Manual Release	<b>B6SFM-25</b>	<b>B6SFM-38</b>	<b>B6SFM-50</b>
Replacement Cartridge & Spring	<b>BC400</b>		
For high temp version, add a (-V) to the end of the model number (Example: B4S0M-25-V).			



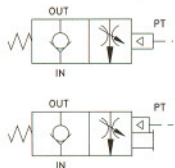


# 1/4 & 3/8 NPTF Swivel Mount Pilot-Operated Check Valves with Flow Controls

- Optional Manual Release
- Bubble Tight Locking
- Swivel Mount
- Flow Controls
- High Flow

## Basic Operation:

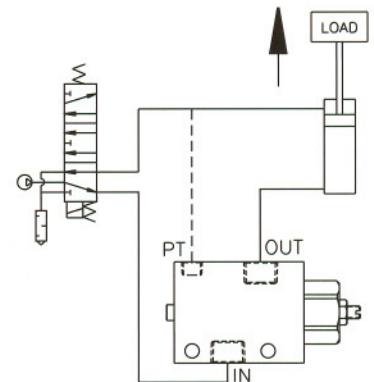
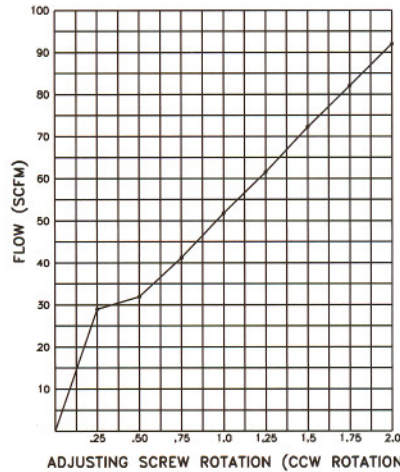
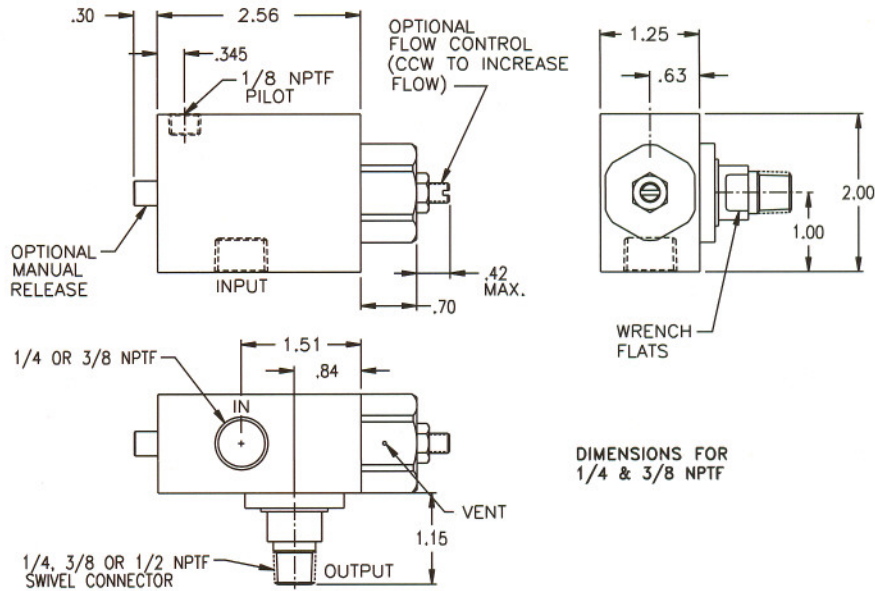
Hold position when a pressure drop or total loss of pressure occurs. Fast advance and slow retract to avoid crash landings. Manual release to exhaust trapped air before maintaining the system (OSHA requirement).



## Operating Data:

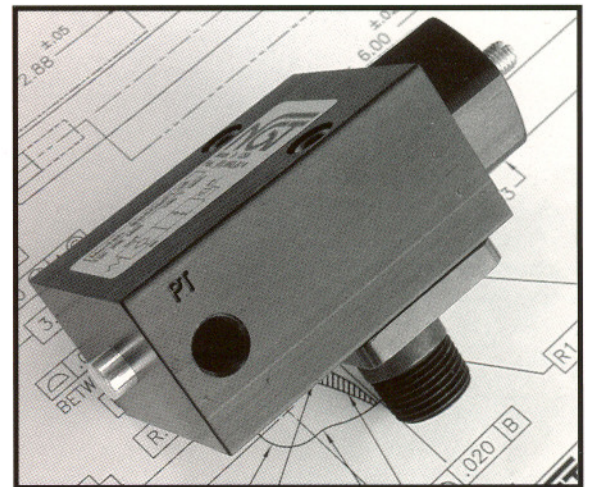
**Max Pressure:** 120 psi  
**Min. Pilot Pressure:** 40 psi  
**Temp Range:** 30° - 150° F  
**Cycle Rate:** 1 cyc/sec. max.  
**Flow Capacity (Cv):** See Graph (for both 1/4 & 3/8 models)

**Cracking Pressure:** 2 psi  
**Pilot Ratio:** 2:1 @ 80 psi  
**Service:** Properly filtered and lubricated air or dry air



Model No.			
<b>1/4 NPTF Input Port</b>			
	1/4 Swivel (Output)	3/8 Swivel (Output)	1/2 Swivel (Output)
No Manual Release	<b>B4S0025FL</b>	<b>B4S0038FL</b>	<b>B4S0050FL</b>
Manual Release	<b>B4S0M25FL</b>	<b>B4S0M38FL</b>	<b>B4S0M50FL</b>
Flush Manual Release	<b>B4SFM25FL</b>	<b>B4SFM38FL</b>	<b>B4SFM50FL</b>

Model No.			
<b>3/8 NPTF Input Port</b>			
	1/4 Swivel (Output)	3/8 Swivel (Output)	1/2 Swivel (Output)
No Manual Release	<b>B6S0025FL</b>	<b>B6S0038FL</b>	<b>B6S0050FL</b>
Manual Release	<b>B6S0M25FL</b>	<b>B6S0M38FL</b>	<b>B6S0M50FL</b>
Flush Manual Release	<b>B6SFM25FL</b>	<b>B6SFM38FL</b>	<b>B6SFM50FL</b>
Replacement Cartridge & Spring	<b>BC400</b>		





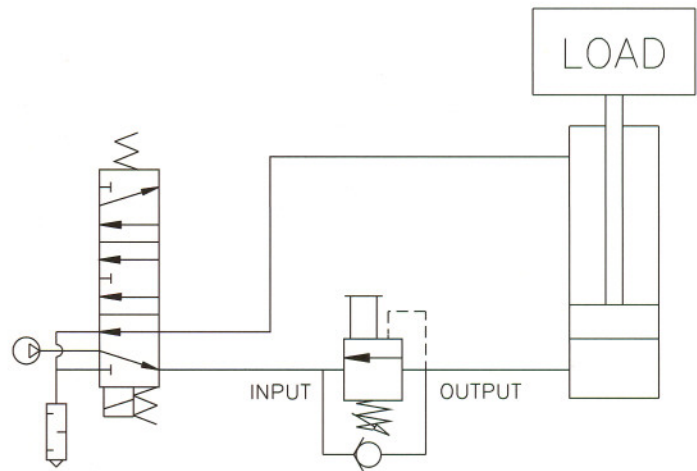
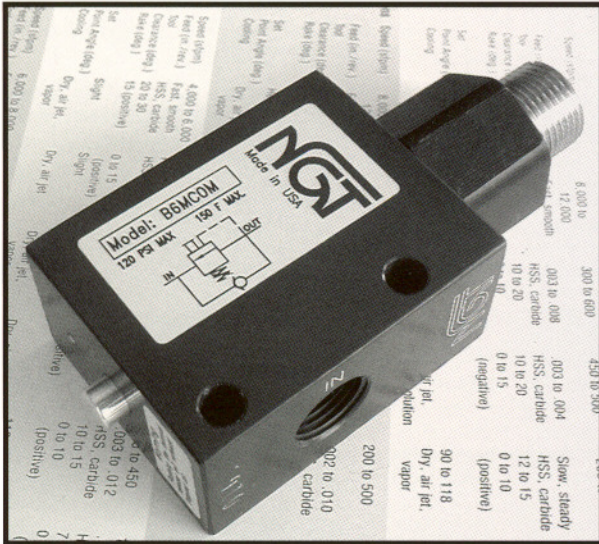
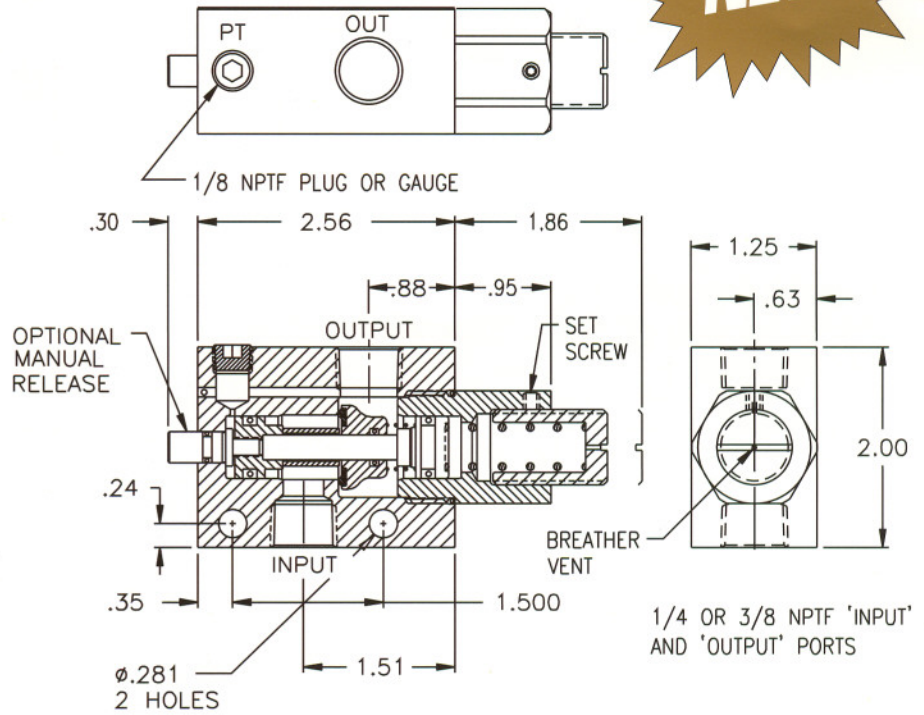
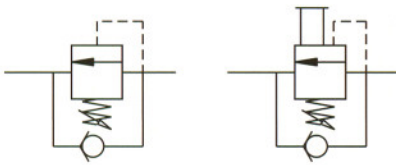
# 1/4 & 3/8 NPTF Pneumatic Counterbalance Valve



- Seals Bubble Tight
- Optional Manual Release
- Adjustable Load

## Basic Operation:

The counterbalance valve will hold a load in position until pressure is applied to move the load. Turning the adjusting screw clockwise increases the load setting. An optional manual release will exhaust trapped pressure before maintaining the system.



## Operating Data:

Pressure Range: 25 - 120 psi  
 Temp Range: 30° - 150° F  
 Flow Capacity (Cv): 2.6 - (1/4 & 3/8 models)  
 Cracking Pressure: 2 psi  
 Adj. Pressure: 100 psi max.  
 Service: Properly filtered and lubricated air or dry air

Model No.	1/4 NPTF	3/8 NPTF
No Manual Release	<b>B4MC00</b>	<b>B6MC00</b>
Manual Release	<b>B4MC0M</b>	<b>B6MC0M</b>
Flush Manual Release	<b>B4MCFM</b>	<b>B6MCFM</b>
Replacement Cartridge	<b>BC400</b>	







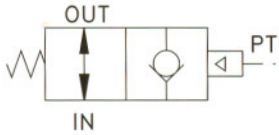
# 1/8, 1/4 & 3/8 NPTF 2-Way Normally Open Pilot to Close



- Bubble Tight Locking
- High Flow
- Pilot Operated

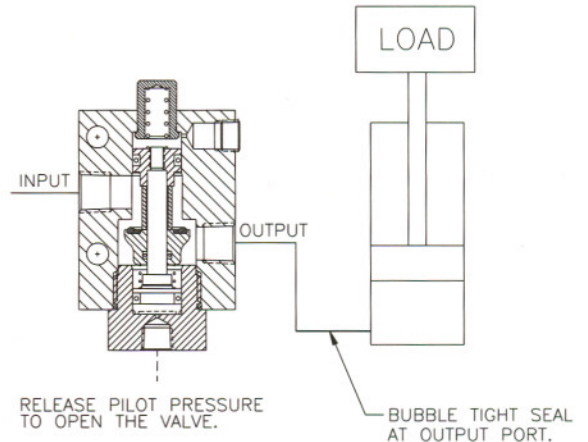
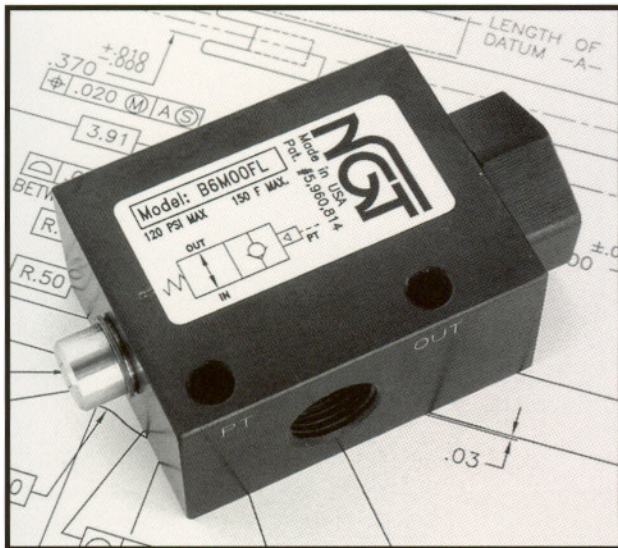
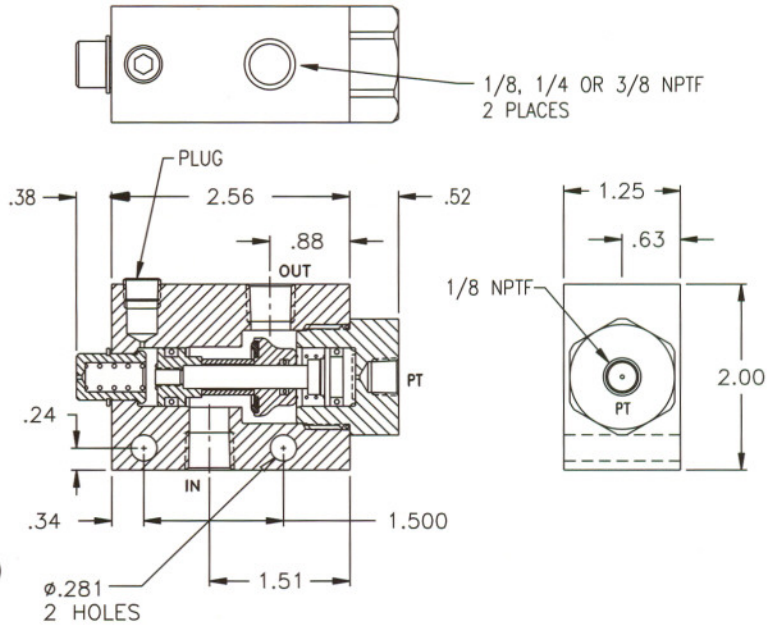
## Basic Operation:

Normally open valve that closes when pressure is applied to the pilot port. To open the valve, release the pilot pressure. Internal pressure allows free flow in one direction.



## Operating Data:

Max. Pressure: 120 psi  
 Temp Range: 30° - 150° F.  
 Cycle Rate: 1 cycles/sec. max.  
 Flow Capacity (Cv): 1.7 - (1/8 model)  
 2.6 - (1/4 & 3/8 models)  
 Pilot to Close: 45 psi minimum  
 Service: Properly filtered and lubricated air or dry air



Model No.		
1/8 NPTF	1/4 NPTF	3/8 NPTF
<b>B2M00N0</b>	<b>B4M00N0</b>	<b>B6M00N0</b>



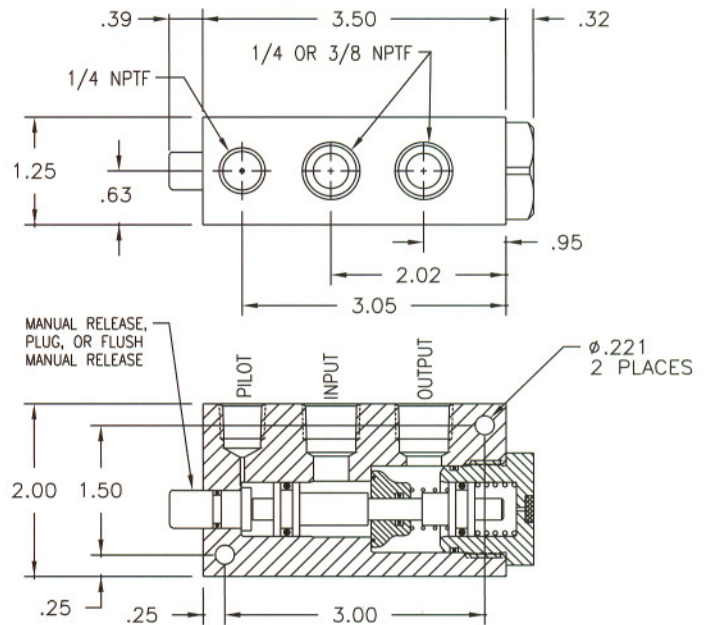
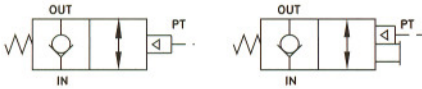
# 1/4 & 3/8 NPTF High Flow Balanced Pilot Operated Check Valves – Same Side Porting

Patent No. 5,960,814

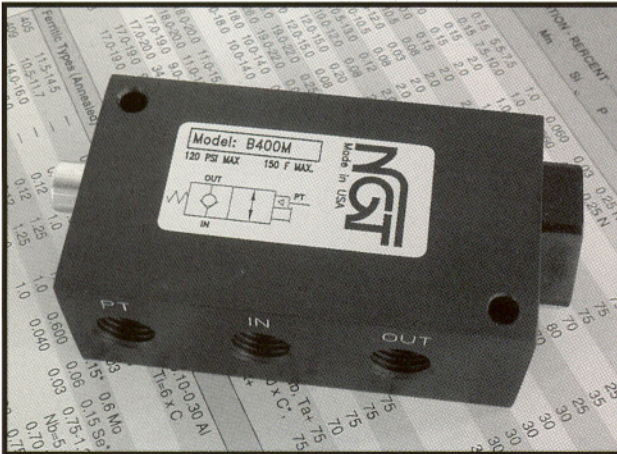
- Optional Manual Release
- Bubble Tight Locking
- High Flow
- 350° Degrees F

## Basic Operation:

Lock your pneumatic device in position when a pressure drop or total loss of pressure occurs. Optional manual release removes trapped air before maintaining the system (OSHA requirement).

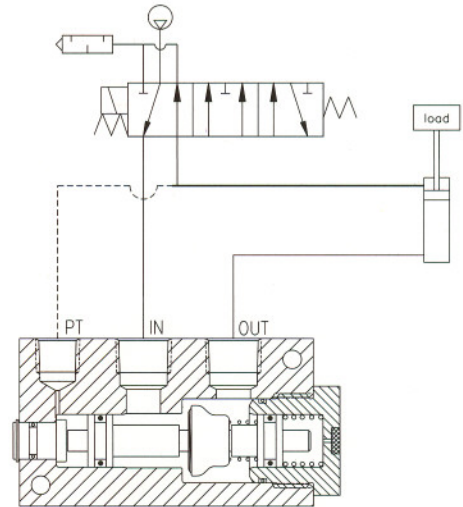


Dimensions for both the B4000 & B6000



## Operating Data:

- Max. Pressure: 120 psi  
 Min. Pilot Pressure: 40 psi  
 Temp Range: 30° - 150° F  
 30° - 350° F (Available)  
 Cycle Rate: 1 cycles/sec. Max.  
 Flow Capacity (CV): 2.8  
 Cracking Pressure: 2 psi  
 Pilot Ratio: 2:1 @ 80 psi  
 Service: Properly filtered and lubricated air or dry air



Typical Locking Circuit

Model No.	1/4 NPTF	3/8 NPTF
No Manual Release	<b>B4000</b>	<b>B6000</b>
Manual Release	<b>B400M</b>	<b>B600M</b>
Flush Manual Release	<b>B40FM</b>	<b>B60FM</b>

- For high temp seals add (-V) to the end of the model number.  
 - Add (-FL) for flow control. Flow control available by July 2005.

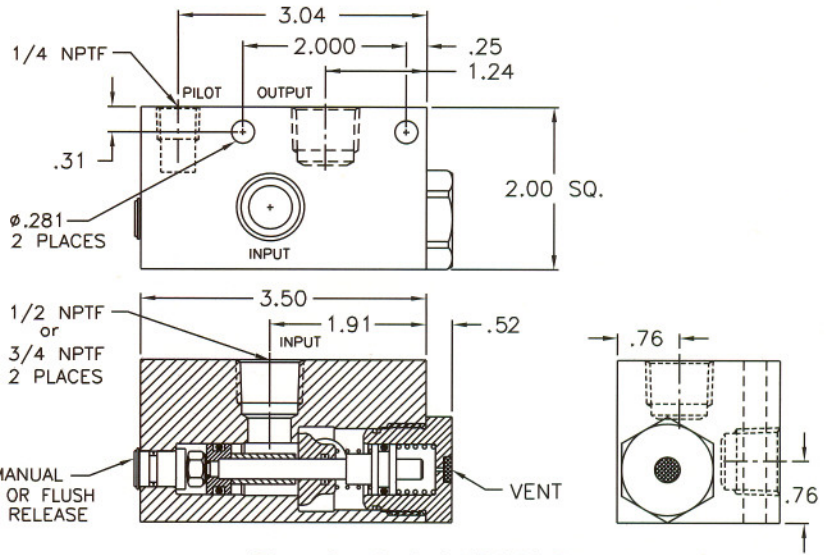
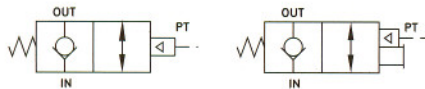


# 1/2 & 3/4 NPTF Balanced Pilot Operated Check Valves

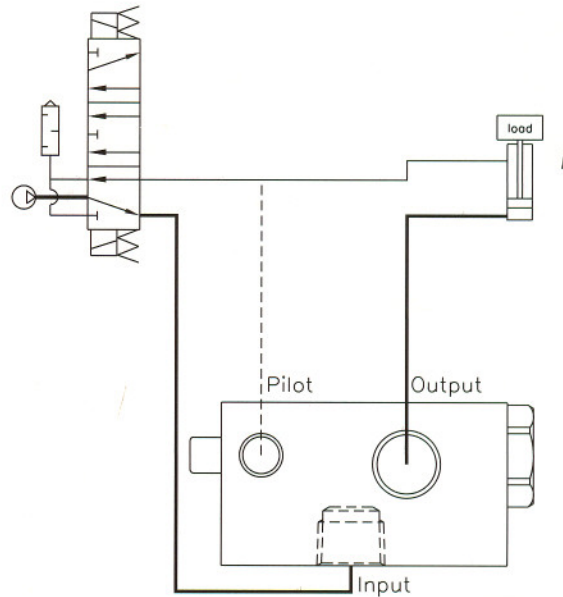
- Manual Release for Trapped Air
- Bubble Tight Locking
- High Flow
- 350° Degrees F

## Basic Operation:

Locks your pneumatic device in position when a pressure drop or total loss of pressure occurs. Manual release for exhausting trapped air before maintaining the system (OSHA requirement).



Dimensions for both 1/2 & 3/4 Ports



## Operating Data:

Max. Pressure: 120 psi  
 Min. Pressure: 40 psi  
 Temp Range: 30° - 150° F  
 30° - 350° F  
 Cycle Rate: 1 cycles/sec. max.  
 Flow Capacity (Cv): 3.8  
 Cracking Pressure: 2 psi  
 Pilot Ratio: 2:1 @ 80 psi  
 Service: Properly filtered and lubricated air or dry air

Model No.	1/2 NPTF*	3/8 NPTF
No Manual Release	<b>B8100</b>	<b>B12000</b>
Manual Release	<b>B810M</b>	<b>B1200M</b>
Flush Manual Release	<b>B81FM</b>	<b>B120FM</b>

\*1/2 available with flow controls add '-FL'  
 3/4 available with flow controls after July 2005

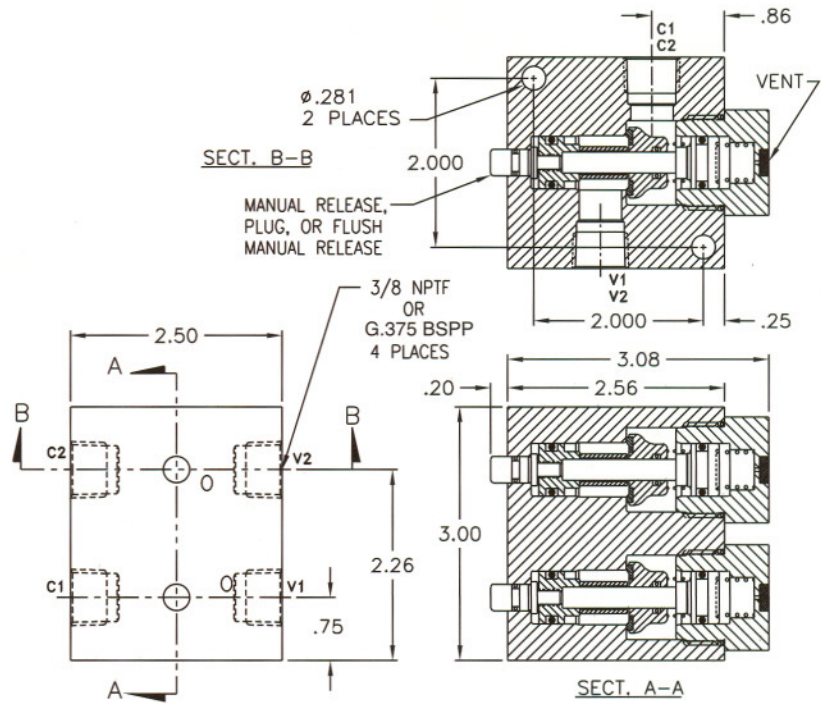
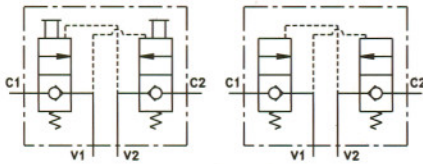


# 3/8 & 1/2 NPTF & 3/8 BSPP Dual Pilot Operated Check Valves

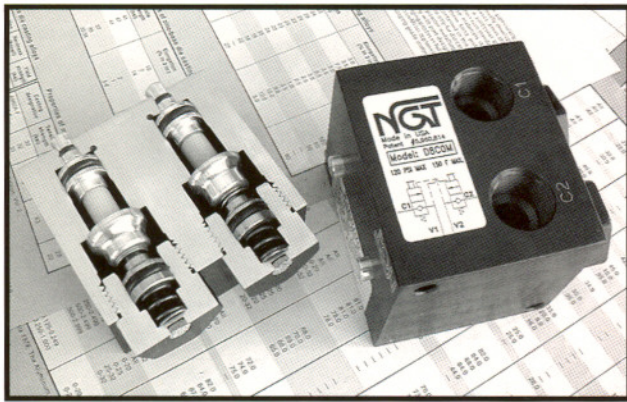
- *Optional Dual Manual Release*
- *Bubble Tight Locking*
- *350° Degrees F*
- *High Flow*
- *G.375 (BSPP) in Stock*

## Basic Operation:

In the event of a pressure loss, this unique valve maintains cylinder position by locking air in both cylinder ports. Eliminate cylinder drift due to leaky spool valves. A manual release is available to release trapped air from both ports independently.

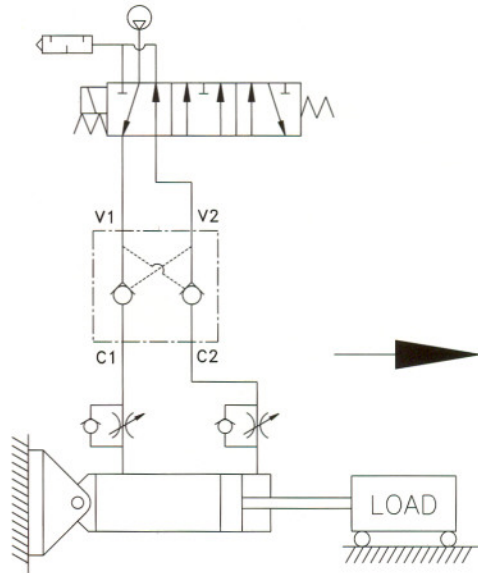


Dimensions apply to both 3/8 & 1/2 NPTF & BSPP models.



## Operating Data:

Pressure Range: 40 - 120 psi  
 Temp Range: 30° - 150° F  
 30° - 350° F (Available)  
 Cycle Rate: 1 cycles/sec. max.  
 Flow Capacity (Cv): 3.9  
 Cracking Pressure: 2 psi  
 Pilot Ratio: 2:1 @ 80 psi  
 Service: Properly filtered and lubricated air or dry air



Model No.	3/8 NPTF	3/8 BSPP	1/2 NPTF
No Manual Release	<b>D6C00</b>	<b>DG6C00</b>	<b>D8C00</b>
Manual Release	<b>D6C0M</b>	<b>DG6C0M</b>	<b>D8C0M</b>
Flush Manual Release	<b>D6CFM</b>	<b>DG6CFM</b>	<b>D8CFM</b>
For high temp seals add (-V) to the model number.			

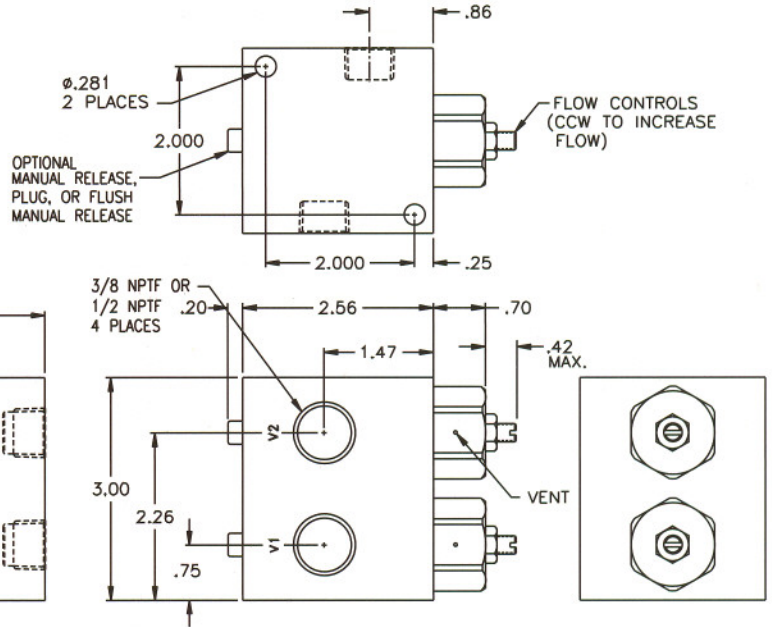
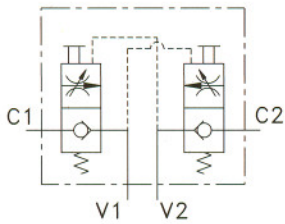


# 3/8 & 1/2 NPTF & 3/8 BSPP Dual Pilot Operated Check Valves with Flow Controls

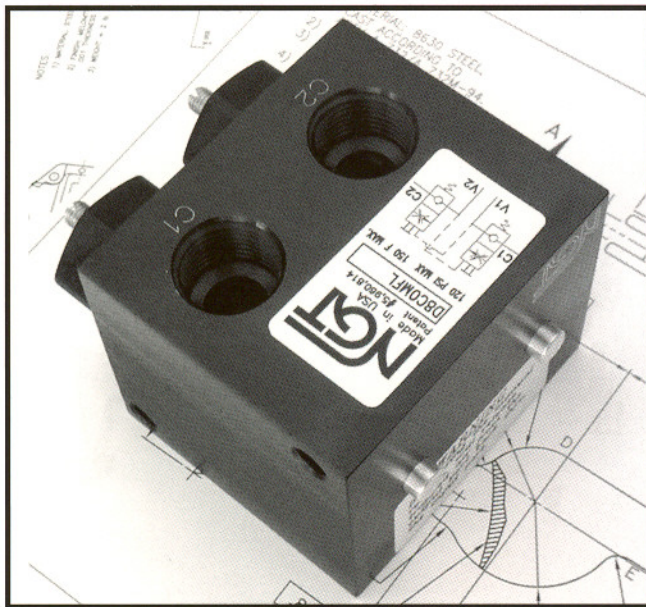
- Flow Controls
- Optional Manual Release
- Bubble Tight Locking
- G.375 (BSPP) in Stock

## Basic Operation:

In the event of a pressure loss this unique valve maintains cylinder position by locking air in both cylinder ports. The internal flow controls meter air out of the cylinder. A manual release is available to release trapped air from both ports independently.

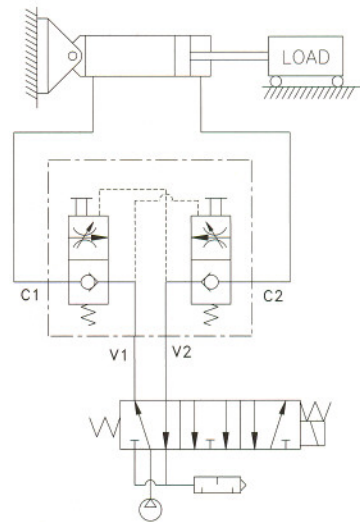


DIMS. APPLY TO BOTH 3/8 & 1/2 NPTF MODELS



## Operating Data:

Pressure Range: 40 - 120 psi  
 Temp Range: 30° - 150° F  
 Cycle Rate: 1 cyc/sec. max.  
 Flow Capacity (Cv): 3.9  
 Cracking Pressure: 2 psi  
 Pilot Ratio: 2:1 @ 80 psi  
 Service: Properly filtered and lubricated air or dry air

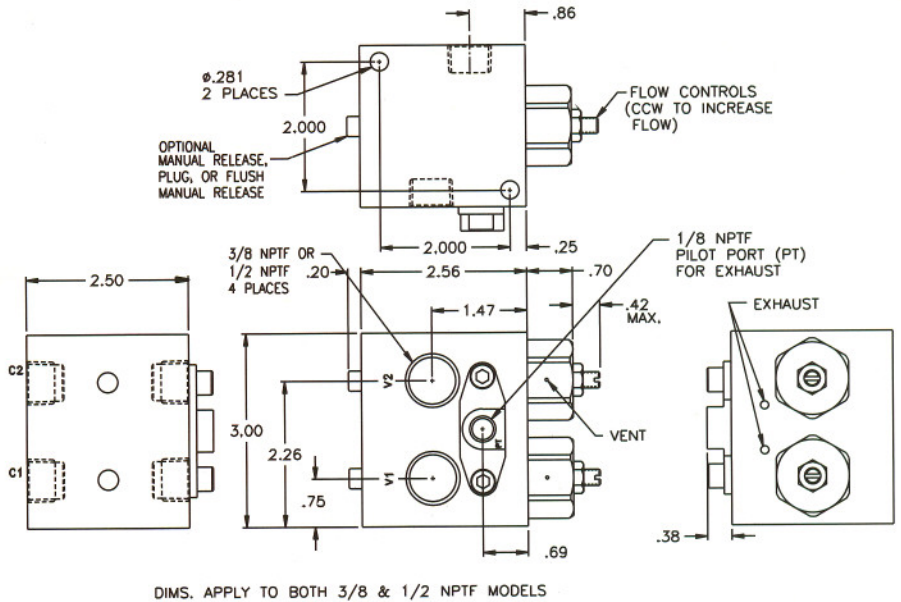
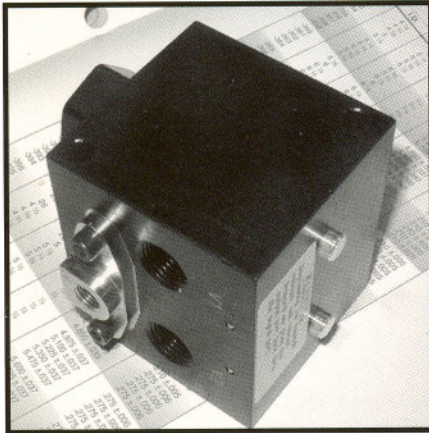


Model No.	3/8 NPTF	3/8 BSPP	1/2 NPTF
No Manual Release	<b>D6C00FL</b>	<b>DG6C00FL</b>	<b>D8C00FL</b>
Manual Release	<b>D6C0MFL</b>	<b>DG6C0MFL</b>	<b>D8C0MFL</b>
Flush Manual Release	<b>D6CFMFL</b>	<b>DG6CFMFL</b>	<b>D8CFMFL</b>
Replacement Cartridge & Spring - 2 required	<b>BC400</b>		



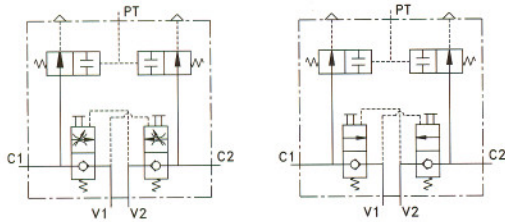
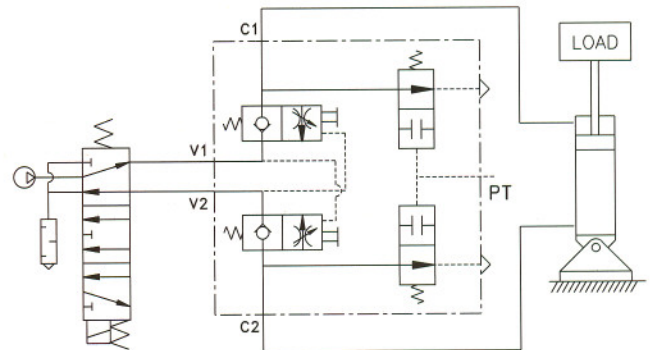
# 3/8 & 1/2 NPTF Dual Pilot Operated Check Valve with Remote Release, Optional Dual Manual Release and Optional Flow Controls

- *Optional Manual Release*
- *Bubble Tight Locking*
- *Flow Controls*
- *Auto Release to Atmosphere*



## Basic Operation:

This valve was designed for the Automotive Industry, where trapped air must be released before repairing equipment. In the event of a pressure loss, both output ports will lock bubble tight, as long as pressure is applied to the pilot port 'PT'. Releasing pressure to the pilot port 'PT' will release trapped air to atmosphere. Optional manual release and flow controls are also available with this model.



WITH FLOW CONTROLS

## Operating Data:

**Pressure Range:** 40-120 psi  
**Temp Range:** 30° - 150° F.  
**Flow Capacity (Cv):** 3.8  
**Cracking Pressure:** 2 psi  
**Pilot Ratio:** 2:1 @ 80 psi  
**Auto Exhaust:** At 80 psi trapped air the pilot port 'PT' must drop to 30 psi to exhaust. Properly filtered and lubricated air or dry air.

**Service:**

Model No.	3/8 NPTF	1/2 NPTF
No Manual Release	<b>D6C00EA</b>	<b>D8C00EA</b>
Manual Release	<b>D6C0MEA</b>	<b>D8C0MEA</b>
Flush Manual Release	<b>D6CFMEA</b>	<b>D8CFMEA</b>

Add '-FL' to the end of the model number for flow controls.  
Example: ( D6C0MEA-FL)







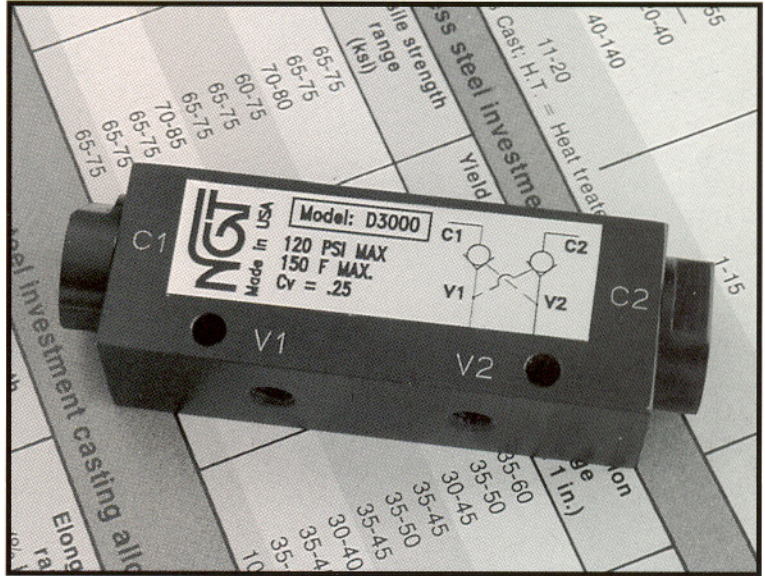
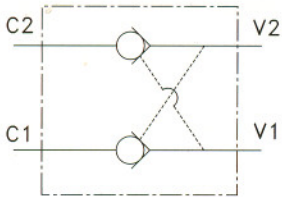


# Minature Dual Pilot Operated Check Valve with 10-32 Ports

- *Bubble Tight Lockings*
- *Small Size*
- *Quick Stop*

## NGT Advantages:

This small, high flow valve will lock air in two directions. The valve can be used to maintain position or to increase air cylinder stopping accuracy. It also maintains bubble tight locking in the event of a decrease or total loss of pressure.



## Operating Data:

Pressure Range:	25 - 120 psi
Temp Range:	30° - 150° F
Flow Capacity (CV):	.25
Cracking Pressure:	1 psi
Pilot Ratio:	3:1 @ 80 psi
Service:	Properly filtered and lubricated air or dry air

<b>Model No.</b>	<b>D3000</b>
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