

Features

N Series

N Series

For decades Parker Pneumatics and Heavy Industrial have been synonymous with durability and long life. High flow-speed N Series poppet valves have been operating in foundries, steel mills, and automotive casting & stamping plants without fail.

Features

- Continuous duty rated option
- Non-lube service
- Hi-flow, short stroke poppet
- Indicator lights available

Specifications

- 2-way NC
- 3-way NO & NC
- Selector function

Ports

- 3/8" Body – 3/8", 1/2" NPT; 3.0 to 4.4 Cv
- 3/4" Body – 1/2", 3/4", 1" NPT; 9.0 to 11.0 Cv
- 1-1/4" Body – 1", 1-1/4", 1-1/2" NPT; 20.0 to 30.0 Cv
- BSPP "G" threads available

Certification / approval

- Approved to be CE marked (Standard L-Pilot & P-Pilot)
- NEMA 4 Option
- Hazardous Duty Option IP65 Rating / NEMA 4

Material specifications

Valve body	Cast aluminum
Poppet assembly	Aluminum and stainless steel
Pilot Valve	Zinc, stainless steel, brass, copper, zinc plated steel
Seals	Nitrile

Lubrication

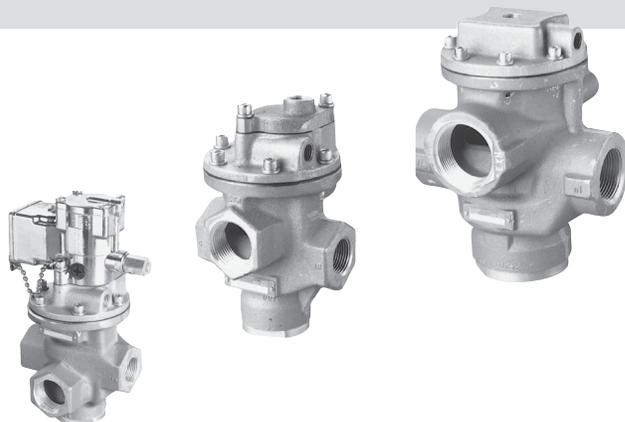
The high speed poppet valves are pre-lubricated to permit use with non-lubricated air. However, air should be lubricated to assure maximum seal life.

F442 lubricating oil is recommended. This oil is specially formulated to provide peak performance and maximum service life from air-operated equipment.

Installation

**CAUTION: DO NOT RESTRICT THE INLET TO POPPET VALVES**

Restriction of the inlet can starve the air supply to the pilot section of internally piloted poppet valves and result in slow shifting or failure of the valve to shift properly. Always connect the supply line directly to the inlet of the valve using the full pipe size of the valve inlet. Never use a quick coupling to connect a poppet valve to the air supply. On valves with a small inlet port, use of an upstream surge tank may be required at lower operating pressures to insure an adequate air supply and proper operation.



Operating information

Operating pressure:

Solenoid valves - internal pilot supply

3/8" Basic	3/4" Basic	1-1/4" Basic
20 to 140 PSIG (standard)	25 to 140 PSIG (200 PSIG option available)	25 to 140 PSIG (200 PSIG option available)

Solenoid valves - external pilot supply

Air pressure thru valve (PSI)	External pilot pressure required (PSI)*	
	3/8" Basic	3/4" Basic
25 PSI	35-200	35-200
50 PSI	45-200	40-200
75 PSI	55-200	50-200
100 PSI	65-200	65-200

Vacuum up to 1" HG, less than a perfect vacuum.

\* With 200 PSI option. Do not exceed 140 PSI with standard pilots.

Internal pilot - remote pilot valve

Air pressure thru valve (PSI)	Remote pilot pressure (PSI)		
	3/8" Basic	3/4" Basic	1-1/4" Basic
25 PSI	30-250	30-250	30-250
50 PSI	50-250	50-250	50-250
75 PSI	70-250	75-250	70-250
100 PSI	95-250	95-250	90-250
150 PSI	140-250	145-250	130-250
200 PSI	175-250	185-250	175-250
250 PSI	215-250	230-250	205-250

Operating temperature:

Operator type	Duty cycle*	Minimum ambient temperature	Maximum ambient temperature
Standard service	Intermittent	0°F (-18°C)	125°F (52°C)
Solenoid	Continuous	0°F (-18°C)	100°F (38°C)
Special service	Intermittent	0°F (-18°C)	125°F (52°C)
Solenoid	Continuous	0°F (-18°C)	125°F (52°C)
Remote pilot	Not applicable	0°F (-18°C)	200°F (93°C)

\* Applications with pilot valves energized for ten (10) minutes or longer with a duty cycle greater than 70% are considered to be continuously energized.

$$\text{Duty cycle} = \frac{\text{Time energized}}{\text{Time energized} + \text{time off}} \times 100\% = \% \text{ Duty Cycle}$$

C  
 Inline Valves  
 Viking Lite  
 Viking Extreme  
 "B" Series  
 Air Saver Unit  
 ADEX Series  
 "N" Series



For inventory, lead times, and kit lookup, visit [www.pdnplu.com](http://www.pdnplu.com)

**Single Solenoid, Non-locking manual override, internal "L" pilot 140 PSI, standard service, junction box w/ light.**



Normally Closed    Normally Open

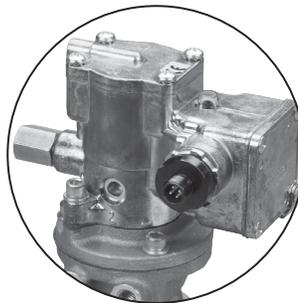
Body size	Cv	In / cyl ports	Exhaust port	Voltage	2-way, 2-position normally closed	3-way, 2-position normally closed	3-way, 2-position normally open
3/8"	3.6 to 3.9	3/8"	1/2"	120VAC	<b>N3153904553</b>	<b>N3553904553</b>	<b>N3753904553</b>
				24VDC	<b>N3153904549</b>	<b>N3553904549</b>	<b>N3753904549</b>
		1/2"	1/2"	120VAC	<b>N3154904553</b>	<b>N3554904553</b>	<b>N3754904553</b>
				24VDC	<b>N3154904549</b>	<b>N3554904549</b>	<b>N3754904549</b>
3/4"	7.7 to 9.6	1/2"	3/4"	120VAC	<b>N3155904553</b>	<b>N3555904553</b>	<b>N3755904553</b>
				24VDC	<b>N3155904549</b>	<b>N3555904549</b>	<b>N3755904549</b>
		3/4"	1"	120VAC	<b>N3156904553</b>	<b>N3556904553</b>	<b>N3756904553</b>
				24VDC	<b>N3156904549</b>	<b>N3556904549</b>	<b>N3756904549</b>
		1"	1"	120VAC	<b>N3157904553</b>	<b>N3557904553</b>	<b>N3757904553</b>
				24VDC	<b>N3157904549</b>	<b>N3557904549</b>	<b>N3757904549</b>

**Single Solenoid, Non-locking manual override, internal "L" pilot 140 PSI, standard service, junction box w/ light, 4-pin M12.**

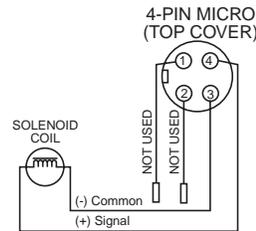


Normally Closed

Body size	Cv	In / cyl ports	Exhaust port	Voltage	2-way, 2-position normally closed	3-way, 2-position normally closed	3-way, 2-position normally open
3/8"	3.6 to 3.9	3/8"	1/2"	24VDC	<b>N3153J04549F</b>	<b>N3553J04549F</b>	<b>N3753J04549F</b>
				24VDC	<b>N3154J04549F</b>	<b>N3554J04549F</b>	<b>N3754J04549F</b>
3/4"	7.7 to 9.6	1/2"	3/4"	24VDC	<b>N3155J04549F</b>	<b>N3555J04549F</b>	<b>N3755J04549F</b>
				24VDC	<b>N3156J04549F</b>	<b>N3556J04549F</b>	<b>N3756J04549F</b>
		3/4"	1"	24VDC	<b>N3156J04549F</b>	<b>N3556J04549F</b>	<b>N3756J04549F</b>
				24VDC	<b>N3157J04549F</b>	<b>N3557J04549F</b>	<b>N3757J04549F</b>



**4-Pin Male/Single Solenoid**  
(Encl. Option J, Wiring Option F)  
(Per ISO 202/01)



C

Inline Valves

Viking Lite

Viking Extreme

"B" Series

Air Saver Unit

ADEX Series

"N" Series

Most popular.



For inventory, lead time, and kit lookup, visit [www.pdnplu.com](http://www.pdnplu.com)

Ordering Information

"N" Series 3/8", 3/4" & 1-1/4" Body Sizes - Solenoid 'L' Pilot

**N** **315** **3** **9** **0** **45** **53**

Valve function - solenoid	
<b>3/8" &amp; 3/4" Body</b>	
2-way, normally closed	315
3-way, normally closed	355
3-way, normally open	375
<b>1-1/4" Body</b>	
2-way, normally closed	325
3-way, normally closed	365
3-way, normally open	385

Port size / thread type	
<b>3/8" body size</b>	
3/8" Inlet & cyl - 1/2" exhaust - NPT	3
<b>1/2" inlet &amp; cyl - 1/2" exhaust - NPT</b>	<b>4</b>
1/2" inlet & cyl - 1/2" exhaust - BSPP	N
<b>3/4" body size</b>	
1/2" inlet & cyl - 3/4" exhaust - NPT	5
<b>3/4" inlet &amp; cyl - 1" exhaust - NPT</b>	<b>6</b>
3/4" inlet & cyl - 1" exhaust - BSPP	Q
1" inlet & cyl - 1" exhaust - NPT	7
<b>1-1/4" body size</b>	
1" inlet & cyl - 1 1/4" exhaust - NPT	7
<b>1-1/4" inlet &amp; cyl - 1-1/2" exhaust - NPT</b>	<b>8</b>
1-1/4" inlet & cyl - 1-1/2" exhaust - BSPP	S*
<b>1-1/2" inlet &amp; cyl - 1-1/2" exhaust - NPT</b>	<b>9</b>
1-1/2" inlet & cyl - 1-1/2" exhaust - BSPP	T*

\* Not available with valve function 325.

Note: BSPP is to the ISO 228 standard, and requires an R-BSPT male fitting.

Solenoid enclosure / override	
<b>Basic pilot</b>	<b>1</b>
Basic pilot NLMO	2
Basic pilot LMO	3
Junction box NLMO	5
Junction box LMO	6
<b>Junction box NLMO w/ light</b>	<b>8</b>
<b>Junction box LMO w/ light</b>	<b>9</b>
Basic pilot ext. LMO	W
JIC NLMO w/ light - 3-pin Automotive	E
<b>JIC NLMO w/ light - 4-pin M12</b>	<b>J</b>
JIC NLMO w/ light - 5-pin Automotive	N

"L" pilot configuration	
Blank	None
C	Chrysler wiring - enclosure 'J' & 'N'
<b>F</b>	<b>Ford wiring - enclosure 'E', 'J' &amp; 'N'</b>
G	GM wiring - enclosure 'J' & 'N'

"L" pilot code						
Code	Voltage			Solenoid enclosure options		
	AC 60hz	AC 50hz	DC	Standard duty (01, 45)	Cont. duty (04, 48)	200 PSI (46)
42	24	24	6	5, 6	6	
45			12	1, 5, 6		
<b>49</b>			<b>24</b>	<b>1, 2, 3, 5, 6, 8, 9, W</b>	<b>6, 8, 9</b>	<b>9</b>
51			48	1		
<b>53</b>	<b>120</b>	<b>110</b>		<b>1, 2, 3, 5, 6, 8, 9, E, N, W</b>	<b>1, 6, 8, 9, N</b>	<b>8, 9, E</b>
57	240	220		1, 3, W		
61			120	5, 6		
<b>79</b>			<b>24</b>	<b>E, J</b>	<b>E, J</b>	<b>E, J</b>

"L" pilot configuration	
01*	External pilot, std service, 140 PSI
04*	External pilot, cont duty, 140 PSI
<b>45</b>	<b>Internal pilot, std service, 140 PSI</b>
46	Internal pilot, std service, 200 PSI
<b>48</b>	<b>Internal pilot, cont duty, 140 PSI</b>

\* Not available with valve function 325, 365, and 385 (1-1/4" body).

Solenoid type	
<b>0</b>	<b>Standard</b>
5*	Hazardous duty
8*	NEMA 4 solenoid

\* Available with enclosure 2 & 3, 'L', pilot configuration 04 & 48, and voltage 49 & 53 ONLY.

C  
Inline Valves  
Viking Lite  
Viking Extreme  
Series "B"  
Air Saver Unit  
ADEX Series  
"N" Series

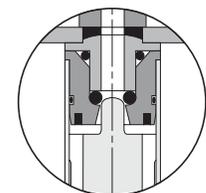
Continuous Duty Pilots

Continuous duty pilots are designed for applications where cycling is infrequent and the pilot is to be energized for indefinite periods of time . . . hours, days or weeks. Typical uses include fail-safe or emergency shutdown circuits where the pilot is to be energized and the valve open as long as the main control is "live" in order to shut off air to equipment in the event of power failure.

The Continuous duty pilot operates satisfactorily in ambient temperatures up to 125°F, even when continuously energized and without the benefit of the cooling air which normally flows through the pilot during frequent cycling. Under certain conditions,

satisfactory operation may be obtained at ambient temperatures above 125°F. CONSULT FACTORY.

Incorporating the performance-proven design features of the standard L-Pilot, the continuous duty pilot utilizes a bullet-shaped stem on the upper end of the plunger. This bullet-shaped stem, seating in a high-temperature rubber o-ring, provides both a bubble-tight seal and positive release.



Continuous Duty Pilot

Most popular.



For inventory, lead times, and kit lookup, visit [www.pdnplu.com](http://www.pdnplu.com)

Ordering Information

Single Solenoid, Non-locking manual override, internal "P" pilot 125 PSI, standard service, P-pilot junction box w/ light.



Normally Closed    Normally Open

Body size	Cv	In / cyl ports	Exhaust port	Voltage	2-way, 2-position normally closed	3-way, 2-position normally closed	3-way, 2-position normally open
1-1/4"	19.5 to 26.7	1"	1-1/4"	120VAC	<b>N3257904753</b>	<b>N3657904753</b>	<b>N3857904753</b>
		1-1/4"	1-1/2"	120VAC	<b>N3258904753</b>	<b>N3658904753</b>	<b>N3858904753</b>
		1-1/2"	1-1/2"	120VAC	<b>N3259904753</b>	<b>N3659904753</b>	<b>N3859904753</b>

"N" Series 1-1/4" Body Sizes - Solenoid Hi-Flow 'P' Pilot

**N 365 8 9 0 47 53**

Valve function - solenoid	
1-1/4" body	
2-Way, normally closed	325
3-Way, normally closed	365
3-Way, normally open	385

Port size / thread type	
1-1/4" body size	
1" inlet & cyl - 1 1/4" exhaust - NPT	7
1-1/4" inlet & cyl - 1-1/2" exhaust - NPT	8
1-1/4" inlet & cyl - 1-1/2" exhaust - BSPP	S
1-1/2" inlet & cyl - 1-1/2" exhaust - NPT	9
1-1/2" inlet & cyl - 1-1/2" exhaust - BSPP	T

Note: BSPP is to the ISO 228 standard, and requires an R-BSPT male fitting.

				"P" pilot code	
				Enclosure options	
Code	Voltage			Standard duty	
	AC 60hz	AC 50hz	DC		
49			24	5, 6	
53	120	110		5, 6, 8, 9	

"P" pilot configuration	
02	External pilot, std service, 125 PSI
47	Internal pilot, std service, 125 PSI

Solenoid type	
0	Standard

Solenoid enclosure / override	
5	Junction box NLMO
6	Junction box LMO
8	Junction box NLMO w/ light
9	Junction box LMO w/ light

Most popular.



For inventory, lead time, and kit lookup, visit [www.pdnplu.com](http://www.pdnplu.com)

C	Inline Valves
	Viking Lite
	Viking Extreme
	"B" Series
	Air Saver Unit
	ADEX Series
	"N" Series

Ordering Information

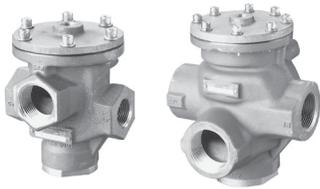
Single Remote Pilot, 1/4" NPT remote pilot port with internal pilot return.



Normally Closed    Normally Open

Body size	Cv	In / cyl ports	Exhaust port	2-way, 2-position normally closed	3-way, 2-position normally closed	3-way, 2-position normally open
3/8"	3.6 to 3.9	3/8"	1/2"	<b>N31431091</b>	<b>N35431091</b>	<b>N37431091</b>
		1/2"	1/2"	<b>N31441091</b>	<b>N35441091</b>	<b>N37441091</b>
3/4"	7.7 to 9.6	1/2"	3/4"	<b>N31451091</b>	<b>N35451091</b>	<b>N37451091</b>
		3/4"	1"	<b>N31461091</b>	<b>N35461091</b>	<b>N37461091</b>
		1"	1"	<b>N31471091</b>	<b>N35471091</b>	<b>N37471091</b>

Single Remote Pilot, 1/4" NPT remote pilot port with internal pilot return.



Normally Closed    Normally Open

Body size	Cv	In / cyl ports	Exhaust port	2-way, 2-position normally closed	3-way, 2-position normally closed	3-way, 2-position normally open
1-1/4"	19.5 to 26.7	1"	1-1/4"	<b>N32471091</b>	<b>N36471091</b>	<b>N38471091</b>
		1-1/4"	1-1/2"	<b>N32481091</b>	<b>N36481091</b>	<b>N38481091</b>
		1-1/2"	1-1/2"	<b>N32491091</b>	<b>N36491091</b>	<b>N38491091</b>

"N" Series 3/8", 3/4" & 1-1/4" Body Sizes - Remote Pilot

**N 314 3 1 091**

Valve Function - Solenoid	Port Size / Thread Type	Pilot Configuration
<b>3/8" &amp; 3/4" Body</b>	<b>3/8" Body Size</b>	089 External Pilot Return
2-Way, Normally Closed <b>314</b>	3/8" Inlet & Cyl - 1/2" Exhaust - NPT 3	<b>091 Internal Pilot Return</b>
3-Way, Normally Closed <b>354</b>	<b>1/2" Inlet &amp; Cyl - 1/2" Exhaust - NPT 4</b>	
3-Way, Normally Open <b>374</b>	1/2" Inlet & Cyl - 1/2" Exhaust - BSPP N	
<b>1-1/4" Body</b>	<b>3/4" Body Size</b>	
2-Way, Normally Closed <b>324</b>	<b>1/2" Inlet &amp; Cyl - 3/4" Exhaust - NPT 5</b>	
3-Way, Normally Closed <b>364</b>	1/2" Inlet & Cyl - 3/4" Exhaust - BSPP P	
3-Way, Normally Open <b>384</b>	<b>3/4" Inlet &amp; Cyl - 1" Exhaust - NPT 6</b>	
	3/4" Inlet & Cyl - 1" Exhaust - BSPP Q	
	1" Inlet & Cyl - 1" Exhaust - NPT 7	
	<b>1-1/4" Body Size</b>	
	<b>1" Inlet &amp; Cyl - 1 1/4" Exhaust - NPT 7</b>	
	<b>1-1/4" Inlet &amp; Cyl - 1-1/2" Exhaust - NPT 8</b>	
	1-1/4" Inlet & Cyl - 1-1/2" Exhaust - BSPP S*	
	<b>1-1/2" Inlet &amp; Cyl - 1-1/2" Exhaust - NPT 9</b>	
	1-1/2" Inlet & Cyl - 1-1/2" Exhaust - BSPP T*	

\* Not available with Valve Function 325.  
Note: BSPP is to the ISO 228 Standard, and requires an R-BSPT male fitting.

Most popular.



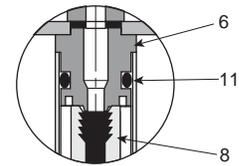
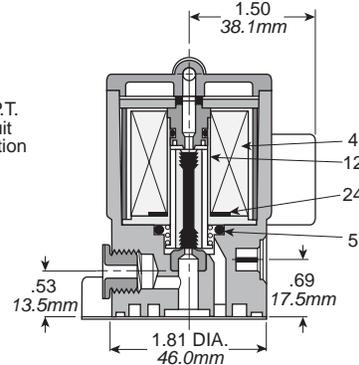
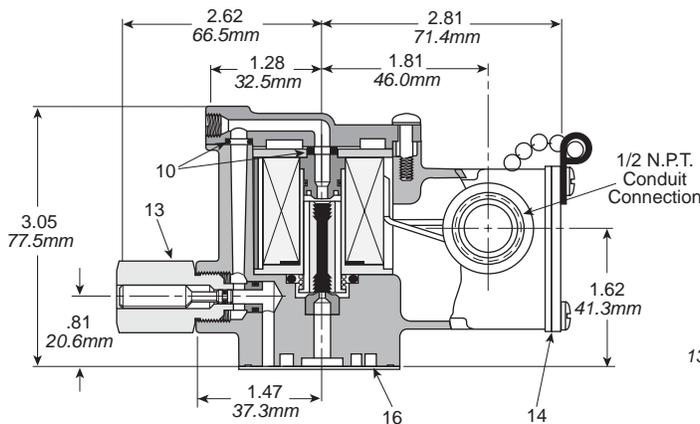
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**Replacement Pilots**

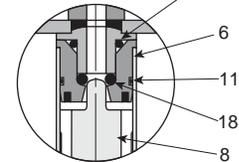


Description	Standard L-pilot		Continuous duty L-pilot	
	Locking	Non-locking	Locking	Non-locking
Override type	Locking	Non-locking	Locking	Non-locking
Basic with override	<b>K0653035**</b>	<b>K0652035**</b>	<b>K0853025**</b>	<b>K0852025**</b>
JIC with junction box & override	<b>K0656035**</b>	<b>K0655035**</b>	<b>K0856025**</b>	<b>K0855025**</b>
JIC pilot with junction box & override & indicator lights (120VAC only)	<b>K0659035**</b>	<b>K0658035**</b>	<b>K0859025**</b>	<b>K0858025**</b>

\*\* Voltage code - (reference model index for availability)



**Standard Duty Pilot Only**



**Continuous Duty Pilot Only**

**Parts List**

Item no.	Part number	Description
4	<b>K593025</b>	Coil 120V 60Hz / 110V 50Hz
	<b>K593035</b>	Coil 240V 60Hz / 220V 50Hz
	<b>K593003</b>	Coil 6VDC / 24V 60Hz
	<b>K593010</b>	Coil 12VDC
	<b>K593014</b>	Coil 24VDC
	<b>K593041</b>	Coil 120VDC
5	<b>H14213</b>	Seal
6	<b>K423006</b>	Top Seat
	<b>K423010</b>	Top Seat (Continuous Duty)
8	<b>K343002</b>	Plunger (STD. Service)
	<b>K343001</b>	Plunger (Continuous Duty)
10*	<b>H14201</b>	Seal
11*	<b>K41RB72011</b>	O-Ring (STD. Service)
	<b>H24969</b>	O-Ring (Continuous Duty)

Item no.	Part number	Description
12	<b>K272004</b>	Plunger Guide
13	<b>K152003</b>	Override Assembly
14	<b>K183047</b>	Cover Gasket
16*	<b>K183001</b>	Gasket
18*	<b>H13473</b>	O-Ring
20*	<b>H13413</b>	O-Ring
22	<b>H19102</b>	120 AC Only - Indicator Light
24	<b>K183108</b>	Gasket

Coil leads are 19" long.

\* Parts included in Service Kit.

Continuous Duty Kit ..... K352366

Standard Service Kit ..... K352166

**C**

Inline Valves

Viking Lite

Viking Extreme

"B" Series

Air Saver Unit

ADEX Series

"N" Series



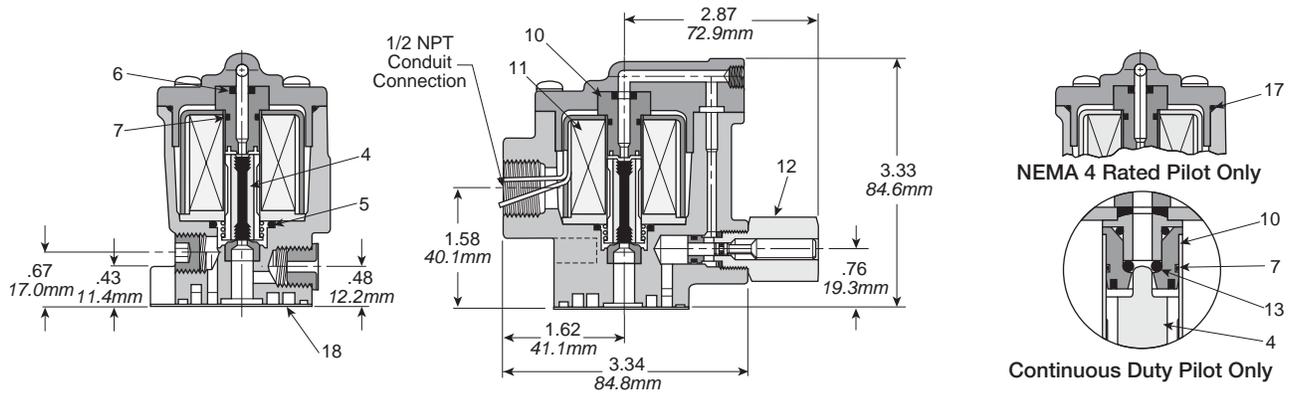
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**Replacement Pilots**



Description	Hazardous duty L-pilot		NEMA 4 L-pilot	
	Hazardous duty L-pilot - UL & CSA	<b>K0451025**</b>	N/A	
Override type	Locking	Non-Locking	Locking	Non-Locking
Hazardous duty with override	<b>K0453025**</b>	<b>K0452025**</b>		
NEMA 4 with override			<b>K2553025**</b>	<b>K255202549</b>

\*\* Voltage code - 49 & 53



**Parts List**

Item no.	Part number	Description	Item no.	Part number	Description
4*	<b>K343002</b>	Plunger (STD. Service)	12	<b>K152003</b>	Override Assembly
	<b>K343001</b>	Plunger (Continuous Duty)	13*	<b>H13473</b>	O-Ring
5*	<b>K14213</b>	Seal	17*	<b>H13716</b>	Gasket (NEMA 4 Rated Pilot Only)
6*	<b>K41RB72009</b>	O-Ring	18*	<b>K183001</b>	Gasket
	<b>K41RB72008</b>	O-Ring (STD. Service)			
7*	<b>K41RB72011</b>	O-Ring (STD. Service)			
	<b>H24969</b>	O-Ring (Continuous Duty)			
10	<b>K423001</b>	Top Seat			
	<b>K423002</b>	Top Seat (Continuous Duty)			
	<b>K593025</b>	Coil 120V 60Hz / 110V 50Hz			
	<b>K593035</b>	Coil 240V 60Hz / 220V 50Hz			
	<b>K593003</b>	Coil 6VDC / 24V 60Hz			
11	<b>K593010</b>	Coil 12VDC			
	<b>K593014</b>	Coil 24VDC			
	<b>K593041</b>	Coil 120VDC			

Coil leads are 19" long.  
 \* Parts included in Service Kit.  
 Continuous Duty Kit ..... **K352366**  
 Standard Service Kit ..... **K352166**

**C**  
 Inline Valves  
 Viking Lite  
 Viking Extreme  
 "B" Series  
 Air Saver Unit  
 ADEX Series  
 "N" Series



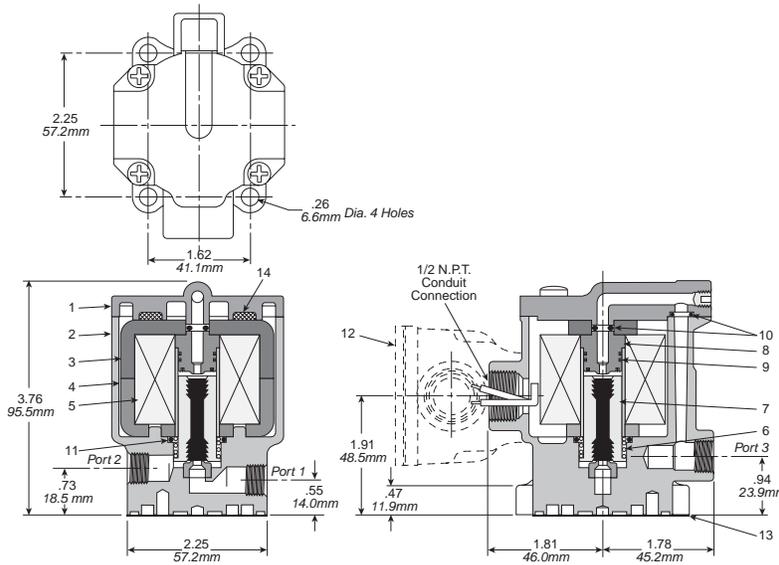
For inventory, lead times, and kit lookup, visit [www.pdnplu.com](http://www.pdnplu.com)

**Replacement Pilots**



Description	Heavy duty P-Pilot		
	No override	Non-locking	Locking
Override type			
Basic with override	<b>K1351045**</b>	N/A	N/A
JIC with junction box & override	N/A	<b>K1355045**</b>	<b>K1356045**</b>
JIC Pilot with junction box & override & indicator lights (120VAC only)	N/A	<b>K135804553</b>	<b>K135904553</b>

\*\* Voltage code - 49 & 53



**Parts List**

Item no.	Part number	Description
1	<b>K062005</b>	Cover Assy
2	<b>K112045</b>	Body, Man. Mtd. (1/8" Bottom Seal)
	<b>K112046</b>	Body, Man. Mtd. (3/16" Bottom Seal)
3	<b>K013001</b>	Magnet Bar
4	<b>K272002</b>	Sleeve Sub Assy
5*	<b>K593108</b>	Coil (115V 60Hz)
	<b>K593112</b>	Coil (230V 60Hz)
	<b>K593097</b>	Coil 24VDC
	<b>K593107</b>	Coil 115VDC

Item no.	Part number	Description
6	<b>K473010</b>	Spring N.O. Valve
	<b>K473011</b>	Spring N.C. Valve
7 •	<b>K343042</b>	Plunger
8	<b>K423020</b>	Top Seat (1/8" Orifice)
	<b>K423022</b>	Top Seat (3/16" Orifice)
9 •	<b>H13436</b>	Seal
10 •	<b>H14202</b>	Seal
11 •	<b>H14215</b>	Seal
12	<b>K322004</b>	Junction Box Kit
13 •	<b>K183012</b>	Gasket

\* Coil leads are 19" long.

• Parts included in Seal Kit K352064.

C

Inline Valves

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Viking Lite

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Viking Extreme

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"B" Series

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Air Saver Unit

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ADEX Series

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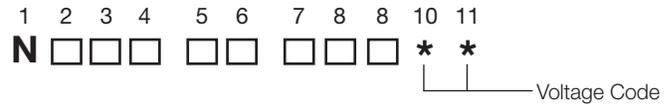
"N" Series



For inventory, lead time, and kit lookup, visit [www.pdnplu.com](http://www.pdnplu.com)

**Coils for Pilot Operated Valves**

The voltage code of the valve can be identified in the 10th and 11th digit of the valve part number.



**L-Pilot Valves**

Voltage Code **	Voltage			Coil	
	60Hz	50Hz	DC	19" Leads	72" Leads
40	12	—	—	<b>K593007</b>	—
41,42	24	—	6	<b>K593003</b>	—
45*	—	—	12	<b>K593010</b>	—
49*	—	—	24 (Standard)	<b>K593014</b>	—
79	—	—	24 (Arc Suppressed)	<b>K593271</b>	—
51*	—	—	48	—	<b>K593185</b>
53*	120	110	—	<b>K593025</b>	—
57*	240	240	—	<b>K593035</b>	—
60	240	220	—	<b>K593035</b>	—
61	—	—	120	<b>K593041</b>	—

\* Indicates voltages approved for solenoid operators designed for use in hazardous locations.

**P-Pilot Valves**

Voltage Code **	Voltage			Coil	
	60Hz	50Hz	DC	19" Leads	72" Leads
43	—	24	—	<b>K593098</b>	—
45	—	—	12	<b>K593094</b>	—
49	—	—	24	<b>K593097</b>	—
51	—	—	48	—	<b>K593254</b>
53	115	—	—	<b>K593108</b>	—
58	—	230	—	<b>K593111</b>	—

**Solenoid Characteristics Chart**

Voltage Range +10/-15% of Nominal

**3/8" & 3/4" Basic – L-Pilot**

Voltage/ Cycles	Amps Inrush	Amps Holding	Resistance		Insulation Class
			Ohms	Watts	
120/60VAC	.29	.18	122	12	B
110/50VAC	.21	.14	122	12	B
240/60VAC	.18	.12	610	12	B
24/50VAC	1.2	.75	6.4	9.5	B
6VDC	—	1.4	4.5	7.6	B
12VDC	—	.66	17.7	9	B
24VDC	—	.32	71	9	B
48VDC	—	.22	216	11	B

**NOTE:** Continuous duty type service is for applications where pilot valve is energized more than ten (10) minutes.

**Solenoid Characteristics Chart**

Voltage Range +10/-15% of Nominal

**1-1/4" Basic – P-Pilot**

Voltage/ Cycles	Amps Inrush	Amps Holding	Resistance		Insulation Class
			Ohms	Watts	
120/60VAC	.46	.25	35	18.5	B
110/50VAC	.36	.19	48	12	B
230/60VAC	.26	.15	125	19.5	B
220/50VAC	.20	.11	191	15	B
24/60VAC	2.3	1.4	1.3	20	B
24/50VAC	1.6	.9	2.1	12	B
12VDC	—	.7	17	8	B
24VDC	—	.33	68	8	B
48VDC	—	.16	275	7.5	B

**NOTE:** Continuous duty type service is for applications where pilot valve is energized more than ten (10) minutes.

**Hazardous Duty Solenoid Listing**

Valves with solenoid operators designed for hazardous locations are UL & CSA Approved as follows:

National Electric Code	Ambient Conditions	NEMA Classification
Class I Div. 1, Group C	Ethyl, Ether, Etc. Gases & Vapors	VII (7)
Class I Div. 1, Group D	Gasoline, Etc. Gases & Vapors	VII (7)
Class I Div. 2, Group B	Butadiene, Etc., Liquid, Fluid or Vapor Normally Contained, or Atmosphere Ventilated	VII (7)
Class II Div. 1, Group E	Metal Dust	IX (9)
Class II Div. 1, Group F	Coal, Coke, Carbon Black Dust	IX (9)
Class II Div. 1, Group G	Flour, Starch, Grain Dust	IX (9)

See Article 500 – Hazardous (Classified) Locations, National Electric Code.

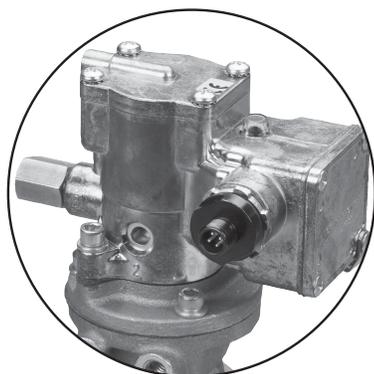


For inventory, lead times, and kit lookup, visit [www.pdnplu.com](http://www.pdnplu.com)

**Flow**

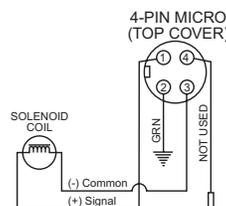
Basic Valve Size	Inlet Port Size	Exhaust Port Size	Cv Inlet to Cylinder	Cv Cylinder to Exhaust
3/8" 3-Way, Normally Closed	3/8" Pipe	1/2" Pipe	3.6	4.2
	1/2" Pipe	1/2" Pipe	3.8	4.3
3/8" 3-Way, Normally Open	3/8" Pipe	1/2" Pipe	3.6	4.1
	1/2" Pipe	1/2" Pipe	3.9	4.5
3/4" 3-Way, Normally Closed	1/2" Pipe	3/4" Pipe	8.2	9.2
	3/4" Pipe	1" Pipe	9.3	10.8
3/4" 3-Way, Normally Open	1/2" Pipe	3/4" Pipe	7.7	6.6
	3/4" Pipe	1" Pipe	9.6	11.4
1-1/4" 3-Way, Normally Closed	1" Pipe	1-1/4" Pipe	19.5	23.5
	1-1/4" Pipe	1-1/2" Pipe	23.3	26.9
	1-1/2" Pipe	1-1/2" Pipe	23.3	26.9
1-1/4" 3-Way, Normally Open	1" Pipe	1-1/4" Pipe	20.4	24.8
	1-1/4" Pipe	1-1/2" Pipe	25.0	29.1
	1-1/2" Pipe	1-1/2" Pipe	26.7	29.9

**Wiring Connections**

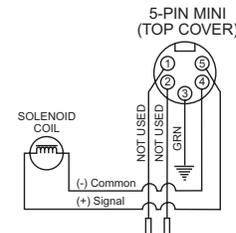


**Chrysler Connection**

**4-Pin Male/Single Solenoid**  
 (Encl. Option J, Wiring Option C)

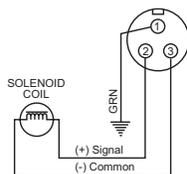


**5-Pin Male/Single Solenoid**  
 (Encl. Option N, Wiring Option C)

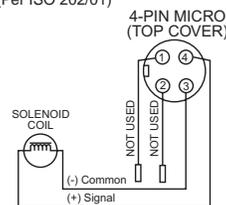


**Ford Connection**

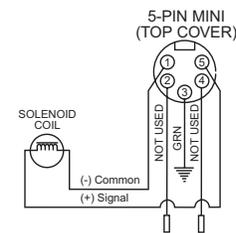
**3-Pin Male/Single Solenoid**  
 (Encl. Option E, Wiring Option F)



**4-Pin Male/Single Solenoid**  
 (Encl. Option J, Wiring Option F)  
 (Per ISO 202/01)



**5-Pin Male/Single Solenoid**  
 (Encl. Option N, Wiring Option F)



**Automotive Connections**

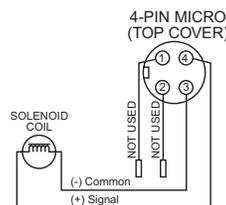
- 3-Pin & 5-Pin "Mini" (7/8 UNF Thread)
- 4-Pin "Micro" (M12 Thread)

**Solenoid Configurations**

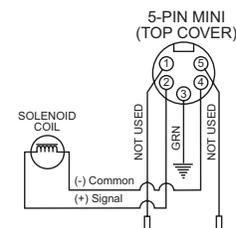
"E", "J", "N"

**GM Connection**

**4-Pin Male/Single Solenoid**  
 (Encl. Option J, Wiring Option G)



**5-Pin Male/Single Solenoid**  
 (Encl. Option N, Wiring Option G)



For inventory, lead time, and kit lookup, visit [www.pdnplu.com](http://www.pdnplu.com)

**C**  
 Inline Valves  
 Viking Lite  
 Viking Extreme  
 "B" Series  
 Air Saver Unit  
 ADEX Series  
 "N" Series

**Selection**

Although reasonable safety factors are designed into each speed poppet valve, it is important that application requirements do not exceed the rated limitation of the valve. This precaution insures a sufficient safety factor.

**Life Expectancy**

Normal multimillion cycle life expectancy of high speed poppet series valves is based on the use of properly filtered and lubricated air at room temperature. In actual laboratory tests, the high speed poppet valves provide maintenance-free service life in excess of 20,000,000 cycles.

**Lubrication**

The high speed poppet valves are pre-lubricated to permit use with non-lubricated air. However, air should be lubricated to assure maximum seal life.

F442 lubricating oil is recommended. This oil is specially formulated to provide peak performance and maximum service life from air-operated equipment.

Other good air line lubricating oils may be used provided they atomize readily and are of the medium aniline type. Aniline point range must be between 180°F - 220°F. Viscosity SUS @ 100°F of 140-170. High aniline oils will shrink seals; low aniline oils will swell seals, reducing operating life and expectancy.

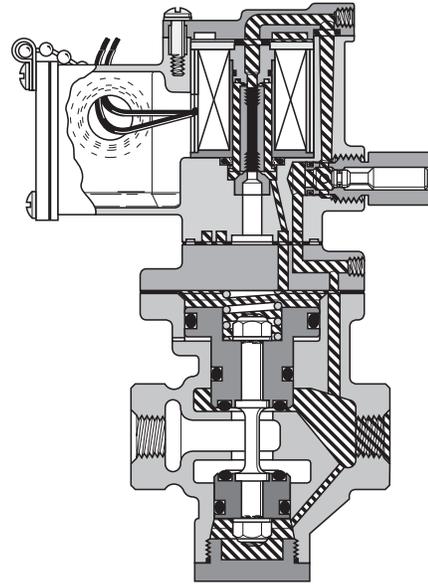
**Installation**

Valves should be installed with reasonable accessibility for service whenever possible. Care should be taken to hold piping length to a minimum and to protect valves from exposure to extreme heat, dirt and moisture. Piping should be clean and clear of dirt and chips. Threads should be the correct size and undamaged. Pipe joint compound should be used sparingly and only on pipe threads, never in the valve body. Care should be taken in installation to avoid undue strain on valve.

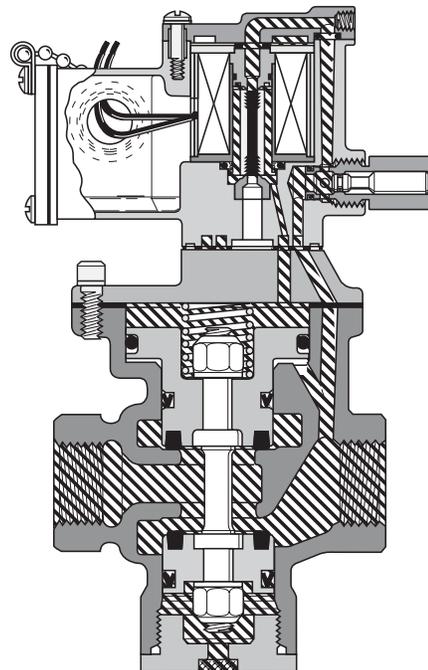
For the small port size options, it is recommended that an air reservoir is located close to the valve inlet as to not starve the valve of air pressure.

**⚠ CAUTION: DO NOT RESTRICT THE INLET TO POPPET VALVES**

Restriction of the inlet can starve the air supply to the pilot section of internally piloted poppet valves and result in slow shifting or failure of the valve to shift properly. Always connect the supply line directly to the inlet of the valve using the full pipe size of the valve inlet. Never use a quick coupling to connect a poppet valve to the air supply. On valves with a small inlet port, use of an upstream surge tank may be required at lower operating pressures to insure an adequate air supply and proper operation.



**3/8" Solenoid Pilot De-Energized Normally Closed**

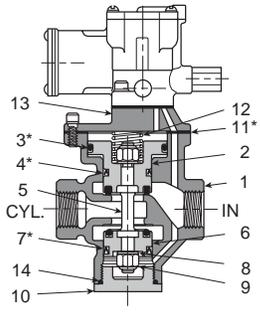


**1-1/4" Solenoid Pilot De-Energized Normally Open**

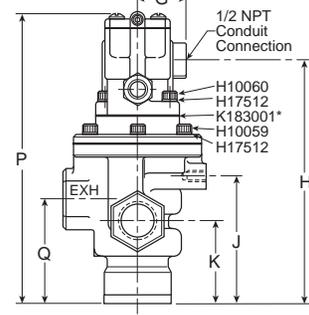
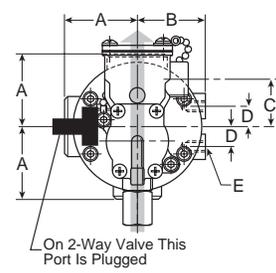
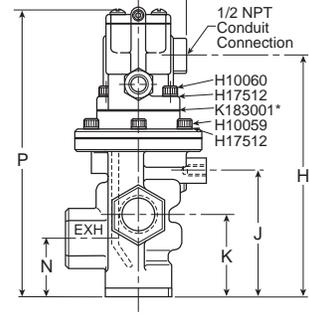
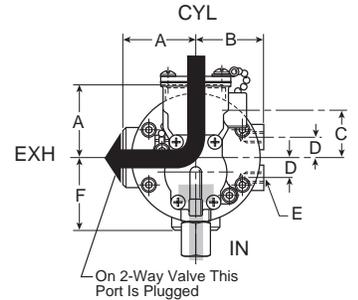
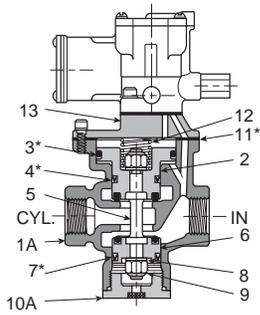
C	Inline Valves
	Viking Lite
	Viking Extreme
	"B" Series
	Air Saver Unit
	ADEX Series
	"N" Series

**Internal Pilot - 3/8" & 3/4" Basic Body**

**Normally Closed**



**Normally Open**



**Exhaust**  
**Pressure**

Top view indicates flow through 3-Way valve with coil de-energized.

**NOTE:** For normal valve operation, override must be in "out" position.

**Internal Pilot - 3/8" & 3/4" Basic Body**

Key	3/8" Body		3/4" Body	
	Inch	mm	Inch	mm
A	1.56	40	2.13	54
B	1.50	38	1.94	49
C	1.81	46	1.34	34
D	.56	14	.56	14
E	3/8-16UNC 7/16" deep		3/8-16UNC 9/16" deep	
F	1.75	44	2.25	57
G	1.50	38	1.50	38
H	5.92	150	7.14	181
J	3.19	81	3.75	95
K	1.88	47	2.44	62
N	1.44	37	1.78	45
P	7.36	196	8.58	218
Q	2.31	59	3.09	84

**Service Kits**

Include all parts normally required for in-service maintenance:

- 3/8" Basic valve with standard service L-Pilots.....**K352076**
- 3/8" Basic valve with continuous duty L-Pilots.....**K352276**
- 3/4" Basic valve with standard service L-Pilots.....**K352077**
- 3/4" Basic valve with continuous duty L-Pilots.....**K352277**

Key	3/8" Valve	3/4" Valve	Description
1	—	1/2" Tap <b>K053075</b>	Body (N.C.)
	3/8" Tap <b>K053022</b>	3/4" Tap <b>K053076</b>	
	1/2" Tap <b>K053023</b>	1" Tap <b>K053220</b>	
1A	—	3/4" Tap <b>K053077</b>	Body (N.O.)
	3/8" Tap <b>K053025</b>	3/4" Tap <b>K053078</b>	
	1/2" Tap <b>K053026</b>	1" Tap <b>K053218</b>	
2	<b>K212001</b>	<b>K212002</b>	Upper piston assy
3*	<b>H13648</b>	<b>H13728</b>	Seal

Key	3/8" Valve	3/4" Valve	Description
4*	<b>H14510</b>	<b>H13676</b>	U-cup (3/8), o-ring (3/4)
5	<b>K493002</b>	<b>K493009</b>	Stem
6	<b>K202001</b>	<b>K202002</b>	Lower piston assy.
7*	<b>H14509</b>	<b>H13676</b>	U-cup (3/8), o-ring (3/4)
8	<b>H17811</b>	<b>H17813</b>	Washer (2)
9	<b>H06326</b>	<b>H06332</b>	Stop nut (2)
10	<b>K103035</b>	<b>K103053</b>	Bottom cap (N.C.)
10A	<b>K092020</b>	<b>K092034</b>	Bottom cap assy. (N.O.)
11*	<b>K183049</b>	<b>K183057</b>	Gasket
12	<b>K473014</b>	<b>K473015</b>	Spring
13	<b>K563015</b>	<b>K563017</b>	Adapter
14*	<b>K41RB72121</b>	<b>K41RB72221</b>	O-ring

\* Parts included in seal kit



For inventory, lead time, and kit lookup, visit [www.pdnplu.com](http://www.pdnplu.com)

C

Inline Valves

Viking Lite

Viking Extreme

"B" Series

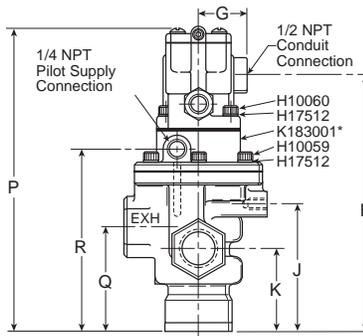
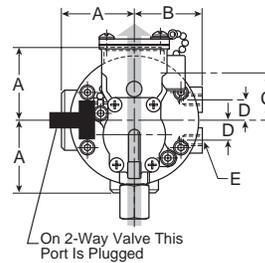
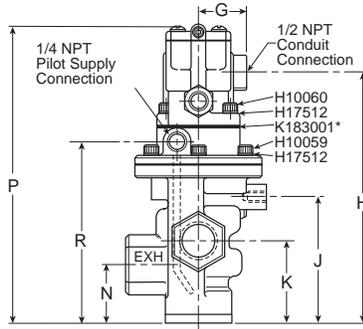
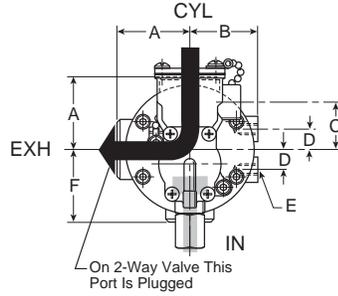
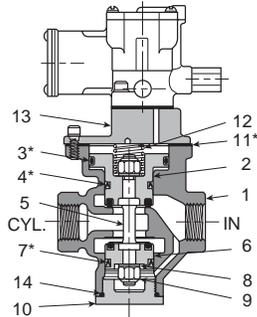
Air Saver Unit

ADEX Series

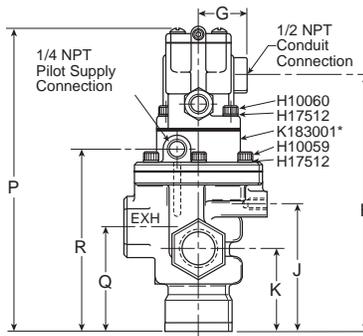
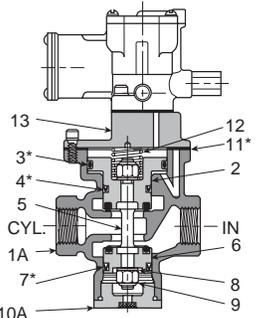
"N" Series

**External Pilot - 3/8" & 3/4" Basic Body**

**Normally Closed**



**Normally Open**



**Exhaust**  
**Pressure**

Top view indicates flow through 3-Way valve with coil de-energized.

**NOTE:** For normal valve operation, override must be in "out" position.

**External Pilot -  
3/8" & 3/4" Basic Body**

Key	3/8" Body		3/4" Body	
	Inch	mm	Inch	mm
A	1.56	40	2.13	54
B	1.50	38	1.94	49
C	1.81	46	1.34	34
D	.56	14	.56	14
E	3/8-16UNC 7/16" deep		3/8-16UNC 9/16" deep	
F	1.75	44	2.25	57
G	1.50	38	1.50	38
H	6.42	163	7.45	189
J	3.19	81	3.75	95
K	1.88	47	2.44	62
N	1.44	37	1.78	45
P	7.86	200	8.89	226
Q	2.31	59	3.09	84
R	4.34	110	5.38	137

**Service Kits**

Include all parts normally required for in-service maintenance:

- 3/8" Basic valve with standard service L-Pilots.....**K352076**
- 3/8" Basic valve with continuous duty L-Pilots.....**K352276**
- 3/4" Basic valve with standard service L-Pilots.....**K352077**
- 3/4" Basic valve with continuous duty L-Pilots.....**K352277**

Key	3/8" Valve	3/4" Valve	Description
	—	1/2" Tap <b>K053067</b>	
1	3/8" Tap <b>K053019</b>	3/4" Tap <b>K053069</b>	Body (N.C.)
	1/2" Tap <b>K053157</b>	1" Tap <b>K053221</b>	
	—	3/4" Tap <b>K053065</b>	
1A	3/8" Tap <b>K053018</b>	3/4" Tap <b>K053070</b>	Body (N.O.)
	1/2" Tap <b>K053064</b>	1" Tap <b>K053219</b>	
	2	<b>K212001</b>	
3*	<b>H13648</b>	<b>H13728</b>	Seal

Key	3/8" Valve	3/4" Valve	Description
4*	<b>K41RB72211</b>	<b>H13676</b>	O-ring
5	<b>K493002</b>	<b>K493009</b>	Stem
6	<b>K202001</b>	<b>K202002</b>	Lower piston assy.
7*	<b>K41RB72210</b>	<b>H13676</b>	O-ring
8	<b>H17811</b>	<b>H17813</b>	Washer (2)
9	<b>H06326</b>	<b>H06332</b>	Stop nut (2)
10	<b>K103035</b>	<b>K103053</b>	Bottom cap (N.C.)
10A	<b>K092020</b>	<b>K092034</b>	Bottom cap assy. (N.O.)
11	<b>K473014</b>	<b>K473015</b>	Spring
12*	<b>K183049</b>	<b>K183057</b>	Gasket
13	<b>K563016</b>	<b>K563021</b>	Adapter
14*	<b>K41RB72121</b>	<b>K41RB72221</b>	O-ring

\* Parts included in seal kit

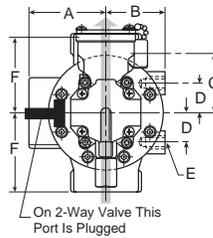
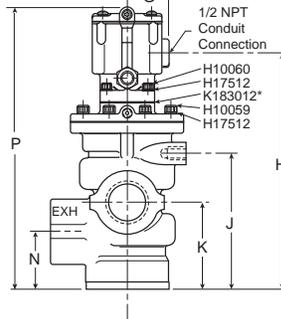
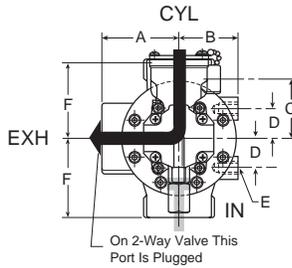
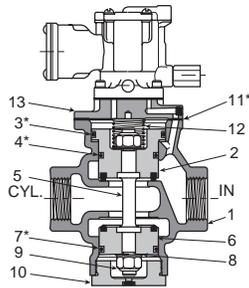
**C**  
 Inline Valves  
 Viking Lite  
 Viking Extreme  
 "B" Series  
 Air Saver Unit  
 ADEX Series  
 "N" Series



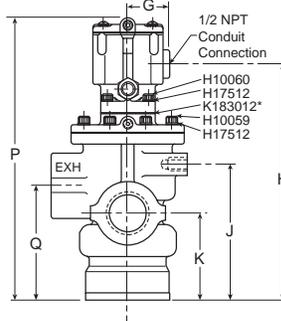
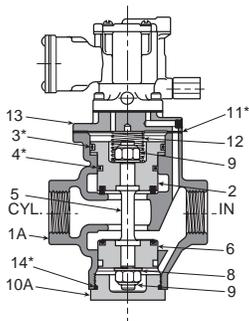
For inventory, lead times, and kit lookup, visit [www.pdnplu.com](http://www.pdnplu.com)

**Internal Pilot - 1-1/4" Basic Body**

**Normally Closed**



**Normally Open**



**Exhaust**  
**Pressure**

Top view indicates flow through 3-Way valve with coil de-energized.

**NOTE:** For normal valve operation, override must be in "out" position.

**Internal Pilot -  
1-1/4" Basic Body**

Key	1-14" Body	
	Inch	mm
A	3.00	76
B	2.25	57
C	1.34	34
D	1.19	30
E	1/2-13 UNC	3/4 Deep
F	3.13	80
G	1.50	38
H	9.30	236
J	5.34	136
K	3.44	87
N	2.31	59
P	11.14	283
Q	4.56	116

**Service Kits**

Include all parts normally required for in-service maintenance:

1-1/4" Basic valve with standard service P-Pilots ..... **K352078**

Key	1-1/4" Valve	Description
1	1" Tap <b>K053111</b>	Body (N.C.)
	1-1/4" Tap <b>K053112</b>	
	1-1/2" Tap <b>K053113</b>	
1A	1" Tap <b>K053114</b>	Body (N.O.)
	1-1/4" Tap <b>K053115</b>	
	1-1/2" Tap <b>K053116</b>	
2	<b>K313029</b>	Upper piston assy
3*	<b>H13752</b>	O-ring

Key	1-1/4" Valve	Description
4*	<b>H13728</b>	Seal
5	<b>K493016</b>	Stem
6	<b>K313028</b>	Lower piston
7*	<b>H13728</b>	Seal
8	<b>H17817</b>	Washer
9	<b>H06338</b>	Stop nut
10	<b>K092046</b>	Bottom cap (N.C.)
10A	<b>K103061</b>	Bottom cap (N.O.)
11*	<b>K183058</b>	Gasket
12	<b>K473016</b>	Spring
13	<b>K012003</b>	Adapter
14*	<b>K41RB72143</b>	O-ring

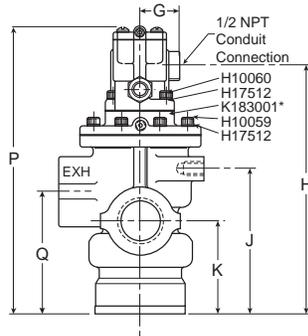
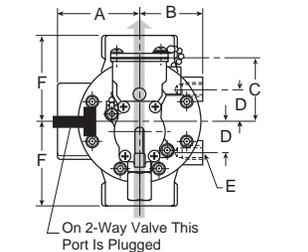
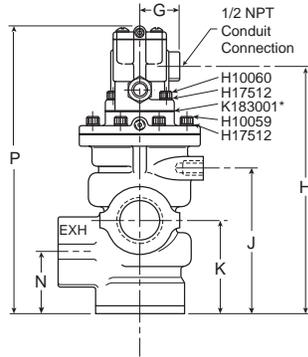
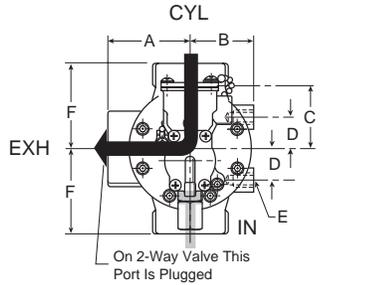
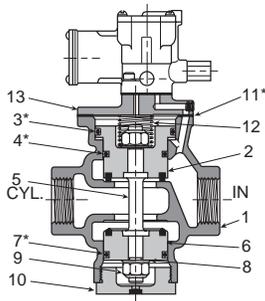
\* Parts included in seal kit



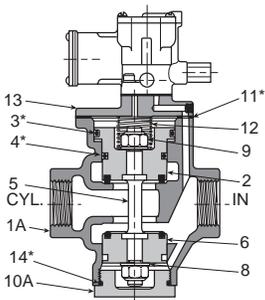
For inventory, lead time, and kit lookup, visit [www.pdnplu.com](http://www.pdnplu.com)

Continuous Duty Pilot - 1-1/4" Basic Body

Normally Closed



Normally Open



**Exhaust**  
**Pressure**

Top view indicates flow through 3-Way valve with coil de-energized.

NOTE: For normal valve operation, override must be in "out" position.

Continuous Duty Pilot - 1-1/4" Basic Body

Key	1-1/4" Body	
	Inch	mm
A	3.00	76
B	2.25	57
C	1.34	34
D	1.19	30
E	1/2-13 UNC	3/4 Deep
F	3.13	80
G	1.50	38
H	9.02	229
J	5.34	136
K	3.44	87
N	2.31	59
P	10.45	265
Q	4.56	116

Service Kits

Include all parts normally required for in-service maintenance:

1-1/4" Basic valve with continuous duty L-Pilot.....**K352080**

Key	1-1/4" Valve	Description
	1" Tap <b>K053111</b>	
1	1-1/4" Tap <b>K053112</b>	Body (N.C.)
	1-1/2" Tap <b>K053113</b>	
	1" Tap <b>K053114</b>	
1A	1-1/4" Tap <b>K053115</b>	Body (N.O.)
	1-1/2" Tap <b>K053116</b>	
	2	
3*	<b>H13752</b>	O-Ring

Key	1-1/4" Valve	Description
4*	<b>H13728</b>	Seal
5	<b>K493016</b>	Stem
6	<b>K313028</b>	Lower piston
7*	<b>H13728</b>	Seal
8	<b>H17817</b>	Washer
9	<b>H06338</b>	Stop nut
10	<b>K092046</b>	Bottom cap (N.C.)
10A	<b>K103061</b>	Bottom cap (N.O.)
11*	<b>K183058</b>	Gasket
12	<b>K473016</b>	Spring
13	<b>K012003</b>	Adapter
14*	<b>K41RB72143</b>	O-ring

\* Parts included in seal kit

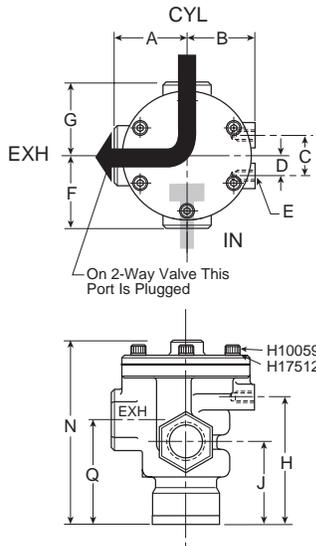
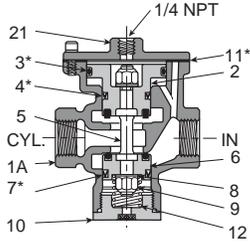
**C**  
 Inline Valves  
 Viking Lite  
 Viking Extreme  
 "B" Series  
 Air Saver Unit  
 ADEX Series  
 "N" Series



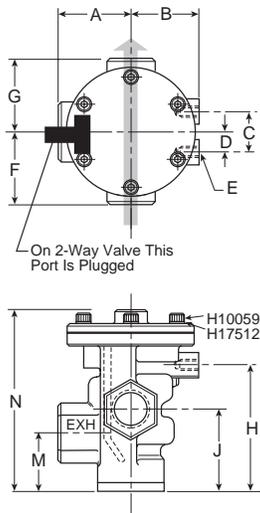
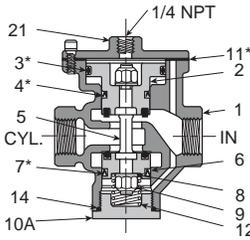
For inventory, lead times, and kit lookup, visit [www.pdnplu.com](http://www.pdnplu.com)

**Internal Return - 3/8", 3/4", 1-1/4" Basic Body**

**Normally Closed**



**Normally Open**



**Exhaust**  
**Pressure**

Top view indicates flow through 3-Way valve.

**NOTE:** For normal valve operation, override must be in "out" position.

**Internal Return - 3/8", 3/4", 1-1/4" Basic Body**

Key	3/8" Body		3/4" Body		1-1/4" Body	
	Inch	mm	Inch	mm	Inch	mm
A	1.56	40	2.13	54	3.00	76
B	1.50	38	1.94	49	2.25	57
C	1.13	29	1.13	29	2.38	60
D	.56	14	.56	14	1.19	30
E	3/8-16UNC 7/16" deep		3/8-16UNC 9/16" deep		1/2-13UNC 3/4" deep	
F	1.75	44	2.25	57	3.13	79
G	1.56	40	2.13	54	3.13	79
H	3.19	81	3.75	95	5.34	136
J	1.88	48	2.44	62	3.44	87
M	1.44	37	1.78	45	2.66	67
N	4.22	107	5.31	135	7.19	183
Q	2.31	59	3.09	78	4.56	116

**Service Kits**

Include all parts normally required for in-service maintenance:

- 3/8" Basic valve.....**K352073**
- 3/4" Basic valve.....**K352074**
- 1-1/4" Basic valve .....**K352075**

Key	3/8" Valve	3/4" Valve	1-1/4" Valve	Description
1	—	1/2" Tap <b>K053075</b>	1" Tap <b>K053111</b>	Body (N.O.)
	3/8" Tap <b>K053022</b>	3/4" Tap <b>K053076</b>	1-1/4" Tap <b>K053112</b>	
	1/2" Tap <b>K053023</b>	1" Tap <b>K053220</b>	1-1/2" Tap <b>K053113</b>	
1A	—	1/2" Tap <b>K053077</b>	1" Tap <b>K053114</b>	Body (N.C.)
	3/8" Tap <b>K053025</b>	3/4" Tap <b>K053078</b>	1-1/4" Tap <b>K053115</b>	
	1/2" Tap <b>K053026</b>	1" Tap <b>K053218</b>	1-1/2" Tap <b>K053116</b>	
2	<b>K212001</b>	<b>K212002</b>	<b>K313029</b>	Upper piston assy
3*	<b>H13648</b>	<b>H13728</b>	<b>H13752</b>	Seal
4*	<b>H14510</b>	<b>H13676</b>	<b>H13728</b>	Seal

Key	3/8" Valve	3/4" Valve	1-1/4" Valve	Description
5	<b>K493002</b>	<b>K493009</b>	<b>K493016</b>	Stem
6	<b>K202001</b>	<b>K202002</b>	<b>K313028</b>	Lower piston assy.
7*	<b>H13499</b>	<b>H13676</b>	<b>H13728</b>	Seal
8	<b>H17811</b>	<b>H17813</b>	<b>H17817</b>	Washer (2)
9	<b>H06326</b>	<b>H06332</b>	<b>H06338</b>	Stop nut (2)
10	<b>K092020</b>	<b>K092034</b>	<b>K092046</b>	Bottom cap (N.C.)
10A	<b>K103035</b>	<b>K103053</b>	<b>K103061</b>	Bottom cap (N.O.)
11*	<b>K183049</b>	<b>K183057</b>	<b>K183058</b>	Gasket
12	<b>K473014</b>	<b>K473015</b>	<b>K473016</b>	Spring
14*	<b>K41RB72121</b>	<b>K41RB72221</b>	<b>K41RB72143</b>	O-ring
21	<b>K123018</b>	<b>K123021</b>	<b>K123024</b>	Cover

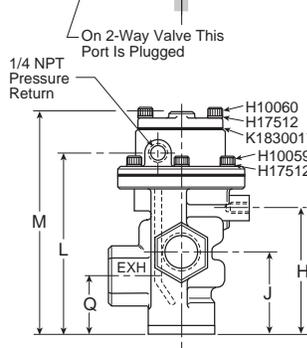
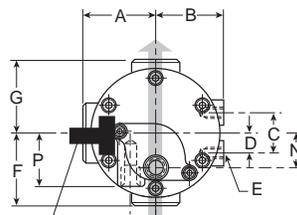
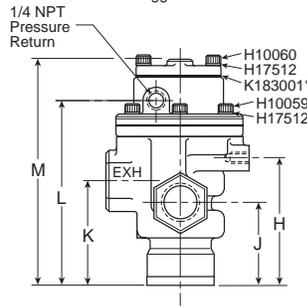
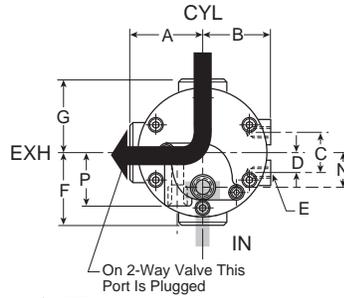
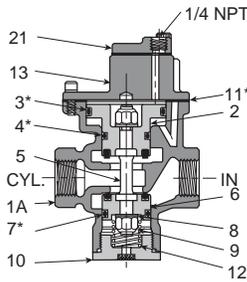
\* Parts included in seal kit



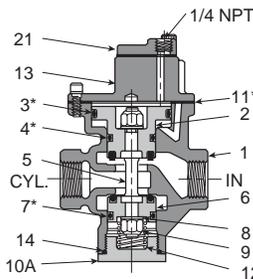
For inventory, lead time, and kit lookup, visit [www.pdnplu.com](http://www.pdnplu.com)

**External Return - 3/8", 3/4", 1-1/4" Basic Body**

**Normally Closed**



**Normally Open**



Key	3/8" Valve	3/4" Valve	1-1/4" Valve	Description
	1/4" Tap <b>K053011</b>	1/2" Tap <b>K053067</b>	1" Tap <b>K053143</b>	
1	—	3/4" Tap <b>K053069</b>	—	Body (N.O.)
	1/2" Tap <b>K053157</b>	1" Tap <b>K053221</b>	1-1/2" Tap <b>K053146</b>	
	1/4" Tap <b>K053010</b>	1/2" Tap <b>K053065</b>	1" Tap <b>K053159</b>	
1A	—	3/4" Tap <b>K053070</b>	1-1/4" Tap <b>K053144</b>	Body (N.C.)
	1/2" Tap <b>K053064</b>	1" Tap <b>K053219</b>	1-1/2" Tap <b>K053145</b>	
2	<b>K212001</b>	<b>K212002</b>	<b>K313029</b>	Upper piston assy
3*	<b>H13648</b>	<b>H13728</b>	<b>H13752</b>	Seal
4*	<b>H13529</b>	<b>H13676</b>	<b>H13728</b>	Seal

Key	3/8" Valve	3/4" Valve	1-1/4" Valve	Description
5	<b>K493002</b>	<b>K493009</b>	<b>K493016</b>	Stem
6	<b>K202001</b>	<b>K202002</b>	<b>K313028</b>	Lower piston assy.
7*	<b>H13499</b>	<b>H13676</b>	<b>H13728</b>	Seal
8	<b>H17811</b>	<b>H17813</b>	<b>H17817</b>	Washer (2)
9	<b>H06326</b>	<b>H06332</b>	<b>H06338</b>	Stop nut (2)
10	<b>K092020</b>	<b>K092034</b>	<b>K092046</b>	Bottom cap assy. (N.C.)
10A	<b>K103035</b>	<b>K103053</b>	<b>K103061</b>	Bottom cap (N.O.)
11*	<b>K183049</b>	<b>K183057</b>	<b>K183058</b>	Gasket
12	<b>K473014</b>	<b>K473015</b>	<b>K473016</b>	Spring
13	<b>K563016</b>	<b>K563021</b>	<b>K563027</b>	Adapter
14*	<b>K41RB72121</b>	<b>K41RB72221</b>	<b>K41RB72143</b>	O-ring
21	<b>K323027</b>	<b>K323027</b>	Not used	Cover

\* Parts included in seal kit

**Exhaust**  
**Pressure**

Top view indicates flow through 3-Way valve.

**NOTE:** For normal valve operation, override must be in "out" position.

**Internal Return - 3/8", 3/4", 1-1/4" Basic Body**

Key	3/8" Body		3/4" Body		1-1/4" Body	
	Inch	mm	Inch	mm	Inch	mm
A	1.56	40	2.13	54	3.00	76
B	1.50	38	1.94	49	2.25	57
C	1.13	29	1.13	29	2.38	60
D	.56	14	.56	14	1.19	30
E	3/8-16UNC 7/16" deep		3/8- 16UNC 9/16" deep		1/2-13UNC 3/4" deep	
F	1.75	44	2.25	57	3.13	79
G	1.56	40	2.13	54	3.13	79
H	3.19	81	3.75	95	5.34	136
J	1.88	48	2.44	62	3.44	87
K	2.31	59	3.09	78	4.56	116
L	4.34	110	5.38	137	7.31	186
M	5.31	135	6.34	161	7.88	200
N	Left of center .53			On center 13		
Q	1.44	37	1.78	45	2.31	59

**Service Kits**

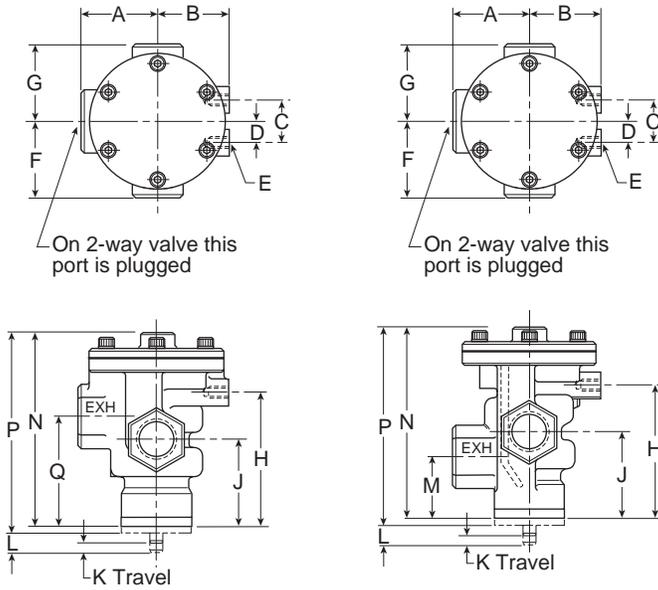
Include all parts normally required for in-service maintenance:

- 3/4" Basic valve.....**K352056**
- 1-1/4" Basic valve .....**K352083**



For inventory, lead times, and kit lookup, visit [www.pdnplu.com](http://www.pdnplu.com)

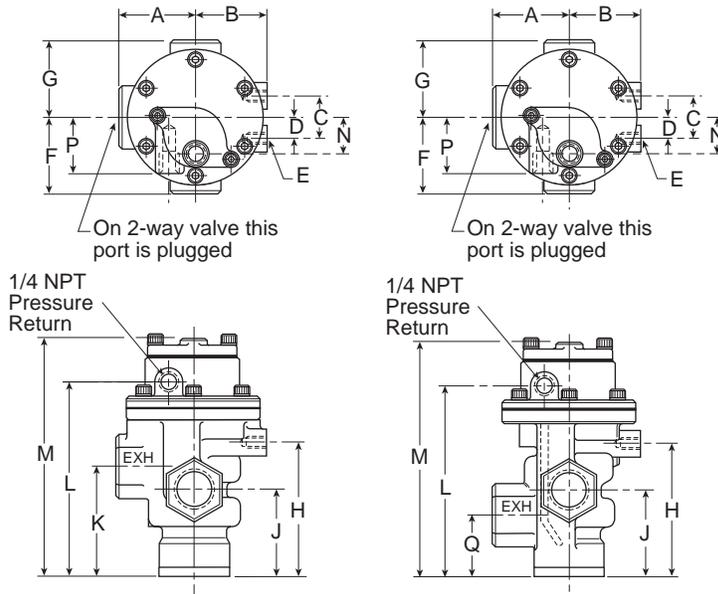
**Internal Return - 3/8", 3/4" & 1-1/4" Basic Body**



**Internal Return - 3/8", 3/4" & 1-1/4" Basic Body**

Key	3/8" Body		3/4" Body		1-1/4" Body	
	Inch	mm	Inch	mm	Inch	mm
A	1.56	40	2.13	54	3.00	76
B	1.50	38	1.94	49	2.25	57
C	1.13	29	1.13	29	2.38	60
D	.56	14	.56	14	1.19	30
E	3/8-16UNC 7/16" deep		3/8-16UNC 9/16" deep		1/2-13UNC 3/4" deep	
F	1.75	44	2.25	57	3.13	79
G	1.56	40	2.13	54	3.13	79
H	3.19	81	3.75	95	5.34	136
J	1.88	48	2.44	62	3.44	87
K	.50	13	.50	13	.50	13
L	.11	3	.16	4	.25	6
M	1.44	37	1.78	45	2.66	67
N	4.22	107	5.31	135	7.19	183
P	4.78	121	5.56	141	7.53	191
Q	2.31	59	3.09	78	4.56	116

**External Return - 3/8", 3/4" & 1-1/4" Basic Body**



**External Return - 3/8", 3/4" & 1-1/4" Basic Body**

Key	3/8" Body		3/4" Body		1-1/4" Body	
	Inch	mm	Inch	mm	Inch	mm
A	1.56	40	2.13	54	3.00	76
B	1.50	38	1.94	49	2.25	57
C	1.13	29	1.13	29	2.38	60
D	.56	14	.56	14	1.19	30
E	3/8-16UNC 7/16" deep		3/8-16UNC 9/16" deep		1/2-13UNC 3/4" deep	
F	1.75	44	2.25	57	3.13	79
G	1.56	40	2.13	54	3.13	79
H	3.19	81	3.75	95	5.34	136
J	1.88	48	2.44	62	3.44	87
K	2.31	59	3.09	78	4.56	116
L	4.34	110	5.38	137	7.31	186
M	5.31	135	6.34	161	7.88	200
N	Left of center .53 13		On center 1.00 25			
Q	1.44	37	1.78	45	2.31	59

C

Inline Valves

Viking Lite

Viking Extreme

"B" Series

Air Saver Unit

ADEX Series

"N" Series