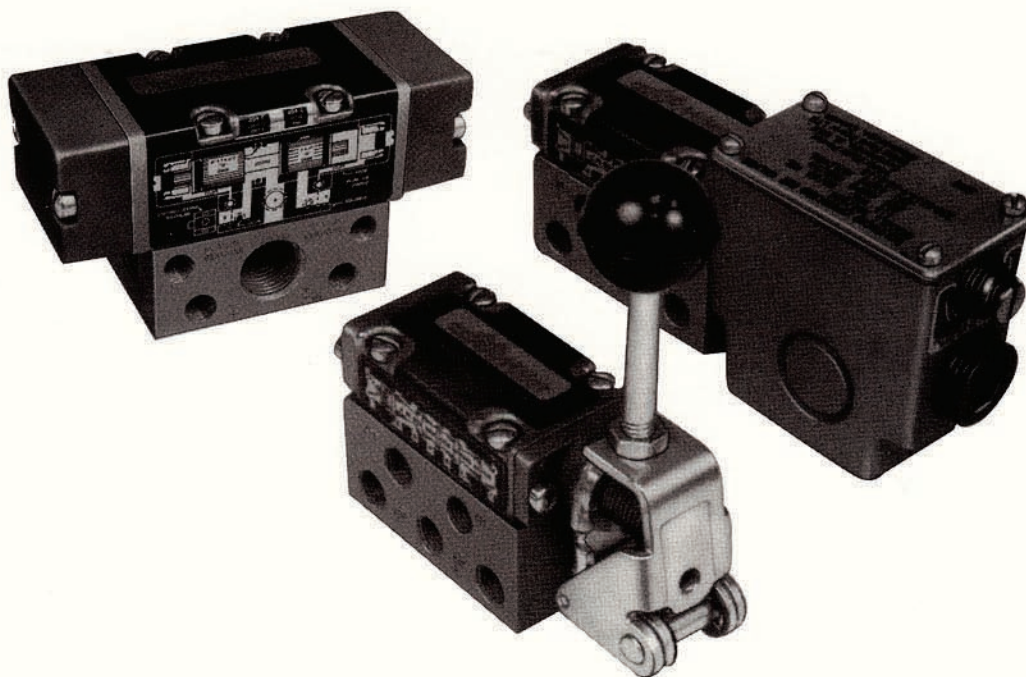


304, 504 & 310 Air Valves

**Easy Assembly for a wide
variety of operations**



**304 & 504 – 3-way & 5-way,
2 position, Inline Valves with
Solenoid, Air Pilot, Manual
and Cam Operators.**

**310 – 3-way, 2 & 3 position,
Port Mounted Valves with Air
Pilot Operators.**



304 & 504 Valves *Quality, Reliability, Versatility*

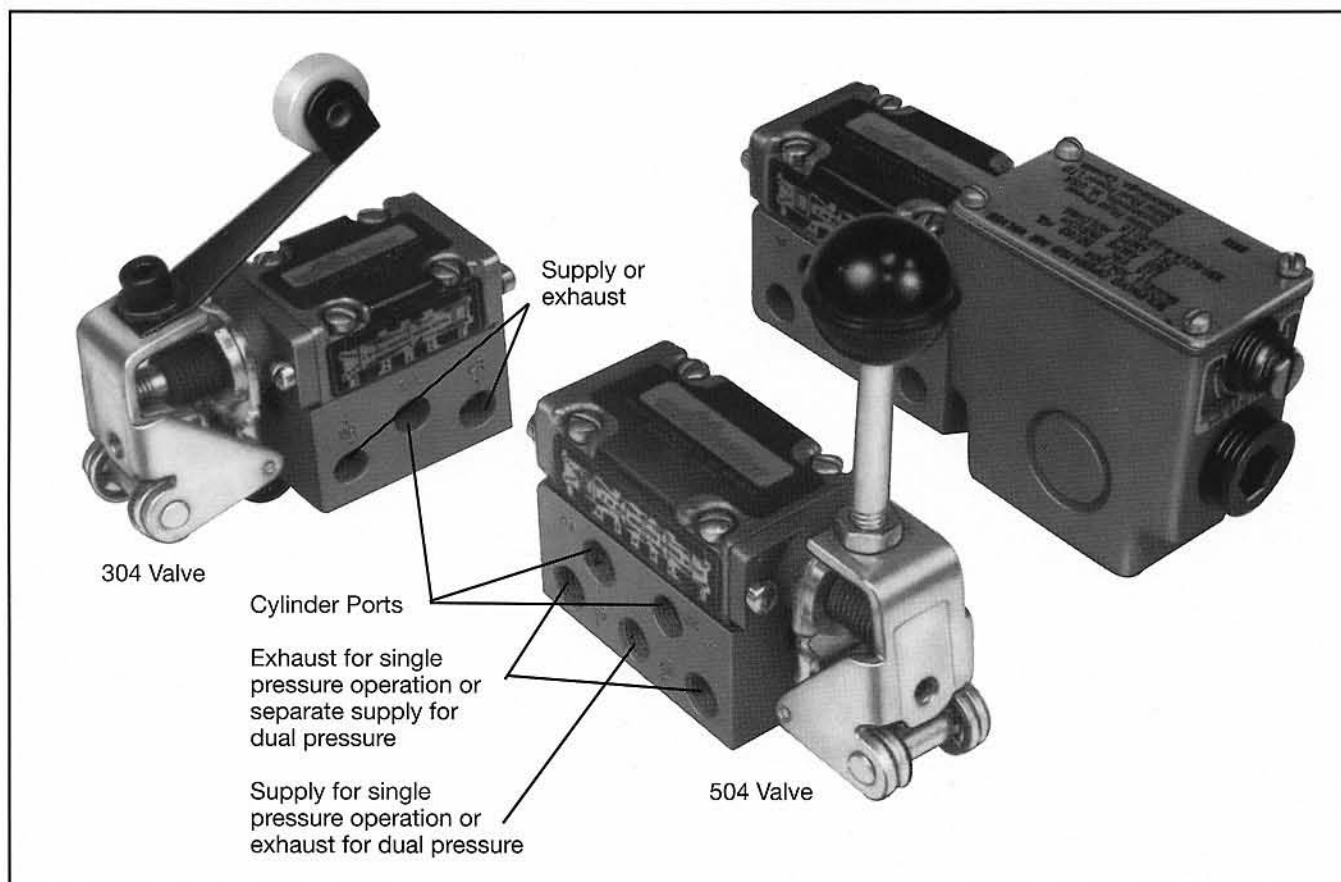


Table of Contents

Table of Contents	Page No.
304 & 504 Valve Specifications.....	2
Modular Design	3
304 Valve Selection.....	4
304 Valve Dimensions	5
504 Valve Selection.....	6
504 Valve Dimensions	7
310 Valve Specifications	8
310 Valve Selection and Dimensions	9
Flow Charts and Solenoid Specifications.....	10
Repair Parts	11
Part Numbers – How To Order.....	12
Power Valve Accessories	13
Other Pneumatic Valves and Components	14
Pneumatic Cylinders, FRL's and Components	15

Miller

Miller 304 & 504 valves feature a hard coated, lapped metal spool design with no dynamic seals to cause binding or sticking. And with no seals to wear, valve servicing is virtually eliminated.

Quality

Miller 304 & 504 valves have aluminum die cast bodies and hard coated aluminum spools to resist corrosion.

The spool is lapped to .000050 tolerance (max.) in straightness, roundness, and bore fit, and rides on a cushion of air.

Reliability

Low friction assures minimum parts wear, thus long life.

Response time is outstanding. Miller direct acting solenoid valves will shift in .007 to .015 seconds. Air pilot valves shift even faster. And the spool will shift with as little as 7 PSI.

Versatility

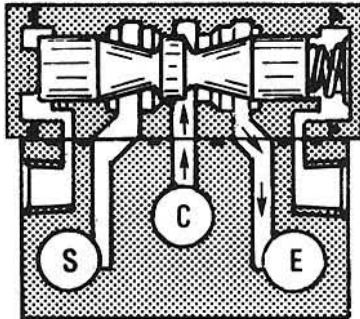
Subbases ported 1/8" thru 1/2" are available for 304 & 504 valves.

Additionally, the modular design allows a variety of operators to mount on either 304 or 504 valves. Air pilot, solenoid, cam roller, hand lever, and palm button actuators are available to change the valves operation.

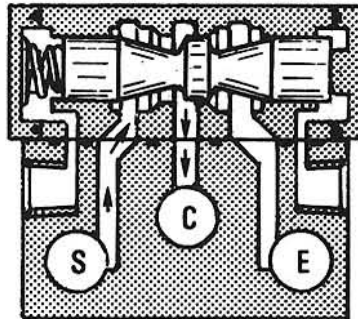
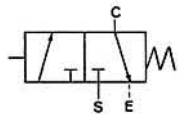
Modular Design

For easy assembly of several different operators

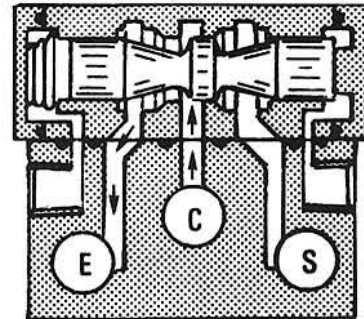
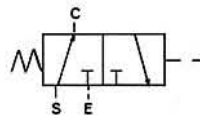
304 Valve Operations



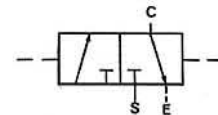
**SPRING RETURN
NORMALLY CLOSED**



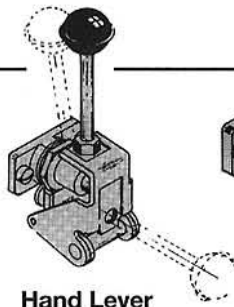
**SPRING RETURN
NORMALLY OPEN**



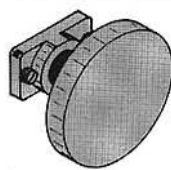
MOMENTARY IMPULSE



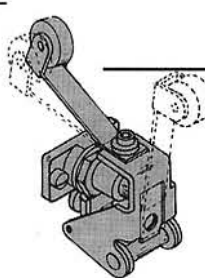
Operators
for either
304 or 504
valves



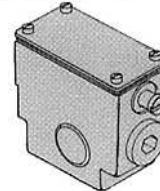
Hand Lever



Palm Button



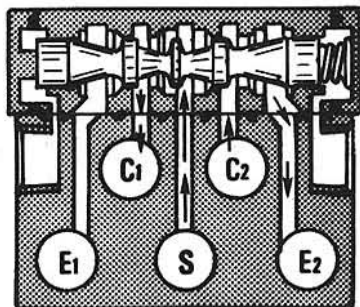
Cam Lever



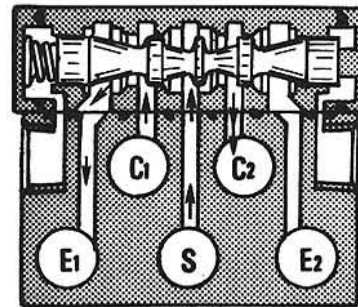
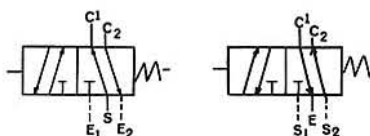
Solenoid

Plus Air
Pilot Operator
(shown)

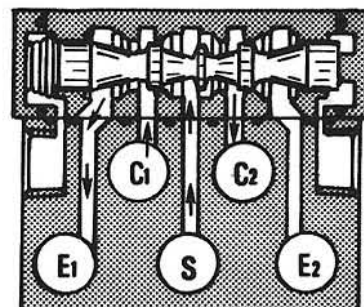
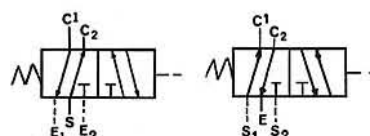
504 Valve Operations



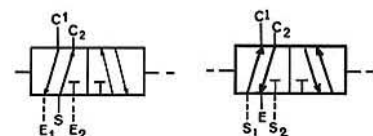
**LEFT CYLINDER PORT
NORMALLY OPEN TO SUPPLY**



**RIGHT CYLINDER PORT
NORMALLY OPEN TO SUPPLY**



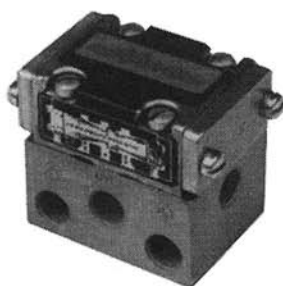
MOMENTARY IMPULSE



Piping the No. 504 Valve to provide ONE SUPPLY PORT and TWO EXHAUST PORTS and installing Miller Speed Control Mufflers in the exhaust ports enables you to control the forward and return cylinder stroke speeds independently.

Piping the No. 504 Valve to provide TWO SUPPLY PORTS and ONE EXHAUST PORT and installing TWO Pressure Regulators in the Circuit enables you to control cylinder forward and return stroke PRESSURES independently. A Speed Control Muffler in the exhaust port will control forward and return stroke speeds simultaneously (not independently).

304 Valve...1/8", 3/8" and 1/2" 3 Way



Specifications:

Media:

Air - Filtered & Lubricated

Ports:

1/8", 3/8" & 1/2"

Flow Rate:

1/8" - .5 CV

3/8" - .6 CV

1/2" - .6 CV

Operating Pressure:

0-250 PSI

Temperature:

32° - 150°F

The 304 Valve may function either normally open or normally closed. The function may be changed by reversing the supply and exhaust piping or by reversing the end of the spool, the spring acts on.

Selection Charts For Assemblies

AIR PILOT OPERATED	OPERATORS		MINIMUM PILOT PRESSURE	PORT SIZE	MODEL NUMBER
	PILOT	RETURN			
	AIR	SPRING	13 PSI	1/8"	300-203-301
				3/8"	300-203-303
				1/2"	300-203-304
	AIR	AIR	7 PSI	1/8"	300-201-301
				3/8"	300-201-303
				1/2"	300-201-304

SOLENOID OPERATED	OPERATORS		POWER CONSUMPTION		PORT SIZE	MODEL NUMBER
	PILOT	SPRING	IN RUSH	HOLDING		
	SOLENOID	SPRING	58VA	29VA	1/8"	300-203-301-115AC*-635
					3/8"	300-203-303-115AC-635
					1/2"	300-203-304-115AC-635
	SOLENOID	SOLENOID	58VA	29VA	1/8"	300-201-301-115AC-2635
					3/8"	300-201-303-115AC-2635
					1/2"	300-201-304-115AC-2635

* Other AC Voltages: 8, 24, 208, 240, 480. DC Voltages: 6, 8, 12, 24, 48, 110. Solenoid indicator light - LA - is an available option with 115 VAC only.

MECHANICALLY OPERATED	OPERATORS		PORT SIZE	MODEL NUMBER
	COMMAND	RETURN		
	PALM BUTTON	SPRING	1/8"	300-203-301-623
			3/8"	300-203-303-623
			1/2"	300-203-304-623
	HAND LEVER	HAND LEVER **	1/8"	300-203-301-625
			3/8"	300-203-303-625
			1/2"	300-203-304-625
	CAM ROLLER	SPRING **	1/8"	300-203-301-627
			3/8"	300-203-303-627
			1/2"	300-203-304-627

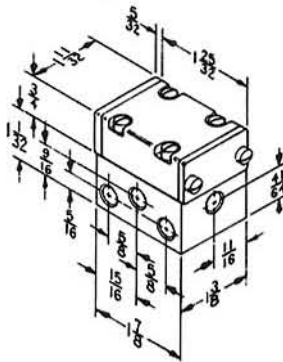
** A field conversion (requiring no additional parts) from detent to spring and vice versa is explained on a pamphlet included with these valves.

Selection Chart For Components

DESCRIPTION	TYPE OR SIZE	MODEL NUMBER
VALVE BODY	SPRING RETURN	300-203
	MOMENTARY IMPULSE	300-201
SUBPLATE	1/8" NPT	300-301
	3/8" NPT	300-303
	1/2" NPT	300-304

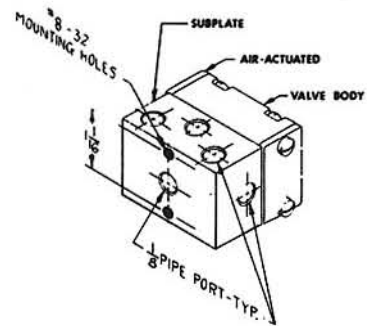
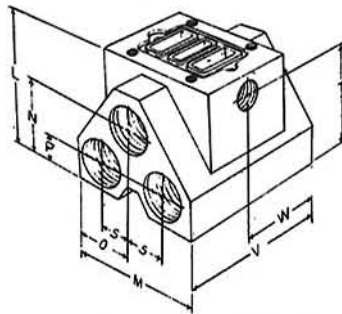
2 Positions *Component and Assembly Dimensions*

Air Pilot Operator



1/8" Subplate

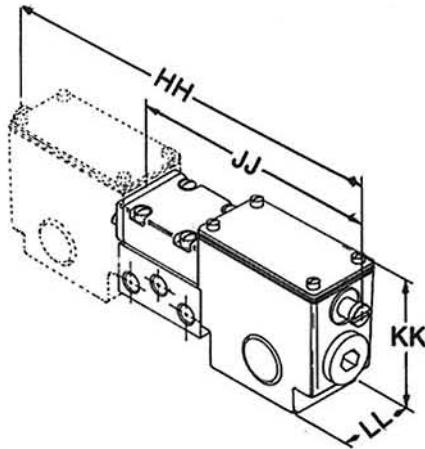
3/8" & 1/2" Subplate



3/8" & 1/2" SUBPLATE DIMENSIONS

SIZE	L	M	N	O	P	S	T	V	W
3/8"	1-11/16	2	1-1/8	1	7/16	17/32	1-7/16	2-1/4	1-1/8
1/2"	2-1/8	2-1/4	1-7/16	1-1/8	7/16	17/32	1-11/16	2-5/16	1-5/32

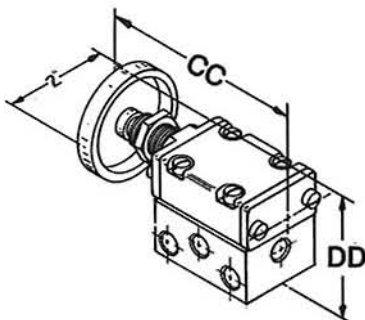
Solenoid Operator(s)



SOLENOID

SIZE	HH	JJ	KK	LL
1/8"	7-1/2	4-7/8	2-3/4	1-3/8
3/8"	7-1/2	4-15/16	3	2-1/4
1/2"	7-1/2	5-1/16	3-3/8	2-5/16

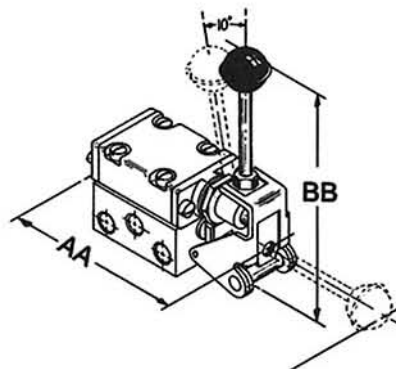
Palm Button Operator



PALM BUTTON OPERATOR

SIZE	CC	DD
1/8"	3-1/2	2-7/16
3/8"	3-9/32	3-5/32
1/2"	3-21/32	3-17/32

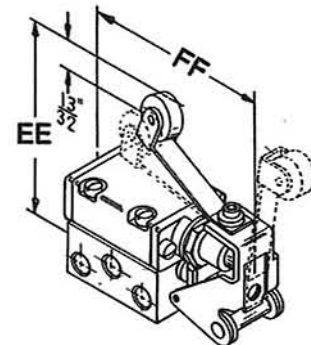
Hand Lever Operator



HAND LEVER OPERATOR

SIZE	AA	BB
1/8"	3-7/8	4-7/8
3/8"	3-15/16	5-19/32
1/2"	4-1/32	5-31/32

Cam Operator



CAM OPERATOR

SIZE	EE	FF
1/8"	3-19/32	3-1/2
3/8"	4-15/16	3-9/16
1/2"	4-11/16	3-21/32

504 Valve...1/8", 1/4", 3/8" and 1/2"



Specifications:

Media:	Air - Filtered & Lubricated
Ports:	1/8", 1/4", 3/8" & 1/2"
Flow Rate:	1/8" .6 CV 3/8" .8 CV 1/4" .8 CV 1/2" .8 CV
Operating Pressure:	0-250 PSI
Temperature:	32° - 150°F

The 504 valve may be dual pressure operated. Use ports 3 & 5 for separate supply pressures and port 1 for common exhaust.

Selection Charts For Assemblies

AIR PILOT OPERATED	OPERATORS		MINIMUM PILOT PRESSURE	PORT SIZE	MODEL NUMBER
	PILOT	RETURN			
	AIR	SPRING	13 PSI	1/8"	320-403-501
				1/4"	320-403-502
				3/8"	320-403-503
				1/2"	320-403-504
	AIR	AIR	7 PSI	1/8"	320-401-501
				1/4"	320-401-502
				3/8"	320-401-503
				1/2"	320-401-504

SOLENOID OPERATED	OPERATORS		POWER CONSUMPTION		PORT SIZE	MODEL NUMBER
	PILOT	RETURN	IN RUSH	HOLDING		
	SOLENOID-	SPRING	58VA	29VA	1/8"	320-403-501-115AC-635
					1/4"	320-403-502-115AC-635
					3/8"	320-403-503-115AC-635
					1/2"	320-403-504-115AC-635
	SOLENOID-	SOLENOID	58VA	29VA	1/8"	320-401-501-115AC-2635
					1/4"	320-401-502-115AC-2635
					3/8"	320-401-503-115AC-2635
					1/2"	320-401-504-115AC-2635

* Other AC Voltages: 8, 24, 208, 240, 480. DC Voltages: 6, 8, 12, 24, 48, 110. Solenoid indicator light - LA - is an available option with 115 VAC only.

MECHANICALLY OPERATED	OPERATORS		PORT SIZE	MODEL NUMBER
	COMMAND	RETURN		
	PALM BUTTON	SPRING	1/8"	320-403-501-623
			1/4"	320-403-502-623
			3/8"	320-403-503-623
			1/2"	320-403-504-623
	HAND LEVER	HAND LEVER **	1/8"	320-403-501-625
			1/4"	320-403-502-625
			3/8"	320-403-503-625
			1/2"	320-403-504-625
	CAM ROLLER	SPRING **	1/8"	320-403-501-627
			1/4"	320-403-502-627
			3/8"	320-403-503-627
			1/2"	320-403-504-627

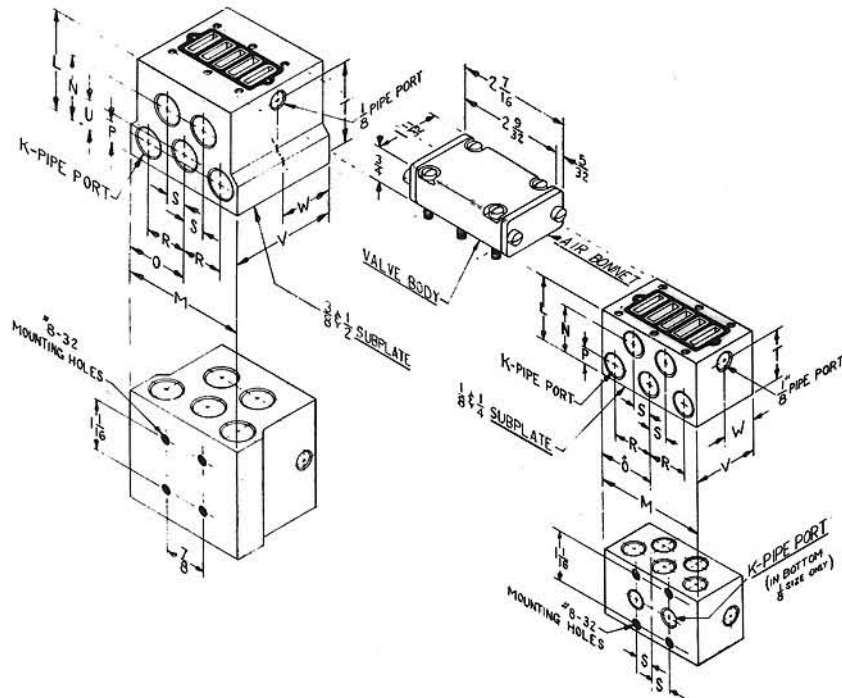
**A field conversion (requiring no additional parts) from detent to spring and vice versa is explained in a pamphlet included with these valves.

Selection Chart For Components

DESCRIPTION	TYPE OR SIZE	MODEL NUMBER
VALVE BODY	SPRING RETURN	320-403
	MOMENTARY IMPULSE	320-401
SUBPLATE	1/8" NPT	320-501
	1/4" NPT	320-502
	3/8" NPT	320-503
	1/2" NPT	320-504

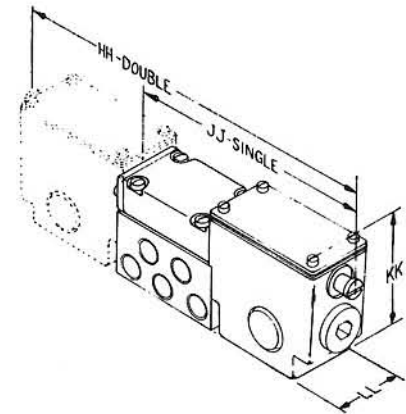
2 Positions *Component and Assembly Dimensions*

Air Pilot Operator



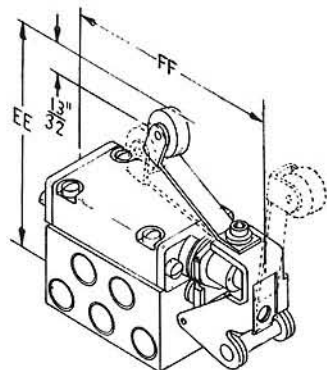
VALVE	DIMENSIONS											
	K	L	M	N	O	P	R	S	T	U	V	W
1/8"	1/8	1-1/8	2-3/8	13/16	1-3/16	5/16	13/16	13/32	53/64	X	1-3/8	11/16
1/4"	1/4	1-3/8	2-3/8	1	1-3/16	11/32	27/32	25/64	1-5/64	X	1-3/8	11/16
3/8"	3/8	2-1/8	2-5/8	1-3/8	1-5/16	7/16	7/8	7/16	1-53/64	19/32	2-1/4	1-1/8
1/2"	1/2	2-5/8	3-1/8	1-11/16	1-9/16	9/16	1	5/8	2-21/64	27/32	2-5/16	1-5/32

Solenoid Operator(s)



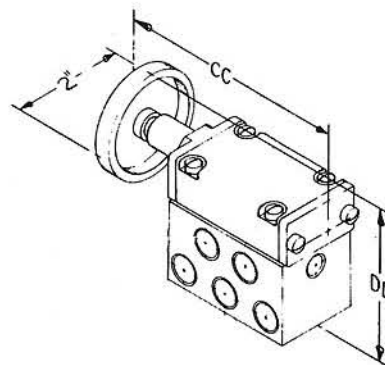
VALVE SIZE	DIMENSIONS			
	HH	KK	LL	JJ
1/8"	8	2-3/4	1-3/8	5-3/8
1/4"	8	2-3/4	1-3/8	5-3/8
3/8"	8	3-3/8	2-1/4	5-3/8
1/2"	8	3-7/8	2-5/16	5-9/16

Cam Operator



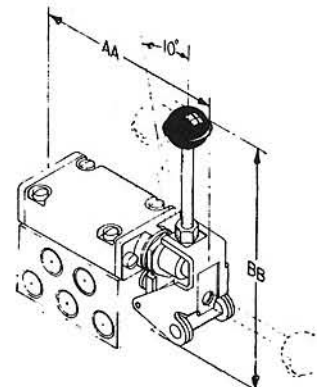
SIZE	DIMENSIONS	
	EE	FF
1/8"	3-11/16	3-29/32
1/4"	3-15/16	3-29/32
3/8"	4-11/16	3-29/32
1/2"	5-3/16	4-3/32

Palm Button Operator



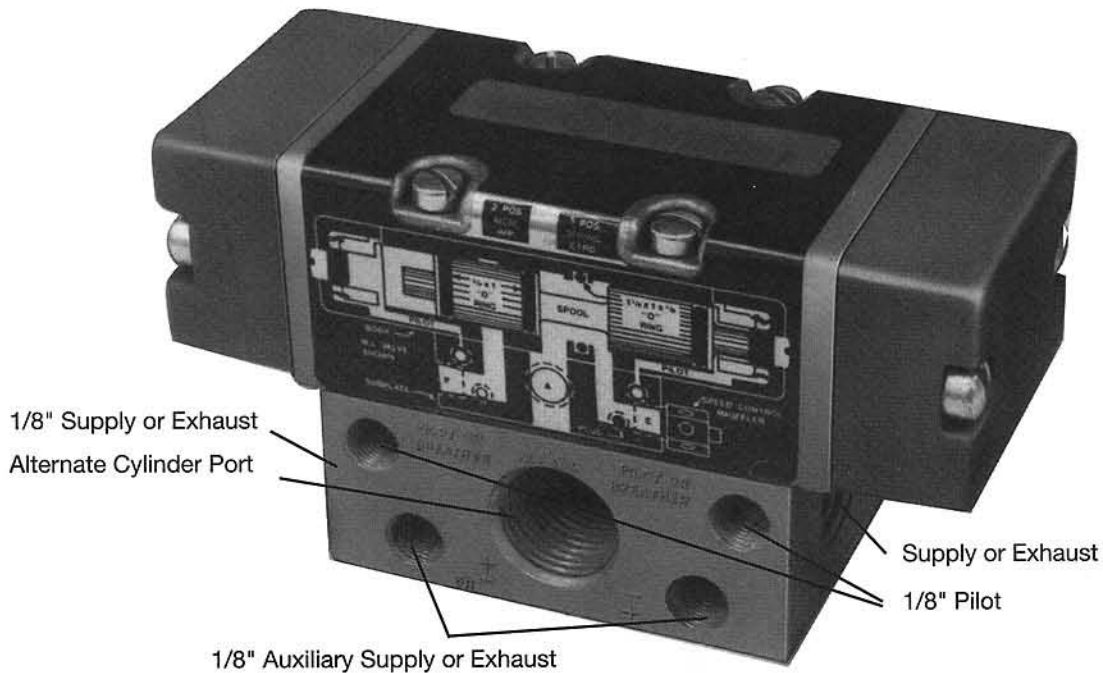
SIZE	DIMENSIONS	
	CC	DD
1/8"	4	2-1/2
1/4"	4	2-3/4
3/8"	4	3-1/2
1/2"	4-3/16	4

Hand Lever Operator



SIZE	DIMENSIONS	
	AA	BB
1/8"	3-29/32	4-25/32
1/4"	3-29/32	5-1/32
3/8"	3-29/32	5-25/32
1/2"	4-3/32	6-9/32

310 Valve... *Quality, Reliability, Versatility*



The Miller 310 valve is a unique power valve for operating medium to large bore air cylinders. Two Miller 310 valves, each mounted directly to the cylinder ports, allow the use of a regulator at each cylinder port, thus permitting use of exact pressure for cylinder work stroke and greatly reduced pressure return stroke.

Quality

Miller 310 Valves have corrosion resistant aluminum die cast bodies, end covers, and subbases; and an anodized aluminum spool. Nitrile seals provide excellent sealing. For mounting ease, a cross-sectional diagram on all valve labels shows how to orientate it on a subbase, as well as internal assemblies that change valve functions.

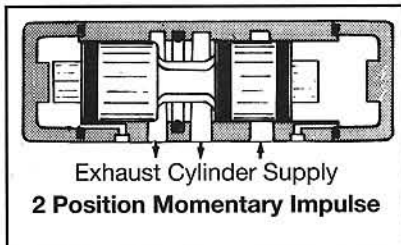
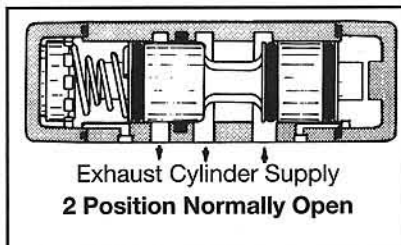
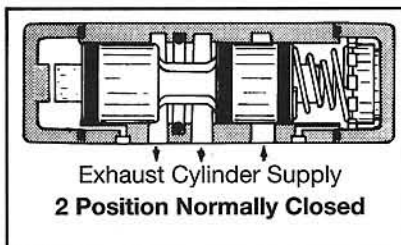
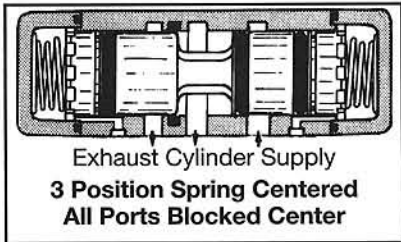
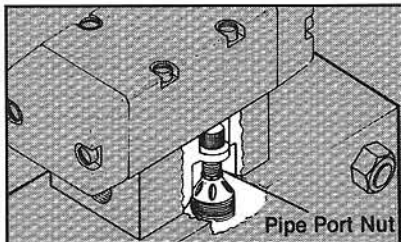
Reliability

Because 310 valves mount directly to the cylinder port, with pipe port nut, it has several important benefits:

- Reduced air consumption
- Lower piping cost
- Maximum power to the cylinder
- High speed operation

Versatility

Four subbase sizes are available to mount the 310 valve, which saves on pipe fittings. Four spool arrangements are offered including something unique in a 3 way valve; a 3 position, spring centered, all ports blocked center configuration.



1/4" Thru 3/4", 3 Way, 2 & 3 Positions



Specifications:

Media: Air - Filtered & Lubricated
Ports: 1/4", 3/8", 1/2", 3/4"
Flow Rate: 1/4" - 2.7 CV 1/2" - 3.7 CV
 3/8" - 3.7 CV 3/4" - 4.7 CV

Operating Pressure: 0-250 PSI
Temperature: 32° - 150° F

This valve is port mounted. Valve bodies and subplates are sold separately.

Selection Chart for Valve Bodies

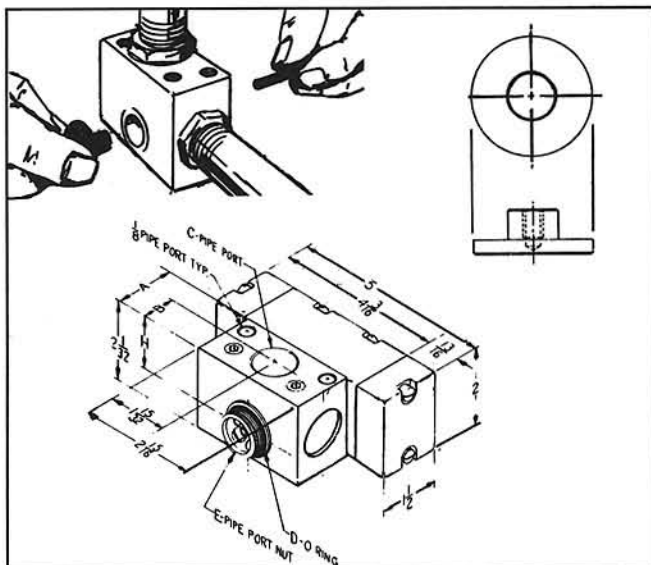
AIR PILOT OPERATED	OPERATORS		MINIMUM PILOT PRESSURE	TYPE	MODEL NUMBER
	PILOT	RETURN			
	AIR	SPRING	23 PSI	NORMALLY CLOSED	310-3
	AIR	SPRING	23 PSI	NORMALLY OPEN	310-4
	AIR	AIR	15 PSI	MOMENTARY IMPULSE	310-1
	AIR & SPRING	AIR & SPRING	25 PSI	SPRING CENTERED	310-2

Selection Chart for Subbases *

PORT SIZE	MODEL NUMBER	PORT SIZE	MODEL NUMBER
1/4"	310-102	3/4"	310-106
3/8"	310-103	* Includes Subbase, O-ring, Pipe Port Nut and Cap Screw	
1/2"	310-104		

Accessories For 310 Air Valves

Subbase Plug—A 310 Subbase can also be mounted inline, rather than directly on cylinder ports. An easily installed Subbase Plug is used to block the flange fitted cylinder port.



No. 310 Valve Body & Subplate Air Operated

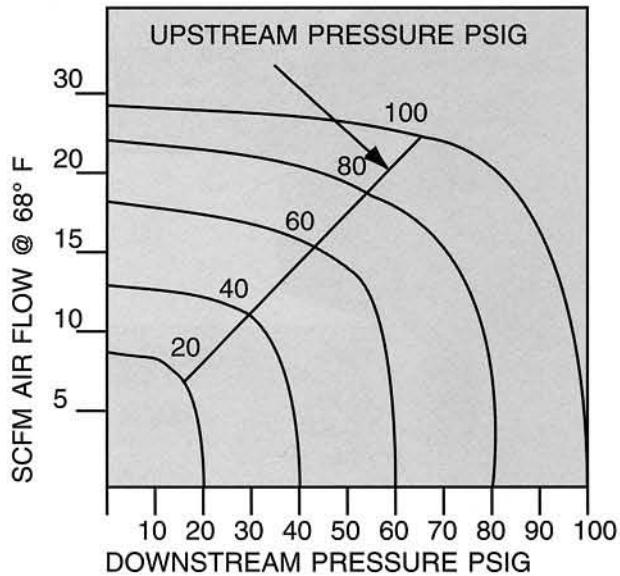
PORT SIZE	MODEL NUMBER **
1/4"	332-6386-25
3/8"	332-6386-38
1/2"	332-6386-50
3/4"	332-6386-75

** Includes Plug, O Ring and Cap Screw

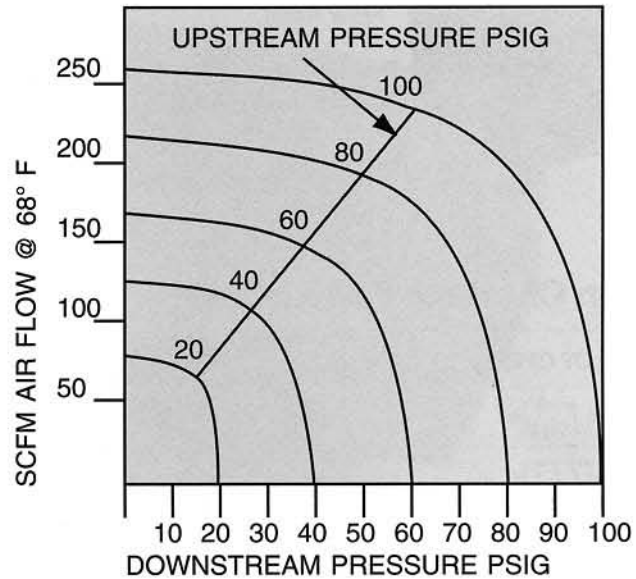
DIMENSIONS							
SIZE	A	B	C	D	E	H	SUBPLATE PART NO.
1/4"	1-1/4	5/8	1/4	5/8 x 3/4	1/4	1-39/64	310-102
3/8"	1-1/4	5/8	3/8	11/16 x 13/16	3/8	1-38/64	310-103
1/2"	1-1/4	5/8	1/2	7/8 x 1	1/2	1-31/64	310-104
3/4"	1-1/2	3/4	3/4	1-1/8 x 1-1/4	3/4	1-25/64	310-106

Valve Flow Charts & Solenoid Specifications

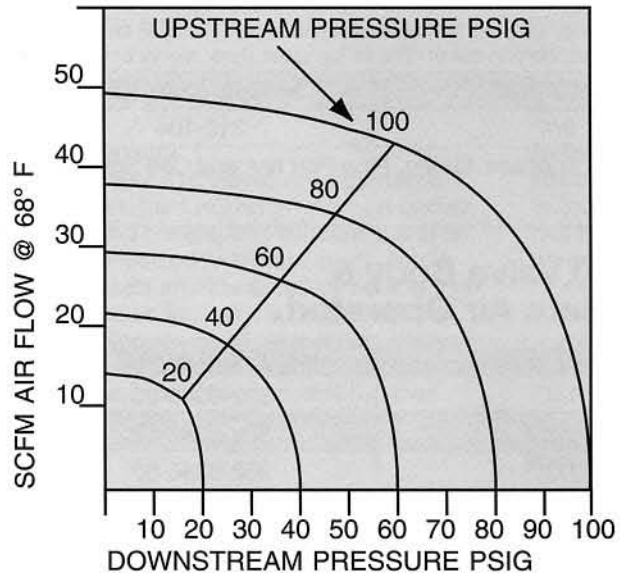
MODEL 304 1/8" SUBBASE
CV = 0.5



MODEL 310 3/4"
CV = 4.7



MODEL 504 1/4", 3/8" & 1/2"
SUBBASE CV = 0.8

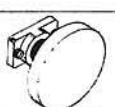
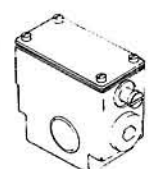


ELECTRICAL CHARACTERISTICS OF MILLER AIR VALVE SOLENOIDS

Rated Voltage	InRush Current VA	Holding Current VA	True Power WATTS
8AC	48	27	—
24AC	50	24	—
115AC	58	29	—
208AC	39	17	—
240AC	41	20	—
480AC	43	19	—
6DC			15
8DC			14
12DC			15
24DC			15
48DC			14
110DC			12
125DC			15
LA	58	29	

Repair Parts For Miller Valves

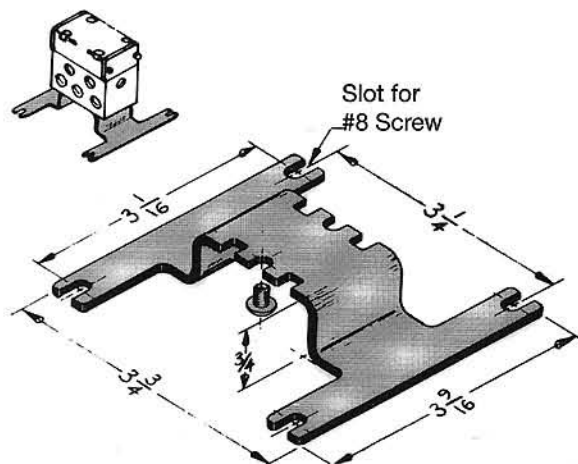
Complete Manual or Mechanical Bonnets For 304 or 504 Valves

	Description	Part Number
	Palm Button	330-623
	Hand Lever	330-625
	Cam Lever	330-627
	Solenoid	330-8AC-635 330-12AC-635 330-24AC-635 330-115AC-635 330-208AC-635 330-240AC-635 330-480AC-635 330-6DC-635 330-8DC-635 330-12DC-635 330-24DC-635 330-110DC-635 330-125DC-635 330-115AC-LA635

Mtg. Bracket For 304 & 504 Valve

Includes 4
Valve Mounting
Screws

Part Number
348-9703



Seals, Gaskets, & Kits for Miller Valves

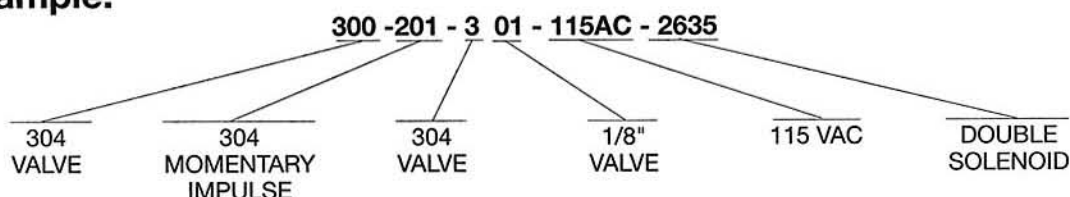
	Description	Part Number
	Paper Gasket for valve body/subbase interface 304 Valve 504 Valve Not req'd for 310 valve	300-GS001 320-GS001
	Plain Bonnet Kit For 310 Valve Includes Bonnet, 2 Mtg. screws, & O-ring	310-39
	Pipe Port Nut & Bolt Kit for Subbases & Pipe Port Tee's 1/4" 3/8" 1/2" 3/4" 1" 1-1/4"	332-6002 332-6003 332-6004 332-6006 332-6008 332-6010
	310 Valve Repair Kit Includes 2 Bonnet O-rings, 3 Spool O-rings, 1 Body O-ring, 1 Subbase Seal 2 Spool Springs, 2 Spring Cages.	349-44
	304 & 504 Valve Repair Kit. Includes 2 Bonnet O-rings, 1 304 subbase seal, 1 504 subbase seal, 1 spool spring.	349-444
	Service Solenoid Kit For 304 & 504 Valves Includes Solenoid, Solenoid Gasket & Mounting Screws	349-8AC-637 349-12AC-637 349-24AC-637 349-115AC-637 349-208AC-637 349-240AC-637 349-480AC-637 349-6DC-637 349-8DC-637 349-12DC-637 349-24DC-637 349-48DC-637 349-110DC-637 349-125DC-637 349-115AC-LA637
	Plain Bonnet Kit For 304 & 504 Valves Includes Bonnet, 2 Mtg. Screws & O-ring	349-639

Miller Part Numbers...How to Order

How To Order Miller Valves 304 & 504 Assemblies

Series	Valve Body Type	Subplate Type	Subplate Size	Operator or Voltage (IF SOL)	Solenoid Type
300 = 304 VALVE	210 = 304 MOMENTARY	3 =	01 = 1/8"	623 = PALM BUTTON	635 = SINGLE SOLENOID
320 = 504 VALVE	IMPULSE	304	02 = 1/4" (504 ONLY)	625 = HAND LEVER	2635 = DOUBLE SOLENOID
	203 = 304 SPRING RET.	5 =	03 = 3/8"	627 = CAM ROLLER	
	401 = 504 MOMENTARY	504	04 = 1/2"	8 AC = 8 VAC	
	IMPULSE			12 AC = 12 VAC	
	403 = 504 SPRING RET.			24 AC = 24 VAC	
				115 AC = 115 VAC	
				208 AC = 208 VAC	
				240 AC = 240 VAC	
				480 AC = 480 VAC	
				6 DC = 6 VDC	
				8 DC = 8 VDC	
				12 DC = 12 VDC	
				24 DC = 24 VDC	
				48 DC = 48 VDC	
				110 DC = 110 VDC	
				125 DC = 125 VDC	
				LA = LAMP (115 AC ONLY)	
				2 LA = LAMP ON BOTH SOL (115 AC ONLY)	

Example:



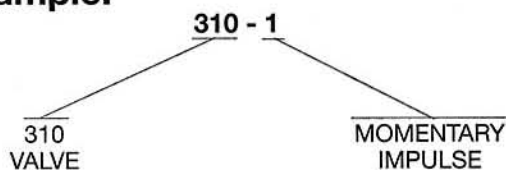
310 Valve Bodies

SERIES	BODY TYPE
310 = 310 VALVE	1 = MOMENTARY IMPULSE
	2 = SPRING CENTERED
	3 = NORMALLY CLOSED
	4 = NORMALLY OPEN

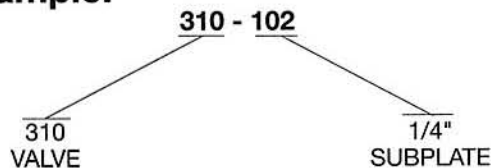
310 Subplates

SERIES	PORT SIZE
310 = 310 VALVE	102 = 1/4"
	103 = 3/8"
	104 = 1/2"
	106 = 3/4"

Example:



Example:



Power Valve Accessories



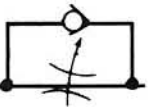
Flow Control Valves

Specifications: Media:

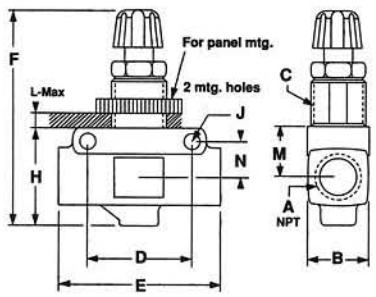
Filtered Air
or Neutral Gas
Non-Lubricated

Pressure: 0-150 PSI

Temp. Range: 20° - 150° F

	Port Size	Check Valve Orifice	Cv	Model Number	Dimensions						
					B	C	D	E	F	J	L
	1/8"	.08	.02	340-FLO-1	.71	.63	.99	1.34	2.09	.17	.24
	1/4"	.20	0.7	340-FLO-2	.94	.88	1.38	1.85	2.68	.21	.26
	3/8"	.31	1.5	340-FLO-3	1.02	.95	1.58	2.52	3.27	.22	.36
	1/2"	.47	3.5	340-FLO-4	1.26	1.19	2.17	3.67	4.43	.26	.55

Features: Inline, panel or fixed mounting. Control knob slotted for optional use with screw driver. Positive setting with lock nut. Fine metering with multi staged needle. 2 PSI crack pressure on reverse check. Needle assembly fixed in body, cannot be disassembled.



Exhaust Mufflers - with Sintered Bronze Element

Speed Control Muffler	Port Size	Model Number	Exhaust Muffler	Port Size	Model Number
 Recommended as Speed Control and Exhaust Silencer for Five Ported Dual Exhaust Valves. Screw Adjustment will vary compressed air exhaust rate and cylinder speed.	1/8"	331-901	 Used to silence exhaust of compressed air from Control Valves.	1/8"	331-921
	1/4"	331-902		1/4"	331-922
	3/8"	331-903		3/8"	331-923
	1/2"	331-904		1/2"	331-924
	3/4"	331-906		3/4"	331-926
	1"	331-908		1"	331-928

304 & 504 Series

- Lapped Spool design for fast valve response time
- Subplates ported 1/8" NPT thru 1/2" NPT to match piping requirements
- Modular Design allows air pilot, solenoid, palm button, hand lever, & cam lever operators

Applications

- Use on high speed machines
- Use where air pressure is low, only 7psi shifts spool
- See pages 4-7 for details

310 Series

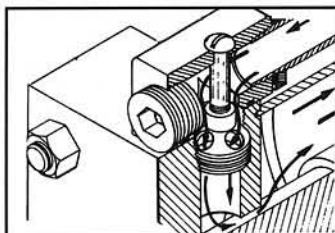
- Soft spool seals for excellent sealing
- "Port Mount" design conserves compressed air
- Subplates ported 1/4" thru 3/4" fit a wide range of flow requirements

Applications

- Dual pressure circuits
- Use for fast cylinder response
- Use pages 8-9 for details

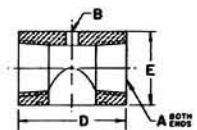
Pipe Port Tee –

For faster piping to ports of pneumatic cylinder valves, regulators, etc.

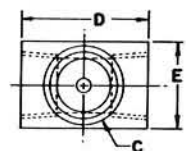


Saves on Piping

Illustration at left shows how the Miller Pipe Port Tee is flush mounted to the cylinder port, thus saving space and reducing piping labor and costs by eliminating threaded pipe unions. A pipe port nut is first threaded into cylinder port, the Pipe Port Tee is threaded to the supply air line, positioned over port, then fastened to port and pipe port nut with a screw.

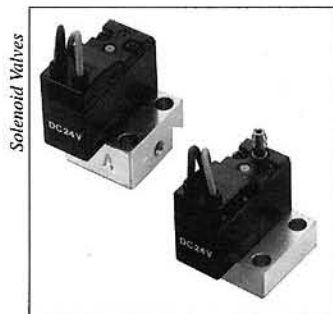


A Port Size	Model Number	B Screw	C O-Ring	D	E
1/4"	332-4202	1/4-20	5/8 x 3/4	1-5/16	7/8
3/8"	332-4203	1/4-20	11/16 x 13/16	1-5/16	7/8
1/2"	332-4204	1/4-20	7/8 x 1	1-13/16	1-1/8
3/4"	332-4206	1/4-20	1-1/8 x 1-1/4	2	1-3/8
1"	332-4208	5/16-18	1-3/8 x 1-1/2	2-5/8	1-5/8
1"-	332-4201	5/16-18	1-3/4 x 1-7/8	2-3/4	2



Pneumatic Valves & Components

Ultra Miniature Valves



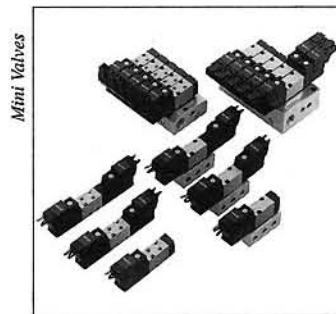
Solenoid Valves

Ultra Miniature Valves (catalog no. 9566)

High flow only 10mm wide
Pilot operated, M5 ports
Low wattage (1 W)
Various electrical connections
Compact design
Quick response
Adaptable to electronic control

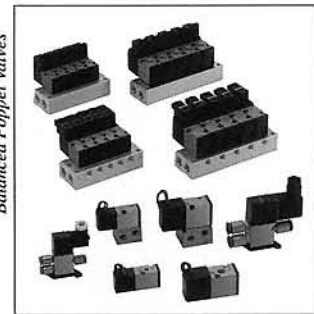
Used for:

- Semi conductor manufacturing line
- CRT plant
- Medical instrumentation, etc.



Mini Valves

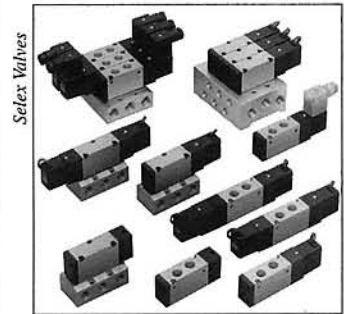
Compact Design Valves



Balanced Poppet Valves

Compact Design Valves (catalog no. 9633)

3-way, 4-way, 5-way for flexible performance
Manual overrides and indicator lights
DIN rack and manifold block
Available in port sizes M5 to 1/2" NPT ports
Body or subbase ported
Solenoid or air pilots are available
Various electrical connections are available
High flow and low wattage (1.8 W)

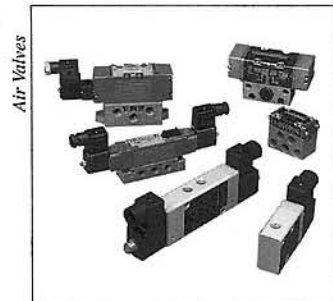


Selex Valves

Balanced Poppet Valves (catalog no. 9567)

3-way
Available in port sizes M5 to 1/4" NPT ports
28" Hg to 100 psi operation

Specialty Valves



Air Valves

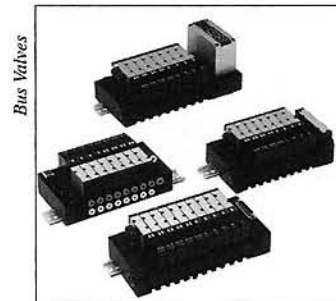
Subbase, ISO, and Hyflo Valves

Miller offers virtually every type of air valve you might need, both 2- and 3-position, 3-, 4- and 5-way valves in manifold, in-line and port-mounted models. Port sizes range from 1/8" to 1 1/4" and ISO 1, ISO 2 and ISO 4. Valves are available with solenoid, air pilot, mechanical and manual operators. ISO valves are available with sandwich type pneumatic flow control and pressure-regulated valves.

Bus Valves (catalog no. 9575, 9574)

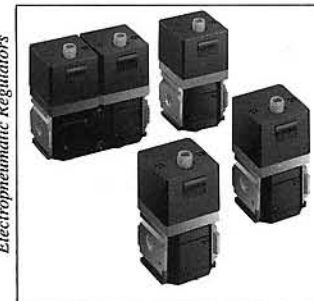
3 types of wiring connection to programmable controllers (call for supported protocols)
Block manifold for max. flexibility
DIN rack, compact, space saving
Call us for your particular application. Port sizes available up to 1/2" NPT

Bus Valves



Bus Valves

Transducers



Electropneumatic Regulators

Electropneumatic Regulators (catalog no. 9546)

Modular design, space saving
One touch wiring by connector
Modular manifold system
4 input signals (0-5V, 0-10V, 4-20mA Variable resistor)
Non-bleed operation

Shock Absorbers



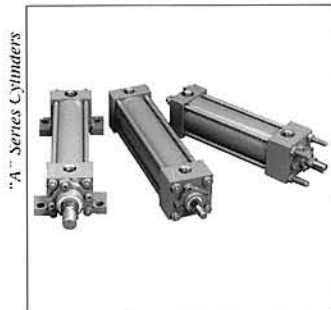
Shock Absorbers

Shock Absorbers (catalog no. 9571)

High energy decelerating characteristics are self-adjusting with slot orifice design
Easy installation
Stroke ranges available 8mm to 20mm

Pneumatic Cylinders, FRL's & Components

Heavy/Medium-Duty Tie Rod Cylinders



"A" Series Cylinders

"A" Series Cylinders (catalog no. 7619)

NFPA standard heavy-duty air cylinders, featuring all steel construction, are available in 23 flange, foot and pivot mounting styles.

"AL" Series Cylinders (catalog no. 8564)

Medium-duty aluminum cylinders, with machined aluminum heads and caps and permanent lubrication, these cylinders are available in 15 NFPA flange, foot and pivot mounting styles, and are readily customized for special applications.

Specifications

	Pressure To	Bore Sizes
"A" Series	250 PSI	1½"-20"
"AL" Series	200 PSI	1½"-8"

Compact Cylinders



"BT & BTM" Series

"BT & BTM" Series (catalog no. 9436)

Eight bore sizes from 7/16" to 2", stroke lengths from ½" to 6", single or double acting and 21 standard mounting styles with optional bumpers, double rod ends and stroke sensing switches.

"B-FLAT" Series (catalog no. 8443)

Built for compactness and convenience, these cylinders are available in both pneumatic and low-pressure hydraulic models.

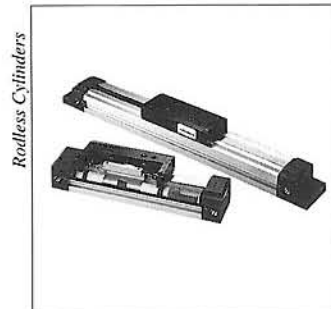


"B-Flat" Series

Specifications

	Pressure To	Bore Sizes
"BT & BTM" Series	250 PSI	7/16"-2"
"B-FLAT" Series	250 PSI	3/4"-2½"

Rodless Cylinders



Rodless Cylinders

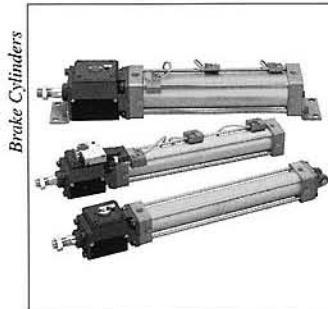
Rodless Cylinders (catalog no. 8625)

The unique patented design of this new cylinder provides long cycle life (approximately 10 million cycles of a 20-inch stroke) and high cycle speed, in non-lubricated applications. The low profile design provides improved resistance to side loads. Position sensing is available on all Miller rodless cylinders.

Brake Cylinders (catalog no. 9570)

High accuracy for stopping position ±1mm
Aluminum cylinder body with bronze brake provides long life
Switches, reed or proximity, DIN plug type, bi-color
Available in bore sizes 40mm to 100mm

Brake Cylinders



Brake Cylinders

Modular FRL's



FRL's (Filter/Regulator/Lubricator)

FRL's (Filter/Regulator/Lubricator) (catalog no. 8557)

All of the modular FRL's from Miller from the 1/8" to 1 1/4" port sizes are rated from pressures to 150 PSI. They feature a unique filter (patent pending) which lasts far longer than standard filters. The 40/5 filter provides the protection of a 5 micron element with the flow-through and service life of a 40 micron filter.

Auxiliary Components



Auxiliary Components

Auxiliary Components (catalog no. 9573)

We complement our line with a full range of pneumatic accessories, including flow controls, checks, quick exhaust valves, fittings, and tubing.

Miller Fluid Power

Main Plant
800 North York Road
Bensenville, IL 60106
(630) 766-3400—Local
(800) 323-2520—Elsewhere
(630) 350-0294—FAX

Miller Fluid Power

33067 Industrial Road
Livonia, MI 48150
(800) 323-2520

Miller Fluid Power Canada Ltd.

1214 Kamato
Mississauga, Ontario, Canada L4W 1Y1
(800) 268-0205—Ontario & Quebec
(905) 625-2780—Elsewhere
(905) 625-8724—FAX

Miller Fluid Power (UK) Ltd.

Unit 3, Bailey Drive
Norwood Industrial Estate
Killamarsh, Sheffield
South Yorkshire, England S31 8HB
(441)-462-438303
(441)-462-420901—FAX

All specifications and information subject to
change without notice or prior obligation.

File 9763 060105

