





### Miniature Pneumatic Products





### Miniature Pneumatic Products

### HUGE Inventory

Hundreds of miniature cylinders, control valves, electronic valves, fittings and other pneumatic products in stock and ready to go!



Order by 1:00 p.m. CST and items *Ship the Same Day* 

Easy-to-Order!



Exceptional quality & reliability!



### Stainless Steel Cylinders

- 5/16" to 3" Bore Sizes
- Universal, Stud, Front Block, Clevis, Trunnion & Fnd Mounts



- Stroke Lengths up to 12"
- Big Variety IN STOCK!

#### Maximatic<sup>®</sup> Valves & Filter-Regulators

- 1/8" NPT & 1/4" NPT Valves
- 1/4" NPT & 3/8" NPT Filter-Regulators
- 3-Way & 4-Way Valves
- Pilot & Electronic Pilot-Operated Valves

#### Manual Valve

• 4-Way Detented Push/Pull Valve

### Fittings

- Barb Style & Push-Quick
- #3-56 through 1/4"
- IN STOCK!

### Electronic Valves



- Clippard's Mouse Valve Series
- 2-Way & 3-Way Operation
- 12- & 24-Volt DC Operation
- Direct-Operated

#### Control Valves

- Large Variety
- Toggle, Stem & Pilot-Operated Versions
- #10-32 & 1/8" NPT
  - Needle, Check, Quick **Exhaust & Shuttle Valves**
  - Adjustable Regulator

#### 10 mm & 15 mm Valves

- 2-Way & 3-Way Operation
- Direct-Operating
- 12- & 24-Volt DC Operation
- Connectors & Manifolds



Clippard . . . A Name You Can Trust!

## Stainless Cylinders Steel Cylinders Ready to Ship!

#### Stud Mount, Double-Acting (SDR)

_					Str	oke					
Bore	1/2"	1″	1 1/2"	2"	3"	4"	5"	6"	8"	10"	12"
5/16"	stock	stock	stock	stock	stock	stock					
1/2"	stock	stock	stock	stock	stock	stock					
9/16"	stock	stock	stock	stock	stock	stock					
5/8"	stock	stock	stock	stock	stock	stock	•	•			
3/4"	stock	stock	stock	stock	stock	stock	stock	stock			
7/8"	stock	stock	stock	stock	stock	stock	•	•			
1 1/16"	stock	stock	stock	stock	stock	stock	stock	stock			
1 1/4"	stock	stock	stock	stock	stock	stock	•	•			
1 1/2"	•	stock	stock	stock	stock	stock	stock	stock	stock	stock	stock
1 3/4"	•	stock	stock	stock	stock	stock	•	•			
2"	•	stock	stock	stock	stock	stock	•	stock			
2 1/2"		stock	stock	stock	stock	stock	•	stock			
3"		stock	•	stock	stock	stock	•	stock	stock		

#### Front Block Mount, Double-Acting (FDR)

				Stro	ke			
Bore	1/2"	1"	1 1/2"	2"	3"	4"	5"	6"
3/4"	stock	stock	stock	stock	stock	stock	•	•
1 1/16"	stock	stock	stock	stock	stock	stock	•	•
1 1/2"	stock	stock	stock	stock	stock	stock	•	•

#### Clevis Mount, Single-Acting (CSR)

D		Stroke									
Bore	1/2"	1"	1 1/2"	2"	3"	4"					
1 1/2"	stock	stock	stock	stock	stock	stock					

A complete line of flow controls, valves, mounting hardware, position sensors, and reed switches also available.





		Stroke											
Bore	1/2"	1"	1 1/2"	2"	3"	4"	5"	6″					
1 1/16"	stock	stock	•	stock	•	stock	•	•					
1 1/2"	stock	stock	stock	stock	stock	•	•	•					



#### End Stud Mount, Double-Acting (EDR)

n.		Stroke											
Bore	1/2"	1"	1 1/2"	2"	3"	4"	5"	6"	8"	10"	12"		
1 1/2"		stock	•	stock	stock	stock	•	•	•	•	•		

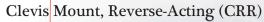


#### Clevis Mount, Double-Acting (CDR)

					Str	oke					
Bore	1/2"	1″	1 1/2"	2"	3"	4"	5"	6"	8"	10"	12"
1 1/2"	•	stock	stock	stock	stock	stock	stock	stock	stock	stock	stock

## Products Ship the Same Day

 Standard Size—Ready to Go within 2 to 3 days



	¥		Stro	ke		
Bore	1/2"	1"	1 1/2"	2"	3"	4"
1 1/2"	•	stock	•	stock	stock	stock



## Products Ship the Same Day!

Standard Size, Ready to Go within 2 to 3 days

#### Universal Mount, Single-Acting (USR)

D.			Strol	ke		
Bore	1/2"	1"	1 1/2"	2"	3"	4"
5/16"	stock	stock	•	stock	stock	stock
1/2"	stock	stock	stock	stock	stock	stock
9/16"	stock	stock	stock	stock	stock	stock
5/8"	stock	stock	stock	stock	stock	stock
3/4"	stock	stock	stock	stock	stock	stock
7/8"	stock	stock	stock	stock	stock	stock
1 1/16"	stock	stock	stock	stock	stock	stock
1 1/4"	stock	stock	•	stock	stock	stock
1 3/4"	stock	stock	•	stock	stock	stock
2"	•	stock	stock	stock	stock	stock

Hundreds of Models— Thousands of Items Ready to Ship Now!

#### Universal Mount, Reverse-Acting (URR)

	D			Stro	ke		
	Bore	1/2"	1″	1 1/2"	2"	3"	4"
Ī	3/4"	•	stock	stock	stock	stock	stock
	7/8"	•	stock	•	stock	•	•
	1 1/16"	•	stock	stock	stock	stock	stock

the finest.

Flast!

#### Stud Mount, Double-Acting, Double Ended Rod (SDD)

	0		Stroke												
	Bore	1/2"	1"	1 1/2"	2"	3"	4"	5"	6"	8"	10"	12"			
	5/8"	•	stock	•	stock	•	•								
Ì	3/4"		stock		stock	stock	stock	•	•						
ĺ	1 1/2"	•	stock	•	stock	stock	stock	•	•	•	•	•			
ĺ	2"	•	stock	•	stock	stock	stock	•	•	•	•	•			
ź	2 1/2"	•	stock	•	stock	stock	stock	•	•	•	•	•			
9	3"		stock		stock	stock	stock	•	•	•	•	•			

#### Universal Mount, Double-Acting (UDR)

					Str	oke					
Bore	1/2"	1"	1 1/2"	2"	3"	4"	5"	6"	8"	10"	12"
5/16"	stock	stock	stock	stock	stock	stock					
1/2"	stock	stock	stock	stock	stock	stock					
9/16"	stock	stock	stock	stock	stock	stock					
5/8"	stock	stock	stock	stock	stock	stock					
3/4"	stock	stock	stock	stock	stock	stock	stock	stock	•	•	•
7/8"	stock	stock	stock	stock	stock	stock					
1 1/16"	stock	stock	stock	stock	stock	stock	stock	stock	•	•	•
1 1/4"	stock	stock	stock	stock	stock	stock	•	•	•	•	•
1 3/4"	•	stock	stock	stock	stock	stock	•	stock	•	•	•
2"	•	stock	stock	stock	stock	stock	•	stock	stock	stock	•
2 1/2"	•	stock	•	stock	stock	stock	•	stock	stock	stock	stock
3"		stock		stock	stock	stock	•	stock	stock	stock	stock

#### Stud Mount, Single-Acting (SSR)

D.					Str	oke					
Bore	1/2"	1″	1 1/2"	2"	3"	4"	5"	6"	8″	10"	12"
5/16"	stock	stock	stock	stock	stock	stock					
1/2"	stock	stock	stock	stock	stock	stock					
9/16"	stock	stock	stock	stock	stock	stock					
5/8"	stock	stock	stock	stock	stock	stock					
3/4"	stock	stock	stock	stock	stock	stock					
7/8"	stock	stock	stock	stock	stock	stock					
1 1/16"	stock	stock	stock	stock	stock	stock					
1 1/4"	stock	stock	stock	stock	stock	stock					
1 1/2"	stock	stock	stock	stock	stock	stock					
1 3/4"	•	stock	stock	stock	stock	stock					
2"	•	stock	•	stock	stock	stock	•	•	•	•	•

#### Stud Mount, Reverse-Acting (SRR)

D.		Stroke				
Bore	1/2"	1"	1 1/2"	2"	3"	4"
3/4"	•	stock	stock	stock	stock	stock
1 1/16"	•	stock	stock	stock	stock	stock
1 1/2"	•	stock	•	stock	stock	stock





### Control valves Directional

2-Way Normally-**Closed, Spring Return** Poppet Valve, #10-32



Order No.: MAV-2

2-Way Normally-**Closed, Spring Return** Poppet Valve, 1/8" NPT Inlet, #10-32 Outlet



Order No.: MAV-2P

2-Way Normally-Closed, Spring Return Poppet Valve, 1/8" NPT



Order No.: MJV-2

3-Way 2 Position Spool Valve, 1/8" NPT, NP Steel Toggle



Order No.: FTV-3P

Same-Day Shipping

3-Way 2 Position Poppet Valve, 1/8" NPT, **NP Steel Toggle** 



Order No.: MJTV-3

3-Way Spool Plunger **Actuated Spring** Return Valve, #10-32



Order No.: FV-3

3-Way Spool Plunger **Actuated Spring** Return Valve, 1/8" NPT



Order No.: FV-3P

3-Way Normally-Closed Valve with Spring Return, 1/8" NPT



Order No.: MIV-3

3-Way Normally-Closed, **Spring Return Poppet** Valve, 1/8" NPT Inlet, #10-32 Outlet



Order No.: MAV-3P

3-Way Normally-**Closed, Spring Return** Poppet Valve, #10-32 **Ports** 



Order No.: MAV-3

Check Valve, 1/8" NPT



Order No.: MICV-1

## In Stock, Ready to Ship!

4-Way 2 Position Spool Valve, 1/8" NPT, **NP Steel Toggle** 



Order No.: MJTV-4

4-Way 2 Position **Fully-Ported Spool** Valve, 1/8" NPT, **NP Steel Toggle** 



Order No.: MITV-5

**Adjustable Pressure** Regulator, 1/8" NPT Inlet, #10-32 Outlet, 0 to 100 psig



Order No.: MAR-1P

**Poppet Style Quick** Exhaust Valve, #10-32



Order No.: MEV-2

Poppet Shuttle Valve, 1/8" NPT



Order No.: MJSV-1

Adjustable Pressure Regulator, #10-32, 0 to 100 psig



Order No.: MAR-1

15° Needle Valve, #10-32, Knurled Knob



Order No.: MNV-1K

15° Needle Valve, #10-32, Screwdriver Slot



Order No.: MNV-1

Pilot-Operated Actuator, Single-Acting, Spring Return, #10-32



Order No.: MPA-3

15° Needle Valve, 1/8" NPT, Screwdriver Slot



Order No.: MNV-1P

15° Needle Valve, 1/8" NPT, Knurled Knob



Order No.: MNV-1KP

Pilot-Operated Actuator, Single-Acting, Spring Return, 1/8" NPT



Order No.: MPA-3P

## Valves & Regulators

10 mm 2-Way, 2 Position, Normally-Closed Valve, 12-Volt

Wire Leads



Order No.: E210A-1W012

10 mm 2-Way, 2 Position, Normally-Closed Valve, 24-Volt

In-Line Connector with LED



Order No.: E210C-2C024

10 mm 3-Way, 2 Position, Normally-Closed Valve, 24-Volt

In-Line Connector



Order No.: E310C-2F024

10 mm 3-Way, 2 Position, Normally-Closed Valve, 24-Volt

In-Line Connector with LED



Order No.: E310C-2C024

10 mm & 15 mm Single-Station Manifolds



10 mm: E10M-01 15 mm: E15M-01

15 mm 3-Way, 2 Position, Normally-Closed Valve, 24-Volt

In-I ine Connector with LED



Order No.: E315F-2C024

**Manually-Operated** 4-Way Lever Valve



Order No.: MMV-L4OD

Wire Connectors



C2A-RB300, 11.8" C2A-RB500, 19.69" C2A-RB1000, 39.37" **Maximatic® Regulators** 



MMR-2P. 1/8" NPT MMR-2O, 1/4" NPT

the finest. -fast!

4-Way Manually-Operated **Detented Push/Pull Valve** 

Order No.: MMV-P4QD

**Maximatic® Stacking** Filter-Regulators



1/4" NPT MMFRS-20

3/8" NPT MMFRS-3W

### Maximatic<sup>®</sup> Valves



#### 3-Way, 2 Position Single Solenoid Valves

Order No.	Connector	Ports	Voltage
MME-31PES-D024	DIN	1/8" NPT	24-Volt
MME-31PES-D110	DIN	1/8" NPT	110-Volt
MME-32QES-D024	DIN	1/4" NPT	24-Volt





#### 4-Way, 2 Position Single Solenoid Valves

Order No.	Connector	Ports	Voltage
MME-41PES-W012	Wire	1/8" NPT	12-Volt
MME-41PES-D024	DIN	1/8" NPT	24-Volt
MME-41PES-D110	DIN	1/8" NPT	110-Volt
MME-42QES-W012	2 Wire	1/4" NPT	12-Volt
MME-42QES-D024	DIN	1/4" NPT	24-Volt
MME-42QES-D110	DIN	1/4" NPT	110-Volt



#### 3-Way Single Air Pilot Valve, 1/4" NPT Ports

Order No.: MMA-32QAS



#### 4-Way Single Air Pilot Valve, 1/4" NPT Ports

Order No.: MMA-42QAS

MME-31/41 uses Industrial Form DIN Connector. MME-32/42 uses Form B DIN Connector.

Products Ship the Same Day!

#### Foot Pedal Valves



3-Way: MMV-F3QM-F 4-Way: MMV-F4QM-F



#### Bulk or Package Quantities

#3-56 Male to 1/16" Brass Barb Connector



Order No.: 11750-2

the finest.
►fast!

#10-32 Male to Barb Connectors



11752-5 1/16" I.D. Barb 11752-8 3/32" I.D. Barb 11752-4 1/8" I.D. Barb 1/8" Male NPT to 1/8" I.D. Barb Connector



Order No.: 2CP4

Same-Day Shipping

Push-Quick Fitting, Tee Union, 1/4" Tubing



Order No.: PQ-TU08

#10-32 Male to 1/8" I.D. Barb Swivel



Order No.: 15045

Push-Quick Fitting, Male Compact Connector, 5/32" Tubing, #10-32 Thread



Order No.: PQ-CC05N

Push-Quick Fittings, Male Connector



Tubing (O.D.)ThreadPQ-MC08P1/4"1/8" NPTPQ-MC08Q1/4"1/4" NPTPQ-MC08N1/4"#10-32PQ-MC05N5/32"#10-32

Adjustable #10-32 "L" Fitting



Order No.: 15002-1

Push-Quick Fittings, Male Elbow



 Tubing (O.D.)
 Thread

 PQ-ME08P
 1/4"
 1/8" NPT

 PQ-ME08Q
 1/4"
 1/4" NPT

 PQ-ME05N
 5/32"
 #10-32

## Electronic Valves

Ship the Same Day!



2-Way Normally-Closed, Spring Return Valves, In-Line Mount, Wire Leads, Buna-N Seals

Pressure	12-Volt	24-Volt
Vac. to 105 psig	EV-2-12	EV-2-24



3-Way Normally-Closed, Spring Return Valves, In-Line Mount, Wire Leads, Buna-N Seals

Pressure	12-Volt	24.1/ 1/
Vac. to 105 psig	EV-3-12	<b>24-Volt</b> EV-3-24



3-Way Fully-Ported, Spring Return Valves, In-Line Mount, Wire Leads, Buna-N Seals

Pressure	12-Volt	24-Volt
Vac. to 105 psig	EVO-3-12	EVO-3-24



## Clippard



#### Cylinders

Considered the standard for industry quality for Stainless Steel, rolled-construction cylinders, and far more . . . Clippard also manufactures Corrosion-Resistant versions, Air Force One® compact cylinders, and the world's most complete line of miniature brass cylinders. From 5/32" to 3" bore.

#### **Control Valves**

Clippard manufactures the broadest line of quality control valves and accessories. From the superior features of our poppet series, to the flexibility and performance of our variety of control methods, we bring the finest control solutions in pneumatics!





#### **Electronic Valves**

The "Mouse" series direct operating 2- and 3-way electronic valves are the industry standard for leak-free operation, but also boast a billion cycle life, fast operation, low heat and low noise operation. In addition, Clippard now has a host of complementary electronic valve series to suit higher flow and other applications.

#### Modular Valves & **Pneumatic Circuits**

With the industry's largest offering of modular pneumatic controls, Clippard is able to offer the most complete pneumatic control circuits. From Two-Hand, No-Tie-Down circuits to Pneumatic Sequence control, Clippard can design and produce robust and economical control solutions.



### Pneumatics. Fast! The Finest Miniature



#### Fittings, Hose, Air Jets & More!

For a complete line of miniature connection capabilities, accessories for air control, mufflers, and more, Clippard can meet the varied needs of the world (metric, too!).





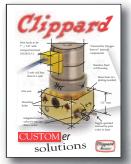
#### Maximatic<sup>®</sup> FLRs

Clippard offers many sizes from #10-32 up to 1" NPT Filters, Regulators, and Lubricators, and combination units. Their modern design and interconnecting brackets provide flexibility and facilitates simple field installation and/or modification.

#### **Integrated Services**

Clippard has created a division focused on integrated solutions for miniature pneumatics, providing sub-assemblies and even complete machines for markets from medical to packaging and beyond. Our capabilities include engineering, manufacturing, assembly and testing to assure the customer receives the right solution to add value to their core competencies.





#### Customer Solutions

If you need a product that fits your application perfectly, Clippard has the capability and the interest to modify one of our products to suit your exact requirements. We have designed and applied thousands of special variations and product modifications from our standard, and are pleased to consider those for OEM applications.

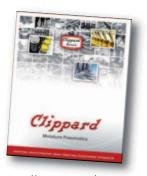


#### Air Engineering and Supply

2719 East Franklin Avenue, P.O. Box 6247, Minneapolis, MN 55406 Toll Free 800.332.4181 Phone 612.332.4181 www.airengr.com

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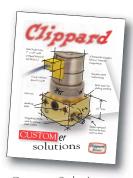
## Same-Day Shipping



Full-Line Product Catalog



Scientific Applications Brochure



Custom Solutions Brochure

