PNEUMATIC COMPONENTS AND SYSTEMS

Air Logic®

MODULAR
Precision Regulators and Manifold Systems

Introduction to Air Logic

The Air Logic Division of Knapp Manufacturing, Inc. designs and manufactures a comprehensive line of pneumatic and vacuum control equipment-sensing and input elements, control elements, output interfacing devices and complete air supply systems. The control elements include both fluidic and moving diaphragm control components. Air Logic has a strong reputation for immediate service, quality, and dependability. For special applications and requirements call Air Logic.

Regulators

Air Logic is a manufacturer of Modular Subminiature Precision Pressure Regulators and Modular Manifold Systems, ideal for instrumentation, medical and industrial applications.
The modular equipment includes

- **Subminiature Precision Pressure Regulators**
- **Factory Preset Precision Pressure Regulators**
- **Manifold Mounted Precision Pressure Regulators**
- **Modular Manifold System**

The Precision Pressure Regulators provide the ultimate in regulation of pressure.

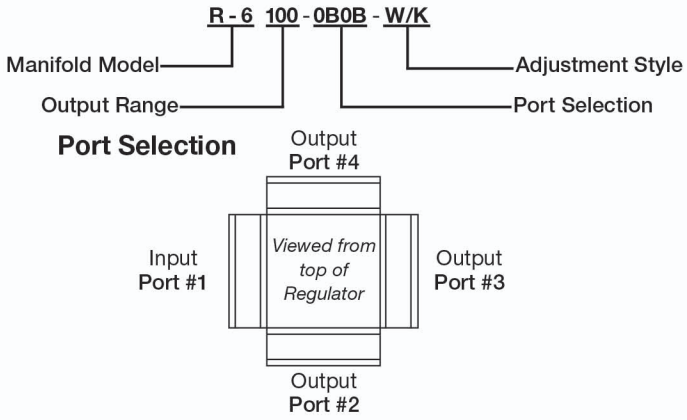
The Modular Manifold System allows various combinations of pneumatic accessories to be assembled together.

The unique modular dovetail design allows the regulator or the manifold to be used individually or assembled into a modular combination of pneumatic components.

Regulator Selection Guide

Please Order by model number for output range or specify the preset output range 0.5 to 40 PSI using 100 PSI supply. Specify accessory letters or numbers for the dovetail ports and adjustment style. The regulator is supplied with an INPUT PORT, an OUTPUT PORT, and two BLANK PORTS as standard. Two accessory ports may be ordered. When choosing the port selection the input port is the starting point. The remaining ports are then selected counterclockwise.

MODEL NUMBER SELECTION

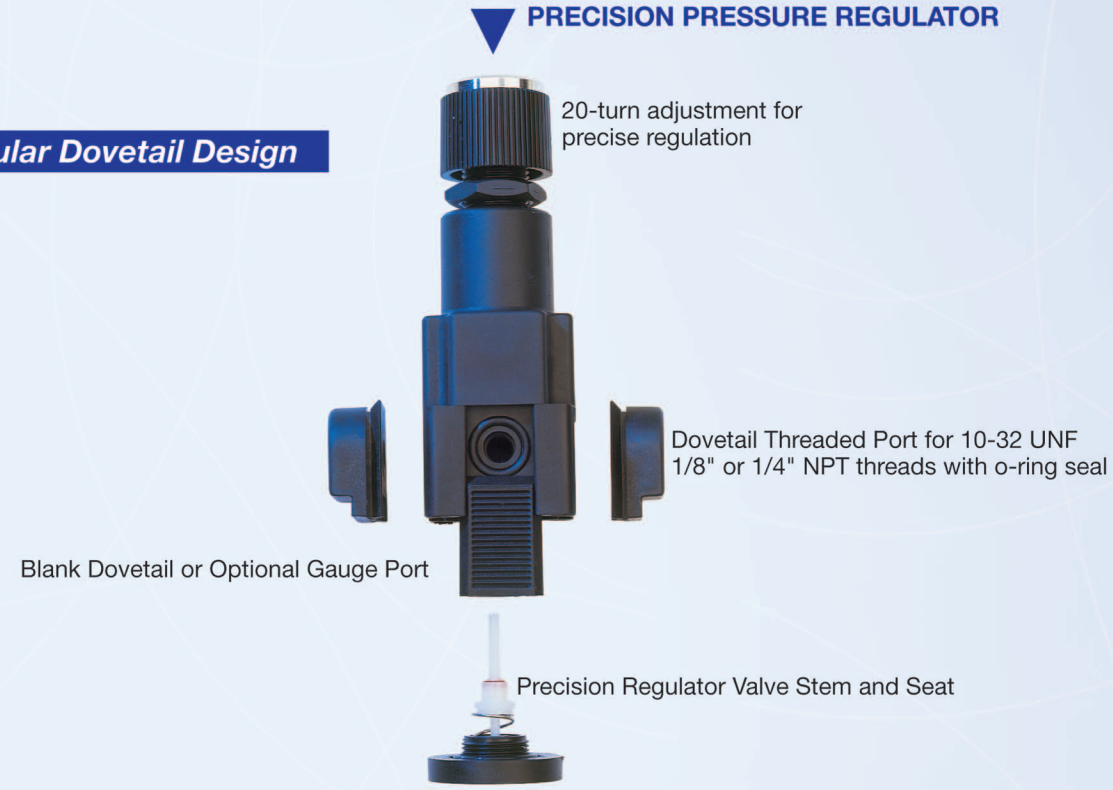


ADJUSTMENT RANGE			INDEX
Model Number	**Adjustment Range**	**Description**	**Page Number**
M-5000	N/A	Modular Manifold	10-11
M-5001	N/A	Modular Manifold	
R-6010	0.5 to 10	Manifold Mounted Pressure Regulator	8-9
R-6030	0.5 to 30		
R-6060	0.5 to 60		
R-6100	0.5 to 100		
PR-6000	Specify Preset Output	Manifold Mounted Preset Regulator	8-9
R-7010	0.5 to 10	Precision Pressure Regulator	4-5
R-7030	0.5 to 30		
R-7060	0.5 to 60		
R-7100	0.5 to 100		
PR-7000	Specify Preset Output	Preset Precision Pressure Regulator	6-7
Modular Dovetail Accessories	N/A	For Pressure Regulator and Manifold System	12-13

PORT CONNECTION		
Selection	**Accessory Number**	**Description**
Side Ports	0	10-32 UNF Threads
	1	1/8-27 NPT Threads
	2	1/4-18 NPT Threads
	B	Blank Dovetail
	U	Union Dovetail
	C	Connecting Dovetail
	G	1/8-27 NPT Dovetail Gauge Port
	H	1/4-18 NPT Dovetail Gauge Port
	D	0-30 PSI Gauge with Gauge Port
	I	0-60 PSI Gauge with Gauge Port
	J	0-100 PSI Gauge with Gauge Port
	K	0-160 PSI Gauge with Gauge Port
	W	Wall Mounting Dovetail Bracket
Manifold Top Cover	0	10-32 UNF Threads
	1	1/8-27 NPT Threads
	2	1/4-18 NPT Threads
	B	Blank Cover

Modular Precision Regulator and Manifold Systems

Unique Modular Dovetail Design



Unique Modular Manifold Design

R-7000 Series
Precision Pressure Regulator

FEATURES

- **Modular Dovetail Design**
- **Excellent Repeatability**
- **Miniature Size**
- **Non-Rising Stem**
- **Automatic Relief**
- **Low Cost**

The **Modular Subminiature Precision Pressure Regulator** is designed for precise regulation of pressure. It is ideal for instrumentation and industrial applications. The pressure regulator has a 20 turn adjustment range from 0.5 to 100 PSI. Maximum supply is 150 PSI. Four adjustment ranges are available: 10 PSI, 30 PSI, 60 PSI and 100 PSI. The standard device is furnished with an adjustment knob and is also available with an extended 1/4" shaft to accept an adjustment knob or furnished with an exposed screwdriver adjustment by which the pressure range can be adjusted.
The **Unique Modular Dovetail** design allows the regulator to be used individually or assembled into a modular combination of pneumatic components.

Port Connections Available

- **Threaded Port**
- **Connector**
- **Union**
- **Gauge Port**
- **Blank Slides**
- **Push-in Fitting**

Patent numbers 5,217,260 & 5,261,447

Unique Modular Dovetail Design

SPECIFICATIONS

Adjustment Range: 0.5 to 100 PSI
Maximum Supply: 150 PSI
Operating Temperature: 40° to 150° F (4° to 66°C)
Recommended Filtration: 5 Micron
Effect of Supply Variation: Within .1 PSI output change with 10 PSI supply change
Flow Regulator: Maximum flow 5 SCFM with 100 PSI supply
Repeatability: Within .1 PSI when the supply pressure is turned off and on
Drift: At 75°F. 0.1 PSI total drift
Supply Consumption: Within 400 cc/m at 100 PSI supply, with a deadend output

MATERIALS

Housing: Glass filled Celcon
Adjustment Screw: Carbon Filled Nylon
Retaining Ring: Carbon Spring Steel
Stem Assembly: Celcon
Diaphragm: Buna N, Polyurethane
Diaphragm Assembly: Celcon
Springs: Stainless Steel
O-Rings: Buna N, Silicone Nitrile
Valve Seat: PVC
Filter: Stainless Steel 304, Micron size 380
Manifold Mount Screws: Zinc

PORT CONNECTIONS

Threaded Dovetail: A Modular Dovetail Slide with 10-32 UNF, 1/8-27 NPT, 1/4-18 NPT thread sizes. The 1/8" and 1/4" NPT contain a brass hoop ring insert. The 1/8" and 1/4" gauge port is available. During assembly fittings should be finger tight plus one turn.

Union Dovetail: A Modular Dovetail Slide with a thru hole joining two units together with a common air supply.

Connecting Dovetail: A Modular Connecting Dovetail Slide with no hole joining two units together with no common air supply.

Gauge Dovetail: A Modular Dovetail Slide with 1/8-27 NPT or 1/4-18 NPT thread sizes. The Dovetail Slide has the word "gauge" molded into the slide.

Blank Dovetail: 2 Blank Dovetail Slides are supplied as standard.

Push-in Fitting Dovetail: Available for 5/32", 3/16", 1/4", 5/16", 4mm and 6mm O.D. Tubing.

MOUNTING

Panel Mount: 9/16" hole for panel mounting, mounting nut furnished. Panel mounting nut should be finger tight plus 1/4 turn.

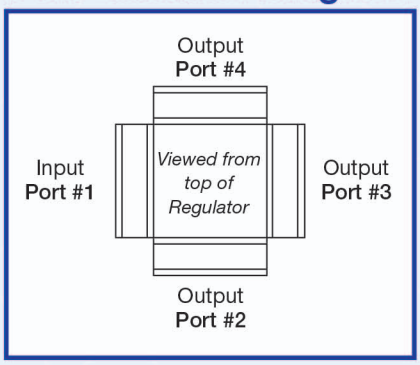
Base mounting: .115 diameter mounting holes, use 4-40 mounting screws.

Wall Mount: Modular Dovetail wall mount.

Regulator Selection Guide

ORDERING INFORMATION Order by model number for output range. Specify accessory letters or numbers for the dovetail ports and adjustment style. The regulator is supplied with an INPUT PORT, an OUTPUT PORT, and two BLANK PORTS as standard. Two accessory ports may be ordered. When choosing the port selection the input port is the starting point. The remaining ports are then selected counterclockwise.

Port Location Diagram

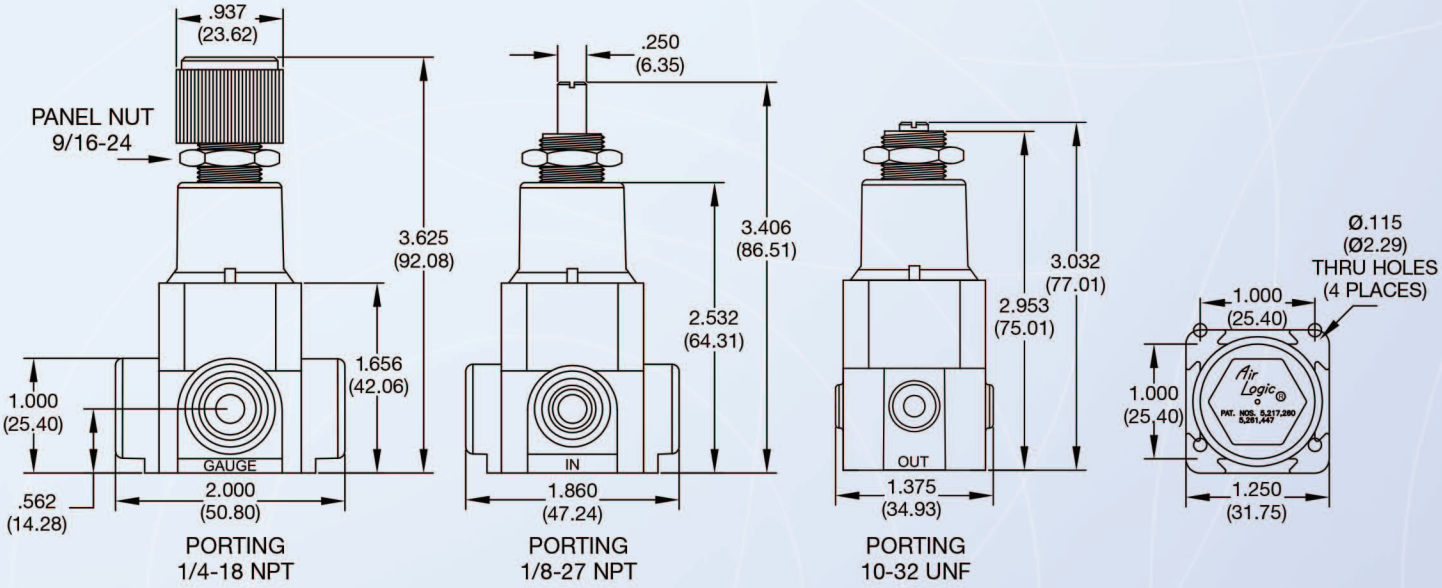


Part Number Guide

R7030 7 S 8 S WO/S

Model Number	Input Port 1	Port 2	Port 3	Port 4	Adjustment Style
R7010 0.5 - 10 PSI **R7030** 0.5 - 30 PSI **R7060** 0.5 - 60 PSI **R7100** 0.5 - 100 PSI	**0** – 10-32 UNF Threads **1** – 1/8-27 NPT Threads **2** – 1/4-18 NPT Threads **3** – Push-in Fitting for 5/32" O.D. tube **4** – Push-in Fitting for 3/16" O.D. tube **5** – Push-in Fitting for 1/4" O.D. tube **6** – Push-in Fitting for 5/16" O.D. tube **7** – Push-in Fitting for 4mm O.D. tube **8** – Push-in Fitting for 6mm O.D. tube **B** – Blank Dovetail **C** – Connecting Dovetail **D** – 0-30 PSI Gauge with Gauge Port **G** – 1/8-27 NPT Dovetail Gauge Port **H** – 1/4-18 NPT Dovetail Gauge Port **I** – 0-60 PSI Gauge with Gauge Port **J** – 0-100 PSI Gauge with Gauge Port **K** – 0-160 PSI Gauge with Gauge Port **L** – 0-15 PSI Gauge with Gauge Port **S** – M5 Threads **W**– Wall Mounting Dovetail Bracket				**W/K -** with adjustment knob **WO/S -** with screw-driver slot adjustment **W/S -** with 1/4" shaft adjustment

DIMENSIONS ( ) = Metric Dimensions



PR-7000 Series
Preset Precision Pressure Regulator

FEATURES

- **Modular Dovetail Design**
- **Excellent Repeatability**
- **Miniature Size**
- **Automatic Relief**
- **Low Cost**

The Modular Precision Preset Regulator is designed to produce a precise output pressure that is preset. The regulator is ideal for instrumentation and industrial applications.

The standard preset model is factory preset to the desired output pressure, 0.5-40 PSI using 100 PSI supply. Specify the supply pressure if the supply is different than 100 PSI.

The Preset Regulator is available with a recessed allen wrench adjustment or a removable adjustment knob.

The Unique Modular Dovetail design allows the regulator to be used individually or assembled into a modular combination of pneumatic components.

Port Connections Available

- **Threaded Port**
- **Connector**
- **Union**
- **Gauge Port**
- **Blank Slides**
- **Push-in Fitting**

Patent numbers 5,217,260 & 5,261,447

Unique Modular Dovetail Design

SPECIFICATIONS

Adjustment Range: 0.5 to 40 PSI
Maximum Supply: 150 PSI
Operating Temperature: 40° to 150° F (4° to 66°C)
Recommended Filtration: 5 Micron
Effect of Supply Variation: Within .1 PSI output change with 10 PSI supply change
Flow Regulator: Maximum flow 5 SCFM with 100 PSI supply
Repeatability: Within .1 PSI when the supply pressure is turned off and on
Drift: At 75°F. 0.1 PSI total drift
Supply Consumption: Within 400 cc/m at 100 PSI supply, with a deadend output

MATERIALS

Housing: Glass filled Celcon
Adjustment Screw: Carbon Filled Nylon
Retaining Ring: Carbon Spring Steel
Stem Assembly: Celcon
Diaphragm: Buna N, Polyurethane
Diaphragm Assembly: Celcon
Springs: Stainless Steel
O-Rings: Buna N, Silicone Nitrile
Valve Seat: PVC
Filter: Stainless Steel 304, Micron size 380
Manifold Mount Screws: Zinc

PORT CONNECTIONS

Threaded Dovetail: A Modular Dovetail Slide with 10-32 UNF, 1/8-27 NPT, 1/4-18 NPT thread sizes. The 1/8" and 1/4" NPT contain a brass hoop ring insert. The 1/8" and 1/4" gauge port is available. During assembly fittings should be finger tight plus one turn.

Union Dovetail: A Modular Dovetail Slide with a thru hole joining two units together with a common air supply.

Connecting Dovetail: A Modular Connecting Dovetail Slide with no hole joining two units together with no common air supply.

Gauge Dovetail: A Modular Dovetail Slide with 1/8-27 NPT or 1/4-18 NPT thread sizes. The Dovetail Slide has the word "gauge" molded into the slide.

Blank Dovetail: 2 Blank Dovetail Slides are supplied as standard.

Push-in Fitting Dovetail: Available for 5/32", 3/16", 1/4", 5/16", 4mm and 6mm O.D. Tubing.

MOUNTING

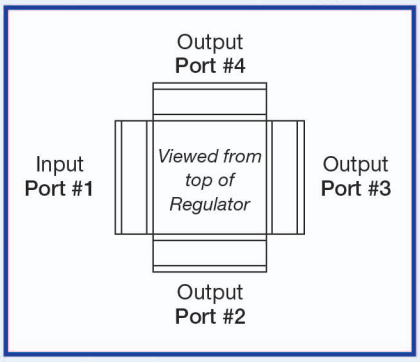
Base Mounting: .115 diameter mounting holes – use 4-40 mounting screws.

Wall Mount: Modular Dovetail wall mount.

Regulator Selection Guide

ORDERING INFORMATION Order by model number and specify the preset output range 0.5 to 40 PSI using 100 PSI supply. Specify accessory letters or numbers for the dovetail ports and adjustment style. The regulator is supplied with an *INPUT PORT*, an *OUTPUT PORT*, and two *BLANK PORTS* as standard. Two accessory ports may be ordered. When choosing the port selection, the *INPUT PORT* is the starting point. The remaining ports are then selected counterclockwise.

Port Location Diagram

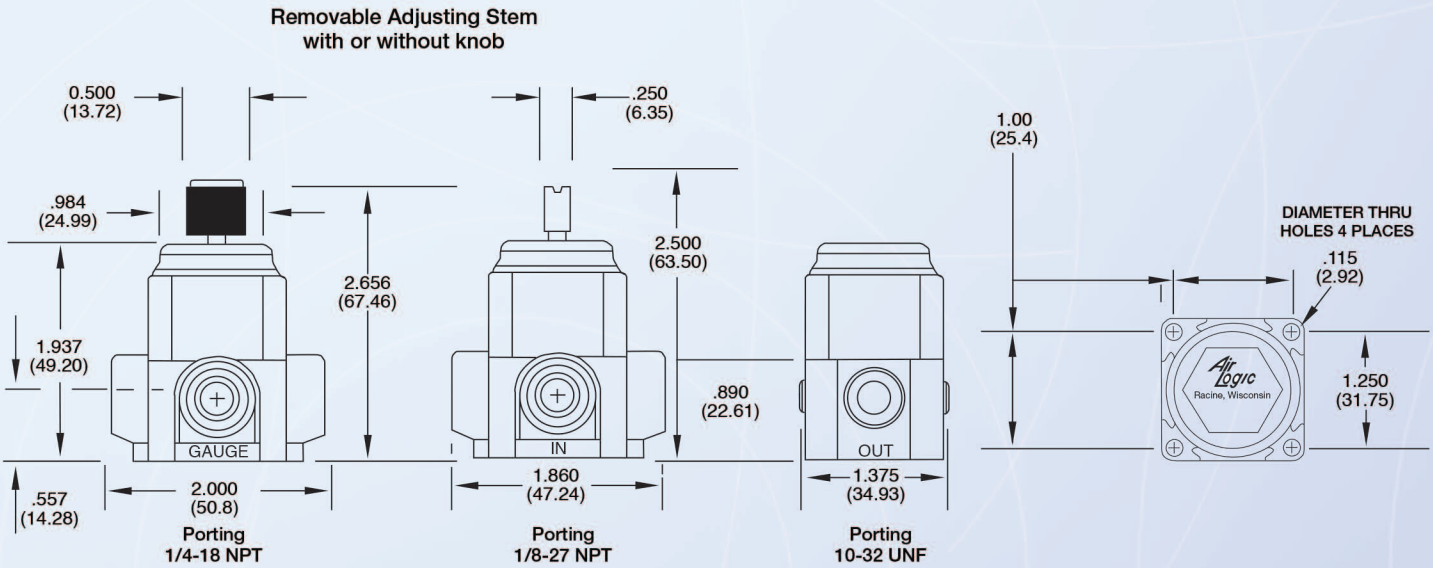


Part Number Guide

PR7018 7 D S B W/S

Model Number	Input Port 1	Port 2	Port 3	Port 4	Adjustment Style
PR7 _ _ _ Specify Output 0.5 - 40 PSI	**0** – 10-32 UNF Threads **1** – 1/8-27 NPT Threads **2** – 1/4-18 NPT Threads **3** – Push-in Fitting for 5/32" O.D. tube **4** – Push-in Fitting for 3/16" O.D. tube **5** – Push-in Fitting for 1/4" O.D. tube **6** – Push-in Fitting for 5/16" O.D. tube **7** – Push-in Fitting for 4mm O.D. tube **8** – Push-in Fitting for 6mm O.D. tube **B** – Blank Dovetail **D** – 0-30 PSI Gauge with Gauge Port **G** – 1/8-27 NPT Dovetail Gauge Port **H** – 1/4-18 NPT Dovetail Gauge Port **I** – 0-60 PSI Gauge with Gauge Port **L** – 0-15 PSI Gauge with Gauge Port **S** – M5 Threads **W**– Wall Mounting Dovetail Bracket				**W/K -** with adjustment knob **W/S -** with adjustment shaft **Allen Wrench Adjustment** does not require specification

DIMENSIONS ( ) = Metric Dimensions



R-6000, PR-6000 Series
Manifold Mounted Pressure Regulator

FEATURES

- **Manifold Mount**
- **Modular Dovetail Design**
- **Excellent Repeatability**
- **Automatic Relief**
- **Low Cost**

The Manifold Mounted Precision Pressure Regulators are designed to mount directly on pneumatic circuit boards or manifold subplates. The port connections for the supply and output are located on the base of the manifold mounted series regulator. Two recessed Buna-N o-rings are supplied for sealing the regulator to the manifold.

The Manifold Mounted Regulators are available in two models: **The Adjustable Precision Regulator** has a 20-turn adjustment range from .5 to 100 PSI. Maximum supply is 150 PSI. Four adjustment ranges are available: 10 PSI, 30 PSI, 60 PSI, and 100 PSI.

The Adjustable Regulator is furnished with an adjustment knob and is also available with an extended 1/4" shaft to accept an adjusting knob or furnished with an exposed screwdriver adjustment by which the pressure range can be adjusted.

The Preset Precision Regulator is designed to produce a precise output pressure that is preset at the factory, 0.5 to 40 PSI using a 100 PSI supply.

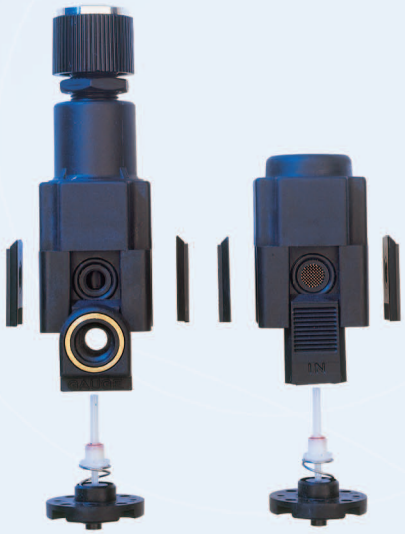
The preset regulator is available with a recessed allen wrench adjustment or a removable adjustment knob.

The **Unique Modular Dovetail** design allows the regulator to be used individually or assembled into a modular combination of pneumatic components.

Port Connections Available

- **Threaded Port**
- **Connector**
- **Union**
- **Gauge Port**
- **Blank Slides**
- **Push-in Fitting**

Patent numbers 5,217,260 & 5,261,447



Unique Modular Dovetail Design

SPECIFICATIONS

Adjustment Range: Adjustment Model, 0.5 to 100 PSI
Preset Model, 0.5 to 40 PSI
Maximum Supply: 150 PSI
Operating Temperature: 40° to 150° F (4° to 66°C)
Recommended Filtration: 5 Micron
Effect of Supply Variation: Within .1 PSI output change with 10 PSI supply change
Flow Regulator: Maximum flow 5 SCFM with 100 PSI supply
Repeatability: Within .1 PSI when the supply pressure is turned off and on
Drift: At 75°F. 0.1 PSI total drift
Supply Consumption: Within 400 cc/m at 100 PSI supply, with a deadend output

MATERIALS

Housing: Glass filled Celcon
Adjustment Screw: Carbon filled Nylon
Retaining Ring: Carbon Spring Steel
Stem Assembly: Celcon
Diaphragm: Buna N, Polyurethane
Diaphragm Assembly: Celcon
Springs: Stainless Steel
O-Rings: Buna N, Silicone Nitrile
Valve Seat: PVC
Filter: Stainless Steel 304, Micron size 380
Manifold Mount Screws: Zinc

PORT CONNECTIONS

Threaded Dovetail: A Modular Dovetail Slide with 10-32 UNF, 1/8-27 NPT, 1/4-18 NPT thread sizes. The 1/8" and 1/4" NPT contain a brass hoopring insert. The 1/8" and 1/4" gauge port is available. During assembly, fittings should be finger tight plus one turn.

Union Dovetail: A Modular Dovetail Slide with a thru hole joining two units together with a common air supply.

Connecting Dovetail: A Modular Connecting Dovetail Slide with no hole joining two units together with no common air supply.

Gauge Dovetail: A Modular Dovetail Slide with 1/8-27 NPT or 1/4-18 NPT thread sizes. The Dovetail Slide has has the word "gauge" molded into the slide.

Blank Dovetail: 2 Blank Dovetail Slides are supplied as standard.

Push-in Fitting Dovetail: Available for 5/32", 3/16", 1/4", 5/16", 4mm and 6mm O.D. Tubing.

MOUNTING

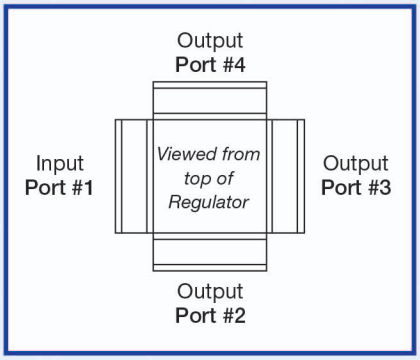
Manifold Mounting: .115 diameter mounting holes - use 4-40 mounting screws

Mounting Base: An Air Logic manifold mounting base is available. 10-32 UNF threaded input and output ports.

Regulator Selection Guide

ORDERING INFORMATION Order by model number for output range or specify the preset output range 0.5 to 40 PSI using 100 PSI supply. Specify accessory letters or numbers for the dovetail ports and adjustment style. The regulator is supplied with an *INPUT PORT*, an *OUTPUT PORT*, and two *BLANK PORTS* as standard. Two accessory ports may be ordered. When choosing the port selection the input port is the starting point. The remaining ports are then selected counterclockwise.

Port Location Diagram

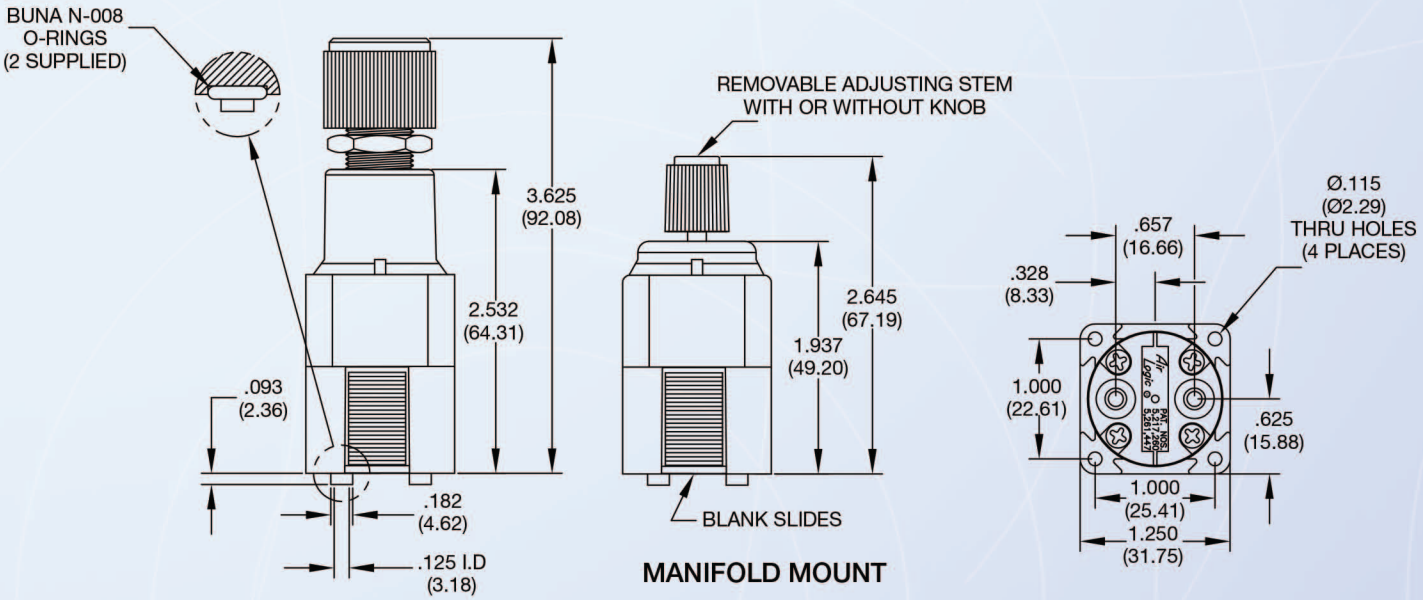


Part Number Guide

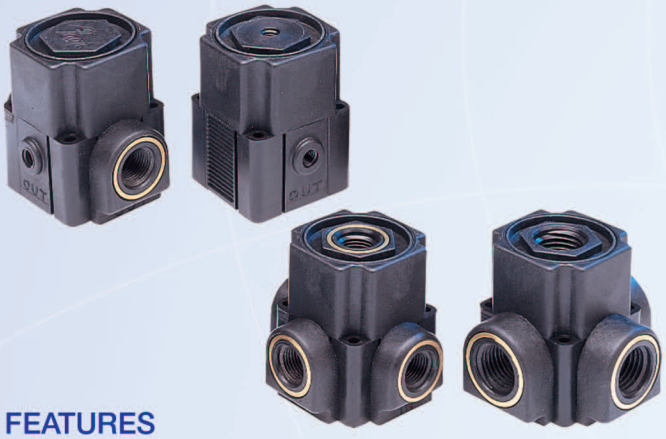
PR6032 B I B W ____

Model Number	Input Port 1	Port 2	Port 3	Port 4	Adjustment Style
R6010 0.5 - 10 PSI	**0** – 10-32 UNF Threads **1** – 1/8-27 NPT Threads **2** – 1/4-18 NPT Threads				**W/K -** with adjustment knob
R6030 0.5 - 30 PSI	**3** – Push-in Fitting for 5/32" O.D. tube **4** – Push-in Fitting for 3/16" O.D. tube **5** – Push-in Fitting for 1/4" O.D. tube				**WO/S -** with screw-driver slot adjustment
R6060 0.5 - 60 PSI	**6** – Push-in Fitting for 5/16" O.D. tube **7** – Push-in Fitting for 4mm O.D. tube **8** – Push-in Fitting for 6mm O.D. tube				**W/S -** with 1/4" Shaft adjustment
R6100 0.5 - 100 PSI	**B** – Blank Dovetail **D** – 0-30 PSI Gauge with Gauge Port **G** – 1/8-27 NPT Dovetail Gauge Port **H** – 1/4-18 NPT Dovetail Gauge Port				Preset Regulator
PR6 _ _ _ Specify Output 0.5 - 40 PSI	**I** – 0-60 PSI Gauge with Gauge Port **J** – 0-100 PSI Gauge with Gauge Port **K** – 0-160 PSI Gauge with Gauge Port **L** – 0-15 PSI Gauge with Gauge Port **S** – M5 Threads **W**– Wall Mounting Dovetail Bracket				Allen Wrench Adjustment does not require specification **W/K or W/S** must be specified

DIMENSIONS ( ) = Metric Dimensions



M-5000 Series
Modular Manifold



FEATURES

- **Modular Dovetail Design**
- **Miniature Size**
- **Low Cost**

The **Modular Manifold** is designed for instrumentation and industrial applications.

The **Unique Modular Dovetail** design allows the manifold block to be used as an individual unit or assembled into a modular combination of pneumatic components.

The **Modular Manifold** is available in two models. The standard model and the filtered model.

The standard model is unfiltered.

The filtered model contains four stainless steel filters in the side ports. Micron size is 380. The top cover is unfiltered.

The **Manifold Block** contains four individual dovetail slides and one top cover that will accept a various assortment of threaded ports or blanks.

Port Connections Available

- **Threaded Port and Top Cover**
- **Blank Slide and Blank Top Cover**
- **Connector**
- **Union**
- **Gauge Port**
- **Push-in Fitting**

The **Modular Dovetail Wall Mount Bracket** is available for wall or cabinet mounting.

The **Pneumatic Accessories** include the modular manifold block, the modular precision pressure and preset regulators, pressure or vacuum switches, and pressure or vacuum gauges.

By combining the pneumatic accessories together pneumatic circuits and systems can be assembled into one Modular Manifold System.

Patent Number 5,217,260

Unique Modular Dovetail Design

SPECIFICATIONS

Maximum Supply: 150 PSI

Operating Temperature: 40° to 150° F (4° to 66°C)

Recommended Filtration: 5 Micron

Capacity: 1 Cubic Inch

MATERIALS

Housing: Glass filled Celcon

O-Rings: Buna N, Silicone Nitrile

Filter: Stainless Steel 304, Micron size 380

PORT CONNECTIONS

Threaded Dovetail: A Modular Dovetail Slide with 10-32 UNF, 1/8-27 NPT, 1/4-18 NPT thread sizes. The 1/8" and 1/4" gauge port is available.

Union Dovetail: A Modular Dovetail Slide with a thru hole joining two units together with a common air supply.

Connecting Dovetail: A Modular Connecting Dovetail Slide with no hole joining two units together with no common air supply.

Blank Dovetail: A Blank Dovetail Slide is supplied when the port is not in use.

Gauge Dovetail: A Modular Dovetail Slide with 1/8-27 NPT or 1/4-18 NPT thread sizes. The Dovetail Slide has the word "gauge" molded into the slide.

Top Cover: The top cover is available in various combinations, 10-32 UNF, 1/8-27 NPT or 1/4-18 NPT thread sizes. The 1/4" and 1/8" contain a brass hoop insert. During assembly, fittings should be finger tight plus one turn. A Blank Top Cover is available when porting is not desired.

Push-in Fitting Dovetail : Available for 5/32", 3/16", 1/4", 5/16", 4mm and 6mm O.D. Tubing.

MOUNTING

Base mounting: .115 diameter mounting holes - use 4-40 mounting screws

Wall Mount: Modular Dovetail wall mount

Manifold Selection Guide

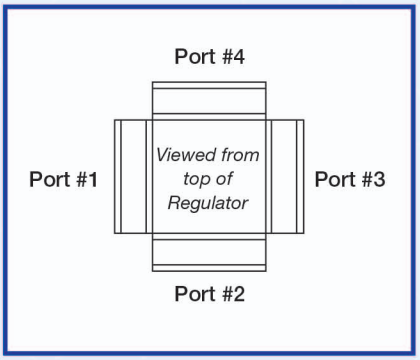
ORDERING INFORMATION Order by model number. Specify accessory letters or numbers for the dovetail ports and top cover port. When choosing the port selection Port #1 is the starting point. The remaining ports are then selected counterclockwise.

Part Number Guide

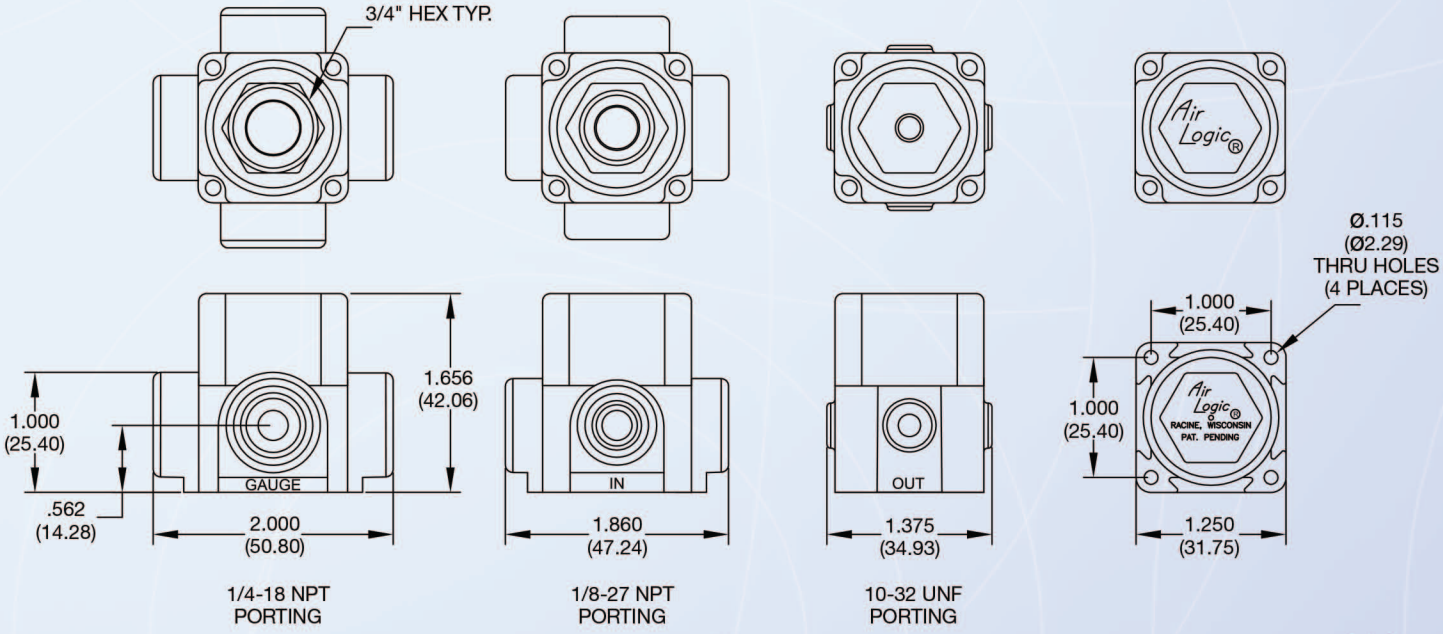
M5000 B J 5 1 2

Model Number	Input Port 1	Port 2	Port 3	Port 4	Top Cover Style
M5000 Standard Model	**0** – 10-32 UNF Threads **1** – 1/8-27 NPT Threads **2** – 1/4-18 NPT Threads **3** – Push-in Fitting for 5/32" O.D. tube **4** – Push-in Fitting for 3/16" O.D. tube **5** – Push-in Fitting for 1/4" O.D. tube **6** – Push-in Fitting for 5/16" O.D. tube **7** – Push-in Fitting for 4mm O.D. tube **8** – Push-in Fitting for 6mm O.D. tube				**0** – 10-32 UNF Threads **1** – 1/8-27 NPT Threads **2** – 1/4-18 NPT Threads **B** – Blank Cover
M5001 Filtered Model	**B** – Blank Dovetail **D** – 0-30 PSI Gauge with Gauge Port **G** – 1/8-27 NPT Dovetail Gauge Port **H** – 1/4-18 NPT Dovetail Gauge Port **I** – 0-60 PSI Gauge with Gauge Port **J** – 0-100 PSI Gauge with Gauge Port **K** – 0-160 PSI Gauge with Gauge Port **L** – 0-15 PSI Gauge with Gauge Port **S** – M5 Threads **W** – Wall Mounting Dovetail Bracket				

Port Location Diagram



DIMENSIONS ( ) = Metric Dimensions



1/4-18 NPT PORTING | 1/8-27 NPT PORTING | 10-32 UNF PORTING

Modular Dovetail Accessories

The **Modular Dovetail Accessories** are designed for the Adjustable Pressure Regulator, the Preset Pressure Regulator, the Manifold Mounted Pressure Regulator, and the Modular Manifold System.

The **Unique Modular Dovetail** design allows the regulator or the manifold to be used individually or assembled into a modular combination of Pneumatic Components.

The **Modular Dovetail Slides** are sealed with a Buna N o-ring to prevent leaking. The dovetail slides are locked in place by the bottom hex cover.

The **Blank Dovetail Slides** are used when porting is not desired. Four blank dovetail slides are standard on the manifold regulator. The supply side is marked “IN” and the output side is marked “OUT.”

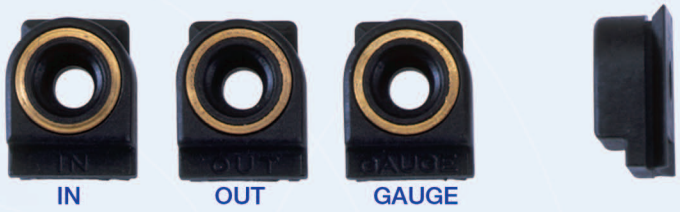
The **Dovetail Union and Connector** allow various combinations of regulators and manifold blocks to be assembled together.

The **Union Dovetail** contains a thru hole joining two units together with a common air supply.

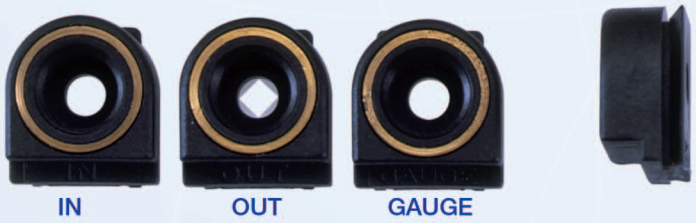
The **Connecting Dovetail** contains no thru hole, but joins two units together with no common air supply.

The **10-32 UNF Threaded Dovetail Slides** have an IN and an OUT.

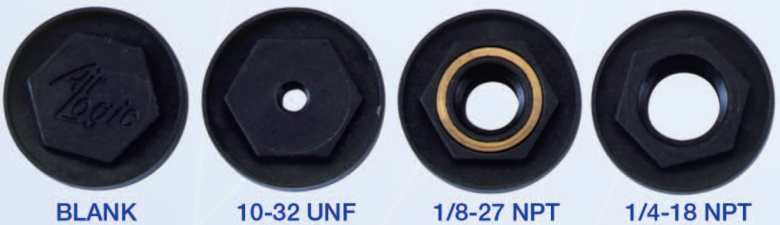
The **1/8-27 NPT Threaded Dovetail Slides** have an IN, OUT, and a GAUGE Port. The 1/8” NPT port contains a brass hoop ring insert designed for added strength.



The **1/4-18 NPT Threaded Dovetail Slides** have an IN, OUT, and Gauge Port. The 1/4” NPT ports contain a brass hoop ring insert designed for added strength.



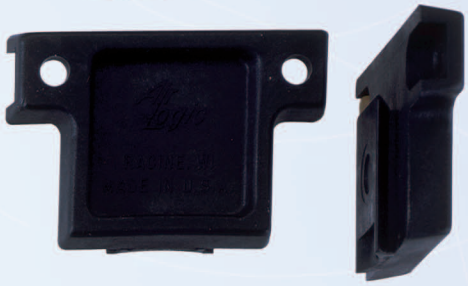
The **Manifold Top Cover** is available with blank port, 10-32 UNF, 1/8-27 NPT and 1/4-18 NPT.



Patent numbers 5,217,260 & 5,261,447

The **Manifold Mounting Base Plate** is designed for testing and evaluating the manifold mounted precision regulator. The mounting base has 10-32 UNF threaded input and output ports. Part Number 7-MMB

The **Modular Dovetail Wall Mount Bracket** is available for wall or cabinet mounting.



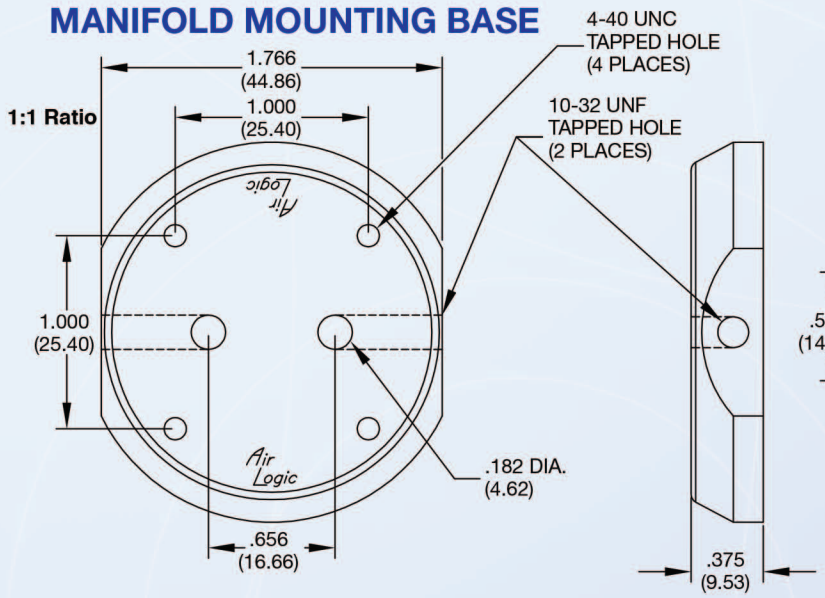
The **Subminiature Pressure or Vacuum Gauges** are available with a miniature 7/8" dial and 1/8" NPT back mount.

Model Number	Range
G-015	0-15 PSI
G-030	0-30 PSI
G-060	0-60 PSI
G-100	0-100 PSI
G-160	0-160 PSI
Vacuum Gauge V-030	0-30" Hg

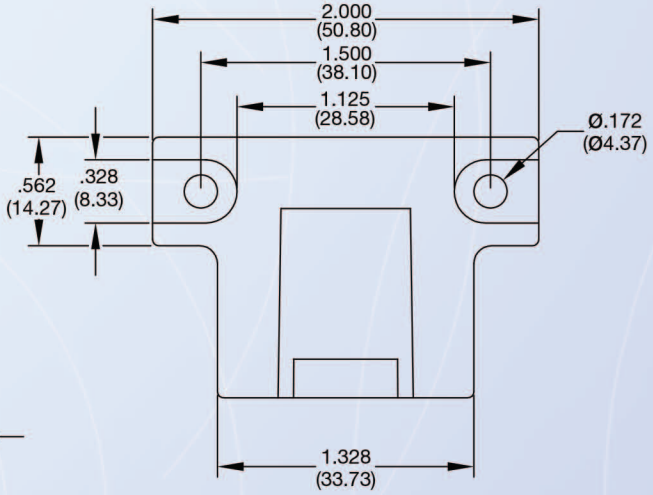
The **Subminiature Pressure Switches** and Vacuum Switches are available with a 1/8" NPT pipe thread mount. The accessories are designed for the 1/8" NPT Threaded Dovetail Slide.

DIMENSIONS ( ) = Metric Dimensions

MANIFOLD MOUNTING BASE



WALL MOUNT BRACKET



AIR LOGIC
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No waiver, alteration or modification of the foregoing shall be valid, unless made in writing and signed by an executive officer of Air Logic. Air Logic reserves the right to alter product designs and materials, when conditions warrant, without notice.

6. Patents, Trademarks and Copyrights. Buyer assumes all liability for patent, trade mark and copy right infringements when products are made to Buyer's specifications.

7. Mandatory Arbitration. The mandatory arbitration provisions of these terms and conditions shall be liberally construed so as to require the arbitration of all claims and disputes of every kind and nature, whether arising out of contract, tort, statute, common law or any other theories of liability and/or recovery in law and/or equity.

Without in any way limiting the above expressed intent, all "Disputed Claims" shall be resolved by mandatory arbitration and shall include, but not be limited to: any differences, claims, matters in dispute, or controversies of every kind or nature as to the existence, construction, validity, interpretation, meaning, performance, non-performance, enforcement, operation, breach, continuance, termination, misrepresentations (both in its formation or its execution), compliance with Federal, State or Local statutes, ordinances, or regulations and any other theories of liability and/or recovery in law and/or equity, arising from or related, either directly or indirectly, to these terms and conditions, the contract of which they are a part, or the matters discussed herein.

All Disputed Claims shall be submitted by the parties to arbitration in accordance with this Agreement and the Wisconsin Arbitration Act, Chapter 788 of the Wisconsin Statutes, if that Act is applicable, and if not, in accordance with the provisions of the United States Arbitration Act, 9 U.S.C. §1 et. seq., or any revisions or recreations of those Acts. In the event of arbitration, each party shall select an arbitrator within thirty (30) days of submission of any Disputed Claims to arbitration. If an arbitrator timely selected by a party is unable, for any reason, to serve until the making of a decision or an award, that party may name a successor arbitrator. If either party fails to designate an arbitrator within the thirty (30) day period, that party's right to name an arbitrator (or any successor arbitrator) is forfeited, and any arbitrator timely named shall select a second arbitrator. The first two arbitrators shall then [within thirty (30) days of the selection of the last of them] jointly select a third arbitrator, the three arbitrators of which shall constitute the "Arbitration Panel". If the two arbitrators to be selected by the parties are unable to agree upon the selection of a third arbitrator, the third arbitrator shall be supplied by the Circuit Court for Racine County, Wisconsin. Each party shall reach an agreement with the arbitrator named by that party on the compensation to be paid to that arbitrator and shall disclose that agreement to the other party and the other arbitrator. The Arbitration Panel shall render its final decision within six (6) months of the selection of the Arbitration Panel. The Arbitration Panel shall conduct all proceedings in Racine, Wisconsin.

In the event a party forfeits its right to select an arbitrator, then the second arbitrator shall be paid by the forfeiting party upon the same terms as the non-forfeiting party compensates its appointed arbitrator. The parties shall each pay one-half (1/2) of the fees and expenses of the third arbitrator as billed by that arbitrator to the parties.

Notwithstanding any other provision to the contrary, the parties agree and consent to the taking of depositions and the use of discovery in accordance with the Federal Rules of Civil Procedure and the Wisconsin Statutes. Furthermore, an aggrieved party prior to the naming of the Arbitration Panel as provided for in this Agreement, may petition the Circuit Court for Racine County, Wisconsin, for such temporary equitable relief as the court may determine is appropriate under the circumstances to maintain the status quo until the appointment of the Arbitration Panel as provided for herein.

After submission of the Disputed Claims to arbitration, but not less than ten (10) business days prior to commencement of the arbitration proceeding in which the Arbitration Panel will finally and fully resolve the Disputed Claims, each party shall provide the other party with a final confidential written settlement offer which shall not be disclosed to the arbitrators prior to the arbitration proceeding. If no settlement is reached, the "Prevailing Party", as defined below, shall be entitled to reimbursement of its reasonable legal fees and expenses and its share of all fees and expenses paid to the arbitrators as part of its final award. In addition to the resolution of the Disputed Claims the Arbitration Panel shall also determine which of the parties, if any, shall be deemed the "Prevailing Party". A party shall be deemed the "Prevailing Party" only if the award rendered by the arbitrators is more favorable to the Prevailing Party then the Prevailing Party's final written settlement offer to the other party, which shall only be disclosed to the arbitrators after they have reached their final decision with respect to the Disputed Claims. The Arbitration Panel may also determine that neither party is a Prevailing Party for purposes of the standard set forth in this subparagraph.

The arbitrators shall be prohibited from awarding punitive damages even if a party would have otherwise been entitled to recover such damages under Federal, State or Local statutes, ordinances or regulations absent this Agreement. The arbitrators shall prepare detailed findings of fact and conclusions of law when rendering their decision.

8. Final Agreement. This writing is intended by the parties as a final expression of their agreement and is intended also as a complete and exclusive statement of the terms and conditions of their agreement. Any subsequent modification or amendment to it may be made only in writing signed by both parties hereto. This writing and these terms and conditions shall be governed by and construed according to the internal laws of the State of Wisconsin.

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