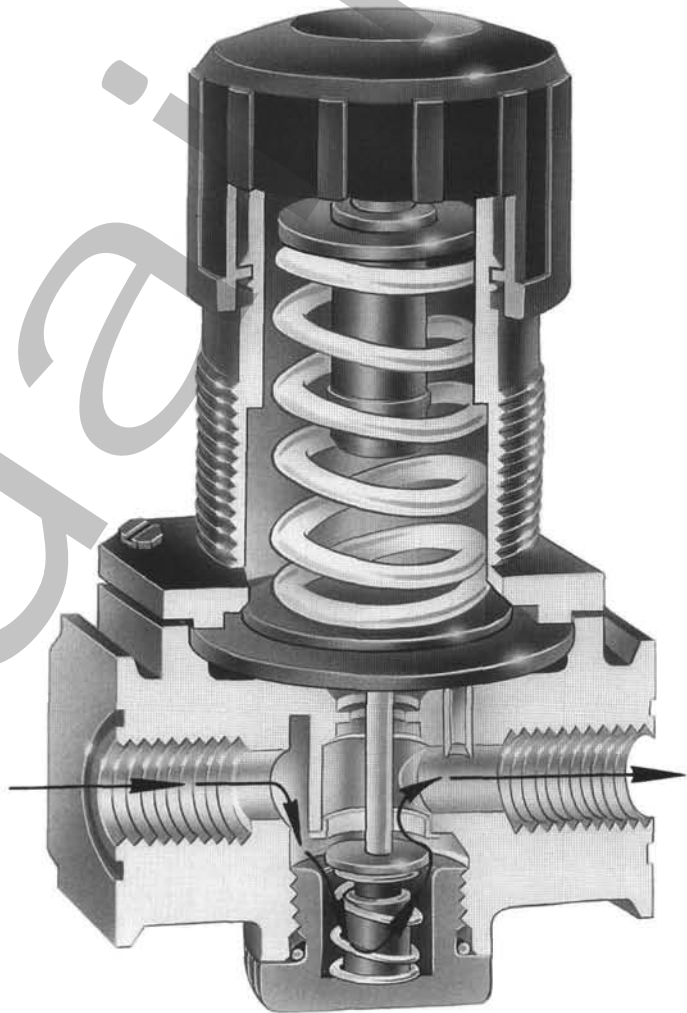


REGULATORS

Pneumatic devices are designed to work at a certain pressure. Most devices will operate at pressures in excess of that recommended. However, operating at higher pressures can cause excess torque, force and wear and can waste compressed air. The best operation and life of the device can be obtained by using the proper pressure level. A regulator is used to reduce and maintain the pressure at a level suitable for the device.

Arrow's quality Regulators include the *Miniature Series* which are high performance, low cost regulators for the O.E.M. market and low flow applications up to 25 scfm. Arrow's *Tri•Star Series* are compact, lightweight regulators engineered for superior performance in a wide range of applications where air flow does not exceed 100 scfm. Arrow's *Midflow Series* regulators are compact and available in 3/8", 1/2" & 3/4" with air flows exceeding 200 SCFM. Arrow's *High Flow Series* heavy duty regulators are for rigorous applications requiring constant pressure for flows up to 240 scfm.

The *General Purpose Precision Series* features state-of-the-art engineering for precision control in critical tolerance applications. These regulators are available in standard and pilot operated models for both low and high flow applications. The *Arrow Precision Regulator* lineup can be tailored to fit your specific needs. All Arrow regulators are easily panel mounted. All Arrow regulators are designed with a micro seat finish to ensure no reduced pressure creep.



ARROW

Miniature Air Regulators

R16



SPECIFICATIONS

Body

- Die cast zinc nickle plated

Bonnet

- Glass filled nylon

Seals

- Buna N

Supply Pressure

- 250 psig

Operating Pressure Range

- 0 to 125 psig standard
- 0 to 60 psig optional
- 0 to 20 psig optional

Operating Temperature Range

- 40°F to 120°F

Gauge Ports

- 1/8" standard, full flow

KITS

Panel Mounting Kit

- Ring only, panel hole size 1³/₁₆" PK1611

Diaphragm Kits

- Relieving RK260
- Non-relieving RK260N

Bracket Kit see page 60

- Bracket and ring BR1611

FEATURES

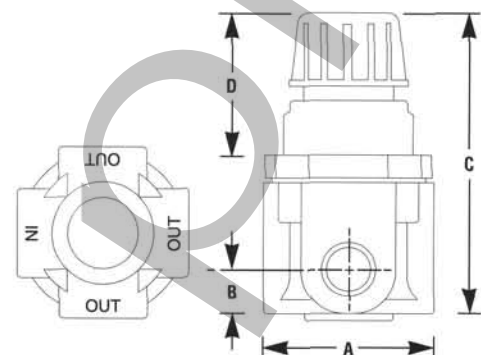
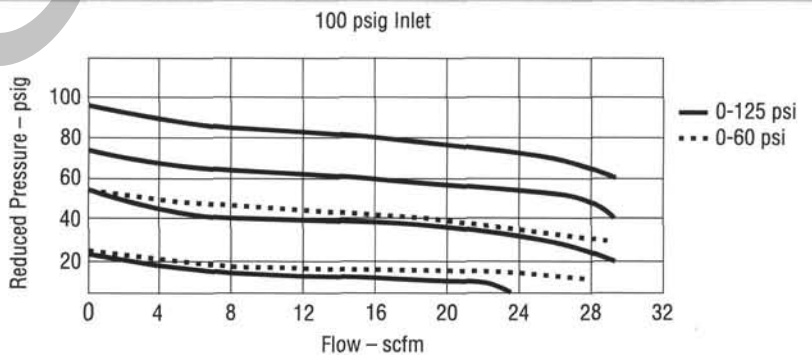
- Micro seat finish to ensure no reduced pressure creep
- Diaphragm operation
- Relieving style standard
- Three position non-rising adjustment knob; push to lock, pull to adjust, detach to make tamper resistant
- Easily panel mounted
- Tamper-proof cap included

OPTIONS

add suffix to part number in alpha order

- B** 2-Position mechanical
Lock Knob R162B
- G** Gauge (0-160 psi) R162G
- I** Instrument pressure R162I
0 to 20 psi adjustment
- L** Low pressure R162L
0 to 60 psi adjustment
- N** Non-relieving R162N
- P** Panel mount R162P
- U** No gauge ports R162U
- V** All 1/4" ports (4) R162V

PERFORMANCE CHARACTERISTICS



DIMENSIONS

PIPE SIZE	MODEL NO.	MAX. FLOW SCFM	DIMENSIONS (INCHES)				WEIGHT (OZS.)
			A	B	C	D	
1/8"	R161	25	1 1/2	1/2	2 3/4	1 1/4	6
1/4"	R162	25	1 1/2	1/2	2 3/4	1 1/4	6

Miniature Air Regulators



SPECIFICATIONS

Body
• Glass filled nylon

Bonnet
• Glass filled nylon

Seals
• Buna N

Supply Pressure
• 250 psig

Operating Pressure Range
• 0 to 125 psig standard
• 0 to 60 psig optional
• 0 to 20 psig optional

Operating Temperature Range
• 40°F to 120°F

Gauge Ports
• 1/8" standard, full flow

KITS

Panel Mounting Kit
• Ring only,
panel hole size 1 3/16" PK1611

Diaphragm Kits
• Relieving RK260
• Non-relieving RK260N

Bracket Kit see page 60
• Bracket and ring BR1611

Applications
• Non-relieving diaphragm can be used on liquid applications

FEATURES

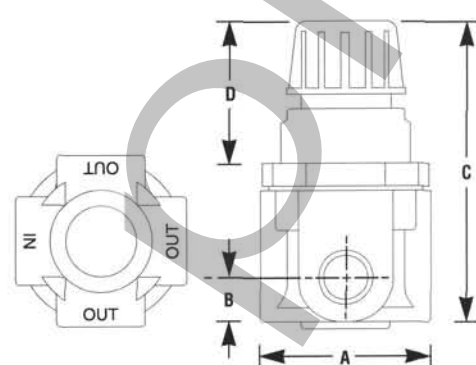
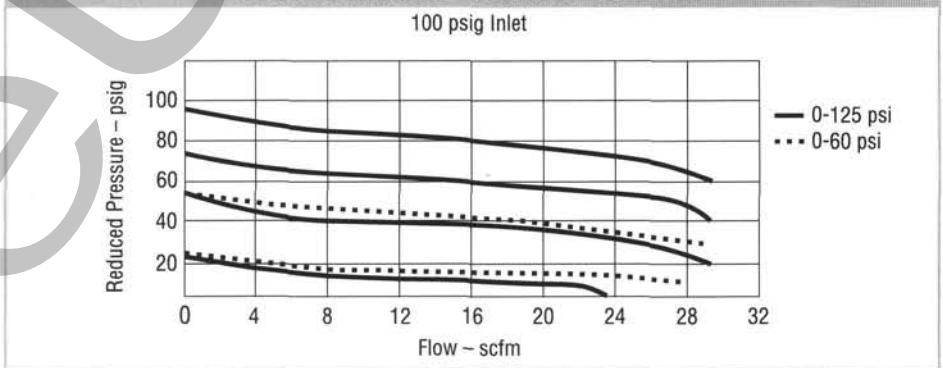
- Micro seat finish to ensure no reduced pressure creep
- Diaphragm operation
- Relieving style standard
- Three position non-rising adjustment knob; push to lock, pull to adjust, detach to make tamper resistant
- Easily panel mounted
- Tamper-proof cap included
- Lightweight

OPTIONS

add suffix to part number in alpha order

- B** 2-Position Mechanical
Lock Knob R262B
- G** Gauge (0-160 psi) R262G
- I** Instrument pressure R262I
0 to 20 psi adjustment
- L** Low pressure R262L
0 to 60 psi adjustment
- N** Non-relieving R262N
- P** Panel mount R262P
- U** No gauge ports R262U
- V** All 1/4" ports R262V
- Y1** Viton diaphragm/valve set R262Y1
- Y2** EDPM diaphragm/valve set R262Y2

PERFORMANCE CHARACTERISTICS



DIMENSIONS

PIPE SIZE	MODEL NO.	MAX. FLOW SCFM	DIMENSIONS (INCHES)				WEIGHT (OZS.)
			A	B	C	D	
1/8"	R261	25	1 1/2	1/2	3/4	1 1/4	2
1/4"	R262	25	1 1/2	1/2	3/4	1 1/4	2

Miniature Water Regulators



FEATURES

- Micro seat finish ensuring no reduced pressure creep
- Sonic welded, leak-tight, non-relieving diaphragm assembly
- Water hammer and vibration dampner
- Three position adjustment knob: "push" to lock, "pull" to adjust and "detach" to make tamper resistant
- Excellent flow characteristics due to the large open outlet orifice
- Flexibility of design, offering all stainless internals and three elastomer selections
- Plastic (glass-filled nylon) construction
- One standard gauge port full flow
- Tamper-proof cap included

OPTIONS

add suffix to part number in alpha order

- B** 2-Position Mechanical
Lockout Knob R362B
- G** Gauge (0-160 psi) R362G
- I** Instrument pressure R362I
0 to 20 psi adjustment
- L** Low pressure R362L
0 to 60 psi adjustment
- P** Panel mount R362P
- U** No gauge port R362U
- V** All 1/4" ports R362V
- Y1** Viton diaphragm/valve set . . R362Y1
- Y2** EDPM diaphragm/valve set . R362Y2

SPECIFICATIONS

- Body**
 - Glass filled nylon
- Bonnet**
 - Glass filled nylon
- Seals**
 - Buna N elastomer standard
- Spring**
 - 316 stainless steel
- Valve**
 - 316 stainless steel
- Flow**
 - 5 gpm
- Supply Pressure**
 - 250 psig
- Operating Pressure Range**
 - 0 to 125 psig
- Operating Temperature Range**
 - 40°F to 120°F
- Gauge Port**
 - (1) 1/8" standard, full flow

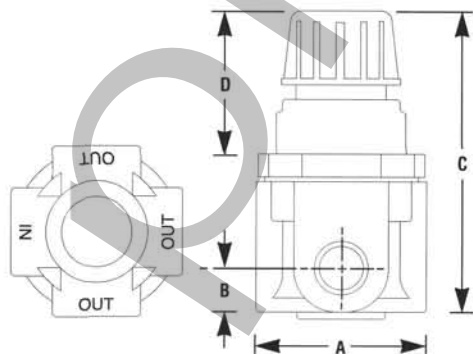
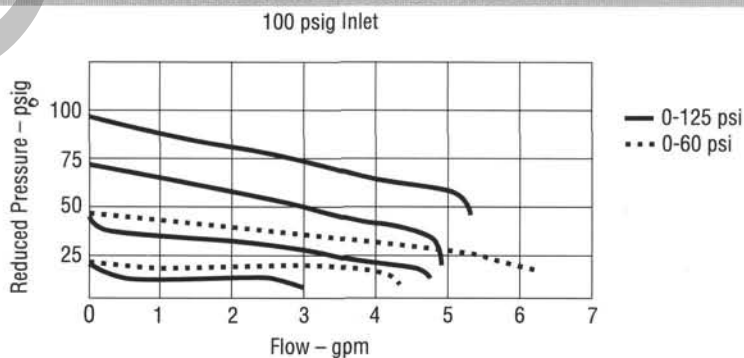
KITS

- Panel Kit**
 - Ring only
panel hole size 1 3/16" PK1611
- Diaphragm Kit**
 - Non-relieving RK260N
- Mini Mounting Bracket** see page 60
 - Ring BR1611

APPLICATIONS

- R360 series miniature water pressure regulator meets all pending restrictions on the use of brass in water systems.
- Prevent water hammer effect.
- Vending machines that require a water mixer
- Drinking fountains
- Home water filtration systems

PERFORMANCE CHARACTERISTICS



DIMENSIONS

PIPE SIZE	MODEL NO.	MAX. FLOW GPM	DIMENSIONS (INCHES)				WEIGHT (OZS.)
			A	B	C	D	
1/8"	R361	5	1 1/2	1/2	2 3/4	1 1/4	3
1/4"	R362	5	1 1/2	1/2	2 3/4	1 1/4	3

Tri•Star Regulators

R35



FEATURES

- Micro finished brass seat to ensure no reduced pressure creep
- Reinforce diaphragm for repeated accuracy
- Minimal pressure droop due to efficient aspiration
- Three position non-rising adjustment knob; push to lock, pull to adjust, detach to make tamper resistant
- Relieving style standard
- In-line or modular installation
- Easily panel mounted
- Tamper-proof cap included
- High scfm flow due to efficient aspiration

OPTIONS

add suffix to part number in alpha order

- G** Gauge (0-160 psi) R354G
- H** High pressure R354H
0 to 250 psi adjustment
- I** Instrument pressure R354I
0 to 20 psi adjustment
- L** Low pressure R354L
0 to 60 psi adjustment
- N** Non-relieving R354N
- P** Panel mount R354P
- Q** Panel mount $\frac{9}{16}$ " bonnet R354Q
- T** Tee handle adjustment R354T

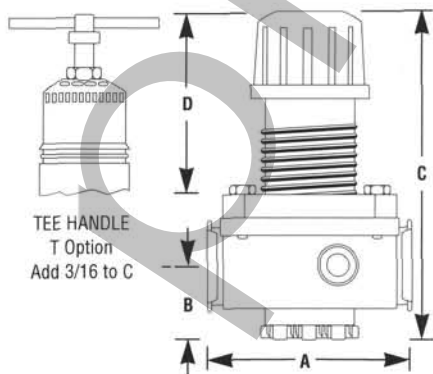
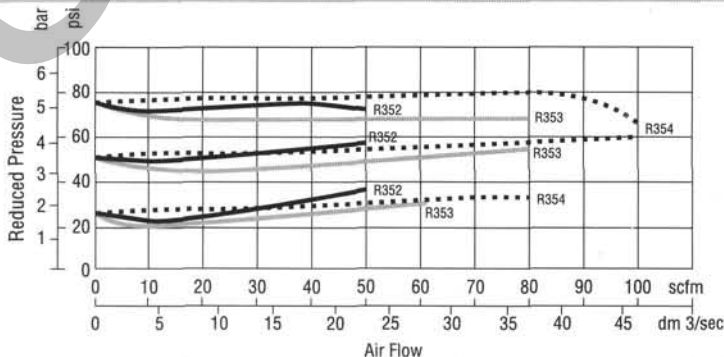
SPECIFICATIONS

- Body**
 - Die cast aluminum
- Bonnet**
 - Glass filled nylon
- Seals**
 - Buna N Elastomer standard
- Seat**
 - Brass
- Supply Pressure**
 - 300 psig
- Operating Pressure Range**
 - 0 to 125 psig
- Operating Temperature Range**
 - 40°F to 120°
- Gauge Port**
 - $\frac{1}{4}$ " full flow

KITS

- Repair Kits**
 - Diaphragm kit relieving DK35
 - Diaphragm kit Non-relieving DK35N
 - Valve kit VK35
- Mounting Kits** see page 60
 - Bracket kit RBK5
 - Panel mounting kit ring only panel hole size $1\frac{3}{16}$ " PKR35
 - Panel mount bracket and ring PMKR35
 - Panel mount bonnet & panel mount nut PMKR35Q

PERFORMANCE CHARACTERISTICS



DIMENSIONS

PIPE SIZE	MODEL NO.	MAX. FLOW SCFM	DIMENSIONS (INCHES)					WEIGHT (LBS.)
			A	B	C	D	E (WIDTH)	
$\frac{1}{4}$ "	R352	50	$2\frac{21}{32}$	$1\frac{7}{32}$	$\frac{5}{8}$	$2\frac{3}{4}$	$2\frac{1}{4}$	1.0
$\frac{3}{8}$ "	R353	80	$2\frac{21}{32}$	$1\frac{7}{32}$	$\frac{5}{8}$	$2\frac{3}{4}$	$2\frac{1}{4}$	1.0
$\frac{1}{2}$ "	R354	100	$2\frac{21}{32}$	$1\frac{7}{32}$	$\frac{5}{8}$	$2\frac{3}{4}$	$2\frac{1}{4}$	1.0

MidFlow Regulators

R37



SPECIFICATIONS

Body

- Die cast aluminum

Bonnet

- Glass filled nylon

Seals

- Buna N Elastomer standard

Seat

- Brass

Supply Pressure

- 300 psig

Operating Pressure Range

- 0 to 125 psig

Operating Temperature Range

- 40°F to 120°

Gauge Port

- 1/4" full flow

KITS

Repair Kits

- Diaphragm kit relieving DK35
- Diaphragm kit Non-relieving DK35N
- Valve kit VK37

Mounting Kits see page 60

- Bracket kit RBK5
- Panel mounting kit ring only panel hole size 1 3/16" PKR35
- Panel mount bracket and ring PMKR35

FEATURES

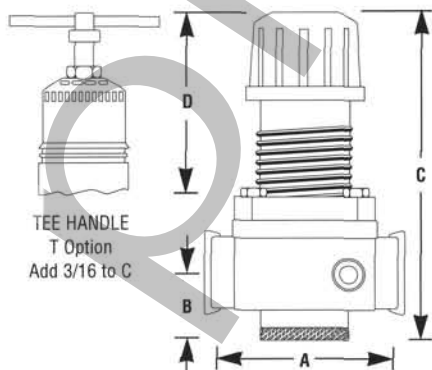
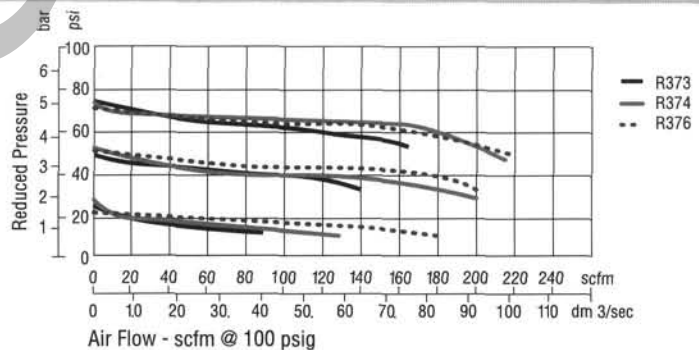
- Micro finished brass seat to ensure no reduced pressure creep
- Reinforce diaphragm for repeated accuracy
- Minimal pressure droop due to efficient aspiration
- Three position non-rising adjustment knob; push to lock, pull to adjust, detach to make tamper resistant
- Relieving style standard
- Easily panel mounted
- Tamper-proof cap included
- High scfm flow due to efficient aspiration

OPTIONS

add suffix to part number in alpha order

- G** Gauge (0-160 psi) R373G
- H** High pressure R373H
0 to 250 psi adjustment
- I** Instrument pressure R373I
0 to 20 psi adjustment
- L** Low pressure R373L
0 to 60 psi adjustment
- N** Non-relieving R373N
- P** Panel mount R373P
- Q** Panel mount 9/16" bonnet R373Q
- T** Tee handle adjustment R373T

PERFORMANCE CHARACTERISTICS



DIMENSIONS

PIPE SIZE	MODEL NO.	MAX. FLOW SCFM	DIMENSIONS (INCHES)					WEIGHT (LBS.)
			A	B	C	D	E (WIDTH)	
3/8"	R373	170	3 1/4	1 13/32	5 7/8	2 3/4	2 1/4	1.3
1/2"	R374	215	3 1/4	1 13/32	5 7/8	2 3/4	2 1/4	1.3
3/4"	R376	220	3 1/4	1 13/32	5 7/8	2 3/4	2 1/4	1.3

High Flow Regulators



SPECIFICATIONS

Body

- Die cast aluminum

Bonnet

- Die cast aluminum

Seals

- Buna N Elastomer standard

Seat

- Brass

Supply Pressure

- 250 psig

Operating Pressure Range

- 0 to 125 psig

Operating Temperature Range

- 40°F to 120°F

Gauge Ports

- 1/4"

KITS

Panel Mounting Kit

- 1586, 1588 PK1586
panel hole size 3/4"

Diaphragm Kit

- Diaphragm kit RK1586R

FEATURES

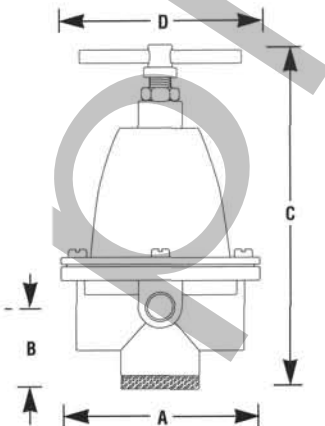
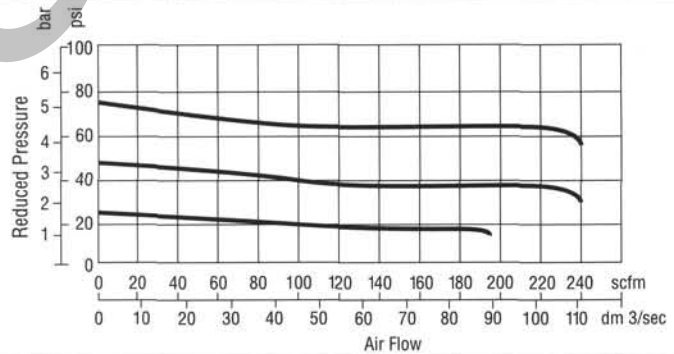
- Micro finished brass seat to ensure no reduced pressure creep
- Reinforce diaphragm for repeated accuracy
- Minimal pressure droop due to efficient aspiration
- Relieving style standard
- Easily panel mounted
- Tamper-proof cap included
- High scfm flow due to efficient aspiration
- Tee handle adjustment

OPTIONS

add suffix to part number in alpha order

- G** Gauge (0-160 psi) 1588G
- H** High pressure 1588H
0 to 250 psi adjustment
- L** Low pressure 1588L
0 to 60 psi adjustment
- N** Non-relieving 1588N
- P** Panel mount 1588P

PERFORMANCE CHARACTERISTICS



DIMENSIONS

PIPE SIZE	MODEL NO.	MAX. FLOW SCFM	DIMENSIONS (INCHES)			D (WIDTH)	WEIGHT (LBS.)
			A	B	C		
3/4"	1586	240	3 1/2	1 5/8	8	4 1/2	2.4
1"	1588	240	3 1/2	1 5/8	8	4 1/2	2.4



Adjustable High Performance Regulators

P10

P14

FEATURES

- Micro finished brass seat to ensure no reduced pressure creep
- Reinforce diaphragm for repeated accuracy
- Minimal pressure droop due to efficient aspiration
- Relieving style standard
- In-line or modular installation
- Easily panel mounted
- High scfm flow due to efficient aspiration
- Continuous bleed

OPTIONS

- G Gauge (0-160 psi) P14-0G
- H High pressure P14-04H
P14 only: 0 to 250 psi adjustment
- L Low pressure P14-04L
P14 Only: 0 to 60 psi adjustment
- NB No bleed P14-04NB
- P Panel mount P14-04P
- Q Panel mount 9/16" bonnet P14-04Q
- SP Std. pressure P10 only P10-04SP

SPECIFICATIONS

- Body**
 - Lightweight die cast aluminum
- Bonnet**
 - Glass filled nylon
- Seals**
 - Buna N Elastomer standard
- Diaphragm**
 - Reinforced Buna N
- Valve**
 - Brass and Buna N Disc
- Seat**
 - Brass
- Supply Pressure**
 - 300 psig
- Reduced Press Flow**
 - P10 0 to 25 psig, P14 0 to 125 psig
- Operating Temperature Range**
 - 40°F to 120°F
- Gauge Ports**
 - 1/4" npt

Bleed Rates

- Continuous 5.0 scfh or .08 scfm

KITS

Panel Mounting Kit

- Panel mount kit
- 9/16" bonnet PMKR35
- Panel mounting ring PKR35

Diaphragm Kit

- Diaphragm kit relieving P10 RKP10R
- Diaphragm kit relieving P14-03, P14-04. RKP10R
- Diaphragm kit P14-02. RKP14

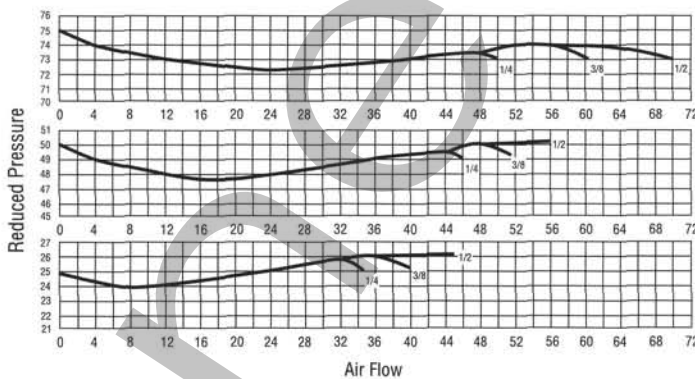
Mounting Kits see page 60

- Mounting bracket RBK5
- Panel mount nut PKR35

Applications

- Pneumatic instrumentation
- Controllers and transmitters
- Valve operators, positioners
- Cylinder loading and braking pressure control
- Roll loading
- Air and force balance hoists
- Electric pneumatic proportional modules
- Precise torque control of air operated tools

PERFORMANCE CHARACTERISTICS



Inverse Ratio Performance – P10

Initial Pressure	-25	-20	-15	-10	-5	0	+5	+10	+15	+20	+25
Reduced Pressure Variance	+2	+1	+1	0	0	0	0	0	-1	-2	-3

Inverse Ratio Performance – P14

Reduced Pressure Variance	+1.5	+1.2	+1	+6	+4	0	-3	-7	-1	-1.3	-1.5
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DIMENSIONS

PIPE SIZE	MODEL NO.	MAX. FLOW SCFM*	MANUAL RANGE PSIG	DIMENSIONS (INCHES)					WEIGHT (LBS.)
				A	B	C	D	E (WIDTH)	
1/4"	P10-02	30	0-25	2 ²¹ / ₃₂	1 ¹³ / ₃₂	5 ⁷ / ₁₆	2 ³ / ₄	2 ¹ / ₄	1.1
3/8"	P10-03	30	0-25	2 ²¹ / ₃₂	1 ¹³ / ₃₂	5 ⁷ / ₁₆	2 ³ / ₄	2 ¹ / ₄	1.1
1/4"	P14-02	40	0-125	2 ²¹ / ₃₂	1 ¹³ / ₃₂	5 ⁷ / ₁₆	2 ³ / ₄	2 ¹ / ₄	1.1
3/8"	P14-03	50	0-125	2 ²¹ / ₃₂	1 ¹³ / ₃₂	5 ⁷ / ₁₆	2 ³ / ₄	2 ¹ / ₄	1.1
1/2"	P14-04	70	0-125	2 ²¹ / ₃₂	1 ¹³ / ₃₂	5 ⁷ / ₁₆	2 ³ / ₄	2 ¹ / ₄	1.1

