

Short Form  
Catalogue

# ControlAir

Precision  
Pneumatic and  
Electropneumatic  
Controls



**ControlAir Inc.**

High Performance  
Affordable  
World-class  
Quality Products

# ControlAir



Current-to-Pressure  
(I/P) Transducers

Voltage-to-Pressure  
(E/P) Transducers

Pressure-to-Current  
(P/I) Transducers

Pressure-to-Voltage  
(P/E) Transducers

Precision Air  
Pressure Regulators

Filter Regulators

Volume Boosters

Snap Acting Relays

Bias Relays

Motorized Regulators

Liquid Level Systems

Friction-free Diaphragm  
Air Cylinders

Custom Engineered  
Devices

ControlAir delivers precision pneumatic and electropneumatic controls like no one else in the business.

We offer world-wide distribution for companies that demand excellent service and outstanding technical support.

Our ISO-9001:2000 registered quality system assures tightly controlled specifications and processes, resulting in high performance, dependable pneumatic controls.

Our dedication to a streamlined manufacturing process assures customers of product availability and on-time delivery.

ControlAir specializes in joint development projects and strategic design partnerships—customizing our products to meet the specific needs of our customers.

▲ AUTOMATED  
INDUSTRIAL  
EQUIPMENT

▲ PROCESS  
CONTROL  
SYSTEMS

▲ MEDICAL  
EQUIPMENT

▲ LABORATORY  
RESEARCH  
AND ANALYSIS

▲ ENERGY  
MANAGEMENT

▲ FLUID POWER

▲ ROBOTICS

▲ VALVE  
AUTOMATION

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**Or call 603/886-9400 for more information  
and a full product catalog**

## Type 100

Multi-stage regulator provides the highest level of regulation accuracy and repeatability available. Output pressure is controlled to within 0.1% of full range.

- ▲ Insensitive to changes in supply pressure and flow
- ▲ Able to hold set pressure over long periods of time
- ▲ High relief capacity, plunger operated, manifold mounted, and low range models are available
- ▲ Compact unit



### Precision Air Pressure Regulator

Flow Capacity SCFM (m3/hr)	14 (25)
Exhaust Capacity SCFM (m3/hr)	3 (5.1)
Sensitivity Inch wc (mm)	0.125 (3.2)
Supply Pressure Max PSIG (kPa)	150 (1050)
Approximate Size (inches)	2.0 x 2.06 x 4.26
Approximate Size (mm)	52 x 52 x 108

Range PSIG (kPa)	Port Size NPT	Model#
2-40 (15-280)	1/8	100-AA
	1/4	100-BA
	3/8	100-CA
2-60 (15-420)	1/8	100-AB
	1/4	100-BB
2-120 (15-840)	3/8	100-CB
	1/8	100-AC
	1/4	100-BC
	3/8	100-CC

### Also Available:

**Type 100HR High Relief Capacity**  
Range: 2-120 (15-840)  
Port Size: 1/4 - Model # 110-BC  
Port Size: 3/8 - Model # 110-CC

**Type 100LR Low Range**  
Range: 5-25 (3.5-175) / Port Size: 1/4  
Model # 120-BA

## Type 100M

Designed to provide precise pneumatic control by use of an electrical signal.



### Motorized Precision Air Pressure Regulator

- ▲ Ideal for control from a remote location
- ▲ Regulation accuracy and sensitivity of the Type 100
- ▲ Maintains set output pressure in the event of a power failure
- ▲ Compact size

## Type 300

Designed to provide clean, accurate air pressure to instruments, valves, and other control equipment. Durable materials of construction in combination with an epoxy paint finish provide long lasting corrosion resistance in harsh industrial environments.

- ▲ Provides constant control of pressure under variable flow rates and supply pressures
- ▲ High capacity, long lasting depth filter
- ▲ Epoxy finish is standard
- ▲ Low droop
- ▲ Through body mounting
- ▲ Materials in the Type 310 meet NACE MR-01-75 requirements



### Instrument Air Filter & Air Filter Regulator

Flow Capacity SCFM (m3/hr)	22 (37.0)
Exhaust Capacity SCFM (m3/hr)	0.1 (0.17)
Sensitivity Inch wc (mm)	1.0 (25.0)
Supply Pressure Max PSIG (kPa)	250 (1700)

Type 300 & Type 310 Filter Regulators	
Approximate Size (inches)	3.13 x 3.13 x 7.50
Approximate Size (mm)	80 x 80 x 190
Type 320 Filter	
Approximate Size (inches)	3.13 x 3.13 x 3.96
Approximate Size (mm)	80 x 80 x 100

### Type 300

Range PSIG (kPa)	Port Size NPT	Model#
0-10 (0-65)	1/4	300-BD
0-30 (0-200)	1/4	300-BA
0-60 (0-400)	1/4	300-BB
0-120 (0-800)	1/4	300-BC

### Type 310 NACE Compliant

Range PSIG (kPa)	Port Size NPT	Model#
0-30 (0-200)	1/4	310-BA
0-60 (0-400)	1/4	310-BB
0-100 (0-650)	1/4	310-BC

### Type 320 Filter

Range PSIG (kPa)	Port Size NPT	Model#
-	1/4	320-BX

## Type 350/360SS

Designed to provide instrument quality air in corrosive environments. Will also provide precise pressure control of sour gases.

- ▲ 316 Stainless Steel Internal and External
- ▲ Viton® Seals
- ▲ NACE approved
- ▲ Large flow capacity
- ▲ Low air consumption
- ▲ Tapped exhaust



### Stainless Steel Filter Regulator & Regulator

Maximum Flow Capacity SCFM (m3/hr)	
1/4" NPT	20 (33.6)
1/2" NPT	160 (272)
Exhaust Capacity SCFM (m3/hr)	1.0 (1.7)
Sensitivity Inch wc (mm)	1.0 (25.0)
Supply Pressure Max PSIG (kPa)	290 (2100)
Type 350SS Filter Regulator	
1/4" NPT Approx. Size (inches)	2.13 x 2.13 x 8.11
1/4" NPT Approx. Size (mm)	54.1 x 54.1 x 206
1/2" NPT Approx. Size (inches)	2.13 x 2.72 x 8.52
1/2" NPT Approx. Size (mm)	54.1 x 69.1 x 216.4
Type 360SS Regulator	
Approximate Size (inches)	2.13 x 2.13 x 5.49
Approximate Size (mm)	54.1 x 54.1 x 139.8

### Type 350SS Filter Regulator

Range PSIG (kPa)	Port Size NPT	Model#
0-30 (0-210)	1/4	350-BA
	1/2	350-DA
0-60 (0-420)	1/4	350-BB
	1/2	350-DB
0-100 (0-700)	1/4	350-BC
	1/2	350-DC
0-150 (0-1050)	1/4	350-BD
	1/2	350-DD

### Type 360SS Regulator

Range PSIG (kPa)	Port Size NPT	Model#
0-30 (0-210)	1/4	360-BA
0-60 (0-420)	1/4	360-BB
0-100 (0-700)	1/4	360-BC
0-150 (0-1050)	1/4	360-BD

## Type 400

General purpose regulator provides reliable performance under variable operating conditions.

- ▲ Repeatable pressure output
- ▲ Corrosion-resistant construction
- ▲ Low cost makes this unit ideal for high volume OEM applications



### General Service Pressure Regulator

Flow Capacity SCFM (m3/hr)	20 (33.6)
Exhaust Capacity SCFM (m3/hr)	0.1 (0.17)
Sensitivity Inch wc (mm)	1.0 (25.0)
Supply Pressure Max PSIG (kPa)	250 (1700)
Approximate Size (inches)	DIA 2.5 H 5.63
Approximate Size (mm)	DIA 63 H 143

Range PSIG (kPa)	Port Size NPT	Model#
0-10 (0-70)	1/4	400-BD
0-30 (0-210)	1/4	400-BA
0-60 (0-420)	1/4	400-BB
0-120 (0-840)	1/4	400-BC

## Type 3500



### High Pressure Regulator\*

Designed to provide low cost reduction of inlet pressures from as high as 6000 psig down to working pressures between 0 and 225 psig. These units can be used where high pressure supply requires a "first cut" drop of the pressure prior to sending it down stream to pilot or pressure loaded regulators.

- ▲ Socket head or tee handle adjustment
- ▲ Multi-seat valve block that can be rotated up to four times for a fresh sealing surface.
- ▲ Choice of three outlet ports for easy hookup
- ▲ Low Cost

\*Available 3/05

# Volume Boosters/Air Relays

## Type 700

Ideal for applications that require high flow capacity and accurate pressure control.

- ▲ Allows flow capacity up to 80 SCFM
- ▲ Dampening action of aspirator tube provides stability under varying flow conditions
- ▲ Sensitive to minute changes in down stream pressure



### Precision High Flow Pressure Regulator

Flow Capacity SCFM (m3/hr)	80 (140)
Exhaust Capacity SCFM (m3/hr)	4 (7.0)
Sensitivity Inch wc (mm)	0.250 (6.4)
Supply Pressure Max PSIG (kPa)	250 (1700)
Approximate Size (inches)	DIA 3.0 H 6.0
Approximate Size (mm)	DIA 76 H 152

Range PSIG(kPa)	Port Size NPT	Model#
0-2 (0-14)	1/4, 3/8, 1/2	700-BA, 700-CA, 700-DA
0-15 (0-105)	1/4, 3/8, 1/2	700-BC, 700-CC, 700-DC
0-30 (0-210)	1/4, 3/8, 1/2	700-BD, 700-CD, 700-DD
0-60 (0-420)	1/4, 3/8, 1/2	700-BE, 700-CE, 700-DE
0-150 (0-1050)	1/4, 3/8, 1/2	700-BF, 700-CF, 700-DF

## Type 700BP

Provides sensitive protection against over pressurization in the downstream portion of a pneumatic system. Operates as a high precision relief valve with an adjustable set point.

- ▲ Provides quick response to controlled system pressure variation
- ▲ Flow capacity up to 50 SCFM
- ▲ Compensating flow control from venturi tube design



### Precision Back Pressure Regulator

Flow Capacity SCFM (m3/hr)	50 (85)
Sensitivity Inch wc (mm)	0.25 (6.4)
Supply Pressure Max PSIG (kPa)	250 (1700)
Approximate Size (inches)	DIA 3.0 H 6.0
Approximate Size (mm)	DIA 76 H 152

Range PSIG(kPa)	Port Size NPT	Model#
0-2 (0-14)	1/4, 3/8, 1/2	710-BA, 710-CA, 710-DA
0-15 (0-105)	1/4, 3/8, 1/2	710-BC, 710-CC, 710-DC
0-30 (0-210)	1/4, 3/8, 1/2	710-BD, 710-CD, 710-DD
0-60 (0-420)	1/4, 3/8, 1/2	710-BE, 710-CE, 710-DE
0-150 (0-1050)	1/4, 3/8, 1/2	710-BF, 710-CF, 710-DF

## Type 800

Compact unit that supplies precise air pressure regulation for applications where space is limited.

- ▲ Flow capacity up to 5 SCFM
- ▲ Stable output
- ▲ Repeatable
- ▲ Self relieving
- ▲ Lightweight construction



### Subminiature Precision Air Pressure Regulator

Flow Capacity SCFM (m3/hr)	5 (8)
Exhaust Capacity SCFM (m3/hr)	0.4 (0.68)
Supply Pressure Max PSIG (kPa)	250 (1700)
Approximate Size (inches)	DIA 1.0 H 3.4
Approximate Size (mm)	DIA 24.5 H 86.4

Range PSIG (kPa)	Port Size		
	1/16 NPT	10-32	M5
0-5 (0-35)	800-AA	800-CA	800-BA
0-15 (0-105)	800-AB	800-CB	800-BB
0-30 (0-210)	800-AC	800-CC	800-BC
0-60 (0-420)	800-AD	800-CD	800-BD
0-100 (0-700)	800-AE	800-CE	800-BE

## Type 850/860

Air/Water regulator provides stable output pressure in a small, economical package.

- ▲ Relieving and non-relieving models
- ▲ Non-rising adjustment knob with locking capability
- ▲ Lightweight construction
- ▲ OEM friendly cost



### Low Cost Miniature Air/Water Pressure Regulator

Flow Capacity SCFM (m3/hr) [gal/min]	24 (41) [2.4]
Exhaust Capacity SCFM (m3/hr)	.5 (.85)
Supply Pressure Max PSIG (kPa)	250 (1700)
Approximate Size (inches)	1.5 x 1.63 x 2.80
Approximate Size (mm)	38.1 x 41.4 x 71.1

Range PSIG (kPa)	Port Size NPT	Air Model#	Water Model#
0-5 (0-35)	1/8	850-AE	860-AEN
	1/4	850-BE	860-BEN
0-15 (0-105)	1/8	850-AA	860-AAN
	1/4	850-BA	860-BAN
0-30 (0-210)	1/8	850-AB	860-ABN
	1/4	850-BB	860-BBN
0-60 (0-420)	1/8	850-AC	860-ACN
	1/4	850-BC	860-BCN
0-100 (0-700)	1/8	850-AD	860-ADN
	1/4	850-BD	860-BDN

## Type 200

Pilot operated, multi-stage 1:1 relay with positive and negative biasing adjustment capability. It accurately and quickly reproduces a signal pressure with consistent repeatability.

- ▲ Output control to within 0.1% of full range
- ▲ Positive or negative bias up to 30 psig
- ▲ High relief capacity model available
- ▲ Compact unit
- ▲ Available with external bias adjustment



### Precision Air Relay

Flow Capacity SCFM (m3/hr)	14 (25)
Exhaust Capacity SCFM (m3/hr)	
<b>Standard Relief</b>	2.0 (3.4)
<b>High Relief Capacity</b>	10 (17)
Sensitivity Inch wc (mm)	0.125 (3.2)
Supply Pressure Max PSIG (kPa)	150 (1050)
Output Pressure Range PSIG (kPa)	2-120 (15-840)
Approximate Size (inches)	2.06 x 2.06 x 2.88
Approximate Size (mm)	52 x 52 x 73

Port Size NPT	Max. Output Pressure	Model #
<b>Standard Relief</b>		
1/4	2-120 psig	200-BC
3/8	2-120 psig	200-CC
<b>High Relief Capacity</b>		
1/4	2-120 psig	210-BC
3/8	2-120 psig	210-CC

## Type 600

Utilizes a signal pressure to produce an output pressure with high flow capacity. Highly resistant to output variation due to changing flow and supply pressure conditions.

- ▲ Flow capacity to 50 SCFM
- ▲ Available with 1:1, 1:3 or 1:6 signal to output ratio
- ▲ High relief capacity



### Volume Booster

Flow Capacity SCFM (m3/hr)	50 (85)
Exhaust Capacity SCFM (m3/hr)	15.0 (26.0)
Sensitivity Inch wc (mm)	.250 (6.4)
Supply Pressure Max PSIG (kPa)	250 (1700)
Output Pressure Range PSIG (kPa)	0-150 (0-1050)
Approximate Size (inches)	DIA 3.0 H 3.5
Approximate Size (mm)	DIA 76 H 85

Port Size NPT	Signal/Output Ratio	Model #
1/4	1:1	600-BA
3/8	1:1	600-CA
1/2	1:1	600-DA
1/4	1:3	600-BC
3/8	1:3	600-CC
1/2	1:3	600-DC
1/4	1:6	600-BD
3/8	1:6	600-CD
1/2	1:6	600-DD

## Type 650

Signal-operated regulator provides an output pressure that is the sum of the input signal pressure plus an easily adjustable preset positive bias.

- ▲ Four bias ranges from 0-15 psig to 0-150 psig
- ▲ Flow capacity to 50 SCFM
- ▲ Relief capacity to 15 SCFM



### Positive Bias Relay

Flow Capacity SCFM (m3/hr)	50 (85)
Exhaust Capacity SCFM (m3/hr)	15.0 (26.0)
Sensitivity Inch wc (mm)	.250 (6.4)
Supply Pressure Max PSIG (kPa)	250 (1700)
Output Pressure Range PSIG (kPa)	0-150 (0-1050)
Approximate Size (inches)	DIA 3.0 H 3.5
Approximate Size (mm)	DIA 76 H 85

Port Size NPT	Signal/Output Ratio	Model #	Bias Range PSI
1/4	1:1	650-BF	0-150*
3/8	1:1	650-CF	0-150*

\*Consult factory for other bias ranges and ratios.

# Diaphragm Air Cylinders

A rolling diaphragm provides a low-friction dynamic seal. This design provides virtually frictionless conversion of fluid pressure to linear force.

- ▲ Low hysteresis
- ▲ No blow-by leakage
- ▲ Available with linear ball bearings
- ▲ Standard units are easily modified to meet individual customer requirements



## Type 500X

This electronic pressure regulator converts a current or voltage input signal to a linearly proportional pneumatic output pressure.

- ▲ Output pressure from 3–15 psig to 3–120 psig
- ▲ NEMA-4X(IP65) Enclosure (optional)
- ▲ Integral volume booster
- ▲ Agency approvals
- ▲ Field reversible
- ▲ Easy span and zero adjustment



### Also Available:

Type 500X High Pressure Range  
Flow Capacity SCFM (m3/hr) 20 (34.0)  
Terminal Based Linearity (% of span) ±1.5  
Supply Pressure Max PSIG (kPa) 150 (1050)

Input Signal	Output Range PSI (kPa)	Model#
4-20 mA	2-60 (14-420)	500-AG
4-20 mA	3-120 (20-830)	500-AH
0-60 mA	2-120 (15-830)	500-BF
0-5 V	2-60 (14-420)	500-CF
0-10 V	3-120 (20-830)	500-EH

### Transducer (I/P, E/P)

Flow Capacity SCFM (m3/hr)	12.0 (20.4)
Terminal Based Linearity (% of span)	±0.75
Repeatability (% of span)	<0.5
Supply Pressure Max PSIG (kPa)	100 (700)
Port Size (Pneumatic)	1/4 NPT
Port Size (Electric)	1/2 NPT
Approximate Size (inches)	2.18 x 2.18 x 4.24
Approximate Size (mm)	55.4 x 55.4 x 107.7

Input Signal	Output Range PSI (kPa)	Model#
4-20 mA	3-15 (20-100)	500-AC
4-20 mA	3-27 (20-185)	500-AD
4-20 mA	6-30 (40-200)	500-AE
4-20 mA	1-17 (7-117)	500-AF
10-50 mA	3-15 (20-100)	500-BC
10-50 mA	3-27 (20-185)	500-BD
10-50 mA	6-30 (40-200)	500-BE
0-5 V	3-15 (20-100)	500-CC
0-5 V	3-27 (40-185)	500-CD
0-5 V	6-30 (40-200)	500-CE
1-9 V	3-15 (20-100)	500-DC
1-9 V	3-27 (40-185)	500-DD
1-9 V	6-30 (40-200)	500-DE



## Type 550X

This electronic regulator provides accurate and economic control for proportional pressure applications.

- ▲ Compact size, accessible porting and easy adjustments for space constrained applications
- ▲ DIN rail, manifold, pipe, wall or panel mounting available
- ▲ NEMA 4X / IP65 housing
- ▲ DIN 43650, terminal block or conduit electrical connections
- ▲ Zero based and high pressure versions available



### Transducer (I/P, E/P)

Flow Capacity SCFM (m3/hr)	12.0 (20.4)
Linearity (Independent) % of span	±0.5
Repeatability % of span	<0.5
Supply Pressure Max PSIG (kPa)	100 (700)
Port Size (Pneumatic)	1/4 NPT
Approximate Size (inches)	1.5 x 2.2 x 3.7
Approximate Size (mm)	38.1 x 55.4 x 93.7

Input Signal	Output Range PSI (kPa)	Model#
4-20 mA	3-15 (20-100)	550-ACA
4-20 mA	3-27 (20-185)	550-ADA
4-20 mA	6-30 (40-200)	550-AEA
4-20 mA	2-60 (15-420)	550-AGA
4-20 mA	3-120 (20-800)	550-AHA
0-10 V DC	2-60 (15-420)	550-EGA
0-10 V DC	3-120 (20-800)	550-EHA

Call for other options.

### Also Available:

Type 550X Zero Based Range  
Max. Flow Capacity SCFM (m3/hr) 20 (34.0)  
Linearity (Independent) % of span ±1.0  
Repeatability % of span <1.0  
Supply Pressure Max PSIG (kPa) 150 (1050)  
Port Size (Pneumatic) 1/4 NPT  
Approximate Size (inches) 1.5 x 2.2 x 5.1  
Approximate Size (mm) 38.1 x 55.4 x 130

Input Signal	Output Range PSI (kPa)	Model#
4-20 mA	0-30 (0-200)	550-AIA
4-20 mA	0-60 (0-400)	550-AJA
4-20 mA	0-120 (0-800)	550-AKA
0-10 V DC	0-30 (0-200)	550-EIA
0-10 V DC	0-60 (0-400)	550-EJA
0-10 V DC	0-120 (0-800)	550-EKA

Call for other options.

## Type 900X

Internal feedback system provides accurate conversion of a variable electrical signal to a linearly proportional pneumatic output.

- ▲ Unit self-corrects to maintain precise control of output pressure
- ▲ Shock, vibration and position insensitive
- ▲ High accuracy
- ▲ Noninteractive zero and span
- ▲ NEMA-4X(IP65) Enclosure
- ▲ Supply pressures up to 130 PSIG
- ▲ Built-in volume booster
- ▲ Wall, panel, pipe, DIN rail (optional) or manifold mounting
- ▲ Direct / reverse acting, full / split range



### Transducer (I/P, E/P)

Flow Capacity SCFM (m3/hr)	4.5 (7.6)
Terminal Based Linearity (% of span)	±0.10
Repeatability (% of span)	<0.10
Supply Pressure Max PSIG (kPa)	100 (700)
Port Size (Pneumatic)	1/4 NPT
Port Size (Electric)	1/2 NPT
Approximate Size (inches)	1.5 x 2.2 x 3.7
Approximate Size (mm)	38.1 x 55.9 x 93.7

Input Signal	Output Range PSI (kPa)	Model#
4-20 mA	3-15 (20-100)	900-ACA
4-20 mA	3-27 (20-185)	900-ADA
4-20 mA	6-30 (40-200)	900-AEA
4-20 mA	1-17 (7-117)	900-AFA
4-20 mA	2-60 (15-420)	900-AGA
4-20 mA	2-100 (15-700)	900-AHA
0-5 V	3-15 (20-100)	900-CCA
0-5 V	3-27 (20-185)	900-CDA
0-5 V	6-30 (40-200)	900-CEA
0-10 V	3-15 (20-100)	900-ECA
0-10 V	3-27 (20-185)	900-EDA
0-10 V	2-60 (15-420)	900-EGA
0-10 V	2-100 (15-700)	900-EHA

## Type 925



### Multi-Function Supply Manifold

Provides a common supply port for the Type 550 or Type 900X I/P, E/P. Individual shut-offs allow in use service.

- ▲ One supply line for multiple outlets
- ▲ Patented individual shut-off valve
- ▲ DIN rail mountable
- ▲ Easy set-up
- ▲ Adaptable to provide common output for solenoid valves



## Type 5500



### Multi-station Digital to Pneumatic Pressure Regulator

This multi-station manifold uses a common air supply to provide electronic proportional control of output pressure through the use of a DeviceNet™ or Profibus™ communication network.

- ▲ 4, 6, or 8 station air pressure control from one fieldbus node
- ▲ Easy commissioning and reduced system wiring
- ▲ Individual shut-off valve for each station
- ▲ Optional diagnostic feedback of output pressure
- ▲ Common air supply simplifies piping
- ▲ Compact design ideal for high-density mounting.



## Type 950XP

Compact I/P transducer in an explosion-proof housing delivers reliable performance in hazardous areas. Internal electronic feedback system maintains accurate control of output pressure.

- ▲ Explosion-proof NEMA-4X(IP65) enclosure.
- ▲ RFI, EMI protected
- ▲ Shock, vibration and position insensitive.
- ▲ Field-selectable outputs (optional)
- ▲ Highly tolerant of impure air



- ▲ Optional tapped exhaust and conduit seal required for FM/CSA approval when using natural gas (sweet) or methane

### Explosion-Proof Transducer (I/P)

Flow Capacity SCFM (m3/hr)	12.0 (20.4)
Terminal Based Linearity (% of span)	±0.10
Repeatability (% of span)	<0.10
Supply Pressure Max PSIG (kPa)	100 (700)
Port Size (Pneumatic)	1/4 NPT
Port Size (Electric)	1/2 NPT
Approximate Size (inches)	DIA 3.50 H 4.60
Approximate Size (mm)	DIA 88.9 H 116.6

Input Signal	Output Range PSI (kPa)	Model#
4-20 mA	3-15 (20-100)	950-AC
4-20 mA	3-27 (20-185)	950-AD
4-20 mA	6-30 (40-200)	950-AE



## Dahl Mite Series

The G.W. Dahl Mite Series of snap acting relays are designed to switch, vent and lock various pressure lines on either an increasing or decreasing pneumatic signal. They are used in critical safety and emergency controls with either air or gas service.



### Mite 70/71/73/74 Snap Acting Pneumatic Relays

- ▲ **Mite 70-** will vent one port to atmosphere while it locks up another until manually reset
- ▲ **Mite 71L/71H-** automatically selects the higher or lower of two pressurized signals to pass downstream
- ▲ **Mite 73-** is similar to a Mite 70 with a line monitoring diaphragm and the ability to be reset pneumatically
- ▲ **Mite 74-** has all of the functions of a Mite 70 plus it controls a precision 3-way valve as well
- ▲ **Mite 85-** is similar to a Mite 74 plus has a pilot operator, two trip points and a pneumatic reset

## Dahl L100

Fully self-contained bubble-tube level system requires only connections to air or gas supply, dip tube and electrical power source to provide precise level indication. Ideal for applications involving hazardous locations or liquids which are highly corrosive, viscous, hot, (molten metal), explosive, slurry type or foodstuff.



- ▲ **Totally Solid State**
- ▲ **High Accuracy and Stability**
- ▲ **Four Times Rated F.S. Overpressure Safety Factor**
- ▲ **Visual Purge Rate Indication**
- ▲ **Blow-Down Capability**
- ▲ **Excellent for Hazardous, High-Temperature, Corrosive or Waste Water Level Measurement**
- ▲ **NEMA 4X Enclosures Available**

### Bubble Tube Liquid Level System

Ranges	0-50 inches water to 0-115 feet water or equivalent, full scale
Gas Input	1.0 to 7.0 SCFH, regulated on-board to a pressure between 120% or 3 psi, whichever is greater, and 200% of full scale liquid head. Maximum blow-down pressure is 150 psi. Maximum on-board regulated pressure is 60 psi
Accuracy	± 0.25% of span guaranteed; ±0.20% of span typical. Includes combined effects of linearity, hysteresis and repeatability errors.
Sensitivity	±0.02% of span guaranteed
Approximate Size (inches)	12.87 x 14.75
Approximate Size (mm)	326.9 x 374.65

Description	Model#
Basic System	L100
Remote Sensing	L100R
Automatic Blow-Down	L100A
Remote Sensing & Automatic Blow-Down	L100AR

## Dahl P200/P290

All solid state circuitry converts standard 3-15, 3-27 or 6-30 psig instrument air into 4-20 or 10-50 mA outputs (4-20 mA only for FM and CSA approval) with uncompromising accuracy and durability. The P200 is FM approved and CSA certified as NEMA 4 (Enc. 4) for all locations and explosion-proof for Class I, Div. 1, Groups A, B, C, D; dust ignition-proof for Class II, Div. 1, Groups E, F, G; and suitable for Class III, Div. 1 locations.



### Pneumatic-to-Current P/I Transducers

	Dahl P200	Dahl P290
Inputs	3-15 psig (20-100 kPa), 3-27 psig (20-180 kPa), 6-30 psig (40-200 kPa)	
Outputs	2 wire: 4-20 mA and 10-50 mA with over-current limit	2 wire: 4-20 mA, with over-current limit 4-wire: 0-1V, and with over-current limit 4-wire: 0-1V, 0-2V, 0-5V, 0-10V, 1-5V, 2-10V
Loads (24 VDC)	700 Ω	2-wire: 700 Ω, standard. Voltage: 5k Ω min.
Accuracy	± 0.15% of span guaranteed; ±0.10% of span typical. Includes combined effects of linearity, hysteresis and repeatability errors	
Temp. Stability	Span and zero: ± 0.007% of span per °F maximum deviation from 77°F calibration	
Approx. Size (inches)	3.5 x 3.125	.75 x 3.43 x 5.37

Description	Model#
P/I Device, 2-wire, FM explosion-proof, 4-20/10-50 mA Field selectable	P200
P/I Module, 2-wire, 4-20	P290M
P/E Module, non-isolated, voltage output, specify range	P290MV

- ▲ **±0.10% Accuracy**
- ▲ **Non-interactive Calibration**
- ▲ **Transient, Over-current and Reverse Polarity Protection**
- ▲ **RFI Immune**
- ▲ **Custom inputs up to 50 PSI**

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