



B34S Series Regulator

Medium Duty Commercial & Industrial Regulator

- ▶ Economical
- ▶ Space-saving design
- ▶ Protects equipment from shock damage
- ▶ Commercial performance in a compact size

Applications

Appropriate for many commercial and industrial uses such as gas engines, burners, furnaces, and boilers. The rapid response of the B34S is particularly well-suited for mid-range applications where quick on/off loads cause shock problems.

Description

The B34S is a spring-loaded self-operated regulator available with or without internal relief. It combines the B31 8" diaphragm case with the B34 valve assembly for an economical solution to mid-range commercial and industrial applications. Among its attributes are an adjustable loading ring for controlled boost at high flows, precision breather opening to ensure proper stability under all conditions, and in the R model, a high capacity internal relief valve. All critical parts are either steel or aluminum, not plastic, to ensure reliability.

▶ B34SN

The B34SN is a spring loaded self-operated regulator with no internal relief (N) valve. This model can be used on mid-range applications where an internal relief, or other type of over-pressure protection device is not required.

▶ B34SR

The B34SR is the internal relief (R) version of the B34S series regulator. The 1" internal relief valve provides exceptional relief capacity

Features

- Interchangeable brass orifice
- Molded diaphragm consisting of Buna-N and nylon
- Upper diaphragm plate of plated steel
- Stainless steel lever pin
- Zinc with dichromate plated steel lever
- One piece molded Buna-N valve seat
- Alodined aluminum valve stem
- Delrin[®] vent valve with Buna-N seat
- Spring loaded internal relief valve assembly
- Vent sizes: 1/4", 3/8", 3/4" and 1"
- Stainless steel vent screen
- Die cast aluminum seal cap
- Field interchangeable adjustment spring
- CGA 6-18 Approved



Correction factors for non-natural gas applications:

The B34S may be used to control gases other than natural gas. To determine the capacity of the B34S for gases other than natural gas, it will be necessary to multiply the values within the capacity tables by a correction factor.

The table below lists the correction factors for some of the more common gases:

Gas Type	Specific Gravity	Correction Factor (CF)
Air	1.00	0.77
Butane	2.01	0.55
Carbon Dioxide (Dry)	1.52	0.63
Carbon Monoxide (Dry)	0.97	0.79
Natural Gas	0.60	1.00
Nitrogen	0.97	0.79
Propane	1.53	0.63
Propane-Air-Mix	1.20	0.71

To calculate the correction factor for gases not listed on the table above, it will be necessary to know the specific gravity of the gas and use it in the formula listed below:

$$\text{Correction Factor (CF)} = \sqrt{\frac{SG_1}{SG_2}}$$

Where:

SG₁ = Specific Gravity of the gas in which the capacity is published.

SG₂ = Specific Gravity of the gas to be controlled.

Construction

Material Construction:

Valve Body:	High tensile strength cast iron (ASTM A-126, Class A)
Orifice:	Brass
Valve Seat:	Buna-N or silicone
Valve Stem:	Alodined aluminum
Lever Pin:	Stainless steel
Lever:	Zinc and dichromate plated steel
Stem Guide:	Aluminum
Upper Diaphragm Plate:	Zinc and dichromate plated steel
Lower Diaphragm Plate:	Die cast aluminum
Diaphragm:	Buna-N on Dacron molded to shape
Vent Valve/Seat:	Delrin/Buna-N
Vent Screen:	Stainless Steel
Adjustment Ferrule:	Delrin
Seal Cap:	Die cast aluminum
Diaphragm Case:	Die cast aluminum

Shipping Weight:

8 Regulators per box:	Box Weight: 100 lbs.
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Specifications

Spring Data	Spring Color	Outlet Pressure Range
B34SR & SN (in. w.c.)	Brown	3.5" w.c.-5.0" w.c.
	Dark Green	4.5" w.c.-6.5" w.c.
	Light Green	5.5" w.c.-7.5" w.c.
	Black	6.0" w.c.-9.0" w.c.
	Blue	8.5" w.c.-12.5" w.c.
	Silver	11.0" w.c.-17.0" w.c.

Spring Data-Model B34SRHP & B34SNHP (PSIG)	Spring Color	Outlet Pressure Range
	Red/Gray	1.0 PSIG
	Yellow	1.2 PSIG-1.5 PSIG
	Red	1.5 PSIG-1.9 PSIG
	White	1.75 PSIG-2.5 PSIG

B34SR Only: Relief Spring setting of 7" w.c. above set pressure is standard. Special springs available on request. The relief vent is available in 1/4", 3/8", 3/4", and 1" and is threaded with a female NPT connection.

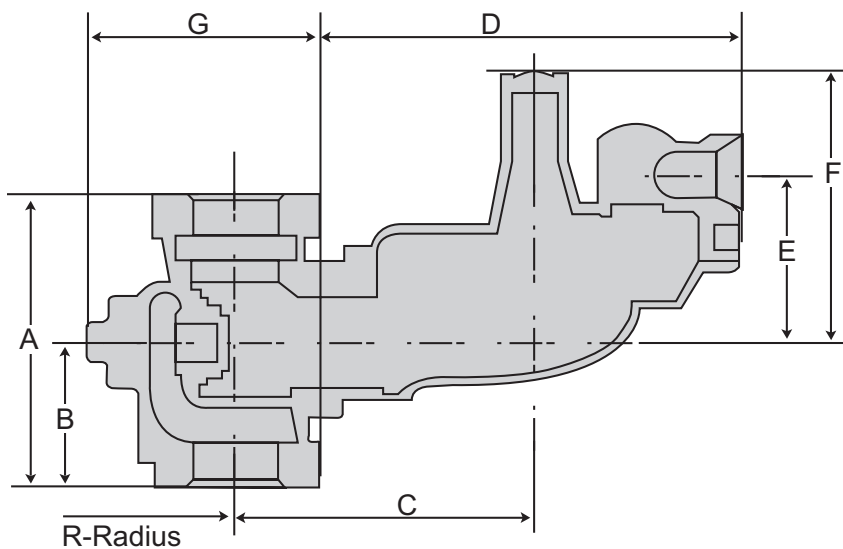
Orifice Data	Size	Wide Open K-Factor	Maximum Inlet Pressure
	1/4" x 3/8"	125	100 PSIG
	3/8" x 1/2"	305	50 PSIG
	1/2" x 5/8"	530	25 PSIG
	5/8" x 3/4"	750	15 PSIG
	3/4" x 7/8"	950	10 PSIG
	7/8" x 1"	1100	10 PSIG

Wide-Open Flow Calculations

For wide-open orifice flow calculations use the following equations:

For $P_1/P_2 < 1.89$ use: $Q = K \sqrt{P_2 (P_1 - P_2)}$ For $P_1/P_2 > 1.89$ use: $Q = \frac{KP_1}{2}$

Where: P_1 = absolute inlet pressure (PSIA) P_2 = absolute outlet pressure (PSIA)
 Q = flow rate (scfh) K = orifice coefficient (scfh/psi)



► Valve Body Sizes

Inlet	Outlet	Screwed	Flanged
1-1/4"	1-1/4"	X	-
1-1/4"	1-1/2"	X	-
1-1/4"	2"	X	-
1-1/2"	1-1/2"	X	-
1-1/2"	2"	X	-
2"	2"	X	X
3"	3"	X	X

x - indicates that the valve body is available in that configuration.

► B34SR & SN Dimensions

Valve Body	Screwed	Flanged
A	5-1/4"	10"
B	2-7/8"	5"
C	6"	--
D	7-13/16"	--
E	3-1/4"	--
F	4-7/8"	--
G	4-1/2"	5-1/2"
R	2-1/4"	3/1/4"

B34 SR & SN Medium Duty Commercial & Industrial Regulator

7" w.c. - Capacity Table (1" Droop) at 100 SCFH*

Capacities in scfh - Orifice Size

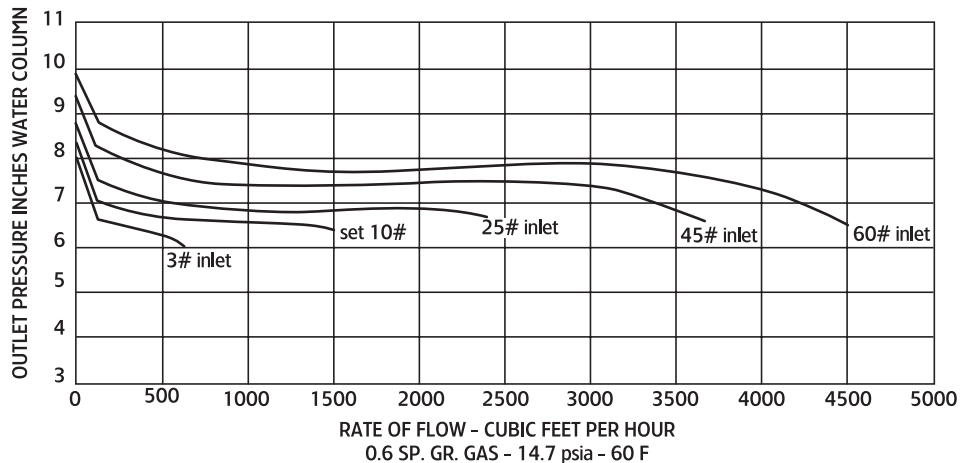
Inlet Pressure PSIG	1/4" x 3/8"	3/8" x 1/2"	1/2" x 5/8"	5/8" x 3/4"	3/4" x 7/8"	7/8" x 1"
1	460	720	940	1180	1360	1540
2	700	1080	1520	1830	2200	2300
3	860	1420	2100	2520	3000	3420
5	1120	1960	3000	3820	4550	5150
8	1360	2860	4400	5600	6600	7500
10	1520	3280	5250	6600	>7500	>7500
15	1860	3980	6950	>7500	Orifice Inlet Pressure Rating Exceeded	
25	2520	5250	>7500			
35	3260	6600				
50	4080	>7500				
75	5665					
100	7250					

Typical Performance Curves

Manufacturer:	Actaris
Type and Model:	B34SR
Regulator:	Inlet Size 2" NPT
	Outlet Size 2" NPT
	Orifice Size 1/4" x 3/8"

Set Point 7.0" w.c. with 10 PSIG inlet @ 100 scfh.
All test results are reported at a base of 14.7 PSIA and 60 F.

B34 SR & SN Regulator Performance - 7" w.c. Set Point

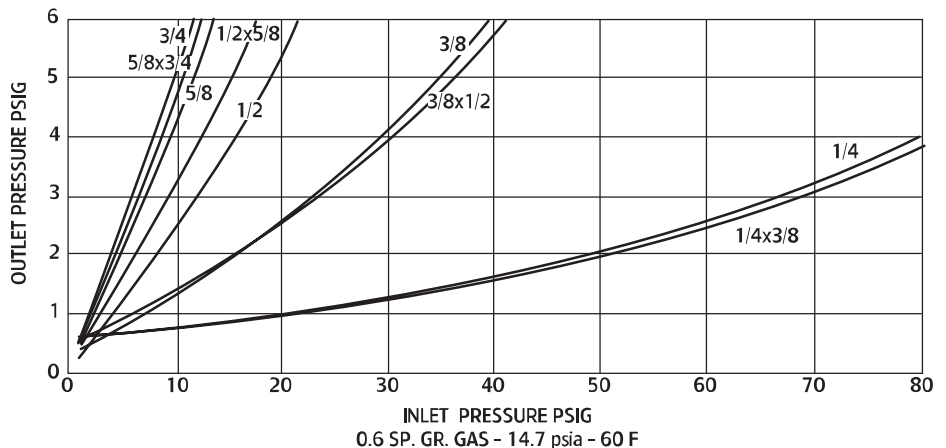


Relief Curves

Manufacturer:	Actaris
Type and Model:	B34SR
Regulator:	Inlet Size 2" NPT
	Outlet Size 2" NPT
	Vent Size 1" NPT

Set Point 7.0" w.c. with 10 PSIG inlet @ 100 scfh.
All test results are reported at a base of 14.7 PSIA and 60 F.

B34 SR & SN - Regulator Relief Curve Blocked per Orifice - 7" w.c. Set Point



* Individual regulator performance may vary from data shown

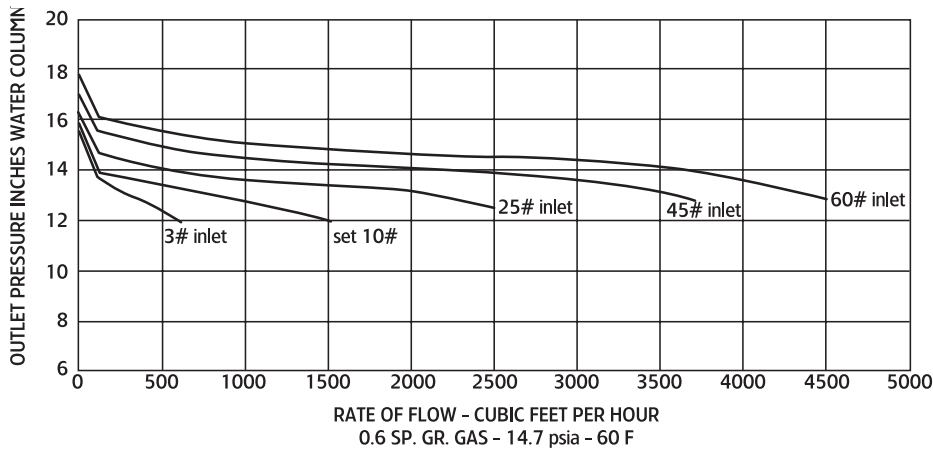
B34 SR & SN Medium Duty Commercial & Industrial Regulator

14" w.c. - Capacity Table (2" Droop) at 100 SCFH*

Capacities in scfh - Orifice Size

Inlet Pressure PSIG	1/4" x 3/8"	3/8" x 1/2"	1/2" x 5/8"	5/8" x 3/4"	3/4" x 7/8"	7/8" x 1"
1	330	625	760	830	980	1100
2	530	1010	1150	1500	1620	1880
3	665	1240	1550	1800	2240	2600
5	810	1740	2200	2940	3700	4300
8	1100	2400	3620	4480	6000	6850
10	1320	3000	4550	6000	7400	>7500
15	1660	3850	7000	>7500	Orifice Inlet Pressure Rating Exceeded	
25	2200	5100	>7500			
35	2860	6650				
50	3750	>7500				
75	5450					
100	6600					

B34 SR & SN Regulator Performance - 14" w.c. Set Point

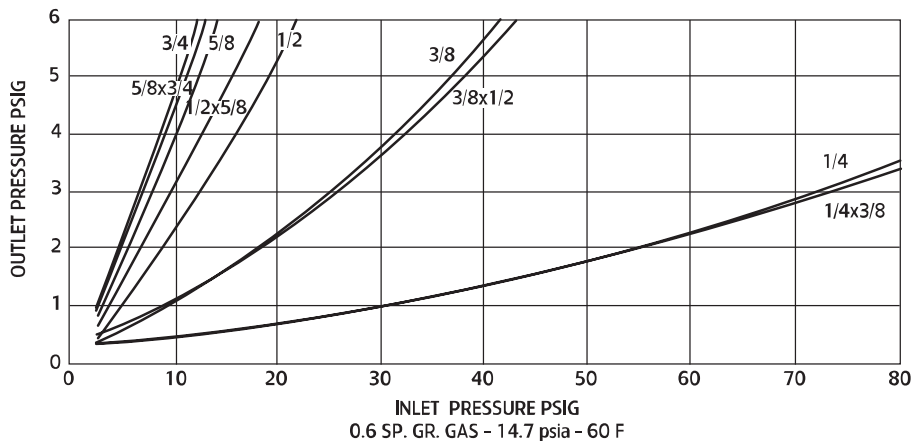


Typical Performance Curves

Manufacturer:	Actaris
Type and Model:	B34SR
Regulator:	Inlet Size 2" NPT
	Outlet Size 2" NPT
	Orifice Size 1/4" x 3/8"

Set Point 14" w.c. with 10 PSIG inlet @ 100 scfh. All test results are reported at a base of 14.7 PSIA and 60 F.

B34 SR & SN - Regulator Relief Curve Blocked per Orifice - 14" w.c. Set Point



Relief Curves

Manufacturer:	Actaris
Type and Model:	B34SR
Regulator:	Inlet Size 2" NPT
	Outlet Size 2" NPT
	Vent Size 1" NPT

Set Point 14" w.c. with 10 PSIG inlet @ 100 scfh. All test results are reported at a base of 14.7 PSIA and 60 F.

B34 SR & SN HP Medium Duty Commercial & Industrial Regulator

1 PSIG - Capacity Table (1% Droop) at 100 SCFH*

Capacities in scfh - Orifice Size						
Inlet Pressure PSIG	1/4" x 3/8"	3/8" x 1/2"	1/2" x 5/8"	5/8" x 3/4"	3/4" x 7/8"	7/8" x 1"
2	425	580	720	890	1000	1120
3	590	780	940	1200	1300	1540
5	800	1080	1300	1560	1840	2220
8	1000	1440	1840	2400	2800	2860
10	1130	1720	2100	2750	3640	3900
15	1470	2300	3100	4100	Orifice Inlet Pressure Rating Exceeded	
25	1900	3620	5200			
35	2680	4400				
50	3700	>7500				
75	5555					
100	6050					

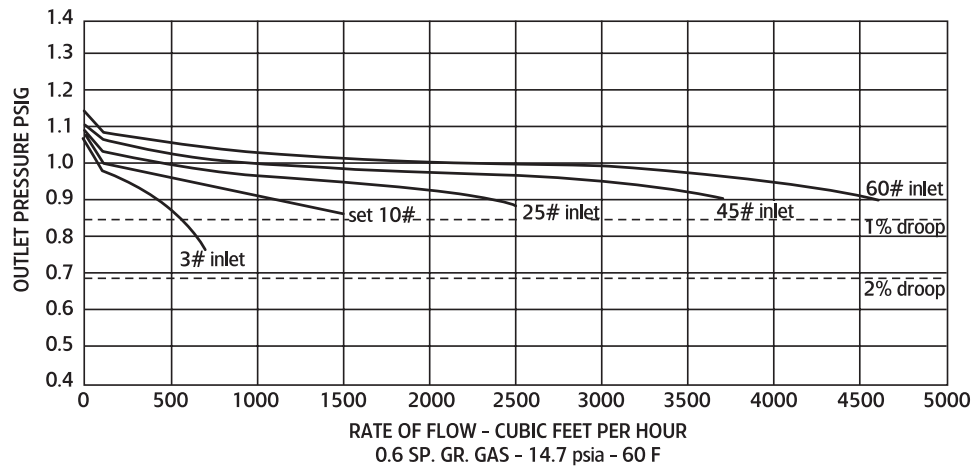
1 PSIG - Capacity Table (2% Droop) at 100 SCFH*

Capacities in scfh - Orifice Size						
Inlet Pressure PSIG	1/4" x 3/8"	3/8" x 1/2"	1/2" x 5/8"	5/8" x 3/4"	3/4" x 7/8"	7/8" x 1"
2	560	930	1180	1460	1720	1920
3	750	1250	1600	1980	2300	2620
5	970	1800	2240	2820	3300	3800
8	1240	2400	3080	4020	4720	5150
10	1390	2840	3620	4750	5750	6500
15	1700	3520	5000	6400	Orifice Inlet Pressure Rating Exceeded	
25	2300	5000	>7500			
35	2900	6150				
50	3700	>7500				
75	5555					
100	6670					

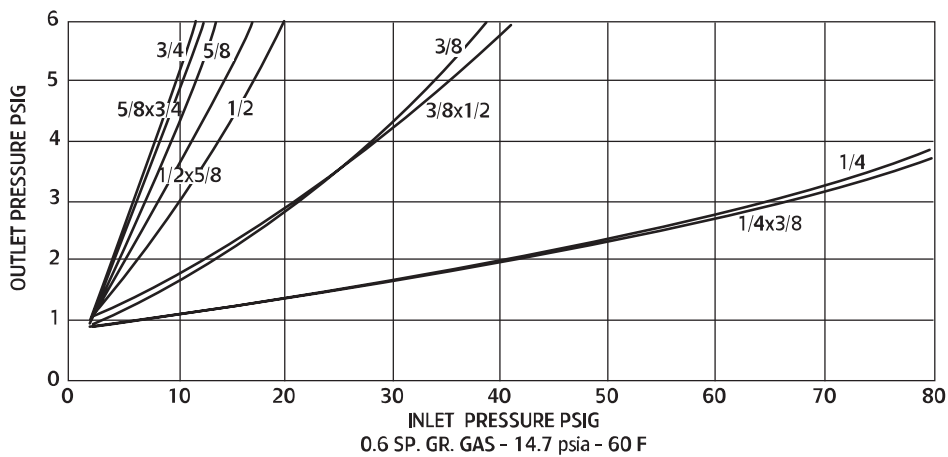
B34 Models SR & SN HP Medium Duty Commercial & Industrial Regulator

1 PSIG

B34SR & SN REGULATOR PERFORMANCE - 1 PSIG SET POINT



B34SR RELIEF CURVES-BLOCKED PER ORIFICE - 1 PSIG SET POINT



Typical Performance Curves

Manufacturer:	Actaris
Type and Model:	B34SR
Regulator:	Inlet Size 2" NPT
	Outlet Size 2" NPT
	Orifice Size 1/4" x 3/8"

Set Point 1 PSIG with 10 PSIG inlet @ 50 scfh. All test results are reported at a base of 14.7 PSIA and 60 F.

Relief Curves

Manufacturer:	Actaris
Type and Model:	B34SR
Regulator:	Inlet Size 2" NPT
	Outlet Size 2" NPT
	Vent Size 1" NPT

Set Point 1 PSIG with 10 PSIG inlet @ 50 scfh. All test results are reported at a base of 14.7 PSIA and 60 F.

B34 SR & SN HP Medium Duty Commercial & Industrial Regulator

2 PSIG - Capacity Table (1% Droop) at 100 SCFH*

Capacities in scfh - Orifice Size

Inlet Pressure PSIG	1/4" x 3/8"	3/8" x 1/2"	1/2" x 5/8"	5/8" x 3/4"	3/4" x 7/8"	7/8" x 1"
3	305	490	510	600	650	770
5	445	700	760	860	1030	1170
8	520	890	965	1290	1500	1780
10	560	990	1220	1420	1740	2040
15	750	1240	1310	1780	Orifice Inlet Pressure Rating Exceeded	
25	975	1850	2100			
35	1200	2060				
50	1500	3550				
75	2130					
100	2730					

2 PSIG - Capacity Table (2% Droop) at 100 SCFH*

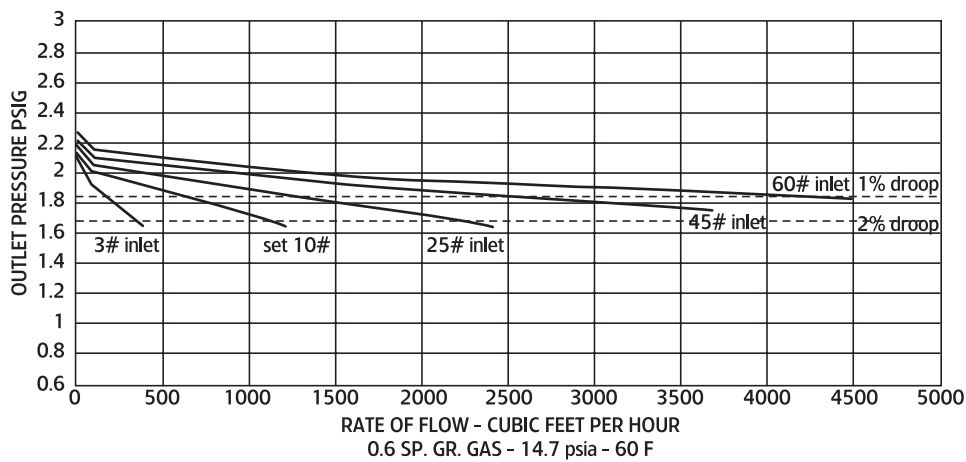
Capacities in scfh - Orifice Size

Inlet Pressure PSIG	1/4" x 3/8"	3/8" x 1/2"	1/2" x 5/8"	5/8" x 3/4"	3/4" x 7/8"	7/8" x 1"
3	470	800	920	1120	1230	1480
5	775	1200	1440	1690	2100	2300
8	930	1670	1960	2450	2980	3500
10	1020	1920	2320	2760	3750	4200
15	1400	2700	2950	3780	Orifice Inlet Pressure Rating Exceeded	
25	1960	3850	4950			
35	2400	4950				
50	3300	>7500				
75	4250					
100	5440					

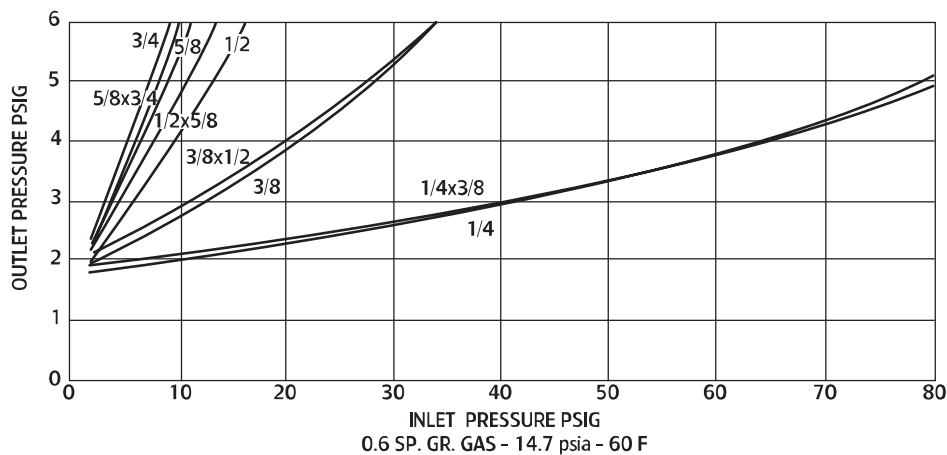
B34 Models SR & SN HP Medium Duty Commercial & Industrial Regulator

2 PSIG

B34SR & SN REGULATOR PERFORMANCE - 2 PSIG SET POINT



B34SR RELIEF CURVES-BLOCKED PER ORIFICE - 2 PSIG SET POINT



Typical Performance Curves

Manufacturer:	Actaris
Type and Model:	B34SR
Regulator:	Inlet Size 2" NPT
	Outlet Size 2" NPT
	Orifice Size 1/4" x 3/8"

Set Point 2 PSIG with 10 PSIG inlet @100 scfh. All test results are reported at a base of 14.7 PSIA and 60 F.

Relief Curves

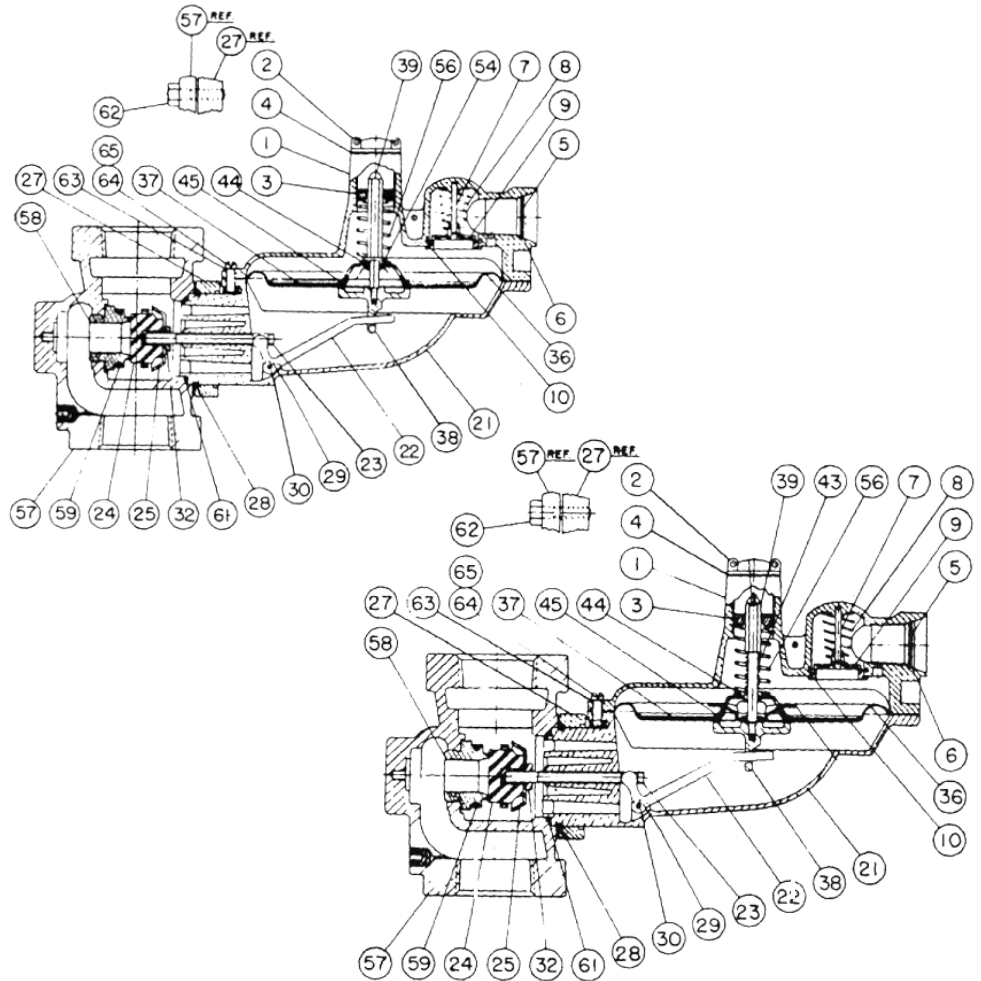
Manufacturer:	Actaris
Type and Model:	B34SR
Regulator:	Inlet Size 2" NPT
	Outlet Size 2" NPT
	Vent Size 1" NPT

Set Point 2 PSIG with 10 PSIG inlet @100 scfh. All test results are reported at a base of 14.7 PSIA and 60 F.

► B34SN and B34SNHP

► B34SR and B34SRHP

Parts List



NO.	PART#	QUANTITY		DESCRIPTION
		SRHP	SNHP SR SN	
1				Upper Diaphragm Case - Specify Vent Pipe Size:
	753104	1	1	Vent - 1/4" Pipe
	753107	1	1	Vent - 1/4" Pipe/H.P.
	753127	1	1	Vent - 3/8" Pipe
	753154	1	1	Vent 3/4" Pipe (standard)
	753204	1	1	Vent 1" Pipe
	753207	1	1	Vent 1" Pipe/H.P.
2	760058	1	1	Seal Cap - Gray in. w.c.
	760059	1	1	Seal Cap - PSIG
	760060	1	1	Seal Cap - Red in. w.c.
	760062	1	1	Seal Cap - Gray PSIG
3	760215	1	1	Adjustment Screw - Delrin (for inches W.C. Outlet Pressure)
	760217			For HP

NO.	PART#	QUANTITY				DESCRIPTION
		SRHP	SNHP	SR	SN	
4	765773	1	1	1	1	Seal Cap Gasket Note: For indoor installation of Regulator, use Seal Cap Gasket, P/N (Leak Proof Seal)
5		1	1	1	1	Vent Screen - Specify:
	762935					Wire Mesh (For all Vents Except 1")
	762933					Wire Mesh (For 1" Vent Only)
6		1	1	1	1	Vent Screen Ret. Ring - Specify
	755727					(For All Vents Except 1")
	755791					(For 1" Vent Only)
7		1	1	1	1	Vent Valve Disc Pin - Specify:
	754806					(For All Vents Except 1")
	754834					(For 1" Vent Only)
8	762601	1	1	1	1	Vent Valve Spring - 1/2 oz.
9	765181	1	1	1	1	Vent Valve Disc
10	765685	1	1	1	1	Vent Valve Seat
21	752124	1	1	1	1	Lower Diaphragm Case - 4:1 Ratio

Parts List - Continued

NO.	PART#	QUANTITY				DESCRIPTION
		SRHP	SNHP	SR	SN	
22	761231	1	1	1	1	Valve Linkage Lever - 4:1 Ratio
23	754021	1	1	1	1	Valve Stem - Aluminum
24	765201	1	1	1	1	Valve Seat - Buna "N" 75-85 Duro
25	761721	1	1	1	1	Deflector
27	751913	1	1	1	1	Valve Body Ref. Plate - Aluminum
28	755725	1	1	1	1	Retainer Plate Snap Ring
29	755141	2	2	2	2	Valve Linkage Pin Screw
30	754831	1	1	1	1	Valve Linkage Pin
32	754085	1	1	1	1	Valve Stem Adapter
36	766121	1	1	1	1	Dia. - .028 Nylon Fab. w/Buna "N"
37	761025	1	1	1	1	Upper Diaphragm Plate
38	756043	1	1	1	1	Lower Diaphragm Plate
39	754301	1	1			Stop Stem
	754303		1	1		Stop Stem
43		1	1			Relief Spring
	762101					7" W.C. Above Set
44	754905	1	1	1	1	Stop Stem Guide Bushing
45	761661		1	1		Relief Cap
	761663	1	1			Relief Cap
54	755801		1	1		Diaphragm Plate Washer
56			1			Adjustment Spring - Specify
	762111		1	1		Brown 4.5-5.5" W.C.
	762117		1	1		D. Green 5.0-7.0" W.C.
	762119		1	1		L. Green 5.5-8.0" W.C.
	762123		1	1		Black 7.0-11.0 W.C.
	762127		1	1		Blue 8.0-12.0" W.C.
	762129		1	1		Silver 11.0-16.0" W.C.
	762131	1	1			Yellow 1.1-1.5 PSIG
	762135	1	1			Red 1.3-2.0 PSIG
	762137	1	1			White 1.75-2.5 PSIG
	762025	1	1			Red/Gray .75-1.1 PSIG
57		1	1	1	1	Valve Body - Specify Type & Size
						Straight:
	750604					1-1/4 x 1-1/4 NPT
	750607					1-1/4 X 1-1/4 NPT w/1/8 NPT Pipe Plug
	750027					1-1/4 x 1-1/2 NPT
	750630					1-1/4 x 1-1/2 NPT w/1/8 NPT Pipe Plug
	750654					1-1/4 x 2 NPT
	750657					1-1/4 x 2 NPT w/1/8 NPT Pipe Plug
	750676					1-1/2 x 1-1/2 NPT
	750680					1-1/2 x 1-1/2 NPT w/1/8 NPT Pipe Plug
	750704					1-1/2 x 2 NPT
	750707					1-1/2 x 2 NPT w/1/8 NPT Pipe Plug
	750726					2 x 2 NPT
	750730					2 x 2 NPT w/1/8 NPT Pipe Plug
						Flanged:
	750754					2" ASA
	750757					2" ASA w/1/8 NPT Pipe Plug
	750804					3" ASA
	750807					3" ASA w/1/8 NPT Pipe Plug
	750777					2" ASA Short Flanged - 125 lbs.
	750780					2"ASAw/1/8NPT Pipe Plug Short Flg125lbs

NO.	PART#	QUANTITY				DESCRIPTION
		SRHP	SNHP	SR	SN	
						Orifice - Straight
	758101					1/4 Dia.
	758104					3/8 Dia.
	758107					1/2 Dia.
	758110					5/8 Dia.
	758113					3/4 Dia.
	758117					7/8 Dia.
						Tapered - Brass
	758172					5/32" x 3/16"
	758150					7/32" x 1/4"
	758151					1/4 x 3/8 Dia.
	758154					5/16 x 3/8 Dia.
	758157					3/8 x 1/2 Dia.
	758160					1/2 x 5/8 Dia.
	758163					5/8 x 3/4 Dia.
	758166					3/4 x 7/8 Dia.
	758169					7/8 x 1 Dia.
59	761761	1	1	1	1	Loading Ring
61	765651	1	1	1	1	Valve Body Gasket
62	755381	2	2	2	2	Retainer Plate
						Screw Hex Hd.-Stee
						5/16-18x1-1/4 Lg. Cad. Plate
63		1	1	1	1	Curved Regulator Plate
	769203					As Silk Screened & Embossed
64	755251	8	8	8	8	Case Screw-Fillister Hd. #12
						24x11/16 Lg. - Cad. Pl. Steel
65	755661	8	8	8	8	Case Screw Nut-Square#12-24 Cad. I.Stl.
NO.	Part#					Description
65	799051					Spring Adjustment - Wrench
	799081					Loading Ring - Positioning Tool
	799021					Thin Wall Orifice - Socket

Installation

- ▶ **A.** Make certain all shipping plugs are removed from the inlet, outlet and vent of any regulator before installation.
- ▶ **B.** When installing the regulator, the inside of the piping and the regulator inlet and outlet are to be clean, free of dirt, pipe dope and other debris to prevent entry into the regulator which could cause loss of pressure control.
- ▶ **C.** The pipe joint sealant should be applied on the male threads of the pipe. Do not use any pipe joint material on the female threads of the regulator or it could become lodged in the regulator causing possible loss of pressure control.
- ▶ **D.** Gas must flow through the valve body of the regulator in the same direction as the arrow cast on the body, or the outlet side of the regulator may be overpressured and damaged.
- ▶ **E.** The diaphragm casing may be mounted in any of four (4) positions relative to the body.
- ▶ **F.** When the regulator is installed OUTDOORS, the vent must always be positioned so that rain, snow, moisture or foreign particles cannot enter the vent opening. It is recommended that the vent be positioned to face downward so as to avoid entry of water or other matter which could interfere with the proper operation of the regulator. The vent should be located away from building eaves, window openings, building air intakes and above the expected snow level at the site. The vent opening should be inspected periodically to insure it does not become blocked by foreign material.
- ▶ **G.** When the regulator is installed INDOORS, the vent must be piped to the outside atmosphere while using the shortest length of pipe, the least number of elbows, and having as large a pipe diameter as the vent size or larger. USING VENT PIPE ANY SIZE SMALLER THAN THE VENT CONNECTION WILL LIMIT THE REGULATOR'S INTERNAL RELIEF VALVE CAPACITY. The outlet end of the pipe must be protected from moisture and the entrance of foreign particles. The regulator should be specified by the user with the size vent and pipe threads desired to make the vent pipe connection.

SAFETY NOTES:

- ▶ **A.** The maximum inlet pressure for this regulator is dependent upon the size of the orifice and model designation. The non-relief models are limited to 60 PSIG maximum inlet pressure unless addition safety devices are used as outlined in DOT code, OPS, Part 192, section 192.197.
- ▶ **B.** When these models are used on liquid petroleum gases, they should be restricted to second-stage pressure reduction in the gaseous phase.

START-UP PROCEDURE

- ▶ **A.** A pressure gauge should be mounted downstream of the regulator to monitor the downstream pressure.
- ▶ **B.** With the downstream valve closed, slowly open the inlet valve. The outlet pressure should rise to slightly greater than the set-point.
- ▶ **C.** Be sure there are no leaks and all connections are tight.
- ▶ **D.** The regulator has been preset at the factory to match specifications given when it was ordered. The outlet pressure may be adjusted by removing the seal cap on top of the spring housing and adjusting the ferrule or screw inside the spring housing using a ratchet with a socket and an extension. With a small amount of gas flowing through the regulator, rotate the ferrule clock-wise to raise the outlet pressure and counter-clockwise to lower the outlet pressure.
- ▶ **E.** After the desired outlet pressure is achieved, replace the seal cap, recheck for leaks. The regulator is ready for operation.

SAFETY WARNING:

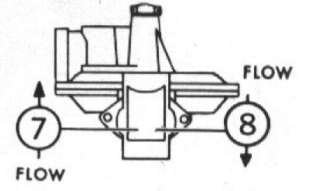
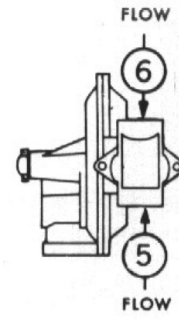
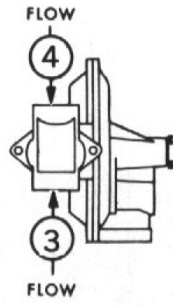
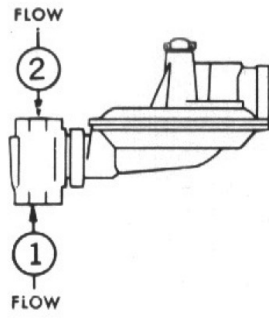
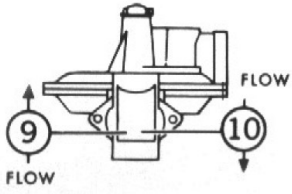
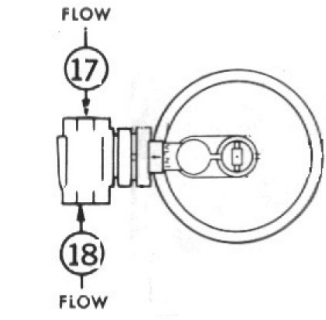
- This product, as of the date of manufacture, is designed and tested to conform to all governmental or industry safety standards then existing as may apply to the manufacturer.
- ▶ The purchaser and user of this product are warned that compliance with the manufacturer's instructions and procedures is required in order to avoid the hazards of leaking gas resulting from improper installation, start-up or use of this product, and further, that all area fire control, building codes or other safety regulations which regulate or concern the application, installation, operation or general use of this product should be complied with.
 - ▶ In order to insure the safe and proper operation of this product, the manufacturer recommends that this product be installed by a qualified installer.

Vent Lines for Regulators

When constructing vent lines to be attached to regulators installed indoors, a few basic rules must be followed:

1. Never use pipe sizes smaller than the vent size itself; anything smaller will restrict the flow of gas. If a long run must be used, it is advisable to increase the pipe one size every ten feet in order to keep the flow restriction as low as possible.
2. Keep the length of vent line as short as possible to minimize the restriction as well as reduce the tendency for the vent piping to cause pulsation of the regulator.
3. Support the vent pipe so there is no strain on the regulator diaphragm case.
4. Always point the end of the vent pipe located outside the building in the downward position to reduce the possibility of rain, snow, sleet etc. from entering the pipe. A bug screen should be installed in the end of the pipe.
5. The terminus of the vent line must not be located near windows, fans, etc. See the installation instructions furnished with the regulator.
6. All applicable codes and regulations must be adhered to.
7. Vent pipe may cause regulator pulsation. If this situation occurs, please consult your regulator representative or the factory.
8. It is strongly recommended that a separate vent line be run for each regulator; a header with other devices installed in it can cause regulator malfunction.
9. If approved by the authority having jurisdiction, the vent lines may be manifolded in accordance with accepted engineering practices to minimize backpressure in the event of diaphragm failure.

Assembly Positions



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Limited Warranty

Actaris U.S. Gas, Inc., 970 Highway 127 North, Owenton, Kentucky 40359-9302, warrants this gas product against defects in materials and workmanship for the earlier of one (1) year from the date the product is shipped by Actaris or a period of one year from the date the product is installed by Actaris at the original purchaser's site. During such one-year period, provided that the original purchaser continues to own the product, Actaris will, at its sole option, repair any defects, replace the product or repay the purchase price.

- This warranty will be void if the purchaser fails to observe the procedures for installation, operation or service of the product as set forth in the Operating Manual and Specifications for the product or if the defect is caused by tampering, physical abuse or misuse of the product.

► Ordering Information

Specify:

1. Inlet and Outlet Connection Size and Type
2. Model Number
3. Outlet pressure desired
4. Inlet pressure range
5. Type of gas and maximum capacity required
6. Assembly position number (see page 13)
7. Vent size
8. Special requirements such as tagging, 1/8" pipe plug tap, seal wire, etc.

• ACTARIS SPECIFICALLY DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING THOSE OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE. UNDER NO CIRCUMSTANCES WILL ACTARIS BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY KIND WHATSOEVER.

- Actaris' liability for any claim of any kind, including negligence and breach of warranty for the sale and use of any product covered by or furnished, shall in no case exceed the price allocable to the product or part thereof which gives rise to the claim.
- In the event of a malfunction of the product, consult your Actaris Service Representative or Actaris U.S. Gas, Inc., 970 Highway 127 North, Owenton, Kentucky 40359-9302.

See Actaris Terms and Conditions of Sale for the full and complete terms of the limited warranty

► Reference Information:

- Product Overview

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