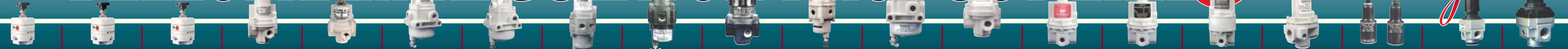
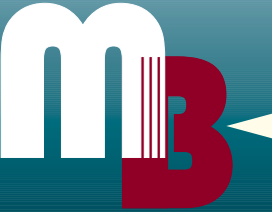


# BELLOFRAM REGULATOR PRODUCT LINE

*Summary*

**KEYS**  
INDICATES KEY SPECIFICATION OR CHARACTERISTIC FOR THAT REGULATOR

1 psig = 6.9 kPa  
1 psig = 0.069 BAR  
1 inch = 25.4 mm  
1 lb. = .45 kg  
1 SCFM = 28.32 LPM



SPECIFICATION CHARACTERISTIC	TYPE 10	TYPE 10HR / EXHR	TYPE 10LR	TYPE 40	TYPE 41	TYPE 50	TYPE 50 NACE	TYPE 51SS	TYPE 51FR	TYPE 51R	TYPE 51 CORROSIVE TEC	TYPE 60	TYPE 65	TYPE 70	TYPE 70BP	TYPE 77 VACUUM REGULATOR	TYPE 78	TYPE 91 TYPE 91 LOW BLEED	TYPE M1R / FR	TYPE M2R/FR
<b>Sensitivity</b>	1/8" Water Column	1/8" Water Column	1/8" Water Column	1" Water Column	1" Water Column	1" Water Column	1" Water Column	1" Water Column	1" Water Column	1" Water Column	1" Water Column	1" Water Column	1" Water Column	1/4" Water Column	1/8" Water Column	1/2" Water Column	1" Water Column	N/A	N/A	N/A
<b>Flow Capacity @ 100 psig Supply and 20 psig outlet</b>	14 SCFM	14 SCFM	4 SCFM at 50 psig supply and 10 psig outlet pressure	20 SCFM	25 SCFM	20 SCFM	20 SCFM	20 SCFM	20 SCFM	20 SCFM	20 SCFM	20 SCFM	20 SCFM	40, 50, or 80 SCFM	50 SCFM	2.5 SCFM @ 29" Hg Vacuum 40 SCFM @ 100 psig supply	200 SCFM	2.5 SCFM 1.4 SCFM	40 SCFM (70 psig outlet)	90 SCFM (70 psig outlet)
<b>Effect of Supply Pressure variation (25 psig) on Outlet Pressure</b>	< 0.005 psig	< 0.005 psig	< 0.005 psig	< 0.2 psig	± 0.35 psig	< 0.2 psig	< 0.2 psig	0.45 psig max	0.45 psig max	0.2 psig	0.45 psig	< 0.2 psig	< 0.2 psig	< 0.025 psig	N/A	< 0.1 psig	< 0.2 psig	< 0.25 psig < 0.5 psig	< 0.2 psig	< 0.2 psig
<b>Exhaust Capacity (5 psig above 20 psig set point)</b>	2 SCFM	10 SCFM / 15 SCFM	2 SCFM	0.1-0.45 SCFM Typical	0.1-0.45 SCFM Typical	0.1-0.45 SCFM Typical	0.1-0.45 SCFM Typical	0.1-0.45 SCFM Typical	0.1-0.45 SCFM Typical	0.1 SCFM Typical	0.1-0.45 SCFM Typical	0.1-0.4 SCFM Typical	0.1-0.4 SCFM Typical	4 SCFM	N/A	4 SCFM	14 SCFM	0.1-0.3 SCFM Typical	< 0.25 SCFM	< 0.25 SCFM
<b>Max Supply Pressure</b>	150 psig	150 psig	50 psig	250 psig	250 psig	250 psig	250 psig	250 psig	250 psig	250 psig	250 psig	250 psig	250 psig	250 psig	250 psig (system pressure)	250 psig	400 psig	250 psig / 150 psig	165 psig	165 psig
<b>Effect of Changes in Flow on Regulated Pressure (100 psig Supply)</b>	0.25 psig over change of 10 SCFM (2-25 psig range, and 10 psig set point)	0.25 psig over change of 10 SCFM (2-25 psig range, and 10 psig set point)	0.25 psig over change of 10 SCFM (2-25 psig range, and 10 psig set point)	2 psig over flow of 10 SCFM (0-30 psig range, 1/4" NPT, 20 psig set point)	1 psig over flow of 10 SCFM (0-30 psig range, 1/4" NPT, 20 psig set point)	4 psig over flow of 10 SCFM (0-30 psig range, 1/4" NPT, 20 psig set point)	4 psig over a flow of 10 SCFM (0-30 psig range, 1/4" NPT, 20 psig set point)	3 psig over flow of 10 SCFM (0-30 psig range, 1/4" NPT, 20 psig set point)	2.5 psig over flow of 10 SCFM (0-30 psig range, 1/4" NPT, 20 psig set point)	3 psig over flow of 10 SCFM (0-30 psig range, 1/4" NPT, 20 psig set point)	2.5 psig over flow of 10 SCFM (0-30 psig range, 1/4" NPT, 20 psig set point)	3 psig over flow of 10 SCFM (1/4" NPT, 0-20 psig range, 10 psig set point)	2.5 psig over flow of 10 SCFM (1/4" NPT, 0-20 psig range, 10 psig set point)	2.5 psig over flow of 50 SCFM (3/8" NPT, 0-30 psig range, 15 psig set point)	N/A	2.0 psig over flow of 10 SCFM (3/8" NPT, 0-30 psig range, 15 psig set point)	2.0 psig over flow of 50 SCFM (3/8" NPT 0-30 psig range, 30 psig set point)	N/A	6 psig over flow of 10 SCFM (1/4" NPT, 20 psig set point)	3.5 psig over flow of 10 SCFM (1/2" NPT, 20 psig set point)
<b>Output Pressure Ranges</b>	2-25 psig 2-60 psig 2-120 psig	2-120 psig	0.5-25 psig	0-30 psig 0-60 psig 0-120 psig	0-2 psig, 0-10 psig 0-30 psig, 0-60 psig 0-100 psig	0-10 psig 0-30 psig 0-60 psig 0-120 psig	0-30 psig 0-60 psig 0-100 psig, 2-150 psig	0-30 psig 0-60 psig 0-100 psig	0-30 psig 0-60 psig 0-100 psig	0-30 psig 0-60 psig 0-100 psig	0-30 psig 0-60 psig 0-120 psig	0-20 psig 20-40 psig 40-60 psig	0-20 psig 20-40 psig 40-60 psig	0-2 psig, 0-10 psig 0-30 psig, 3-200 psig 1-60 psig, 2-150 psig	0-2 psig, 0-10 psig 0-30 psig, 0-60 psig, 0-150 psig	Vacuum To: 2 psig, 10 psig, 30 psig, 100 psig, 150 psig	0-2 psig, 0-10 psig, 0-30 psig, 0-60 psig, 0-125 psig	0-5 psig, 0-10 psig 0-30 psig, 0-60 psig 0-100 psig	0-10 psig 0-30 psig 0-60 psig 0-120 psig	0-10 psig 0-30 psig 0-60 psig 0-120 psig
<b>Total Air Consumption @ Maximum Output</b>	8 SCFH	8 SCFH	8 SCFH	6 SCFH	6 SCFH (20 psi output)	6 SCFH	6 SCFH	6 SCFH	6 SCFH	6 SCFH	6 SCFH	6 SCFH	6 SCFH	from 1.0 to 12.5 SCFH	N/A	6 SCFH	12 SCFH	3 SCFH 0.3 SCFH	0.3 SCFH	0.3 SCFH
<b>Port Size</b>	1/8", 1/4", 3/8" NPT, BSPT	1/8", 1/4", 3/8" NPT, BSPT	1/4" NPT, BSPT	1/4" NPT, BSPT	1/4" NPT, BSPT	1/4" NPT, BSPT	1/4" NPT, BSPT	1/4", 3/8" NPT, BSPT	1/4" NPT, BSPT	1/4" NPT, BSPT	1/4" NPT, BSPT	1/4" NPT, BSPT	1/4" NPT, BSPT	1/4", 3/8", 1/2" NPT, BSPT	1/4", 3/8", 1/2" NPT, BSPT	1/4", 3/8" NPT, BSPT	3/8", 1/2", 3/4", 1" NPT, BSPT	1/16" - 27 NPT/ 5mm	1/8", 1/4" NPT	1/4", 3/8", 1/2" NPT
<b>Size</b>	2.06" X 2.06" X 4.26"	2.06" X 2.06" X 4.26"	2.06" X 2.06" X 4.26"	2.5" X 2.5" X 5.63"	2.5" X 2.5" X 5.75"	3.19" X 3.19" X 7.25"	3.19" X 3.19" X 7.25"	2.5" X 2.5" X 8.14"	2.5" X 2.5" X 6.95"	2.5" X 2.5" X 4.59"	2.5" X 2.5" X 8.1"	3.19 X 3.19 X 4.70	2.5" X 2.5" X 3.13"	3.0" X 3.0" X 6.0"	3.0" X 3.0" X 6.0"	3.0" X 3.0" X 7.25"	3.82" X 3.82" X 7.5"	.875" X .875" X 3.33"	M1R - 1.6 X 1.7 X 3.5" M1FR - 1.6 X 1.7 X 6.4"	M2R - 2.5 X 2.5 X 5.4" M2FR - 2.5 X 2.5 X 9.4"
<b>Weight</b>	1.4 lb.	1.4 lb.	1.4 lb.	0.82 lb.	0.84 lb.	1.81 lb.	1.81 lb.	3.0 lb.	1.09 lb.	0.58 lb.	1.1 lb.	1.59 lb.	0.69 lb.	1.41 lb.	1.5 lb.	1.92 lb.	5.0 lb.	2.2 oz.	M1R-0.4 lb. / M1FR-0.6 lb.	M2R - 1.0 lb. M2FR - 1.6 lb.
<b>Materials of Construction</b>	Body: Diecast zinc alloy with vinyl paint Capsule and Adjusting Screw: Stainless steel Trim: Stainless steel, brass, plated steel, acetal resin Diaphragm: Buna-N elastomer and polyester fabric Knob: Phenolic Plastic	Body: Diecast zinc alloy with vinyl paint Capsule and Adjusting Screw: Stainless steel Trim: Stainless steel, brass, plated steel, acetal resin Diaphragm: Buna-N elastomer and polyester fabric Knob: Phenolic Plastic	Body: Diecast zinc alloy with vinyl paint Capsule and Adjusting Screw: Stainless steel Trim: Stainless steel, brass, plated steel, acetal resin Diaphragm: Buna-N elastomer and polyester fabric Knob: Phenolic Plastic	Body: Diecast aluminum with vinyl paint Adjusting Screw: Plated steel Trim: Plated steel, brass, acetal resin Diaphragm: Buna-N elastomer and polyester fabric Knob: Phenolic Plastic (option) Spring: Music wire	Body: Diecast aluminum with vinyl paint Adjusting Screw: Plated steel Trim: Plated steel, brass, acetal resin Diaphragm: Buna-N elastomer and polyester fabric Knob: Phenolic Plastic Spring: Music wire	Body: Diecast aluminum with vinyl paint Adjusting Screw: Plated steel Trim: Plated steel, brass, acetal resin Diaphragm: Buna-N elastomer and polyester fabric Knob: Phenolic Plastic (option) Spring: Music wire	Body: Diecast aluminum with epoxy paint Adjusting Screw: Stainless Steel Trim: Stainless Steel, Neoprene, EPDM Diaphragm: Neoprene and Polyester fabric Spring: Inconel X-750	Body: 316 Stainless steel Adjusting Screw: Plated steel Trim: 316 SS, Polyphenylene sulfide Diaphragm: Fluorocarbon and polyester fabric Spring: Inconel X-750	Body: 316 Stainless steel Adjusting Screw: Plated steel Trim: 316 SS, Polyphenylene sulfide Diaphragm: Fluorocarbon and polyester fabric Spring: Inconel X-750	Body: Diecast aluminum with vinyl paint Adjusting Screw: Plated steel Trim: Plated steel, brass, acetal resin, Buna-N (o-ring) Diaphragm: Buna-N elastomer and polyester fabric Knob: Phenolic plastic (option) Spring: Music wire	Body: Diecast aluminum with vinyl paint Adjusting Screw: Plated steel Trim: Plated steel, brass, acetal resin, Buna-N (o-ring) Diaphragm: Buna-N elastomer and polyester fabric Knob: Phenolic plastic (option) Spring: Music wire	Body: Aluminum Alloy Adjusting Screw: Stainless Steel Trim: Stainless Steel, Acetal, Polyphenylene Sulfide, Fluorocarbon, Cellulose Diaphragm: Buna-N elastomer and polyester fabric Spring: Inconel X-750	Body: Diecast aluminum with vinyl paint Adjusting Screw: Plated steel Trim: Plated steel, brass, acetal resin Diaphragm: Buna-N elastomer and polyester fabric Knob: None Spring: Music wire	Body: Diecast aluminum with vinyl paint Adjusting Screw: Plated steel Trim: Plated steel, brass, acetal resin Diaphragm: Buna-N with polyester fabric Knob: Phenolic plastic Spring: Music wire	Body: Diecast aluminum with vinyl paint Adjusting Screw: Plated steel Trim: Plated steel, brass, acetal resin Diaphragm: Buna-N with polyester fabric Knob: Phenolic plastic Spring: Music wire	Body: Diecast aluminum with vinyl paint Adjusting Screw: Plated steel Trim: Stainless steel, brass plated steel, Acetal and Buna-N Diaphragm: Buna-N with polyester fabric Knob: Phenolic plastic Spring: Music wire	Body: Diecast aluminum with vinyl paint Adjusting Screw: Plated steel Trim: Brass, plated steel Diaphragm: Buna-N with polyester fabric Knob: Phenolic plastic Spring: Music wire	Body: Anodized aluminum Adjusting Screw: Plated steel Trim: Brass, Acetal Diaphragm: Fluorocarbon with polyester fabric Knob: Acetal resin Spring: Music wire	Body: Diecast Aluminum with Vinyl Paint Adjusting Screw: Plated Steel Trim: Aluminum, Engineered Plastic, Plated Steel Diaphragm: Buna-N with Polyester Fabric Knob: Engineered Plastic Spring: Music wire	Body: Diecast Aluminum with Vinyl Paint Adjusting Screw: Plated Steel Trim: Aluminum, Engineered Plastic, Plated Steel Diaphragm: Buna-N with Polyester Fabric Knob: Engineered Plastic Spring: Music wire
<b>Preset Pressure</b>	Yes	Yes	Yes	No	No	No	No	No	No	No	No	Standard	Standard	No	No	No	No	No	No	No
<b>Tamper Proof Cover Option</b>	Yes	Yes	Yes	Yes	No	Yes	Yes	No	No	No	Yes	Standard	Standard	Yes	Yes	No	Yes	No	Yes	Yes
<b>Filter / Dripwell</b>	No	No	No	No	No	Yes	Yes	Yes	Yes	No	Yes	Yes	No	No	No	No	No	No	M1R - No / M1FR - Yes	M2R - No / M2FR - Yes
<b>Mounting Options</b>	Pipe or Panel	Pipe or Panel	Pipe or Panel	Pipe, Panel or Bracket	Pipe, Panel or Bracket	Pipe Panel, Bracket or Thru Body Holes	Pipe Panel, Bracket or Thru Body Holes	Pipe, Panel or Bracket	Pipe, Panel or Bracket	Pipe, Panel or Bracket	Pipe, Panel or Bracket	Pipe, Bracket or Thru Body Holes	Pipe or Bracket	Pipe, Panel or Bracket	Pipe, Panel or Bracket	Pipe, Panel or Bracket	Pipe, Panel or Bracket	Pipe or Panel	Pipe, Panel or Bracket	Pipe, Panel or Bracket