

MB MARSH BELLOFRAM[®]

Group of Companies

Electro-Pneumatic Servo Pressure Controllers

Electro-Pneumatic I/P, E/P, & P/I Transducers

Rolling Diaphragm Regulators & Relays

Rolling Diaphragm Cylinders

Filter-Regulator-Lubricators



Precision Control Devices

Contents

Regulators

| | |
|--|----|
| Type 10 Pressure Regulator Series | 2 |
| Type 10PI Plunger Operated Regulator | 3 |
| Type 10HR & 10EXHR High Relief Regulators | 3 |
| Type 10LR Low Range Regulator | 3 |
| Type 10 Motorized Pressure Regulators | 5 |
| Type 110 Pressure Regulator Series | 6 |
| Type 40 Pressure Regulator Series | 8 |
| Type 41-1 & Type 41-2 Pressure Regulator Series | 10 |
| Type 50 Filter Regulator Series | 13 |
| Type 51 & Type 50 NACE Pressure Regulator Series | 16 |
| Type 51 Stainless Steel Pressure Regulator Series | 19 |
| Type 60 & Type 65 Pre-set Pressure Regulators | 22 |
| Type 70 High Flow Pressure Regulator | 25 |
| Type 70BP High Flow Back Pressure Regulator | 25 |
| Type 77 Vacuum Regulator Series | 28 |
| Type 78 High Flow Air Regulator Series | 30 |
| Type 91 Subminiature Regulator Series | 33 |
| FRU Filters, Regulators and Lubricators | 34 |

Relays & Volume Boosters

| | |
|---|----|
| Comparison Chart | 38 |
| Type 20 Precision Air Relays | 40 |
| Type 72 & 72HR Positive Bias Booster Relays | 41 |
| Type 75 Air Relays | 42 |
| Type 79 High Flow Air Relays | 43 |

Diaphragm Air Cylinders

| | |
|---|----|
| Standard & Super Cylinders | 46 |
| Small Bore Cylinders | 47 |

I/P, E/P & P/I Transducers

| | |
|---|----|
| Type 1000 I/P & E/P Transducers | 58 |
| Type 1001 I/P & E/P Transducers | 62 |
| Type 1500 I/P & E/P Transducers | 67 |
| Type 2000 I/P & E/P Transducers | 72 |
| Type 5000 P/I Transducers | 77 |

T3000 I/P's & E/P's

| | |
|--|----|
| Comparison & Overview of I/P's | 80 |
| Type 3110 / Type 3120 Analog Circuit-Card Regulators | 82 |
| Type 3111 Analog Circuit-Card Regulators | 83 |
| Type 3210 & 3220 Analog Weatherproof Regulators | 84 |
| Type 3211 & 3221 Analog Weatherproof Regulators | 85 |
| Type 3212 & 3222 Analog Weatherproof Regulators | 86 |

Type 3215

Weatherproof Regulator with Super High Flow ... 87

External Volume Boosters

Digital Electro-Pneumatic Transducers

Digital User Interfaces
Type 3000 Serial RS-485 User Interfaces

Type 3410 & 3420
Digital Circuit-Card Regulators

Type 3411
Digital Circuit-Card Pressure Regulators

Type 3510 & 3520
Digital Weatherproof Regulators

Type 3511 & 3521
Digital Weatherproof Regulators

Type 3512 & 3522
Digital Weatherproof Regulators

Dimensional Drawings

Remote Pressure Sensors (RPS)

Cordsets

Converters

Power Supplies & Control Knobs

Applications

Accessories

MPS 8
Manual Panel Station

Marshalltown
Value Series Gauges

Diaphragm Seals

Model 12000
Mini Serviceable Rubber Diaphragm Seal

Model B8498
Gauge Protector with Rubber Diaphragm Seal ...

Model 13000
Mini / All Welded Diaphragm Seal

Model 13040
All Welded Diaphragm Seal

Model 14000
Diaphragm Seal

Model 14040
Removable Diaphragm Seal

Digital Pressure Indicator

Terms and Conditions

Custom Applications

To Our Customers

Terms and Conditions

Marsh Bellofram Group of Companies is the consolidation of pneumatics, electronics and electrical components for the industrial, process and automation markets. Electro-pneumatic and pneumatic controls, pressure and temperature instruments, digital counters and timers, motor controls and motion control instrumentation make up the main stay of the Companies products. The Groups include Marsh and Marshalltown pressure instruments, Bellofram pneumatic products, Automatic Timing and Controls counters and timers, Diversified Electronics motor protection products, Thermo-Couple Products temperature instruments and our new line of BelGAS oil, gas and industrial products.

Marsh Bellofram is an ISO 9001:2000 firm, we also recognize the importance of quality throughout our entire organization, and constantly strive to deliver value in our product and throughout our whole company.

Remember that orders are accepted via fax or mail:

Sales Fax: 304-387-4417

Mail: Marsh Bellofram, State Route 2, Box 305, Newell, WV 26050

Statement of Warranty

Warranty extends for 18 months from the manufacturing date code to be free of defects in materials and workmanship in normal use. The warranty is limited to repair or replacement of the defective product at the discretion of Bellofram. Products returned for repair under warranty will be guaranteed for the remainder of the warranty period or 90 days which ever is longer. Products returned for repair under non-warranty will be guaranteed for a period of 90 days.

Important Notice

Our Recommendations, if any, for the use of our products are based on tests believed to be reliable. The greatest care is exercised in the selection of raw materials and in our manufacturing operations. However, since the use of this product is beyond the control of the manufacturer, no guarantee or warranty, expressed or implied is made as to such use or effects incidental to such use, handling or possession or results to be obtained, whether in accordance with the directions or claimed so to be. The manufacturer expressly disclaims responsibility therefor. Furthermore, nothing contained herein shall be construed as a recommendation to use any product in conflict with existing laws and/or patents covering any material or use.

Standard Additional Fees

Drop Ship Fee: There is a \$10.00 fee per shipment for products shipped to someone other than the Distributor. The exception to this fee is if the product is late and it is Bellofram's error. Remember we can only ship to one address for each factory order per day. Note – cylinders are exempt from this fee.

Expedite Fee: There is a \$15.00 fee per factory order line item for this service. This applies to any order that must ship within two business days after receipt of the order. It also applies to accelerate delivery of product on existing order, if the product is available. The Distributor can expedite without charge if the product does not have to ship until the third business day after notification. Note–cylinders are exempt from this fee.

Retesting Fee: There is a \$25.00 fee per unit on products returned which successfully test within Quality Control Specifications. For example, if three units came back on an RGA and all three tests within our testing specification there would be a \$25.00 per unit fee imposed, for a total

of \$75.00 for the three units. However, if a unit is returned and does not meet our Quality Control Specifications there will not be a charge for the defective unit. Note: If the product lists for \$50.00 or less, the Retesting Fee will be equal to the repair charge which is less than \$25.00.

Restocking Fee: On rare occasions Bellofram may authorize a credit return, when this occurs there will be a 25% restocking fee imposed. If Bellofram ships a product in error the fee will be waived. It is important that all communication be written and faxed such as order cancellations, additions, corrects, release date changes (the number release change can be limited). If a product ships and you had canceled it there will not be a restocking fee provided there is a written cancellation request on file.

Handling Fee: A \$10.00 handling fee will be imposed on RGA's out of warranty. However, if you decide to pay to have the product repaired this fee would not apply.

Evaluation Fee: For mechanical products, there will be a \$25.00 fee per unit if the product is out of warranty. For electro-mechanical, the fee is \$25.00 to \$75.00 depending on product.

Return Goods Authorization Procedure

Returns can be made for such reasons as defective product, authorized 90-day samples, wrong product shipped, duplicate shipment or warranty repair. Defective product will be confirmed prior to credit being issued.

The following procedure must be adhered to before material can be authorized for return:

1. An RGA number must be issued with all questions answered and information blocks completed. The more information obtained on the RGA will better help Bellofram to correct the problem.
2. The customer is to be notified that the RGA number MUST accompany the package on the outside of the box and on the packing slip.
3. All RGA's are to be shipped to Bellofram freight pre-paid. Freight for duplicate shipments, wrong products and defective product will be issued as credit.
4. All RGA's must be authorized by the Bellofram CS Manager or VP Sales and are valid for only 45 days from issue.

NOTE: All RGA's must have as a minimum the following information before being approved:

- Customer invoice number
- Customer account number
- Customer PO number
- Bellofram system number
- Product catalog number and quantity
- Product description
- Reason for return

Let Us Design One for you!

Custom Designed Regulators

- Specialized in meeting OEM Design Requirements
- Forward Flows to 2000 SCFM
- Supply Pressures to 5500 psi / 379.2 BAR
- Vacuum to 600 psi / 41.2 BAR Regulated Output

Contact the Applications Engineers at Marsh Bellofram

800-727-5646 • FAX: (304) 387-4417

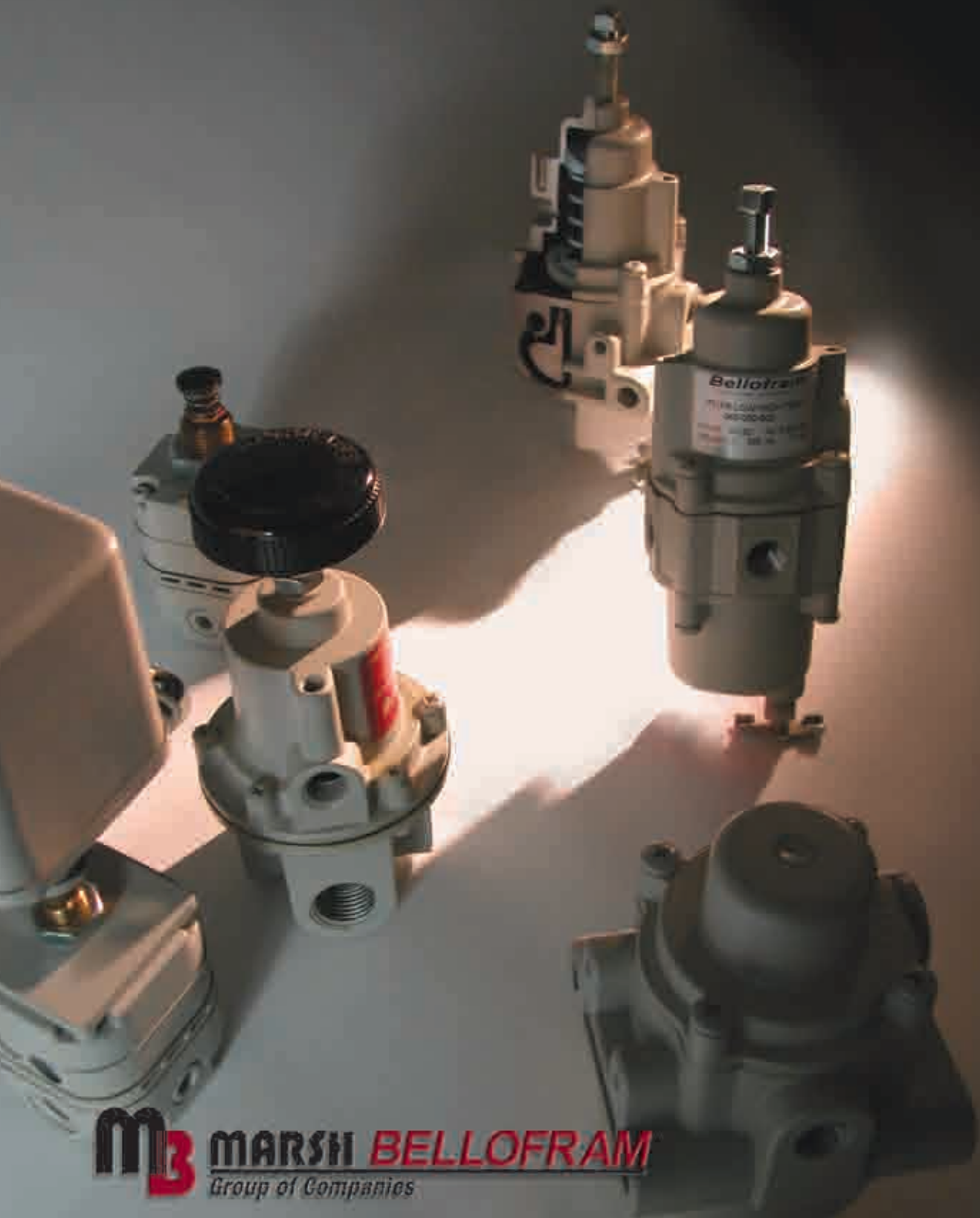


Visit Us Online

www.marshbellofram.com



www.marshbellofram.com/PCD



MB **MARSH BELLOFRAM**
Group of Companies

USA

Marsh Bellofram
8019 Ohio River Blvd
Newell, WV 26050 USA
1-800-727-5646
Fax: 1-304-387-1212
info@marshbellofram.com

EUROPE

Marsh Bellofram Europe
9 Castle Park, Queens Drive
Nottingham NG2 1AH, UK
+44 (0) 115993 3300
Fax: +44 (0) 115993 3301
bellofram@aol.com

INDIA

Bellofram Instruments (India) Pvt. Ltd.
Survey No. 83, 2/3, Old NDA Road
Near Vidyut Controls
At Post: Shivane, Taluka- Haveli
Dist. Pune 411023 India
mb_india@marshbellofram.com

CHINA

Marsh Bellofram Trading (Shanghai) Co. Ltd.
Add: Rm 403, FangZheng Building,
No 1122 Xin Jinqiao Rd., Shanghai, China
021-50327750 50327751 50327752 Ext. 812
Fax: 201-50327753 P.C. 201206
info@marshbellofram.cn