Bulletin V5013-12 January 2016

NOR'EAST CONTROLS



GLOBE VALVES MIXING & DIVERTING

V5013 Series



Previously manufactured by Dezurik® and Honeywell®

Description:

The Nor' East Series 8600 (mixing) and Series 8900 (diverting) cage valves are designed for light industrial applications. The spring-type pneumatic diaphragm actuation is available as either direct or reverse acting as specified.

Accessories:

- Side mounted positions, pneumatic and electro pneumatic
- Limit switches
- Top mounted Handwheel
- Air Filter regulator
- Transducer
- Solenoid

SPECIFICATIONS

Actuator

| Type 05 (For 2-1/2 and 3-inch) | Pneumatic diaphragm-actuated. Direct or reverse acting |
|------------------------------------|---|
| Construction | Anodized aluminum diaphragm cases and yokes |
| Diaphragm Material | Molded of flexible Neoprene and convoluted to retain a constant effective area through the total stroke. Ambient temperature range of -29° to 71°C (-20° to 160°F). |
| Effecrtive Diaphragm Area | Direct acting: 40 in ² (258 cm ²) Reverse acting: 38 in ² (245 cm ²) |
| Actuator Stem | Zinc-plated steel. |
| Spring | Total enclosed and corrosion resistant. Range: 3 to 15 psig standard. (For other ranges, see Table 2). |
| Air Pressure (Air-to-diaphragm) | Normal: 18 or 25 psig (124 or 172 kPa) Maximum Operating: 35 psig (241 kPa) |
| Air Connections | 1/4" NPT. |
| Type 01 (For 4, 5, 6, & 8-inch) | Pneumatic, diaphragm-actuated. Direct or reverse acting. |
| Construction | Pressed steel diaphragm case plates and heavy duty, cast iron yoke. Finished in blue corrosion-resistant enamel. |
| Diaphragm Material | Molded of Buna N with nylon insert. Ambient temperature of -29° to 82°C (-20° to 180°F). Other materials are available for high or lower temperatures. |
| Spring | Totally enclosed. Range: 3 to 15 psig standard. (For other ranges, see Table 2). |
| Air Pressure (Air-to-diaphragm) | , |
| Air Connections | 1/4" NPT. |

Body

| Туре | Three-way, mixing or diverting with single piece body and cage type inner valve construction. |
|----------|---|
| Material | Cast iron. |
| Sizes | Model 8605 and 8905: 2-1/2 and 3 inch. Model 8601 and 8901: 4, 5, 6 and 8 inch. |
| Ratings | Flanged ends: 125 lb or ANSI in all sizes. |

Bonnet

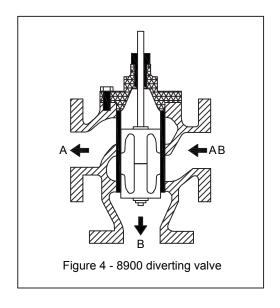
| Packing | Screwed Box: |
|---------|---|
| | Valve sizes: 2-1/2, 3, 4, 5 and 6 inch. Spring-loaded Teflon V-rings. |
| | Bolted Box: |
| | 8-inch valve. Spring-loaded Teflon V-rings. |

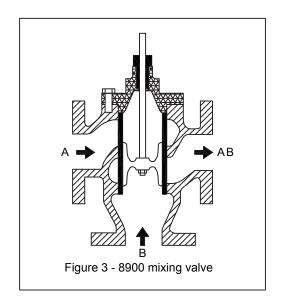
Trim

| Seats | Replaceable bronze. Both seats held in place by bronze cage and sealed in body by rubber o-rings. |
|--------------|---|
| Plug | Bronze; linear characteristic. |
| Valve Travel | (See Table 2). |

Sizing Data

| Table 1 - FLOW COEFFICIENT Cv | | | | | | | |
|-------------------------------|-------------------------------|-----|-----|-----|-----|-----|--|
| Plug Type | Plug Type Valve Size (Inches) | | | | | | |
| | 2-1/2 | 3 | 4 | 5 | 6 | 8 | |
| Linear | 63 | 100 | 160 | 250 | 360 | 600 | |





ORDERING DATA

Please Specify:

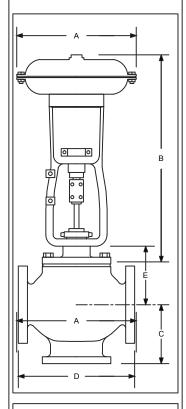
- Valve Model 8601 or 8605 (mixing service)
- Valve Model 8901 or 8905 (diverting service)
- Size
- Body Rating
- Packing
- Spring Range
- Actuator Size
- Action (refer to Table 3)
- Accessories

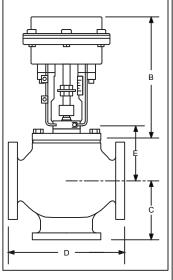
| TABLE 2 - M | IAXIMUM P | RESSURE DIF | FERENTIALS IN | CLOSED | POSITI | ON | | |
|---|-----------------------|-------------------------|------------------------|--------|--------|----|----|----|
| Actuator Type, Size & Travel () | Air Supply Psig | Spring Range Psig | Valve Size (inches) | | | | | |
| | | | 2-1/2 | 3 | 4 | 5 | 6 | 8 |
| 05 | 18 | 3-15 | 15 | 10 | - | | | |
| (3/4) | | 6-12 | 40 | 25 | - | | | |
| | 25 | 9-15 | 50 | 45 | - | | | |
| 01-13 | 18 | 3-15 | - | - | 15 | 9 | 6 | |
| (1-1/2) | 25 | 7-15 | - | - | 50 | 35 | 24 | |
| 01-15 | 18 | 3-15 | - | - | - | - | - | 6 |
| (2) | | 3-9 | - | - | - | - | - | 10 |
| | 40 | 6-30 | - | - | - | - | - | 23 |
| 01-185 | 18 | 3-15 | - | - | - | - | - | 10 |
| (2) | | 4.5-10 | - | - | | - | - | 19 |
| | 25 | 6-16.5 | - | - | - | - | - | 25 |
| | 40 | 8-29 | - | - | | - | - | 40 |

| TABLE 3 - VALVE ACTION | | |
|------------------------|--|---|
| Туре | Direct Actuator (increased air signal) | Reverse Actuator (increased air signal) |
| 8600 Mixing | Closes bottom port | Closes top port |
| 8900 Diverting | Closes top port | Closes bottom port |

| TABLE 4 | TABLE 4 - MODELS 8601 AND 8901 | | | | | | | |
|---------|--------------------------------|------|-------|-------------|-------------|-------------|-------------|------|
| DIRECT | ACTUATOR | | | | | | | |
| Valve | Actuator | Α | В | С | С | D | D | E |
| Size | Size | | | 125 Iron | 250 Iron | 125 Iron | 250 Iron | |
| 4 | 13 | 15.0 | 27.63 | 8.69 | 9.5 | 10.0 | 14.5 | 7.5 |
| | | 381 | 702 | 221 | 241 | 330 | 368 | 191 |
| 5 | 13 | 15.0 | 28.13 | 9.63 | 10.18 | 15.0 | 16.75 | 8.0 |
| | | 381 | 715 | 245 | 259 | 381 | 425 | 203 |
| 6 | 13 | 15.0 | 28.94 | 10.69 | 11.18 | 16.5 | 18.62 | 8.8 |
| | | 381 | 735 | 272 | 284 | 419 | 473 | 224 |
| 8 | 15 | 17.5 | 34.63 | 14.0 | 14.62 | 21.38 | 22.38 | 9.25 |
| | | 445 | 880 | 356 | 371 | 543 | 568 | 235 |
| | 18S | 20.5 | 38.13 | 14.0 | 14.62 | 21.38 | 22.38 | 9.25 |
| | | 521 | 969 | 356 | 371 | 543 | 568 | 235 |
| REVERS | E ACTUATOR | R | | | | | | |
| 4 | 13 | 15.0 | 30.38 | 8.69 | 9.5 | 13.0 | 14.5 | 7.5 |
| | | 381 | 772 | 221 | 241 | 330 | 368 | 191 |
| 5 | 13 | 15.0 | 30.88 | 9.63 | 10.18 | 15.0 | 16.75 | 8.0 |
| | | 381 | 784 | 245 | 259 | 381 | 425 | 203 |
| 6 | 13 | 15.0 | 31.69 | 10.69 | 11.18 | 16.5 | 18.62 | 8.8 |
| | | 381 | 805 | 272 | 284 | 419 | 473 | 224 |
| 8 | 15 | 17.5 | 38.38 | 14.0 | 14.62 | 21.38 | 22.38 | 9.25 |
| | | 445 | 975 | 356 | 371 | 543 | 568 | 235 |
| | 185 | 20.5 | 41.63 | 14.0 | 14.62 | 21.38 | 22.38 | 9.25 |
| | | 521 | 1057 | 356 | 371 | 543 | 568 | 235 |
| | | | | | | | | |

| TABLE 5 - MODELS 8605 and 8905 | | | | | | | | |
|--------------------------------|----------|------|-------|------|------|------|------|------|
| Valve | Actuator | Α | В | С | С | D | D | E |
| Size | Size | | | 125 | 250 | 125 | 250 | |
| | | | | Iron | Iron | Iron | Iron | |
| 2-1/2 | 05 | 9.25 | 15.94 | 6.44 | 7.0 | 9.5 | 11.5 | 4.63 |
| | | 235 | 405 | 164 | 178 | 241 | 292 | 118 |
| 3 | 05 | 9.25 | 16.56 | 6.63 | 7.5 | 11.0 | 12.5 | 5.25 |
| | | 235 | 421 | 168 | 191 | 279 | 318 | 133 |





REPAIR PARTS LIST

| 2 1/2" V5013-B1003 (Mixing) | | | | | |
|-----------------------------|--------------|---|--|--|--|
| Description | Qty Req. | | | | |
| Gasket | 30067859 859 | 1 | | | |
| Packing | 30041035 854 | 5 | | | |
| O-Ring | 30684011 001 | 2 | | | |
| Seat Ring | 30067842 905 | 2 | | | |
| Packing Nut | 30067857 107 | 1 | | | |
| Spring flange | 30041086 107 | 1 | | | |
| Spring | 30041084 218 | 1 | | | |
| Stem head | 30041088 107 | 1 | | | |
| Stem | 30067837 316 | 1 | | | |
| Plug | 30067832 760 | 1 | | | |

| 3" V5013-C1019 (Diverting) | | | | | |
|---------------------------------|--------------|---|--|--|--|
| Description Part Number Qty Rec | | | | | |
| Gasket | 30067860 859 | 1 | | | |
| Packing | 30041035 854 | 5 | | | |
| O-Ring | 30067531 891 | 2 | | | |
| Seat Ring | 30067843 905 | 2 | | | |
| Packing Nut | 30067857 107 | 1 | | | |
| Spring flange | 30041086 107 | 1 | | | |
| Spring | 30041084 218 | 1 | | | |
| Stem head | 30041088 107 | 1 | | | |
| Stem | 30067872 316 | 1 | | | |
| Plug | 30067867 760 | 2 | | | |

| 2 1/2" V5013-C1001 (Diverting) | | | | | |
|--------------------------------|--------------|----------|--|--|--|
| Description | Part Number | Qty Req. | | | |
| Gasket | 30067859 859 | 1 | | | |
| Packing | 30041035 854 | 5 | | | |
| O-Ring | 30684011 001 | 2 | | | |
| Seat Ring | 30067842 905 | 2 | | | |
| Packing Nut | 30067857 107 | 1 | | | |
| Spring flange | 30041086 107 | 1 | | | |
| Spring | 30041084 218 | 1 | | | |
| Stem head | 30041088 107 | 1 | | | |
| Stem | 30067871 316 | 1 | | | |
| Plug | 30067866 760 | 2 | | | |

| 4" V5013-B1029 (Mixing) | | |
|-------------------------|--------------|----------|
| Description | Part Number | Qty Req. |
| Gasket | 30067861 859 | 1 |
| Packing | 30041036 854 | 6 |
| O-Ring | 30067533 891 | 2 |
| Seat Ring | 30067844 905 | 2 |
| Packing Nut | 30067858 001 | 1 |
| Spring flange | 30041087 107 | 1 |
| Spring | 30041085 218 | 1 |
| Stem head | 30041089 235 | 1 |
| Stem | 30067839 316 | 1 |
| Plug | 30067834 760 | 1 |

| 3" V5013-B1011 (Mixing) | | |
|-------------------------|--------------|----------|
| Description | Part Number | Qty Req. |
| Gasket | 30067860 859 | 1 |
| Packing | 30041035 854 | 5 |
| O-Ring | 30067531 891 | 2 |
| Seat Ring | 30067843 905 | 2 |
| Packing Nut | 30067857 107 | 1 |
| Spring flange | 30041086 107 | 1 |
| Spring | 30041084 218 | 1 |
| Stem head | 30041088 107 | 1 |
| Stem | 30067838 316 | 1 |
| Plug | 30067833 760 | 1 |

| 4" V5013-C1027 (Diverting) | | |
|----------------------------|--------------|----------|
| Description | Part Number | Qty Req. |
| Gasket | 30067861 859 | 1 |
| Packing | 30041036 854 | 6 |
| O-Ring | 30067533 891 | 2 |
| Seat Ring | 30067844 905 | 2 |
| Packing Nut | 30067858 001 | 1 |
| Spring flange | 30041087 107 | 1 |
| Spring | 30041085 218 | 1 |
| Stem head | 30041089 235 | 1 |
| Stem | 30067873 316 | 1 |
| Plug | 30067868 760 | 2 |

REPAIR PARTS LIST

| 5" V5013-B1037 (Mixing) | | |
|-------------------------|--------------|----------|
| Description | Part Number | Qty Req. |
| Gasket | 30067862 859 | 1 |
| Packing | 30041036 854 | 6 |
| O-Ring | 30067535 891 | 2 |
| Seat Ring | 30685316 001 | 2 |
| Packing Nut | 30067858 001 | 1 |
| Spring flange | 30041087 107 | 2 |
| Spring | 30041085 218 | 1 |
| Stem head | 30041089 235 | 1 |
| Stem | 30067840 316 | 1 |
| Plug | 30067835 100 | 1 |

| 6" V5013-C1043 (Diverting) | | |
|----------------------------|--------------|----------|
| Description | Part Number | Qty Req. |
| Gasket | 30067863 859 | 1 |
| Packing | 30041036 854 | 6 |
| O-Ring | 30067856 891 | 2 |
| Seat Ring | 30067849 100 | 2 |
| Packing Nut | 30067858 001 | 1 |
| Spring flange | 30041087 107 | 2 |
| Spring | 30041085 218 | 1 |
| Stem head | 30041089 235 | 1 |
| Stem | 30067875 316 | 1 |
| Plug | 30067870 100 | 2 |

| 5" V5013-C1035 (Diverting) | | |
|----------------------------|--------------|----------|
| Description | Part Number | Qty Req. |
| Gasket | 30067862 859 | 1 |
| Packing | 30041036 854 | 6 |
| O-Ring | 30067535 891 | 2 |
| Seat Ring | 30685316 001 | 2 |
| Packing Nut | 30067858 001 | 1 |
| Spring flange | 30041087 107 | 2 |
| Spring | 30041085 218 | 1 |
| Stem head | 30041089 235 | 1 |
| Stem | 30067874 316 | 1 |
| Plug | 30067835 100 | 2 |

| 6" V5013-B1045 (Mixing) | | |
|-------------------------|--------------|----------|
| Description | Part Number | Qty Req. |
| Gasket | 30067863 859 | 1 |
| Packing | 30041036 854 | 6 |
| O-Ring | 30067856 891 | 2 |
| Seat Ring | 30067849 100 | 2 |
| Packing Nut | 30067858 001 | 1 |
| Spring flange | 30041087 107 | 2 |
| Spring | 30041085 218 | 1 |
| Stem head | 30041089 235 | 1 |
| Stem | 30067841 316 | 1 |
| Plug | 30067836 100 | 1 |

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Sales and Service

Allagash International Group, LLC representatives are located in major cities throughout the world. For the name of the representative nearest you, email us: sales@allagashinternational.com

Allagash International, Group LLC reserves the right to incorporate our latest design and material changes without notice or obligation.

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