



## **DeZURIK MG MANUAL GEAR ACTUATOR SIZING**

**For**

- **BHP High Performance Butterfly Valves**
- **PEC Eccentric Plug Valves**
- **VPB V-Port Ball Valves**
- **RCV Rotary Control Valves**
- **BOS-US Resilient Seated Butterfly Valves**



# BHP High-Performance Butterfly Valves

## Handwheel Actuators

### ANSI Class 150 (PN 10/16) PTFE (TT/TI, RT/RI) Seat

| Valve Size             | Actuator Code | Shutoff Pressure<br>psi (kPa) |
|------------------------|---------------|-------------------------------|
| 2-8" (50-200mm)        | MG-7-HD8      | 285 (1960)                    |
| 10-14" (250-350mm)     | MG-1012-HD8   | 285 (1960)                    |
| 16" (400mm)            | MG-1216-HD16  | 285 (1960)                    |
| 18 & 20" (450 & 500mm) | MG-1216-HD24  | 285 (1960)                    |

### ANSI Class 150 (PN 10/16) Dual Seat (TTS2/TIS2 or RTS2/RIS2)

| Valve Size             | Actuator Code | Shutoff Pressure<br>psi (kPa) |
|------------------------|---------------|-------------------------------|
| 2-8" (50-200mm)        | MG-7-HD8      | 285 (1960)                    |
| 10 & 12" (250 & 300mm) | MG-1012-HD12  | 285 (1960)                    |
| 14 & 16" (350 & 400mm) | MG-1216-HD24  | 285 (1960)                    |
| 18 & 20" (450 & 500mm) | MG-16-HD30    | 285 (1960)                    |

### ANSI Class 150 (PN 10/16) Fyre-Block (TTS2 & FB or RTS2 & FB) and Metal (S2) Seat

| Valve Size             | Actuator Code | Shutoff Pressure<br>psi (kPa) |
|------------------------|---------------|-------------------------------|
| 2-6" (50-150mm)        | MG-7-HD8      | 285 (1960)                    |
| 8" (200mm)             | MG-1012-HD8   | 285 (1960)                    |
| 10" (250mm)            | MG-1012-HD12  | 285 (1960)                    |
| 12" (300mm)            | MG-1216-HD16  | 285 (1960)                    |
| 14 & 16" (350 & 400mm) | MG-1216-HD24  | 285 (1960)                    |
| 18 & 20" (450 & 500mm) | MG-16-HD30    | 285 (1960)                    |

## Chainwheel Actuators

### ANSI Class 150 (PN 10/16) PTFE (TT/TI, RT/RI) Seat

| Valve Size             | Actuator Code | Shutoff Pressure<br>psi (kPa) |
|------------------------|---------------|-------------------------------|
| 2-8" (50-200mm)        | MG-7-CW8      | 285 (1960)                    |
| 10-14" (250-350mm)     | MG-1012-CW8   | 285 (1960)                    |
| 16 & 18" (400 & 450mm) | MG-1216-CW20  | 285 (1960)                    |
| 20" (500mm)            | MG-16-CW30    | 285 (1960)                    |

### ANSI Class 150 (PN 10/16) Dual Seat (TTS2/TIS2 or RTS2/RIS2)

| Valve Size             | Actuator Code | Shutoff Pressure<br>psi (kPa) |
|------------------------|---------------|-------------------------------|
| 2-8" (50-200mm)        | MG-7-CW8      | 285 (1960)                    |
| 10 & 12" (250 & 300mm) | MG-1012-CW12  | 285 (1960)                    |
| 14 & 16" (350 & 400mm) | MG-1216-CW20  | 285 (1960)                    |
| 18 & 20" (450 & 500mm) | MG-16-CW30    | 285 (1960)                    |

### ANSI Class 150 (PN 10/16) Fyre-Block (TTS2 & FB or RTS2 & FB) and Metal (S2) Seat

| Valve Size             | Actuator Code | Shutoff Pressure<br>psi (kPa) |
|------------------------|---------------|-------------------------------|
| 2-6" (50-150mm)        | MG-7-CW8      | 285 (1960)                    |
| 8" (200mm)             | MG-1012-CW8   | 285 (1960)                    |
| 10" (250mm)            | MG-1012-CW12  | 285 (1960)                    |
| 12 & 14" (300 & 350mm) | MG-1216-CW20  | 285 (1960)                    |
| 16" (400mm)            | MG-1216-CW30  | 285 (1960)                    |
| 18 & 20" (450 & 500mm) | MG-16-CW30    | 285 (1960)                    |

### ANSI Class 300 (PN 25/40) PTFE (TT/TI, RT/RI) Seat

| Valve Size             | Actuator Code | Shutoff Pressure<br>psi (kPa) |
|------------------------|---------------|-------------------------------|
| 2-6" (50-150mm)        | MG-7-HD8      | 740 (5100)                    |
| 8 & 10" (200 & 250mm)  | MG-1012-HD8   | 740 (5100)                    |
| 12" (300mm)            | MG-1216-HD16  | 740 (5100)                    |
| 14 & 16" (350 & 400mm) | MG-1216-HD24  | 740 (5100)                    |
| 18" (450mm)            | MG-16-HD30    | 740 (5100)                    |
| 20" (500mm)            | MG-64-HD30    | 740 (5100)                    |

### ANSI Class 300 (PN 25/40) Dual Seat (TTS2/TIS2 or RTS2/RIS2)

| Valve Size             | Actuator Code | Shutoff Pressure<br>psi (kPa) |
|------------------------|---------------|-------------------------------|
| 2-4" (50-100mm)        | MG-7-HD8      | 740 (5100)                    |
| 6-8" (150-200mm)       | MG-1012-HD8   | 740 (5100)                    |
| 10 & 12" (250 & 300mm) | MG-1216-HD24  | 740 (5100)                    |

### ANSI Class 300 (PN 25/40) Fyre-Block (TTS2 & FB or RTS2 & FB) and Metal (S2) Seat

| Valve Size         | Actuator Code | Shutoff Pressure<br>psi (kPa) |
|--------------------|---------------|-------------------------------|
| 2-4" (50-100mm)    | MG-7-HD8      | 740 (5100)                    |
| 6" (150mm)         | MG-1012-HD8   | 740 (5100)                    |
| 8" (200mm)         | MG-1012-HD12  | 740 (5100)                    |
| 10-12" (250-300mm) | MG-1216-HD24  | 740 (5100)                    |

Note: Handwheel actuators are available at standard and 180° mounting positions.

### ANSI Class 300 (PN 25/40) PTFE (TT/TI, RT/RI) Seat

| Valve Size            | Actuator Code | Shutoff Pressure<br>psi (kPa) |
|-----------------------|---------------|-------------------------------|
| 2-6" (50-150mm)       | MG-7-CW8      | 740 (5100)                    |
| 8 & 10" (200 & 250mm) | MG-1012-CW8   | 740 (5100)                    |
| 12-16" (300-400mm)    | MG-1216-CW20  | 740 (5100)                    |
| 18" (450mm)           | MG-16-CW30    | 740 (5100)                    |
| 18" (450mm)           | MG-64-CW30    | 740 (5100)                    |

### ANSI Class 300 (PN 25/40) Dual Seat (TTS2/TIS2 or RTS2/RIS2)

| Valve Size             | Actuator Code | Shutoff Pressure<br>psi (kPa) |
|------------------------|---------------|-------------------------------|
| 2-4" (50-100mm)        | MG-7-CW8      | 740 (5100)                    |
| 6 & 8" (150 & 200mm)   | MG-1012-CW8   | 740 (5100)                    |
| 10 & 12" (250 & 300mm) | MG-1216-CW20  | 740 (5100)                    |

### ANSI Class 300 (PN 25/40) Fyre-Block (TTS2 & FB or RTS2 & FB) and Metal (S2) Seat

| Valve Size             | Actuator Code | Shutoff Pressure<br>psi (kPa) |
|------------------------|---------------|-------------------------------|
| 2-4" (50-100mm)        | MG-7-CW8      | 740 (5100)                    |
| 6" (150mm)             | MG-1012-CW8   | 740 (5100)                    |
| 8" (200mm)             | MG-1012-CW12  | 740 (5100)                    |
| 10 & 12" (250 & 300mm) | MG-1216-CW20  | 740 (5100)                    |

Note: Chainwheel actuators are available at standard and 180° mounting positions.

# PEC Eccentric Plug Valves

## Handwheel Actuators ANSI Class 125-Iron (PN10)

| Valve Size      | Actuator Code | Shutoff Pressure<br>psi (kPa) |
|-----------------|---------------|-------------------------------|
| .5-3" (15-80mm) | MG-7-HD8      | 175 (1210)                    |

## Chainwheel Actuators ANSI Class 125-Iron (PN10)

| Valve Size      | Actuator Code | Shutoff Pressure<br>psi (kPa) |
|-----------------|---------------|-------------------------------|
| .5-3" (15-80mm) | MG-7-CW8      | 175 (1210)                    |

## ANSI Class 150-Steel (PN10/16)

| Valve Size      | Actuator Code | Shutoff Pressure<br>psi (kPa) |
|-----------------|---------------|-------------------------------|
| .5-3" (15-80mm) | MG-7-HD8      | 285 (1960)                    |

## ANSI Class 150-Steel (PN10/16)

| Valve Size      | Actuator Code | Shutoff Pressure<br>psi (kPa) |
|-----------------|---------------|-------------------------------|
| .5-3" (15-80mm) | MG-7-CW8      | 285 (1960)                    |

# VPB V-Port Ball Valves

## Handwheel Actuators ANSI Class 150/300 (PN 10/16)

| Valve Size           | Actuator Code            | Shutoff Pressure<br>psi (kPa) |
|----------------------|--------------------------|-------------------------------|
| 1-4" (25-100mm)      | MG-7-HD8                 | 285 (1960)                    |
| 6 & 8" (150 & 200mm) | MG-1012-HD8              | 285 (1960)                    |
| 10" (250mm)          | MG-1012-HD12             | 285 (1960)                    |
| 12-16" (300-400mm)   | MG-1216-HD24             | 285 (1960)                    |
| 18" (450mm)          | MG-16-HD30               | 285 (1960)                    |
| 20" (500mm)          | MG-16-HD30<br>MG-64-HD30 | 175 (1210)<br>200 (1380)      |

## Chainwheel Actuators ANSI Class 150/300 (PN 10/16)

| Valve Size           | Actuator Code            | Shutoff Pressure<br>psi (kPa) |
|----------------------|--------------------------|-------------------------------|
| 1-4" (25-100mm)      | MG-7-CW8                 | 285 (1960)                    |
| 6 & 8" (150 & 200mm) | MG-1012-CW8              | 285 (1960)                    |
| 10" (250mm)          | MG-1012-CW12             | 285 (1960)                    |
| 12-16" (300-400mm)   | MG-1216-CW20             | 285 (1960)                    |
| 18" (450mm)          | MG-16-CW30               | 285 (1960)                    |
| 20" (500mm)          | MG-16-CW30<br>MG-64-CW30 | 175 (1210)<br>200 (1380)      |

**Note:** On 1-16" (25-400mm) VPB valves, handwheel and chainwheel actuators are available at standard, 90°, 180° and 270° mounting positions. On 18 & 20" (450 & 500mm) valves, only standard and 180° positions are available.

# RCV Rotary Control Valves

## Handwheel Actuators ANSI Class 150/300 (PN 10/16)

| Valve Size      | Actuator Code                | Shutoff Pressure<br>psi (kPa) |
|-----------------|------------------------------|-------------------------------|
| 1-4" (25-100mm) | MG-7-HD8                     | 740 (5100)                    |
| 6" (150mm)      | MG-1012-HD12                 | 740 (5100)                    |
| 8" (200mm)      | MG-1012-HD12<br>MG-1216-HD24 | 350 (2400)<br>740 (5100)      |
| 10" (250mm)     | MG-1216-HD24<br>MG-16-HD30   | 500 (3450)<br>740 (5100)      |
| 12" (300mm)     | MG-16-HD30<br>MG-64-HD30     | 350 (2400)<br>500 (3450)      |

**Note:** HC bodies are rated at 285 psi (1960 kPa). Contact DeZURIK for actuator sizing.

## Chainwheel Actuators ANSI Class 150/300 (PN 25/40)

| Valve Size      | Actuator Code                | Shutoff Pressure<br>psi (kPa) |
|-----------------|------------------------------|-------------------------------|
| 1-4" (25-100mm) | MG-7-CW8                     | 740 (5100)                    |
| 6" (150mm)      | MG-1012-CW12                 | 740 (5100)                    |
| 8" (200mm)      | MG-1012-CW12<br>MG-1216-CW20 | 350 (2400)<br>740 (5100)      |
| 10" (250mm)     | MG-1216-CW20<br>MG-16-CW30   | 500 (3450)<br>740 (5100)      |
| 12" (300mm)     | MG-16-CW30<br>MG-64-CW30     | 350 (2400)<br>500 (3450)      |

**Note:** HC bodies are rated at 285 psi (1960 kPa). Contact DeZURIK for actuator sizing.

**Note:** On 1-4" (25-100mm) RCV valves, actuators are available at standard, 90°, 180° and 270° mounting positions. On 6-12" (150-300mm) valves, actuators are available at standard and 180° mounting positions.

# BOS - US Resilient Seated Butterfly Valves

## Handwheel Actuators

| Valve Size      | Order Code   | Maximum Pressure Differential<br>psi (kPa) |
|-----------------|--------------|--|
| 2-6" (50-150mm) | MG-7-HD8*    | 250 (1720)                                 |
| 8" (200mm)      | MG-1012-HD8* | 250 (1720)                                 |
| 10" (250mm)     | MG-1012-HD12 | 250 (1720)                                 |
| 12" (300mm)     | MG-1012-HD12 | 100 (690)                                  |
|                 | MG-1216-HD16 | 250 (1720)                                 |
| 14" (350mm)     | MG-1216-HD20 | 250 (1720)                                 |
| 16" (400mm)     | MG-1216-HD24 | 150 (1030)                                 |
|                 | MG-16-HD30   | 250 (1720)                                 |
| 18" (450mm)     | MG-16-HD30   | 150 (1030)                                 |
|                 | MG-1250-HD28 | 250 (1720)                                 |
| 20" (500mm)     | MG-16-HD30   | 75 (515)                                   |
|                 | MG-1250-HD28 | 250 (1720)                                 |

## Chainwheel Actuators

| Valve Size      | Order Code   | Maximum Pressure Differential<br>psi (kPa) |
|-----------------|--------------|--|
| 2-6" (50-150mm) | MG-7-CW8     | 250 (1720)                                 |
| 8" (200mm)      | MG-1012-CW8  | 250 (1720)                                 |
| 10" (250mm)     | MG-1012-CW8  | 250 (1720)                                 |
| 12" (300mm)     | MG-1012-CW12 | 100 (690)                                  |
|                 | MG-1216-CW12 | 250 (1720)                                 |
| 14" (350mm)     | MG-1216-CW20 | 250 (1720)                                 |
| 16" (400mm)     | MG-1216-CW20 | 150 (1030)                                 |
|                 | MG-16-CW24   | 250 (1720)                                 |
| 18" (450mm)     | MG-16-CW24   | 150 (1030)                                 |
|                 | MG-1250-CW30 | 250 (1720)                                 |
| 20" (500mm)     | MG-16-CW24   | 75 (520)                                   |
|                 | MG-1250-CW30 | 250 (1720)                                 |

\* If ordered with a dial indicating floorstand FSDIR or FSDIU, use HD12 in place of HD8

Note: Actuator comes with 18-8 Stainless Steel Bolting.  
316 Stainless Steel Bolting is not available.

### Sales and Service

For information about our worldwide locations, approvals, certifications and local representative:

Web Site: [www.dezurik.com](http://www.dezurik.com) E-Mail: [info@dezurik.com](mailto:info@dezurik.com)



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