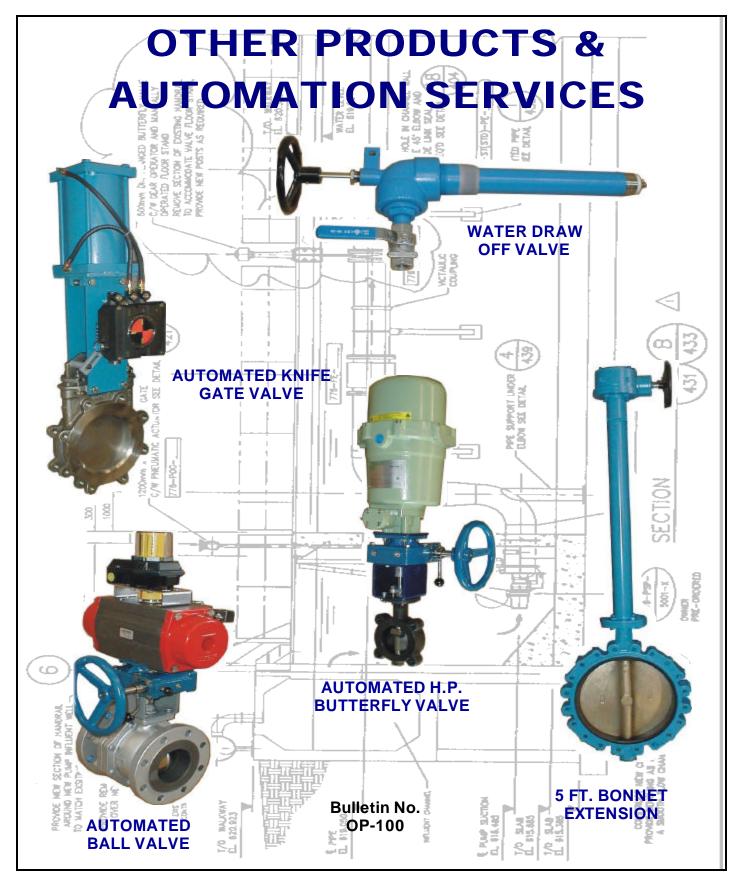




| DESCRIPTION | BULLETIN NO. |
|-----------------------------------|---------------------|
| COVER | OP-100 |
| OTHER PRODUCTS | OP-101A |
| OTHER PRODUCTS CONTINUED | OP-101B |
| AUTOMATION SERVICES | OP-102 |
| DAMPER VALVE SERIES 80 DIMENSIONS | DV-101 |
| DAMPER VALVE SERIES 80 FEATURES | DV-102 |







OTHER PRODUCTS

DAMPER VALVES:

FABRICATED FROM CARBON STEEL OR STAINLESS STEEL PLATE, FLANGED AND WAFER BODIES IN SIZES 2"-60" IN DIAMETER.

FEATURES INCLUDE EPOXY COATED BODIES, 304 STAINLESS STEEL SHAFTS, AND HIGH TEMPERATURE GRAPHOIL PACKING.

(PLEASE REFER TO BULLETINS DV-101 & 102 IN THIS SECTION)



DESIGNED AND MANUFACTURED BY CHALLENGER VALVE TO FACILITATE THE REMOVAL OF CONDENSATION AND WATER FROM A TANK IN SUB ZERO TEMPERATURES.

FEATURES INCLUDE EPOXY COATED BODY, STAINLESS STEEL BARREL AND VALVE SHAFT, TEFLON SEAT, AND PADLOCKABLE HANDWHEEL.

DRAIN VALVES ARE DESIGNED TO SUIT A 2" N.P.T. THREADED TANK FLANGE WITH 1 1/2" N.P.T. THREADED DRAIN CONNECTION.



OTHER PRODUCTS

VALVE BONNET EXTENSION:

VALVE EXTENSIONS ARE CUSTOM FABRICATED TO SUIT THE APPLICATION AND ARE AVAILABLE IN THREE TYPES OF MATERIAL.

A) CARBON STEEL HOUSING, EPOXY COATED WITH CARBON STEEL INNER DRIVE SHAFT.

B) CARBON STEEL HOUSING, EPOXY COATED WITH 304 STAINLESS INNER DRIVE SHAFT.

C) 304 STAINLESS STEEL HOUSING AND 304 STAINLESS STEEL INNER DRIVE SHAFT.

ALL SHAFT EXTENSIONS ARE GASKET SEALED AT THE TOP PLATE OF THE VALVE AND ARE SUITABLE FOR SUBMERGED OR BURIED SERVICE.

DECLUTCHABLE MANUAL OVERRIDE:

SANDWICH TYPE DESIGN TO FIT BETWEEN THE VALVE AND ACTUATOR.

AVAILABLE IN SIZES 2,200" LB'S TO 32,00" LB'S OF TORQUE.

SHAFT COUPLINGS CAN BE MACHINED TO SUIT THE APPLICATION.

FEATURES INCLUDE POWDER COATED BODY WITH STAINLESS STEEL INPUT SHAFT AND FASTENERS.

PLEASE REFER TO SECTION 3 OF OUR CATALOGUE FOR COMPLETE SPECIFICATIONS.



AUTOMATION SERVICES

AUTOMATED BUTTERFLY VALVE:

3" HIGH PERFORMANCE BUTTERFLY VALVE WITH CHALLENGER MOA-2 DECLUTCHABLE MANUAL OVERRIDE AND RCS SUR-49 SPRING RETURN ELECTRIC ACTUATOR.

AUTOMATED BALL VALVE:

4" CARBON STEEL BALL VALVE WITH CHALLENGER MOA-2
DECLUTCHABLE MANUAL OVERRIDE AND CHALLENGER PA125DA
PNEUMATIC ACTUATOR C/W MONITEUR VALVE POSITION TRANSMITTER
AND BURKERT 4-WAY SOLENOID VALVE.



AUTOMATED KNIFE GATE VALVE

8" STAINLESS STEEL KNIFE GATE VALVE WITH PNEUMATIC CYLINDER AND 3-15 PSI PNEUMATIC POSITIONER.





SERIES: 80 DAMPER VALVE

Applications: On-Off or Throttling Control for Corrosive and Non-Corrosive

VALVE DIMENSIONS: 50 MM - 1600 MM (2" - 60")

| • / \- | ALVE DIMENSIONS: SO MINI 1000 MINI (2 00) | | | | | | | | | | | | | | |
|------------|--|---------------|-------|--------|---------|------------|-------|--------|---------|-----|-------|---------|-------------------------|-------------|-------------|
| SIZE MM | SIZE IN | SHAFT DIA. | Α | В | С | D | E | F | G | Н | J | Q | NO. OF MTG. HOLES | WT. LBS. | WT. KGS. |
| 50 | 2" | 9/16 | 2 | 6 | 3 1/2 | _ | 1 | 5 1/2 | 1 5/8 | 1/4 | 5/32 | 1 5/16 | 4 | 3 | 1.4 |
| 65 | 2 1/2" | 9/16 | 2 1/2 | 7 | 3 1/2 | ΙĻ | 1 | 6 | 1 3/4 | 1/4 | 13/64 | 1 7/8 | 4 | 3.7 | 1.7 |
| 80 | 3" | 9/16 | 3 | 7 1/2 | 3 1/2 | 0 | 1 | 6 1/4 | 1 3/4 | 1/4 | 7/32 | 2 1/2 | 4 | 4 | 1.8 |
| 100 | 4" | 9/16 | 4 | 9 | 3 1/2 | S D | 1 | 7 | 2 | 1/4 | 16/64 | 3 9/16 | 4 | 6.5 | 3 |
| 125 | 5″ | 3/4 | 5 | 10 | 3 1/2 | ÜÏ | 1 | 7 1/2 | 2 1/8 | 1/4 | 1/4 | 4 5/8 | 4 | 8.5 | 3.9 |
| 150 | 6″ | 3/4 | 6 | 11 | 3 1/2 | | 1 1/8 | 8 | 2 1/8 | 1/4 | 1/4 | 5 7/16 | 4 | 10 | 4.5 |
| 200 | 8″ | 3/4 | 8 | 13 1/2 | 3 1/2 | I⊥ M | 1 1/8 | 9 1/2 | 2 1/2 | 1/4 | 1/4 | 7 7/16 | 4 | 15 | 6.8 |
| 250 | 10" | 3/4 | 10 | 16 | 5 | IT E | 1 1/8 | 10 3/4 | 2 1/2 | 1/4 | 1/4 | 9 1/2 | 4 | 26 | 11.8 |
| 300 | 12" | 3/4 | 12 | 19 | 5 | A S | 1 1/8 | 12 1/4 | 3 | 1/4 | 1/4 | 11 7/16 | 4 | 42 | 19 |
| 350 | 14″ | 3/4 | 14 | 21 | 5 | | 1 1/8 | 13 3/8 | 3 | 1/4 | 1/4 | 13 | 4 | 65 | 29.5 |
| 400 | 16″ | 7/8 | 16 | 23 1/2 | 6 | lç ĭ | 1 1/4 | 14 1/4 | 4 | 3/8 | 1/4 | 15 1/2 | 4 | 105 | 47.6 |
| 450 | 18″ | 7/8 | 18 | 25 | 6 | 0 | 1 1/4 | 15 | 4 1/4 | 3/8 | 1/4 | 17 1/2 | 4 | 115 | 52.2 |
| 500 | 20" | 1 3/8 | 20 | 27 1/2 | 6 | ΜŽ | 2 | 16 1/4 | 4 7/8 | 3/8 | 1/4 | 19 7/16 | 4 | 145 | 65.8 |
| 600 | 24" | 1 3/8 | 24 | 32 | 5 15/16 | A S | 3 | 20 1/8 | 5 15/16 | 1/2 | 3/8 | 23 3/8 | 4 | 265 | 120.2 |
| 750 | 30" | 1 3/8 | 30 | 38 3/4 | 6 9/16 | l ∖ | 4 1/4 | 22 7/8 | 6 9/16 | 1/2 | 3/8 | 29 1/4 | 4 | 385 | 174.6 |
| 900 | 36" | 1 3/8 | 36 | 46 | 7 7/8 | ΙĎ | 4 1/4 | 26 1/2 | 7 7/8 | 5/8 | 1/2 | 35 1/16 | 4 | 615 | 279 |
| 1000 | 42" | 1 7/8 | 42 | 53 | 9 7/8 | R | 4 1/4 | 30 1/4 | 9 7/8 | 5/8 | 1/2 | 40 3/4 | 4 | 875 | 396.9 |
| 1200 | 48" | 3 | 48 | 59 1/2 | 10 7/8 | | 5 | 35 3/4 | 10 7/8 | 3/4 | 5/8 | 46 3/4 | 4 | 1335 | 605.6 |
| 1400 | 54" | 3 1/2 | 54 | 66 1/4 | 12 | | 5 1/2 | 40 1/4 | 12 | 3/4 | 5/8 | 52 3/4 | 4 | 1705 | 773.4 |
| 1600 | 60" | 3 3/4 | 60 | 73 | 12 | | 5 1/2 | 44 1/2 | 12 | 1 | 3/4 | 58 3/4 | 4 | 2705 | 1227 |

NOTES:

"Q" IS THE CHORDAL DIMENSION AT VALVE FACE FOR DISC CLEARANCE.

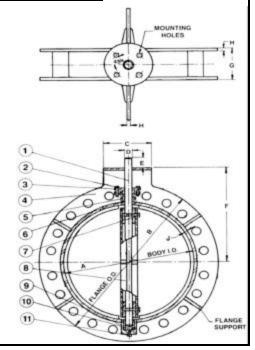
SHAFT END AND TOP PLATE BOLT CIRCLE DIAMETER DIRECT MOUNTS TO CHALLENGER ACTUATORS OR CUSTOMER SPECIFICATIONS.

FLANGE OR DISC THICKNESS MAY BE REDUCED BASED ON LOW FLOW AND

STANDARD MATERIALS

SERIES: 80 (FLANGED)

| NO. | COMPONENTS | MATERIAL | QTY. |
|-----|---------------|---------------------|------|
| 1 | SHAFT | STAINLESS STEEL 316 | 1 |
| 2 | PACKING SCREW | STAINLESS STEEL | (2) |
| 3 | PACKING GLAND | CARBON STEEL | 1 |
| 4 | BODY | CARBON STEEL | 1 |
| 5 | BUSHING | MEEHANITE | 1 |
| 6 | PACKING | TEFLON | 1 |
| 7 | DISC SCREW | STAINLESS STEEL | (2) |
| 8 | DISC | CARBON STEEL | 1 |
| 9 | BUSHING | MEEHANITE | 1 |
| 10 | BALL BEARING | CARBON STEEL | 1 |
| 11 | SET SCREW | CARBON STEEL | 1 |





SERIES: 80 DAMPER VALVE - cont.

Applications: On-Off or Throttling Control for Corrosive and Non-Corrosive Hot or Cold Gases in Heavy or Light Wall Pipe or Ducting

STANDARD FEATURES

- 316 Stainless Steel Shafts.
- Meehanite Bushings to absorb torque loads or side thrust under high temperature.
- Flanged 16" thru 60".
- Adjustable Bearings on valves 16" and over.
- Thru Shaft design on valves 16" and over.
- Top and Bottom Bushings: Metal, Teflon or Nylon for Corrosive Service.
- · Self-Lubricating Adjustable Shaft Packing.
- Leakage Rate on Metal Metal Seats to ANSI B16.104 Class 1.
- Body Reinforcing Ribs on valves 16" and over.
- Standard Drillings to ANSI B16.5 125"/150" Flanges.
- Rectangular Mounting Plate on valves 16" and over.

STANDARD RATING/BODY STYLE

Pressure:

0-15 PSI Flanged/Wafer All Trim Combinations (Fully Closed Position)

Temperature:

650°F Metal - Metal Seats Non-Corrosive Service Carbon Steel Body and Disc

1200°F Metal - Metal Seats 316 Stainless Steel Body and Disc

SERIES: 80

Optional Rating/Flanged and Wafer

Temperature: * Rubber Seat

Buna - 40°F + 200°F Hypalon - 40°F + 200°F Viton - 40°F + 400°F * **Fiberglass Seat** 40°F + 1,000°F

OPTIONAL FEATURES

SERIES: 80

- Wafer Bodies 2" 14" / Flanged Bodies 2" 60".
- Split Shaft Design for High Flow Capacity and Throttling Control.
- Light Weight Design to Suit Light Ducting Applications.
- Exotic Materials for Corrosive Applications.
- · Alternate Laying Lengths.
- Extended Neck for High Temperature.
- Special Flange Drillings Available.
- Customer Specified Actuator Mounting.
- Conformance to Non-Standard Pipe Diameters.
- Chain Wheel Operated.
- · Locking Service.

NOTE:

- For pressure and temperature requirements exceeding standards, consult factory.
- Acceptable leakage rates to ANSI B16.104 Class 1.