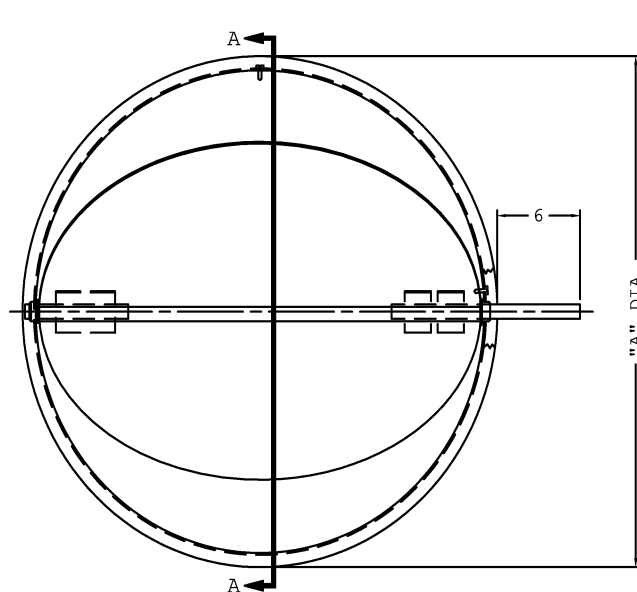
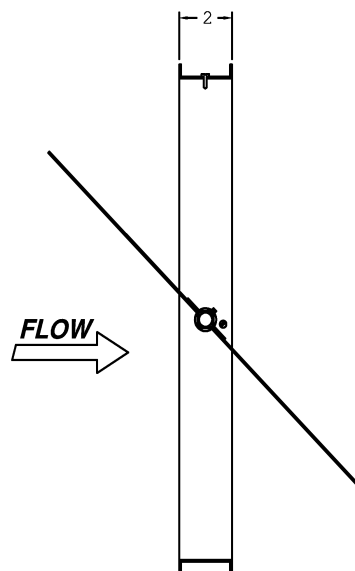


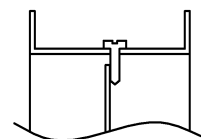
VOLUME CONTROL DAMPER, SINGLE THICKNESS BLADE, GALVANIZED STEEL CONSTRUCTION, 180°F MAX. TEMP.



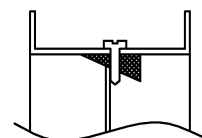
FACE VIEW
FLOW ENTERING SIDE



SECTION A-A



STOP DETAIL



**OPTIONAL
SEAL DETAIL**

| AWV ITEM No. | QUANTITY | "A" DUCT DIAMETER | EPT SEALS (150°F) | SILICONE SEALS (450°F) | STAINLESS STEEL AXLES | O.I.B. SLEEVE (300°F) | S.S. SLEEVE (350°F) | TEFLON SLEEVE (250°F) | PRESS FIT S.S. BALL W/CAD. PLATED RACES (250°F) | COMMENTS |
|--------------|----------|----------------------|----------------------|---------------------------|--------------------------|--------------------------|------------------------|--------------------------|--|----------|
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |

STANDARD SPECIFICATIONS

FRAME: 2" x 1/2" x 14 GAUGE GALVANIZED STEEL CHANNEL.

BLADE: 16 GAUGE GALVANIZED STEEL.

AXLE: 1/2" DIAMETER PLATED STEEL STUBS.

BEARINGS: NYLON SLEEVE WITH STAINLESS STEEL THRUSTWASHERS. (200°F)


STOPS: #10 PLATED SHEET METAL SCREWS FOR THE OPEN AND CLOSED POSITIONS.

FINISH: MILL WITH TOUCH-UP ON WELDS.

ACTUATOR: AN EXTENDED SHAFT 6" BEYOND THE FRAME IS STANDARD.

NOTES

- DESIGN CRITERIA:
MAX. VELOCITY: 3000 FPM / 15 m/s
MAX. DIFF. PRESS.: 2 IN. WG / 500 Pa
MAX. TEMPERATURE: 180°F / 82°C (WITHOUT SEALS)
150°F / 65°C (WITH EPT SEALS)
- WHEN SILICONE SEALS ARE USED, STAINLESS STEEL AXLES AND SLEEVE BEARINGS MUST BE USED.
- MINIMUM DIAMETER: 6" MAXIMUM DIAMETER: 18"
- "A" DIMENSION IS THE DUCT DIAMETER. DAMPERS ARE FABRICATED 1/8" UNDERSIZE.
- DRAWINGS ARE SUBJECT TO CHANGE WITHOUT NOTICE. SPECIFIC INFORMATION FOR ANY COMPONENT PART OR CONSTRUCTION DETAIL WILL BE FURNISHED UPON REQUEST.
- ANY VARIATIONS FROM THE STANDARD SPECIFICATIONS MUST BE FACTORY APPROVED IN ADVANCE.
- SEE PAGE 17 OF DAMPER BROCHURE FOR PERFORMANCE DATA.

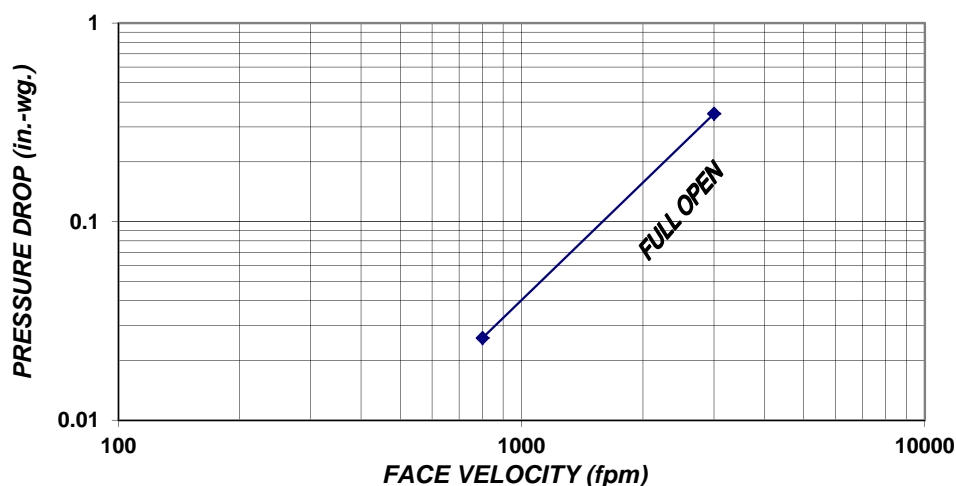
| | | | |
|--|-------------|------|----|
| REV. | DESCRIPTION | DATE | BY |
| DATE: | | | |
| AWV PROD. No.: | | | |
| CUSTOMER: | | | |
| CUSTOMER ORDER No.: | | | |
| AGENT: | | | |
| AGENT ORDER No.: | | | |
|  american warming and ventilating A MESTEK COMPANY 7301 INTERNATIONAL DRIVE HOLLAND, OHIO | | | |
| VC-22 VOLUME CONTROL DAMPER | | | |
| DRN. BY | DWG. NO. | REV. | |
| SJA | VC-22-1 | | |
| DATE | 3-26-01 | | |

TORQUE:

The torque required to operate a control damper is the greatest torque value that the damper will see in operation. The table below gives torque values for velocity, pressure and seals. The torque required for a damper without seals is the torque due to velocity or pressure, whichever is greater. The torque required for a damper with seals is the torque due to velocity, pressure, or seals, whichever is greater. The values in the chart below are based on 3000 fpm and 2 inches wg.

| VC-22 | | | | | | | | | |
|--------|----------|--------|----|----|----|----|----|----|----|
| TORQUE | | DIA. | 6 | 8 | 10 | 12 | 14 | 16 | 18 |
| | Velocity | In-lbs | 10 | 10 | 10 | 10 | 18 | 25 | 35 |
| | Pressure | In-lbs | 10 | 10 | 10 | 10 | 10 | 10 | 10 |
| | Seal | In-lbs | 10 | 10 | 10 | 10 | 14 | 18 | 25 |

PRESSURE DROP: TYPICAL PERFORMANCE CURVE



Tested per AMCA Standard 500;
Figure 5.3 (in-duct mount)
Size tested: 18" diameter

LEAKAGE:

Quantities are derived from tests performed in accordance with AMCA Standard 500. The values shown in the chart are stated in SCFM. For lower leakages, consult our representative or factory customer service department prior to selection.

| LEAKAGE IN SCFM | | | | |
|--------------------|---------------------|-----------|------------------|-----------|
| DAMPER DIAMETER | VC-22 WITHOUT SEALS | | VC-22 WITH SEALS | |
| | PRESSURE | | PRESSURE | |
| | 1 in. wg. | 2 in. wg. | 1 in. wg. | 2 in. wg. |
| 6 | 110 | 155 | 8 | 12 |
| 8 | 145 | 205 | 9 | 13 |
| 10 | 180 | 255 | 9 | 13 |
| 12 | 215 | 305 | 10 | 15 |
| 14 | 250 | 355 | 10 | 15 |
| 16 | 285 | 405 | 11 | 16 |
| 18 | 325 | 460 | 12 | 17 |