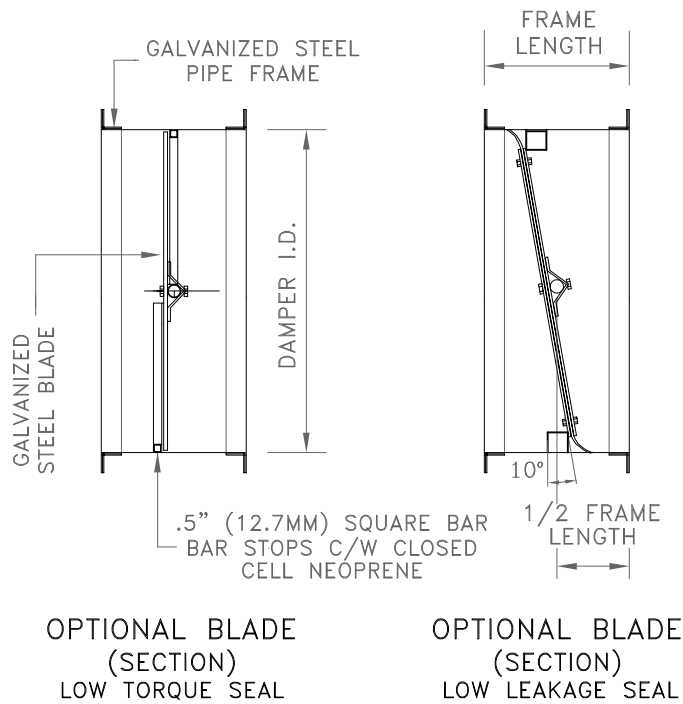


SIDE VIEW

END VIEW



OPTIONAL BLADE (SECTION) LOW TORQUE SEAL

OPTIONAL BLADE (SECTION) LOW LEAKAGE SEAL



COMMERCIAL ROUND FLANGED CONTROL DAMPER PBS-FR

STANDARD SPECIFICATIONS

- CONST. - GALVANIZED STEEL PIPE FRAME, SPOT WELDED JOINT, C/W FLANGES
- FRAME - ROLLED GALVANIZED STEEL, SEE SIZE/MATERIAL CHART
- FLANGES - ROLLED ANGLE FLANGES, STITCH WELDED, SEE SIZE/MATERIAL CHART
- BLADE - GALVANIZED STEEL SHEET, OR AS PER OPTIONS BELOW, SEE SIZE/MATERIAL CHART
- SEALS - NONE, OR AS PER OPTIONS BELOW
- SHAFT - C.D. PLATED STEEL, SEE SIZE/MATERIAL CHART
4" (101.6MM) FOR ONE ACTUATOR
8" (203.2M) FOR TWO ACTUATORS
- BEARINGS - PRESSED IN OILITE BUSHINGS, SEE SIZE/MATERIAL CHART
- MOTOR MT. - 12 GA. GALVANIZED STEEL BRACKET
- FINISH - MILL GALVANIZED
- SIZE - MINIMUM 6" (152.4MM) DIA.
MAXIMUM 48" (1219.2MM) DIA.

OPTIONS

- CONST. ALUMINUM (PBA-FR)
 STAINLESS STEEL (PBSS-FR)
- FLANGE HOLES PLEASE SPECIFY SIZE OF HOLES, NUMBER OF HOLES AND DIAMETER OF CENTER LINES
- BEARINGS NYLON BUSHINGS
 STAINLESS STEEL BUSHINGS
 PRESSED IN BALL BEARINGS
- SEALS LOW TORQUE SEAL - CLOSED CELL NEOPRENE (-50° F. - 250° F.)
 LOW LEAKAGE SANDWICH TYPE SEAL NEOPRENE SHEET (-50° F. TO +250° F.)
 SILICONE (-60° F. TO +450° F.)
- CONTROLS - HAND QUADRANT, MOTORIZED ACTUATORS

TECHNICAL NOTES

- MAX. RECOMMENDED VEL. - SEE MAXIMUM SYSTEM CHART
- MAX. STATIC PRESSURE - SEE MAXIMUM SYSTEM CHART
- LEAKAGE - SEE AIR LEAKAGE CHART
- TORQUE - SEE TORQUE/FREE AREA CHART

THIS DAMPER IS MANUFACTURED TO INSIDE DIMENSIONS.

* FOR MORE INFORMATION, CONTACT OUR FACTORY *

NOTES

APPROVAL

DATE:
PROJECT:
ENGINEER:
CUSTOMER:
DISTRIBUTOR:

PBS-FR

MAXIMUM SYSTEM CHART

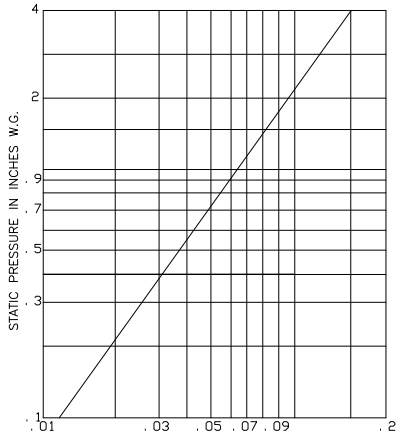
| DAMPER I.D. DIAMETER | MAXIMUM SYSTEM PRESSURE | MAXIMUM SYSTEM VELOCITY |
|----------------------|-------------------------|-------------------------|
| 6" | 10" W.G. | 2500 F.P.M. |
| 12" | 8" W.G. | 2200 F.P.M. |
| 24" | 6" W.G. | 2000 F.P.M. |
| 36" | 4" W.G. | 2000 F.P.M. |
| 48" | 4" W.G. | 2000 F.P.M. |



**COMMERCIAL
ROUND FLANGED
CONTROL DAMPER
PBS-FR**

SIZE/MATERIAL CHART

| INSIDE DIAMETER | | PIPE FRAME | FLANGE | BLADE THICKNESS (OR EQUAL) | SHAFT & BEARING DIAMETER |
|-----------------|---------|----------------------------------|---------------|----------------------------|--------------------------|
| ABOVE | THROUGH | LOW TORQUE PIPE FRAME LENGTH/GA. | | | |
| 6.00" | 8.00" | 12" X 24 GA. | 1.5" X 0.125" | 24 GA. | 0.50" |
| 8.75" | 12.00" | 12" X 22 GA. | 1.5" X 0.125" | 22 GA. | 0.50" |
| 12.75" | 14.00" | 12" X 22 GA. | 1.5" X 0.125" | 22 GA. | 0.50" |
| 15.00" | 24.00" | 12" X 20 GA. | 1.5" X 0.125" | 20 GA. | 0.75" |
| 25.00" | 32.00" | 12" X 18 GA. | 2.0" X 0.188" | 18 GA. | 0.75" |
| 33.00" | 44.00" | 12" X 16 GA. | 2.0" X 0.188" | 18 GA. | 1.00" |
| 45.00" | 48.00" | 12" X 16 GA. | 2.0" X 0.250" | 18 GA. | 1.00" |

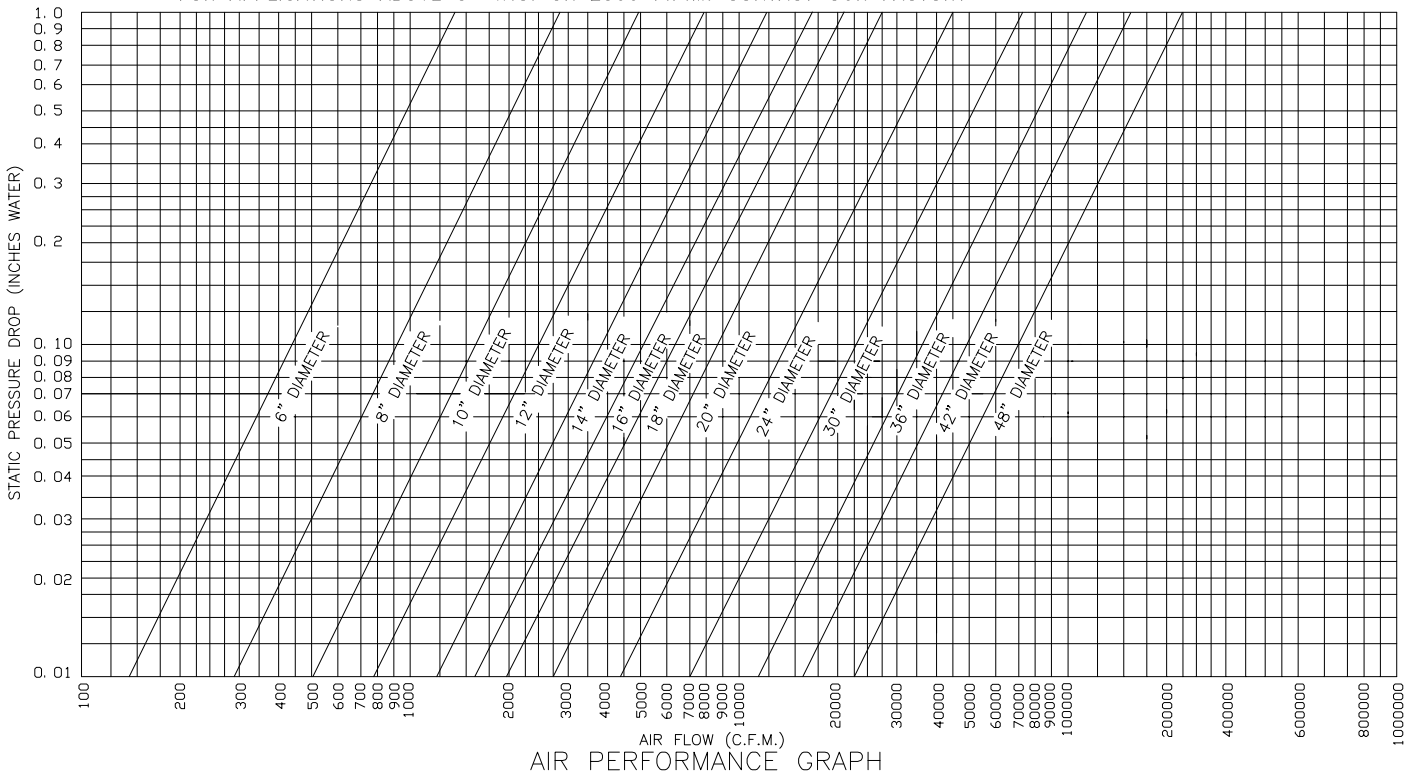


AIR LEAKAGE CHART
STANDARD AIR - 0.075 LBS

TORQUE/FREE AREA CHART

| MIN. IN/LBS TORQUE REQUIRED TO OPERATE PBS-FR DAMPERS WITH LOW LEAKAGE SEALS | | | | | | | | | | | | | |
|--|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| DIA. SIZE | 6" | 8" | 10" | 12" | 14" | 16" | 18" | 20" | 24" | 30" | 36" | 42" | 48" |
| TORQUE | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 130 | 160 | 190 | 220 | 250 |
| FREE AREA (SQUARE FEET) | | | | | | | | | | | | | |
| LOW TORQUE | 0.12 | 0.24 | 0.41 | 0.62 | 0.88 | 1.15 | 1.49 | 1.87 | 2.76 | 4.43 | 6.43 | 8.88 | 11.72 |
| LOW LEAKAGE | 0.18 | 0.32 | 0.51 | 0.74 | 1.02 | 1.31 | 1.67 | 2.08 | 3.02 | 4.75 | 6.82 | 9.32 | 12.23 |

- TORQUE FIGURES ABOVE APPLY TO APPLICATIONS UNDER 2" W.G. OR 1000 F.P.M.
- FOR APPLICATIONS BETWEEN 2" AND 3" W.G. OR 1000 AND 2500 F.P.M. MULTIPLY TORQUE VALUE BY 1.5
- FOR APPLICATIONS ABOVE 3" W.G. OR 2500 F.P.M. CONTACT OUR FACTORY



THE INFORMATION CONTAINED ON THIS DATA SHEET REMAINS THE PROPERTY OF WESTERN VENTILATION PRODUCTS LTD. AND IS PROTECTED BY COYPRIGHT. WESTVENT AIR PERFORMANCE RATINGS SHOWN ARE BASED ON TESTS MADE BY TECHNICIANS IN OUR TEST LABORATORY.