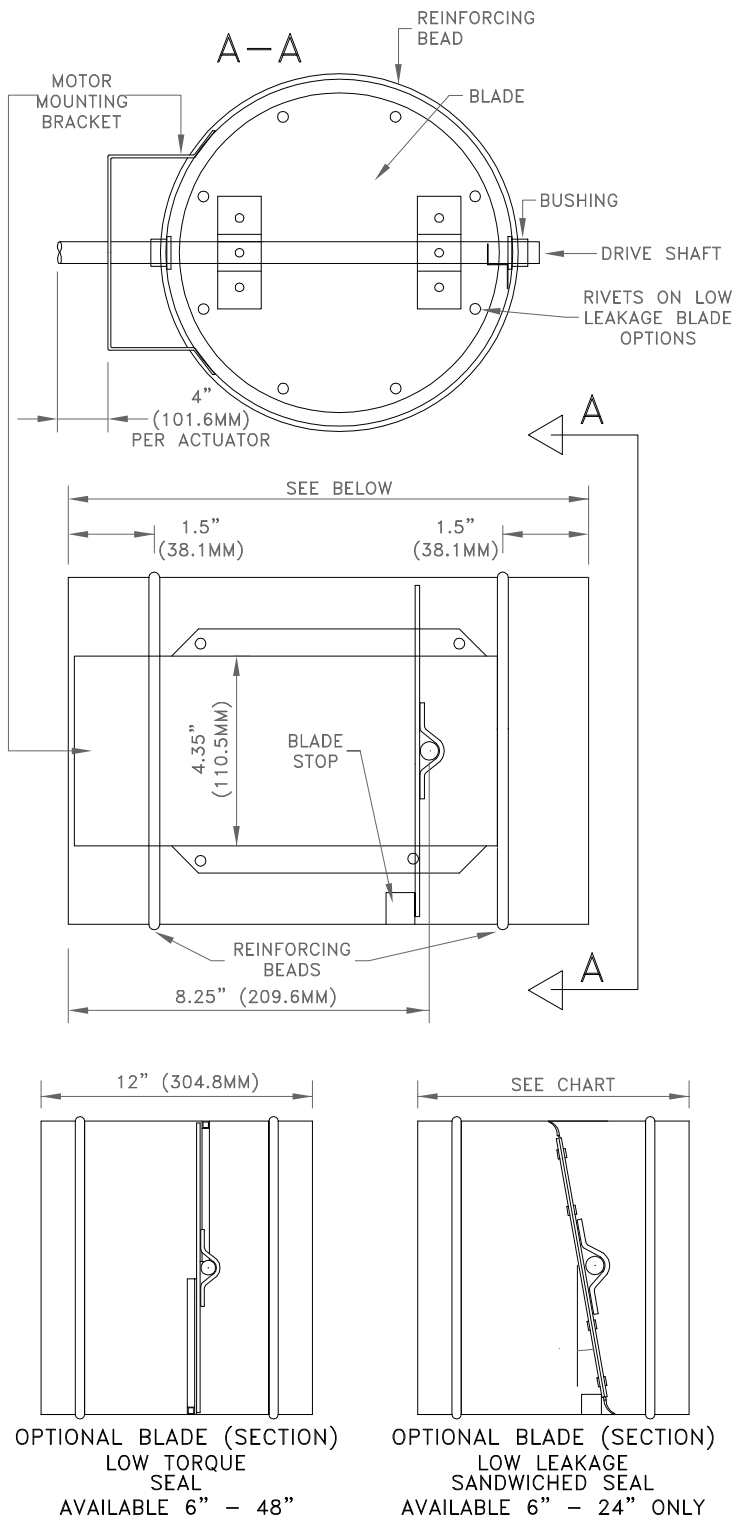




COMMERCIAL ROUND CONTROL DAMPER PBS-R



STANDARD SPECIFICATIONS

- CONST. - GALVANIZED STEEL PIPE FRAME, SPOT WELDED JOINT
- FRAME - ROLLED GALVANIZED STEEL, BEADED, SEE SIZE/MATERIAL CHART
- BLADE - GALVANIZED STEEL SHEET, OR AS PER OPTIONS BELOW, SEE SIZE/MATERIAL CHART
- SEALS - NONE, OR AS PER OPTIONS BELOW
- DRIVE SHAFT - C.R. PLATED STEEL, SEE SIZE/MATERIAL CHART
4" (101.6MM) FOR ONE ACTUATOR
8" (203.2MM) FOR TWO ACTUATORS
- BEARINGS - PRESSED IN OILITE BRONZE BUSHINGS
- MOTOR MT. - 18 GA. GALVANIZED STEEL BRACKET
- FINISH - MILL GALVANIZED
- SIZE - MINIMUM 6" (152.4MM) DIA.
MAXIMUM 48" (1219.2MM) DIA.
SEE NOTES BELOW ON SECTIONS

OPTIONS

- CONST. ALUMINUM (PBA-R)
- STAINLESS STEEL (PBSS-R)
- BEARINGS NYLON BUSHINGS
- S.S. BUSHINGS
- SEALS LOW TORQUE SEAL - CLOSED CELL NEOPRENE (-50° F. TO +250° F.)
- LOW LEAKAGE SANDWICH TYPE SEAL NEOPRENE SHEET (-50° F. TO +250° F.)
- SILICONE (-60° F. TO +450° F.)
- CONTROLS MATERIAL HAND QUADRANT, MOTORIZED ACTUATORS
304 & 316 STAINLESS, SPECIAL ORDER

TECHNICAL NOTES

- MAX. REC. VELOCITY - SEE MAXIMUM SYSTEM CHART
- MAX. REC. SYSTEM PRESSURE - SEE MAXIMUM SYSTEM CHART
- LEAKAGE - SEE AIR LEAKAGE CHART
- TORQUE - SEE TORQUE/FREE AREA CHART

DAMPER IS MANUFACTURED 1/8" (3.18MM) SMALLER THAN ORDERED SIZE UNLESS EXACT DIMENSIONS ARE STATED.

* FOR MORE INFORMATION, CONTACT OUR FACTORY *

NOTES

APPROVAL

DATE:
PROJECT:
ENGINEER:
CUSTOMER:
DISTRIBUTOR:

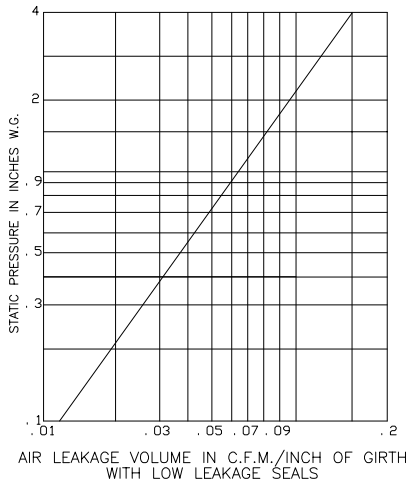
PBS-R

MAXIMUM SYSTEM CHART

| DAMPER O.D. DIAMETER | MAXIMUM SYSTEM PRESSURE | MAXIMUM SYSTEM VELOCITY |
|----------------------|-------------------------|-------------------------|
| 6" | 10" W.G. | 2000 F.P.M. |
| 12" | 8" W.G. | 2000 F.P.M. |
| 24" | 6" W.G. | 2000 F.P.M. |



**COMMERCIAL
ROUND CONTROL DAMPER
PBS-R**



AIR LEAKAGE CHART
STANDARD AIR - 0.075 LBS

SIZE/MATERIAL CHART FOR LOW TORQUE & LOW LEAKAGE TO 24"

| NOMINAL OUTSIDE DIAMETER | | LOW TORQUE PIPE FRAME LENGTH/GA. | LOW LEAKAGE PIPE FRAME LENGTH/GA. | BLADE THICKNESS (OR EQUAL) | SHAFT & BEARING DIAMETER |
|--------------------------|---------|----------------------------------|-----------------------------------|----------------------------|--------------------------|
| ABOVE | THROUGH | | | | |
| 6.00" | 8.00" | 12" X 24 GA. | 12" X 24 GA. | 24 GA. | 0.50" |
| 8.75" | 12.00" | 12" X 22 GA. | 12" X 22 GA. | 22 GA. | 0.50" |
| 12.75" | 14.00" | 12" X 20 GA. | 16" X 20 GA. | 22 GA. | 0.50" |
| 15.00" | 24.00" | 12" X 20 GA. | 16" X 20 GA. | 20 GA. | 0.75" |

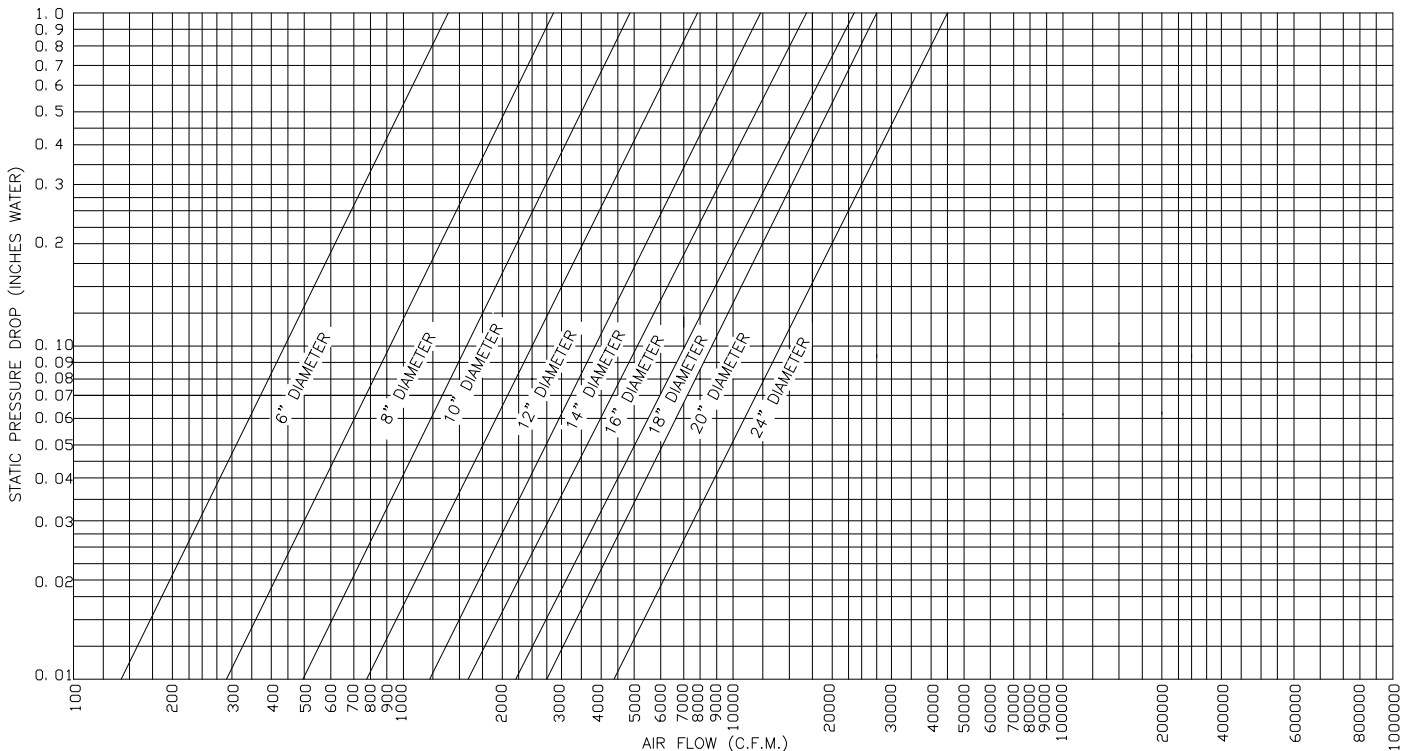
LOW TORQUE ONLY 25" - 48"

| | | | | | |
|--------|--------|--------------|-----|--------|-------|
| 25.00" | 30.00" | 12" X 18 GA. | N/A | 18 GA. | 0.75" |
| 31.00" | 36.00" | 12" X 16 GA. | | 16 GA. | 0.75" |
| 37.00" | 42.00" | 12" X 16 GA. | | 12 GA. | 0.75" |
| 43.00" | 48.00" | 12" X 16 GA. | | 10 GA. | 1.00" |

TORQUE/FREE AREA CHART

| MIN. IN/LBS TORQUE REQUIRED TO OPERATE PBS-R DAMPERS WITH LOW LEAKAGE SEALS | | | | | | | | | | | |
|---|-------------|------|------|------|------|------|------|------|------|------|------|
| | DIA. SIZE | 6" | 8" | 10" | 12" | 14" | 16" | 18" | 20" | 24" | OVER |
| | TORQUE | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 130 | N/A |
| FREE AREA (SQUARE FEET) | LOW TORQUE | 0.12 | 0.24 | 0.41 | 0.62 | 0.88 | 1.15 | 1.49 | 1.87 | 2.76 | N/A |
| | LOW LEAKAGE | 0.18 | 0.32 | 0.51 | 0.74 | 1.02 | 1.31 | 1.67 | 2.08 | 3.02 | N/A |

- 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 2000 F.P.M. MULTIPLY TORQUE VALUE BY 1.5
- FOR APPLICATIONS ABOVE 3" W.G. OR 2000 F.P.M. CONTACT FACTORY



AIR PERFORMANCE GRAPH

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