



INDUSTRIAL ROUND FLANGED CONTROL DAMPER PBS-FR-LD

STANDARD SPECIFICATIONS

- CONST. - GALVANIZED STEEL PIPE FRAME, C/W FLANGES. WELDED ASSEMBLY
- FRAME - ROLLED GALVANIZED STEEL, SEE SIZE/MATERIAL CHART
- FLANGES - ROLLED ANGLE FLANGES, STITCHED WELDED, SEE SIZE/MATERIAL CHART
- BLADE - GALVANIZED STEEL PLATE OR AS PER OPTIONS BELOW, SEE SIZE/MATERIAL CHART
- SEALS SHAFT - NONE, OR AS PER OPTIONS BELOW
- SHAFT - C.D. PLATED STEEL
- 4" (101.6MM) FOR ONE ACTUATOR
- 8" (203.2MM) FOR TWO ACTUATORS
- BEARINGS - PRESSED IN STAINLESS STEEL 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

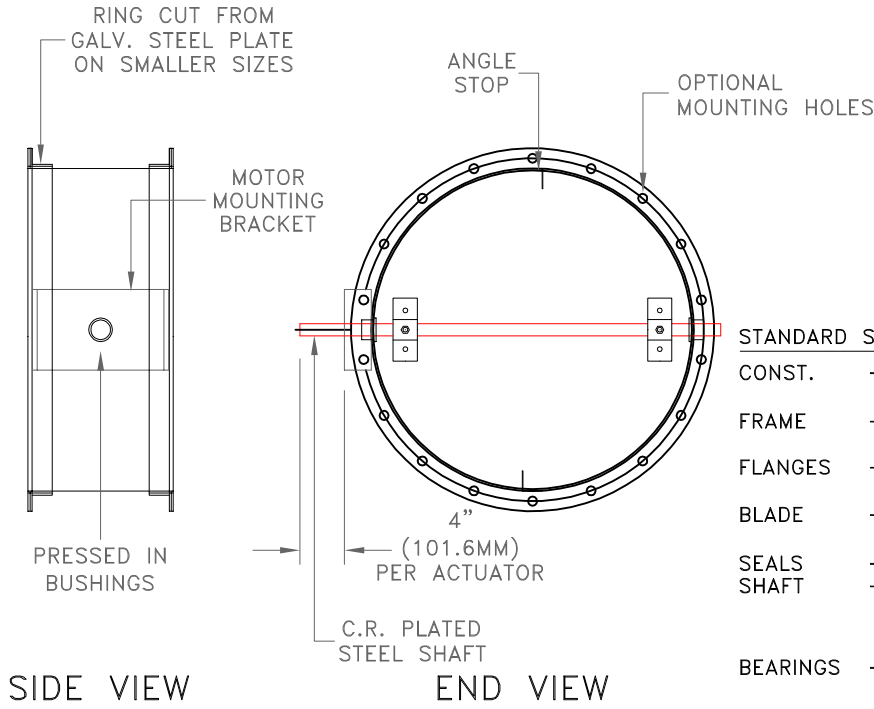
- CONST. ALUMINUM (PBA-FR-LD)
- STAINLESS STEEL (PBSS-FR-LD)
- FLANGE HOLES PLEASE SPECIFY SIZE OF HOLES, NUMBER OF HOLES AND DIAMETER OF CENTER LINES
- BEARINGS NYLON BUSHINGS
- OILITE BRONZE BUSHINGS
- PRESSED IN BALL BEARINGS
- SEALS LOW TORQUE SEAL - CLOSED CELL NEOPRENE (-50° F. - 250° F.)
- LOW 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

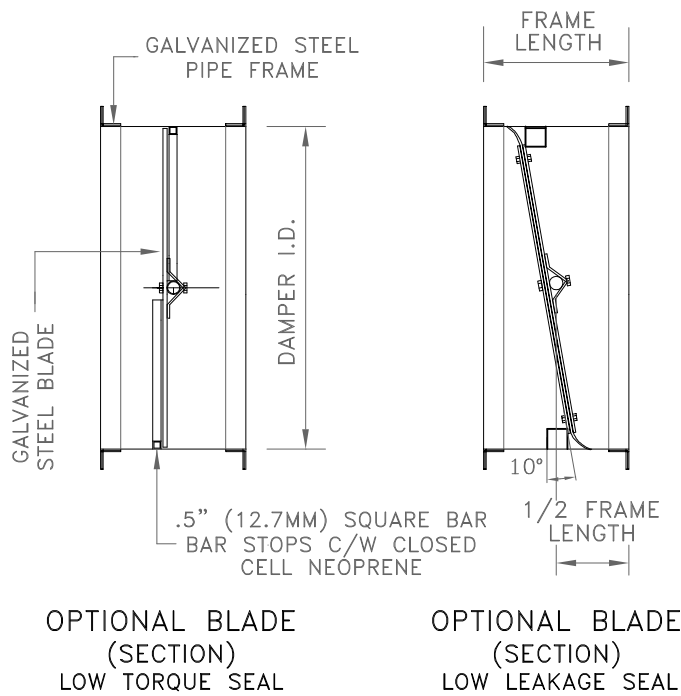
THIS DAMPER IS MANUFACTURED TO INSIDE DIMENSIONS.

* FOR MORE INFORMATION, CONTACT OUR FACTORY *



SIDE VIEW

END VIEW



OPTIONAL BLADE
(SECTION)
LOW TORQUE SEAL

OPTIONAL BLADE
(SECTION)
LOW LEAKAGE SEAL

NOTES

APPROVAL

DATE:
PROJECT:
ENGINEER:
CUSTOMER:
DISTRIBUTOR:

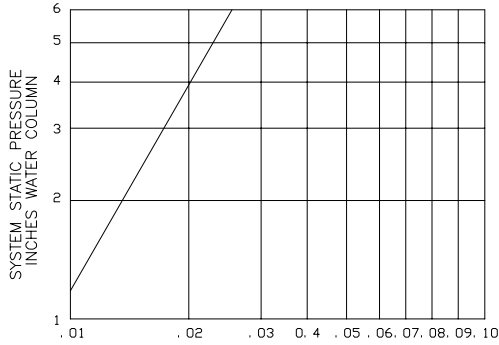
PBS-FR-LD

MAXIMUM SYSTEM CHART

DAMPER I.D. DIAMETER	MAXIMUM SYSTEM PRESSURE	MAXIMUM SYSTEM VELOCITY
6"	10" W.G.	4000 F.P.M.
12"	10" W.G.	4000 F.P.M.
24"	8" W.G.	4000 F.P.M.
36"	8" W.G.	3500 F.P.M.
48"	8" W.G.	3000 F.P.M.



INDUSTRIAL ROUND FLANGED CONTROL DAMPER PBS-FR-LD



AIR LEAKAGE CHART
STANDARD AIR - 0.075 LBS

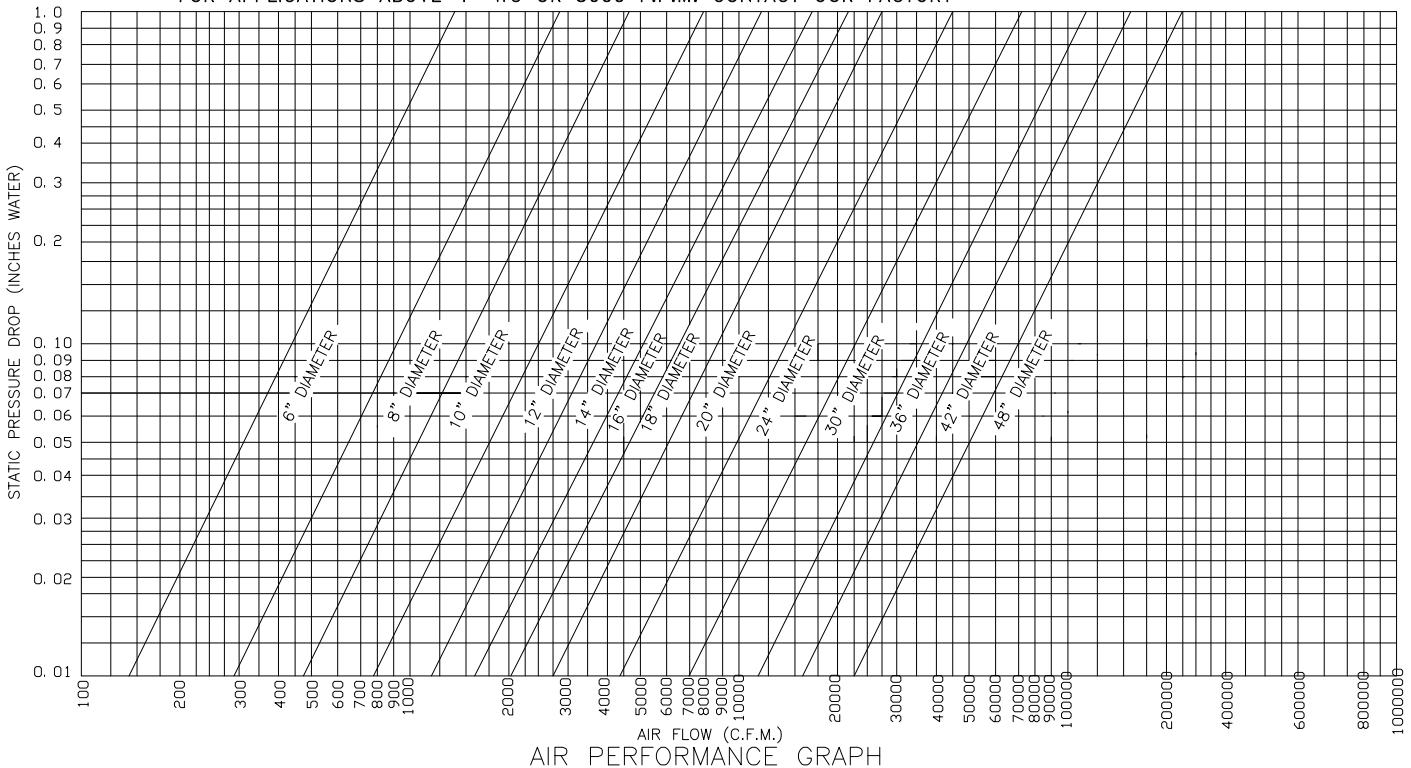
SIZE/MATERIAL CHART

INSIDE DIAMETER		PIPE FRAME		BLADE THICKNESS (OR EQUAL)	SHAFT & BEARING DIAMETER
ABOVE	THROUGH	LENGTH/GA.	FLANGES		
6.00"	8.00"	12" X 12 GA.	1.5" X 0.125"	12 GA.	0.50"
8.75"	12.00"	12" X 12 GA.	1.5" X 0.125"	12 GA.	0.50"
12.75"	14.00"	12" X 10 GA.	1.5" X 0.125"	10 GA.	0.75"
15.00"	24.00"	12" X 10 GA.	1.5" X 0.125"	10 GA.	0.75"
25.00"	32.00"	12" X 10 GA.	2.0" X 0.188"	10 GA.	0.75"
33.00"	44.00"	12" X 10 GA.	2.0" X 0.188"	10 GA.	1.00"
45.00"	48.00"	12" X 10 GA.	2.0" X 0.250"	10 GA.	1.00"

TORQUE/FREE AREA CHART

MIN. IN/LBS TORQUE REQUIRED TO OPERATE PBS-FR-LD 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	0.10	0.22	0.36	0.56	0.81	1.10	1.43	1.80	2.68	4.33	6.31	8.74	11.39
LOW LEAKAGE	0.15	0.29	0.46	0.68	0.95	1.26	1.61	2.01	2.93	4.65	6.69	9.18	11.89

- 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 BETWEEN 3" AND 4" W.G. OR 2500 AND 3000 F.P.M. MULTIPLY TORQUE VALUE BY 2.0
- FOR APPLICATIONS ABOVE 4" WG OR 3000 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 COPYRIGHT. WESTVENT AIR PERFORMANCE RATINGS SHOWN ARE BASED ON TESTS MADE BY TECHNICIANS IN OUR TEST LABORATORY.