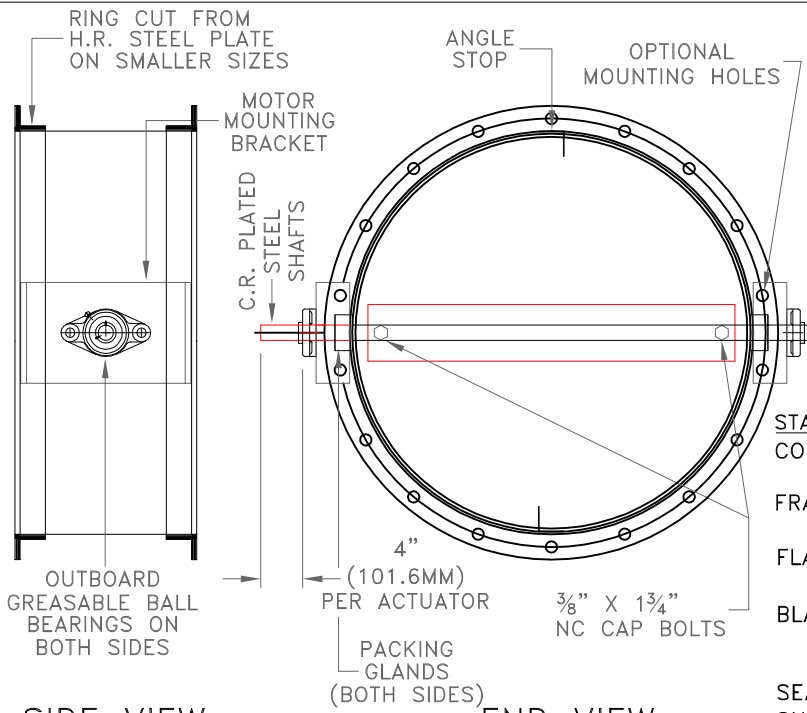


westvent®

INDUSTRIAL HIGH PRESSURE ROUND FLANGED CONTROL DAMPER PBS-FR-HD



STANDARD SPECIFICATIONS

- CONST. - H.R. STEEL PIPE FRAME C/W FLANGES WELDED ASSEMBLY
- FRAME - ROLLED H.R. STEEL, SEE SIZE/MATERIAL CHART
- FLANGES - ROLLED ANGLE FLANGES, STITCH WELDED, SEE SIZE/MATERIAL CHART
- BLADE - H.R. STEEL PLATE, OR AS PER OPTIONS BELOW, LARGER SIZES MAY HAVE EXTRA BRACING. SEE SIZE/MATERIAL CHART
- SEALS - NONE, OR AS PER OPTIONS BELOW
- SHAFT - C.D. PLATED STEEL, C/W PACKING GLANDS, SEE SIZE/MATERIAL CHART
- 4" (101.6MM) FOR ONE ACTUATOR
- 8" (203.2MM) FOR TWO ACTUATORS
- 12" (304.8MM) FOR THREE ACTUATORS
- BEARINGS - GREASABLE HEAVY DUTY BALL BEARINGS OUTBOARD MOUNTED
- MOTOR MT. - .250" H.R. STEEL BRACKET
- FINISH - EPOXY ENAMEL
- SIZE - MINIMUM 6" (152.4MM) DIA. MAXIMUM 60" (1524MM) DIA.

OPTIONS

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

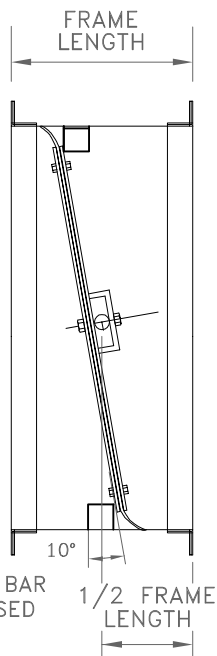
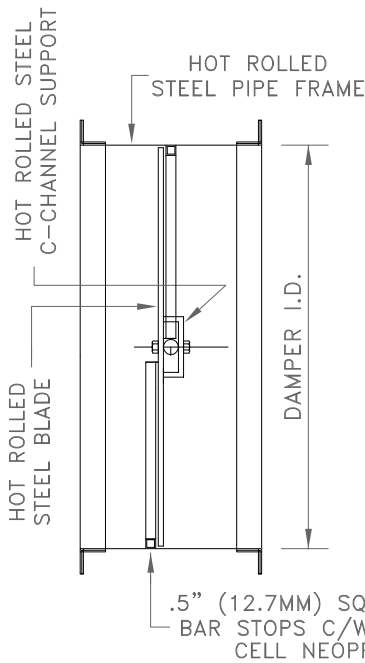
TECHNICAL NOTES

- MAX. RECOMMENDED VEL. - SEE MAX. SYSTEM CHART
- MAX. STATIC PRESSURE - SEE MAX. 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

THIS DRAWING REPLACES THE PBS-HPV

DATE:
PROJECT:
ENGINEER:
CUSTOMER:
DISTRIBUTOR:

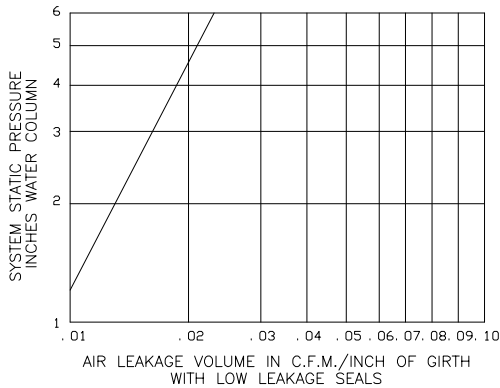
PBS-FR-HD

MAXIMUM SYSTEM CHART

DAMPER I.D. DIAMETER	MAXIMUM SYSTEM PRESSURE	MAXIMUM SYSTEM VELOCITY
6"	18" W.G.	6500 F.P.M.
12"	18" W.G.	6500 F.P.M.
24"	18" W.G.	6500 F.P.M.
36"	16" W.G.	6500 F.P.M.
48"	15" W.G.	6500 F.P.M.
60"	15" W.G.	6000 F.P.M.



INDUSTRIAL HIGH PRESSURE ROUND FLANGED CONTROL DAMPER PBS-FR-HD



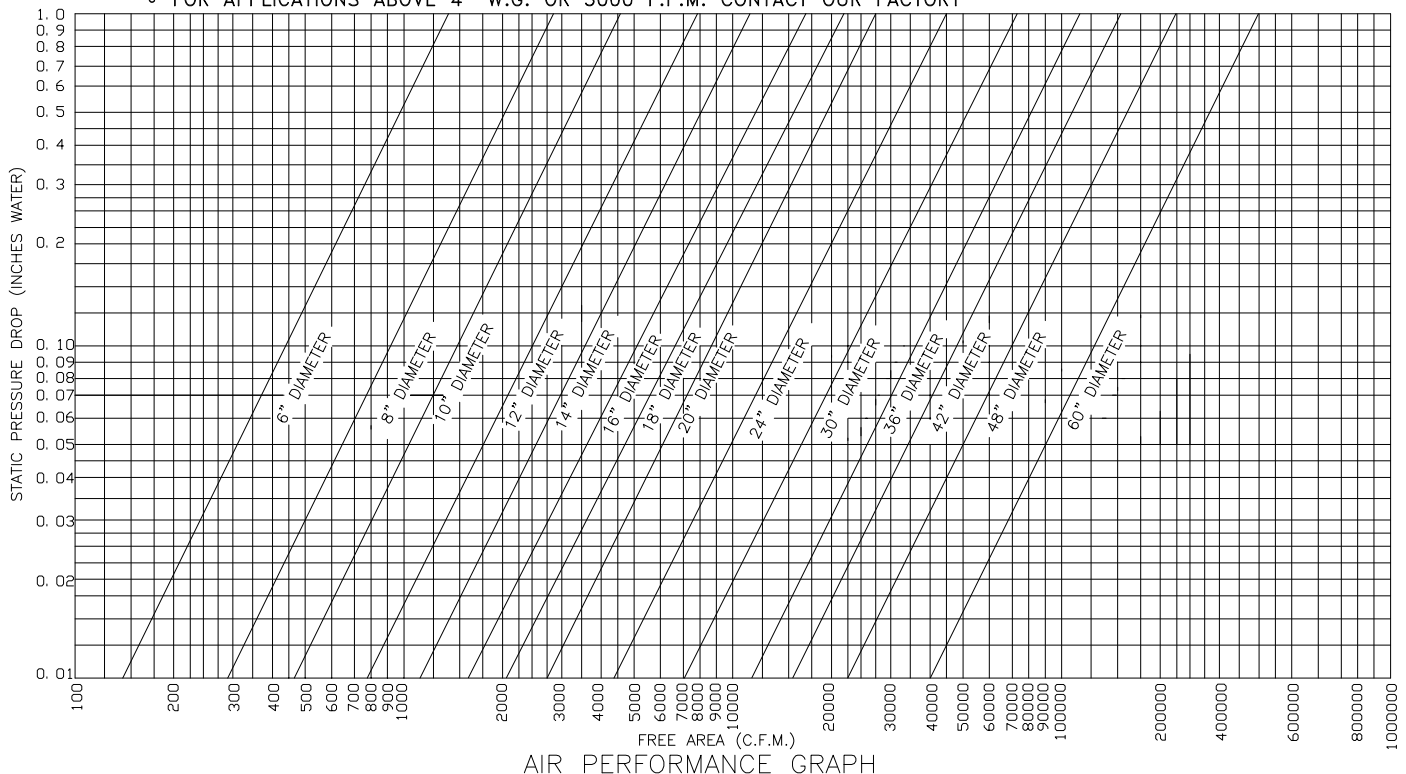
SIZE/MATERIAL CHART

INSIDE DIAMETER		PIPE FRAME		BLADE THICKNESS (OR EQUAL)	SHAFT & BEARING DIAMETER
ABOVE	THROUGH	LENGTH/GA.	FLANGES		
6.00"	8.00"	12" X 0.125"	1.5" X 0.125"	0.125"	0.50"
8.75"	12.00"	12" X 0.125"	1.5" X 0.125"	0.125"	0.75"
12.75"	14.00"	12" X 0.125"	1.5" X 0.125"	0.250"	0.75"
15.00"	24.00"	12" X 0.125"	1.5" X 0.125"	0.250"	0.75"
25.00"	32.00"	12" X 0.250"	2.0" X 0.250"	0.250"	0.75"
33.00"	44.00"	12" X 0.250"	2.0" X 0.250"	0.250"	1.00"
45.00"	48.00"	12" X 0.250"	2.0" X 0.313"	0.250"	1.50"
49.00"	60.00"	12" X 0.313"	2.5" X 0.313"	0.375"	2.00"

TORQUE/FREE AREA CHART

MIN. IN/LBS TORQUE REQUIRED TO OPERATE PBS-FR-HD DAMPERS WITH LOW LEAKAGE SEALS														
DIA. SIZE	6"	8"	10"	12"	14"	16"	18"	20"	24"	30"	36"	42"	48"	60"
TORQUE	40	50	60	70	80	90	100	110	130	160	190	220	250	290
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	2.95	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" W.G. 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 COYPRIGHT. WESTVENT AIR PERFORMANCE RATINGS SHOWN ARE BASED ON TESTS MADE BY TECHNICIANS IN OUR TEST LABORATORY.