

**INDUSTRIAL SWARTWOUT FIBERGLASS SERIES
MODEL 911
FIBERGLASS ROUND BALANCING DAMPER**

STANDARD CONSTRUCTION

FRAME

Fiberglass channel, Vinyl Ester Resin. See table below for dimensions.

BLADE

Fiberglass, Vinyl Ester Resin.

AXLE

Pultruded fiberglass, Vinyl Ester Resin. See table below for diameter.

BEARINGS

Molded PTFE.

CONTROL SHAFT

Axle extends 6" (152) beyond frame. Complete with SS hand quadrant.

SIZES

4", 6", 7", 8", 9", 10", 12", 14", 16", 18", 20", 22", 24", 26", 28", 30", 32", 34", 36", 42", 48". (102, 152, 178, 203, 229, 254, 305, 356, 406, 457, 508, 559, 610, 660, 711, 762, 813, 864, 914, 1067, 1219.)

MAXIMUM TEMPERATURE

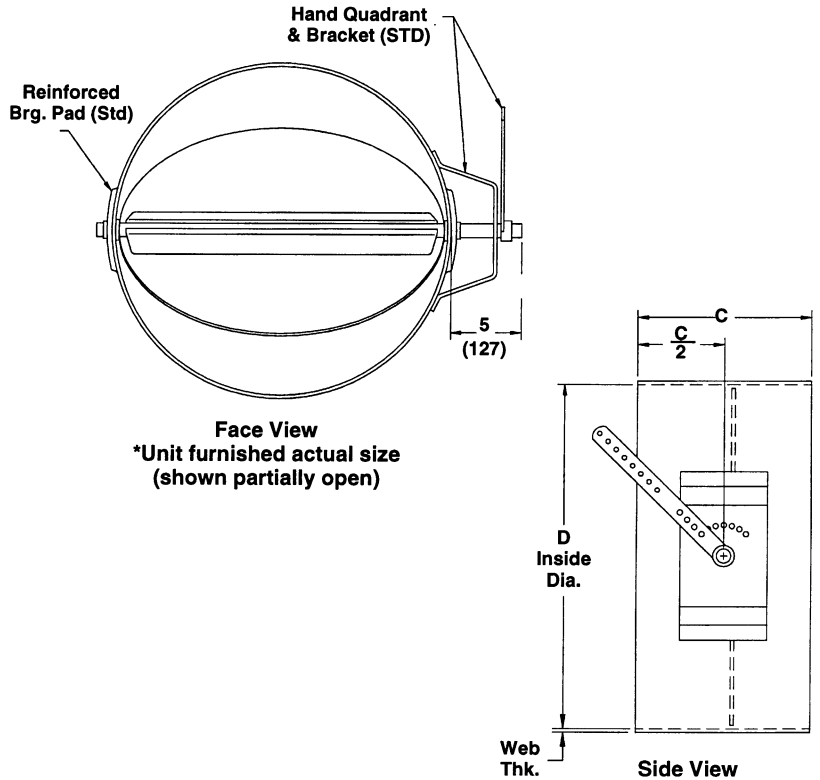
200°F (94°C).

MAXIMUM SYSTEM PRESSURE

5" w.g.

MAXIMUM VELOCITY

2000 fpm.



Dimensions in parenthesis () indicate millimeters.

NOTES

1. Crank lever and hand quadrant constructed of stainless steel/FRP brackets.
2. Consult brochure FOVB-495 for chemical resistance chart.
3. Construction based on voluntary standard PS-1869.

VARIATIONS

Additional variations to those listed in table are available. Consult Ruskin for pricing.

- Other resins.
- Exterior coatings.

"D" Inside Diameter	"C" Dimension	WEB THK.	BLADE THK.
4 (102)	6	1/8	1/4
6 thru 9 (152 - 248)	*	1/8	1/4
10 (254)	10	1/8	1/4
12 thru 20 (305 - 508)	12	1/8	1/4
22 thru 36 (559 - 914)	12	3/16	1/4
42 (1067)	12	1/4	1/2
48 (1219)	12	1/4	1/2

*C dimension same as D dimension on units 6-9 diameter.

NOTE: All options at additional cost.

FRAME	BLADE	AXLES	BEARINGS	SEALS (OPT)	OPTIONS
FIBERGLASS - (SEE SCHEDULE)	FIBERGLASS W/ MOLDED AXLE SADDLE	FIBERGLASS ROD (SEE SCHEDULE)	MOLDED PTFE W/ GRAPHITE	VITON O-RING SHAFT SEAL	EXTERNAL FINISHES

QTY.	DIMENSIONS		TAG
	D	C	

911 SUGGESTED SPECIFICATION

Furnish and install, at locations shown on plans, or in accordance with schedules, center pivoted single blade fiberglass round control dampers. Damper frame shall have a resin rich corrosion barrier a minimum of 100 mils thick on the service side. The structural layers shall be applied after exotherm of the corrosion liner is complete and shall consist of alternating layers of chopped strand mat to conform to ASME/ANSI RTP1-1989, Mandatory Appendix M-1. The glass to resin ratio shall be minimum of 32-35% glass to a maximum of 65-67% resin, documented to ASTM-2584-68. Lamination of the frame web will include a minimum $\frac{5}{8}$ " thick build up at the axle location. The outer surface of the finished laminate shall comply with ASME/ANSI RTP1-1989, paragraph M1A-224. To minimize ultraviolet degradation of the laminate, certain U.V. absorbers, or screening agents, must be applied.

Damper blade shall be constructed of the same material as the damper frame. A surfacing veil allowing a resin rich coating, minimum 100 mils thick, shall be applied to both service sides of

blades. Laminate construction shall conform to PS-15-69 and ASME/ANSI RTP1-1989.

A full length pultruded fiberglass axle shall be supplied. The axle shall be constructed of a vinyl ester based material, combined with continuous strand roving, and complete with surfacing veil. Axle construction shall conform to ASTM D4385-84a.

Fiberglass dampers shall have been tested for pressure drop in accordance with AMCA Standard 500 in an AMCA registered laboratory. Blade deflection shall not exceed $\frac{1}{180}$ of the span at 10" w.g.

Submittal information shall include leakage and performance data documentation.

Manufacturer shall provide sample damper for construction review and approval.

Dampers shall be Ruskin Swartwout Series model 911.

PRESSURE LIMITATIONS

Damper Dia.	Max. System Pressure	Max. System Velocity
48" (1219)	5"	2000 fpm
36" (914)	5"	2000 fpm
24" (610)	5"	2000 fpm
12" (305)	5"	2000 fpm

Dampers may tolerate higher pressure and velocities than those indicated here. Conservative ratings are presented intentionally in an effort to avoid misapplication. Consult Ruskin or your Ruskin representative when damper is to be applied in conditions exceeding recommended maximums.

