



Industrial Fiberglass Specialties, Inc.

521 Kiser Street
Dayton, OH 45404-1641
Tel: 937-222-9000
Fax: 937-222-9020

Product Data

Heavy Duty FRP Round Air Flow Control Devices

08-03-99

Page #1 of 4

Corrosive air handling applications require both dependable equipment and controls to safely control air flow. Long lasting performance, combined with dependable mechanical operation at times when control is needed, is often difficult to obtain. Industrial Fiberglass Specialties is offering round balancing and round control dampers made of Fiberglass Reinforced Plastic (FRP) resins as a solution to that dilemma.

Constructed of reinforced corrosion resistant plastic resins or Teflon on all air contacting surfaces, these items complement any corrosion resistant air duct system with continued long-term performance and ease of installation. Available in a variety of sizes with differing end configurations, Industrial Fiberglass Specialties wants to help you in meeting your complete corrosive air handling needs.

FRP ROUND BUTTERFLY DAMPERS

As a leading manufacturer and fabricator of fiberglass reinforced plastic products for over 20 years, we have designed our butterfly damper specifically for use in most corrosive environments. These include wastewater treatment plants, pharmaceutical facilities, pulp and paper mills and chemical plants.

FRP construction provides excellent corrosion resistance in most industrial and commercial environments. Standard construction utilizes a fire retardant vinylester resin, a synthetic surfacing veil and 50 mil internal corrosion barrier. Laminate construction can be custom tailored to suit your specific application.

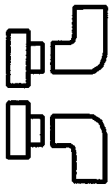
Contact the manufacturer for size availability, and pricing.

Features include:

- Excellent corrosion resistance.
- Economical, initial cost is typically lower than comparable stainless steel models, yet provides superior performance and service life.
- Strong and sturdy, yet lightweight
- Electrically non-conductive
- Thermally non-conductive
- Easy installation. Standard damper is provided with flanged ends per ASTM D-3982 and NBS PS 15-69, Table 2. Other flange drilling types can be provided. An economical option is to fabricate our damper directly into duct spools. This option is available for projects only. Eliminating two pair of flanges significantly lowers cost.

Benefits for User:

- Long term performance and service life.
- Lowers initial installed and projected maintenance costs of both new and existing air handling systems.
- Provides worry free operation in corrosive environments that may have other operational constraints as well.
- Lower total installed cost and easy replacement of units suffering exterior damage from impact or management decision to upgrade existing equipment.



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Page #2 of 4

Available Styles:

- **Model #RD or SD-7** - These types of dampers are intended to provide an economical answer to your air volume needs. It is designed without stops or seals, for volume balancing only.
- **Model #RD or SD-8** - These types of dampers are intended to control air flow through branch and trunk lines. It is provided with positive blade stops and minimum blade to shell clearances. Design and construction minimizes leakage.
- **Model #RD or SD-10** - These dampers are intended to control air flow when a positive seal and minimum leakage is required. It is well suited for use at fans, by-pass circuits and other equipment uses. It is provided with positive blade stops and a elastomeric blade seal and shaft seal. This model is certified for low leakage service.

Available Sizes:

Available Sizes				
Dia.	Shell Thk.	Flg. Thk.	Blade Thk.	Axle Dia.
06	0.125"	0.250"	0.250"	1.00"
08	0.125"	0.250"	0.250"	1.00"
10	0.125"	0.375"	0.250"	1.00"
12	0.125"	0.375"	0.250"	1.00"
14	0.125"	0.375"	0.250"	1.00"
16	0.125"	0.500"	0.250"	1.00"
18	0.125"	0.500"	0.250"	1.00"
20	0.125"	0.500"	0.250"	1.00"
24	0.188"	0.500"	0.375"	1.50"
30	0.188"	0.500"	0.375"	1.50"
36	0.188"	0.500"	0.375"	1.50"
42	0.250"	0.625"	0.500"	2.00"
48	0.250"	0.625"	0.500"	2.00"
54	0.250"	0.625"	0.500"	2.00"
60	0.250"	0.625"	0.500"	2.00"
72	0.250"	0.625"	0.500"	2.00"
84	0.312"	0.625"	0.500"	2.00"



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Page #3 of 4

Model Nomenclature:

Please specify dampers as follows:

i.e., RD-708-IS-PE = <RD> - <7> <08> - <IS> - <PE>
 A. B. C. D. E.

- A. Model RD - Round damper
Model SD - Square or rectangular damper
- B. Style 7 - Balancing damper (as specified above)
Style 8 - Branch run, close tolerance damper (as specified above)
Style 10 - Air tight seal damper (as specified above)
- C. Two digit diameter size from above table.
- D. IS - Isophthalic polyester resin
VE - Vinylester resin
FN - Furan resin
- E. PE - Plain ends
FL - Flanged ends, 25 psi duct rated
FL150 - Flanged ends, 150# ANSI rated

For example: An 8" diameter round balancing damper, made of isophthalic polyester resin, and with plain ends would be specified as: RD-708-IS-PE.

Our sales staff will be happy to assist you with model numbers and alternate configurations as your needs may dictate.

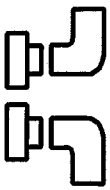
Available Operators:

Standard - Hand lever quadrant, custom fabricated using fiberglass channel and rods.

Optional - Worm gear operator by *Dynatorque*, factory installed and tested. The exterior finish is painted to match the duct. Aluminum hand wheels or chain wheels will be sized and provided as required. Several electric actuators are available. Call the factory for information.

Construction:

Shell and flange shall be filament wound per ASTM D-2310 and ASTM D-4024. Blade shall be contact molded or premium grade flat sheet manufactured by the FRP pultrusion process.



Liner laminate shall be Nexus veil followed by one ply of chopped strand mat. Structural laminate shall be alternating layers of chopped strand mat.

Resin system shall be a premium grade fire retardant vinyl ester with 3% antimony trioxide added.

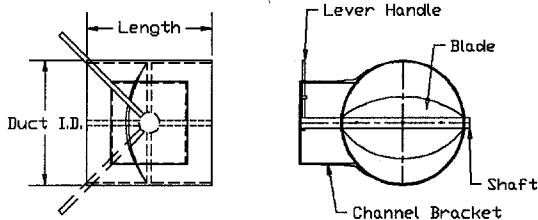
Exterior surface shall be resin rich, smooth and free of exposed glass fibers or sharp projections.

Outer surface shall be coated with a premium grade pigmented urethane coating for increased ultra violet protection and weatherability.

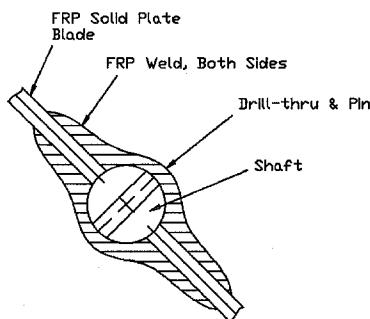
Once piece shaft shall be a premium grade pultruded fiberglass solid round rod.

Shaft bearing shall be a matched fiberglass sleeve encapsulated in fiberglass or Teflon.

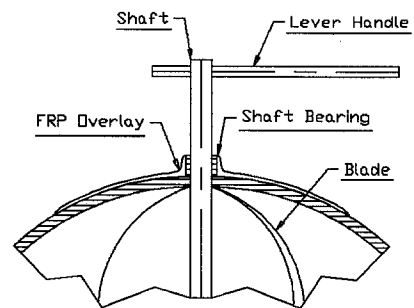
Typical Construction Details:



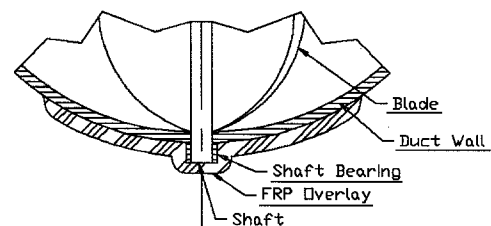
FRP Butterfly Damper



Cross-section of shaft & blade



Open Bearing Detail



Closed Bearing Detail