

Memtech Acoustics **FDS**

FREE STANDING SPRING ISOLATORS

Application

FDS spring mounts are recommended for use in isolating floor mounted sources of noise and vibration located near critically quiet areas.

FDS spring mounts are typically used to reduce the transmission of noise and vibration from low speed mechanical equipment into a building structure. Operating static deflections are available to 4” (102 mm) to compensate for long span floor structures.

FDS spring mounts are used in a wide range of applications, some requiring equipment bases in addi tion to spring isolators, and can be used to support and isolate the following equipment types: reciprocating air or refrigeration compressors, close coupled and base mounted pumps, packaged air handling and refrigera tion equipment, centrifugal fans, internal combustion en gines, and similar equipment. FDS Isolators are for use on equipment that is not subject to lateral forces such as wind.

Description

FDS Spring Vibration Isolators consist of high deflection, free-standing, unhoused, large diameter, laterally stable steel springs assembled into an upper load plate and leveling assembly. To assure stability, the spring isolators have lateral spring stiffness greater than 1.0 times the rated vertical stiffness and are designed to provide a minimum of 50% overload capacity. Springs are polyester powder coated, with a 1000-hour salt spray rating per ASTM B-117. In lighter capacities, FDS Spring Isolators have molded neoprene bottom load plate assemblies. FDS isolators have provisions for bolt ing the isolator to the structure. FDS isolators are avail able with deflections to 4” (102 mm) and with load ca pacities to 23,200 lbs. (10523 kg) as standard products. Custom isolators with higher deflection and greater load capacities are also available. FDS Spring Isola tors are highly effective for control of both high and low frequency vibration produced by reciprocating air or re frigeration compressors, pumps, packaged air handling and air conditioning equipment, centrifugal and axial fans, internal combustion engines, etc.

Specifications

Vibration isolators shall be free standing, unhoused, laterally stabile steel springs. Springs shall have a lateral stiffness greater than 1.0 times the rated vertical stiffness and shall be designed to provide a minimum 50% overload capacity.

Springs shall be assembled between top and bottom load plates. The upper load plate shall be provided with steel leveling bolts, lock nut and washer for attachment to the supported equipment. The lower load plate shall incorporate a non-skid noise isolation pad and shall have provisions for bolting the isolator to the supporting structure, as required.

Springs shall be selected to provide operating static deflections shown on the Vibration Isolation Schedule or as otherwise indicated on the project documents. Springs shall be color coded or otherwise identified to indicate load capacity.

Spring isolation mounts for floor-mounted equipment shall be Model FDS as manufactured.

Imperial Submittal Drawings

FDS-1-12/3500
FDS-1-2500/7000
FDS-1-5000/14000
FDS-2-100/1975
FDS-2-2000/4500
FDS-2-4000/9000
FDS-2-8000/18000
FDS-4-100/5800
FDS-4-2250/5800
FDS-4-5500/11600
FDS-4-11000/23200

Metric Submittal Drawings

FDS-1-12/3500(m)
FDS-1-2500/7000(m)
FDS-1-5000/14000(m)
FDS-2-100/1975(m)
FDS-2-2000/4500(m)
FDS-2-4000/9000(m)
FDS-2-8000/18000(m)
FDS-4-100/5800(m)
FDS-4-2250/5800(m)
FDS-4-5500/11600(m)
FDS-4-11000/23200(m)

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