

Open Spring Mount Type AD

50mm Static Deflection

APPLICATION

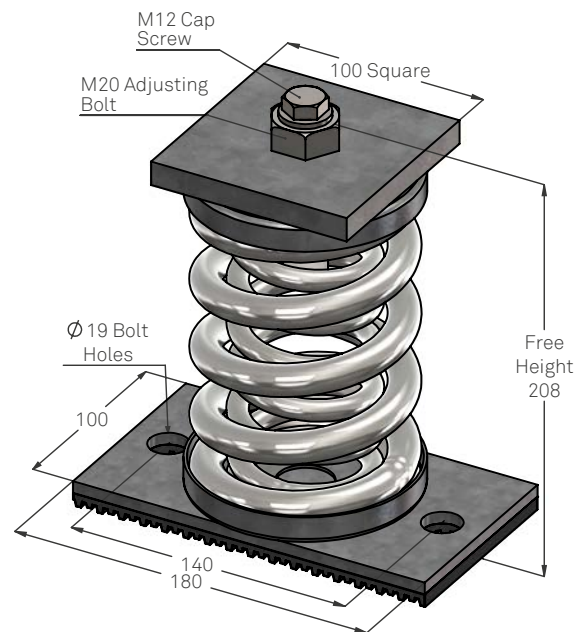
For high efficiency isolation where a rugged, medium deflection, open spring mount is required. Typically used on fans, pumps, cooling towers, compressors, etc.

FEATURES

- Heavy duty stable steel spring
- Built-in leveling bolt with locking cap screw, capable of compensating for full static deflection
- Non-skid ribbed pad bonded to base
- Springs are steel cup located for easy interchange

OPTIONS

- Extra layers of ribbed pad on base with steel shim spacers for higher acoustical isolation



AD DIMENSIONS

AD PRODUCT GUIDE

Type	Max Load kg	Static Deflection mm	Spring Constant kg/mm	Spring Colours	
				Outer	Inner
AD-50	65	50	1.3	Blue	-
AD-51	125	50	2.5	Black	-
AD-510	195	50	3.9	Black	Blue
AD-52	225	50	4.5	Red	-
AD-520	295	50	5.9	Red	Blue
AD-521	350	50	7.0	Red	Black
AD-53	450	50	9.0	Green	-
AD-530	520	50	10.4	Green	Blue
AD-531	575	50	11.5	Green	Black
AD-55	650	50	13.0	Grey	-
AD-551	775	50	15.5	Grey	Black
AD-552	900	50	18.0	Grey	Red
AD-553	1,000	50	20.0	Grey	Green
AD-593	1,115	45	24.8	Orange	Green

DESIGN

All type AD spring mounts are designed with a horizontal to vertical stiffness ratio between 0.9 and 1.1 at rated load; ratio of spring diameter to loaded height minimum 0.8; and a rated maximum operating deflection of 2/3 deflection to solid.

ACOUSTICAL ISOLATION

Steel spring mounts provide effective isolation of mechanical vibration. However, the spring itself has its own inherent surge frequency depending on its physical geometry and material properties. As such, it is possible to transmit certain audible level frequencies.

To minimise these audible level transmissions, all mounts are fitted with a resilient rubber base. For type AD mounts, the standard base has a theoretical effectiveness of 95% to 98% in isolating such transmissions.

If greater high frequency isolation is required, a second layer of pad is attached to the base, separated from the first by a 1.5mm metal shim plate.

MOUNT SELECTION

When selecting mounts, it is recommended that a safety factor of 10-20% is applied to the calculated mass of equipment to avoid overloading of mounts. If maximum rated deflections are required, then equipment should be weighed and an accurate assessment of point loads made.

For equipment using more than four mounts, endeavour to distribute them so that each mount has equal loading. If this cannot be done, mount selection must be made on the basis of matching static deflections as closely as possible.

INSTALLATION

1. Remove cap screw and washer.
2. Locate mount under hole in equipment leg or base (see note below).
3. Replace cap screw and washer but do not tighten.
4. Raise equipment to desired elevation and level by turning adjusting bolt anticlockwise to raise.
5. Tighten cap screw to lock assembly.

NOTE:

1. It maybe necessary to lift or block up equipment to place mount in position.
2. The equipment is supported on the head of the bolt.

BOLTING DOWN

If bolting is required, the lower plate must be located and fastened to the floor before equipment is placed on its mounts. Bolts must only be tightened a half turn more than hand tight. An isolation sleeve should be used to prevent the transmission of acoustical frequencies by metal to metal contact between the bolt and the mount, see Datasheet IS for details.

RECOMMENDED FASTENINGS

M10 fastenings are recommended for securing the AD Mount. Refer to Datasheet IS for type IS Isolating Sleeve kits for full rubber isolation of the bolt fastening.

TECHNICAL ASSISTANCE

All Embelton offices can provide detailed technical assistance on the use of this product in specific applications.

CONDITIONS OF SALE

These products are sold subject to the published Embelton General Conditions of Sale, copies of which maybe inspected on request.

SPECIFICATION

Spring mounts shall be free standing and laterally stable without any housing, capable of up to 50mm rated static deflection, incorporating a 6mm minimum ribbed non-skid acoustical pad on the base. Mounts shall have an inbuilt leveling facility capable of compensating for the rated spring design deflection and of being locked into position. Springs shall have a minimum additional travel of 50% rated deflection to solid and a diameter not less than 0.8 of loaded height; they shall be type AD as supplied by Embelton.