

Open Spring Mounts Type XT / XQ

75mm to 100mm Static Deflection

APPLICATION

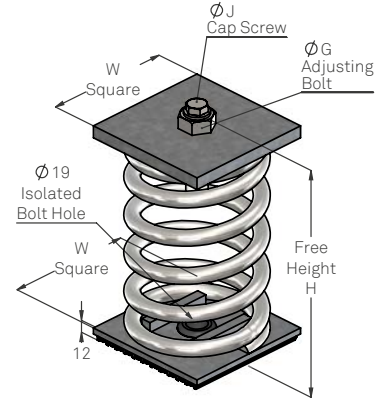
Used where a high degree of vibration isolation is required for machines with rotation speeds down to the order of 300 RPM. Typically used on centrifugal fans, air compressors, etc.

FEATURES

- Heavy duty stable steel spring
- Built-in leveling bolt with locking cap screw
- Non-skid ribbed pad bonded to base – no need for bolting in most cases
- Acoustically isolated holes in the base when bolting down is required
- Springs are steel block located for easy interchange

OPTIONS

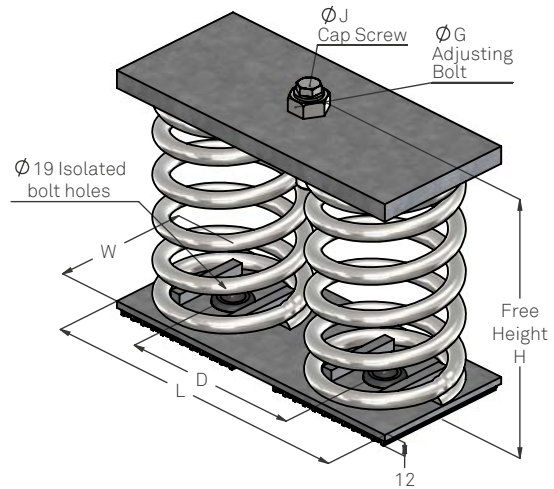
- Extra layer of ribbed pad on base with steel shim spacer for higher acoustical isolation



XT-1, XQ-1

XT / XQ PRODUCT GUIDE

Type	Max Load kg	Static Deflection mm	Spring Constant kg/mm	Spring Colour
XT-1-562	150	75	2.0	Black
XT-1-563	210	75	2.8	Red
XT-1-564	300	75	4.0	Green
XT-1-565	420	75	5.6	Grey
XT-1-566	600	75	8.0	Orange
XT-1-566A	700	75	9.3	Orange/Black
XT-2-562	300	75	4.0	Black
XT-2-563	420	75	5.6	Red
XT-2-564	600	75	8.0	Green
XT-2-565	840	75	11.2	Grey
XT-2-566	1,200	75	16.0	Orange
XT-2-566A	1,400	75	18.6	Orange/Black
XQ-1-761	110	100	1.1	Blue
XQ-1-762	150	100	1.5	Black
XQ-1-763	210	100	2.1	Red
XQ-1-764	300	100	3.0	Green
XQ-1-765	420	100	4.2	Grey
XQ-1-766	600	100	6.0	Orange
XQ-2-761	220	100	2.2	Blue
XQ-2-762	300	100	3.0	Black
XQ-2-763	420	100	4.2	Red
XQ-2-764	600	100	6.0	Green
XQ-2-765	840	100	8.4	Grey
XQ-2-766	1,200	100	12.0	Orange



XT2, XQ-2

XT / XQ Dimensions

Type	H mm	L mm	W mm	D mm	X* mm	G mm	J mm
XT-1	240	-	130	-	50	M20	M12
XT-2	245	300	130	170	50	M20	M12
XQ-1	285	-	180	-	50	M20	M12
XQ-2	295	390	180	210	70	M24	M12

* X is the maximum length of adjustment (upwards) from the fully inserted position of the leveling bolt.

DESIGN

All type XT, XQ 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 XT and XQ mounts, the standard base has a theoretical effectiveness of over 80% 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 cup must be located and fastened to the floor before equipment is placed on its mount. Bolts must only be tightened a half turn more than hand tight.

This type of mount is provided with a rubber isolated bolt hole which minimises transmission of acoustical frequencies to the floor.

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 75mm or 100mm rated static deflection, incorporating a 6mm minimum ribbed non-skid acoustical pad on the base. Mounts shall have an inbuilt leveling facility capable 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 XT or XQ as supplied by Embelton.