

## Open Spring Mounts Type XLD / XWD

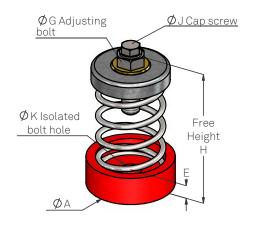
50mm Static Deflection, Cup Located

#### **APPLICATION**

A low cost, easily installed spring mount in which the spring can be quickly interchanged to give a wide range of load/deflection characteristics. Typically used for fans, pumps, packaged air conditioners, floor piping supports, compressors, etc.

### **FEATURES**

- Heavy duty stable steel spring
- Built-in leveling bolt with locking cap screw, capable of compensating for full static deflection
- Separate top and bottom location cups
- Rubber isolated bolt hole in base
- Moulded rubber base cup with non-skid surface



**XLD** 

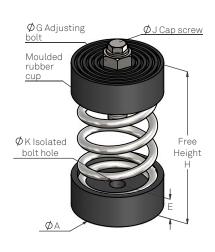
#### XLD / XWD PRODUCT GUIDE

<b>T</b>	Max	Static	Spring	Spring Colours	
Туре	Load kg	Deflection mm	Constant kg/mm	Stripe 1	Stripe 2
XLD-44	6	50	0.12	Black	Black
XLD-45	9	50	0.18	White	White
XLD-46	14	50	0.28	White	Violet
XLD-47	22	50	0.44	Violet	Violet
XLD-48	35	50	0.70	Violet	Yellow
XLD-49	55	50	1.10	Yellow	Yellow
XWD-33	50	50	1.0	White	-
XWD-34	75	50	1.5	Violet	-
XWD-35	110	50	2.2	Yellow	-
XWD-36	150	50	3.0	Brown	-
XWD-37	200	50	4.0	4.0 Orange	
XWD-38	250	50	5.0 Orange		Black
XWD-39	350	40	8.8	Orange	Green

# XLD / XWD Dimensions

Туре	H mm	A mm	G mm	J mm	K mm	E* mm			
XLD	137	80	M16	M10	20	13			
XWD SERIES									
33-37	187	99	M20	M12	17	20			
38-39	195	99	M20	M12	17	20			

<sup>\*</sup> Dimension E is depth of isolated bolt hole.



**XWD** 



#### **DESIGN**

All type XLD and XWD 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.

The spring is located in a detachable cup at the top and bottom which allows for easy interchange if required. A single bolt hole in the base cup allows for quick alignment and fastening when necessary.

### **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 XLD and XWD mounts, the standard cup has a theoretical effectiveness of 95% to 98% in isolating such transmissions.

#### **MOUNT SELECTION**

When selecting mounts, it is recommended that a safety factor of 10-20% is applied to the calculated mass of equipment 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.

- 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 mounts. 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, incorporating upper and lower spring locating cups at least one of which must be capable of isolating acoustical frequencies even when bolted down. 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 XLD or XWD as supplied by Embelton.



**EXAMPLE OF OPEN SPRING ISOLATION**