

Open Spring Mounts Type XS / XL / XW

25mm Static Deflection, Cup Located

APPLICATION

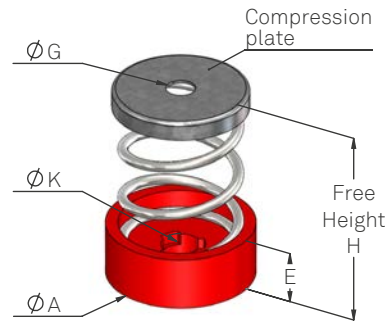
A low cost, easily installed spring isolator in which the spring can be quickly interchanged to give a wide range of load/ deflection characteristics. Typically used for fans, pumps, packaged air conditioners, floor piping supports, small compressors, etc.

FEATURES

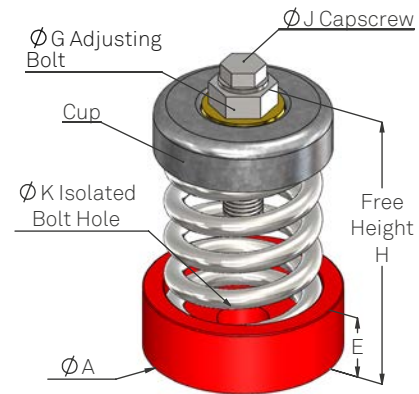
- Heavy duty stable steel spring
- Built-in leveling bolt with locking capscrew, capable of compensating for full static deflection (XL, XW only)
- Separate top and bottom location cups
- Rubber isolated bolt hole in base
- Moulded, noise absorbing rubber base cup with non-skid surface

OPTIONS

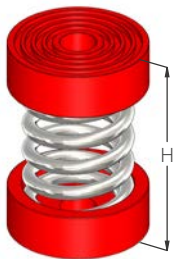
- XL can be supplied without the adjusting bolt and with a rubber cup on top, coded NXL.
- Height H = XL height minus 2mm
- XS can be supplied with leveling bolt, coded XSB.
- Height H = XS height plus 22mm



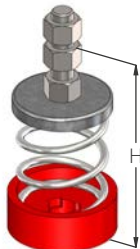
XS



XL



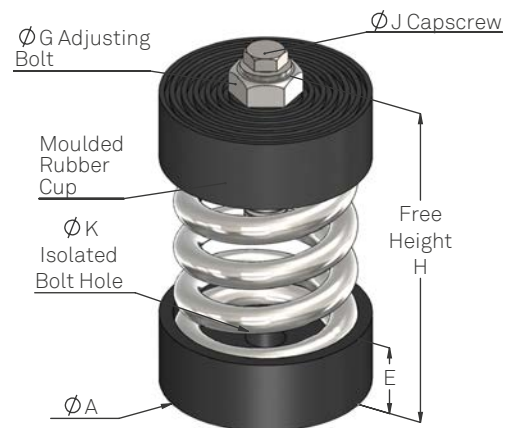
NXL OPTION



XSB OPTION

XS / XL / XW Dimensions

Type	H mm	A mm	G mm	J mm	K mm	E* mm
XS	84	60	12**	-	16	12
XL SERIES						
92-95	122	80	M16	M10	20	13
96-97	125	80	M16	M10	20	13
98	127	80	M16	M10	20	13
99-100	133	80	M16	M10	20	13
101-102	141	80	M16	M10	20	13
XW SERIES						
400-425	165	99	M20	M12	17	20
1,000-1,628	170	99	M20	M12	17	36
1,731	172	99	M20	M12	17	36



XW

* Dimension E is depth of isolated bolt hole.

** Hole only, not tapped.

XS / XL / XW PRODUCT GUIDE

Type	Max Load kg	Static Deflection mm	Spring Constant kg/mm	Spring Colours	
				Stripe 1	Stripe 2
XS-9	10	33	0.30	Yellow	-
XS-10	15	33	0.45	Brown	-
XS-11	30	33	0.9	Blue	-
XS-12	50	28	1.8	Black	-
XS-13	75	25	3.0	Red	-
XS-14	125	25	5.0	Green	-
XS-16	175	20	8.8	Grey	-
XS-17	200	15	13.3	Orange	-
XL-92	50	33	1.5	Yellow	-
XL-93	100	33	3.0	Brown	-
XL-94	150	30	5.0	Blue	-
XL-95	200	30	6.7	Black	-
XL-96	250	28	8.9	Red	-
XL-97	300	28	10.7	Green	-
XL-98	400	25	16.0	Grey	-
XL-99	550	23	23.9	Orange	-
XL-100	650	20	32.5	Orange	Black
XL-101	775	20	38.7**	Orange	-*
XL-102	950	20	47.5**	Orange	Black*
				Outer	Inner
XW-400	200	33	6.1	Black	-
XW-422	275	33	8.3	Black	Blue
XW-423	300	33	9.1	Black	Yellow
XW-425	380	30	12.7	Black	Red
XW-1000	450	25	18.0	Green	-
XW-1023	510	25	20.4	Green	Yellow
XW-1024	550	25	22.0	Green	Green
XW-1025	580	25	23.2	Green	Red
XW-1026	690	25	27.6	Green	White
XW-1600	775	25	31	Grey	-
XW-1622	820	25	32.8	Grey	Blue
XW-1624	875	25	35	Grey	Green
XW-1626	1,000	25	40	Grey	White
XW-1627	1,100	25	44	Grey	Orange
XW-1628	1,150	24	47.9	Grey	Grey
XW-1731	1,275	20	63.8	Orange	Grey/Yellow

* With inner spring (green) square AL top cup

** Averaged over full deflection range

DESIGN

All type X 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 XS, XL and XW mounts, the standard cup has a theoretical effectiveness of 95% to 97% 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 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 mount positions, endeavour to distribute them so that each mount has equal loading. If this cannot be done, isolator 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 may be 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 may be 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 to solid of 50% rated deflection and a diameter not less than 0.8 of loaded height; they shall be type XS, XL or XW as supplied by Embelton.