

Isolation Hanger Elements KDXS(S)/ KDX / KDXW

25mm Static Deflection Spring

APPLICATION

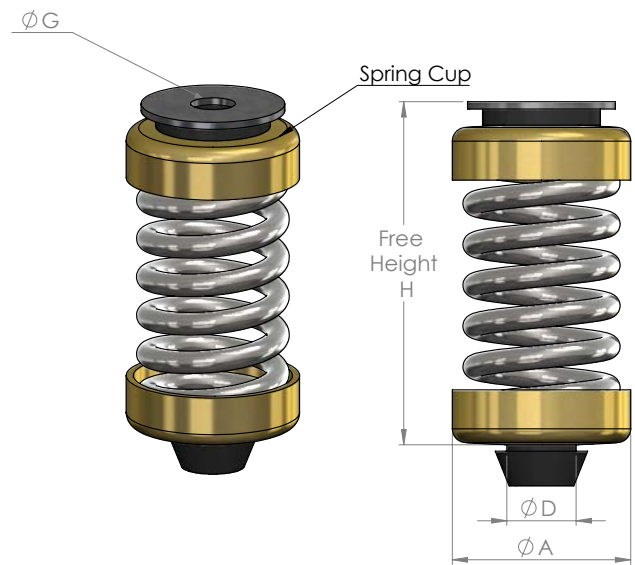
Where a low cost spring hanger element is required for effective isolation of vibration. These elements are typically used for trapeze-supported piping, packaged air conditioners, fan coil units and fans; particularly where height limitations are present.

FEATURES

- Heavy duty stable steel spring
- Moulded acoustically isolating rubber base cup with integral location collar
- Simple design allows quick installation

OPTIONS

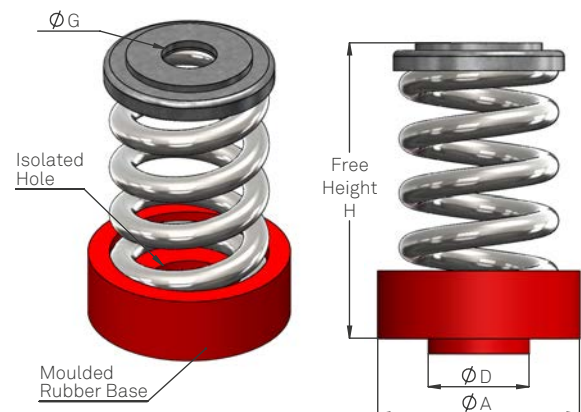
- Type KDXS 9-12 can be supplied with matching right angle bracket for wall or equipment side mount (HBKDXS)



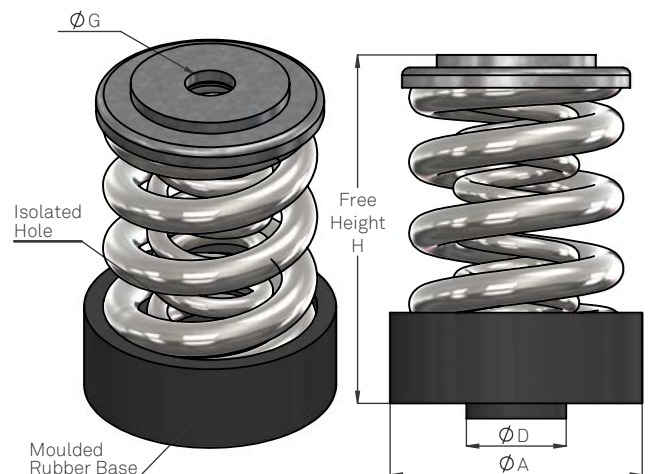
KDXSS DIMENSIONS

KDX Dimensions

Type	H mm	A mm	D mm	G (max) mm
KDXSS				
50-75	72	40	16	10
120-143	87	50	16	10
KDXS	84	60	30	12
KDX SERIES				
92-96	113	80	40	16
97-100	125	80	40	20
KDXW	144	99	40	20



KDXS / KDX DIMENSIONS



KDXW DIMENSIONS

KDX PRODUCT GUIDE

Type	Max Load kg	Static Deflection mm	Spring Constant kg/mm	Spring Colours	
				Outer	Inner
KDXSS-50	50	25	2.0	Black	-
KDXSS-75	75	25	3.0	Red	-
KDXSS-120	120	25	4.8	Green	-
KDXSS-143	143	25	5.7	Grey	-
KDXS-9	10	33	0.30	Yellow	-
KDXS-10	15	33	0.45	Brown	-
KDXS-11	30	33	0.9	Blue	-
KDXS-12	50	28	1.8	Black	-
KDXS-13	75	25	3.0	Red	-
KDXS-14	125	25	5.0	Green	-
KDXS-16	175	20	8.8	Grey	-
KDXS-17	200	15	13.3	Orange	-
KDX-92	50	33	1.5	Yellow	-
KDX-93	100	33	3.0	Brown	-
KDX-94	150	30	5.0	Blue	-
KDX-95	200	30	6.7	Black	-
KDX-96	250	28	8.9	Red	-
KDX-97	300	28	10.7	Green	-
KDX-98	400	25	16.0	Grey	-
KDX-99	550	23	23.9	Orange	-
KDX-100	650	20	32.5	Orange	Black
KDXW-400	200	33	6.1	Black	-
KDXW-421	254	33	7.7	Black	Black
KDXW-422	275	33	8.3	Black	Blue
KDXW-423	300	33	9.1	Black	Yellow
KDXW-425	380	30	12.7	Black	Red
KDXW-1000	450	25	18.0	Green	-
KDXW-1021	480	25	19.2	Green	Black
KDXW-1023	510	25	20.4	Green	Yellow
KDXW-1024	550	25	22.0	Green	Green
KDXW-1025	580	25	23.2	Green	Red
KDXW-1026	690	25	27.6	Green	White
KDXW-1600	775	25	31.0	Grey	-
KDXW-1622	820	25	32.8	Grey	Blue
KDXW-1624	875	25	35.0	Grey	Green
KDXW-1626	1,000	25	40.0	Grey	White
KDXW-1627	1,100	25	44.0	Grey	Orange
KDXW-1628	1,150	24	47.9	Grey	Grey

DESIGN

Springs used in type KDX hanger elements 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

Although steel spring mounts provide particularly effective isolation of mechanical vibration, the spring itself may transmit certain audible level frequencies if present.

In KDX hanger elements, spring transmission of most audible frequencies is effectively minimised by incorporating a moulded rubber cup on the base. These are theoretically 95-98% effective in isolation of spring transmission frequencies.

HANGER SELECTION

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

INSTALLATION

1. This type of hanger may be installed above the supporting structure or below the equipment support point. A clearance hole of minimum diameter D must be provided in the support structure through which the rod passes.
2. When under load, adjustment of height can be made at either end of the support rod, whichever is more convenient.

TECHNICAL ASSISTANCE

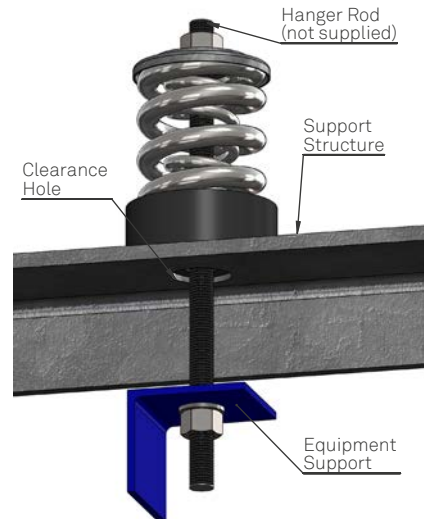
All Embelton offices can provide detailed technical assistance on the use of product in specific applications.

CONDITIONS OF SALE

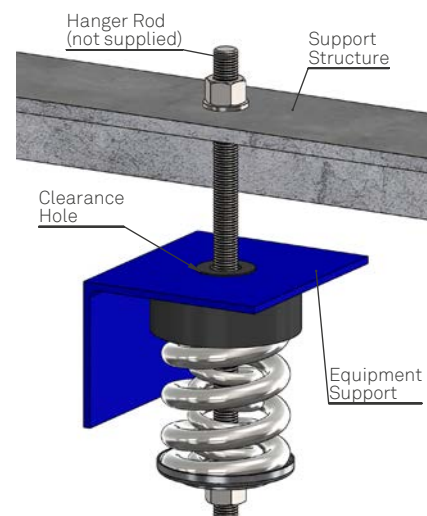
These products are sold subject to the published Embelton General Conditions of Sale, copies of which may be inspected on request.

SPECIFICATION

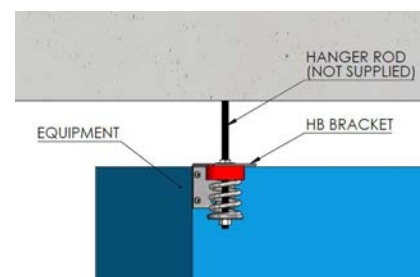
Suspension of elements shall consist of a stable steel spring in series with an acoustical isolating rubber pad. The spring shall have a minimum additional KDX travel of 50% rated deflection to solid. They shall be type KDX as supplied by Embelton.



KDX INSTALLATION METHOD 1



KDX INSTALLATION METHOD 2



HBKDXS BRACKET MOUNT