

Open Restrained Spring Mountings

Types ORS25 & ORS50



The ORS mounting has been designed specifically for applications where transmission of low frequency machinery vibration to a building structure must be reduced to avoid physical damage or annoyance to the occupants.

It is a low frequency mounting specifically designed to limit vertical movement on equipment such as cooling towers and chillers. This could otherwise be excessive due to the low stiffness springs required to provide isolation of low frequency vibration.

Applications located at roof level can be successfully mounted on ORS units as any movement caused by high wind loads will be limited. Equipment which contains large volumes of liquid will benefit from installation on ORS mountings because during “draining down” upward movement is restricted thus avoiding damage to pipework and electrical connections.

DESIGN FEATURES

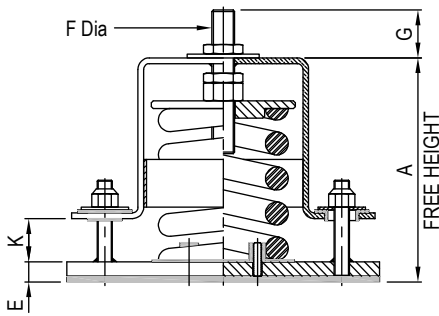
- High strength all steel construction fully zinc plated after fabrication.
- Colour coded helical steel springs to BS1726 Class B with nominal deflections of 25 mm and 50 mm and up to 50% overload capacity also O/D equal to at least 80% of working height.
- Vertical and lateral restraints have rubber inserts to avoid metallic contact and adequate radial clearance ensures isolation efficiency is not impaired.
- Spring located using rubber sleeved pegs and seated on a rubber washer to reduce high frequency transmission.
- Working height and vertical limiting stops are fully adjustable.
- 6 mm thick ribbed rubber seating pad supplied as standard.

TYPICAL APPLICATIONS

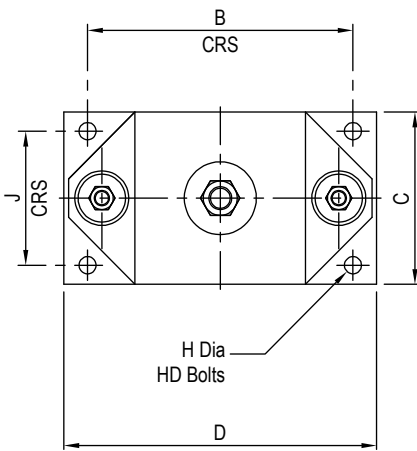
- Cooling Towers.
- Chillers.
- Large Fans.
- Air Handling Units.

TYPE ORS

TYPE ORS MOUNTINGS - SIZE ORS25



PART No.	COLOUR CODE	RATED LOAD (kg)	DEFLECTION AT RATED LOAD (mm)	DIMENSIONS (mm)											WT (kg) MAX			
				A	B	C	D	E	F	G	H	J	K					
ORS25/200	RED	200	25															
ORS25/300	PURPLE	300	25															
ORS25/400	GREY	400	25															
ORS25/500	ORANGE	500	25															
ORS25/600	BROWN	600	25	168	200	110	230	16	M16	40	M10	80	42	6				
ORS25/700	ORANGE/BLACK*	700	25															
ORS25/800	BLACK	800	25															
ORS25/1000	BLUE	1000	25															
ORS25/1200	BLUE/BLACK*	1200	25															
ORS25/650	YELLOW	650	27															
ORS25/850	GREEN	850	27	196	280	150	310	21	M20	50	M12	120	45	14				
ORS25/1050	BLUE	1050	25															
ORS25/1250	WHITE	1250	25															
ORS25/1300	RED	1300	27															
ORS25/1600	PURPLE	1600	25															
ORS25/2000	GREY	2000	26	234	280	180	330	21	M24	50	M16	140	45	20				
ORS25/2300	BROWN	2300	29															



TYPE ORS MOUNTINGS - SIZE ORS50

PART No.	COLOUR CODE	RATED LOAD (kg)	DEFLECTION AT RATED LOAD (mm)	DIMENSIONS (mm)											WT (kg) MAX			
				A	B	C	D	E	F	G	H	J	K					
ORS50/100	YELLOW	100	50															
ORS50/200	GREEN	200	50															
ORS50/300	BLUE	300	50	168	200	110	230	16	M16	40	M10	80	42	6				
ORS50/400	WHITE	400	50															
ORS50/500	RED/BLACK	500	50															
ORS50/510	BLACK/PURPLE	510	50															
ORS50/760	BLACK/GREY	760	50															
ORS50/1000	BLACK/ORANGE	1000	50	240	280	180	330	21	M24	50	M16	140	51	18				
ORS50/1300	BLACK/BROWN	1300	50															

* Internal nested spring.

ISOLATION EFFICIENCY AT TYPICAL MACHINE SPEEDS

MACHINE SPEEDS (rpm)	EFFICIENCY %	
	25 mm DEFL.	50 mm DEFL.
300	34.0	75.2
500	83.3	92.3
750	93.2	96.7
1000	96.3	98.2
1200	97.4	98.7
1500	98.4	99.2

Spring Deflection

Spring stiffness is linear over its working range therefore the actual deflection for a given load can be calculated as follows:-

$$\text{Actual Deflection (mm)} = \frac{\text{Actual Load (kg)} \times \text{Rated Deflection (mm)}}{\text{Rated Load (kg)}}$$

The above figures are theoretical values only based on the vertical natural frequency of the sprung system assuming infinitely stiff structural supports. The effects of high frequency spring coil resonances on low frequency performance are also ignored.

For full installation instructions please refer to our data sheet DS025.

For more detailed information and technical assistance please contact our Technical Department.

In the interests of continual development, the Company reserves the right to make modifications to these details without notice.



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