

# Open Spring Mountings

Type OSB, OSS, OS25 & OS50



This unique range of Open Spring mountings uses integral rubber end fixing of the springs which sets them apart from all other designs. Loose springs and plates are now history and high frequency noise attenuation is provided regardless of whether a rubber seating pad is used or not.

Originally designed for use with Type IPF Inertia Pouring Frames, the OS mountings are now widely used to isolate vibration from every conceivable type of rotating and reciprocating machine. Where control of transient motion is required Open Spring mountings can be used in conjunction with our Viscous Dampers Type SFD.

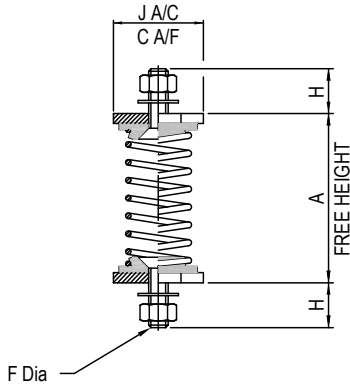
## DESIGN FEATURES

- Unique expanding rubber end fixing of springs (Patent applied for) which also provides high frequency attenuation.
- Nominal 20, 25 & 50 mm deflection colour coded helical steel springs to BS1726 Class B with 50% overload capacity and O/D equal to at least 85% of working height.
- Can be bolted to supporting structure or free standing on 6 mm thick ribbed rubber pad (3 mm on OSS).
- Fully height adjustable (OS25 & OS50).
- All steel components are zinc plated.
- No snubbing gives maximum efficiency.

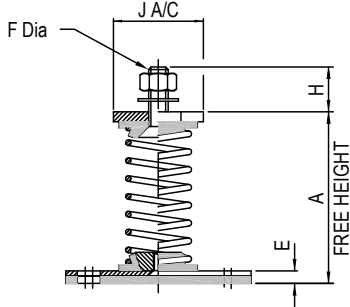
## TYPICAL APPLICATIONS

- Axial and Centrifugal Fans.
- Air Handling Units.
- Low Level Pipework.
- With Inertia Bases type IPF for Pumps, Generating Sets and Compressors etc.

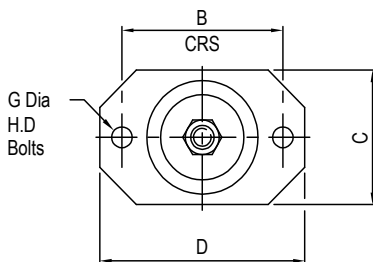
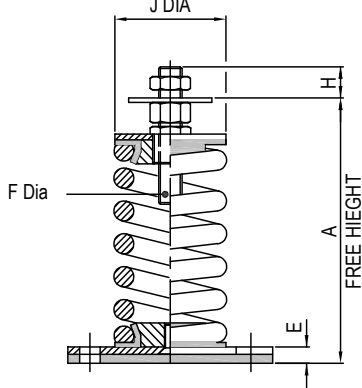
OSB20/10 — OSB15/100



OSS20/10 — OSS15/100



OS25/30 — OS50/500



TYPE OS MOUNTINGS - SIZES OSB, OSS, OS25 & OS50

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	
OSB20/10	PURPLE	10	20											
OSB20/15	YELLOW	15	20											
OSB20/20	GREY	20	20	68	-	32	-	-	M8	-	18	37	0.15	
OSB20/40	GREEN	40	20											
OSB20/70	RED	70	20											
OSB15/100	BLUE	100	15											
OSS20/10	PURPLE	10	20											
OSS20/15	YELLOW	15	20											
OSS20/20	GREY	20	20	69	57	38	76	5	M8	M6	18	37	0.2	
OSS20/40	GREEN	40	20											
OSS20/70	RED	70	20											
OSS15/100	BLUE	100	15											
OS25/30	YELLOW	30	25											
OS25/60	GREEN	60	30											
OS25/100	BLUE	100	25	115	87	70	110	10	M10	M8	20	57	0.9	
OS25/160	WHITE	160	25											
OS25/250	RED	250	25											
OS25/200	RED	200	25											
OS25/300	PURPLE	300	25											
OS25/400	GREY	400	25											
OS25/500	ORANGE	500	25											
OS25/600	BROWN	600	25	152	110	90	140	11	M16	M12	24	76	2.6	
OS25/700	ORANGE/BLACK*	700	25											
OS25/800	BLACK	800	25											
OS25/1000	BLUE	1000	25											
OS25/1200	BLUE/BLACK*	1200	25											
OS50/100	YELLOW	100	50											
OS50/200	GREEN	200	50											
OS50/300	BLUE	300	50	180	110	90	140	11	M16	M12	24	76	2.3	
OS50/400	WHITE	400	50											
OS50/500	RED/BLACK	500	50											

\* Internal nested spring.

ISOLATION EFFICIENCY AT TYPICAL MACHINE SPEEDS

MACHINE SPEEDS (rpm)	EFFICIENCY %		
	15 mm DEFL.	25 mm DEFL.	50 mm DEFL.
300	DO NOT USE	34.0	75.2
500	68.7	83.3	92.3
750	88.1	93.2	96.7
1000	93.7	96.3	98.2
1200	95.7	97.4	98.7
1500	97.3	98.4	99.2
1750	98.0	98.8	99.4
2000	98.5	99.1	99.5

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 DS027.

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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