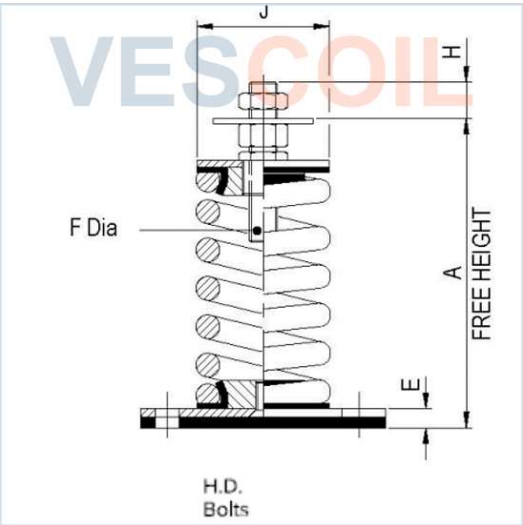
VESCOIL INTERNATIONAL

TECHNICAL DATA SHEET

Open Spring Mountings

Fig. 9412 | OPEN SPRING MOUNTINGS - TYPE OSB, OSS & OS25



DOCUMENTATION

This unique range of Open Spring mountings uses integral rubber end fixing of the springs which sets them apart from all other designs. Larger capacity open spring mountings use rubber grommets and base pads to ensure no direct metal path between the machine and the seating, thus enhancing high frequency noise isolation.

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 & 25mm 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).
• All steel components are zinc plated.
• No snubbing gives maximum efficiency.

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TYPICAL APPLICATIONS

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

ISOLATION EFFICIENCY AT TYPICAL MACHINE SPEEDS

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

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.

SPRING DEFLECTION

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

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

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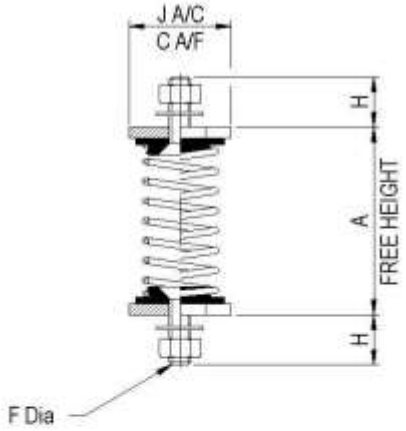
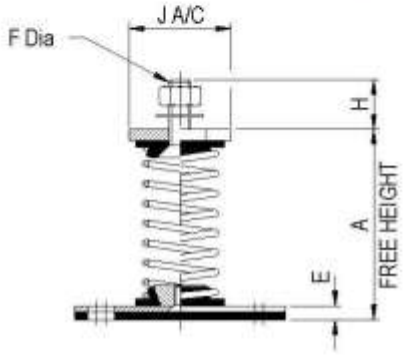
TYPE OS MOUNTINGS - SIZES OSB, OSS, OS25

PART No.	COLOUR CODE	RATED LOAD (kg)	DEFLECTION AT RATED LOAD (mm)	DIMENSIONS (mm)									MAX WT (kg)
				A	B	C	D	E	F	G	H	J	
OSB20/10	PURPLE	10	20	68	-	32	-	-	M8	-	16	⬡ 37	0.15
OSB20/15	YELLOW	15	20										
OSB20/20	GREY	20	20										
OSB20/40	GREEN	40	20										
OSB20/70	RED	70	20										
OSB15/100	BLUE	100	15										
OSS20/10	PURPLE	10	20	69	57	38	76	5	M8	M6	16	⬡ 37	0.2
OSS20/15	YELLOW	15	20										
OSS20/20	GREY	20	20										
OSS20/40	GREEN	40	20										
OSS20/70	RED	70	20										
OSS15/100	BLUE	100	15										
OS25/30	YELLOW	30	25	115	87	70	110	10	M10	M8	20	○ 57	0.9
OS25/60	GREEN	60	30										
OS25/100	BLUE	100	25										
OS25/160	WHITE	160	25										
OS25/250	RED	250	25										
OS25/200	RED	200	25	152	110	90	140	11	M16	M12	24	○ 76	2.6
OS25/300	PURPLE	300	25										
OS25/400	GREY	400	25										
OS25/500	ORANGE	500	25										
OS25/600	BROWN	600	25										
OS25/700	ORANGE/BLACK*	700	25										
OS25/800	BLACK	800	25										
OS25/1000	BLUE	1000	25										
OS25/1200	BLUE/BLACK*	1200	25										
OS25/650	YELLOW	650	26	176	165	130	200	18	M20	M16	42	○ 130	9
OS25/850	GREEN	850	27										
OS25/1050	BLUE	1050	26										
OS25/1250	WHITE	1250	26										
OS25/1300	RED	1300	27	225	210	150	250	18	M24	M16	52	○ 150	13
OS25/1600	PURPLE	1600	25										
OS25/2000	GREY	2000	26										
OS25/2300	BROWN	2300	29										

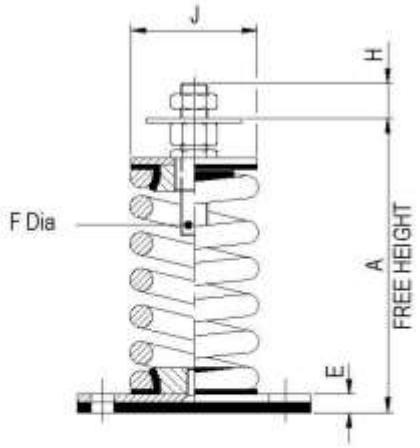
OSB20/10 — OSB15/100

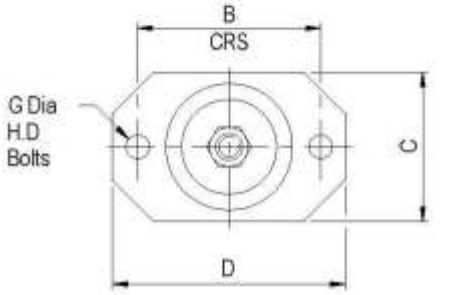


OSS20/10 — OSS15/100



OS25/30 — OS25/2300





APPLICATION NOTES

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.