

# Enclosed Spring Mountings

Type ES – Enclosed Spring and ECS – Enclosed Captive Spring Mounting



A unique range of mountings designed primarily for building services applications where the control of low frequency vibration and noise emanating from mechanical plant is of paramount importance.

The benefits of a combined rubber and steel housing for the spring have helped establish the ES and ECS mountings as industry standards accepted by specifiers, equipment manufacturers and mechanical services installers alike.

## Design Features

- Nitrile rubber (oil resistant) lower spring housing eliminates the possibility of metallic continuity and ensures excellent acoustic performance. Steel reinforced on ECS range.
- Full enclosed captive assembly protects the spring and controls transient motion.
- All steel components are zinc plated.
- Nominal 15, 20, 25 & 50 mm deflection colour coded helical steel springs to BS1726 Class B, laterally stable with 50% overload capacity.
- Simple single screw height adjustment.
- 6 mm thick ribbed rubber seating pads available for ES25 and ECS ranges.
- Colour coded labels for easy identification.
- Stainless Steel variants available.

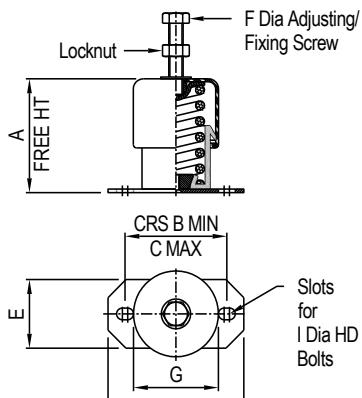
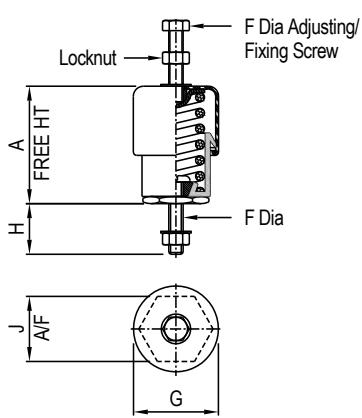
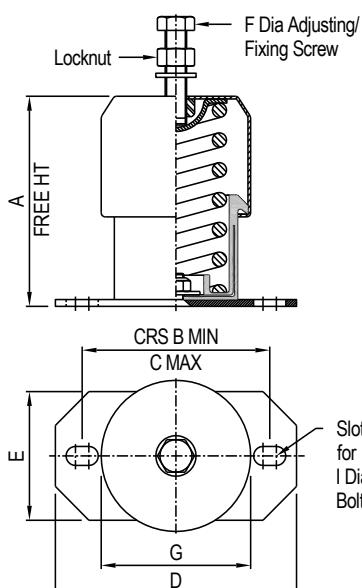
## Typical Applications

- Axial and Centrifugal Fans
- Air Handling Units
- Chillers and Cooling Towers
- Rotary and Multi-Cylinder Compressors
- Diesel Generating Sets (ECS only)
- Mechanical Test Rigs
- Isolation of Sensitive Equipment



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**TYPE ES**

**TYPE ESB**

**TYPE ECS**

**Spring Deflection**

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

**TYPE ES, ESB, ES25, ECS25 & ECS50 MOUNTINGS**

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	I	J	
ES20/10	PURPLE	10	20											
ES20/15	YELLOW	15	20	63	54	60	76	38	M8	48	-	M6	-	0.25
ES20/20	GREY	20	20											
ES20/40	GREEN	40	20											
ES20/70	RED	70	20											
ES15/100	BLUE	100	15											
ESB20/10	PURPLE	10	20											
ESB20/15	YELLOW	15	20	65	-	-	-	-	M8	48	26	-	36	0.25
ESB20/20	GREY	20	20											
ESB20/40	GREEN	40	20											
ESB20/70	RED	70	20											
ESB15/100	BLUE	100	15											
ES25/30	YELLOW	30	25											
ES25/60	GREEN	60	30											
ES25/100	BLUE	100	25	88	85	90	110	70	M10	78	-	M8	-	1.0
ES25/160	WHITE	160	25											
ES25/250	RED	250	25											
ECS25/100	WHITE/YELLOW	100	25											
ECS25/200	WHITE/RED	200	25											
ECS25/300	WHITE/PURPLE	300	25											
ECS25/400	WHITE/GREY	400	25											
ECS25/500	WHITE/ORANGE	500	25											
ECS25/600	WHITE/BROWN	600	25	127	130	150	180	95	M16	111	-	M12	-	3.0
ECS25/700	WHITE/BLACK*	700	25											
ECS25/800	WHITE/GOLD	800	25											
ECS25/1000	WHITE/1000	1000	25											
ECS25/1200	WHITE/1200*	1200	25											
ECS25/1400	WHITE/1400*	1400	25											
ECS50/100	BLACK/YELLOW	100	50											
ECS50/200	BLACK/GREEN	200	50	155	130	150	180	95	M16	111	-	M12	-	2.8
ECS50/300	BLACK/BLUE	300	50											
ECS50/400	BLACK/WHITE	400	50											
ECS50/500	BLACK/RED	500	50											

\* Internal nested spring.

**Seating Pads**

Ribbed rubber seating pads can now be fitted as standard, suffix Pt. No. /B e.g. ES25/100/B.

**Stainless Steel**

This option is available across the entire range for external and other hostile environments.

When ordering the Pt. No. should be suffixed with /S for Stainless Steel or if fitted with a seating pad /SB e.g. ECS25/500/S or ECS25/500/SB.

**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

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.

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

**For full instructions please refer to our data sheet DS026.**

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

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



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