



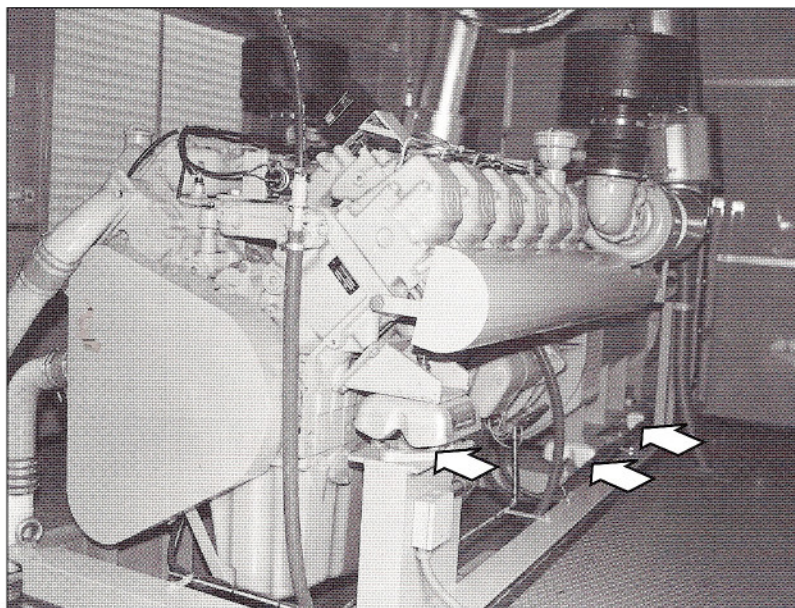
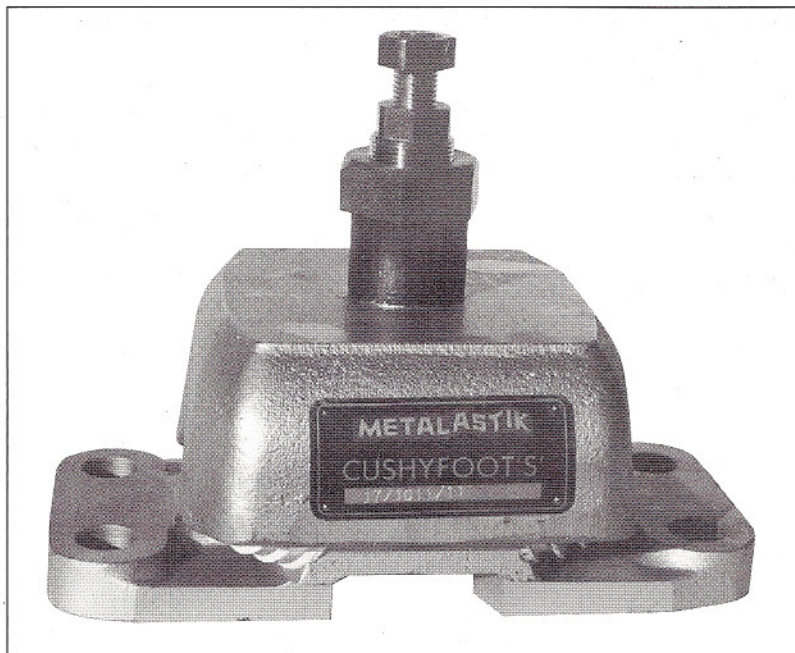
CUSHYFOOT SERIES 'S' MOUNTING

Cushyfoot Series 'S' mountings are designed primarily for lightweight four cycle high speed diesel engines widely used on locomotive applications. They are compact units offering high load capacity and static deflections up to 10mm thereby providing excellent vibration isolation. An adjustable buffer which restricts engine movement in all directions within acceptable limits is incorporated. Shunting shock loads up to 5g can be accommodated.

The mountings are particularly suitable for diesel electric and diesel hydraulic locomotives. For the former, a 6 point mounting system may be needed due to the additional mass of the generator but for the diesel hydraulic combination, a 4 point mounting arrangement is normally satisfactory. On diesel hydraulic locos, torque reaction forces need to be considered and the vertical stiffness of the mountings is such that the overload buffer does not come into action under these forces.

Cushyfoot 'S' mountings provide different stiffness rates in transverse and fore-and-aft directions. Under transverse loading, the circular bonded rubber-to-metal spring elements are deflected in shear, whilst in a longitudinal direction, the spring reaction is mainly in the compression mode. In a vertical direction, the spring elements are loaded in combined shear and compression, giving both high load capacity and relatively large static deflections. Stiffness ratios are shown overleaf and the mountings should be fitted so that the stiffest mode is parallel to the engine crankshaft (to resist braking forces) and maximum flexibility is provided transversely to effectively isolate engine vibrations in this direction.

Cushyfoot 'S' mountings are also suitable for stationary and marine engine applications.



Metalastik Cushyfoot 'S' mountings fitted to 450kVA Diesel Alternator sets installed in power cars supplied by CON-MEC A/S Denmark to Iranian Railways.

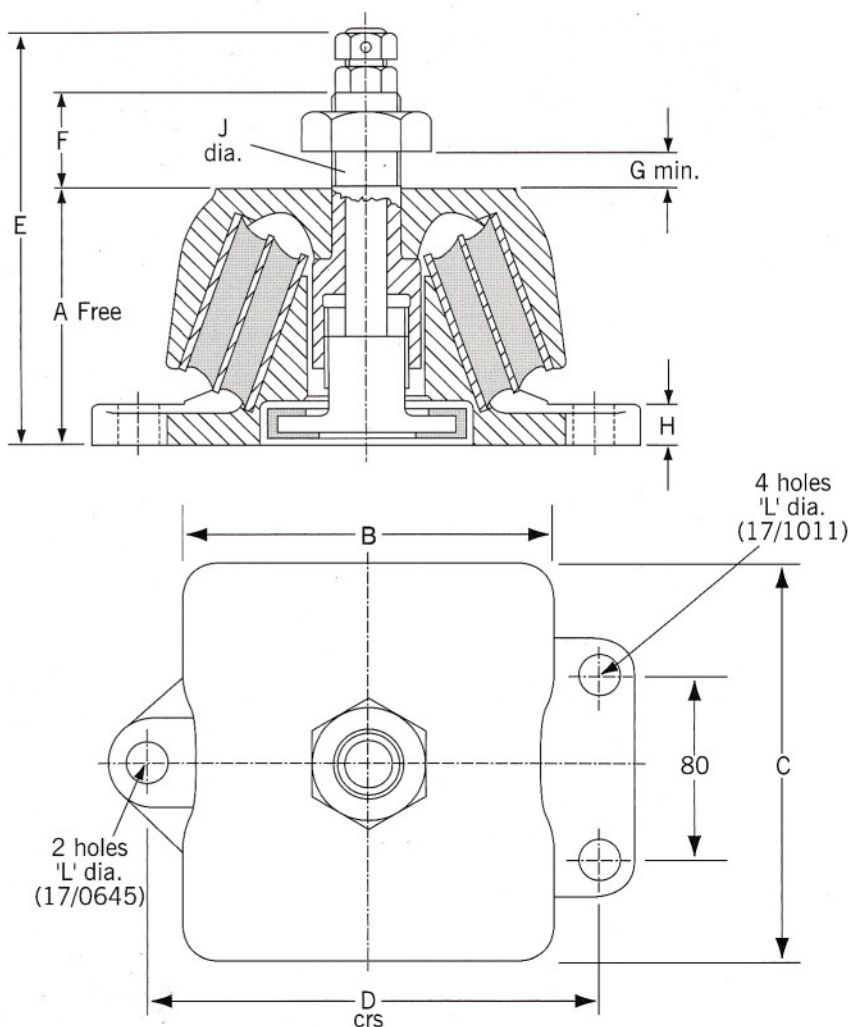
SPRINGS AND COMPONENTS FOR RAIL VEHICLES



VIBRATION CONTROL SYSTEMS

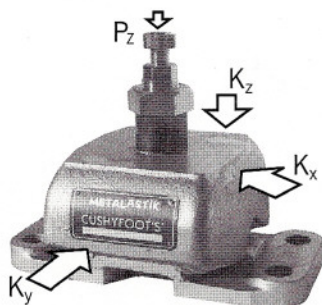
The Metalastik product range is subject to development which may result in amendment or withdrawal of the data provided in this literature. Product performance information given is calculated nominal static data which must be verified by adequate testing by the buyer in the configuration in which the components are to be used. If incorrectly used danger or damage may result. For any proposed application additional free technical assistance will be provided on request. The buyer shall take all reasonable measures to eliminate or reduce any risk to health or safety which may arise from use of the goods. Product data sheets providing information in accordance with Section 6 of the Health & Safety at Work Act 1974 are available upon request.

The diagrams show overall and fitting dimensions only. It is recommended that a drawing of the product is obtained before ordering.



| Part No. | 17/0645 | 17/1011 |
|----------------|---------|---------|
| A | 116 | 129 |
| B | 178 | 194 |
| C | 197 | 216 |
| D | 203 | 254 |
| E | 187 | 232 |
| F | 44 | 70 |
| G | 16 | 38 |
| H | 19 | 25 |
| J | 32 | 38 |
| L | 19.8 | 25 |
| UNIT MASS (kg) | 15 | 21 |

RELATIVE STIFFNESSES



| Part No. | 17/0645 | 17/1011 |
|----------|---------|---------|
| Kx | 2.5 | 5 |
| Ky | 0.25 | 0.5 |
| Kz | 1 | 1 |

