

## Technical data

Avacone series 50 - 20000N  
ms232 series through to ms248 series



Photo shows ms236, ms238 with pedestal and ms243 series mountings

Avacone mountings are designed to offer flexibility in the axial direction but limited movement radially. These characteristics make the mountings particularly suitable for mounting mobile equipment where movement in the horizontal plane has to be accommodated and restrained. Avacone mountings offer a compact design and can usually be installed into existing chassis members. All Avacone mountings are identified by the letters 'ms' at the start of the part number.

The mountings should always be used with the top and bottom rebound washers fitted above and below the mounting to form a fully captive arrangement and to prevent excessive movement resulting from shock and inertia loads.

The ms236 and ms238 series can be supplied fitted in a pedestal base (see photo above).

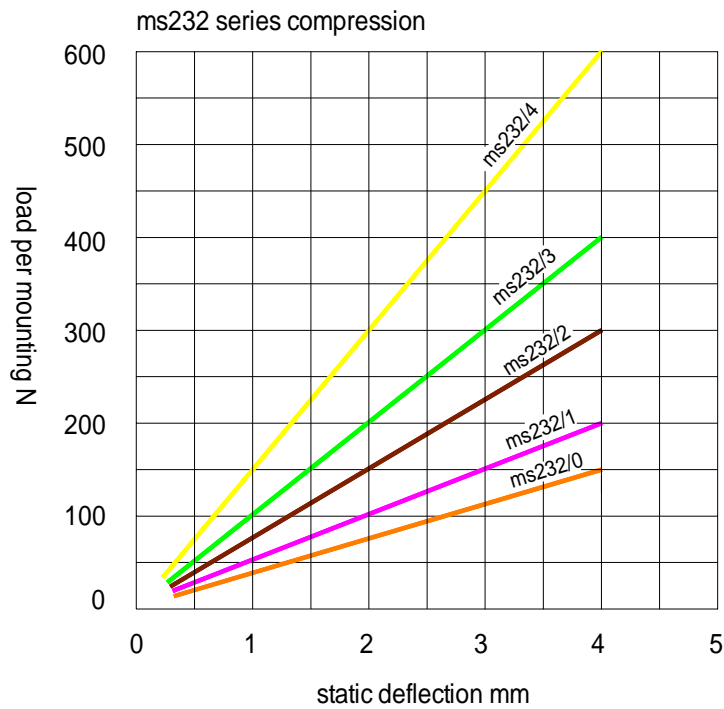
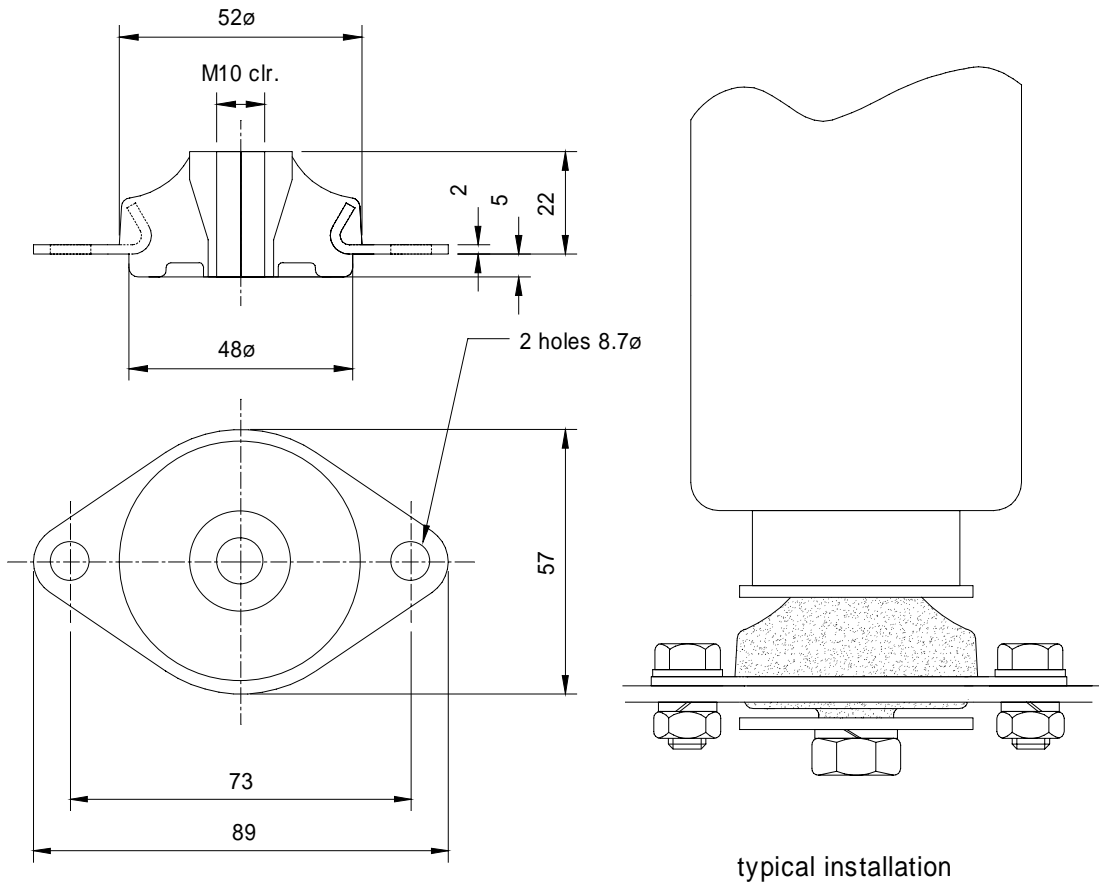
There are seven sizes available in the range and the load carrying capacity for each is detailed in the table below:

<b>ms232</b> series	50 – 600N
<b>ms207-8</b> series	200 – 800N
<b>ms236</b> series	500 - 4500N
<b>ms238</b> series	1000 - 6000N
<b>ms243</b> series	1000 - 7000N
<b>ms247</b> series	2000 - 16000N
<b>ms248</b> series	2500 – 20000N

Advice on the most suitable mounting for a given application can be obtained from our technical department. Typical applications include the mounting of gearboxes and transmission equipment, liquid storage tanks, mobile generating sets, mobile compressors, marine engines, radiators, and vehicle cab mountings.

Technical data

Avacone series 50 - 600N  
ms232 series

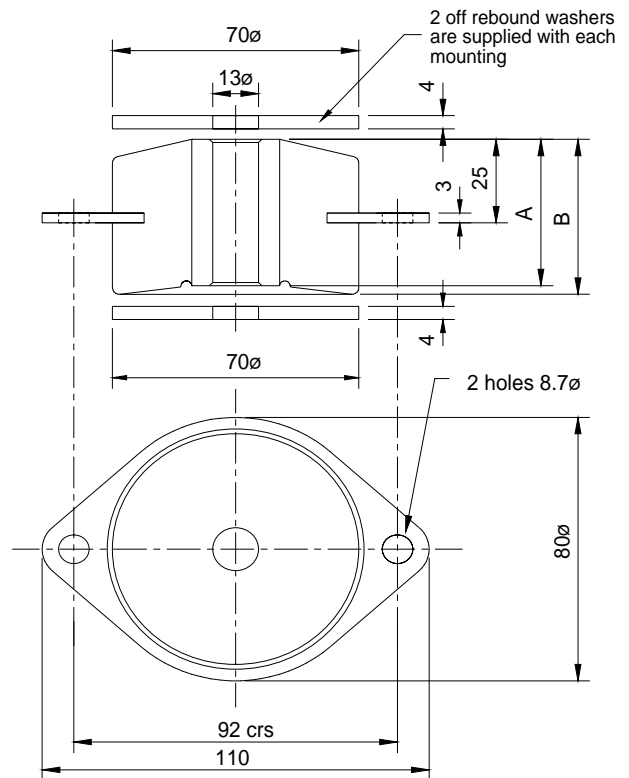


In the typical installation drawing shown above the mounting is drawn with the top and bottom snubbing washer above and below the mounting. These are optional but do help to increase the overall stability of the

mounting installation. The bottom rebound element is designed to restrain upward vertical movements of the mounted equipment.

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ms207- ms208 series 200 - 800N  
 Lightweight mounting for shock loads up to 2kN



ms207/208 series

The ms207/208 series mountings can be used for applications where shock loads are to be accommodated and restrained. They are particularly useful when the overall movement of equipment has to be controlled due to space limitations about the mounted equipment.

The mounting is supplied complete with two washers which are to be fitted either side of the mounting as shown in the illustration over the page to form a fully captive arrangement. In this way the mounted unit remains mechanically attached to the supporting structure in the event of the rubber element being destroyed.

The mountings may be used at deflections less than 2.0mm provided a spacer washer is fitted on the underside of the mounting between the centre core and the bottom rebound washer. Typical applications include the mounting of mobile engine driven equipment (petrol or diesel) i.e. mobile compressors, arc welders, generators, also radiators and other forms of trailer mounted equipment.

The photograph above shows a ms207 series mounting being used upside down in the inverted position to isolate a radiator fitted to a diesel engine.

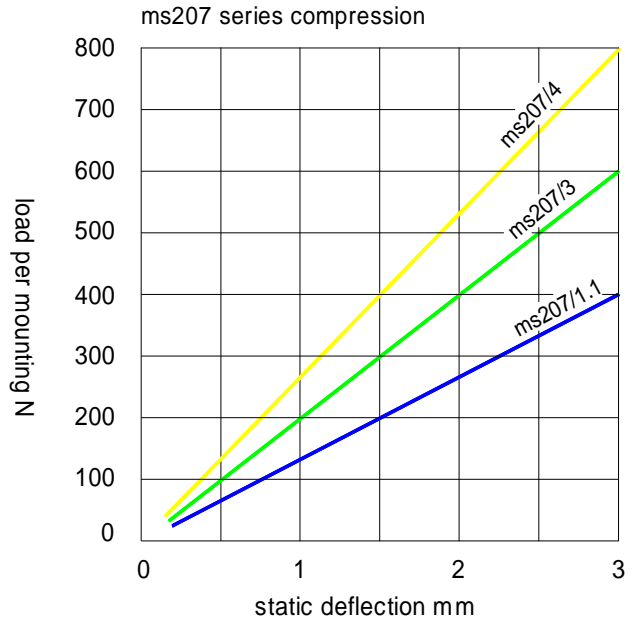
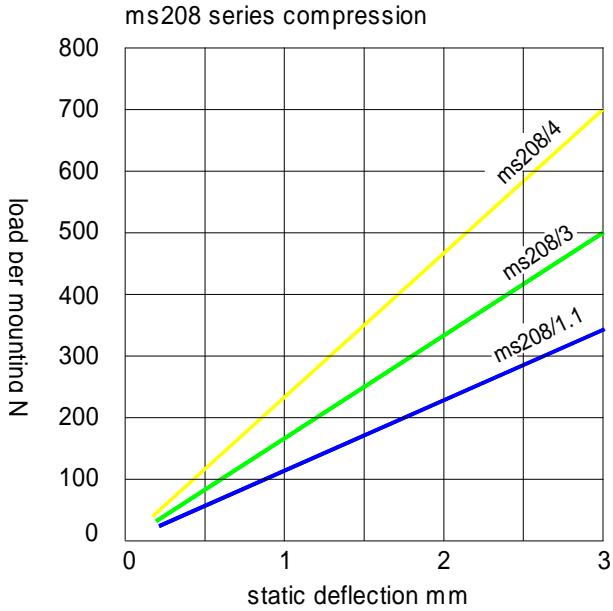
table - maximum loads

part no:	colour code	A	B	compression	Deflection
ms208/1.1	blue	38	41	350N	3.00 mm
ms207/1.1	blue	44.5	47.5	400N	3.00 mm
ms208	green	38	41	500N	3.00 mm
ms207	green	44.5	47.5	600N	3.00 mm
ms208/2	yellow	38	41	700N	3.00 mm
ms207/2	yellow	44.5	47.5	800N	3.00 mm

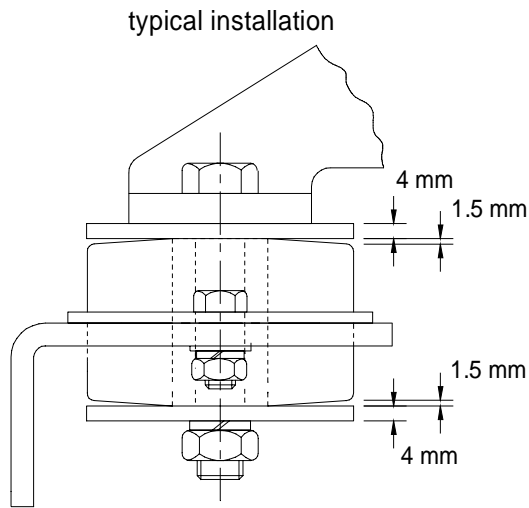
Technical data

ms207- ms208 series 200 - 800N

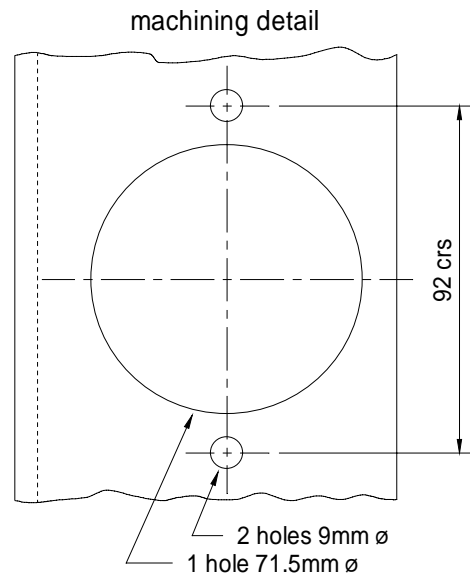
Lightweight mounting for shock loads up to 2kN

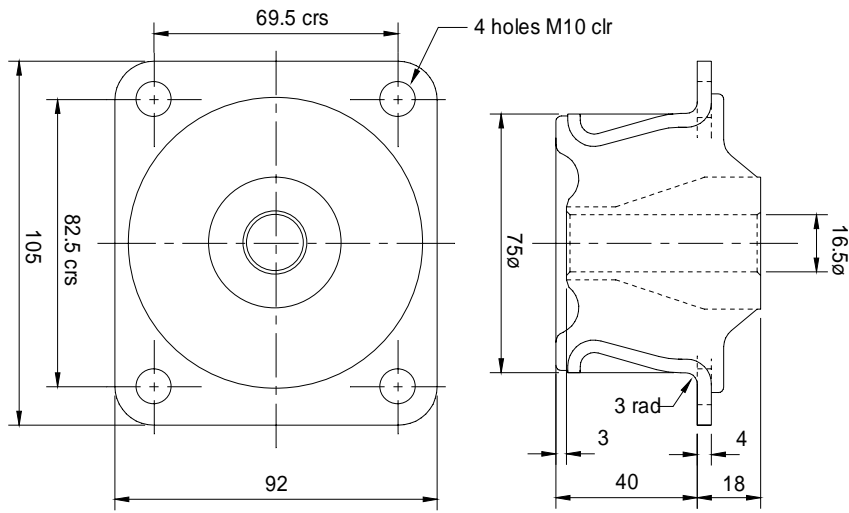


Generally mountings should be chosen to deflect between 2.0 and 3.0mm under load. Mountings can be used at deflections less than 2.0mm provided a 2.0mm thick washer is used between the centre core and the lower rebound washer.

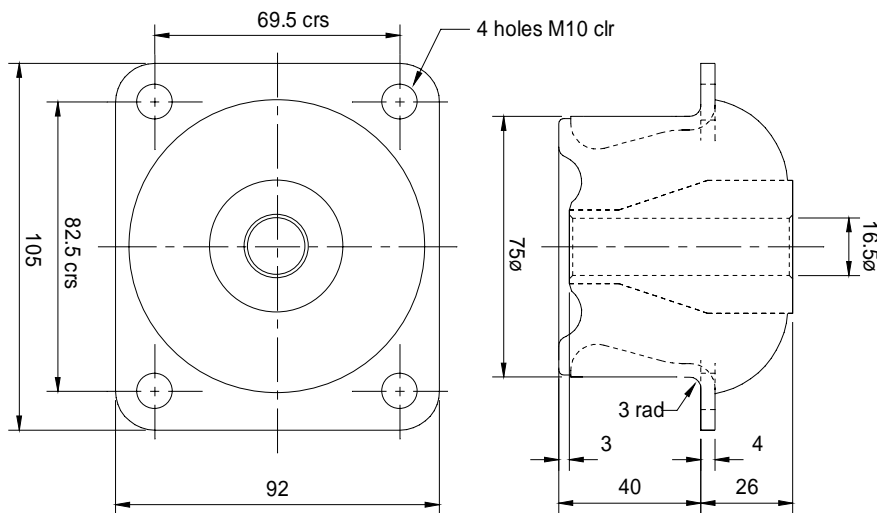


Mounting shown under maximum rated compressive load

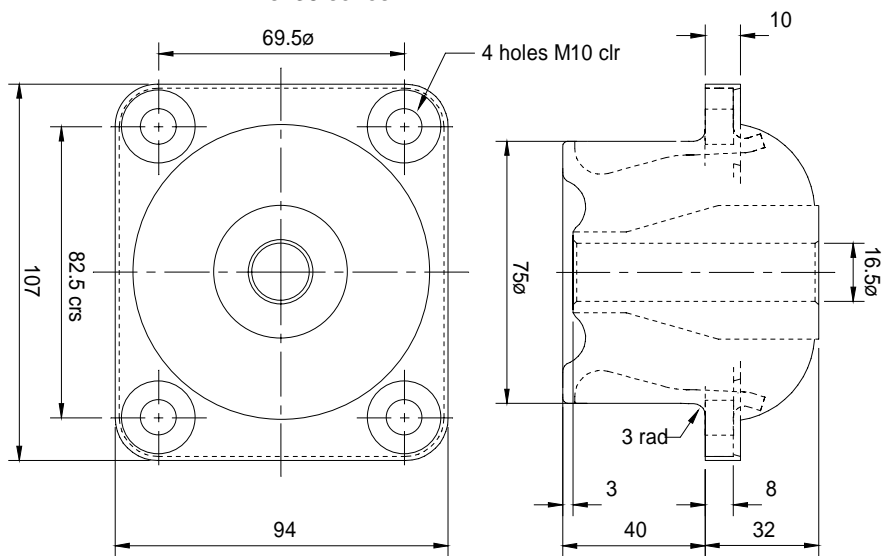




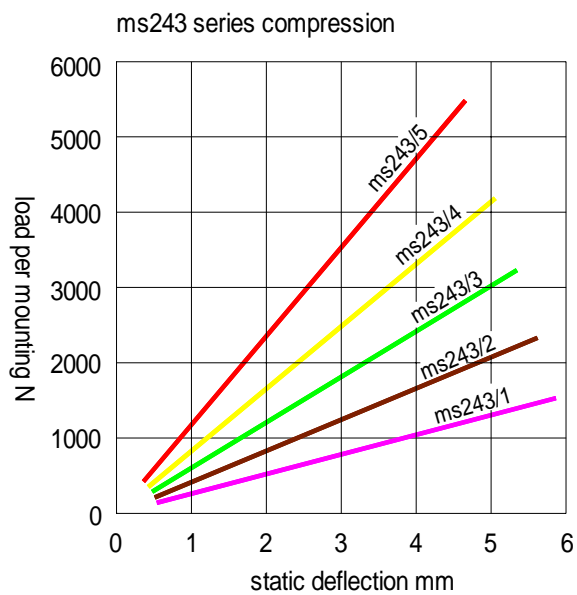
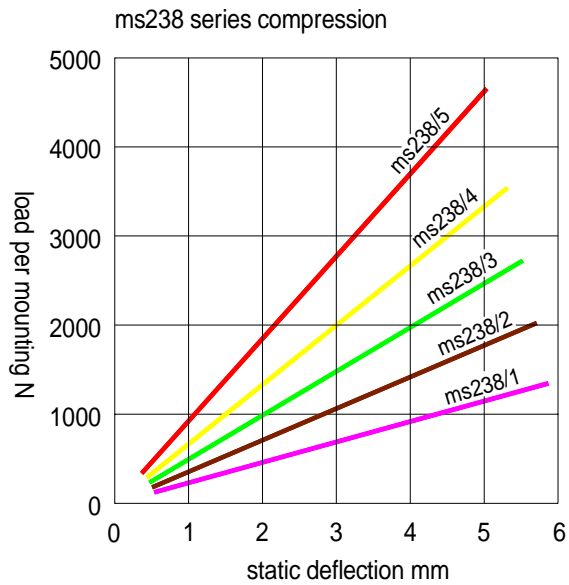
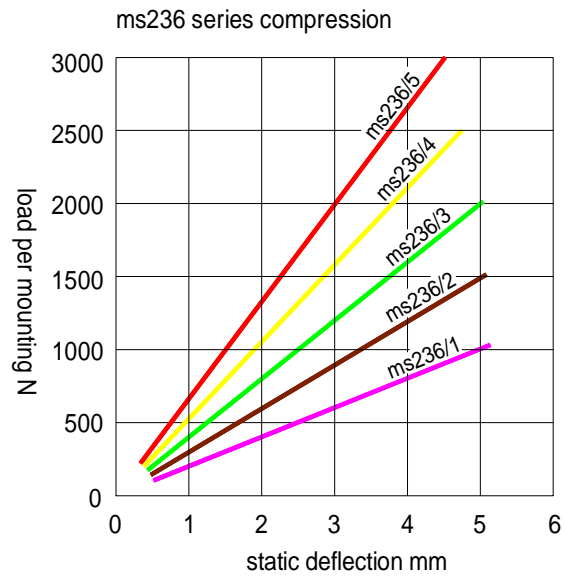
ms236 series



ms238 series

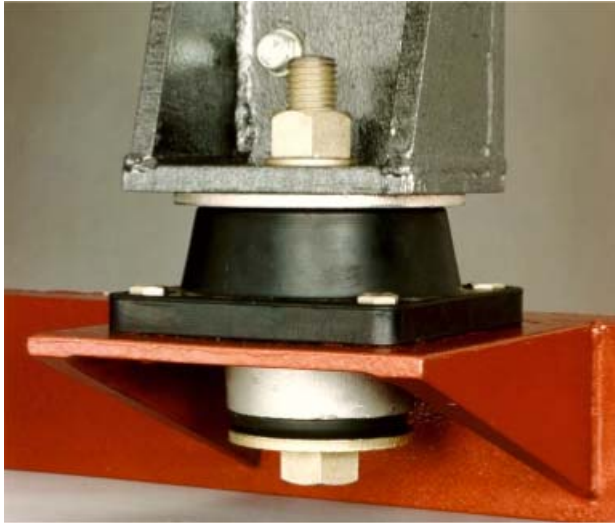


ms243 series



**ms247 - ms248 series 1KN - 20KN**

For use where large inertia forces have to be accommodated and restrained



picture shows typical ms248 installation

**ms247/248 series**

The ms247/248 series mountings have been designed to provide flexibility in an axial direction but limited movement radially. These features make the mounting particularly suitable for use with mobile equipment where movement in the vertical and horizontal planes has to be accommodated and restrained e.g. trailer mounted generators and compressors, industrial/marine engines and associated equipment, radiators, fluid tanks, transmission equipment etc.

The design of the ms247/248 series is unique in that it combines the properties of rubber loaded in compression and shear in separate elements. This reduces the ratio of the horizontal/vertical stiffness and makes the mountings more suitable to a wider range of applications. The ms247/MS248 range may be used in combination with one

another. Normally mountings are fitted into existing chassis members or steelwork to offer a compact design coupled with great strength. The lower rebound washer forms an integral part of the mounting design and must always be fitted as shown in the photograph above unless otherwise instructed by our technical department. The rebound washer fitted to the top of the mounting is required when the supporting steelwork above the mounting does not cover the full surface area of the mounting. Type numbers 20 upwards have cut out sections in the underside of the mounting to modify the stiffness characteristics in each horizontal plane.

The ms247 series and ms248 series may be used to restrain horizontal inertia loads up to a maximum of 40kN/mounting.

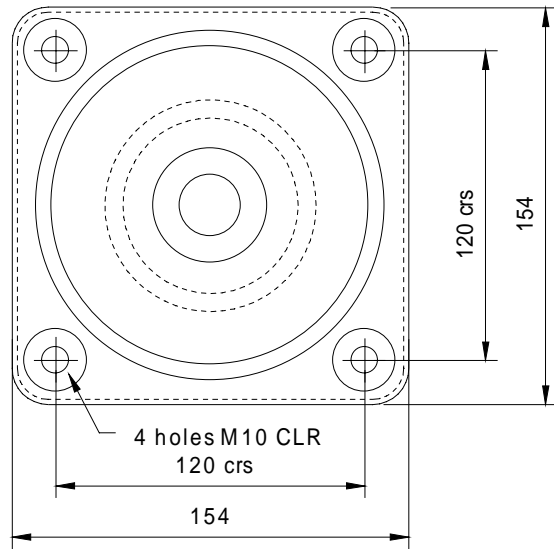
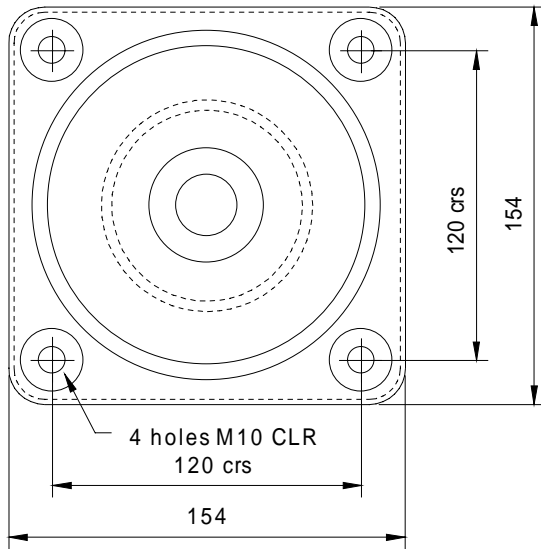
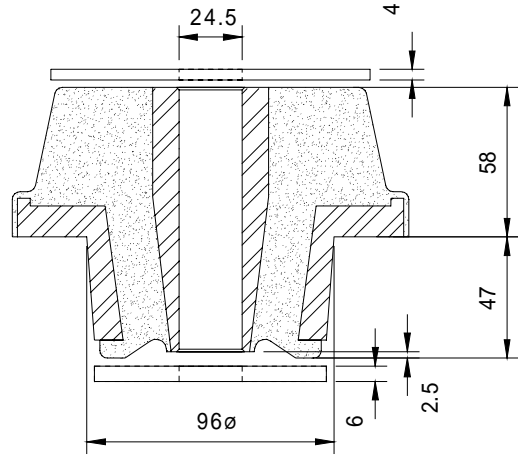
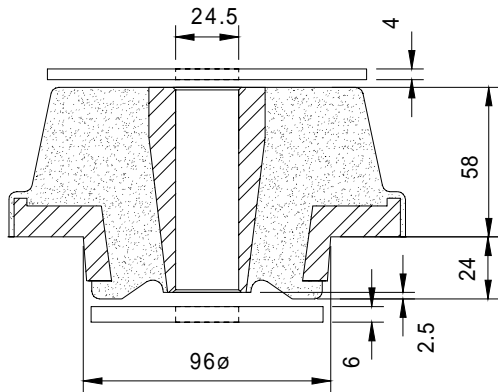
table - maximum loads

part no:	colour code	compression	deflection
ms247/1	purple	4000N	6.00mm
ms247/2	brown	6000N	6.00mm
ms247/3	green	8000N	6.00mm
ms247/4	yellow	12000N	6.00mm
ms247/5	red	16000N	6.00mm

part no:	colour code	compression	deflection
ms248/1	purple	5000N	6.00mm
ms248/2	brown	7500N	6.00mm
ms248/3	green	10000N	6.00mm
ms248/4	yellow	15000N	6.00mm
ms248/5	red	20000N	6.00mm

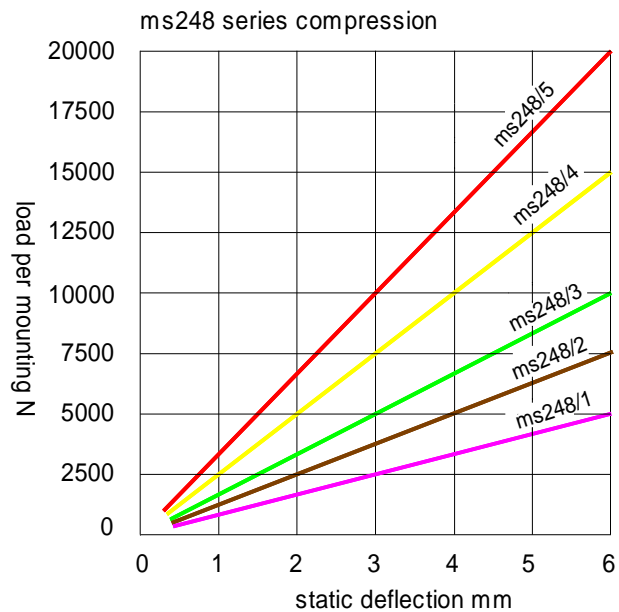
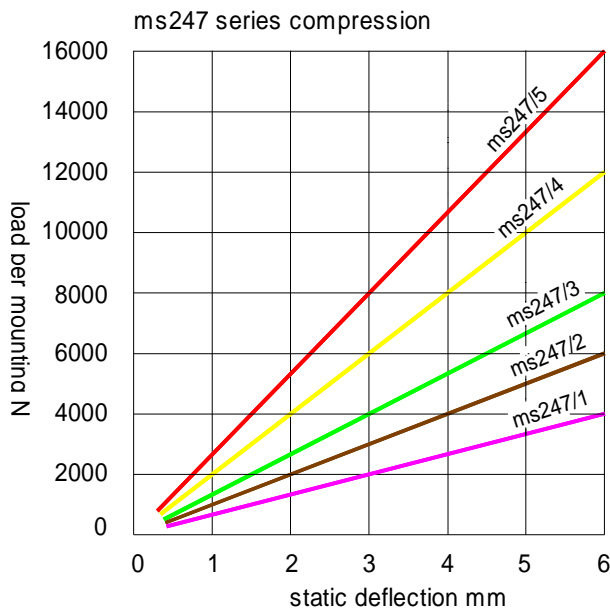
Technical data

ms247 - ms248 series 1KN - 20KN  
 Suitable for use with mobile and marine equipment



ms247 series

ms248 series





Technical data

Top and bottom rebound washers

For use with ms series mountings to limit movements arising from shock and inertia loadings.

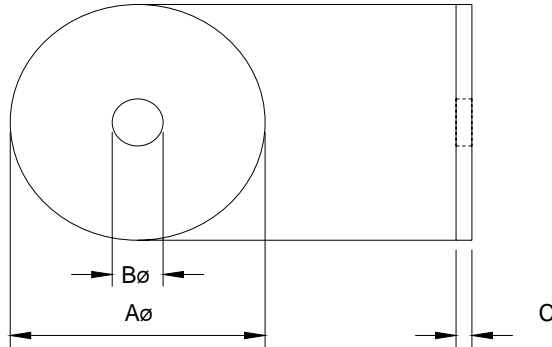


table - dimensions

part no:	A	B	C
743	70	13	4
997	75	16.5	5
788	75	M16x2	5
780	124	24.5	4
793	90	24.5	6

For mounting series	Top rebound washer	Bottom rebound washer
ms207-ms208 (M12 clearance hole)	Part no: 743	Part no: 743
ms236-ms243 (M16 clearance hole)	Part no: 997	Part no: 997
ms236-ms243 (M16x2 tapped hole)	Part no: 788	Part no: 788
ms247-ms248 (M24 clearance hole)	Part no: 780	Part no: 793

Recommended tightening torque for centre fixing bolts

Thread size	Torque Nm
M12	80
M16	120
M24	200



Illustration of how the ms series mountings may be used to suspend equipment underneath the supporting steelwork.

