M Mount

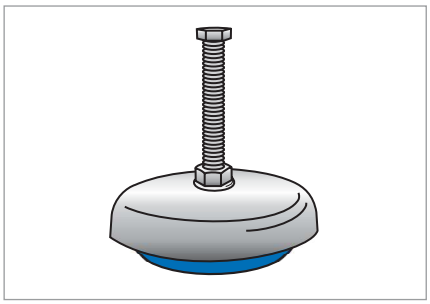

Fig. 1 M Mount

Material

Standard material	Hardness
Acrylonitrile-butadiene rubber NBR 68	45, 55, 60, 65, 70, 75, 85 Shore A

Operating conditions

Compressive forces in Z direction	1200 N ... 55000 N	Maximum permissible force
Max. temperature	+90 °C, transient +110 °C	
Min. temperature	–20 °C	

Product description

M mounts combine a low-line compact design with good insulation capabilities and the possibility of levelling load.

Product advantages

- Oil-resistant elastomer material
- Non-anchored installation
- Reduced transmission of structure-borne noise
- Good insulating capability
- Built-in capability for levelling the load
- RoHS-compliant.

Application

M mounts are used for non-anchored installation and heavy driven machinery. They feature the capacity for levelling of the attached machine and provide vibration insulation.

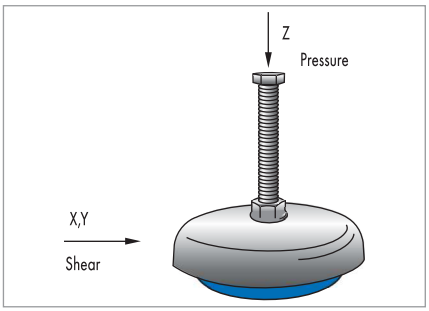

Fig. 2 Primary load directions

M mounts feature an increasing stiffness over the compressive deflection in the Z direction. Through no anchoring in the foundation or frame, no shear forces should be transferred. The weight is absorbed in the longitudinal axis. M mounts made from stainless steel and special rubber compounds can be supplied on enquiry for special application cases (e.g. food processing or chemical industries and shipbuilding).

Design notes

The mounts consist of two metal parts that are joined by a vulcanised elastomer pad. An adjusting screw allows for levelling of the attached machine. The special mixture of nitrile-rubber (Perbunan) used for the M Mount is oil-resistant.

Fitting & installation

- M mounts have an adjusting screw for securing them to the mass they carry, and are designed to sit on the supporting surface without being anchored
- Ensure that the mating face of the mass carried by the mount is parallel with the supporting surface, and make sure that the supporting surface is level and smooth
- The nut is for securing the leg of the machine to the mount
- This arrangement means that the weight of the machine does not impose a load on the nut in the bowl of the mount
- Do not under any circumstances attempt to sandwich the leg of the machine between two nuts
- The form of the boreholes to accommodate the threaded studs or securing screws must be compliant with DIN EN 20273
- It is important to ensure that the mating faces of the frame anchorage and the mass carried by the mount are flat and smooth
- M mounts can also be installed without threaded fasteners if compressive-load deflection is significantly greater than maximum amplitude.

Article list

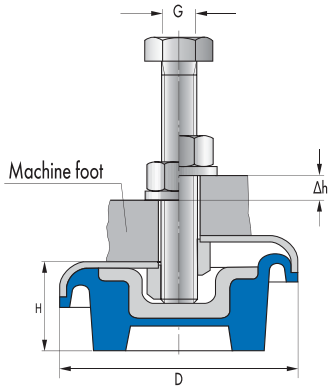

Fig. 3 M Mount

Nominal maxima Pressure		Stiffness	Outside Ø	Height	Adjust-ment height	Threads	Product No.	Material	Type	Article No.	
$F_{z\,max}$	$s_{z\,max}$	c_z	D	H	Δh	G					
[N]	[mm]	[N/mm]	[mm]	[mm]	[mm]						
1200	3,5	340	80	30	8	M 12 x 80	5018 023	45 NBR 68	M 80/1	96504	●
2000	3,5	570	80	30	8	M 12 x 80	5018 023	60 NBR 68	M 80/3	96505	●
3000	3,5	850	80	30	8	M 12 x 80	5018 023	70 NBR 68	M 80/4	96506	●
3500	3,5	1000	80	30	8	M 12 x 80	5018 023	75 NBR 68	M 80/5	96507	●
5000	4,0	1250	120	37	12	M 12 x 100	5018 020	45 NBR 68	M120/1	96496	●
6000	4,0	1500	120	37	12	M 12 x 100	5018 020	55 NBR 68	M120/2	96497	●
8000	4,0	2000	120	37	12	M 12 x 100	5018 020	65 NBR 68	M120/3	96498	●
9200	4,0	2300	160	41	12	M 16 x 120	5018 021	45 NBR 68	M160/1	96499	●
13500	4,0	3375	160	41	12	M 16 x 120	5018 021	65 NBR 68	M160/3	96500	●
18000	4,0	4500	160	41	12	M 16 x 120	5018 021	70 NBR 68	M160/4	96501	●
9200	4,0	2300	160	41	12	M 16 x 140	5018 704	45 NBR 68	M160/1	49039496	○
13500	4,0	3375	160	41	12	M 16 x 140	5018 704	65 NBR 68	M160/3	49039497	○
18000	4,0	4500	160	41	12	M 16 x 140	5018 704	70 NBR 68	M160/4	49014539	●
26000	4,0	6500	185	48	8	M 20 x 160	5018 022	75 NBR 68	M185/5	96502	●
55000	4,0	13750	185	48	8	M 20 x 160	5018 022	85 NBR 68	M185/6	96503	●

● Available from stock ○ On request: Tool is available, delivery at short notice