

MO Mount

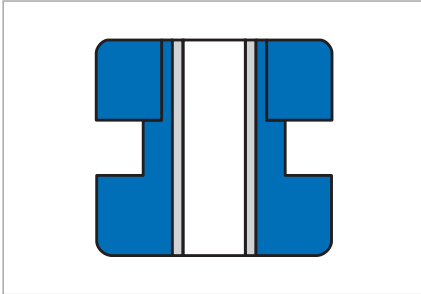


Fig. 1 MO Mount 753

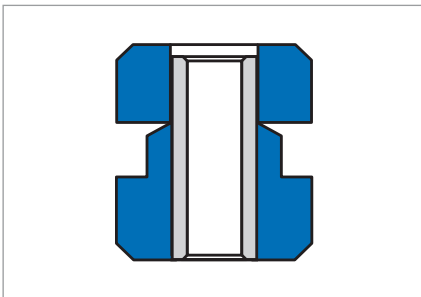


Fig. 2 MO Mount 754

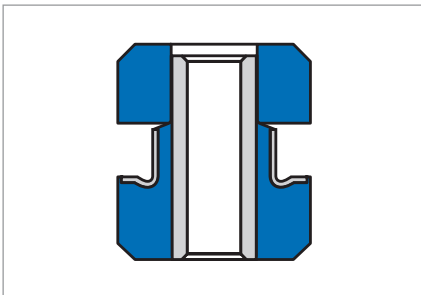


Fig. 3 MO Mount 755

Product description

MO mounts are suitable for use as resilient connecting elements.

Product advantages

- Dependable limitation of radial deflection
- Compact
- Good insulating capability in the longitudinal direction
- RoHS-compliant.

Application

The range of possible applications for MO mounts is wide, extending from applications with driven machinery, PTOs and radiators up to small cabs for vehicles, and also including attachments for exhaust-air ducts and exhaust pipes in maritime engineering.

Material

Standard material	Hardness
Chlorine-butadiene rubber CR 57	42, 45, 50, 55, 60, 64, 75 Shore A

Operating conditions

Radial forces	1000 N ... 2800 N	Maximum permissible force
Axial forces	1800 N ... 2400 N	Maximum permissible force
Max. temperature	+100 °C, transient +130 °C	
Min. temperature	-30 °C	

MO mounts feature equal stiffness in the horizontal directions (X,Y). These mounts have a greater flexibility in the Z direction which leads to a correspondingly higher isolation. The limitation of the spring displacements in the radial direction generally appear more than in the axial direction. The longitudinal axis is recommended as the primary load direction.

Design notes

The MO mount with central borehole comprises an elastomer body and a vulcanised elastomer metal part. These parts attached to each other create an annular clamping groove. This mount configuration is expandable through layers or spatially corresponding limiter components for the axial spring displacement which leads to a progressive spring characteristic curve and serves as tear-off protection at the same time.

Fitting & installation

- MO mounts are designed to accommodate a threaded fastener inserted through the central borehole
- Individual components permit slight adjustment to allow for in-situ offset
- Combine the mount with a tubular spacer if tightening torques are high
- Depending on the quality of the material selected, threaded-fasteners of at least one strength class higher can be used
- Select a tubular spacer with an outside diameter allowing slight play for the inside diameter d_1 of the MO mount
- Select the through-hole of the tubular spacer to accommodate the securing screw according to DIN EN 20273
- The surfaces for force transfer to the threaded fastener by the elastomer part should be large and flat
- Position MO mounts such that the rubber-metal part bolts directly to the component to be insulated
- Install the elastomer-only part with a washer (see the section on washers and centering washers for details of the washer)
- Make sure that the edges of bore S_D are chamfered, or preferably radiused, at both ends
- MO mounts with steel reinforcement (Type 3) require this radiusing only at the rubber-only end.

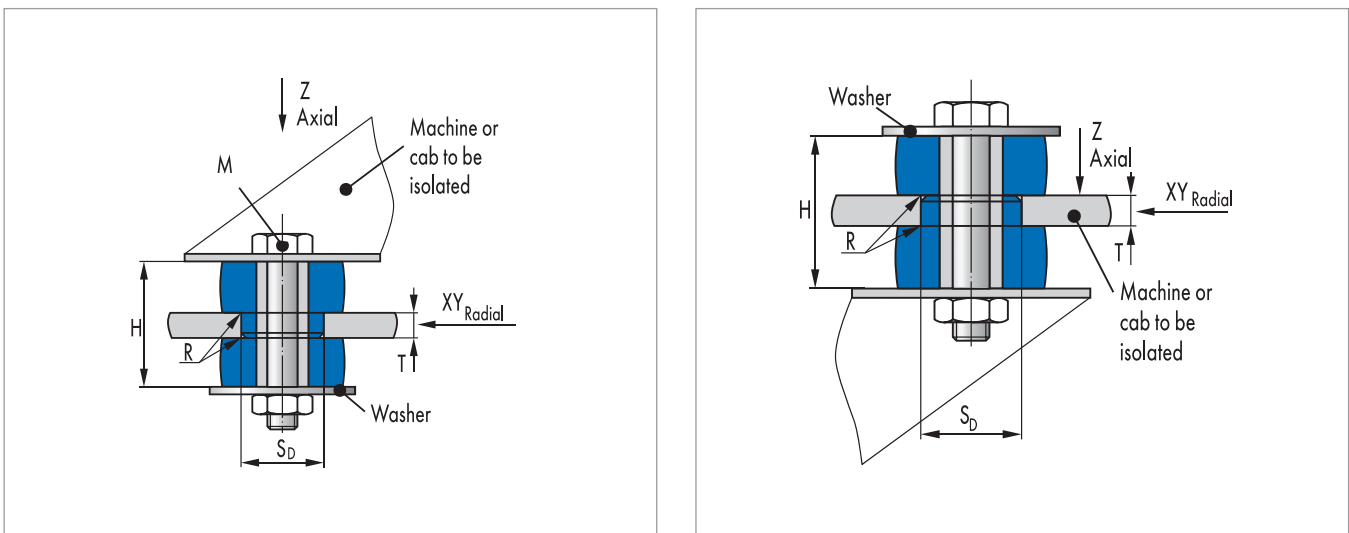


Fig. 4 Fitting & installation instructions: MO Mount with load directions

Article list

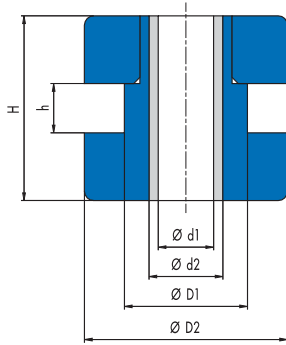


Fig. 5 MO Mount Type I

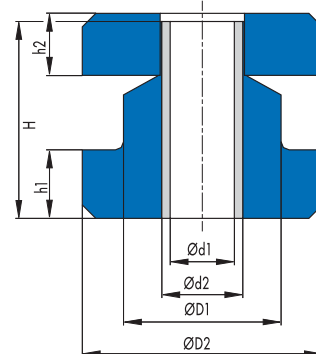


Fig. 6 MO Mount Type II

Nominal maxima			Stiffness	Nominal maxima			Stiffness	Main dimensions						Frame	
Axial pressure			Radial shear			Pipe		Thickness		Installation Ø	Outside Ø	Tube length	Borehole Ø	Thickness	
F _{z max}	S _{z max}	C _{z max}	F _{x, y max}	S _{x, y max}	C _{x, y max}	d ₁	d ₂	h ₁	h ₂	D ₁	D ₂	H	S _D ±0,1	T	
[N]	[mm]	[N/mm]	[N]	[mm]	[N/mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	
420	1,5	280	540	1,0	540	9,0	12,0	11,0	11,0	20,0	33,0	30,0	20,5	9	
1800	1,5	1200	2300	1,0	2300	9,0	12,0	11,0	11,0	20,0	33,0	30,0	20,5	9	
640	3,3	190	240	1,2	200	9,0	21,3	20,5	19,5	33,0	48,0	50,0	33,4	13	
910	2,2	410	340	2,2	150	9,0	21,3	20,5	19,5	33,0	48,0	50,0	33,4	13	
840	3,1	270	300	4,2	70	9,0	21,3	20,5	19,5	33,0	48,0	50,0	33,4	13	
2970	2,7	1100	1570	3,8	410	9,0	21,3	20,5	19,5	33,0	48,0	50,0	33,4	13	
620	3,0	210	380	1,0	380	13,5	20,7	20,5	19,5	33,0	48,0	50,0	33,5	12	
1650	3,0	550	1000	1,0	1000	13,5	20,7	20,5	19,5	33,0	48,0	50,0	33,5	12	
900	3,0	300	1100	1,0	1100	13,5	20,7	20,5	19,5	31,2	48,0	50,0	31,5	13	
1600	3,0	530	1900	1,0	1900	13,5	20,7	20,5	19,5	31,2	48,0	50,0	31,5	13	
2400	3,0	800	2800	1,0	2800	13,5	20,7	20,5	19,5	31,2	48,0	50,0	31,5	13	
3900	3,0	1300	4500	1,0	4500	13,5	20,7	20,5	19,5	31,2	48,0	50,0	31,5	13	
2100	3,0	700	1400	1,0	1400	16,7	26,0	22,9	22,9	40,1	64,8	61,7	40,5	20	
3000	3,0	1000	200	1,0	200	16,7	26,0	22,9	22,9	40,1	64,8	61,7	40,5	20	
1330	2,3	580	560	1,1	510	23,8	31,3	25,4	23,0	58,4	89,0	73,0	58,8	29	
1890	2,8	680	1140	2,3	500	23,8	31,3	25,4	23,0	58,4	89,0	73,0	58,8	29	
2940	3,7	790	1660	1,9	870	23,8	31,3	25,4	23,0	58,4	89,0	73,0	58,8	29	
5700	1,5	3800	2520	1,6	1580	23,8	31,3	25,4	23,0	58,4	89,0	73,0	58,8	29	

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

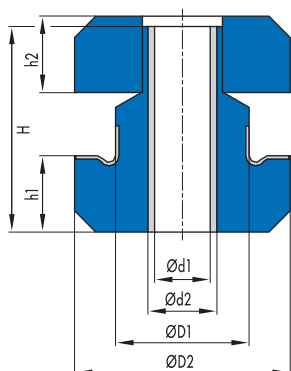


Fig. 7 MO Mount Type III

	max. screw strength class (without sleeve)	max. tightening torque	Product No.	Material	Type	Corrosion protection	Article No.	
	M	M _{sp}						
		[N/m]						
	M 6 6.8/M 8 5.6	7,5 / 11,0	3918 753	42 CR	I	phosphated	49031354	●
	M 6 6.8/M 8 5.6	7,5 / 11,0	3918 753	75 CR	I	phosphated	511453	●
	M 8 12.9	40,0	3918 765	45 CR 057	II	Fe//Zn8Znph/r/3	49029937	●
	M 8 12.9	40,0	3918 765	50 CR 057	II	Fe//Zn8Znph/r/3	49038236	○
	M 8 12.9	40,0	3918 765	60 CR 057	II	Fe//Zn8Znph/r/3	49038235	○
	M 8 12.9	40,0	3918 765	75 CR 057	II	Fe//Zn8Znph/r/3	49038234	○
	M10 8.8/M12 5.6	47,0/39,0	3918 754	42 CR	II	phosphated	49011344	●
	M10 8.8/M12 5.6	47,0/39,0	3918 754	64 CR	II	phosphated	511454	●
	M10 8.8/M12 5.6	47,0/39,0	3918 755	42 CR	III	phosphated	49012351	○
	M10 8.8/M12 5.6	47,0/39,0	3918 755	55 CR	III	phosphated	2129379	●
	M10 8.8/M12 5.6	47,0/39,0	3918 755	64 CR	III	phosphated	511452	●
	M10 8.8/M12 5.6	47,0/ 39,0	3918 755	75 CR	III	phosphated	49003069	●
	M12 5.6	39,0	3918 768	45 CR	II	phosphated	49038161	○
	M12 5.6	39,0	3918 768	60 CR	II	phosphated	49038160	○
	M16 5.8/M20 4.6	126,0/147,0	3918 766 HD	45 CR 057	II	Fe//Zn8Znph/r/3	49033624	○
	M16 5.8/M20 4.6	126,0/147,0	3918 766 HD	50 CR 057	II	Fe//Zn8Znph/r/3	49036771	○
	M16 5.8/M20 4.6	126,0/147,0	3918 766 HD	60 CR 057	II	Fe//Zn8Znph/r/3	49036770	○
	M16 5.8/M20 4.6	126,0/147,0	3918 766 HD	75 CR 057	II	Fe//Zn8Znph/r/3	49036769	○