

Double U-Shear Mount

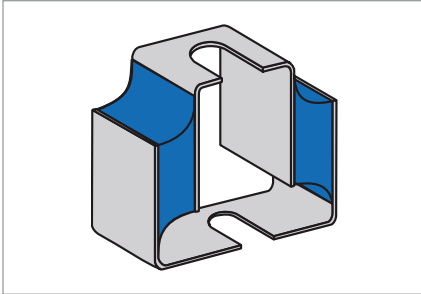


Fig. 1 Double U-Shear Mount

Product description

Double U-shear mounts are especially suited for isolation tasks. These mounts have an especially simple design and a high ease of installation.

Product advantages

- Good insulating capability in the Z direction
- Effective limitation of shock loads in the compressive-deflection direction
- Virtually no progression
- Linear characteristic
- RoHS-compliant.

Application

Double U-shear mounts are used to mount instruments, units, pumps, compactors and compressors. They are equally suitable for the decoupling of exhaust-air ducts because of their ability to compensate for structure-borne sound and thermal expansion.

Material

Standard material	Hardness
Natural rubber NR 11	45, 50, 60, 70 Shore A

Operating conditions

Shear F_z/F_y	120 N ... 2000 N	Maximum permissible force
Max. temperature	+60 °C, transient +80 °C	
Min. temperature	-45 °C	

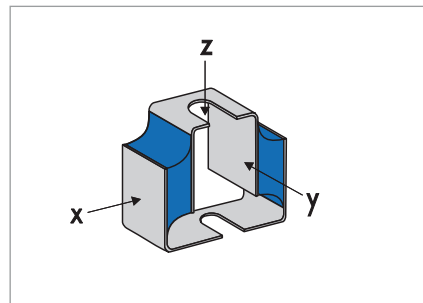


Fig. 2 Primary load directions

Design notes

A mount of this type consists of two dove-tailed U-shaped steel channel sections held together by elastomer pads.

They are designed so that the stiffness to resist shear increases in the order Y, Z, X. Depending on the type, they limit strong shock loads in the compressive-deflection direction (+Z). The effective stiffness can be adjusted by turning the mount on the static load (Z axis). Select the primary load direction +Z so that it is perpendicular to the planes of attachment.

Fitting & installation

- Double U-shear mounts have threads to accommodate grooves.
- Avoid non-load-dependent offset of the U-shaped channel sections relative to each other
- Individual components permit slight adjustment to allow for in-situ planar or angular offset
- It is important to ensure full-surface contact between the mating faces of the U-shaped channel sections and the frame on the one hand and the supported mass on the other.

Article list

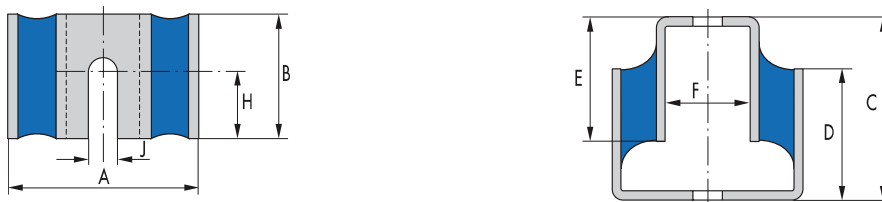


Fig. 3 Double U-Shear Mount 053 18 001, 053 18 002, 053 18 003 and 053 18 004

Nominal maxima		Stiffness	A	B	C	D	E	F	H	J	Product No.	Material	Article No.	
Shear														
$F_{z \max}$	$S_{z \max}$	c_{shear}												
[N]	[mm]	[N/mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]				
120	6,1	20	61	20	43	27	25	20,4	10,0	6,6	5318 004	45 NR 11	96764	●
150	5,6	30	61	20	43	27	25	20,4	10,0	6,6	5318 004	50 NR 11	96763	●
160	4,3	40	61	20	43	27	25	20,4	10,0	6,6	5318 004	60 NR 11	96765	●
220	7,0	30	71	25	62	43	38	26,4	12,5	11,0	5318 003	50 NR 11	96769	●
300	5,2	60	71	25	62	43	38	26,4	12,5	11,0	5318 003	60 NR 11	96771	●
300	3,3	90	71	25	62	43	38	26,4	12,5	11,0	5318 003	70 NR 11	96770	●
850	7,0	120	79	50	78	56	51	32,4	25,0	13,5	5318 002	50 NR 11	96775	●
850	4,2	200	79	50	78	56	51	32,4	25,0	13,5	5318 002	60 NR 11	96777	●
980	3,0	330	79	50	78	56	51	32,4	25,0	13,5	5318 002	70 NR 11	96773	●
2000	7,0	290	87	65	108	83	76	38,4	32,5	17,5	5318 001	50 NR 11	96781	●
2000	3,5	570	87	65	108	83	76	38,4	32,5	17,5	5318 001	60 NR 11	96784	●
2000	2,8	710	87	65	108	83	76	38,4	32,5	17,5	5318 001	70 NR 11	96779	●

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