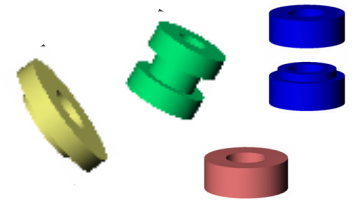
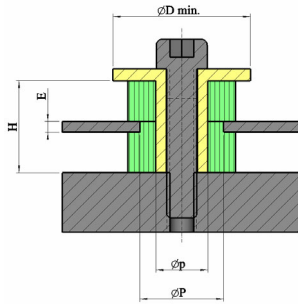


Grommets, Shouldered and Plate Washers Series



Mounting principle



As showed above they may mounted with (not bounded) metallic parts, in order to apply the recommended pre-tension given by "H" and in relation with "E" and general sizes of dampers (see dimensions table), and also to assure a good bounce, given by "D min" in case of shock. "D min" is generally 10% larger that outside diameter of isolator

Applications

This dampers are recommended to make insulation of electronic boards or different units and boxes in middle to high frequency range in most severe operational conditions

The problems linked to the environment being significantly minimised by this type of damper, it becomes possible to use electronic boards or standard components that are commonly available on the market

Due to their geometry and to the various combinations that are made possible by modifying the dimensions and/or elastomers, we can reduce the vibratory levels, modify the board's natural modes, shift the critical frequencies, etc...

Codification

The reference to be indicate is for example : PF-4-42-58-16-18-S-[AA]

PF : for grommets, RE : for shouldered washers, RP for plate washers

4 : Max dimension of screw who can be used

42 : $\varnothing A$ in 1/10e of mm

58 : $\varnothing B$ in 1/10e of mm

16 : Dimension "F" in 1/10e of mm

18 : Dimension "E" in 1/10e of mm

S : Elastomers material, in this case Silicon, could be N(neoprene), SF(Fluoro-Silicone), FC(Fluoro-Carbon)

AA : Hardness index of elastomers

Characteristics

The minimum resonance frequency is generally over 50Hz and in most of cases over 150Hz

The amplification at resonance can reach values lower than 4, for execution in high damped silicone for example

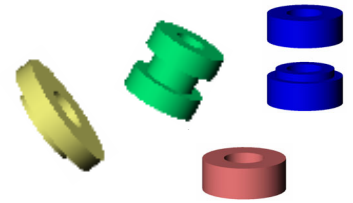
The operative temperature range is from -55°C to $+150^{\circ}\text{C}$ for silicone executions and from -30°C to $+80^{\circ}\text{C}$ for neoprene executions

The pre-tension is generally 10% of total height "D", the thickness of board "E" and the mounted height "H" gives the required pre-tension, the difference between inner diameter of rubber and outside diameter of shouldered screw gives also a pre-tension in radial direction

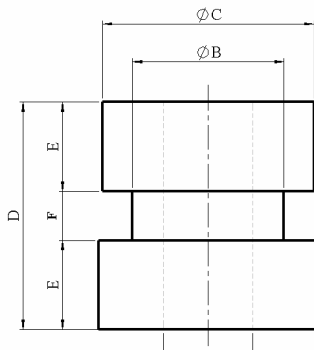
The behaviour of dampers are directly linked to this pre-tension values, and could change for the same isolators if its implantation is different

Ed. 01/04

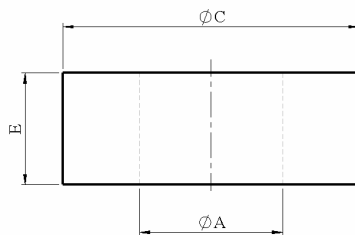
Grommets, Shouldered and Plate Washers Series



PF series

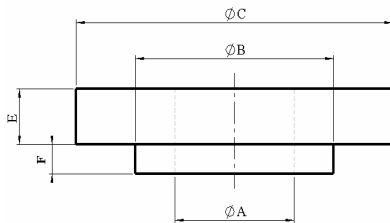


PF	ØA	ØB	ØC	D	F	E	Old P/N
3	3,2	4,3	6,4	5,0	3,0	1,0	605-GS
4	4,0	5,5	9,0	9,0	2,0	3,5	689-GS
4	4,2	5,8	8,0	5,2	1,6	1,8	323-GS
5	5,5	9,9	14,5	15,5	3,5	6,0	387-GS
6	6,0	8,0	12,0	11,5	2,5	4,5	237-GS
6	6,25	14,3	19	4,8	1,6	1,6	717-GS
8	8,25	14,3	19	12,0	8	2	718-GS
10	10,0	13,0	18,0	12,0	2,8	4,6	312-GS



RP series

RP	ØA	ØB	ØC	D	F	E	Old P/N
3	3,2	0	5,5	0	0	1,5	725-GS
3	3,2	0	7,0	0	0	5,3	370-GS
3	3,2	0	7,5	0	0	7,0	563-GS
3	3,5	0	8,0	0	0	3,0	254-GS
3	3,5	0	10,5	0	0	8,5	606-GS
4	4,0	0	9,2	0	0	8,0	767-GS
5	5,0	0	9,5	0	0	4,5	276-GS
5	5,5	0	15	0	0	2,0	667-GS
5	5,5	0	24	0	0	2,0	668-GS
8	8,3	0	16,3	0	0	14	559-GS
8	8,7	0	18,0	0	0	4,5	583-GS
12	12,5	0	28,0	0	0	2,0	637-GS



RE series

RE	ØA	ØB	ØC	D	F	E	Old P/N
3	3,5	5,0	8,0	0	1,6	3,0	254-GS
4	4,0	5,2	8,0	0	1,2	4,0	610-GS
5	5,0	6,5	9,5	0	1,6	4,5	276-GS
5	5,8	9,9	14,3	0	1,6	5,8	926-GS
6	6,0	12,0	18,0	0	5,5	6,5	336-GS
6	6,3	12,0	18,5	0	6,0	6,5	350-GS
6	6,5	11,5	15,0	0	4,0	8,5	340-GS
8	8,0	13,1	15,5	0	2	4,6	680-GS
8	9,0	15,0	24,0	0	2,0	4,6	520-GS