

High performance shock and vibration isolation materials

ISOMAT IM BR 40, 50 70

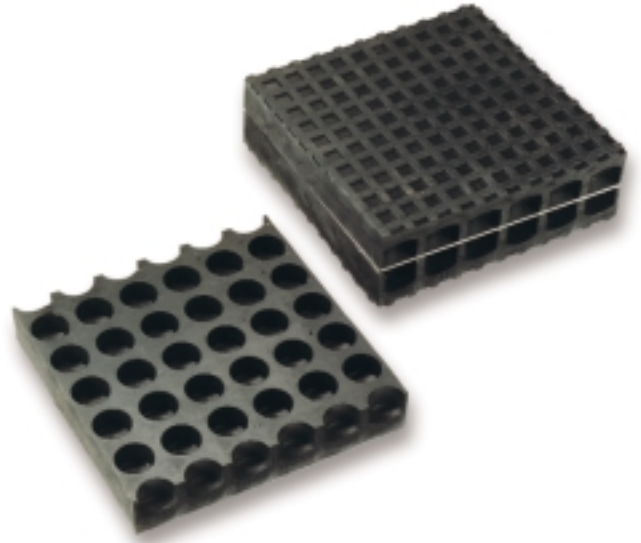
Low frequency high performance shock and vibration

Colour: Black

Description: A specially designed highly effective low frequency shock and vibration isolation material

Construction

Moulded from high quality Nitrile NBR rubber. Circular pockets moulded into one side increase elasticity and create air pockets to increase isolation efficiency. A square tread pattern moulded onto the top surface provides a high friction grip to underside of machine base. -50 and -75 grades generally supplied with steel interleaves.



Applications

High performance shock and vibration isolation of impact and vibration creating machinery including: granulators, crushers, forging machines, hydraulic and mechanical presses, diesel gensets,

Other properties

Creep: Minimal

Operational Life: 30+ years (subject to environment)

Oil and Chemical Resistance:

Excellent, full chemical resistance table available on request.

Natural Frequency Range: Low to medium

Working Temperature Range: -30 to +120 o C

(Properties subject to change outside range -10 to +80 o C)

Standard Sheet Sizes mm:

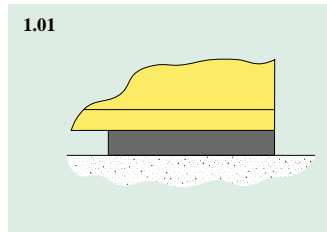
1000x500, 500x500 and other sizes to order. Pads can be supplied against customer drawings including holes, slots etc.

Cutting and drilling: Cut with band saw or water jet.

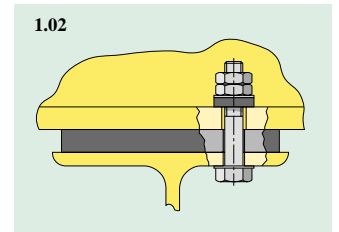
Holes with twist drill or punch

Health and Safety: Wear protection against any dust created when cutting and or drilling

Building Materials class: B2



Free standing installation on single thickness pads.



Bolt through installations to steelwork

ISOMAT IM BR			-40									-50									
			IM-BR-40-25			IM-BR-40-50			IM-BR-40-75			IM-BR-50-25			IM-BR-50-50			IM-BR-50-75			
Compression Modulus Ec	N/mm2		3	3	3	3.7	3.7	3.7	3	3	3	3.7	3.7	3.7	3	3	3				
Specific Spring Constant Ks	N/mm/mm2		0.12	0.06	0.04	0.15	0.07	0.05	0.12	0.06	0.04	0.15	0.07	0.05	0.12	0.06	0.04				
Thickness T	mm		25	50	75	25	50	75	25	50	75	25	50	75	25	50	75				
Damping	C/Cc		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1				
Coefficient of Friction (dry)			0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8				
Hardness IRHD Shore A	+/- 3		40	40	40	50	50	50	40	40	40	50	50	50	40	40	40				
Ratio Dyn to Static Modulus	D		2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4				
Maximum Static Load Msp	N/mm2		0.4	0.4	0.4	0.5	0.5	0.5	0.4	0.4	0.4	0.5	0.5	0.5	0.4	0.4	0.4				
Maximum Static Load Msp	kg/cm2		4	4	4	5	5	5	4	4	4	5	5	5	4	4	4				
Static Loading Pressure																					
	MPa	N/mm2	kg/cm2	fsv	fdv	d	fsv	fdv	d	fsv	fdv	d	fsv	fdv	d	fsv	fdv	d			
	0.10	0.10	1	17	27	0.83	12	19	1.67	10	16	2.50	19	30	0.68	14	21	1.35	11	17	2.03
	0.20	0.20	2	12	19	1.67	9	14	3.33	7	11	5.00	14	21	1.35	10	15	2.70	8	12	4.05
	0.30	0.30	3	10	16	2.50	7	11	5.00	6	9	7.50	11	17	2.03	8	12	4.05	6	10	6.08
	0.35	0.35	3.5	9	14	2.92	7	10	5.83	5	8	8.75	10	16	2.36	7	11	4.73	6	9	7.09
	0.40	0.40	4	-	-	-	-	-	-	-	-	-	10	15	2.70	7	11	5.41	6	9	8.11

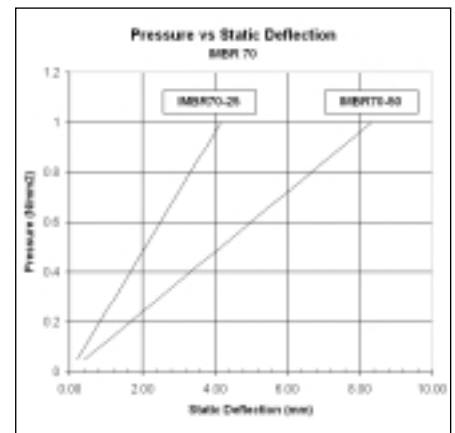
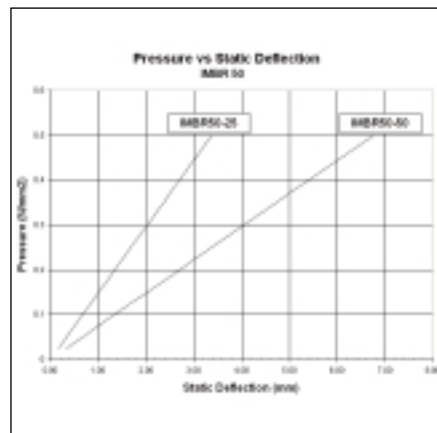
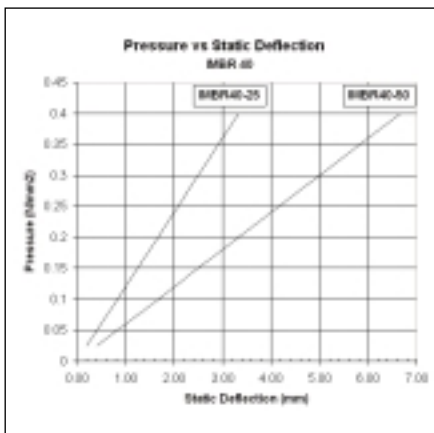
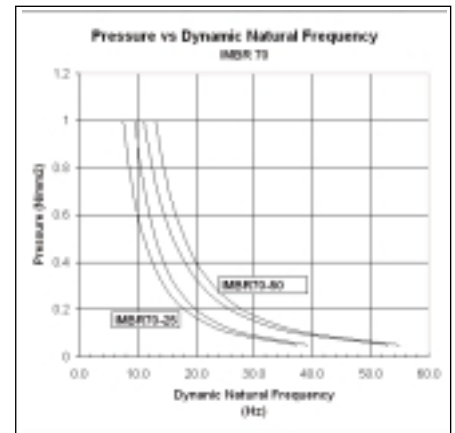
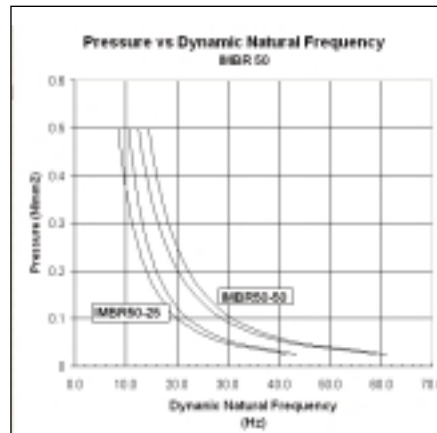
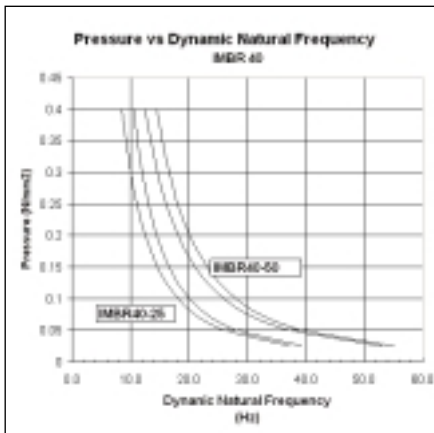
Vertical		
Static Natural Frequency	Hz	fsv
Dynamic Natural Frequency	Hz	fdv
Static Deflection	mm	d

This information is for guidance only

ISOMAT IM BR		-70										
					IM-BR-70-25			IM-BR-70-50			IM-BR-70-75	
Compression Modulus	Ec	N/mm2	6			6			6			
Spring Constant	Ks	N/mm/mm2	0.24			0.12			0.08			
Thickness	T	mm	25			50			75			
Damping	C/Cc		0.1			0.1			0.1			
Coefficient of Friction (dry)			0.8			0.8			0.8			
Hardness IRHD Shore	A+/- 3		70			70			70			
Ratio Dyn to Static Modulus	D		2.4			2.4			2.4			
Maximum Static Load	Msp	N/mm2	1			1			1			
Maximum Static Load	Msp	kg/cm2	10			10			10			
Static Loading Pressure												
	MPa	N/mm2	kg/cm2	fsv	fdv	d	fsv	fdv	d	fsv	fdv	d
	0.10	0.10	1	25	38	0.42	17	27	0.83	14	22	1.25
	0.20	0.20	2	17	27	0.83	12	19	1.67	10	16	2.50
	0.30	0.30	3	14	22	1.25	10	16	2.50	8	13	3.75
	0.35	0.35	3.5	13	20	1.46	9	14	2.92	8	12	4.38
	0.40	0.40	4	12	19	1.67	9	14	3.33	7	11	5.00
	0.50	0.50	5	11	17	2.08	8	12	4.17	6	10	6.25
	0.60	0.60	6	10	16	2.50	7	11	5.00	6	9	7.50
	0.70	0.70	7	9	14	2.92	7	10	5.83	5	8	8.75
	0.80	0.80	8	9	14	3.33	6	10	6.67	5	8	10.00
	0.90	0.90	9	8	13	3.75	6	9	7.50	5	7	11.25
	1.00	1.00	10	8	12	4.17	6	9	8.33	5	7	12.5

This information is for guidance only

Vertical		
Static Natural Frequency	Hz	fsv
Dynamic Natural Frequency	Hz	fdv
Static Deflection	mm	d



Farrat Isolevel Ltd.

Balmoral Road, Altrincham, Cheshire WA15 8HJ. England GB

Tel: +44 (0) 161 924 1600 Fax: +44 (0) 161 924 1616

email: sales@farrat.com www.farrat.com