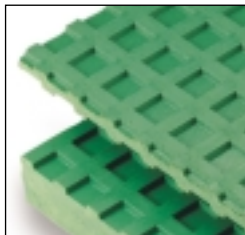


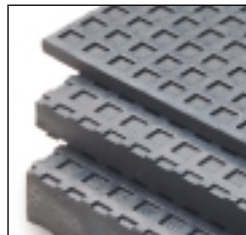
Complete Solutions

Machine Mounts, Levelling Mounts

Anti Vibration Materials



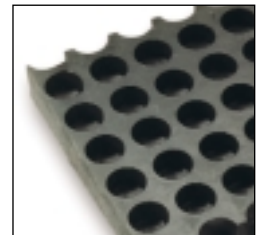
Squaregrip
(SG) page 4



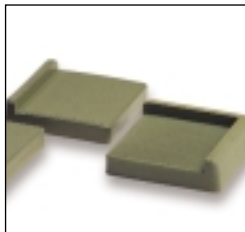
NBR
(NBR) page 4



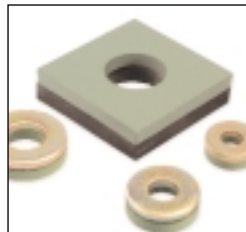
Vidam
(VM) page 5



Isomat
(IM) page 5



Corner / Side Foot
(CF, SF) page 7



Anti Vibration Washers
(AW, AWS) page 7



Jackmounts
(JCM, JRM, JSM, JMS) page 8



Jackmounts Captive
(JMP) page 9



Jackmounts Captive
(JMS-P Stainless) page 9



MF Mounts
(MF) page 10



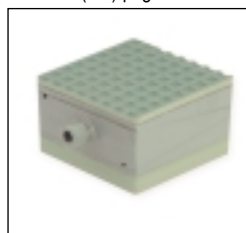
Levelling Mounts
(LF Stainless) page 11



Isomounts
(ISO) page 12



Isobloc
(ISB) page 13



Wedgemounts
(WL, WLF) page 14

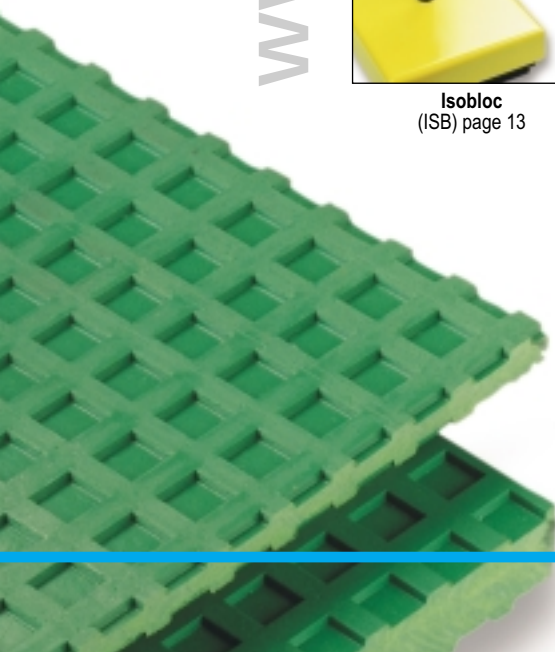


Wedgemounts
(WLB, WLT) page 15

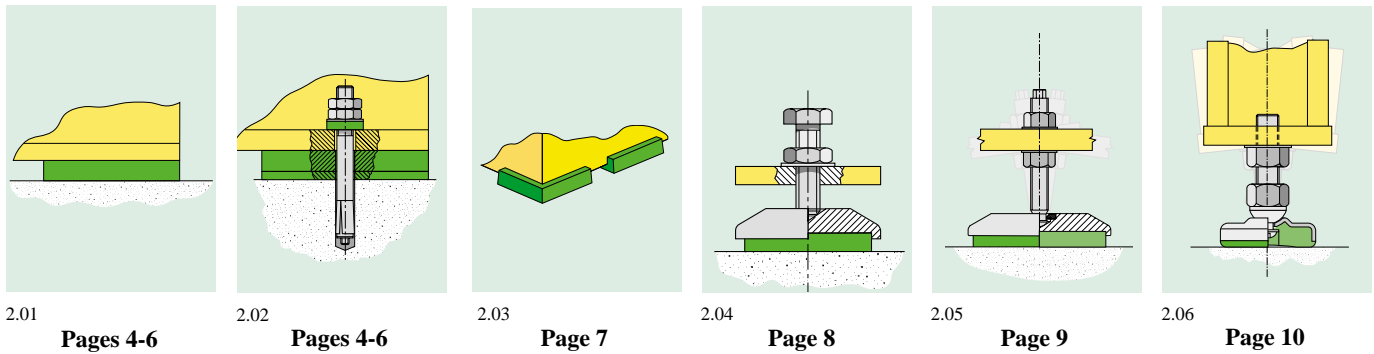


Wedge Levelling Elements
(WLE) page 16

www.farrat.com



Complete solutions



Farrat Products

| | | | | | |
|--|---|--|--|---|---|
| <p>Free standing Anti-vibration pads SQUAREGRIP, VIDAM, NBR, ISOMAT,</p> | <p>Bolt through Anti-vibration pads SQUAREGRIP, VIDAM, NBR, ISOMAT,</p> | <p>CORNERFOOT CF SIDEFoot SF</p> | <p>JACKMOUNT JSM, JCM, JRM Freestanding: FS Bolt-on: BO Flat recess: FR</p> | <p>JACKMOUNT Pendulum Screw JMP Stainless Jackmount Pendulum Screw JMS-P</p> | <p>MF MOUNTS Zinc plated MF-P Stainless MF-S</p> |
|--|---|--|--|---|---|

Typical applications

| | | | | | |
|---|--|--|--|---|---|
| <p>Free standing installation and isolation of a wide range of machinery and equipment.</p> | <p>Shock & vibration isolation of presses, shipboard machinery, pumps and compressors.</p> | <p>Moulded Machine Mounting pads, eg general purpose machinery</p> | <p>For machines suited to levelling screw support, e.g. grinders, lathes, machining centres.</p> | <p>Mounts for general machinery, suited to levelling screw support.</p> | <p>For machinery and equipment in Pharmaceutical, Food and drink, Chemical industries</p> |
|---|--|--|--|---|---|

Farrat machine mounting methods

Theory of vibration isolation

Farrat Machine Mounts provide a systematic method of machine installation.

Vibration damping mounts for:

- Shock, vibration and noise reduction.
- Reduced machine maintenance costs.
- Protection of factory floors, machines and people from shock and vibration.
- Accurate levelling.
- Excellent machine to floor contact.
- Economic installation and re-location

Installation Modes:

- Free standing mounts for a wide range of machinery.
- Bolt-on mounts for machines with strong shock and inertia forces.
- Bolt-through mounts for machines needing stiffness and damping.
- Rigid support systems: Levelators, Levelling Elements WLE for long bed machinery.

Farrat experience

Farrat has over 42 years experience in the field of machine installation methods, shock and vibration control.

Farrat mountings are used throughout the world. Installations include:

- General machinery in electrical and mechanical engineering,

- Printing, and packaging machines.
- Long bed lathes and roll grinders.
- Steam and gas turbines.
- Shipboard machinery
- Co-ordinate measuring machines.
- Plastic and rubber machinery.
- Steel processing plant.

Vibration

Vibration can affect machine performance and damage buildings and structures. Vibration transmitted to the air becomes noise which can be harmful and annoying

Vibration has several causes which include:

- Out of balance in rotating parts
- Electromagnetic forces
- Cutting and impact forces
- Hydraulic fluctuations

Vibration control

Vibration can be controlled, reduced or eliminated by adopting some of the following measures:

- Make machines to finer tolerances.
- Balance rotating parts.
- Introduce cushioning and damping elements into structures.
- Support machines on vibration isolation mountings.
- Increase machine mass.

- Increase mass by attaching machine to an elastically supported foundation.
- Alter machine design to avoid internal resonances.
- Use machine mounts to avoid or reduce support resonance.

Resonance occurs when the disturbing vibrational frequency **fe** is the same as a natural frequency **fn** in the structure being affected by the vibration. In resonant conditions large amplitudes of vibration can occur.

Vibration Isolation

Vibration Isolation reduces the level of vibration transmitted to or from a machine, building or structure from another source.

The degree of isolation achieved depends on the Ratio:

$$\frac{\text{Frequency of disturbing vibration } fe}{\text{Natural frequency of isolator } fn} = \frac{fe}{fn}$$

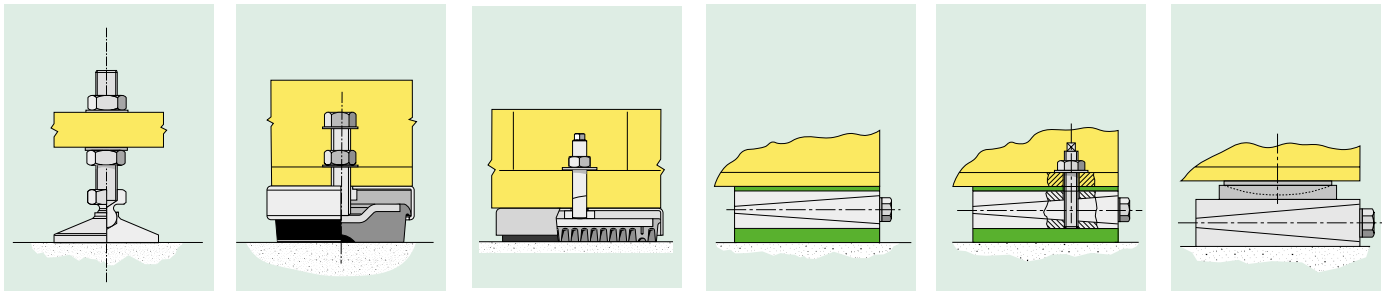
2: The level of isolator damping C/Cc

Referring to the diagram 3.07, the degree of isolation is given as Transmissibility (i.e. amount of vibration transmitted at a specific frequency **fe** as a fraction of the disturbing vibration at the same frequency **fe**).

Transmissibility:

- > 1 = Increased transmitted vibration
- = 1 = No vibration isolation
- < 1 = Vibration isolation

Shock and vibration isolation



3.01 Page 11 3.02 Page 12 3.03 Page 13 3.04 Page 14 3.05 Page 15 3.06 Page 16

| | | | | | |
|---|---------------------------|-------------------------------|---|---|--|
| LFS Stainless Steel levelling mounts | ISOMOUNTS Round | ISOBLOC Rectangular | WEDGEMOUNTS WL. WLF Freestanding | WEDGEMOUNTS WLB-Bolt-on WLT-Bolt-through | LEVELLING ELEMENTS WL-LE WLB-LE WLT-LE Spheriseats SPS |
|---|---------------------------|-------------------------------|---|---|--|

| | | | | | |
|--|---|---|--|--|---|
| For machinery and equipment in Pharmaceutical, Food and drink, Chemical industries | Injection moulders, power presses, diesel generators, packaging machines, impact machinery. | Diesel generators, Forging machines, Power presses Injection moulding machines. | Machine tools, rubber and plastic machinery, printing machines, large injection moulding machines. | Bolt-on mounts for injection moulders, power presses. Bolt-through mounts for long bed or top heavy machines. | Supporting and levelling machinery requiring rigid support. |
|--|---|---|--|--|---|

Transmissibility T can be read from diagram 3.07 or calculated as follows:
If no damping present in isolators i.e. C/Cc = 0

$$\text{Transmissibility } T = \frac{1}{1 - R^2}$$

If damping present then:

$$\text{Transmissibility } T = \frac{1 + \frac{R^2}{Q^2}}{\sqrt{(1 - R^2)^2 + \frac{R^2}{Q^2}}}$$

$$R = \frac{fe}{fn} \quad Q = \frac{1}{2 C/Cc}$$

fe - disturbing frequency can be determined by measurement. The natural frequency fnd of a machine supported on isolators is given by:

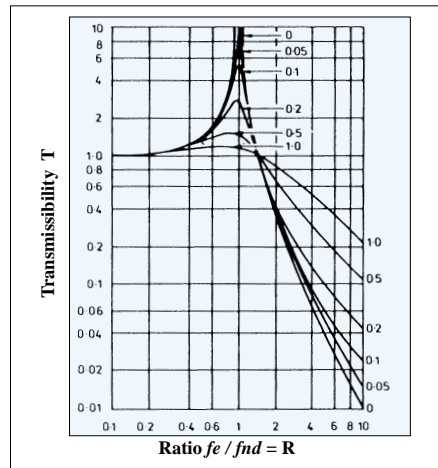
$$fnd = \frac{1}{2} \sqrt{\frac{Kt \times D}{M}} \text{ Hz}$$

Kt = Sum of Isolator Spring Constants (K1+K2+K3...) N/m

$$D = \frac{\text{Dynamic compression modulus } Ecd \text{ N/mm}^2}{\text{Static compression modulus } Ecs \text{ N/mm}^2} \text{ of the isolators.}$$

M = Mass of machine kg

Natural frequency for anti-vibration pads



3.07

Natural frequency fnd for anti-vibration pads
Total area of AV pads under machine A mm²
Thickness of AV pads t mm
Static Compression modulus Ecs N/mm²
Ratio: Dynamic/Static Modulus D
Spring Constant K N/m

$$K = \frac{Ecs \times A \times 1000}{t} \text{ N/m}$$

Mounted Machine mass M kg

Dynamic natural frequency of the mounted machine fnd Hz

$$fnd = \frac{1}{2} \sqrt{\frac{K \times D}{M}} \text{ Hz}$$

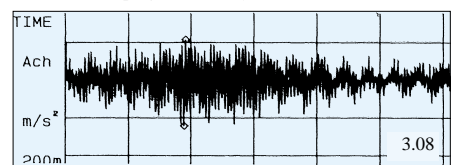
Isolator Damping

Damping in a vibration isolation system converts vibrational energy into heat which is then dissipated. The damping level C/Cc equals the fraction of vibrational energy lost per vibration cycle

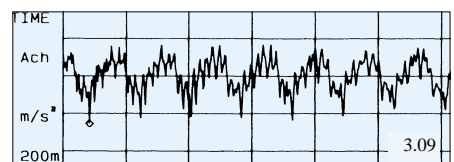
Effect of damping on machine vibration and isolation efficiency:

| Damping levels C/Cc for isolator types | | | |
|--|--------------------------------|---------------------------------|------------------------------------|
| Damping: | Low | Average | High |
| C/Cc: | 0 - 0.02 | 0.03 - 0.09 | 0.1 + |
| Isolator type: | Steel spring Natural rubber | Synthetic elastomers and mounts | High damping elastomers and mounts |
| Isolation efficiency: | high | good | moderate |
| Machine movement: | high | moderate | low |

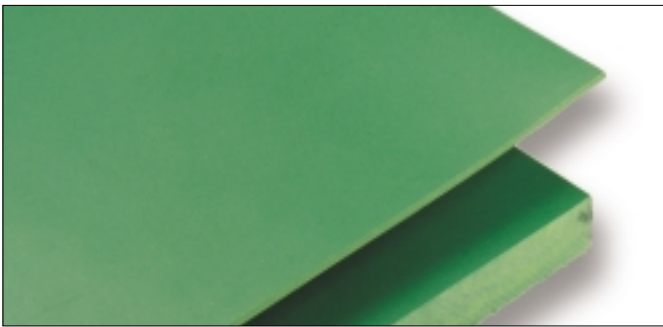
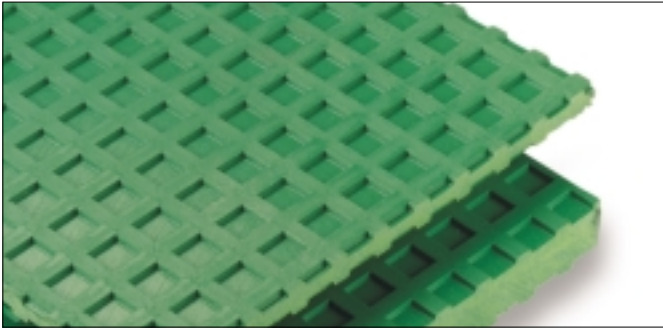
Vibration damping can actually reduce machine vibration:



Machine vibration when machine is rigidly supported



Machine vibration when machine is on vibration damping mounts



SG

Description; High strength, stiff vibration damping materials for machinery needing stiff vibration damped support with minimum machine movement.

SG 5, SG 15, Tread both sides (T2)
SG 5P1, SG 15 P1 Tread one side, Plain side for adhesive bonding
Applications
 e.g. Machine tools, printing machinery, textile machines, structural damping of machinery.

SG 2P2, SG 6P2 , SG 15P2, SG 25 P2 No Tread, plain both sides
Applications
 Machines requiring some damping with high support stiffness e.g. Lathes, Machining Centres, long bed machines Structural damping, High impact loads, buffers.

Construction
 Moulded from high grade nitrile rubber re-inforced with microscopic cotton and polyester fibres to increase strength and stiffness

Oil and Chemical Resistance: Excellent
 Full chemical resistance table available on request
Damping C/Cc: 0.16
Coefficient of Friction (dry): 0.6-0.7
Ratio Dynamic to Static Modulus: 5
Working Temperature Range deg. C: -30 to + 120
Standard Sheet Sizes: 1000 x 500mm plus Strips and Pads

Cut with bandsaw, circular saw or waterjet. Holes: drill or punch

| SQUAREGRIP | | | | | | | |
|------------|----------------|---------------|-------|--------------------------|---------------------------------------|----|-------|
| | Hard-ness Irhd | Thick-ness mm | Tread | Compr. Modulus Ecs N/mm2 | Maximum Loading Pressure N/mm2 kg/cm2 | | SSPC* |
| SG | 90 | 5 | T2 | 18 | 2.0 | 20 | 3.60 |
| SG | 90 | 15 | T2 | 37 | 2.0 | 20 | 2.47 |
| SG | 90 | 5 | P1 | 22 | 2.0 | 20 | 4.40 |
| SG | 90 | 15 | P1 | 45 | 2.0 | 20 | 3.00 |
| SG | 90 | 2 | P2 | 60 | 6 | 60 | 30.00 |
| SG | 90 | 6 | P2 | 60 | 6 | 60 | 10.00 |
| SG | 90 | 10 | P2 | 60 | 6 | 60 | 6.00 |
| SG | 90 | 15 | P2 | 60 | 6 | 60 | 4.00 |
| SG | 90 | 25 | P2 | 60 | 6 | 60 | 2.40 |

Tread Key T2 Tread both sides, P1 Tread one side, P2 No tread either side

*SSPC Specific static spring constant.

NBR

Description; An elastic vibration damping material with high shock and vibration damping

NBR 40-8, NBR 60-8, NBR 70-8, NBR 70-15, NBR 70-25, NBR 80-25 Tread both sides (T2)
NBR 70-5P1, NBR 70-15P1 Tread one side, Plain for adhesive bonding
Applications

Passive Isolation
 e.g. Sensitive equipment such as scientific, measuring and test equipment.

Active Isolation
 e.g. Pumps, compressors, power presses, forging machines, diesel generators, Hydraulic equipment, granulators, material handling equipment

Construction
 Moulded from high grade nitrile (NBR) rubber in various hardnesses to suit desired natural frequency and isolation efficiency.

Oil and Chemical Resistance: Excellent
 Full chemical resistance, table available on request
Damping C/Cc: 0.09
Coefficient of Friction (dry): 0.8-0.9
Ratio Dynamic to Static Modulus: 4
Working temperature range deg. C: - 30 to + 120
Standard Sheet Sizes;1000 x 500mm plus Strips and Pads

Cut with bandsaw or waterjet; Holes: drill or punch

| NBR | | | | | | | |
|-----|----------------|---------------|-------|--------------------------|---------------------------------------|----|-------|
| | Hard-ness Irhd | Thick-ness mm | Tread | Compr. Modulus Ecs N/mm2 | Maximum Loading Pressure N/mm2 kg/cm2 | | SSPC* |
| NBR | 40 | 8 | T2 | 3.4 | 0.5 | 5 | 0.43 |
| NBR | 60 | 8 | T2 | 7 | 1 | 10 | 0.88 |
| NBR | 70 | 8 | T2 | 12 | 1.5 | 15 | 1.50 |
| NBR | 70 | 15 | T2 | 12 | 1.5 | 15 | 0.80 |
| NBR | 70 | 25 | T2 | 12 | 1.5 | 15 | 0.48 |
| NBR | 80 | 25 | T2 | 28 | 2 | 20 | 1.12 |
| NBR | 70 | 5 | P1 | 16 | 1.5 | 15 | 3.20 |
| NBR | 70 | 15 | P1 | 16 | 1.5 | 15 | 1.07 |

Tread Key T2 Tread both sides, P1 Tread one side, P2 No tread either side

*SSPC Specific static spring constant.



Vidam VM

Description;

General purpose machine mounting anti vibration material

VM 3, 6,10,13,20,25

Applications

Light machine tools, woodworking machines, assembly machines, Machinery and equipment in food, drink, chemical and pharmaceutical industries, heating and ventilating equipment. No tread. May need adhesive in certain situations. Use Farrat Squaregrip Adhesive

Construction

A nitrile rubber/granulated cork composite material.

Oil and Chemical Resistance: Excellent

Full chemical resistance, table available on request.

Damping C/Cc: 0.12

Coefficient of Friction (dry): 0.6-0.7

Ratio Dynamic to Static Modulus: 3.9

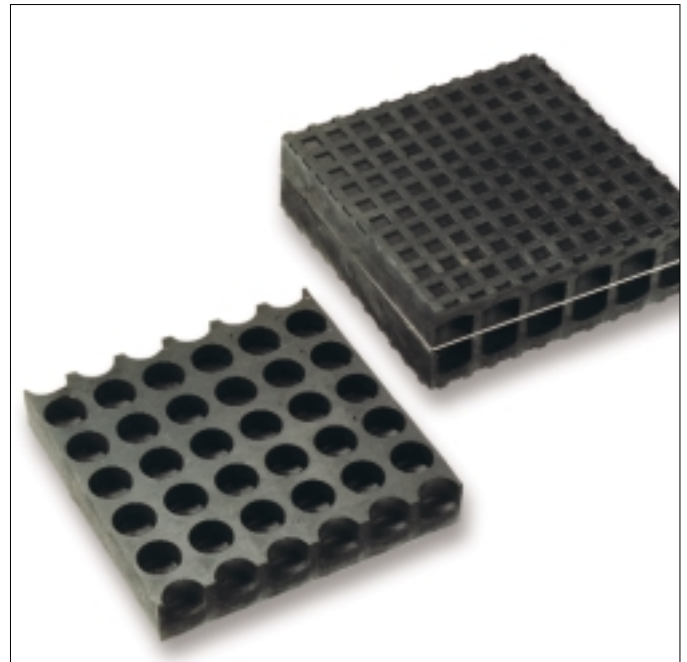
Working temperature range; deg. C: - 30 to + 120

Standard Sheet Sizes;1000x1000mm plus Strips and Pads

Cut with bandsaw, circular saw or waterjet. Holes: drill or punch

| VIDAM VM | | | | | | | |
|----------|----------------------|----------------------|-------|-----------------------------------|--|---|-------|
| | Hard- ness Irh | Thick- ness mm | Tread | Compr. Modulus Ecs N/mm2 | Maximum Loading Pressure N/mm2 kg/cm2 | | SSPC* |
| VM | 65 | 3 | No | 7 | 0.5 | 5 | 2.33 |
| VM | 65 | 6 | No | 7 | 0.5 | 5 | 1.17 |
| VM | 65 | 10 | No | 7 | 0.5 | 5 | 0.70 |
| VM | 65 | 13 | No | 7 | 0.5 | 5 | 0.54 |
| VM | 65 | 20 | No | 7 | 0.5 | 5 | 0.35 |
| VM | 65 | 25 | No | 7 | 0.5 | 5 | 0.28 |

*SSPC Specific static spring constant.



ISOMAT IM

Description;

An elastic vibration isolation material with holes moulded into one side to increase flexibility and shock absorption with the created internal air pockets

IM BR 40-25, IM BR 50-20, -25 , IM BR 70-25

Applications

Passive Isolation

Vibration sensitive machinery and equipment e.g. Measuring machines, test equipment, electronic equipment, Also incorporated into ISOMAT machine foundation isolators

Active Isolation

Shock and vibration isolation of impact and vibration generating machinery and equipment: e.g. Presses, forging machines, granulators

Construction

Manufactured from high quality Nitrile rubber

Oil and Chemical Resistance: Excellent

Full chemical resistance, table available on request.

Damping C/Cc: 0.10

Coefficient of Friction (dry): 0.7-0.8

Ratio Dynamic to Static Modulus: 2.4

Working temperature range; deg. C: - 30 to + 120

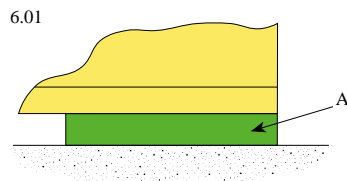
Standard Sheet Sizes;1000x500mm plus Strips and Pads

Cut with bandsaw or waterjet; Holes: drill or punch

| ISOMAT IM | | | | | | | |
|-----------|----------------------|----------------------|-------|-----------------------------------|--|----|-------|
| | Hard- ness Irh | Thick- ness mm | Tread | Compr. Modulus Ecs N/mm2 | Maximum Loading Pressure N/mm2 kg/cm2 | | SSPC* |
| IM BR | 40 | 25 | Top | 3.00 | 0.4 | 4 | 0.12 |
| IM BR | 40 | 50 | Top | 3.00 | 0.4 | 4 | 0.06 |
| IM BR | 50 | 20 | No | 3.70 | 0.5 | 5 | 0.19 |
| IM BR | 50 | 25 | Top | 3.70 | 0.5 | 5 | 0.15 |
| IM BR | 50 | 50 | Top | 3.70 | 0.5 | 5 | 0.07 |
| IM BR | 70 | 25 | Top | 6.00 | 1.2 | 12 | 0.24 |
| IM BR | 70 | 50 | Top | 6.00 | 1.2 | 12 | 0.12 |

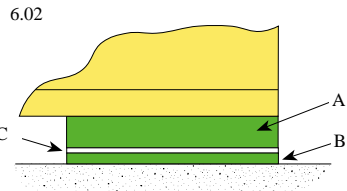
*SSPC Specific static spring constant.

Typical applications



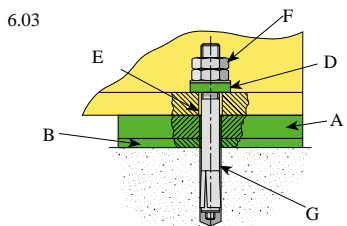
1) Free standing installation on single thickness pads. Floors must be level.

Pad A
 SG 15 Machine tools, weaving machinery.
 NBR 80 Heavy cutting machine tools, impact machines.
 NBR 15 Injection moulders, hydraulic equipment.
 IM 25 Power presses and other impact machines.
 IM 25 Sensitive measuring, electronic and testing equipment.
 VM General machinery and equipment.
 SG P2 Anvil Pads, Transfer machinery



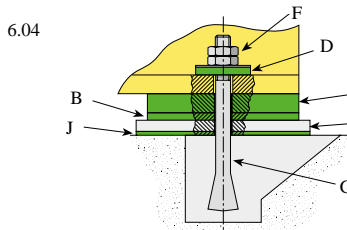
2) Free standing installation on multiple thickness pads A, B with shims C for levelling in between pads. Shims C can be steel plates (tack weld multiple plates together) or Squaregrip SG 2 P2 or 5 P2 pads.

Pad A as above.
 Pad B for shim gripping: SG 5.
 Pad B for extra isolation same as Pad A.



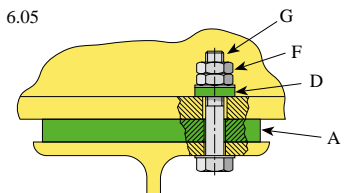
3) Bolt through pad installation using single A, or multiple pad A, B configuration. AW anti-vibration washers D to isolate holding down bolts. Sleeve bolts passing through machine foot with Isolation Bush E if space permits.

For top heavy or tall machines e.g. power presses. Machines needing to be bolted down for extra stiffness or stability. e.g. certain weaving machines, shipboard machinery.



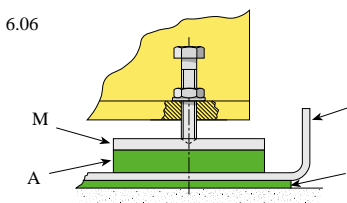
4) Bolt through pad installation with extra large anti-vibration washers D for applications where high static and/or dynamic bolt loadings expected.

Generally for large power presses, steel processing machinery and other impact machinery.



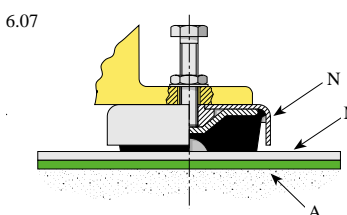
5) Bolt through pad installations to steelwork support.

Power presses and other impact machines. Process plant, pumps, compressors, air-conditioning plant. Shipboard machinery.



6) Vibration damping pads A under steel spreader plates M installed in a drip tray. Drip tray L can be installed on Vidam 3 or 6 mm, material K to provide good seating on floor.

Machinery needing installation in oil drip trays e.g. machine tools



7) Vibration damping pads A under steel spreader plates installed under adjustable mounts e.g. **Isomounts, Wedgemounts**

Pad A - **ISOMAT IM**

Impact machinery e.g. power presses where very high shock and vibration isolation is required.
 Machines on suspended floors where very good isolation is required.

Key to diagram

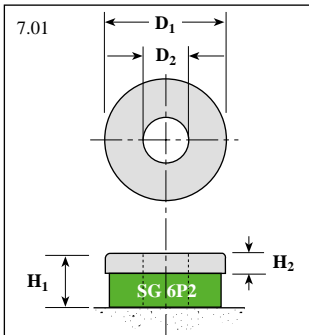
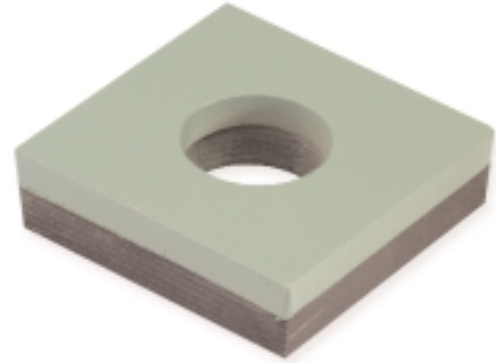
- A) Vibration damping pad
- B) Additional vibration damping or shim gripping pad
- C) Levelling shims-either steel plates (tackwelded together to prevent slippage), or SG 2 P2 or SG 6 P2 pads.

- D) Bolt isolation (anti-vibration) washers AW, AWS
- E) Bolt isolation bush, if space permits
- F) Self-locking nut or normal nut + lock nut.
- G) Hold down/foundation bolts.
- H) Optional steel spreader plate (6-10mm thick) same size as pads A, B used to span bolt pockets in floor/foundation prior to grouting.

- J) Vidam 6 seating pad under steel plate H.
- K) Vidam VM 3 or VM6 pads
- L) Drip tray
- M) Steel spreader Plate
- N) Adjustable machine mount e.g. **Isomount, Wedgemount**

AW Anti Vibration Washers, Round

AWS Anti Vibration Washers, Square



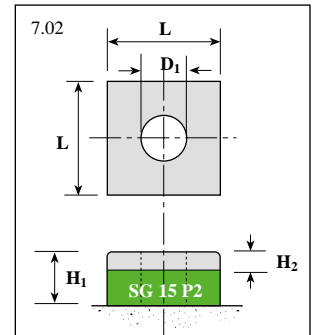
| AW | D ₁ | D ₂ | H ₁ | H ₂ | T | F |
|-------|----------------|----------------|----------------|----------------|-----|----|
| AW 10 | 30 | 11 | 11 | 5 | 7 | 4 |
| AW 12 | 30 | 13 | 11 | 5 | 13 | 6 |
| AW 14 | 35 | 15 | 12 | 6 | 20 | 8 |
| AW 16 | 40 | 17 | 12 | 6 | 30 | 10 |
| AW 20 | 40 | 21 | 12 | 6 | 60 | 13 |
| AW 24 | 50 | 25 | 14 | 8 | 90 | 18 |
| AW 30 | 60 | 31 | 14 | 8 | 140 | 24 |
| AW 36 | 70 | 37 | 16 | 10 | 230 | 33 |

| AWS | L | D ₂ | H ₁ | H ₂ | T | F |
|--------|-----|----------------|----------------|----------------|-----|----|
| AWS 30 | 80 | 31 | 21 | 6 | 190 | 34 |
| AWS 36 | 90 | 37 | 21 | 6 | 280 | 42 |
| AWS 42 | 100 | 43 | 25 | 10 | 390 | 50 |
| AWS 48 | 110 | 49 | 25 | 10 | 540 | 60 |
| AWS 56 | 125 | 57 | 25 | 10 | 840 | 80 |

Dimensions: mm

T = Max tightening torque Nm

F = Corresponding bolt tension kN

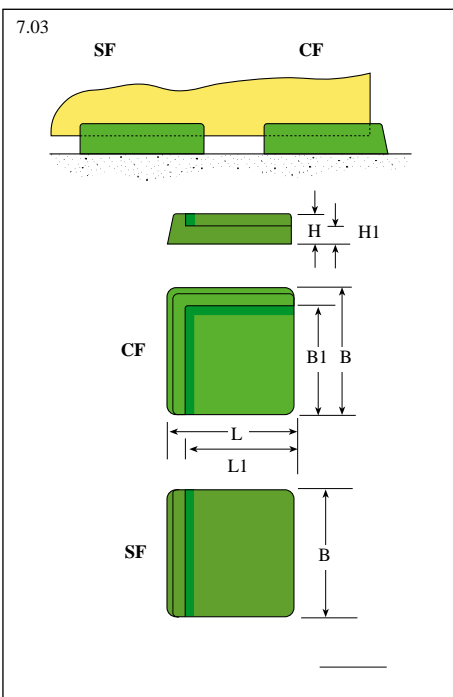
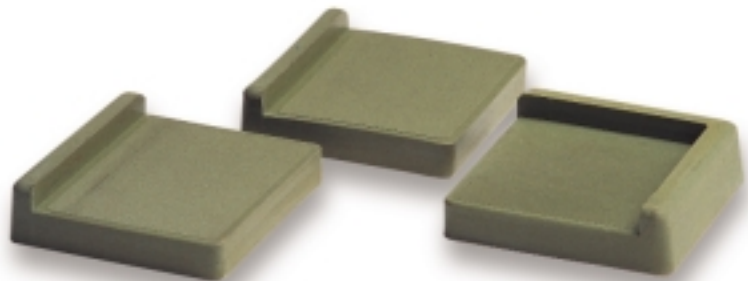
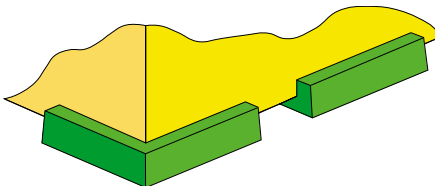


Farrat AW - AWS anti vibration washers reduce vibration transmitted to or from holding down bolts. AW - AWS washers are placed between the hold down nut and machine base or flange. AWS for high bolt load applications.

Tightening torques 'T' relate to dry, unplated, metric coarse threads. If higher tightening torques (T) are required, consult Farrat for advice.

AV Material - AW=SG 6P2 AWS=SG 15 P2

Cornerfoot CF Sidefoot SF Machine mounting pads



CF/SF machine mounting pads are an ideal way of installing general purpose machines. The moulded edges form a location corner on the CF units and an end location on the SF units.

CF/SF -E

Moulded from 70 IRHD NBR nitrile rubber

Colour: **Black**

Advantages

- Positive location of pads under machine
- Excellent friction grip and seating
- Vibration damping
- Re-usable
- Excellent chemical and oil resistance.

Levelling

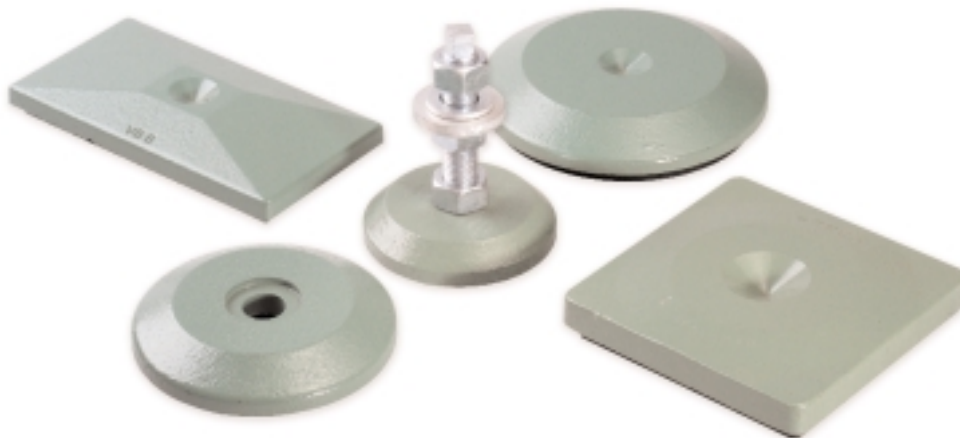
If levelling is required this is best done using Squaregrip shimming pads SG 2P2, 6P2 or 15P2 placed between floor and underside of CF/SF pads.

| Cornerfoot CF, Sidefoot SF | | | | | | | Max. Load daN |
|----------------------------|-----------|----------------|----------------|----|----------------|-----------|---------------|
| Model | L x B | L ₁ | B ₁ | H | H ₁ | Shim size | |
| CF 75E | 75 x 75 | 62 | 62 | 25 | 15 | 75 x 75 | 600 |
| CF 90E | 90 x 90 | 78 | 78 | 25 | 15 | 90 x 90 | 800 |
| CF 125E | 125 x 125 | 112 | 112 | 25 | 15 | 125 x 125 | 1600 |
| SF 90E | 90 x 90 | 78 | - | 25 | 15 | 90 x 90 | 800 |

Dimensions: mm

1daN = 1kg

For mounting, levelling and vibration damping of machines and equipment suited to levelling screw support in all industries.



| Anti vibration grades | | | | |
|-----------------------|-------------|----------------------|--|--|
| | AV Material | Typical Applications | | |
| -50 | Soft | NBR-50-10 P2 | Vibration sensitive equipment eg Measuring and Test, Optical, Laboratory | |
| -70 | Elastic | NBR-70-10 P2 | Active Shock & Vibration eg injection moulders, packaging machines | |
| -80 | Stiff | NBR-80-10 P2 | High stiffness with damping eg machine tools, printing machines | |
| -90 | Very Stiff | SG-10 P2 | Very Stiff with damping eg lathes, transfer machines, grinders | |

| Dimensions, Load Capacities and Characteristics | | | | | | | | | |
|---|--------------------|------------------|-------------------|-------------|-----------------------|------|------|------|--------------|
| Model | Base size L x B | Base Height H | FS Cone dia. C | Variants | Maximum Loads / Mount | | | | Unit Mass |
| | | | | | -50 | -70 | -80 | -90 | |
| JSM | mm | mm | mm | | daN | daN | daN | daN | kg |
| 5* | 75x75 | 20 | 20 | BO | 200 | 400 | 600 | 700 | 0.6 |
| 10* | 100x100 | 22 | 24 | BO | 400 | 800 | 1200 | 1400 | 1.06 |
| 20* | 125x125 | 24 | 30 | BO | 650 | 1300 | 2000 | 2500 | 1.9 |
| 30* | 150x150 | 26 | 30 | BO | 1000 | 2000 | 3000 | 3600 | 2.3 |
| JRM | L x B | | | | | | | | |
| 16* | 165x85 | 25 | 24 | BO | 600 | 1200 | 1700 | 2000 | 1.4 |
| 21* | 215x115 | 27 | 30 | BO | 1000 | 2000 | 3200 | 3800 | 2.75 |
| 24* | 265x165 | 30 | 32 | BO | 2000 | 4000 | 6000 | 7200 | 5.5 |
| JCM | D | | | | | | | | |
| 60* | 70 | 22 | 20 | BO,FR,FR/BT | 150 | 300 | 400 | 500 | 0.3 |
| 80* | 90 | 22 | 22 | BO,FR,FR/BT | 250 | 500 | 800 | 1000 | 0.6 |
| 100* | 110 | 24 | 26 | BO,FR,FR/BT | 400 | 800 | 1200 | 1400 | 0.9 |
| 120* | 130 | 26 | 26 | BO,FR,FR/BT | 550 | 1100 | 1700 | 2000 | 1.45 |
| 130* | 140 | 26 | 28 | BO,FR,FR/BT | 650 | 1300 | 2000 | 2400 | 1.65 |
| 170* | 180 | 28 | 32 | BO,FR,FR/BT | 1100 | 2200 | 3400 | 4000 | 3.05 |
| 200* | 210 | 32 | 40 | BO,FR,FR/BT | 1600 | 3200 | 4700 | 5600 | 5.2 |

* Specify Vibration damping grades e.g. -50 and fixing e.g. BO M16x2

BO (Bolt On) variants: M10 x 1.5; M12 x 1.75; M16 x 2; M20 x 2.5; M24 x 3.

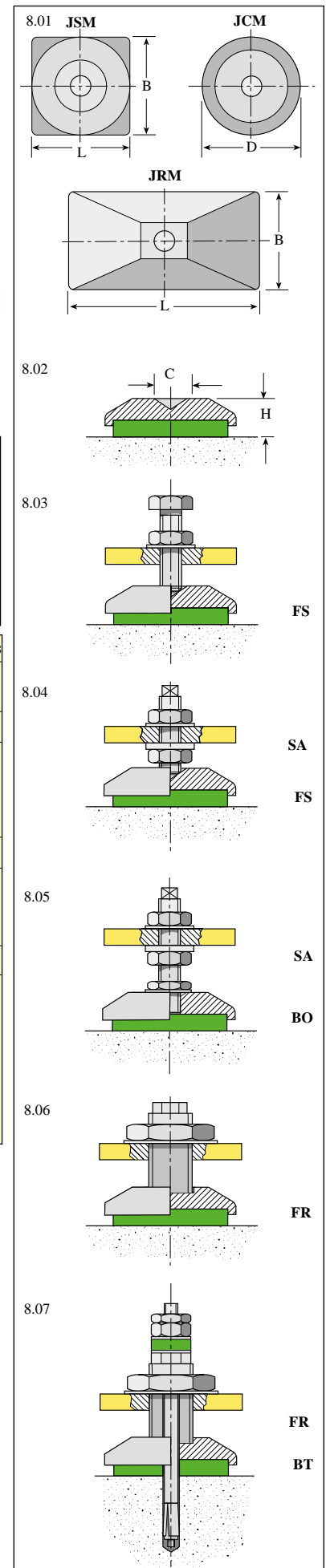
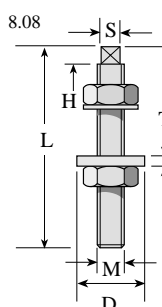
FR (Flat Recess) variants: FR 32; FR 38; FR44; FR 50.

1 daN = 1kg

Order Examples

| | | | |
|-----------------------------|----------------------|------------|-------------------------------------|
| Free Standing | FS | Base only | JSM 5-50 FS |
| Bolt on | BO | Base only | JRM 21-70 BO M16x2 |
| Flat recess | FR (JCM only) | Base only | JCM 200-80 FR 32 |
| FR with bolt-through | FR+BT | Base only | JCM 130-90 FR 32 BT 18 |
| Bolt on with screw assembly | BO+SA | Base+Screw | JCM 80-50 BO M16x2+SA 16x150 |

| Screw assemblies SA to convert plain hole in machine base into a levelling screw.7 | | | | | | |
|--|-------|-----------------------------|----|----|----|---|
| Size | Pitch | L | S | H | D | T |
| M10 | 1.5 | 80 | 8 | 10 | 30 | 5 |
| M12 | 1.75 | 80, 100, 120, 150, - | 8 | 10 | 30 | 5 |
| M16 | 2.0 | 80, 100, 115, 150, 180, 250 | 11 | 10 | 40 | 6 |
| M20 | 2.5 | - 100, 115, 150, 180, 250 | 13 | 10 | 40 | 6 |
| M24 | 3.0 | - - - 150, 180 - | 18 | 10 | 50 | 8 |



JMP Jackmounts with Captive Pendulum Screw
Cast Iron 250 Base, Zinc plated mild steel screw

JMS P Jackmounts with Captive Pendulum Screw
Stainless Steel 304 Base and screw



Pendulum screw tilts up to 5° in any direction. For mounting, levelling and vibration damping of machines and equipment all industries and suited to levelling screw support.

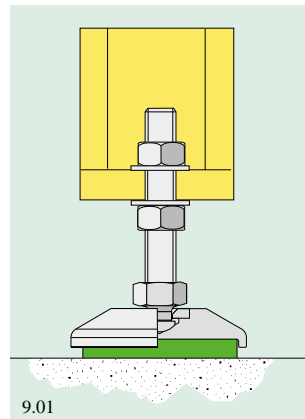
| Model | | Maximum Static Load/Mount | | | | Unit Mass kg |
|-----------------------|----------------------|---------------------------------------|---------|---------|--------|--------------|
| JMP Cast Iron | Dimensions mm D H | -50 daN | -70 daN | -80 daN | | |
| 60-* | 70 22 | 150 | 300 | 400 | 0.30 | |
| 80-* | 90 22 | 250 | 500 | 800 | 0.60 | |
| 100-* | 110 24 | 400 | 800 | 1200 | 0.90 | |
| 120-* | 130 26 | 550 | 1100 | 1700 | 1.45 | |
| 130-* | 140 26 | 650 | 1300 | 2000 | 1.65 | |
| 170-* | 180 28 | 1100 | 2200 | 3400 | 3.05 | |
| Finishes to JMP Bases | | | | | Suffix | |
| Standard to order | Green ZP | RAL 6011 Zinc Plated Yellow Passivate | | | GN | ZP |

1 daN = 1kg

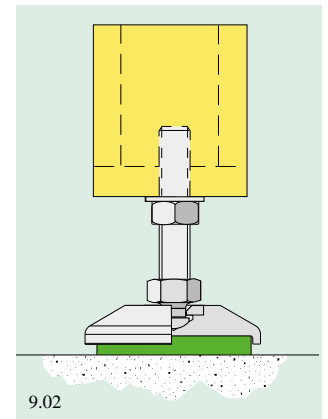
| Model | | Maximum Static Load/Mount | | | | Unit Mass kg |
|-----------------|----------------------|---------------------------|---------|---------|------|--------------|
| JMS-P Stainless | Dimensions mm D H | -50 daN | -70 daN | -80 daN | | |
| 60-* | 60 22 | 150 | 300 | 400 | 0.30 | |
| 80-* | 80 22 | 250 | 500 | 800 | 0.60 | |
| 100-* | 100 24 | 400 | 800 | 1200 | 0.90 | |
| 120-* | 120 26 | 550 | 1100 | 1700 | 1.45 | |
| 150-* | 150 26 | 1600 | 1300 | 2000 | 2.20 | |

1 daN = 1kg

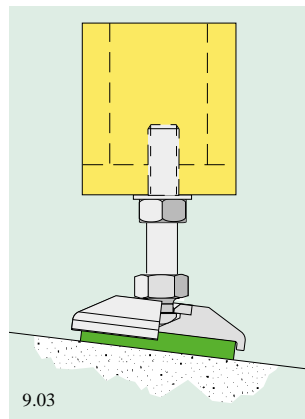
| PSP Pendulum Screws Zinc Plated Mild Steel PSS Pendulum Screws Stainless Steel 304 | | | | | | |
|---|----------------|---------------|----------|-------|---------|-------|
| Pendulum Screws | | Dimensions mm | | | | |
| Thread | M | M10x1.5 | M12x1.75 | M16x2 | M20x2.5 | M24x3 |
| | T ₁ | 8 | 10 | 12 | 19 | 10 |
| | T ₂ | 21 | 23 | 25 | 32 | 23 |
| | D | 15.5 | 15.5 | 15.5 | 15.5 | 15.5 |
| | AF | 17 | 19 | 24 | 30 | 19 |
| | L ₁ | 44 | 70 | 70 | 70 | - |
| | | 94 | 90 | 90 | 90 | - |
| | | - | 140 | 140 | 150 | 150 |
| | | - | 200 | 200 | 200 | 200 |
| | | - | 250 | 250 | 250 | - |
| Order Examples | | | | | | |
| PSP 16x2x140 Pendulum Screw Assembly Zinc Plated Mild Steel | | | | | | |
| PSS 20x2.5x150 Pendulum Screw Assembly Stainless Steel 304 | | | | | | |
| JMP 100-50 GN PSP 16x2x140 Base Green, Screw Zinc Plated Mild Steel | | | | | | |
| JMS-P 80-70 PSS 20x2.5x150 Stainless Steel 304 Base and Screw | | | | | | |



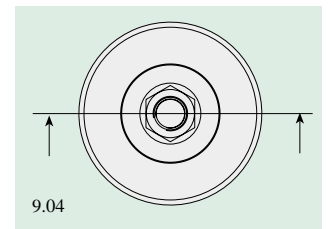
9.01



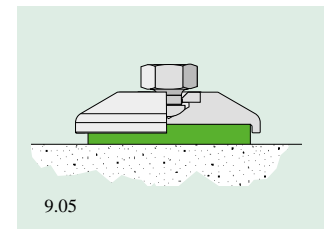
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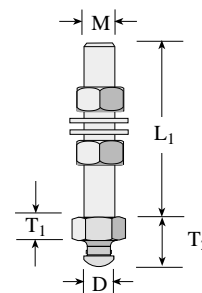
9.03



9.04



9.05

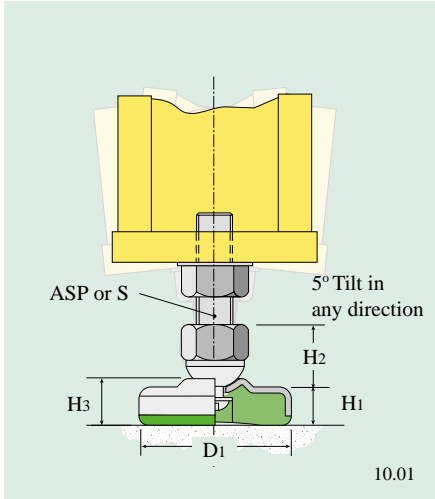


9.05

JMP Base + PNP Pendulum Nut
e.g. JMP 100-50+PNP 16x 2

JMS-P Base + PNS Pendulum Nut
e.g. JMS-P 100-50+PNS 16x 2

For machine and equipment with loads of up to 850 daN per mount



Farrat MF

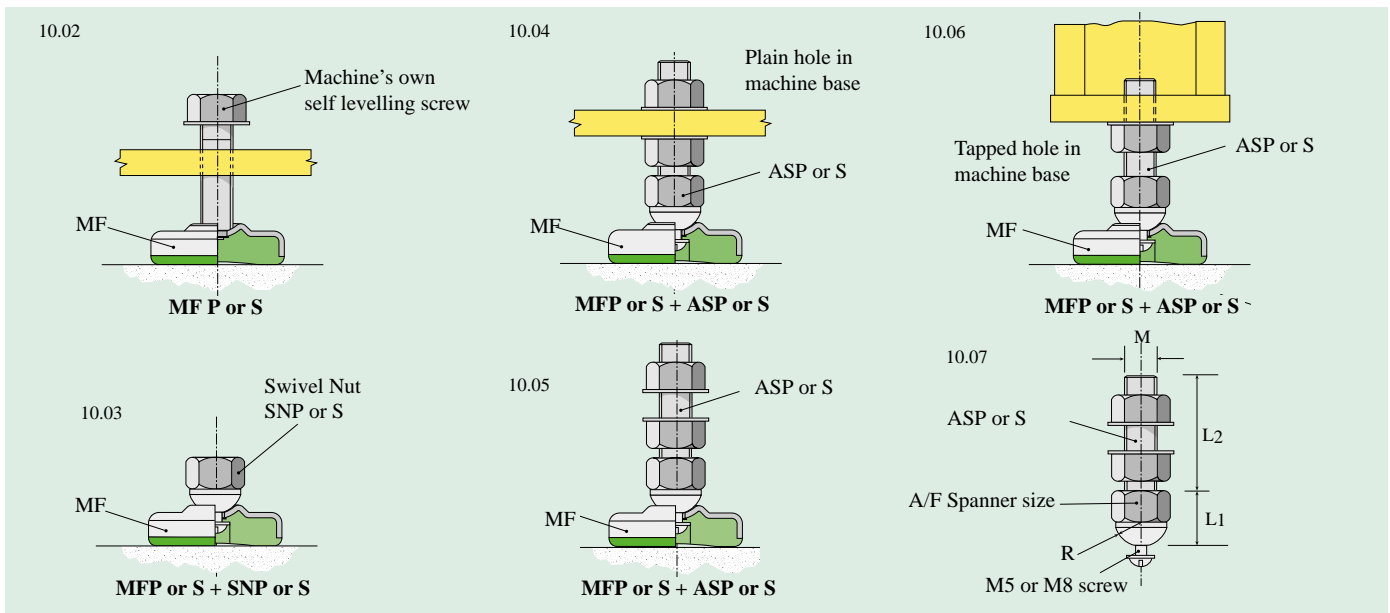
Machine feet with oil resistant nitrile rubber pad bonded to steel cover. Excellent vibration damping and high friction grip. The swivelling adjusting screw tilts up to 5° in any direction.

Typical applications;

Special purpose machines, Automation equipment, Conveyors, Lightweight machine tools, Weighing machines, Food, drink and pharmaceutical machines and equipment, Chemical plant, Process & Packaging machines.

MFP Bright zinc plated mild steel

MFS Stainless Steel for food drink & chemical industries



| MF Bases Bright Zinc Plated Mild Steel MFP | | | | |
|--|--------------|---------------|----|----|
| Base Model | Max Load daN | Dimensions mm | | |
| | | D1 | H1 | H3 |
| MFP- 5E | 300 | 50 | 14 | 17 |
| MFP- 8E | 600 | 80 | 14 | 21 |
| MFP-10E | 850 | 100 | 14 | 24 |

| MF Bases Stainless Steel 304 MFS | | | | |
|----------------------------------|--------------|---------------|----|----|
| Base Model | Max Load daN | Dimensions mm | | |
| | | D1 | H1 | H3 |
| MFS- 5E | 300 | 50 | 15 | 17 |
| MFS- 8E | 600 | 80 | 16 | 21 |
| MFS -10E | 850 | 100 | 18 | 24 |

| Swivel Nuts Zinc plated mild steel SNP Stainless Steel 304 SNS | | | | | |
|--|-----|-----------|----|----|--------|
| Dimensions mm | | | | | |
| Model | A/F | M | R | L1 | Thread |
| SNP or S 10 x 1.5 | 17 | 10 x 1.50 | 11 | 20 | M5 |
| SNP or S 12 x 1.75 | 19 | 12 x 1.75 | 11 | 21 | M5 |
| SNP or S 16 x 2 | 24 | 12 x 1.75 | 11 | 24 | M5 |
| SNP or S 20 x 2.5 | 30 | 16 x 2.00 | 11 | 28 | M5 |
| SNP or S 20 x 2.5 | 30 | 16 x 2.00 | 11 | 28 | M8 |
| SNP or S 24 x 3 | 30 | 20 x 2.50 | 11 | 28 | M5 |
| SNP or S 24 x 3 | 30 | 20 x 2.50 | 11 | 28 | M8 |

Order example: Base with swivel nut: e.g. MFP-5E+SNP 12 x 1.75 M5; MFS-8E+SNS 20 x 2.5 M8

| Adjusting Screws Bright Zinc Plated Mild Steel | | | | | |
|--|-----|-----------|----|----|-----|
| Dimensions mm | | | | | |
| Model | A/F | M | R | L1 | L2 |
| ASP 10 x 100 | 17 | 10 x 1.50 | 11 | 20 | 90 |
| ASP 12 x 100 | 19 | 12 x 1.75 | 11 | 21 | 90 |
| ASP 12 x 150 | 19 | 12 x 1.75 | 11 | 21 | 140 |
| ASP 16 x 100 | 24 | 16 x 2.00 | 11 | 24 | 90 |
| ASP 16 x 150 | 24 | 16 x 2.00 | 11 | 24 | 140 |
| ASP 20 x 100 | 30 | 20 x 2.50 | 11 | 28 | 90 |
| ASP 20 x 150 | 30 | 20 x 2.50 | 11 | 28 | 140 |

Adjusting screws with 2 Hex. Nuts, 2 Washers
Order example: Base with screw MFP-5E+ASP-12x1.75x100

| Adjusting Screws Stainless Steel 304/15 (S) | | | | | |
|---|-----|-----------|----|----|-----|
| Dimensions mm | | | | | |
| Model | A/F | M | R | L1 | L2 |
| ASS 10 x 100 | 17 | 10 x 1.50 | 11 | 20 | 90 |
| ASS 12 x 100 | 19 | 12 x 1.75 | 11 | 21 | 90 |
| ASS 12 x 150 | 19 | 12 x 1.75 | 11 | 21 | 140 |
| ASS 16 x 100 | 24 | 16 x 2.00 | 11 | 24 | 90 |
| ASS 16 x 150 | 24 | 16 x 2.00 | 11 | 24 | 140 |
| ASS 20 x 100 | 30 | 20 x 2.50 | 11 | 28 | 90 |
| ASS 20 x 150 | 30 | 20 x 2.50 | 11 | 28 | 140 |

Adjusting screws with 2 Hex. Nuts, 2 Washers
Order example: Base with screw MFS-5E+ASS-12x1.75x100

1 daN = 1kg

Solid stainless steel machine and equipment levelling mounts

With captive swivel ball nut: **LFN**
 with levelling screw assembly: **LFS**

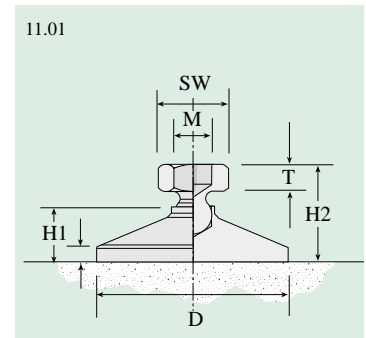
Applications

Machine and equipment support and levelling in Chemical, Food and Drink, Textile, Pharmaceutical and Scientific industries.



| Base + Swivel Nut LFN | | | | | | | | | Max Load daN |
|-----------------------|------------|----|----|----|----|-----------|---|-----------|--------------|
| Product Code | Dimensions | | | | | M | L | Ball Dia. | |
| | D | H1 | H2 | T | AF | | | | |
| LFN 0510 | 50 | 11 | 25 | 9 | 17 | 10 x 1.50 | - | 8 | 600 |
| LFN 0612 | 60 | 15 | 38 | 10 | 19 | 12 x 1.75 | - | 16 | 1500 |
| LFN 0812 | 80 | 19 | 42 | 10 | 24 | 12 x 1.75 | - | 16 | 1500 |
| LFN 0816 | 80 | 19 | 42 | 12 | 24 | 16 x 2.0 | - | 16 | 2000 |
| LFN 1016 | 100 | 26 | 49 | 12 | 24 | 16 x 2.0 | - | 16 | 2000 |
| LFN 1020 | 100 | 26 | 53 | 15 | 30 | 20 x 2.5 | - | 16 | 3000 |
| LFN 1024 | 100 | 26 | 53 | 18 | 36 | 24 x 3.0 | - | 16 | 4000 |

1 daN = 1kg

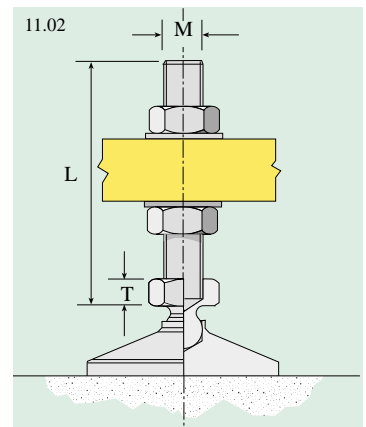


LFN

| Base + Swivel Nut+Screw Assembly LFS | | | | | | | | | Max Load daN |
|--------------------------------------|------------|----|----|----|----|-----------|-----|-----------|--------------|
| Product Code | Dimensions | | | | | M | L | Ball Dia. | |
| | D | H1 | H2 | T | AF | | | | |
| LFS 051010 | 50 | 11 | 25 | 9 | 17 | 10 x 1.50 | 100 | 8 | 600 |
| LFS 061210 | 60 | 15 | 38 | 10 | 19 | 12 x 1.75 | 100 | 16 | 1500 |
| LFS 081210 | 80 | 19 | 42 | 10 | 19 | 12 x 1.75 | 100 | 16 | 1500 |
| LFS 081215 | 80 | 19 | 42 | 10 | 19 | 12 x 1.75 | 150 | 16 | 1500 |
| LFS 081610 | 80 | 19 | 42 | 12 | 24 | 16 x 2.0 | 100 | 16 | 2000 |
| LFS 081615 | 80 | 19 | 42 | 12 | 24 | 16 x 2.0 | 150 | 16 | 2000 |
| LFS 101610 | 100 | 26 | 49 | 12 | 24 | 16 x 2.0 | 100 | 16 | 2000 |
| LFS 101615 | 100 | 26 | 49 | 12 | 24 | 16 x 2.0 | 150 | 16 | 2000 |
| LFS 102010 | 100 | 26 | 53 | 15 | 30 | 20 x 2.5 | 100 | 16 | 3000 |
| LFS 102015 | 100 | 26 | 53 | 15 | 30 | 20 x 2.5 | 150 | 16 | 3000 |
| LFS 102415 | 100 | 26 | 53 | 18 | 36 | 24 x 3.0 | 150 | 16 | 4000 |

1 daN = 1kg

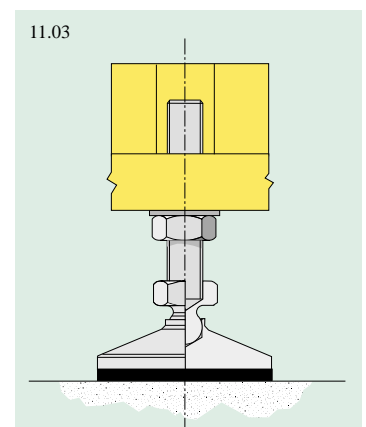
n.b. Can be supplied with 3mm Rubber Pad bonded to underside of base- add suffix **P** when ordering e.g. **LFS102010 P**



LFS

| Base + Swivel Nut+Screw Assembly LFS | | | | | | |
|---|----------------|-----------|-----------|-----------|-----------|-----------|
| LF Bases with Screws (other screw lengths to order) Order Codes | | | | | | |
| Screw Thread | Screw Length L | LFS04 | LFS05 | LFS06 | LFS08 | LFS10 |
| M10 x1.5 | 100 | LFS041010 | LFS051010 | - | - | - |
| M12 x1.75 | 100 | - | - | LFS061210 | LFS081210 | LFS101210 |
| M12 x1.75 | 150 | - | - | LFS061215 | LFS081215 | LFS101215 |
| M16 x2 | 100 | - | - | LFS061610 | LFS081610 | LFS101610 |
| M16 x2 | 150 | - | - | LFS061615 | LFS081615 | LFS101615 |
| M16 x2 | 200 | - | - | LFS061620 | LFS081620 | LFS101620 |
| M20 x2.5 | 100 | - | - | LFS062010 | LFS082010 | LFS102010 |
| M20 x2.5 | 150 | - | - | LFS062015 | LFS082015 | LFS102015 |
| M20 x2.5 | 250 | - | - | LFS062025 | LFS082025 | LFS102025 |
| M24 x3 | 100 | - | - | LFS062410 | LFS082410 | LFS102410 |
| M24 x3 | 150 | - | - | LFS062415 | LFS082415 | LFS102415 |
| M24 x3 | 200 | - | - | LFS062420 | LFS082420 | LFS102420 |
| M24 x3 | 250 | - | - | LFS062425 | LFS082425 | LFS102425 |

n.b. Can be supplied with 3mm Rubber Pad bonded to underside of base- add suffix **P** when ordering e.g. **LFS102010 P**



LFS-P

Mounts for levelling, shock and vibration absorption

Isomounts provide an efficient and economic method of installation of a wide range of machinery and equipment. Machines can be installed and accurately levelled without bolting down or grouting. Machine performance is improved through effective shock and vibration isolation and damping.

Typical applications include:

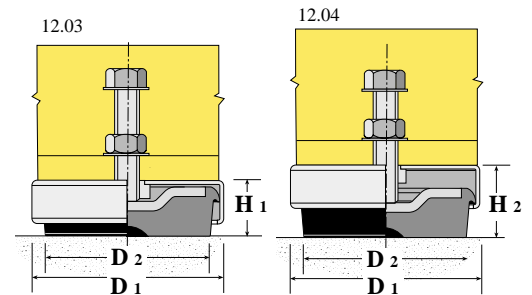
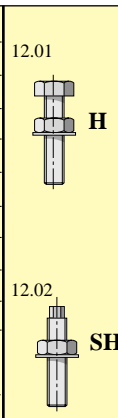
- Compressors and Pump Sets
- Diecasting machines
- Diesel Generators
- Hydraulic Power Packs
- Injection Moulding Machines
- Packaging Machinery
- Presses: Forging, Hydraulic and Mechanical
- Rubber Machinery
- Testing Machines



| Dimensions, Capacities and Characteristics | | | | | | | | | |
|--|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Isomount | Unit | 0-70 | 1-80 | 2-80 | 3-80 | 3 HM-80 | 35-80 | 4-80 | 5-80 |
| Diameter D ₁ | mm | 50 | 78 | 120 | 160 | 160 | 200 | 228 | 320 |
| Diameter D ₂ | mm | 36 | 60 | 100 | 135 | 140 | 170 | 200 | 300 |
| Height, Min.. H ₁ | mm | 21 | 32 | 55 | 39 | 55 | 55 | 55 | 70 |
| Height, Max H ₂ | mm | 30 | 44 | 70 | 55 | 75 | 75 | 75 | 100 |
| Vertical Adjust | - | 9 | 12 | 15 | 16 | 20 | 20 | 20 | 30 |
| Screw Thread | H or SH | M10x1.50 | M12x1.25 | M16x1.5 | M20x1.50 | M20x1.50 | M24x1.50 | M24x1.50 | M30x1.5 |
| Alternative Thread | H or SH | - | M10x1.50 | M12x1.25 | M16x1.5 | M16x1.5 | M20x1.50 | M20x1.50 | M24x1.50 |
| | H | - | M12x1.75 | M16x2 | - | - | - | - | M30x2 |
| Standard Rubber | IRHD A | -70 | -80 | -80 | -80 | -80 | -80 | -80 | -80 |
| Spring Constant | Standard | | | | | | | | |
| Vertical | kN / mm | 1.2 | 3.3 | 7 | 9 | 17 | 21 | 26 | 55 |
| Horizontal | kN / mm | 0.4 | 1.2 | 2.5 | 3 | 6 | 7 | 10 | 20 |
| Damping Factor | C / Cc | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 |
| Maximum Load/Mount | daN | 150 | 500 | 1200 | 2500 | 3000 | 4000 | 5000 | 12000 |
| Mass without screw | kg | 0.25 | 0.5 | 1.5 | 2.5 | 2.6 | 3.9 | 6.4 | 19.1 |

1 daN = 1 kg

| Adjusting Screws Size x Lengths available | | | | | |
|---|------------|-----------|-----------|-----------|-----------|
| H = Hexagon Head, screw zinc plated | | | | | |
| M10 x 1.5 | M12 x 1.75 | M16 x 2 | M20 x 1.5 | M24 x 1.5 | M30 x 2.0 |
| 60 H | 80 H | 70 H | 100 H | 130 H | 200 H |
| 80 H | 100 H | 100 H | 120 H | 150 H | - |
| - | - | 150 H | 150 H | 180 H | - |
| - | - | - | 180 H | 250 H | - |
| - | - | - | 250 H | - | - |
| 17 A/F | 19 A/F | 24 A/F | 30 A/F | 36 A/F | 46 A/F |
| SH = Hexagon Head stud, zinc plated | | | | | |
| | M12 x 1.25 | M16 x 1.5 | M20 x 1.5 | M24 x 1.5 | M30 x 1.5 |
| | 120 SH | 120 SH | 170 SH | 170 SH | 170 SH |
| Spanner | 9 A/F | 12 A/F | 15 A/F | 19 A/F | 24 A/F |



Order examples:
ISO-5-80 + M30 x 2 x 200H
 Steel cover normal finish: Bright zinc plated

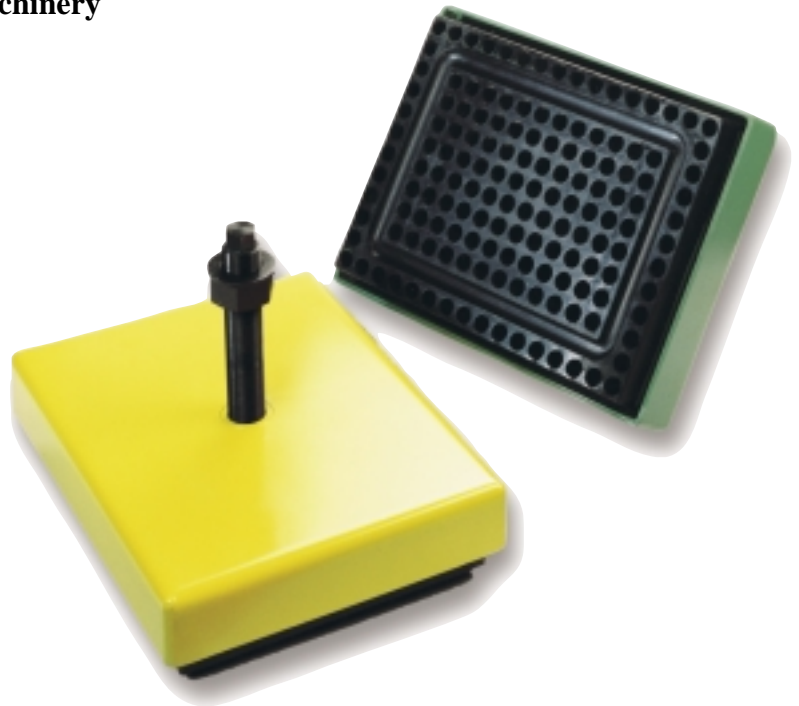
High load capacity mounts for impact machinery

Vibration Damping Machine Mounts featuring:

- High Load Capacity
- Precision fine screw thread height adjustment
- Excellent vertical and horizontal shock and vibration isolation performance
- Loadings per mount up to 25 tonnes
- Predictable performance
- Machine installation without bolting down

Applications include:

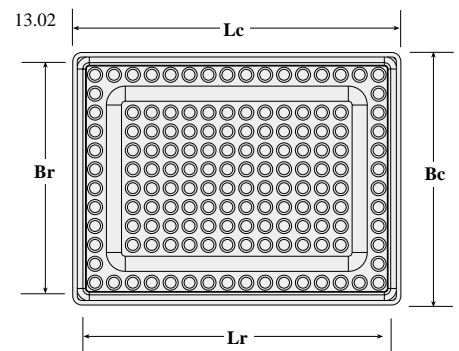
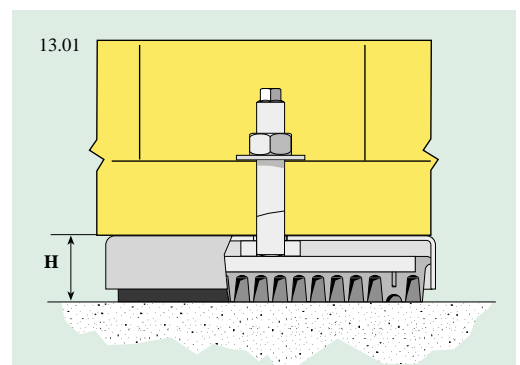
- Diesel generators
- Forging machines
- Impact machinery
- Injection moulding machines
- Presses hydraulic and mechanical
- Pressure Diecasting Machines



| Dimensions, Capacities and Features | | | | | | |
|-------------------------------------|------------------|-----|--------|----------------|----------------|----------------|
| Isobloc | ISB for variants | | Units | Isobloc ISB 10 | Isobloc ISB 25 | Isobloc ISB 50 |
| Max load/Mount | -70 | | daN | 7500 | 18000 | 36000 |
| | -70 | | tonnes | 7.5 | 18 | 36 |
| | -80 | | daN | 10000 | 25000 | 50000 |
| | -80 | | tonnes | 10 | 25 | 50 |
| Cover | Length | Lc | mm | 284 | 434 | 675 |
| | Width | Bc | mm | 234 | 334 | 475 |
| Rubber base | Length | Lr | mm | 250 | 400 | 600 |
| | Width | Br | mm | 200 | 300 | 400 |
| Mount Height (unloaded) | Min | Hmi | mm | 87 | 87 | 150 |
| | Max | Hma | mm | 109 | 109 | 180 |
| Height Adjustment | | | mm | 22 | 22 | 30 |
| Mass without screw | | | kg | 16 | 35 | 144 |

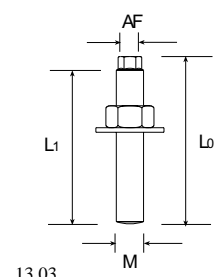
1 daN = 1 kg

| Static Spring Constant | for | | | | | |
|---------------------------------|-----|-----|-------|------|------|------|
| Vertical | -70 | Ksv | kN/mm | 6.25 | 15 | 29 |
| Horizontal | -70 | Khv | kN/mm | 2.3 | 5.5 | 10 |
| Vertical | -80 | Ksv | kN/mm | 9 | 22 | 42 |
| Horizontal | -80 | Khv | kN/mm | 3.3 | 8 | 14 |
| Damping Factor | | | C/Cc | 0.09 | 0.09 | 0.09 |
| Ratio Dynamic to Static Modulus | | | | 2.4 | 2.4 | 2.4 |



Standard Cover Colour
Yellow RAL 1023 = YE

| Standard Adjusting Screws SH | | | | | | | |
|---|----|-----------|-----------|-----------|-----------|-----------|-----------|
| Threads | SH | M24 x 1.5 | M30 x 1.5 | M36 x 1.5 | M42 x 1.5 | M48 x 2.0 | M56 x 2.0 |
| AF | mm | 17 | 24 | 27 | 32 | 36 | 41 |
| Lengths Lo | mm | 170 | 200 | 220 | 220 | 300 | 300 |
| Lengths L ₁ | mm | 160 | 190 | 200 | 200 | 280 | 280 |
| For Hex. head screws see Isomount page 12 | | | | | | | |
| for ISB | | 10 | 10 | 25 | 25, 50 | 50 | 50 |

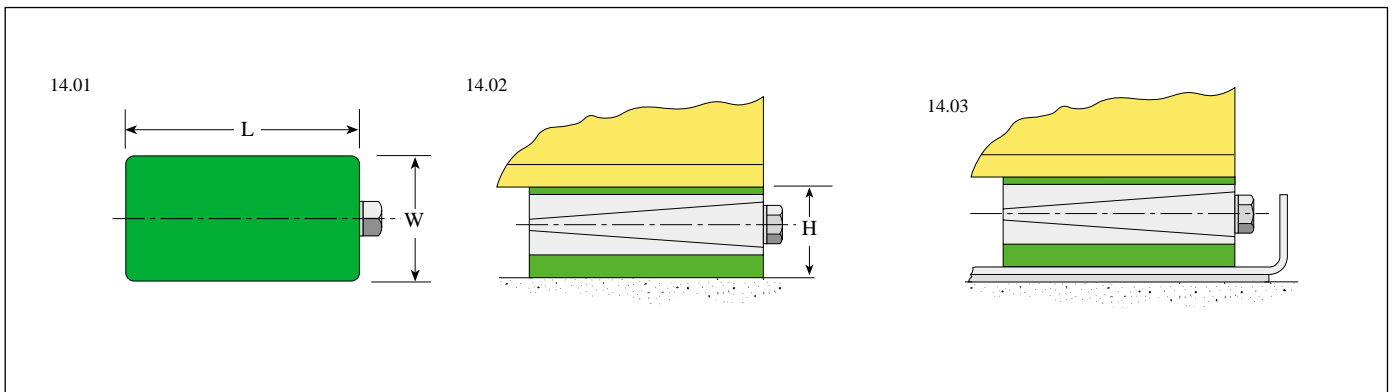


Order Example ISB 10 -70 SH M30 x 200 x 200

Precision, height adjustable, vibration damping machine mounts for accurate, efficient and economical machine installation



Typical applications:
Machine tools, rubber and plastics machinery, printing and packaging machinery.



| Vibration damping grades | | | | |
|--------------------------|---------|-------------|------------|--|
| Type | Top (T) | Bottom (B) | Grade | Application examples |
| A | SG5 P1 | SG 15 P1 | Standard | General machine tools, Printing machines etc |
| B | SG 2P2 | SG 6 P2 | Stiff | CNC Lathes, Machining centres, Boring and Milling machines, Grinders, Transfer machines |
| C | SG 2 P2 | IM BR-70-25 | Elastic | Passive isolation of sensitive equipment Active isolation of Impact machinery, Presses etc. |
| D | NBR 5P1 | NBR 15P1 | Flexible | Shock absorbing Injection moulding and Diecasting machines |
| E | SG 2 P2 | SG2P2 | Very Stiff | Long bed machinery |

| Free Standing Wedgemounts WL,WLF | | | | | | | | | |
|----------------------------------|-----|-----|---------------------------|----|----|----|----|-----------------|--------------|
| Dimensions mm | | | Heights H (mid position.) | | | | | Height Adj. +/- | Unit Mass kg |
| Model | L | W | A | B | C | D | E | | |
| WL 1* | 105 | 55 | 56 | 44 | 63 | 56 | 40 | 4 | 1.4 |
| WLF1* | 115 | 80 | 60 | 48 | 67 | 60 | 44 | 5 | 2.6 |
| WL 2* | 150 | 75 | 60 | 48 | 67 | 60 | 44 | 5 | 3.2 |
| WLF2* | 115 | 115 | 66 | 54 | 73 | 66 | 50 | 6 | 3.5 |
| WL 3* | 200 | 95 | 66 | 54 | 73 | 66 | 50 | 6 | 5.8 |
| WLF3* | 150 | 150 | 66 | 54 | 73 | 66 | 50 | 6 | 6.9 |
| WL 4* | 200 | 200 | 66 | 54 | 73 | 66 | 50 | 6 | 11.8 |
| WL 5* | 250 | 115 | 90 | 78 | 97 | 90 | 74 | 9 | 13.5 |
| WL 6* | 200 | 250 | 92 | 80 | 99 | 92 | 76 | 10 | 18.0 |
| WL 7* | 250 | 330 | 90 | 78 | 97 | 90 | 74 | 9 | 33.1 |

*Specify grade: e.g. WL 2B

| Maximum Load Capacity daN for variants | | | | | |
|--|----------------|-------|------|------|-------|
| Model | Damping Grades | | | | |
| | A | B | C | D | E |
| WL1* | 500 | 600 | 400 | 500 | 1500 |
| WLF1* | 1000 | 1300 | 800 | 1000 | 3000 |
| WL2* | 900 | 1200 | 700 | 900 | 3000 |
| WLF2* | 1300 | 1600 | 1000 | 1300 | 4000 |
| WL3* | 1900 | 2200 | 1500 | 1900 | 6000 |
| WLF3* | 2300 | 3000 | 1800 | 2300 | 7000 |
| WL4* | 4000 | 5000 | 3200 | 4000 | 12000 |
| WL5* | 3000 | 4000 | 2300 | 3000 | 9000 |
| WL6* | 5400 | 7000 | 4000 | 5400 | 14000 |
| WL7* | 9000 | 10000 | 6500 | 9000 | 25000 |

Order Example WL 2 - A

1 daN = 1 kg

Precision, height adjustable, vibration damping machine mounts for accurate, efficient and economical machine installation

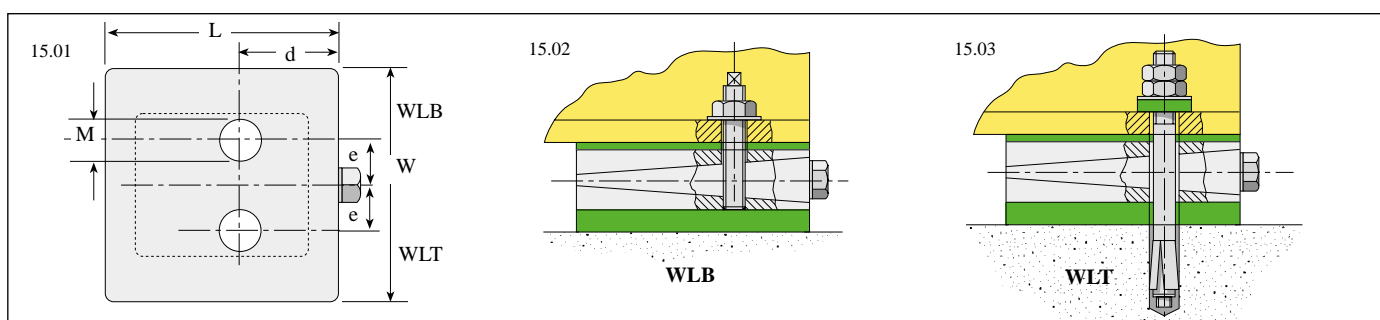


WLB



WLT

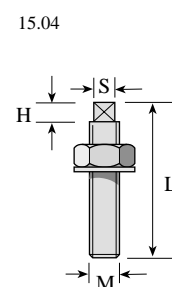
Typical applications: Machine tools, Rubber machinery, Printing and Packaging Machinery, Injection Moulders



| Fitted with vibration damping pads | | | | |
|------------------------------------|---------|------------|------------|---|
| Type | Top (T) | Bottom (B) | Grade | Application examples |
| F | No pad | SG 15 P1 | Standard | General Machine Tools, Printing Machines etc |
| G | No pad | SG 6P2 | Stiff | CNC Lathes, Machining Centres, Boring and Milling Machines, Grinders, Transfer machines |
| H | No pad | SG 2P2 | Very Stiff | Long Bed Machinery |

WLB and WLT can also be supplied on request with vibration damping variants A,B,C, D or E (See WL, WLF)

| Wedgemounts Bolt on WLB, Bolt through WLT | | | | | | | | Dimensions mm | | | |
|---|-------|-----|-----|---------------------------|----|----|-----------------|-----------------------|-----|------------|-----------|
| WLB | WLT | L | W | Heights H (mid position.) | | | Height Adj. +/- | Bolt on/through holes | | | |
| | | | | F | G | H | | d | e | WLB Thread | WLT dia M |
| WLB 1 | WLT 1 | 115 | 80 | 55 | 45 | 42 | 6 | 45 | 17 | M12 | 14 |
| WLB 2 | WLT 2 | 115 | 115 | 61 | 51 | 48 | 6 | 50 | 24 | M16 | 18 |
| WLB 3 | WLT 3 | 150 | 150 | 61 | 51 | 48 | 6 | 60 | 24 | M20 | 22 |
| WLB 4 | WLT 4 | 200 | 200 | 61 | 51 | 48 | 6 | 75 | 27 | M20 | 22 |
| WLB 6 | WLT 6 | 200 | 250 | 87 | 78 | 74 | 10 | 95 | 27 | M20 | 22 |
| WLB 7 | WLT 7 | 250 | 330 | 85 | 76 | 72 | 9 | 125 | 105 | M24 | 26 |



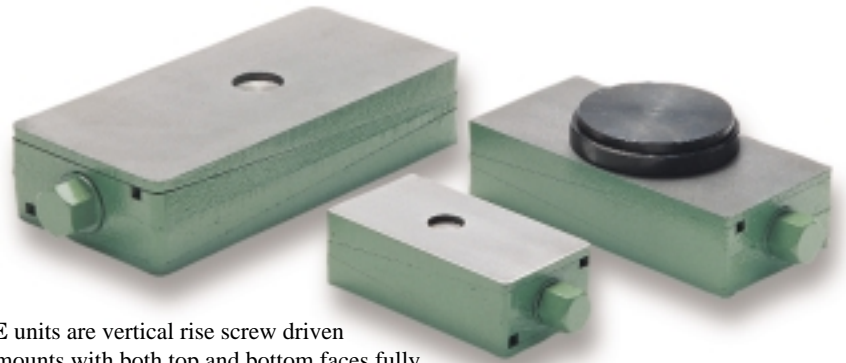
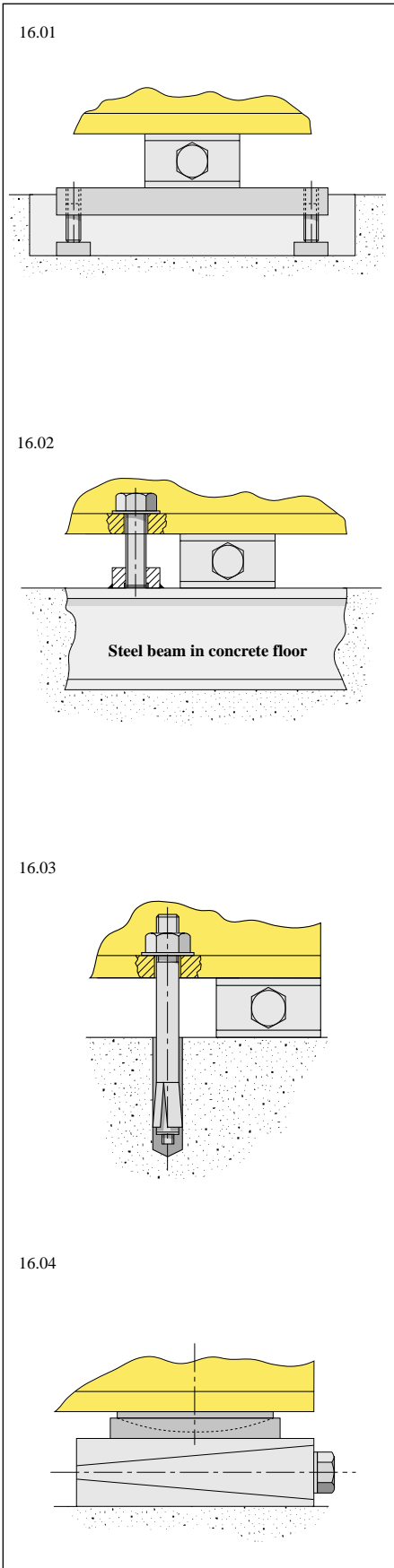
| Maximum Load/Mount daN | | | | |
|------------------------|-------|---------------------------|-------|-------|
| WLB | WLT | Vibration damping variant | | |
| | | F | G | H |
| WLB 1 | WLT 1 | 900 | 1200 | 3000 |
| WLB 2 | WLT 2 | 1300 | 1600 | 4000 |
| WLB 3 | WLT 3 | 2300 | 3000 | 7000 |
| WLB 4 | WLT 4 | 4000 | 5000 | 12000 |
| WLB 6 | WLT 6 | 5500 | 7000 | 14000 |
| WLB 7 | WLT 7 | 9000 | 10000 | 25000 |

Order Examples: WLB 2 F, WLT 3 G

1 daN = 1 kg

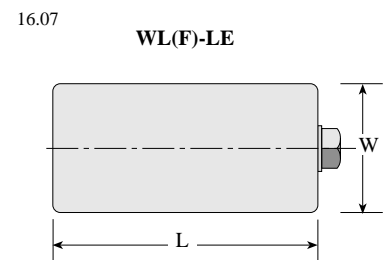
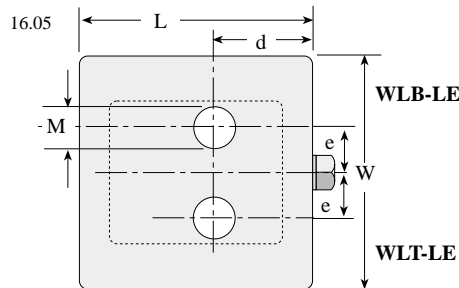
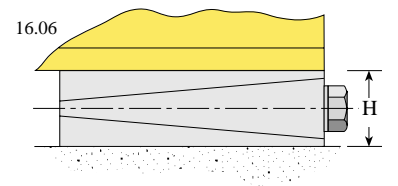
| Bolt on screw assemblies BOS | | | | | |
|---|---|---------------|-------|---------|-------|
| Zinc plated mild steel | | Dimensions mm | | | |
| Thread | M | M12x1.75 | M16x2 | M20x2.5 | M24x3 |
| Zinc Plated Mild Steel | S | 8 | 11 | 13 | 18 |
| | H | 10 | 10 | 10 | 10 |
| | L | 80 | 80 | - | - |
| Order Example BOS M20x2.5x115 | | 100 | 100 | 100 | - |
| | | 120 | 115 | 115 | - |
| | | 150 | 150 | 150 | 150 |
| | | - | 180 | 180 | 180 |
| Order Examples | | | | | |
| WLB 1 F+ 1-BOS M12x1.75x100 Wedgemount WLB with one (1) Bolt on screw per mount | | | | | |
| WLB 2 G+ 2-BOS M16x2x150 Wedgemount WLB with two (2) Bolt on screws per mount | | | | | |
| WLB 3 H Wedgemount WLB No Bolt on screw | | | | | |

Precision Wedge Levelling units for rigid machine support



WL-LE units are vertical rise screw driven Wedgemounts with both top and bottom faces fully machined.

Applications include:
Supporting and levelling machinery during construction, erection and operation. LEs provide a rigid support for maximum stiffness. They can be installed free standing for machines without strong dynamic forces or in conjunction with holding down bolts located alongside the WL-LE units.



| Wedge Levelling Elements WL-LE | | | | Dimensions: mm | | | | | | |
|--------------------------------|-----------|----------------|---------------------|----------------|--------|---------|-----|-----|-----|----|
| Free standing | B Bolt on | T Bolt through | Max.Load/ Mount daN | L x W | H mid. | H Adj.. | d | e | M | |
| WL 1-LE | - | - | 1500 | 105 x 55 | 34 | ± 4 | - | - | - | - |
| WLF 1-LE | WLB 1-LE | WLT1 -LE | 3000 | 115 x 80 | 38 | ± 6 | 45 | 15 | M12 | 14 |
| WL 2-LE | - | - | 3000 | 150 x 75 | 38 | ± 5 | - | - | - | - |
| WLF 2-LE | WLB 2-LE | WLT 2 -LE | 4000 | 115 x 115 | 44 | ± 6 | 50 | 24 | M16 | 18 |
| WL 3-LE | - | - | 6000 | 200 x 95 | 45 | ± 6 | - | - | - | - |
| WLF 3-LE | WLB 3-LE | WLT 3 -LE | 7000 | 150 x 150 | 44 | ± 6 | 60 | 24 | M20 | 22 |
| WL 5-LE | - | - | 9000 | 250 x 115 | 68 | ± 9 | - | - | - | - |
| WL 6-LE | WLB 6-LE | WLT 6 -LE | 14000 | 200 x 220 | 72 | ± 10 | 95 | 27 | M20 | 22 |
| WL 7-LE | WLB 7-LE | WLT 7 -LE | 25000 | 250 x 330 | 68 | ± 9 | 125 | 105 | M24 | 26 |

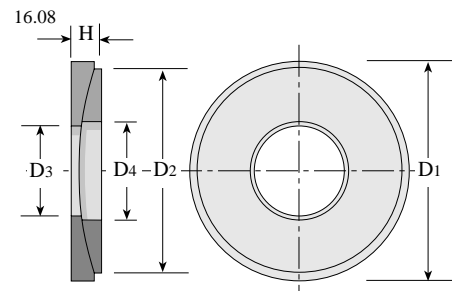
Order examples ; WL2 LE; WLF 3LE; WLB 2LE; WLT 1LE.

1daN = 1 kg

Spheriseats SPS

Optional Spheriseats placed on the LE units can be used to take up complex angles between the LE and machine base.

| Spheriseats SPS | | Dimensions: mm | | | |
|-----------------|----|----------------|-----|-----|--|
| SPS | 75 | 95 | 110 | 150 | |
| D1 | 75 | 95 | 110 | 150 | |
| D2 | 70 | 90 | 100 | 140 | |
| H | 15 | 17 | 20 | 25 | |



D3 To be specified, D4 = D3 + 5 Order example:SPS 95 - D3 = 50



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