HepcoMotion®

SH
shock absorbers

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Introducing
HepcoMotion SH Shock Absorbers

Hepco Shock Absorbers are the ideal solution to eliminate damaging impact forces created by moving loads and objects. They are particularly useful when used with Hepco's range of linear slide systems, and will offer the user:

- Extended machine life
- Higher operating speeds leading to greater production throughput
- Higher operating loads
- Reduced stress in associated parts
- Reduced noise
- Reduced design and fabrication costs

Traditional stopping devices such as springs and rubber bumpers will store energy rather than dissipate it. Having stopped the object it then bounces back causing further loading on associated parts, leading to fatigue and failure.
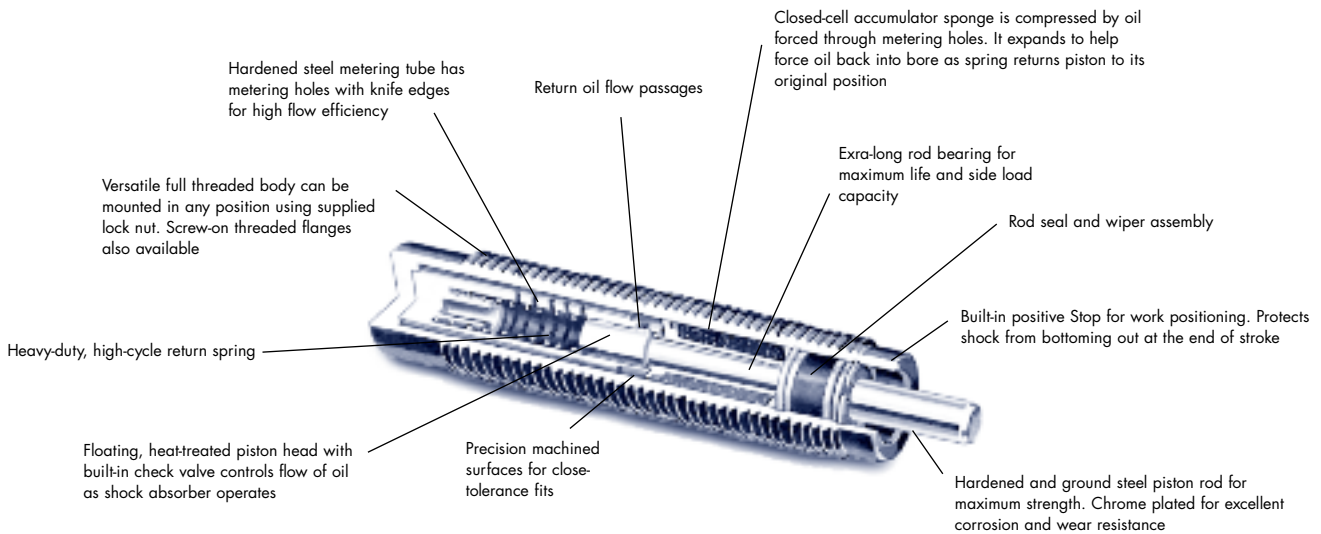

Hepco SH Shock Absorbers will match the speed and mass of the moving object and bring it to rest with no shock – the energy will simply be dissipated, mostly as heat. They also out-perform cylinder cushioning or dashpots, dissipating the energy at a uniform rate, thus enabling far faster stopping times to be achieved. The range offers adjustable and non–adjustable full threaded metric type shock absorbers together with fixed flange adjustable type up to 28mm bore size.

Hepco Shock Absorbers can be used with all of Hepco's linear motion products but users will find them a key element in applications for the HPS Powerslide–2 and HDS Heavy Duty System where extra shock absorption is often required.

System Composition

Non-Adjustable Full Threaded Body Shock Absorbers

Hardened steel metering tube has metering holes with knife edges for high flow efficiency

Return oil flow passages

Closed-cell accumulator sponge is compressed by oil forced through metering holes. It expands to help force oil back into bore as spring returns piston to its original position

Versatile full threaded body can be mounted in any position using supplied lock nut. Screw-on threaded flanges also available

Exra-long rod bearing for maximum life and side load capacity

Rod seal and wiper assembly

Heavy-duty, high-cycle return spring

Built-in positive Stop for work positioning. Protects shock from bottoming out at the end of stroke

Floating, heat-treated piston head with built-in check valve controls flow of oil as shock absorber operates

Precision machined surfaces for close-tolerance fits

Hardened and ground steel piston rod for maximum strength. Chrome plated for excellent corrosion and wear resistance

Non-Adjustable Full Threaded Type Series SH10 to 25

These are self–compensating shock absorbers designed to decelerate loads over a specified narrow weight range. They are useful in high speed or high cycle applications where the loading and speed parameters are known and are not likely to change significantly in the future. They incorporate a tamper proof, non–adjustable internal metering tube selected for the application.

The entire body of the unit is threaded which assists in the heat dissipating process, together with a built in positive stop to prevent "bottoming out". The stop will also provide a datum work positioning point.

These shock absorbers are easy to mount and can be screwed into a threaded hole with a single Lock Nut (Universal Mounts available for this purpose) or fitted into a through hole with two Lock Nuts on the body of the unit.
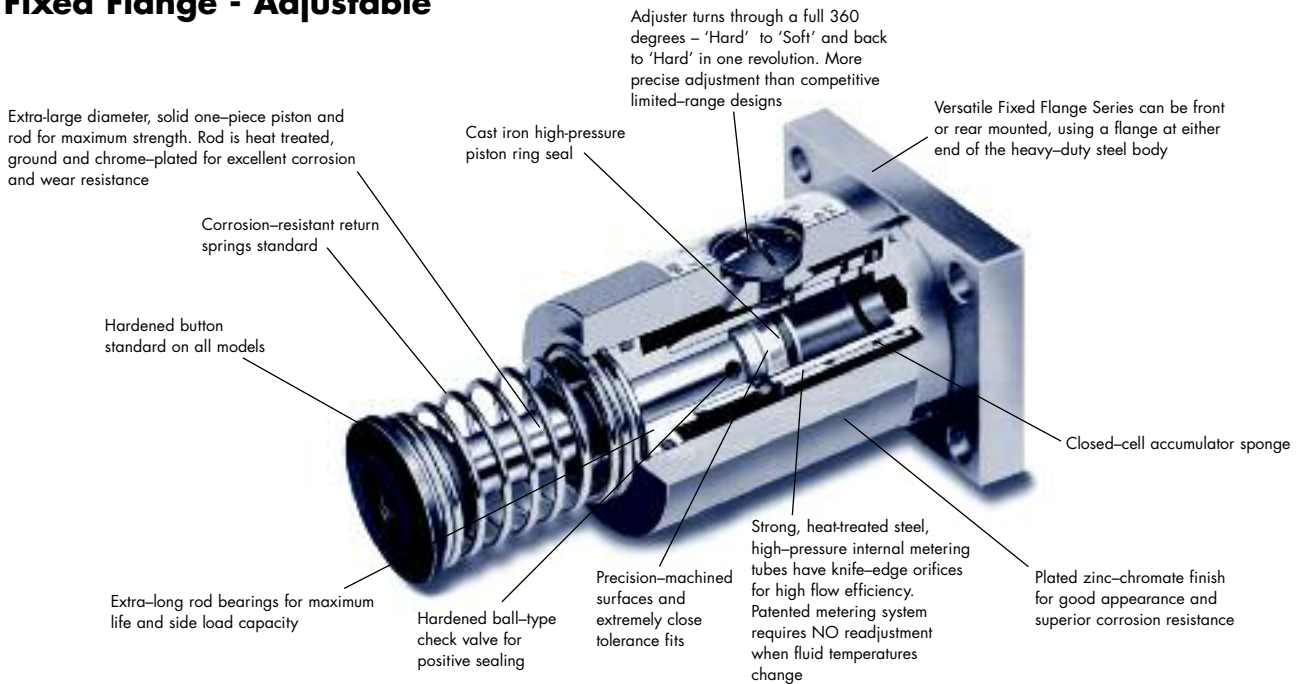
Adjustable Full Threaded Type Series SHA20 to 36

These models offer greater versatility and allow operation within a wide range of loading conditions. The adjustable fine tuning provides optimum performance, particularly useful where it is desirable to use the same size shock absorber throughout the installation even if velocities vary greatly. The SHA20 and SHA36 sizes have built in positive stops whilst the SHA25 requires a Stop Collar.

All sizes are offered with the necessary Lock Nuts and a Universal Mounting Flange.

Fixed Flange - Adjustable

Extra-large diameter, solid one–piece piston and rod for maximum strength. Rod is heat treated, ground and chrome–plated for excellent corrosion and wear resistance

Corrosion–resistant return springs standard

Hardened button standard on all models

Extra–long rod bearings for maximum life and side load capacity

Hardened ball–type check valve for positive sealing

Precision–machined surfaces and extremely close tolerance fits

Cast iron high-pressure piston ring seal

Adjuster turns through a full 360 degrees – 'Hard' to 'Soft' and back to 'Hard' in one revolution. More precise adjustment than competitive limited–range designs

Versatile Fixed Flange Series can be front or rear mounted, using a flange at either end of the heavy–duty steel body

Closed–cell accumulator sponge

Strong, heat-treated steel, high–pressure internal metering tubes have knife–edge orifices for high flow efficiency. Patented metering system requires NO readjustment when fluid temperatures change

Plated zinc–chromate finish for good appearance and superior corrosion resistance

Adjustable Fixed Flange Type Series SHA45 to 67

Fixed Flange Shock Absorbers are interchangeable with other manufacturer's units of the same bore size and are offered at competitive prices to similar models, making them attractive for OEM users. The fixed flange design offers a positive location which eliminates the need to adjust stops, limit switches or sensors and consequently saves time on installation or when changing. For this reason they are often chosen by OEMs for use on the same machine or range of machines, the adjustable feature allowing operation within a wide load and speed range. They are available with a rear or front mounting flange with a range of Stop Collars and Bars to complement the series.

Positive Stop Bars and Collars for Fixed Flange Models Series SHA45 to 67

Positive Stop Collars and Bars are hardened and precision machined – they enable a fixed work positioning point to be established, automatically preventing bottoming out of the piston rod. There is no need to calculate the clearance required! Both Bars for front flange and Collars for rear flange mounting perform the same function. Stop Bars, being securely fitted to the flange, are not to be used for mounting – there are separate holes in the flange for this function. The Stop Collar fits over the front of the shock absorber body and has the added benefit that it will assist in protecting the return spring, rod and seals from weld splatter, metal cutting and other contaminants. Both Bars and Collars act as a visual check to ensure that the full stroke of the shock absorber is being used at all times.

Application Examples

Pneumatic Handling System

A suction pad head is mounted to a Hepco HPS Powerslide-2 guided rodless cylinder. This unit is used to pick boxes from a conveyor and place them onto an automatic trailer loading system. High cycle rate and high impact speed mean that internal cushioning is insufficient even when the load is light.

Shock Absorbers provide smoother stopping while preventing damage to the cylinder internals.
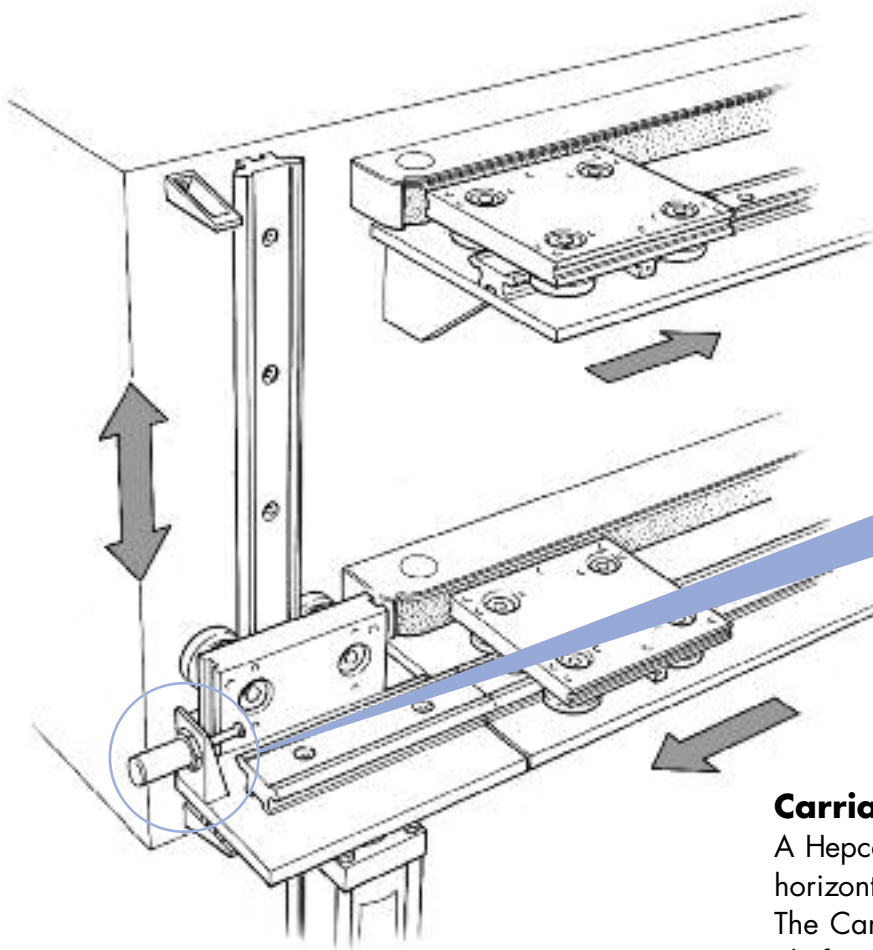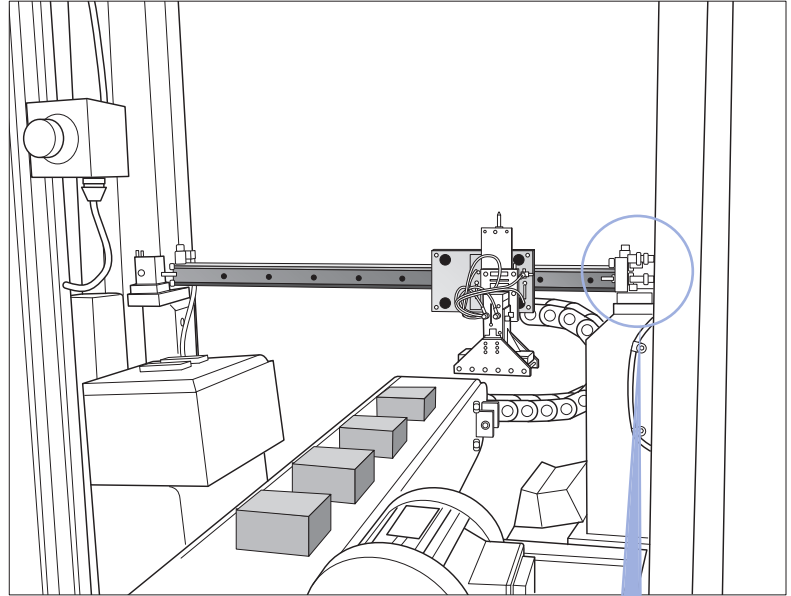
Carriage Transport System

A Hepco GV3 Carriage is driven on the horizontal slide by a friction drive.
The Carriage continues onto the vertical platform under its own momentum.
The Shock Absorber is used to absorb that momentum, preventing the Carriage from bouncing back.
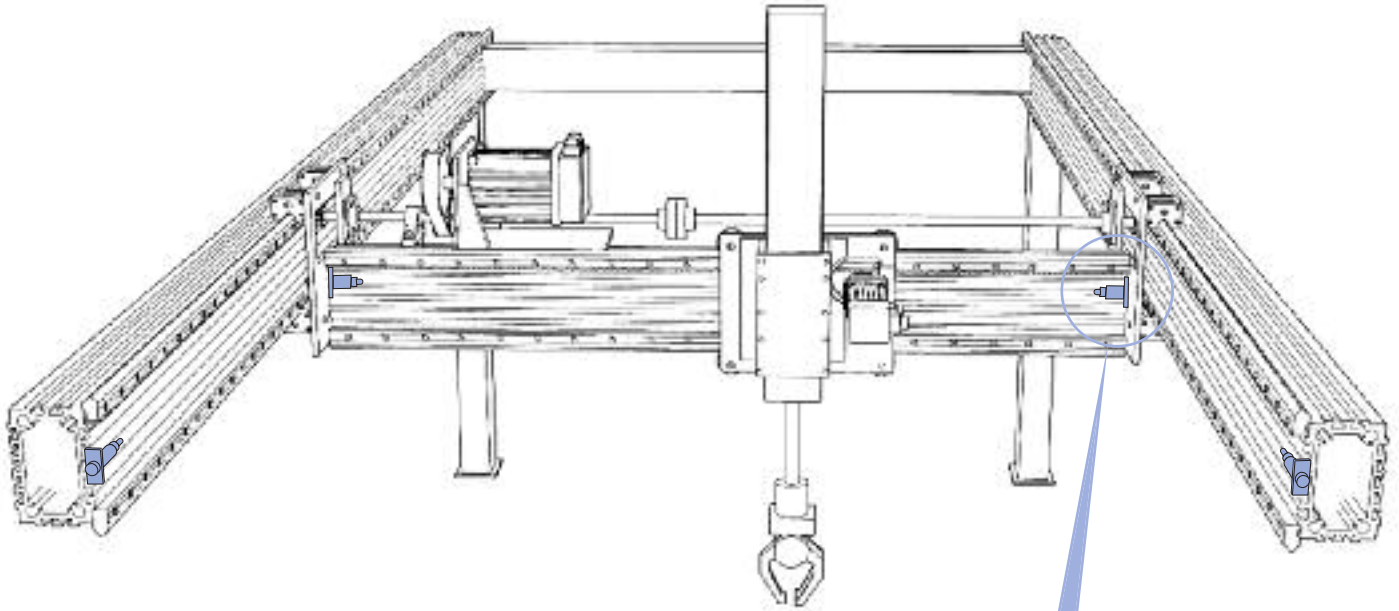
Heavy Duty Pick and Place Gantry

This system uses Hepco HDS Heavy Duty Beams with Single Edge Slides and rack drive on the X and Y axes. Shock Absorbers are used here as a safety protection feature in case of limit switch failure causing motor over-run.

The high value of this gantry set-up means that the small additional investment in shock absorption is well justified to prevent any possibility of damage due to control system failure.

Shock Absorbers are mounted as close as possible to the Centre of Gravity of the moving masses.

Absorbing Shock

In order to minimise the damaging inertia forces on a system as it comes to rest, a shock absorber of some kind is required. The Hepco SH Shock Absorber is best suited to this requirement as it is designed to provide constant force throughout its operating stroke. As the piston moves through its stroke the velocity is constantly decreasing – this requires a reduction in orifice area to maintain constant pressure, and therefore constant decelerating force. Hepco SH Shock Absorbers meter oil through a series of metering holes (see drawings page 2 and 3), the position and size of which are computer calculated to ensure constant pressure.

Dashpots, cylinder cushions and springs all exhibit variable force over their operational stroke, leading to greater resisting forces than are necessary with a Hepco SH Shock Absorber.

Adjustable shock absorbers offer the additional advantage of being able to fine–tune the resistance, and therefore obtain maximum cycle rates with soft, non-destructive stops.
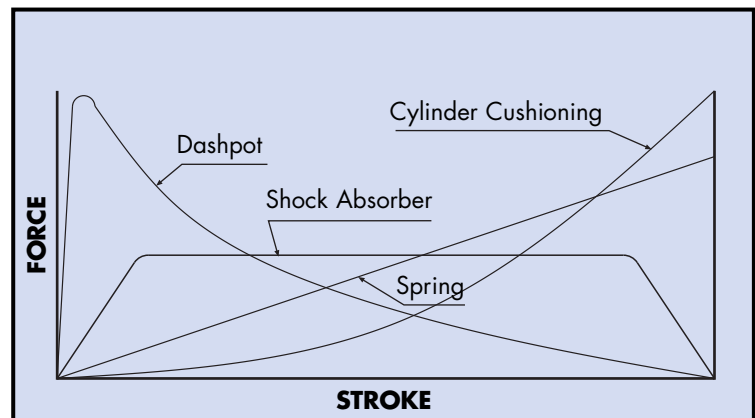
Selecting the Correct Size Shock Absorber

There are three factors which need to be considered when selecting a shock absorber. The energy dissipated per cycle, the energy dissipated per hour and the effective mass of the object being brought to rest. These factors can be calculated for most applications using the four parameters listed.

1. Mass to be decelerated   m (kg)
2. Impact Velocity   v (m/s)
3. Propelling Force   F (N)
4. Cycles Per Hour   C (/hr)

Key to symbols used

E_1	Kinetic Energy (Nm)
E_2	Propelling Force Energy (Nm)
E_3	Total Energy Per Cycle (Nm)
E_4	Total Energy Dissipated Per Hour (Nm)
m	Mass (kg)
Me	Effective Mass (kg)
F	Propelling Force (N)
C	Cycles Per Hour (/hr)
S	Shock Absorber Stroke (m)
v	Impact Velocity (m/s)
v_i	Impact Velocity for rotary applications (m/s)
v_p	Peripheral Velocity for rotary applications (m/s)
r	Radius of Table (m)
Pm	Motor Power (Kw)
g	Acceleration due to gravity = 9.81 (m/s^2)
μ	Coefficient of Friction between mass and rollers
M	Propelling Torque (Nm)
b	Shock Absorber Mounting Radius (m)

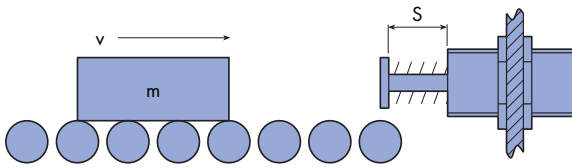# Absorbing Shock

Moving mass without propelling force

$E_1 = \dfrac{m \times v^2}{2}$

$E_2 = 0$

$E_3 = E_1 + E_2$

$E_4 = E_3 \times C$

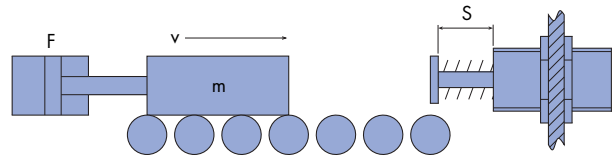$Me = \dfrac{2 \times E_3}{v^2} = m$

Moving mass with propelling force

$E_1 = \dfrac{m \times v^2}{2}$

$E_2 = F \times S$

$E_3 = E_1 + E_2$

$E_4 = E_3 \times C$

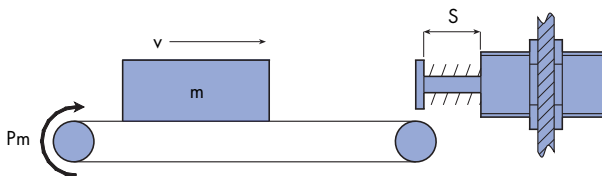$Me = \dfrac{2 \times E_3}{v^2}$

Moving mass, motor driven

$E_1 = \dfrac{m \times v^2}{2}$

$E_2 = \left(\dfrac{2500 \times Pm}{v}\right) \times S$

$E_3 = E_1 + E_2$

$E_4 = E_3 \times C$

$Me = \dfrac{2 \times E_3}{v^2}$
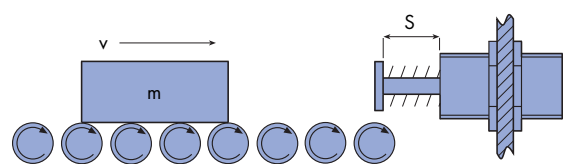

Moving mass, propelled by driven rollers/conveyor

$E_1 = \dfrac{m \times v^2}{2}$

$E_2 = (m \times S \times M) \times S$

$E_3 = E_1 + E_2$

$E_4 = E_3 \times C$

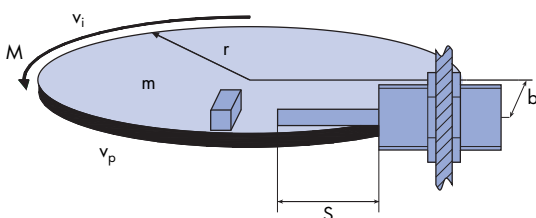$Me = \dfrac{2 \times E_3}{v^2}$

Rotary table with propelling force

$E_1 = \dfrac{m \times v_p^2}{4}$

$E_2 = \dfrac{m \times S}{b}$

$E_3 = E_1 + E_2$

$E_4 = E_3 \times C$

$Me = \dfrac{2 \times E_3}{v_i^2}$

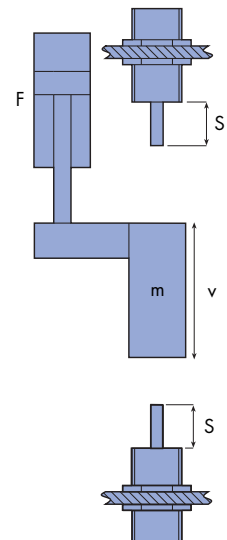## Mass propelled vertically

$E_1 = \dfrac{m \times v^2}{2}$

E_2 (movement downwards)
$= [F + (g \times m)] \times S$

E_2 (movement upwards)
$= [F - (g \times m)] \times S$

$E_3 = E_1 + E_2$

$E_4 = E_3 \times C$

$Me = \dfrac{2 \times E_3}{v^2}$

Energy Capacity Ratings

Having determined the energy requirements of your application, select a bore size and stroke that will perform the function from the charts below.

As a guideline, build in a safety factor of 20% more capacity than is actually required. This will allow for any application changes with respect to weight, velocity and cycles. It is also suggested that the longest stroke possible is chosen as this will provide maximum deceleration performance with lowest impact forces for added safety.

If you require help in selecting the correct shock absorber for your installation, please refer your application details to our Technical Sales Department.

Non–Adjustable Full Threaded Body Shock Absorbers

Part No.	Stroke (mm)	Effective Mass (kg) Me		Maximum Energy Capacity		Mounting Strength Required (N)*
		Min.	Max.	Nm Per Cycle (E_3)	Nm Per Hour (E_4)	
SH10	6.4	1.8	5.5	2.9	22600	1130
SH10H	6.4	4.5	13.6	2.9	22600	1130
SH12	9.5	0.9	16.4	8.6	28250	2260
SH14	12.7	0.9	10	17.2	34000	3390
SH14H	12.7	8.6	86	17.2	34000	3390
SH14HC	12.7	68	204	17.2	34000	3390
SH20	12.7	2.3	25	25.9	45200	5100
SH20H	12.7	22.7	227	25.9	45200	5100
SH20HC	12.7	181	908	25.9	45200	5100
SH204	25.4	2.3	16	50.8	68000	5000
SH204H	25.4	9	59	50.8	68000	5000
SH204HC	25.4	36	227	50.8	68000	5000
SH25	25.4	9	136	69	68000	6800
SH25H	25.4	113	1135	69	68000	6800
SH25HC	25.4	400	2270	69	68000	6800

Adjustable Full Threaded Body Shock Absorbers

Part No.	Bore (mm)	Stroke (mm)	Effective Mass (kg) Me		Maximum Energy Capacity		Mounting Strength Required (N)*
			Min.	Max.	Nm Per Cycle (E_3)	Nm Per Hour (E_4)	
SHA20	4.8	12.7	0.91	109	23	45200	4500
SHA25	9.5	25.4	4.5	545	68	67800	6670
SHA3625	12.7	25.4	4.5	1135	141	84750	13900
SHA3650	12.7	50.8	9.5	2270	282	98310	13900

Fixed Flange Adjustable Shock Absorbers

| Part No.	Bore (mm)	Stroke (mm)	Effective Mass (kg) Me		Maximum Energy Capacity		Mounting Strength Required (N)*
			Min.	Max.	Nm Per Cycle (E_3)	Nm Per Hour (E_4)	
SHA4525 F/R	19	25.4	27	3629	305.1	124294	30000
SHA4550 F/R	19	50.8	43	6350	610.2	146893	30000
SHA4575 F/R	19	76.2	54	9526	915.3	180791	30000
SHA6750 F/R	28.6	50.8	73	12701	1582	169492	77850
SHA67100 F/R	28.6	101.6	118	18144	3164	225989	77850

*Based on: $\dfrac{2500 \times E_3 \text{ (MAX.)}}{\text{Stroke}}$

Selection Examples

Example 1

A 25mm bore cylinder with a driving force of 250N is used to drive a mass of 16kg through a travel of 700mm. The system is required to operate at a rate of 1 stroke per second, giving 1 shock absorber stroke every 2 seconds or 1800 per hour. A shock absorber stroke of 12.7mm is estimated.

With a short stroke pneumatic cylinder it is expected that the cylinder will accelerate the mass throughout its travel. The average speed is 0.7m in 1 sec, i.e. 0.7m/s however the impact speed at the end of the cylinder travel is 2 x average speed i.e. 1.4m/s.
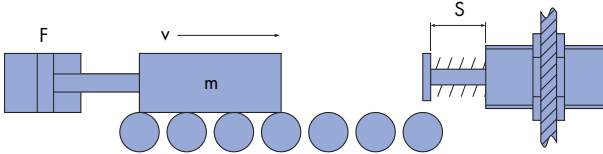
$$E_1 = \frac{m \times v^2}{2} = \frac{16 \times 1.4^2}{2} = 15.7 \text{ Nm}$$

$$E_2 = F \times S = 250 \times 0.0127 = 3.18 \text{ Nm}$$

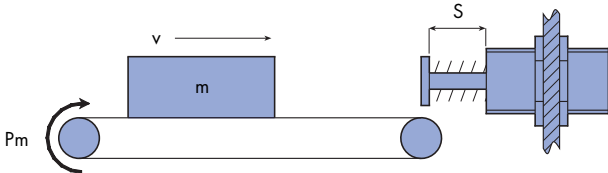$$E_3 = E_1 + E_2 = 15.7 + 3.18 = 18.88 \text{ Nm}$$

$$E_4 = E_3 \times C = 18.88 \times 1800 = 33984 \text{ Nm/hr}$$

$$Me = \frac{2 \times E_3}{v^2} = \frac{2 \times 18.88}{1.4^2} = 19.3 \text{ Kg}$$

From the tables on page 8, the selection is SH20

Example 2

A mass of 50kg is driven by a 0.75kw motor and belt drive at a speed of 0.9m/s. The system does 6 cycles per minute or 360 per hour. Shock absorber stroke of 25mm is estimated.

$$E_1 = \frac{m \times v^2}{2} = \frac{50 \times 0.9^2}{2} = 20.25 \text{ Nm}$$

$$E_2 = \left(\frac{2500 \times Pm}{v}\right) \times S = \left(\frac{2500 \times 0.75}{0.9}\right) \times 0.025 = 52.1 \text{ Nm}$$

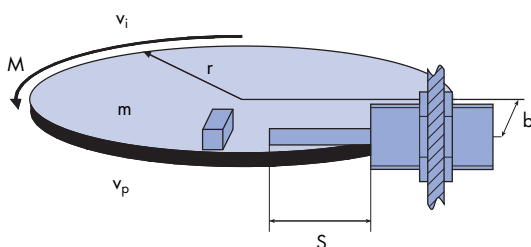$$E_3 = E_1 + E_2 = 20.25 + 52.08 = 72.33 \text{ Nm}$$

$$E_4 = E_3 \times C = 72.33 \times 360 = 26038 \text{ Nm/hr}$$

$$Me = \frac{2 \times E_3}{v^2} = \frac{2 \times 72.33}{0.9^2} = 178.6 \text{ Kg}$$

From the tables on page 8, the selection is SHA3625

Example 3

A mass of 100kg is rotated by a torque of 200Nm at a peripheral speed of 0.8m/s. The radius of the ring is 400mm and the shock absorber acts at a radius of 350mm. The shock absorber performs 120 cycles per hour.

$$E_1 = \frac{m \times v_p^2}{4} = \frac{100 \times 0.8^2}{4} = 16 \text{ Nm}$$

$$E_2 = \frac{M \times S}{b} = \frac{200 \times 0.025}{0.35} = 14.3 \text{ Nm}$$

$$E_3 = E_1 + E_2 = 16 + 14.3 = 30.3 \text{ Nm}$$

$$E_4 = E_3 \times C = 30.3 \times 120 = 3636 \text{ Nm/hr}$$
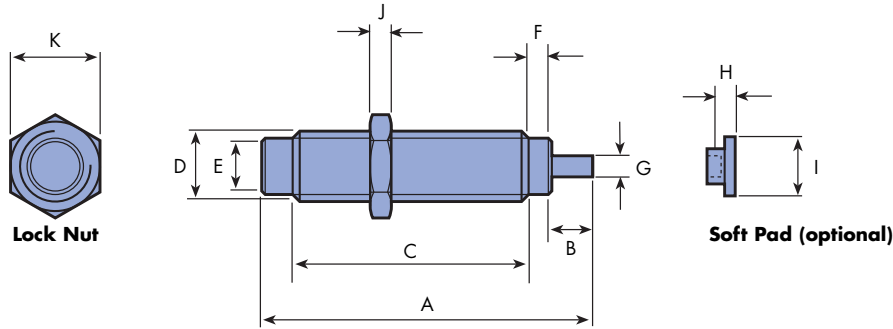
$$v_i = \frac{v_p \times b}{r} = \frac{0.8 \times 0.35}{0.4} = 0.7 \text{ m/s}$$

$$Me = \frac{2 \times E_3}{v_i^2} = \frac{2 \times 30.3}{0.7^2} = 123.7 \text{ Kg}$$

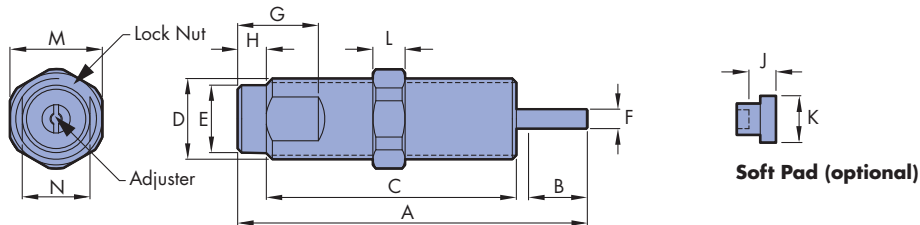From the tables on page 8, the selection is SHA25

Data and Dimensions
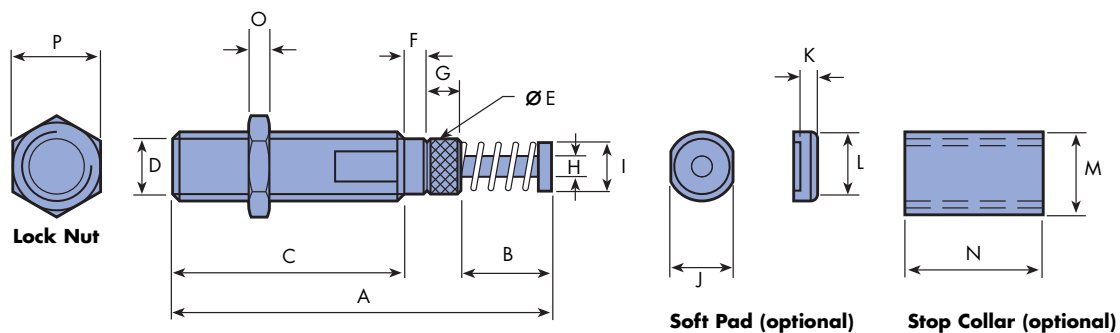
Non–Adjustable, Full Threaded Body Shock Absorbers

Lock Nut

Soft Pad (optional)

Part No.	A	B	C	D	E	F	G	H	I	J	K
		(stroke)									(A/F)
SH10	47	5.8	33.5	M10 x 1.0	8.4	3.3	3	3.6	8.4	3	12.7
SH12	66	9.7	45	M12 x 1.0	10.4	5	3.3	3.1	10.4	4	16
SH14	87	11.9	61	M14 x 1.5	11.9	4	4.8	6.9	11.9	5	17
SH20	89	11.9	61.7	M20 x 1.5	17	5.6	6.4	4.8	17	6	23.9
SH204	140.5	24.6	100.3	M20 x 1.5	17	5.6	6.4	4.8	17	6	23.9
SH25	149	24.6	107	M25 x 1.5	22.4	4.6	7.9	6.4	22.4	8	30

Adjustable, Full Threaded Body Shock Absorbers

Lock Nut

Adjuster

Soft Pad (optional)

Part No.	A	B	C	D	E	F	G	H	J	K	L	M	N
		(Stroke)										(A/F)	(A/F)
SHA20	86.7	12.7	62	M20 x 1.5	16.8	4.8	20	7.1	6.9	11.9	8	22.9	16.9

Lock Nut

Soft Pad (optional)

Stop Collar (optional)

Part No.	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
										(A/F)						(A/F)
SHA25	120.7	34.9	61.7	M25 x 1.5	22.6	10.9	12.7	7.9	19.5	22	6.4	22.2	31.8	55.6	8	30

Data and Dimensions

Adjustable, Full Threaded Body Shock Absorbers
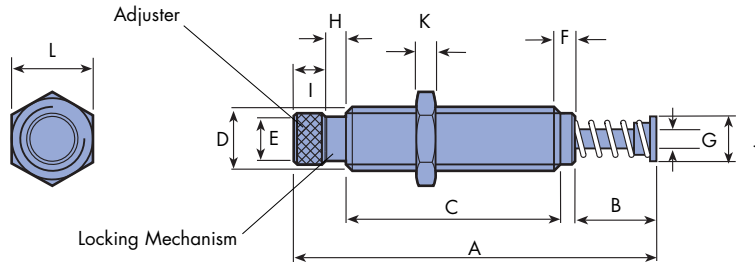
Part No.	A	B	C	D	E	F	G	H	I	J	K	L
		(stroke)									(A/F)	
SHA3625	165	23.8	108.9	M36 x 1.5	22.2	6.4	9.5	10.9	15	25.4	6.4	41.4
SHA3650	251.9	49.2	170.4	M36 x 1.5	22.2	6.4	9.5	10.9	15	25.4	6.4	41.4

Universal Mounts
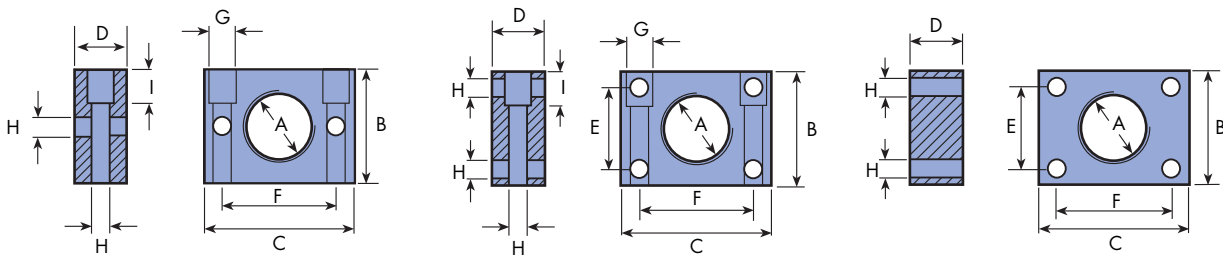
UNIVERSAL MOUNT	A	B	C	D	E	F	G	H	I
UM10	M10 x 1.0	25.4	38.1	12.7	N/A	25.4	8.1	4.6	5.3
UM12	M12 x 1.0	25.4	38.1	12.7	N/A	25.4	8.1	4.6	5.3
UM14	M14 x 1.5	29	45	16	N/A	35	8.1	4.6	5.3
UM20	M20 x 1.5	35	46	16	25.4	35	10.4	5.6	10.4
UM25	M25 x 1.5	35	46	16	25.4	35	10.4	5.6	10.4
UM36	M36 x 1.5	44.5	50.8	9.5	27	46.3	N/A	5.6	N/A

Lock Nut

SHOCK ABSORBER	LOCK NUT
SH10	LN10
SH12	LN12
SH14	LN14
SH/SHA20	LN20
SH/SHA25	LN25
SHA36	LN36

Soft Pad   Material: Polyurethane

SHOCK ABSORBER	SOFT PAD
SH10	SP10
SH12	SP12
SH14/SHA20	SP14
SH20	SP20
SH25	SP25
SHA25	SP25A

Lock Nut, Soft Pad and Universal Mount part numbers correspond with the part number of the Full Threaded Body Shock Absorber these accesories are to be used with.

# Data and Dimensions

Fixed Flange Adjustable Shock Absorbers
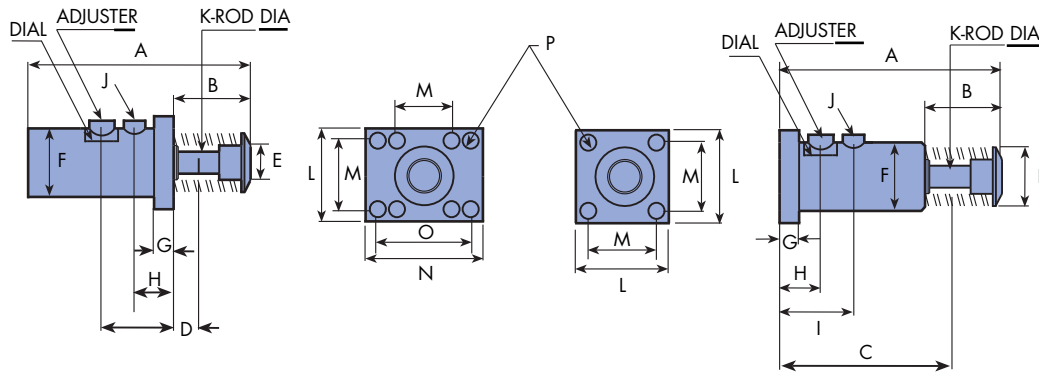
Part No.	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
SHA4525F	144.5	50	N/A	24.6	38.1	44.5	12.7	29.4	47.2	1/8 NPT	14.3	57.2	41.3	76.2	60.3	8.7
SHA4550F	195.3	75.4	N/A	24.6	38.1	44.5	12.7	29.4	59.9	1/8 NPT	14.3	57.2	41.3	76.2	60.3	8.7
SHA4575F	246.1	100.8	N/A	24.6	38.1	44.5	12.7	29.4	76.6	1/8 NPT	14.3	57.2	41.3	76.2	60.3	8.7
SHA6750F	225.4	85.7	N/A	34.9	50.8	66.7	15.9	34.9	69.8	1/4 NPT	20.6	88.9	69.8	N/A	N/A	10.3
SHA67100F	327	136.5	N/A	34.9	50.8	66.7	15.9	34.9	95.3	1/4 NPT	20.6	88.9	69.8	N/A	N/A	10.3
SHA4525R	144.5	50	119.1	N/A	38.1	44.5	12.7	29.4	47.2	1/8 NPT	14.3	57.2	41.3	76.2	60.3	8.7
SHA4550R	195.3	75.4	144.5	N/A	38.1	44.5	12.7	29.4	59.9	1/8 NPT	14.3	57.2	41.3	76.2	60.3	8.7
SHA4575R	246.1	100.8	169.9	N/A	38.1	44.5	12.7	29.4	76.6	1/8 NPT	14.3	57.2	41.3	76.2	60.3	8.7
SHA6750R	225.4	85.7	174.6	N/A	50.8	66.7	15.9	34.9	69.8	1/4 NPT	20.6	88.9	69.8	N/A	N/A	10.3
SHA67100R	327	136.5	225.4	N/A	50.8	66.7	15.9	34.9	95.3	1/4 NPT	20.6	88.9	69.8	N/A	N/A	10.3

J = oil hole size for external accumulator (available on request)
Flanges are rectangular for size 45 shock absorbers and square for size 67 shock absorbers.

Stop Collar - for use only with rear flanged shock absorbers, series SHA45/67R
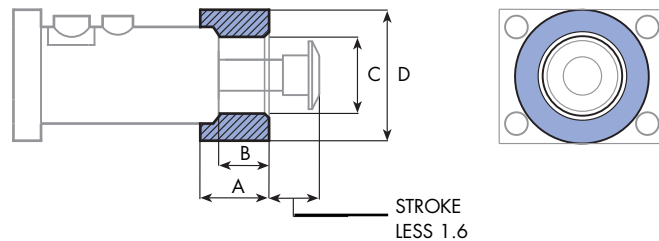
Part No.	A	B	C	D
SC45R	35	25.8	39.7	54
SC67R	48.4	36.1	54	79.4

Positive Stop Bars - for use only with front flanged shock absorbers, series SHA45/67F
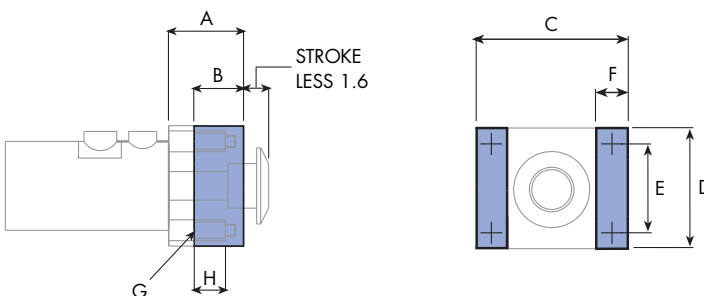
Part No.	A	B	C	D	E	F	G	H
SB45F	38.1	25.8	79.4	57.2	41.3	12.7	5/16 - 18	19
SB67F	51.6	36.1	88.9	88.9	69.9	12.7	3/8 - 16	19

Installation

Adjustable and Non–Adjustable Full Threaded Body Models

UNIVERSAL
MOUNTING
PLATE

CUSTOMER
SUPPLIED EXTERNAL
POSITIVE STOP

STOP COLLAR
protects shock absorber piston
from bottoming out. Optional collar
available for SHA25

SINGLE LOCK NUT
ensures positive
locking in tapped
mounting hole

STUD MOUNT
in threaded blind tapped
hole, using lock nut

THRU-HOLE MOUNT
arrangement is used for
mounting in clearance
holes
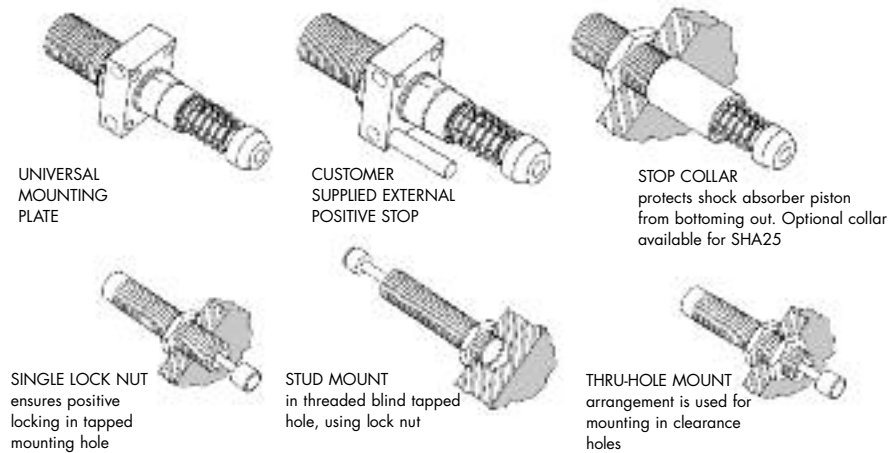
Adjustment

Hepco Shock Absorbers are supplied with the adjustment set at the mid position between hard and soft. To adjust, use a hex key to unlock the adjuster. If the initial impact is abrupt, then the shock absorber is set too hard, use a screwdriver to gradually rotate the adjuster towards "soft" or "18". If there is a hard impact at the end of the stroke then the initial setting is too soft, turn the adjuster towards "hard" or "0". The correct setting is indicated by deceleration through the entire operating stroke, without any abrupt shocks. When the correct setting is found, lock the adjuster screw with the hex key.

Ordering Details

Simply order the part number of the shock absorber and any accessories required, together with the quantity, for example:

4 x SHA25   Adjustable Full Threaded Body Shock Absorber, size 25
4 x SP25   Soft Pads for Shock Absorber SHA25

Important Notes:
Adjustable and Non-Adjustable Full Threaded Body Shock Absorbers are supplied with one Lock Nut as standard. Certain mounting arrangements (see above) may require additional Lock Nuts – these should be ordered as separate items, referring to the table at the bottom of page 11 for the correct part number.

Universal Mounts for full threaded body models and Positive Stop Bars for fixed flange models are not supplied with fixing screws as length will be application dependent – see the relevant table for screw sizes required.

External Accumulators are not standard items in the fixed flange range, but can be obtained by Hepco to special order on extended delivery times.
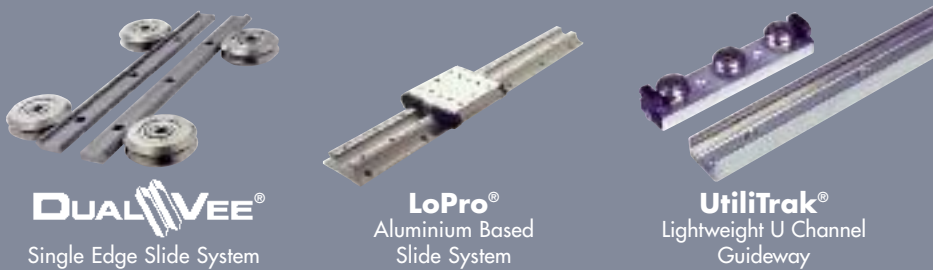
Soft Pads are not available for shock absorber SHA36.

Stop Collar for Shock Absorber SHA25 is optional and should be ordered as a separate item, part number SC25.

HepcoMotion® Product Range

GV3
Linear Guidance and Transmission System

HDS2
Heavy Duty Slide System

PRT
Ring Slides and Track System

HDRT
Heavy Duty Ring Slides and Track System

SL2
Stainless Steel Based Slide System

LBG
Linear Ball Guides

SBD
Sealed Belt Drive

MCS
Aluminium Frame and Machine Construction System

HDLS
Heavy Duty Driven Linear System

DLS
Linear Transmission and Positioning System

HTS
Telescopic Ball Bearing Slides

HPS
Powerslide-2 Guided Rodless Cylinder

MHD
Heavy Duty Track Roller Guidance System

DTS
Driven Track System

BSP
Ballscrew Premier

Simple Select®
Vee Slide Linear Guidance Systems

PDU2
Profile Driven Unit

PSD120
Profile Screw Driven Unit

Bishop-Wisecarver Product Range

HepcoMotion® – Exclusive European partners and distributors for Bishop-Wisecarver since 1984.

DualVee®
Single Edge Slide System

LoPro®
Aluminium Based Slide System

UtiliTrak®
Lightweight U Channel Guideway

**For further information on HepcoMotion® products –
please request our leaflet 'FPL'**

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