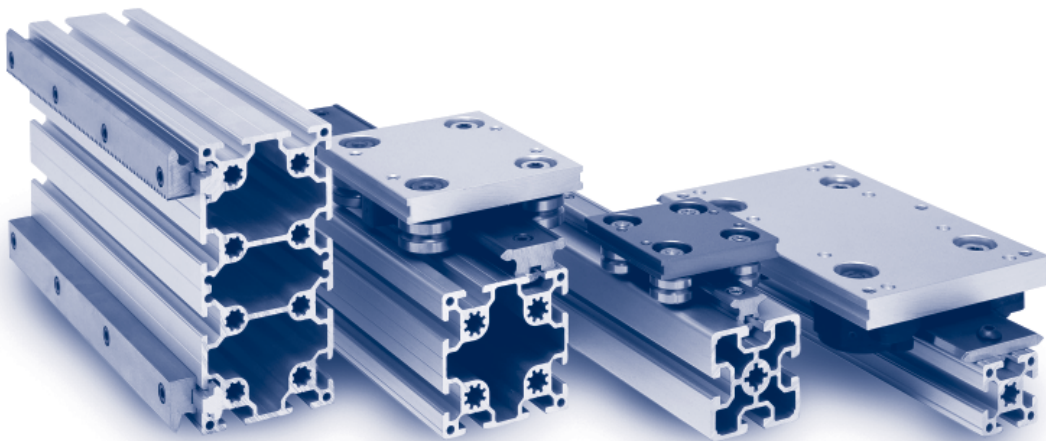


MCS Machine Construction System and **MFS** Machine Fencing System

Profiles with Linear Guides

MCS Profiles with Linear Guides

Hepco GV3 & SL2 Slide Systems mounted to MCS Profiles



MCS aluminium profiles are available fitted with **Hepco Linear Slide Systems** as complete ready to install units incorporating either carbon chrome **GV3** slides or **SL2** stainless steel slides. Slides with independent fixings are available for customers preferring self assembly.

The proven Hepco 'V' slide principle, with its one piece edge hardened steel slideway, is the ideal choice for motion guidance in frame construction systems.

Hepco Slide Systems are suitable for running with or without lubrication. Higher loads and longer life can be achieved if lubricated and various devices are available for this purpose. Customers may choose from a number of carriage lengths to provide various sizes of platform for mounting. Carriage plates are constructed in aluminium to minimise inertia.

Benefits

- High load capacity with long life
- Easy to install and adjust
- Accepts load in all directions
- Tolerant of misalignment
- Quiet friction-free motion
- Works in any plane
- Tolerant of debris
- Little or no maintenance

GV3 6 types of carriage cater for most design requirements and 3 grades of slide precision allows selection according to cost/performance requirements. Numerous sizes and options makes this the most versatile slide system available.

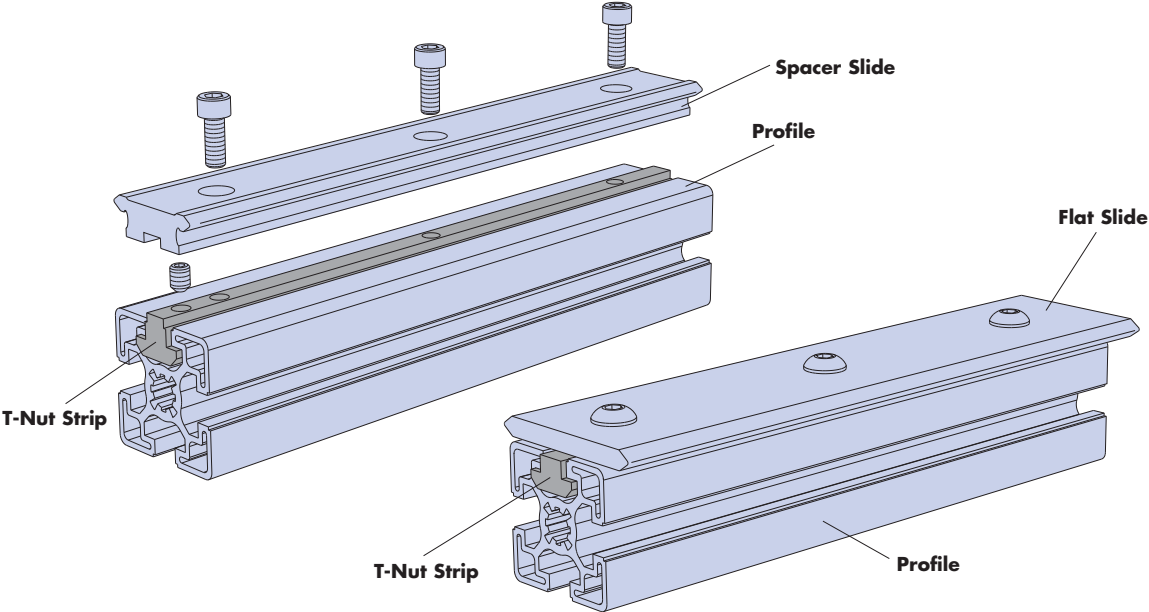
SL2 is available in basic GV3 standard carriage format, with fine ground surface finish of stainless steel components for maximum corrosion resistance. Aluminium carriage with U.S.D.A approved surface treatment provides corrosion resistance better than most stainless steels.

Request the **GV3+SL2** catalogue (01884 257000) or download from the HepcoMotion website: www.HepcoMotion.com



Profiles with Linear Guides

Method of attaching Slides to MCS Profiles



The method of fixing provides location of spacer slide and retention of fixing screw position in the event of disassembly.

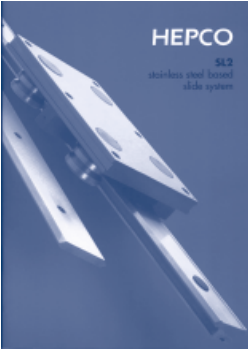
Selection Procedure



The information in this catalogue facilitates initial selection of the slide system and provides details of compatibility with MCS profiles. For comprehensive information, full load/life details and some ordering references, it will be necessary to also refer to the GV3 and SL2 catalogues.

Stage 1

Select the type of carriage required from the various options illustrated on pages 56 and 57. Note the Slide types, Slide precision grades, Bearing types and Lubrication Devices generally available for each carriage type.



Stage 2

(Spacer Slides Ref. pages 58 & 59; Flat slides Ref. pages 60 & 61):
Select the MCS profile required and choose a compatible slide taking account of the slide and bearing type for the chosen carriage, system dimensions, load requirements and specific availability of various options.

Stage 3

Refer to ordering details on page 62.

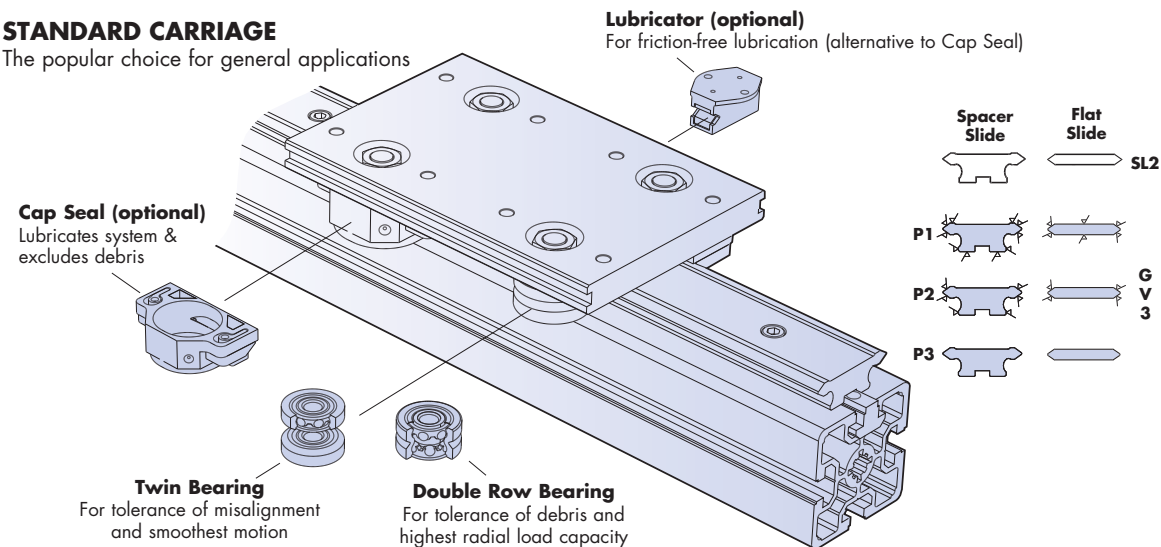
MCS Machine Construction System and MFS Machine Fencing System

Profiles with Linear Guides

Carriage Types

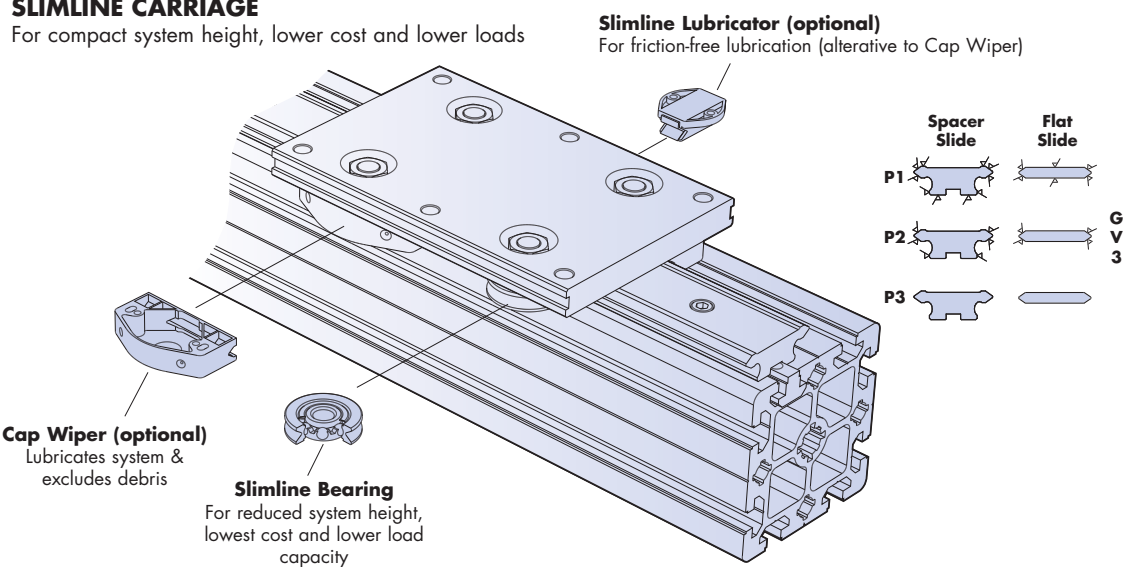
STANDARD CARRIAGE

The popular choice for general applications



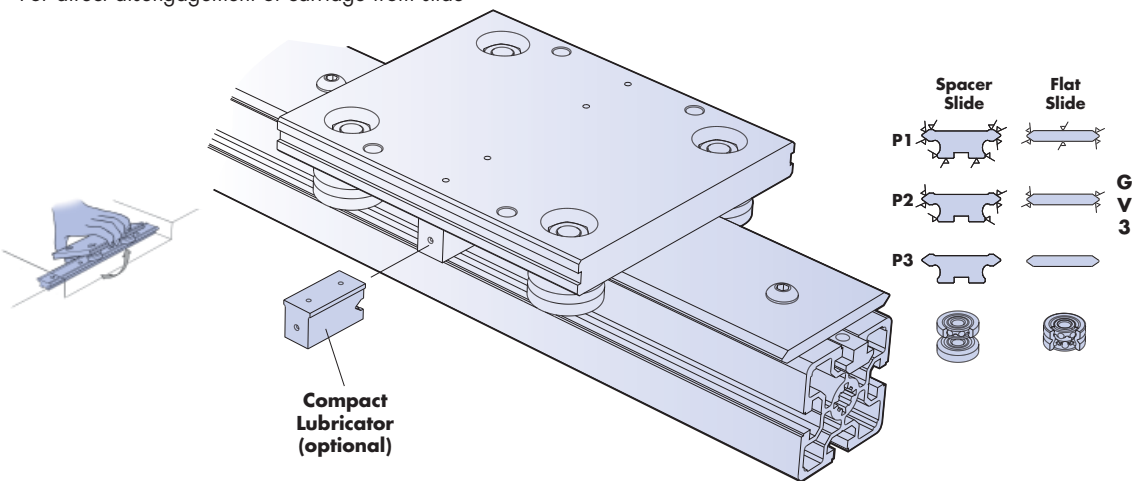
SLIMLINE CARRIAGE

For compact system height, lower cost and lower loads



REMOVABLE CARRIAGE

For direct disengagement of carriage from slide

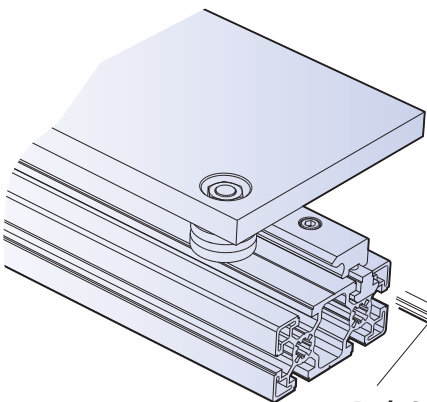


Profiles with Linear Guides

Carriage Types

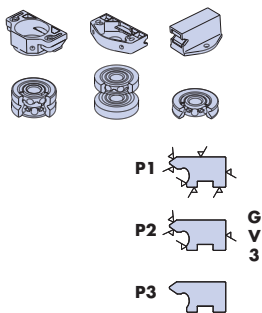
SINGLE EDGE SLIDE CARRIAGE

(customer to construct)
For wide system stability,
centre space for drive
facility and increased
moment load capacity



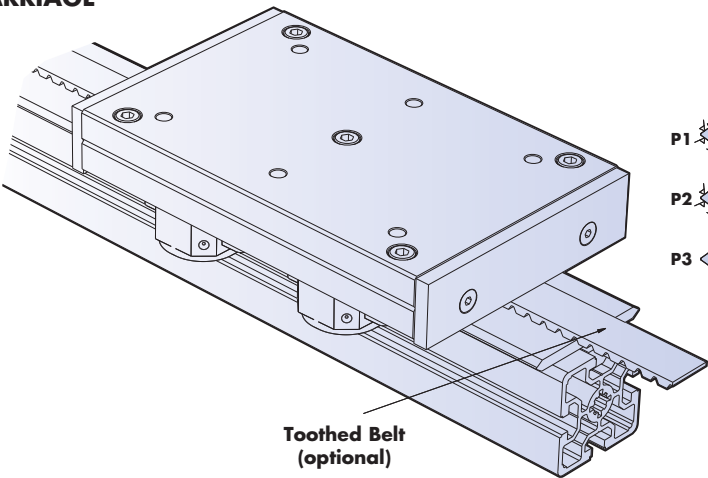
Drive Pinion
(optional)

Rack Cut Option

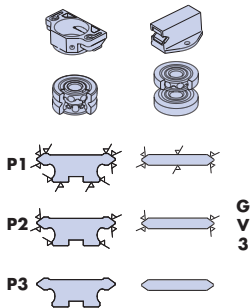


BELT DRIVEN CARRIAGE

Complete with belt
tension adjustment
facility and
removable top
plate to aid
customising.
For low cost drive
facility with high
speed capability.

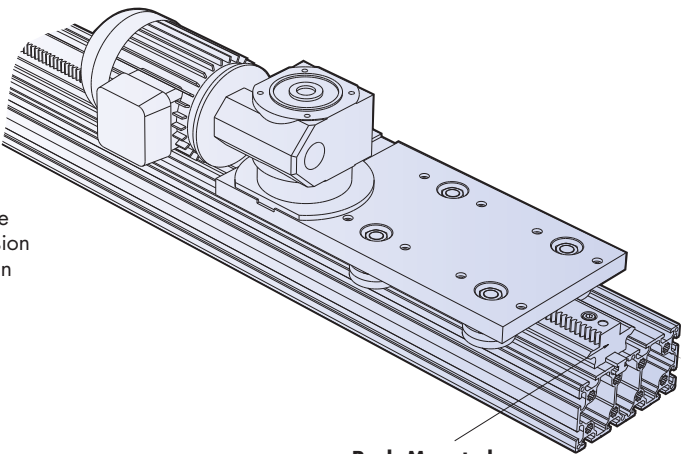


Toothed Belt
(optional)

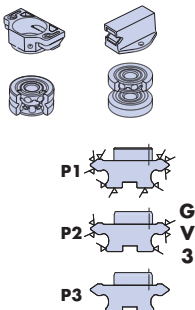


RACK DRIVEN CARRIAGE

Complete with Pinion,
Drive Flange with
micro-adjustment facility,
and Gearbox.
(AC Motor and Speed
Controller, optional.)
A complete drive package
capable of high transmission
forces and good resolution
over long lengths



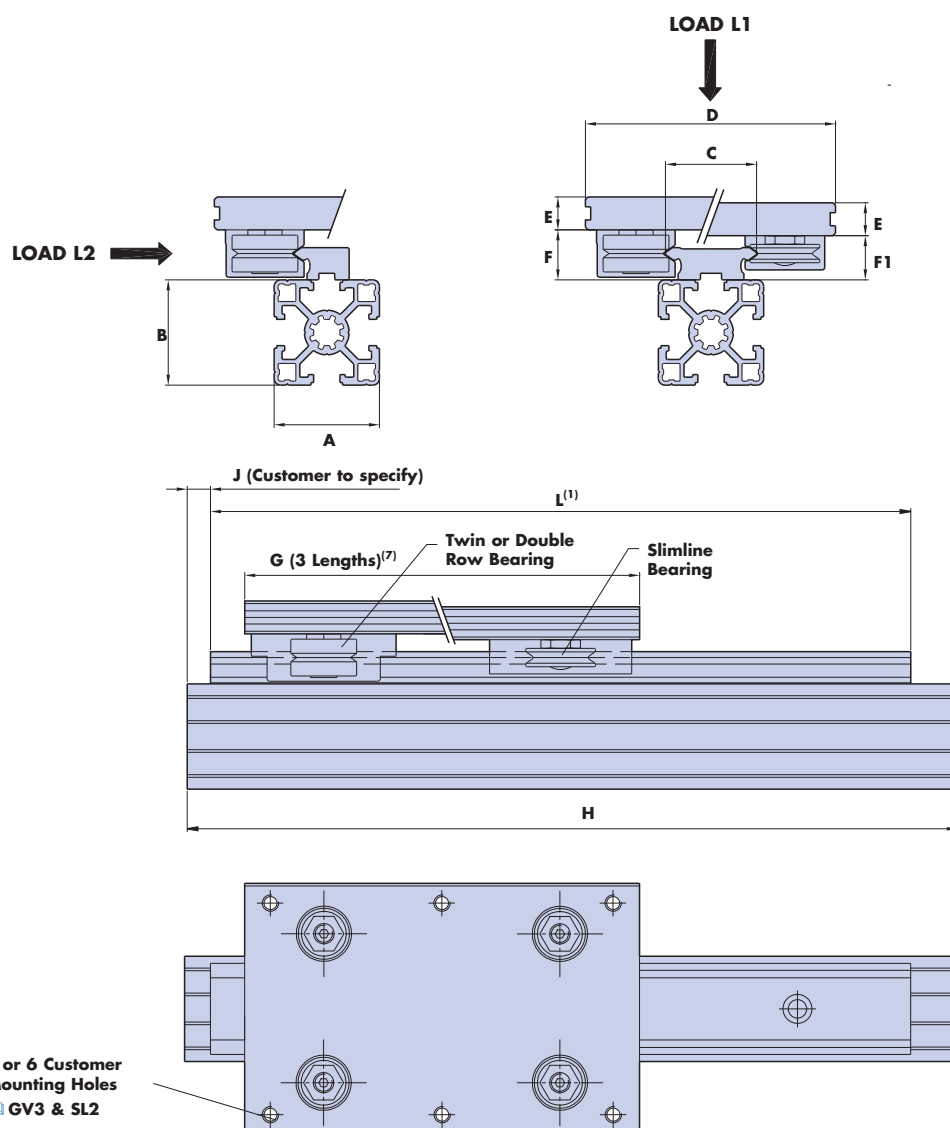
Rack Mounted
Spacer Slide



MCS Machine Construction System and MFS Machine Fencing System

Profiles with Linear Guides

Spacer Slides with MCS Profiles











Notes:

- (1) Slide lengths are available to customers' requirements up to 3956mm. Unlimited lengths can be achieved by butting.
- (2) Hepco Rack Driven Carriage not available, but customers may construct their own using GV3 Pinion **GV3** **P45**.
- (3) Carriage Plate to be constructed by customer.
- (4) Rack Driven Carriage is offset in relation to centre of slide. Length and configuration is to customers requirements **GV3** **P49**.
- (5) All types of carriage with the exception of some sizes of Rack and Belt driven carriages (see table) are available to suit all sizes of double edge GV3 spacer slides.
- (6) NM76 & NL76 spacer slides can only be attached to the two centre most positions of the 160mm wide face of the 80 x 160 profile.
- (7) Cap seals/cap wipers are not available for the shortest length carriages. Belt Driven Carriages are available in 2 lengths only **GV3** **P46-47**.

Profiles with Linear Guides

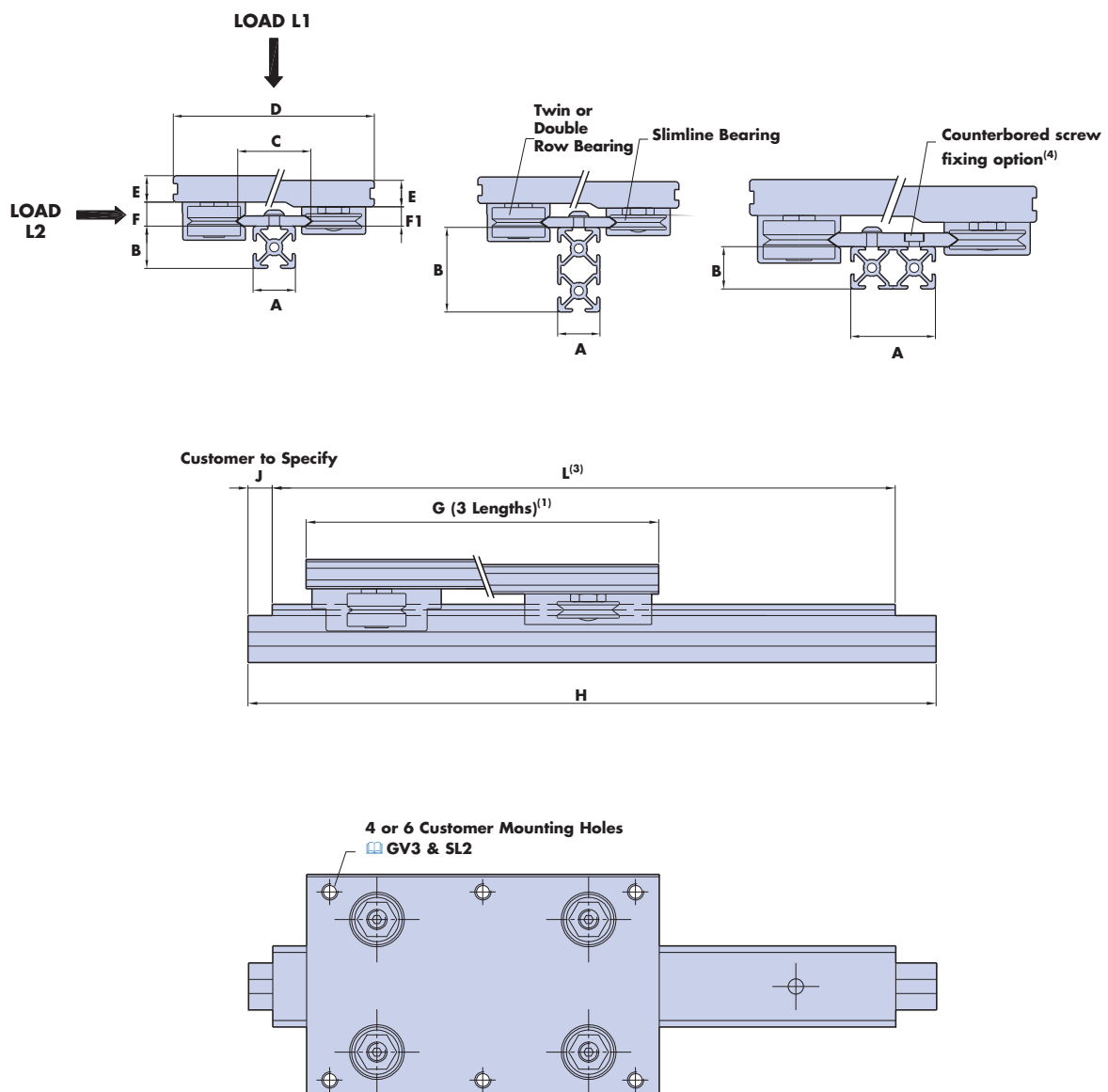
Compatibility Table Spacer Slides with MCS Profiles

		SLIDE PART NUMBER							(5) RACK DRIVE CARRIAGE AVAILABILITY										LOAD (C) LUBRICATED (NEWTONS)									
									(5) BELT DRIVE CARRIAGE AVAILABILITY																			
		GV3 	GV3 	GV3 	SL2 																							
A	B		C		C			C			D	E	~F	~F1	G ⁽⁷⁾			L1	L2	L1	L2	L1	L2					
20 20 40	20 40 20	NV	20								64	10	15	14	65	100	140	760	1200	500	400	400	480					
		NV	28								(2)	(2)	15	-	(2)													
				NV	28	R						(2)	(2)	15	-	(2)												
							NVE					(3)	(3)	15	14	(3)												
30 30 30 60 90	30 60 90 30 30	NV	28								72	11	15	14	75	125	175	760	1200	500	400	400	480					
				NV	28	R						(2)	(2)	15	-	(2)												
							NVE					(3)	(3)	15	14	(3)												
		NS	25									80	11.5	19	17	80	135	180	1600	3000	1280	1200	940	1150				
				NS	25	R						(2)	(2)	19	-	(2)												
								SSNS	25			80	11.5	19	-	80	130	180	1600	3000	960	960						
		NS	35							✓	95	12.5	19	17	100	150	200	1600	3000	1280	1200	940	1150					
				NS	35	R						(2)	(2)	19	-	(2)												
							NSE					(3)	(3)	19	17	(3)												
				NM	44						✓	116	14.5	24	21	125	180	225	3600	6000	3200	2800	2000	2400				
				NM	44	R			✓	(4)	18	24	-	(4)														
						SSNM	44			116	14.5	24	-	125	175	225	3600	6000	3000	3000								
						NME				(3)	(3)	24	21	(3)														
						NLE				(3)	(3)	38.6	33.4	(3)			10000	10000	7200	6400	4240	5200						
160	80	NM	76 ⁽⁶⁾						✓	150	18	24	21	170	240	340	3600	6000	3200	2800	2000	2400						
				NM	76	R ⁽⁶⁾			✓	(4)	18	24	-	(4)														
		NL	76 ⁽⁶⁾							185	20	38.6	33.4	200	300	400	10000	10000	7200	6400	4240	5200						
				NL	76	R ⁽⁶⁾				✓	(4)	20	38.6	-	(4)													
45 45 45 60 60 90	45 60 90 45 60 90	NV	28								72	11	15	14	75	125	175	760	1200	500	400	400	480					
				NV	28	R						(2)	(2)	15	-	(2)												
		NS	25									80	11.5	19	17	80	135	180	1600	3000	1280	1200	940	1150				
				NS	25	R						(2)	(2)	19	-	(2)												
								SSNS	25			80	11.5	19	-	80	130	180	1600	3000	960	960						
		NS	35							✓	95	12.5	19	17	100	150	200	1600	3000	1280	1200	940	1150					
				NS	35	R					(2)	(2)	19	-	(2)													
											(2)	(2)	19	-	(2)													
							NSE					(3)	(3)	19	17	(3)												
				NM	44						✓	116	14.5	24	21	125	180							225	3600	6000	3200	2800
				NM	44	R			✓	(4)	18	24	-	(4)														
						SSNM	44			116	14.5	24	-	125	175	225	3600	6000	3000	3000								
									✓	135	17	24	21	150	200	280	3600	6000	3200	2800	2000	2400						
				NM	60	R			✓	(4)	18	24	-	(4)														
										(3)	(3)	24	21	(3)														
						NME				(3)	(3)	38.6	33.4	(3)			10000	10000	7200	6400	4240	5200						
60 60	45 60	NM	76						✓	150	18	24	21	170	240	340	3600	6000	3200	2800	2000	2400						
				NM	76	R			✓	(4)	18	24	-	(4)														
		NL	76							185	20	38.6	33.4	200	300	400	10000	10000	7200	6400	4240	5200						
				NL	76	R				✓	(4)	20	38.6	-	(4)													
							SSNL	76			185	20	38.6	-	200	300	400	8000	10000	6000	6000							

MCS Machine Construction System and **MFS** Machine Fencing System

Profiles with Linear Guides

Flat Slides with MCS Profiles














Notes:

- (1) Cap seals/cap wipers are not available for the shortest length carriages. Belt Driven Carriages are available in 2 lengths only **GV3** **P46-47**.
- (2) Standard, Slimline and Removable Carriages are available to suit all sizes of GV3 Flat slides. Some sizes of slide are also available to suit Belt Driven Carriages (see table). On special application, Flat Slides can be fitted with mounted Rack and supplied with Rack Driven Carriages.
- (3) Slide lengths are available to customers' requirements up to 3956mm. Unlimited lengths can be achieved by butting.
- (4) The counterbored screw fixing option with low head socket cap screws DIN 6912 will be supplied for double row slide fixing when used with slimline carriage.

Profiles with Linear Guides

Compatibility Table Flat Slides with MCS Profiles

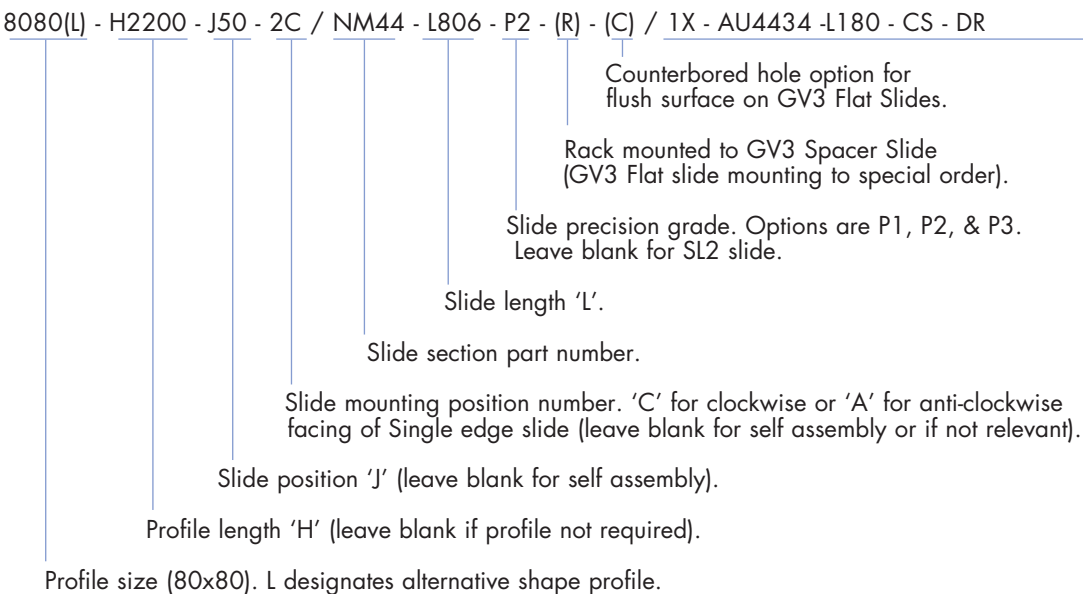
		SLIDE PART NUMBER				<div><div><div>✓ = FITS WITH ALLGRADES OF SLIDE</div><div>P3 = FITS WITH P3 GRADE SLIDE ONLY</div><div>✗ = WILL NOT FIT</div><div>- = NOT APPLICABLE</div></div><div></div><div></div></div>														LOAD (C) LUBRICATED (NEWTONS)					
																									
		L1	L2	L1	L2															L1	L2				
A	B		C		C	D	E	~F	~F1	G ⁽¹⁾															
20 20	20 40	V	28			72	11	9	7.9	75	125	175	✓	P3	P3	✓	P3	✓		760	1200	500	400	400	480
		S	35			95	12.5	11.4	9.2	100	150	200	✓	✓	✓	✓	✓	✓	✓	1600	3000	1280	1200	940	1150
				SSS	35	95	12.5	11.4	-	100	150	200	✓	✓	✓	-	-	-		1600	3000	960	960	-	-
30 30 30	30 60 90	M	44			116	14.5	14.6	11.4	125	180	225	✓	✓	P3	✓	✓	✓	✓	3600	6000	3280	2800	800	800
				SSM	44	116	14.5	14.6	-	125	175	225	✓	✓	✗	-	-	-		3600	6000	3000	3000	-	-
		S	50			112	14	11.4	9.2	110	160	220	✓	✓	✓	✓	✓	✓	✓	1600	3000	1280	1200	940	1150
				SSS	50	112	14	11.4	-	110	160	220	✓	✓	✓	-	-	-		1600	3000	960	960	-	-
60	30	M	76			150	18	14.6	11.4	170	240	340	✓	✓	✓	✓	✓	✓	✓	3600	6000	3200	2800	2000	2400
				SSM	76	150	18	14.6	-	170	240	340	✓	✓	✓	-	-	-		3600	6000	3000	3000	-	-
90	30	L	120			240	24	23.6	18.9	240	360	480	P3	P3	P3	P3	P3	P3		10000	10000	7200	6400	4240	5200
40	20	S	50			112	14	11.4	9.2	110	160	220	✓	✓	P3	✓	P3	✓	✓	1600	3000	1280	1200	940	1150
				SSS	50	112	14	11.4	-	110	160	220	✓	✓	✗	-	-	-		1600	3000	960	960	-	-
40 40	40 80	S	50			112	14	11.4	9.2	110	160	220	✓	✓	P3	✓	P3	✓	✓	1600	3000	1280	1200	940	1150
				SSS	50	112	14	11.4	-	110	160	220	✓	✓	✗	-	-	-		1600	3000	960	960	-	-
		M	60			135	17	14.6	11.4	150	200	280	✓	✓	✓	✓	✓	✓	✓	3600	6000	3200	2800	2000	2400
				SSM	60	135	17	14.6	-	150	200	280	✓	✓	✓	-	-	-		3600	6000	3000	3000	-	-
		M	76			150	18	14.6	11.4	170	240	340	✓	✓	✓	✓	✓	✓	✓	3600	6000	3200	2800	2000	2400
				SSM	76	150	18	14.6	-	170	240	340	✓	✓	✓	-	-	-		3600	6000	3000	3000	-	-
		L	76			185	20	23.6	18.9	200	300	400	✓	✓	✓	✓	✓	✓		10000	10000	7200	6400	4240	5200
				SSL	76	185	20	23.6	-	200	300	400	✓	✓	✓	-	-	-		8000	10000	6000	6000	-	-
45 45 45	45 60 90	M	60			135	17	14.6	11.4	150	200	280	✓	✓	✓	✓	✓	✓	✓	3600	6000	3200	2800	2000	2400
				SSM	60	135	17	14.6	-	150	200	280	✓	✓	✓	-	-	-		3600	6000	3000	3000	-	-
		M	76			150	18	14.6	11.4	170	240	340	✓	✓	✓	✓	✓	✓	✓	3600	6000	3200	2800	2000	2400
				SSM	76	150	18	14.6	-	170	240	340	✓	✓	✓	-	-	-		3600	6000	3000	3000	-	-
		L	76			185	20	23.6	18.9	200	300	400	✓	✓	✓	✓	✓	✓		10000	10000	7200	6400	4240	5200
				SSL	76	185	20	23.6	-	200	300	400	✓	✓	✓	-	-	-		8000	10000	6000	6000	-	-
60 60	45 60	M	76			150	18	14.6	11.4	170	240	340	✓	✓	✓	✓	✓	✓	✓	3600	6000	3200	2800	2000	2400
				SSM	76	150	18	14.6	-	170	240	340	✓	✓	✓	-	-	-		3600	6000	3000	3000	-	-
		L	76			185	20	23.6	18.9	200	300	400	P3	P3	P3	P3	P3	P3		10000	10000	7200	6400	4240	5200
				SSL	76	185	20	23.6	-	200	300	400	✓	✓	✓	-	-	-		8000	10000	6000	6000	-	-
80 80 80 90 90	40 80 160 45 90	L	120			240	24	23.6	18.9	240	360	480	P3	P3	P3	P3	P3	P3		10000	10000	7200	6400	4240	5200

Slide hole centres and fixing screw sizes and types may vary from those specified in the GV3 & SL2 catalogues. There may also be additional and redundant holes.

MCS Machine Construction System and MFS Machine Fencing System

Profiles with Linear Guides

Ordering Details



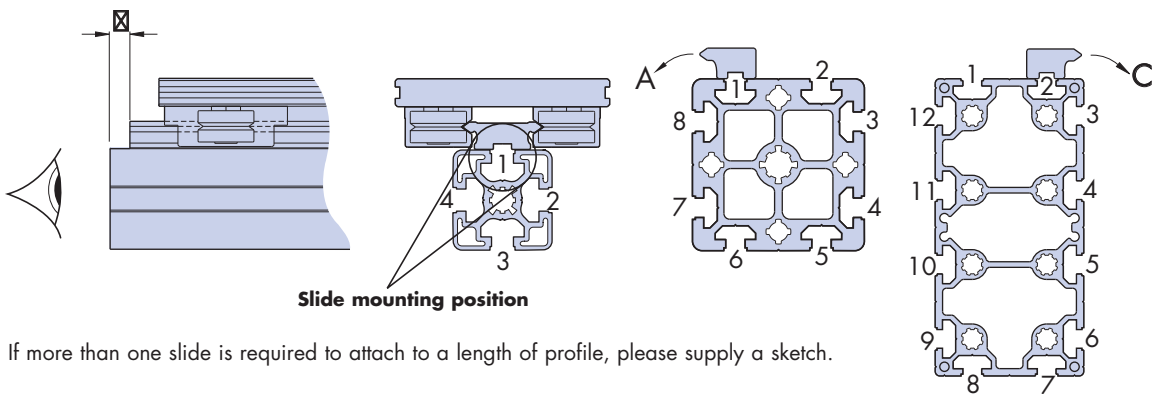
1x - AU4434 - L180 - CS - DR = Carriage reference (example only). Please specify from GV3 or SL2 catalogue according to following procedure:

Carriage identification (GV3):

- 1. Refer to tables on relevant Carriage page of GV3 catalogue (Standard Carriage, Removable Carriage, Slimline Carrage, Belt Driven Carriage or Rack Driven Carriage).
N.B The Single Edge Slide Carriage is for construction by the customer, therefore individual Bearings and Lubrication Devices etc. must be selected from the GV3 catalogue.
- 2. Read off the basic carriage part number in column 1, adjacent to the chosen slide part number in column 2.
- 3. Determine the full carriage part number to include the options required by following the Ordering Details below the table.

Carriage Identification (SL2):

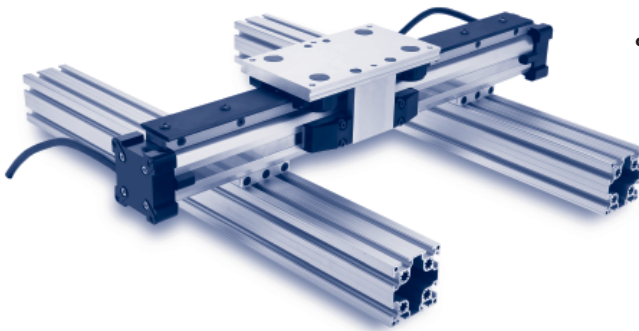
- 1. Refer to the table on Assembled Systems (see page 9 of the SL2 catalogue).
- 2. Identify the basic carriage part number in column 1 according to the chosen slide part number. The slide part number is the last five letters / numbers of the carriage part number.
- 3. Determine the full carriage part number to include the options required by following the Ordering Details below the table.



Profiles with Linear Guides

MCS Profiles with Linear Guides

Hepco Powerslide 2 supported on MCS Profile Beams



Request the MCS/HPS catalogue & Mounting document (01884 257000) or download from the HepcoMotion website: www.HepcoMotion.com



High-speed, maintenance free performance are the key benefits of **Hepco's Powerslide 2**, with ex-stock availability and standard lengths up to 6m.

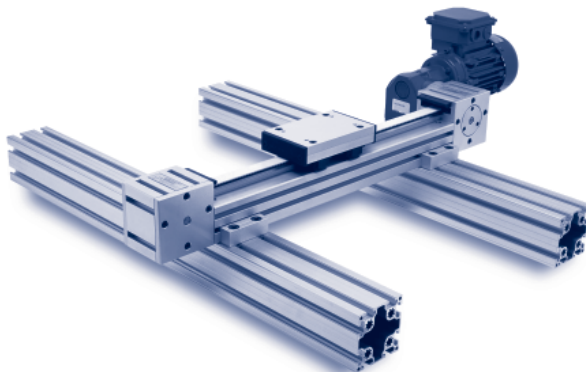
The **HPS** range of pneumatic linear systems is based around an extruded aluminium cylinder ideal for mounting to **MCS**. With the optional addition of **Hepco SH** shock absorbers high speed, long life systems can be achieved.

Mounting to **MCS** profiles whether by the end caps or tailored connectors could not be easier. For further details please contact Hepco's Technical Sales Team.

Benefits

- Self supporting • Long life • 10 size combinations • High load • Easy installation
- Corrosion resistant options

Hepco Driven Linear System supported on MCS profile beams



Request the MCS/DLS catalogue & Mounting document (01884 257000) or download from the HepcoMotion website: www.HepcoMotion.com



New fixing options are available in the **MCS** range allowing specifiers to take advantage of the ready to mount high speed Driven Linear System.

Ideal for simple linear or multi-axis systems, **DLS** incorporates all of the Hepco V-guide benefits of zero maintenance and environmental tolerance, but combines them with a robust belt drive producing speeds of up to 6m/s and standard lengths up to 8m.

A range of mounting options are available to enable easy connection to **MCS** profiles which, due to their interchangeability with other profiles, makes this the ideal system for retro-fitting machine elements.

Benefits

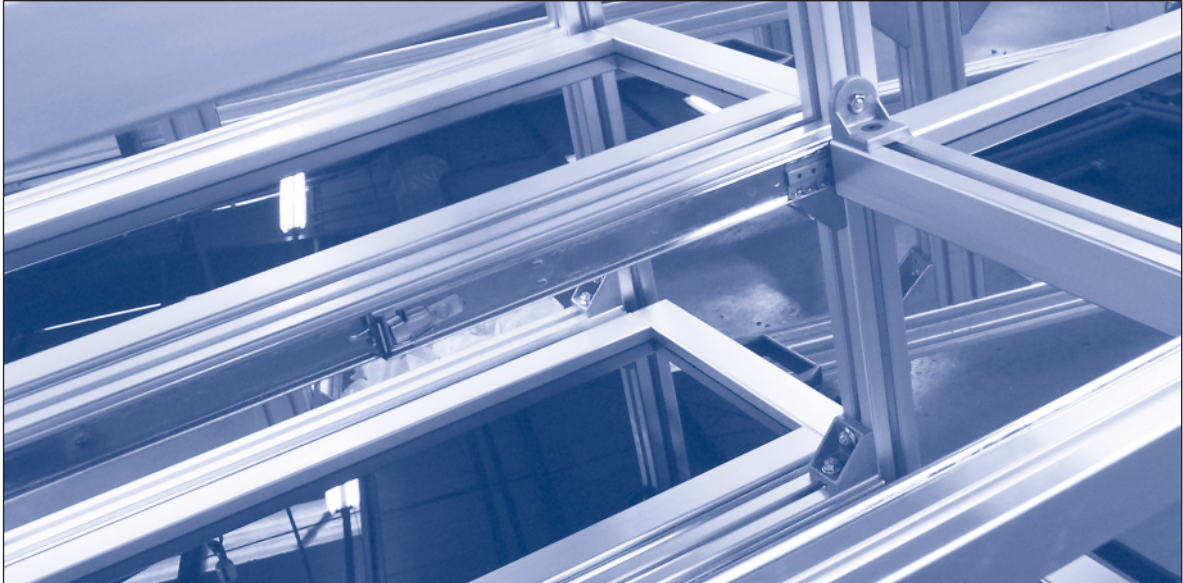
- Long system life • Low maintenance • High speed • Quiet operation
- Easy secondary machining • Robust AC motor system

MCS Machine Construction System and **MFS** Machine Fencing System

Profiles with Linear Guides

MCS Profiles with Linear Guides

Hepco HTS Telescopic Ball Bearing Slides mounted to MCS profiles



Hepco HTS telescopic ball bearing slides are manufactured under strict quality control conditions backed by ISO 9002 certification using the highest quality materials and up to date manufacturing processes. These high quality slides are quiet, rigid under extended loads and due to the superior construction offer excellent smooth motion and low friction characteristics across the complete travel length.

Hepco's Telescopic slides are an ideal partner with **MCS** aluminium profile sections enabling simple yet rigid drawers, printer tables, circuit board packs etc to be designed into any Hepco **MCS** frame available. Mounting of the slides is simple utilising Hepco's range of anti rotation T-Nuts.

Features and Benefits

- 5 basic ranges from light to heavy duty up to 280kg/pair
- Range of options available, lock out, lever disconnect etc.
- Standard ranges available from stock
- Rigid member ball bearing slide structure maintains smooth motion over entire travel
- High static capacity from rigid structure with minimal deflection
- Quality cold rolled steel members with slotted mounting holes for quick installation
- Exceptional accuracy from precision pressed slide rails
- 3 member slide series for higher capacity in narrow space

Request the HTS catalogue (01884 257000) or download from the HepcoMotion website: www.HepcoMotion.com

