

### Introducing

# HepcoMotion Simple Select®

# **Vee Slide Linear Guidance Systems**

Hepco Simple-Select® offers four useful sizes of spacer slides supplied complete with carriages assembled and ready for installation. All units are fitted with double row bearings and cap seals to ensure a long and trouble-free life. Our general purpose spacer slide precision cold drawn and hardened on the Vee running surfaces provides good accuracy and long life, even in the most hostile environment. Specifying could not be easier. Check the load to be carried against the carriage load capacities and Aluminum Carriage Plate check that the physical size Mounting surface has 6 useful meets your requirements fixing holes (full size sectional • Useable surface area for component mounting views on page 6). **Blanking Plugs Double Row Bearings**  Enhances system Provide maximum load appearance capacity and durability Cap Seals Provide constant lubrication for the life of the machine Solid Steel Spacer Slide

# Simple Select®

#### **Benefits**

Select standard range of 4 popular sizes ready for dispatch in 24 hours or less

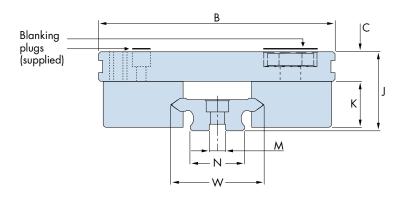
• Simple to mount

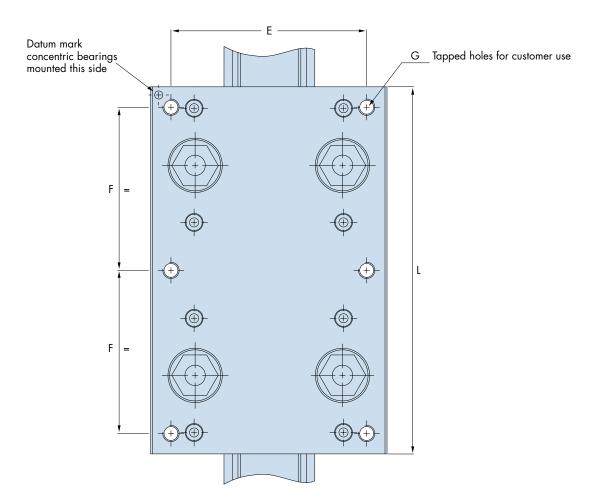
Utilizes proven Hepco Vee Slide technology – ideal for high speed/short stroke movements

• Hard wearing Vee running surfaces

- Low installation time simply bolt slide down
- Can be fitted to unmachined surfaces if required
- System compliance ideal for fitting to aluminum profiles
- Accurate drawn slide allows smooth low friction movement
- Double row bearings for long and trouble free life
- Fitted cap seals prevent dirt ingress and ensure constant positive lubrication
- Induction hardened Vee slide low wear characteristics
- Quiet in operation

## **Dimensional Data**





Size	w	В	С	J	К	L	M	N	E	F	G
20	20	64	10	24.95	14	100	5 x 2	12.4	50	44	6 x M5
25	25	80	11.5	30.7	18	135	6 x 2.5	15.4	65	60	6 x M6
44	44	116	14.5	38.7	22.5	180	8 x 3	26.4	96	80	6 x M8
76	76	185	20	58. <i>7</i>	36.5	300	15 x 5	50.4	160	135	6 x M10

For a more extensive range of options please refer to our GV3 Catalog.

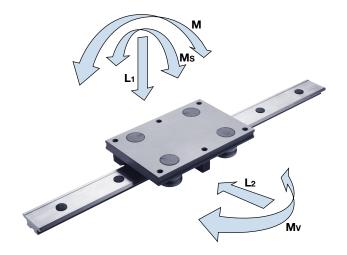
### Load/Life Data

Components used in the Simple-Select® range will provide the user with the best combination to achieve a long and trouble free life in clean or arduous environments. Fitted cap seals cover double row bearings and provide a reservoir for grease lubrication and to prevent dirt ingress. In most cases a single application of grease, which Bishop-Wisecarver provides on assembly of the unit, will last for the life of the machine.

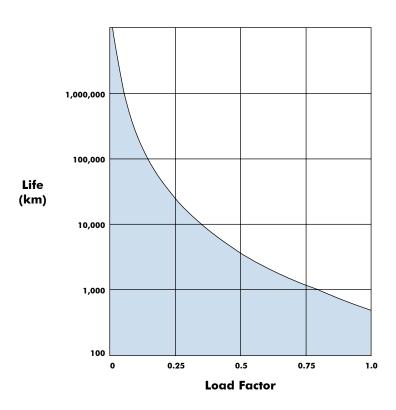
### **Simple Life Check**

Most applications involve central L1 loads. In these cases simply divide your load (N) by the carriage L1 capacity figure below to determine a load factor. Then simply read off the life from the graph. For offset loads you will need to add the relevant load factors to determine the total. Load Factor should not exceed 1.

	Carriage Capacities							
Size	L1(N)	L2(N)	Ms(Nm)	Mv(Nm)	M(Nm)			
20	435	685 4		19	12			
25	800	1500	9	56	30			
44	2800	4700	57	243	146			
76	10000	10000	360	990	990			



$$Load\ Factor = \frac{Load\ Carried}{Carriage\ Capacity} = \frac{L_1}{L_{1_{\{max\}}}} + \frac{L_2}{L_{2_{\{max\}}}} + \frac{Ms}{Ms_{\{max\}}} + \frac{Mv}{Mv_{\{max\}}} + \frac{M}{Mv_{\{max\}}} + \frac{$$



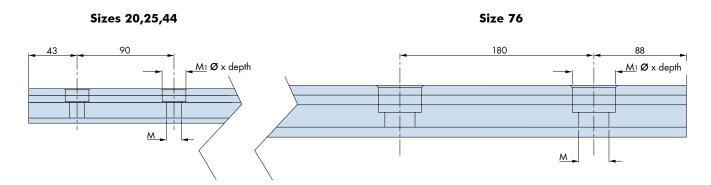
# **Ordering Details**

Available slide lengths from the Simple-Select® range are shown in the chart below:

Slide Size	Slide Lengths in mm										
20	266	356	536	716	896	1076	1256	1436	1616	1796	1976
25	266	356	536	716	896	1076	1256	1436	1616	1796	1976
44	266	356	536	716	896	1076	1256	1436	1616	1796	1976
76	-	-	536	716	896	1076	1256	1436	1616	1796	1976

Other lengths available on request up to 4m (not Simple-Select® service).

### **Slide Hole Centers**



Size	M	M <sub>1</sub>
20	4.5	8 x 4.1
25	5.5	10 x 5.1
44	7	11 x 6.1

Size	M	M <sub>1</sub>		
76	14	20 x 12		

To Order – Simply specify slide size, number of fitted carriages and slide length



Units are supplied with carriages adjusted ready for mounting.

### **Technical Specifications**

'V' Slides

Material and Finish: High carbon bearing steel AISI 52100, hardened on 'V' faces to 58-62 Rockwell

'C' scale. Slide will be supplied with chemical black or similar finish.

**Bearings** 

Bearing Raceways and Balls: Carbon-chromium bearing steel AISI 52100, hardened and tempered.

Shields: Steel, except size 18 which has nitrile rubber seals.

Cage: Plastic

Studs: High Tensile Steel with tensile strength = 695 N/mm<sup>2</sup>. Chemical black finish.

Temperature Range: -20°C to +120°C

**Carriage Plates** 

Material: High Strength Aluminum Alloy

Finish: Black Anodized

Carriage Plate & Slide Counterbore Plugs

Material: Plastic

**Cap Seals** 

Material: Body: Thermoplastic elastomer

Inserts: Impact resistant plastic

Wipers: Felt

Temperature Range: -20°C to +60°C

Frictional Resistance for 'V' Slide Systems

To determine frictional resistance use 0.02 x Load (N) + Seal Friction (N).

Seal friction figures: Size 20 = 4 N Size 25 = 7 N

Size 44 = 15 N Size 76 = 28 N

**External Lubrication** 

Cap Seals will be supplied lubricated, further lubrication is not normally necessary unless a high duty cycle/speed is involved. In these cases re-lubrication with a grease NLGI consistency No. 2 will suffice.

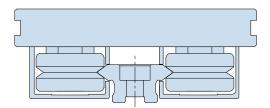
Maximum Linear Speeds for 'V' Slides & Bearings.

Lubricated 'V' Slides = 8 m/s

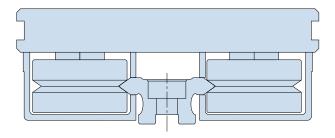
Material specifications may change for reasons of technical advantage or availability.

# **Full Size Sectional Views**

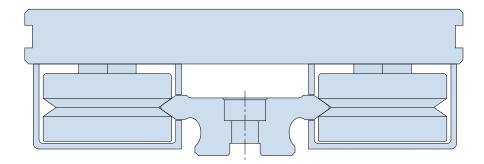
### Size 20



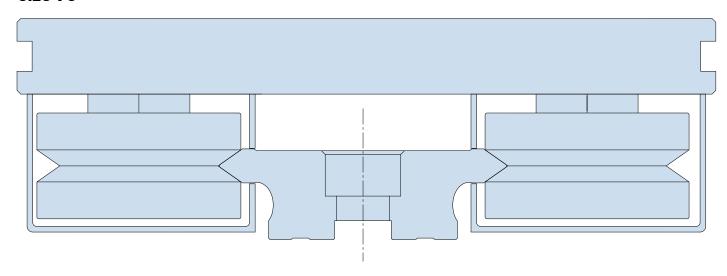
### Size 25



### Size 44



Size 76



**Bishop-Wisecarver Corporation:** Manufacturer of the original DualVee® guide wheel and industry leader in guided motion technology, and exclusive North and Central American partner and distributor for HepcoMotion products since 1984.

# **BISHOPWISECARVER®**

#### **Bishop-Wisecarver**

DualVee® Guide Wheels LoPro® Linear Motion System MadeWell® Crown Rollers MinVee® Linear Slide System UtiliTrak® Linear Motion Guide



#### **HepcoMotion®**

DAPDU2 Double Acting Profile Driven Unit

DLS Driven Linear System

DTS Driven Track System

GV3 Linear Guidance and Transmission System

**HDCB Heavy Duty Compact Beam** 

HDCS Heavy Duty Compact Screw

HDLS Heavy Duty Driven Linear System

HDRT Heavy Duty Ring Slides and Track System

HDS2 Heavy Duty Slide System

MHD Heavy Duty Track Roller Guidance System

MCS Machine Construction System

PDU2 Profile Driven Unit

PDU2M Belt Driven Unit for Moment Loads

PRT2 Precision Ring and Track System

PSD80 Screw Driven Linear Actuator

PSD120 Profile Screw Driven Unit

SBD Sealed Belt Drive

Simple-Select®

SL2 Stainless Steel Based Slide System

#### **3D CAD DRAWINGS**

Download 3D CAD files for our complete product line at www.bwc.com/3dcad.php.

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On Blogger http://bwcnews.blogspot.com/

#### **PRODUCT ORDERS**

Please call Bishop-Wisecarver with your specific application requirements. Our technical staff is available to assist with your custom solution.

Bishop-Wisecarver provides a written one year limited warranty assuring the customer that its products conform to published specifications and are free from defects in material or workmanship.

Complete terms and conditions and warranty information is available at www.bwc.com/about conditions.vp.html

