

HepcoMotion® SIMPLE SELECT

VEE SLIDE LINEAR GUIDANCE SYSTEM

August 2023

Introducing HepcoMotion Simple Select®



Vee Slide Linear Guidance Systems

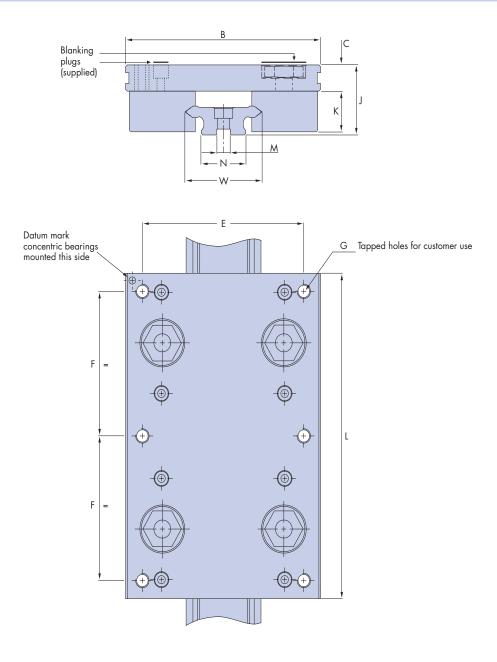
Hepco Simple-Select® offers four useful sizes of spacer slides supplied in 24 hours or less complete with carriages assembled ready for installation. All units are fitted with double row bearings and cap seals to ensure a long and trouble-free life. The general purpose spacer slide precision cold drawn 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 check that the physical size meets your requirements (full size sectional Aluminum Carriage Plate Mounting surface has 6 useful views on page 6). fixing holes • Usable surface area for component mounting **Blanking Plugs** Double Row Bearings Enhances system appearance Provide maximum load capacity and durability **Cap Seals** • Provide constant lubrication for the life of the machine **Solid Steel Spacer Slide** • Simple to mount • Hard wearing Vee running surfaces



Benefits

- Select standard range of 4 popular sizes ready for dispatch in 24 hours or less
- Utilizes proven Hepco Vee Slide technology ideal for high speed/short stroke movements
- 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 | м | 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 | 58.7 | 36.5 | 300 | 15 x 5 | 50.4 | 160 | 135 | 6 x M10 |

For a more extensive range of options please refer to the GV3 Catalog in **www.bwc.com**

Load/Life Data

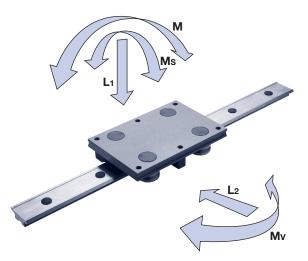
Components used in the Simple-Select[®] range will provide the user with the best combination to achieve a long and trouble free life in clean or arduous environments. Fitted cap seals cover double row bearings and provide a reservoir for grease lubrication and to prevent dirt ingress. In most cases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

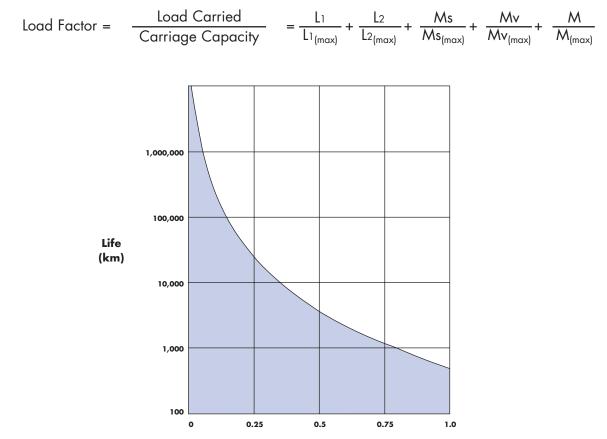
Simple Life Check

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) | 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

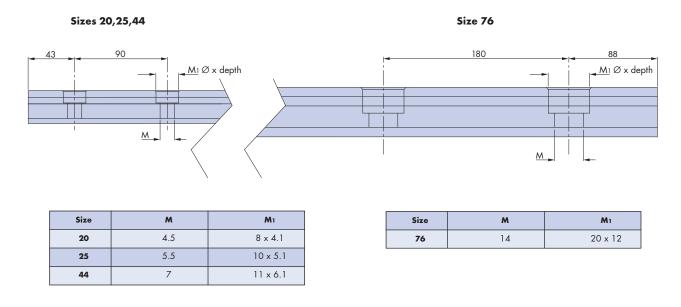
Ordering Details

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

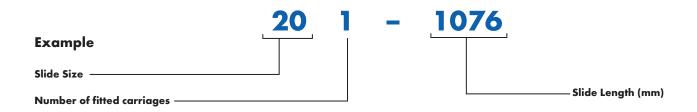
| Slide Size | Slide Lengths in mm | | | | | | | | | | |
|---------------|---------------------|-----|-----|-----|-----|------|------|------|------|------|------|
| 20 | 266 | 356 | 536 | 716 | 896 | 1076 | 1256 | 1436 | 1616 | 1796 | 1976 |
| 25 | 266 | 356 | 536 | 716 | 896 | 1076 | 1256 | 1436 | 1616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



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 ² . 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 | 0°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.

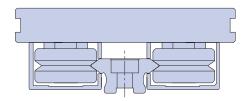
Maximum Linear Speeds for 'V' Slides & Bearings.

Lubricated 'V' Slides = 8 m/s

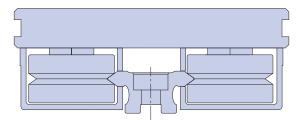
Material specifications may change for reasons of technical advantage or availability.

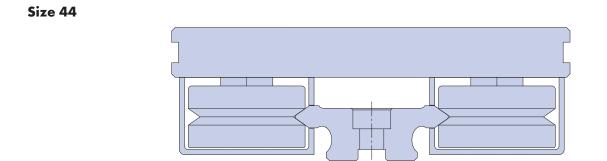
Full Size Sectional Views

Size 20

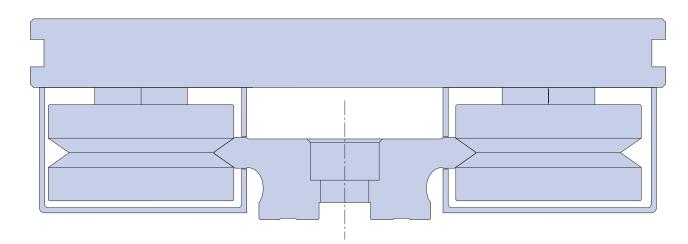


Size 25





Size 76



Bishop-Wisecarver^ $^{\rm (I\!\!R)}$ is proud to be the exclusive North American distributor of HepcoMotion $^{\rm (I\!\!R)}$ products since 1984.

BISHOP WISECARVER

Components & Accessories

DualVee[®] MadeWell[®] GV3 SL2 PRT2 HDS2 HDRT MCS Motor Mounts Gantry Brackets Wrenches

Manual Linear Guide Systems

DualVee[®] UtiliTrak[®] MinVee[®] GV3 Simple Select[®] SL2 HDS2 MHD HTS

Actuated Linear Guide Systems

LoPro[®] XLA™ ECO60[™] SlickStick™ SteadyRail™ HDLS HDCS PDU2 DAPDU2 SBD PSD SDM DLS

Rotary Guide Systems PRT2

DTS2 DTS ALR HDRT 1-Trak GFX

Robot Transfer Units LoPro[®] RTU

DualVee[®] RTU

Custom Solutions

Extruded Profile Guides Custom Bearings Custom Subassemblies Engineering Services Large Diameter Ring Guides and Track

BWC.COM

Women's Business Enterprise



Certified WOSB

Contact

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Quality Certifications



• Certified Bay Area Green Business

Certified Evergreen

Certifications & Compliance

- EN 9100:2018
- JISQ 9100:2016
- ISO 13485 & GMP Compliance
- Responsible Minerals Initiative
- RoHS
- International Traffic in Arms Regulations Compliant