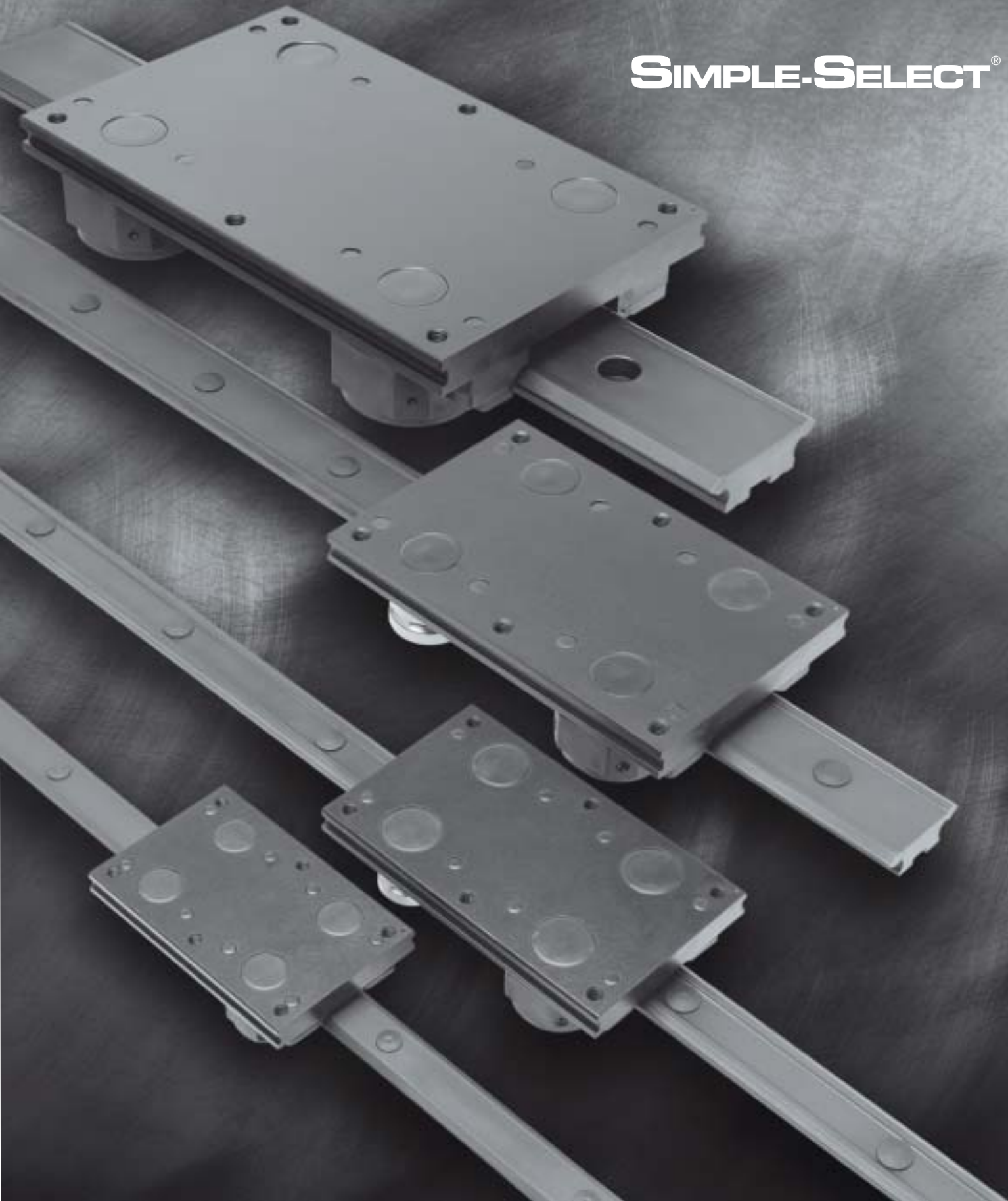


***bwvc***<sup>®</sup>

*Bishop-Wisecarver Corporation*

***Motion without limits.***<sup>™</sup>

**SIMPLE-SELECT**<sup>®</sup>

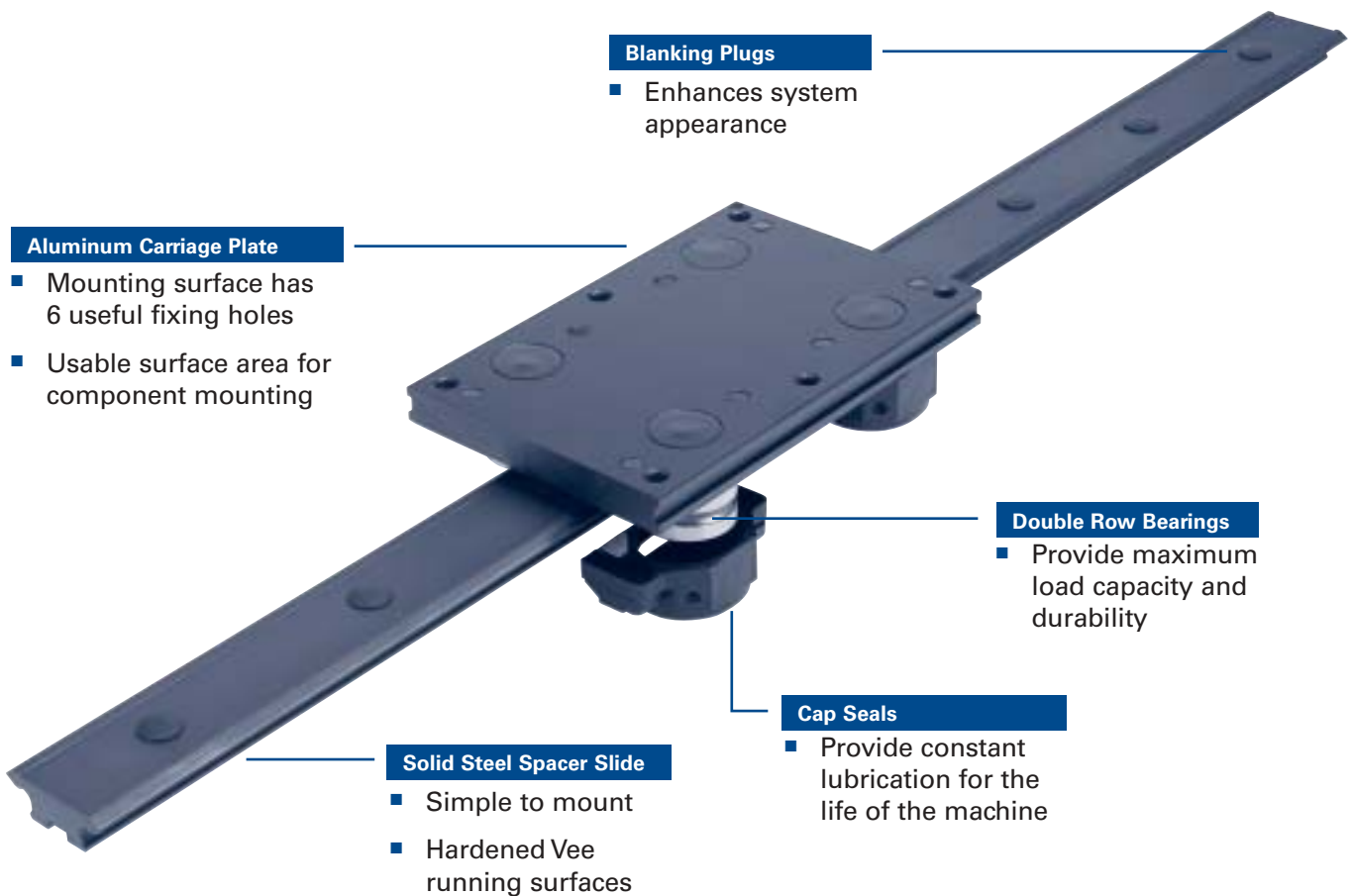


## Simple-Select® Vee Slide Linear Guidance Systems

Bishop-Wisecarver Corporation's Simple-Select® offers four useful sizes of spacer slides 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. 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.

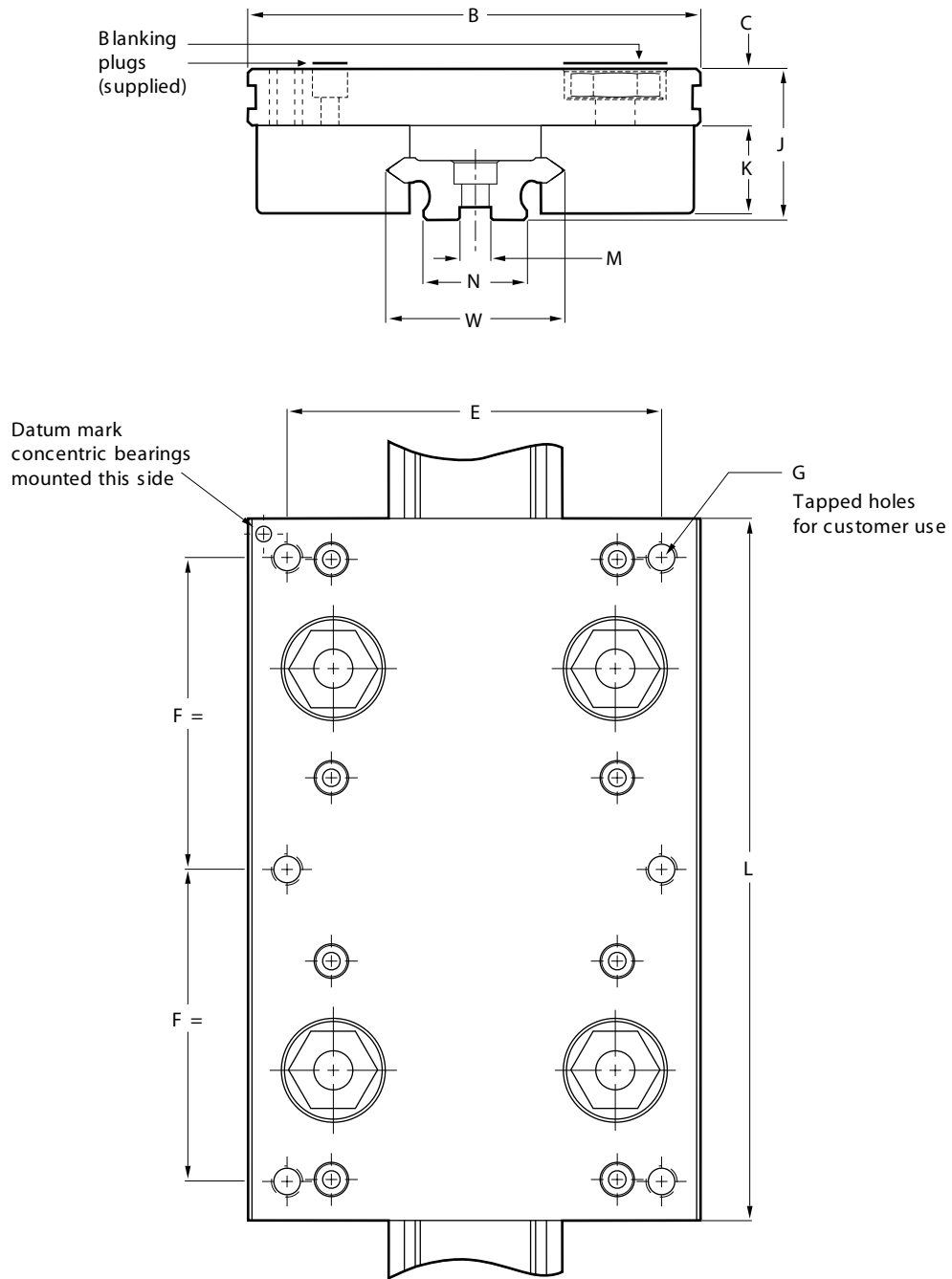
Check the load to be carried against the carriage load capacities and check that the physical size meets your requirements (full size sectional views on page 2).



### Benefits

- Select from a standard range of 4 popular sizes
- Utilizes proven BWC Vee Slide technology – ideal for high speed/short stroke movements
- Short 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 for low wear characteristics
- Quiet in operation

## Dimensional Data



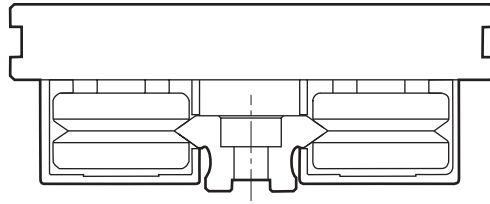
Size	W	B	C	J	K	L	M	N	E	F	G
20	20	64	10	24.95	14	100	5 x 2	12.4	50	44	6 x M5
25	25	80	11.5	30.7	18	135	6 x 2.5	15.4	65	60	6 x M6
44	44	116	14.5	38.7	22.5	180	8 x 3	26.4	96	80	6 x M8
76	76	185	20	58.7	36.5	300	15 x 5	50.4	160	135	6 x M10

### Notes

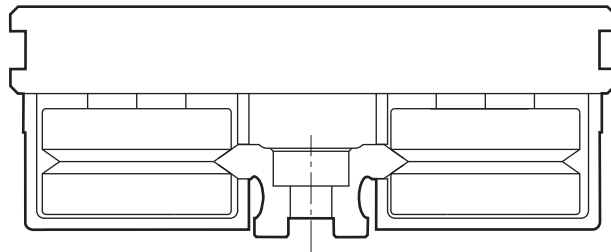
For a more extensive range of options please refer to our GV3 Catalog.

Full Size Sectional Views

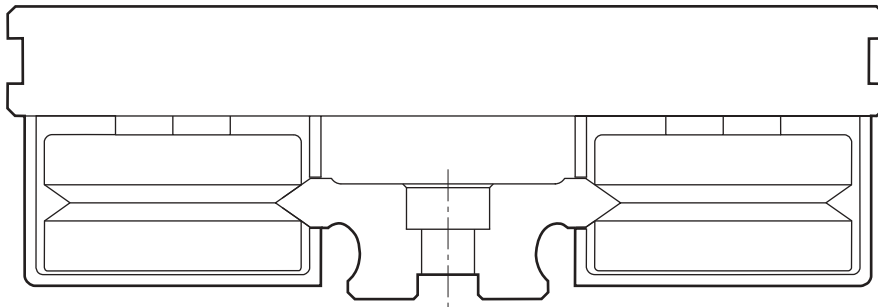
Size 20



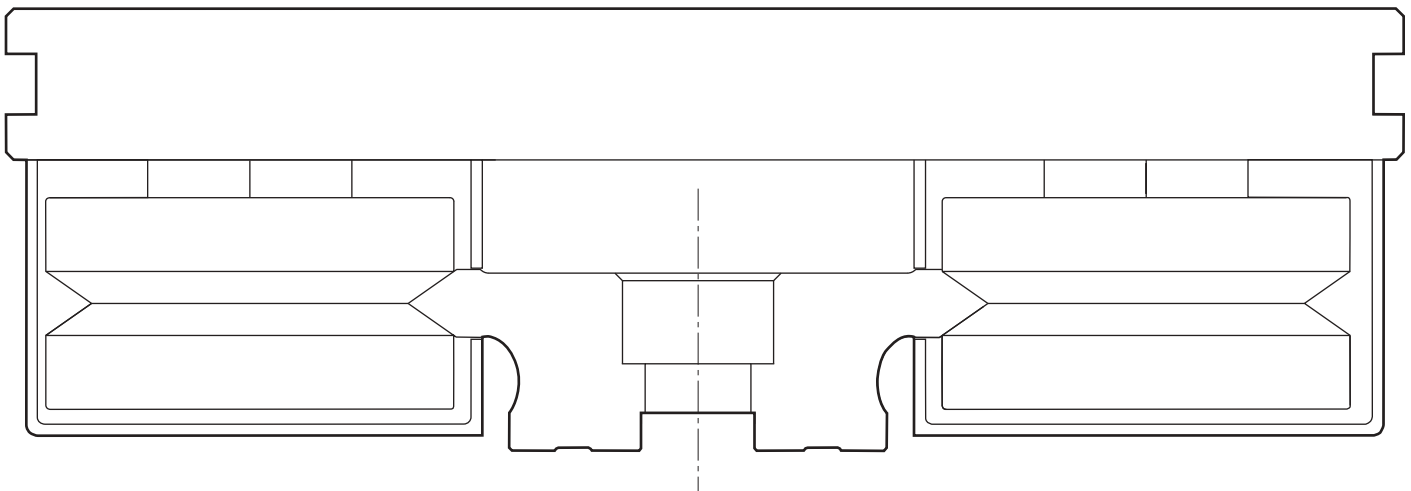
Size 25



Size 44



Size 76



## 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 prevent dirt ingress. In most cases a single application of grease, which BWC provides on assembly of the unit, will last for the life of the machine.

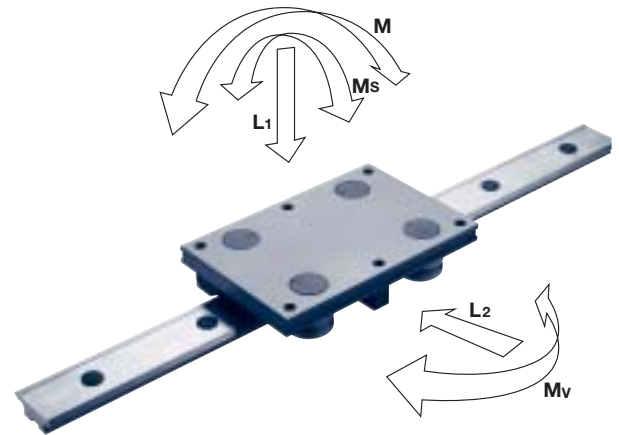
### Simple Life Check

Most applications involve central L<sub>1</sub> loads.

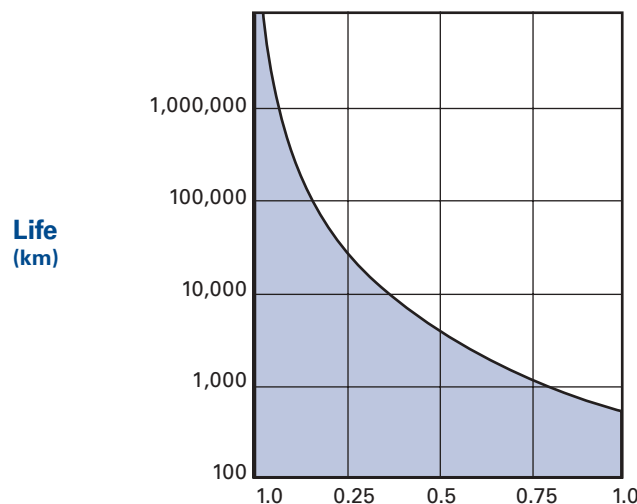
In these cases simply divide your load (N) by the carriage L<sub>1</sub> capacity figure below to determine a load factor. Then simply read off the life from the graph. For offset loads you will need to add the relevant load factors to determine the total.

Load Factor should not exceed 1.

Size	Carriage Capacities				
	L <sub>1</sub> (N)	L <sub>2</sub> (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



$$\text{Load Factor} = \frac{\text{Load Carried}}{\text{Carriage Capacity}} = \frac{L_1}{L_{1(\text{max})}} + \frac{L_2}{L_{2(\text{max})}} + \frac{M_s}{M_{s(\text{max})}} + \frac{M_v}{M_{v(\text{max})}} + \frac{M}{M_{(\text{max})}}$$



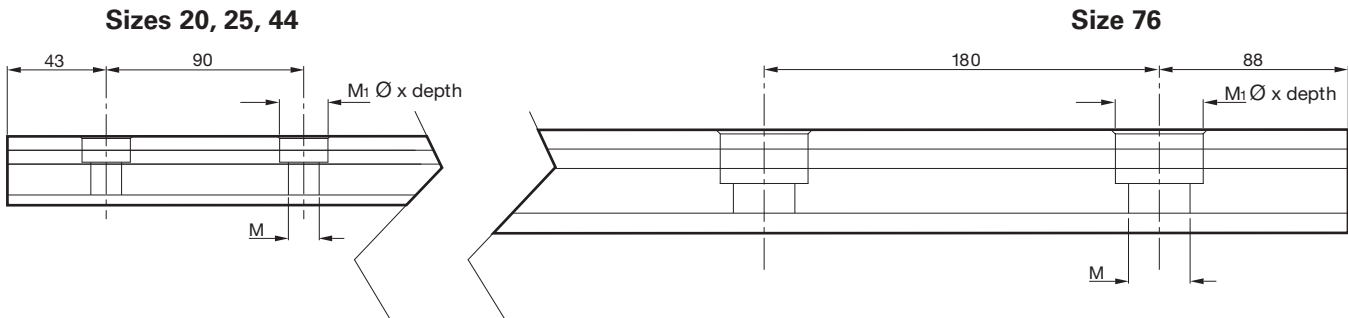
## Ordering Details

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 (please see GV3 catalog).

## 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

## Ordering Details

Simply specify slide size, number of fitted carriages and slide length.

**Example:** Slide Size 20 1 - 1076  
 Number of fitted carriages \_\_\_\_\_ Slide Length (mm)

Units are supplied with carriages adjusted ready for mounting.

## Technical Specifications

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### '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 with bright zinc plated finish, 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  $0.02 \times \text{Load (N)} + \text{Seal Friction (N)}$ .

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.*

# BWC® Solutions

DualVee® Components and Linear Guides — built with DualVee Motion Technology®

Simple-Select® — Assembled Vee Slide Linear Guidance Systems

GV3™ Linear Guidance and Transmission System

SL2® Stainless Steel Based Slide System

HDS™ Heavy Duty Slide System

PDU 2™ — Profile Driven Unit

UtiliTrak® Linear Motion Guide — built with DualVee Motion Technology®

LoPro® Linear Motion System — built with DualVee Motion Technology®

DLS™ Driven Linear System

HDLS™ Heavy Duty Driven Linear System

RTS™ Ring and Track System /DTS® Driven Track System

MCS™ Aluminum Frame and Machine Construction System

 <b>Motion without limits.™</b>
2104 Martin Way Pittsburg, CA 94565-5027 tel 888 580 8272 fax 925 439 5931
<a href="http://www.bwc.com">www.bwc.com</a>

Bishop-Wisecarver Corporation warrants, to the original purchaser only, that the products (a) conform to the specifications published in this catalog or as otherwise communicated to the purchaser, and (b) are free from defects in material or workmanship. This warranty expires one year from the date of delivery. Any failure of the products to conform to the foregoing warranty must be communicated to Bishop-Wisecarver Corporation in writing within 13 months after delivery. Bishop-Wisecarver Corporation shall have the option, in its discretion, of correcting any failure or defect, providing replacement products, or providing a full refund of the purchase price. These remedies are the purchaser's exclusive remedies for breach of warranty. Any repair of defective products, including parts and labor, will be performed at Bishop-Wisecarver's expense and at its facilities. All freight must be prepaid by the customer.

The limited warranty and limited remedy set forth above constitute the only warranty of Bishop-Wisecarver Corporation and the purchaser's only remedies in the event such warranty is breached. The foregoing limited warranty is exclusive of all other warranties pertaining to the products, written or oral, express or implied, including but not limited to the implied warranties of merchantability and fitness for a particular purpose, or against patent infringement.

Bishop-Wisecarver Corporation does not warrant (a) defects caused by failure to provide a suitable installation environment for the product, (b) damage caused by use of the product for purposes other than those for which it was designed, (c) damage caused by unauthorized attachments or modifications, (d) products which have been repaired or altered outside of our facility, or (e) any other abuse or misuse by the purchaser. In no event will Bishop-Wisecarver be liable for any special, incidental or consequential damages, including but not limited to claims for injury to or death of persons, or for damage to property, based on breach of warranty, breach of contract, negligence, strict tort or any other legal theory, including loss of profits or revenues, loss of use of the product, cost of any substitute equipment or facilities, and the claims of customers or other third parties. Any action for breach of warranty must be commenced within 15 months following delivery of the product.

The purchaser acknowledges that it is selecting the product and/or system choices for its particular application, and is relying on its own expertise and not the expertise of Bishop-Wisecarver Corporation in making such selections.