


# 90° V-Guide Units

Units / Wheels

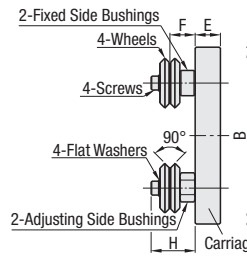


**90° V-Guide Unit**

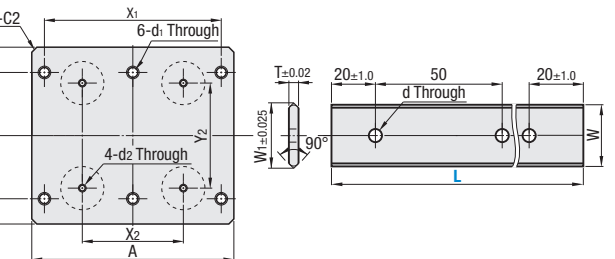
RoHS 10

Type		Material	Surface Treatment	Hardness
Set	1-Carriage	BVGU	Carriage	Plate: 5052 Aluminum Alloy
	2-Carriage	BV2GU	Rail	Black Anodize
		BVGUR (P.725)		

**Carriage**



**Rail**




① A carriage and rail are provided as a set.  
② W<sub>1</sub> is the dimension at the intersection of 90°. (Both ends are R machined)

③ Number of Holes =  $\frac{L-40}{50} + 1$

Part Number Type	No.	L 50mm Increment	W	W <sub>1</sub>	d	A	B	X <sub>1</sub>	X <sub>2</sub>	Y <sub>1</sub>	Y <sub>2</sub>	d <sub>1</sub>	d <sub>2</sub>	E	F	H	T	Wheel	Bushing		Screw
																			Fixed Side	Adjusting Side	
BVGU	25	90-1740	25	25.74	5.5	80	70	70	40	50	41.59	M5	M3	10	10	17.5	4.5	BVGH1	BVGBS1-C	BVGBS1-E	CB3-22
BV2GU	25L		25	25.74	5.5	120	70	100	80	50	41.59	M5	M3	10	10	17.5	4.5				
	44		44	44.74	7	120	105	100	80	80	70.14	M6	M6	10	12	24.5	6	BVGH2	BVGBS2-C	BVGBS2-E	CB6-25

④ A / X<sub>1</sub> / X<sub>2</sub> of No. 25L are larger than those of No. 25.

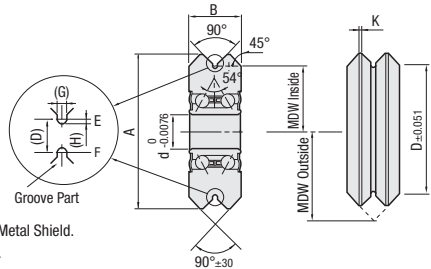
Part Number Example: **BVGU25 - L**



**90° V-Guide Wheels**

RoHS 10

Type	Material	Hardness	Seal	Heat Resistant Temperature
*BVGH	52100 Bearing Steel	60-62 HRC min.	Metal Shield	0-100°C
*BVGHS	440C Stainless Steel Equivalent	58-60 HRC min.	Nitrile Rubber	
BVGH	440C Stainless Steel Equivalent	58-60 HRC min.	Metal Shield	-30-260°C



\*For BVGHS No.2 / No.3, the materials are changed to Nitrile Rubber Metal Shield.  
① G and H dimensions are for reference only, and subject to change.


Part Number Type	No.	A	B	d	D		(G)*	(H)*	K	Radial Load (LRmax.) (N)	Thrust Load (LSmax.) (N)
					Between E and F	MDW					
BVGH	1	19.557	7.874	4.762	15.848	7.924	11.861	1.0	0.5	1220	252
	2	30.733	11.099	9.525	25.399	12.700	18.236	1.4	0.7	2650	625
	3	45.718	15.874	11.999	38.099	19.049	26.974	2.0	1.0	5900	1701
BVGHS	1	19.557	7.874	4.762	15.848	7.924	11.861	1.0	0.5	1220	252
	2	30.733	11.099	9.525	25.399	12.700	18.236	1.4	0.7	2650	625
	3	45.718	15.874	11.999	38.099	19.049	26.974	2.0	1.0	5900	1701
BVGH	1	19.557	7.874	4.762	15.848	7.924	11.861	0.508	0.254	1013	209
	2	30.733	11.099	9.525	25.399	12.700	18.236	0.762	0.381	2200	519
	3	45.718	15.874	11.999	38.099	19.049	26.974	0.889	0.432	4897	1412

kgf=Nx0.101972

Part Number Example: **BVGH3**

# 90° V-Guide Units

Bushings / Single-Sided / Double-Sided Tracks

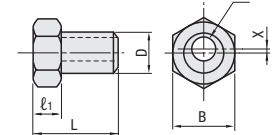


**90° V-Guide Units - Bushing**

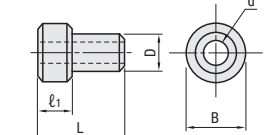
RoHS 10

Type	Material	Surface Treatment	Hardness
BVGBS	1045 Carbon Steel Equivalent	Black Oxide	58 HRC min. (90° Edge)
BVGBS	440C Stainless Steel Equivalent	—	52 HRC min. (90° Edge)

**E (Eccentric Bushings)**




**C (Fixed Bushings)**



Material: 303 Stainless Steel

Part Number Type	No.	Specification	L	D	B	d	Tolerance	Applicable Screws	X	t1	H
	2	C	17.24	9.52	13	6	+0.018 0	M6	—	6.45	12
	3	C	24.68	11.99	19	8	+0.022 0	M8	—	9.06	17

Part Number Example: **BVGBS1 - E**

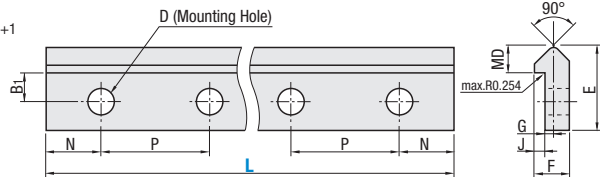


**90° V-Guide Units - Single-Sided Tracks**

RoHS 10

Type	Mounting Hole	Material	Hardness
BVGTNL	Available	1045 Carbon Steel Equivalent	53 HRC min. (90° Edge)
BVGTNSL		420 Stainless Steel Equivalent	40 HRC min. (90° Edge)

① Number of Holes =  $\frac{L-40}{50} + 1$




Part Number Type	No.	L 50mm Increment	E ±0.38	F ±0.38	G ±0.05	J	MD ±0.05	D	B <sub>1</sub>	N ±0.01	P ±0.02
	2	15.88	6.35	2.36	4.75	4.5	5.5				
	3	22.23	8.71	1.57	2.77	6.35	5.5	8			

Part Number Example: **BVGTNL1 - L**

Part Number Alterations: **BVGTNL1 - (MTC) L**

① Only applicable to Single Sided Track Type BVGTNL.

Alteration	Surface Treatment
Code	MTC
Spec.	Electroless nickel plating is applied. ⊗ Not available for Stainless Steel Type.

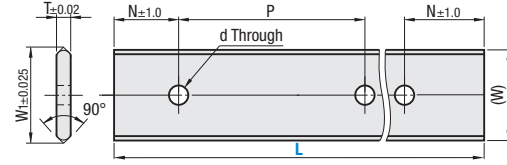


**90° V-Guide Units - Double-Sided Tracks**

RoHS 10

Type	Material	Surface Treatment	Hardness
BVGUR	1045 Carbon Steel Equivalent	Black Oxide	58 HRC min. (90° Edge)
BVGURS	440C Stainless Steel Equivalent	—	52 HRC min. (90° Edge)

① W<sub>1</sub> is the dimension at the intersection of 90°. (Both ends are R machined)  
② Number of Holes =  $\frac{L-40}{50} + 1$



Part Number Type	No.	L 50mm Increment	(W)	W <sub>1</sub>	T	N ±0.01	P ±0.02	d
BVGURS	44	(44)	44.74	6.0			7.0	

Part Number Example: **BVGUR25 - L**