

90° V-Guide Units

Units / Wheels

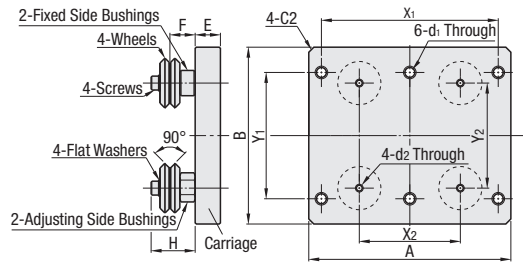
90° V-Guide Unit



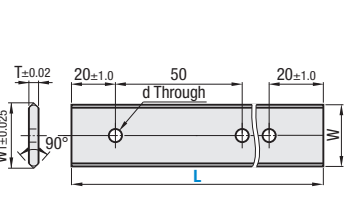
RoHS10

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

Carriage



Rail



① A carriage and rail are provided as a set.
② W₁ is the dimension at the intersection of 90°. (Both ends are R machined)

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

Part Number		L 50mm Increment	W	W ₁	d	A	B	X ₁	X ₂	Y ₁	Y ₂	d ₁	d ₂	E	F	H	T	Wheel	Bushings		Screw
Type	No.																		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
1-Carriage Set	25L		25	25.74	5.5	120	70	100	80	50	41.59	M5	M3	10	10	17.5	4.5				
BV2GU	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
2-Carriage Set																					

① A / X₁ / X₂ of No. 25L are larger than those of No. 25.

Part Number Example

Part Number - L

BVGU25 - 840

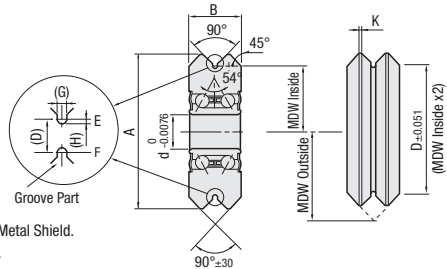
90° V-Guide Wheels



RoHS10

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	
BVGHT	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		A	B	d	D	MDW		(G)*	(H)*	K	Radial Load (LRmax.) (N)	Thrust Load (LSmax.) (N)
Type	No.				Between E and F	Inside	Outside					
BVGH	1	19.557	7.874	4.762	15.848	7.924	11.861	1.0	0.5	0.229	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
BVGHT	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

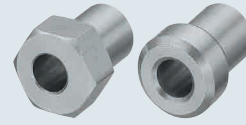
Part Number

BVGH3

90° V-Guide Units

Bushings / Single-Sided / Double-Sided Tracks

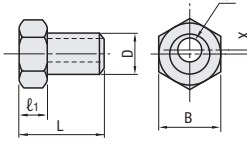
90° V-Guide Units – Bushing



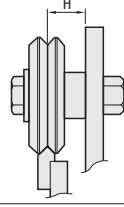
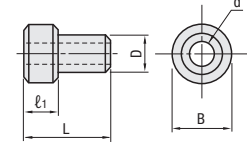
RoHS10

BVGBS

E (Eccentric Bushings)



C (Fixed Bushings)



Material: 303 Stainless Steel

Part Number		Specification	L	D	B	d	Tolerance	Applicable Screws	X	l1	H
Type	No.										
BVGBS	1	C E	13.68	4.75	10	3	+0.014 0	M3	— 0.3	6.06	10
	2	C E	17.24	9.52	13	6	+0.018 0	M6	— 0.6	6.45	12
	3	C E	24.68	11.99	19	8	+0.022 0	M8	— 1.0	9.06	17

Part Number Example

Part Number - Spec.

BVGBS1 - E

90° V-Guide Units – Single-Sided Tracks



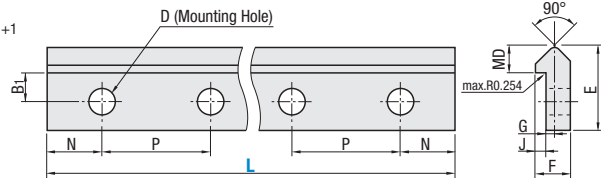
RoHS10

BVGTLNL

BVGTNLSL

Type	Mounting Hole	Material	Hardness
BVGTLNL	Available	1043 Carbon Steel Equivalent	53 HRC min. (90° Edge)
BVGTNLSL		440C Stainless Steel Equivalent	40 HRC min. (90° Edge)

① Number of Holes = $\left(\frac{L-40}{50}\right) + 1$



Part Number		L 50 mm Increment	E ±0.38	F ±0.38	G ±0.05	J	MD ±0.05	D	B ₁	N ±0.01	P ±0.02
Type	No.										
BVGTLNL BVGTNLSL	1	90~1790	11.10	4.75	0.79	1.57	3.18	3.5	4	20	50
	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

Part Number - L

BVGTLNL1 - 640

Part Number Alterations

Part Number - (MTC) L

BVGTLNL1 - MTC740

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



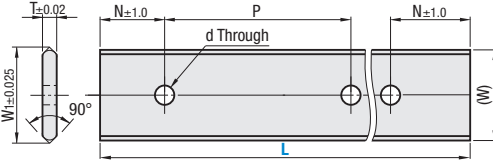
RoHS10

BVGUR

BVGURS

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 W₁ is the dimension at the intersection of 90°. (Both ends are R machined)
② Number of Holes = $\left(\frac{L-40}{50}\right) + 1$



Part Number		L 50 mm Increment	(W)	W ₁	T	N ±0.01	P ±0.02	d
Type	No.							
BVGUR BVGURS	25	90~1740	(25)	25.74	4.5	20	50	5.5
	44		(44)	44.74	6.0			7.0

Part Number Example

Part Number - L

BVGUR25 - 90