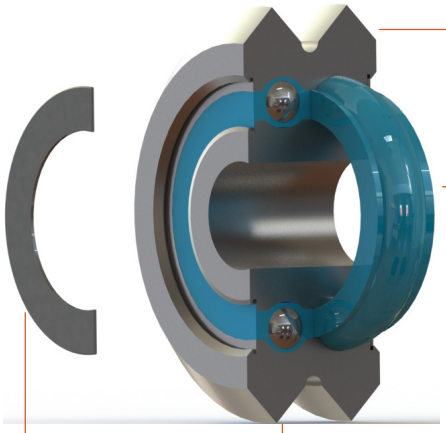
BISHOP WISECARVER

NEW

DUALVEE GUIDE WHEELS WITH SOLID LUBRICANT

Solid lubricant innovations extend never-before-seen reliability and longevity to Bishop-Wisecarver's proven DualVee® guide wheel motion systems – furthering their ability to excel in harsh and extreme environments.



Self-Cleaning DualVee Motion Technology®
Uses vee profile wheels and track to wipe debris off running surfaces as the system runs.

H1 Food Grade Solid Lubricant
Ideal for retaining oil in food processing, food packaging, pharmaceutical applications, and more. Suitable for incidental food contact. Polymer is dyed blue for easy inspection.

Seal/Shield
Further protects against debris ingress and oil loss.

Stainless Steel Bearing
Provides corrosion, chemical, and wear resistance.

Stainless steel retaining ring not shown.

EXTENDING LIFE IN HARSH AND EXTREME ENVIRONMENTS

Achieve upwards of ***2.5X the travel life**** of grease-lubricated bearings. The solid polymer matrix can hold up to 30% more oil than traditional grease lubricant and ***retains oil much better than grease (even under washdown conditions)***. Additionally, solid lubricant provides a natural resistance to debris ingress, moisture/humidity, chemicals (including acids, lyes, and solvents), and the spread of wear particles.

*Travel life is dependent on load. Tests have validated up to 6.59X predicted life for comparable grease-filled wheels.

DualVee Solid Lubricant Guide Wheels Are Ideal For:

- WET & HUMID ENVIRONMENTS
- FOOD GRADE
- HARSH DEBRIS ENVIRONMENTS
- LOW NOISE
- SMOOTH, LOW FRICTION MOTION
- LONG LENGTH

DUALVEE® SOLID LUBRICANT GUIDE WHEELS

Product Features

From factory automation projects to OEM designs, **DualVee Motion Technology®** components and assemblies provide the design flexibility for virtually any guided motion application. Based on the **DualVee®** guide wheel, this technology offers a level of reliability that is unmatched in the industry. Solid lubricant wheels use an oil-filled polymer matrix instead of grease to prevent ingress in wet and washdown environments and to extend wheel life.

WHEEL VERSION	APPLICATION CONDITIONS	APPLICATION EXAMPLES	AVAILABLE SIZES	PROTECTION	WHEEL MATERIAL	BALL RETAINER MATERIAL	LUBRICATION	MAX VELOCITY	TEMPERATURE RANGE °F [°C]
Solid Lubricant	• Washdown conditions • Wet / humid conditions • Food equipment • Pharma equipment	• Food processing • Food packaging • Medical device manufacturing	1, 2, 3	Seal/shield	440C Stainless Steel	304 Stainless Steel	H1 Food Grade Oil-Filled Polymer Matrix	2 m/s	-40° to +176° [-40° to +80°]

Seal/shield materials are 300 series stainless steel and NBR combination
Certificate: https://www2.bwc.com/rs/872-EFC-487/images/2probity-certificate-CC2920549.pdf
Wheels can be assembled with user specified grease lubricants, call for more information

Dimensions

STOCK CODE	DUALVEE WHEEL SIZE	OUTER DIAMETER D	WIDTH W	BORE DIAMETER B	VEE RADIUS INSIDE VRI	VEE RADIUS OUTSIDE VRO	WEIGHT (g)
W1SSXH1SL	*1*	Ø0.771 [Ø19.58]	.310 [7.87]	Ø.1875+.0000/-.0003 [Ø4.760+.000/-.008]	.313 [7.95]	.468 [11.89]	11.1
W2SSXH1SL	*2*	Ø1.210 [Ø30.73]	.438 [11.13]	Ø.3750+.0000/-.0003 [Ø9.530+.000/-.008]	.500 [12.70]	.719 [18.26]	39.0
W3SSXH1SL	*3*	Ø1.803 [Ø45.80]	.625 [15.88]	Ø.4724+.0000/-.0003 [Ø12.000+.000/-.008	.750 [19.05]	1.063 [27.00]	130.2

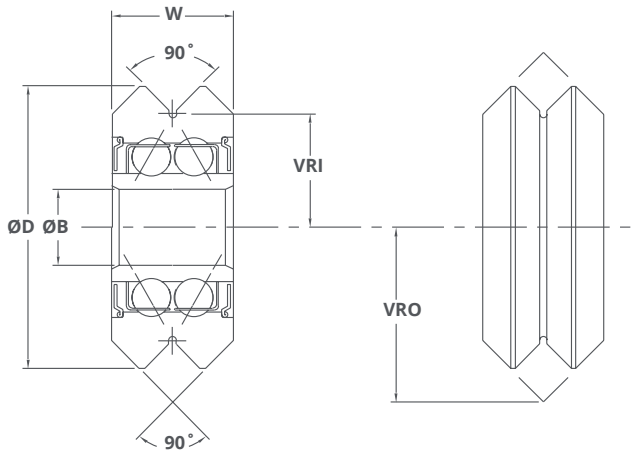
Values are in inches [millimeters] unless otherwise specified.

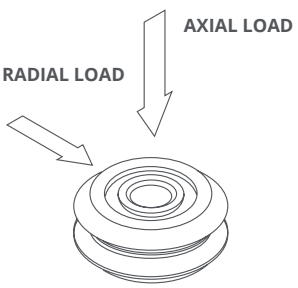
Working Load Capacities

Working load capacities are based on empirical data on guide wheels used in general applications with static and dynamic load conditions. Guide wheels can routinely achieve travel life of one million cycles or higher when these specified load capacities are observed.

LOAD CAPACITIES	DUALVEE WHEEL SIZE	WORKING RADIAL LOAD CAPACITY L_R		WORKING AXIAL LOAD CAPACITY L_A	
		N	lbf	N	lbf
	1	1220	274	252	57
	2	2650	596	625	141
	3	5900	1326	1701	382

See the Technical Data catalog for details on life calculation.





BISHOP WISECARVER
Expertly Designed, Delivered to Perform

Contact

Phone: ***(925) 439-8272***
Email: ***Sales@bwc.com***
Website: ***bwc.com***

2104 Martin Way
Pittsburg, CA 94565

DUALVEE® SOLID LUBRICANT GUIDE WHEELS

Product Features

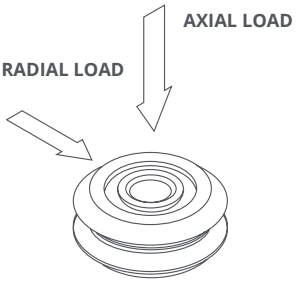
From factory automation projects to OEM designs, **DualVee Motion Technology®** components and assemblies provide the design flexibility for virtually any guided motion application. Based on the **DualVee®** guide wheel, this technology offers a level of reliability that is unmatched in the industry. Solid lubricant wheels use an oil-filled polymer matrix instead of grease to prevent ingress in wet and washdown environments and to extend wheel life.

WHEEL VERSION	APPLICATION CONDITIONS	APPLICATION EXAMPLES	AVAILABLE SIZES	PROTECTION	WHEEL MATERIAL	BALL RETAINER MATERIAL	LUBRICATION	TEMPERATURE RANGE °F [°C]
Solid Lubricant	• Washdown conditions • Wet / humid conditions • Food equipment • Pharma equipment	• Food processing • Food packaging • Medical device manufacturing	1, 2, 3	Seal/shield	440C Stainless Steel	304 Stainless Steel	H1 Food Grade Oil-Filled Polymer Matrix	-40° to +176° [-40° to +80°]

Seal/shield materials are 300 series stainless steel and NBR combination
Certificate: https://www2.bwc.com/rs/872-EFC-487/images/2probity-certificate-CC2920549.pdf
Wheels can be assembled with user specified grease lubricants, call for more information

Working Load Capacities

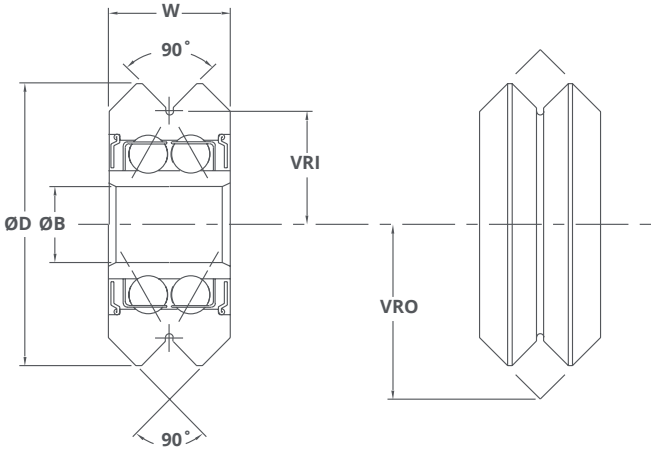
Working load capacities are based on empirical data on guide wheels used in general applications with static and dynamic load conditions. Guide wheels can routinely achieve travel life of one million cycles or higher when these specified load capacities are observed.



LOAD CAPACITIES

DUALVEE WHEEL SIZE	WORKING RADIAL LOAD CAPACITY L_R		WORKING AXIAL LOAD CAPACITY L_A	
	N	lbf	N	lbf
1	1220	274	252	57
2	2650	596	625	141
3	5900	1326	1701	382

See the Technical Data catalog for details on life calculation.



Dimensions

STOCK CODE	DUALVEE WHEEL SIZE	OUTER DIAMETER D	WIDTH W	BORE DIAMETER B	VEE RADIUS INSIDE VRI	VEE RADIUS OUTSIDE VRO	WEIGHT (g)
W1SSXH1SL	*1*	Ø0.771 [Ø19.58]	.310 [7.87]	Ø.1875+.0000/-.0003 [Ø4.760+.000/-.008]	.313 [7.95]	.468 [11.89]	11.1
W2SSXH1SL	*2*	Ø1.210 [Ø30.73]	.438 [11.13]	Ø.3750+.0000/-.0003 [Ø9.530+.000/-.008]	.500 [12.70]	.719 [18.26]	39.0
W3SSXH1SL	*3*	Ø1.803 [Ø45.80]	.625 [15.88]	Ø.4724+.0000/-.0003 [Ø12.000+.000/-.008	.750 [19.05]	1.063 [27.00]	130.2

Values are in inches [millimeters] unless otherwise specified.

BISHOP WISECARVER
Expertly Designed, Delivered to Perform

Contact

Phone: ***(925) 439-8272***
Email: ***Sales@bwc.com***
Website: ***bwc.com***

2104 Martin Way
Pittsburg, CA 94565

DUALVEE® SOLID LUBRICANT GUIDE WHEELS

Product Features

From factory automation projects to OEM designs, **DualVee Motion Technology®** components and assemblies provide the design flexibility for virtually any guided motion application. Based on the **DualVee®** guide wheel, this technology offers a level of reliability that is unmatched in the industry. Solid lubricant wheels use an oil-filled polymer matrix instead of grease to prevent ingress in wet and washdown environments and to extend wheel life.

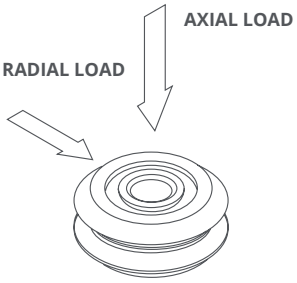
WHEEL VERSION	APPLICATION CONDITIONS	APPLICATION EXAMPLES	AVAILABLE SIZES	PROTECTION	WHEEL MATERIAL	BALL RETAINER MATERIAL	LUBRICATION	TEMPERATURE RANGE °F [°C]
Solid Lubricant	• Washdown conditions • Wet / humid conditions • Food equipment • Pharma equipment	• Food processing • Food packaging • Medical device manufacturing	1, 2, 3	Seal/shield	440C Stainless Steel	440C Stainless Steel	H1 Food Grade Oil-Saturated Polymer Matrix	-40° to +176° [-40° to +80°]

Seal/shield materials are 300 series stainless steel and NBR combination
Wheels can be assembled with user specified grease lubricants, call for more information

LOAD CAPACITIES

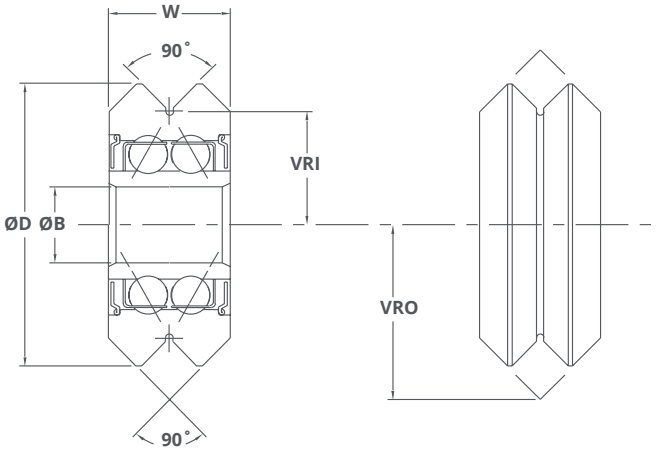
DUALVEE WHEEL SIZE	WORKING RADIAL LOAD CAPACITY L_R		WORKING AXIAL LOAD CAPACITY L_A	
	N	lbf	N	lbf
1	2650	596	625	141
2	2650	596	625	141
3	5900	1326	1701	382

Specific load ratings vary by wheel version, see the Technical Data catalog for details.



Working Load Capacities

Working load capacities are based on empirical data on guide wheels used in general applications with static and dynamic load conditions. Guide wheels can routinely achieve travel life of one million cycles or higher when these specified load capacities are observed.



DIMENSIONS

DUALVEE WHEEL SIZE	OUTER DIAMETER	WIDTH	BORE DIAMETER	VEE RADIUS INSIDE	VEE RADIUS OUTSIDE	WEIGHT (g)
	D	W	B	VRI	VRO	
1	Ø1.210 [Ø30.73]	.438 [11.13]	Ø.3750+.0000/-.0003 [Ø9.530+.000/-.008]	.500 [12.70]	.719 [18.26]	39.0
2	Ø1.210 [Ø30.73]	.438 [11.13]	Ø.3750+.0000/-.0003 [Ø9.530+.000/-.008]	.500 [12.70]	.719 [18.26]	39.0
3	Ø1.803 [Ø45.80]	.625 [15.88]	Ø.4724+.0000/-.0003 [Ø12.000+.000/-.008	.750 [19.05]	1.063 [27.00]	130.2

Values are in inches [millimeters]