

# **UtiliTrak®** Series

# A LINEAR GUIDE SYSTEM

**EXPERTLY DESIGNED, DELIVERED TO PERFORM** 

Revised 1/22



# EXPERTLY DESIGNED, DELIVERED TO PERFORM

Powered by nearly 70 years of relentless problem-solving and steadfast reliability, Bishop-Wisecarver delivers innovative motion solutions around the world that thrive in harsh and extreme conditions. Our linear and rotary motion solutions, custom complex assemblies, and embedded intelligence systems lead the manufacturing industry, and they are backed by The Signature Experience promise of expert guidance, confidence and customer satisfaction.

# PERFECT FOR HARSH AND EXTREME ENVIRONMENTS

When you purchase from Bishop-Wisecarver, you aren't just getting a product that works; you're getting products, systems, and industry-leading expertise you can trust, especially in harsh conditions and critical environments—always exceeding our customers' reliability requirements.

# **Our Motion Products and Solutions Are Also Perfect For:**



HARSH ENVIRONMENTS



SMOOTH, LOW FRICTION MOTION



LONG LENGTH



MOIST ENVIRONMENTS



LOW NOISE



FOOD GRADE



HIGH/LOW TEMPERATURE



CLEAN ROOM



### LOW TOTAL COST OF OWNERSHIP



VACUUM

# **INTRODUCTION**

UtiliTrak<sup>®</sup> linear guides are designed for commercial applications where easy installation and minimal maintenance requirements are the primary design objectives. It is constructed with DualVee Motion Technology<sup>®</sup> in the vee and vee/crown wheel, or the MadeWell<sup>®</sup> crown roller designs. These, along with a variety of material and seal options, provides high reliability, easy installation and low maintenance solutions in a sleek, compact design.

Fit up is pre-set for PW, SW, and CR wheel plates when ordered with matching linear guide tracks, but is easily adjusted by rotating the eccentrically mounted center guide wheels. This allows modification of running characteristics such as drag, breakaway force and preload. The VC series wheel plates are not pre-set.

Each wheel plate assembly includes a standard channel lubricator, which distributes a light coat of oil along the length of the channel during normal operation. Channels can be butt-joined for unlimited travel lengths.

# **Design Benefits**

- Very low rolling friction
- Ground channel butt-joint
- Butt-joining precision ground channel for unlimited travel lengths
- High load capacity
- Contamination tolerant
- Low maintenance
- Simple installation
- Vibration-resistant options NEW

# Key Industries

- Architecture
- Automotive
- Medical
- Packaging
- Printing
- Pharmaceutical





**PW Series** 





**SW Series** 



**CR Series** 

# TABLE OF CONTENTS

UtiliTrak Overview	3 - 5
PW Series	6 - 10
SW Series	11 - 16
VC Series	17 - 21
CR Series	22 - 25
Accessories	26 - 31

For instructions regarding mounting and orientation, life estimation, preloading, and maintenance, see the UtiliTrak section of the Technical Data catalog.

### **Need Help**

Application + Design Assistance 925.439.8272

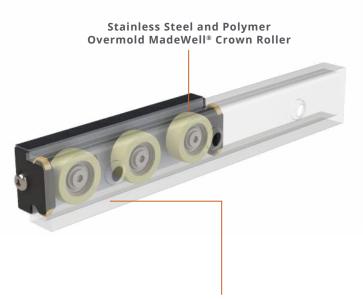
**3D Modeling + CAD Drawing** BWC.com

# UTILITRAK<sup>®</sup> SERIES COMPARISON

		PW S	ERIES	VC SERIES	SW SI	ERIES	CR SERIES
		CROWN	90° VEE	90° VEE/CROWN	CROWN	90° VEE	90° VEE
	Compatible Channel	C Channel	90° Vee	90° Vee C Channel	C Channel	90° Vee	90° Vee
M	Compatible Wheel Plate	Crown Roller	90° Vee	90° Vee/Crown	Crown Roller	90° Vee	90° Vee
OVERVIEW	Loading Direction	Radial Only	Axial and Radial	Vee = Axial and Radial Crown = Radial Only	Radial Only	Axial and Radial	Axial and Radia
0	Optional Brake	Yes	Yes	Yes	Yes	Yes	Not Available
	Available Sizes	0, 1, 2	0, 1, 2	1, 2, 3	1, 2, 3	1, 2, 3	1, 2, 3
	Material(s)	Aluminum	Aluminum	Carbon Steel	Carbon Steel	Carbon Steel	Stainless Steel and Aluminum
CHANNEL	Standard Coating	Clear Anodize	Clear Anodize	Polyurethane Paint	Polyurethane Paint	Polyurethane Paint	Clear Anodize
СНАІ	Hardened	No	No	Yes	Yes	Yes	Yes
	Finish	Extruded	Extruded	Precision Ground	Precision Ground	Precision Ground	Polished
	# of Wheels	3, 4, 5	3, 4, 5	3, 4, 5	3, 4, 5	3, 4, 5	3
	Bearings	Single Row Deep Groove	Single Row Deep Groove	Double Row Angular Contact	Double Row Angular Contact	Double Row Angular Contact	Double Row Angular Contact
	Wheel Material	Polymer Overmold Stainless Steel	Polymer Overmold Stainless Steel	Carbon Steel	Carbon Steel	Carbon Steel Stainless Steel	Stainless Steel
	Wheel Material Grade	Polyacetal and 440C	Polyacetal and 440C	52100	52100	52100 440C	440C
	Max. Angular Misalignment	+/- 7°	0°	+/- 2°	+/- 7°	0°	0°
PLATE	Vibration- Resistant Lock Nut	Optional	Optional	Optional	Optional	Optional	Not Available
WHEEL PLATE	Wheel Bottom Hex Feature (Size 2 and 3)	Standard	Standard	Not Available	Standard	Optional	Not Available
M	Preloaded Adjustment Hex	Metric	Metric	Metric	Metric	Inch	Metric
	Lubrications	Molded Nylon End Caps	Molded Nylon End Caps	Molded Nylon End Caps	Molded Nylon End Caps	Molded Nylon End Caps	Stamped Stainless Steel Center Mounted
	Wheel Protection	Sealed	Sealed	Sealed	Sealed	Sealed Shielded Seal/Shield Washroom	Sealed Seal/Shield
	Wheel Versions	Corrosion Resistant	Corrosion Resistant	Carbon Steel	Carbon Steel	Carbon Steel Corrosion Resistant Food/Pharma High/Low Temp. Vacuum Washdown	Corrosion Resistant

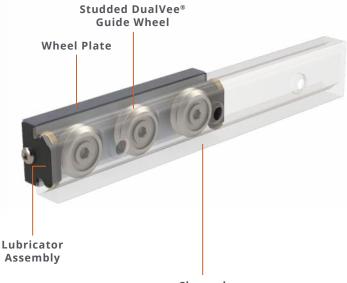
# **UTILITRAK® SERIES COMPARISON**

# PW Crown Wheel Plate in C Channel



Channel Precision Extruded Aluminum Clear Anodize C Channel

# SW Wheel Plate with Vee Wheels in Vee Channel



Channel Induction Hardened Carbon Bearing Steel

# VC Wheel Plate in Vee Channel

CR Wheel Plate in Composite Channel



# **PW SERIES**

The UtiliTrak<sup>®</sup> PW Series are linear bearings made with Madewell<sup>®</sup> polymer guide wheels and matching extruded aluminum linear guide track channels. The pairing of wheel plate with channel are designed and built of materials for lighter load capacities, but highly corrosive environments.

### **Design Benefits**

- Light to medium duty applications
- High speed capacity
- Ease of installation
- Smooth anti-friction operation
- Low noise
- Vibration-resistant wheel plate option NEW
- Eccentric bearing for easy wheel plate adjustment
- Tolerates up to 7° of angular misalignment
- Butt-joining extruded channel for unlimited travel lengths

### **Key Industries**

- Food Product Processing
- Agriculture
- Medical
- Testing Laboratories
- Diagnostic Substance Mfg.
- Paper/Pulping

### **Application Examples**

- Agrochemical (liquid fertilizer) filling
- Liquid medicine & cleaning wash
- High impact cleaning spray nozzles in paper production

For instructions regarding mounting and orientation, life estimation, preloading, and maintenance, see the UtiliTrak section of the Technical Data catalog.





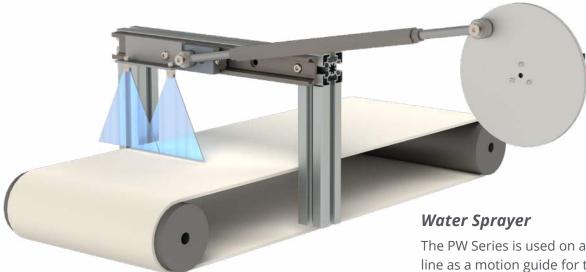


Crown Roller

Vee Wheel

		CROWN	90° VEE
	Compatible Channel	C Channel	90° Vee
IEW	Compatible Wheel Plate	Crown Roller	90° Vee
VERVIEW	Loading Direction	Radial Only	Axial and Radial
Μ	Optional Brake	Yes	Yes
	Available Sizes	0, 1, 2	0, 1, 2
_	Material(s)	Aluminum	Aluminum
CHANNE	Standard Coating	Clear Anodize	Clear Anodize
CHAI	Hardened	No	No
	Finish	Extruded	Extruded
	# of Wheels	3, 4, 5	3, 4, 5
	Bearings	Single Row Deep Groove	Single Row Deep Groove
	Wheel Material	Polymer Overmold Stainless Steel	Polymer Overmold Stainless Steel
111	Wheel Material Grade	Polyacetal and 440C	Polyacetal and 440C
VHEEL PLATE	Max Angular Misalignment	+/- 7°	0°
EL P	Vibration-Resistant Lock Nut	Optional	Optional
NHE	Wheel Bottom Hex Feature (Size 2 and 3)	Standard	Standard
	Preloaded Adjustment Hex	Metric	Metric
	Lubrications	Molded Nylon End Caps	Molded Nylon End Caps
	Wheel Protection	Shielded	Shielded
	Wheel Versions	Corrosion Resistant	Corrosion Resistant

# **Application Examples**



The PW Series is used on a food processing line as a motion guide for the spray application of liquid preservatives. Anodized aluminum with stainless steel guide wheel bearings are combined with polymer wheels for corrosion resistant operation.

# Laboratory Liquid Dispensing

Multi-axis laboratory automation for high throughput fluid pipetting. The small footprint linear guides are made from corrosion resistant aluminum, stainless steel, and polymer wheels that are well suited for lightweight tabletop instrumentation and low contamination but highly corrosive environments.



# Wheel Plate Stock Code, Mass, and Max Load Capacity

See the Technical Data catalog page 24 - 26 for sizing/selection and life estimation.

		# OF	STOCK CODE*	MASS	RAD	IAL L <sub>R</sub>	AXI	AL L <sub>A</sub>	PITC	CH M <sub>p</sub>	YAI	V M <sub>Y</sub>	ROL	L M <sub>R</sub>
	SIZE	WHEELS	STOCK CODE*	(G)	(N)	(LBF)	(N)	(LBF)	(N-M)	(LBF-FT)	(N-M)	(LBF-FT)	(N-M)	(LBF-FT)
		3	UTOWPAP	46	53	12	38	9	0.6	0.5	0.6	0.5	0.2	0.1
	о	4	UT0WPAP-4A	60	53	12	46	10	21.1	15.6	1.8	1.3	0.4	0.3
VEE		5	UT0WPAP-5A	90	63	14	54	12	21.1	15.6	1.8	1.3	0.4	0.3
00° V		3	UT1WPAP	92	107	24	76	17	2.0	1.5	2.0	1.5	0.5	0.4
6	1	4	UT1WPAP-4A	120	107	24	91	20	61.5	45.4	5.1	3.8	1.0	0.7
		5	UT1WPAP-5A	160	127	30	107	24	61.5	45.4	5.1	3.8	1.0	0.7
		3	UT2WPAP	243	142	32	94	21	3.6	2.7	3.2	2.4	1.2	0.9
	2	4	UT2WPAP-5A	315	142	32	113	25	124.9	92.1	9.3	6.8	2.3	1.7
		5	UT2WPAP-5A	340	169	38	133	30	124.9	92.1	9.3	6.8	2.3	1.7

		# OF	STOCK CODE*	MASS	RADI	ALL <sub>R</sub>	AXI	AL L <sub>A</sub>	PITC	CH M <sub>P</sub>	YAL	V M <sub>Y</sub>	ROL	L M <sub>R</sub>
	SIZE	WHEELS	STOCK CODE*	(G)	(N)	(LBF)	(N)	(LBF)	(N-M)	(LBF-FT)	(N-M)	(LBF-FT)	(N-M)	(LBF-FT)
		3	UTOWPAPR	47	53	12	0	0	0	0	0.6	0.5	0	0
	о	4	UT0WPAPR-4A	60	53	12	0	0	0	0	1.8	1.3	0	0
S		5	UT0WPAPR-5A	90	63	14	0	0	0	0	1.8	1.3	0	0
CROWN		3	UT1WPAPR	94	107	24	0	0	0	0	2.0	1.5	0	0
บ	1	4	UT1WPAPR-4A	120	107	24	0	0	0	0	5.1	3.8	0	0
		5	UT1WPAPR-5A	160	127	30	0	0	0	0	5.1	3.8	0	0
		3	UT2WPAPR	246	142	32	0	0	0	0	3.2	2.4	0	0
	2	4	UT2WPAPR-5A	315	142	32	0	0	0	0	9.3	6.8	0	0
		5	UT2WPAPR-5A	340	169	38	0	0	0	0	9.3	6.8	0	0

\*For vibration-resistant lock nut option, replace "WPA" with "WPLA" in stock code. Prevailing torque lock nuts are 304 stainless steel, resistant to high/low temp. & chemicals.

# **Clear Anodized Channel Stock Code**

C Channel	90° Vee
UTTRA0 ( <i>L</i> ) ( <i>M</i> )	UTTA0 ( <i>L</i> ) ( <i>M</i> )
UTTRA1 ( <i>L</i> ) ( <i>M</i> )	UTTA1 ( <i>L</i> ) ( <i>M</i> )
UTTRA2 ( <i>L</i> ) ( <i>M</i> )	UTTA2 ( <i>L</i> ) ( <i>M</i> )

(*L*) is channel length in mm with 1 decimal place (up to 3600.0 mm); butt-join channel for unlimited travel lengths.

(*M*) is custom Hole to End space for one end in mm with 1 decimal place (9.0 to 72.0 mm). Leave blank for default value on both ends.

Example: UTTRA1 2160.0 20.5 Example: UTTA2 1030.5

## To Calculate Hole to End Space (Dimension M) Step 1: Calculate number of hole spaces

-			
(Length in mr		f hole spaces (round do	
80	to r	nearest whole number)	)
X = 14	X = 16	X = 18	
(size 0)	(size 1)	(size 2)	

### Step 2: Calculate sum of end spaces

Length in mm - (# of spaces :	x 80) = Sum of end
2	lengths

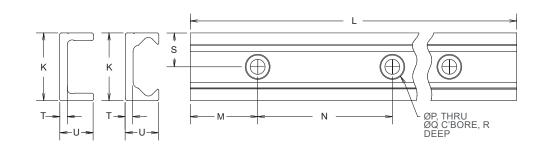
# Step 3: Calculate M

 $\frac{\text{By default } M = (\text{Sum of end spaces})}{2}$ 

If specifying a custom *M*, the other end space is (Sum of end spaces) - (Specified end space *M*).

# **PW SERIES**

# Channel

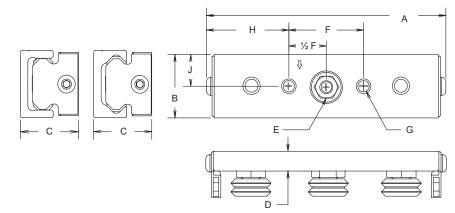


# Dimensions

SIZE	CHANNEL	STOCK CODE	к	L*	M**	N	P	Q	R	S	т	U	RECOMMENDED FASTENER
0	90° Vee	UTTA0	.787 [20.00]	141.732 ± .079 Max. [3600 ± 2 Max.]	Use Formula	3.150 [80.00]	.189 [4.80]	.325 [8.26]	.118 [3.00]	.394 [10.00	.158 [4.00]	.433 [11.00]	M4
0	Crown	UTTRA0	.787 [20.00]	141.732 ± .079 Max. [3600 ± 2 Max.]	on Page 8 to	3.150 [80.00]	.189 [4.80]	.325 [8.26]	.118 [3.00]	.394 [10.00]	.158 [4.00]	.433 [11.00]	Low Head Cap Screw
	90° Vee	UTTA1	1.024 [26.00]	141.732 ± .079 Max. [3600 ± 2 Max.]	Calculate	3.150 [80.00]	.228 [5.79]	.393 [9.98]	.110 [2.79]	.512 [13.00]	.158 [4.00]	.591 [15.00]	M5
'	Crown	UTTRA1	1.024 [26.00]	141.732 ± .079 Max. [3600 ± 2 Max.]	Custom End	3.150 [80.00]	.228 [5.79]	.393 [9.98]	.110 [2.79]	.512 [13.00]	.158 [4.00]	.591 [15.00]	Low Head Cap Screw
-	90° Vee	UTTA2	1.575 [40.00]	141.732 ± .079 Max. [3600 ± 2 Max.]	Spacing Possible	3.150 [80.00]	.347 [8.81]	.561 [14.25]	.120 [3.05]	.788 [20.00]	.177 [4.50]	.777 [19.74]	M8
2	Crown	UTTRA2	1.575 [40.00]	141.732 ± .079 Max. [3600 ± 2 Max.]	(9.0 to 72.0 mm)	3.150 [80.00]	.347 [8.81]	.561 [14.25]	.120 [3.05]	.788 [20.00]	.177 [4.50]	.777 [19.74]	Low Head Cap Screw

\*Standard cut-to-length tolerance +/- 0.06" [1.524 mm] \*\*Hole end spacing tolerance +/- 0.03" [0.762 mm]

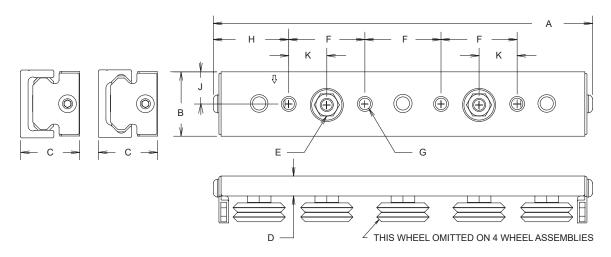
# **3 Wheel Plate**



Dim	ensions												
SIZE	WHEEL STYLE	STOCK CODE	# WHEELS	А	B	с	D	E	F	G	н	J	WHEEL WRENCH
0	90° Vee	UTOWPAP	3	3.144 [79.86]	.709 [18.00]	.866 [22.00]	.310 [7.87]	8MM SOCKET	.866 [22.00]	M4 X 0.7	1.139 [28.93]	.355 [9.02]	BAW0
U	Crown	UTOWPAPR	3	3.144 [79.86]	.709 [18.00]	.866909 [22.00 - 23.09]	.310 [7.87]	8MM SOCKET	.866 [22.00]	M4 X 0.7	1.139 [28.93]	.355 [9.02]	BAWU
	90° Vee	UT1WPAP	3	4.467 [113.46]	.945 [24.00]	1.036 [26.31]	.347 [8.81]	10MM SOCKET	.1575 [40.00]	M6 X 1.0	1.446 [36.73]	.472 [12.00]	BAW1
'	Crown	UT1WPAPR	3	4.467 [113.46]	.945 [24.00]	1.024 - 1.087 [26.00 - 27.61]	.347 [8.81]	10MM SOCKET	.1575 [40.00]	M6 X 1.0	1.446 [36.73]	.472 [12.00]	DAVVI
2	90° Vee	UT2WPAP	3	5.675 [144.15]	1.496 [38.00]	1.377 [34.98]	.464 [11.79]	13MM SOCKET	1.772 [45.00]	M8 X 1.25	1.952 [49.58]	.748 [19.00]	DAM/2
2	Crown	UT2WPAPR	3	5.675 [144.15]	1.496 [38.00]	1.366 - 1.472 [34.70 - 37.39]	.464 [11.79]	13MM SOCKET	1.772 [45.00]	M8 X 1.25	1.952 [49.58]	.748 [19.00]	BAW2

Dimensions are shown in inch and [millimeter] values Drawings are not to scale

# 4 and 5 Wheel Plate



Dim	ensions								1					
SIZE	WHEEL STYLE	STOCK CODE	# WHEELS	A	В	с	D	E	F	G	н	J	к	WHEEL WRENCH
	0001/0	UTOWPAP-4A	4	4.718 [119.84]	.709 [18.00]	.866 [22.00]	.310 [7.87]	8MM SOCKET	.866 [22.00]	M4 X 0.7	1.060 [26.92]	.355 [9.02]	.433 [11.00]	
	90° Vee	UTOWPAP-5A	5	4.718 [119.84]	.709 [18.00]	.866 [22.00]	.310 [7.87]	8MM SOCKET	.866 [22.00]	M4 X 0.7	1.060 [26.92]	.355 [9.02]	.433 [11.00]	DAVAG
0	<b>C</b>	UT0WPAPR-4A	4	4.718 [119.84]	.709 [18.00]	.866909 [22.00 - 23.09]	.310 [7.87]	8MM SOCKET	.866 [22.00]	M4 X 0.7	1.060 [26.92]	.355 [9.02]	.433 [11.00]	BAW0
	Crown	UT0WPAPR-5A	5	4.718 [119.84]	.709 [18.00]	.866909 [22.00 - 23.09]	.310 [7.87]	8MM SOCKET	.866 [22.00]	M4 X 0.7	1.060 [26.92]	.355 [9.02]	.433 [11.00]	-
	0001/0	UT1WPAP-4A	4	6.553 [166.45]	.945 [24.00]	1.036 [26.31]	.347 [8.81]	10MM SOCKET	1.378 [35.00]	M6 X 1.0	1.210 [30.73]	.472 [12.00]	.807 [20.50]	
	90° Vee	UT1WPAP-5A	5	6.553 [166.45]	.945 [24.00]	1.036 [26.31]	.347 [8.81]	10MM SOCKET	1.378 [35.00]	M6 X 1.0	1.210 [30.73]	.472 [12.00]	.807 [20.50]	
1	-	UT1WPAPR-4A	4	6.553 [166.45]	.945 [24.00]	1.024 - 1.087 [26.00 - 27.61]	.347 [8.81]	10MM SOCKET	1.378 [35.00]	M6 X 1.0	1.210 [30.73]	.472 [12.00]	.807 [20.50]	BAW1
	Crown	UT1WPAPR-5A	5	6.553 [166.45]	.945 [24.00]	1.024 - 1.087 [26.00 - 27.61]	.347 [8.81]	10MM SOCKET	1.378 [35.00]	M6 X 1.0	1.210 [30.73]	.472 [12.00]	.807 [20.50]	-
	0001/	UT2WPAP-4A	4	8.852 [224.16]	1.496 [38.00]	1.377 [34.98]	.464 [11.79]	13MM SOCKET	1.772 [45.00]	M8 X 1.25	1.755 [44.58]	.748 [19.00]	.866 [22.50]	
	90° Vee	UT2WPAP-5A	5	8.852 [224.16]	1.496 [38.00]	1.377 [34.98]	.464 [11.79]	13MM SOCKET	1.772 [45.00]	M8 X 1.25	1.755 [44.58]	.748 [19.00]	.866 [22.50]	DANA/D
2	Crown	UT2WPAPR-4A	4	8.852 [224.16]	1.496 [38.00]	1.366 - 1.472 [34.70 - 37.39]	.464 [11.79]	13MM SOCKET	1.772 [45.00]	M8 X 1.25	1.755 [44.58]	.748 [19.00]	.866 [22.50]	BAW2
	Crown	UT2WPAPR-5A	5	8.852 [224.16]	1.496 [38.00]	1.366 - 1.472 [34.70 - 37.39]	.464 [11.79]	13MM SOCKET	1.772 [45.00]	M8 X 1.25	1.755 [44.58]	.748 [19.00]	.866 [22.50]	

Dimensions are shown in inch and [millimeter] values Wheel plate is representative of both DualVee wheels and MadeWell crown rollers Drawings are not to scale

# SW SERIES

The UtiliTrak<sup>®</sup> SW Series are linear bearings with a wide variety of steel and stainless steel DualVee<sup>®</sup> guide wheels and MadeWell<sup>®</sup> crown rollers, and matching precision ground channels designed to withstand heavy load capacity requirements in compact spaces and where challenging environmental conditions such as washdown, or high contamination or debris exist.

# **Design Benefits**

- Medium to heavy duty applications
- Ease of installation
- High speed capacity
- Smooth anti-friction operation
- Low noise
- Vibration-resistant wheel plate option NEW
- Eccentric bearing for easy wheel plate adjustment
- Tolerates up to 7° of angular misalignment
- Butt-joining drawn and extruded channel for unlimited travel lengths
- Special bearing options to suit the environment

### **Key Industries**

- Aeronautical
- Cutting, Slicing, & Slitting
- Food Processing
- Medical
- Packaging
- Welding
- Pharmaceutical
- Search, Detection, & Scanning
- Transportation

### **Application Examples**

- Adjustable seats
- Equipment trays and slide-outs
- Adjustable position & lock mechanisms
- Material processing & handling equipment

For instructions regarding mounting and orientation, life estimation, preloading, and maintenance, see the UtiliTrak section of the Technical Data catalog.





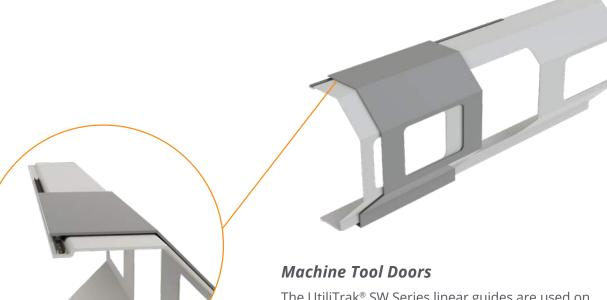


Crown Roller

Vee Wheel

		CROWN	90° VEE
	Compatible Channel	C Channel	90° Vee
	Compatible Wheel Plate	Crown Roller	90° Vee
	Loading Direction	Radial Only	Axial and Radial
	Optional Brake	Yes	Yes
	Available Sizes	1, 2, 3	1, 2, 3
	Material(s)	Carbon Steel	Carbon Steel
	Standard Coating(s)	Polyurethane Paint Black Oxide	Polyurethane Paint Black Oxide
	Hardened	53 HR <sub>c</sub>	53 HR <sub>c</sub>
)	Finish	Precision Ground	Precision Ground
	# of Wheels	3, 4, 5	3, 4, 5
	Bearings	Double Row Angular Contact	Double Row Angular Contact
	Wheel Material	Carbon Steel	Carbon Steel Stainless Steel
	Material Grade	52100	52100 or 440C
	Max. Angular Misalignment	+/- 7°	0°
	Vibration-Resistant Lock Nut	Optional	Optional
	Wheel Bottom Hex Feature (Size 2 and 3)	Optional	Optional
	Preloaded Adjustment Hex	Inch	Inch
	Lubrications	Molded Nylon End Caps	Molded Nylon End Caps
	Wheel Protection	Sealed	Shielded Seal/Shield Washdown
	Wheel Versions	Carbon Steel	Carbon Steel Corrosion Resistant Food/Pharma High/Low Temp. Vacuum Washdown

# **Application Examples**



The UtiliTrak<sup>®</sup> SW Series linear guides are used on the sheet metal door structure of a machine tool. Several wheel plates are attached to the large structure to provide smooth and reliable motion within the debris contaminated environment.

# Spindle Assembly

The UtiliTrak<sup>®</sup> SW Series can be used on the vertical z-axis of a CNC routing machine to guide the routing spindle. The machine utilizes a combination of channel profiles to prevent binding in the spindle assembly with a vee channel with vee guide wheels on one side, and a C channel with crown rollers on the opposite side.



**Wheel Plate Max Load Capacity** See the Technical Data catalog page 24 - 26 for sizing/selection and life estimation.

	# OF	STOCK CODE*	MASS	RADI	AL L <sub>R</sub>	AXIA	AL L <sub>A</sub>	PITC	CH M <sub>P</sub>	YAI	V M <sub>y</sub>	ROL	L M <sub>R</sub>
SIZE	WHEELS		(G)	(N)	(LBF)	(N)	(LBF)	(N-M)	(LBF-FT)	(N-M)	(LBF-FT)	(N-M)	(LBF-FT)
	3	UT1WPA	114	2440	549	719	162	18	13.3	30.5	22.5	7.0	5.2
1	4	UT1WPA-4A	163	2440	549	862	194	32.3	23.8	45.8	33.8	9.8	7.2
	5	UT1WPA-5A	181	2900	652	1014	228	32.3	23.8	45.8	33.8	12.6	9.3
	3	UT1WPAX	114	2440	549	719	162	18	13.3	30.5	22.5	7.0	5.2
1	4	UT1WPAX-4A	163	2440	549	862	194	32.3	23.8	45.8	33.8	9.8	7.2
	5	UT1WPAX-5A	181	2900	652	1014	228	32.3	23.8	45.8	33.8	12.6	9.3
	3	UT1SSXWPA	114	1952	439	575	129	14.4	10.6	24.4	18	5.6	4.1
1	4	UT1SSXWPA-4A	163	1952	439	690	155	25.8	19.1	36.6	27	7.8	5.8
	5	UT1SSXWPA-5A	181	2318	522	811	182	25.8	19.1	36.6	27	10.1	7.5
	3	UT1SS227WPA	114	1952	439	575	129	14.4	10.6	24.4	18	5.6	4.1
1	4	UT1SS227WPA-4A	163	1952	439	690	155	25.8	19.1	36.6	27	7.8	5.8
	5	UT1SS227WPA-5A	181	2318	522	811	182	25.8	19.1	36.6	27	10.1	7.5
	3	UT1SS300WPA	114	1952	439	575	129	14.4	10.6	24.4	18	5.6	4.1
1	4	UT1SS300WPA-4A	163	1952	439	690	155	25.8	19.1	36.6	27	7.8	5.8
	5	UT1SS300WPA-5A	181	2318	522	811	182	25.8	19.1	36.6	27	10.1	7.5
	3	UT2WPAXS	330	5300	1191	1475	332	58	42.8	100	73.8	22.7	16.7
2	4	UT2WPAXS-4A	479	5300	1191	1770	398	107	78.9	150	110.6	31.8	23.5
	5	UT2WPAXS-5A	543	6300	1416	2080	468	107	78.9	150	110.6	40.9	30.2
	3	UT2SSXWPA	330	4240	953	1180	265	46.4	34.2	80	59	18.2	13.4
2	4	UT2SSXWPA-4A	479	4240	953	1416	318	85.6	63.2	120	88.6	25.4	18.8
	5	UT2SSXWPA-5A	543	5040	1133	1664	374	85.6	63.2	120	88.6	32.7	24.1
	3	UT2SS227WPA	330	4240	953	1180	265	46.4	34.2	80	59	18.2	13.4
2	4	UT2SS227WPA-4A	479	4240	953	1416	318	85.6	63.2	120	88.6	25.4	18.8
	5	UT2SS227WPA-5A	543	5040	1133	1664	374	85.6	63.2	120	88.6	32.7	24.1
	3	UT2SS300WPA	330	4240	953	1180	265	46.4	34.2	80	59	18.2	13.4
2	4	UT2SS300WPA-4A	479	4240	953	1416	318	85.6	63.2	120	88.6	25.4	18.8
	5	UT2SS300WPA-5A	543	5040	1133	1664	374	85.6	63.2	120	88.6	32.7	24.1
	3	UT3WPAXS	943	11800	2653	5100	1147	229	168.9	346	255.2	118	87
3	4	UT3WPAXS-4A	1370	11800	2653	6122	1376	408	300.9	519	382.8	165.2	121.8
	5	UT3WPAXS-5A	1533	14040	3156	7140	1605	408	300.9	519	382.8	212.4	156.7
	3	UT3SS227WPA	943	9440	2122	4080	917	183.2	135.2	276.8	204.3	94.4	69.7
3	4	UT3SS227WPA-4A	1370	9440	2122	4898	1101	326.4	240.9	415.2	306.4	132.2	97.5
	5	UT3SS227WPA-5A	1533	11210	2525	5711	1284	326.4	240.9	415.2	306.4	169.9	125.4
	3	UT3SS300WPA	943	9440	2122	4080	917	183.2	135.2	276.8	204.3	94.4	69.7
3	4	UT3SS300WPA-4A	1370	9440	2122	4898	1101	326.4	240.9	415.2	306.4	132.2	97.5
3	5	UT3SS300WPA-5A	1533	11210	2525	5711	1284	326.4	240.9	415.2	306.4	169.9	125.4

\*Stock Code Key:

UTnWPAX: Carbon, Sealed UTnWPA: Carbon, Shielded UTnWPAXS: Carbon, Seal/Shield UTnSSXWPA: Stainless, Sealed UTnSS227: Stainless, High Temp UTnSS300: Stainless, Low Temp

For vibration-resistant lock nut option, replace "WPA" with "WPLA" in stock code. Prevailing torque lock nuts are 304 stainless steel, resistant to high/low temp. and chemicals.

# Wheel Plate Max Load Capacity

See the Technical Data catalog page 24 - 26 for sizing/selection and life estimation.

		# OF		MASS	RAD	AL L <sub>R</sub>	AXI	AL L <sub>A</sub>	PITC	CH M,	YA	N M <sub>y</sub>	ROLL M <sub>R</sub>	
	SIZE	WHEELS	STOCK CODE*	(G)	(N)	(LBF)	(N)	(LBF)	(NM)	(LBF-FT)	(NM)	(LBF-FT)	(NM)	(LBF-FT)
		3	UT1WPAR	121	2440	549	0	0	0	0	30.5	22.5	0	0
	1	4	UT1WPAR-4A	195	2440	549	0	0	0	0	45.8	33.8	0	0
		5	UT1WPAR-5A	220	2900	652	0	0	0	0	45.8	33.8	0	0
		3	UT1WPAXR	121	2440	549	0	0	0	0	30.5	22.5	0	0
	1	4	UT1WPAXR-4A	195	2440	549	0	0	0	0	45.8	33.8	0	0
Ζ		5	UT1WPAXR-5A	220	2900	652	0	0	0	0	45.8	33.8	0	0
CROWN	2	3	UT2WPAR	320	5300	1191	0	0	0	0	100	73.8	0	0
ຽ		4	UT2WPAR-4A	522	5300	1191	0	0	0	0	150	110.6	0	0
		5	UT2WPAR-5A	598	6300	1416	0	0	0	0	150	110.6	0	0
		3	UT2WPAXR	320	5300	1191	0	0	0	0	100	73.8	0	0
	2	4	UT2WPAXR-4A	522	5300	1191	0	0	0	0	150	110.6	0	0
		5	UT2WPAXR-5A	598	6300	1416	0	0	0	0	150	110.6	0	0
		3	UT3WPAXR	910	11800	2653	0	0	0	0	346	255.2	0	0
	3	4	UT3WPAXR-4A	1478	11800	2653	0	0	0	0	519	382.8	0	0
		5	UT3WPAXR-5A	1665	14040	3156	0	0	0	0	519	382.8	0	0

\*For vibration-resistant lock nut option, replace "WPA" with "WPLA" in stock code.

# **Clear Anodized Channel Stock Code**

C Channel	90 ° Vee
UTTRS1 ( <i>L</i> ) ( <i>M</i> )	UTTS1 ( <i>L</i> ) ( <i>M</i> )
UTTRS2 ( <i>L</i> ) ( <i>M</i> )	UTTS2 ( <i>L</i> ) ( <i>M</i> )
UTTRS3 ( <i>L</i> ) ( <i>M</i> )	UTTS3 ( <i>L</i> ) ( <i>M</i> )

(L) is channel length in mm with 1 decimal place (up to 3600.0 mm); butt-join channel for unlimited travel lengths.

(*M*) is custom Hole to End space for one end in mm with 1 decimal place (9.0 to 72.0 mm). Leave blank for default value on both ends.

Example: UTTRS1 2160.0 20.5 Example: UTTS2 1030.5

# To Calculate Hole to End Space (Dimension M) Step 1: Calculate number of hole spaces

(Length in mm	- X) = # of	hole spaces (round down
80	to ne	earest whole number)
X = 16	X = 18	X = 20

### (size 1) (size 2) (size 3)

# Step 2: Calculate sum of end spaces

Length in mm - (# of spaces x 80	) = Sum of end
2	lengths

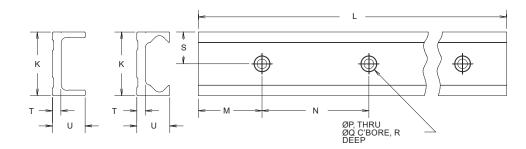
### Step 3: Calculate M

By default *M* = (Sum of end spaces) 2

If specifying a custom *M*, the other end space is (Sum of end spaces) - (Specified end space *M*).

# SW SERIES

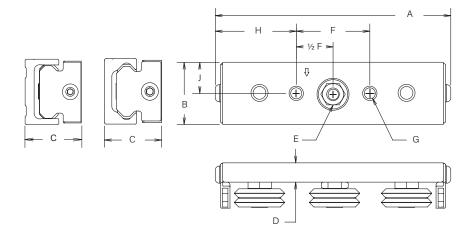
# Channel



Dime	ensions												
SIZE	CODE		L*	M**	N	P	Q	R	S	т	U	RECOMMENDED FASTENER	
	90° Vee	UTTS1	1.024 [26.00]	141.732 ± .079 Max. [3600 ± 2 Max.]	Use Formula	3.150 [80.00]	.228 [5.79]	.393 [9.98]	.110 [2.79]	.512 [13.00]	.158 [4.00]	.591 [15.00]	M5
1	Crown	UTTRS1	1.024 [26.00]	141.732 ± .079 Max. [3600 ± 2 Max.]	on Page 14 to	3.150 [80.00]	.228 [5.79]	.393 [9.98]	.110 [2.79]	.512 [13.00]	.158 [4.00]	.591 [15.00]	Low Head Cap Screw
2	90° Vee	UTTS2	1.575 [40.00]	141.732 ± .079 Max. [3600 ± 2 Max.]	Custom	3.150 [80.00]	.347 [8.81]	.561 [14.25]	.120 [3.05]	.788 [20.00]	.177 [4.50]	.777 [19.74]	M8
2	Crown	UTTRS2	1.575 [40.00]	141.732 ± .079 Max. [3600 ± 2 Max.]	Custom End Spacing	3.150 [80.00]	.347 [8.81]	.561 [14.25]	.120 [3.05]	.788 [20.00]	.177 [4.50]	.777 [19.74]	Low Head Cap Screw
-	90° Vee	UTTS3	2.284 [58.00]	141.732 ± .079 Max. [3600 ± 2 Max.]	Possible (9.0 to	3.150 [80.00]	.347 [8.81]	.561 [14.25]	.197 [5.00]	1.142 [29.00]	.315 [8.00]	1.180 [29.97]	M8
3	Crown	UTTRS3	2.284 [58.00]	141.732 ± .079 Max. [3600 ± 2 Max.]	72.0 mm)	3.150 [80.00]	.347 [8.81]	.561 [14.25]	.197 [5.00]	1.142 [29.00]	.315 [8.00]	1.180 [29.97]	Low Head Cap Screw

\*Standard cut-to-length tolerance +/- 0.06" [1.524 mm] \*\*Hole end spacing tolerance +/- 0.03" [0.762 mm]

# **3 Wheel Plate**

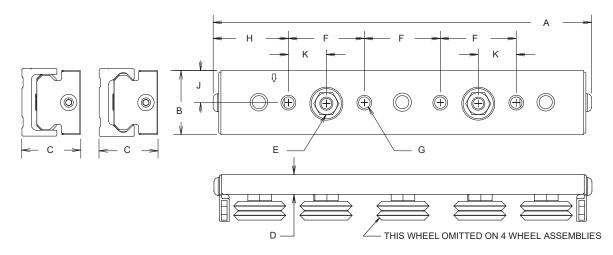


Din	nensions												
SIZE	WHEEL STYLE	STOCK CODE	# WHEELS	A	В	с	D	E*	F	G	н	J	WHEEL WRENCH
1	90° Vee	Various	3	4.467 [113.46]	.945 [24.00]	1.036 [26.31]	.347 [8.81]	10MM SOCKET	.1575 [40.00]	M6 X 1.0	1.446 [36.73]	.472 [12.00]	BAW1
	Crown	Wheel	3	4.467 [113.46]	.945 [24.00]	1.024 - 1.087 [26.00 - 27.61]	.347 [8.81]	10MM SOCKET	.1575 [40.00]	M6 X 1.0	1.446 [36.73]	.472 [12.00]	DAVVI
2 -	90° Vee	and Materials	3	5.675 [144.15]	1.496 [38.00]	1.377 [34.98]	.464 [11.79]	13MM SOCKET	1.772 [45.00]	M8 X 1.25	1.952 [49.58]	.748 [19.00]	DAWO
	Crown	are	3	5.675 [144.15]	1.496 [38.00]	1.366 - 1.472 [34.70 - 37.39]	.464 [11.79]	13MM SOCKET	1.772 [45.00]	M8 X 1.25	1.952 [49.58]	.748 [19.00]	BAW2
	90° Vee	See Page 13	3	7.926 [201.32]	2.165 [55.00]	1.968 [50.00]	.620 [15.75]	15MM SOCKET*	2.362 [60.00]	M10 X 1.5	2.782 [70.66]	1.083 [27.50]	DAW2
3	Crown	Options.	3	7.926 [201.32]	2.165 [55.00]	1.846 - 2.102 [46.89 - 53.40]	.620 [15.75]	15MM SOCKET*	2.362 [60.00]	M10 X 1.5	2.782 [70.66]	1.083 [27.50]	BAW3

Dimensions are shown in inch and [millimeter] values

Drawings are not to scale \*Size 3 wheel plate assemblies with vibration-resistant lock nuts ("WPLA" in stock code) use 17MM SOCKET

# 4 and 5 Wheel Plate



Dim	nensions			I										
SIZE	WHEEL STYLE	STOCK CODE	# WHEELS	A	B	с	D	<b>E</b> *	F	G	н	J	к	WHEEL WRENCH
	0001/0		4	6.553 [166.45]	.945 [24.00]	1.036 [26.31]	.347 [8.81]	10MM SOCKET	1.378 [35.00]	M6 X 1.0	1.210 [30.73]	.472 [12.00]	.807 [20.50]	
	90° Vee		5	6.553 [166.45]	.945 [24.00]	1.036 [26.31]	.347 [8.81]	10MM SOCKET	1.378 [35.00]	M6 X 1.0	1.210 [30.73]	.472 [12.00]	.807 [20.50]	DANA
1	Crown		4	6.553 [166.45]	.945 [24.00]	1.024 - 1.087 [26.00 - 27.61]	.347 [8.81]	10MM SOCKET	1.378 [35.00]	M6 X 1.0	1.210 [30.73]	.472 [12.00]	.807 [20.50]	- BAW1
	Crown		5	6.553 [166.45]	.945 [24.00]	1.024 - 1.087 [26.00 - 27.61]	.347 [8.81]	10MM SOCKET	1.378 [35.00]	M6 X 1.0	1.210 [30.73]	.472 [12.00]	.807 [20.50]	
	90° Vee W Ver a Mat Avai	Various Wheel Versions and Materials are Available. See	4	8.852 [224.16]	1.496 [38.00]	1.377 [34.98]	.464 [11.79]	13MM SOCKET	1.772 [45.00]	M8 X 1.25	1.755 [44.56]	.748 [19.00]	.866 [22.50]	
2			5	8.852 [224.16]	1.496 [38.00]	1.377 [34.98]	.464 [11.79]	13MM SOCKET	1.772 [45.00]	M8 X 1.25	1.755 [44.56]	.748 [19.00]	.866 [22.50]	- BAW2
2			4	8.852 [224.16]	1.496 [38.00]	1.366 - 1.472 [34.70 - 37.39]	.464 [11.79]	13MM SOCKET	1.772 [45.00]	M8 X 1.25	1.755 [44.56]	.748 [19.00]	.866 [22.50]	DAWZ
	Crown	Page 13 Options.	5	8.852 [224.16]	1.496 [38.00]	1.366 - 1.472 [34.70 - 37.39]	.464 [11.79]	13MM SOCKET	1.772 [45.00]	M8 X 1.25	1.755 [44.56]	.748 [19.00]	.866 [22.50]	
	90° Vee		4	12.493 [317.32]	2.165 [55.00]	1.968 [50.00]	.620 [15.75]	15MM SOCKET*	2.362 [60.00]	M10 X 1.5	2.704 [68.68]	1.083 [27.50]	1.181 [30.00]	
3 -	90 Vee	_	5	12.493 [317.32]	2.165 [55.00]	1.968 [50.00]	.620 [15.75]	15MM SOCKET*	2.362 [60.00]	M10 X 1.5	2.704 [68.68]	1.083 [27.50]	1.181 [30.00]	BAW3
	Crown		4	12.493 [317.32]	2.165 [55.00]	1.846 - 2.102 [46.89 - 53.40]	.620 [15.75]	15MM SOCKET*	2.362 [60.00]	M10 X 1.5	2.704 [68.68]	1.083 [27.50]	1.181 [30.00]	
		Crown	5	12.493 [317.32]	2.165 [55.00]	1.846 - 2.102 [46.89 - 53.40]	.620 [15.75]	15MM SOCKET*	2.362 [60.00]	M10 X 1.5	2.704 [68.68]	1.083 [27.50]	1.181 [30.00]	

Dimensions are shown in inch and [millimeter] values Wheel plate is representative of both DualVee wheels and MadeWell crown rollers Drawings are not to scale \*Size 3 wheel plate assemblies with vibration-resistant lock nuts ("WPLA" in stock code) use 17MM SOCKET

# VC SERIES

The UtiliTrak<sup>®</sup> VC is a compact hybrid design of the DualVee<sup>®</sup> wheels and MadeWell<sup>®</sup> crown rollers perfect for commercial applications. It highlights the ease of selection by seamlessly pairing with both vee and C channel profiles to fit your application.

# **Design Benefits**

- Ease of installation
- Versatility between vee and C channel profiles
- High speed capacity
- Very low rolling friction operation
- Low noise
- Vibration-resistant wheel plate option NEW
- Eccentric bearing for easy wheel plate adjustment
- Tolerates up to 2° of angular misalignment
- Butt-joining precision ground channel for unlimited travel lengths

## **Key Industries**

- Aerospace
- Architecture
- Automotive
- Medical
- Packaging
- Printing

### **Application Examples**

- Sliding doors, windows, & partitions
- Adjustable and movable walls and furniture for reduced square footage
- Adjustable seats
- Equipment trays and slide-outs
- Material handling equipment
- Product indexing, cartoning and packaging

For instructions regarding mounting and orientation, life estimation, preloading, and maintenance, see the UtiliTrak section of the Technical Data catalog.







C Channel

Vee Channel

		90° VEE / CROWN ROLLER
	Compatible Channel	90° Vee & C Channel
EW	Compatible Wheel Plate	90° Vee / C Channel
VERVIEN	Loading Direction	Vee = Axial and Radial Crown = Radial Only
0	Optional Brake	Yes
	Available Sizes	1, 2, 3
-	Material(s)	Carbon Steel
VNE	Standard Coating(s)	Polyurethane Paint
CHANNE	Hardened	Yes
•	Finish	Precision Ground
	# of Wheels	3, 4, 5
	Bearing	Double Row Angular Contact
	Wheel Material	Carbon Steel
11.	Wheel Material Grade	52100
NHEEL PLATE	Max. Angular Misalignment	+/- 2°
EL P	Vibration-Resistant Lock Nut	Optional
NHE	Wheel Bottom Hex Feature	Not Available
	Preloaded Adjustment Hex	Metric
	Lubrications	Molded Nylon End Caps
	Wheel Protection	Sealed
	Wheel Versions	Carbon Steel

# VC SERIES

# **Application Examples**

# **Medical Table**

The UtiliTrak<sup>®</sup> VC Series is a compact solution perfect for applications such as medical tables that need to be able to adjust and move with limited space.

# Workbench

A channel mounted to a workbench acts as a guide when utilizing the wheel plate as a method for pushing material towards a saw. A hand brake is added for manually setting the braking point.

# Wheel Plate Max Load Capacity

See the Technical Data catalog page 24 - 26 for sizing/selection and life estimation.

0175	# 0F		MASS	RADI	AL L <sub>R</sub>	AXIAL L <sub>A</sub>		PITCH M <sub>p</sub>		YAW M <sub>y</sub>		ROLL M <sub>R</sub>	
SIZE	WHEELS	STOCK CODE*	(G)	(N)	(LBF)	(N)	(LBF)	(N-M)	(LBF-FT)	(N-M)	(LBF-FT)	(N-M)	(LBF-FT)
	3	UTVC1XWPA	121	2440	549	719	162	18	13.3	30.5	22.5	7.0	5.2
1	4	UTVC1XWPA4	173	2440	549	862	194	32.3	23.8	45.8	33.8	9.8	7.2
	5	UTVC1XWPA5	193	2900	652	1014	228	32.3	23.8	45.8	33.8	12.6	9.3
	3	UTVC2XWPA	348	5300	1191	1475	332	58	42.8	100	73.8	22.7	16.7
2	4	UTVC2XWPA4	503	5300	1191	1770	398	107	78.9	150	110.6	31.8	23.5
	5	UTVC2XWPA5	573	6300	1416	2080	468	107	78.9	150	110.6	40.9	30.2
	3	UTVC3XWPA	999	11800	2653	5100	1147	229	168.9	346	255.2	118	87
3	4	UTVC3XWPA4	1446	11800	2653	6122	1376	408	300.9	519	382.8	165.2	121.8
	5	UTVC3XWPA5	1632	14040	3156	7140	1605	408	300.9	519	382.8	212.4	156.7

\*For vibration-resistant lock nut option, replace "WPA" with "WPLA" in stock code. Prevailing torque lock nuts are 304 stainless steel, resistant to high/low temp. & chemicals.



# **Clear Anodized Channel Stock Code**

C Channel	90° Vee
UTTRS1 ( <i>L</i> ) ( <i>M</i> )	UTTS1 ( <i>L</i> ) ( <i>M</i> )
UTTRS2 ( <i>L</i> ) ( <i>M</i> )	UTTS2 ( <i>L</i> ) ( <i>M</i> )
UTTRS3 ( <i>L</i> ) ( <i>M</i> )	UTTS3 ( <i>L</i> ) ( <i>M</i> )

(*L*) is channel length in mm with 1 decimal place (up to 3600.0 mm); butt-join channel for unlimited travel lengths.

(*M*) is custom Hole to End space for one end in mm with 1 decimal place (9.0 to 72.0 mm). Leave blank for default value on both ends.

Example: UTTRS1 2160.0 20.5 Example: UTTS2 1030.5

### To Calculate Hole to End Space (Dimension M) Step 1: Calculate number of hole spaces

(Length in mn		f hole spaces (round down	
80	tor	nearest whole number)	
X = 16	X = 18	X = 20	
(size 1)	(size 2)	(size 3)	

### Step 2: Calculate sum of end spaces

 $\frac{\text{Length in mm} - (\# \text{ of spaces x 80})}{2} = \text{Sum of end}$ 

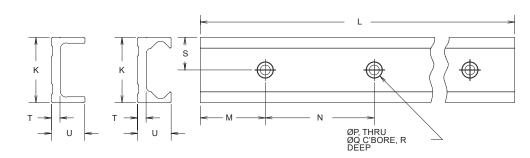
### Step 3: Calculate M

 $\frac{\text{By default } M = (\text{Sum of end spaces})}{2}$ 

If specifying a custom *M*, the other end space is (Sum of end spaces) - (Specified end space *M*).

# **VC SERIES**

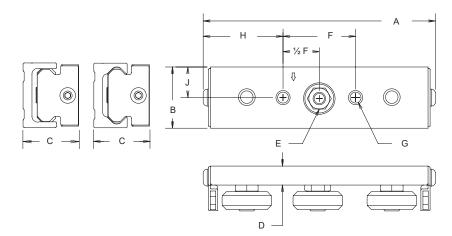
# Channel



Dime	ensions							I					
SIZE	CHANNEL	STOCK CODE	к	L*	M**	N	P	Q	R	S	т	U	RECOMMENDED FASTENER
1	90° Vee	UTTS1	1.024 [26.00]	141.732 ± .079 Max. [3600 ± 2 Max.]	Use Formula	3.150 [80.00]	.228 [5.79]	.393 [9.98]	.110 [2.79]	.512 [13.00]	.158 [4.00]	.591 [15.00]	M5
1	Crown	UTTRS1	1.024 [26.00]	141.732 ± .079 Max. [3600 ± 2 Max.]	on Page 19 to	3.150 [80.00]	.228 [5.79]	.393 [9.98]	.110 [2.79]	.512 [13.00]	.158 [4.00]	.591 [15.00]	Low Head Cap Screw
2	90° Vee	UTTS2	1.575 [40.00]	141.732 ± .079 Max. [3600 ± 2 Max.]	Calculate	3.150 [80.00]	.347 [8.81]	.561 [14.25]	.120 [3.05]	.788 [20.00]	.177 [4.50]	.777 [19.74]	M8
2	Crown	UTTRS2	1.575 [40.00]	141.732 ± .079 Max. [3600 ± 2 Max.]	End	3.150 [80.00]	.347 [8.81]	.561 [14.25]	.120 [3.05]	.788 [20.00]	.177 [4.50]	.777 [19.74]	Low Head Cap Screw
3	90° Vee	UTTS3	2.284 [58.00]	141.732 ± .079 Max. [3600 ± 2 Max.]	Possible (9.0 to	3.150 [80.00]	.347 [8.81]	.561 [14.25]	.197 [5.00]	1.142 [29.00]	.315 [8.00]	1.180 [29.97]	M8
3	Crown	UTTRS3	2.284 [58.00]	141.732 ± .079 Max. [3600 ± 2 Max.]	72.0 mm)	3.150 [80.00]	.347 [8.81]	.561 [14.25]	.197 [5.00]	1.142 [29.00]	.315 [8.00]	1.180 [29.97]	Low Head Cap Screw

\*Standard cut-to-length tolerance +/- 0.06" [1.524 mm] \*\*Hole end spacing tolerance +/- 0.03" [0.762 mm]

# **3 Wheel Plate**

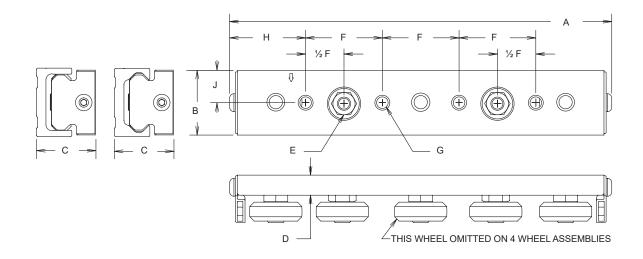


Dim	ensions												I	
SIZE	WHEEL STYLE	STOCK CODE	# WHEELS	A	В	C (IN VEE CHANNEL)	C (IN C CHANNEL)	D	<b>E</b> *	F	G	H	J	WHEEL WRENCH
1	90° Vee/ Crown	UTVC1XWPA	3	4.467 [113.46]	.945 [24.00]	1.036 [26.31]	1.024 - 1.087 [26.00 - 27.61]	.347 [8.81]	10MM SOCKET	.1575 [40.00]	M6 X 1.0	1.446 [36.73]	.472 [12.00]	BAW1
2	90° Vee/ Crown	UTVC2XWPA	3	5.675 [144.15]	1.496 [38.00]	1.377 [34.98]	1.366 - 1.472 [34.70 - 37.39]	.464 [11.79]	13MM SOCKET	1.772 [45.00]	M8 X 1.25	1.952 [49.58]	.748 [19.00]	BAW2
3	90° Vee/ Crown	UTVC3XWPA	3	7.926 [201.32]	2.165 [55.00]	1.968 [50.00]	1.846 - 2.102 [46.89 - 53.40]	.620 [15.75]	15MM SOCKET*	2.362 [60.00]	M10 X 1.5	2.782 [70.66]	1.083 [27.50]	BAW3

Dimensions are shown in inch and [millimeter] values Wheel plate is representative of both DualVee wheels and MadeWell crown rollers Drawings are not to scale

\*Size 3 wheel plate assemblies with vibration-resistant lock nuts ("WPLA" in stock code) use 17MM SOCKET

# 4 and 5 Wheel Plate



Din	nensions					l			I						
SIZE	WHEEL STYLE	STOCK CODE	# WHEELS	A	В	C (IN VEE CHANNEL)	C (IN C CHANNEL)	D	<b>E</b> *	F	G	н	J	к	WHEEL WRENCH
1	90° Vee/	UTVC1XWPA4	4	6.553 [166.45]	.945 [24.00]	1.036 [26.31]	1.024 - 1.087 [26.00 - 27.61]	.347 [8.81]	10MM SOCKET	1.378 [35.00]	M6 X 1.0	1.210 [30.73]	.472 [12.00]	.807 [20.50]	BAW1
'	Crown	UTVC1XWPA5	5	6.553 [166.45]	.945 [24.00]	1.036 [26.31]	1.024 - 1.087 [26.00 - 27.61]	.347 [8.81]	10MM SOCKET	1.378 [35.00]	M6 X 1.0	1.210 [30.73]	.472 [12.00]	.807 [20.50]	BAWI
2	90° Vee/	UTVC2XWPA4	4	8.852 [224.16]	1.496 [38.00]	1.377 [34.98]	1.366 - 1.472 [34.70 - 37.39]	.464 [11.79]	13MM SOCKET	1.772 [45.00]	M8 X 1.25	1.755 [44.56]	.748 [19.00]	.886 [22.50]	BAW2
2	Crown	UTVC2XWPA5	5	8.852 [224.16]	1.496 [38.00]	1.377 [34.98]	1.366 - 1.472 [34.70 - 37.39]	.464 [11.79]	13MM SOCKET	1.772 [45.00]	M8 X 1.25	1.755 [44.56]	.748 [19.00]	.886 [22.50]	BAVVZ
3	90° Vee/	UTVC3XWPA4	4	12.493 [317.32]	2.165 [55.00]	1.968 [50.00]	1.846 - 2.102 [46.89 - 53.40]	.620 [15.75]	15MM SOCKET*	2.362 [60.00]	M10 X 1.5	2.704 [68.68]	1.083 [27.50]	1.181 [30.00]	BAW3
3	Crown	UTVC3XWPA5	5	12.493 [317.32]	2.165 [55.00]	1.968 [50.00]	1.846 - 2.102 [46.89 - 53.40]	.620 [15.75]	15MM SOCKET*	2.362 [60.00]	M10 X 1.5	2.704 [68.68]	1.083 [27.50]	1.181 [30.00]	DAVV3

Dimensions are shown in inch and [millimeter] values Wheel plate is representative of both DualVee wheels and MadeWell crown rollers Drawings are not to scale

\*Size 3 wheel plate assemblies with vibration-resistant lock nuts ("WPLA" in stock code) use 17MM SOCKET

# **CR SERIES**

The UtiliTrak<sup>®</sup> CR Series has been designed and engineered as a corrosion resistant stainless steel guide wheel plate paired with composite channel with aluminum base and polished stainless steel track. It is ideal for medium to heavy duty transport applications where corrosion resistance is required.

# **Design Benefits**

- Medium to heavy duty applications
- Ease of installation
- Corrosion resistant
- Food processing compatible and meets FDA standard
- High speed capacity
- Very low rolling friction operation
- Low noise
- Eccentric bearing for easy wheel plate adjustment
- Butt-joining precision ground channel for unlimited travel lengths

# **Key Industries**

- Food Processing
- Vertical Farming
- Nuclear
- Cutting

# **Application Examples**

- Chicken cutting, slicing, and processing with regular chemical washdowns
- Automated or manual pool cover
- Chemical dipping & coating
- Envelope accumulator





Vee Wheel

		CR Series
		90° VEE
	Compatible Channel	90° Vee
IEW	Compatible Wheel Plate	90° Vee
VERVIEW	Loading Direction	Axial and Radial
0V	Optional Brake	Not Available
	Available Sizes	1, 2, 3
7	Material(s)	Stainless Steel and Aluminum
HANNEI	Standard Coating(s)	Clear Anodized Base, Oiled Channel
HA	Hardened	Yes
G	Finish	Polished
	# of Wheels	3
	Bearing	Double Row Angular Contact
	Wheel Material	Stainless Steel
ΤE	Wheel Material Grade	440C
PLA	Max. Angular Misalignment	0°
VHEEL PLATE	Wheel Bottom Hex Feature	Not Available
S	Preloaded Adjustment Hex	Metric
	Lubrications	Stamped Stainless Steel Center Mounted
	Wheel Protection	Sealed Seal/Shield
	Wheel Versions	Corrosion Resistant

For instructions regarding mounting and orientation, life estimation, preloading, and maintenance, see the UtiliTrak section of the Technical Data catalog.

# CR SERIES

# **Application Examples**

# Envelope Sorter

The UtiliTrak<sup>®</sup> CR Series linear guides are available with long single-piece channel lengths that are ideal for bulk processing and production equipment. This machine uses a parallel pair of CR series linear guides to control the outflow of envelopes and paper products.

# **Chemical Dipping**

UtiliTrak<sup>®</sup> CR Series with corrosion resistant stainless steel components is used as a linear guide for supporting fragile but heavy loads as they are lowered into a barrel of chemicals for a treatment process.

**Wheel Plate Max Load Capacity** See the Technical Data catalog page 24 - 26 for sizing/selection and life estimation.

	WHEEL		MASS	RADI	ALLR	AXI	AL L <sub>A</sub>	PITC	CH M <sub>P</sub>	YA	W M <sub>Y</sub>	ROI	L M <sub>R</sub>
	SIZE	STOCK CODE	(G)	(N)	(LBF)	(N)	(LBF)	(N-M)	(LBF-FT)	(N-M)	(LBF-FT)	(N-M)	(LBF-FT)
STEEL	1	UTCCA1-SS	136	2440	549	719	162	18	13.3	30.5	22.5	7.0	5.2
ILESS 9	2	UTCCA2-SS	385	5300	1191	1475	332	58	42.8	100	73.8	22.7	16.7
STAINLESS	3	UTCCA3-SS	1107	11800	2653	5100	1147	229	168.9	346	255.2	118	87
нын	1	UTCCA1-227	136	1952	439	575	129	14.4	10.6	24.4	18	5.6	4.1
STAINLESS HIGH TEMP	2	UTCCA2-227	385	4240	953	1180	265	46.4	34.2	80	59	18.2	13.4
STAII	3	UTCCA3-227	1107	9440	2122	4080	917	183.2	135.2	276.8	204.3	94.4	69.7



# Track Channel (Composite Assembly): **Clear Anodized Aluminum Base** with Polished Stainless Steel Track

### 90° Vee

Dimensions:

UTCOMP1SS - (Channel length in mm) UTCOMP2SS - (Channel length in mm) UTCOMP3SS - (Channel length in mm)

Example: UTCOMP2SS 1.440

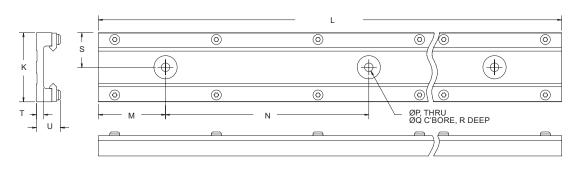


					CR STA	NDARD CHA	NNEL LENGT	н (ММ)					
Size 0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Size 1	190	290	390	490	590	690	790	890	990	1090	2990	3490	N/A
Size 2	240	390	540	690	840	990	1140	1290	1440	1590	2190	2790	3390
Size 3	415	665	915	1165	1415	1665	1915	2165	2415	2665	2915	3165	3415

Channel lengths come in stock lengths and are customizable by application. Butt-joining channel for unlimited travel lengths.

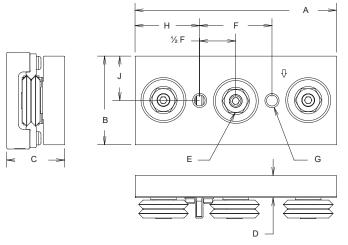
# CR SERIES

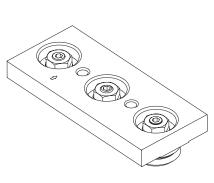
# Channel



Dime	ensions												
SIZE	CHANNEL	STOCK CODE	к	L	М	N	Р	Q	R	S	т	U	RECOMMENDED FASTENER
1	90° Vee	UTCOMP1SS	1.575 [40.00]	137.402 ± .079 Max. [3495 ± 2 Max.]	1.771 [45.00]	3.937 [100.00]	.272 [6.91]	.740 [18.80]	.079 [2.00]	.788 [20.00]	.232 [5.89]	.697 [17.70]	M6 Pan Head Screw
2	90° Vee	UTCOMP2SS	2.362 [60.00]	133.465 ± .079 Max. [3390 ± 2 Max.]	1.771 [45.00]	5.906 [150.00]	.346 [8.79]	1.000 [25.40]	.118 [3.00]	1.181 [30.00]	.287 [7.29]	.839 [21.31]	M8 Pan Head Screw
3	90° Vee	UTCOMP3SS	3.346 [85.00]	134.449 ± .079 Max. [3415 ± 2 Max.]	3.249 [82.52]	9.843 [250.00]	.413 [10.49]	1.125 [28.58]	1.97 [5.00]	1.673 [42.50]	.354 [9.00]	1.162 [29.52]	M10 Pan Head Screw

# **3 Wheel Plate**





Dim	ensions												
SIZE	WHEEL STYLE	STOCK CODE	# WHEELS	A	B	с	D	E	F	G	н	J	WHEEL WRENCH
	Stainless Steel	UTCCA1-SS	3	3.940 [100.00]	1.496 [38.00]	1.102 [28.00]	.398 [10.11]	7MM SOCKET	1.575 [40.00]	M6 X 1.0	1.183 [30.05]	.748 [19.00]	1.5 mm
1	High Temperature Stainless Steel	UTCCA1-227	3	3.940 [100.00]	1.496 [38.00]	1.102 [28.00]	.398 [10.11]	7MM SOCKET	1.575 [40.00]	M6 X 1.0	1.183 [30.05]	.748 [19.00]	Hex
2	Stainless Steel	UTCCA2-SS	3	4.920 [125.00]	2.165 [55.00]	1.417 [36.00]	.540 [13.72]	13MM SOCKET	1.772 [45.00]	M8 X 1.25	1.575 [40.00]	1.083 [27.50]	4 mm
2	High Temperature Stainless Steel	UTCCA2-227	3	4.920 [125.00]	2.165 [55.00]	1.417 [36.00]	.540 [13.72]	13MM SOCKET	1.772 [45.00]	M8 X 1.25	1.575 [40.00]	1.083 [27.50]	Hex
3	Stainless Steel	UTCCA3-SS	3	6.690 [170.00]	3.150 [80.00]	1.968 [50.00]	.772 [19.61]	17MM SOCKET	2.362 [60.00]	M10 X 1.5	2.164 [55.00]	1.575 [40.00]	5 mm
3	High Temperature Stainless Steel	UTCCA3-227	3	6.690 [170.00]	3.150 [80.00]	1.968 [50.00]	.772 [19.61]	17MM SOCKET	2.362 [60.00]	M10 X 1.5	2.164 [55.00]	1.575 [40.00]	Hex

Dimensions are shown in inches and [millimeters] Drawings are not to scale

# Flat Wrench for Eccentric Wheel Adjustment

- Adjusting the wheel plate fit and running feel requires a socket wrench and an open-end flat wrench (SW/PW/VC)
- Instructions for preloading and adjustment can be found in the UtiliTrak section of the Technical Data Catalog

H	SIZE	STOCK CODE	A	B	с	D (MM)	E (INCH)
ENCI	0	BAW0	5.00 [127]	1.25 [31.75]	0.075 [1.9]	11	3/8
WR	1	BAW1	7.00 [177.8]	1.50 [38.1]	0.075 [1.9]	12	7/16
FLAT WRENCH	2	BAW2	8.00 [203.2]	1.75 [44.5]	0.105 [2.7]	14	9/16
	3	BAW3	9.00 [228.6]	2.00 [50.8]	0.135 [3.4]	19	3/4

Dimensions are shown in inches and [millimeters] unless otherwise specified. Drawings are not to scale  $% \left[ \left( {{{\rm{D}}_{\rm{m}}}} \right) \right]$ 

# **Brake Kit for Wheel Plates**

- Compact system ideal for applications where handle arm access space is limited
- Brake system allows steel (VC and SW series) and aluminum (PW series) UtiliTrak<sup>®</sup> wheel plates to be manually locked at any user-selected position on vee and C channel
- Brake block fabricated from aluminum and hard anodized for corrosion resistance, abrasion resistance, good gripping/braking action, and long life

KE	SIZE	STOCK CODE	MASS (G)
BRAK	0	UTOBRKCLMPK	45
	1	UT1BRKCLMPK	54
HAND	2	UT2BRKCLMPK	77
H	3	UT3BRKCLMPK	181

Dimensions													
SIZE	STOCK CODE	A	В	с	D	E	F	G	н	J	К	L	М
0	UTOBRKCLMPK	2.488 [63.2]	5.675 [144.2]	1.042 [26.5]	1.181 [30.0]	1.770 [45.0]	.275 [7.0]	.607 [15.4]	.032 [0.8]	4.180 [106.2]	2.914 [74.0]	2.884 [73.3]	.155 [2.9]
1	UT1BRKCLMPK	2.895 [73.5]	7.174 [182.2]	1.449 [36.8]	1.378 [35.0]	1.770 [45.0]	.275 [7.0]	.736 [18.7]	.181 [4.6]	5.679 [144.2]	4.194 [106.5]	4.164 [105.8]	.137 [3.5]
2	UT2BRKCLMPK	3.450 [87.6]	8.535 [216.8]	2.004 [50.9]	1.575 [40.0]	1.770 [45.0]	.275 [7.0]	1.052 [26.7]	.367 [9.3]	7.040 [178.8]	5/315 [135.0]	5.285 [134.2]	.180 [4.6]
3	UT3BRKCLMPK	4.466 [113.4]	11.925 [303.0]	2.617 [66.5]	2.205 [56.0]	2.480 [63.0]	.433 [11.0]	1.488 [37.8]	.706 [17.9]	9.878 [250.9]	7.480 [190.0]	7.450 [189.2]	.223 [5.7]

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Dimensions are shown in inches and [millimeters] unless otherwise specified. Drawings are not to scale.

# ACCESSORIES

# Bridge Kit

• Includes fasteners and brackets to mount bridge element to UtiliTrak<sup>®</sup> wheel plates

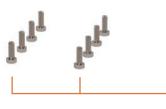
**Carbon Steel** 

Bridge Plate

- UtiliTrak<sup>®</sup> wheel plates and channel are sold separately
- Custom machining on bridge available
- Carbon steel bridge does not include mounting holes

MCS T-Slot Extrusion Bridge Bridge Plate Brackets

	WHEEL PLATE	WHEEL COUNT	CHANNEL SPAN WIDTH RANGE	BRIDGE ELEMENT TYPE	STOCK CODE	
	SIZE		(MM)			
		3	125 to 200	Carbon Steel Plate	UT0BPB3Knnnn.n*	
	•	5	125 to 200	MCS T-Slot Extrusion	UT0BEB3Knnnn.n*	
	0	4 or 5	125 to 300	Carbon Steel Plate	UT0BPB5Knnnn.n*	
		4015	125 to 500	MCS T-Slot Extrusion	UT0BEB5Knnnn.n*	
		3	150 to 300	Carbon Steel Plate	UT1BPB3Knnnn.n*	
STI	1	5	150 to 500	MCS T-Slot Extrusion	UT1BEB3Knnnn.n*	
IE K	'	4 or 5	150 to 450	Carbon Steel Plate	UT1BPB5Knnnn.n*	
BRIDGE KITS		4015	150 to 450	MCS T-Slot Extrusion	UT1BEB5Knnnn.n*	
BR		3	150 to 375	Carbon Steel Plate	UT2BPB3Knnnn.n*	
	2	3	150 to 375	MCS T-Slot Extrusion	UT2BEB3Knnnn.n*	
	2	4 or 5	150 to 600	Carbon Steel Plate	UT2BPB5Knnnn.n*	
		4015	150 10 600	MCS T-Slot Extrusion	UT2BEB5Knnnn.n*	
		2	225 to 500	Carbon Steel Plate	UT3BPB3Knnnn.n*	
	3 -	3	225 to 500	MCS T-Slot Extrusion	UT3BEB3Knnnn.n*	
		4 or 5	225 to 1000	Carbon Steel Plate	UT3BPB5Knnnn.n*	
		4015	225 10 1000	MCS T-Slot Extrusion	UT3BEB5Knnnn.n*	

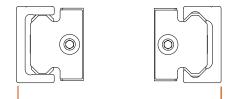


Customized Bridge Plate

Per Application Need

Bridge Plate Mounting Screws

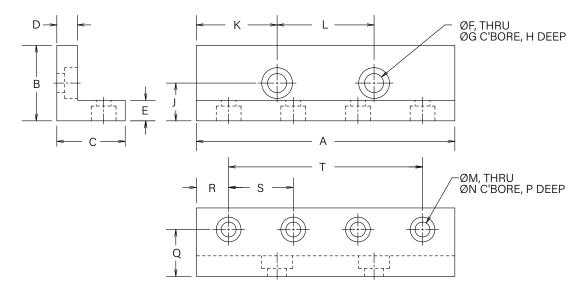
Wheel Plate Mounting Bolts



Channel Span Width

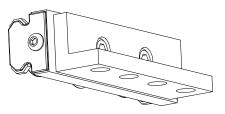
\*nnnn.n is the channel span width in mm. See page 30-1.

# Bridge Brackets - 3 Wheel Plate



Dir	nensions																		
								T	-SLOT EX	<b>KTRUSIO</b>	N								
SIZE	STOCK CODE	A	B	с	D	E	F	G	н	J	к	L	м	N	P	Q	R	s	т
0	UT0BEB3	3.150 [80.01]	.730 [18.54]	.980 [24.89]	.188 [4.76]	.188 [4.76]	.189 [4.80]	.328 [8.33]	.120 [3.05]	.385 [9.78]	1.142 [29.01]	.866 [22.00]	.189 [4.80]	.328 [8.33]	.126 [3.20]	.626 [15.90]	.394 [10.01]	.787 [20.00]	2.362 [60.00]
1	UT1BEB3	3.150 [80.01]	.906 [23.01]	.980 [24.89]	.250 [6.35]	.250 [6.35]	.272 [6.91]	.450 [11.43]	.180 [4.57]	.506 [12.85]	.788 [20.02]	1.575 [40.00]	.189 [4.80]	.328 [8.33]	.190 [4.83]	.685 [17.40]	.394 [10.01]	.787 [20.00]	2.362 [60.00]
2	UT2BEB3	4.724 [199.99]	1.378 [35.00]	1.230 [31.24]	.375 [9.53]	.375 [9.53]	.348 [8.84]	.563 [14.30]	.230 [5.84]	.709 [18.01]	1.476 [37.49]	1.772 [45.00]	.272 [6.91]	.453 [11.51]	.270 [6.86]	.866 [22.00]	.590 [14.99]	1.181 [30.00]	3.543 [90.00]
3	UT3BEB3	6.300 [160.02]	1.811 [46.00]	1.980 [50.29]	.500 [12.70]	.500 [12.70]	.425 [10.80]	.688 [17.48]	.400 [10.16]	.920 [23.37]	1.969 [50.01]	2.362 [60.00]	.348 [8.84]	.563 [14.30]	.330 [8.38]	1.181 [30.00]	.788 [20.01]	1.575 [40.00]	4.724 [120.00]

Din	nensions																		
									STEEL	PLATE									
SIZE	STOCK CODE	A	B	с	D	E	F	G	н	J	к	L	м	N	P	Q	R	s	T
0	UT0BPB3	3.150 [80.01]	.730 [18.54]	.980 [24.89]	.188 [4.76]	.188 [4.76]	.189 [4.80]	.328 [8.33]	.120 [3.05]	.385 [9.78]	1.142 [29.01]	.866 [22.00]	.189 [4.80]	N/A	N/A	.626 [15.90]	.394 [10.01]	.787 [20.00]	2.362 [60.00]
1	UT1BPB3	3.150 [80.01]	.906 [23.01]	.980 [24.89]	.250 [6.35]	.250 [6.35]	.272 [6.91]	.450 [11.43]	.180 [4.57]	.506 [12.85]	.788 [20.02]	1.575 [40.00]	.189 [4.80]	N/A	N/A	.685 [17.40]	.394 [10.01]	.787 [20.00]	2.362 [60.00]
2	UT2BPB3	4.724 [199.99]	1.378 [35.00]	1.230 [31.24]	.375 [9.53]	.375 [9.53]	.348 [8.84]	.563 [14.30]	.230 [5.84]	.709 [18.01]	1.476 [37.49]	1.772 [45.00]	.272 [6.91]	N/A	N/A	.866 [22.00]	.590 [14.99]	1.181 [30.00]	3.543 [90.00]
3	UT3BPB3	6.300 [160.02]	1.811 [46.00]	1.980 [50.29]	.500 [12.70]	.500 [12.70]	.425 [10.80]	.688 [17.48]	.400 [10.16]	.920 [23.37]	1.969 [50.01]	2.362 [60.00]	.348 [8.84]	N/A	N/A	1.181 [30.00]	.788 [20.01]	1.575 [40.00]	4.724 [120.00]



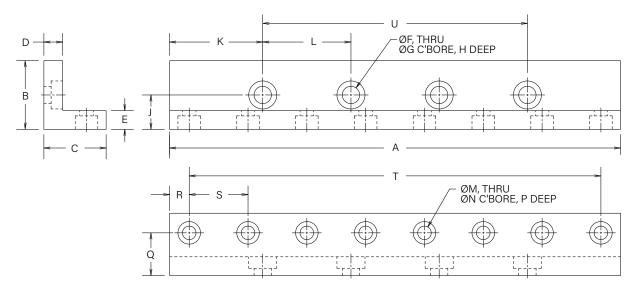
Brackets for T-Slot Extrusion Have Counterbored Thru Holes

Dimensions are shown in inches and [millimeters] Drawings are not to scale



Brackets for Steel Plate Have Thru Holes

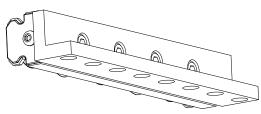
# Bridge Brackets - 4 and 5 Wheel Plate



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Dimen	ISIUIIS

									Т	-SLOT E	XTRUSIC	ON									
SIZE	STOCK CODE	A	B	с	D	E	F	G	н	J	к	L	# OF HOLES	м	N	P	Q	R	s	T	U
0	UT0BEB5	4.528 [115.01]	.730 [18.54]	.980 [24.89]	.188 [4.76]	.188 [4.76]	.189 [4.80]	.328 [8.33]	.120 [3.05]	.385 [9.78]	.965 [24.51]	.866 [22.00]	6	.189 [4.80]	.328 [8.33]	.126 [3.20]	.626 [15.90]	.296 [7.52]	.787 [20.00]	3.937 [100.00]	2.598 [66.00]
1	UT1BEB5	6.300 [160.02]	.906 [23.01]	.980 [24.89]	.250 [6.35]	.250 [6.35]	.272 [6.91]	.450 [11.43]	.180 [4.57]	.506 [12.85]	1.083 [27.51]	1.378 [35.00]	8	.189 [4.80]	.328 [8.33]	.190 [4.83]	.685 [17.40]	.394 [10.01]	.787 [20.00]	5.512 [140.00]	4.134 [105.00]
2	UT2BEB4	9.055 [230.00]	1.378 [35.00]	1.230 [31.24]	.375 [9.53]	.375 [9.53]	.348 [8.84]	.563 [14.30]	.230 [5.84]	.709 [18.01]	1.870 [47.50]	1.772 [45.00]	8	.272 [6.91]	.453 [11.51]	.270 [6.86]	.866 [22.00]	.394 [10.01]	1.181 [30.00]	8.268 [210.00]	5.315 [135.00]
3	UT3BEB5	12.205 [310.01]	1.811 [46.00]	1.980 [50.29]	.500 [12.70]	.500 [12.70]	.425 [10.80]	.688 [17.48]	.400 [10.16]	.920 [23.37]	2.559 [65.00]	2.362 [60.00]	8	.348 [8.84]	.563 [14.30]	.330 [8.38]	1.181 [30.00]	.591 [15.00]	1.575 [40.00]	11.024 [280.00]	7.087 [180.00]

Di	mension	s																			
										STEEL	PLATE										
SIZE	STOCK CODE	A	B	с	D	E	F	G	н	J	к	L	# OF HOLES	м	N	P	Q	R	s	T	U
0	UT0BPB5	4.528 [115.01]	.730 [18.54]	.980 [24.89]	.188 [4.76]	.188 [4.76]	.189 [4.80]	.328 [8.33]	.120 [3.05]	.385 [9.78]	.965 [24.51]	.866 [22.00]	6	.189 [4.80]	N/A	N/A	.626 [15.90]	.296 [7.52]	.787 [20.00]	3.937 [100.00]	2.598 [66.00]
1	UT1BPB5	6.300 [160.02]	.906 [23.01]	.980 [24.89]	.250 [6.35]	.250 [6.35]	.272 [6.91]	.450 [11.43]	.180 [4.57]	.506 [12.85]	1.083 [27.51]	1.378 [35.00]	8	.189 [4.80]	N/A	N/A	.685 [17.40]	.394 [10.01]	.787 [20.00]	5.512 [140.00]	4.134 [105.00]
2	UT2BPB5	9.055 [230.00]	1.378 [35.00]	1.230 [31.24]	.375 [9.53]	.375 [9.53]	.348 [8.84]	.563 [14.30]	.230 [5.84]	.709 [18.01]	1.870 [47.50]	1.772 [45.00]	8	.272 [6.91]	N/A	N/A	.866 [22.00]	.394 [10.01]	1.181 [30.00]	8.268 [210.00]	5.315 [135.00]
3	UT3BPB5	12.205 [310.01]	1.811 [46.00]	1.980 [50.29]	.500 [12.70]	.500 [12.70]	.425 [10.80]	.688 [17.48]	.400 [10.16]	.920 [23.37]	2.559 [65.00]	2.362 [60.00]	8	.348 [8.84]	N/A	N/A	1.181 [30.00]	.591 [15.00]	1.575 [40.00]	11.024 [280.00]	7.087 [180.00]



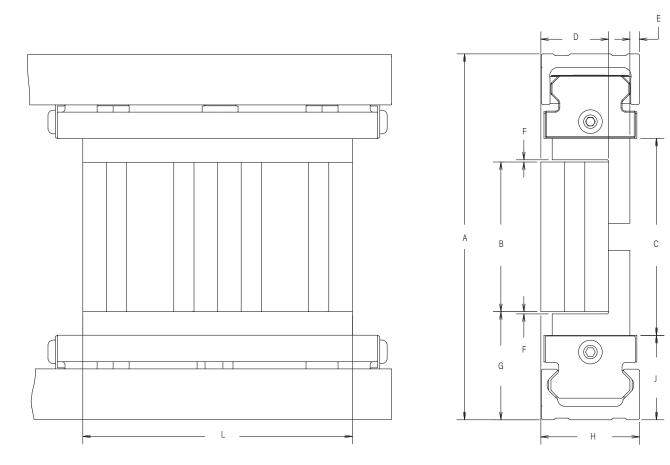
Brackets for T-Slot Extrusion Have Counterbored Thru Holes



Dimensions are shown in inches and [millimeters] Drawings are not to scale

# **ACCESSORIES**

# Bridge Kit - T-Slot Extrusion

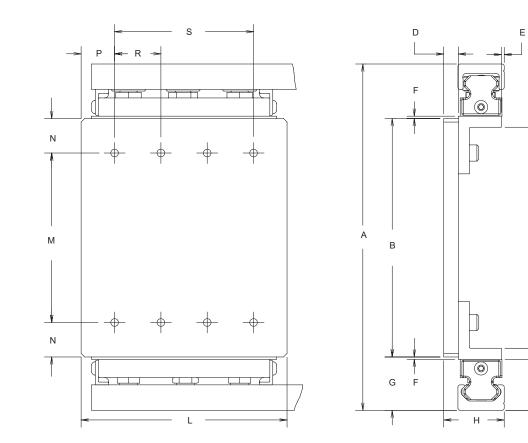


### Dimensions

T-SLOT EXTRUSION												
SIZE	STOCK CODE	A	B	С	D	E	F	G	н	J	L	
0	UT0BE3Knnnn.n*		Dim. A - 2.205 [56.00]	Dim. A - 1.732 [44.00]	.787 [20.00]	.009 [0.23]	.048 [1.21]	1.102 [28.00]	.984 [25.00]	.867 [22.02]	3.150 [80.00]	
U	UT0BE5Knnnn.n*		Dim. A - 2.205 [56.00]	Dim. A - 1.732 [44.00]	.787 [20.00]	.009 [0.23]	.048 [1.21]	1.102 [28.00]	.984 [25.00]	.867 [22.02]	4.724 [120.00]	
1	UT1BE3Knnnn.n*		Dim. A - 2.677 [68.00]	Dim. A - 2.071 [52.60]	.787 [20.00]	.006 [0.15]	.053 [1.35]	1.340 [34.02]	1.048 [26.49]	1.036 [22.02]	3.150 [80.00]	
'	UT1BE5Knnnn.n*	Channel	Dim. A - 2.677 [68.00]	Dim. A - 2.071 [52.60]	.787 [20.00]	.006 [0.15]	.053 [1.35]	1.340 [34.02]	1.048 [26.49]	1.036 [22.02]	6.299 [160.00]	
2	UT2BE3Knnnn.n*	Span Width	Dim. A - 3.622 [92.00]	Dim. A - 2.756 [70.00]	1.181 [30.00]	0.79 [2.01]	.059 [1.50]	1.812 [46.01]	1.635 [41.53]	1.377 [34.98]	4.724 [120.00]	
2	UT2BE5Knnnn.n*		Dim. A - 3.622 [92.00]	Dim. A - 2.756 [70.00]	1.181 [30.00]	0.79 [2.01]	.059 [1.50]	1.812 [46.01]	1.635 [41.53]	1.377 [34.98]	9.449 [240.00]	
3	UT3BE3Knnnn.n*		Dim. A - 5.039 [128.00]	Dim. A - 3.937 [100.00]	1.575 [40.00]	.222 [5.64]	.052 [1.31]	2.519 [63.98]	2.297 [58.34]	1.968 [49.99]	6.299 [160.00]	
3	UT3BE5Knnnn.n*		Dim. A - 5.039 [128.00]	Dim. A - 3.937 [100.00]	1.575 [40.00]	.222 [5.64]	.052 [1.31]	2.519 [63.98]	2.297 [58.34]	1.968 [49.99]	12.598 [320.00]	

\*nnnn.n is the channel span width in mm Dimensions are shown in inches and [millimeters] Drawings are not to scale

# Bridge Kit - 3 and 5 Steel Plate



### Dimensions

3 AND 5 STEEL PLATE																		
SIZE	STOCK CODE	A	B	с	D	E	F	G	н	J	K	L	м	# OF SCREWS	N	P	R	s
0	UT0BC3Knnnn.n*		Dim. A - 1.815 [46.10]	Dim. A - 2.110 [53.60]	.250 [6.35]	.049 [1.24]	.040 [1.02]	.907 [23.04]	1.029 [26.14]	.867 [22.02]	1.055 [26.80]	3.500 [88.90]	Dim A - 2.988 [75.90]	4	.586 [14.88]	.569 [14.45]	.787 [20.00]	2.362 [60.00]
	UT0BC5Knnnn.n*		Dim. A - 1.815 [46.10]	Dim. A - 2.110 [53.60]	.250 [6.35]	.049 [1.24]	.040 [1.02]	.907 [23.04]	1.029 [26.14]	.867 [22.02]	1.055 [26.80]	4.500 [114.30]	Dim A - 2.984 [75.90]	4	.586 [14.88]	.282 [7.16]	.787 [20.00]	3.937 [100.00]
1	UT1BC3Knnnn.n*		Dim. A - 2.130 [54.10]	Dim. A - 2.571 [65.30]	.375 [9.53]	.112 [2.84]	.029 [0.74]	1.085 [27.56]	1.393 [35.38]	1.036 [26.31]	1.286 [32.66]	3.500 [88.90]	Dim A - 3.463 [87.96]	4	.656 [16.66]	.569 [14.45]	.787 [20.00]	2.362 [60.00]
	UT1BC5Knnnn.n*	Channel	Dim. A - 2.130 [54.10]	Dim. A - 2.571 [65.30]	.375 [9.53]	.112 [2.84]	.029 [0.74]	1.085 [27.56]	1.393 [35.38]	1.036 [26.31]	1.286 [32.66]	6.250 [158.75]	Dim A - 3.463 [87.96]	4	.656 [16.66]	.369 [9.37]	.787 [20.00]	5.512 [140.00]
2	UT2BC3Knnnn.n*	Span Width	Dim. A - 2.835 [72.00]	Dim. A - 3.504 [89.00]	.375 [9.53]	.119 [3.02]	.040 [1.02]	1.417 [35.99]	1.872 [47.55]	1.377 [34.98]	1.752 [44.51]	5.000 [127.00]	Dim A - 4.488 [114.00]	6	.826 [20.98]	.729 [18.52]	1.181 [30.00]	3.543 [90.00]
2	UT2BC5Knnnn.n*		Dim. A - 2.835 [72.00]	Dim. A - 3.504 [89.00]	.375 [9.53]	.119 [3.02]	.040 [1.02]	1.417 [35.99]	1.872 [47.55]	1.377 [34.98]	1.752 [44.51]	9.250 [234.95]	Dim A - 4.488 [114.00]	6	.826 [20.98]	.491 [12.47]	1.181 [30.00]	8.268 [210.00]
3	UT3BC3Knnnn.n*		Dim. A - 4.016 [102.00]	Dim. A - 4.937 [125.40]	.500 [12.70]	.251 [6.38]	.040 [1.02]	2.008 [51.00]	2.562 [65.07]	1.968 [49.99]	1.968 [49.99]	6.000 [152.40]	Dim A - 6.298 [159.97]	8	1.141 [28.98]	.638 [16.21]	1.575 [40.00]	4.724 [120.00]
3	UT3BC5Knnnn.n*		Dim. A - 4.016 [102.00]	Dim. A - 4.937 [125.40]	.500 [12.70]	.251 [6.38]	.040 [1.02]	2.008 [51.00]	2.562 [65.07]	1.968 [49.99]	1.968 [49.99]	12.000 [304.80]	Dim A - 6.298 [159.97]	8	1.141 [28.98]	.488 [12.40]	1.575 [40.00]	11.024 [280.00]

\*nnnn.n is the channel span width in mm Dimensions are shown in inches and [millimeters] Drawings are not to scale

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