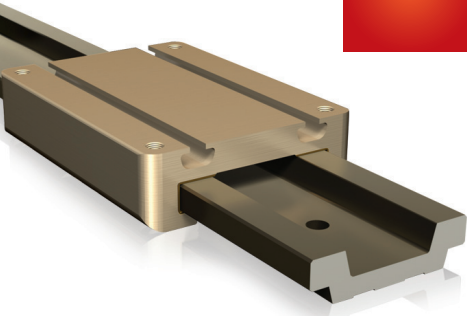
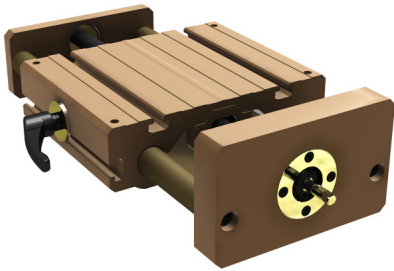


NEW



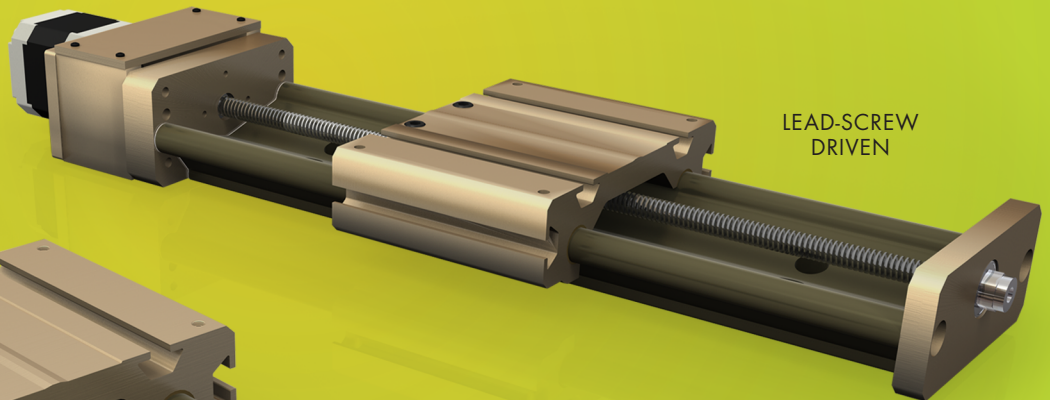
LOW PROFILE



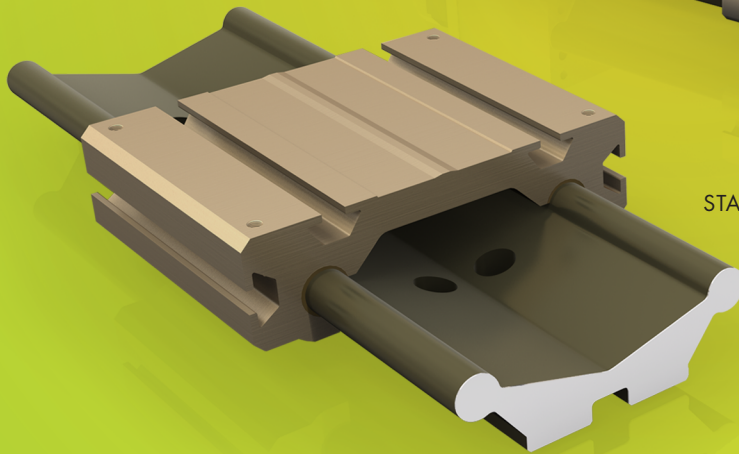
LEAD-SCREW WITH HAND BRAKE

Uni-guide™

PRODUCT OVERVIEW



LEAD-SCREW
DRIVEN



STANDARD

uniguide.pbclinear.com

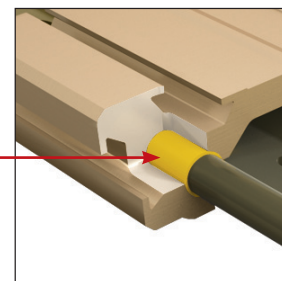
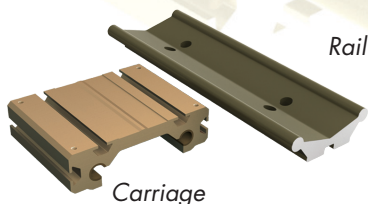
Unlimited
design
options &
versatility.

The Uni-Guide family provides the answer by reducing bulky part count, simplifying assembly and integration and facilitating smooth maintenance-free travel throughout the life of the system. Designed to thrive in the most challenging environments—caustic, dirty, extreme and clean-reliant—the Uni-Guide product family features the design advantages for best-in-class linear motion performance.

Uni-guide™

TWO-PIECE ASSEMBLY

Ceramic coated rail and aluminum alloy carriage assembly facilitates quick and easy integration into new or existing systems.



SELF-LUBRICATING LINER

Uni-Guide's Frelon® liner allows it to excel in the most demanding surroundings: temperature extremes, heavy particulates, wash-down and extreme vibration.

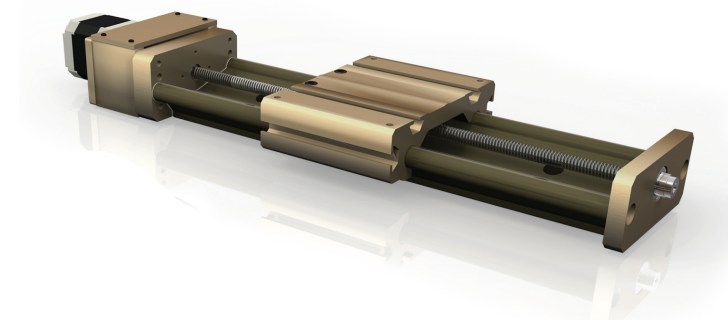
FEATURES

- Driven or non-driven system
- Slide sizes (75mm, 100mm, 125mm)
- Standard length or cut-to-length rails and carriage assemblies
- Continuous lengths up to 10 feet
- Ease of mounting - carriage t-slots and pre-drilled mounting holes
- Easy drop-in unit - no alignment needed
- Drive options - lead or ball screw driven

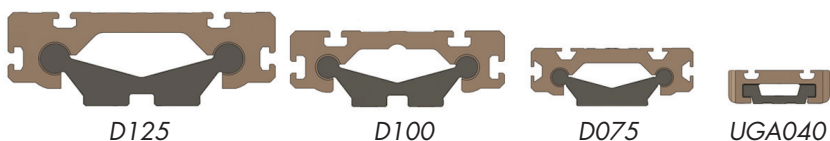
ACCESSORIES *(See page 6)*

- NEMA Standard Motor
- Hand brake or crank
- Motor mount attachments

Contact manufacturer for available accessory options. See page 8 for ordering information.

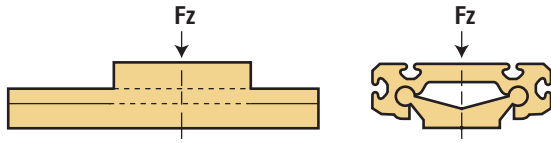


UNI-GUIDE FAMILY OF SIZES

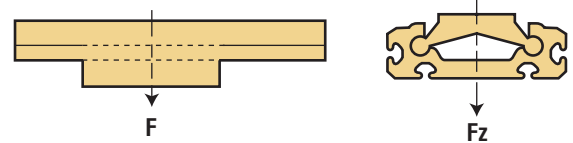


Static Loads - Standard Uni-Guide

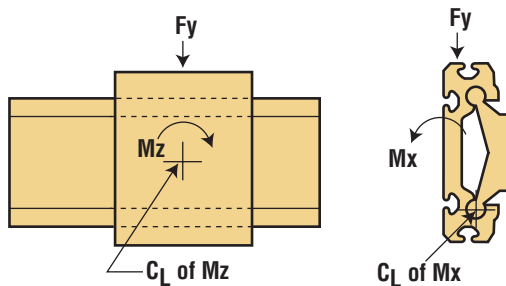
The numbers below are for guides only in a static condition. The drive mechanism selected (lead screw, ball screw, cylinder, etc.) becomes the limiting factor when calculating maximum load and speed capacities. The user is responsible for determining the maximum capacity for the complete system based on the manufacturer's data for their drive configuration.



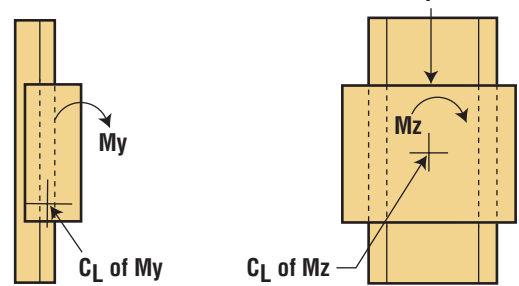
SIZE	Fz MAX LOAD (lbs.)	Fz MAX LOAD (N)
D075	500	2,224
D100	750	3,336
D125	1,000	4,448
UGA040C-0x1xxx	1,843	8,200
UGA040C-1x1xxx	1,483	6,600
UGA040C-2x1xxx	1,101	4,900



SIZE	Fz (Inverted) MAX LOAD (lbs.)	Fz (Inverted) MAX LOAD (N)
D075	125	556
D100	190	845
D125	250	1,112
UGA040C-0x1xxx	607	2,700
UGA040C-1x1xxx	607	2,700
UGA040C-2x1xxx	607	2,700



SIZE	Fy (lbs.)	Mx (in./lbs.)	Mz (in./lbs.)	Fy (N)	Mx (nm)	Mz (nm)
D075	250	340	350	1,112	38	40
D100	375	650	730	1,668	73	82
D125	500	1,200	1,225	2,224	136	138
UGA040C-0x1xxx	1101	1,062	1,505	4,900	120	170
UGA040C-1x1xxx	1281	1,062	2,567	5,700	120	290
UGA040C-2x1xxx	1371	1,062	2,567	6,100	120	290

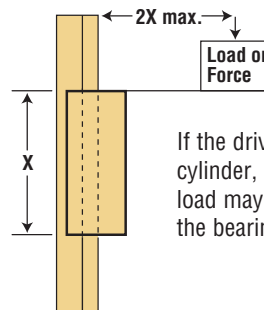


SIZE	My (in./lbs.)	Mz (in./lbs.)	My (nm)	Mz (nm)
D075	340	350	38	40
D100	650	730	73	82
D125	1,200	1,225	136	138
UGA040C-0x1xxx	1,505	1,505	170	170
UGA040C-1x1xxx	2,567	2,567	290	290
UGA040C-2x1xxx	2,567	2,567	290	290

Designs must also operate within the following dynamic parameters:

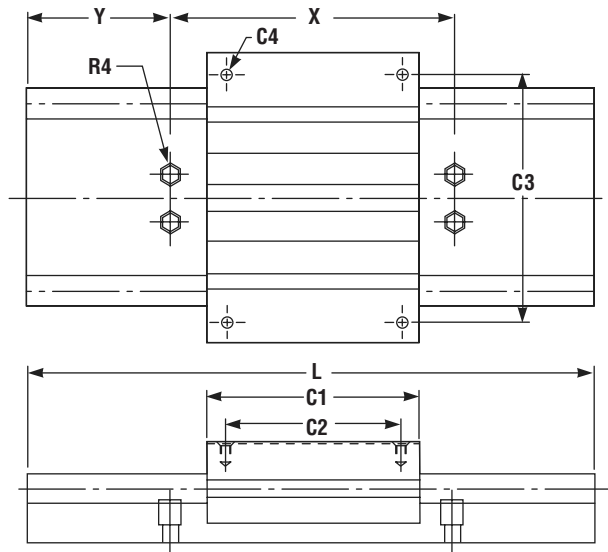
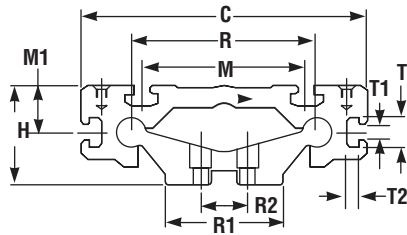
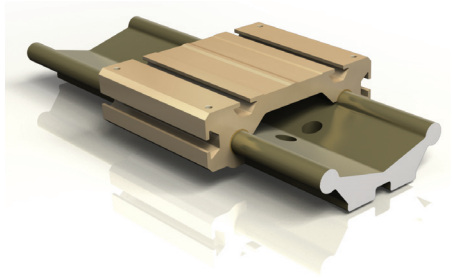
- Maximum Loads (P) = from charts above
- Maximum Speed Dry (V) = 300 ft./min. (1.524 m/s)
- Maximum PV (pressure x velocity) = 20,000 (0.70 N/mm² x m/s)
- PV Example: Load = 85 psi
Speed = 180 ft./min.
PV = 85 x 180 = 15,300 PV

NOTE: Frelon GOLD[®] bearing material coefficient of friction is 0.125.



If the drive mechanism (lead screw, ball screw, cylinder, etc.) is centered on the carriage, the load may not exceed a 2:1 ratio to the length of the bearings or binding will occur.

Standard - No Drive Mechanism



STANDARD INCH SERIES WITH NO DRIVE MECHANISM (inches)

PART NUMBER	R	R1	R2	X	R4	Y	H	C	C1	C2	C1	C2	C3	C4	M	M1	L MAX-FEET
					BOLT SIZE				STANDARD	STANDARD	EXTENDED	EXTENDED		BOLT SIZE			
D075-xxx	2.95	2	0.75	4	1/4	2	1.625	4.6	3.5	3	4.5	4	4	10-32	2.6	.819	12
D100-xxx	3.94	2.6	1	6	5/16	3	2.125	6.1	4.5	3.75	6	5.25	5.25	1/4-20	3.5	1.02	
D125-xxx	4.92	3.3	1.25		3/8	3	2.625	7.6	6	5.25	7.5	6.75	6.75	5/16-18	4.33	1.30	

* "Y" dimension can be specified at time of order.

CARRIAGE TYPES

PART NO.	DRILL	DEPTH	TAP	DEPTH
D075-xxx	.159	.534	10-32	.440
D100-xxx	.201	.750	1/4-20	.500
D125-xxx	.257		5/16-18	.625

T-SLOT INFORMATION (inches)

PART NO.	T	T1	T2
D075-xxx	.590	.256	.236
D100-xxx	.661	.319	.268
D125-xxx			

METRIC SERIES WITH NO DRIVE MECHANISM (mm)

PART NUMBER	R	R1	R2	X	R4	Y	H	C	C1	C2	C1	C2	C3	C4	M	M1	L MAX-FEET
					BOLT SIZE				STANDARD	STANDARD	EXTENDED	EXTENDED		BOLT SIZE			
DM075-xxx	75	51	20	120	M 6	60	41.3	117	85	73	110	98	105	M 5	66	16.5	3.66m
DM100-xxx	100	66	25	150	M 8	75	54	155	115	95	150	130	135	M 6	89	26	
DM125-xxx	125	84	30	200	M 10	100	66.7	193	150	130	190	170	175	M 8	110	33	

* "Y" dimension can be specified at time of order.

STANDARD LENGTHS CHART (inches)

PART NO.	8"	12"	16"	18"	20"	24"	28"	30"	32"	36"	40"	42"	48"
D075-xxx	X		X		X		X		X		X		
D100-xxx		X		X		X		X		X		X	
D125-xxx				X				X				X	X

RAIL Ø APPROXIMATE	
D075	.470 = 12mm
D100	.630 = 16mm
D125	.820 = 22mm

Straightness - ±.002"/ft

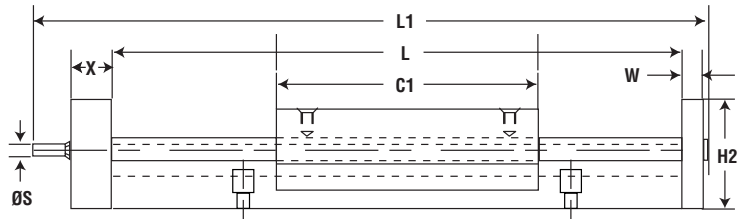
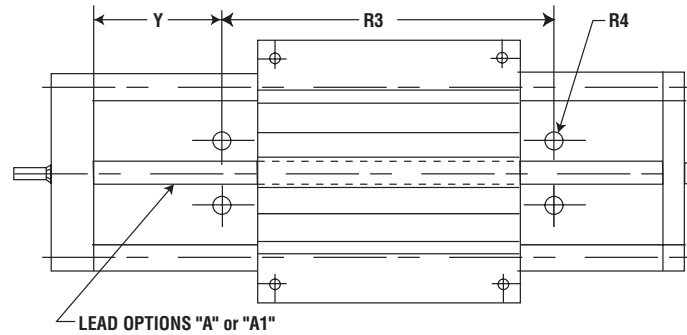
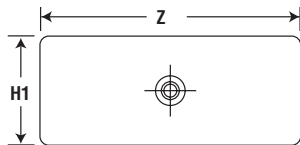
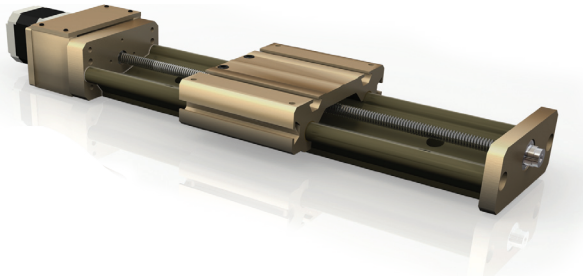
T-SLOT INFORMATION (mm)

PART NO.	T	T1	T2
DM075-xxx	15.0	6.5	6.0
DM100-xxx	16.8	8.1	6.8
DM125-xxx			

WEIGHTS

PART NO.	RAIL PER INCH	STANDARD CARRIAGE	EXTENDED CARRIAGE	
	(lbs.)	(lbs.)	(lbs.)	(kg.)
D075-xxx	0.19	0.98	1.26	.57
D100-xxx	0.32	2.12	2.82	1.28
D125-xxx	0.48	4.56	5.7	2.59

Driven

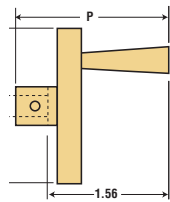


DIMENSIONAL DATA

PART NO.	STROKE	L	L1	C1	NOMINAL SCREW DIA.	A	A1	S	Y	R3	R4	W	X	Z	H1	H2
	(L-C1)					STANDARD LEAD	OPTIONAL LEAD									
D075xx-12	8.5	12	13.93	3.5	3/8"	0.250	0.500	0.187	2	4	1/4	0.375	0.625	3.42	1.75	1.625
D075xx-16	12.5	16	17.93													
D075xx-20	16.5	20	21.93													
D075xx-24	20.5	24	25.93													
D100xx-12	7.5	12	14.61	4.5	1/2	0.250	0.500	0.314	3	6	5/16	0.5	1	4.56	2.5	2.500
D100xx-18	13.5	18	20.61													
D100xx-24	19.5	24	26.61													
D100xx-30	25.5	30	32.61													
D100xx-48	25.5	30	32.61	6	5/8	0.250	0.500	0.314	3	6	3/8	0.5	1	5.78	3.5	2.500
D125xx-12	6	12	14.85													
D125xx-18	12	18	20.85													
D125xx-24	18	24	26.85													
D125xx-30	24	30	32.85													
D125xx-36	30	36	38.85													
D125xx-48	30	48	38.85													
D125xx-60	30	60	38.85													

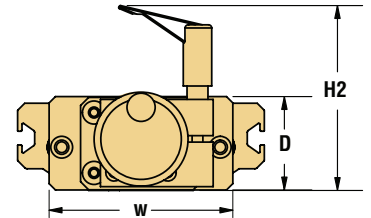
HAND CRANK

PART NO.	P	H
75H	2.31	1.75
100H	2.31	2.25
125H	2.31	3.25



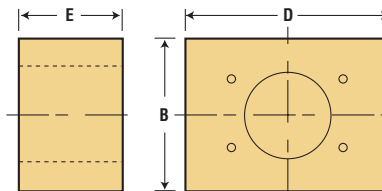
HAND BRAKE

PART NO.	W	D	H2
D0075AHB	3.42	1.74	3.4
D0100AHB	4.57	2.50	4.3
D0125AHB	5.79	3.47	4.7

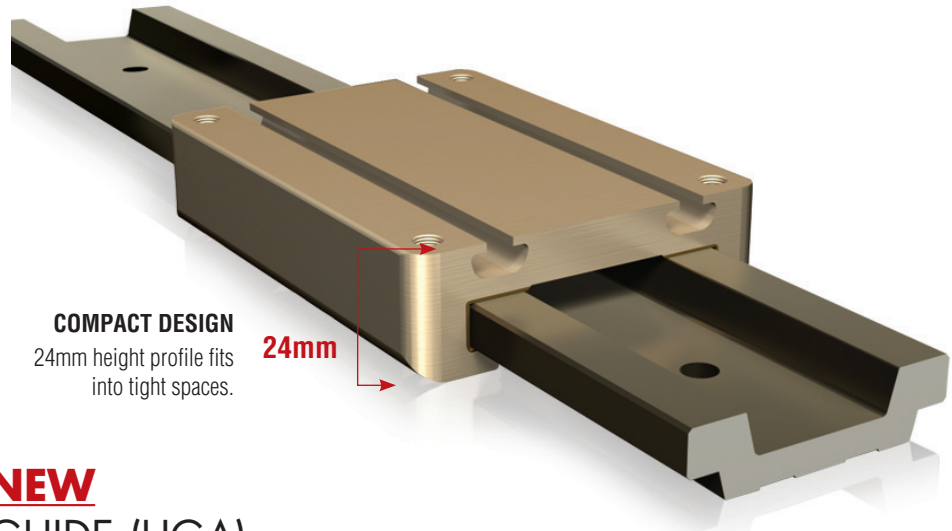


MOTOR MOUNT ATTACHMENT

PART NO.	NEMA MOTOR	B	E	D
75N	NEMA 17	2	1.81	3.25
100N	NEMA 23	2.5	1.81	3.25
125N	NEMA 34	3.5	2.3	4.25



New.
Simple.
Compact.



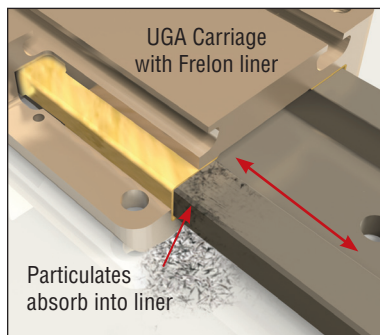
COMPACT DESIGN
24mm height profile fits
into tight spaces.

24mm

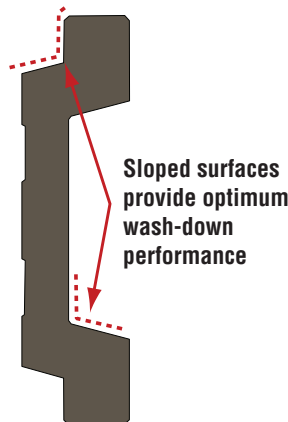
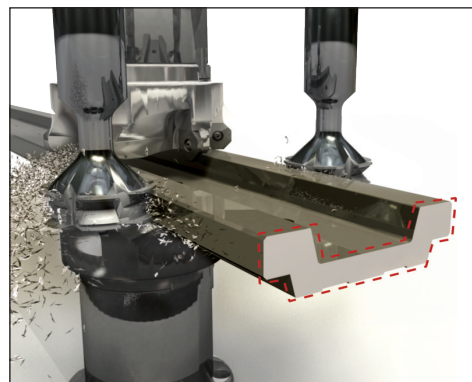
INTRODUCING THE **NEW** LOW PROFILE UNI-GUIDE (UGA)

A new solution that maintains the proven advantages of the standard Uni-Guide in a simple, compact assembly.

Uni-guide
LOW PROFILE



The proprietary self-lubricating Frelon liner offers the ability to self-heal around particulates and provides an inherent wiping action to eliminate rail damage. The Frelon liner also provides maintenance-free travel without external lubrication.

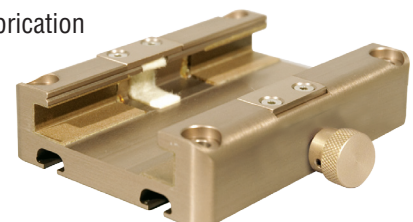


FEATURES

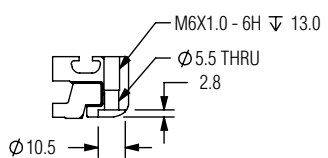
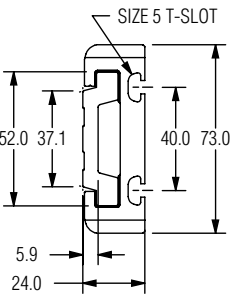
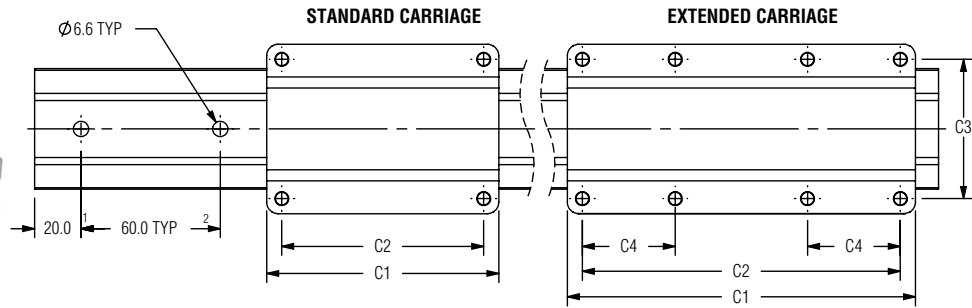
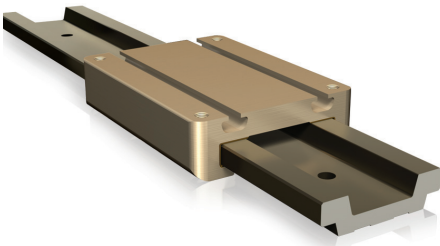
- Performance Advantage - Frelon® self-lubricating liner provides low wear, high load capacities and maintenance-free operation. Available in three liner options.
- SIMO® Process - PBC Linear's patent pending milling operation creates a precision machined rail and carriage surface - tight tolerances and alignment accuracy
- Simple Two - Piece Assembly - Ceramic coated rail and aluminum alloy carriage assembly facilitates quick and easy integration into new or existing systems.
- Wash-Down Optimized - Angled rail design - ensures optimum wash-down and prevents buildup of particulates and chemicals
- Splatter Proof - hard anodized aluminum prevents contaminants from sticking

ACCESSORIES *(See page 8)*

- Hand Brake
- Felt Wick Lubrication



Low Profile - No Drive Mechanism



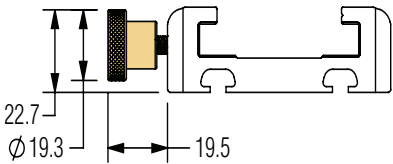
DIMENSIONAL DATA

CARRIAGE PART#	STANDARD CARRIAGE (mm)				
	C1	C2	C3	C4	lbs. (kg)
UGA040C-0x1xxx	100	87	60	N/A	.504 (0.23)
UGA040C-1x1xxx	150	137	60	40	.750 (0.34)
UGA040C-2x1xxx	200	187	60	60	1.014 (0.46)

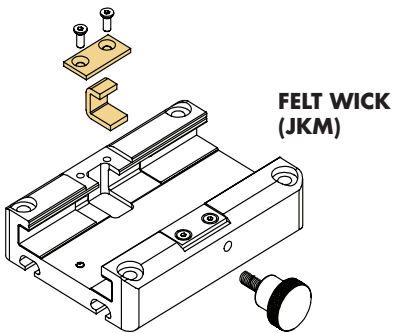
1 N=0.2248 lbf 1 N-m = 0.7376 ft.-lbs.

See page 8 for ordering information.

ACCESSORIES



HAND BRAKE (CHB)



FELT WICK (JKM)

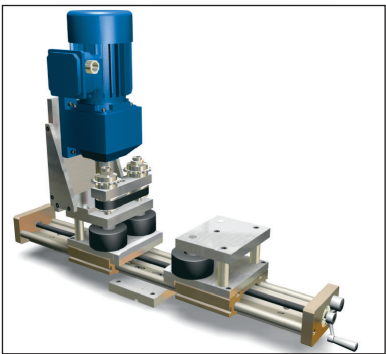
APPLICATION EXAMPLES



Food Packaging Transfer - The new Low Profile Uni-Guide (UGA) is being utilized for smooth, reliable and oil-free transfer on a food packaging production line. An ideal choice due to its wash-down friendly design and maintenance-free advantage.



Adjustable Package Handler - The Uni-Guide provided seamless system integration into a new packaging robot without a re-design. Optional hand-breaks provided the quick manual adjustment for up to 60 different box shapes and sizes.

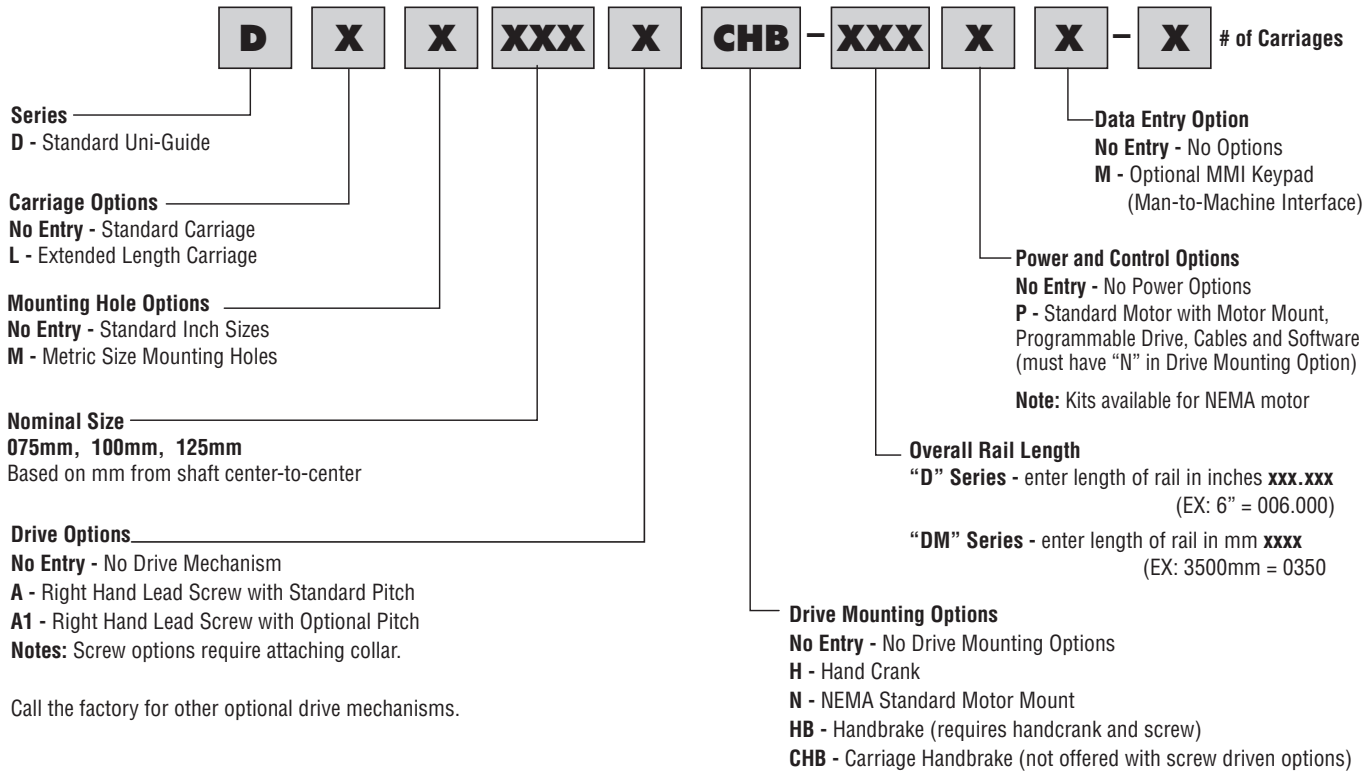


Power Vice - Specially designed for powered material feeding of extended length products in the woodworking/metalworking industries, the Uni-Guide vice can be quickly adjusted for multiple beam configurations.

Ordering

Uni-guide™

STANDARD OR DRIVEN



LOW PROFILE

UG	A	040	R	-	XXXX	-	X	X	X
UNI-GUIDE	SERIES	INT/EXT SIZE	IDENTIFIER		RAIL LENGTH		ANODIZING ³	HOLE PATTERN	VERSION
	A = Standard	040 = 40mm	R = Rail		0000-3650mm		0 = Standard 1 = Clear	0 = Standard (60mm)	0 = Std

Uni-guide™

LOW PROFILE

Ex: UGA040R-0300-000
UGA040C-0P1G00

UG	A	040	C	-	X	X	X	X	X	X
UNI-GUIDE	SERIES	INT/EXT SIZE	IDENTIFIER		CARRIAGE LENGTH	RUNNING CLEARANCE	CARRIAGE HEIGHT	FRELON® TYPE ³	CARRIAGE OPTIONS	VERSION
	A = Standard	040 = 40mm	C = Carriage		0 = 100mm 1 = 150mm 2 = 200mm	P = Precision C = Compensated	1 = Tall w/t-slots	G = Frelon Gold E = Frelon J W = Frelon W	0 = None ⁴ 1 = CHB (hand brake) 2 = JKM (lube option) 3 = Both	0 = Standard

Notes: ¹Default end to first hole is 20mm

²60mm hole spacing provided for higher moment capacity. For low moment applications, every other hole may be used.

³Frelon® GOLD must be paired with standard anodized rail. Frelon J and Frelon W must be paired with clear anodized rail.

⁴"None" carriage option is ready to accept both CHB and JKM options for after market addition.

LINEAR MOTION TROUBLE? The Uni-Guide might be the solution for you.
Contact an application engineer toll-free 1-888-777-0556.

TO ORDER CALL 1-800-962-8979

The data and specifications in this publication have been carefully compiled and are believed to be accurate and correct. However, it is the responsibility of the user to determine and ensure the suitability of PBC Linear™ products for a specific application. PBC Linear™ only obligation will be to repair or replace without charge, any defective components if returned promptly. No liability is assumed beyond such replacement. Specifications are subject to change without notice.

10.10_B

PBC
LINEAR
A PACIFIC BEARING CO.