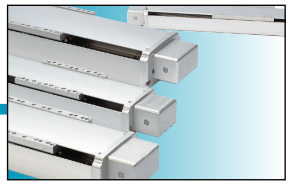
Axidyne® TRUTrack™ TKB Belt Drives

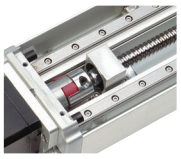
OVERVIEW



APPLICATION BENEFITS

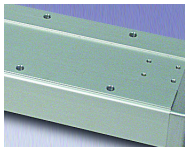
- Straightness and flatness within 0.0002 inches per inch
- Superior rigidity, high moment loads, faster speeds
- Lowest carrier deflection of any Tol-O-Matic actuator
- Excellent repeatability
- Wide stable platform for XY applications

GUIDANCE SYSTEM



- Ground linear profiled rails and ball bearing blocks decreases deflection and provide smooth carrier/load movement

STANDARD MOUNTING

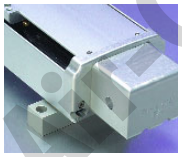


- Mounting holes are spaced the length of the actuator for ease in mounting directly to a flat surface.

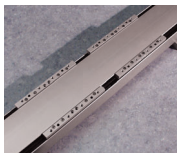
ACTUATOR/MOTOR FACTORS

- Actuator's operating temperature range (40-130° F, 4-54° C) should take into consideration heat generated by the motor and drive, linear velocity and work cycle time.
- For large frame motors or small actuators, cantilevered motors need to be supported, if subjected to continuous rapid reversing duty and/or under dynamic conditions.

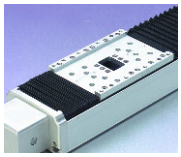
AVAILABLE OPTIONS



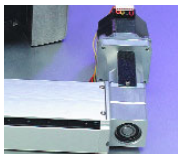
Mounting Plates: provide clearance height for motors and motor mounts when mounting on a flush surface. Recommended on all TruTrack actuators, they prevent actuator body deflections over .015 in (3.8mm).



Auxiliary Carrier: Increases rigidity, load-carrying capacity and bending moments

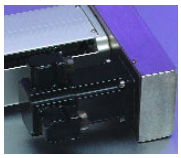


Bellows: protects from dust and dirt environments.



Motor Mounting and Gearhead Reduction:

Direct Drive Mounting— motor is mounted directly to the drive end assembly. Motor may be mounted directly on the left or right side.



Reduction Drive Mounting—motor is mounted to the reduction assembly, providing a speed reduction from the motor to the belt drive wheel. TKB actuators are available with a 1:1 or 2:1 reduction.

Gearhead Reduction—Gearheads are available for applications requiring reduction for inertia matching or higher torque at lower speeds. High efficiency, single stage, true planetary gearheads are available in 5.5:1 and 10:1 ratios for reduction solutions with most Tol-O-Matic NEMA 23- and 34-frame motors. For gearhead specifications and dimensions see page F-10.

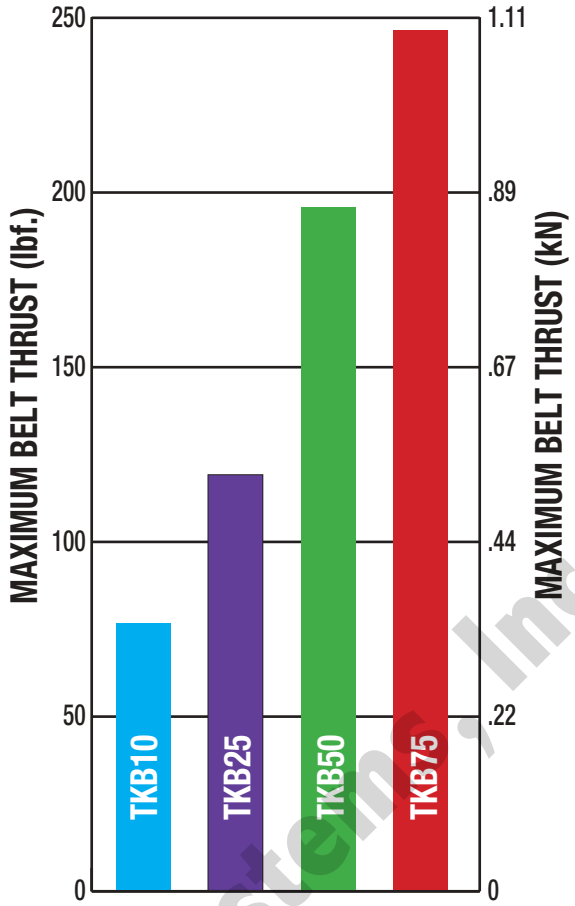
Switches: Available in ac reed or dc Hall-effect. (TRIAC switches are not available on TruTrack actuators) See section I.

BELT PERFORMANCE

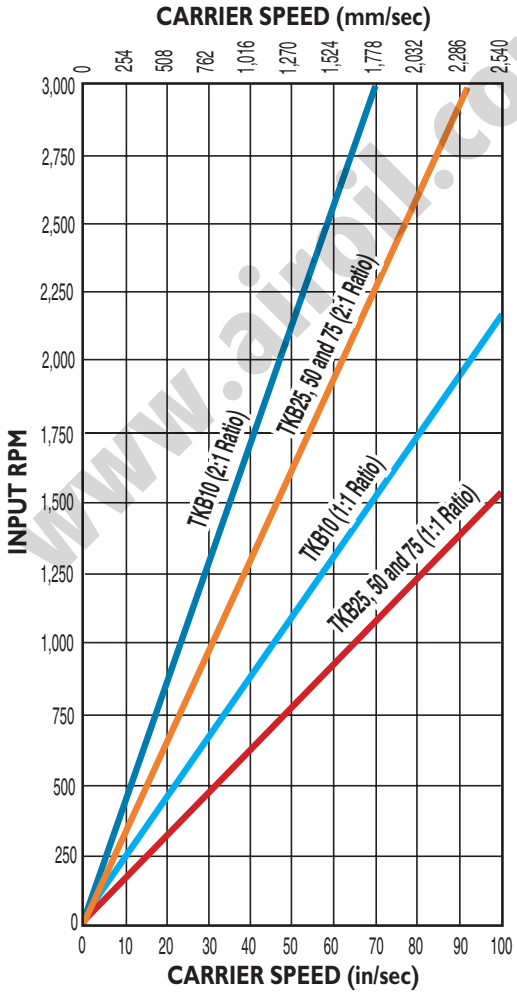
TKB Series
- Belt force and speed capacities
- Belt specifications

BELT FORCE AND SPEED CAPACITIES

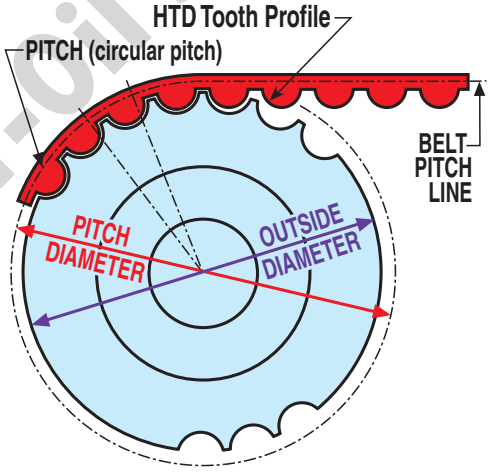
BELT FORCE FOR TKB ACTUATORS



BELT SPEED FOR TKB ACTUATORS



BELT SPECIFICATIONS



STYLE:	HTD Tooth
TOOTH PITCH:	5mm
BELT MATERIAL:	Polyurethane body with steel tension members
CHARACTERISTICS:	• For higher speed, higher load applications • Heavy duty drive and idler pulley bearings

OVERALL SERIES SPECIFICATIONS

TKB BELT, INERTIA AND BREAKAWAY TORQUE SPECIFICATIONS

TKB ENGLISH ACTUATORS								
ACTUATOR SERIES	MAXIMUM STROKE (in)	BELT WIDTH (in)	BELT DEAD LENGTH (in)	WHEEL PITCH DIA. (in)	MOTION RATIO (in/rev)	STRAIGHTNESS & FLATNESS (in) [1] (Constrained)	TEMP. RANGE [2] (F°)	BREAKAWAY TORQUE (lb-in)
TKB10	96	0.59	15.88	0.89	2.787	0.0002	40 - 130	3.5
TKB25	96	1.00	23.12	1.19	3.742	0.0002	40 - 130	10.0
TKB50	96	1.57	26.23	1.19	3.742	0.0002	40 - 130	10.0
TKB75	196	1.97	25.68	1.19	3.742	0.0002	40 - 130	10.0

TKB METRIC ACTUATORS								
ACTUATOR SERIES	MAXIMUM STROKE (mm)	BELT WIDTH (mm)	BELT DEAD LENGTH (mm)	WHEEL PITCH DIA. (mm)	MOTION RATIO (mm/rev)	STRAIGHTNESS & FLATNESS (mm) [1] (Constrained)	TEMP. RANGE [2] (C°)	BREAKAWAY TORQUE (N-m)
TKB10	2438	15.0	333.6	22.5	70.78	0.005	4 - 54	0.35
TKB25	2438	25.4	533.8	30.3	95.05	0.005	4 - 54	1.06
TKB50	2438	40.0	867.4	30.3	95.05	0.005	4 - 54	1.06
TKB75	2438	50.0	1089.8	30.3	95.05	0.005	4 - 54	1.06

GENERAL ACTUATOR SPECIFICATIONS

TKB ENGLISH ACTUATORS						
ACTUATOR SERIES	CARRIER WEIGHT (lb.)	BASE WEIGHT (inc. carrier) (lb.)	WEIGHT PER (in) OF STROKE (lb.)	INERTIA (lb-in²) BASE ACTUATOR (inc. carrier assy.)	INERTIA (lb-in²) PER (in) OF STROKE	REPEATABILITY (in.)
TKB10	0.64	3.23	0.20	0.165	0.0012	±0.002
TKB25	2.41	10.69	0.46	1.100	0.0046	±0.002
TKB50	3.38	14.99	0.61	1.576	0.0072	±0.002
TKB75	4.42	18.34	0.72	2.039	0.0090	±0.002

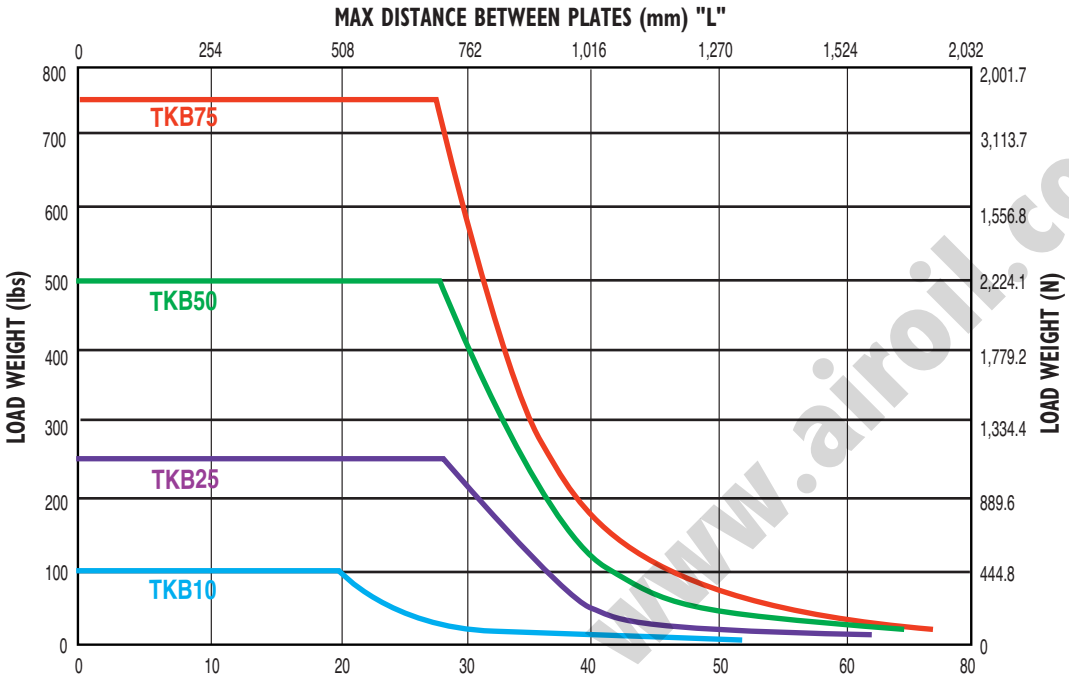
TKB METRIC ACTUATORS						
ACTUATOR SERIES	CARRIER MASS (kg)	BASE MASS (inc. carrier) (kg)	MASS PER (mm) OF STROKE (kg)	INERTIA (kg-cm²) BASE ACTUATOR (inc. carrier assy.)	INERTIA (kg-cm²) PER (mm) OF STROKE	REPEATABILITY (mm)
TKB10	0.3	1.5	0.09	0.48	0.41	±0.05
TKB25	1.1	4.8	0.21	3.22	1.29	±0.05
TKB50	1.5	6.8	0.28	4.61	2.05	±0.05
TKB75	1.5	8.3	0.32	5.97	2.54	±0.05

[1] The listed values relating to straightness/flatness are intended for reference purposes only, and not as an engineering standard of absolute tolerance for a given actuator. Appropriate installation is the single most important factor in reducing such deviation, so good engineering practices such as measurement, mapping, etc. must be employed in applications with stringent straightness/flatness requirements.

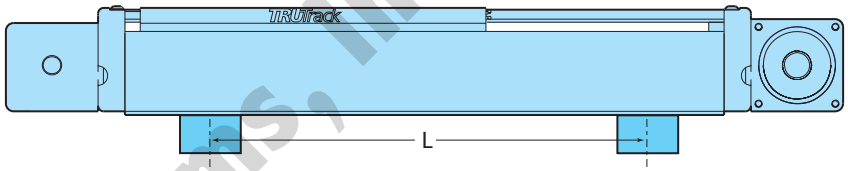
[2] Heat generated by the motor and drive should be taken into consideration as well as linear velocity and work cycle time. For applications that require operation outside of the recommended temperature range, contact the factory.

LARGE FRAME MOTORS AND SMALLER SIZE ACTUATORS: Cantilevered motors need to be supported, if subjected to continuous rapid reversing duty and/or under dynamic conditions.

MOUNTING RECOMMENDATIONS



Actuator body theoretical axial deflection will not exceed .015 in (0.38 mm)



FRICTION FORCE

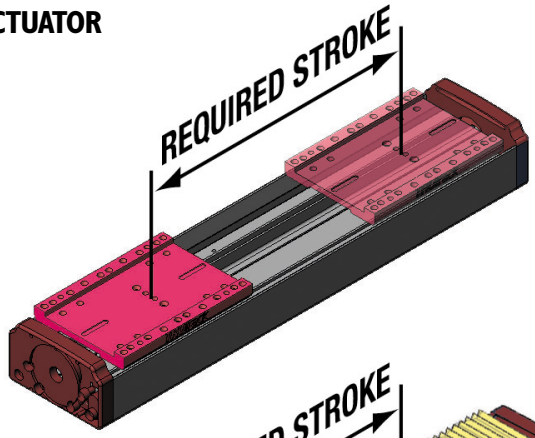
lbf = 0.0003 x LOAD (lb) + 3.96

N = 0.003 x LOAD (kg) + 17.6

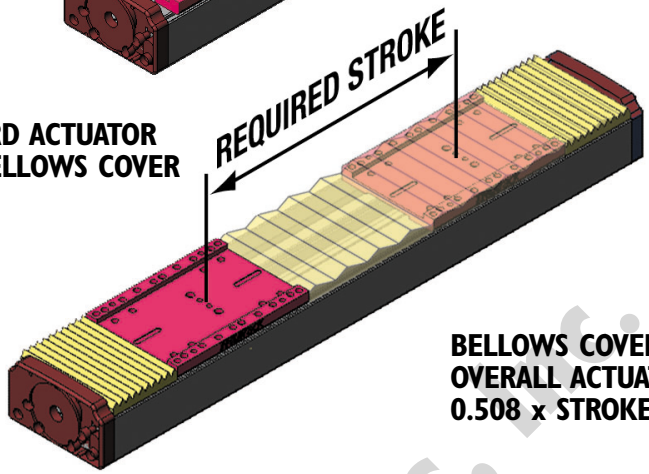
OVERALL SERIES SPECIFICATIONS

BELLOWS OPTION STROKE REQUIREMENTS

STANDARD ACTUATOR



STANDARD ACTUATOR WITH BELLOWS COVER



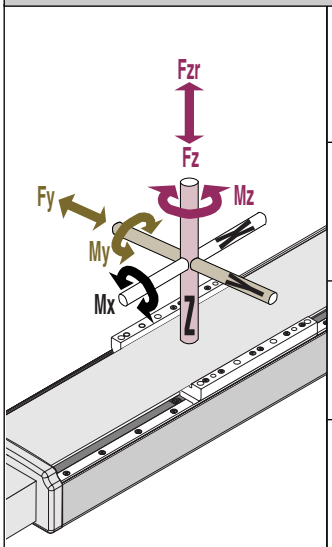
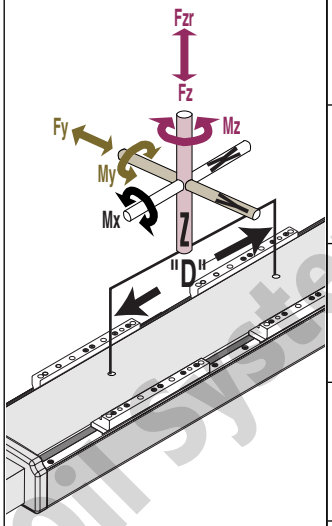
BELLOWS COVER OPTION INCREASES OVERALL ACTUATOR LENGTH BY 0.508 x STROKE

MAXIMUM AVAILABLE STROKE FOR BELLOWS OPTION

TKB10	64 inches (1626 mm)
TKB25	64 inches (1626 mm)
TKB50	64 inches (1626 mm)
TKB75	64 inches (1626 mm)

OVERALL SERIES SPECIFICATIONS

BENDING MOMENTS AND LOADS

MAXIMUM BENDING MOMENTS AND LOADS*		ENGLISH				METRIC CONVERSIONS			
STANDARD CARRIER		**TKB10**	**TKB25**	**TKB50**	**TKB75**	**TKB10**	**TKB25**	**TKB50**	**TKB75**
	**Maximum Dynamic Bending Moments**								
	Mx (Roll) (lb-in : N-m)	85	721	971	1151	9.6	81.5	109.7	130.0
	My (Pitch) (lb-in : N-m)	234	1014	1442	1477	26.4	114.6	162.9	166.9
	Mz (Yaw) (lb-in : N-m)	234	915	1301	1332	26.4	103.4	147.0	150.5
	Maximum Dynamic Loads								
	Fy (Radial Load) (lb : N)	100	250	500	750	445	1113	2225	3338
	Fz (Lateral Load) (lb : N)	100	250	500	750	445	1113	2225	2225
	Fzr (Reverse Lateral Load) (lb : N)	100	250	500	750	445	1113	2225	2225
	Maximum Static Bending Moments								
	Mx (Roll) (lb-in : N-m)	170	1251	1685	1997	19.2	141.3	190.3	225.6
	My (Pitch) (lb-in : N-m)	468	1759	2502	2563	52.9	198.8	282.7	289.5
	Mz (Yaw) (lb-in : N-m)	468	1588	2257	2311	52.9	179.4	255.0	261.1
	Maximum Static Loads								
	Fy (Radial Load) (lb : N)	200	434	868	1301	890	1931	3863	5789
	Fz (Lateral Load) (lb : N)	200	434	868	868	890	1931	3863	3863
	Fzr (Reverse Lateral Load) (lb : N)	200	434	868	868	890	1931	3863	3863
AUXILIARY CARRIER: Increases rigidity, load-carrying capacity and moments		**TKB10**	**TKB25**	**TKB50**	**TKB75**	**TKB10**	**TKB25**	**TKB50**	**TKB75**
	**Maximum Dynamic Bending Moments**								
	Mx (Roll) **(lb-in : N-m)	170	1442	1942	2302	19.2	162.9	219.4	260.1
	My (Pitch) **(lb-in : N-m)	563	1733	3810	3875	63.6	195.7	430.5	437.8
	Mz (Yaw) **(lb-in : N-m)	563	1733	3810	3875	63.6	195.7	430.5	437.8
	Maximum Dynamic Loads								
	Fy (Radial Load) (lb : N)	200	500	1000	1500	890	2225	4450	6675
	Fz (Lateral Load) (lb : N)	200	500	1000	1500	890	2225	4450	4450
	Fzr (Reverse Lateral Load) (lb : N)	200	500	1000	1500	890	2225	4450	4450
	Maximum Static Bending Moments								
	Mx (Roll) **(lb-in : N-m)	340	2502	3369	3994	38	283	381	451
	My (Pitch) **(lb-in : N-m)	1126	3006	6610	6723	127	340	747	760
	Mz (Yaw) **(lb-in : N-m)	1126	3006	6610	6723	127	340	747	760
	Maximum Static Loads								
	Fy (Radial Load) (lb : N)	400	868	1735	2603	1780	3863	7721	11583
	Fz (Lateral Load) (lb : N)	400	868	1735	1735	1780	3863	7721	7721
	Fzr (Reverse Lateral Load) (lb : N)	400	868	1735	1735	1780	3863	7721	7721
	Minimum Dimension 'D' (in : mm)	5.63	6.93	7.63	7.75	142.9	176.0	193.8	196.9

**** Bending moments are based on 200,000,000 (5,000 KM) linear inches of carrier travel.***

Breakaway torque will increase when using the Auxiliary carrier option. When ordering, determine your working stroke and enter this value into the configuration string. Overall actuator length will automatically be calculated.

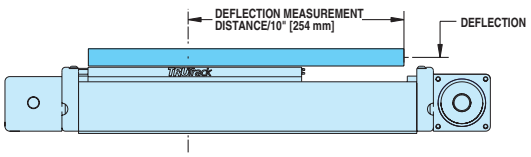
Deflection Considerations: In applications where substantial Mx or My moments come into play, deflection of the cylinder tube, carrier and supports must be considered. The deflection factors shown in the Load Deflection charts, are based on cylinder mounted with tube supports at minimum recommended spacing. If more rigidity is desired, refer to the Auxiliary or Dual Carrier options.

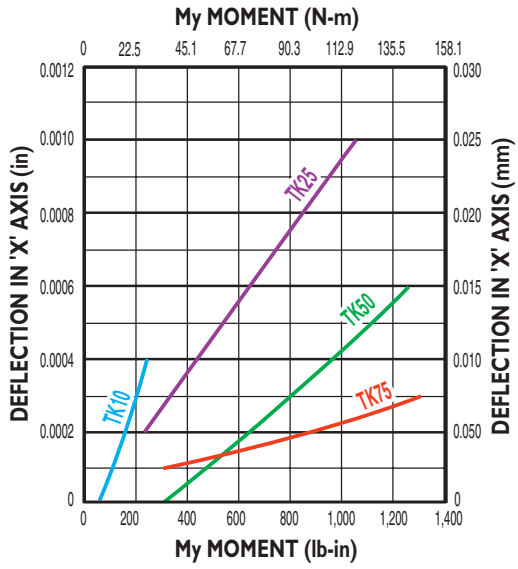
***** Loads shown in table are at minimum "D" dimension, for ratings with longer "D" dimension see graph on page C-87.***

OVERALL SERIES SPECIFICATIONS

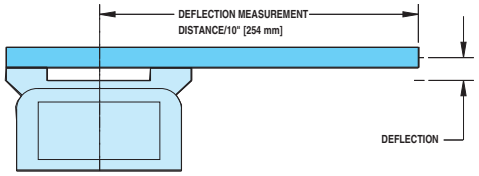
LOAD DEFLECTION

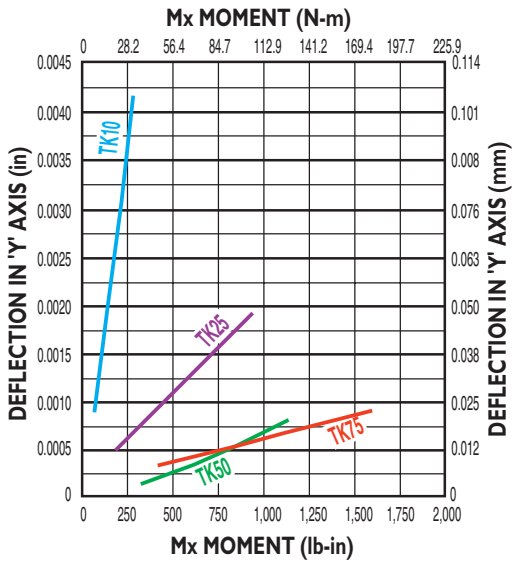
X-AXIS DEFLECTION





Y-AXIS DEFLECTION



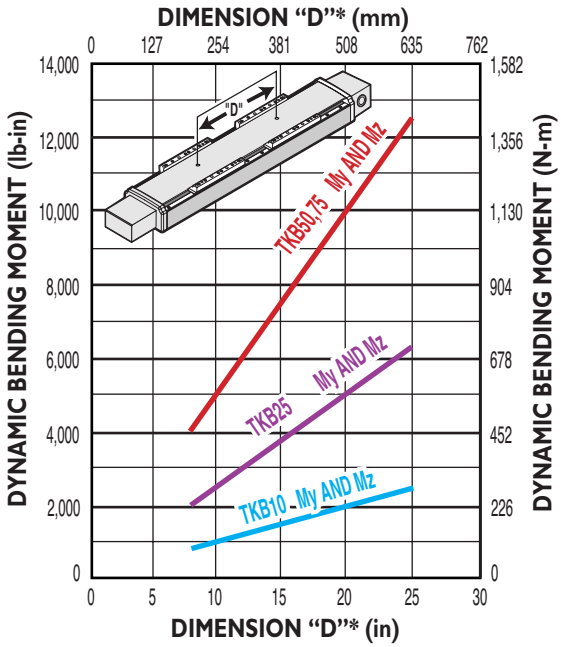


RODLESS

TKB Series
- Load deflection
- Auxiliary carrier

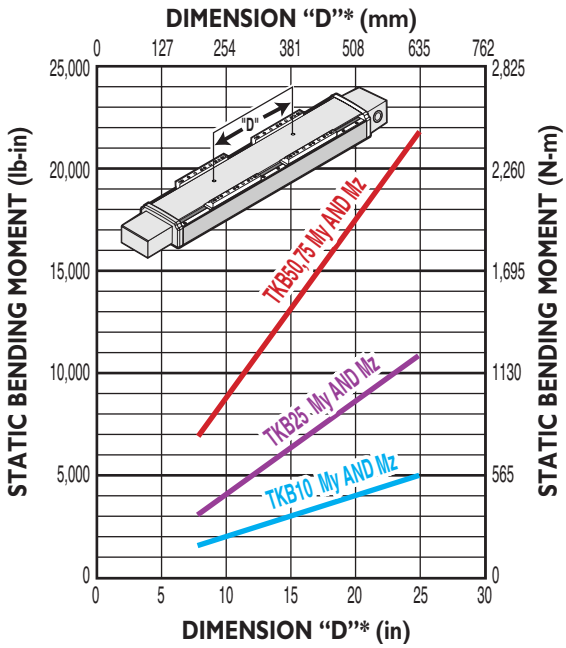
AUXILIARY CARRIER: BENDING MOMENT AT 'D' DISTANCE

DYNAMIC BENDING MOMENT



Rates shown on charts were calculated with these assumptions:
1.) Coupling between carriers is rigid.
2.) Load is equally distributed between carriers.
3.) Coupling device applies no misalignment loads to carriers.

STATIC BENDING MOMENT

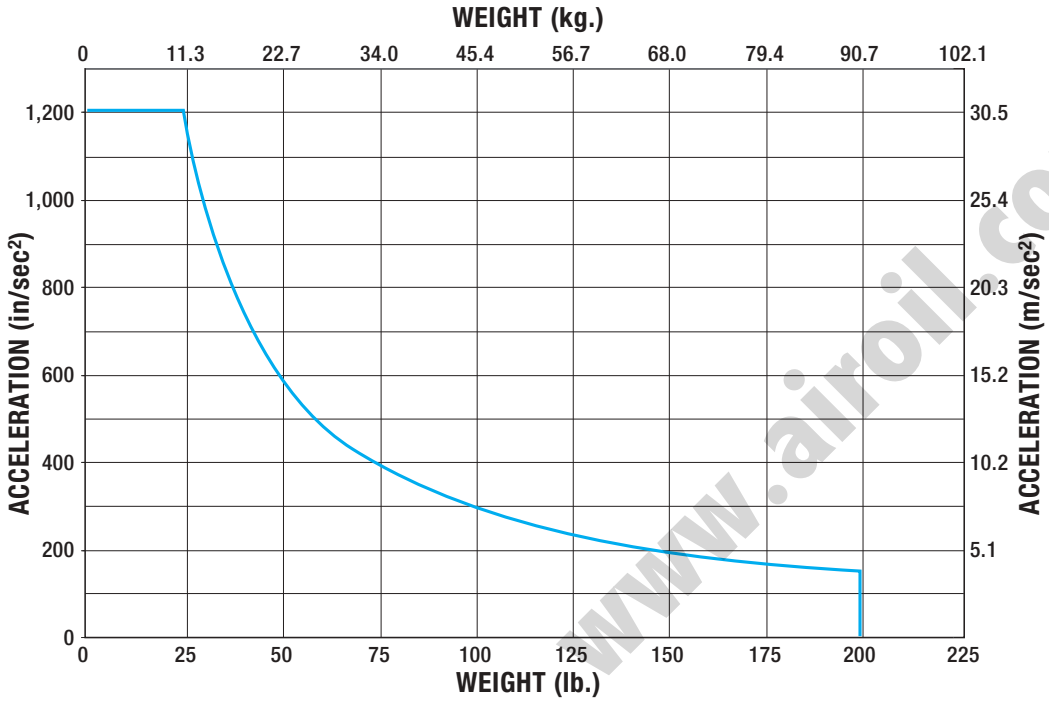


* Customer must specify Dimension "D" (Distance between carrier center lines) in configuration string.

BELT SPECIFICATIONS

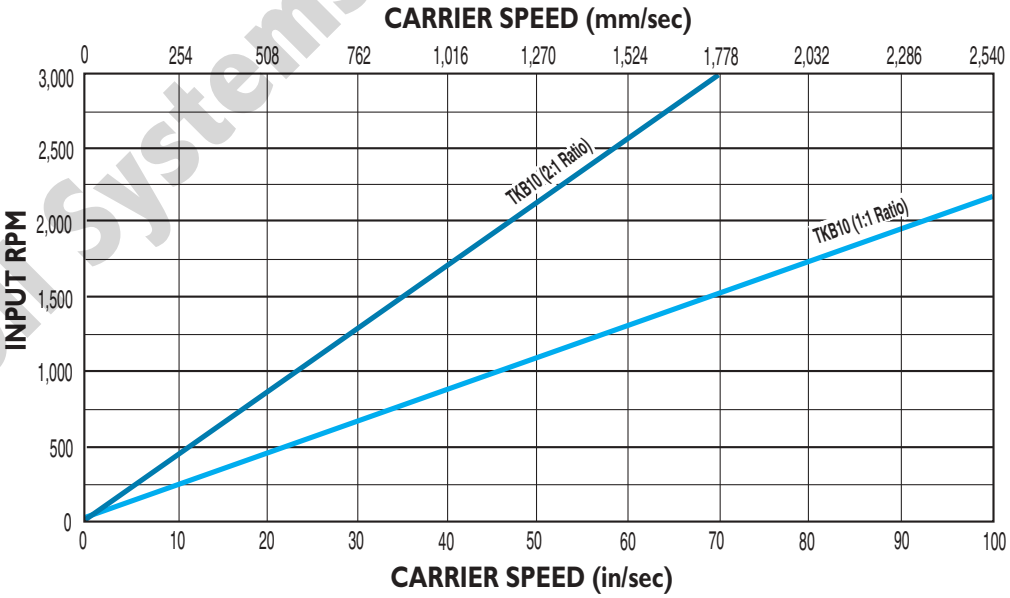
TKB10 Series
- Belt load
- Maximum belt speed

TKB10 MAXIMUM ACCELERATION AS A FUNCTION OF CARRIER LOAD WEIGHT



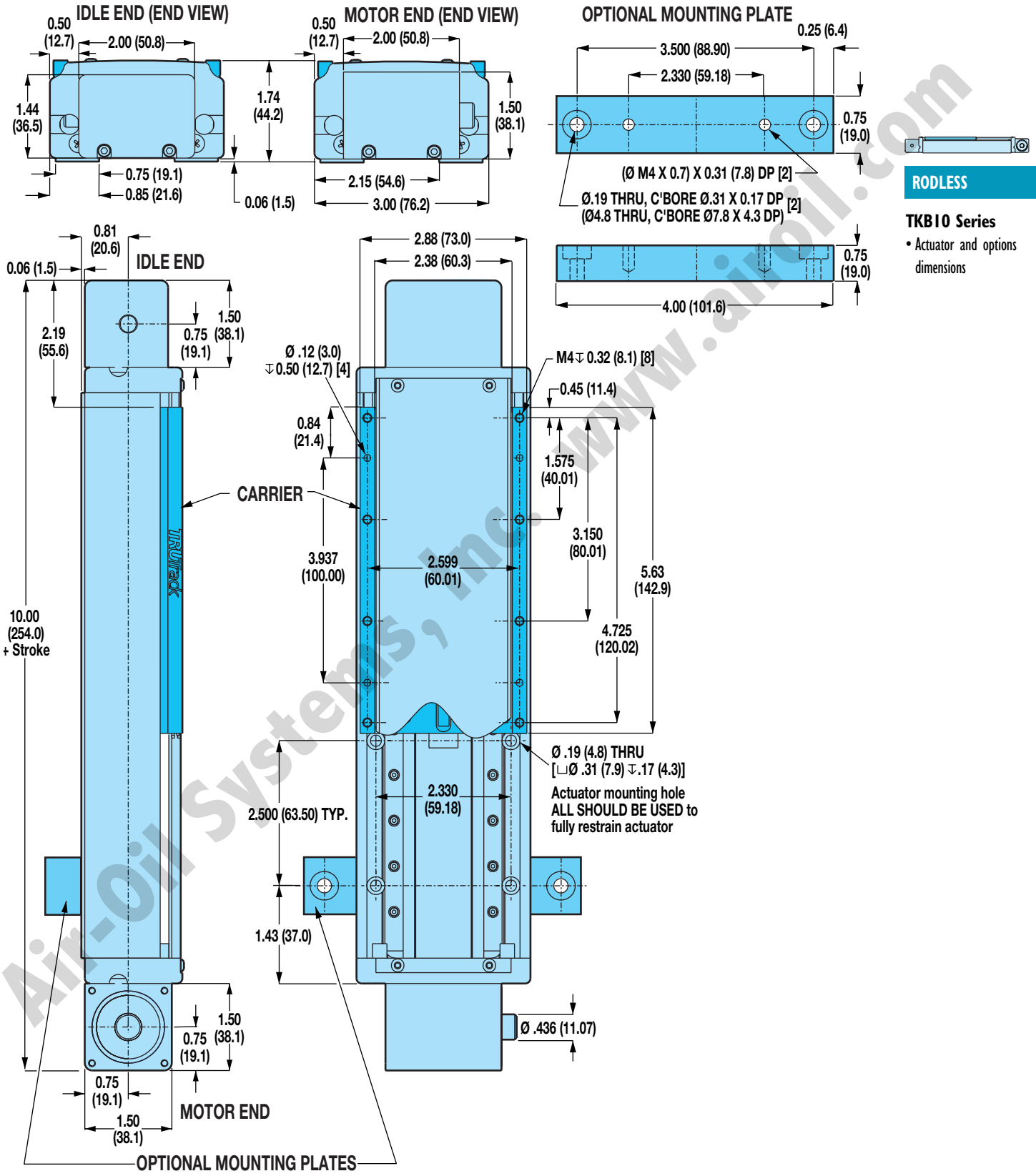
Total load on belt not to exceed 75 lbf. (334 N).

TKB10 MAXIMUM BELT SPEED



DIMENSIONS

TKB10 ACTUATOR AND OPTIONS

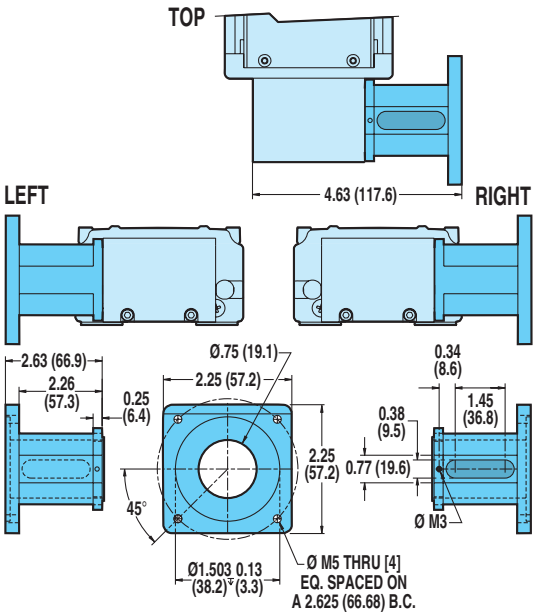


Unless otherwise noted, all dimensions shown are in inches (Dimensions in parenthesis are in millimeters)

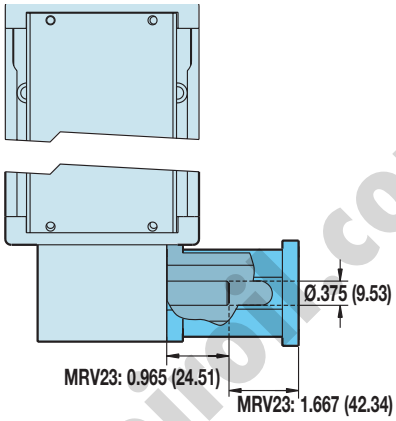
DIMENSIONS

TKB10 DIRECT DRIVE MOTOR MOUNTING

For 23-frame MRV brushless and 23-frame gearheads



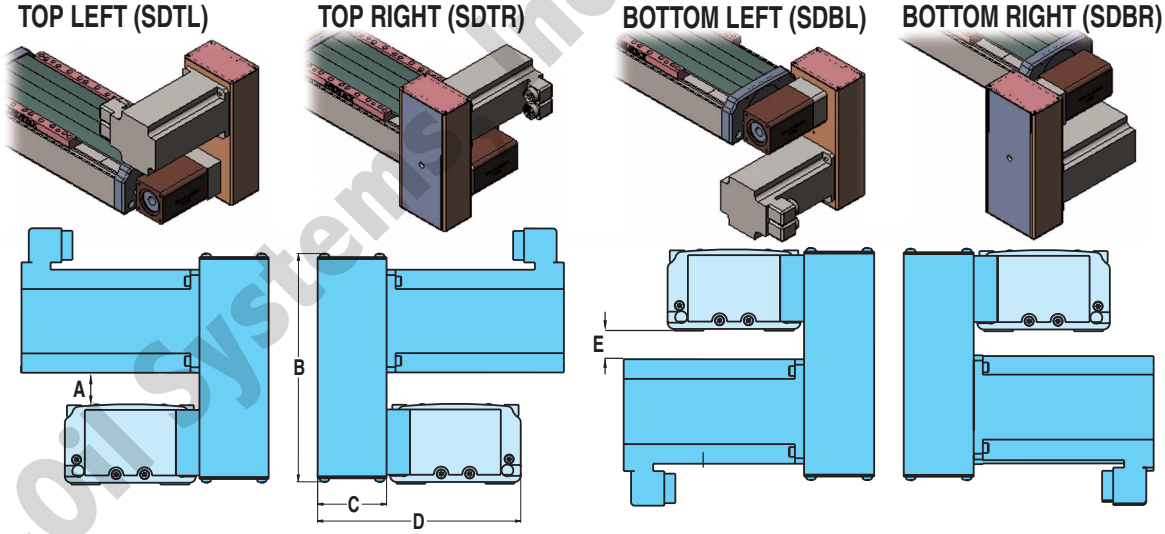
XY/XJ SHAFT OPTION



If a Tol-O-Matic motor is not specified in the configuration string, customer's motor must conform to the shaft dimensions shown for mounting compatibility. Please specify your motor type and frame size when ordering. See ordering page F-26 and refer to Customer Supplied Motor Mounting Specifications document 3600-4632.

TKB10 REDUCTION DRIVE MOTOR MOUNTING

TOP LEFT (SDTL) TOP RIGHT (SDTR) BOTTOM LEFT (SDBL) BOTTOM RIGHT (SDBR)



DIMENSIONS

	MOTORS	A		B		C		D		E	
		in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
BRUSHLESS	MRV11	1.21	30.7	5.70	144.8	2.13	54.1	4.50	114.3	1.33	33.7
	MRV21, 22, 23, 24	0.86	21.9	5.70	144.8	2.13	54.1	4.50	114.3	0.98	24.9

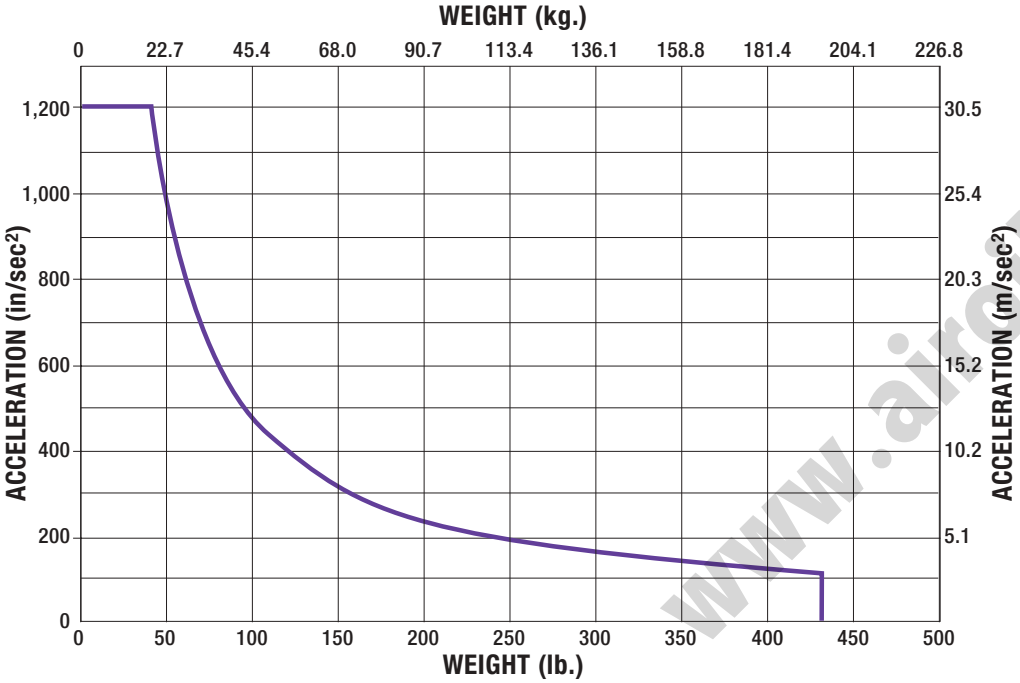
SPECIFICATIONS

MOTORS	REDUCTION DRIVE WEIGHT				REDUCTION INERTIA AT MOTOR SHAFT			
	1:1 RATIO		2:1 RATIO		1:1 RATIO		2:1 RATIO	
	lb	kg	lb	kg	lb-in²	kg-cm²	lb-in²	kg-cm²
MRV11	1.80	0.82	1.80	0.82	.056	.1639	.088	.2568
MRV21, 22, 23, 24	1.80	0.82	1.80	0.82	.056	.1639	.088	.2568

REDUCTION EFFICIENCY: 0.95

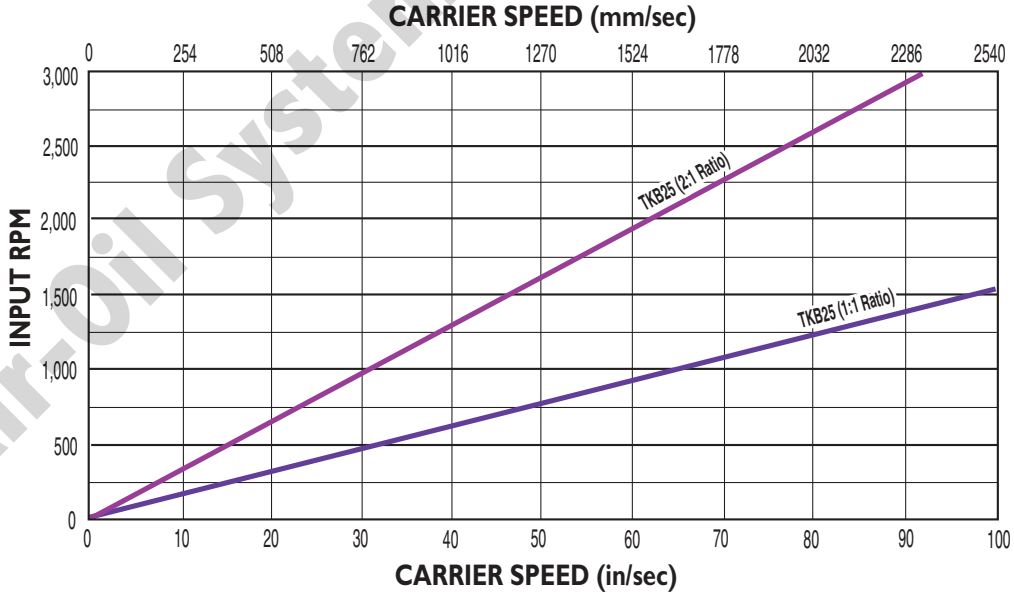
BELT SPECIFICATIONS

TKB25 MAXIMUM ACCELERATION AS A FUNCTION OF CARRIER LOAD WEIGHT



Total load on belt not to exceed 120 lbf. (534 N).

TKB25 MAXIMUM BELT SPEED

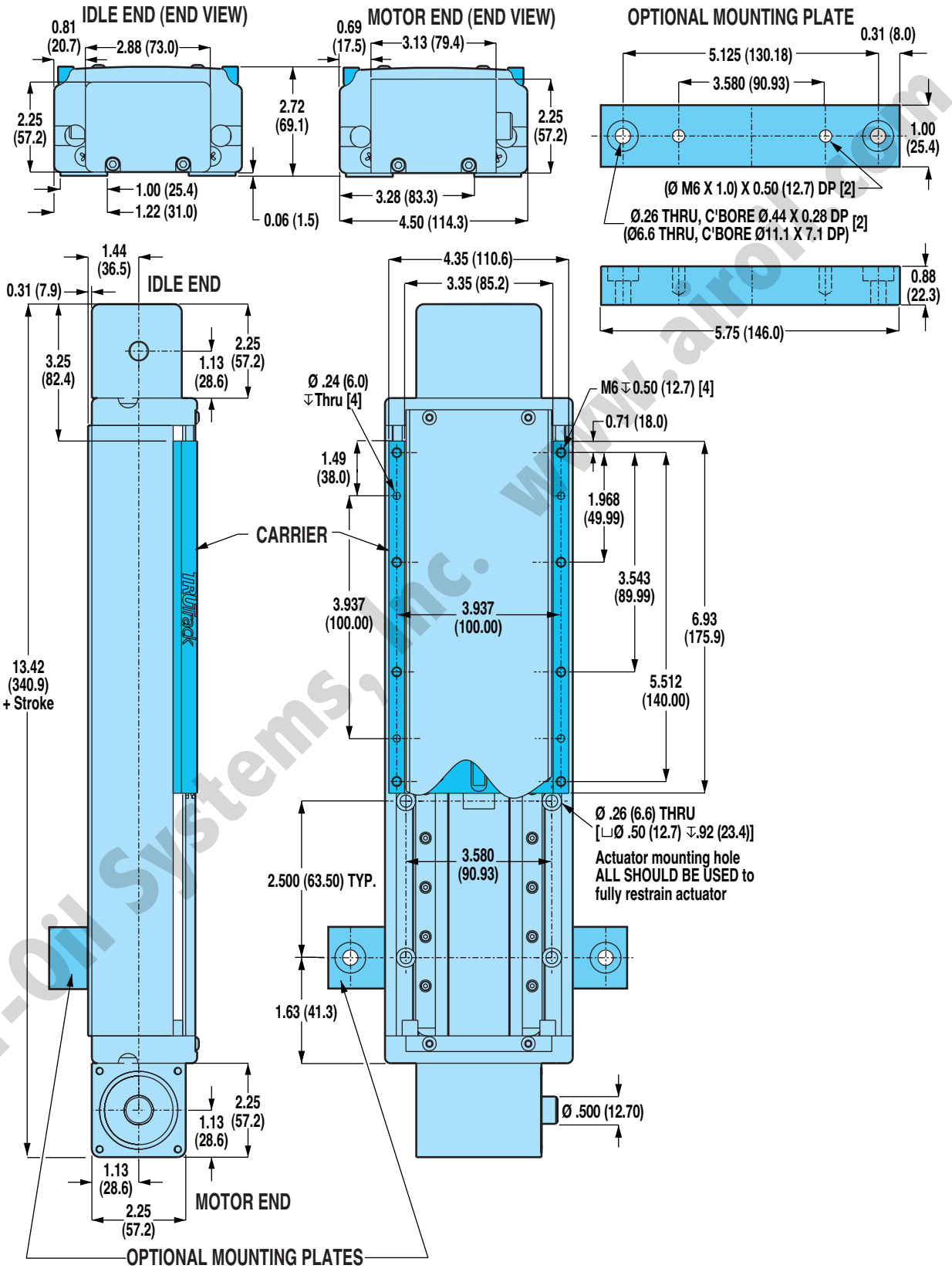


DIMENSIONS

TKB25 ACTUATOR AND OPTIONS

TKB10 Series

- Actuator and option dimensions

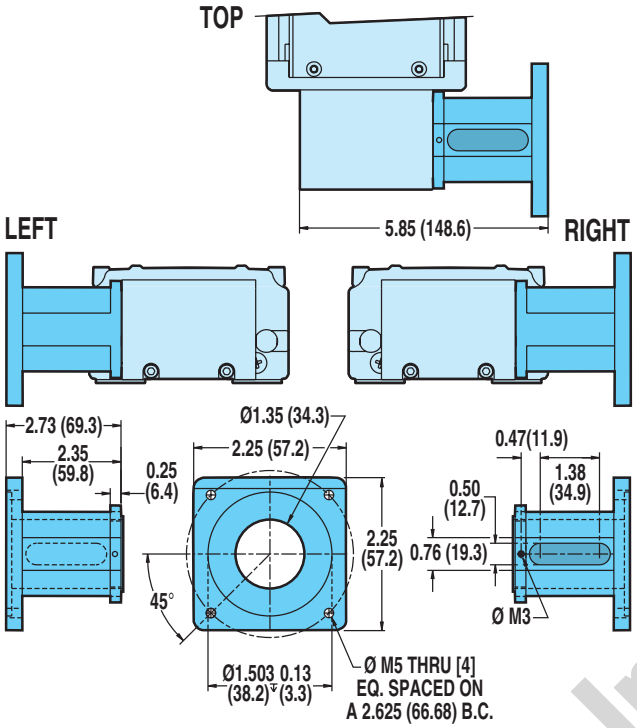


Unless otherwise noted, all dimensions shown are in inches (Dimensions in parenthesis are in millimeters)

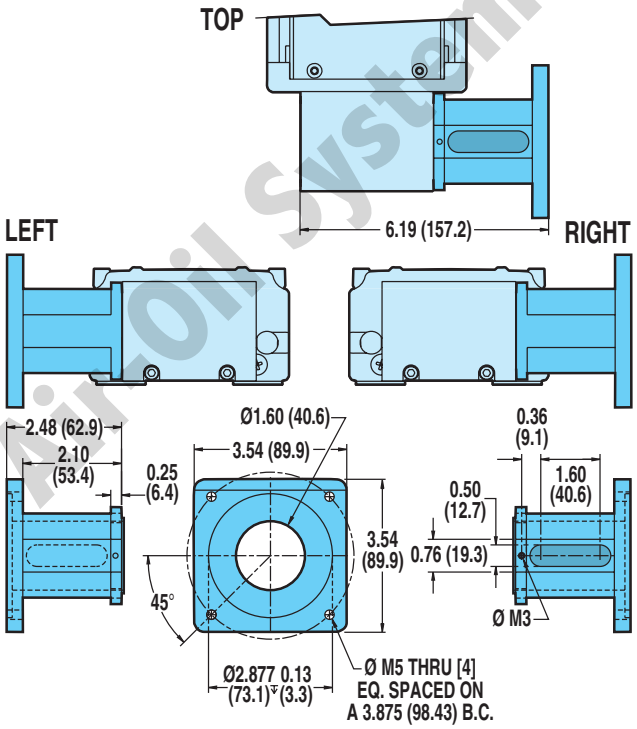
DIMENSIONS

TKB25 DIRECT DRIVE MOUNTING MOTOR ADAPTER

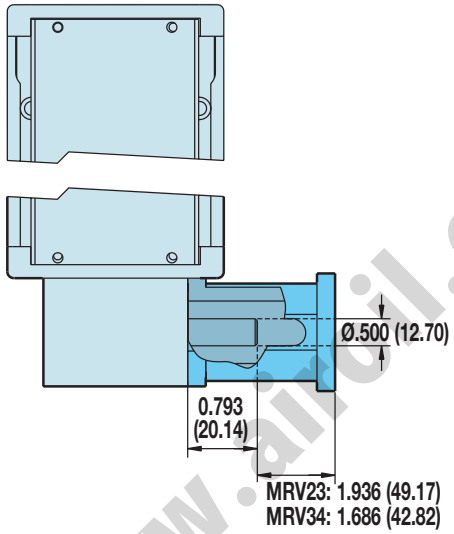
For 23-frame MRV brushless motors and gearheads



For 34-frame MRV brushless and 34-frame gearheads.



XY/XJ SHAFT OPTION



If a Tol-O-Matic motor is not specified in the configuration string, customer's motor must conform to the shaft dimensions shown for mounting compatibility. Please specify your motor type and frame size when ordering. See ordering pages F-26 and refer to Customer Supplied Motor Mounting Specifications document 3600-4632.

RODLESS

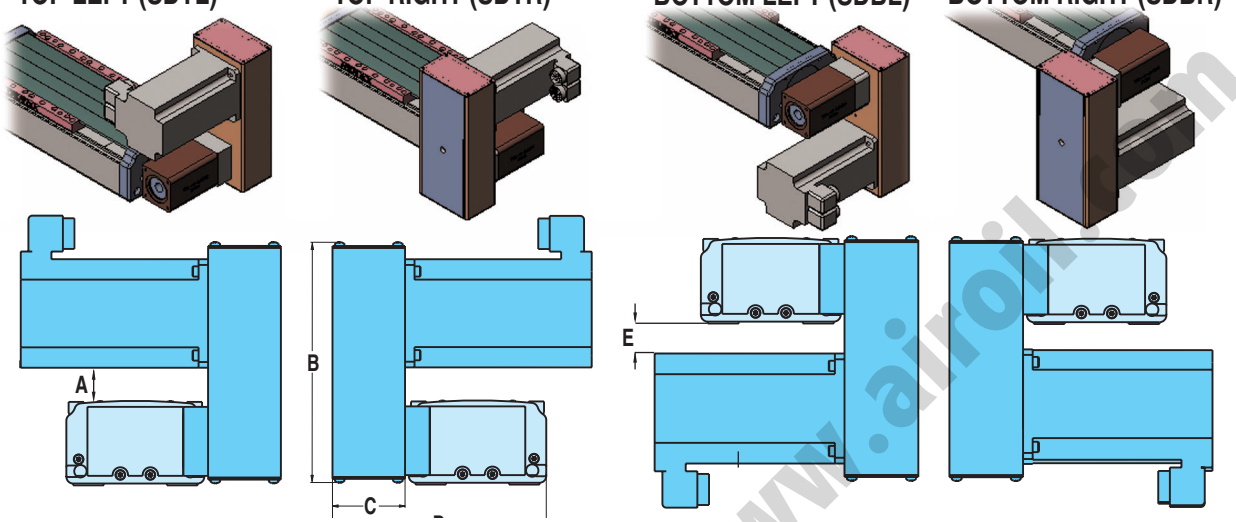
TKB25 Series

- Direct drive motor and gearhead mounting

DIMENSIONS

TKB25 REDUCTION DRIVE MOTOR MOUNTING

TOP LEFT (SDTL) TOP RIGHT (SDTR) BOTTOM LEFT (SDBL) BOTTOM RIGHT (SDBR)



DIMENSIONS

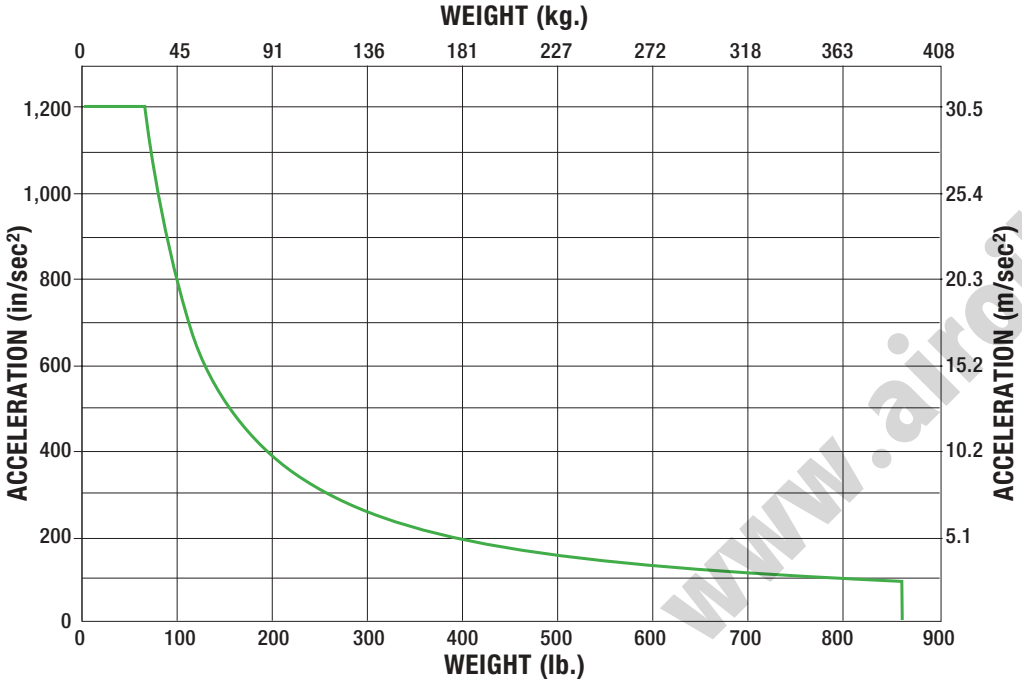
	MOTORS	A		B		C		D		E	
		in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
BRUSHLESS	MRV21, 22, 23, 24	1.77	44.9	7.02	178.3	2.13	54.1	5.67	144.1	1.61	40.8
BRUSHLESS	MRV31, 32, 33	1.12	28.5	7.79	197.9	2.38	60.5	5.92	150.4	0.96	24.4

SPECIFICATIONS

MOTORS	REDUCTION DRIVE WEIGHT				REDUCTION INERTIA AT MOTOR SHAFT			
	1:1 RATIO		2:1 RATIO		1:1 RATIO		2:1 RATIO	
	lb	kg	lb	kg	lb-in²	kg-cm²	lb-in²	kg-cm²
MRV21, 22, 23, 24	2.55	1.16	2.78	1.26	.036	.1054	.227	.6628
MRV31, 32, 33	2.80	1.27	3.03	1.37	.036	.1054	.227	.6628

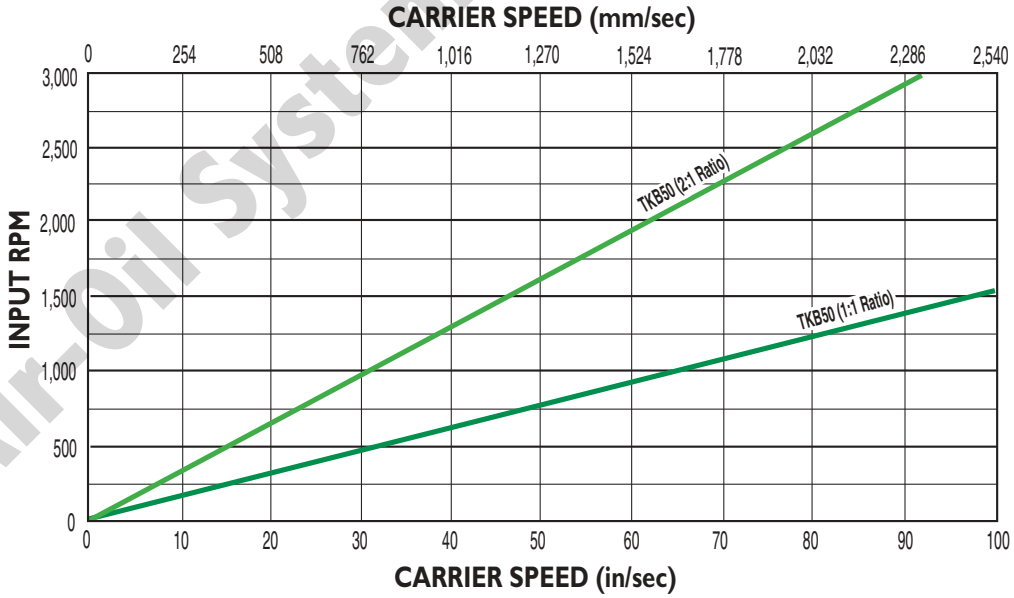
REDUCTION EFFICIENCY: 0.95

TKB50 MAXIMUM ACCELERATION AS A FUNCTION OF CARRIER LOAD WEIGHT



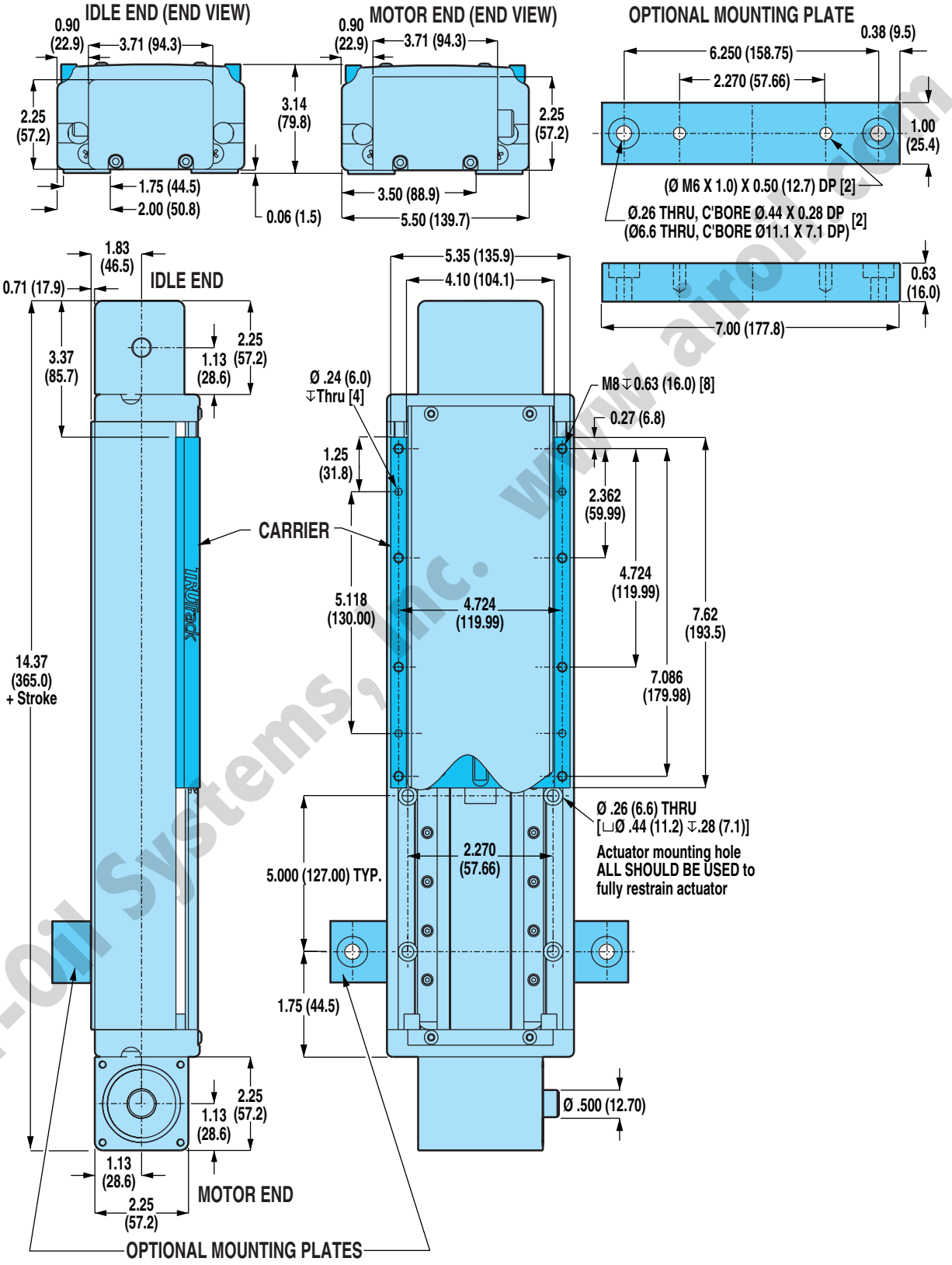
Total load on belt not to exceed 195 lbf. (867 N).

TKB50 MAXIMUM BELT SPEED



DIMENSIONS

TKB50 ACTUATOR AND OPTIONS

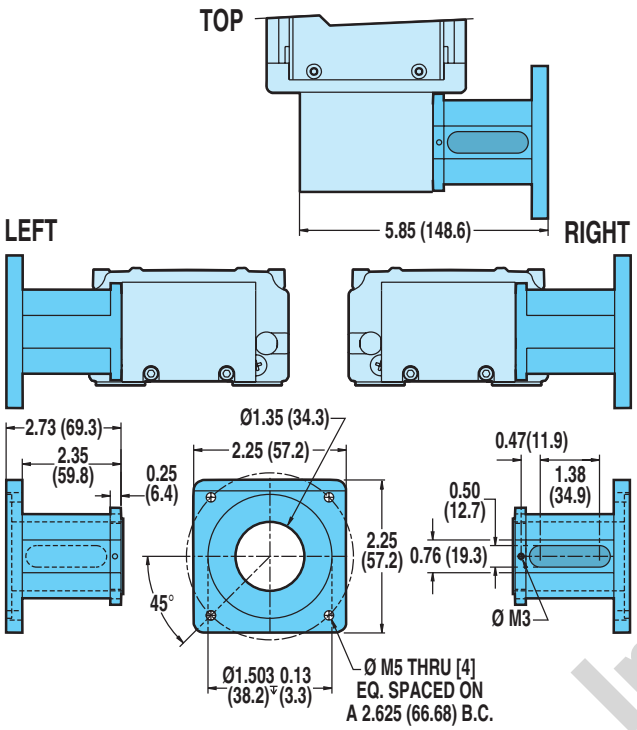


Unless otherwise noted, all dimensions shown are in inches (Dimensions in parenthesis are in millimeters)

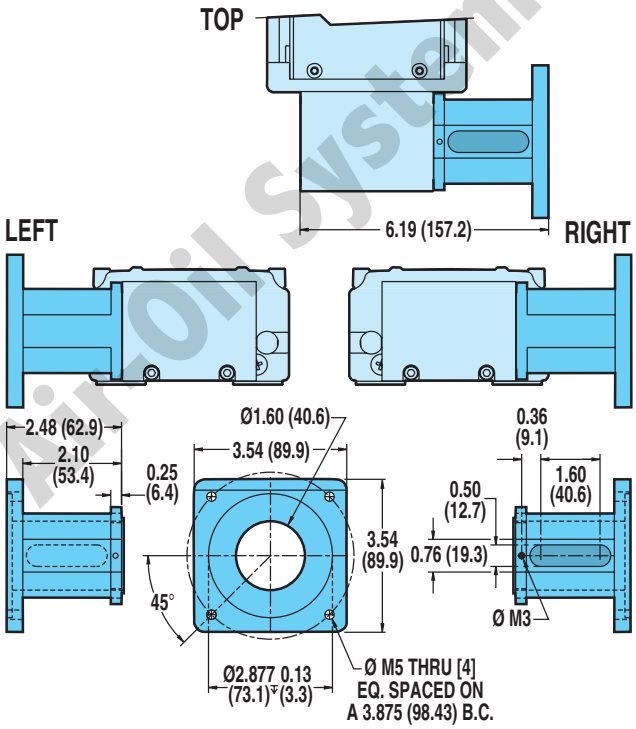
DIMENSIONS

TKB50 DIRECT DRIVE MOUNTING MOTOR ADAPTER

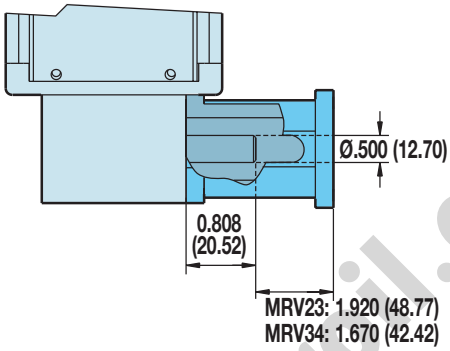
For 23-frame MRV brushless motors and gearheads



For 34-frame MRV brushless and 34-frame gearheads.



XY/XJ SHAFT OPTION



If a Tol-O-Matic motor is not specified in the configuration string, customer's motor must conform to the shaft dimensions shown for mounting compatibility. Please specify your motor type and frame size when ordering. See ordering page F-26 and refer to Customer Supplied Motor Mounting Specifications document 3600-4632.

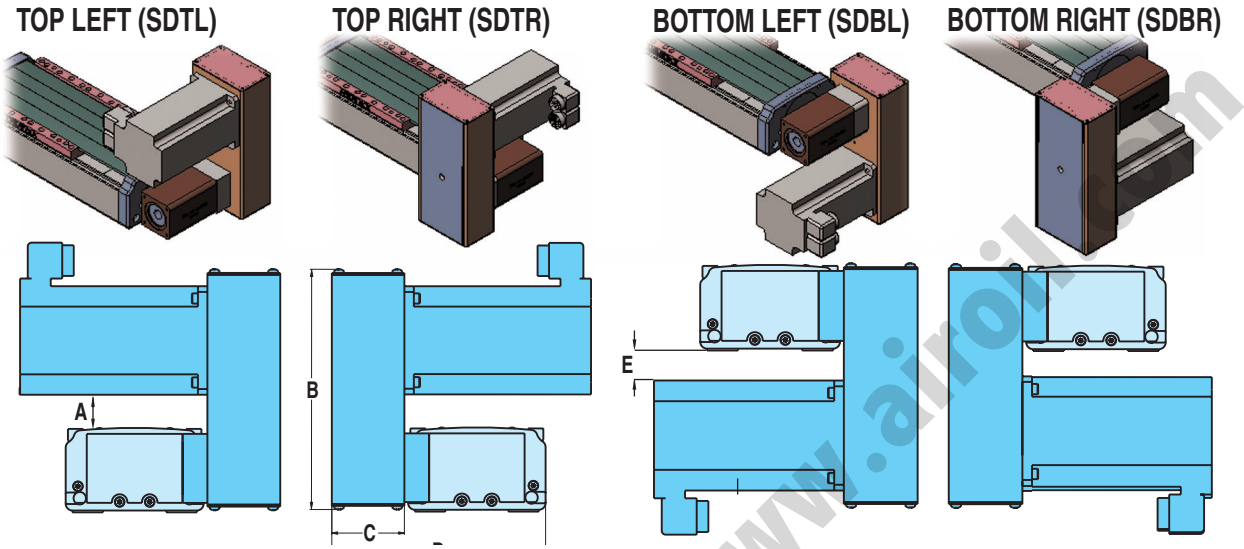
RODLESS

TKB50 Series

- Direct drive motor mounting
- Xy/Xj shaft option

DIMENSIONS

TKB50 REDUCTION DRIVE MOTOR MOUNTING



DIMENSIONS

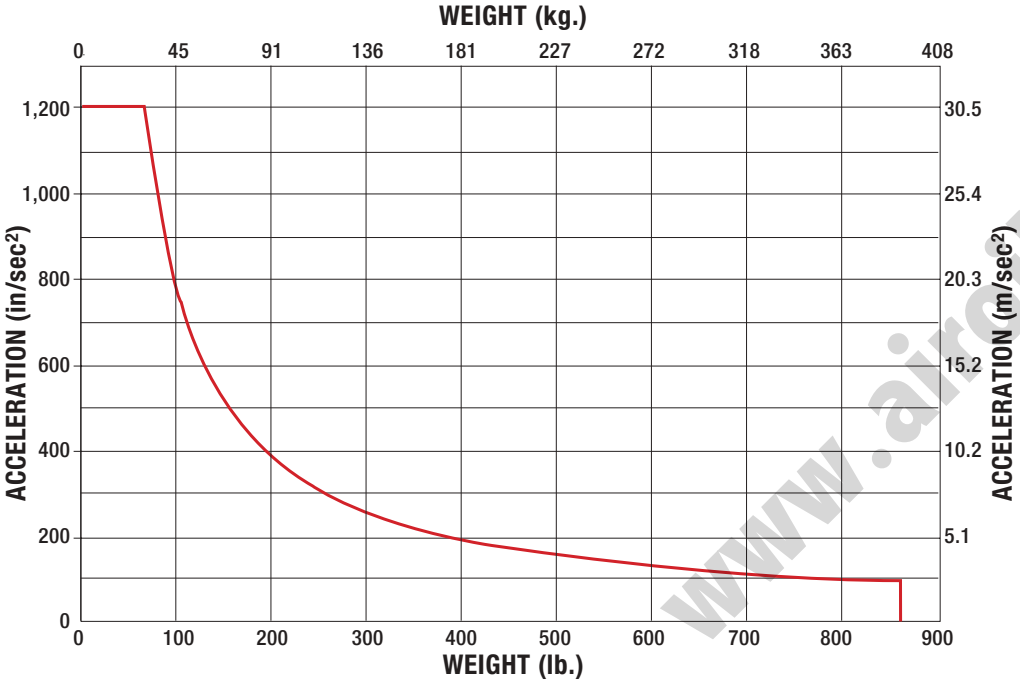
	MOTORS	A		B		C		D		E	
		in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
BRUSHLESS	MRV21, 22, 23, 24	2.50	63.4	8.34	211.8	2.13	54.1	6.48	164.6	1.96	49.7
BRUSHLESS	MRV31, 32, 33	1.85	47.0	8.98	228.1	2.38	60.5	6.73	170.9	1.31	33.3

SPECIFICATIONS

MOTORS	REDUCTION DRIVE WEIGHT				REDUCTION INERTIA AT MOTOR SHAFT			
	1:1 RATIO		2:1 RATIO		1:1 RATIO		2:1 RATIO	
	lb	kg	lb	kg	lb-in²	kg-cm²	lb-in²	kg-cm²
MRV21, 22, 23, 24	2.87	1.30	3.10	1.40	.036	.1054	.227	.6628
MRV31, 32, 33	3.44	1.56	3.60	1.63	.036	.1054	.227	.6628

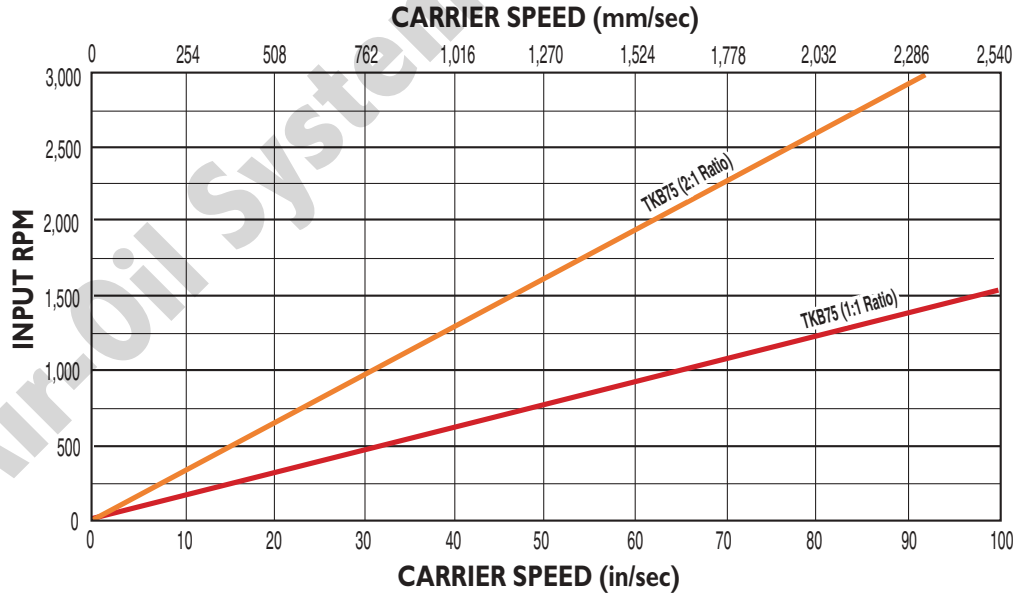
REDUCTION EFFICIENCY: 0.95

TKB75 MAXIMUM ACCELERATION AS A FUNCTION OF CARRIER LOAD WEIGHT



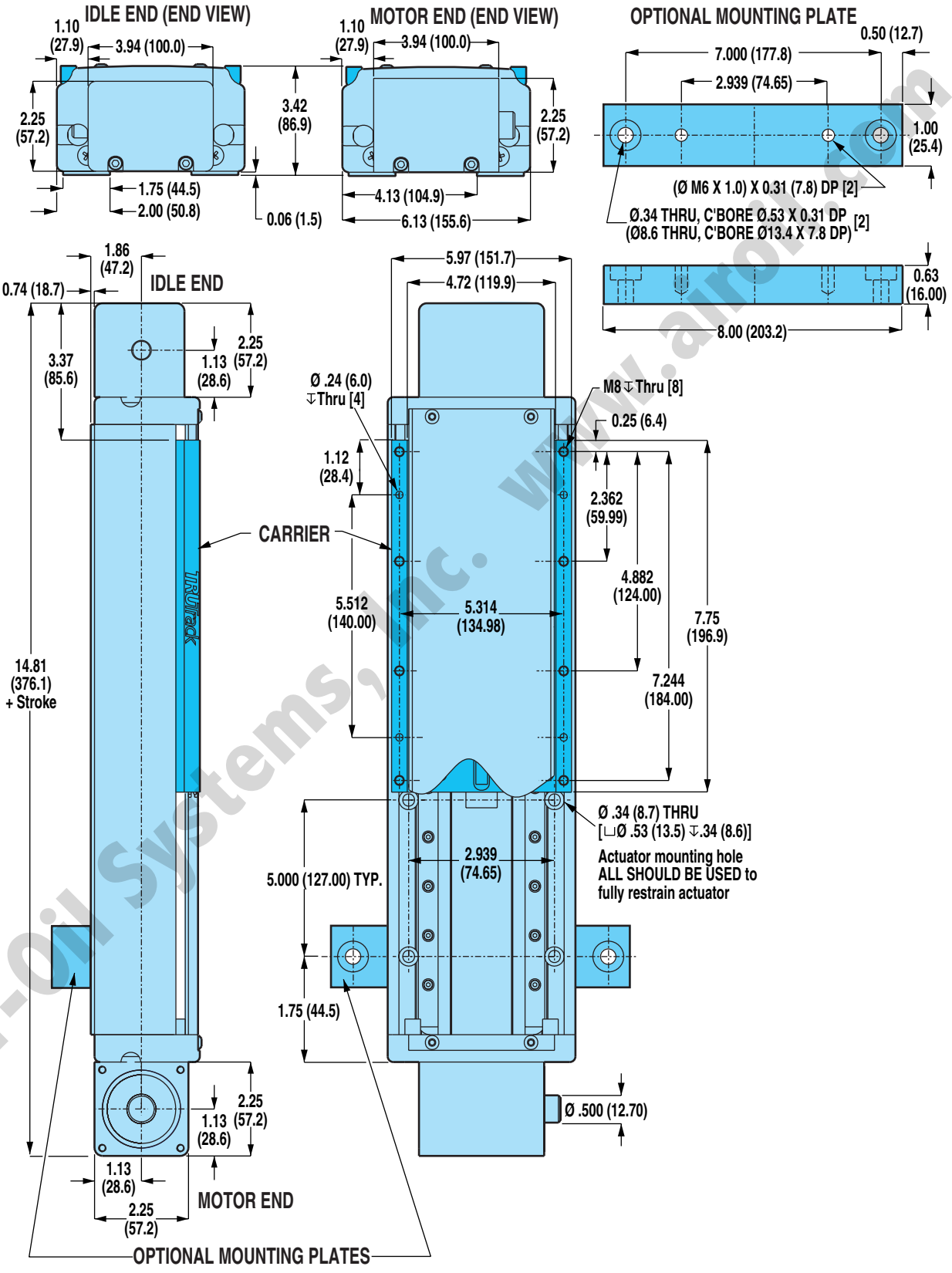
Total load on belt not to exceed 245 lbf. (1090 N).

TKB75 MAXIMUM BELT SPEED



DIMENSIONS

TKB75 ACTUATOR AND OPTIONS

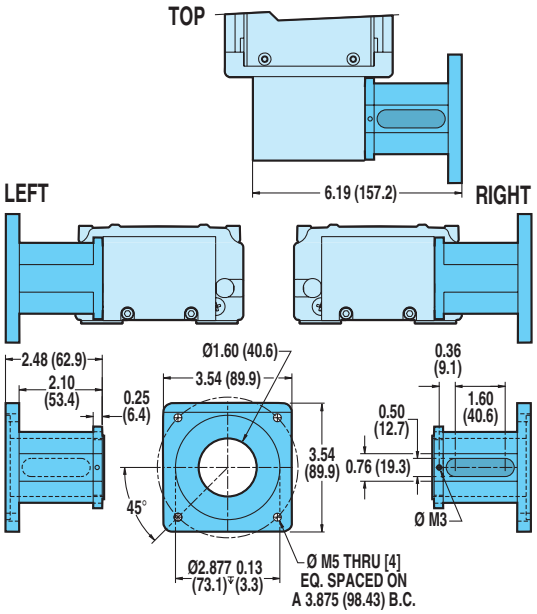


Unless otherwise noted, all dimensions shown are in inches (Dimensions in parenthesis are in millimeters)

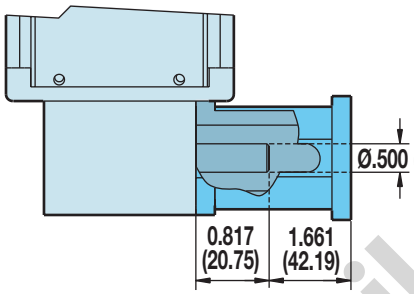
DIMENSIONS

TKB75 DIRECT DRIVE MOTOR MOUNTING

For 34-frame MRV brushless and 34-frame gearheads



XY/XJ SHAFT OPTION



If a Tol-O-Matic motor is not specified in the configuration string, customer's motor must conform to the shaft dimensions shown for mounting compatibility. Please specify your motor type and frame size when ordering.
See ordering pages F-26 and refer to Customer Supplied Motor Mounting Specifications document 3600-4632.

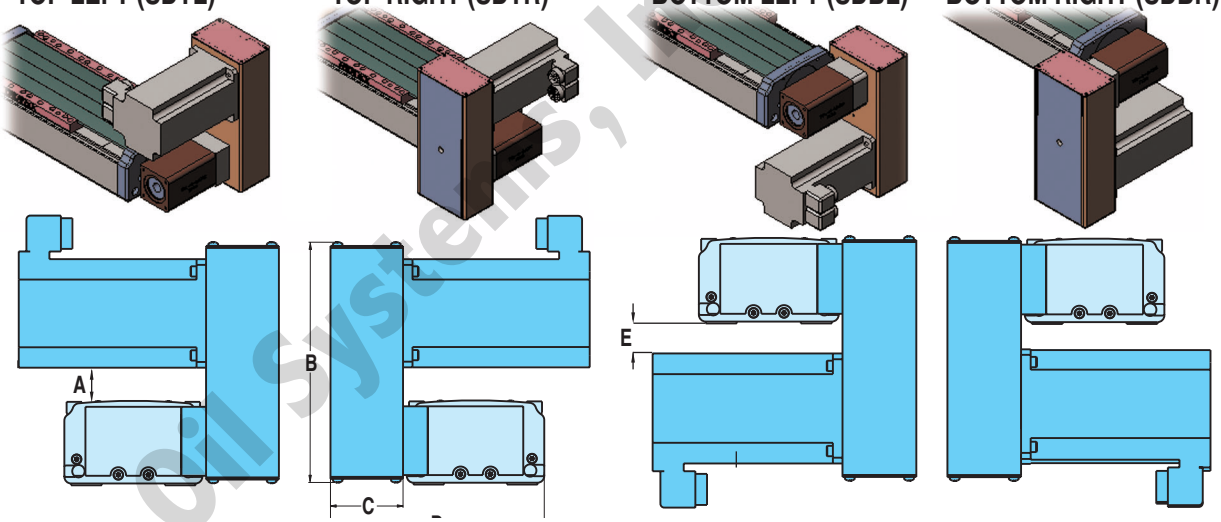
RODLESS

TKB75 Series

- Direct drive motor mounting dimensions
- Reduction drive motor mounting dimensions
- Xy/Xj motor mounting option

TKB75 REDUCTION DRIVE MOTOR MOUNTING

TOP LEFT (SDTL) TOP RIGHT (SDTR) BOTTOM LEFT (SDBL) BOTTOM RIGHT (SDBR)



DIMENSIONS

	MOTORS	A		B		C		D		E	
		in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
BRUSHLESS	MRV31, 32, 33	1.60	40.7	8.98	228.1	2.38	60.5	7.00	177.9	1.28	32.5

SPECIFICATIONS

MOTORS	REDUCTION DRIVE WEIGHT				REDUCTION INERTIA AT MOTOR SHAFT			
	1:1 RATIO		2:1 RATIO		1:1 RATIO		2:1 RATIO	
	lb	kg	lb	kg	lb-in²	kg-cm²	lb-in²	kg-cm²
MRV31, 32, 33	3.44	1.56	3.60	1.63	.036	.1054	.227	.6628

REDUCTION EFFICIENCY: 0.95

ORDERING

BASE MODEL SPECIFICATIONS

OPTIONS SPECIFICATIONS

TKB 50 SK48 SDBR2 DC18 KT2 BE2 LU MP4

MODEL TYPE

TKB TKB Series TruTrack Belt Drive

PAYLOAD LIMITS

10 100 lbs
25 250 lbs
50 500 lbs
75 750 lbs

STROKE LENGTH

SK Stroke, then enter desired stroke length in decimal inches

MODEL	MAX STROKE* (in)
TKB ALL SIZES	96

*Actuator cover has maximum stroke of 48 inches

MOTOR MOUNTING / REDUCTIONS

(must choose one)

SDL Direct Drive / left
SDR Direct Drive / right

⚠ ***A motor size and code must be selected when specifying a 1:1 or 2:1 reduction. Reference the ordering pages in sections F, G and H for the motor types and selections.***

SDTL1 1:1 Reduction Drive / top left
SDTR1 1:1 Reduction Drive / top right
SDBL1 1:1 Reduction Drive / bottom left
SDBR1 1:1 Reduction Drive / bottom right
SDTL2 2:1 Reduction Drive / top left
SDTR2 2:1 Reduction Drive / top right
SDBL2 2:1 Reduction Drive / bottom left
SDBR2 2:1 Reduction Drive / bottom right

AUXILIARY CARRIER

DC_ _ Auxiliary Carrier, then center-to-center spacing desired in decimal inches. (Center-to-Center spacing will add to overall dead length and will not subtract from the stroke length

SWITCHES

RT_ Reed Switch (Form A) with 5-meter lead, and quantity desired
BT_ Reed Switch (Form C) with 5-meter lead, and quantity desired
KT_ Hall-effect Sinking Switch with 5-meter lead, and quantity desired
TT_ Hall-effect Sourcing Switch with 5-meter lead, and quantity desired
SP*_ Sensor Package

*Includes: Two Form C reed switches w/5-meter leads, mounted 1" from end-of-stroke and one Hall-effect sinking switch w/5-meter lead, mounted 2" from end-of-stroke on motor end.

BELLOWS

BE2 Bellows option (increases the dead length of the actuator, see page C-87)

SPECIAL LUBRICATION

LU Low dust generating grease

MOUNTING PLATES

MP_ Mounting Plates plus quantity desired

TO ORDER MOTORS/CONTROLS/INTERFACES

BRUSHLESS SERVO (SEE PAGE F-33)

⚠ ***Not all codes listed are compatible with all options.***

Use the Tol-O-Motion™ Sizing Software to determine available options and accessories based on your application requirements.

FIELD RETROFIT KITS				
ITEM	TKB10	TKB25	TKB50	TKB75
Mounting Plates	0601-9803	0602-9803	0603-9803	0604-9803