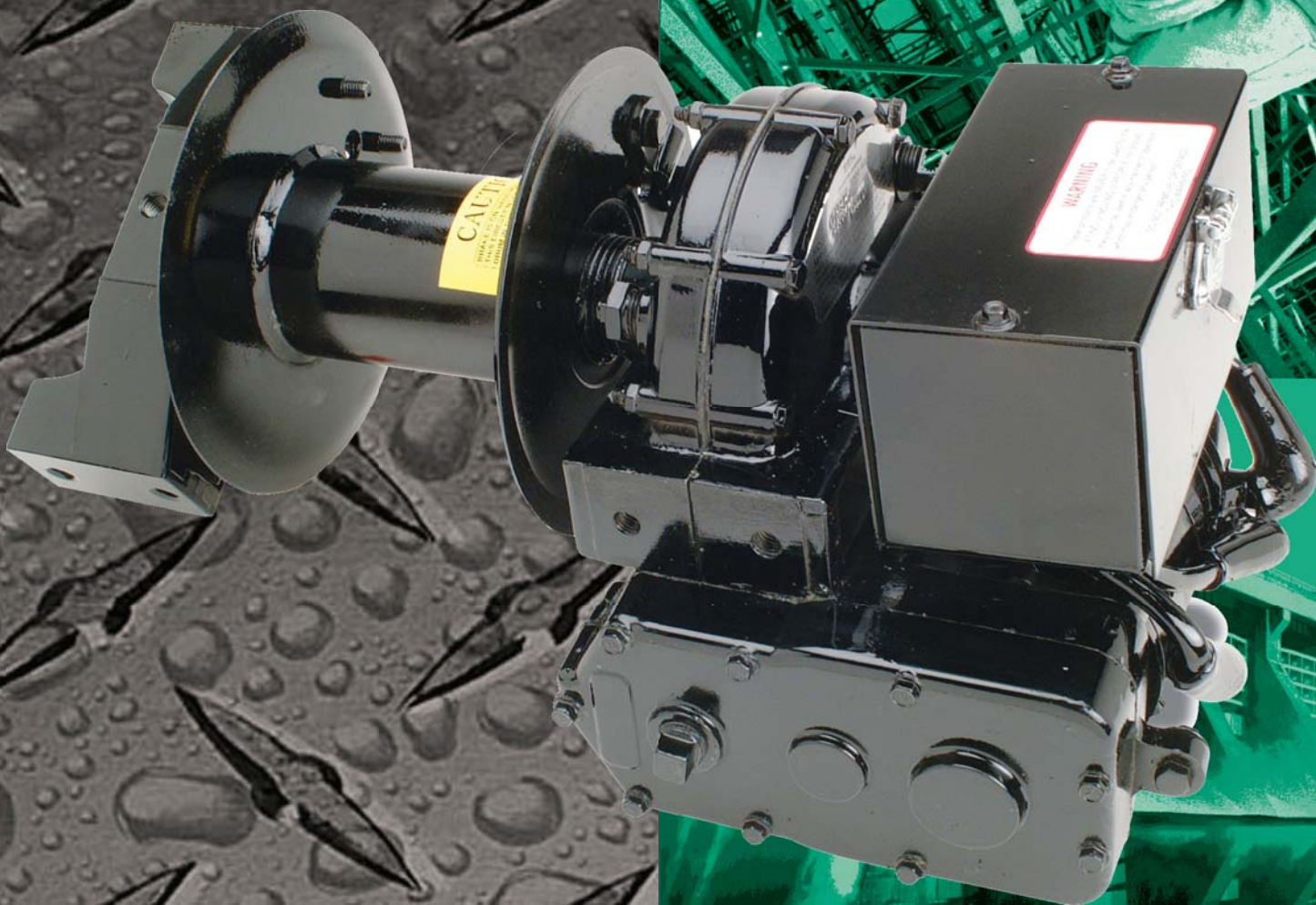


**WINCHES & REDUCERS**

**RIKI**<sup>®</sup>

**Commercial Grade  
Truck Equipment**



## Building Quality Winches Since 1934

RKI has been manufacturing quality winches to serve the needs of industrial, commercial and private users for over seventy years.

Our winches are used all over the world in the manufacture of cranes, aerial devices, processing plants, agriculture equipment, refuse collection and oilfield rigs.

**Cranes** To ensure the highest quality, every one of our products is designed, tested, and built in our Houston, Texas facility. If one of our standard winches or options does not meet your specific requirements, we can provide custom drums, shafts, mountings and accessories to match your exact specifications.

**Aerial Devices**

### High Quality Features:

- Processing Plants**
    - > Aluminum bronze worm gears
    - > Hardened steel worms
    - > Tapered roller bearings on wormshaft
  - Agriculture**
    - > Fabricated steel drums will not break
    - > Hundreds of standard configurations
  - Refuse Collection**
    - > Available for any power source: mechanical, hydraulic, electric
    - > Oil-cooled plate type worm brakes
- > Line pull up to 20,000 pounds
  - > Standard options include capstans, roller assemblies, drum guards, drum-shaft extensions, worm brakes, drums keyed to shaft
  - > Custom drums, shafts, and mountings available to meet your individual needs

Note: Not all features apply to all winches.

**Oilfield Rigs**

### Superior Pulling Power

**Cement Plants** Many industries use our winches for everyday jobs or incorporate our winches into products to serve their special applications.

**Utility Companies** Utility companies use our winches to tension cable for power line installations; mines and cement plants use our winches to run conveyers; and loggers use our winches to load trees for transport. In Texas, many of the light towers that line our major highways have an RKI winch installed in the base that is used to lower and raise the light rings for easy maintenance.



Light ring on top of pole is lowered by an RKI winch for maintenance.



Shown here is the area the RKI winch is installed in the light pole.

# RKI WINCH LINE-UP



**02MLX-2RSSL 2,000 POUND**



**12HLX-5LXSL 12,000 POUND**



**08HUO-3LBSL 8,000 POUND**



**08HUU-3LSSL 8,000 POUND**



**08MLX-2LSSL 8,000 POUND**



**08ELO-2LBSR 8,000 POUND**



**20HLO/U-5LSSL 20,000 POUND**

**STANDARD WINCH CONFIGURATIONS**

	Model	Ratio	Gear Cut	Drum	Shaft	Assembly
<b>Mechanical</b>	02MLX	2	R	S	S	L, R
	08MLX	2, 3, 4	L	X, S, A, B, C, D	S, E, C	L, R
	08MLO/U	2, 3, 4	L	X, S, A, B, C, D	S, E, C	L, R
	08MUX	2, 3, 4	L	X, S, A, B, C, D	S, E, C	L, R
	08MUO/U	2, 3, 4	L	X, S, A, B, C, D	S, E, C	L, R
	12MLX	5	L	X, S, A, B	S, E	L, R
	12MLO/U	5	L	X, S, A, B	S, E	L, R
	12MUX	5	L	X, S, A, B	S, E	L, R
	12MUO/U	5	L	X, S, A, B	S, E	L, R
	15MLO/U	5	L	S	S, E	L, R
	15MUO/U	5	L	S	S, E	L, R
	20MLO/U	5	L	S	S, E	L, R
<b>Hydraulic</b>	08HLX	2, 3, 4	L	X, S, A, B, C, D	S, E, C	L, R
	08HLO/U	2, 3, 4	L	X, S, A, B, C, D	S, E, C	L, R
	08HUX	2, 3, 4	L	X, S, A, B, C, D	S, E, C	L, R
	08HUO/U	2, 3, 4	L	X, S, A, B, C, D	S, E, C	L, R
	12HLX	5	L	X, S, A, B	S, E	L, R
	12HLO/U	5	L	X, S, A, B	S, E	L, R
	12HUX	5	L	X, S, A, B	S, E	L, R
	12HUO/U	5	L	X, S, A, B	S, E	L, R
	15HLO/U	5	L	S	S, E	L, R
	15HUO/U	5	L	S	S, E	L, R
	20HLO/U	5	L	S	S, E	L, R
	<b>Electric</b>	08ELX	2, 3, 4	L	S, A, B, C, D	S, E, C
08ELO/U		2, 3, 4	L	S, A, B, C, D	S, E, C	L, R
08EUX		2, 3, 4	L	S, A, B, C, D	S, E, C	L, R
08EUO/U		2, 3, 4	L	S, A, B, C, D	S, E, C	L, R

**Model Number Designation**

<u>12</u>	<u>M</u>	<u>L</u>	<u>O</u>	-	<u>5</u>	<u>L</u>	<u>S</u>	<u>S</u>	<u>L</u>
1	2	3	4		5	6	7	8	9

- WINCH SERIES.
  - POWER SOURCE: E=Electrical 12VDC, H=Hydraulic adapter, M=Mechanical input shaft.
  - MOUNTING CONFIGURATION: L=Lowmount, U=Upright mount.
  - WORM BRAKE ROTATION: O=Overwind, U=Underwind, X=No brake.
  - WORM GEAR RATIO: 2=36:1, 3=18:1, 4=9:1, 5=32:1.
  - WORM GEAR HAND: L=Left hand, R=Right hand.
  - DRUM CODE: (See table on right). X=No Drum (Speed Reducer).
  - SHAFT CODE: S=Standard, E=Ready for extended shaft, C=Keyed for mounting capstan, B=Ready for mounting industry standard bayonet capstan (Speed Reducers Only).
  - WINCH ASSEMBLY: L=Left hand, R=Right hand.
- \*NOTE ANY Z DESIGNATION INDICATES SPECIAL OPTIONS.

**Drum Sizes**

WINCH SERIES	STD/OPT	DRUM CLUTCH	BARREL DIAMETER	FLANGE DIAMETER	BARREL LENGTH	PART NUMBER	DRUM CODE
02	STD	NO	2.12"	4.50"	3.37"	41584	S
08	STD	YES	3.50"	8.25"	7.87"	40600	S
08	OPT	NO	3.50"	8.25"	5.50"	40855	A
08	OPT	NO	3.50"	8.25"	6.12"	42808	B
08	OPT	NO	3.50"	8.25"	8.18"	42596	C
08	OPT	NO	3.50"	8.25"	4.30"	41344	D
12	STD	YES	3.75"	9.87"	13.40"	41714	S
12	OPT	YES	3.75"	9.87"	7.65"	41968	A
12	OPT	NO	3.75"	9.87"	7.65"	41417	B
15_L	STD	YES	4.50"	8.58"	15.06"	41844	S
15_U	STD	YES	4.50"	12.87"	15.06"	42356	S
20	STD	YES	5.00"	13.90"	13.00"	42718	S

- NOTE:
- Cable capacities are for standard drum. Standard drums and readily available optional drums are shown above. Other drums are available as specials.
  - Cable capacities are 90% of theoretical.
  - Hydraulic winch performance is for standard motor. Optional motors with different characteristics are available.



## WORM-GEAR WINCH SPECIFICATIONS

Mechanical																	
SERIES	GEAR RATIO	Input Torque		MAX SPEED (RPM)	ROPE DIA.	1st Layer			2nd Layer			3rd Layer			4th Layer		
		START (LB-IN)	RUN (LB-IN)			MAX LOAD (LB.)	LENGTH (FEET)	LINE SPEED (FPM)	MAX LOAD (LB.)	LENGTH (FEET)	LINE SPEED (FPM)	MAX LOAD (LB.)	LENGTH (FEET)	LINE SPEED (FPM)	MAX LOAD (LB.)	LENGTH (FEET)	LINE SPEED (FPM)
02M	36:1	190	130	1200	1/4	2000	8	21	1650	17	25	1410	27	29	1230	40	34
08M	36:1	1250	850	900	5/16	8000	23	25	6870	50	29	6020	79	33	5360	113	37
08M	18:1	1500	1090	900	5/16	8000*	23	50	6870	50	58	6020	79	66	5360	113	74
08M	9:1	2450	1960	900	5/16	8000*	23	100	6870	50	116	6020	79	132	5360	113	148
12M	32:1	1990	1330	900	1/2	12000	27	31	9710	60	39	8160	99	46	7030	145	53
15ML	32:1	4500	3600	400	9/16	15000	32	16	12270	70	20	10380	117	24			
15MU	32:1	4500	3600	400	9/16	15000	32	16	12270	70	20	10380	117	24	9000	170	27
20M	32:1	4400	2900	400	5/8	20000	29	18	16360	66	22	13850	108	27	12000	157	31

\* First layer holding capacity with worm brake is 2500 lb. for 18:1 and 600 lb. for 9:1. Pulling capacity is the value stated.

Hydraulic																	
SERIES	GEAR RATIO	Pressure		MAX FLOW (GPM)	ROPE DIA.	1st Layer			2nd Layer			3rd Layer			4th Layer		
		START (PSI)	RUN (PSI)			MAX LOAD (LB.)	LENGTH (FEET)	LINE SPEED (FPM)	MAX LOAD (LB.)	LENGTH (FEET)	LINE SPEED (FPM)	MAX LOAD (LB.)	LENGTH (FEET)	LINE SPEED (FPM)	MAX LOAD (LB.)	LENGTH (FEET)	LINE SPEED (FPM)
08H	36:1	1650	1200	15	5/16	8000	23	16	6870	50	18	6020	79	21	5360	113	24
08H	18:1	2020	1510	15	5/16	8000*	23	31	6870	50	36	6020	79	42	5360	113	47
08H	9:1	1900	1470	15	5/16	8000*	23	38	6870	50	44	6020	79	50	5360	113	56
12H	32:1	1490	1020	15	1/2	12000	27	12	9710	60	15	8160	99	17	7030	145	20
15HL	32:1	2480	1690	20	9/16	15000	32	12	12270	70	15	10380	117	18			
15HU	32:1	2480	1690	20	9/16	15000	32	12	12270	70	15	10380	117	18	9000	170	20
20H	32:1	1840	1080	34	5/8	20000	29	18	16360	66	22	13850	108	27	12000	157	31

\* First layer holding capacity with worm brake is 2500 lb. for 18:1 and 600 lb. for 9:1. Pulling capacity is the value stated.

Electric																	
SERIES	GEAR RATIO	AMPS	VOLTS	ROPE DIA.	1st Layer			2nd Layer			3rd Layer			4th Layer			
					MAX LOAD (LB.)	LENGTH (FEET)	LINE SPEED (FPM)	MAX LOAD (LB.)	LENGTH (FEET)	LINE SPEED (FPM)	MAX LOAD (LB.)	LENGTH (FEET)	LINE SPEED (FPM)	MAX LOAD (LB.)	LENGTH (FEET)	LINE SPEED (FPM)	
08E	36:1	320	12	5/16	8000	23	10	6870	50	12	6020	79	13	5360	113	15	
08E	18:1	320	12	5/16	5000*	23	20	4300	50	23	3770	79	27	3350	113	30	
08E	9:1	320	12	5/16	2500*	23	40	2150	50	47	1880	79	53	1680	113	60	

\* First layer holding capacity with worm brake is 2500 lb. for 18:1 and 600 lb. for 9:1. Pulling capacity is the value stated.

Winch Weights					
SERIES	WEIGHT	SERIES	WEIGHT	SERIES	WEIGHT
02MLX	12	08MLO	86	12MUU	171
08ELX	130	08MUX	56	15HLO	256
08ELO	132	08MUU	58	15HUO	292
08EUX	100	12HLX	206	15MLO	260
08EUU	102	12HLO	220	15MUO	294
08HLX	86	12HUX	162	20HLO	320
08HLO	88	12HUU	176	20MLO	300
08HUX	58	12MLX	201		
08HUU	60	12MLO	215		
08MLX	84	12MUX	157		

Standard Hydraulic Motors				
SERIES	RATIO	MOTOR	SAE FLANGE NUMBER	WEIGHT
08	36:1	40339	"A"-2 BOLT	13
08	18:1	40339	"A"-2 BOLT	13
08	9:1	40341	"A"-2 BOLT	18
12	32:1	40341	"A"-2 BOLT	18
15	32:1	42342	"A"-2 BOLT/METRIC 4-BOLT	26
20	32:1	42730	"C"-4 BOLT	62

## CHOOSING A WINCH: THINGS TO CONSIDER

### 1. Maximum Line Pull

The maximum line pull of a winch depends upon which cable layer is being used, as shown in the chart on the previous page, and must not be exceeded. For example, if you need to pull 8,000 pounds with 75 feet of cable on the drum, a Series 12 winch would be required since a Series 8 winch is only capable of pulling 6,020 pounds with that much cable on the drum.

### 2. Line Speed

Do not exceed the line speed shown for mechanical winches without first consulting the factory.

### 3. Power Source

Be sure your power source can meet the winch's requirements as shown in the table on the previous page.

### 4. Worm Brake

Applications that involve holding a suspended load should have a worm brake. Some applications, such as using a winch to free a vehicle that is stuck in mud, do not need a worm brake. Winches with brakes must have the cable wound according to the brake setting. Winches with brakes can be ordered either "overwind" cable spooled over the drum in the direction of the brake housing or "underwind" cable spooled under the drum in the direction of the brake housing. See example at right.

### 5. Drum Clutch

If you wish to pull rope off the drum by hand, a drum clutch is needed. If such freespooling is not needed, a keyed drum will be more reliable.

### 6. Duty Cycle

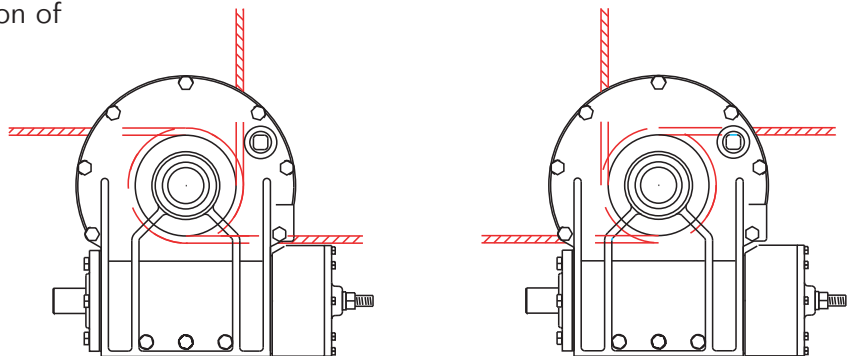
Winches are rated for intermittent duty only. Excessive use will cause high oil temperature resulting in rapid oil deterioration, lower efficiency and increased wear.

### 7. Mounting

Winch should be mounted with the worm shaft horizontal and below the drum. Other arrangements may not provide adequate lubrication. Worm brakes must be mounted below the oil level or they will fail.

### 8. Special Requirements

Extra cable capacity, higher line speed, grooved drum barrel, divided drum, galvanizing and stainless steel shafts for improved corrosion resistance, custom mounting, special shafts and power sources are some of the modifications we have made. Call us with your needs.



**UNDERWIND**

**OVERWIND**

**CAUTION:** Remote control should be connected only when vehicle is stationary and winch is being operated.

## WINCH ACCESSORIES

RKI offers a full line of accessories to complement your RKI winch. Because we know that proper winch accessories mean maximum performance, our engineers spend extra time designing the best accessory products to help you get your job done right. When you use your RKI winch with the correct accessories and enhancements, it becomes an even more versatile and productive tool.

### FEATURING:

- ROLLER ASSEMBLIES
- BAYONET CAPSTAN
- KEYED CAPSTAN
- CABLE GUARDS
- CAPSTAN DRIVES

For more information about RKI winch accessories, see your authorized RKI dealer or visit [www.rkius.com](http://www.rkius.com).

### WARNING:

PRODUCTS SHOWN IN THIS BROCHURE ARE **NEVER** TO BE USED FOR THE **LIFTING** OR **MOVING** OF PEOPLE NOR SHOULD THEY EVER BE USED IN ANY MANNER OF OPERATION WHICH **MAY ENDANGER ANY INDIVIDUAL**.

### WARNING:

CABLE CLAMPS ARE NOT DESIGNED TO HOLD RATED WINCH LOAD. AT LEAST 5 WRAPS OF CABLE MUST REMAIN ON THE DRUM AT ALL TIMES.

## Other RKI Quality Products

- > Aluminum Treadplate and Steel Truck Boxes for Pick-Up Trucks and Flatbeds
- > Canopy Bodies
- > Custom Truck Boxes and Service Bodies
- > Line Bodies
- > Saddle Compartments
- > Service Bodies
- > Space Packs
- > Truck Mount Cranes
- > Versatile Storage Systems
- > Window Grilles

IN ORDER TO PROVIDE YOU WITH THE MOST INNOVATIVE AND PROGRESSIVE EQUIPMENT, ALL PRICES, SPECIFICATIONS, AND DESIGNS ARE SUBJECT TO CHANGE WITHOUT NOTICE.



# RKI<sup>®</sup>

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