

Safety Innovation To Help You Work Smarter.

### Strength You Can Depend On



RUFNEK® planetary winches are backed by the strength of TWG, a global leader in standard and engineered winch, gearbox and load information systems for the Crane, Construction and Truck Equipment markets. From our state-of-the-art manufacturing facilities in Oklahoma, TWG engineers and produces equipment and components relied on by the world's largest industries.

Headquartered in Tulsa, Oklahoma, TWG is comprised of six companies that specialize in industry-specific winches and supporting electronic systems. They include DP Winch, Gear Products, Inc., Greer Company, LANTEC Winch & Gear, Inc., Pullmaster Winch and Tulsa Winch, Inc.

TWG is part of the Dover Corporation, an NYSE-traded, multi-billion dollar corporation that manufactures a diverse range of products and components for commercial and industrial use.



# In the Field, There's No Such Thing as *Safe Enough*.

At Tulsa Winch, we know that accidents, equipment failure and downtime are direct hits to your bottom line. That's why we engineer the industry's most advanced hydraulic planetary winches to help leaseholders, OEMs, truck riggers and oilfield fleets perform safer and smarter.

Now, Tulsa Winch introduces a new generation of planetary winches to help minimize and prevent dangerous winch overloading like nothing else—Rufnek® with  $Intelliguard^{\mathbb{M}}$ .

RUFNEK® with Intelliguard™ combines
RUFNEK's legendary performance with
Intelliguard's field-proven technology to
offer added protection against injuries
and costly equipment damage. We call
it pure safety innovation. You'll call it
your first line of defense against the
unexpected.



At TWG, we continue to raise the bar on how planetary winches should perform—and it's been that way for nearly 75 years.

RUFNEK® planetary winches are specifically designed for the world's Oilfield Industry. In the harshest terrains, on the most challenging projects, RUFNEK® planetary winches set a new benchmark for safe, reliable operation and rugged performance.



Technical and Customer Support

918.298.8300

# Smart Technology. Safer Operation.

Rufnek® winches and accessories are ideal for tough oilfield and heavy haul applications and engineered with the advanced safeguards you've come to expect from Tulsa Winch. Now, every Rufnek® planetary winch is designed with *Intelliguard™*, a state-of-the-art capacity-alert system that electronically measures torque and load information each time your winch is operated. As the winch approaches its maximum torque, Intelliguard's light indicator warns the operator and records the event.

Intelliguard's electronic records are easily downloadable and provide fleet and safety managers with critical information on the daily operation of their winches. The result? A new ability to help you make more informed decisions about equipment handling, preventive maintenance and safety training.

Accumulated Winch I	Hours:	Hours Since Last	Download:					
Winch Serial Number	:	Vehicle:	Company:					
Measurements Date Range		Total Days	Total Time (Hours)					
System On Events:	7/06/10-8/08/1	10 34	6					
Winch Usage:	7/06/10-8/08/1	10 34	1 (Acc. Time Clock)					
Torque Events:	7/27/10-8/08/1	10 8	.3 (Log Time 80-125%)					
Capacity Range Below 80%:	Time (Hours) 	% of Logged Time	% of Total Winch Usage					
80-89%:	.7 (1-3) 9	0 45	67 15					
90-99%:	7	35	12					
100-109%:	3	15	5					
110-119%:	1	5	1					
120-125%:	0	0	0					
Totals:	1	100	100					
For Clutch Engageme	ent / Disengagement	t See Detail Report						

Product integrity. Service integrity. Just two of the strengths that have made Tulsa Winch® and Rufnek® the Oilfield Industry's most trusted names in winch systems.

Our Technical Support and Customer Support teams are always available to answer your equipment questions or help you improve your fleet safety.



Rufnek® with *Intelliguard* planetary winches are available in pulling capacities from 45,000 to 130,000 pounds and offer added protection from winch overloading on bed trucks, winch trucks and pole trucks.

Intelliguard<sup>™</sup> capacity-alert system with cab-mounted indicator.

## Advanced Features and Superior Benefits

Two-speed hydraulic motor with shift-on-the-fly capability.

Optimal flexibility in selecting line speed and line pull to match load conditions.

#### Single, externally mounted air shift cylinder.

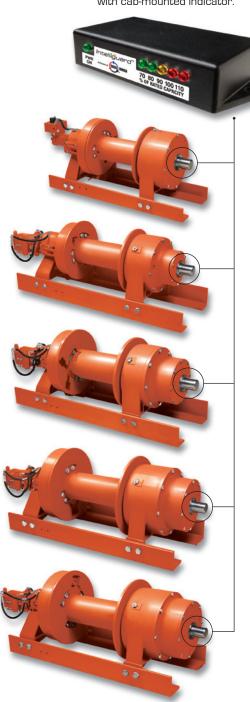
Allows efficient, simple operation and easy access for maintenance.

Integral, spring-applied, hydraulically released multiple disk brake with hydraulic brake valve and overrunning clutch.

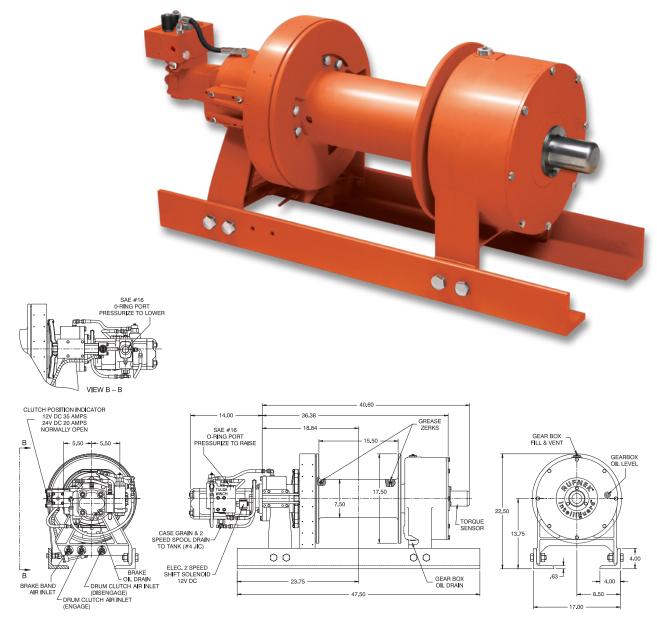
Provides superior load control and smoother operation in the best possible configuration to ensure longer brake life and positive clutch engagement.

#### Air-applied drum brake.

Prevents bird-nesting of cable during free-spool operation.



# 45,000 lb. Pulling Capacity



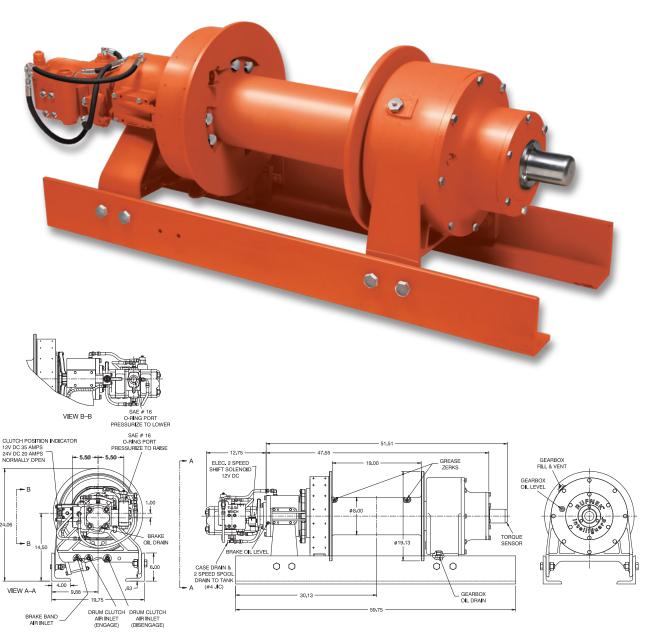
Approximate weight: 940 lb / 426 kg

PERFORMANCE DATA					2,250 PSI @ 60 GPM / 155 BAR @ 227 LPM						
	Low Speed				High Speed				Cable		
Layer	Linepull		Linespeed		Linepull		Linespeed		Capacity	.875"Ø	
	(lb)	(kg)	(fpm)	(mpm)	(lb)	(kg)	(fpm)	(mpm)	(ft)	(m)	
1	45,000	20,412	41	13	22,500	10,206	82	25	32	10	
2	36,818	16,701	50	15	18,409	8,350	101	31	70	21	
3	31,154	14,131	60	18	15,577	7,066	120	37	116	35	
4	27,000	12,247	69	21	13,500	6,124	138	42	168	51	
5	23,823	10,806	78	24	11,911	5,403	157	48	228	69	

A CAUTION: A WARNING:

The last 5 wraps of cable must be left on the drum to assist the cable clamp in holding the load.

# 60,000 lb. Pulling Capacity



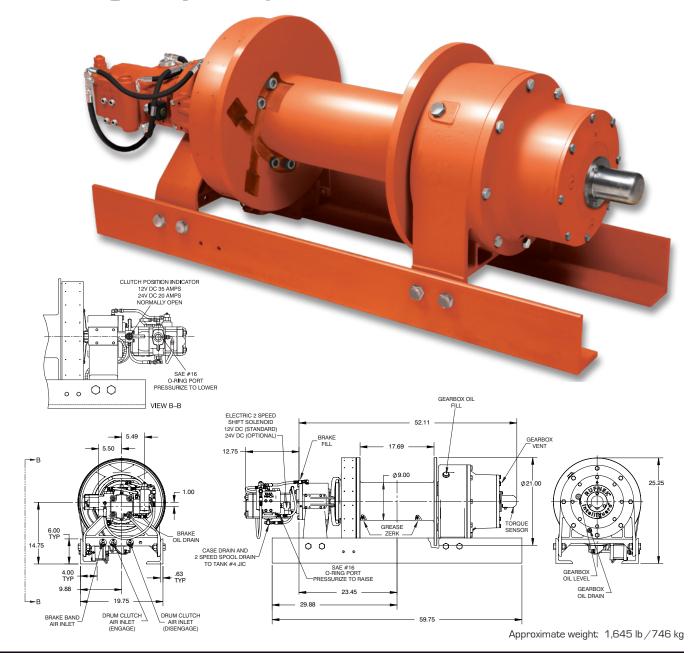
Approximate weight: 1,300 lb / 589 kg

#### PERFORMANCE DATA 2,400 PSI @ 60 GPM / 164 BAR @ 227 LPM Low Speed **High Speed** Cable 1.0"Ø Linepull Linespeed Linepull Linespeed Capacity Layer (lb) (fpm) (mpm) (lb) (fpm) (mpm) (ft) (m) (kg) (kg) 27,216 1 60.000 33 10 27,310 12,385 71 22 45 14 2 49,101 22,267 40 12 22,344 10,133 87 27 30 3 41,547 18,842 47 14 18,907 8,574 103 31 164 50 36,008 16,329 54 17 7,431 239 4 16,386 119 36 73

#### **A CAUTION:**

### 80,000 lb.

#### **Pulling Capacity**



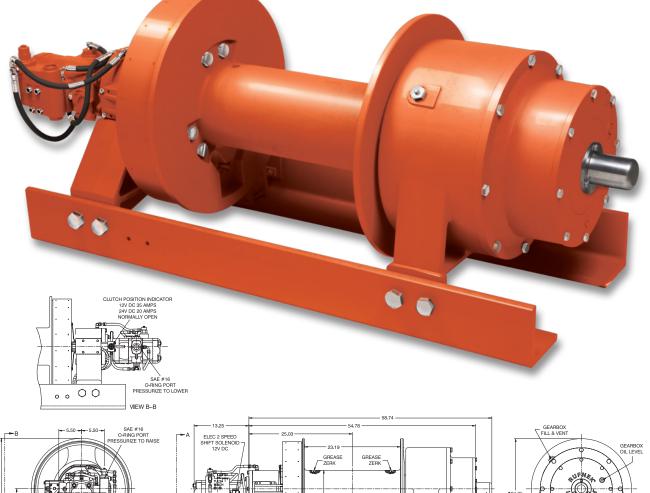
PERFORMANCE DATA 2,700 PSI @ 60 GPM / 186 BAR @ 227 LPM **High Speed** Cable Low Speed Layer Linepull Linespeed Linepull Linespeed Capacity 1.0"Ø (lb) (kg) (fpm) (mpm) (lb) (kg) (fpm) (mpm) (ft) (m)

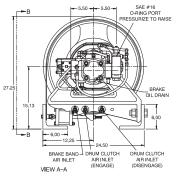
80,000 36,287 27 8 36,526 16,565 18 45 14 1 60 2 66,679 30,239 33 10 30,438 13,804 72 22 98 30 3 57,153 25,919 38 12 26,090 11,832 84 26 160 49 4 50,009 22,679 44 13 22,829 10,353 231 70 96 29 5 44,453 20,159 49 15 20,292 9,203 108 312 95

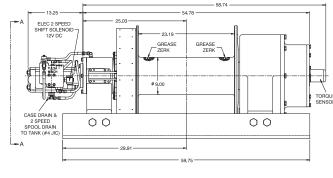
A CAUTION: A WARNING:

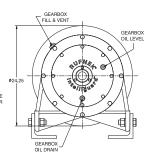
The last 5 wraps of cable must be left on the drum to assist the cable clamp in holding the load.











Approximate weight: 2,060 lb / 934 kg

PERFORMANCE DATA						2,750 PSI @ 60 GPM / 190 BAR @ 227 LPM						
		Low S	peed			High Speed				Cable		
Layer	Line <sub> </sub> (lb)	pull (kg)	Line (fpm)	espeed (mpm)	Line (lb)	pull (kg)	Line (fpm)	espeed (mpm)	Capacity (ft)	1.125"Ø (m)		
1	100,000	45,357	23	7	45,901	20,816	49	15	53	16		
2	81,830	37,110	28	8	37,555	17,031	60	18	118	36		
3	69,241	31,401	33	10	31,777	14,411	71	22	194	59		
4	60,009	27,214	38	12	27,540	12,490	82	25	283	86		
5	52,949	24,012	43	13	24,300	11,020	93	28	383	117		
6	47,376	21,485	48	15	21,742	9,860	104	32	495	151		
	A											

#### **A** CAUTION:

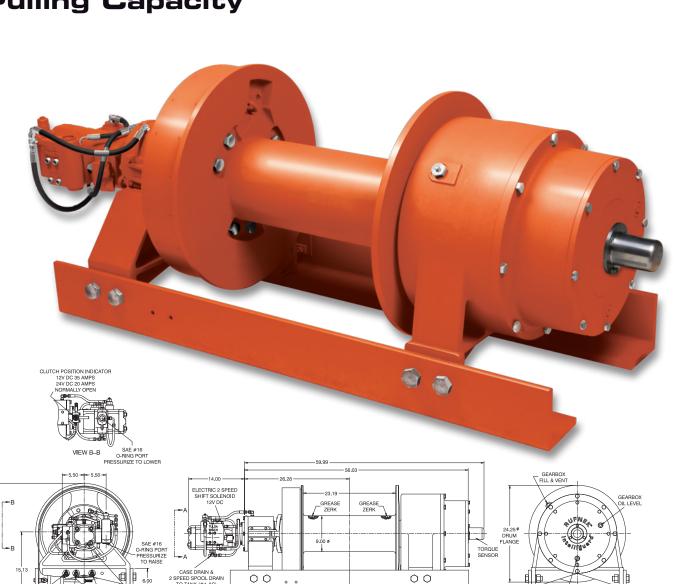
#### **WARNING:**

The last 5 wraps of cable must be left on the drum to assist the cable clamp in holding the load.

BRAKE BANI AIR INLET

> DRUM CLUTCH AIR INLET (ENGAGE)

# 130,000 lb. Pulling Capacity



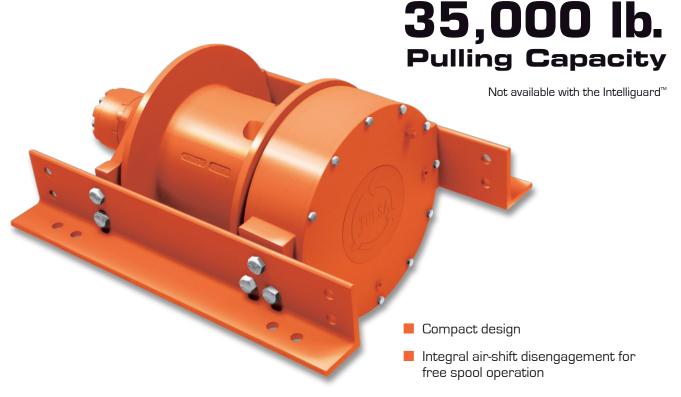
Approximate weight: 2,200 lb / 998 kg

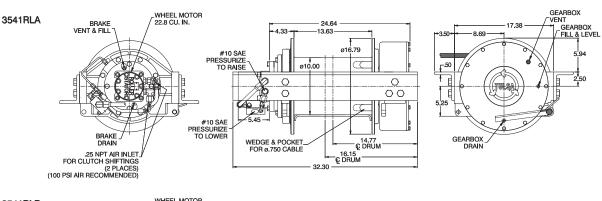
GEARBOX OIL DRAIN

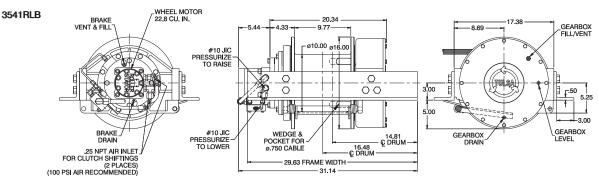
PERFORMANCE DATA					2,500 PSI @ 60 GPM / 172 BAR @ 227 LPM						
	Low Speed				High Speed				Cable		
Layer	Linepull		Linespeed		Linepull		Linespeed		Capacity	1.125"Ø	
	(lb)	(kg)	(fpm)	(mpm)	(lb)	(kg)	(fpm)	(mpm)	(ft)	(m)	
1	130,000	59,706	15	5	65,828	29,853	31	9	53	16	
2	107,718	48,850	19	6	53,859	24,425	37	11	118	36	
3	91,146	41,335	22	7	45,573	20,667	44	13	194	59	
4	78,993	35,823	25	8	39,497	17,912	51	16	283	86	
5	69,700	31,609	29	9	34,850	15,804	58	18	383	117	
6	62,363	28,282	32	10	31,181	14,141	65	20	495	151	
	•			A 0.01171001 A 10/4				11110			

A CAUTION: A WARNING:

The last 5 wraps of cable must be left on the drum to assist the cable clamp in holding the load.





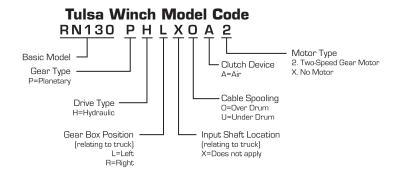


#### 2,000 PSI @ 30 GPM / 138 BAR @ 114 LPM PERFORMANCE DATA 3541RLA (Low Speed) 3541RLB (Low Speed) Linepull Linespeed Cable Cap. 0.750"Ø Linepull Linespeed Cable Cap. 0.750"Ø Layer (lb) (kg) (fpm) (ft) (m) (lb) (fpm) (ft) (m) (mpm) (kg) (mpm) 1 35,000 15,876 19 5 46 14 35,000 15,876 19 5 33 10 2 30.722 13.935 21 6 98 30 30.722 13.935 21 6 70 21 3 27,371 12,415 24 7 156 48 27,371 12,415 24 7 113 34

A CAUTION:

**A WARNING:** 

The last 5 wraps of cable must be left on the drum to assist the cable clamp in holding the load.



Contact sales@team-twg.com for other options or assembly configurations.





### Have a Question?

To speak with a Tulsa Winch technical representative or to order Tulsa Winch parts, call us at 918.298.8300 or visit our Web site at www.team-twg.com.

Winches in the brochure are optimized for viewing and not shown to scale. All measurements are in inches. All Tulsa Winch® RUFNEK® Winches are designed in accordance with SAE J706. Because of product improvement, we reserve the right to make changes without notice.

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