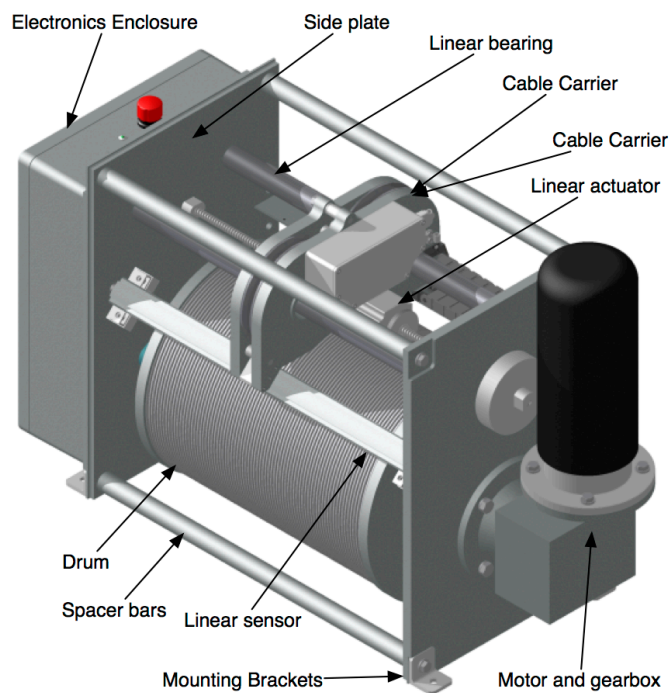


DGRTLaminar

Programmable Borehole Winches

Laminar600 & Laminar2000

21 August 2013

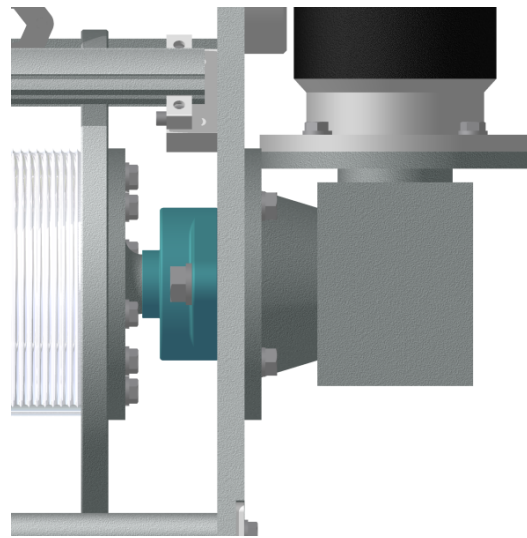


Space Saving High Performance

Laminar series borehole winches provide wireline logging in a slim and compact self-contained package.

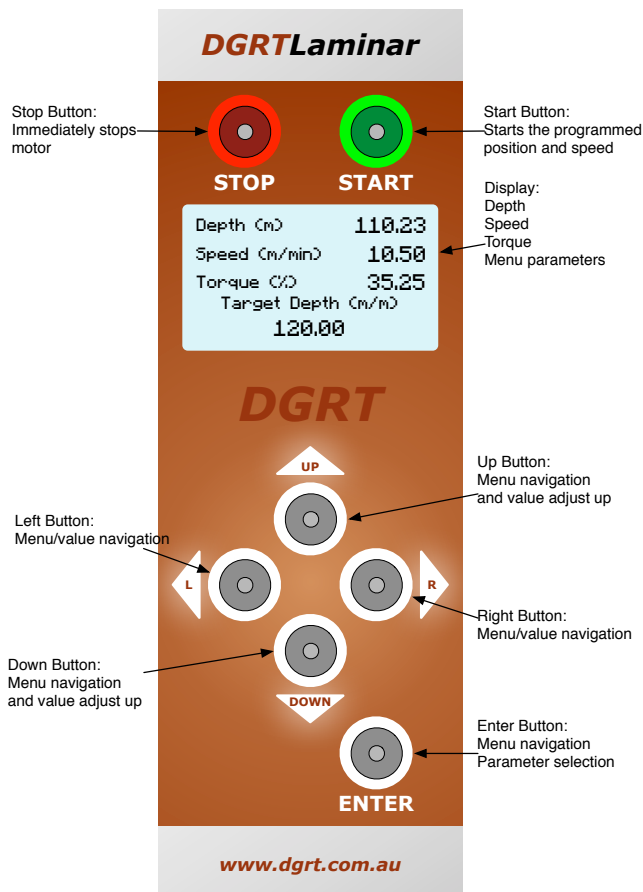
With high output motors and gearboxes, Laminar winches have torque and speed to suit all types of borehole logging applications.

To deliver safe and reliable winching each Laminar winch is tempered with adjustable torque limiting and over-spool protection as standard.



System Compatibility

Laminar Winches use industry standard, four-core 3/16th inch wireline cable with Gearhart Owen style cable heads.



Straight through signal wiring allows simple interfacing with acquisition systems from any manufacturer.

Speed and depth change information is available as a high-resolution quadrature signal pair, with an adjustable pulsing factor to best suit the acquisition system used.

Full Remote Control

Laminar winches are designed for operation with no direct interaction with the winch itself. All controllable features are accessible using the remote hand control, standard with every winch.

Remote control not only improves safety of operation, it also allows the winch to be mounted in a space with limit access.

Depth, Speed, Torque and cable spooling information is displayed on the hand controller for constant operator feedback.

Strong and Flexible

Oversized components and clever design allows upward, forward, backward and downward exit of the wireline cable. The winch can be mounted vertically or horizontally to best suit the intended application. On request, modifications can be made to customer requirements.

Controlled Depth and Speed

Dial in the target depth, and the required speed. The winch does the rest. It's that simple.

Acceleration and speed are electronically controlled to maintain a smooth speed profile regardless of cable weight, depth, drum rotation or application load.

Direct 'Up' and 'Down' control is accessible when handling the wireline cable or to power through blockages.

Simplified Safety

Direct gearbox drive and electronic cable laying means no chain, no gears, no complicated guards and reduced pinch hazards. An electronic brake included as standard, ensures the winch doesn't run away in its idle state.



Closed loop monitoring of drum rotation, cable tension and wireline speed detects spooling errors and safely stops operation before the cable becomes a hazardous mess. No external load sensors are used meaning less wiring during installation and less maintenance.

Included is an electromechanical Emergency Stop circuit, which de-energises the motors and actuators and not the electronics. This keeps the depth readings accurate.

Cable Spooling 2.0

Laminar winches exclusively utilise electronically controlled actuators to accurately spool the wireline cable. On the rare occasion that the operator needs to adjust the cable spooling, this can be safely performed remotely using the Hand Control. No direct interaction with the winch unit is necessary.



Computer Interfacing and Control

Laminar winches are designed for computer control in mind. As an optional configuration, plug your laptop into the winch to use complex depth and speed profiles and automatically update positioning via a programming interface.

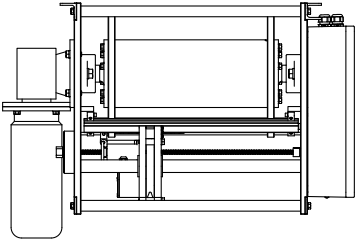
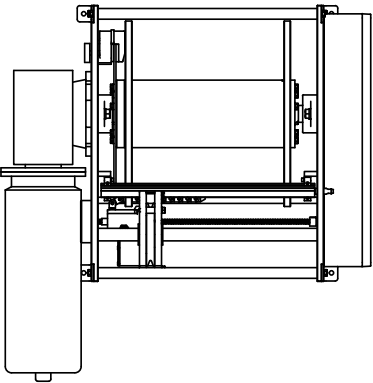
DGRT can design custom software solutions to integrate the winch control into existing computerised systems.

Capacities and Configurations

Laminar winches come in 600m and 2000m models and have many areas of customisation for particular applications.

Examples of customisation:

- 12 or 24VDC Power (on Laminar 600 only).
- Larger/Smaller motors
- Custom guarding
- External Emergency stops
- Depth and signal adaptors
- Computer interfacing

	Laminar600	Laminar2000
		
Nominal Capacity 3/16 th cable	600m	2000m
Standard Motor Power	370W Other motors available	1.5kW Other motors available
Gearbox ratio	40:1 Other ratios available	
Approx. Max speed (full capacity 3/16 th cable)	33m/min	50m/min
Power system	240VAC 50Hz 12-24VDC optional	240VAC 50Hz
Wireline Output	5 wireline (4 conductor and armour) via slipring and 17 pin connector	
Depth Output Format	Single ended or Differential driven outputs. Self powered.	
Minimum Depth Resolution (@50m/min max)	4.1667E-4 m	
Approx. dimension (L x W x H)	830mm x 600mm x 315mm	876mm x 892mm x 455mm

Images are indicative only. Specifications subject to change without notification

More Information

For more specifications and information on Laminar Series or other borehole equipment please contact DGRT Pty Ltd.

Address

Unit 2
3 Achievement Crescent
Acacia Ridge
QLD 4110
Australia

Phone/Fax

Phone:
+61 7 3040 9040
Fax:
+61 7 3054 0274

Email

enquiry@dgrt.com.au

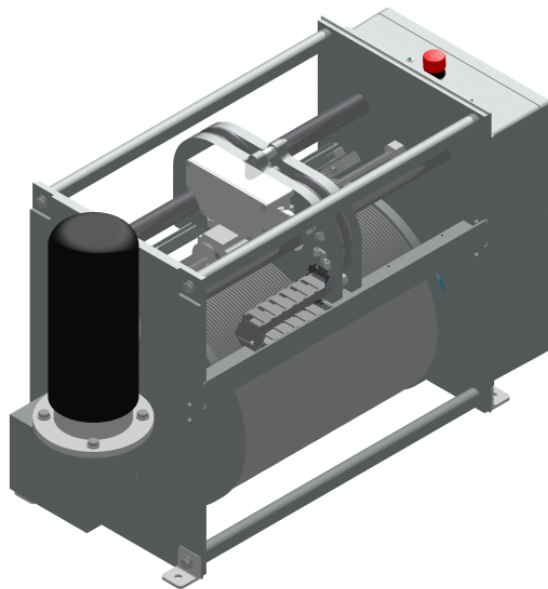
Web

www.dgrt.com.au

DGRTLaminar600 ***DGRTLaminar2000***

Document version 2.2

DGRTLaminar Programmable Borehole Winches
Copyright 2013 DGRT Pty Ltd



DGRT ■ Geophysical Engineering
■ Borehole Winches ■ Borehole Sondes
www.dgrt.com.au ■ Equipment Servicing ■ Software Solutions