



Hydraulic and Electric Winch Systems

New electric
winch system
featuring
proportional
control



sales@rotec.net | +44 (0)1823 348 900 | www.rotec.net



Rotec Hydraulics has been supplying quality hydraulic and pneumatic solutions since 1979.

Unlike our competitors, we deliver fully integrated solutions with in-house expertise from electrical, mechanical, hydraulic and pneumatic disciplines.

Our hydraulic and electric winch system solutions are all designed, installed and tested in-house by our team of experienced engineers.

In addition to manufacturing winch systems, we can also offer on-site servicing contracts.

Trusted by those across all industry sectors, our winch systems have even been featured on BBC's Top Gear.

We are a full member of the LEEA, have LOLER certified engineers, are 'Q Approved' by the British Fluid Power Association (BFPA) for Hose Assemblies, a recognised BFPA Training Centre, and the only Parker Accredited Hydraulic Technology Centre south of Birmingham.

Independently audited by Achilles for UVBD, JOSCAR and SafeContractor registered, as well as holding ISO 9001 and 14001 accreditations demonstrates we take our processes, quality and environmental management systems seriously, business wide.



3,600 kg Electric Winch System

Electric winch system with proportional control capability.

Developed to match the performance of an equivalent hydraulic winch, this electric solution is ideal for industrial, commercial, utilities, forestry and agricultural applications.

Custom-designed, manufactured, installed and tested by our in-house team of qualified and experienced engineering team.

We also offer a preventative maintenance, servicing and repairs service.

The design and manufacture can be adjusted to meet your required specification.

Features for 'generic winch performance':

- 1450 kg @ 5m / min Line Pull (Lift Mode) on 1st layer of drum
- 3600 kg @ 5m / min Line Pull (Drag Mode) on 1st layer of drum
- Line pull force control integrated in motor inverter
- Infinite winch control using joysticks in cab and/or remote pendant
- Customisable joystick mapping (including torque and speed limits to prevent system abuse)
- Integrated thermal management of both motor and motor inverter
- Natural air cooling of motor inverter
- Designed to match performance of equivalent hydraulic winch.

Electrify your fleet's winches with our fully customisable electric winch system.

Proportional control improves operational stability, allowing for smoother and more precise control when lifting and lowering loads.



4,500 kg Hydraulic Winch System

Bespoke proportional control hydraulic winch system that can be tailored to your operational needs.

Includes hydraulic system, electronic control system and mechanical components. Installed and tested by our skilled engineers and issued with test certification.

Case study:

Our client required a front of vehicle mounted winch system, featuring two selectable standard modes of operation.

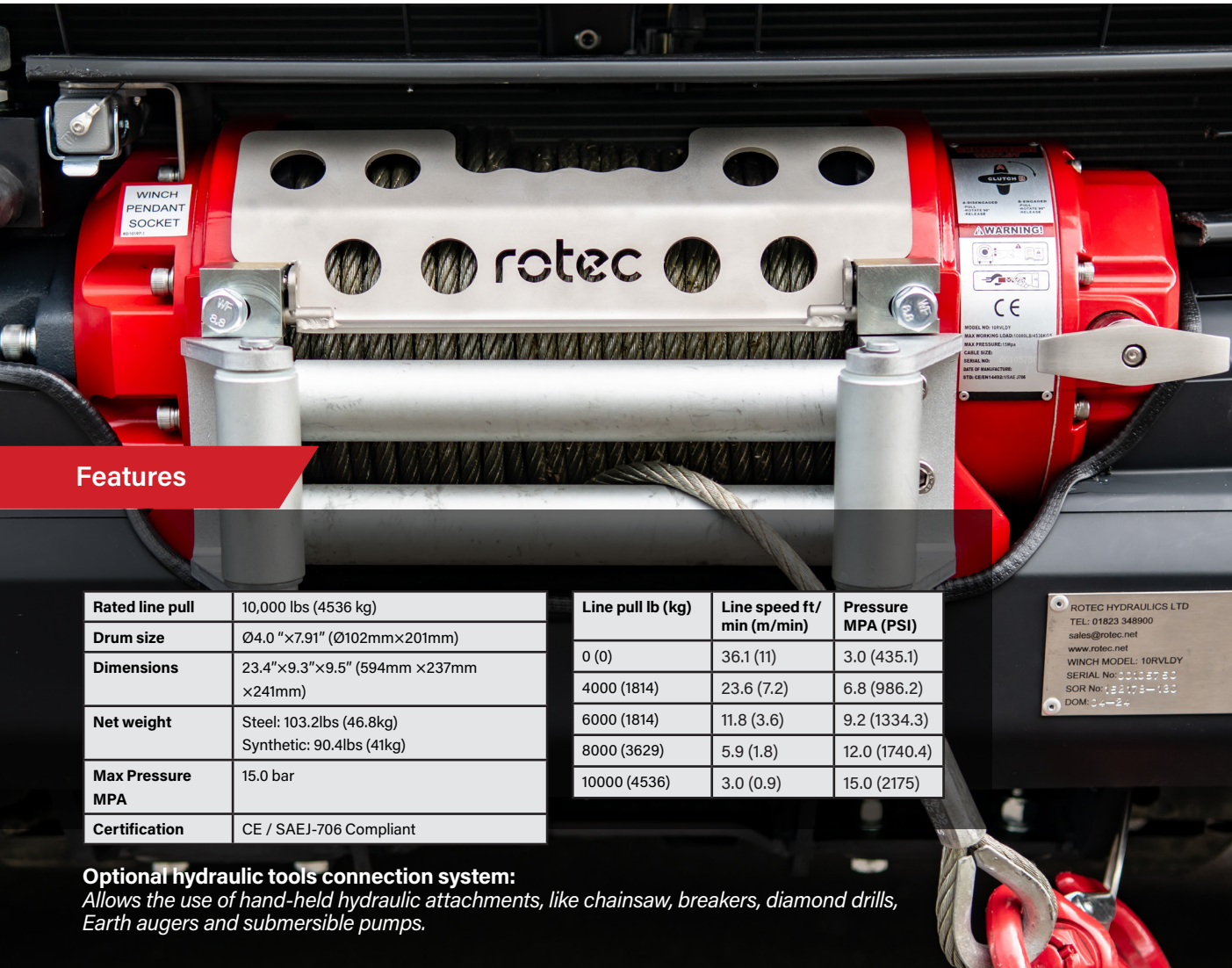
- 9mm x 47metres compact wire rope
- Heavy duty eye hook
- Operator proportional speed control
- Line pull force control integrated
- Integral fail safe static hydraulic brake, with automatic apply and release
- Integral dynamic hydraulic brake.
- Engine electronic hand throttle control system, configured to the engine

Mode 1 = Lifting

- Lifting and lowering of goods operations
- 1,550 kg working load limit on the winch drum 1st layer
- Wired remote control pendant with control joystick and emergency stop
- 1st layer wire rope speed up to 5 metres/minute

Mode 2 = Self recovery.

- Vehicle recovery operations
- 3,600 kg working load limit on the winch drum 1st layer
- In-cab control joystick operation
- 1st layer wire rope speed up to 2.5 metres/minute.



Features

Rated line pull	10,000 lbs (4536 kg)
Drum size	Ø4.0 "x7.91" (Ø102mmx201mm)
Dimensions	23.4"x9.3"x9.5" (594mm x237mm x241mm)
Net weight	Steel: 103.2lbs (46.8kg) Synthetic: 90.4lbs (41kg)
Max Pressure MPA	15.0 bar
Certification	CE / SAEJ-706 Compliant

Line pull lb (kg)	Line speed ft/min (m/min)	Pressure MPA (PSI)
0 (0)	36.1 (11)	3.0 (435.1)
4000 (1814)	23.6 (7.2)	6.8 (986.2)
6000 (1814)	11.8 (3.6)	9.2 (1334.3)
8000 (3629)	5.9 (1.8)	12.0 (1740.4)
10000 (4536)	3.0 (0.9)	15.0 (2175)

Optional hydraulic tools connection system:

Allows the use of hand-held hydraulic attachments, like chainsaw, breakers, diamond drills, Earth augers and submersible pumps.

Specification

Rated line pull	15,000 lbs (6804 kg)	Line pull lb (kg)	Line speed ft/ min (m/min)	Pressure MPA (PSI)
Drum size	Ø5.0 "x10.5" (Ø127mm x266mm)	0 (0)	23 (7)	2.0 (290)
Dimensions	28.9"x11.8"x10.9" (735mm x300mm x277mm)	8000 (3629)	16.7 (5.1)	9.2 (1337)
Net weight	Steel: 171.1lbs (77.6kg) Synthetic: 146.8lbs (66.6kg)	10000 (4536)	12.4 (3.8)	11.5 (1627)
Max Pressure MPA	17.5 bar	12000 (5448)	8.5 (2.6)	14.0 (2030)
Certification	CE / SAEJ-706 Compliant	15000 (6810)	4.2 (1.3)	17.5 (2537)

Optional hydraulic tools connection system:

Allows hand-held hydraulic attachments, like chainsaw, pole jack, tamper, breakers, diamond drills, Earth augers, submersible pumps can be used.



6,800 kg Hydraulic Winch System

System designed to suit your application. Installed and tested by our experienced engineers and issued with test certification.

Case study:

Our client required a front of vehicle mounted winch system, featuring two selectable standard modes of operation.

- 30 metre wire rope capacity
- Heavy duty eye hook
- Operator electrical control of the winch
- Line pull force control integrated
- Integral fail safe static hydraulic brake, with automatic apply and release
- Integral dynamic hydraulic brake.
- Engine electronic hand throttle control system, configured to the engine

Mode 1 = Lifting

- Lifting and lowering of goods operations
- 2,350 kg working load limit on the winch drum 1st layer
- Wired remote control pendant with control joystick and emergency stop
- 1st layer wire rope speed up to 7 metres/minute

Mode 2 = Self recovery.

- Vehicle recovery operations
- 6,000 kg working load limit on the winch drum 1st layer
- Wired remote control multi-function pendant and emergency stop
- 1st layer wire rope speed up to 2.5 metres/minute.

350 kg Capstan Winch System

Hydraulic capstan winch system with purpose-built sliding trolley mount.

Ideal for industrial, commercial, utilities and agricultural applications.

Includes

- Hydraulic system
- Electronic control system
- Mechanical components

Designed, manufactured, installed and tested by our in-house team of qualified and experienced engineering team.

Features include:

- Lifting and lowering of goods
- Fibre rope use
- Fast rope line speeds of 22-24 metres/minute
- 350 kg dynamic working load limit
- Integral roller fairlead to allow for horizontal and vertical rope deployment during winching operations
- Integral fail-safe static brake, with automatic apply and release
- Integral dynamic hydraulic brake
- Durable stainless steel capstan winch drum
- Integral rope grab facility
- Integral rope tie off facility
- Integral rope recovery point
- Remote electrical foot pedal operation for start and stop
- Engine electronic hand throttle control system, configured to the engine
- Remote vehicle mounted electrical control box for easy control of hydraulic system, including emergency stop
- Previously fitted to Ford Ranger and Toyota Hilux vehicles.

To minimise the risk of manual handling injuries, the capstan winch can be installed onto a custom-designed sliding trolley mount.

Situated in the rear workspace of the vehicle, the operator is then able to easily manoeuvre the winch between its operational and storage positions.

Optional features

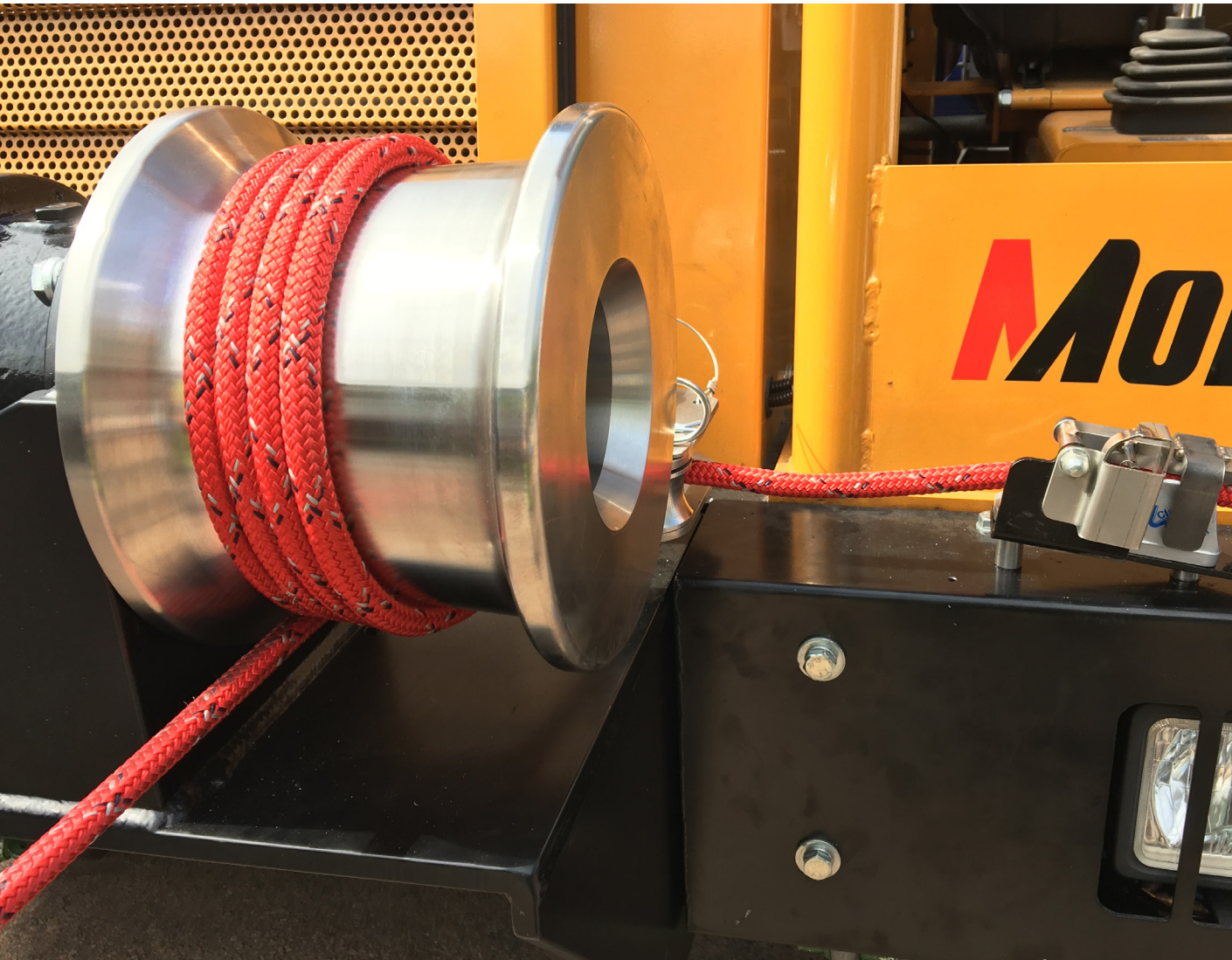
Remote winch stop and start functionality:

Allows operator to stop and start the engine from the rear of the vehicle, without the ignition key engaged.

Rear body installation:

Capstan winch can be installed below the rear body false floor (subject to vehicle's body design) to maintain clean, clutter free lines.





750 kg Capstan Winch System

Hydraulic capstan winch system custom-made for rubber tracked carriers.

Ideal for various applications including industrial, utilities and forestry.

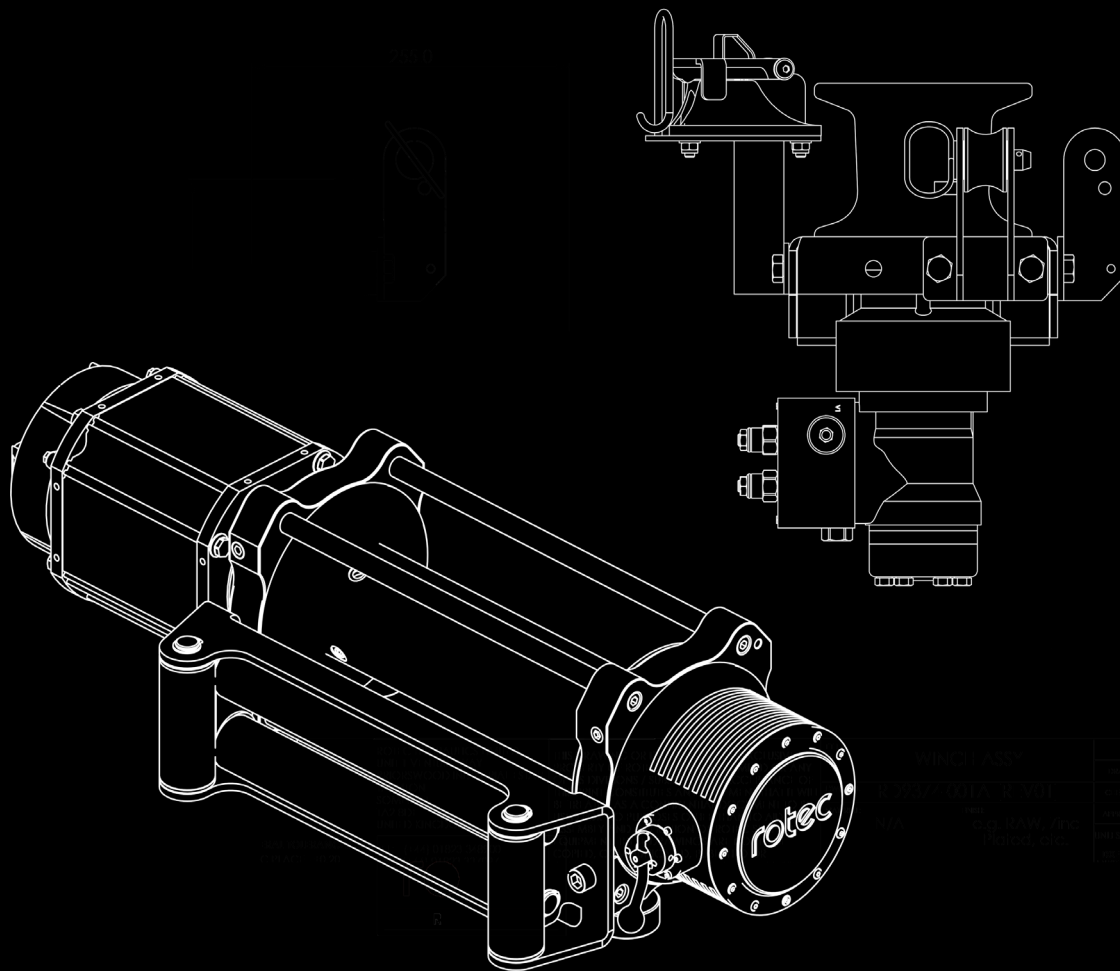
Includes

- Hydraulic system
- Electronic control system
- Mechanical components

Installed and tested by our skilled engineers and issued with test certification.

Features

- Lifting and lowering of goods
- Fibre rope use
- Fast rope line speeds of 22-24 metres/minute
- 750 kg dynamic working load limit
- Integral roller fairlead to allow for horizontal and vertical rope deployment during winching operations
- Integral fail-safe static brake, with automatic apply and release
- Integral dynamic hydraulic brake
- Durable stainless steel capstan winch drum
- Integral rope grab facility
- Integral rope tie off facility
- Integral rope recovery point
- Remote electrical foot pedal operation for start and stop of the winch.



Bespoke Systems

Our ability to tailor winch system designs to your vehicle and operational requirements sets us apart from most winch system suppliers.

As we believe in providing consistent excellent customer service, we not only work with you to create and improve designs, but also manufacture the winch systems at our fully equipped workshop.

Customise rated line pull, line speed or rope capacity to optimise your operations.

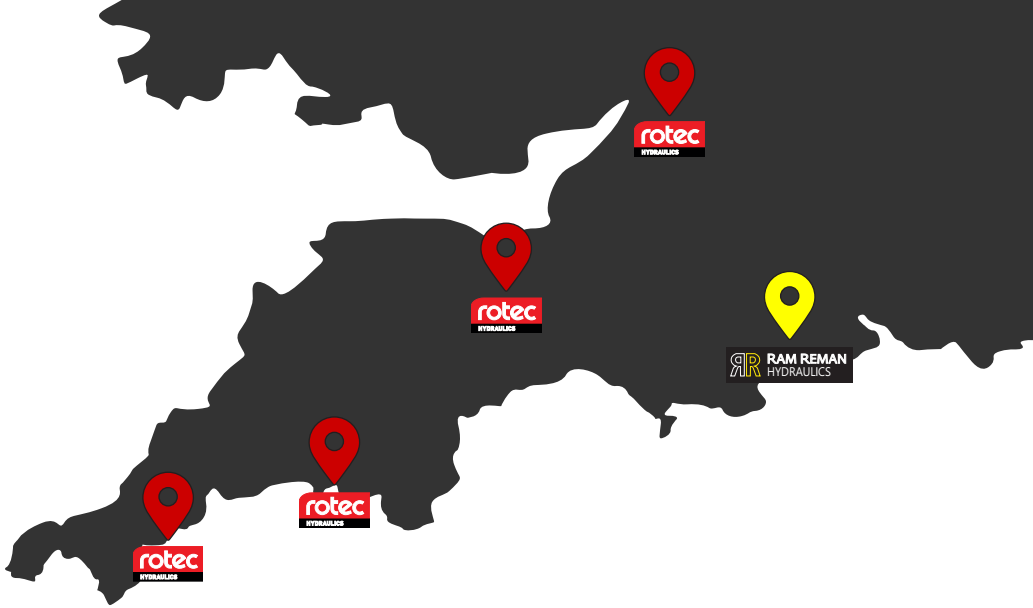
Added value opportunities include training packages, training videos and on-site servicing contracts.

Innovative

Work smarter, more accurately and increase productivity with proportional control capability and/or remote monitoring options.

Reliable

We use high quality, robust components so that all our winch systems are suitable for operating in challenging environments. Our on-site servicing and replacement parts service reduces risk of downtime and ensures good reliability.



Taunton (Head office)

Unit 1, Venture Way
Priorswood Ind. Estate
Taunton, Somerset
TA2 8DE

T: 01823 348 900
E: sales@rotec.net

Plymouth

Units 8, 9 & 14, Yacht Haven Quay
Breakwater Road
Plymstock, Devon
PL9 7FE

T: 01752 262 966
E: plymouth@rotec.net

Stroud

Unit 1, Stroud Enterprise Centre
Bath Road, Lightpill
Stroud, Gloucester
GL5 3NL

T: 01453 767 729
E: stroud@rotec.net

Falmouth

Queens Wharf,
The Docks,
Falmouth, Cornwall
TR11 4NR

T: 01326 653 287
E: falmouth@rotec.net

Ram Reman *(Part of the Rotec Group)*

Gundrymoor Trading Centre
Collingwood Road
West Moors, Dorset
BH21 6QQ

T: 01202 861 888
E: sales@ramreman.co.uk



HYDRAULIC | PNEUMATIC | ELECTRICAL | MECHANICAL