

DESIGNED FOR MILITARY AND CIVILIAN USE  
WHERE A HIGH STANDARD OF PERFORMANCE IS  
REQUIRED BOTH ON AND OFF THE ROAD



# TECHNICAL SPECIFICATIONS

Both vehicles are designed to meet the following requirements:

- Very low ground pressure for sand or soft ground.
- Trench crossing capability to a maximum width of one metre.
- Ascend and descend 100% slope (45°).
- Scree crossing i.e. loose rocks.
- Wading to at least 31.5 inches/800mm.
- Road speeds up to 60 mph/96 kph (6 × 6) and 55 mph/105 kph (8 × 8).
- Small turning circle for excellent manoeuvrability in confined areas.
- The vehicles have an all steel box section ladder chassis with integral welded body. Cross members support the Land Rover One-Ten drivetrain, suspension and axles.
- Tow a four tonne trailer.
- Air portable underslung from Puma or Chinook, or inside Chinook, and both Hercules variants, can be airdropped on a standard NATO pallet.
- No driver training required.
- Carry 10 men (6 × 6) or 12 men (8 × 8) including driver.
- Carry crew of two plus one tonne payload with ½ tonne overload capability (6 × 6) or carry crew of two plus two tonne payload (8 × 8); tow a four tonne trailer or powered trailer equipment.
- Limited amphibious capability (6 × 6), full amphibious version (8 × 8).
- The whole assembly is treated with a corrosion resistant finish.
- All wheels are driven and are fitted with 31" diameter/15" wide tyres.
- Power assisted steering is standard and acts on the front axle (6 × 6), and front and rear axles (8 × 8).
- Chassis 90% stronger than other all wheel drive vehicles.
- Ease of maintenance, full engine and transmission change can be done in one hour.

All mechanical parts are fully proven components, available world wide and carrying full warranties.

## ESARCO 6 × 6:

### Engines:

Water cooled 2.5 litre 70 hp Land Rover DIESEL engine, 4 cylinders in line formation, cast iron construction, 5 bearing crankshaft.  
Bore: 92mm (3.7") Stroke: 90mm (3.6")  
Cubic capacity: 2,498cc Compression ratio 21:1  
Max Power: 70 bhp @ 4,000 rpm  
Max Torque: 114 lb/ft @ 1800 rpm

**Main gearbox** — 5 speed manual gearbox with synchromesh on all forward gears.

**Transfer boxes** — one transfer box on main gearbox output shaft driving Nos. 1 & 3 axles and a second transfer box driving No. 2 axle. High and low ratio on all main gearbox speeds and inter axle differential locking may be selected by the driver.

**Brakes** — servo-assisted hydraulic brakes, disc on front axle, drum brakes on rear axle. Transmission handbrake operating on first transfer box rear output shaft.

**Suspension** — long travel coil springs, controlled by double acting shock absorbers to all six wheels. Axles located by radius arms and panhard rods.

**Body** — sheet steel construction with the driver and co-driver seated over the No. 1 axle on either side of the engine. Ten (10) men or a 1.4tonne payload may be carried. A roll bar can be fitted, which is removable for air portability or stacking.

**Axles** — 3 beam type axles incorporating spiral bevel type differentials and fully floating axle shafts. Differential ratio 3.54:1.

**Wheels and Tyres** — Pressed steel wheels, 5 stud fixing, size 10" × 15" with 31 × 15.5 — 15 BPR tyres. ALL SIX WHEELS DRIVE.

**Steering** — Front power assisted, providing a 15 ft (4.590m) outer radius turning circle, 8' 6" (2.590m) inner radius.

**Power take-off** — Available if required.

**Fuel System** — 16.75 gallon (76 litre) fuel tank situated under the rear load bed, leading to engine by Bendix electric pump.

**Seating** — Individual weatherproof front seats. If required the Esarco 6 × 6 vehicle can be supplied with eight (8) bucket seats, mounted on a removable frame, to fit the rear load bed.

**Instrumentation** — The instrument panel consists of, speedometer, fuel gauge, temperature gauge, generator warning light.

**Electrical system** — Fully weatherproof, 12 volt negative earth system consisting of 65 amp output alternator and heavy duty battery.

**Lighting** — Headlamps (60 watt main beam/55 watt dipped beam), side lamps, indicator lamps with 4-way hazard warning system, stop/tail lamps, number plate lamps.

**Body** — The flat load bed 93.7" (2390mm) long and 78.7" (2000mm) wide. A limited amphibious capability is available if required.

**Road Speed** — carrying 1 tonne payload, 2 man crew and 16.75 gallons of fuel: 60 mph (96 km/h).

### Weight distribution of vehicle:

- Centre of gravity of load platform — 1.4m (55") FORWARD OF DATUM.
- Permissible Centre of Gravity shift is between 1.8m (71") and 0.7m (27.5") FORWARD OF DATUM.
- Maximum height of Centre of Gravity of load is 0.9m (35.4") above the load bed.
- Vertical position of Centre of Gravity is defined as the top of the main chassis member.
- Recommended maximum axle loading — 1610 kg (3542 lbs) per axle.

\* Datum is defined as the forward face of the rear cross member.

## ESARCO 8 × 8:

### Engines:

Water cooled 3.5 litre Vee 8 114 hp petrol engine. Aluminum alloy construction, 5 bearing crankshaft and self adjusting hydraulic tappets.  
Bore: 88.9mm (3.5") Stroke: 71.1mm (2.8")  
Cubic capacity: 3,826cc Compression ratio 8.13:1  
Max Power: 85.2 kW (114 bhp) @ 4,000 rpm  
Max Torque: 251 Nm (185 lb/ft) @ 2500 rpm

### OR

Water cooled 3.6 6 cylinder 150 bhp turbo-charged diesel engine. Cast iron construction, 7 bearing crankshaft.  
Bore: 92mm (3.7") Stroke: 90mm (3.6")  
Cubic capacity: 3,589cc Compression ratio 22:1  
Max Power: 111.9 kW (114 bhp) @ 4,200 rpm  
Max Torque: 289 Nm (213 lb/ft) @ 2400 rpm

**Main gearbox** — 5 speed manual gearbox with synchromesh on all forward gears.

**Transfer boxes** — one transfer box on main gearbox output shaft driving Nos. 1 & 3 axles and a second transfer box driving No. 2 & 4 axle. High and low ratio on all main gearbox speeds and inter axle differential locking may be selected by the driver.

**Brakes** — servo-assisted hydraulic brakes, disc on front axle, drum brakes on centre axles. Transmission handbrake operating on first transfer box rear output shaft.

**Suspension** — long travel coil springs, controlled by double acting shock absorbers to all eight wheels. Axles located by radius arms and panhard rods.

**Body** — sheet steel construction with the driver and co-driver seated over the No. 1 axle on either side of the engine.

**Axles** — 4 beam type axles incorporating spiral bevel type differentials and fully floating axle shafts. Differential ratio 3.54:1. Steering is effected on the front and rear axles. The two centre axles are not steered.

**Wheels and Tyres** — Pressed steel wheels, 5 stud fixing, size 10" × 15" with 31 × 15.5 — 15 BPR tyres. ALL EIGHT WHEELS DRIVE.

**Steering** — Front and rear axle steering, power assisted, providing an 18 ft (5.486m) turning circle, 9 ft (2.743m) inner radius.

**Power take-off** — Available if required.

**Fuel System** — 17.5 gallon (80 litre) fuel tank situated under the rear load bed, leading to engine by Bendix electric pump.

**Seating** — Individual weatherproof front seats. If required the Esarco 8 × 8 vehicle can be supplied with 10 bucket seats, mounted on a removable frame, to fit the rear load bed.

**Instrumentation** — The instrument panel consists of, speedometer, fuel gauge, temperature gauge, generator warning light.

**Electrical system** — Fully weatherproof, 12 volt negative earth system consisting of 65 amp output alternator and 60 amp hour battery (petrol & diesel engines).

**Lighting** — Headlamps (60 watt main beam/55 watt dipped beam), side lamps, indicator lamps with 4-way hazard warning system, stop/tail lamps and number plate lamps.

**Body** — The flat load bed 109" (2775mm) long and 77" (1950mm) wide.

**Road Speed** — carrying 2-tonne payload, 2 man crew and 17.5 gallons of fuel: 65 mph (105 km/h).

### Weight distribution of vehicle:

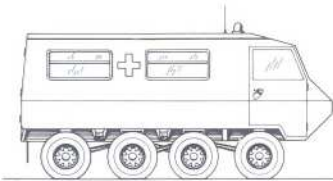
- Centre of gravity of load platform — 1.4m (55") FORWARD OF DATUM\*
- Permissible Centre of Gravity shift is between 1.8m (71") and 0.7m (27.5") FORWARD OF DATUM.
- Maximum height of Centre of Gravity of load is 0.9m (35.4") above the load bed.
- Vertical position of Centre of Gravity is defined as the top of the main chassis member.
- Recommended maximum axle loading — 1610 kg (3542 lbs) per axle.

\* Datum is defined as the forward face of the rear cross member.

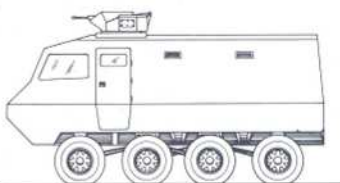




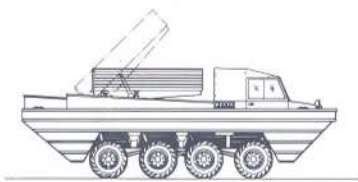
Four Man Cab Extended Flatbed



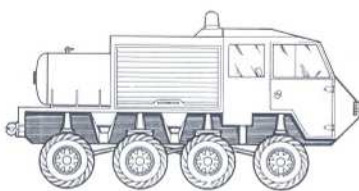
Ambulance



Armoured Carrier



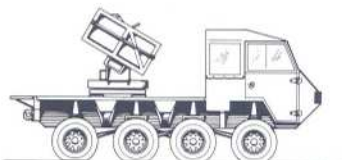
Amphibious



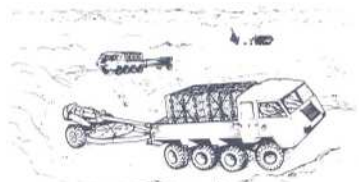
Firefighter



Helicopter Field Service



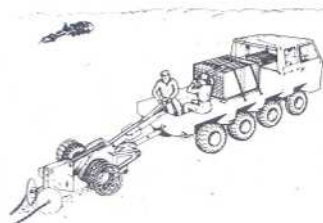
Missile Launcher



105mm Gun Tug



20mm Cannon



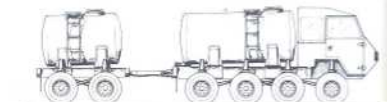
Bar mine Layer



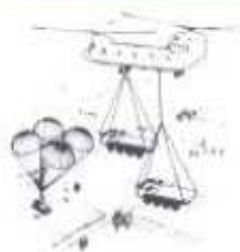
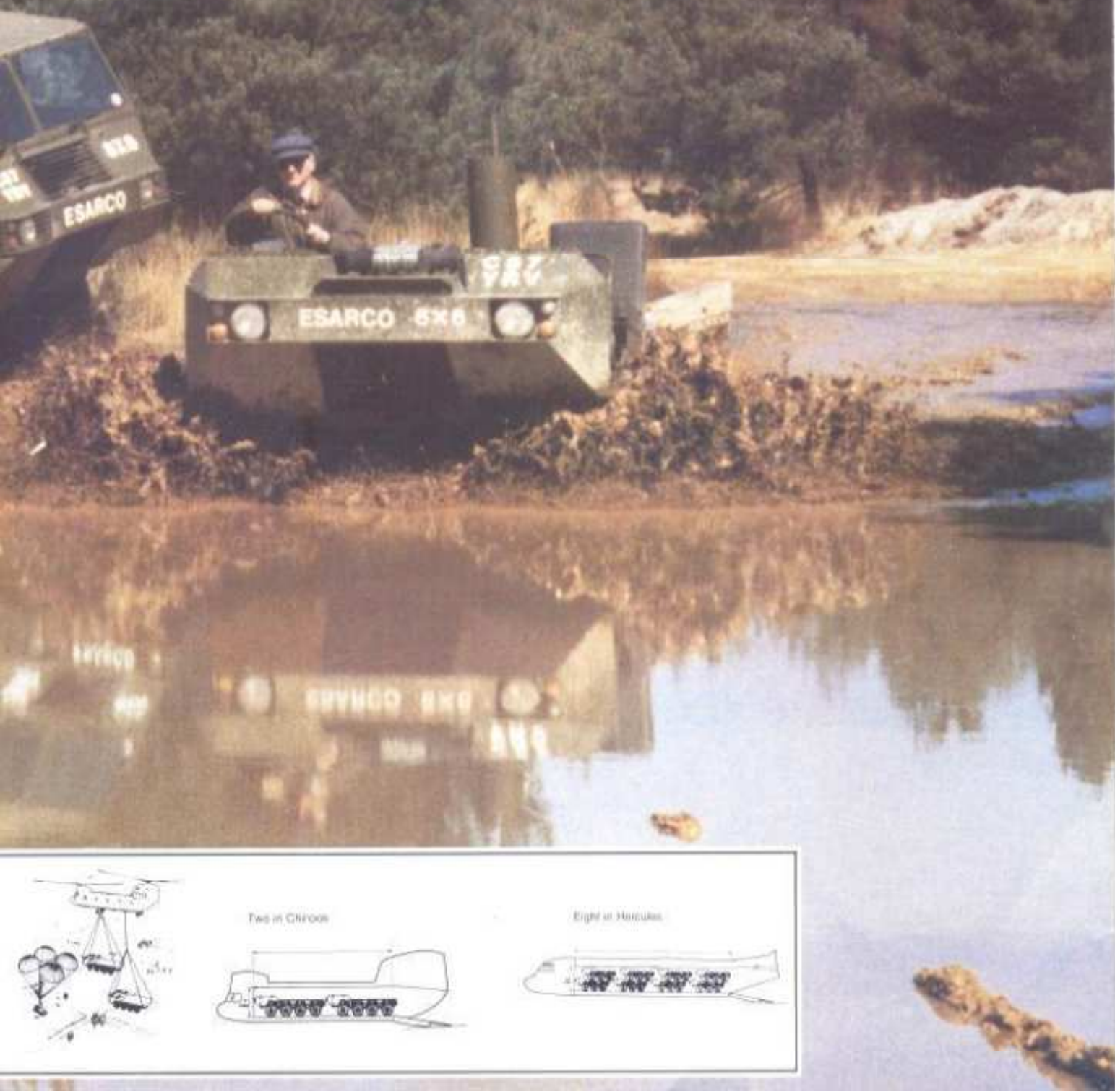
Ranger Mine Layer



Digger



Fuel/Water Tanker plus Trailer



Two in Chifoon



Eight in Hercules





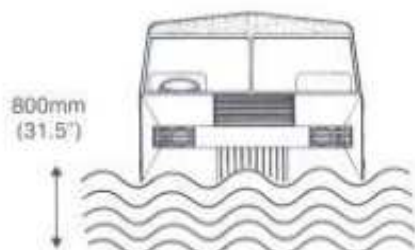
## DIMENSIONS

### ESARCO 6 × 6

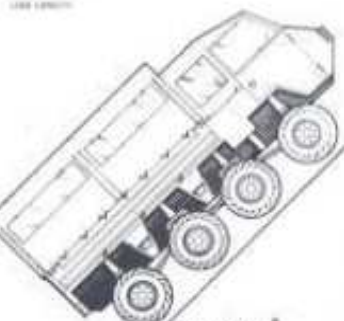
<b>Weight</b>	1400 kg	3080 lbs
<b>Payload</b>	1½ tonnes (max)	
<b>Seating</b>	10 maximum	
<b>Length</b>	3.860m	152 inches
<b>Width</b>	2.000m	78.7 inches
<b>Height (top of steering wheel)</b>	1.610m	63.4 inches
<b>Track</b>	1.588m	62.5 inches
<b>Cargo bed length</b>	2.380m	93.7 inches
<b>Cargo bed width</b>	2.000m	78.7 inches
<b>Height of cargo bed from ground</b>	0.950m	37.5 inches
<b>Ground clearance</b>	0.310m	12.2 inches
	<small>(except under diffs - Guard fitted)</small>	
	0.215m	8.5 inches
<b>Wading depth</b>	0.800m	31.5 inches
<b>Maximum gradient</b>		45° (1 in 1)
<b>Approach angle</b>		50°
<b>Departure angle</b>		50°
<b>Ramp brake over angle</b>		90°
<b>Turning circle (inner radius)</b>	2.59m	8ft 6 inches
<b>Tyre size</b>	31 × 15.5 - 15 8PR	
<b>Tyre pressure</b>	1.03 bar	15 psi
<b>Ground pressure (empty)</b>	0.28 bar	4.1 psi
<b>Ground pressure (with 1 tonne payload)</b>	0.5 bar	5.5 psi
<b>Engine</b>	2.5 litre	70 hp diesel
<b>Fuel capacity (standard)</b>	76 litres	16.75 gallons
<b>Fuel capacity (maximum)</b>	113.5 litres	25 gallons
<b>Fuel consumption</b>	7.75 km/litre	22 mpg
<b>Speed</b>	96 kph	60 mph
<b>Range (standard)</b>	589 km	368 miles
<b>Range (maximum)</b>	880 km	550 miles

### ESARCO 8 × 8

<b>Weight</b>	2.5 tonnes	2.455 tons
<b>Payload</b>	2.0 tonnes	1.96 tons
<b>Seating</b>	12 maximum	
<b>Length</b>	4.750m	187 inches
<b>Width</b>	2.000m	78.7 inches
<b>Height (to top of doors)</b>	2.000m	78.7 inches
<b>Track</b>	1.588m	62.5 inches
<b>Cargo bed length</b>	2.775m	109.0 inches
<b>Cargo bed width</b>	1.950m	77.0 inches
<b>Height of cargo bed from ground</b>	1.000m	40.0 inches
<b>Ground clearance</b>	0.215m	8.5 inches
<b>Wading depth (Petrol)</b>	0.500m	20.0 inches
<b>Wading depth (Diesel)</b>	0.800m	31.5 inches
<b>Maximum gradient</b>		45° (1 in 1)
<b>Approach angle</b>		50°
<b>Departure angle</b>		60°
<b>Ramp brake over angle</b>		90°
<b>Turning circle (inner radius)</b>	2.743m	9 feet
<b>Tyre size</b>	31 × 15.5 - 15 8PR	
<b>Tyre pressure</b>	1.03 bar	15 psi
<b>Ground pressure (empty)</b>	0.37 bar	5.5 psi
<b>Ground pressure (with 2 tonne payload)</b>	0.44 bar	6.4 psi
<b>Engine</b>	3.5 litre V8	114 hp Petrol
	3.6 litre	150 hp turbo-charged diesel
<b>Fuel capacity (standard)</b>	80 litres	17.5 gallons
<b>Fuel capacity (maximum)</b>	146.5 litres	32 gallons
<b>Fuel consumption (Petrol)</b>	23.8 l/100km	12 mpg
<b>Fuel consumption (Diesel)</b>	14.3 l/100km	20 mpg
<b>Speed</b>	105 kph	65 mph
<b>Petrol Range (standard)</b>	336 km	210 miles
<b>Petrol Range (maximum)</b>	614 km	384 miles
<b>Diesel Range (standard)</b>	560 km	350 miles
<b>Diesel Range (maximum)</b>	1024 km	640 miles



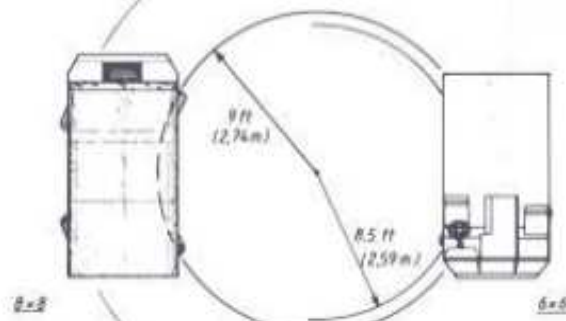
WADING DEPTH



MAX 45°  
MAXIMUM GRADIENT



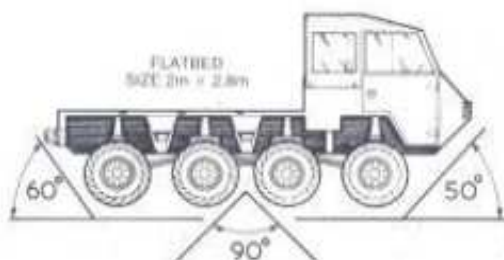
215mm  
(8.5")  
GROUND CLEARANCE



TURNING CIRCLE



MAX 40°  
MAXIMUM TILT



ANGLES OF ACCESS

#### Optional Extras for Esarco Vehicles

Winch (mechanical/electrical), Towhook (NATO/Pintle/50mm ball), Wiring kit for towing, Weather protection, Run-flat tyre system, Hard/soft top cab, Rear canvas tilting, Seating for 8 men (6 × 6 only), Flotation tanks on hull (6 × 6 only), Tracks for rear axles (8 × 6 only), Seat for 10 men (8 × 8 only), Tracks for two centre axles if required (8 × 8 only).

**Specialist fits to customer's requirements.**

# THE FUTURE OF MILITARY VEHICLES



Designed by **Esarco Limited**  
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CWEASY G Ref: 19020425.



Manufactured in the United Kingdom by:  
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Beaumaris, Anglesey, Gwynedd LL58 8HY.  
Tel: 0248 810431 Telex 61295.

**Note:** As we are always seeking to improve our product, the information given herein gives only a general indication of performance, speed, load capacity etc., etc., none of which shall form part of any contract.

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