



PROTANK DIRECT HOT WATER CYLINDERS

500L and 1000L

Protank direct hot water cylinders are designed for high demand hot water production using the high output 'Habanero' heat exchanger module or as a stand alone buffer tank for direct water heaters.

Protanks direct model internal tank and fittings are crafted from the highest possible spec 'Marine Duplex' 2205 stainless steel in order to achieve a 10bar maximum rating.



Model Range

| Code | Description | Height x Ø |
|----------|--------------|----------------|
| CYSC500 | 500L, 10bar | 1830mm x 720mm |
| CYSC1000 | 1000L, 10bar | 2175mm x 915mm |

Features

- 800kPa or 1000kPa cold water expansion installation kits
- All tapping's including the inlet and outlet ports are side mounted for easy access and reduced overall height
- Direct mount pressure relief and cold water expansion valve ports vertically aligned for easy waste connection
- Up-sized 50mm inlet and outlet ports for low pressure drops and high flow rates
- Integrated temperature gauge port
- Convenient installation kit including gauge, pressure relief valve, cold water expansion valve & primary thermostat

Installation Kits

| Code | Description |
|-------------|--|
| CYSC500K | 1000kPa PR / 800kPa CWE / Temp gauge / Thermostat |
| CYSC500KHP | 1200kPa PR / 1000kPa CWE / Temp gauge / Thermostat |
| CYSC1000K | 1000kPa PR / 800kPa CWE / Temp gauge / Thermostat |
| CYSC1000KHP | 1200kPa PR / 1000kPa CWE / Temp gauge / Thermostat |



SPECIFICATIONS

| General Specification | | | |
|----------------------------------|-----------------------|---------------------------|--------------------------|
| Manufactured by | RM Cylinders | Case Construction | |
| Country of origin | UK | End material | Polypropylene |
| | | End thickness | 2 mm |
| | | Wall material | Painted Galvanized steel |
| | | Wall thickness | 0.45 mm |
| | | End joint | Press fit |
| | | Wall joint | Lock form joint |
| Pressure Ratings | | | |
| Max. Press. Relief valve setting | 1200 kPa | Thermal Insulation | |
| Max. CWE valve setting | 1000 kPa | Insulation specification | EPC/IsoPMDI |
| Max. operating press. | 900 kPa | Wall thickness | 50 mm |
| Recommended operating press. | 600 / 800 kPa | Base thickness | 10 mm |
| | | Top thickness | 50 mm |
| Shell Construction | | | |
| Shell type | Single skin | | |
| Shell material | 2205 Marine Duplex SS | | |
| Thickness | 1 mm | | |
| Circumferential joint | Tig butt weld | | |
| Longitudinal joint | Tig butt weld | | |

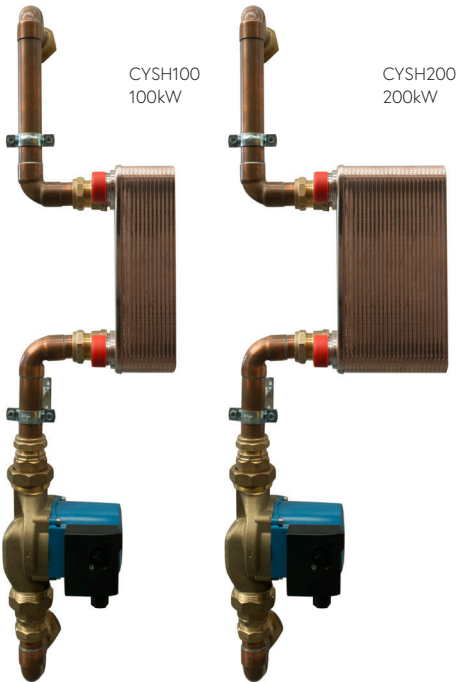
Optional 'Habanero' Module

In place of the traditional coil in tank style calorifier, together with RM Cylinders we have developed an external heat exchanger module which manifolds directly into the accumulators pre-arranged ports.

This allows a significantly higher kW transfer than would normally be possible if using internal heat exchange coils while also retaining the full 500L or 1000L storage capacity. The result is large volume hot water production for less cost and a smaller foot print.

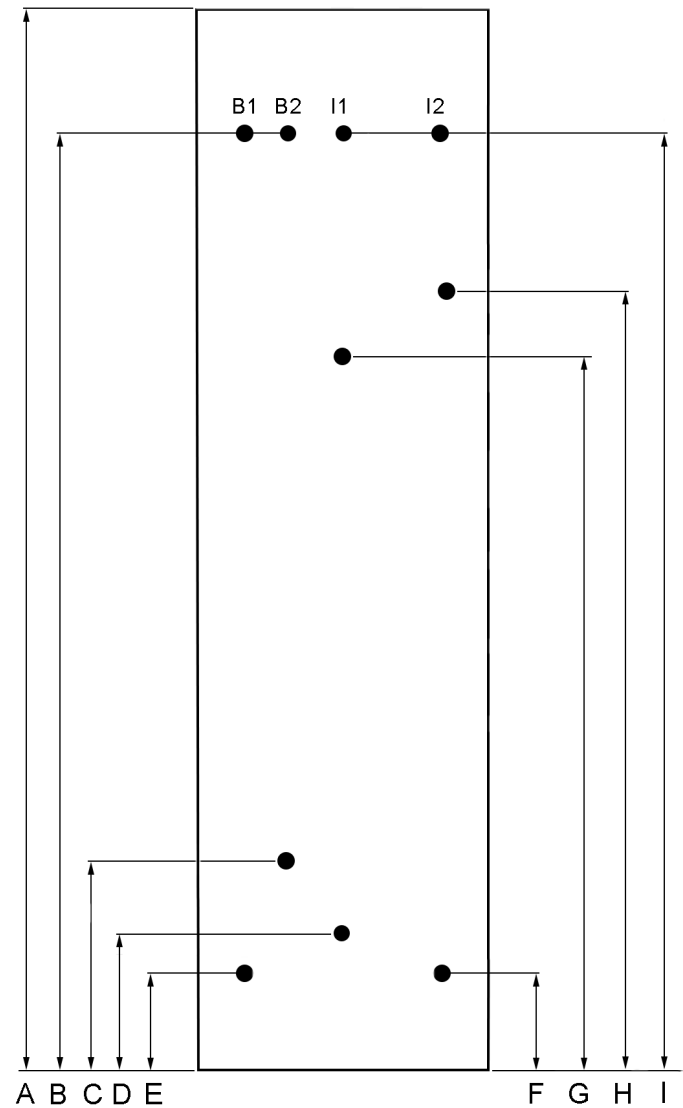
| Specification | CYSH100 | | CYSH200 | |
|------------------------------|----------------------|--|----------------------|--|
| GEA Heat exchanger | AISI304 brased plate | | AISI304 brased plate | |
| Maximum transfer | 100kW | | 200kW | |
| Primary flow required | 8.8m³/hr | | 14.7m³/hr | |
| Primary pressure drop | 41kPa | | 35kPa | |
| SS Recirc. pump size/volatge | 32mm, 230V | | 32mm, 230V | |
| Pump max consumption | 190W | | 225W | |

| Hot Water Production | 60min | 120min | 180min | Recovery |
|----------------------|-------|--------|--------|----------|
| 500L + 100kW | 2500L | 4400L | 6300L | 11min |
| 500L + 200kW | 4400L | 8200L | 12000L | 6min |
| 1000L + 100kW | 3200L | 5100L | 7000L | 21min |
| 1000L + 200kW | 5100L | 8900L | 12700L | 11min |



The 500 and 1000L share the same convenient tapping size and positions which will accept both the 100kW or 200kW 'Habanero' modules.

PORT LAYOUT



| Technical Specification | 500L | | 1000L | |
|-------------------------|--------------------|---------|--------------------|---------|
| A. Overall height (Ø) | 1830mm | (720mm) | 2175mm | (915mm) |
| B1. Pressure Relief | 1575mm | (20mm) | 1865mm | (20mm) |
| B2. Upper Stat Pocket | 1575mm | (22mm) | 1865mm | (22mm) |
| C. Lower Stat Pocket | 425mm | (22mm) | 465mm | (22mm) |
| D. Habanero Return | 285mm | (50mm) | 325mm | (50mm) |
| E. Cold Water Expan. | 225mm | (20mm) | 265mm | (25mm) |
| F. Inlet | 225mm | (50mm) | 265mm | (50mm) |
| G. Habanero Flow | 1285mm | (50mm) | 1465mm | (50mm) |
| H. Return | 1430mm | (20mm) | 1435mm | (20mm) |
| I1. Gauge Port | 1575mm | (15mm) | 1865mm | (15mm) |
| I2. Outlet | 1575mm | (50mm) | 1865mm | (50mm) |
| Weight empty | 50kg | | 150kg | |
| Weight full | 590kg | | 1150kg | |
| Insulation quantity | 211cm ² | | 341cm ² | |

PROTANK 20 YEAR LIMITED WARRANTY

All terms of the warranty, subject to the conditions below, are effective from the date of installation if proof of installation date can be provided. Where the date of installation is not known or cannot be proven, the warranty will commence one month after proof of purchase date.

Single Residential Domestic Warranty

A single residential domestic installation is defined as an installation where the hot water cylinder with a factory set thermostat delivers hot water to a privately owned single family residential dwelling which is not used for commercial purposes.

Protank Excluding Valves and Element

5 YEARS FREE PARTS and LABOUR costs to replace or repair the cylinder if it fails due to manufacturing defect.

Followed by;

5 YEARS FREE PARTS ONLY costs (excluding labour) to replace or repair the cylinder if it fails due to manufacturing defect.

Followed by;

10 YEARS *PRO-RATA PARTS ONLY reducing costs (excluding labour) according to the below formula, to replace or repair the cylinder if it fails due to manufacturing defect.

*Pro-Rata Formula = Original purchase price x remaining warranty in years ÷ total warranty period of the cylinder.

Caleffi Valves (excluding any 3rd party valves)

5 YEARS FREE PARTS and LABOUR costs to replace or repair any valve that fails due to manufacturing defect.

Protank Element Only;

12 MONTHS FREE PARTS and LABOUR costs to replace or repair the element if it fails due to manufacturing defect.

Commercial Applications Warranty

Any installation not considered to be a single residential domestic type.

Protank and Caleffi Valves Excluding Element

5 YEARS FREE PARTS and LABOUR costs to replace or repair the cylinder or valves if failure is due to a manufacturing defect.

Protank Element Only;

12 MONTHS FREE PARTS and LABOUR costs to replace or repair the element if it fails due to manufacturing defect.

Refer to full terms, conditions and exclusions in the installation/owners manual



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