Johnson & Starley





The Solution for You

How to decide which unit is right for your requirements.

Below are a number of examples, along with data to help you decide which unit is right for you.

There are a number of points to consider along the way - firstly, how many major outlets for hot water do you have to supply?

Baths require between 55 and 100 litres, Jacuzzis require up to 550 litres. (Baths allow 30 minutes duration). Small Showers require 11 litres per minute, High Volume Showers ie., multi-jet, require 35 litres per minute. (Showers allow 10 minutes duration). Sinks require between 10 and 15 litres, Wash Basins require between 1 and 5 litres.

DIRECT	INDIRECT	APPLICATION	COMMERCIAL SE		
					Indirect
120L	90L	Flat	Large House -	6 bed / 4 bathrooms	2 x 210L
150L	120L	1/2 Bed (1 bath/shower)	Guest House -	8 bed / 4 bathrooms	2 x 300L
180L	150L	3 Bed (1 bath/shower)	Small Hotel -	8 bed / 8 bathrooms	3 x 210L
210L	180L	4 Bed (1 bath/shower)	Sports Pavilion -	25 people / 4 showers	2 x 300L
250L	210L	4/5 Bed (2 baths/showers)	Sports Pavilion -	25 people / 6 showers	3 x 210L
300L	250L	4/6 Bed (3 baths/showers)	Student House -	25 people / 3 bathrooms	3 x 300L
_	300L	5/7 Bed (3 baths/showers)	Old People's Home -	60 bed / 10 bathrooms	5 x 300L
•	•	•		•	

Reheat Performance

Finally, you have to estimate the number of times any one of these outlets will be used before the unit has time to recover:

INDIRECT	RE-HEAT	COIL KW	DIRECT	REHEAT TIME One Element	REHEAT TIME Two Elements
90L	13 MINS	16.5	90L	58 MINS	_
120L	17 MINS	16.5	20L	90 MINS	45 minutes
150L	17 MINS	18.9	150L	121 MINS	61 Minutes
180L	21 MINS	18.9	180L	157 MINS	79 Minutes
210L	22 MINS	18.9	210L	192 MINS	96 minutes
250L	28 MINS	21.4	250L	224 MINS	112 Minutes
300L	36 MINS	21.4	300L	263 MINS	132 Minutes

The reheat performance is measured from 15°C to 60°C after drawing off 70% of the capacity.

APPROVALS & GUARANTEES

WRAS approved and Approved to Building Regulations G3 and L1. WRc-NSF approved.

Vessel: 25 Year fully transferable guarantee.

Controls and Expansion Vessel 2 years, Immersion Heater 2 years when used in domestic applications.

benchmark)



WRc-NSF Ltd





Other longer life immersion heaters are available for industrial purposes

* The unit must be serviced annually and log book supplied completed for any guarantee to remain valid.



Johnson & Starley Ltd.

Rhosili Road, Blackmills, Northampton NN4 7LZ Tel: 01604 762881 Fax: 01604 767408

www.johnsonandstarley.co.uk

PREMIER

DUPLEX STAINLESS STEEL

HOT WATER CYLINDER

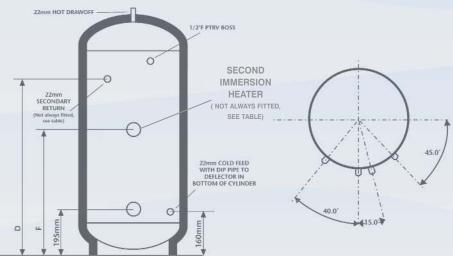
RELIABILITY YOU CAN TRUST

Components

Technical Specifications - Indirect

Aguastar Premier Direct is a duplex stainless steel unvented storage cylinder complete with 2 no. 3kw incoloy immersion heaters (90L has 1 no. 3kw immersion heater). The duplex cylinder has a 25 year guarantee and heat retention is achieved by use of a 50mm thick CFC/HCFC free (ODP ZERO) insulation. The cylinder casing has a white powder coated finish and all units are delivered complete with fitting kit (refer to parts list).





CAPACITY HEIGHT			DIAMETER	D	F	(Kg-EMPTY) (Kg-FULL)			
	90 L	718	550	N/F	N/F	25	115		
	120 L	906	550	N/F	510	30	150		
	150 L	1093	550	N/F	610	35	185		
	180 L	1281	550	N/F	710	40	220		
	210 L	1469	550	1000	810	45	255		
	250 L	1719	550	1250	950	50	300		
	300 L	2032	550	1500	1100	55	355		

All Dimensions are in mm and are of the cased unit. N/F = not fitted.

Aguastar Premier comes complete with all the fittings you need to complete the installation.

INDIRECT PARTS

- Inlet Control set
- Temperature & Pressure relief valve
- 15mm / 22mm Tundish
- Expansion vessel
- Expansion vessel mounting bracket
- 22mm compression (DZR) connections
- Drain (DZR)
- 1 x 15mm end feed tee
- Expansion vessel hose
- 1 x Immersion Heater (2 on 250ltr & 300ltr)
- Two port valve
- Wiring centre
- Dual Thermostat
- Installation & Maintenance Instructions
- Benchmark Log Book

DIRECT PARTS

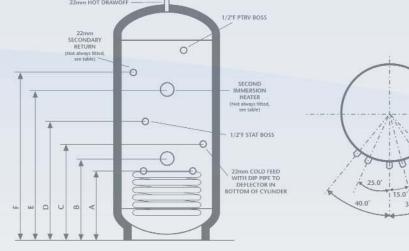
- Inlet Control set
- Temperature & Pressure relief valve
- 15mm / 22mm Tundish
- Expansion vessel
- Expansion vessel mounting bracket
- 22mm compression (DZR) connection
- Drain (DZR)
- 1 x 15mm end feed tee
- Expansion vessel hose
- 2 x Immersion Heaters (1 on 90L)
- Installation & Maintenance Instructions
- Benchmark Log Book





Aquastar Premier Indirect is a duplex stainless steel unvented storage cylinder complete with back-up 3kw incoloy immersion heater (250L and 300L have 2 no. immersion heaters). The duplex cylinder has a 25 year guarantee and heat retention is achieved by use of a 50mm thick CFC/HCFC free (ODP ZERO) insulation. The cylinder casing has a white powder coated finish and all units are delivered complete with fitting kit (refer to parts list). The high recovery coil is fitted low in the base of the cylinder to ensure recovery is achieved on 100% of its volume.





CAPACITY	HEIGHT	DIAMETER	A	В	C	D	E	F	(Kg-EMPTY)	(Kg-FULL)	
90 L	718	550	290	330	390	345	N/F	N/F	30	120	
120 L	906	550	290	330	390	345	N/F	N/F	35	155	
150 L	1093	550	330	370	465	385	N/F	N/F	40	190	
180 L	1281	550	330	370	465	385	N/F	N/F	45	225	
210 L	1469	550	365	405	465	465	N/F	1150	50	260	
250 L	1719	550	365	405	465	560	950	1400	55	305	
300 I	2032	550	365	105	165	660	1100	1600	60	360	

AVAILABLE AS AN OPTIONAL EXTRA

Optional on all units: 6kW rated immersion heaters.

90 L	110	550	230	330	390	343	11/1	11/1	30	120	1
120 L	906	550	290	330	390	345	N/F	N/F	35	155	ı
150 L	1093	550	330	370	465	385	N/F	N/F	40	190	ı
180 L	1281	550	330	370	465	385	N/F	N/F	45	225	ı
210 L	1469	550	365	405	465	465	N/F	1150	50	260	ı
250 L	1719	550	365	405	465	560	950	1400	55	305	ı
300 L	2032	550	365	405	465	660	1100	1600	60	360	
											4

All Dimensions are in mm and are of the cased unit. N/F = not fitted.