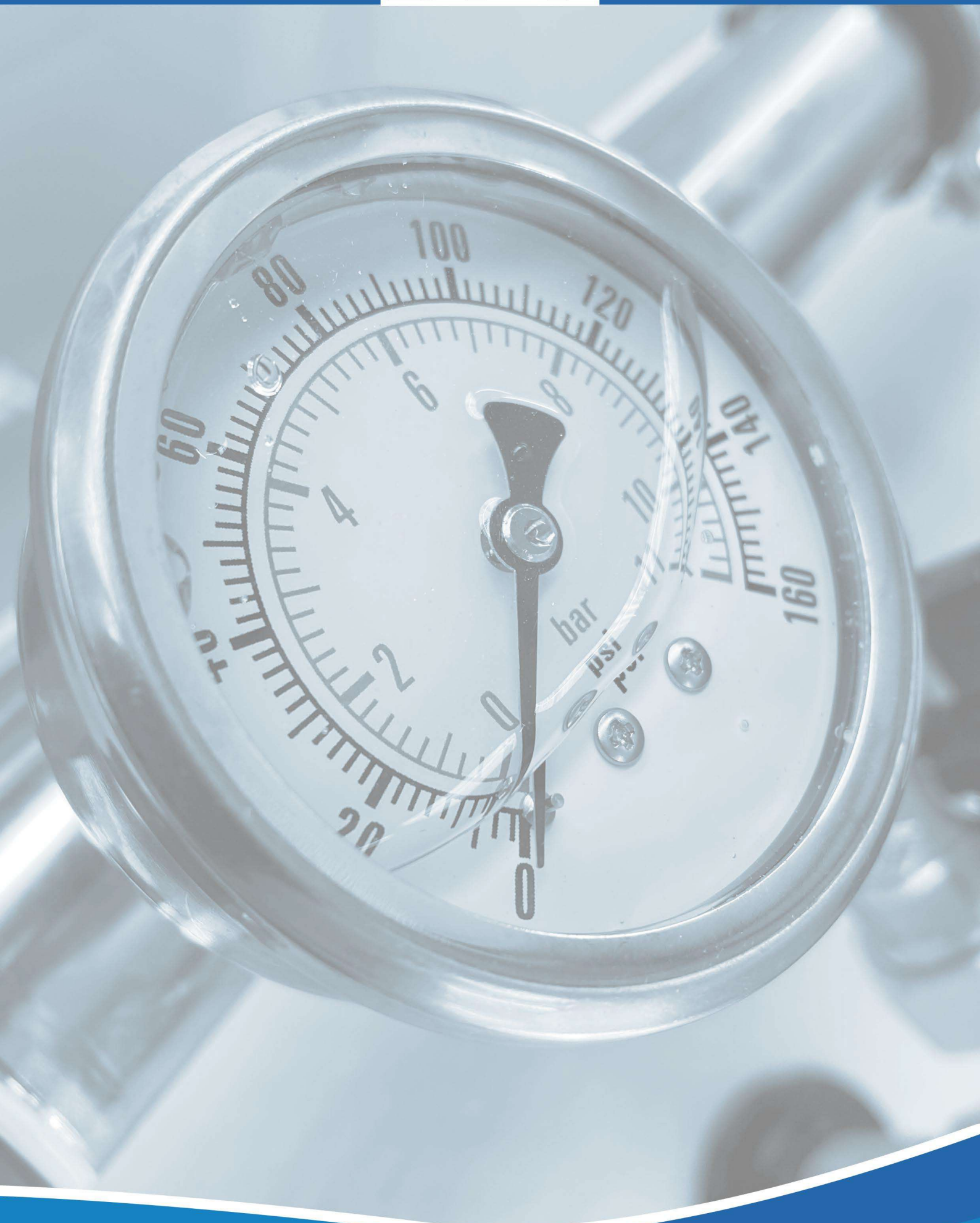




ARC Panel Booster Set

In twin, and triple configuration with variable speed inverters



Product Overview

The ARC Panel Booster Set is a compact and cost-effective cold water booster set ideal for residential, commercial, and industrial applications. Despite its compact design, the ARC Panel Booster Set includes advanced features normally found on larger booster systems including fault signals and error code display as standard.

Product Application Examples

- ▶ Building services
- ▶ Air conditioning
- ▶ Heating
- ▶ Water lifting and handling
- ▶ Irrigation
- ▶ Washing systems



Operation

The ARC Panel Booster Set uses the ARC variable speed inverter(s) which are installed within the control panel of the booster set. The inverter(s) regulate the rotational speed of the pumps using the electrical frequency. The inverter operates at a minimal value that meets the user's specific demand.

In simple terms, once the pressure drops, the inverter recognises the drop in pressure and instructs the pumps to increase speed in order to meet the proportional demand.

The ARC Panel Booster Set works in a "master/slave" arrangement and shares operational duty in 60 minute cycles, this ensures joint usage across the system.

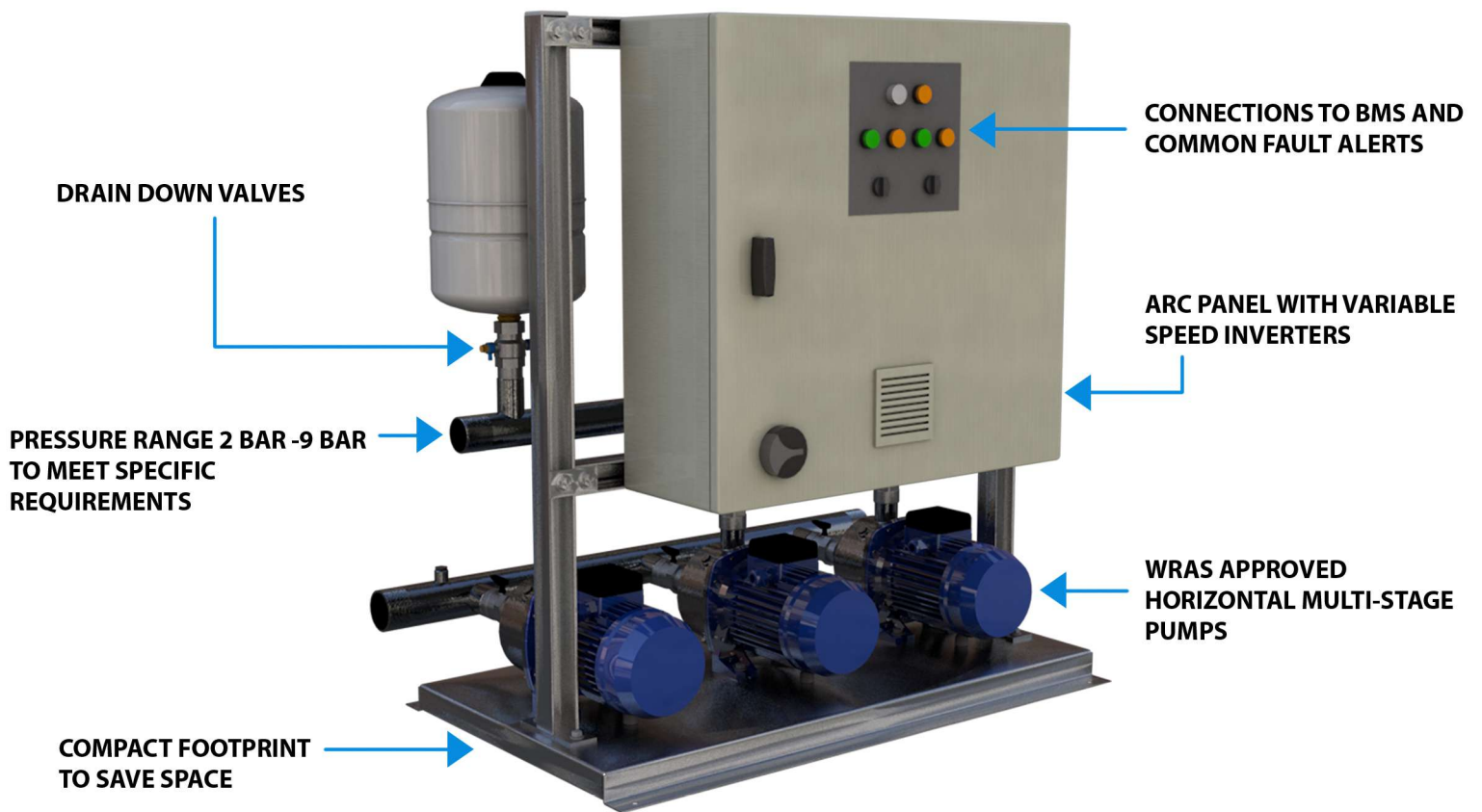
Tank Options

Direct Pumps and Tanks provide a vast array of WRAS approved cold water storage tanks, brass equilibrium ball valves, GRP enclosures for external housing of the booster system.

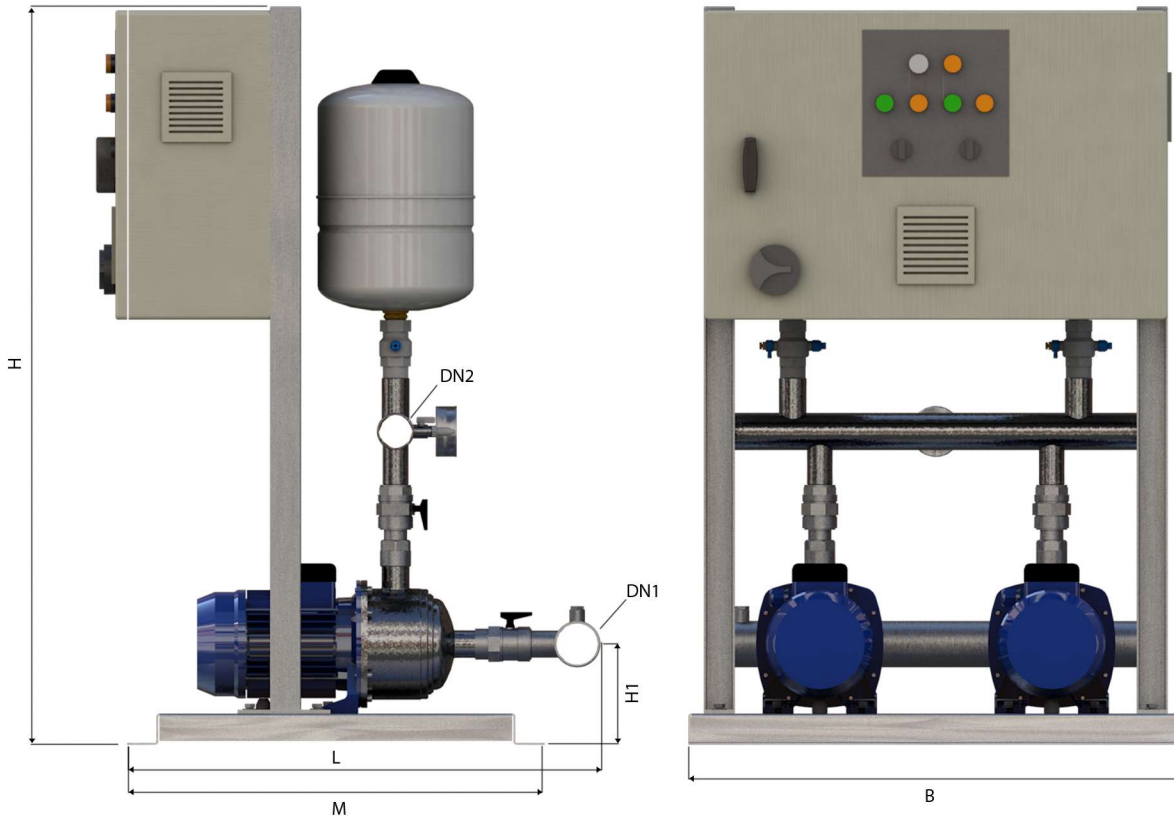
These enclosures can come fully insulated with encapsulated base boards for added thickness and stability and even drip trays, complete with overflow by-laws and CAT 4 (AG) or 5 (AB) air gap water protection.



ARC Panel Booster Set Features at a Glance

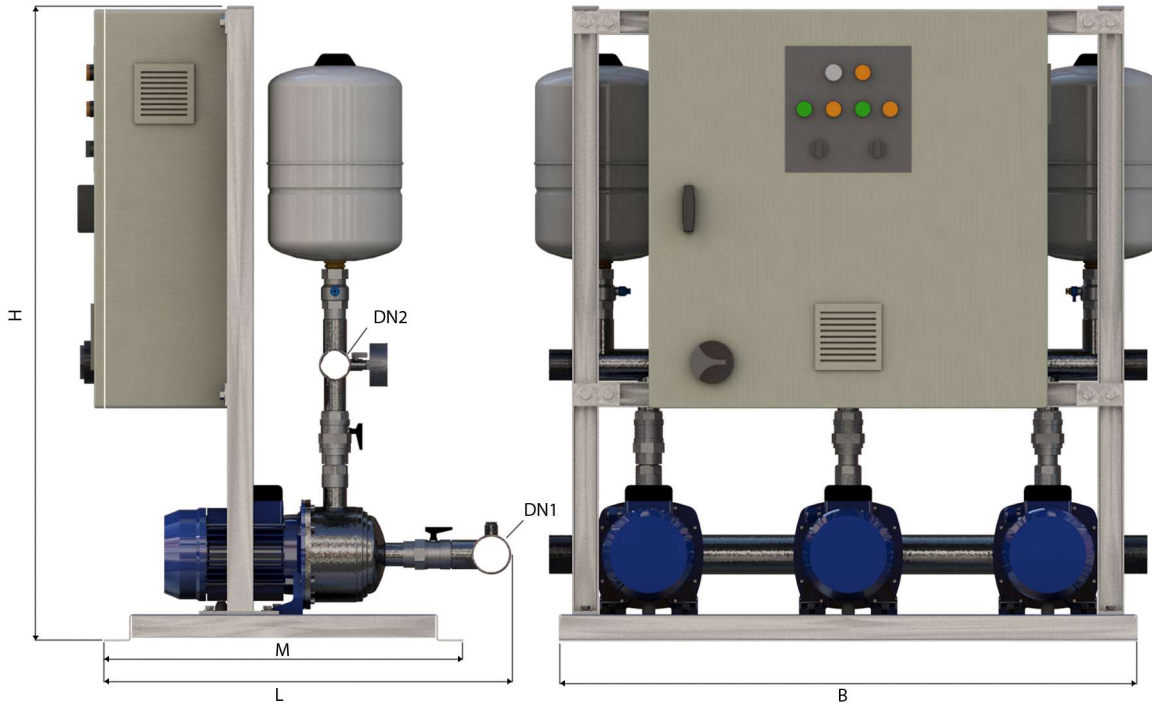


Twin ARC Panel Booster Set



Model Ref	DN1	DN2	B	H	H1	L	M	Power Supply	kW	HP	FLC (amp)
2RS302/8DPT	2"	1 1/4"	640	900	135	608	540	1x240v	2x0.45	2x0.6	2x2.3
2RS305/8DPT	2"	1 1/4"	640	900	135	656	540	1x240v	2x0.75	2x1.0	2x3.0
2RS306/8DPT	2"	1 1/4"	640	800	135	680	540	1x240v	2x0.9	2x1.2	2x4.3
2RS307/8DPT	2"	1 1/4"	640	900	135	704	540	1x240v	2x1.3	2x1.8	2x5.6
2RS308/8DPT	2"	1 1/4"	640	900	135	728	540	1x240v	2x1.3	2x1.8	2x5.6
2RS502/8DPT	2"	1 1/4"	640	900	135	608	540	1x240v	2x0.45	2x0.6	2x2.3
2RS505/8DPT	2"	1 1/4"	640	900	135	656	540	1x240v	2x1.3	2x1.8	2x5.6
2RS506/8DPT	2"	1 1/4"	640	900	135	680	540	1x240v	2x1.3	2x1.8	2x5.6
2RS507/8DPT	2"	1 1/4"	640	900	135	704	540	1x240v	2x1.5	2x2.0	2x6.3
2RS508/8DPT	2"	1 1/4"	640	900	135	728	540	1x240v	2x2.2	2x3.0	2x8.2
2RS1002/8DPT	2 1/2"	2"	640	950	135	627	540	1x240v	2x0.75	2x1.0	2x3.0
2RS1003/8DPT	2 1/2"	2"	640	950	135	689	540	1x240v	2x1.3	2x1.8	2x5.6
2RS1004/8DPT	2 1/2"	2"	640	950	135	708	540	1x240v	2x1.5	2x2.0	2x6.3
2RS1005/8DPT	2 1/2"	2"	640	950	135	722	540	1x240v	2x2.2	2x3.0	2x8.2
2RS1006/8DPT	2 1/2"	2"	640	950	135	739	540	1x240v	2x2.2	2x3.0	2x8.2
2RS1803/8DPT	4"	2 1/2"	640	1050	135	689	540	1x240v	2x2.2	2x3.0	2x8.2
2RS1804/8DPT	4"	2 1/2"	640	1050	135	708	540	1x240v	2x3.0	2x4.0	2x6.1
2RS1805/8DPT	4"	2 1/2"	640	1050	135	722	540	1x240v	2x4.0	2x5.5	2x8.7
2RS1806/8DPT	4"	2 1/2"	640	1050	135	739	540	1x240v	2x4.0	2x5.5	2x8.7

Triple ARC Panel Booster Set

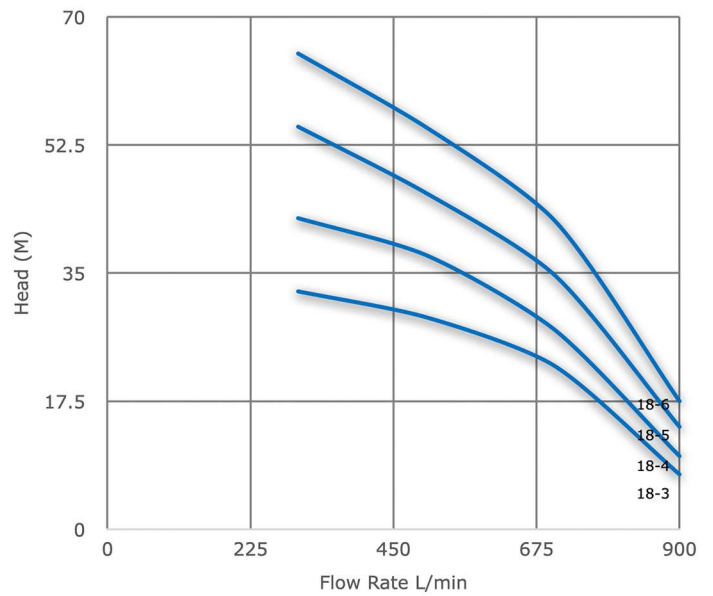
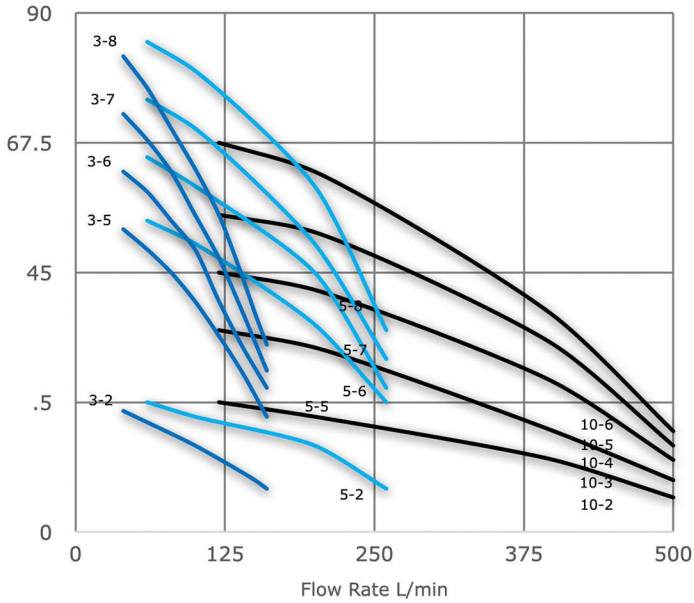


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2RS502/8DPT	2"	1 1/4"	640	900	135	608	540	1x240v	3x0.45	3x0.6	3x2.3
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Twin ARC Panel Booster Set

Pump Curve Data

Operating Parameters: 0 - 50°C Max Temperature, Max Pressure: 8.5 Bar Max Flow 500l/min



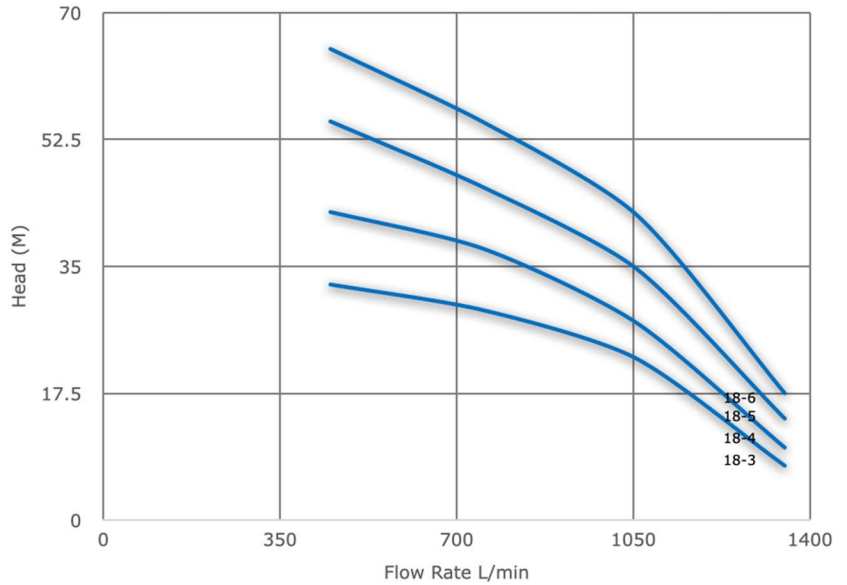
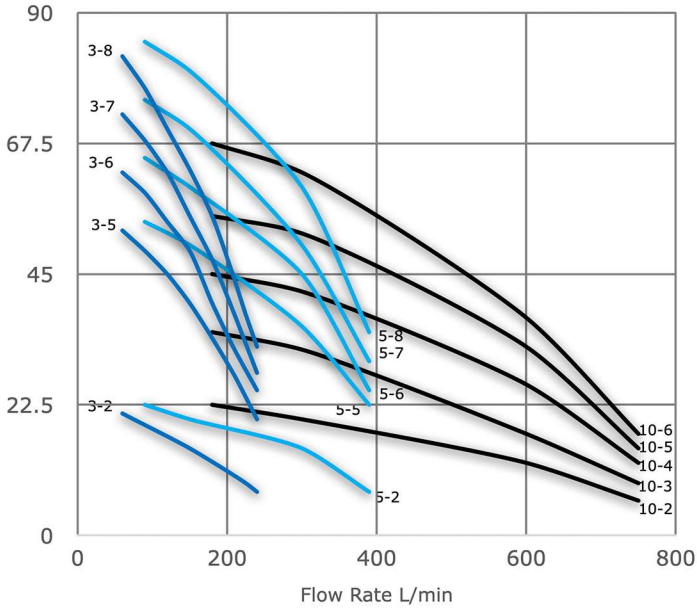
All systems set at mid curve efficiency during first activation on wet test using the RS variable speed inverter at closed valve up to max pressure. The performance curves are based on kinematic viscosity values = 1/mm²/s and density equivalent to 1000kg/m³.

Curve tolerance according to ISO9906, data extracted directly from Ebara data. Each pump operates within a 60-65dB noise rating at max speed, data recorded from 1m distance to a +/- 2.5dB fluctuation.

Triple ARC Panel Booster Set

Pump Curve Data

Operating Parameters: 0 - 50°C Max Temperature, Max Pressure: 8.5 Bar Max Flow 750l/min



All systems set at mid curve efficiency during first activation on wet test using the RS variable speed inverter at closed valve up to max pressure. The performance curves are based on kinematic viscosity values = 1/mm²/s and density equivalent to 1000kg/m³.

Curve tolerance according to ISO9906, data extracted directly from Ebara data. Each pump operates within a 60-65dB noise rating at max speed, data recorded from 1m distance to a +- 2.5dB fluctuation.

Pump and Vessel

Technical Data

	Description	Values
Pump Data	Operating Range	0.5 m ³ /hr - 45m ³ /hr
	Pumped Liquid	Clean potable ground or mixed water
	Liquid Solids	Water must be free of solid and fibrous suspensions.
	Chemical Handling	No
	Weather Protection	Must be protected from weather and above freezing temperatures.
	Pumped Liquid Temperature Range	0 - 50°C
	Ambient Operating Temperature Range	-40°C max 1 km above sea-level
	Maximum Operating Pressure	PN10 / 10 bar
Vessel data	Expansion Vessel	Included as standard
	Single Pump Set	1 x 8L
	Twin Pump Set	2 x 8L & AISI 304 stainless suction and discharge manifold
	Triple Pump Set	3 x 8L & AISI 304 stainless suction and discharge manifold

Pump Material

Technical Data

Pump Material Data	
Description	Values
Casing	EN 1.4301 (AISI 304)
Impeller	
Casing Cover	
Shaft Seal	Ceramic / Carbon / EPDM
Bracket	EN AB AISI 11CU2(FE) Die Cast Aluminium
Suction	G1" G1¼" G1½" G2" G2½" UNI ISO 228
Discharge	G1" G1¼" G1½" G2" G2½" UNI ISO 228



Direct Pumps and Tanks Ltd
Unit 12 Cossall Industrial Estate
Ilkeston
Derbyshire
DE7 5UA
Tel: 0115 9444474
Fax: 0115 9442040
Email: info@dpandt.co.uk