

aquaplus

**Series ES
ISO 2858 (ISO 5199) End Suction
Bare Shaft Industrial Centrifugal
Pumps 50Hz**



ES Series - Bare Shaft Pumps

The ES SERIES of pumps complies fully to the international standard ISO 2858 and ISO 5199.

DESIGN FEATURES

This pump includes the back pull-out design, and when a suitable spacer coupling is fitted to a direct coupled unit, the casing and motor can remain in position while all other pump parts can be removed for simple and quick maintenance.

The volute casing is fitted with a replaceable wear ring and has a suction vane to give smooth flow into the double shrouded hydraulically balanced impeller.

Only four shaft assemblies are required to cover the total range and this gives many common interchangeable parts for pumps fitted to the same shaft.

The standard pump is fitted with a mechanical seal chamber. All these pumps can be fitted with a packed stuffing box incorporating a lantern ring.

Pumps can be supplied as a bare shaft unit, or in many other arrangements, including complete with coupling, guard, baseplate and either electric motor or engine.

Maximum Temperature

With standard packed gland - minus 10°C to 140°C.

Maximum Pressure

Maximum operating pressure 1600kPa.

Maximum test pressure 2100kPa.

Maximum Speed

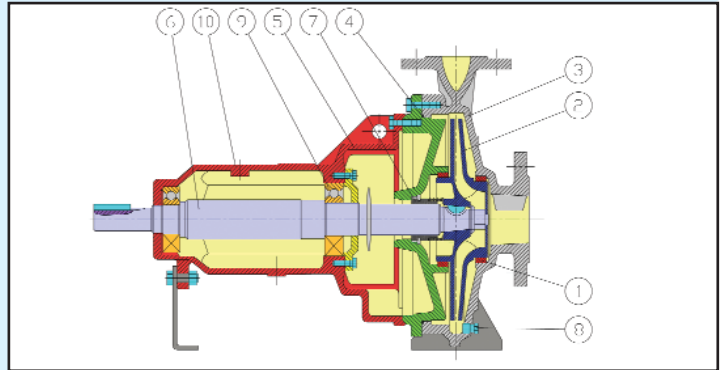
Maximum direct coupled speed for pumps varies between 3600 RPM and 1500 RPM depending upon pump size and method of drive.

APPLICATIONS

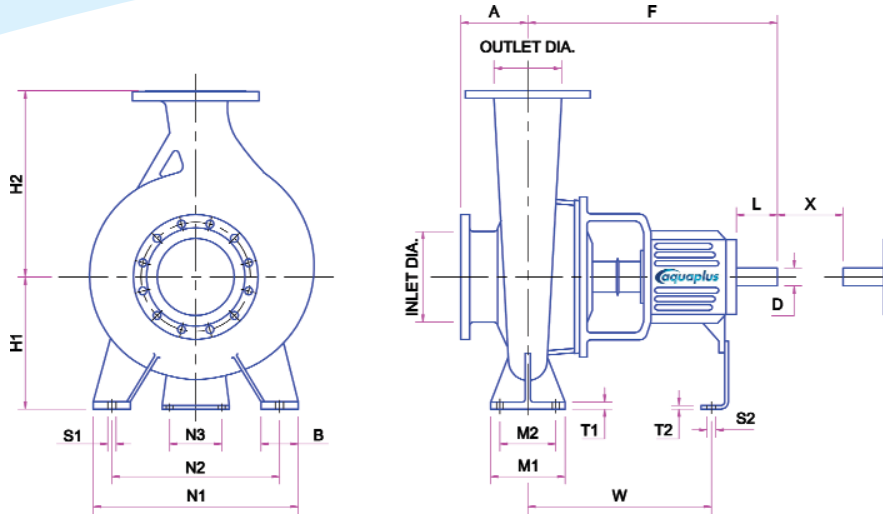
- Circulation of liquids
- Condenser water
- Heating water
- Irrigation
- HVAC
- Dewatering
- Mineral processing
- Dust suppression
- Chemical transfer

MATERIAL OPTIONS ● Closest Australian Equivalents

CODE	CASING	IMPELLER	SHAFT	WEAR RING
10	cast iron AS1830 T220	bronze AS1565 C95210	stainless steel AS1449 GR420	cast iron AS1830 T220
30	cast iron AS1830 T220	cast iron AS1830 T220	stainless steel AS1449 GR420	cast iron AS1830 T220
50	cast iron AS1830 T220	stainless steel AS1449 316Ti	stainless steel AS1449 GR420	cast iron AS1830 T220



1. **Bronze wear rings** - fitted as standard, replaceable front and rear wear rings with optional materials, for a trouble free lifecycle.
2. **Bronze impeller** - in a closed design is fitted as standard to prevent corrosion in stationary or inactive situations. Cast 304SS or 316SS are available on request. The use of 3-D solid model Computer Aided Design (CAD) and Computational Fluid Dynamics (CFD) ensures high efficiencies, reducing overall running costs. Impeller diameters can be trimmed to suit specified performance.
3. **Pump casing** - high efficiency Cast Iron volute castings, with flanges rated to PN1.6MPa (16bar), drilled to AS2129, Table E. Material options: 304SS or 316SS.
4. **Casing oring** - re-usable orings in Nitrile for ease of re-assembly (optional materials available).
5. **Back pull-out design** - allowing for easy removal of rotating element without disturbing the pipe work, lagging, motor or pump volute casing. This is proven to reduce downtime whilst performing routing maintenance.
6. **Enlarged Shaft** - reduces shaft deflection. Standard in 420SS and 316SS as an option. Tapered and keyed shaft design allowing ease of removal in maintenance and positive locking whilst in operation.
7. **Shaft seal** - single, high quality Aquaplus or approved equivalent mechanical seal with carbon vs ceramic fitted as standard with other options such as silicone vs silicone or high temp also available.
8. **Tappings** - convenient suction and discharge pressure gauge tappings plus volute drain, fitted as standard to all Aquaplus ES series pumps.
9. **Bearings** - Heavy duty SKF or approved equivalent, greased for life, reducing maintenance. Housed within removable bearing cap cover assembly, protected by a quality manufactured lip seal reducing ingress of moisture or foreign matter.
10. **Bearing housing** - Robust / heavy duty, manufactured in high strength cast iron providing trouble free life cycle.

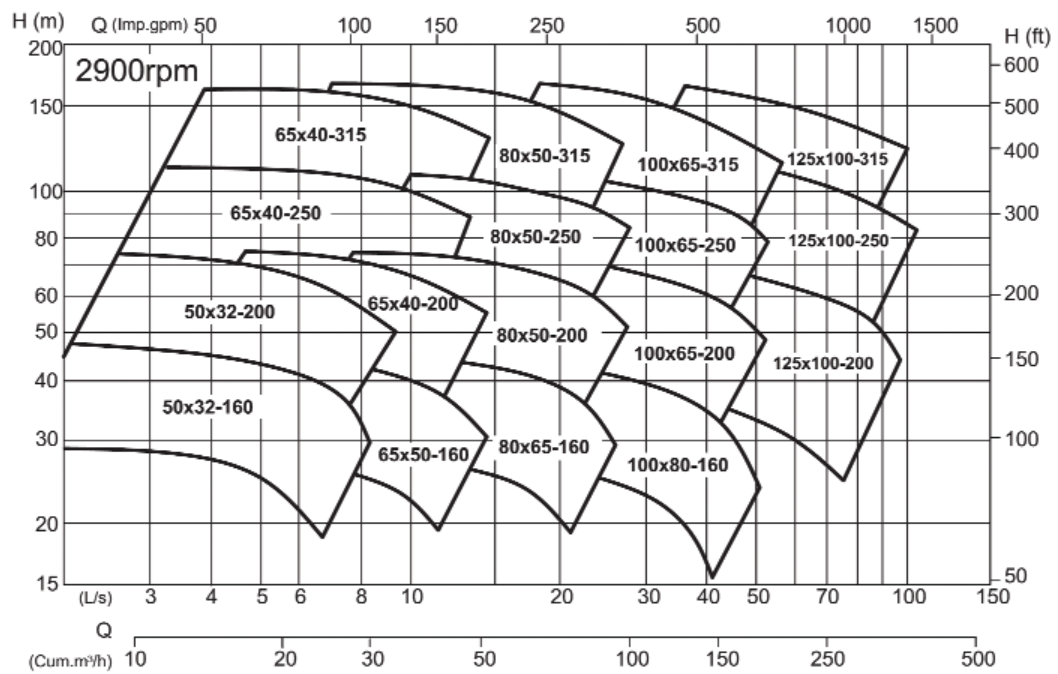
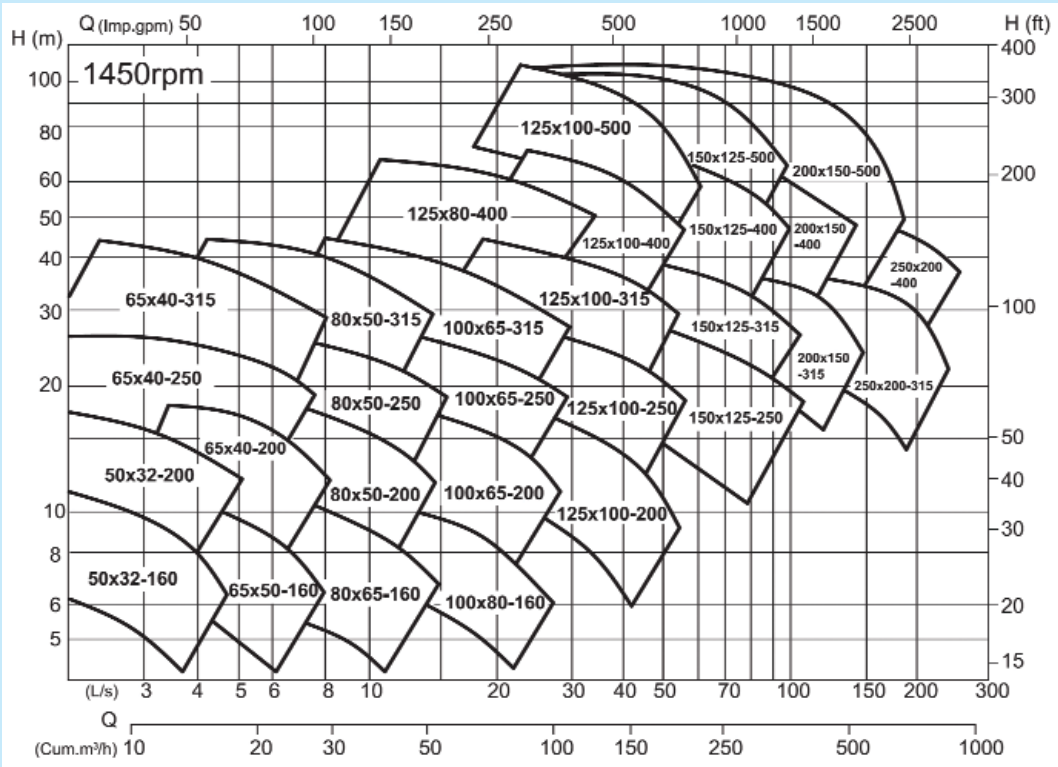


DIMENSIONS

Pump End			Shaft No	Pump Dimensions					Mounting Dimensions								Bolt Holes		Shaft End		Gap	Wt
In	Out	Imp		A	F	H1	H2	B	M1	M2	N1	N2	N3	T1	T2	W	S1	S2	D	L	X	kg
50	32	160	1	80	385	132	160	50	100	70	240	190	110	12	6	285	M12	M12	24	50	100	38
50	32	200	1	80	385	160	180	50	100	70	240	190	110	12	6	285	M12	M12	24	50	100	46
65	50	160	1	80	385	132	160	50	100	70	240	190	110	12	6	285	M12	M12	24	50	100	40
65	40	200	1	100	385	160	180	50	100	70	265	212	110	13	6	285	M12	M12	24	50	100	48
65	40	250	2	100	500	180	225	65	125	95	320	250	110	14	6	370	M12	M12	32	80	100	70
65	40	315	2	125	500	200	250	65	125	95	345	280	110	16	6	370	M12	M12	32	80	100	80
80	65	160	1	100	385	160	180	50	100	70	265	212	110	13	6	285	M12	M12	24	50	100	46
80	50	200	1	100	385	160	200	50	100	70	265	212	110	13	6	285	M12	M12	24	50	100	52
80	50	250	2	125	500	180	225	65	125	95	320	250	110	15	6	370	M12	M12	32	80	100	72
80	50	315	2	125	500	225	280	65	125	95	345	280	110	18	6	370	M12	M12	32	80	100	87
100	80	160	2	100	500	160	200	65	125	95	280	212	110	14	6	370	M12	M12	32	80	100	68
100	65	200	2	100	500	180	225	65	125	95	320	250	110	14	6	370	M12	M12	32	80	140	70
100	65	250	2	125	500	200	250	80	160	120	360	280	110	16	6	370	M16	M12	32	80	140	80
100	65	315	3	125	530	225	280	80	160	120	400	315	110	18	6	370	M16	M12	42	110	140	118
125	80	400	3	125	530	280	355	80	160	120	435	355	110	20	6	370	M16	M12	42	110	140	165
125	100	200	2	125	500	200	280	80	160	120	360	280	110	17	6	370	M16	M12	32	80	140	85
125	100	250	3	140	530	225	280	80	160	120	400	315	110	18	6	370	M16	M12	42	110	140	126
125	100	315	3	140	530	250	315	80	160	120	400	315	110	19	6	370	M16	M12	42	110	140	135
125	100	400	3	140	530	280	355	100	200	150	500	400	110	20	6	370	M20	M12	42	110	140	175
125	100	500	4	160	670	355	450	100	200	150	550	450	110	25	10	500	M20	M16	48	110	180	313
150	125	250	3	140	530	250	355	80	160	120	400	315	110	19	6	370	M16	M12	42	110	140	140
150	125	315	3	140	530	280	355	100	200	150	500	400	110	20	6	370	M20	M12	42	110	140	150
150	125	400	3	140	530	315	400	100	200	150	500	400	110	21	6	370	M20	M12	42	110	140	186
150	125	500	4	160	670	355	450	100	200	150	550	450	140	25	10	500	M20	M16	48	110	180	336
200	150	315	4	160	670	315	400	100	200	150	550	450	140	25	10	500	M20	M16	48	110	180	222
200	150	400	4	160	670	315	450	100	200	150	550	450	140	25	10	500	M20	M16	48	110	180	300
200	150	500	4	160	670	400	500	100	200	150	550	450	140	25	10	500	M20	M16	48	110	180	382
250	200	315	4	180	670	315	450	100	200	150	550	450	140	25	10	500	M20	M16	48	110	180	277
250	200	400	4	180	670	355	500	100	200	150	550	450	140	25	10	500	M20	M16	48	110	180	340

- Notes:**
- Standard flange drilling to AS2129 Table E:16 bar rating.
 - Dimensions in mm
 - Gap (X) necessary for the withdrawal of bearing housing, back cover and impeller assembly towards the drive end

TECHNICAL SPECIFICATIONS



AVAILABLE FROM