



# CASTLE PUMPS LTD

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The UK Agent of...  
**azcuepumps**



## Datasheet

Can be supplied with a vacuum or electric **priming pump on request** for difficult suction conditions

**Wearing rings** to improve pump efficiency and provide clearance between the casing and impeller, preventing their wear, meaning only the less costly wear rings need replacing

**Back pull out design** for easy maintenance - allows the internals to be removed without disconnecting the pump from the pipework

**Marine type approved** by all classification societies e.g. Lloyds/ABS

**Compact and space saving** vertical design making it ideal for installations which have limited space



**Double suction impeller** enabling higher flow rates at lower pressures than alternative vertical centrifugal pumps

**Interchangeable spare parts** with other Azcue models to reduce stock holding

**Separate shafts** in pump head & motor - no need to replace entire pump & motor if the shaft wears

**Long coupled** to enable maintenance of pump head without removing the motor first

**Manufactured in Spain** with materials from own foundry

## Series **LD** Vertical Split Case Centrifugal Pump

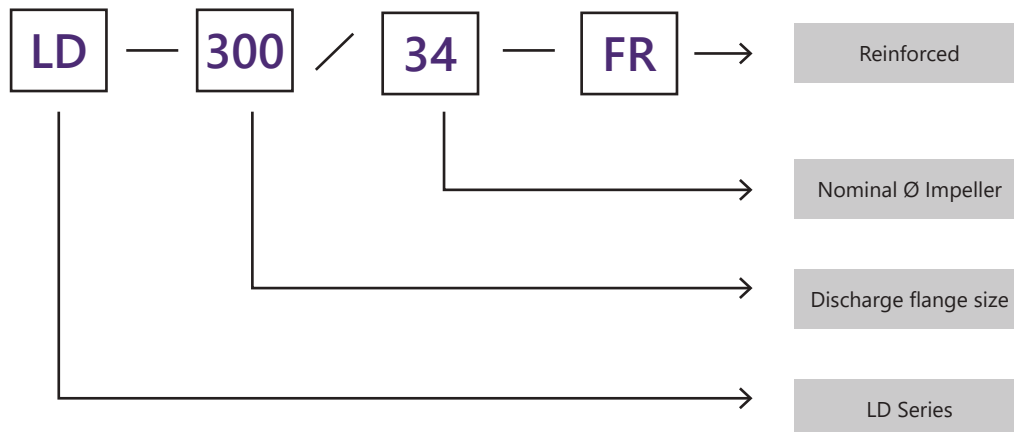
# LD Vertical Split Case Centrifugal Pump – Long Coupled



## Performance:


Max Flow rate	6000 m <sup>3</sup> /h
Max Pressure	60 M
Max Temperature	120°C
Sizes Available	DN300 - DN400 Outlet

## Description



## Vertical Split Case Centrifugal

### Pumps Available options -

- ATEX approved 
- Supplied with priming pump for difficult suction conditions
  - » Vacuum priming - better solution for long suction distances thanks to its ability to dry run for short periods of time
  - » Electric priming pump

### Common Applications -

- Aquaculture
- Ballast
- Cooling
- Fume Scrubber
- Grey Water
- Pressure Booster
- Sea Water Cooling
- Sea Water Injection
- Sea Water Service
- Water Circulating
- Water Transfer

### Benefits -

- Manufactured in Spain by manufacturer with over 100 years' experience, using materials from their own foundry for complete control
- Marine type approved by all classification societies e.g. Lloyds/ABS for independent verification the pump meets quality standards
- Double suction impeller, splitting the pump case into two separate chambers so that it can achieve much higher flow rates at lower pressures than other centrifugal pumps for higher volumes of fluid transfer
- Compact and space saving vertical design making it ideal for installations which have limited space
- Long coupled to separate the pump head from the motor, so should the seal fail fluid is prevented from entering the motor and causing damage to this part
- Durable for continuous use thanks to additional bearings in the pump head to share the strain of operation, increasingly its robustness
- Interchangeable spare parts with other Azcue models to reduce stock holding required
- Spares available for a minimum of 15 years after model discontinuation for long term servicing even if the pump is no longer produced
- Bearings are greased for life with long service intervals to reduce maintenance costs – bearings replaced at 25,000 hours
- Back pull out design for easy maintenance - allows the motor to be removed without disconnecting the pump
- Wearing rings to improve pump efficiency and provide clearance between the casing and impeller, preventing their wear, meaning only the less costly wear rings need replacing
- Separate shafts in pump head and motor - no need to replace entire pump and motor if shaft wears, saving costs
- Motors are tropicalized as standard for operation up to 45°C meaning the motor is designed continue operating during higher than average temperature
- ATEX approved version for hazardous environments

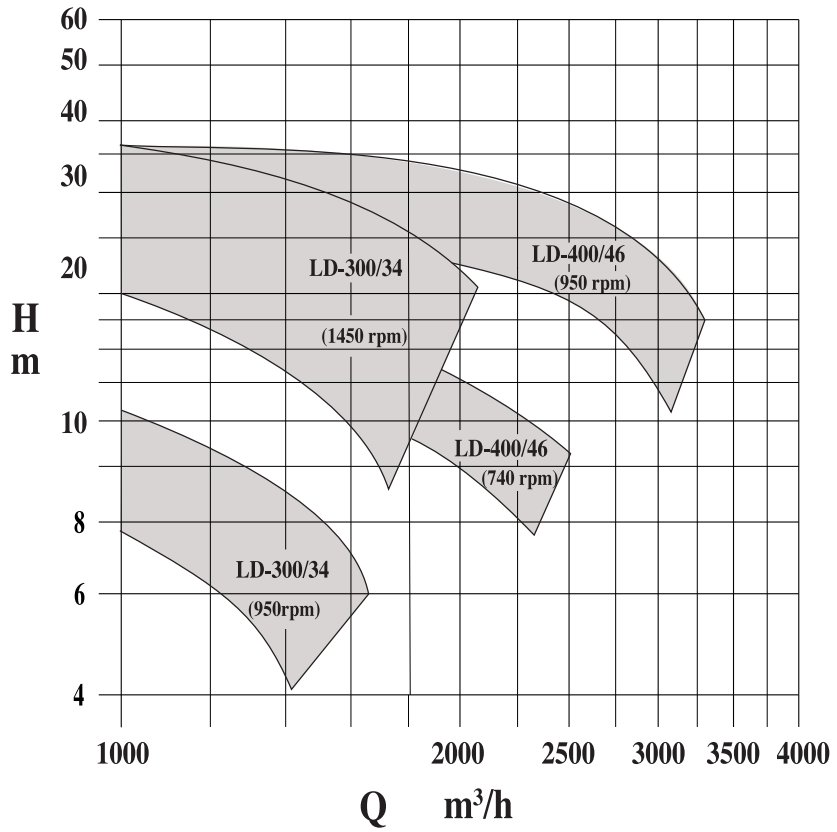


### Materials

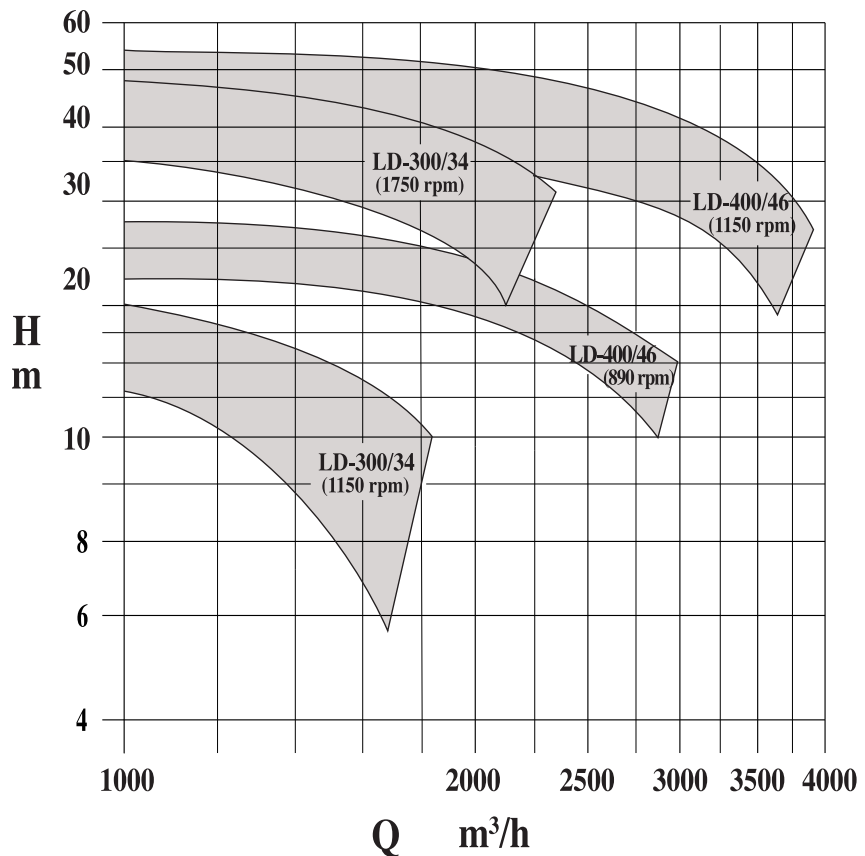
Volute	Bronze	Cast iron	Stainless steel
Impeller	Bronze	Bronze	Stainless steel
Casing Cover	Bronze	Cast iron	Stainless steel
Shaft	Stainless steel		

**Performance Curves**

50 Hz

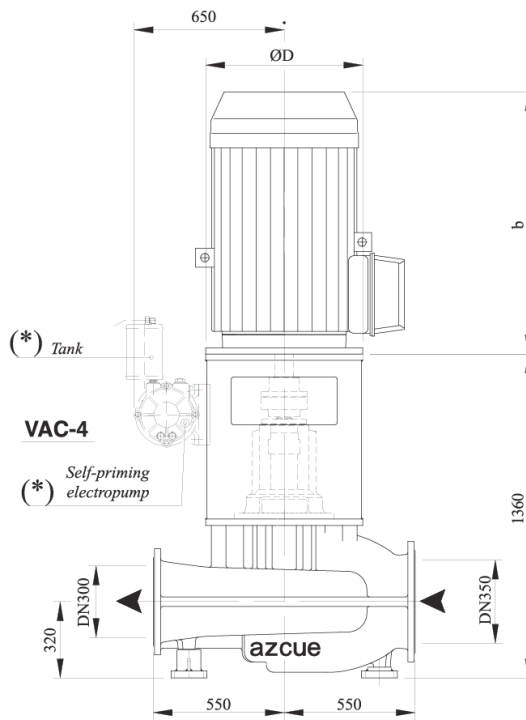
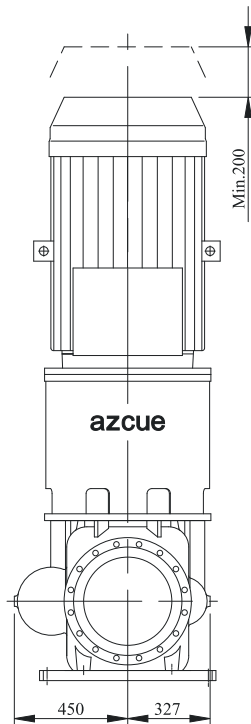
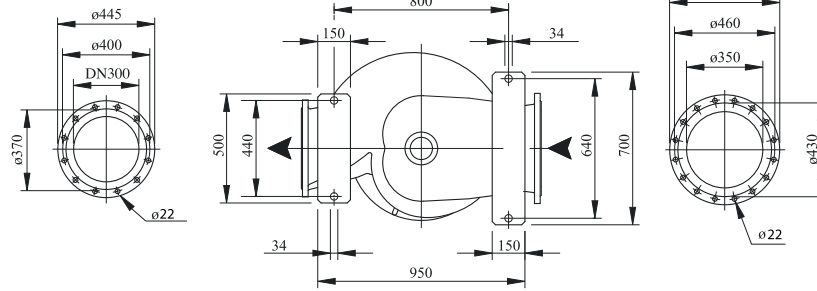


60 Hz



## Dimensions

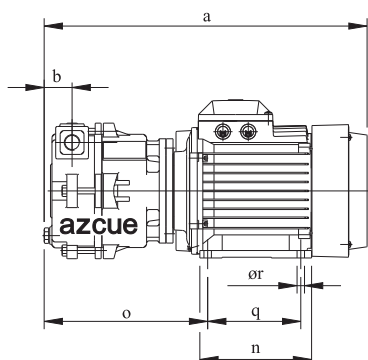
LD 300/34



### (\*) Optional priming pump & tank

Type	Motor				$\phi D$	b	kg.
	R.p.m. / t/min.	R.p.m. / t/min.	R.p.m. / t/min.	R.p.m. / t/min.			
280SA	45	52	75	86	550	900	1600
280SMA	55	63	90	103	550	1000	1650
315SA	75	86	110	126	660	1000	1850
315SMA	90	103	132	152	660	1100	1880
315MB	110	126	160	185	660	1100	2100
315LA	132	152	200	230	660	1150	2200

Subject to alterations



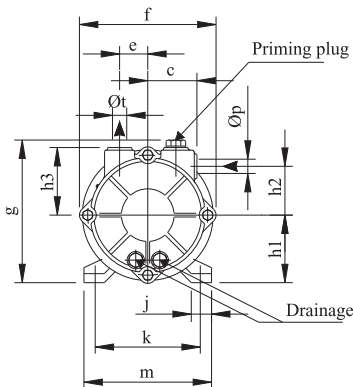
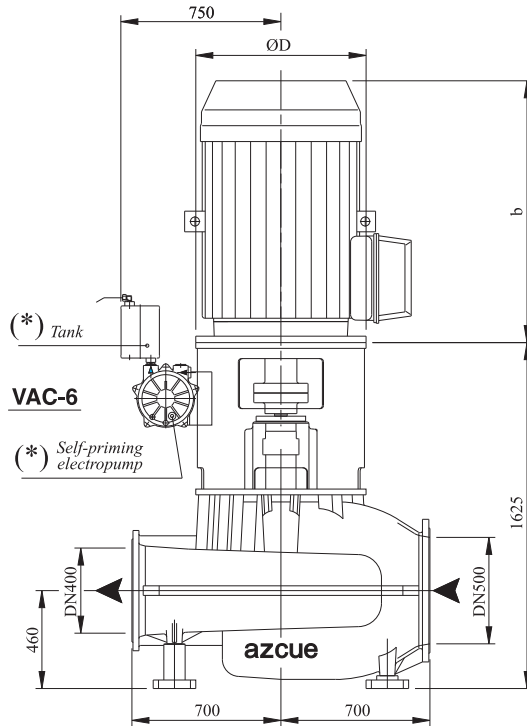
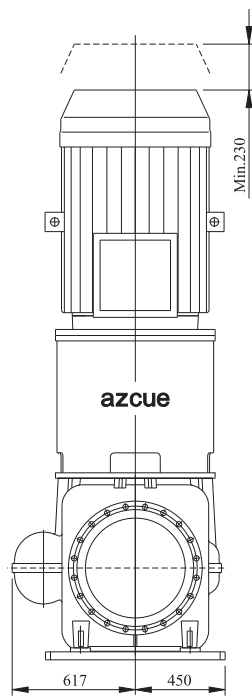
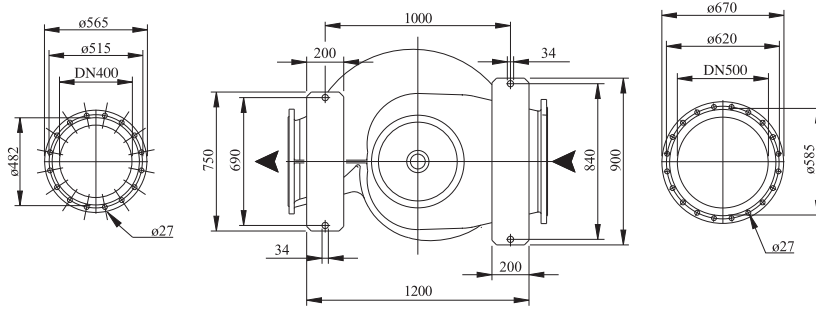
Type	Motor			a	b	c	e	f	g	h1	h2	h3	j	k
	Type	KW	Rpm											
VAC-4	90L-2	2,2	2900	435	37,5	65,5	37,5	182	190	90	65	90	27	14
VAC-6	112M-4	5,5	1450	528	45	118	70	311	272	112	122	160	47	19

Subject to alterations



## Dimensions

LD 300/34



Type	Motor				$\phi D$	b	kg.
	R.p.m. / t/min.		R.p.m. / t/min.				
	750	900	950	1150			
315SMA	75	86	90	103	660	1100	2475
315MB	90	103	110	126	660	1100	2575
315LA	110	126	132	152	660	1150	2675
355MA	132	152	160	185	800	1250	3030
355MB	160	185	200	230	800	1310	3250
355LKD	200	230	250	285	800	1450	3600

Subject to alterations

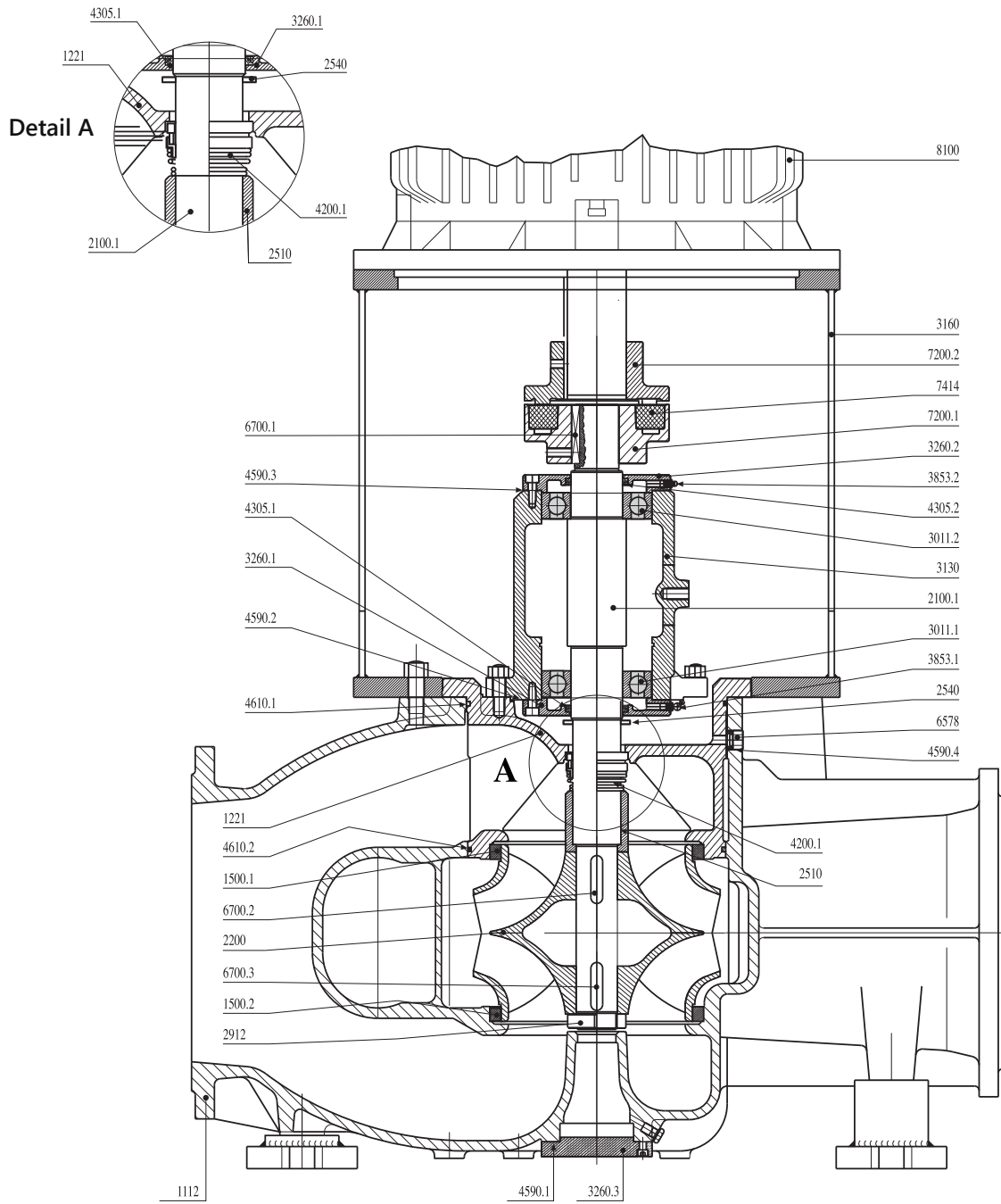
h3	j	k	m	n	o	q	$\phi r$	$\phi p$	$\phi t$	kg.
90	27	140	170	150	220	125	10	ISO G1/2	ISO G1/2	25
160	47	190	222	168	270	140	12	ISO G1	ISO G1	80

Subject to alterations



## Sectional Drawing

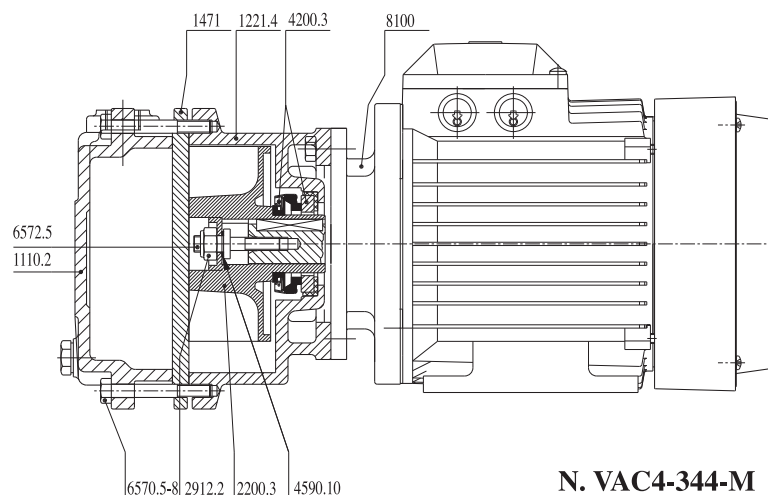
LD Series



## Sectional Drawing

Description	Ref.
Pump casing	1110.2
Voluta casing	1112
Casing cover	1221
Casing cover	1221.4
Interstage plate	1471
Casing wear ring	1500.1
Casing wear ring	1500.2
Shaft	2100
Impeller	2200
Impeller	2200.3
Spacer ring	2510
Thrower	2540
Impeller nut	2912
Impeller nut	2912.2
Radial ball bearing	3011.1-2
Bearing bracket	3130
Motor stool	3160
Bearing cover	3260.1-2
Bearing cover	3260.3
Grease nipple	3853
Mechanical seal	4200.1
Mechanical seal	4200.3
Shaft seal ring	4305.1-2
Gasket	4590.1
Gasket	4590.2-3
Gasket	4590.-4
Gasket	4590.10
O-ring	4610.1
O-ring	4610.2
Screw	6570.5-8
Stud	6572.5
Threaded plug	6578
Key	6700.1
Key	6700.2-3
Coupling half	7200.1
Coupling half	7200.2
Coupling bush	7414
Motor	8100

## Independent Priming Pump



**N. VAC4-344-M**