



CASTLE PUMPS LTD

Your process delivered.

The UK Agent of...
azcuepumps



Datasheet

Pump **manufactured in Spain** with materials from own foundry

Can handle **liquids** with up to **50% gas/air** content

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

Interchangeable spare parts with other Azcue models to reduce stock holding

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



Long coupled making it **durable** for continuous use and easier to maintain as you can get to the pump head without removing the motor

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

Multistage impeller design enabling very high pressure/suction capabilities

Additional bearing in the pump head to share the strain of operation and increase robustness

Series **BR** Long Coupled Multistage Side Channel Pump

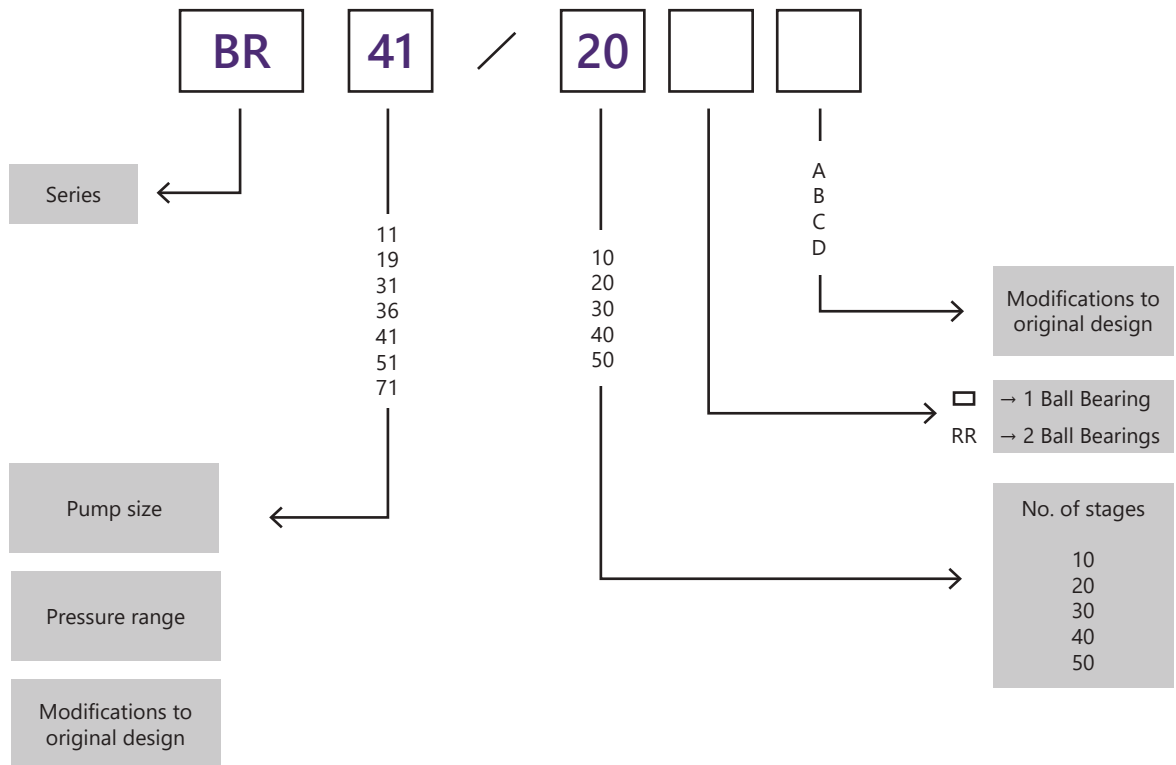
BR Long Coupled Multistage Side Channel Pump



Performance:

Max Flow rate	45 m ³ /h
Max Pressure	225 M
Max Temperature	130°C
Sizes Available	DN25 - 65

Description



Available Options -

- BR - Long coupled, multistage
- BR-RR - Long coupled, multistage with secondary bearing and mechanical seal

Common Applications -

- Aquaculture
- Boiler Feed
- Closed Loop HVAC Circulating
- Condensate Extraction
- Cooling
- Deck Wash
- Lubricant
- Pressure Boosting
- Reverse Osmosis/Desalination
- Sea Water Cooling
- Sea Water Service
- Swimming Pool
- Water Circulating
- Water Supply
- 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
- 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
- Excellent self priming capabilities, making it suited to applications with difficult and long suction conditions
- Multistage design gives it very high pressure/suction capabilities
- Can handle liquids with up to 50% gas/air content
- 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
- Back pull out design for easy maintenance - allows the motor to be removed without disconnecting the pump
- Separate shafts in pump head and motor - no need to replace entire pump and motor if shaft wears, saving costs
- BR-RR version had the addition of a secondary bearing and mechanical seal to share the load of operation and reduce the chance of leaking



Materials

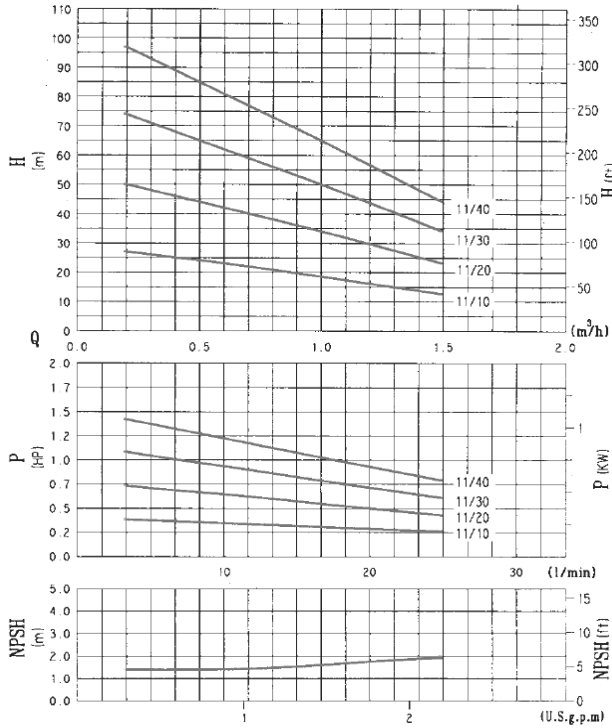
	A	B
Shaft	Stainless Steel (Aisi 316)	Stainless Steel (Aisi 316)
Impeller	Bronze G-CuA110Ni	Bronze G-CuA110Ni
Suction/Discharge casings	GG25	Bronze G-CuSn5ZnPb(Rg5)
Diffuser	GG25	Bronze G-CuSn5ZnPb

Can also be manufactured in different materials as nodular cast iron, stainless etc if required.

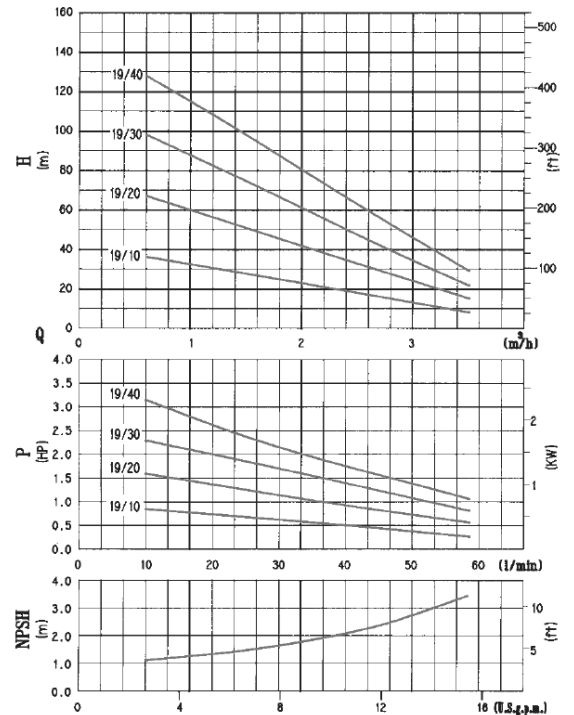
Performance Curves - 50 Hz

1.450 r.p.m^{t/min}

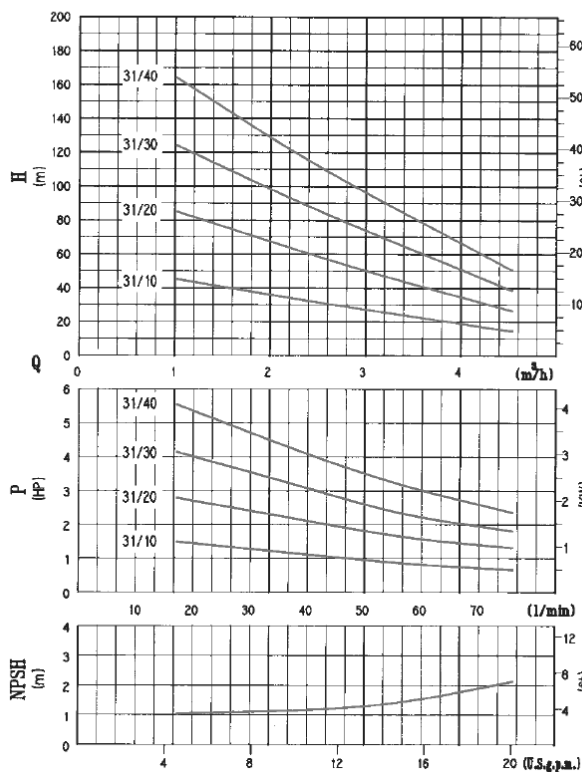
Size 11



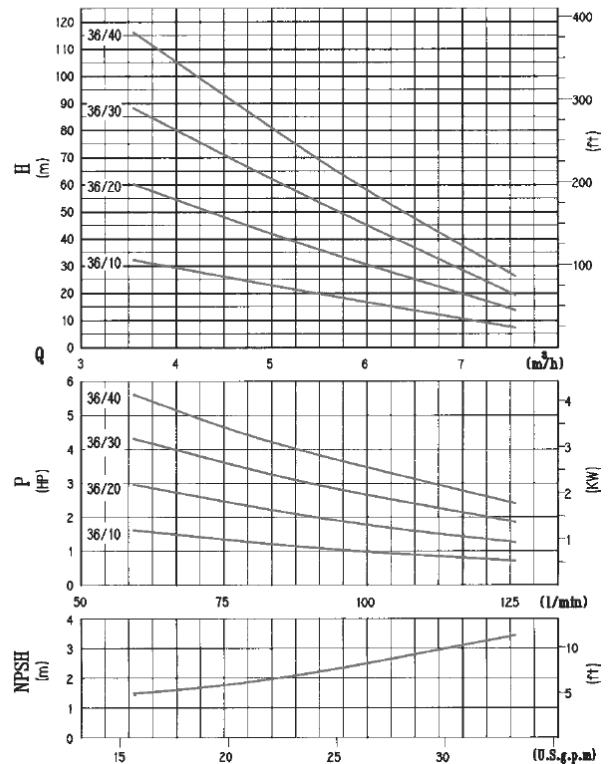
Size 19



Size 31



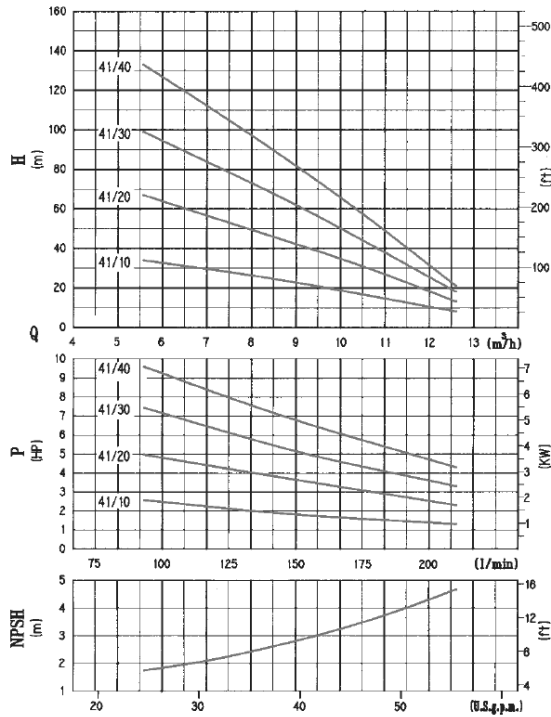
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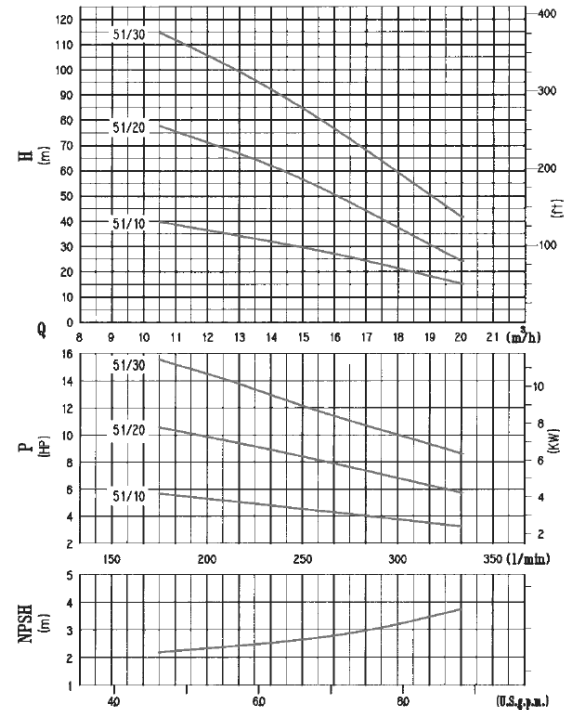
Performance Curves - 50 Hz

1.450 r.p.m^{t/min}

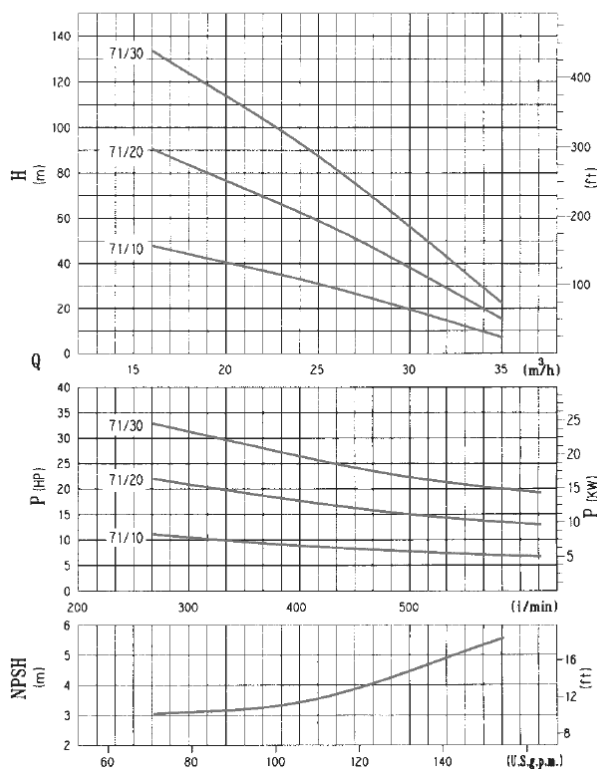
Size 41



Size 51



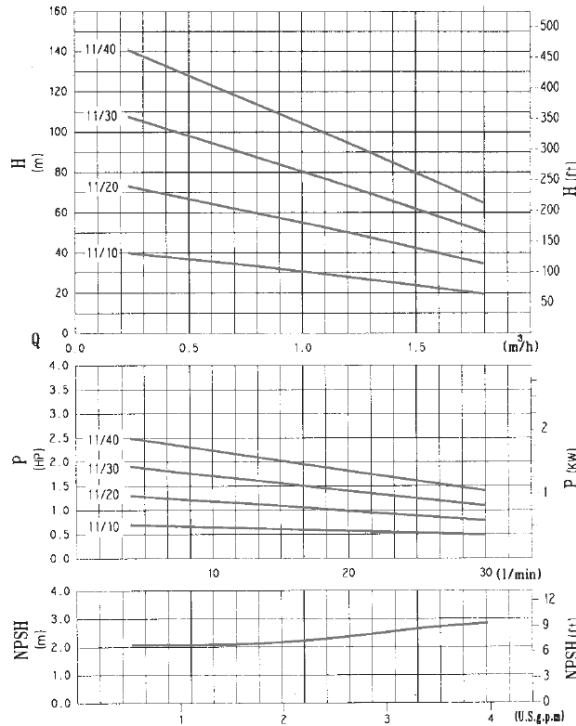
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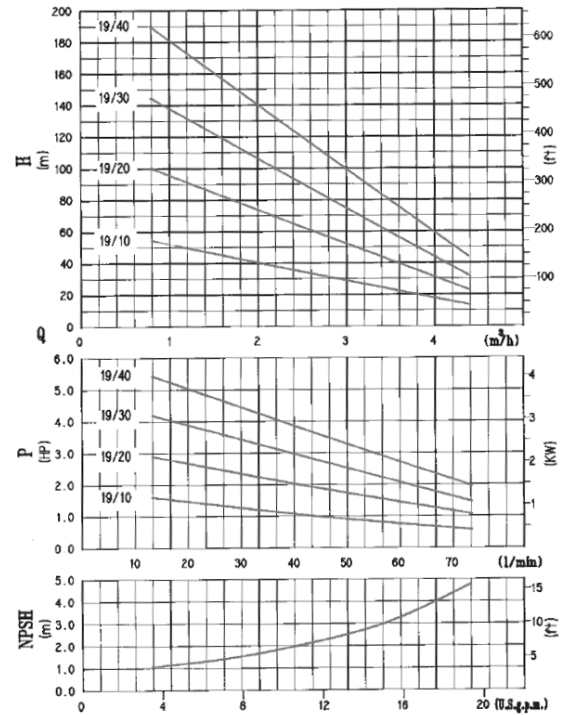
Performance Curves - 60 Hz

1.750 r.p.m^{t/min}

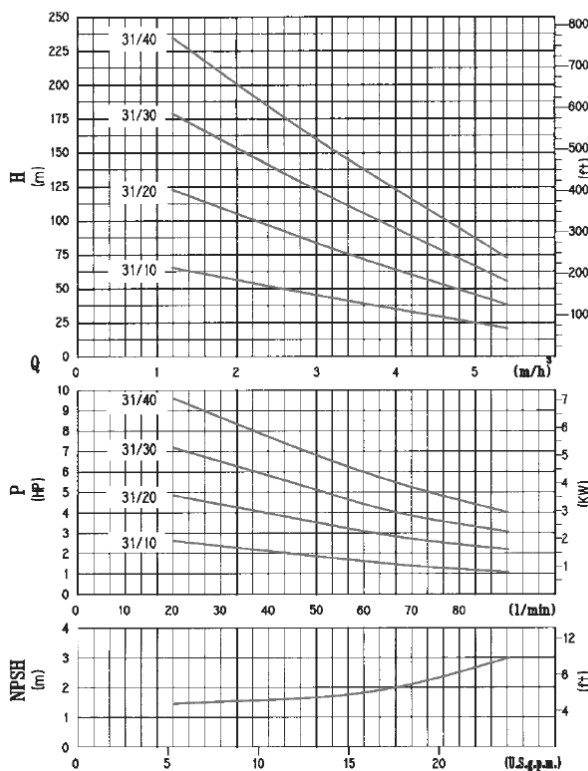
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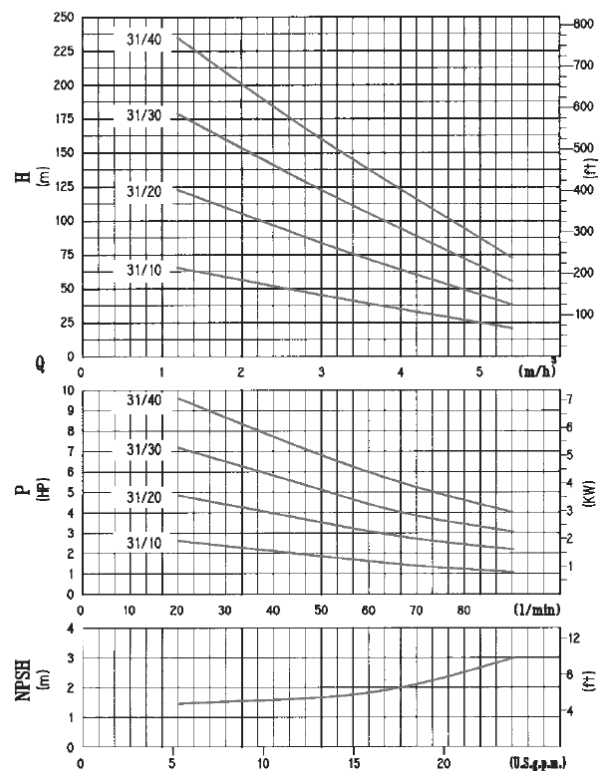
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Size 31



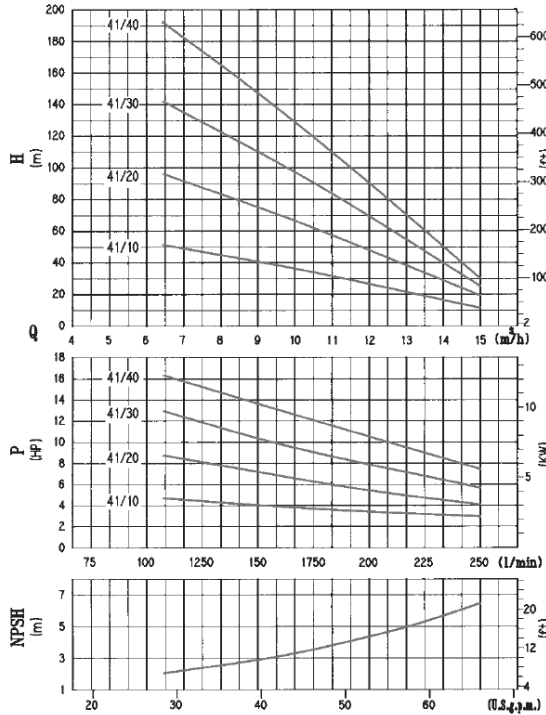
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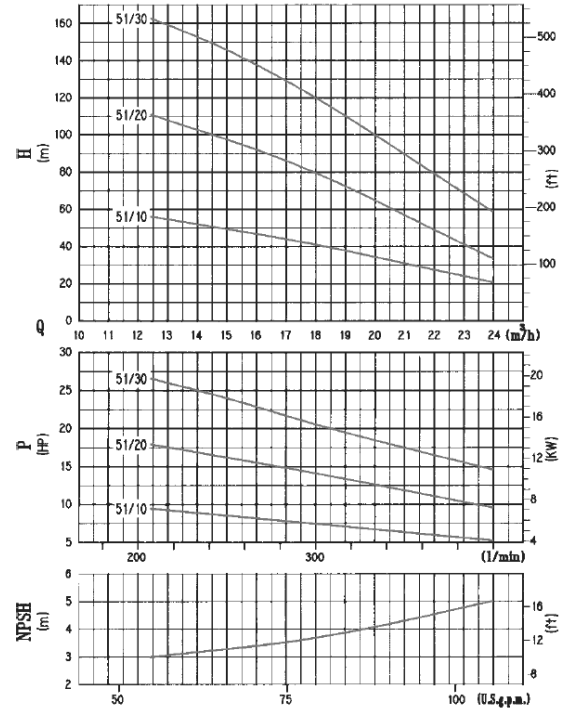
Performance Curves - 60 Hz

1.750 r.p.m^{t/min}

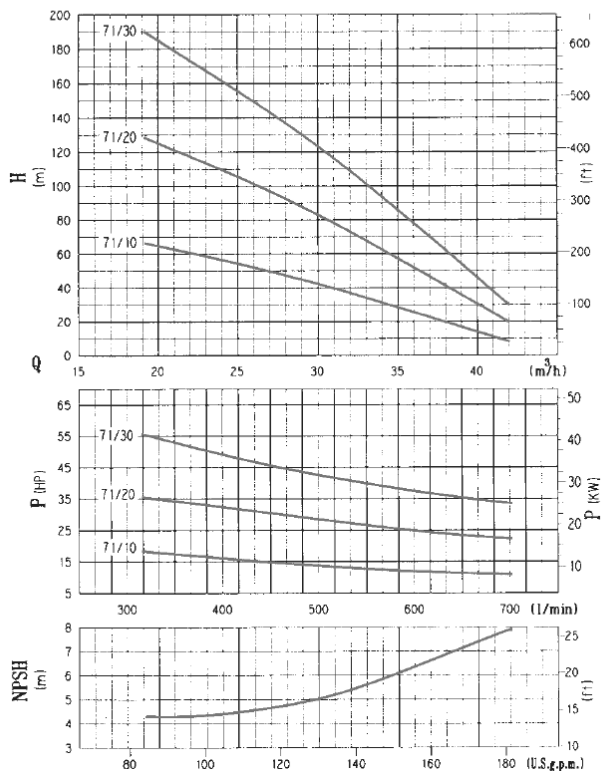
Size 41



Size 51

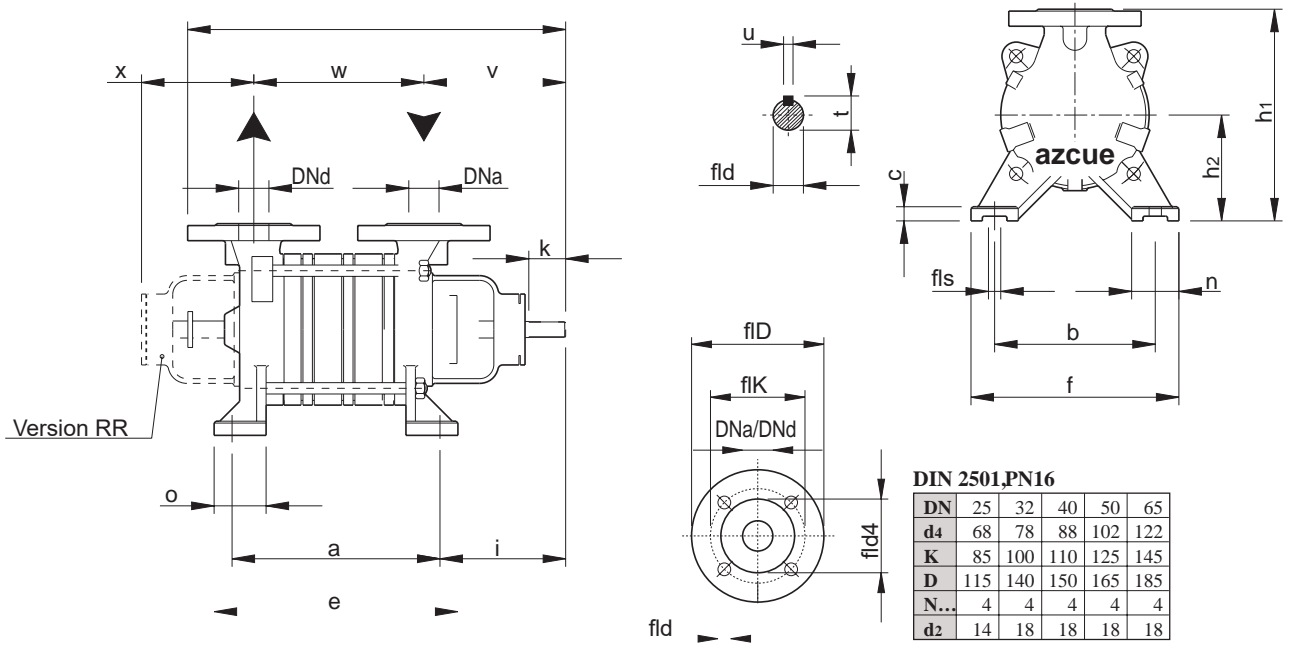


Size 71



Dimensions

BR - Bare Shaft Assembly

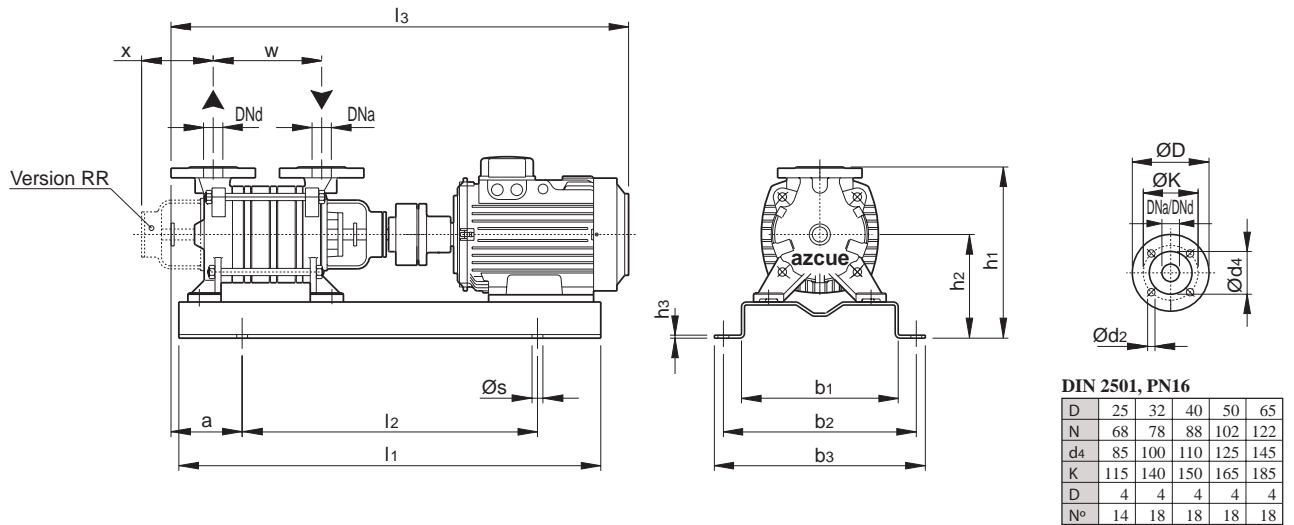


Type	DN _a	DN _d	f	b	n	s	c	h ₁	h ₂	k	d	t	u	i	v	o	x	a	e	w	l	kg
19/10*	25	25	155	120	36	13	13	205	100	40	14	16,1	5	152	166	50	130	150	186	122	350	19
19/20*																		186	222	158	385	22
19/30*																		222	258	194	420	25
19/40*																						
31, 36/10	32	32	220	160	50	13	15	224	112	40	16	18,1	5	135	154	55	125	180	218	144	368	25
31, 36/20																		220	258	184	408	30
31, 36/30																		260	298	224	448	35
31, 36/40																						
41/10	40	40	220	170	50	13	20	267	132	38	19	21,5	6	195	195	55	155	154	186	147	420	35
41/20																		207	239	200	473	41
41/30																		260	292	253	526	47
41/40																		313	345	306	579	53
51/10	50	50	220	160	55	13	20	290	150	40	22	24,9	8	195	205	55	165	184	218	167	455	45
51/20																		256	290	240	528	53
51/30																		329	363	313	600	67
71/10	65	65	250	200	50	15	20	300	150	56	28	30,9	8	217	240	64	210	228	278	190	525	50
71/20																		318	368	280	615	65
71/30																		408	458	370	705	80

* Availability advised
 Subject to alterations.

Dimensions

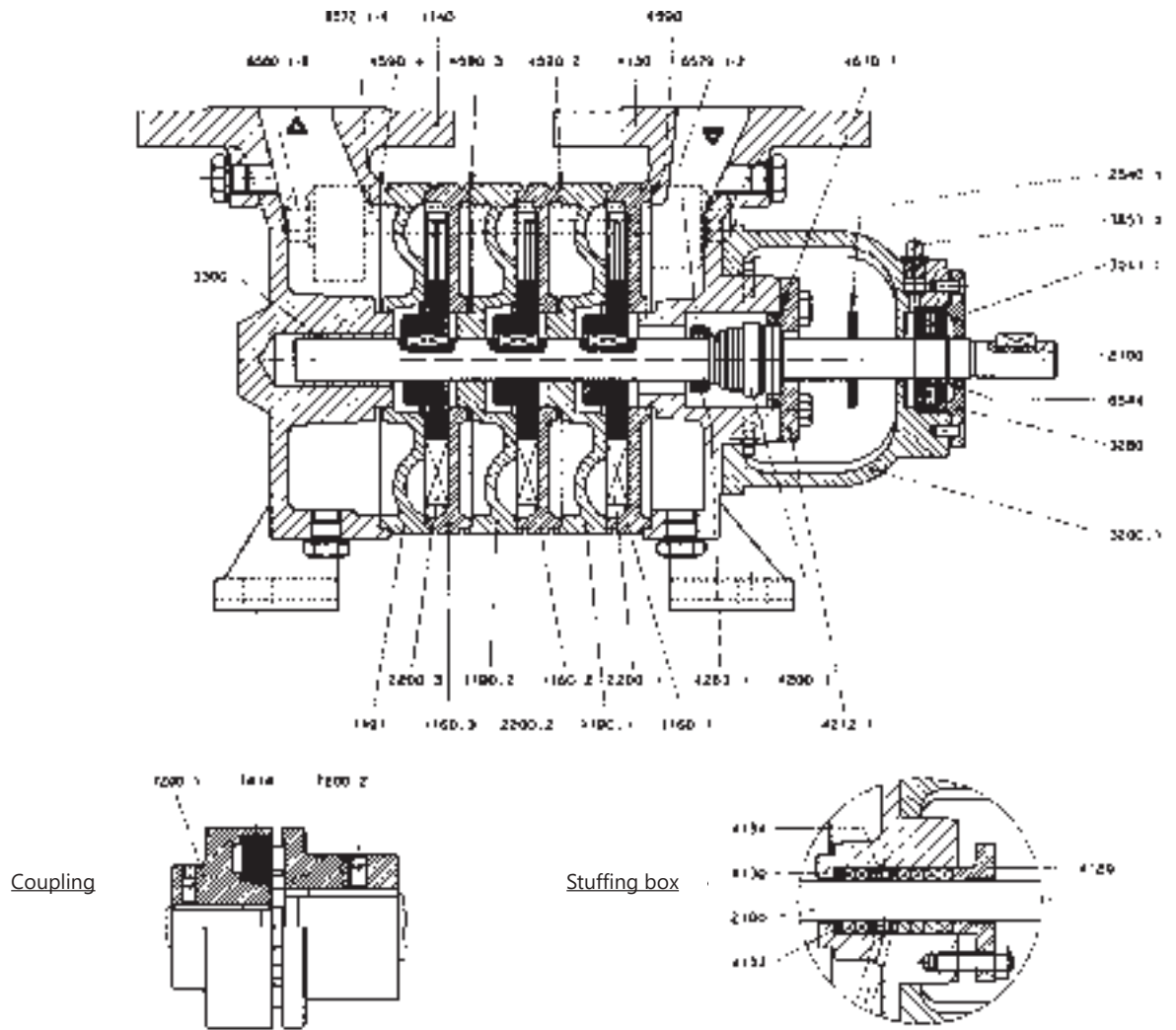
BR - Electropump (1450/1750 r.p.m)



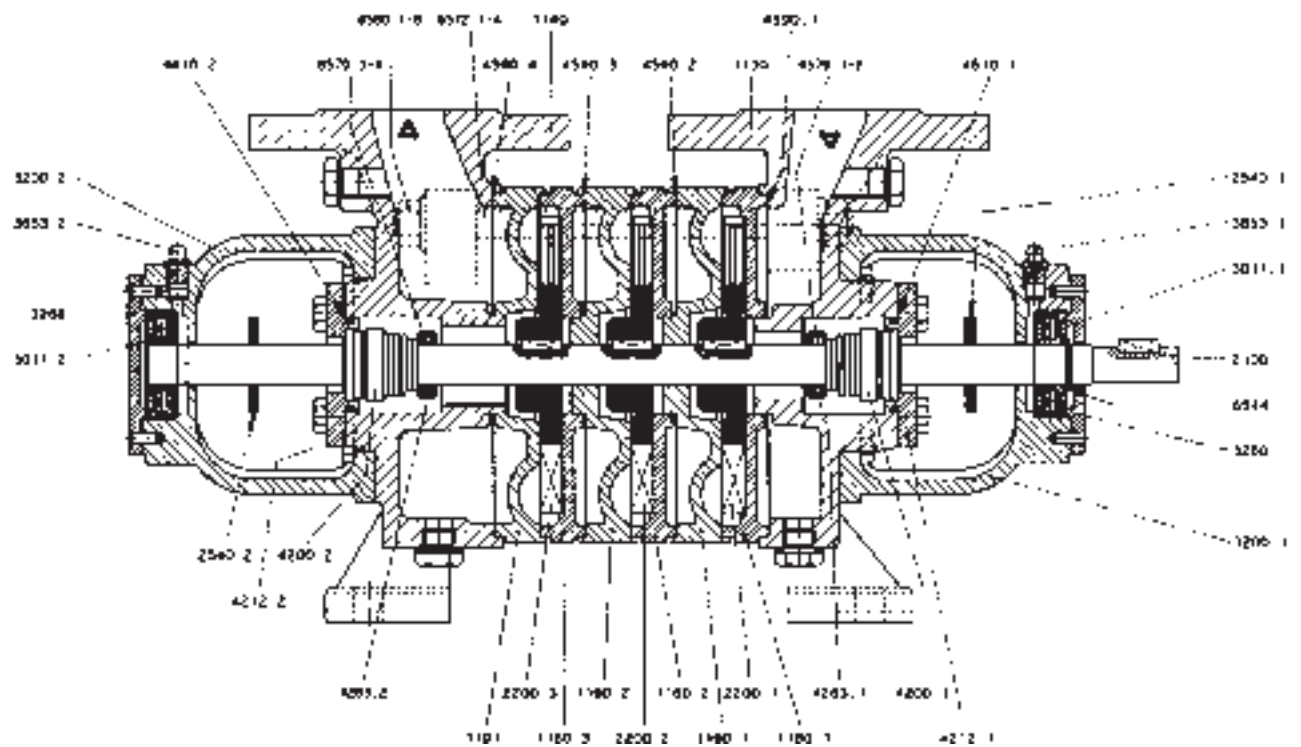
Type	Motor			DNa	DNd	h1	h2	h3	b1	b2	b3	s	x	w	a	l1	l2	l3	Kg							
	KW	HP	Tipo																							
19/10*	0.37	0.5	71-b	25	25	245	140	7	230	270	300	18	130	122	125	600	380	610	37							
	0.5	0.7	80-a															650	40							
	0.75	1	80-b															650	40							
0.75	1	80-b	650															40								
1.1	1.5	90-S	690															44								
1.5	2	90-L	690															47								
19/20*	1.1	1.5	90-S			25	25	245	140	7	230	270	300	18	130	122	125	600	380	720	50					
	1.5	2	90-L																	720	52					
	2.2	3	100-L																	760	57					
1.1	1.5	90-S	760																	53						
1.5	2	90-L	760																	55						
2.2-3	3-4	100-L	800																	68						
19/30*	0.5	0.7	80-a	32	32			264	152	7	230	270	300	18	125	144	130	600	380	670	45					
	0.75	1	80-b																	670	52					
	1.1	1.5	90-S																	710	52					
1.5	2	90-L	710																	54						
1.1	1.5	90-S	710																	52						
1.5	2	90-L	710																	54						
19/40*	1.1	1.5	90-S			32	32	284	172	7	270	320	350	18	125	144	125	700	490	750	54					
	1.5	2	90-L																	750	54					
	2.2	3	100-L																	750	54					
1.1	1.5	90-S	184																	125	700	490	750	60		
1.5	2	90-L																							790	66
2.2-3	3-4	100-L																							810	73
4	5.5	112-M		830	75																					
2.2-3	3-4	100-L		850	80																					
4	5.5	112-M		950	95																					
31, 36/10	1.1	1.5	90-S	40	40			327	192	7	270	320	350	18	155	147	160	700	490	760	62					
	1.5	2	90-L																	760	64					
	2.2	3	100-L																	800	75					
1.5	2	90-L	815			70																				
2.2-3	3-4	100-L	855			80																				
4	5.5	112-M	875			91																				
31, 36/20	2.2-3	3-4	100-L			40	40	327	192	7	270	320	350	18	155	200	160	700	490	835	86					
	4	5.5	112-M																	855	80					
	2.2-3	3-4	100-L																	875	91					
4	5.5	112-M	910																	87						
5.5	7.5	132-S	930																	96						
3	4	100-L	900																	600	1030	107				
31, 36/30	3	4	100-L	50	50			360	220	7	310	360	390	18	165	240	205	1000	690	960	100					
	4	5.5	112-M																	980	106					
	5.5	7.5	132-S																	1085	117					
4	5.5	112-M	1085																	117						
5.5	7.5	132-S	1085																	117						
7.5	10	132-M	1085																	127						
31, 36/40	2.2-3	3-4	100-L			50	50	350	210	7	270	320	350	18	165	167	205	800	500	835	86					
	4	5.5	112-M																	855	95					
	5.5	7.5	132-S																	930	102					
4	5.5	112-M	930																	102						
5.5	7.5	132-S	1030																	116						
7.5	10	132-M	1030																	126						
41/10	11	15	160-M	50	50			360	220	7	310	360	390	18	165	240	205	1000	690	1155	148					
	7.5	10	132-M																	1100	143					
	15	20	160-L																	1230	163					
11	15	160-M	1275																	178						
15	20	160-L	1275																	178						
3	4	100-L	905																	100						
41/20	3	4	100-L			65	65	360	210	7	310	360	390	18	210	190	205	1000	690	935	107					
	4	5.5	112-M																	1010	118					
	5.5	7.5	132-S																	1010	128					
7.5	10	132-M	1010																	128						
5.5	7.5	132-S	1100																	131						
7.5	10	132-M	1100																	141						
41/30	11	15	160-M	65	65			360	220	7	310	360	390	18	210	280	205	1000	690	1230	165					
	15	20	160-L																	1270	180					
	7.5	10	132-M																	1315	190					
11	15	160-M	1360																	205						
15	20	160-L	1435																	280						
18.5	25	180-M	1435																	280						
22	30	180-L	1435			300																				

* Availability advised
 Subject to alterations.

Sectional Drawing
Series BR



Series BR-RR



Sectional Drawing

DESCRIPTION	Ref
Pump casing	1110
Suction casing	1130
Delivery casing	1140
Suction diffuser	1160.1-3
Discharge diffuser	1190.1-2
Diffuser last stage	1191
Casing	1221
Shaft	2100
Impeller	2200.1-3
Spacer ring	2510
Thrower	2540.1-2
Radial ball bearing	3011.1-2
Bearing housing	3200.1-2
Bearing cover	3260
Bearing end cover	3266
Bearing bush	3300
Grease nipple	3853.1-2
Mechanical seal	4200.1
Mechanical seal	4200.2
Seal cover	4212.1-2
Spring plate	4263.1-2
Gasket	4590.1-4
O-ring	4610.1-2
O-ring	4610.3
Priming plug	6511
Circlip	6544
Stud	6572.1-4
Socket head cap screw	6579.1-4
Socket head cap screw	6579.5-6
Nut	6580.1-8
Coupling half	7200.1
Coupling half	7200.2
Coupling bush	7414
Coupling guard	7450
Motor	8100
Stuffing box	
Stuffing box gland	4120
Gland packing	4130
Packing seating ring	4133
Lantern ring	4134