

09/2016



water passion



Construction

Close-coupled centrifugal pumps with open impeller. The built-in backflow preventer avoids reverse siphoning when the pump is stopped and assures automatic re-priming at the next start. The pump re-priming itself even if partially filled with liquid and with completely empty suction pipe.

A: version with pump casing and lantern bracket in cast iron.
 B-A: version with pump casing and lantern bracket in bronze (the pumps are supplied fully painted).

Applications

For clean or slightly dirty water, also with solids up to 10 mm grain size for A 40, A 50 and 15 mm for A 65, A 80.

For draining a basin or a sump.

For irrigation. For civil and industrial applications.

Operating conditions

Liquid temperature from -10 °C to +90 °C.

Room temperature up to 40 °C.

Maximum permissible working pressure up to 6 bar (10 bar for A 80-170).

Continuous duty.

Motor

2-pole induction motor, 50 Hz ($n \approx 2900$ rpm).

A three-phase 230/400 V $\pm 10\%$ up to 3 kW;
 400/690 V $\pm 10\%$ from 4 to 7,5 kW;

AM: single-phase 230 V $\pm 10\%$, with thermal protector.
 Capacitor inside the terminal box.

Insulation class F.

Protection IP 54.

Classification scheme IE2 for three-phase motors from 0,75 kW to 5,5 kW, IE3 for 7,5 kW.

Constructed in accordance with: EN 60034-1; EN 60034-30.
 EN 60335-1, EN 60335-2-41.

Special features on request

Other voltages.

Frequency 60 Hz (as per 60 Hz data sheet).

Protection IP 55.

Special mechanical seal.

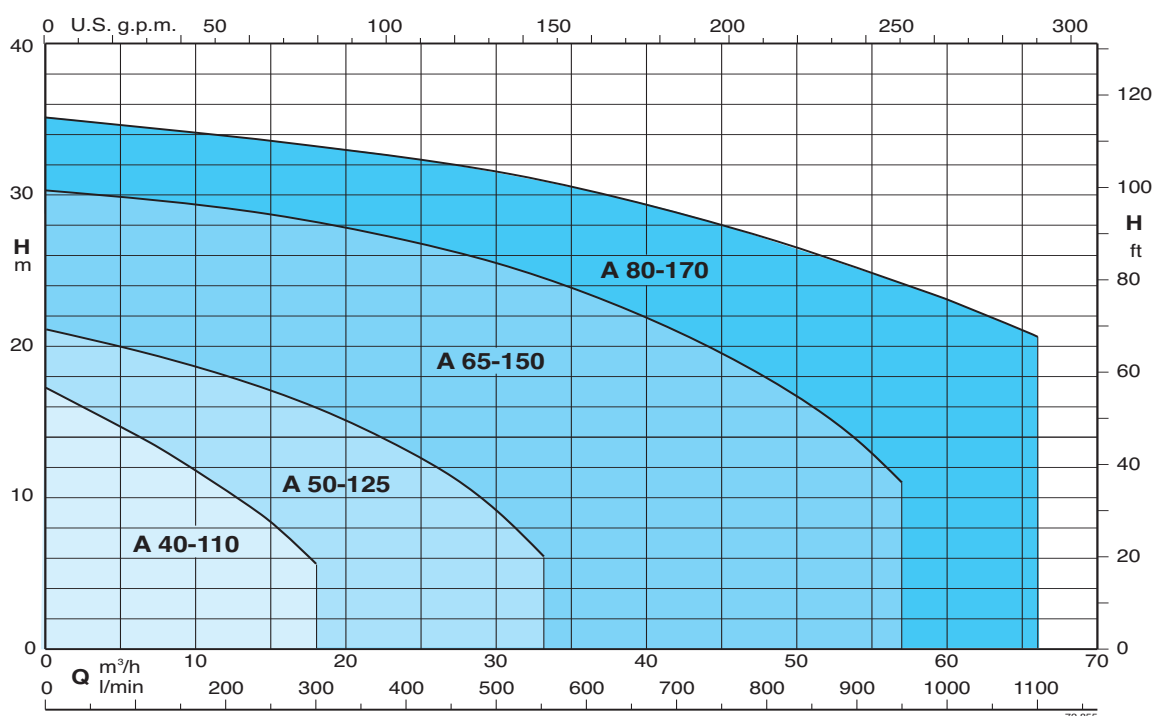
Higher or lower liquid or ambient temperatures.

Construction with bearing bracket.

Materials

Components	A	B-A
Pump casing Suction flange Inspection cover (for A 65, A 80) Lantern bracket Impeller	Cast iron GJL 200 EN 1561	Bronze G-Cu Sn 10 EN 1982
Shaft	Chrome-nickel steel 1.4305 EN 10088 (AISI 303) Chrome steel 1.4104 EN 10088 (AISI 430) for A 65-150A,B	Cr-Ni-Mo steel 1.4401 EN 10088 (AISI 316)
Mechanical seal	Carbon - Ceramic - NBR	

Coverage chart $n \approx 2900$ rpm





Performance $n \approx 2900$ rpm

3 ~			1 ~			P ₂		Q	m³/h l/min	3,6	4,8	6	7,5	8,4	9,6	10,8	12	15	18
230 V 400 V			230 V P ₁							60	80	100	125	140	160	180	200	250	300
A	A		A	kW	kW	HP													
A 40-110B/A B-A 40-110B/A			AM 40-110B/A B-AM 40-110B/A			0,55 0,75		H _m	12,9	12,4	11,8	11	10,4	9,8	9	8,3	6	3,4	
A 40-110A/A B-A 40-110A/A			AM 40-110A/A B-AM 40-110A/A			0,75 1			15,4	14,9	14,2	13,3	12,9	12,1	11,3	10,5	8,4	5,6	

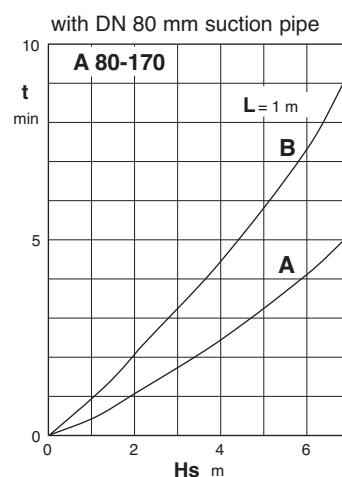
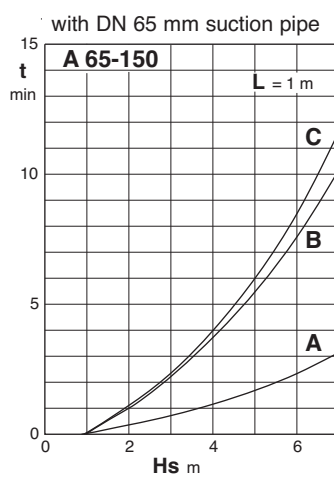
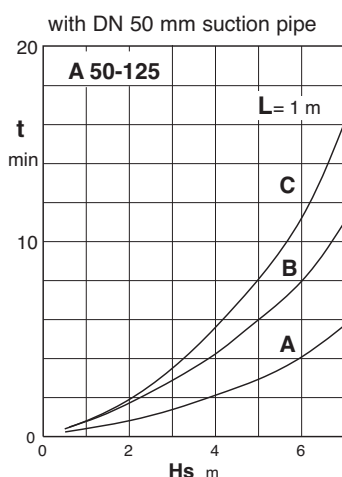
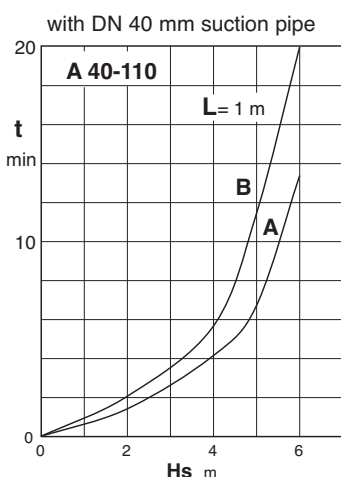
3 ~			230 V 400 V		1 ~		230 V P ₁		P ₂		Q	m ³ /h	6	9	12	15	18	21	24	27	30	33
			A	A			A	kW	kW	HP		l/min	100	150	200	250	300	350	400	450	500	550
A 50-125CE B-A 50-125CE			3,3	1,9	AM 50-125CE B-AM 50-125CE		5,8	1,2	0,75	1	H m	12,8	12,2	11,3	10	8,5	7	5,3	3,3			
A 50-125BE B-A 50-125BE			4,7	2,7	AM 50-125BE B-AM 50-125BE		7,4	1,6	1,1	1,5		15,5	14,9	14,2	12,9	11,6	10	8,3	6,2	4		
A 50-125AE B-A 50-125AE			7,5	4,3	AM 50-125AE B-AM 50-125AE		9,2	2,1	1,5	2		19,5	19	18	17	15,5	14	12,5	10,5	8	5	

3 ~ 230 V 400 V					P ₂		Q ^{m³/h} l/min	15	18	24	30	33	36	42	48	54	57
A A					kW HP			250	300	400	500	550	600	700	800	900	950
A 65-150C/B B-A 65-150C/A	11,5 9,15	6,6 5,3			2,2	3	H m	17,5	17	16	14	13	11,5	9	6,5		
A 65-150B/B B-A 65-150B/A	11,5	6,6			3	4		21,5	21	19,5	17,5	16,5	15,5	12,5	9,5	6,5	
A 65-150A/B B-A 65-150A/A	-	9,6			4	5,5		29	28	27	25,5	24,5	23,5	21	18	14	11

3 ~		230 V 400 V				P ₂		Q m ³ /h l/min	15	18	21	24	30	36	45	54	60	66
	A	A			kW	HP	250		300	350	400	500	600	750	900	1000	1100	
A 80-170B/A B-A 80-170B/A		-	10,9		5,5	7,5	H m	27,3	27,3	27	26,8	25,7	24,4	22,1	19	16,7	13,7	
A 80-170A/A B-A 80-170A/A		-	14,3		7,5	10		33,6	33,2	32,9	32,5	31,6	30,5	28,1	25,3	23,2	20,4	

P₁ Maximum power input. P₂ Rated motor power output. H Total head in m. B-A, B-AM = Bronze construction. Tolerances according to UNI EN ISO 9906:2012

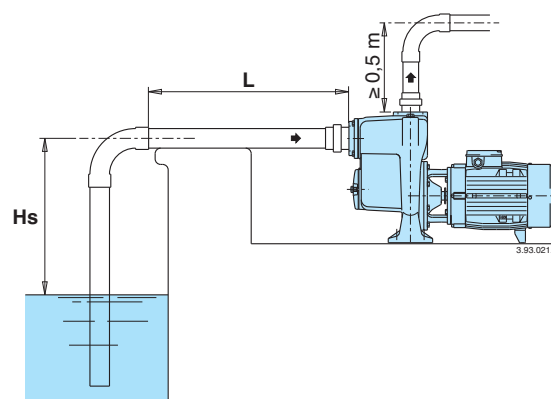
Self-priming capability



H_s (m) Suction lift.

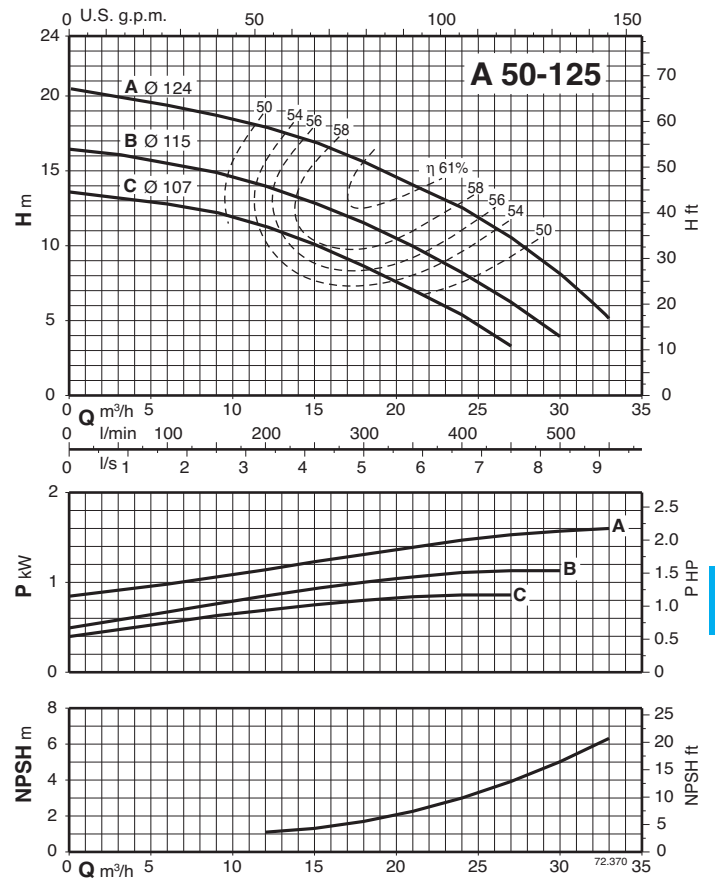
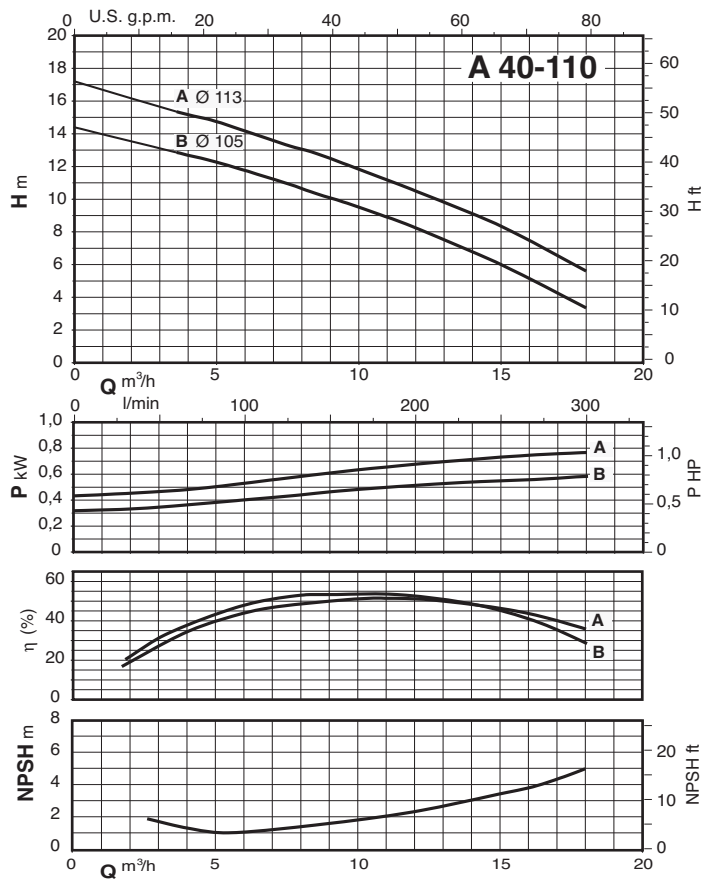
L (m) Horizontal length of suction pipe above the water level.

t (min) Self-priming time.

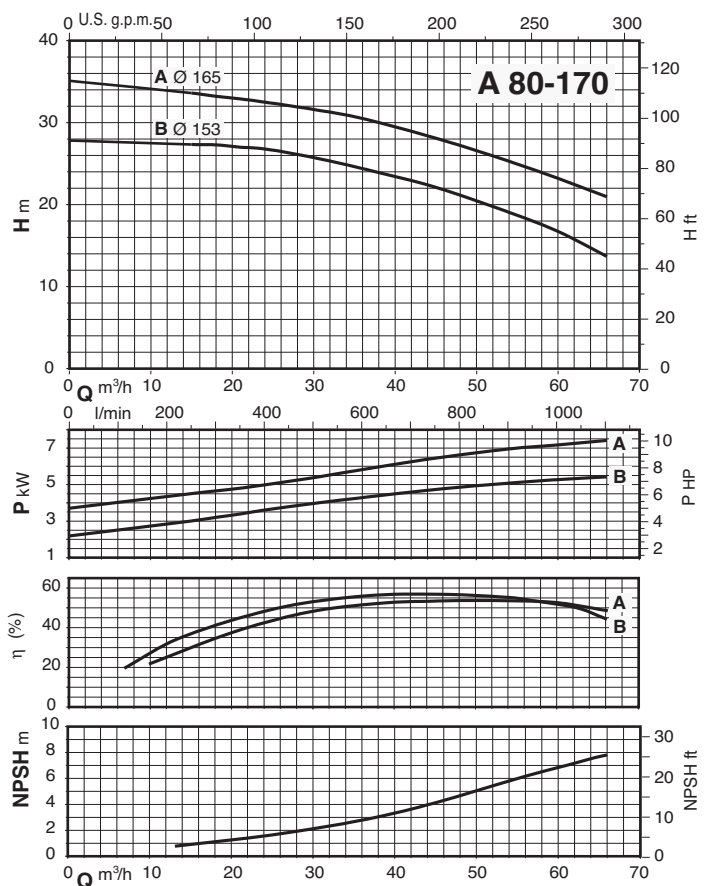
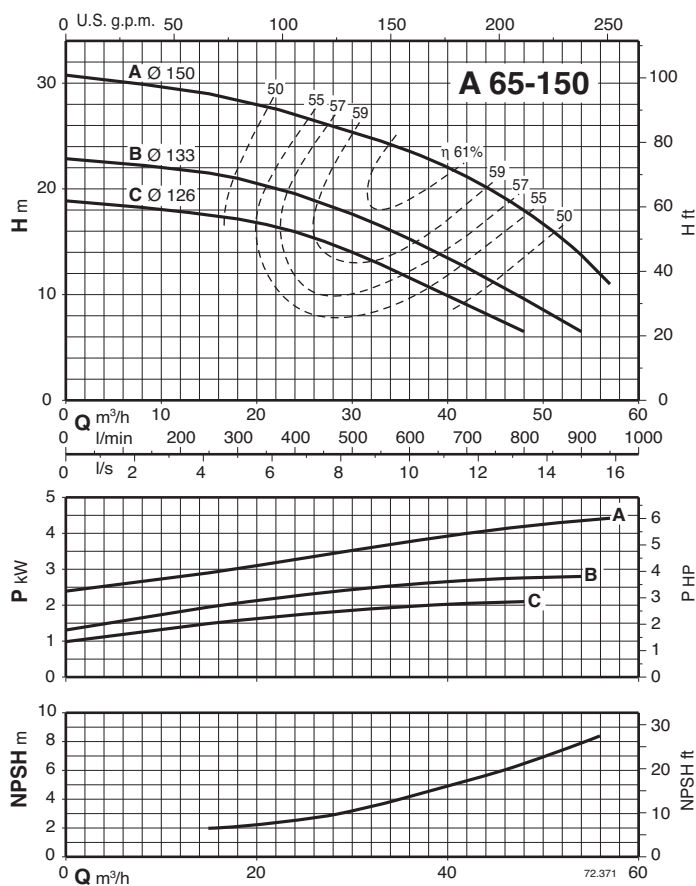




Characteristic curves $n \approx 2900$ rpm

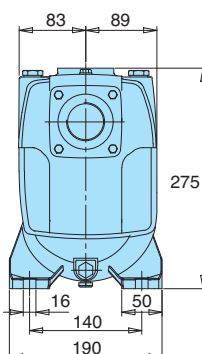
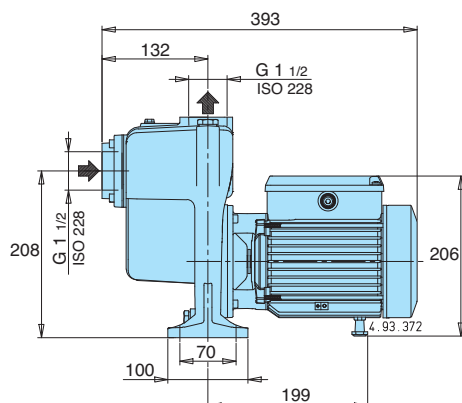


16

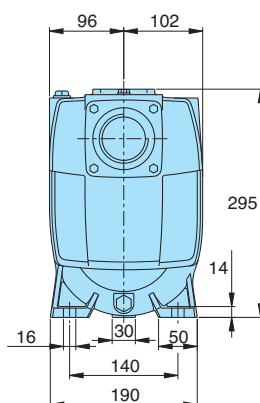
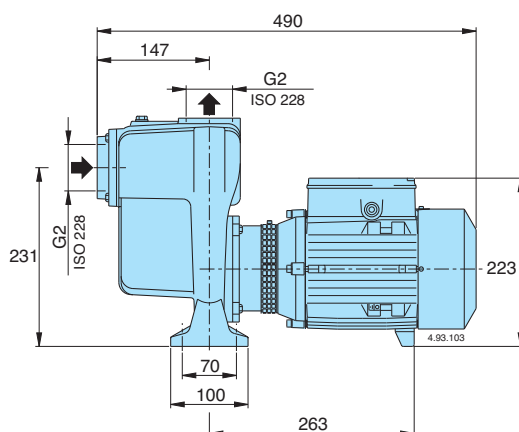




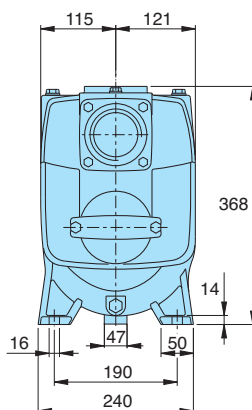
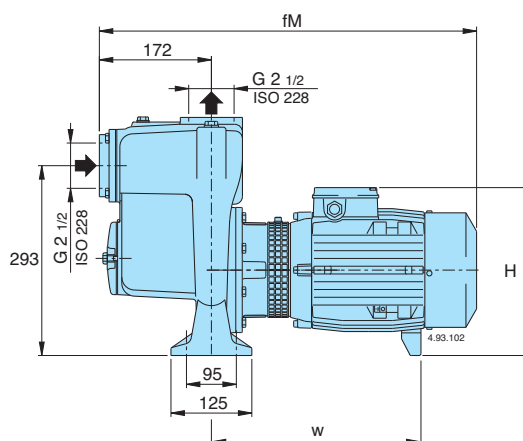
Dimensions and weights



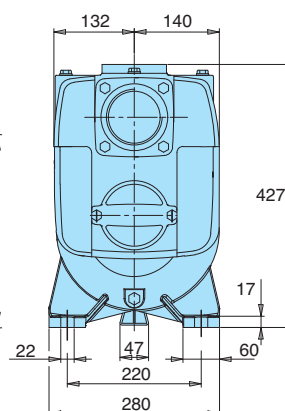
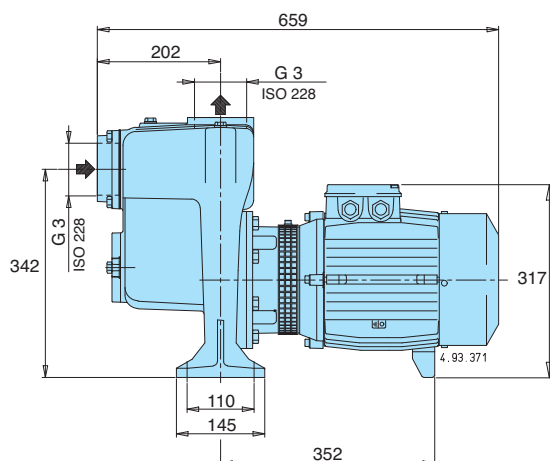
	kg
A 40-110A/A	19,8
AM 40-110A/A	20,8
A 40-110B/A	18,9
AM 40-110B/A	19,8
B-A 40-110A/A	22,5
B-AM 40-110A/A	23,5
B-A 40-110B/A	21,6
B-AM 40-110B/A	22,5



	kg
A 50-125AE	29,9
AM 50-125AE	31
A 50-125BE	28
AM 50-125BE	29,1
A 50-125CE	26,9
AM 50-125CE	27,8
B-A 50-125AE	33,6
B-AM 50-125AE	33,6
B-A 50-125BE	31
B-AM 50-125BE	32,6
B-A 50-125CE	29,6
B-AM 50-125CE	30,6



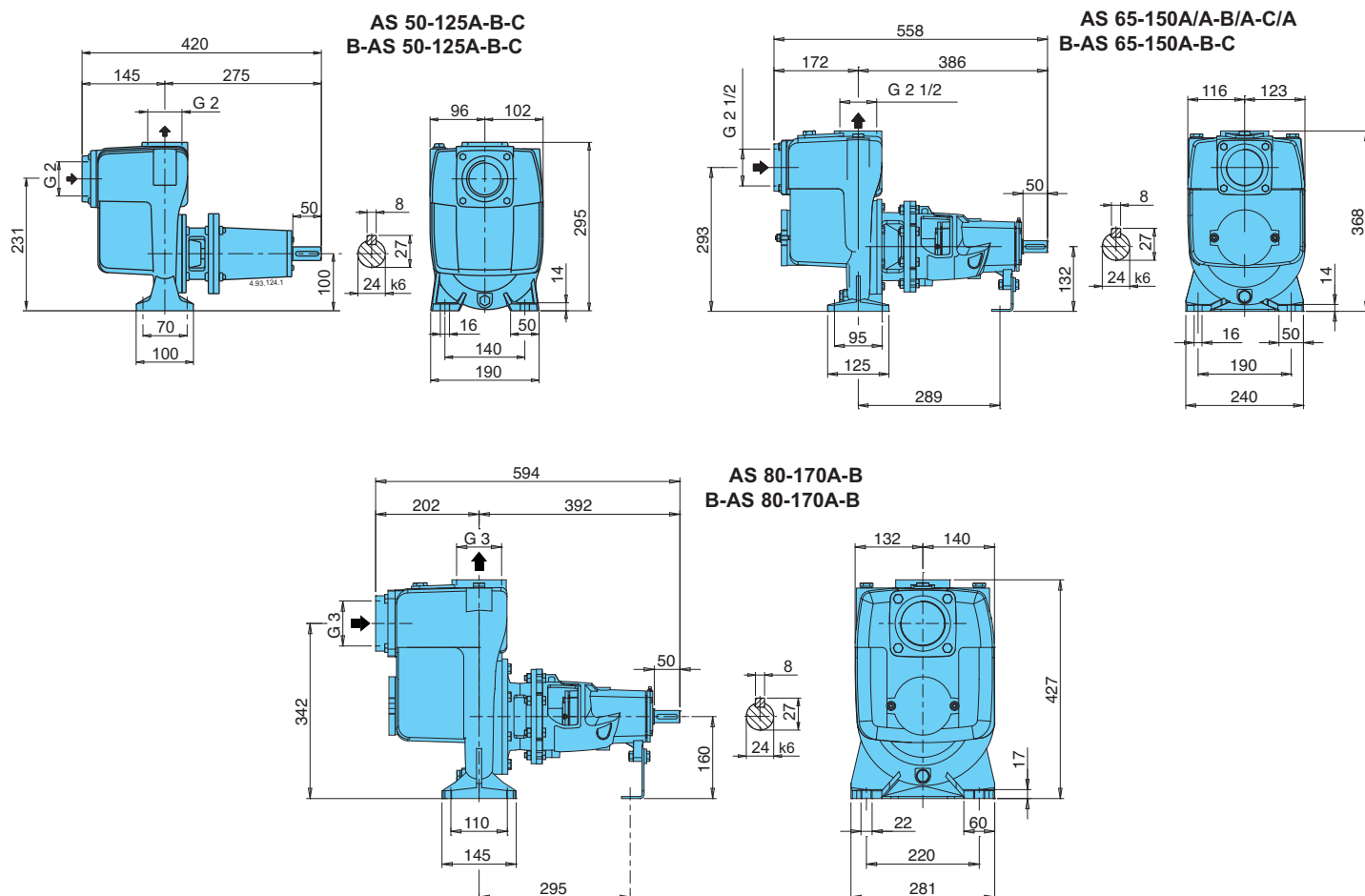
TYPE	mm			kg
	fM	H	w	
A 65-150C/B	595	270	324	56,7
B-A 65-150C/A	583	260	319	50,4
A 65-150B/B	595	270	324	57
B-A 65-150B/A	595	270	324	58,5
A 65-150A/B	595	270	324	58,5
B-A 65-150A/A	595	270	324	60



	kg
A 80-170A/A	85,8
A 80-170B/A	80,3
B-A 80-170A/A	95,6
B-A 80-170B/A	90,1

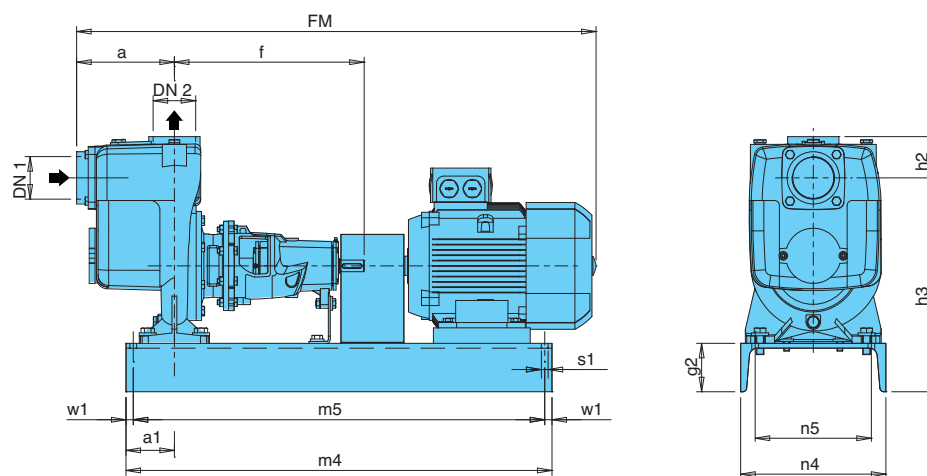


Dimensions and weights



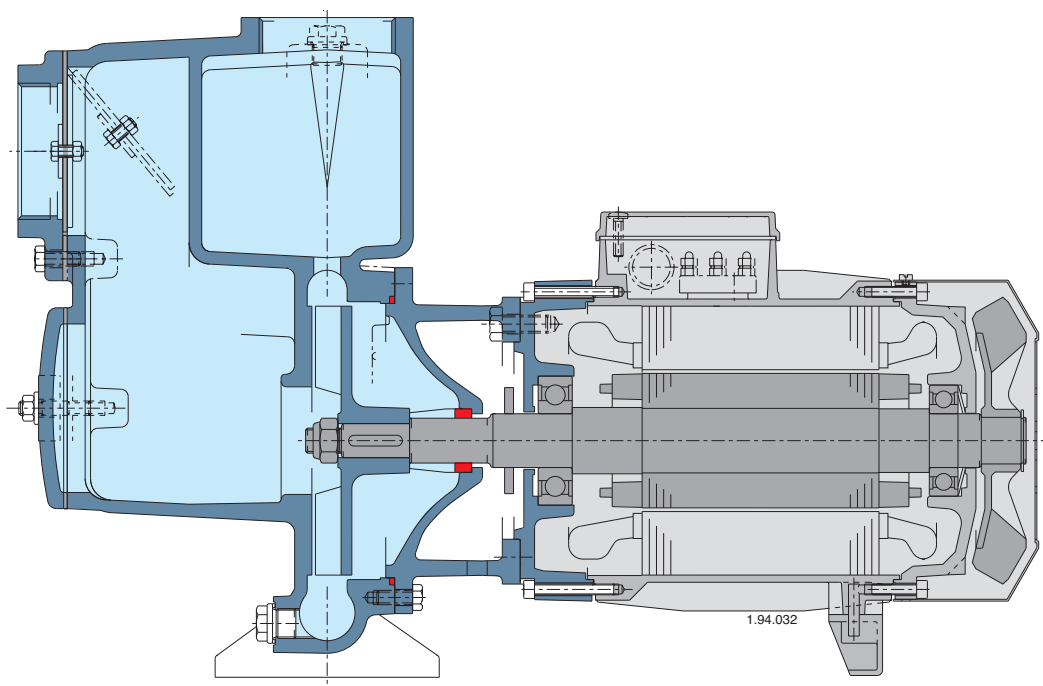
16

Pumps with motor



PUMP	MOTOR	kW	mm														
			DN ₁	DN ₂	a	f	h ₃	h ₂	m ₄	m ₅	w ₁	n ₄	n ₅	a ₁	g ₂	s ₁	FM≈
B-AS - AS 50-125C	80 M2	0,75	G 2	G 2	145	275	306	64	625	595	15	140	200	100	75	14	716
B-AS - AS 50-125B	80 M2	1,1															771
B-AS - AS 50-125A	90 S2	1,5															771
B-AS - AS 65-150C/A	90 L2	2,2	G 2 1/2	G 2 1/2	172	386	378	93	780	750	15	190	240	90	85	14	909
B-AS - AS 65-150B/A	100 L2	3															958
B-AS - AS 65-150A/A	112 M2	4															951
AS 80-170B/A	132 S2	5,5	G3	G3	202	392	442	85	880	850	15	240	300	100	100	14	1073
AS 80-170A/A	132 S2	7,5															1073

Features



Fast self priming

An integrated non-return valve and the design of the pump casing ensures rapid priming, once the pump body has been filled with water.

Flexible

The option to choose between cast iron and bronze materials for the hydraulic parts in contact with the pumped liquid allows A series pumps to be selected for use with different types of liquids.

Solid parts

The open impeller allows for the passage of suspended solids in pumped liquid.

Exclusive design

An innovative, patented guard prevents contact with rotating parts, providing protection to the end user whilst allowing for inspection of the mechanical seal.

Reliable

The bearing and shaft are designed to ensure the reduction of the stress, providing high reliability under all operating conditions.