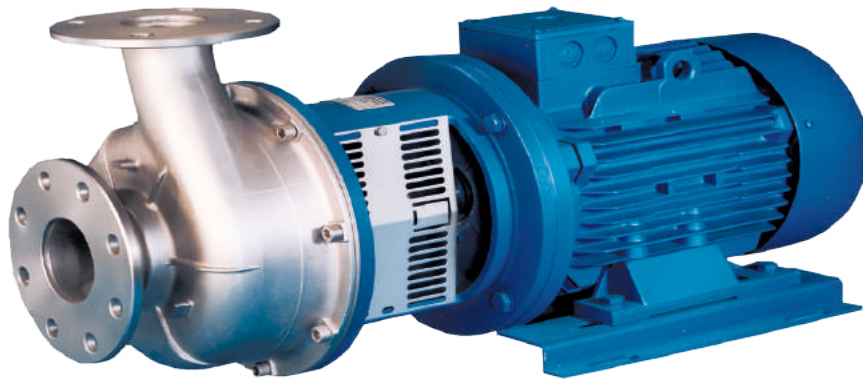


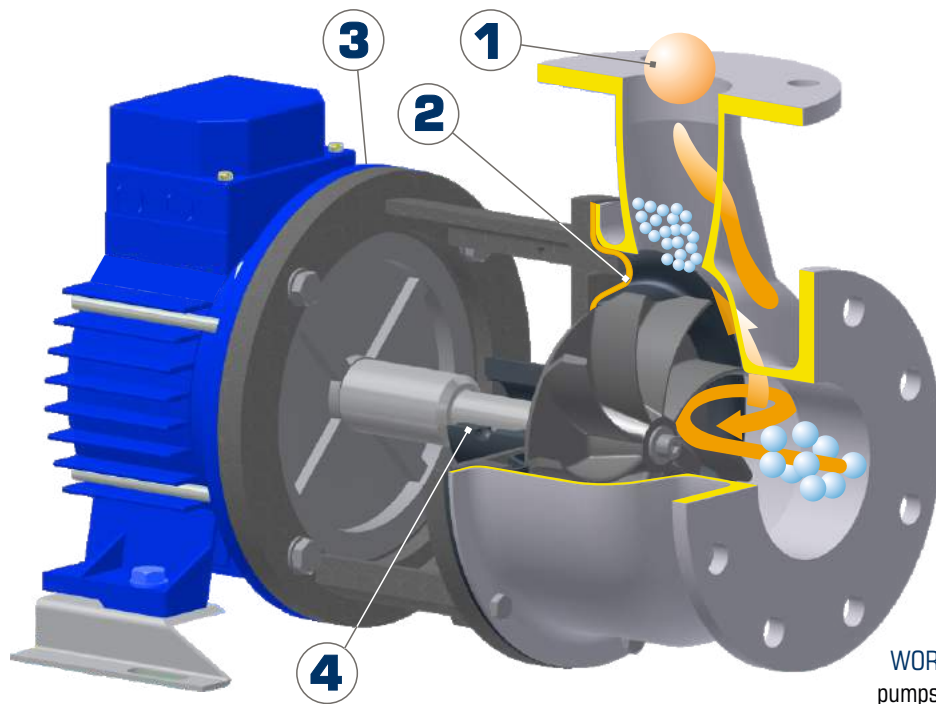
BEDU
≡ POMPEN ≡

VORTEX IMPELLER RS



made for your process

VORTEX IMPELLER



RS
RSA

WORKING: The RS & RSA pumps are single stage ones with a special recessed impeller placed in the back side of casing. **Soft pumping:** most of the liquid cross the pump casing without involving directly the impeller. This assures that all crystals, delicate solids, granules, flakes of biologic mud , leather parts, etc... are pumped without any damage.

Long and filamentary solids pass through the pump without causing any clogging. Vortex impeller is able to pump mixtures up to **50% of air or gas**. Great solution also to transfer **viscous products** up to 700 cPs. Thanks to their simple construction and their components modularity, they ensure limited spare parts stock and low running costs.

The **seal system** is so complete that these pumps are often used for difficult applications. The execution with food connections is also available with **shrouded motor**. The maximum **working pressure** is 8 BARS according to the pump size. All pump sizes are equipped with standard electric motors.

- **USE:**
 - ⇒ **FOOD INDUSTRY:** to transfer liquids with suspended solids, fruit and vegetables washing, CIP systems, tanker truck load and unload, etc...
 - ⇒ **BIODIESEL and BIO-ETHANOL PLANTS.**
 - ⇒ **WATER TREATMENT :** for liquids with suspended solids, also filamentous, biological sludge , flocculated sludge, calcium hydroxide, flotation systems with 15% air (as maximum).
 - ⇒ **CHEMICAL and BASIC PHARMACEUTICAL INDUSTRY.**
 - ⇒ **TEXTILE INDUSTRY** for chemical baths and brine.
 - ⇒ **TANNERY INDUSTRY** for chemical baths with suspended solids and filaments.
- **FREE PASSAGE:** the range includes pumps with discharge ports up to 65 mm, free passage of 45 m.
- **VERSATILITY:** 8 different seal seats arrangement allow these pumps to be used for any plant needs.
- **MAINTENANCE:** Standardized electric motors in order to simplify maintenance.
- **MATERIALS:** AISI 316
- **CONNECTIONS:**
 - ⇒ 1) Flanged type with UNI 2278 PN 16 interaxis.
 - ⇒ 2) Food connections DIN 11851 or others on demand.

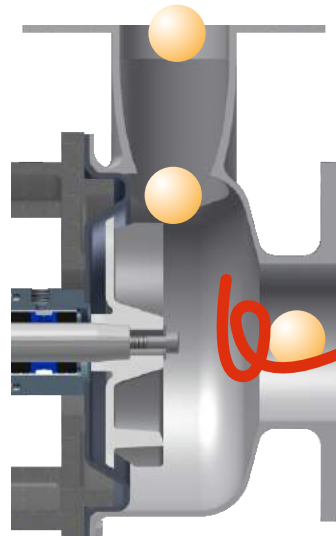


FLANGED or FOOD CONNECTIONS



1 - SOLIDS FREE PASSAGE

Free passage up to 60% of the port : The recessed impeller assures the passage of solids and filamentous materials up to 60% of the delivery branch port diameter (see technical tables). Long and filamentary solids pass through the pump without causing any clogging. Some examples: swarfs, grass and plant parts, textile fibres, bags, cords, bones and slaughtering parts, leather parts in the tannery industry, tomato with peels and stems, apples and other fruit waste, green leafy vegetable, onion and potatoes skins, feathers, straw, food remains, plastic or bottles parts, wood parts and chips, waste water, etc..



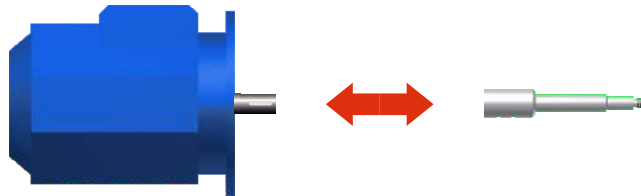
WEARING RESISTANCE

ABRASION RESISTANCE: The pump casing has been designed to pump liquids together with suspended solids even if slightly abrasive. Surface continuity avoids the risk of any clogging. The main wearing points have been properly shaped.

2

3- STANDARD ELECTRIC MOTOR

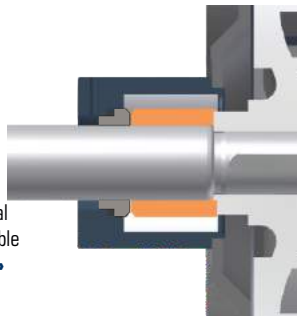
STANDARD MOTORS mounted on RS - RSA pumps have B5 - B3B5 or B3B14 shape according to the pump size, which are easily available on the market. The shaft is fixed on the motor shaft and it is replaceable in case of wearing.



4- SEAL SYSTEMS

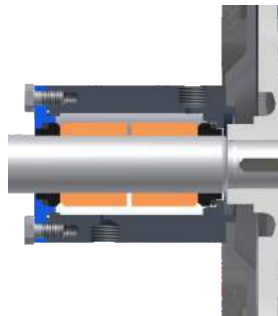
Standard / E single seal

Self lubricated single mechanical seal PLAN 02. Also available for PLAN 11-32 («E» exec.)



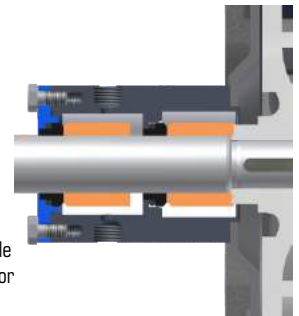
C double back to back mechanical seal

double back to back seal. PLAN 53 - PLAN 54



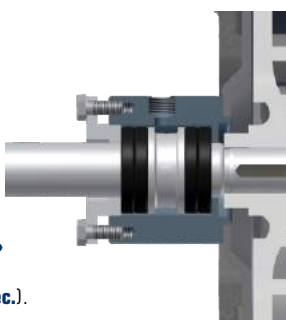
L double tandem mechanical seal

double tandem mechanical seal. PLAN 52. Also suitable washing connection for the pump side seal.



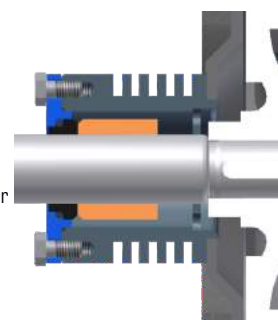
S / B gland packing

gland packing seal with barrier hydraulic ring and flushing («S» exec.). Also suitable without ring («B» exec.).



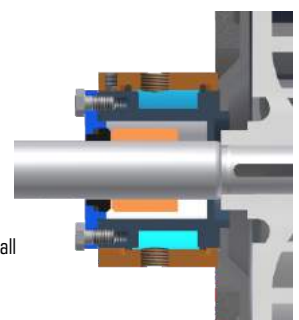
R air cooled chamber

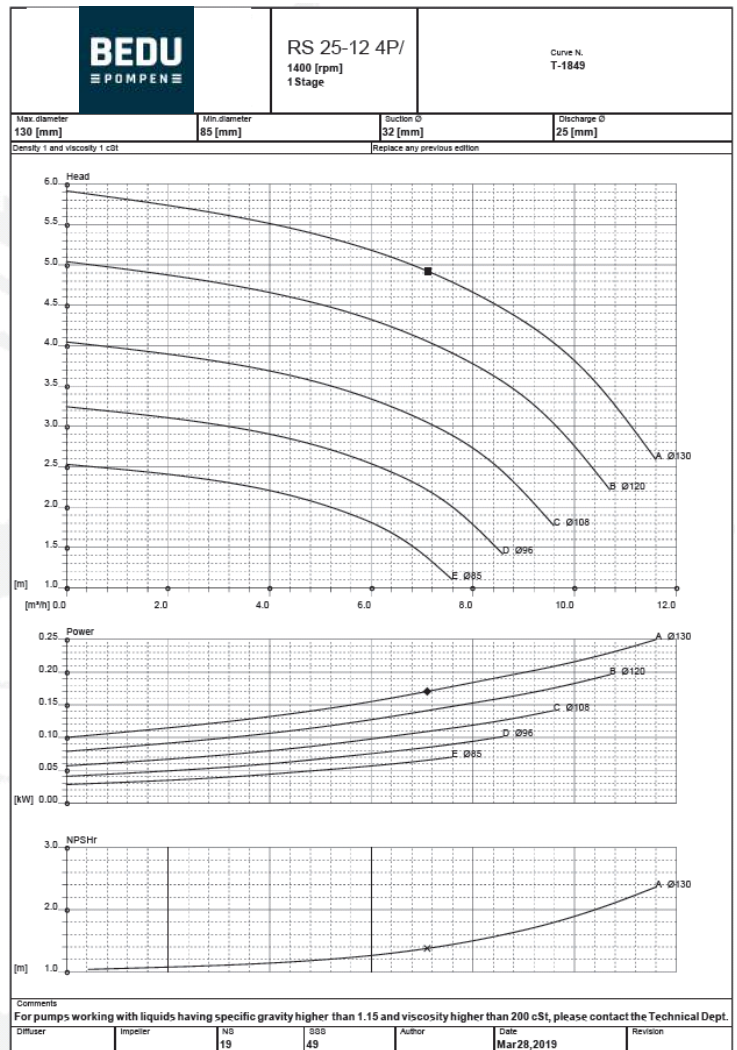
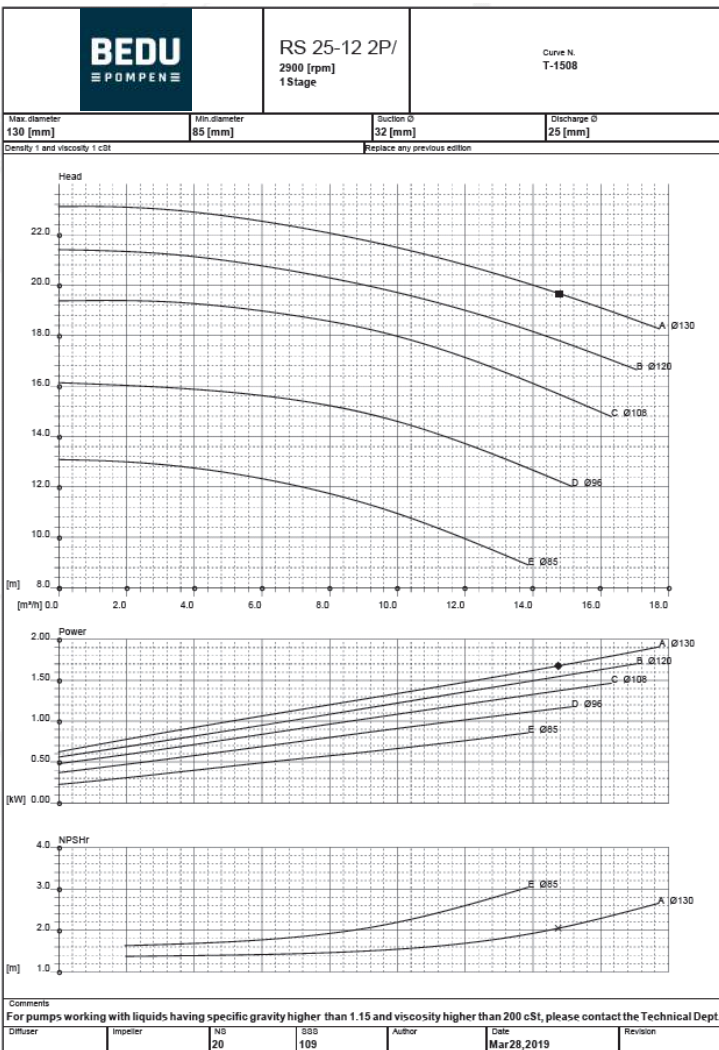
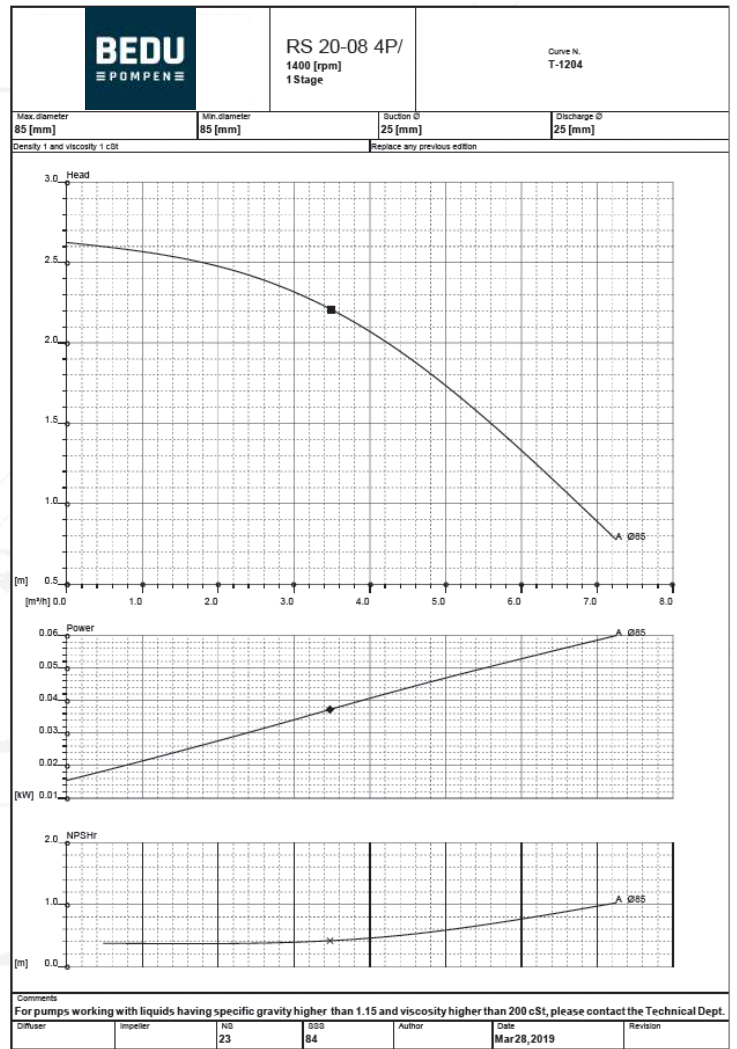
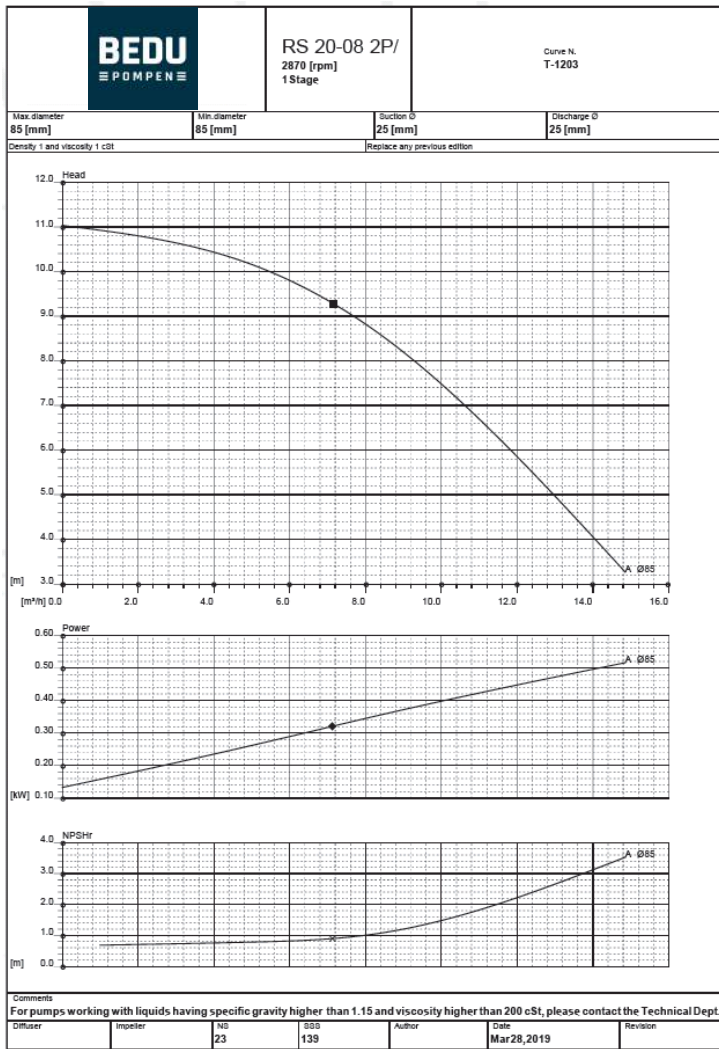
Air cooled chamber

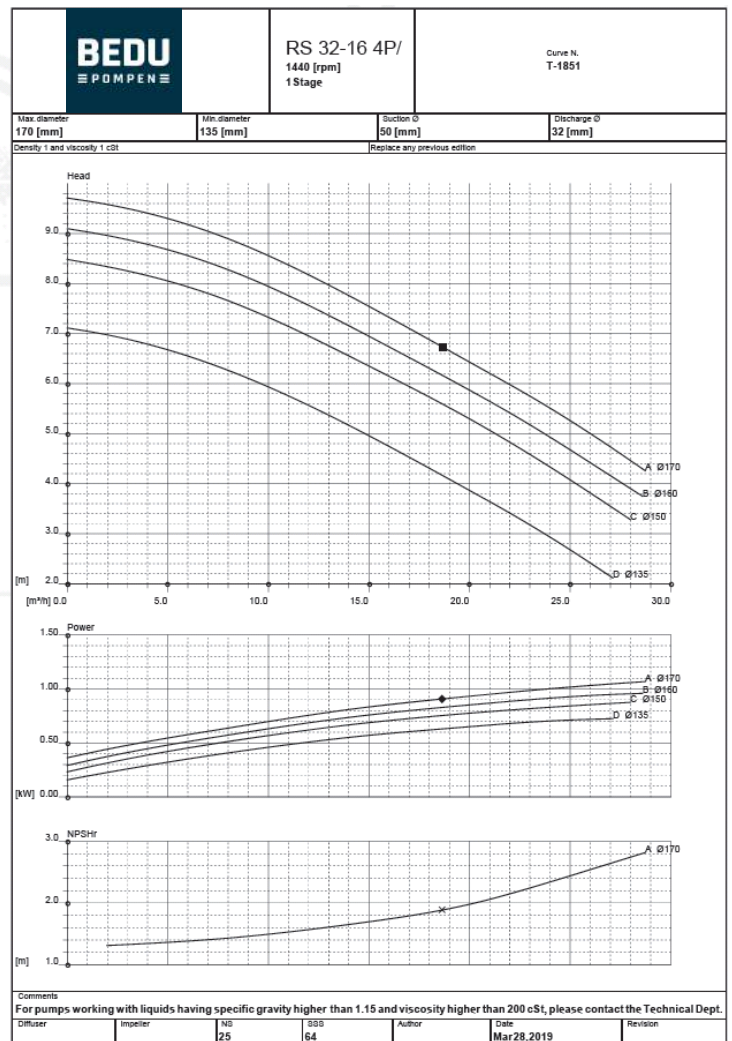
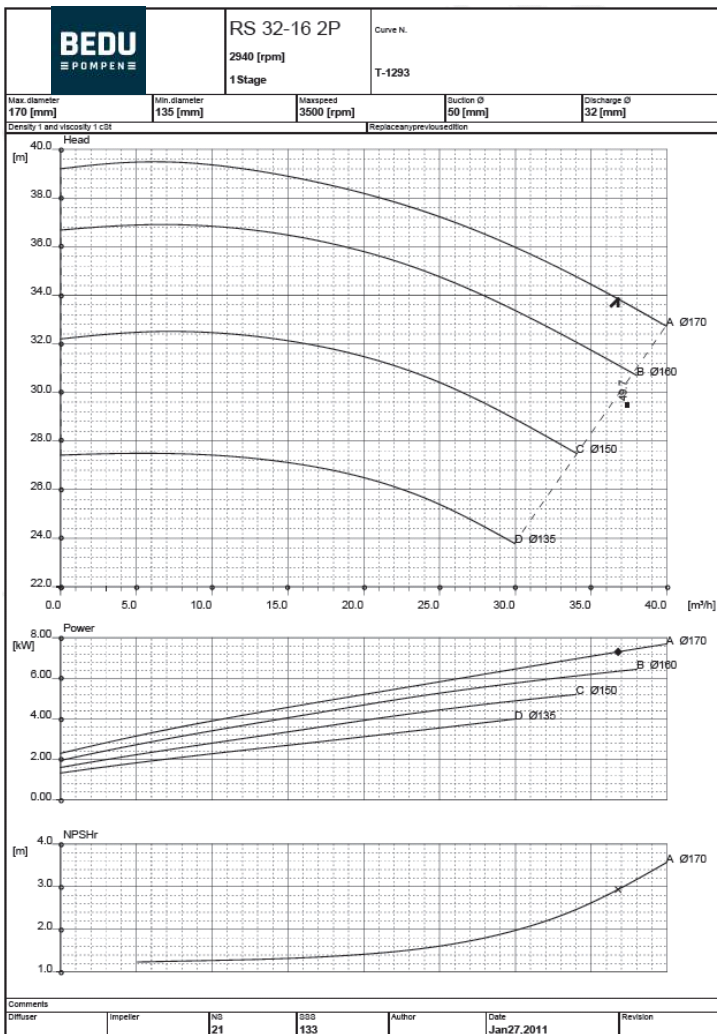
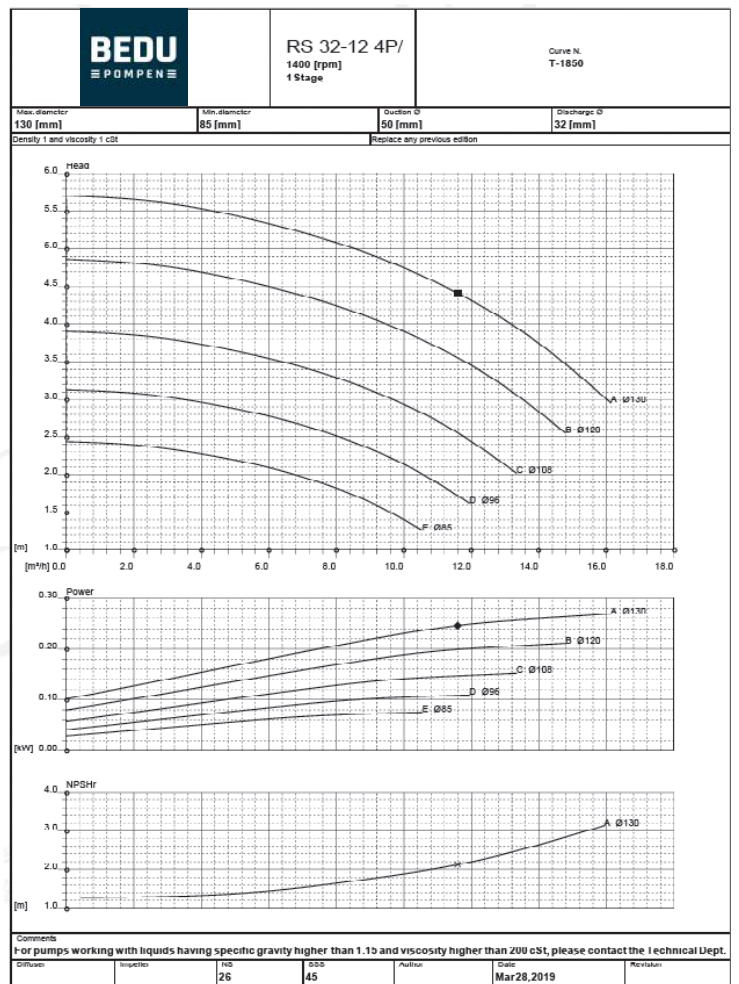
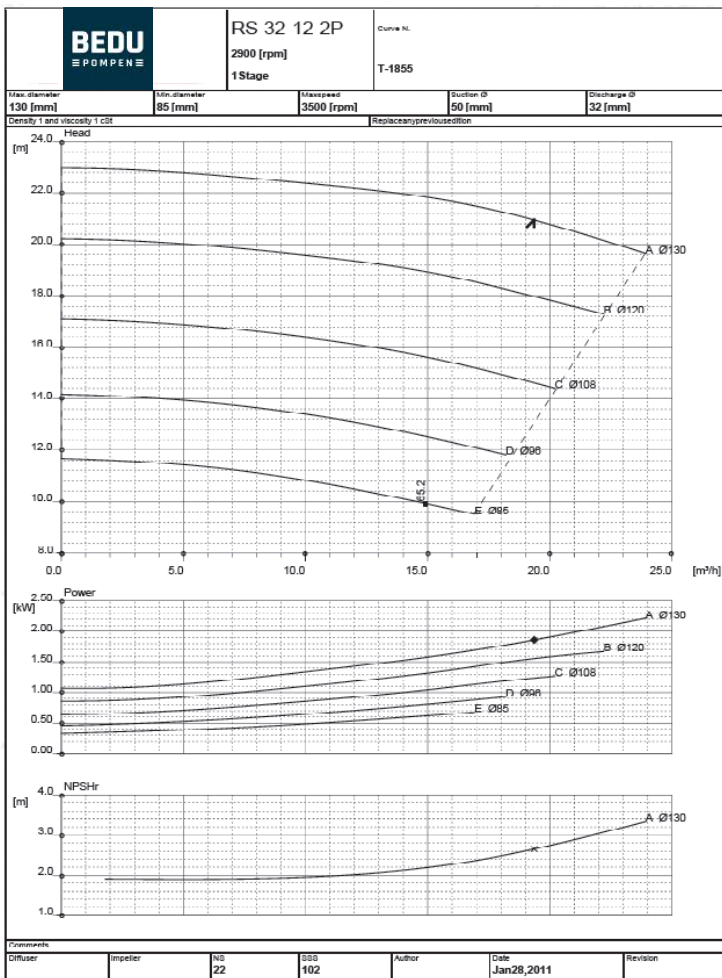


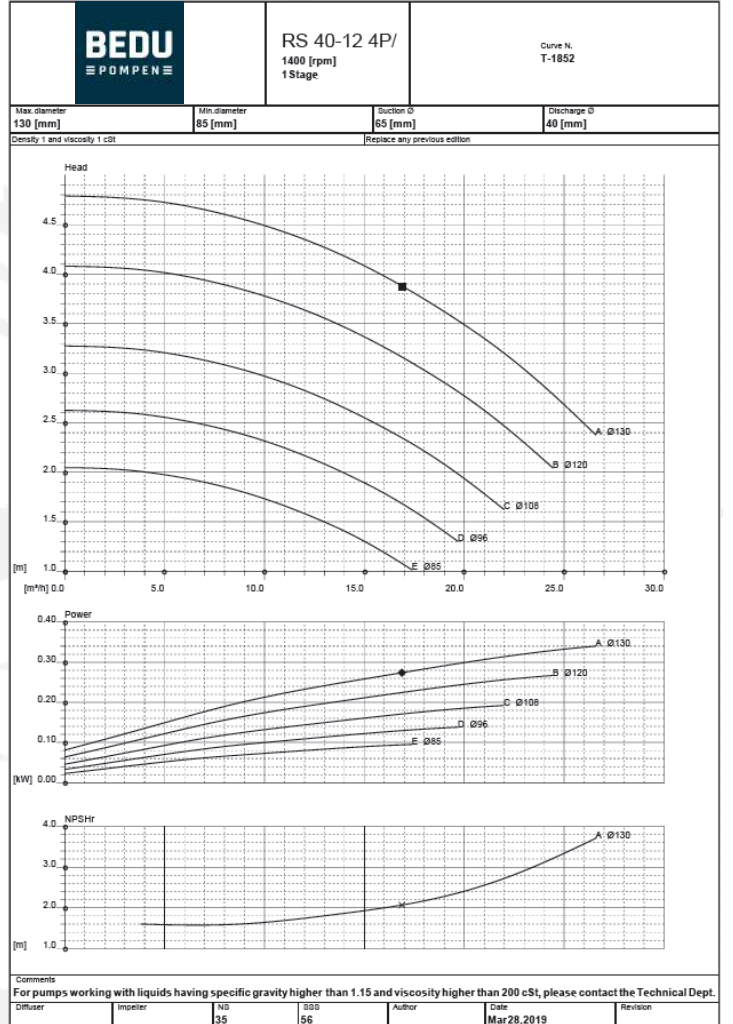
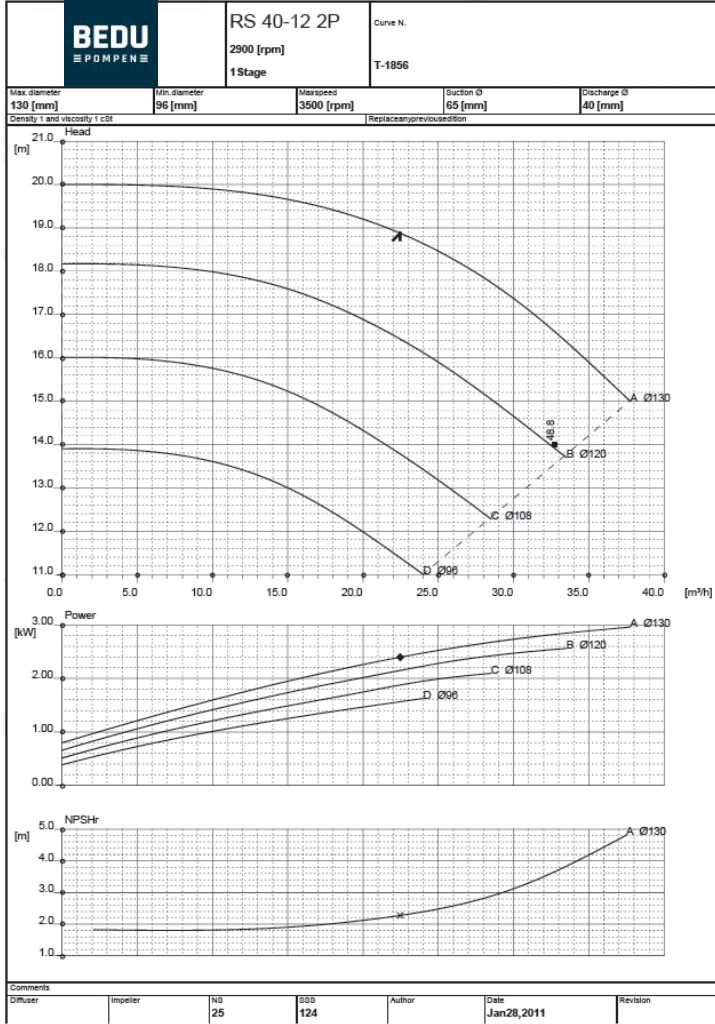
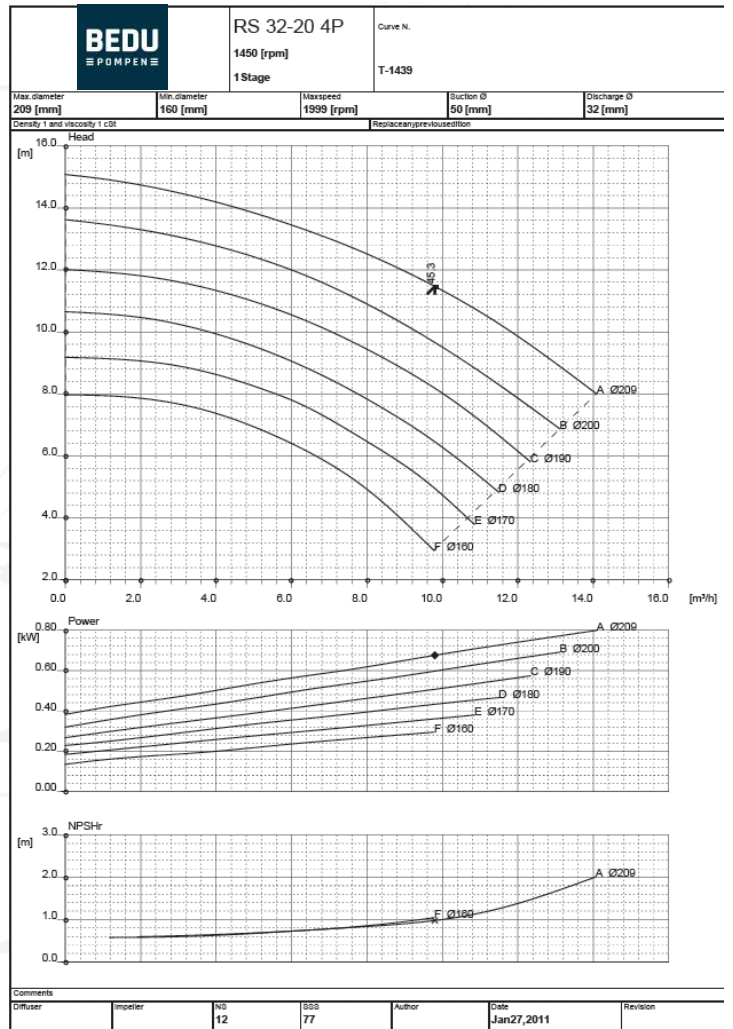
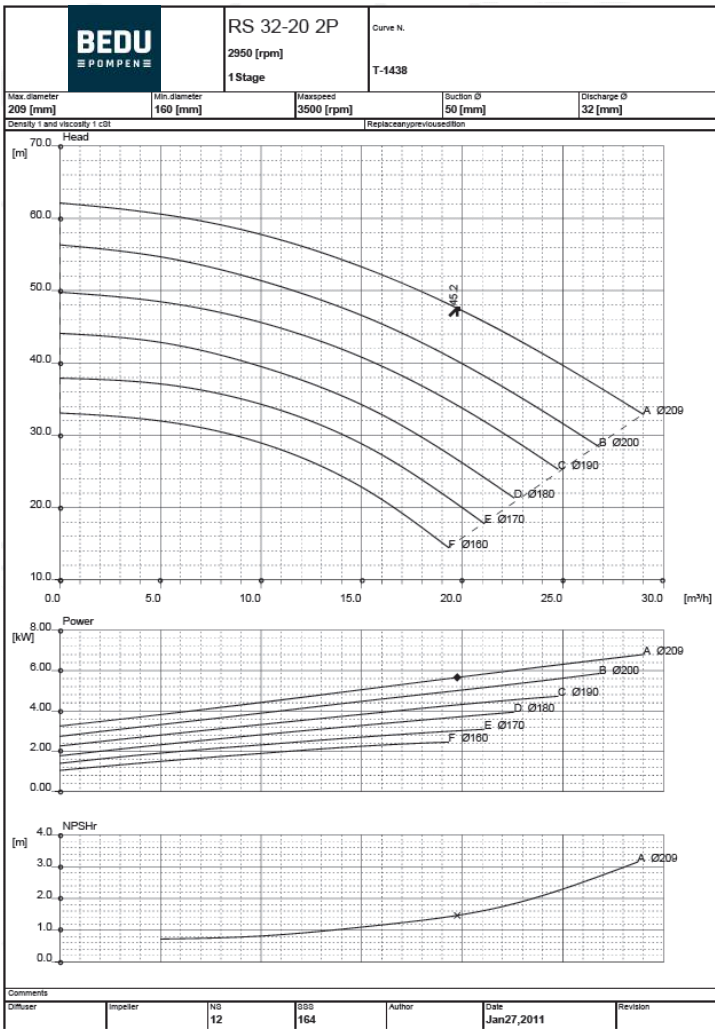
H heating / cooling chamber

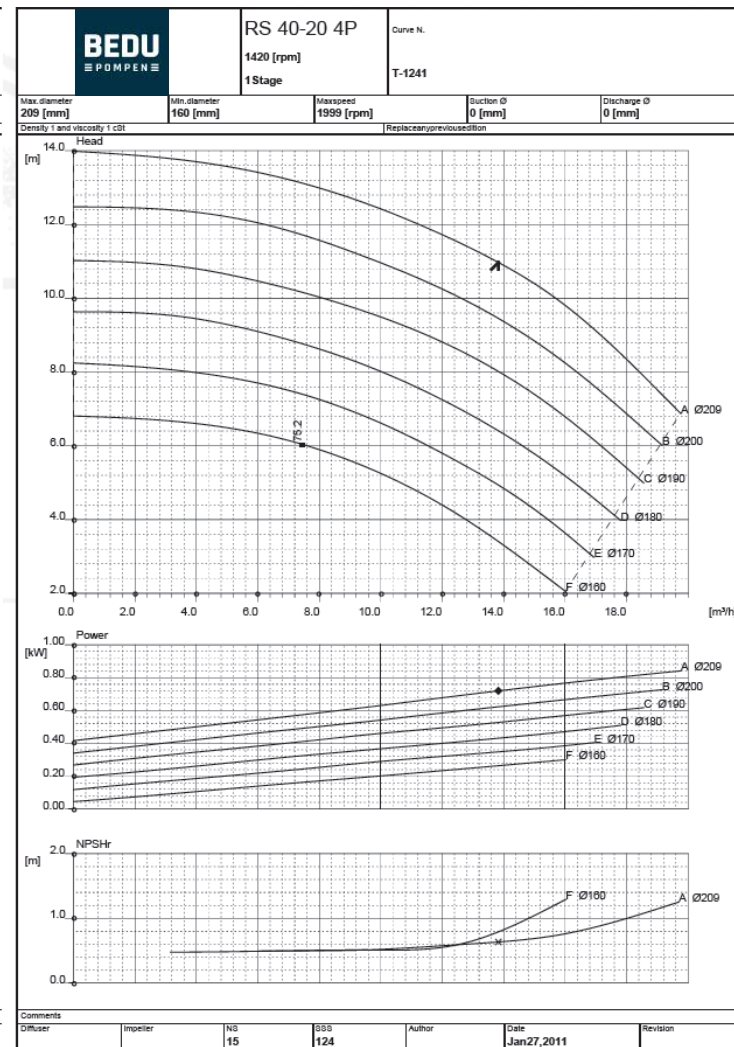
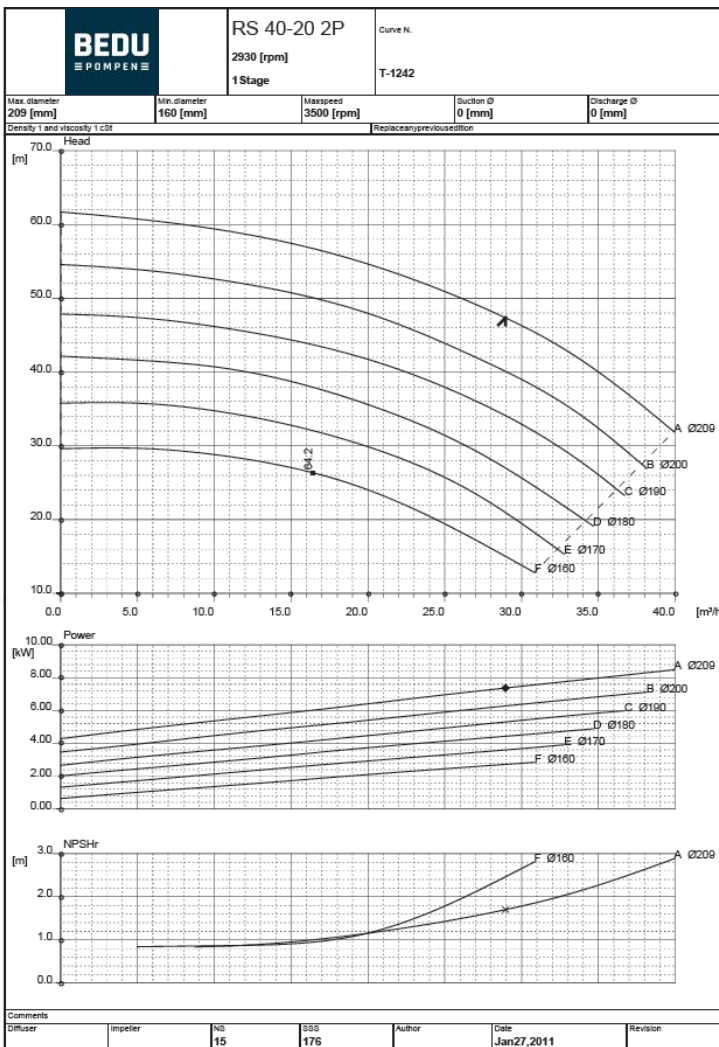
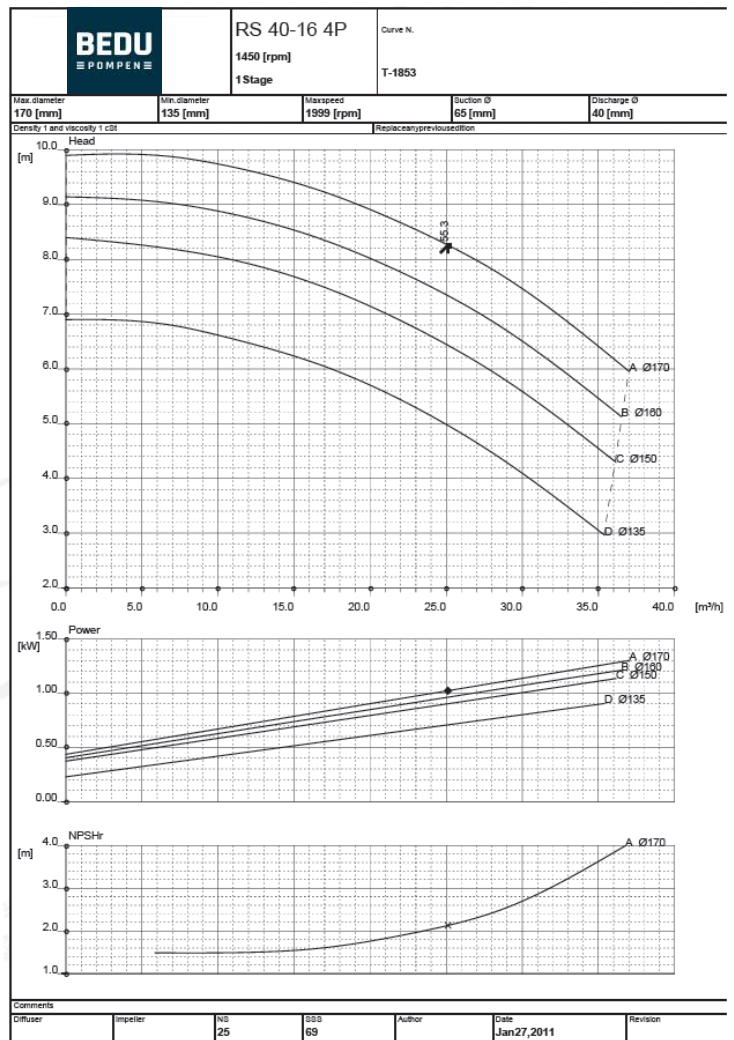
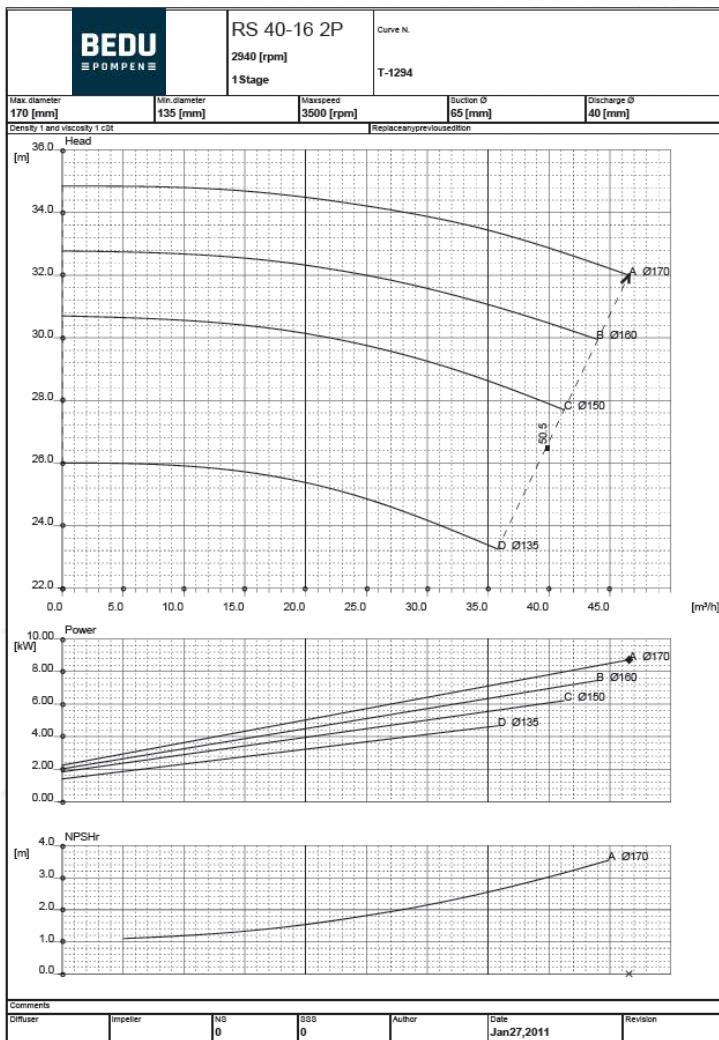
The heating or cooling chamber can be easily installed on all RS pumps

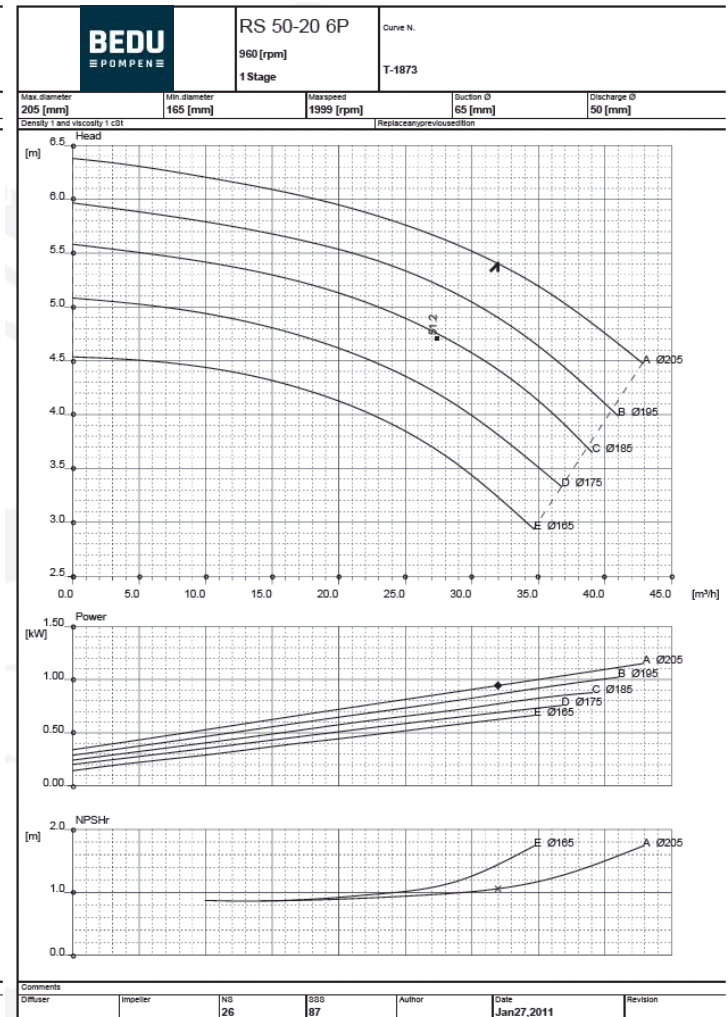
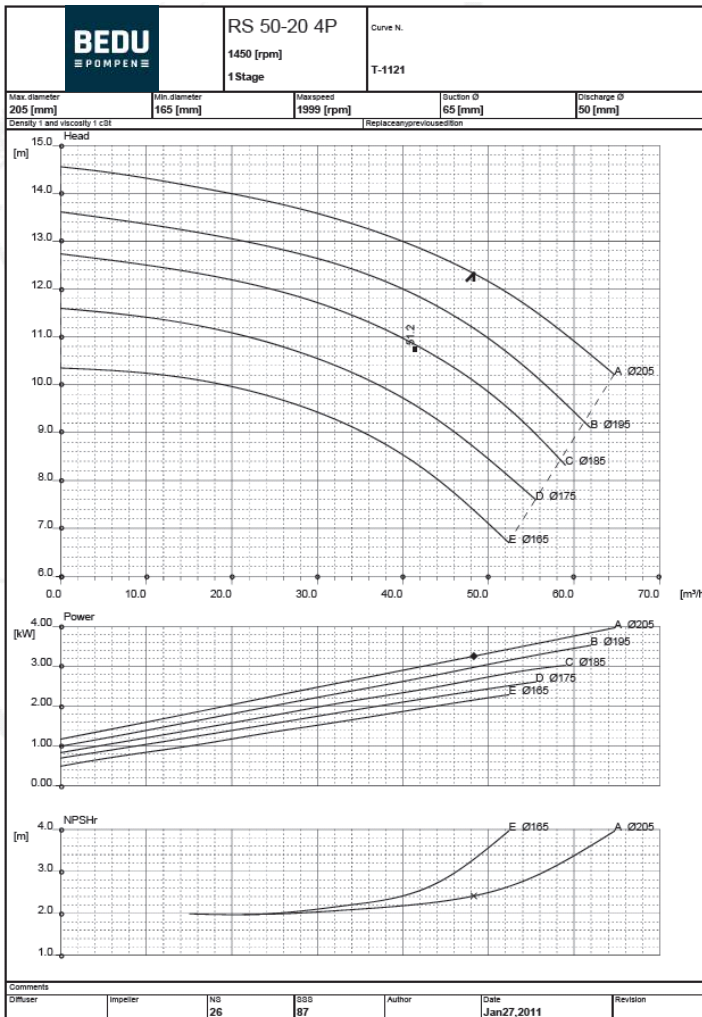
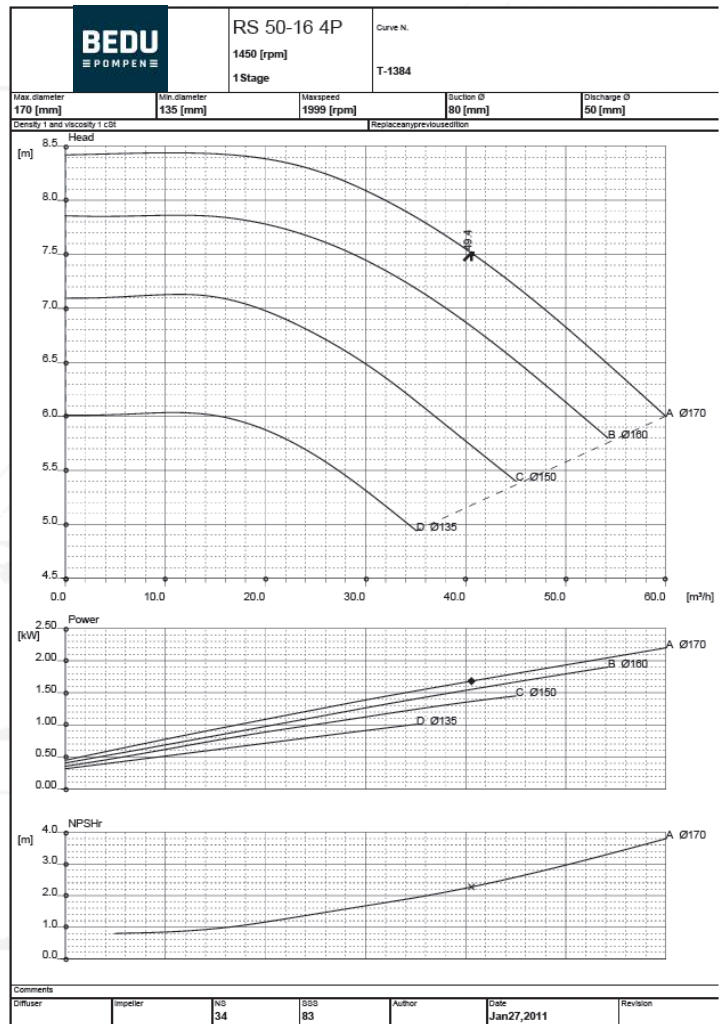
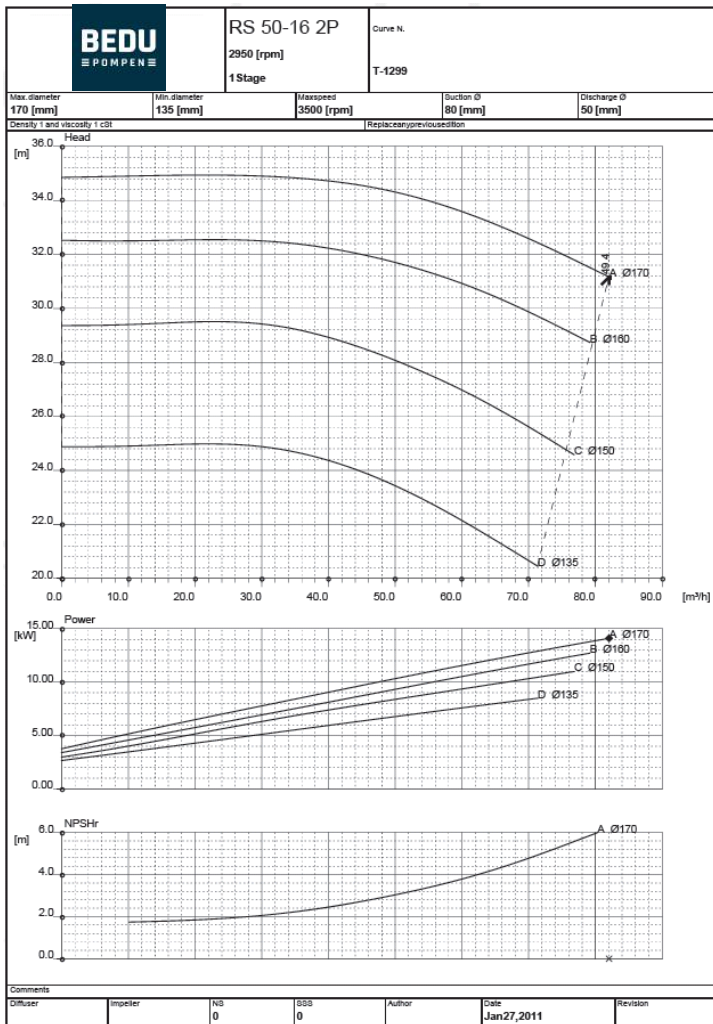


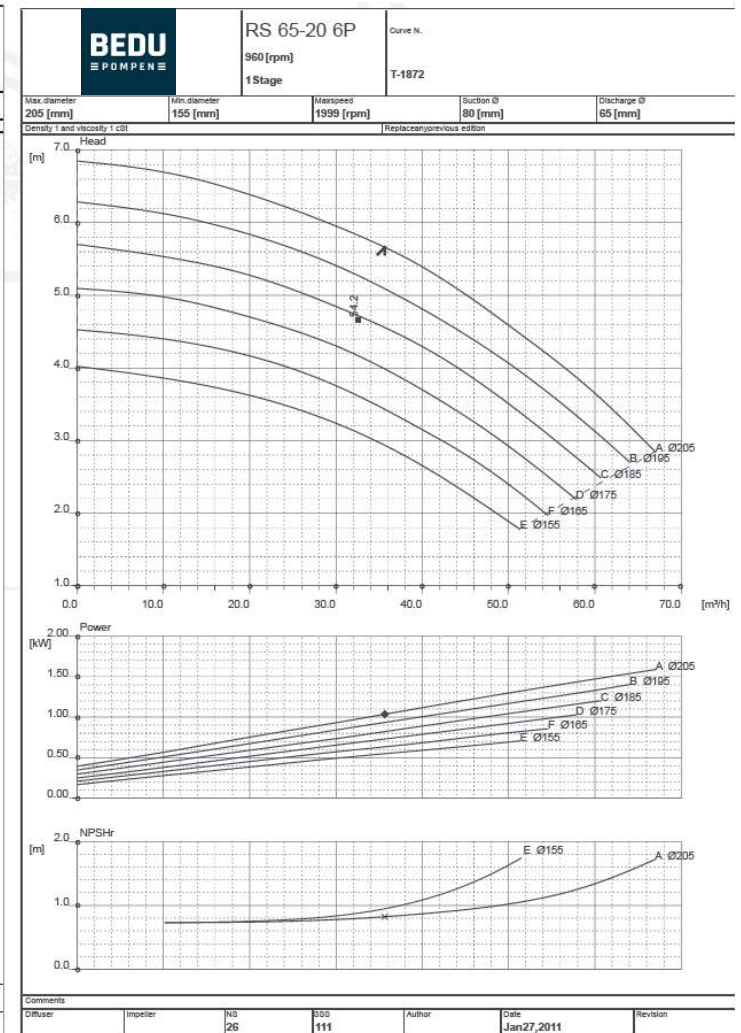
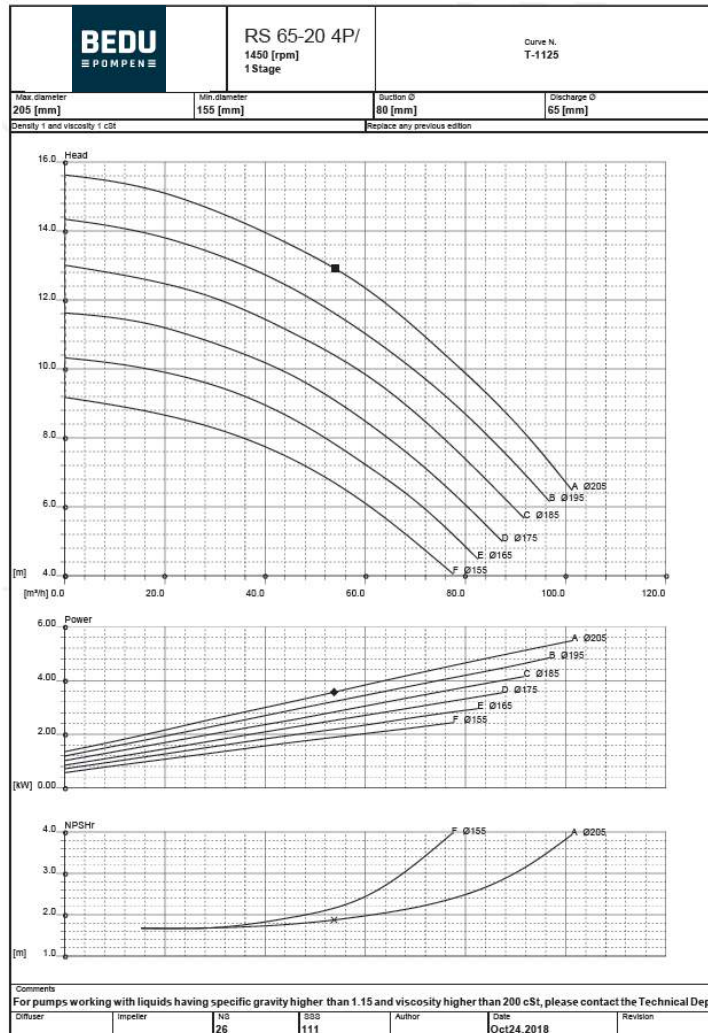
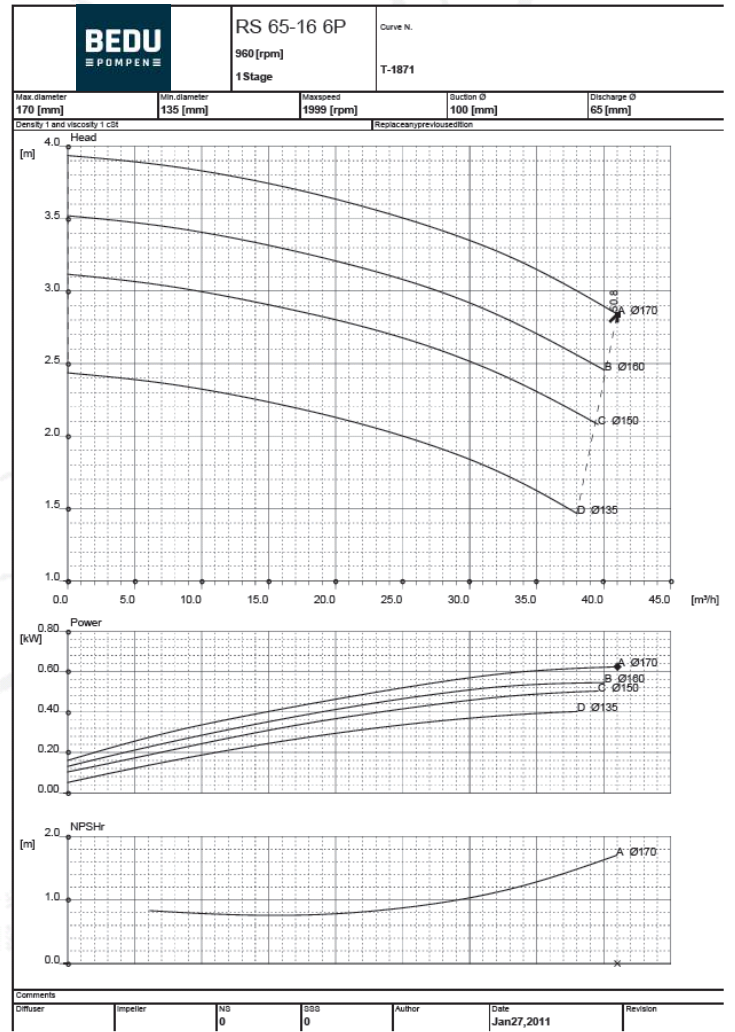
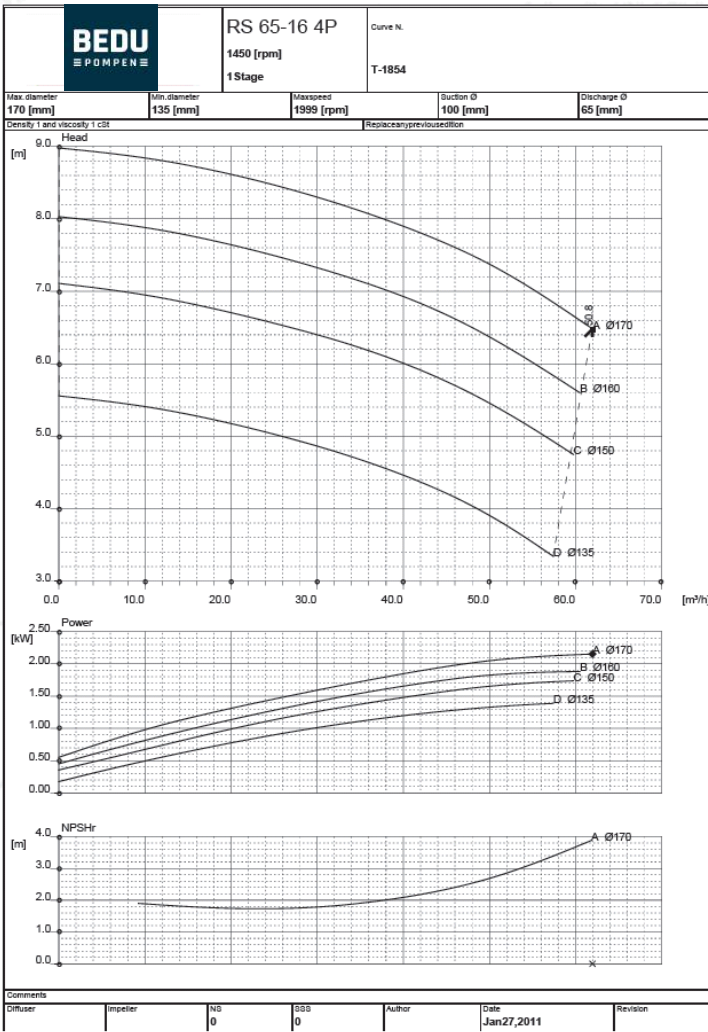












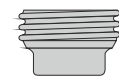


Fig. 1

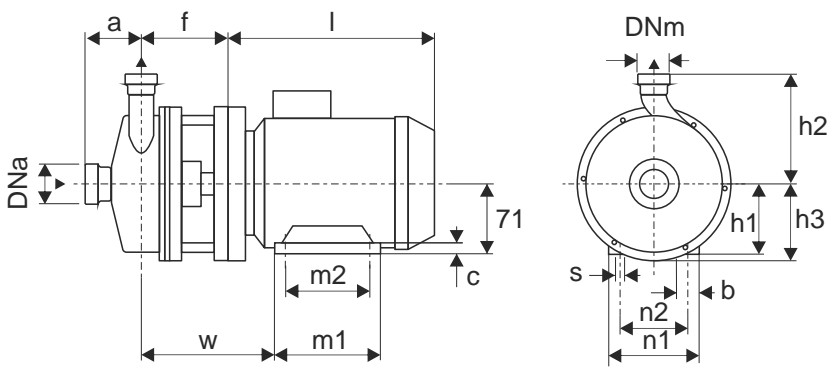


Fig. 2

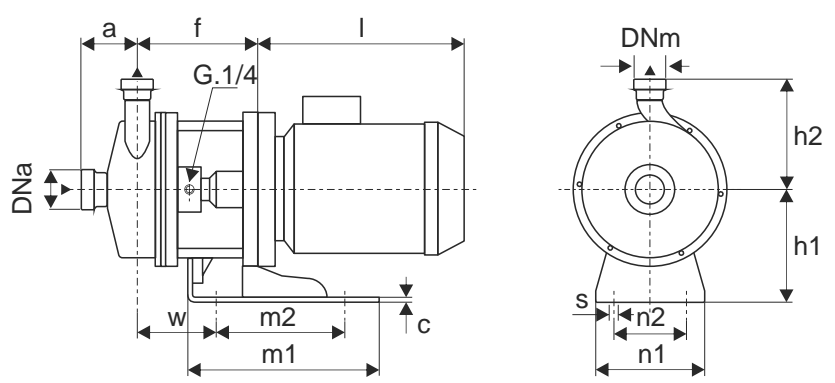
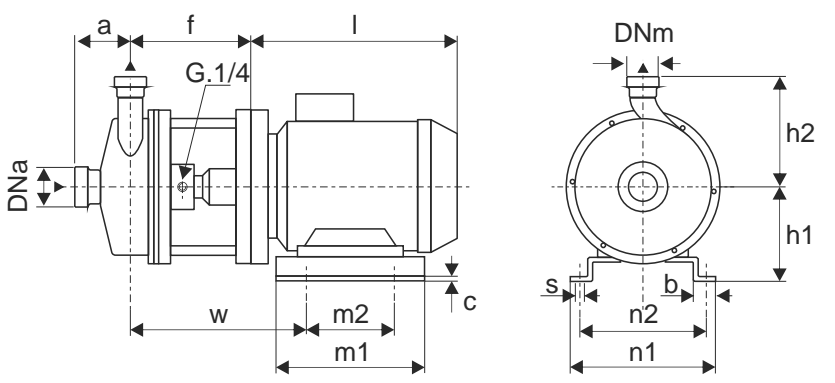
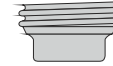
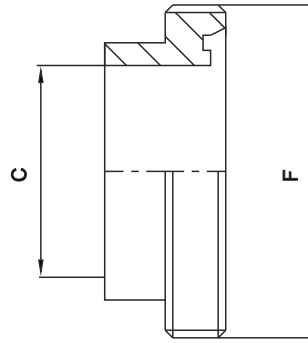


Fig. 3





ELECTRIC MOTOR					
Size IEC	Power in Kw			(a) [mm]	(a) Weight [Kg]
	2 Poles	4 Poles	6 Poles		
71	0.37	0.25	0.18	205	5.5
71	0.55	0.37	0.25	205	5.5
80	0.75	0.55	0.37	235	9
80	1.1	0.75	0.55	235	10
90	1.5	1.1	0.75	250	12
90	2.2	1.5	1.1	280	14
100	3	2.2	1.5	300	21
100	-	3	-	300	23
112	4	4	2.2	330	30
132	5.5	5.5	3	400	40
132	7.5	7.5	4	400	45
132	9.2	9.2	5.5	400	52
132	11	-	-	400	60
160	15	-	-	490	85



DIN 11851		
DNa DNm	C	F
25	25,0	52x1/6
32	31,0	58x1/6
40	37,0	65x1/6
50	49,0	78x1/6
65	66,0	95x1/6
80	81,0	110x1/4
100	97,6	130x1/4

Picture	Pump size	Motor size	DIMENSIONS [mm]															weight (b) [kg]
			DNa	DNm	a	f	h1	h2	h3	b	c	m1	m2	n1	n2	s	w	
1	20-08	71	25	25	55	90	71	115	-	35	10	116	90	142	112	11	135	4,5
1		71	25	25	55	90	71	115	-	35	10	116	90	142	112	11	135	4,5
1	25-12	71	32	25	55	84	71	148	102	35	10	116	90	142	112	11	129	5,5
2		80	32	25	55	174	150	148	102	0	4	235	165	164	130	10	119	12
2		90	32	25	55	174	150	148	102	0	4	235	165	164	130	10	119	12
3	32-12	100	32	25	55	174	150	148	102	23	3	260	175	250	230	10	240	13
1		71	50	32	80	95	71	150	102	35	10	116	90	142	112	11	131	7,5
2		80	50	32	80	176	150	150	102	0	4	235	165	164	130	10	124	14
2		90	50	32	80	176	150	150	102	0	4	235	165	164	130	10	124	14
3		100	50	32	80	196	150	150	102	23	3	260	175	250	230	10	244	16
3	32-16	80	50	32	85	184	155	170	-	23	3	300	220	203	183	10	174	20
3		90	50	32	85	184	165	170	-	23	3	300	220	218	198	10	193	20
3		100	50	32	85	204	155	170	-	25	3	280	200	240	218	12	237	22
3		112	50	32	85	204	167	170	-	25	3	280	200	270	248	12	244	22
3		132	50	32	85	224	162	170	-	29	4	340	220	326	304	14	269	27
3	32-20	80	50	32	95	191	155	193	-	23	3	300	220	203	183	10	175	30
3		90	50	32	95	191	165	193	-	23	3	300	220	218	198	10	194	30
3		100	50	32	95	211	155	193	-	25	3	280	200	240	218	12	238	33
3		112	50	32	95	211	167	193	-	25	3	280	200	270	248	12	245	33
3	40-12	132	50	32	95	231	162	193	-	29	4	340	220	326	304	14	270	38
1		70	65	40	73	95	71	150	102	35	10	116	90	142	112	11	131	8,5
2		80	65	40	73	176	150	150	102	0	4	235	165	164	130	10	124	15
2		90	65	40	73	176	150	150	102	0	4	235	165	164	130	10	124	15
3		100	65	40	73	196	130	150	102	23	3	250	175	250	230	10	244	17
3	40-16	112	65	40	73	196	142	150	102	23	3	250	175	280	260	10	238	17
3		80	65	40	73	190	155	170	-	23	3	300	220	203	183	10	180	21
3		90	65	40	73	190	165	170	-	23	3	300	220	218	198	10	199	21
3		100	65	40	73	210	155	170	-	25	3	280	200	240	218	12	243	23
3		112	65	40	73	210	167	170	-	25	3	280	200	270	248	12	250	23
3	40-20	132	65	40	73	230	162	170	-	29	4	340	220	326	304	14	275	28
3		90	65	40	117	191	165	195	-	23	3	300	220	218	198	10	196	31
3		100	65	40	117	213	155	195	-	25	3	280	200	240	218	12	240	34
3		112	65	40	117	213	167	195	-	25	3	280	200	270	248	12	247	34
3		132	65	40	117	235	162	195	-	29	4	340	220	326	304	14	272	39
3	50-16	80	80	50	113	195	155	190	-	23	3	300	220	203	183	10	185	24
3		90	80	50	113	195	165	190	-	23	3	300	220	218	198	10	204	24
3		100	80	50	113	215	155	190	-	25	3	280	200	240	218	12	248	26
3		112	80	50	113	215	167	190	-	25	3	280	200	270	248	12	255	26
3		132	80	50	113	225	162	190	-	29	4	340	220	326	304	14	280	31
3	50-20	100	65	50	118	239	155	215	-	25	3	280	200	240	218	12	266	41
3		112	65	50	118	239	167	215	-	25	3	280	200	270	248	12	273	41
3		132	65	50	118	259	162	215	-	25	4	340	220	326	304	14	298	46
3		160	65	50	118	289	190	215	-	25	4	340	220	364	342	14	392	53
3	65-16	90	100	65	112	195	165	212	-	23	3	300	220	218	198	10	204	25
3		100	100	65	112	215	155	212	-	25	3	280	220	240	218	12	248	27
3		112	100	65	112	215	167	212	-	25	3	280	200	270	248	12	255	27
3	65-20	100	80	65	133	248	155	240	-	25	3	280	200	240	218	12	275	39
3		112	80	65	133	248	167	240	-	25	3	280	200	270	246	12	282	39
3		132	80	65	133	268	162	240	-	29	4	340	220	326	304	14	307	44

(b) Dimensions and weights are subject to variations.

(a) Not binding dimension that can change according to motor brand

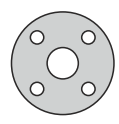


Fig. 1

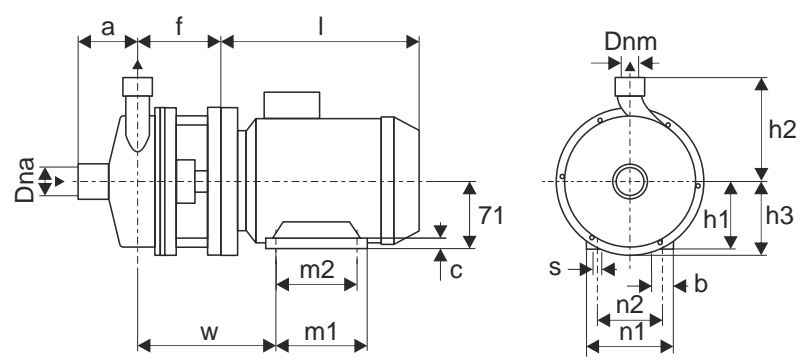


Fig. 2

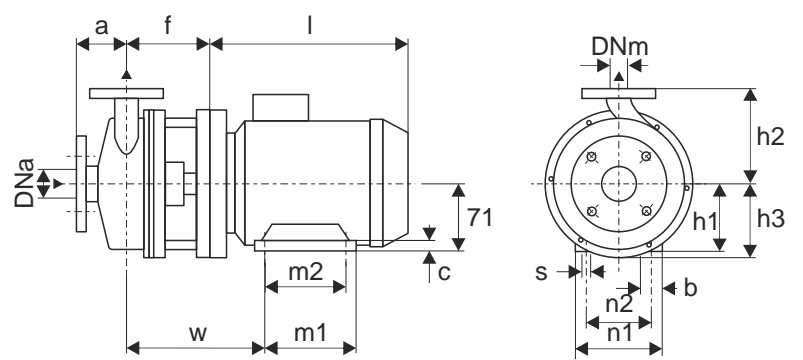


Fig. 3

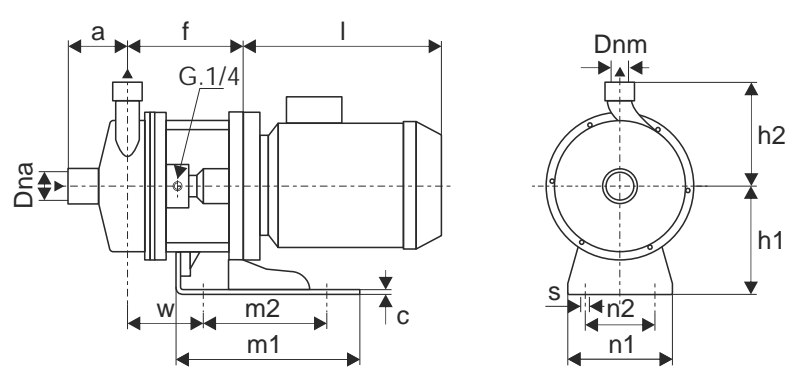


Fig. 4

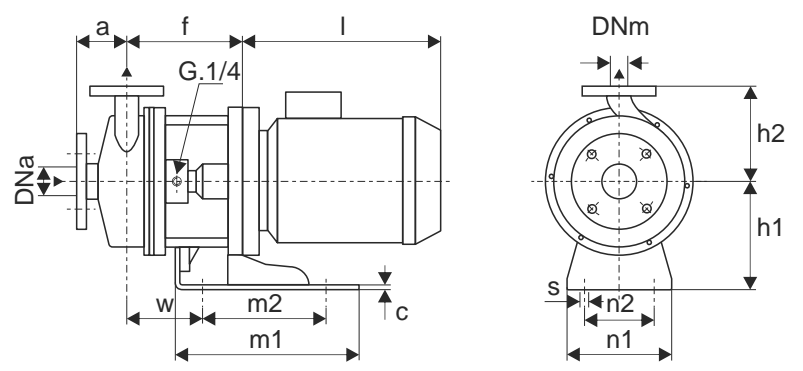
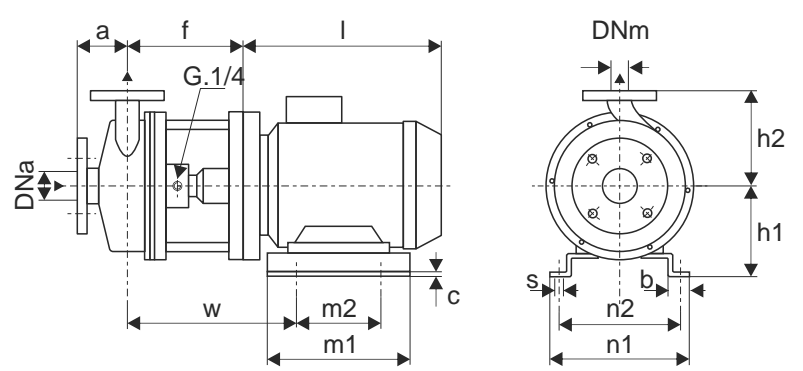
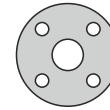


Fig. 5





ELECTRIC MOTOR					
Size IEC	Power in Kw			(a) [mm]	(a) Weight [Kg]
	2 Poles	4 Poles	6 Poles		
71	0.37	0.25	0.18	205	5.5
71	0.55	0.37	0.25	205	5.5
80	0.75	0.55	0.37	235	9
80	1.1	0.75	0.55	235	10
90	1.5	1.1	0.75	250	12
90	2.2	1.5	1.1	280	14
100	3	2.2	1.5	300	21
100	-	3	-	300	23
112	4	4	2.2	330	30
132	5.5	5.5	3	400	40
132	7.5	7.5	4	400	45
132	9.2	9.2	5.5	400	52
132	11	-	-	400	60
160	15	-	-	490	85

FLANGE DIMENSIONS				
DNa	DE	CF	Lf	Zf
32	140	100	18	4
40	150	110	18	4
50	165	125	18	4
65	185	145	18	4
80	200	160	18	8
100	220	180	18	8

Picture	Pump size	Motor size	DIMENSIONS [mm]														weight ^(b) [kg]	
			DNa	DNm	a	f	h1	h2	h3	b	c	m1	m2	n1	n2	s		w
1	20-08	71	1"M	3/4"M	42	90	71	100	-	35	10	116	90	142	112	7	135	4,5
1		71	1"M	3/4"M	42	90	71	100	-	35	10	116	90	142	112	7	135	4,5
1	25-12	71	1"1/4F	1"F	75	84	71	160	102	35	10	116	90	142	112	7	129	5,5
3		80	1"1/4F	1"F	75	174	150	160	-	0	4	235	165	164	130	10	122	12
3		90	1"1/4F	1"F	75	174	150	160	-	0	4	235	165	164	130	10	122	12
5		100	1"1/4F	1"F	75	194	150	160	-	23	3	250	175	250	230	10	244	
2	32-12	71	50	32	80	95	71	140	102	35	10	116	90	142	112	7	140	7,5
4		80	50	32	80	176	150	140	-	0	4	235	165	164	130	10	124	14
4		90	50	32	80	176	150	140	-	0	4	235	165	164	130	10	124	14
5		100	50	32	80	196	150	140	-	23	3	250	175	250	230	10	244	16
5	32-16	80	50	32	80	184	155	160	-	23	3	300	220	203	183	10	174	20
5		90	50	32	80	184	165	160	-	23	3	300	220	218	198	10	193	20
5		100	50	32	80	204	155	160	-	25	3	280	200	240	218	12	237	22
5		112	50	32	80	204	167	160	-	25	3	280	200	270	248	12	244	22
5	32-20	132	50	32	80	224	162	160	-	29	4	340	220	326	304	14	269	27
5		80	50	32	80	191	155	177	-	23	3	300	220	203	183	10	175	30
5		90	50	32	80	191	165	177	-	23	3	300	220	218	198	10	194	30
5		100	50	32	80	211	155	177	-	25	3	280	200	240	218	12	238	33
5	40-12	112	50	32	80	211	167	177	-	25	3	280	200	270	248	12	245	33
5		132	50	32	80	231	162	177	-	29	4	340	220	326	304	14	270	38
2		70	65	40	80	95	71	140	102	35	10	116	90	142	112	7	140	8,5
4		80	65	40	80	176	150	140	-	0	4	235	165	164	130	10	124	15
4	40-16	90	65	40	80	176	150	140	-	0	4	235	165	164	130	10	124	15
5		100	65	40	80	196	130	140	-	23	3	250	175	250	230	10	244	17
5		112	65	40	80	196	142	140	-	23	3	250	175	280	260	10	238	17
5		80	65	40	80	190	155	160	-	23	3	300	220	203	183	10	180	21
5	40-20	90	65	40	80	190	165	160	-	23	3	300	220	218	198	10	199	21
5		100	65	40	80	210	155	160	-	25	3	280	200	240	218	12	243	23
5		112	65	40	80	210	167	160	-	25	3	280	200	270	248	12	250	23
5		132	65	40	80	230	162	160	-	29	4	340	220	326	304	14	275	28
5	50-16	90	65	40	100	191	165	180	-	23	3	300	220	218	198	10	196	31
5		100	65	40	100	213	155	180	-	25	3	280	200	240	218	12	240	34
5		112	65	40	100	213	167	180	-	25	3	280	200	270	248	12	247	34
5		132	65	40	100	235	162	180	-	29	4	340	220	326	304	14	272	39
5	50-20	80	80	50	100	195	155	180	-	23	3	300	220	203	183	10	185	24
5		90	80	50	100	195	165	180	-	23	3	300	220	218	198	10	204	24
5		100	80	50	100	215	155	180	-	25	3	280	200	240	218	12	248	26
5		112	80	50	100	215	167	180	-	25	3	280	200	270	248	12	255	26
5	65-16	132	80	50	100	225	162	180	-	29	4	340	220	326	304	14	280	31
5		100	65	50	100	239	155	200	-	25	3	280	200	240	218	12	266	41
5		112	65	50	100	239	167	200	-	25	3	280	200	270	248	12	273	41
5		132	65	50	100	259	162	200	-	25	4	340	220	326	304	14	298	46
5	65-20	160	65	50	100	289	190	200	-	25	4	340	220	364	342	14	392	53
5		90	100	65	100	195	165	200	-	23	3	300	220	218	198	10	204	25
5		100	100	65	100	215	155	200	-	25	3	280	220	240	218	12	248	27
5		112	100	65	100	215	167	200	-	25	3	280	200	270	248	12	255	27
5	65-20	100	80	65	100	248	155	225	-	25	3	280	200	240	218	12	275	39
5		112	80	65	100	248	167	225	-	25	3	280	200	270	246	12	282	39
5		132	80	65	100	268	162	225	-	29	4	340	220	326	304	14	307	44

(a)

Dimensions and weights are subject to variations.

Not binding dimension that can change according to motor brand

(b)

Weight without electric motor

M**= male - F** = female