

BS Series

Booster Pumps





GENERAL INFORMATION

Flow Rate	Up to 56 m ³ /h
Pressure	Up to 150 m
Frequency	Three Phase 50 Hz - 60 Hz*
Maximum Operating Pressure	Up to 16 bar



Transferable Liquids

- Clean or slightly contaminated low viscosity liquids without solid and fibrous particles.



Shaft Sealing

- Soft packing is used in standard production.
- It is possible to use mechanical seal according to customer request or type of liquid.



Applications

Water treatment and Pressurization	Power Plants
Heating, Ventilating and Air Conditioning	Building System
Agricultural Irrigation and Drainage	Chemical Industry
Food and Beverage Industry	Mining
Iron and Steel Industry	Marine



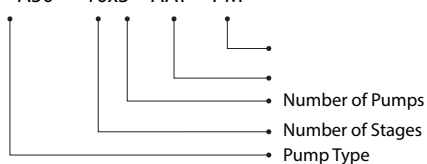
Design Features

- BS Series Series boosters are designed for pressing non-corrosive liquids without large solid particles.
- Impeller material is glass fiber reinforced noryl.
- Vertical pumps with closed impeller can able to be separated.
- Balancing holes of the impellers are dynamically balanced and minimizes axial loads.
- Cylindrical roller bearings that are resistant to high temperatures and can operate under heavy conditions are used at both ends of the pump.
- The discharge flange of the pump is on the motor side and the suction flange is below.
- With its vertical shaft structure, it occupies less space than horizontal shaft design.
- Boosters are manufactured with horizontal or vertical pumps.
- It can be produced as single, double and triple pumps according to the desired flow rate. Up to 6 pumps can be set if needed.
- Single pump booster has phase protection and sequencing relay (FKS).
- It is available water level float (electric float) in single pump systems.
- Multiple sets, phase control in multiple pump boosters and liquid level control are standard features.
- Pressure boosters can be frequency controlled upon request. It can be manufactured with variable speed.
- Boosters it can work automatically and manually in two different modes.



Pump Code

SP - A50 - 10x3 - AAY - T M





DESCRIPTIONS



DIN



EN

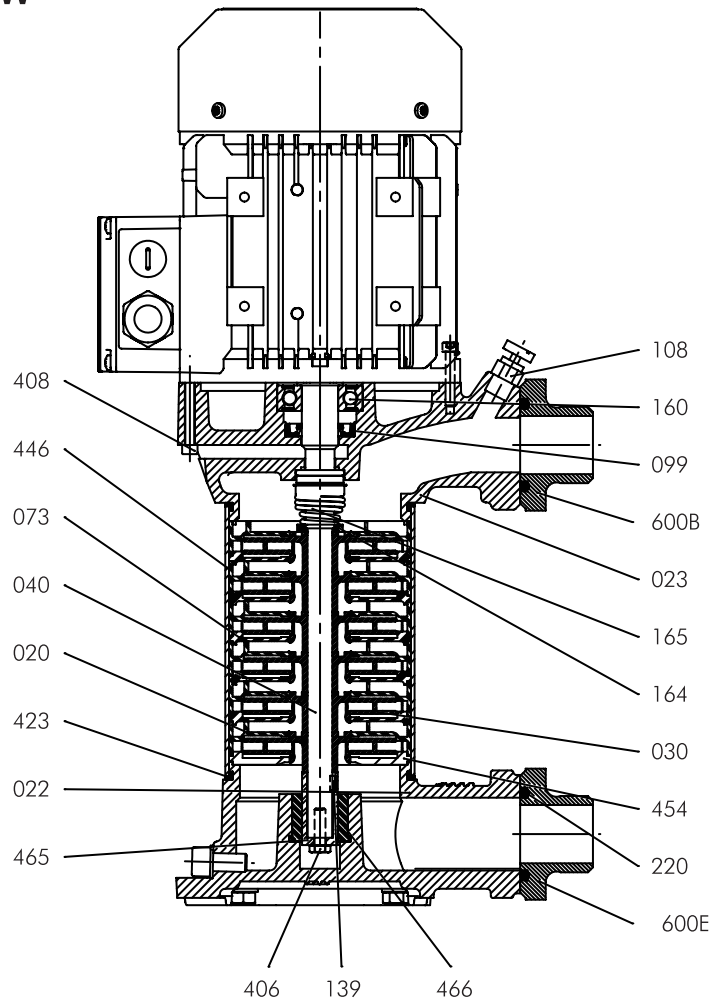


AISI/SAE/ASTM

Cast Iron	0.6025	EN-GJL-250 (GG 25)	A 48 Class 40-B
Ductile Iron Casting	0.7040	EN-GJS-400-18-LT (GGG 40)	A 536 60-40-18
Ductile Iron Casting	0.7043	EN-GJS-400-18-LT (GGG 40.3)	A 536 60-40-18
Steel Casting	1.0619	GP 240 GHGS-C25	A216 WCB
Chrome Nickel Steel Casting	1.4308	G-X5 Cr Ni 19-10	A 351 CF8
Chrome Nickel Steel Casting (Low Carbon)	1.4309	G-X2 Cr Ni 19-11	A 351 CF3
Chrome Nickel Molybdenum Steel Casting	1.4408	G-X5 Cr Ni Mo 19-11-2	A 351 CF8M
Chrome Nickel Molybdenum Steel Casting (L.C.)	1.4409	G-X2 Cr Ni Mo 19-11-2	A 351 CF3M
Austenitic Steel Casting	1.4500	G-X7 Cr Ni Mo Cu Nb 25-20	A 351 CN7M
Austenitic - Ferritic Steel Casting (Duplex)	1.4517	G-X2 Cr Ni Mo Cu N 25-6-3-3	A 890 CD4MCuN
Austenitic - Ferritic Steel Casting (S.D.)	1.4469	G-X2 Cr Ni Mo N 26-7-4	A 890 CE3MN
Martensitic Stainless Steel Casting	1.4317	G-X4 Cr Ni 13-4	A 352 CA6NM
Martensitic Stainless Steel Casting	1.4008	G-X7 Cr Ni Mo 12-1	A 217 CA15
Bronze Casting (Tinned)	2.1050.01	G-Cu Sn 10	B 427 C90700
Bronze Casting (Nickel Alloy)	2.0975.01	G-Cu Al10 Ni	B 148 C95500
Bronze Casting (Leaded)	2.1096.01	G-Cu Sn 5 Zn Pb	B 584 C83600
Chromium Steel	1.4021	X20 Cr13	A 276 Type 420
Chrome Steel (Heat Treatment)	1.4021	X20 Cr13	A 276 Type 420+QT
Chrome Nickel Steel	1.4301	X5 Cr Ni 18-10	A 276 Type 304
Chrome Nickel Molybdenum Steel (L.C.)	1.4404	X2 Cr Ni Mo 17-12-2	A 276 Type 316L
Duplex (Austenitic-Ferritic) Steel	1.4460	X3 Cr Ni Mo N 27-5-2	AISI 329
Duplex (Austenitic-Ferritic) Steel	1.4462	X2 Cr Ni Mo N 22-5-3	UNS S32205
Ductile Iron Casting	0.7050	EN-GJS-500- 7 -LT (GGG 50)	A 536 70-50-05



SECTIONAL VIEW



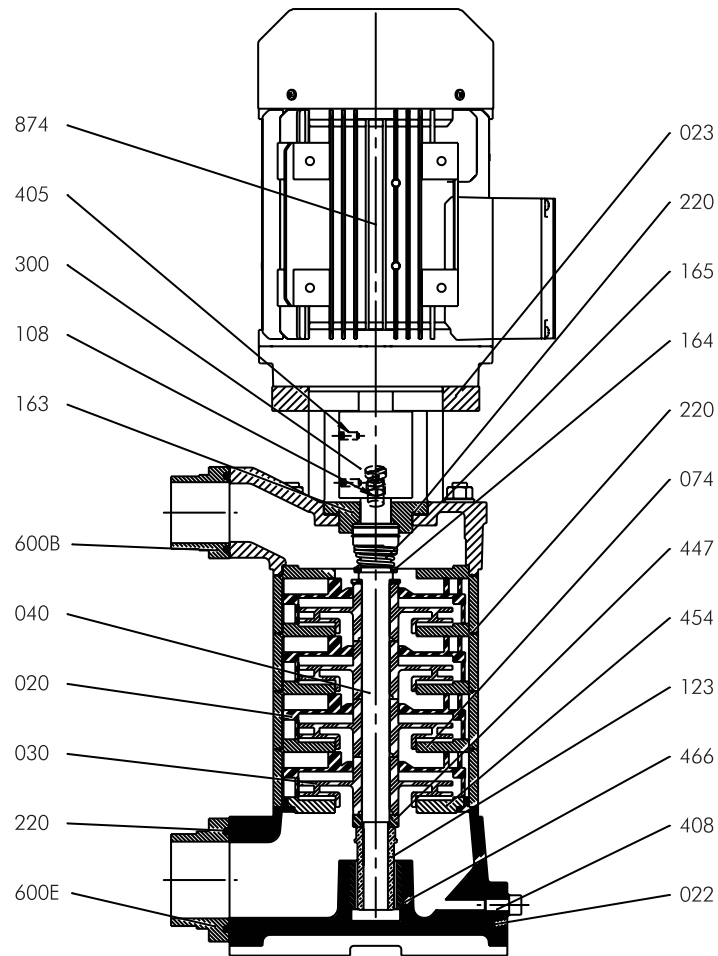
Part List

Discharge Casing	023
Shaft	040
Bearing	160
Stage cover	073
Diffuser	020
Impeller	030
Suction Bearing Housing	465
Suction Cover	454
Packing Housing	164
Oil Seal	099
Packing	165
Pin	139
Bolt	406
Imbus Bolt	408
Suction Casing	022
Suction Bed	466
Suction Flange	600 E
Discharge Flange	600 B
Trunk Pipe	446
Body Gasket	423
O-ring	220
Air Vent	108





SECTIONAL VIEW



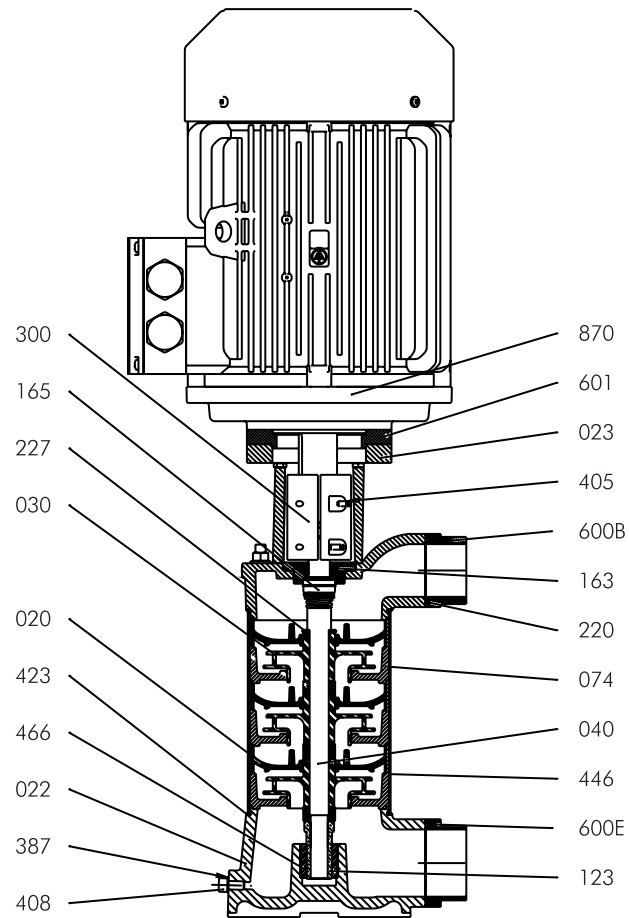
Part List

Suction Casing	022
Discharge Casing	023
Impeller	030
Diffuser	020
Level	074
Suction Cover	454
Suction Bearing	123
Mechanical Seal Cover	163
Shaft	040
Shaft Housing	447
Packing Housing	164
Packing	165
O-ring	220
Suction Bed	466
Motor	874
Suction Flange	600 E
Discharge Flange	600 B
Air Vent	108
Imbus Bolt	408
Grub Screw	405
Coupling	300





SECTIONAL VIEW



Part List

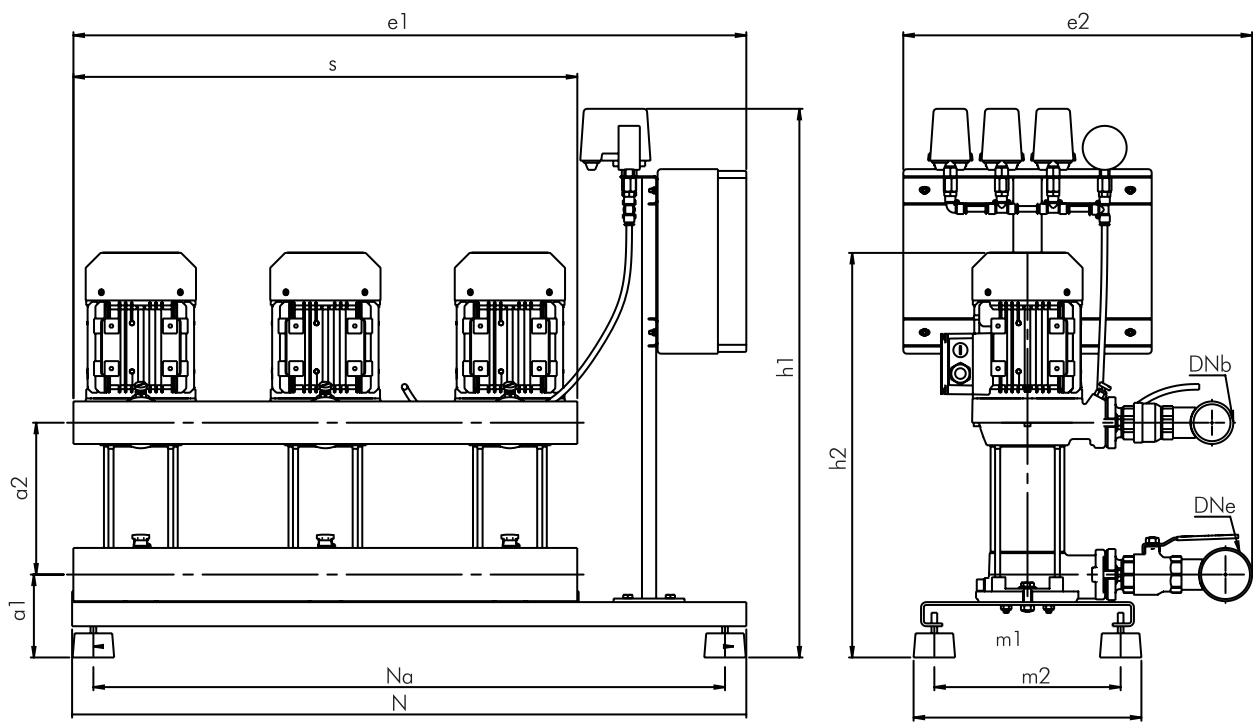
Suction Casing	022
Suction Bed	466
Level	074
diffuser	020
Impeller	030
Suction Bearing	123
Shaft	040
Discharge Casing	023
Mechanical Seal Cover	163
Motor Housing	601
Coupling	300
Mechanical Seal	165
Motor	870
Grub Screw	405
O-ring	220
Discharge Flange	600 B
Suction Flange	600 E
Body Gasket	423
Trunk Pipe	446
Copper Washer	387
Imbus Bolt	408







PUMP DIMENSIONS



General Dimensions

Pump Type	Number of Stages	Motor Power (kW)	Motor Speed (rpm)	DNe	DNb	a1	a2	s	h1	Na	N	e1	e2	m1	m2	h2
BSK-80X1	6	0,75	3000	32	32	111	213	379	684	348	348	403	401	188	135	565
BSK-80X1	8	1,1	3000	32	32	111	213	379	684	348	348	403	401	188	135	609
BSK-80X1	11	1,5	3000	32	32	111	213	379	684	348	348	403	401	188	135	675

General Dimensions

Pump Type	Number of Stages	Motor Power (kW)	Motor Speed (rpm)	DNe	DNb	a1	a2	h1	s	e1	N	Na	m1	m2	h2	e2
BSK-80X2	6	0,75	3000	50	40	112	213	760	450	692	623	565	191	132	565	423
BSK-80X2	8	1,1	3000	50	40	112	258	760	450	692	623	565	191	132	609	423
BSK-80X2	11	1,5	3000	50	40	112	323	760	450	692	623	565	191	132	675	423

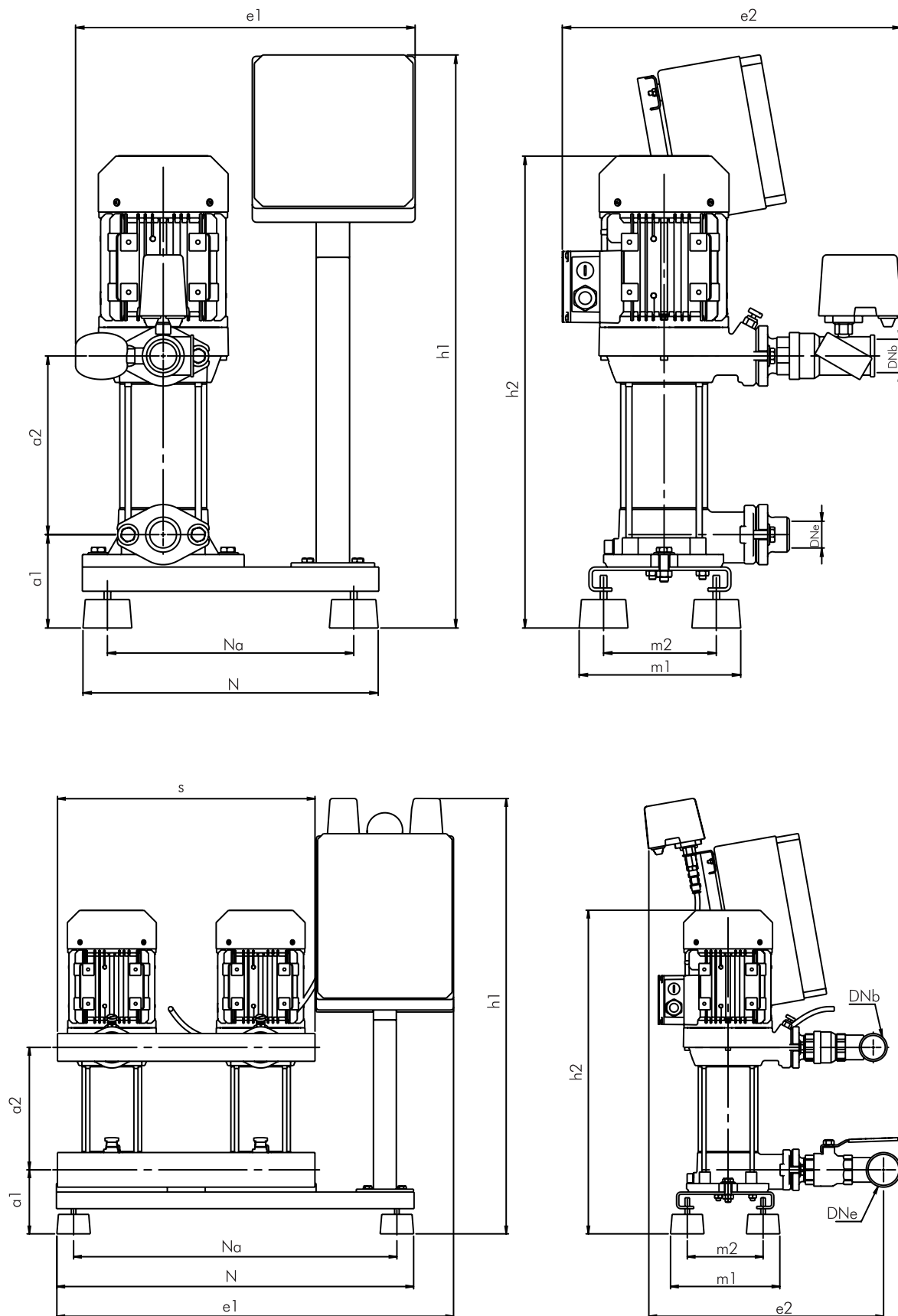
General Dimensions

Pump Type	Number of Stages	Motor Power (kW)	Motor Speed (rpm)	DNe	DNb	a1	a2	s	e1	N	Na	h1	m1	m2	h2	e2
BSK-80X3	6	0,75	3000	65	50	117	213	710	948	950	890	773	321	262	570	484
BSK-80X3	8	1,1	3000	65	50	117	257	710	948	950	890	773	321	262	618	484
BSK-80X3	11	1,5	3000	65	50	117	323	710	948	950	890	773	321	262	684	484



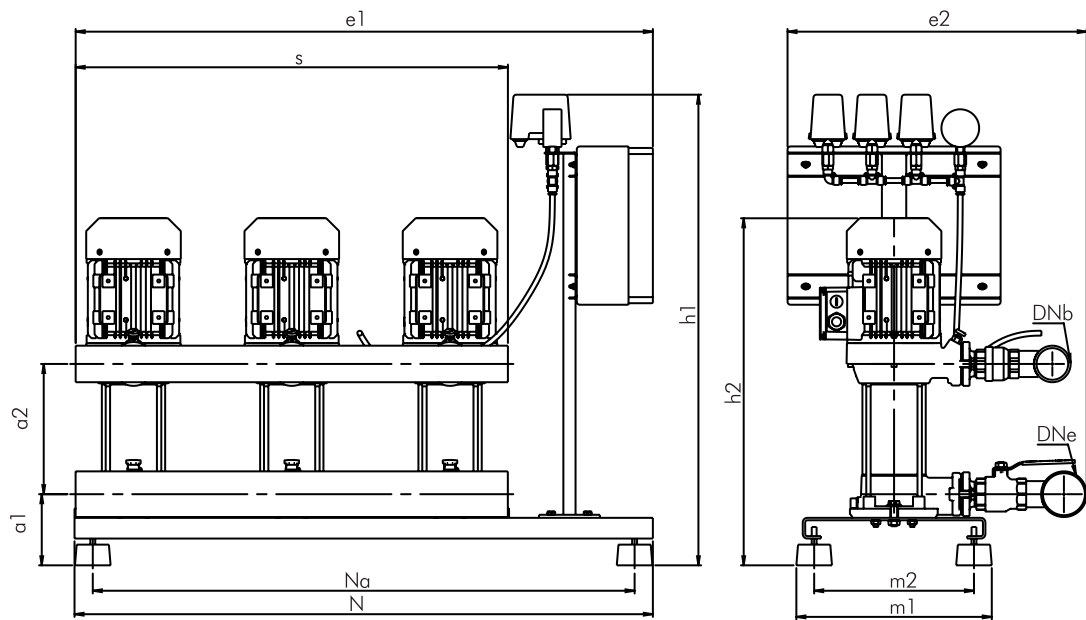


PUMP DIMENSIONS





PUMP DIMENSIONS



General Dimensions

Pump Type	Number of Stages	Motor Power (kW)	Motor Speed (rpm)	DNe	DNb	a1	a2	s	h1	Na	N	e1	e2	m1	m2	h2
BSS-90X1	4	1.5	3000	32	32	111	193	400	680	315	373	415	416	225	172	584
BSS-90X1	6	2,2	3000	32	32	111	249	400	680	315	373	415	416	225	172	640
BSS-90X1	7	3	3000	32	32	111	277	400	680	315	373	415	416	225	172	668
BSS-90X1	8	3	3000	32	32	111	305	400	680	315	373	415	416	225	172	696
BSS-90X1	9	3	3000	32	32	111	333	400	680	315	373	415	416	225	172	724

General Dimensions

Pump Type	Number of Stages	Motor Power (kW)	Motor Speed (rpm)	DNe	DNb	a1	a2	h1	s	e1	N	Na	m1	m2	h2	e2
BSS-90X2	4	1.5	3000	50	40	111	193	756	450	719	663	605	221	162	584	584
BSS-90X2	6	2,2	3000	50	40	111	249	756	450	719	663	605	221	162	640	640
BSS-90X2	7	3	3000	50	40	111	277	756	450	719	663	605	221	162	668	668
BSS-90X2	8	3	3000	50	40	111	305	756	450	719	663	605	221	162	172	696
BSS-90X2	9	3	3000	50	40	111	333	756	450	719	663	605	221	162	172	724

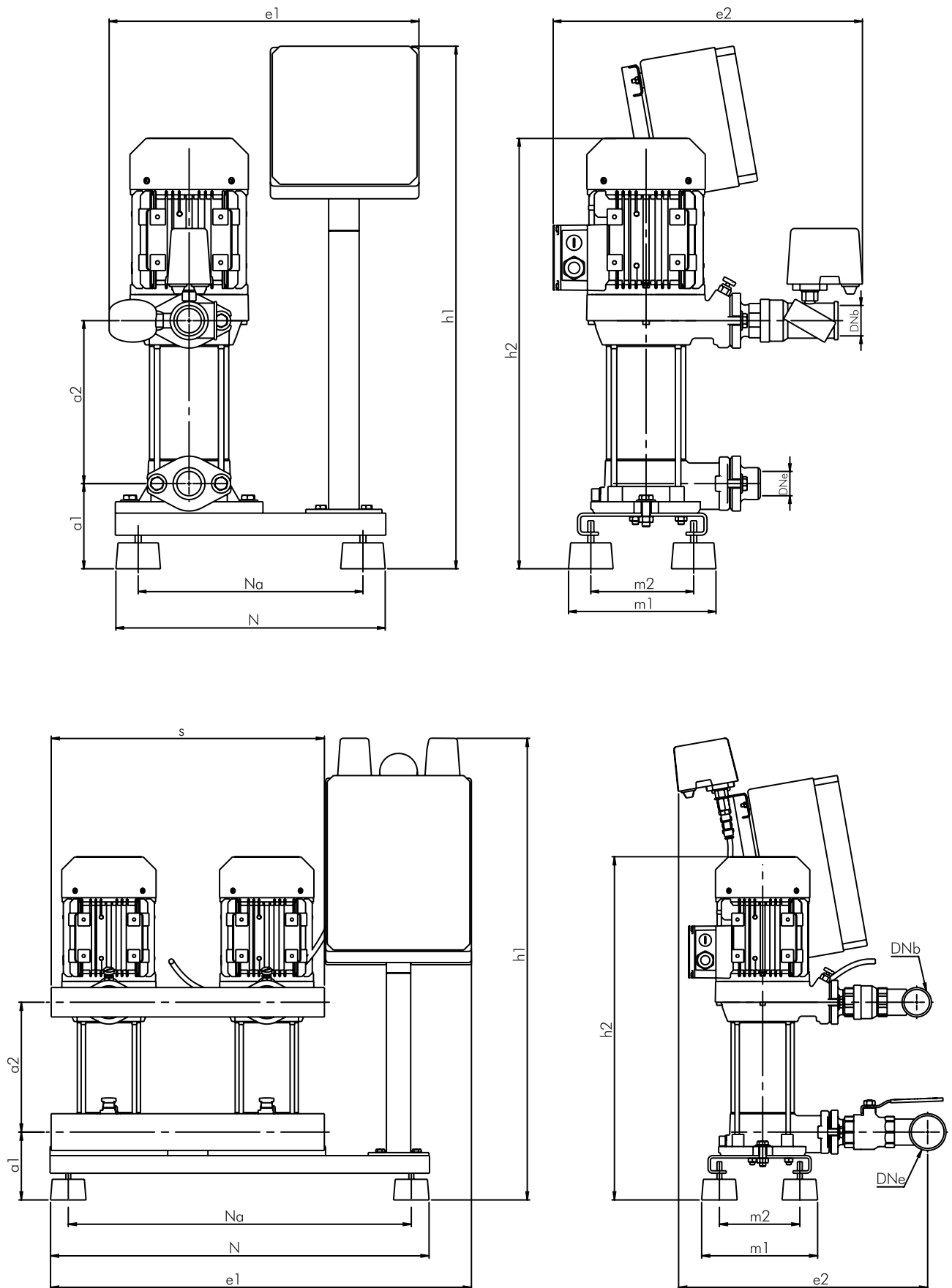
General Dimensions

Pump Type	Number of Stages	Motor Power (kW)	Motor Speed (rpm)	DNe	DNb	a1	a2	s	e1	N	Na	h1	m1	m2	h2	e2
BSS-90X3	4	1.5	3000	80	65	121	193	710	939	948	890	773	321	262	594	500
BSS-90X3	6	2,2	3000	80	65	121	249	710	939	948	890	773	321	262	650	500
BSS-90X3	7	3	3000	80	65	121	277	710	939	948	890	773	321	262	678	500
BSS-90X3	8	3	3000	80	65	121	305	710	939	948	890	773	321	262	706	500
BSS-90X3	9	3	3000	80	65	121	333	710	939	948	890	773	321	262	734	500



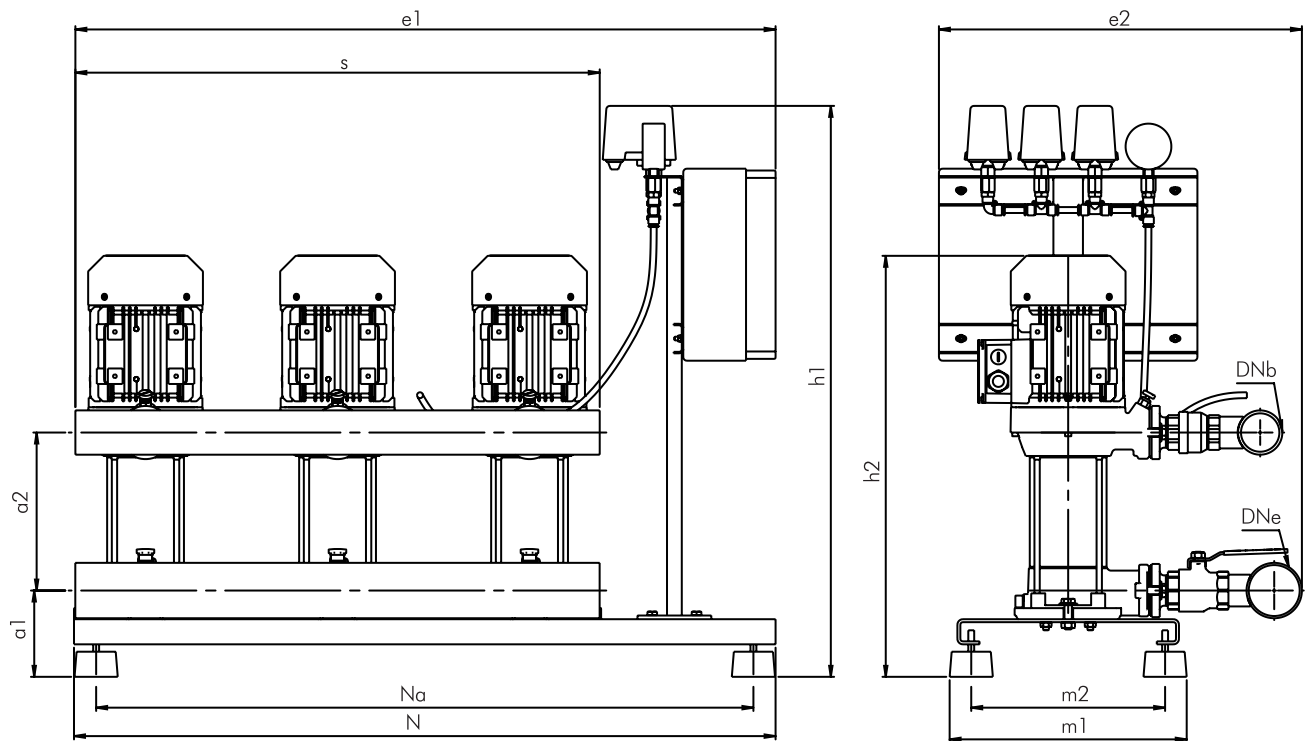


PUMP DIMENSIONS





PUMP DIMENSIONS



General Dimensions

Pump Type	Number of Stages	Motor Power (kW)	Motor Speed (rpm)	DNe	DNb	a1	a2	h1	s	Na	N	e1	e2	m1	m2	h2
BSL-100	4	4 compact	3000	40	40	118	220	679	416	345	398	423	468	235	182	662
BSL-100	5	4 compact	3000	40	40	118	253	679	416	345	398	423	468	235	182	695
BSL-100	6	5,5 compact	3000	40	40	118	258	679	416	345	398	423	468	235	182	728
BSL-100	7	4 compact	3000	40	40	118	2	679	416	345	398	423	468	235	182	662

General Dimensions

Pump Type	Number of Stages	Motor Power (kW)	Motor Speed (rpm)	DNe	DNb	a1	a2	h1	s	e1	N	Na	m1	m2	h2	e2
BSL-100x2	4	4 compact	3000	65	50	123	220	760	550	810	733	675	240	181	667	502
BSL-100x2	5	4 compact	3000	65	50	123	253	760	550	810	733	675	240	181	700	460
BSL-100x2	6	5,5 compact	3000	65	50	123	258	753	550	810	733	675	240	181	733	491
BSL-100x2	7	5,5 compact	3000	65	50	123	319	760	550	810	733	675	240	181	766	490

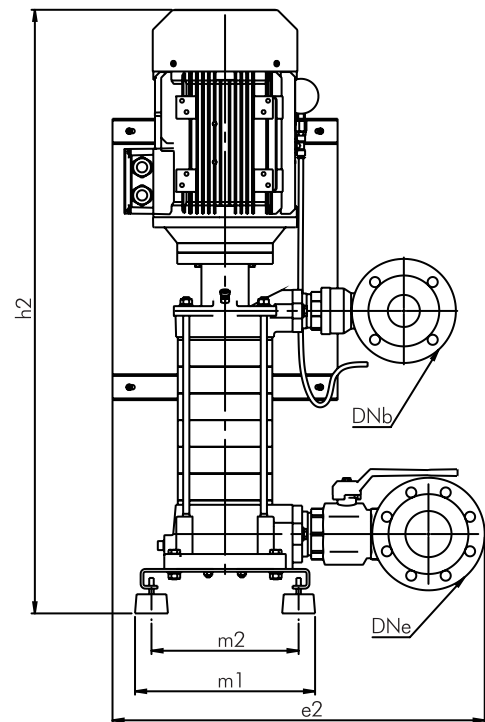
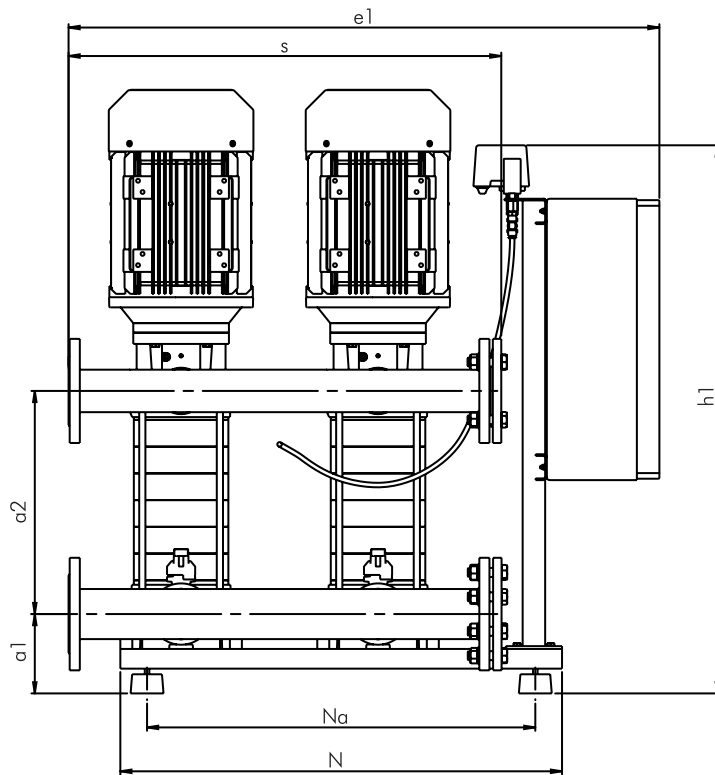
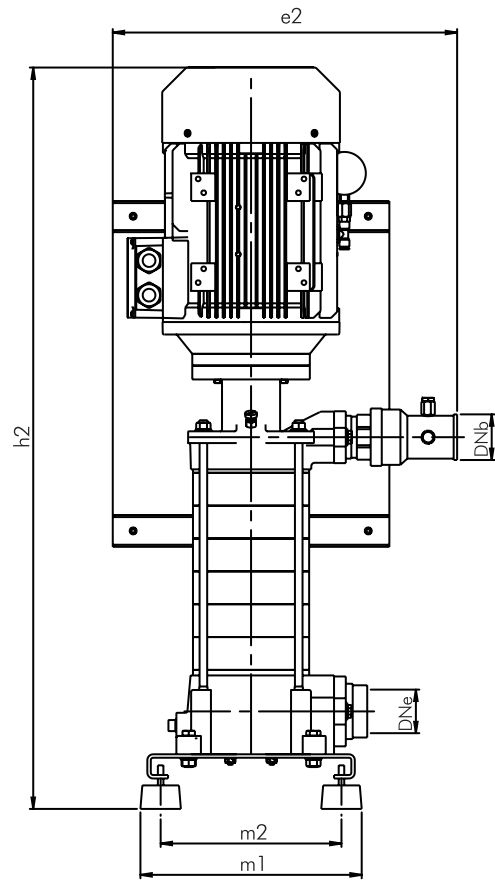
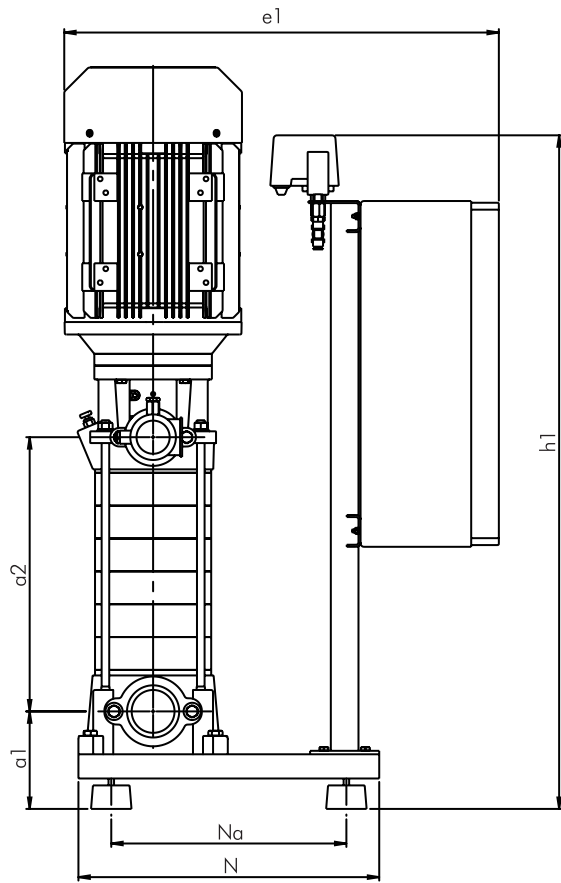
General Dimensions

Pump Type	Number of Stages	Motor Power (kW)	Motor Speed (rpm)	DNe	DNb	a1	a2	s	e1	N	Na	h1	m1	m2	h2	e2
BSL-100x3	4	4 compact	3000	80	65	128	220	830	1057	948	890	773	321	262	672	557
BSL-100x3	5	4 compact	3000	80	65	128	253	830	1036	948	890	773	321	262	705	557
BSL-100x3	6	5,5 compact	3000	80	65	128	258	830	1036	948	890	773	321	262	738	557
BSL-100x3	7	5,5 compact	3000	80	65	128	319	830	1043	948	890	773	321	262	771	557



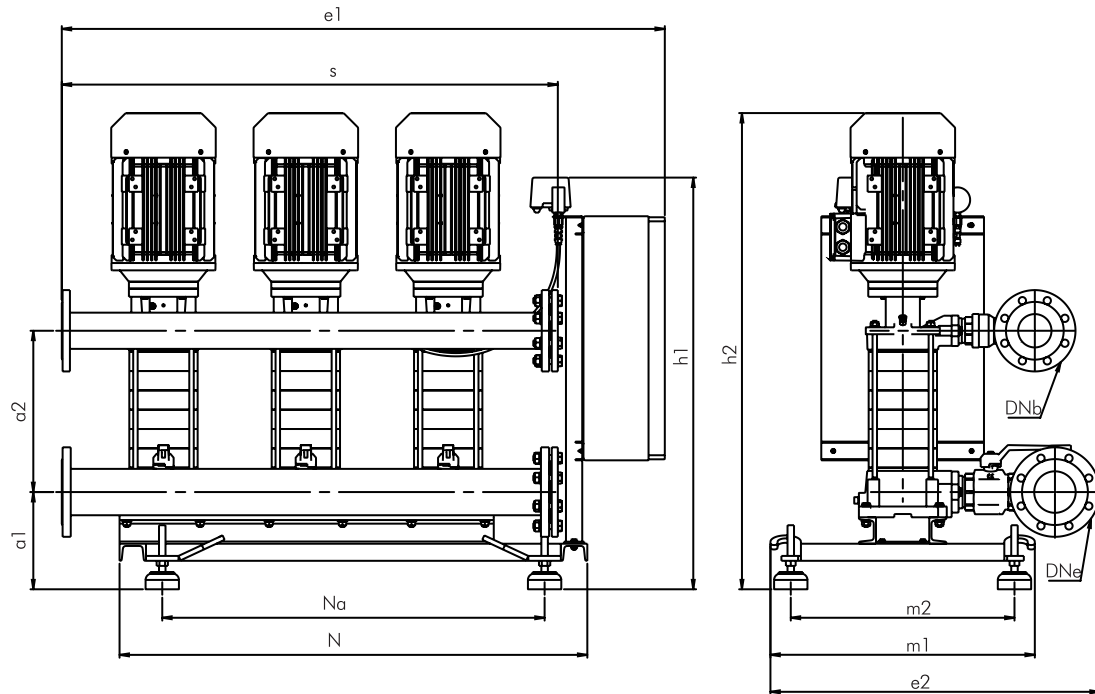


PUMP DIMENSIONS





PUMP DIMENSIONS



General Dimensions															
Pump Type	Number of Stages	Motor Power (kW)	Motor Speed (rpm)	DNc	DNb	a1	a2	N	Na	e1	h1	m1	m2	h2	e2
BSL50-Ax1	4	3	3000	65	50	141	301	435	340	596	974	314	261	855	498
BSL50-Ax1	5	4 compact	3000	65	50	141	346	435	340	607	974	314	261	923	498
BSL50-Ax1	6	5,5 compact	3000	65	50	141	396	435	340	628	974	314	261	1072	498
BSL50-Ax1	7	7,5 compact	3000	65	50	141	444	435	340	628	974	314	261	1120	498
BSL50-Ax1	8	11 compact	3000	65	50	141	491	435	340	628	974	314	261	1167	498
BSL50-Ax1	10	11 compact	3000	65	50	141	586	435	340	628	974	314	261	1262	498

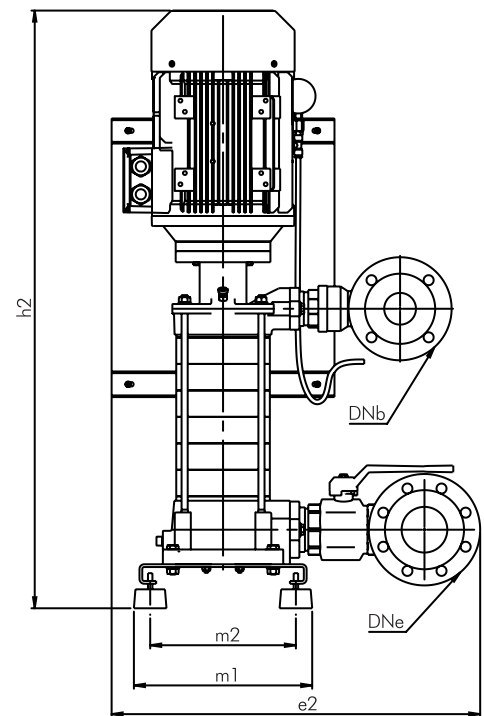
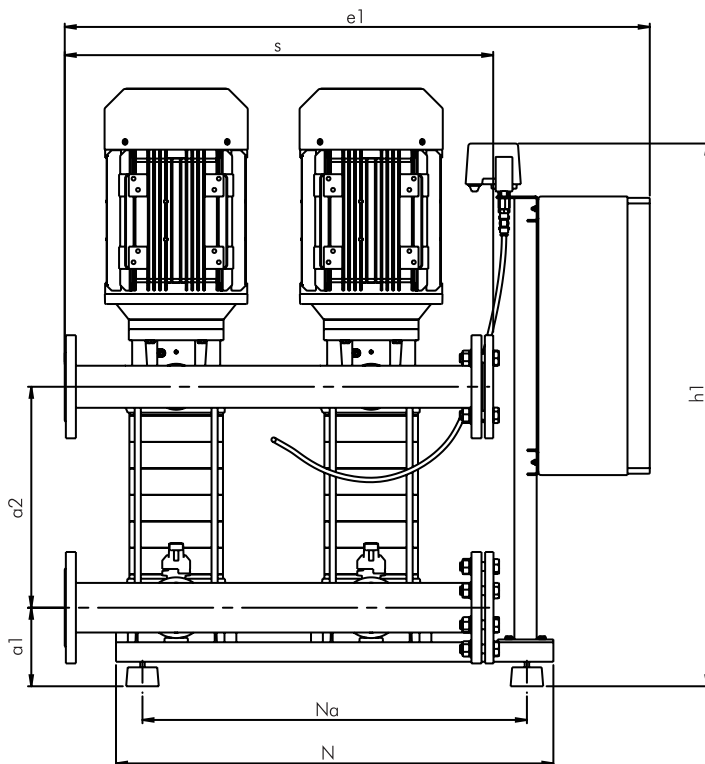
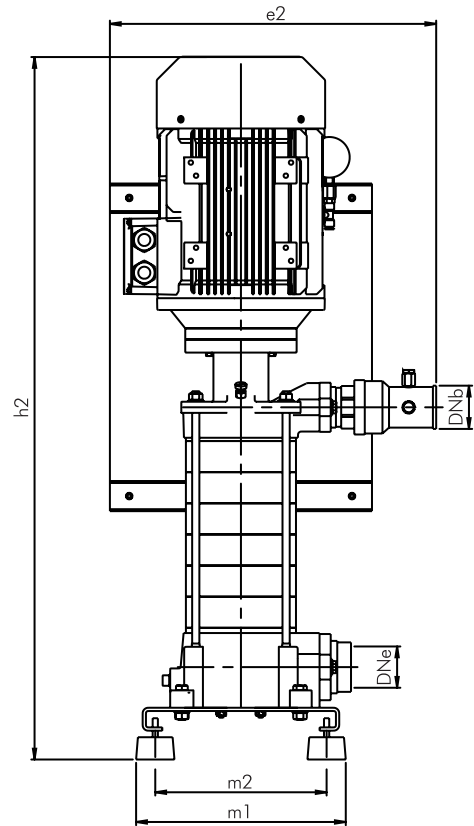
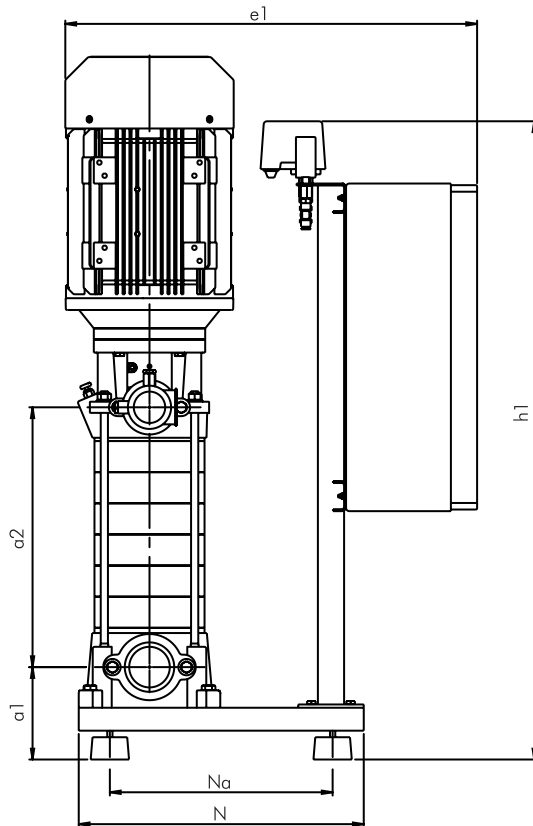
General Dimensions																
Pump Type	Number of Stages	Motor Power (kW)	Motor Speed (rpm)	DN _e	DN _b	a ₁	a ₂	s	e ₁	h ₁	Na	N	m ₁	m ₂	h ₂	e ₂
BSL50-Ax2	4	3	3000	80	65	141	304	769	1050	974	690	785	320	261	855	653
BSL50-Ax2	5	4 compact	3000	80	65	141	349	769	1050	974	690	785	320	261	923	653
BSL50-Ax2	6	5,5 compact	3000	80	65	141	396	769	1050	974	690	785	320	261	1072	653
BSL50-Ax2	7	7,5 compact	3000	80	65	141	446	769	1050	974	690	785	320	261	1119	653
BSL50-Ax2	8	11 compact	3000	80	65	141	493	769	1050	974	690	785	320	261	1167	658
BSL50-Ax2	10	11 compact	3000	80	65	141	588	769	1050	974	690	785	320	261	1262	658

General Dimensions																
Pump Type	Number of Stages	Motor Power (kW)	Motor Speed (rpm)	DN _e	DN _b	a ₁	a ₂	N	N _a	s	e ₁	h ₁	m ₁	m ₂	h ₂	e ₂
BSL50-Ax3	4	3	3000	100	80	239	301	1150	940	1219	1482	1012	650	550	953	807
BSL50-Ax3	5	4 compact	3000	100	80	239	349	1150	940	1219	1482	1012	650	550	1021	807
BSL50-Ax3	6	5,5 compact	3000	100	80	239	396	1150	940	1219	1482	1012	650	550	1170	807
BSL50-Ax3	7	7,5 compact	3000	100	80	239	444	1150	940	1219	1482	1012	650	550	1217	807
BSL50-Ax3	8	11 compact	3000	100	80	239	491	1150	940	1219	1482	1212	650	550	1265	807
BSL50-Ax3	10	11 compact	3000	100	80	239	586	1150	940	1219	1482	1212	650	550	1360	807



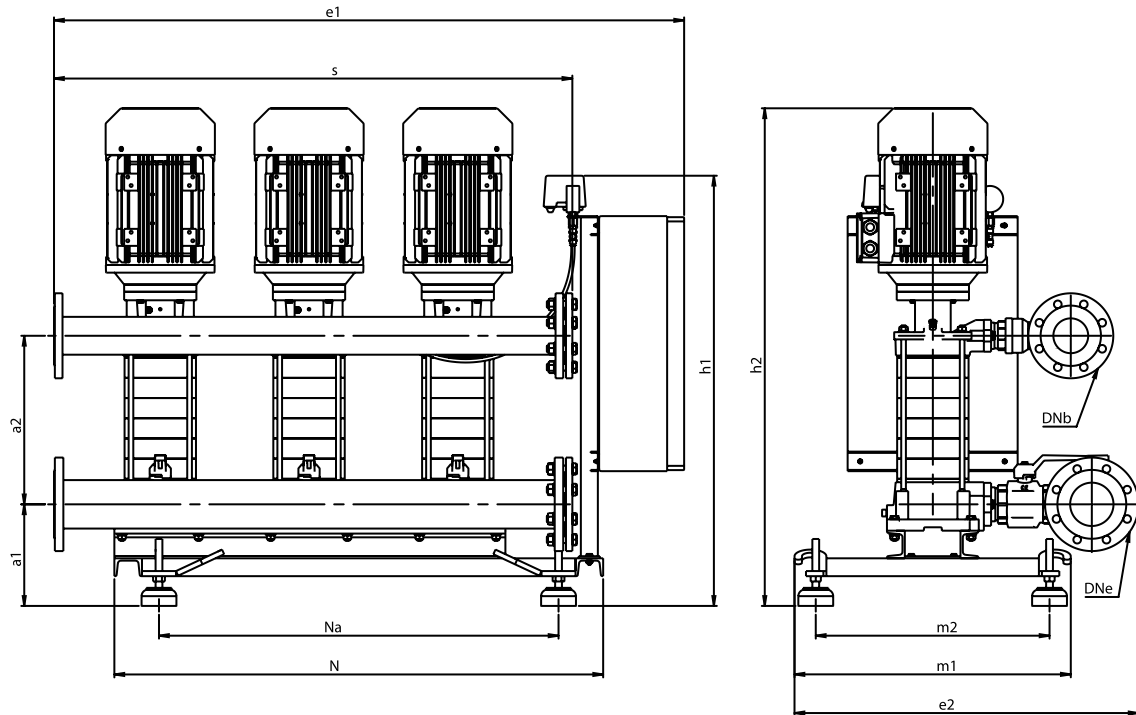


PUMP DIMENSIONS





PUMP DIMENSIONS



General Dimensions															
Pump Type	Number of Stages	Motor Power (kW)	Motor Speed (rpm)	DNe	DNb	a1	a2	N	Na	e1	h1	m1	m2	h2	e2
BSL50-Bx1	3	4 (Compact)	3000	65	50	141	254	435	340	500	974	320	261	828	498
BSL50-Bx1	4	5,5 (Compact)	3000	65	50	141	301	435	340	500	974	320	261	977	498
BSL50-Bx1	5	7,5 (Compact)	3000	65	50	141	349	435	340	500	974	320	261	1024	498
BSL50-Bx1	6	7,5 (Compact)	3000	65	50	141	396	435	340	500	974	320	261	1072	498
BSL50-Bx1	7	11 (Compact)	3000	65	50	141	444	435	340	500	974	320	261	1119	498

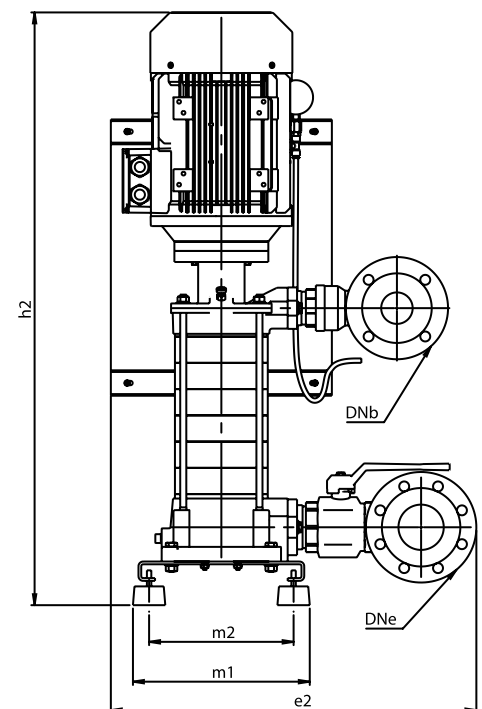
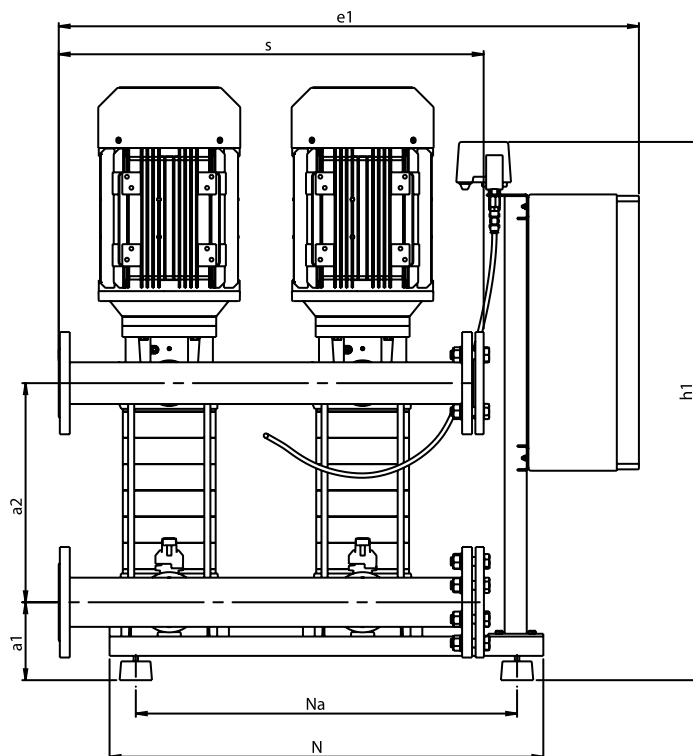
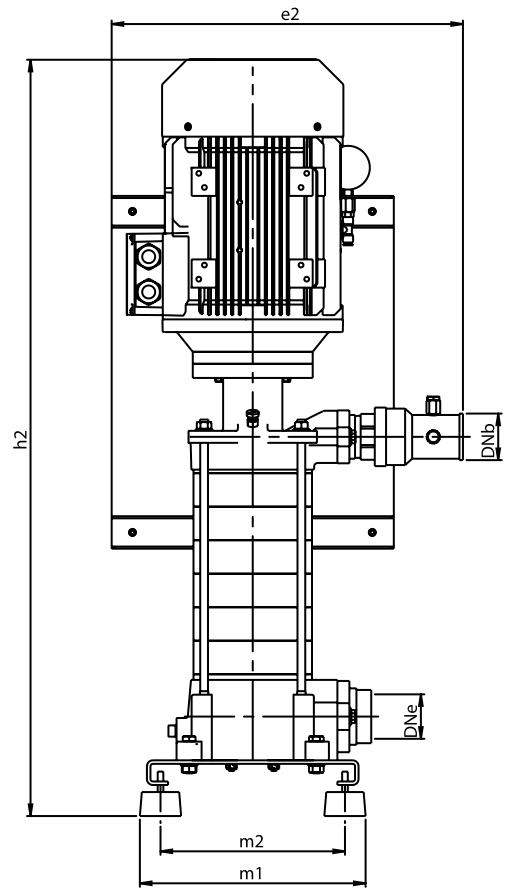
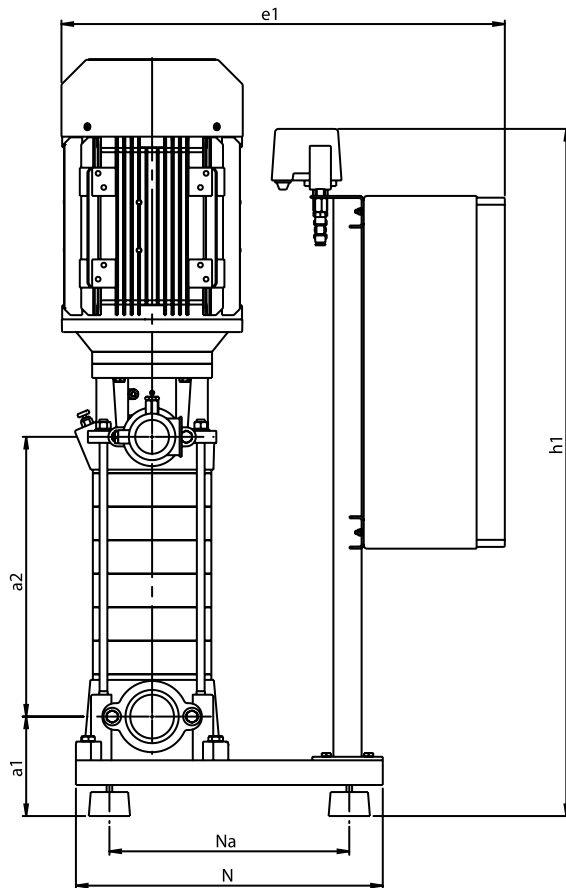
General Dimensions																
Pump Type	Number of Stages	Motor Power (kW)	Motor Speed (rpm)	DNe	DNb	a1	a2	s	e1	h1	Na	N	m1	m2	h2	e2
BSL50-Bx2	3	4 (Compact)	3000	80	65	141	254	769	1050	974	690	785	320	261	828	653
BSL50-Bx2	4	4 (Compact)	3000	80	65	141	301	769	1050	974	690	785	320	261	977	653
BSL50-Bx2	5	5,5 (Compact)	3000	80	65	141	349	769	1050	974	690	785	320	261	1024	653
BSL50-Bx2	6	7,5 (Compact)	3000	80	65	141	396	769	1050	974	690	785	320	261	1072	653
BSL50-Bx2	7	11 (Compact)	3000	80	65	141	444	769	1050	974	690	785	320	261	1119	658

General Dimensions																
Pump Type	Number of Stages	Motor Power (kW)	Motor Speed (rpm)	DNe	DNb	a1	a2	N	Na	s	e1	h1	m1	m2	h2	e2
BSL50-Bx3	3	4 (Compact)	3000	100	80	239	254	1150	940	1219	1482	1012	650	550	926	807
BSL50-Bx3	4	4 (Compact)	3000	100	80	239	301	1150	940	1219	1482	1012	650	550	1075	807
BSL50-Bx3	5	5,5 (Compact)	3000	100	80	239	349	1150	940	1219	1482	1012	650	550	1122	807
BSL50-Bx3	6	7,5 (Compact)	3000	100	80	239	396	1150	940	1219	1482	1012	650	550	1170	807
BSL50-Bx3	7	11 (Compact)	3000	100	80	239	444	1150	940	1219	1482	1012	650	550	1217	807



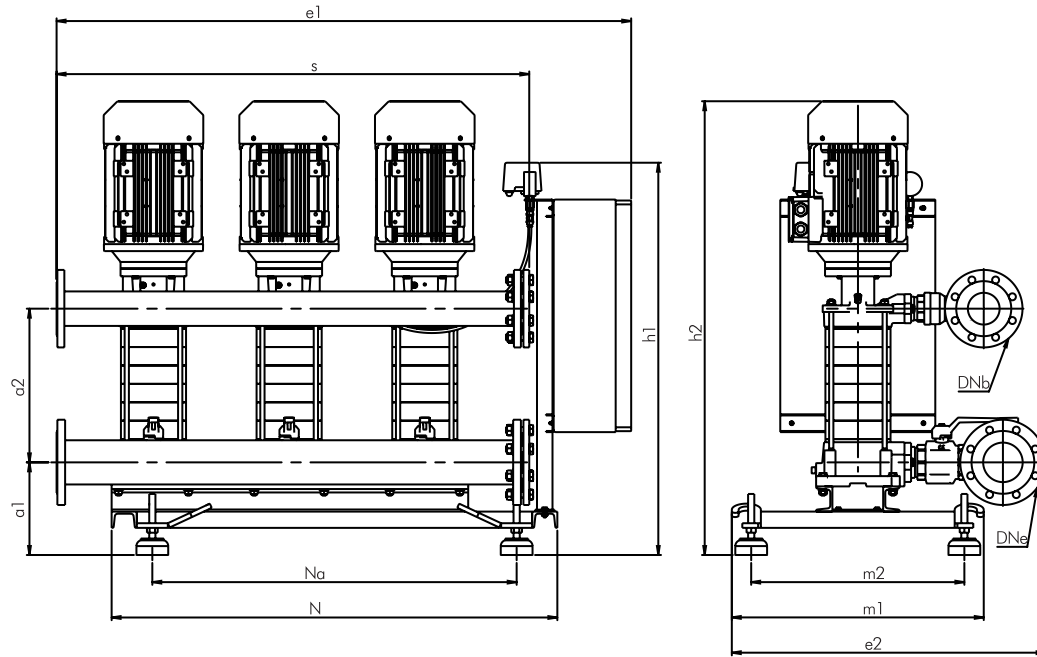


PUMP DIMENSIONS





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General Dimensions

Pump Type	Number of Stages	Motor Power (kW)	Motor Speed (rpm)	DNe	DNb	a1	a2	N	Na	e1	h1	m1	m2	h2	e2
BSL-Cx1	3	5.5 (Compact)	3000	65	50	141	254	435	340	628	974	320	261	929	498
BSL-Cx1	4	7.5 (Compact)	3000	65	50	141	301	435	340	628	974	320	261	977	498
BSL-Cx1	5	11 (Compact)	3000	65	50	141	349	435	340	628	974	320	261	1024	498
BSL-Cx1	6	11 (Compact)	3000	65	50	141	396	435	340	628	974	320	261	1072	498
BSL-Cx1	7	15 (Compact)	3000	65	50	141	444	435	340	628	974	320	261	1230	498
BSL-Cx1	8	15 (Compact)	3000	65	50	141	491	435	340	628	974	320	261	1277	498

General Dimensions

Pump Type	Number of Stages	Motor Power (kW)	Motor Speed (rpm)	DNe	DNb	a1	a2	s	e1	h1	Na	N	m1	m2	h2	e2
BSL-Cx2	3	7.5 (Compact)	3000	80	65	141	254	769	1050	974	690	785	320	261	929	653
BSL-Cx2	4	11 (Compact)	3000	80	65	141	301	769	1050	974	690	785	320	261	977	653
BSL-Cx2	5	11 (Compact)	3000	80	65	141	349	769	1050	974	690	785	320	261	1024	658
BSL-Cx2	6	11 (Compact)	3000	80	65	141	396	769	1050	974	690	785	320	261	1072	658
BSL-Cx2	7	15 (Compact)	3000	80	65	141	444	769	1050	974	690	785	320	261	1230	653
BSL-Cx2	8	15 (Compact)	3000	80	65	141	444	769	1050	974	690	785	320	261	1227	653

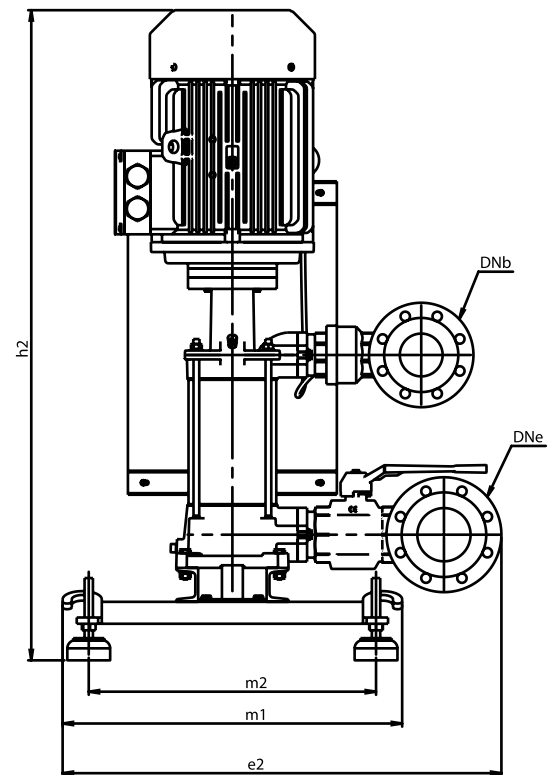
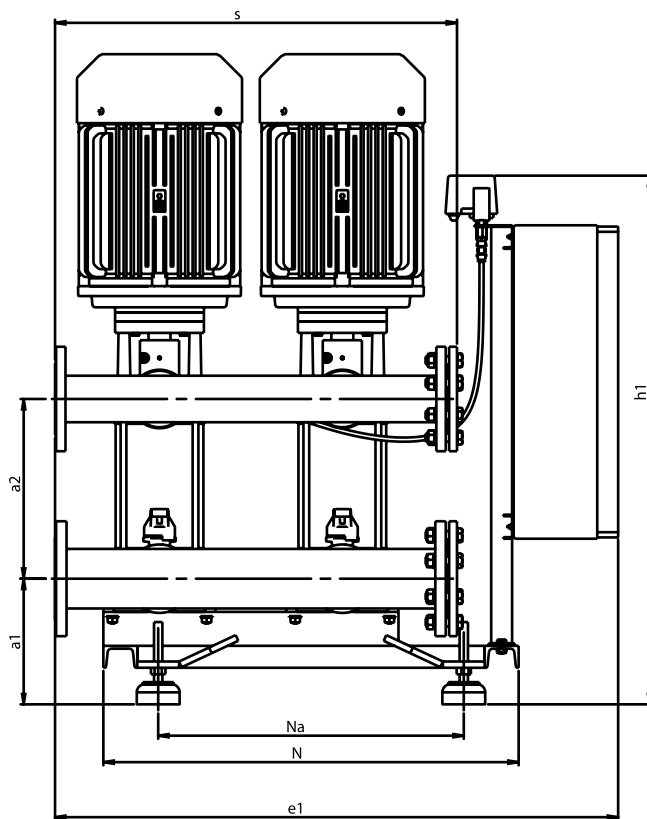
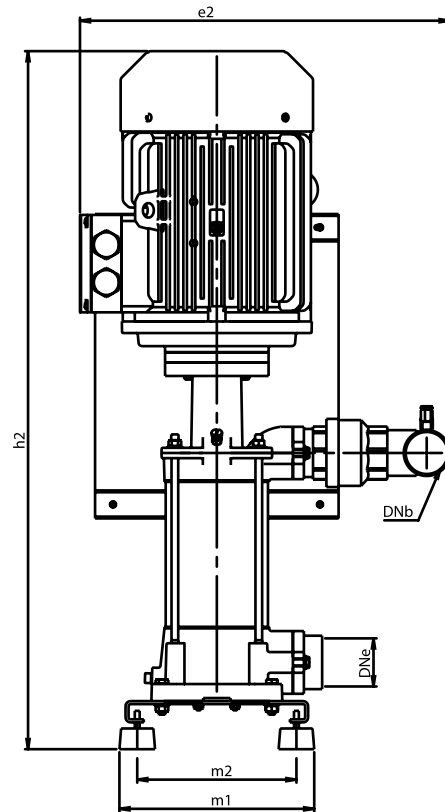
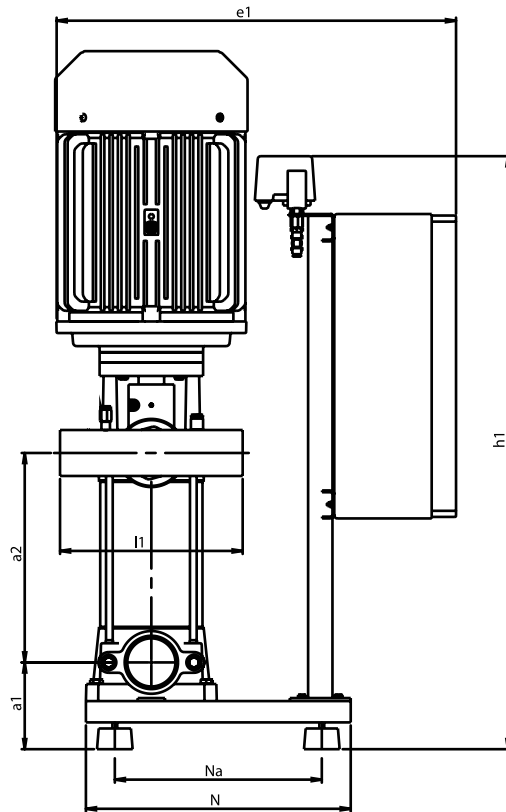
General Dimensions

Pump Type	Number of Stages	Motor Power (kW)	Motor Speed (rpm)	DNe	DNb	a1	a2	N	Na	s	e1	h1	m1	m2	h2	e2
BSL-Cx3	3	5.5 (Compact)	3000	100	80	239	254	1150	940	1219	1482	1012	650	550	1027	683
BSL-Cx3	4	5.5 (Compact)	3000	100	80	239	254	1150	940	1219	1482	1012	650	550	1027	683
BSL-Cx3	5	5.5 (Compact)	3000	100	80	239	254	1150	940	1219	1482	1012	650	550	1027	683
BSL-Cx3	6	5.5 (Compact)	3000	100	80	239	254	1150	940	1219	1482	1012	650	550	1027	683
BSL-Cx3	7	5.5 (Compact)	3000	100	80	239	254	1150	940	1219	1482	1012	650	550	1027	683
BSL-Cx3	8	5.5 (Compact)	3000	100	80	239	254	1150	940	1219	1482	1012	650	550	1027	683



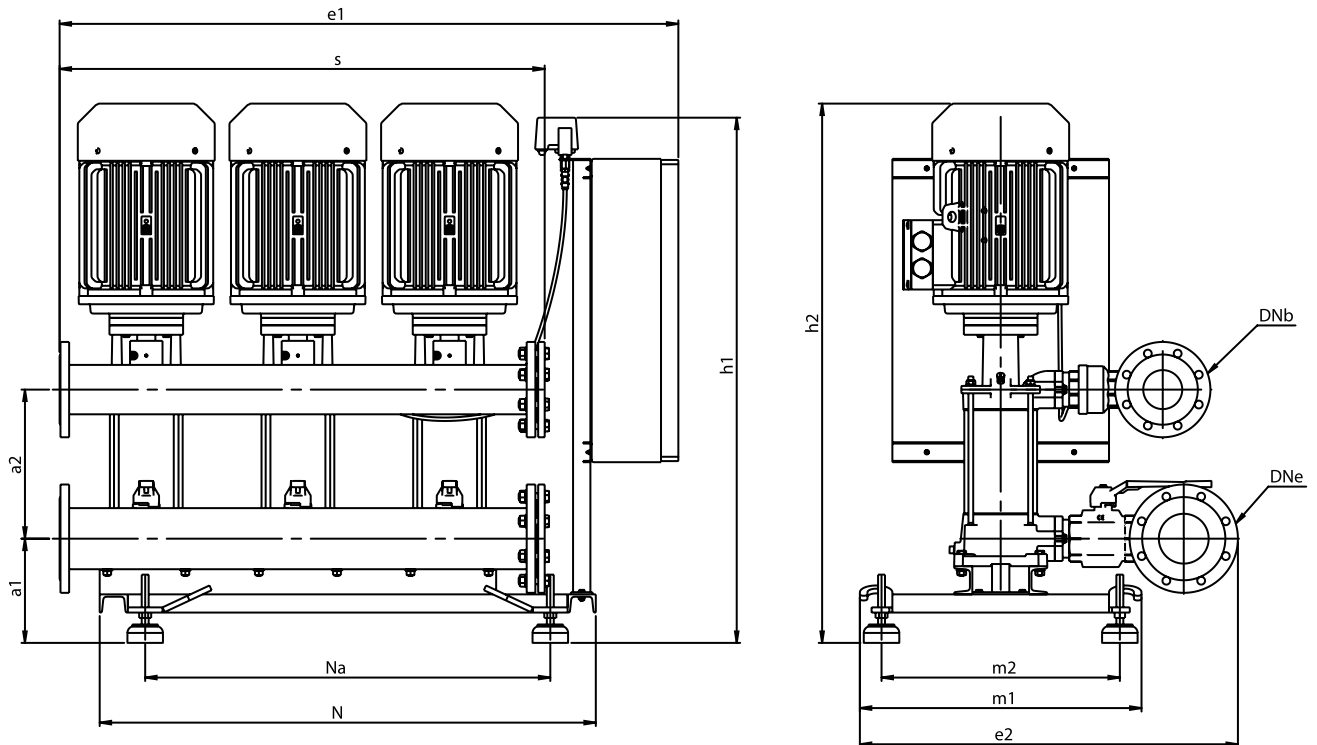


PUMP DIMENSIONS





PUMP DIMENSIONS



General Dimensions

Pump Type	Number of Stages	Motor Power (kW)	Motor Speed (rpm)	DNe	DNb	a1	a2	s	e1	Na	N	h1	m1	m2	h2	e2
BSL-Dx1	3	11	3000	80	65	142	344	300	658	340	435	974	320	261	1145	600
BSL-Dx1	4	15	3000	80	65	142	418	300	658	340	435	974	320	261	1218	600
BSL-Dx1	5	15	3000	80	65	142	492	300	658	340	435	974	320	261	1292	600
BSL-Dx1	6	18,5	3000	80	65	142	566	300	658	340	435	974	320	261	1366	600

General Dimensions

Pump Type	Number of Stages	Motor Power (kW)	Motor Speed (rpm)	DNe	DNb	a1	a2	s	e1	h1	Na	N	m1	m2	h2	e2
BSL-Dx2	3	11	3000	100	80	240	344	769	1078	1012	585	795	650	550	1242	838
BSL-Dx2	4	15	3000	100	80	240	418	769	1078	1012	585	795	650	550	1316	838
BSL-Dx2	5	15	3000	100	80	240	492	769	1078	1012	585	795	650	550	1390	838
BSL-Dx2	6	18,5	3000	100	80	240	566	769	1078	1012	585	795	650	550	1464	838

General Dimensions

Pump Type	Number of Stages	Motor Power (kW)	Motor Speed (rpm)	DNe	DNb	a1	a2	N	Na	s	e1	h1	m1	m2	h2	e2
BSL-Dx3	3	11	3000	125	100	240	344	1145	935	1119	1428	1212	650	550	1240	870
BSL-Dx3	4	15	3000	125	100	240	418	1145	935	1119	1428	1212	650	550	1316	870
BSL-Dx3	5	15	3000	125	100	240	492	1145	935	1119	1428	1212	650	550	1390	870
BSL-Dx3	6	18,5	3000	125	100	240	566	1145	935	1119	1428	1212	650	550	1464	870

