

Volute casing pumps



ZLND 32 - 125 ... 300 - 500

TECHNICAL DATA

Flow:	max. 1800 m ³ /h
Head:	max. 140 m
Speed:	max. 3600 rpm
Material:	cast iron (0B,0C,0E) and stainless steel (4B)
Temperature:	max. 170 °C depending on the shaft sealing and material execution.
Casing Pressure:	material design 4B PN 16 0B, 0C, 0E PN 16 / 10 ¹⁾ / 14 ²⁾
Shaft sealing:	mechanical seal or stuffing box
Flange connections:	material design 4B DIN 2501 PN 16 0B, 0C, 0E DIN 2501 PN 16 / 10 ³⁾
Direction of rotation:	clockwise when looking at the pump from the drive end.



APPLICATION

Volute casing pumps of the ZLN range (meeting DIN 24255 / EN 733 and ISO 9908) are used when clear or turbid liquids free from solid particles are to be pumped. Application areas for pumps in this range include:

Automobile, mechanical and general engineering industries
Food and beverage industry
Pharmaceutical industry
Paint industry
Plastic and rubber industry
Iron and non-ferrous metal industry
Paper and pulp industry
Textile industry
Building and construction industry
Heating and air conditioning
Drainage
Water supply
Irrigation

A range of materials is available to meet the specific needs of customers. For applications not covered by this pump range we offer the ISOchem range.

DESIGN

Horizontal, single-stage volute casing pumps with connections and main dimensions to DIN 24255 / EN 733, plus 19 additional sizes. The design of the pump allows the complete drive unit to be withdrawn from the casing without disturbing the attached pipe work. If a spacer type coupling is used, it is also unnecessary to disconnect the motor.

The range covers 50 sizes with only 5 different bearing brackets.

CONSTRUCTION

Casing pressure:

Material 4B:	max 16 bar from - 40 °C to +120 °C max 14 bar from 120°C up to +170 °C
Material 0B, 0C, 0E:	max 16/10 ¹⁾ /14 ²⁾ bar from - 20 °C to +120 °C max 14/9 ¹⁾ /8 ²⁾ bar from 120 °C up to +170 °C

Max. casing pressure= inlet pressure + delivery head at zero flow

Please note: The relevant technical regulations and safety rules must be observed.

Flanges location:

Axial suction flange, discharge flange radially upwards.

Flanges:

Material design 4B: Complies with DIN 2543 PN 16
Material design 0B, 0C, 0E: DIN 2533 PN 16 / 2532 PN 10³⁾
Flanges drilled according to ANSI 150 can be supplied.

Bearings:

Bearing brackets 25, 35 and 45: Two ball bearings, lifetime greased (2Z), design code B, or oil lubrication, design code C.
Bearing brackets 55 and 65: One double row angular contact bearing on pump side, plus one ball bearing on drive side, grease lubricated S or oil lubricated T.
Oil lubrication configurations with CLO (Constant Level Oiler) can be supplied.

Shaft sealing:

Shaft sealing either by stuffing box or mechanical seal.
Code 041: Self-sealed, uncooled packing rings
Code 052: Uncooled packing rings, external sealing liquid
Code AF3: Balanced mechanical seal, seal face materials SiC/Carbon, elastomer EPDM
Code BJ3: Unbalanced bellows mechanical seal, seal face materials SiC/Carbon, elastomer EPDM
Code C23: Unbalanced bellows mechanical seal, seal face materials SiC/Carbon, elastomer EPDM
Code AFS: Balanced mechanical seal, seal face materials SiC/ SiC, elastomer FPM (Viton)
Code BJS: Unbalanced bellows mechanical seal, seal face materials SiC/ SiC, elastomer FPM (Viton)
Code C2S: Unbalanced bellows mechanical seal, seal face materials SiC/ SiC, elastomer FPM (Viton)
Code AFK: Balanced mechanical seal, seal face materials SiC/carbon, elastomer FPM (Viton) double PTFE (Teflon) wrapped
Code BJJ: Unbalanced bellows mechanical seal, seal face materials SiC/Carbon, elastomer FPM (Viton)
Code C2J: Unbalanced bellows mechanical seal, seal face materials SiC/Carbon, elastomer FPM (Viton)
Codes AX3, AXS, AXK: are equivalent to AF3, AFS, AFK plus quench
Codes AY3, AYS, AYK: are equivalent to AF3, AFS, AFK plus heating
Code A93, A9S, A9K: are equivalent to AF3, AFS, AFK plus external flushing

As an option, Code 051 (as 052, but with inlet and outlet) and other sealing execution can be supplied on request.

¹⁾ From 80-400 to 300-500 except 150-500

²⁾ 150-500

³⁾ 150-200, 150-250 and 200-250

Material design:

Item	Component	Material				Construction					
		Mat. N°	DIN denomination	ISO EN denomination	US Material		0B	0C	0E	4B	
					ASTM Standard	AISI					
10.20	Volute casing	EN-JL 1040 1.4408	GG-25 GX6CrNiMo18 10	EN-GJL 250 GX5CrNiMo19-11-2	A 278 Cl. 30 A 351 CF8M	316	x	x	x	x	
16.10	Casing cover	EN-JL 1040 1.4408	GG-25 GX6CrNiMo18 10	EN-GJL 250 GX5CrNiMo19-11-2	A 278 Cl. 30 A 351 CF8M	316	x	x	x	x	
21.00	Shaft	1.0503 1.4021 1.4401	C 45 X 20 Cr13 X5CrNiMo17 12 2	C 45 X 20 Cr13 X5CrNiMo17 12 2	A 576 Gr1045 A 276 Type 420 A 167 Gr316	1045 420 316	x(*) x	x(*) x	x(*) x	x	
23.00	Impeller	EN-JL 1040 2.1050 1.4408	GG-25 G-CuSn10 GX6CrNiMo18 10	EN-GJL 250 GX5CrNiMo19-11-2	A 278 Cl. 30 B 427 C91600 A 351 CF8M	316	x	x	x	x	
33.00	Bearing bracket	EN-JL 1040	GG-25	EN-GJL 250	A 278 Cl. 30		x	x	x	x	
52.30	Shaft sleeve / Mechanical seal	1.4021	X 20 Cr13	X 20 Cr13	A 276 Type 420	420	x	x	x		
52.40	Shaft sleeve / Stuffing box	1.4021 1.4401	X 20 Cr13 X5CrNiMo17 12 2	X 20 Cr13 X5CrNiMo17 12 2	A 276 Type 420 A 167 Gr316	420 316	x	x	x	x	
46.10	Shaft seal / Stuffing box	Soft packing						x	x	x	x
43.30	Mechanical seal	Silicon Carbide / Carbon EPDM or Viton (See other options)						x	x	x	x

(*) Only in bearing brackets 55 and 65.

Casing gasket:

The casing is sealed by means of a confined flat gasket of EWP 210 material. Code of this design: 2

The casing is sealed by means of a confined flat gasket of PTFE. Code of this design: 4

Motor Power:

Using commercial electric motors, type of construction IM B3.

To determine the drive power we recommend the following safety margin:

Up to 4 kW: 25%

4 to 7,5 kW: 20%

above 7,5 kW: 15%

The following speeds must not be exceeded:

Size	max. speed rpm	Size	max. speed rpm	Size	max. speed rpm	Size	max. speed rpm
32125 32160	3600	32250	3000	40315 ³⁾ 50315 ³⁾	1800	150500 200315	1500
32200 40125		40250		65315 80315		200400 200500	
40160 40200		50250		80400 100315		250300 250315	
50125 50160		65250		100400 125250		250400 250500	
50200 65125		80250		125315 125400		300400 300500	
65160 65200 ¹⁾		100250 ²⁾		150200 150250 ⁴⁾			
80160 ¹⁾ 80200		125200 ²⁾		150315 150400			
100160 100200				200250			

¹⁾ In material design 4B max. speed 3000 rpm

²⁾ In material design 4B max. speed 1800 rpm

³⁾ In material design 0E, and 4B max. speed 3000 rpm

⁴⁾ In material design 4B max. speed 1500 rpm

The max. speeds are derived from the permissible shaft loads and the permissible peripheral speeds of the impellers

Bearing bracket / pump size:

Bracket 25	32125 32160 32200 32250 40125 40160 40200 40250 50125 50160 50200 50250 65125 65160 65200 80160
Bracket 35	40315 50315 65250 65315 80200 80250 80315 100160 100200 100250 100315 125200 125250 150200 150250
Bracket 45	80400 100400 125315 125400 150315 150400 200250
Bracket 55	150500 200315 200400 200500 250300 250315
Bracket 65	250400 250500 300400 300500

General comments:

For horizontal volute pumps in CLOSE COUPLED construction with STANDARD motor for nominal performances and flange connections as per EN 733 refer to our series **ZLK**.

For INLINE pumps with the same drive unit, consisting of bearing bracket with bearing, stub shaft and mechanical seal, casing cover, impeller and impeller nut, refer to our series **ZLI** (supplied also with magnetic drive).

For equipping hot media systems a complete programme is available for a flow range between 1-1000 m³/h consisting of the range:

ZTN volute pumps to EN 733 design with base plate t_{max} 350 °C PN 16. Heat transfer oil.

ZTK volute pumps to EN 733 close coupled design t_{max} 350 °C PN 16. Heat transfer oil.

ZTI volute pumps to EN 733 as INLINE construction (up to t_{max} 400⁰ °C with magnetic drive) PN 16. Heat transfer oil.

ZEN volute pumps to EN 22858, t_{max} 230 °C PN 40. Hot water design.

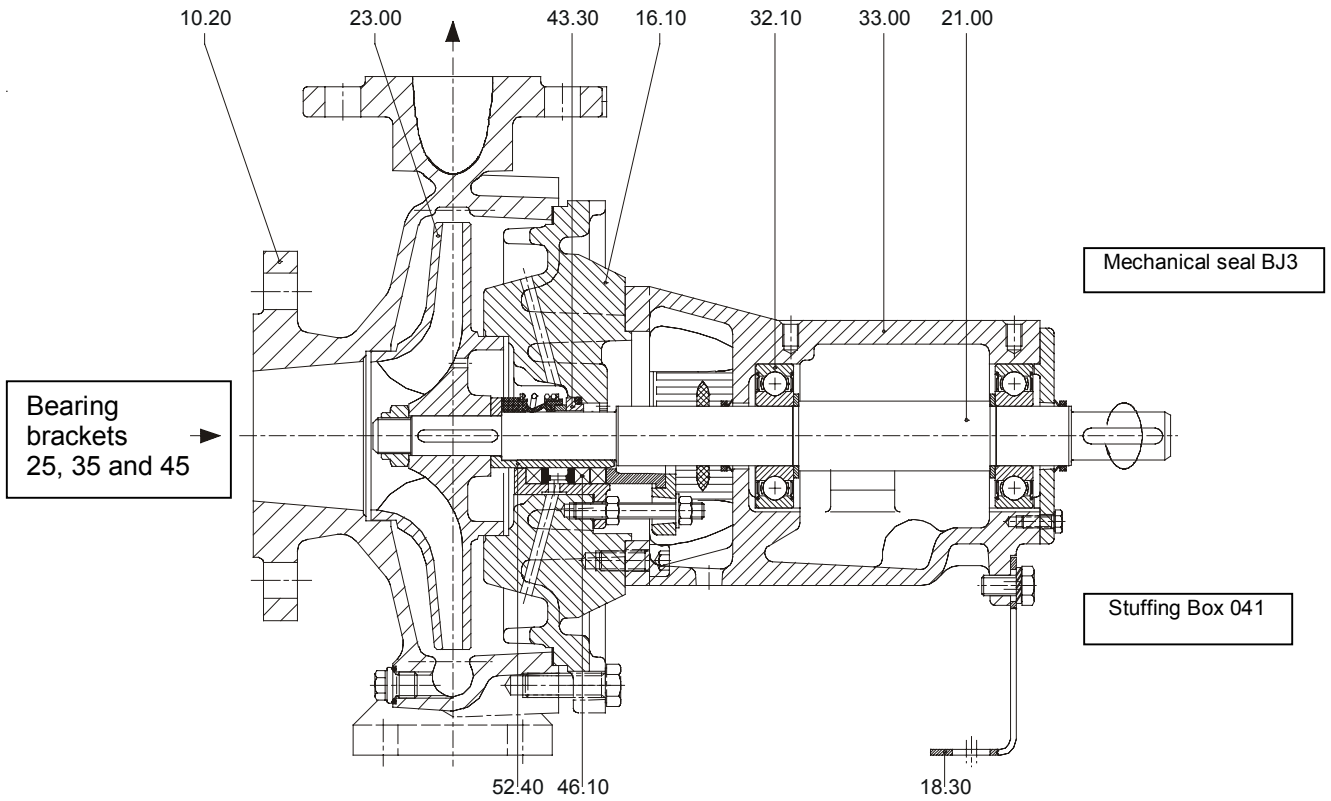
ZDN volute pumps to EN 22858, t_{max} 185 °C PN 25. Hot water design.

ZHN volute pumps to EN 733, t_{max} 180 °C PN 16. Hot water design.

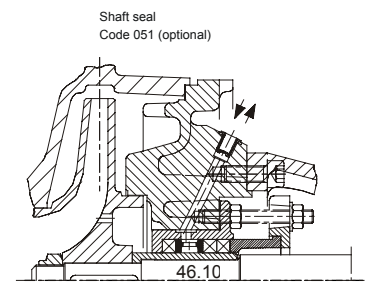
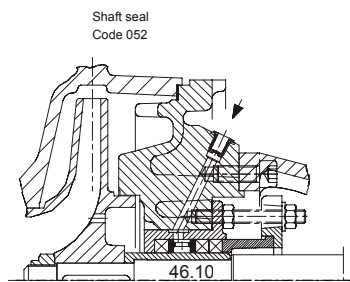
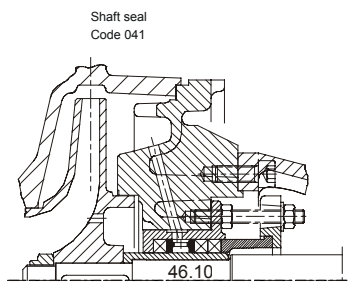
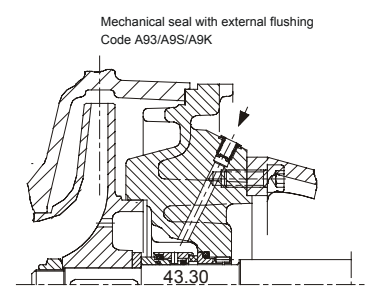
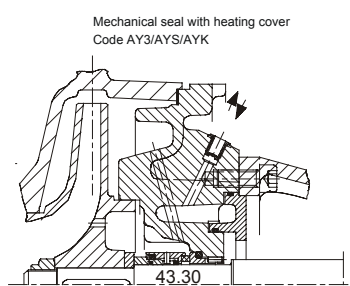
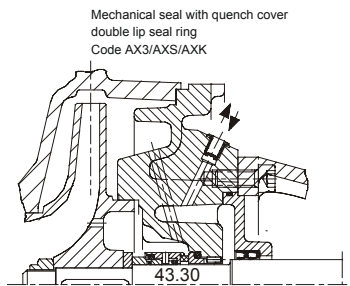
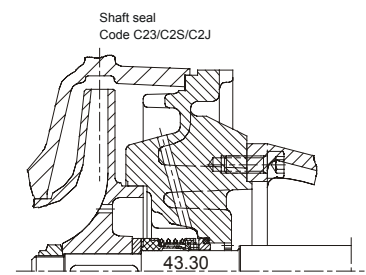
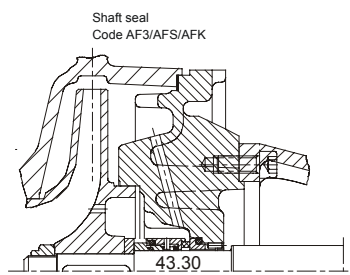
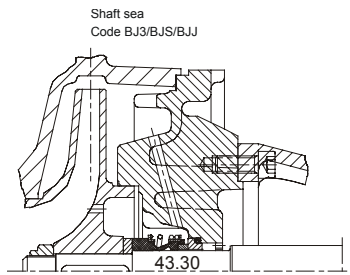
ZLI volute pumps to EN 733 as INLINE construction, t_{max} 150 °C PN 25. Hot water design.

Designs are subject to amendment without prior notice.

SECTIONAL DRAWING AND NOMENCLATURE

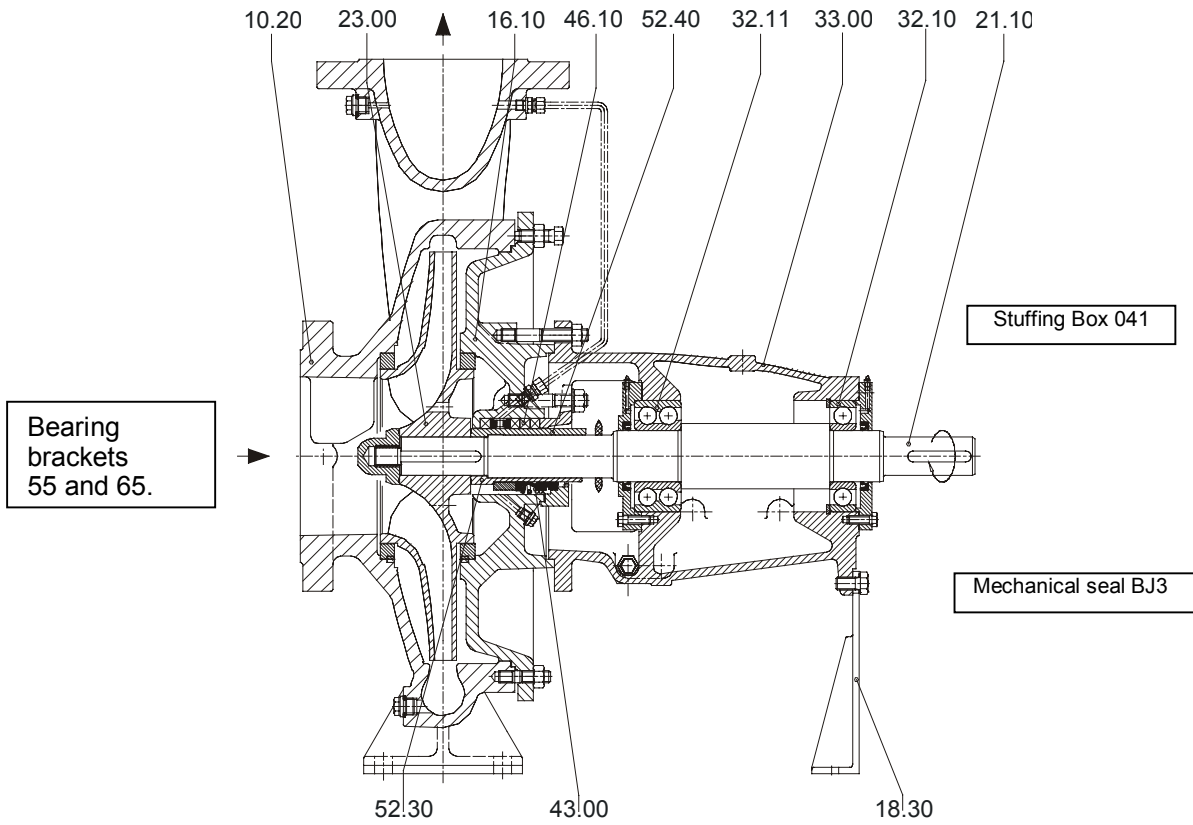


10.20	volute casing	23.00	impeller	43.30	mechanical seal
16.10	casing cover	32.10	ball bearing	46.10	stuffing box
18.30	support foot	33.00	bearing bracket	52.40	shaft sleeve (stuffing box)
21.00	shaft				

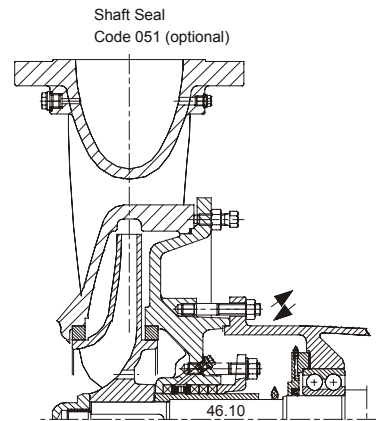
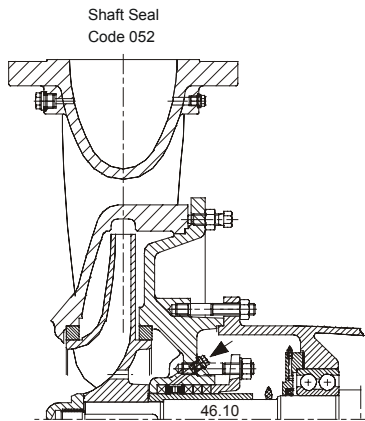
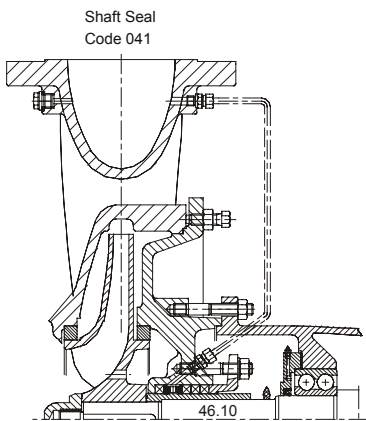
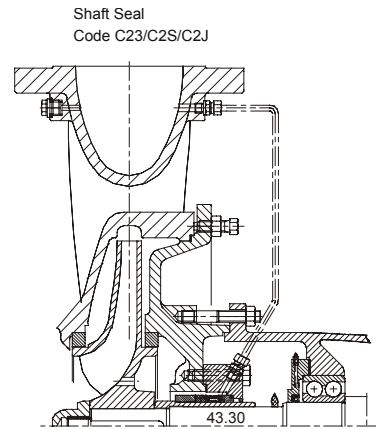
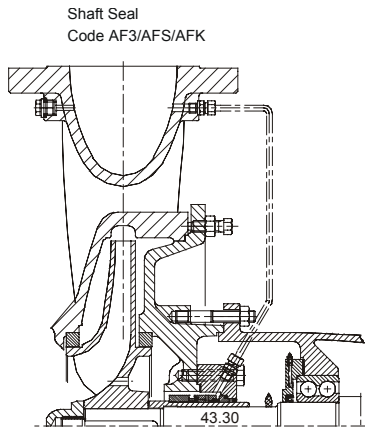
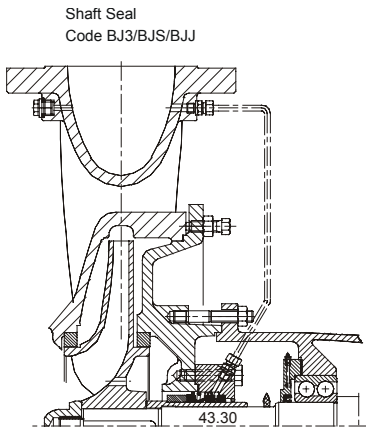


Designs are subject to amendment without prior notice.

SECTIONAL DRAWING AND NOMENCLATURE



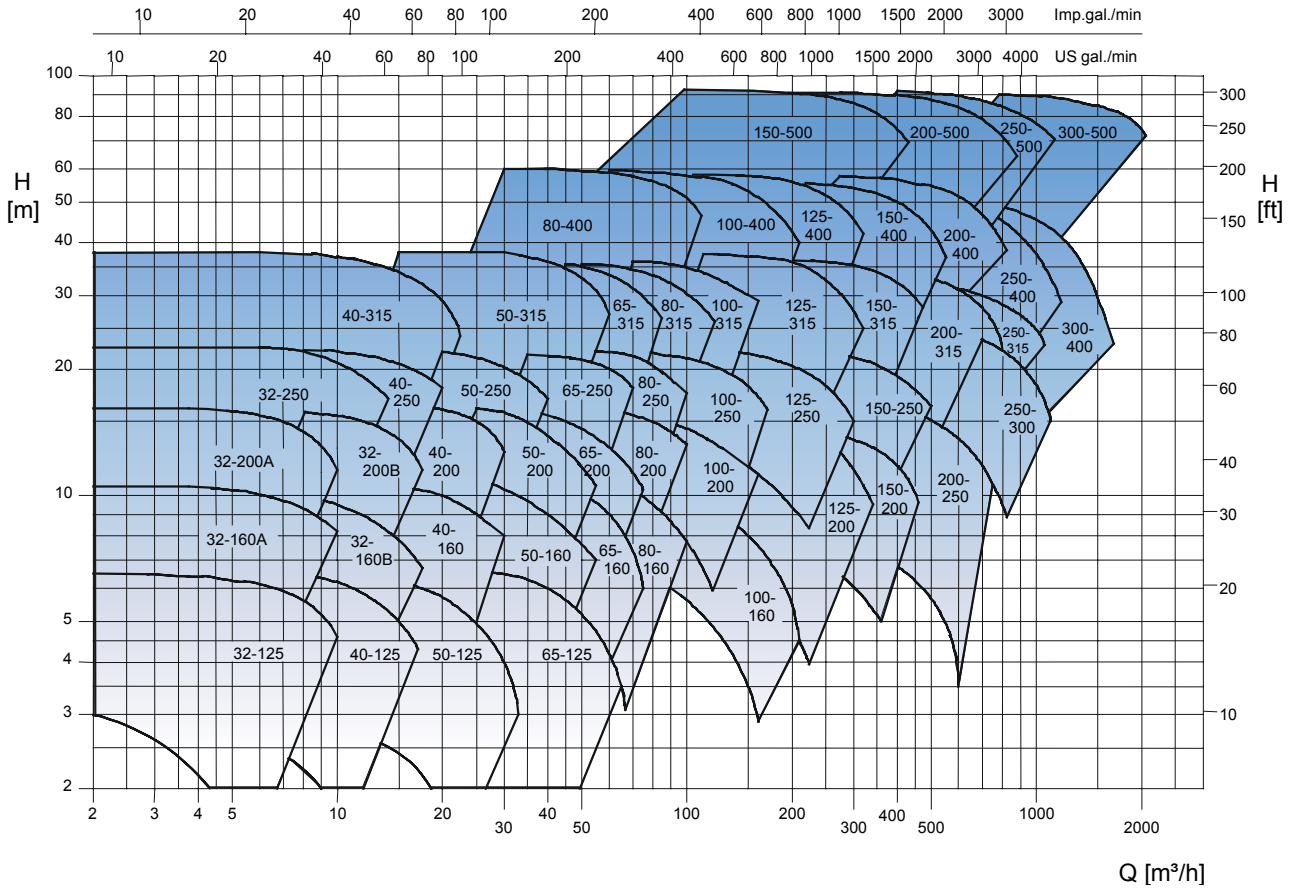
10.20	volute casing	23.00	impeller	43.30	mechanical seal
16.10	casing cover	32.10	ball bearing	46.10	stuffing box
18.30	support foot	32.11	ball bearing	52.30	shaft sleeve (mechanical seal)
21.00	shaft	33.00	bearing bracket	52.40	shaft sleeve (stuffing box)



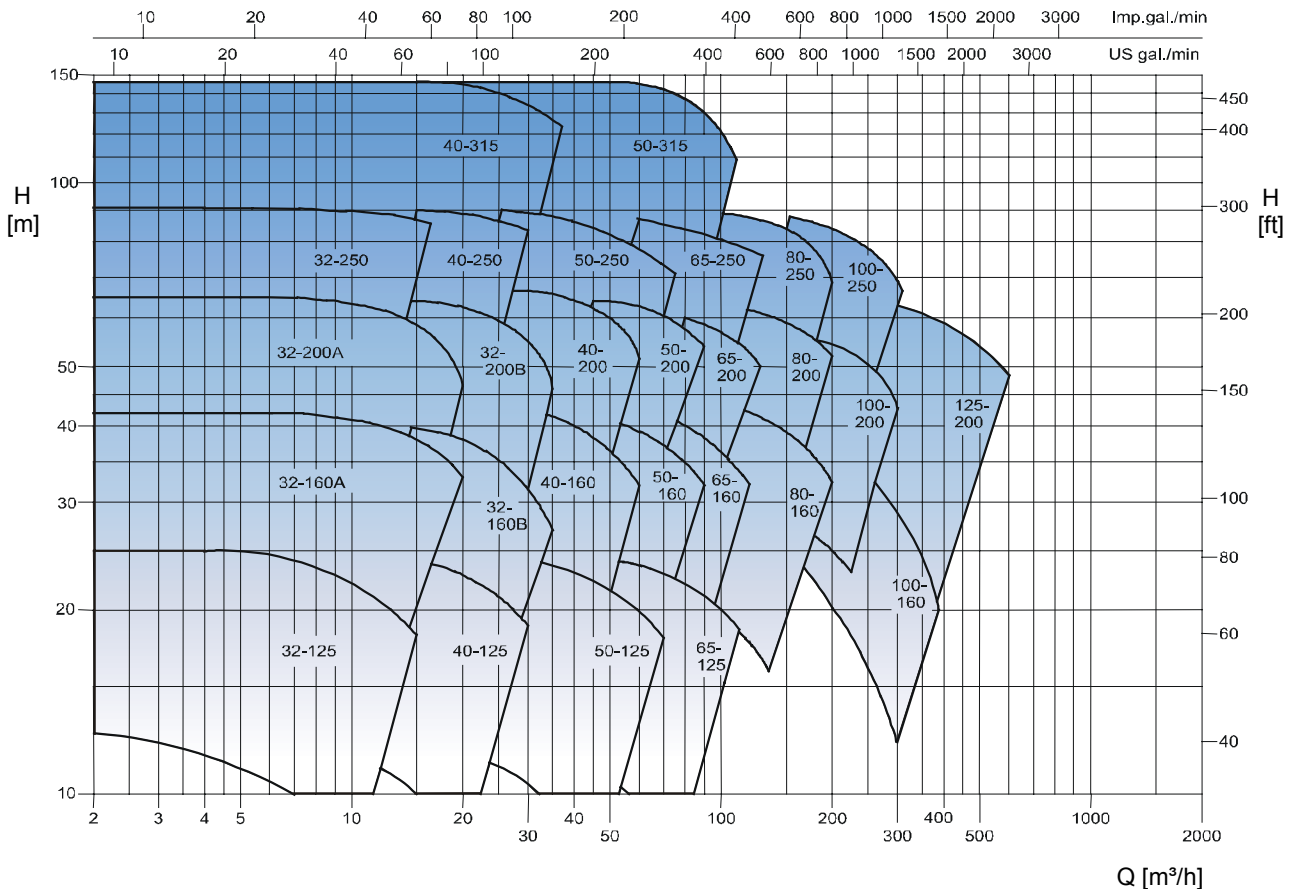
Designs are subject to amendment without prior notice.

Performance Graph

n = 1450 rpm



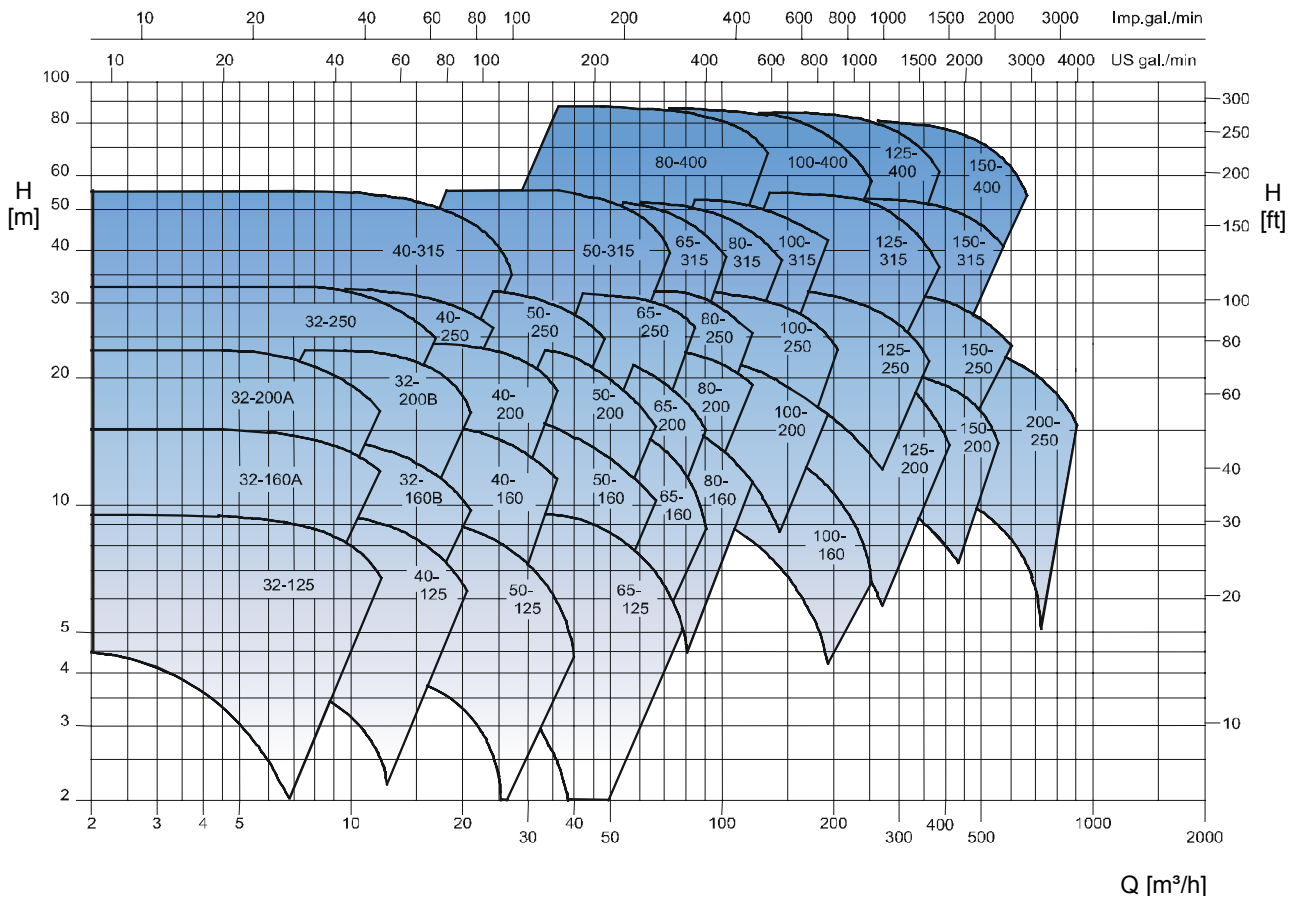
n = 2900 rpm



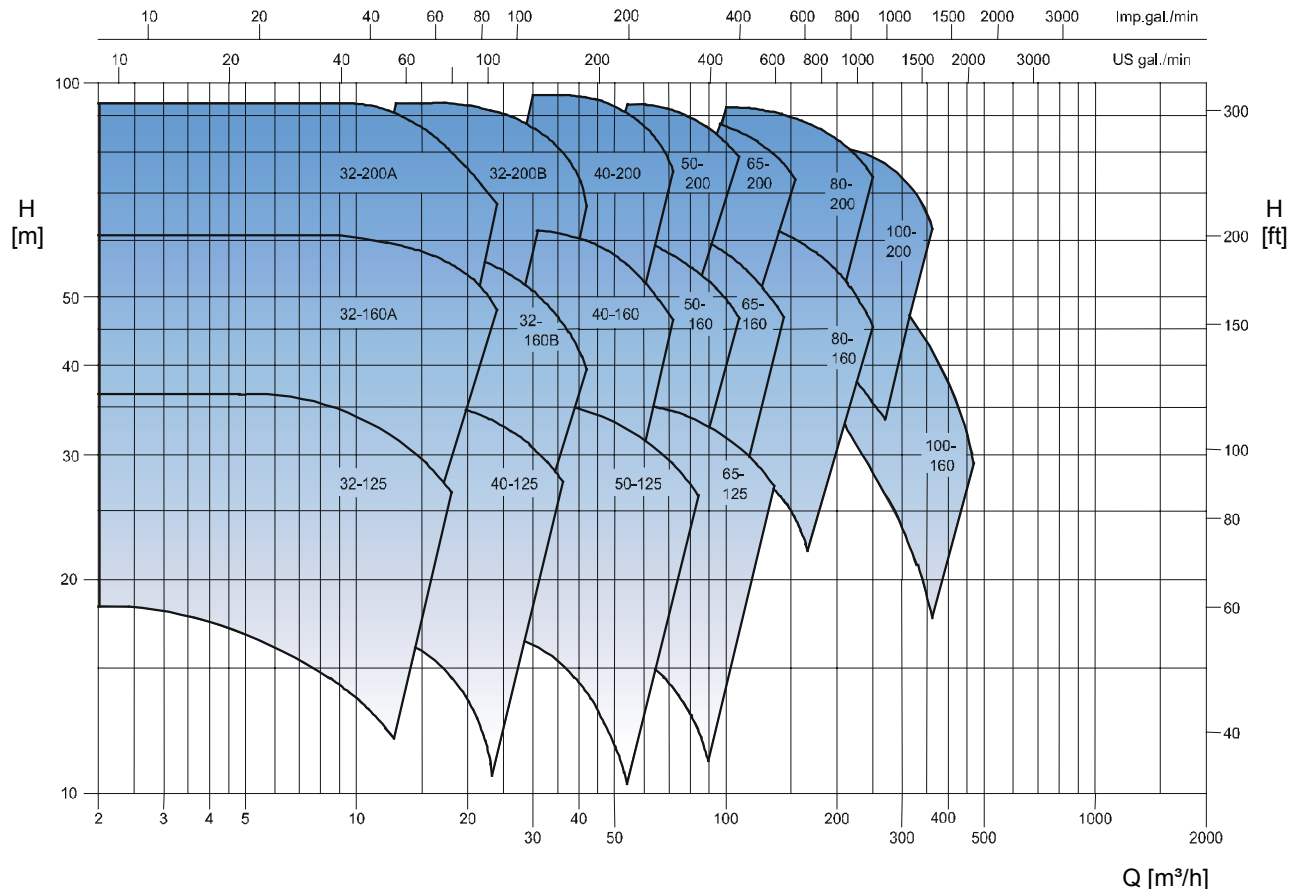
Designs are subject to amendment without prior notice.

Performance Graph

n = 1750 rpm

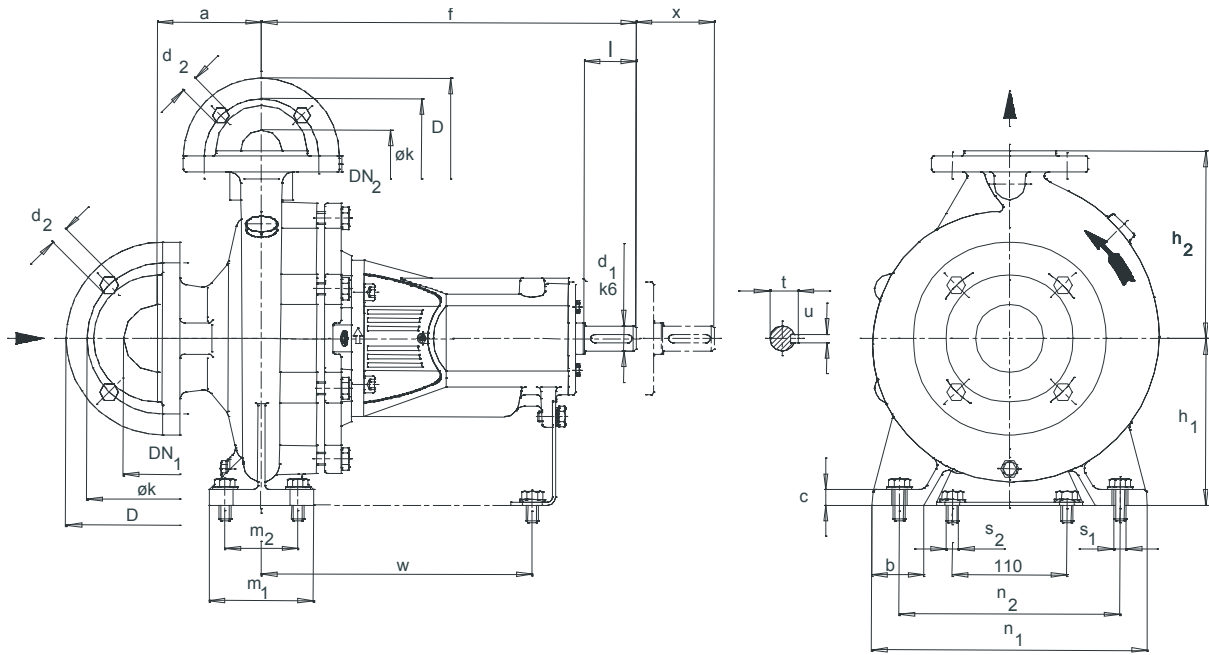


n = 3500 rpm



Designs are subject to amendment without prior notice.

Table of Dimensions



All dimensions in mm

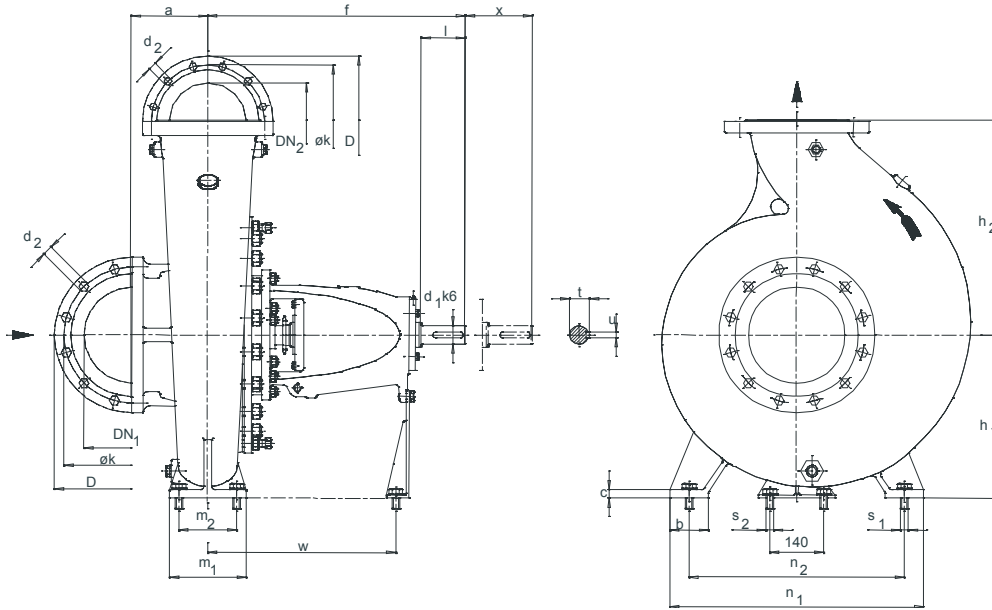
Size	BB	Pump dimensions						Foot dimensions						Shaft end							
		DN ₂	DN ₁	a	f	h ₁	h ₂	b	c	m ₁	m ₂	n ₁	n ₂	s1*	s2*	w	x	d ₁	l	t	u
32125	25	32	50	80	360	112	140	50	15	100	70	190	140	M12	M12	260	100	24	50	27	8
32160	25	32	50	80	360	132	160	50	15	100	70	240	190	M12	M12	260	100	24	50	27	8
32200	25	32	50	80	360	160	180	50	15	100	70	240	190	M12	M12	260	100	24	50	27	8
32250 ¹⁾	25	32	50	100	360	180	225	65	15	125	95	320	250	M12	M12	260	100	24	50	27	8
40125	25	40	65	80	360	112	140	50	15	100	70	210	160	M12	M12	260	100	24	50	27	8
40160	25	40	65	80	360	132	160	50	15	100	70	240	190	M12	M12	260	100	24	50	27	8
40200	25	40	65	100	360	160	180	50	15	100	70	265	212	M12	M12	260	100	24	50	27	8
40250	25	40	65	100	360	180	225	65	15	125	95	320	250	M12	M12	260	100	24	50	27	8
40315 ¹⁾	35	40	65	125	470	225	250	65	18	125	95	345	280	M12	M12	340	100	32	80	35	10
50125	25	50	65	100	360	132	160	50	15	100	70	240	190	M12	M12	260	100	24	50	27	8
50160	25	50	65	100	360	160	180	50	15	100	70	265	212	M12	M12	260	100	24	50	27	8
50200	25	50	65	100	360	160	200	50	15	100	70	265	212	M12	M12	260	100	24	50	27	8
50250	25	50	65	100	360	180	225	65	15	125	95	320	250	M12	M12	260	100	24	50	27	8
50315 ¹⁾	35	50	65	125	470	225	280	65	17	125	95	345	280	M12	M12	340	100	32	80	35	10
65125	25	65	80	100	360	160	180	65	15	125	95	280	212	M12	M12	260	100	24	50	27	8
65160	25	65	80	100	360	160	200	65	15	125	95	280	212	M12	M12	260	100	24	50	27	8
65200	25	65	80	100	360	180	225	65	15	125	95	320	250	M12	M12	260	140	24	50	27	8
65250	35	65	80	100	470	200	250	80	15	160	120	360	280	M16	M12	340	140	32	80	35	10
65315	35	65	80	125	470	225	280	80	18	160	120	400	315	M16	M12	340	140	32	80	35	10
80160	25	80	100	125	360	180	225	65	15	125	95	320	250	M12	M12	260	140	24	50	27	8
80200	35	80	100	125	470	180	250	65	15	125	95	345	280	M12	M12	340	140	32	80	35	10
80250	35	80	100	125	470	200	280	80	18	160	120	400	315	M16	M12	340	140	32	80	35	10
80315	35	80	100	125	470	250	315	80	18	160	120	400	315	M16	M12	340	140	32	80	35	10
80400 ¹⁾	45	80	125	125	530	280	355	80	18	160	120	435	355	M16	M12	370	140	42	110	45	12
100160 ¹⁾	35	100	125	125	470	200	280	80	18	160	120	360	280	M16	M12	340	140	32	80	35	10
100200	35	100	125	125	470	200	280	80	18	160	120	360	280	M16	M12	340	140	32	80	35	10
100250	35	100	125	140	470	225	280	80	18	160	120	400	315	M16	M12	340	140	32	80	35	10
100315	35	100	125	140	470	250	315	80	18	160	120	400	315	M16	M12	340	140	32	80	35	10
100400	45	100	125	140	530	280	355	100	18	200	150	500	400	M20	M12	370	140	42	110	45	12
125200 ¹⁾	35	125	150	140	470	250	315	80	18	160	120	400	315	M16	M12	340	140	32	80	35	10
125250	35	125	150	140	470	250	355	80	18	160	120	400	315	M16	M12	340	140	32	80	35	10
125315	45	125	150	140	530	280	355	100	18	200	150	500	400	M20	M12	370	140	42	110	45	12
125400	45	125	150	140	530	315	400	100	18	200	150	500	400	M20	M12	370	140	42	110	45	12
150200 ¹⁾	35	150	200	160	470	280	400	100	20	200	150	550	450	M20	M12	340	140	32	80	35	10
150250 ¹⁾	35	150	200	160	470	280	400	100	20	200	150	500	400	M20	M12	340	140	32	80	35	10
150315	45	150	200	160	530	280	400	100	18	200	150	550	450	M20	M12	370	140	42	110	45	12
150400	45	150	200	160	530	315	450	100	18	200	150	550	450	M20	M12	370	140	42	110	45	12
200250 ¹⁾	45	200	200	160	590	280	400	100	22	200	150	500	400	M20	M12	430	180	42	110	45	12

¹⁾ Transnorm pump sizes, not included in DIN 24255 / EN 733. Flanges drilled according to ANSI 150 on request.

* Slots suitable for bolts with dimensions indicated. Bolts are not included in the bare shaft pump standard scope of supply.

Designs are subject to amendment without prior notice.

Table of Dimensions



All dimensions in mm

Size	BB	Pump dimensions						Foot dimensions								Shaft end					
		DN ₂	DN ₁	a	f	h ₁	h ₂	b	c	m ₁	m ₂	n ₁	n ₂	s ₁ *	s ₂ *	w	x	d ₁	l	t	u
150500 ¹⁾	55	150	200	180	670	400	500	100	22	200	150	640	540	M20	M16	489	180	50	115	53.5	14
200315 ¹⁾	55	200	250	200	670	355	450	100	22	200	150	550	450	M20	M16	489	180	50	115	53.5	14
200400 ¹⁾	55	200	250	180	670	355	500	100	22	200	150	550	450	M20	M16	489	180	50	115	53.5	14
200500 ¹⁾	55	200	250	200	670	425	560	100	22	200	150	660	560	M20	M16	489	180	50	115	53.5	14
250300 ¹⁾	55	250	300	305	655	425	550	120	28	240	190	700	600	M20	M16	474	180	50	115	53.5	14
250315 ¹⁾	55	250	300	250	670	375	560	120	28	240	190	620	520	M20	M16	489	180	50	115	53.5	14
250400 ¹⁾	65	250	300	250	720	400	600	120	29	240	190	700	600	M20	M16	508	180	60 ²⁾	145	64	18
250500 ¹⁾	65	250	300	250	720	450	670	120	32	240	190	750	650	M20	M16	503	180	60 ²⁾	145	64	18
300400 ¹⁾	65	300	350	300	720	425	670	120	30	250	190	760	660	M24	M16	508	180	60 ²⁾	145	64	18
300500 ¹⁾	65	300	350	300	720	480	670	140	32	250	190	840	720	M24	M16	508	180	60 ²⁾	145	64	18

¹⁾ Transnorm pump sizes, not included in DIN 24255 / EN 733. Flanges drilled according to ANSI 150 on request.

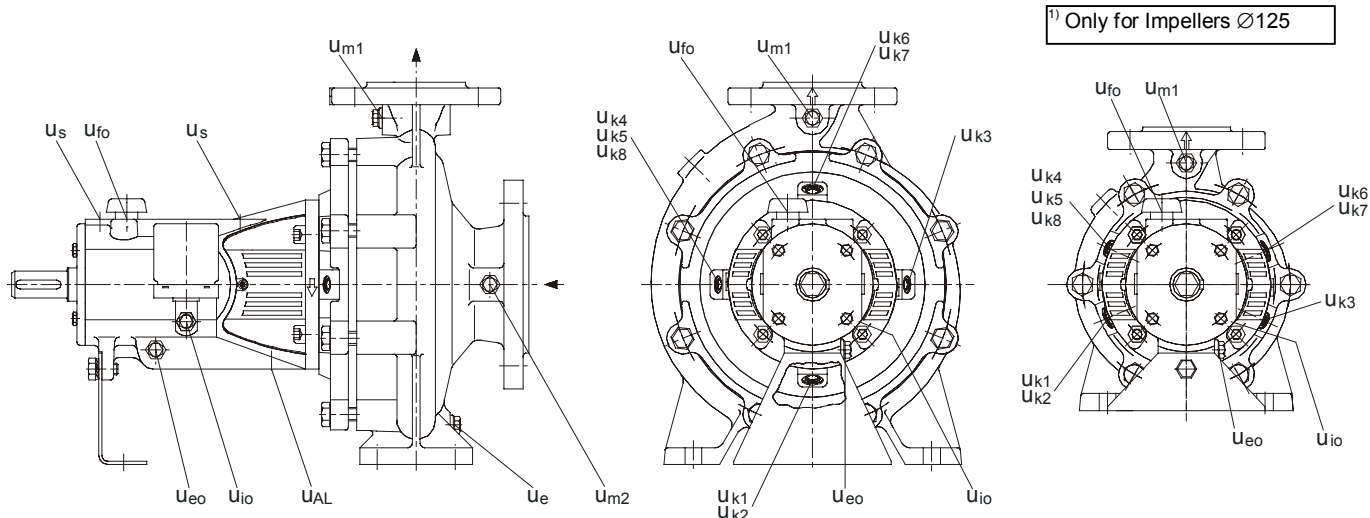
²⁾ For these sizes the clearance corresponds to M6.

* Slots suitable for bolts with dimensions indicated. Bolts are not included in the bare shaft pump standard scope of supply.

Flange connections to DIN 2501 PN 16														DIN 2501 PN 10			
DN ₂ /DN ₁	32	40	50	65	80	100	125	150	200	250	300	350	400	100	125	150	200
D	140	150	165	185	200	220	250	285	340	405	460	520	580	220	250	285	340
k	100	110	125	145	160	180	210	240	295	355	410	470	525	180	210	240	295
d ₂ x number	18x4	18x4	18x4	18x4	18x8	18x8	18x8	22x8	22x12	26x12	26x12	26x16	30x16	18x8	18x8	22x8	22x8

Designs are subject to amendment without prior notice.

Connections for bearing brackets 25, 35 and 45



¹⁾ Only for Impellers Ø125

- u_{m1} : Pressure gauge. Only available on request
- u_{m2} : Pressure gauge. Only available on request
- u_e : Drainage
- u_{eo} : Oil drainage
- u_{io} : Constant level oiler
- u_{fo} : Oil filling
- u_{AL} : Drainage for leakage. Threaded hole only available on request
- u_s : Sensor

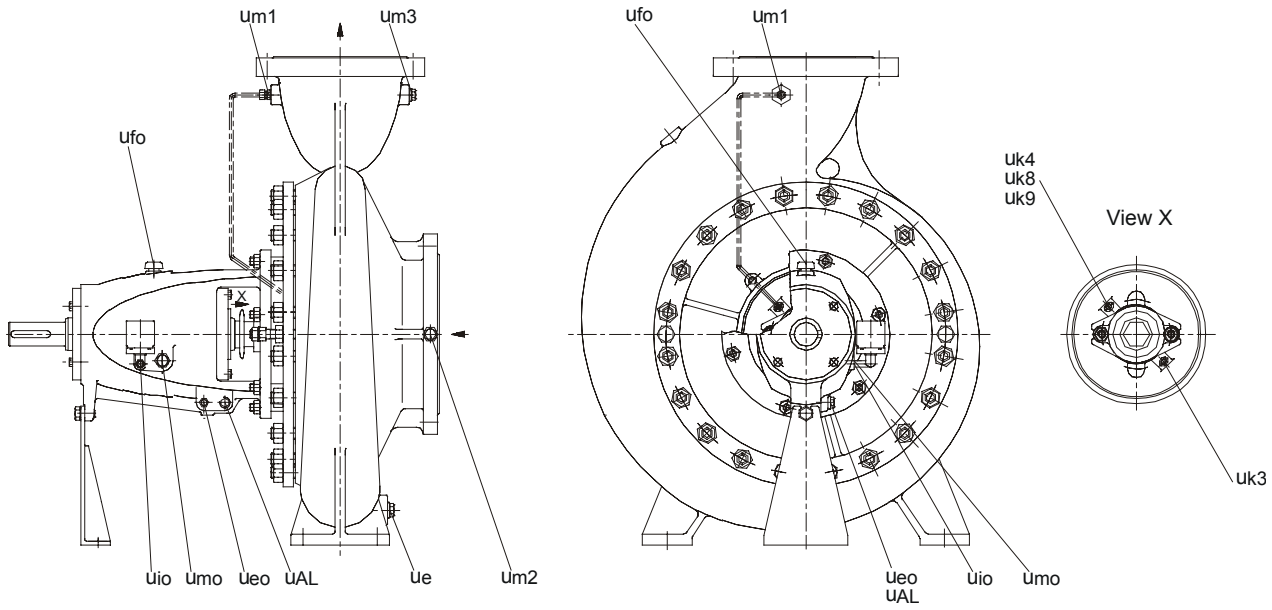
- u_{k1} : Quench Inlet
- u_{k2} : Heating Inlet
- u_{k3} : 051 Inlet (Stuffing box)
- u_{k4} : 052 External sealing (Stuffing box)
- u_{k5} : External Flushing
- u_{k6} : Quench Outlet
- u_{k7} : Heating Outlet
- u_{k8} : 051 Outlet (Stuffing box)

Size	U _{m1}	U _{m2}	U _e	U _{eo}	U _{io}	U _{fo}	U _{AL}	U _s	U _{k1}	U _{k2}	U _{k3}	U _{k4}	U _{k5}	U _{k6}	U _{k7}	U _{k8}															
32125 ¹⁾	G 1/4		G 1/4																												
32160																															
32200																															
32250																															
40125 ¹⁾																															
40160																															
40200																															
40250																															
40315																															
50125 ¹⁾																															
50160																															
50200																															
50250																															
50315																															
65125 ¹⁾			G 3/8														G 1/4	Ø15.65	Ø13	M 8											
65160																															
65200																															
65250																															
65315																															
80160																															
80200																															
80250																															
80315																															
80400																															
100160	G 1/4																														
100200	G 1/8																														
100250	G 1/4																														
100315	G 1/8																														
100400	G 1/4																														
125200	G 1/8																														
125250	G 1/4																														
125315	G 1/8																														
125400	G 1/4																														
150200	G 1/8																														
150250	G 1/4																														
150315	G 1/8																														
150400	G 1/4																														
200250	G 1/4																														

Certain construction sizes do not correspond in all details to the drawing

Designs are subject to amendment without prior notice.

Connections for bearing brackets 55 and 65.

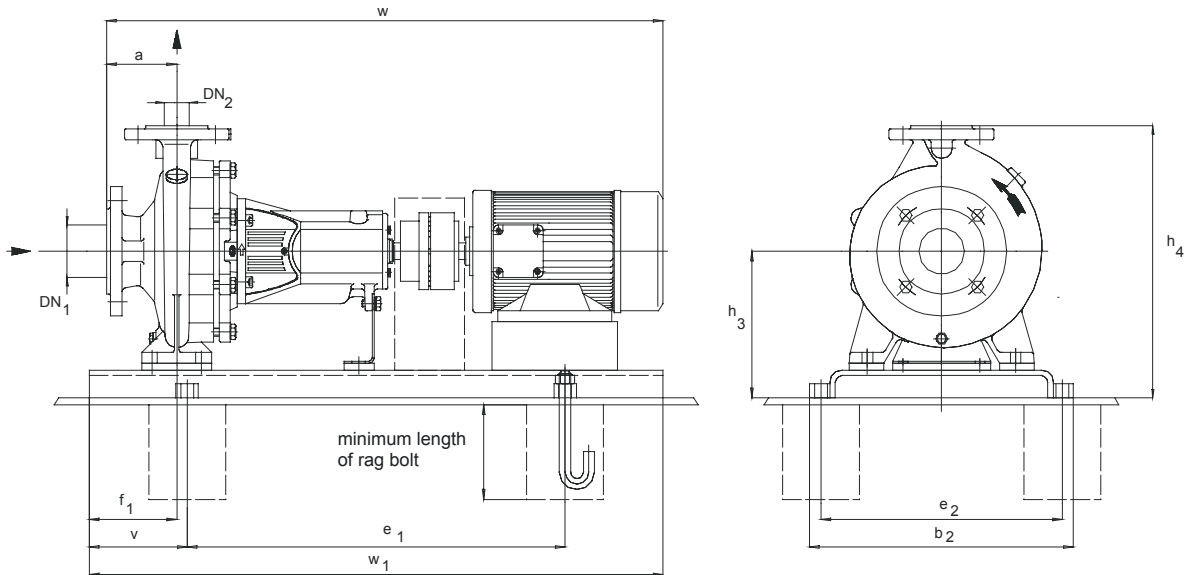


- u_{m1} : Self sealing connection
- u_{m2} : Pressure/vacuum gauge. Only available on request
- u_e : Drainage
- u_{eo} : Oil drainage
- u_{io} : Constant level oiler
- u_{fo} : Oil filling
- u_{AL} : Drainage for leakage

- u_{m3} : Pressure gauge connection
- u_{k3} : 051 Inlet (Stuffing box)
- u_{k4} : 052 External sealing (Stuffing box)
- u_{k8} : 051 Outlet (Stuffing box)
- u_{mo} : Oil level control
- u_{k9} : 041 inlet (Stuffing box)

Size	U _{m1}	U _{m2}	U _e	U _{eo}	U _{io}	U _{fo}	U _{AL}	U _{m3}	U _{k3}	U _{k4}	U _{k8}	U _{mo}	U _{k9}
150500													
200315													
200400													
200500													
250300													
250315	G1/4	G1/2	G1/2	G1/4	G1/4	∅20	G1/2	G1/2	G1/4	G1/4	G1/4	G3/4	G1/4
250400													
250500													
300400													
300500													

Foundation plan, bearing brackets 25, 35 and 45.



Dimensions in mm

Tolerances for welded parts acc. to DIN 8570 B

n = 1450 rpm

Size	Motor		Base plate No.	Cplg.	Weight kg		DN ₂	DN ₁	a	b ₂	e ₁	e ₂	v	f ₁	h ₃	h ₄	w*	w ₁	Rag bolt	
	size	kW			pump	unit														
32-125	71	0.25	S241		31	50														
32-160	71	0.37	S301	B68	33	65	32	50	80	330	480	290	125	60	177	317	683		730	M16x200
	80	0.55																		
32-200	80	0.55	S383		34	68														
	90S	1.10																		
32-250	80	0.75	S383		46	103			100	490	600	440	160	75	260	485	737		920	M20x400
	90S	1.10																		
40-125	71	0.37	S241		28	60														
	80	0.55																		
40-160	71	0.37	S301	B68	30	62	40	65	80	330		290	125	60	177	317	683		730	M16x200
	80	0.55																		
40-200	80	0.75	S383		36	77			100	390	480	350	125	60	197	357	717		920	M20x400
	90S	1.10																		
40-250	80	0.55	S383	B80	36	75														
	90L	1.50																		
40-315	90S	1.10	S434	B95	46	106			125	490	600	440	160	75	260	485	795		1000	M20x400
	100L	2.20																		
50-125	100L	3.00	S342	B80	73	150														
	112M	4.00																		
50-160	132S	5.50	S301	B68	73	155	50	65	100	540	660	490	170	60	305	555	971		730	M16x200
	132S	5.50																		
50-200	132S	5.50	S342	B80	73	155														
	132S	5.50																		
50-250	132S	5.50	S383	B80	73	155														
	132S	5.50																		
50-315	132S	5.50	S434	B95	73	155			125	540	660	490	170	60	305	555	971		1000	M20x400
	132M	7.50																		
65-125	80	0.55	S342	B68	33	80	65	80	100	450	540	400	140	60	240	420	737		820	M20x400
	80	0.75																		
65-160	80	0.75	S342	B80	39	95														
	90L	1.50																		
65-200	80	0.55	S342	B80	39	95														
	100L	2.20																		

Designs are subject to amendment without prior notice.

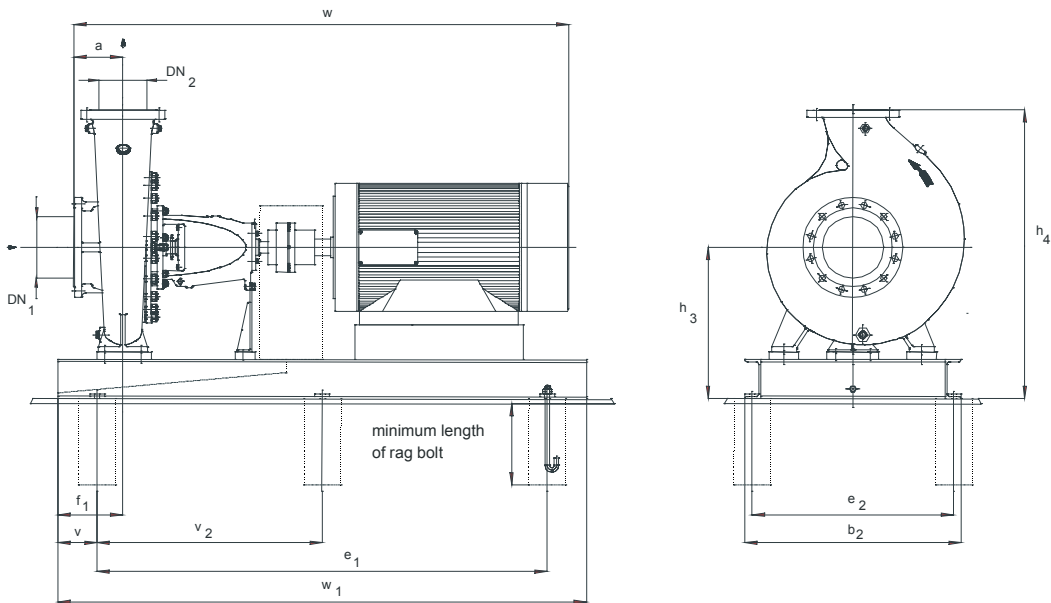
Size	Motor		Base plate No.	Cplg.	Weight kg		DN ₂	DN ₁	a	b ₂	e ₁	e ₂	v	f ₁	h ₃	h ₄	w*	w ₁	Rag bolt
	size	kW			pump	unit													
65-200	90S	1.10	S383	B68	45	105	65	80	100	490	600	440	160	75	260	485	795	920	M20x400
	90L	1.50				108											795		
	100L	2.20		118		836													
	100L	3.00		120		836													
65-250	100L	2.20	S434	B80	70	125	90	125	730	740	670	190	90	325	605	1068	1120	M24x400	
	100L	3.00				158										946			
	100L	4.00		160		946													
	112M	4.00		165		967													
65-315	132S	5.50	S605	B95	92	181	125	125	610	840	550	205	90	300	550	1043	1250	M24x400	
	132S	5.50				236										1068			
	132M	7.50		247		1094													
	160M	11.00		268		1186													
80-160	160L	15.00	S486	B110		288										1248			
	80	0.75	S383	B68	43	100	80	100	490	600	440	160	75	260	485	762	920	M20x400	
	90S	1.10				103										820			
	90L	1.50		106		820													
100L	2.20	116		861															
80-200	100L	3.00	S434	B80	60	118	125	125	610	840	550	205	90	300	580	971	1120	M24x400	
	90L	1.50				125										930			
	100L	2.20		134		971													
	100L	3.00		136		971													
80-250	112M	4.00	S605	B95	75	141	125	125	730	740	670	190	90	350	665	1068	1250	M24x400	
	132S	5.50				157										1068			
	132M	7.50		197		1094													
	132S	5.50		202		1068													
80-315	132M	7.50	S486	B95	95	218	125	125	610	840	550	205	90	380	735	1094	1250	M24x400	
	160M	11.00				239										1068			
	160L	15.00		251		1094													
	160M	11.00		272		1186													
80-400	160L	15.00	S486	B110	143	291	80	125	610	840	550	205	90	380	735	1248	1250	M24x400	
	160M	11.00				322										1247			
	160L	15.00		340		1247													
	180M	18.50		361		1371													
100-160	180L	22.00	S434	B80	78	376	125	125	610	840	550	205	90	380	735	1371	1250	M24x400	
	200L	30.00				424										1429			
	100L	2.20		166		971													
	100L	3.00		169		971													
100-200	112M	4.00	S605	B95	78	174	125	125	730	740	670	190	90	300	580	1068	1120	M24x400	
	132S	5.50				190										1068			
	100L	2.20		158		971													
	100L	3.00		160		971													
100-250	112M	4.00	S434	B80	70	165	125	125	540	660	490	170	90	280	560	992	1000	M20x400	
	132S	5.50				181										1068			
	132M	7.50		193		1094													
	112M	4.00		213		1007													
100-315	132S	5.50	S605	B80	85	213	100	125	730	740	670	190	90	325	605	1083	1120	M24x400	
	132M	7.50				228										1109			
	160M	11.00		240		1201													
	160M	11.00		261		1201													
100-400	160L	15.00	S486	B110	104	300	140	140	610	840	550	205	90	350	665	1263	1250	M24x400	
	180M	18.50				320										1325			
	180L	22.00		337		1325													
	160L	15.00		402		1262													
125-200	180M	18.50	S606	B110	177	423	110	110	730	940	670	230	110	380	735	1386	1400	M24x400	
	180L	22.00				438										1386			
	200L	30.00		486		1444													
	225S	37.00		548		1481													
125-250	225M	45.00	S607	B140		569										1481			
	132M	7.50	S605	B95	100	256	125	150	140	730	740	670	190	90	350	1109	1120	M24x400	
	160M	11.00				277										1201			
	160L	15.00		296		1263													
132M	7.50	258		1109															
125-315	160M	11.00	S486	B110	102	279	125	150	140	730	840	205	110	380	735	1263	1250	M24x400	
	160L	15.00				298										1263			
	160L	15.00		375		1262													
	180M	18.50		396		1386													
125-400	180L	22.00	S606	B110	151	411	125	150	140	730	840	205	110	380	735	1386	1250	M24x400	
	200L	30.00				459										1444			
	225S	37.00		520		1481													
	200L	30.00		498		1444													
150-200	225S	37.00	S606	B140	188	559	125	150	140	730	840	205	110	380	780	1481	1400	M24x400	
	225M	45.00				580										1481			
	250M	55.00		793		1604													
	280S	75.00		1047		1679													
150-250	132M	7.50	S605	B95	123	295	150	200	160	730	840	670	205	110	380	780	1129	1250	M24x400
	160M	11.00				316											1221		
	160L	15.00		335		1283													
	180M	18.50		355		1345													
150-315	160L	15.00	S606	B110	128	340	150	200	160	730	840	670	205	110	380	780	1283	1400	M24x400
	180M	18.50				360											1345		
	180L	22.00		389		1345													
	200L	30.00		436		1403													

Designs are subject to amendment without prior notice.

Size	Motor		Base plate No.	Cplg.	Weight kg		DN ₂	DN ₁	a	b ₂	e ₁	e ₂	v	f ₁	h ₃	h ₄	w*	w ₁	Rag bolt
	size	kW			pump	unit													
150-315	180L	22.00	S606	B110	170	431	150	200	160	730	840	670	230	110	380	780	1406	1400	M24x400
	200L	30.00		B125		479											1464		
	225S	37.00		B140		540											1501		
	250M	55.00	S607	B160		774											1624		
225M	45.00	B140		598	1501														
150-400	250M	55.00	180x73x14	B160	205	811	150	200	160	730	940	680	170	200	455	905	1624	1800	M16x200
	280S	75.00		B180		1065											1699		
	280M	90.00		1117		1699													
	160L	15.00	S607	B95		471											1342		
180M	18.50	B110		492	1466														
180L	22.00			507	1466														
200L	30.00	B125		555	1524														

* Motor protection type IP 55, dimensions depend on the motor manufacturer.
Dimension listed are taken from the SIEMENS catalogue.

Foundation plan, bearing brackets 55 and 65.



Dimensions in mm

Tolerances for welded parts acc. to DIN 8570 B

n = 1450 rpm

Size	Motor		Base plate No.	Cplg.	Weight kg		DN ₂	DN ₁	a	b ₂	v	e ₁	e ₂	v ₂	f ₁	h ₃	h ₄	w*	w ₁	Rag bolt																	
	size	kW			pump	unit																															
150-500	180L	22	167x81x12	B125	335	674	150	200	180	810	170	1330	760	665	235	550	1050	1566	1670	M16x200																	
	200L	30	174x82x14	B140																	754																
	225S	37	178x82x14	B140																	817																
	225M	45																			845																
	250M	55	190x82x14	B160																	955																
	280S	75	198x82x14	B180																	1136																
	280M	90																			1397																
	315S	110	212x83x16																		1477																
	315M	132																			1635																
	315L	160	226x83x16	B200																	1775																
	315L	200																			1605																
	315	250	238x87x16	B225																	1605																
200-315	180L	22	169x72x12	B125	310	659	200	250	200	720	170	1350	670	675	255	505	955	1586	1690	M16x200																	
	200L	30	176x73x14	B140																	712																
	225S	37	180x73x14	B140																	777																
	225M	45																			805																
	250M	55	192x73x14	B160																	915																
	280S	75	200x74x14	B180																	1095																
	180L	22	167x72x12	B125																	340	742	200	250	180	720	170	1330	670	665	235	505	1005	1566	1670	M16x200	
	200L	30	174x73x14	B140																																	807
	225S	37	178x73x14	B140																																	835
	225M	45																																			945
	250M	55	190x73x14	B160																																	1125
	280S	75	198x74x14	B180																																	1175
280M	90			1400																																	
315S	110	212x82x16		1480																																	
315M	132			1635																																	
315L	160	226x82x16	B200	1775																																	
315L	200			1610																																	
315	250	238x87x16	B225	1610																																	
200-500	225M	45	180x84x14	B140	395	915	200	250	200	840	190	1420	770	710	260	595	1155	1681	1800	M16x200																	
	250M	55	192x84x14	B160																	1025																
	280S	75	200x84x14	B180																	1205																
	280M	90																			1255																
	315S	110	214x85x16																		1465																
	315M	132																			1545																
	315L	160	228x85x16	B200																	1700																
	315L	200																			1840																
	315	250	240x87x16	B225																	1665																
	315	315		B250																	1865																
	355	355	264x98x18																		1965																
	200-500	225M	45	180x84x14																	B140	395	915	200	250	200	840	190	1420	770	710	260	595	1155	1681	1800	M16x200
250M		55	192x84x14	B160	1025																																
280S		75	200x84x14	B180	1205																																
280M		90			1255																																
315S		110	214x85x16		1465																																
315M		132			1545																																
315L		160	228x85x16	B200	1700																																
315L		200			1840																																
315		250	240x87x16	B225	1665																																
315		315		B250	1865																																
355		355	264x98x18		1965																																

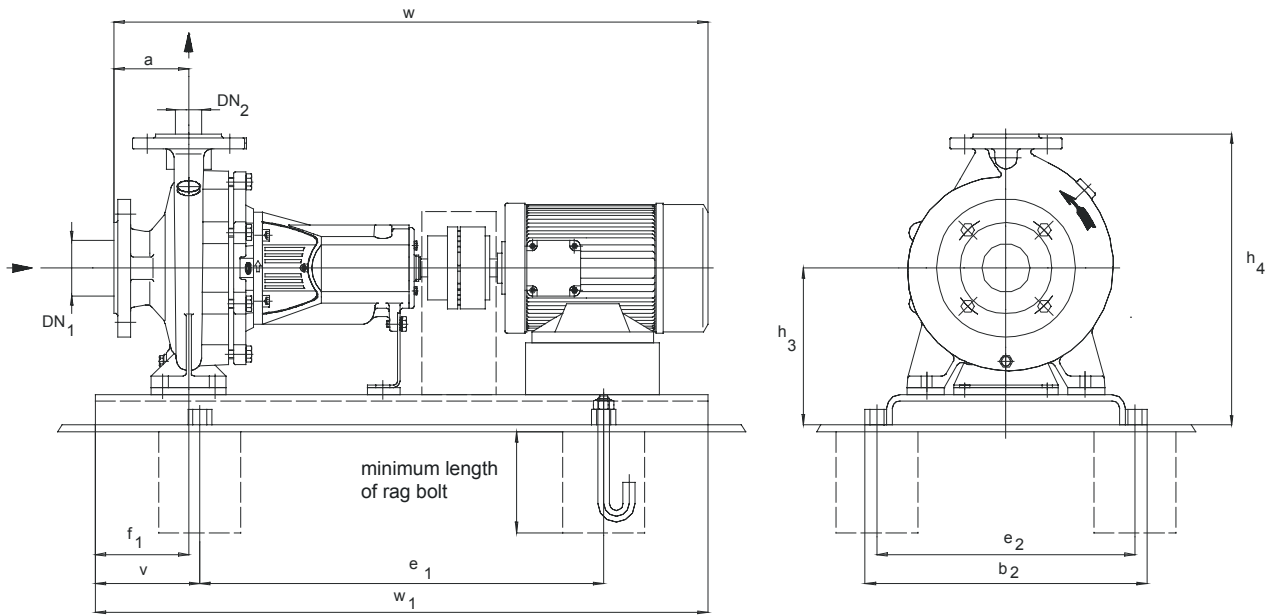
* Motor protection type IP 55, dimensions depend on the motor manufacturer. Dimensions listed are taken from the SIEMENS catalogue.

Size	Motor		Base plate No.	Cplg.	Weight kg		DN ₂	DN ₁	a	b ₂	v	e ₁	e ₂	v ₂	f ₁	h ₃	h ₄	w*	w ₁	Rag bolt		
	size	kW			pump	unit																
250-300	225S	37	189x88x14	B140	416	894	250	300	305	880	190	1510	830	755	365	595	1145	1771	1890	M16x200		
	225M	45				922					190	1470		715				1771	1890			
	250M	55	201x88x14	B160		1037					210	1590		795				1894	2010			
	280S	75	209x88x14	B180		1217					210	1670		835				1969	2090			
250-315	200L	30	181x80x14	B125	424	842	250	250	800	190	1430	750	715	310	545	1105	1694	1810	M16x200			
	225S	37	185x80x14	B140		902				190	1470		735				1731	1850				
	225M	45	197x80x14	B160		930				190	1590		795				1731	1850				
	250M	55				1045				210			1630				815	1854		1970		
	280S	75	205x80x14	B180		1225				210	1630		815				1929	2050				
	280M	90	219x82x16	B200		1275				210							1929	2050				
	315S	110				1485				210							1770	760	885	315	565	1125
	315M	132				1565				210							2064	2190				
250-400	225S	37	190x88x14	B140	464	958	250	250	880	190	1520	830	760	310	570	1170	1781	1900	M16x200			
	225M	45				985				190			800				1781	1900				
	250M	55	202x88x14	B160		1095				210	1600		840				1904	2020				
	280S	75	210x88x14	B180		1275				210	1680						1979	2100				
	280M	90	224x89x16	B200		1325				210	1780		890				1979	2100				
	315S	110				1540				230							1780	890	2114	2240		
	315M	132	238x89x16	B225		1620				230	1920		960				2114	2240				
	315L	160				1775				230							1920	960	2114	2240		
	315L	200	250x89x16	B250		1915				230	2000		1000				2254	2380				
	315	250				1735				250							2000	1000	2254	2380		
	315	315				2135				250							2374	2500				
	355	355	274x98x18			2040				250							2374	2500				
250-500	280S	75	210x93x14	B180	589	1407	250	250	930	210	1680	880	840	310	620	1290	1979	2100	M16x200			
	280M	90				1456				210			840				1979	2100				
	315S	110	224x94x16	B200		1671				230	1780		890				2114	2240				
	315M	132	238x94x16			1755				230	1780		890				2114	2240				
	315L	160	250x94x16	B225		1910				230	1920		880				960	315	640	1310	2114	2240
	315L	200				2050				230	1920		880				960	315	640	1310	2114	2240
	315	250				1860				250	2000		1000				2374	2500				
	315	315				2160				250							2374	2500				
	355	355	274x98x18	B250		2165				270	2200		920				1100	320	610	1210	2599	2740
	355	400				2205				270	2200		920				1100	320	660	1330	2599	2740
300-400	225M	45	195x94x14	B140	620	1150	300	300	940	190	1570	890	785	360	595	1265	1831	1950	M16x200			
	250M	55	207x94x14	B160		1260				210	1650		825				1954	2070				
	280S	75	215x94x14	B180		1442				210	1730		865				2029	2150				
	280M	90				1491				210			865				2029	2150				
	315S	110	229x95x16	B200		1701				230	1830		890				915	365	615	1285	2164	2290
	315M	132	243x95x16			1785				230	1830		890				915	365	615	1285	2164	2290
	315L	160	255x95x16	B225		1945				250	1930		965				2304	2430				
	315L	200				2085				250	1930		965				2304	2430				
	315	250				1892				250	2050		1025				2424	2550				
	315	315	279x98x18	B250		2191				250							2424	2550				
	355	355				2196				270	2250		920				1125	370	635	1305	2649	2790
	355	400				2240				270							1125	370	635	1305	2649	2790
300-500	225M	45	195x102x14	B140	800	1270	300	300	1020	190	1570	970	785	360	650	1320	1831	1950	M16x200			
	250M	55	207x102x14	B160		1477				210	1650		825				1954	2070				
	280S	75	215x102x14	B180		1655				210	1730		865				2029	2150				
	280M	90				1711				210			865				2029	2150				
	315S	110	229x103x16	B200		1925				230	1830		915				2164	2290				
	315M	132	243x103x16			2007				230	1830		915				2164	2290				
	315L	160	255x103x16	B225		2170				250	1930		965				2304	2430				
	315L	200				2313				250	1930		965				2304	2430				
	315	250				2725				250	2050		1025				2424	2550				
	315	315	279x104x18	B250		2939				250							2424	2550				
	355	355				3372				270							2649	2790				
	355	400				3474				270	2250		980				1125	370	690	1360	2649	2790
	355	500				3689				270							1125	370	690	1360	2649	2790
	400	560	299x106x18	A315		4302				290	2410		1000				1205	2849	2990			
	400	630				4524				290							2849	2990				
	400	710				4728				290							2849	2990				
400	710																					

* Motor protection type IP 55, dimensions depend on the motor manufacturer. Dimensions listed are taken the SIEMENS catalogue.

Designs are subject to amendment without prior notice.

Foundation plan, bearing brackets 25,35 and 45



Dimensions in mm

Tolerances for welded parts acc. to DIN 8570 B

n = 2900 rpm

Size	Motor		Base plate No.	Cplg.	Weight kg		DN ₂	DN ₁	a	b ₂	e ₁	e ₂	v	f ₁	h ₃	h ₄	w*	w ₁	Rag bolt
	size	kW			pump	unit													
32-125	71	0.55	S241	B68	31	51	32	50	80	330	480	290	125	60	177	317	683	730	M16x200
	80	0.75				52											717		
	80	1.10				54											717		
	90S	1.50				57											775		
32-160	90L	2.20	S301	B80	33	74	32	50	80	390	480	350	140	60	197	357	775	820	M16x200
	90S	1.50				72											837		
	90L	2.20				80											837		
	100L	3.00				89											816		
32-200	112M	4.00	S272	B80	33	96	32	50	80	360	540	320	140	60	197	357	837	820	M16x200
	90L	2.20				81											775		
	100L	3.00				90											816		
	112M	4.00				97											837		
32-250	132S	5.50	S303	B95	34	128	32	50	80	390	480	350	125	60	225	405	913	920	M20x400
	132S	7.50				138											913		
	132S	7.50				151											933		
	160M	11.00				171											1051		
40-125	160M	15.00	S434	B95	46	184	32	50	100	540	660	490	170	75	260	485	1051	1000	M20x400
	80	1.10				64											717		
	90S	1.50				67											775		
	90L	2.20				71											775		
40-160	100L	3.00	S272	B80	30	80	40	65	80	360	540	320	140	60	197	357	816	820	M16x200
	90S	1.50				69											775		
	90L	2.20				77											775		
	100L	3.00				79											816		
40-200	112M	4.00	S303	B95	36	115	40	65	100	390	600	350	160	60	240	420	913	920	M20x400
	100L	3.00				92											836		
	112M	4.00				99											857		
	132S	5.50				122											933		
40-250	160M	11.00	S383	B95	46	133	40	65	100	490	600	440	160	75	240	420	1051	1000	M20x400
	160M	15.00				162											1051		
	132S	7.50				151											933		
	160M	11.00				171											1051		
50-125	160L	18.50	S434	B95	46	224	32	50	100	540	660	490	170	75	260	485	1113	1000	M20x400
	90S	1.50				69											795		
	90L	2.20				77											795		
	132S	5.50				116											933		
50-160	132S	5.50	S303	B95	30	116	40	65	100	390	480	350	125	60	197	357	795	730	M16x200
	90L	2.20				83											795		
	100L	3.00				92											836		
	112M	4.00				99											857		
50-160	132S	5.50	S342	B80	36	122	40	65	100	450	540	400	140	60	225	405	933	920	M16x200
	132S	7.50				133											933		
	160M	11.00				162											1051		
	160M	11.00				162											1051		

* Motor protection type IP 55, dimensions depend on the motor manufacturer. Dimensions listed are taken the SIEMENS catalogue.

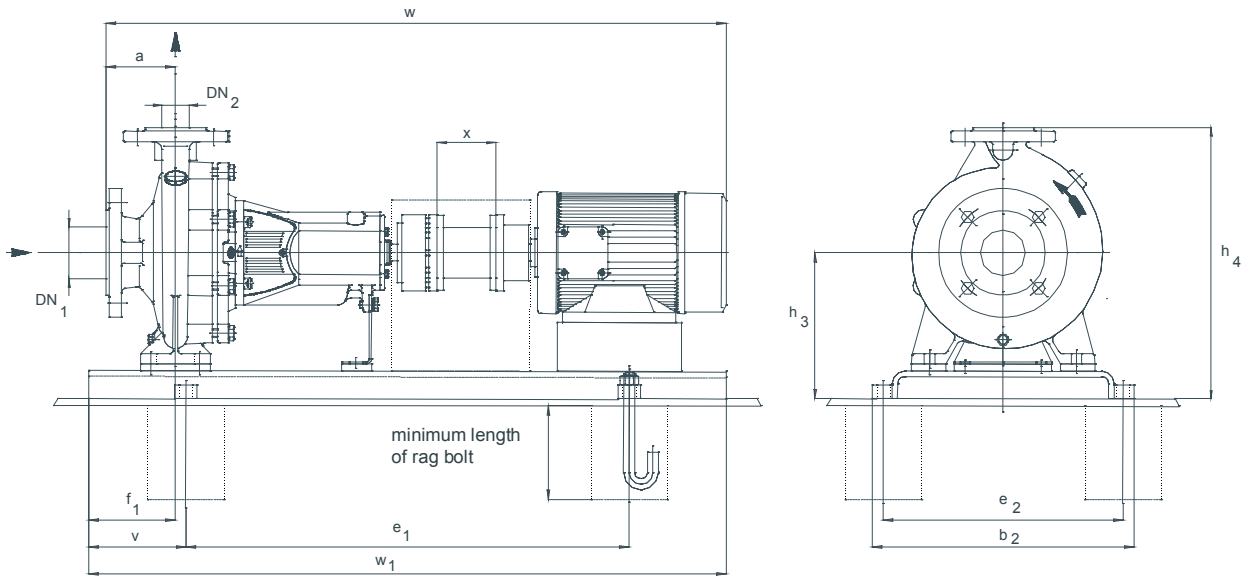
Designs are subject to amendment without prior notice.

Size	Motor		Base plate No.	Cplg.	Weight kg		DN ₂	DN ₁	a	b ₂	e ₁	e ₂	v	f ₁	h ₃	h ₄	w*	w ₁	Rag bolt							
	size	kW			pump	unit																				
50-200	100L	3.00	S342	B80	40	96	50	65	100	450	540	400	140	60	240	440	836	820	M20x400							
	112M	4.00	S303	B95		103				390	600	350	160		225	425	933	920	M16x200							
	132S	5.50				126				490	600	440	160		240	440	1051	1051	1000							
	132S	7.50				136									260	485	1051			1113						
	160M	11.00	S383			167				540	660	490	170		280	505	1175	1120	M24x400							
160M	15.00	S434	180		730	740	670	190	300	525	1233															
50-250	160M	15.00	S605	B110	50	188	65	80	100	540	740	670	190	75	260	485	1051	1000								
	160L	18.50				228									280	505	1175	1120	M24x400							
	200L	30.00				303									300	525	1233									
65-125	100L	3.00	S342	B80	33	98	65	80	100	450	540	400	140	60	240	440	836	820	M20x400							
	112M	4.00	S383	B95		104				490	600	440	160				857	933		920						
	132S	5.50				119											933									
	132S	7.50				130											933									
65-160	132S	5.50	S434		B95	39	125	65	80	100	540	660	490	170	75	260	485	1051	1000	M20x400						
	132S	7.50		136			1051																			
65-200	160M	11.00	S605	B110	45	165	65	80	100	730	740	670	190	75	280	505	1175	1120	M24x400							
	160M	15.00				179											300	525	1233							
	160M	15.00				170											222									
65-250	180M	22.00	S486	B125	70	238	65	80	100	540	740	670	200	90	280	530	1223	1140	M20x400							
	200L	30.00				298											610	840	550	205	300	550	1285	1250	M24x400	
	200L	37.00				397																	1343			
	200L	37.00				332											730	940	670	230	325	575	1373	1400		
	225M	45.00				S607											357									
80-160	132S	7.50	S383	B95	43	148	80	100	125	490	600	440	160	75	260	485	958	920	M20x400							
	160M	11.00	167			540				660	490	170	280				530	1076		1120	M24x400					
	160M	15.00	180															1186								
	160L	18.50	220															1248								
180M	22.00	S605	B110	235	730	740	670	190	300	550	1368	1368	1250													
80-200	160M	15.00	S486	B110	60	226	80	100	125	610	840	550	205	90	300	580	1310	1250	M24x400							
	160L	18.50				244											1368									
	180M	22.00				259											1368									
80-250	200L	30.00	S607	B125	75	314	80	100	125	730	940	670	230	90	325	605	1398	1400	M24x400							
	200L	37.00				338											350	630		1528						
	180M	22.00				293											300	580		1310	1368	1250				
	200L	30.00				348														1368						
	225M	45.00				402											730	940		670	230	350	630	1543	1800	
250M	55.00	S607	651																							
100-160	160L	18.50	S435	B95	78	263	100	125	125	540	740	490	200	90	280	580	1248	1140	M20x400							
	180M	22.00	B110	278		610				840	550	205	300				580	1368	1250	M24x400						
	200L	30.00	S486	341														1368								
	200L	37.00	365	1368																						
100-200	160L	18.50	S435	B95	70	254	100	125	140	540	740	490	200	90	280	580	1248	1140	M20x400							
	180M	22.00	B110	269		610				840	550	205	300				580	1310	1250	M24x400						
	200L	30.00	S486	332														1368								
	200L	37.00	357	730														940			670	230	325	605	1398	1400
	225M	45.00	S607	397														610			840	550	205	350	630	1543
100-250	200L	30.00	S607	B125	85	357	100	125	140	730	940	670	230	90	325	605	1383	1250	M24x400							
	200L	37.00				382											744	1200		696	300	380	660	1413	1800	
	225M	45.00				413																		1543		
	250M	55.00				B140											661	350		630	1543	1800				
	280S	75.00				S609A											827	380		660	1643	1800				
280M	90.00	B160	869																							
125-200	250M	55.00	S607	B140	100	677	125	150	140	730	940	670	230	90	350	665	1543	1400	M24x400							
	280S	75.00	S609A	B160		842				744	1200	696	300				380	695		1643	1800					
	280M	90.00	884																							

* Motor protection type IP 55, dimensions depend on the motor manufacturer. Dimensions listed are taken from the SIEMENS catalogue.

Designs are subject to amendment without prior notice.

Foundation plan for units with spacer type coupling, bearing brackets 25,35 and 45.



Dimensions in mm

Tolerances for welded parts acc. to DIN 8570B

n = 1450 rpm

Size	Motor		Base plate No.	Cplg.	Weight kg		DN ₂	DN ₁	a	b ₂	e ₁	e ₂	v	f ₁	h ₃	h ₄	x	w*	w ₁	Rag bolt		
	size	kW			pump	unit																
32-125	71	0.37	S272	H80	31	69	32	50	80	360	540	320	140	60	177	317	100	823	820	M16x200		
	71	0.37			71	71									823							
32-160	80	0.55			33	73									857							
	80	0.55			34	74									857							
32-200	80	0.75	S015	H80	76	79	325	160	361	600	440	160	75	225	405	210	390	857	920	M20x400		
	90S	1.10			79	79								915								
32-250	80	0.75	S383	H80	46	105	40	65	100	490	600	440	160	75	260	485	75	260	485	877	920	M20x400
	90S	1.10			108	112									935							
	90L	1.50			112	120									976							
	100L	2.20			120	120									976							
40-125	71	0.37	S272	H80	28	66	40	65	80	360	540	320	140	60	177	317	100	823	820	M20x200		
	80	0.55			68	68									857							
40-160	71	0.37			70	70									823							
	80	0.55			70	72									857							
40-200	80	0.75	S015	H80	30	75	600	325	160	361	600	400	140	60	182	342	240	420	877	820	M20x200	
	90S	1.10			75	75									915							
40-250	80	0.55	S342	H80	36	85	400	350	160	450	540	400	140	60	240	420	225	405	877	820	M16x200	
	80	0.75			86	86									877							
40-200	90S	1.10	S303	H80	36	89	600	350	160	390	600	440	160	75	225	405	225	405	935	920	M20x400	
	90L	1.50			93	93									935							
40-250	90S	1.10	S383	H80	46	108	400	350	160	490	600	440	160	75	260	485	75	260	485	935	920	M20x400
	90L	1.50			112	120									976							
	100L	2.20			120	120									976							
	100L	3.00			123	123									976							
40-315	100L	2.20	S605	H95	73	163	730	740	670	125	730	740	190	325	575	325	575	1111	1120	M24x400		
	100L	3.00			165	170									1111							
	112M	4.00			170	186									1132							
	132S	5.50			186	186									1208							
50-125	71	0.37	S272	H80	30	68	50	65	100	360	540	320	140	60	197	357	100	843	820	M16x200		
	80	0.55			70	70									877							
50-160	80	0.75			72	72									877							
	80	0.55			77	77									877							
50-200	80	0.75	S342	H80	36	79	600	350	160	390	600	400	140	60	240	420	225	405	935	920	M16x200	
	90S	1.10			82	82									935							
50-250	80	0.75	S342	H80	40	91	540	400	140	450	540	400	140	60	240	440	240	440	877	820	M20x400	
	90S	1.10			94	94									877							
50-200	90L	1.50	S303	H80	40	97	600	350	160	390	600	440	160	75	225	425	75	225	425	935	920	M16x200
	100L	2.20			106	106									976							
	90L	1.50			116	116									935							
	100L	2.20			125	125									976							
50-250	100L	3.00	S383	H80	50	127	730	740	670	125	730	740	190	325	605	325	605	1132	1120	M24x400		
	112M	4.00			132	132									1132							
	112M	4.00			186	186									1208							
	132S	5.50			201	201									1234							
50-315	132M	7.50	S605	H80	88	226	730	740	670	125	730	740	190	325	605	325	605	1208	1120	M24x400		
	132M	7.50			226	226									1234							
65-125	80	0.55	S342	H80	33	83	65	80	100	450	540	400	140	60	240	420	240	420	877	820	M20x400	
	80	0.75			84	84										877						
65-160	80	0.75			90	90										877						
	90L	1.50			97	97										877						
65-160	100L	2.20	S383	H80	39	115	600	440	160	490	600	440	160	60	440	440	935	920	M20x400			
	100L	2.20			115	115									976							

Designs are subject to amendment without prior notice.

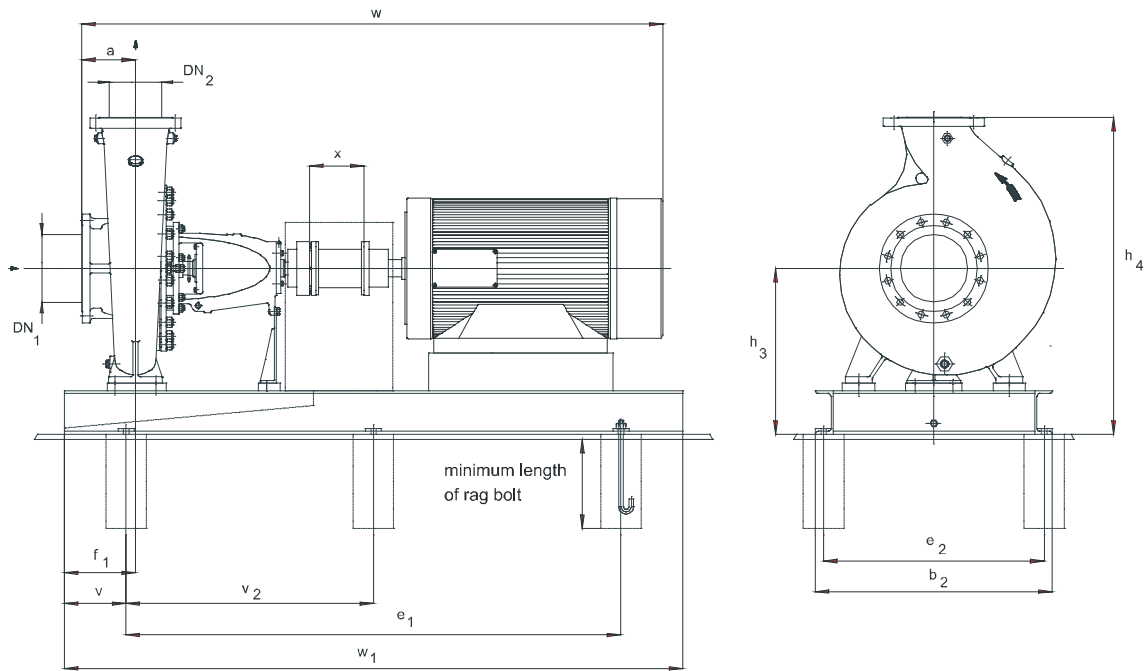
Size	Motor		Base plate No.	Cplg.	Weight kg		DN ₂	DN ₁	a	b ₂	e ₁	e ₂	v	f ₁	h ₃	h ₄	x	w*	w ₁	Rag bolt								
	size	kW			pump	unit																						
65-200	90S	1.10	S383	H80	45	107	65	80	100	490	600	440	160	75	260	485	140	935	920	M20x400								
	90L	1.50				111												935										
	100L	2.20				119												976										
	100L	3.00				127												976										
	112M	4.00				127												997										
65-250	100L	2.20	S605	H95	70	159	90	125	610	840	550	205	200	300	550	140	1086	1120	M24x400									
	112M	4.00				167											1086											
	132S	5.50	S435			196											540		490	200	280	530	1183	1140	M20x400			
	132M	7.50				237											1208											
65-315	132M	7.50	S486	H110	92	249	125	610	840	550	205	230	325	605	140	1234	1250	M24x400										
	160M	11.00				270										1326												
	160L	15.00	S607			290										730		940	670	230	1388	1400						
	80	0.75				102										902												
80-160	90S	1.10	S383	H80	43	105	80	100	490	600	440	160	75	260	485	140	960	920	M20x400									
	90L	1.50				108											960											
	100L	2.20				117											1001											
	100L	3.00				119											1001											
	90L	1.50				S434											126			540	660	490	170	1070	1000			
100L	2.20	149	1111																									
80-200	100L	3.00	S605	H95	60	151	80	100	730	740	670	190	90	280	530	140	1132	1120	M24x400									
	112M	4.00				156											1208											
	132S	5.50				172											1208											
	100L	3.00				H80											198			1111								
112M	4.00	203	1132																									
80-250	132S	5.50	S486	H95	75	219	125	610	840	550	205	200	300	580	140	1208	1250	M24x400										
	132M	7.50				231										1234												
	132S	5.50				240										1208												
80-315	132M	7.50	S486	H95	95	252	125	610	840	550	205	200	350	665	140	1234	1250	M24x400										
	160M	11.00				273										1326												
	160L	15.00	S607			H110										293			730	940	670	230	1388	1400				
	160M	11.00														324			1383	1250								
80-400	160L	15.00	S486	H95	143	381	80	125	730	940	670	230	380	735	140	1383	1400	M24x400										
	180M	18.50				403										1507												
	180L	22.00	S607	H110		418										1507												
	200L	30.00				H125										467			1565									
	100L	2.20	S605	H80												78			168	100	125	730	740	670	190	300	580	140
100L	3.00	170			1111																							
112M	4.00	175			1132																							
132S	5.50	S435			H95	204	540	490	200	280	560	1208	1140	M20x400														
100L	2.20		159	1111																								
100-200	100L	3.00	S605	H80	70	161	125	610	840	550	205	200	300	580	140	1111	1120	M24x400										
	112M	4.00				167										1132												
	132S	5.50				S435										H95			196	540	490	200	280	560	1208	1140	M20x400	
	132M	7.50																	207	1234								
	112M	4.00				S605										H80			214	610	840	550	205	300	580	1250		
132S	5.50	230	1147																									
100-250	132M	7.50	S486	H95	85	241	100	125	730	740	670	190	90	325	605	140	1223	1250	M24x400									
	160M	11.00				262											1249											
	160M	11.00				282											1341											
	160L	15.00				302											1403											
	180L	22.00				322											1465											
100-315	180L	22.00	S607	H110	104	339	140	610	840	550	205	200	350	665	140	1465	1400	M24x400										
	160L	15.00				H125										399			1465									
	160L	15.00	S607	H95												417			730	940	670	230	1398	1400				
	180M	18.50				H110										439			1522									
	180L	22.00	454	1522																								
100-400	200L	30.00	S608	H140	177	502	125	150	730	940	670	230	110	380	735	140	1580	1400	M24x400									
	225S	37.00				553											1617											
	225M	45.00	574	1617																								
	160L	15.00	S608	H140		417											1060			270	1522	1600						
	180M	18.50				439											1580											
125-200	132M	7.50	S486	H95	100	257	125	150	610	840	550	205	90	350	665	140	1249	1250	M24x400									
	160M	11.00				278											1341											
	160L	15.00				298											1403											
	132M	7.50				S607											H110			259	730	940	670	230	1249	1250		
	160M	11.00																		280	1341							
125-250	160L	15.00	S607	H95	102	300	125	150	610	840	550	205	110	380	735	140	1403	1400	M24x400									
	160L	15.00				390											1403											
	180M	18.50				H110											412			1398								
	180L	22.00															H125			426	1522							
	200L	30.00				475														1580								
125-315	225S	37.00	S608	H140	151	526	125	150	730	940	670	230	110	380	735	140	1617	1600	M24x400									
	225S	37.00				526											1617											
	200L	30.00	S607	H125		514											940			230	1580	1400						
	225S	37.00				564											1617											
	125-400	225M	45.00	S608		H160											188			585	125	150	1060	680	170	200	455	855
250M		55.00	817		1740																							
280S		75.00	1054		1815		1800																					
132M		7.50	S606		H95		296	1460	680	170	200	455	855	1815	1800	M16x200												
160M		11.00					329	1269																				
150-200	160L	15.00	S607	H110	123	348	150	200	730	940	670	230	110	380	780	140	1361	1400	M24x400									
	180M	18.50				368											1423											
	160L	15.00				354											1485											
	180M	18.50				374											1423											
150-250	180L	22.00	H125	H140	128	391	150	200	730	940	670	230	110	380	780	140	1485	1400	M24x400									
	200L	30.00				454											1485											
	160L	15.00				354											1543											

Designs are subject to amendment without prior notice.

Size	Motor		Base plate No.	Cplg.	Weight kg		DN ₂	DN ₁	a	b ₂	e ₁	e ₂	v	f ₁	h ₃	h ₄	x	w*	w ₁	Rag bolt	
	size	kW			pump	unit															
150-315	180L	22.00	S607	H110	170	446	150	200	160	730	940	670	230	110	380	780	140	1542	1400	M24x400	
	200L	30.00		H125		495												1600			
	225S	37.00		H140		546												1637			
	225M	45.00	S608	H140		567												270	1760		1600
	250M	55.00		H160		798															
150-400	225M	45.00	S608	H140	205	603	160	730	1060	1460	680	170	200	455	905	140	415	865	1600	M16x200	
	250M	55.00		H160		835											1760				
	280S	75.00		180x73x14		H180											1072	1835			1800
	280M	90.00	H180			1125															
	200-250	160L	15.00	S608		H110											230	492			200
180M		18.50	512		1642																
180L		22.00	527		1642																
200L		30.00	H125		576	1700															

* Motor protection type IP 55, dimensions depend on the motor manufacturer. Dimensions listed are taken from the SIEMENS catalogue.

Foundation plan for units with spacer type coupling, bearing brackets 55 and 65.



Dimensions in mm

Tolerances for welded parts acc. to DIN 8570 B

n = 1450 rpm

Size	Motor		Base plate No.	Cplg.	Weight kg		DN ₂	DN ₁	a	b ₂	v	e ₁	e ₂	v ₂	f ₁	h ₃	h ₄	x	w*	w ₁	Rag bolt										
	size	kW			pump	unit																									
150-500	180L	22.0	185x81x12	H125	335	677	150	200	180	810	190	1470	760	735	235	550	1050	180	1742	1850	M16 x200										
	200L	30.0	192x82x14																			757									
	225S	37.0	196x82x14	H140																		820	190	1580	770	790	240	570	1070	1837	1960
	225M	45.0																				850	190	830	2035	2150					
	250M	55.0	208x82x14	H160																		961	210	1660	770	865	2035	2150	2170	2300	
	280S	75.0	215x82x14	H180																		1143	210	1730	770	865	2035	2150	2170	2300	
	280M	90.0	230x83x16	H200																		1193	230	1840	770	920	2170	2300	2170	2300	
	315S	110																				1406	230	1840	770	920	2170	2300			
	315M	132																				1486	230	1840	770	920	2170	2300			
	315L	160	244x83x16	H200																		1644	250	1940	770	970	245	590	1090	2310	2440
	315L	200	256x87x16	H225																		1784	250	1940	770	970	245	590	1090	2310	2440
315	250	1625			250	2060	810	1030	2430	2560																					
200-315	180L	22.0	187x72x12	H125	310	715	200	200	720	190	1490	670	745	255	505	955	180	1762	1870	M18 x200											
	200L	30.0	194x73x14																		715										
	225S	37.0	198x73x14	H140																	780	190	1560	680	780	260	525	975	1820	1940	
	225M	45.0	810	190																	1600	680	800	1857	1980						
	250M	55.0	210x73x14	H160																	921	210	1680	680	840	1980	2100				
	280S	75.0	217x74x14	H180																	1102	210	1750	690	875	2055	2170				
	280M	90.0	210x73x14	H160																	740	210	1680	690	840	1980	2100				
315L	160	1102			210	1750	690	875	2055	2170																					
200-400	180L	22.0	185x72x12	H125	340	669	200	250	180	720	190	1470	670	735	235	505	1005	180	1742	1850	M16 x200										
	200L	30.0	192x73x14																			745									
	225S	37.0	196x73x14	H140																		810	190	1540	680	790	240	525	1025	1837	1960
	225M	45.0	840	190																		1580	680	790	1837	1960					
	250M	55.0	208x73x14	H160																		951	210	1660	680	830	1960	2080			
	280S	75.0	215x74x14	H180																		1132	210	1730	690	865	2035	2150			
	280M	90.0	230x82x16	H200																		1182	210	1730	690	865	2035	2150			
	315S	110																				1409	230	1840	690	920	2170	2300			
	315M	132																				1489	230	1840	690	920	2170	2300			
	315L	160	244x82x16	H200																		1644	250	1940	760	970	245	545	1045	2310	2440
	315L	200	256x87x16	H225																		1784	250	1940	760	970	245	545	1045	2310	2440
315	250	1630			250	2060	810	1030	2430	2560																					
200-500	225M	45.0	198x84x14	H140	395	920	200	200	840	190	1600	790	800	260	595	1155	180	1857	1980	M16 x200											
	250M	55.0	210x84x14	H160																	1031	210	1680	790	840	1980	2100				
	280S	75.0	217x84x14	H180																	1212	210	1750	790	875	2055	2170				
	280M	90.0	232x85x16	H200																	1262	210	1750	790	875	2055	2170				
	315S	110																			1474	230	1860	790	930	2190	2320				
	315M	132	1554	230																	1860	790	930	2190	2320						
	315L	160	246x85x16	H200																	1709	250	1960	790	980	265	615	1175	2330	2460	
	315L	200	258x87x16	H225																	1849	250	1960	790	980	265	615	1175	2330	2460	
	315	250																			1685	250	2080	810	1040	2430	2580				
	315	315	281x98x18	H250																	1885	250	2080	810	1040	2430	2580				
	355	355																			1985	290	2230	920	1115	270	635	1195	2675	2810	

* Motor protection type IP 55, dimensions depend on the motor manufacturer. Dimensions listed are taken from the SIEMENS catalogue.

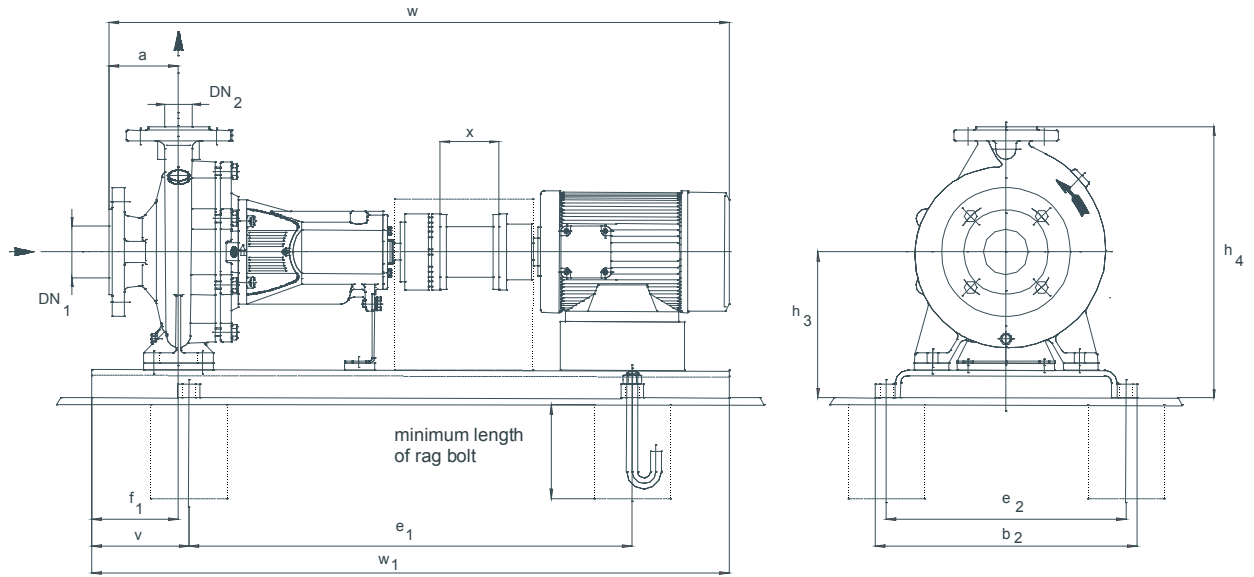
Size	Motor		Base plate No.	Cplg.	Weight kg		DN ₂	DN ₁	a	b ₂	v	e ₁	e ₂	v ₂	f ₁	h ₃	h ₄	x	w*	w ₁	Rag bolt												
	size	kW			pump	unit																											
250-300	225S	37	207x88x14	H140	416	898	250	300	305	880	210	1650	830	825	365	595	1145	180	1947	2070	M16x200												
	225M	45				928																											
	250M	55	219x88x14	H160		1044																									2070	2190	
	280S	75	226x88x14	H180		1225																									2145	2260	
250-315	200L	30	199x80x14	H125	424	846	250	300	250	800	190	750	805	310	545	1105	180	1870	1990	M164x200													
	225S	37	203x80x14	H140		906																											
	225M	45				936																											
	250M	55	215x80x14	H160		1052																											
	280S	75	222x80x14	H180		1233																											
	280M	90				1283																											
	315S	110	237x82x16	H200		1496																											
315M	132			1576																													
250-400	225S	37	208x88x14	H140	464	962	250	300	250	880	210	830	870	310	570	1170	180	1957	2080	M16x200													
	225M	45				991																											
	250M	55	220x88x14	H160		1103																											
	280S	75	227x88x14	H180		1284																											
	280M	90				1334																											
	315S	110	242x89x16	H200		1552																											
	315M	132				1632																											
	315L	160	256x89x16	H225		1787																											
	315L	200				1927																											
	315	250	268x89x16			1758																											
	315	315		H250		2158																											
355	355	291x98x18		2063																													
250-500	280S	75	227x93x14	H180	589	1431	250	300	250	930	230	880	905	310	620	1290	180	2155	2270	M16x200													
	280M	90				1480																											
	315S	110	242x94x16	H200		1703																											
	315M	132				1780																											
	315L	160	256x94x16			1933																											
	315L	200				2068																											
	315	250	268x94x16	H225		1903																											
	315	315				2197																											
	355	355	291x98x18	H250		2202																											
	355	400				2242																											
300-400	225M	45	213x94x14	H140	620	1143	300	350	300	940	210	890	855	360	595	1265	180	2007	2130	M16x200													
	250M	55	225x94x14	H160		1243																											
	280S	75	232x94x14	H180		1466																											
	280M	90				1515																											
	315S	110	247x95x16	H200		1733																											
	315M	132				1810																											
	315L	160	261x95x16			1968																											
	315L	200				2103																											
	315	250	273x95x16	H225		1949																											
	315	315				2248																											
	355	355	296x98x18	H250		2253																											
355	400		2290																														
300-500	225M	45	213x102x14	H140	800	1263	300	350	300	1020	210	970	855	360	650	1320	180	2007	2130	M16x200													
	250M	55	225x102x14	H160		1471																											
	280S	75	232x102x14	H180		1654																											
	280M	90				1711																											
	315S	110	247x103x16	H200		1925																											
	315M	132				2007																											
	315L	160	261x103x16			2170																											
	315L	200				2313																											
	315	250	273x103x16	H225		2720																											
	315	315				2938																											
	355	355	296x104x18	H250		3372																											
	355	400				3474																											
	355	500																															
	400	560	**	**		**					**							**	**		**	**	**	**	**	**	**	**	**	**	**	**	
400	630																																
400	710																																

* Motor protection type IP 55, dimensions depend on the motor manufacturer.
Dimensions listed are taken from the SIEMENS catalogue.

** On request.

Designs are subject to amendment without prior notice.

Foundation plan for units with spacer type coupling, bearing brackets 25, 35 and 45



Dimensions in mm

Tolerances for welded parts acc. to DIN 8570 B

n = 2900 rpm

Size	Motor		Base plate No.	Cplg.	Weight kg		DN ₂	DN ₁	a	b ₂	e ₁	e ₂	v	f ₁	h ₃	h ₄	x	w*	w ₁	Rag bolt
	size	kW			pump	unit														
32-125	71	0.55	S272	H80	31	70	32	50	80	360	540	320	140	60	177	317	100	823	820	M16x200
	80	0.75				71									857					
	80	1.10				73									915					
	90S	1.50				76									915					
	90L	2.20				79									915					
32-160	90S	1.50	S385	H80	33	78	32	50	80	490	740	440	200	60	212	372	100	915	1140	M20x400
	90L	2.20				81									915					
	100L	3.00				89									915					
	112M	4.00				96									915					
32-200	90L	2.20	S385	H80	34	82	32	50	80	490	740	440	200	60	240	420	100	915	1140	M20x400
	100L	3.00				90									956					
	112M	4.00				97									977					
	132S	5.50				121									1053					
	132S	7.50				131									1053					
32-250	132S	7.50	S385	H95	46	152	32	50	100	490	740	440	200	60	260	485	100	1073	1140	M20x400
	160M	11.0				164									1191					
	160M	15.0				177									1191					
40-125	80	1.10	S385	H80	28	70	40	65	80	730	740	670	190	60	192	332	100	857	1140	M20x400
	90S	1.50	S605			73									915					
	90L	2.20	S385			76									915					
	100L	3.00	S385			84									915					
40-160	90S	1.50	S385	H80	30	75	40	65	80	730	740	670	190	60	212	372	100	915	1140	M20x400
	90L	2.20				78									915					
	100L	3.00				86									956					
	112M	4.00				93									977					
	132S	5.50				116									1053					
40-200	100L	3.00	S605	H80	36	101	40	65	100	730	740	670	190	60	232	392	100	976	1120	M24x400
	112M	4.00				106									997					
	132S	5.50				123									1073					
	132S	7.50				133									1073					
	160M	11.00				164									1191					
40-250	132S	7.50	S385	H95	46	152	40	65	100	730	740	670	190	60	260	440	100	1073	1140	M20x400
	160M	11.00				193									1191					
	160M	15.00				207									1191					
50-125	90S	1.50	S015	H80	30	75	50	65	100	361	600	325	160	60	182	342	100	935	920	M12x100
	90L	2.20	S434			H95									78	935				
	132S	5.50	S303			H80									116	1073				
50-160	90L	2.20	S303	H80	36	93	50	65	100	390	600	350	160	60	225	405	100	935	920	M14x200
	100L	3.00	S385			101									976					
	112M	4.00	S303			108									997					
	132S	5.50	S434			123									1073					
	132S	7.50	S605			133									1073					
	160M	11.00	S605			164									1191					
																730		740		

* Motor protection type IP 55, dimensions depend on the motor manufacturer. Dimensions listed are taken from the SIEMENS catalogue.

Size	Motor		Base plate No.	Cplg.	Weight kg		DN ₂	DN ₁	a	b ₂	e ₁	e ₂	v	f ₁	h ₃	h ₄	x	w*	w ₁	Rag bolt				
	size	kW			pump	unit																		
50-200	100L	3.00	S303	H80	40	105	50	65	100	390	600	350	160	60	225	425	100	976	920	M16				
	112M	4.00	S434			112												997	x200					
	132S	5.50				127												1073	1000	M20				
	132S	7.50				137												1073	x400					
	160M	11.00	S605			168												1191	M24					
160M	15.00	182		1191	x400																			
50-250	160M	15.00	S385	H95	50	211	65	80	100	730	740	670	190	75	280	505	140	1191	1120	M24				
	160L	18.50				229												1253	1140	M20				
	180M	22.00	S486			H110												250	1315	1250	M24			
	200L	30.00				H125												281	1373	x400				
65-125	100L	3.00	S383	H80	33	108	65	80	100	490	600	440	160	60	240	660	100	976	920	M20				
	112M	4.00	S385			115					740	200	1140											
	132S	5.50	S434			130					540	660	490					170	60		240	660	1000	1073
	132S	7.50				141																		1073
65-160	132S	5.50	S605	H95	39	136	65	80	100	730	740	670	190	75	260	460	140	1073	1120	M24				
	132S	7.50				147												1073						
	160M	11.00				167												1191						
65-200	160M	11.00	S385	H95	45	192	65	80	100	730	740	670	190	75	280	505	140	1191	1120	M24				
	160M	15.00				206												1191						
	160L	18.50				224												1253	1140		M20			
	180M	22.00				S486												H110	240		1315	1250	M24	
	200L	30.00																H125	300		1373	x400		
65-250	160L	18.50	S607	H95	70	264	65	80	100	730	940	670	230	90	300	550	140	1363	1400	M24				
	180M	22.00				280												1425						
	200L	30.00				389												1483						
	200L	37.00				335												1513	1600					
	225M	45.00				S608												H125	414		1060	270	325	575
80-160	132S	7.50	S605	H95	43	149	80	100	125	730	740	670	190	75	280	505	140	1098	1120	M24				
	160M	11.00	190			1216																		
	160M	15.00	204			1216												1140	M20					
	160L	18.50	222			1278																		
	180M	22.00	S486			H110												237	1340		M24			
160M	15.00	H95		227	1326	1250	x400																	
160L	18.50	253	1388																					
80-200	180M	22.00	S436	H110	60	269	80	100	125	610	840	550	205	75	280	530	140	1450	1270	M20				
	200L	30.00	324			1508																		
	200L	37.00	348			1508																		
	180M	22.00	S607			H110												295	1450		1400	M24		
200L	30.00	H125		350	1508																			
80-250	200L	37.00	S608	H125	75	374	80	100	125	730	940	670	230	90	300	580	140	1508	1600	M24				
	225M	45.00				450												1538						
	250M	55.00				655												1688						
	180M	22.00				S607												H110	288		1450	1400	M24	
	200L	30.00																H125	343		1508			
100-160	160L	18.50	S607	H95	78	272	80	100	125	940	940	670	230	90	300	580	140	1388	1400	M24				
	180M	22.00				288												1450						
	200L	30.00				367												1508						
	200L	37.00				335												1508						
	160L	18.50				S608												H125	264		1388			
180M	22.00	H110	280	1450																				
100-200	200L	30.00	S607	H125	70	359	80	100	125	730	1060	670	230	90	325	605	140	1508	1600	M24				
	200L	37.00				445												1538						
	225M	45.00				445												1538						
	200L	30.00				350												1523	1400					
100-250	200L	37.00	S608	H140	85	374	80	100	140	940	1060	670	300	90	350	630	140	1523	1600	M24				
	225M	45.00				461												1553						
	250M	55.00				666												1683						
	280S	75.00				S609A												H160	850		1783	1800		
	280M	90.00				892												1783						
125-200	250M	55.00	S608	H140	100	682	80	100	140	730	1060	670	270	90	350	665	140	1683	1600	M24				
	280S	75.00	S609A			H160												865	1783		1800			
	280M	90.00	907			1783												x400						

* Motor protection type IP 55, dimensions depend on the motor manufacturer.
Dimensions listed are taken from the SIEMENS catalogue.

Designs are subject to amendment without prior notice.

Data regarding size - order information

Type	Size	Hydraulic + Bearing	Shaft Seal	Material	Casing Gasket
		<ul style="list-style-type: none"> A• First hydraulic B• Second hydraulic D• Double volute •B Two ball bearings greased for life (ZZ) •C Two ball bearings oil lubricated •S One double row angular contact bearing plus one ball bearing, grease lubricated •T One double row ball bearing plus ball bearing, oil lubricated •2 Oil lubrication configurations with CLO 	<p>041: Self-sealed, uncooled packing rings 052: Uncooled packing rings, external seal liquid AF3: Balanced mechanical seal, seal face materials SiC/Carbon, elastomer EPDM BJ3: Unbalanced bellows mechanical seal, seal face materials SiC/Carbon, elastomer EPDM C23: Unbalanced bellows mechanical seal, seal face materials SiC/Carbon, elastomer EPDM AFS: Balanced mechanical seal, seal face materials SiC/ SiC, elastomer FPM (Viton) BJS: Unbalanced bellows mechanical seal, seal face materials SiC/ SiC, elastomer FPM (Viton) C2S: Unbalanced bellows mechanical seal, seal face materials SiC/ SiC, elastomer FPM (Viton) AFK: Balanced mechanical seal, seal face materials SiC/carbon, elastomer FPM (Viton) double PTFE (Teflon) wrapped BJJ: Unbalanced bellows mechanical seal, seal face materials SiC/Carbon, elastomer FPM (Viton) C2J: Unbalanced bellows mechanical seal, seal face materials SiC/Carbon, elastomer FPM (Viton)</p> <p>AX3,AXS,AXK: AF3,AFS,AFK plus quench AY3,AYS,AYK: AF3,AFS,AFK. plus heating A93,A9S,A9K: AF3,AFS,AFK plus external flushing</p>	<p>0B: Cast iron GG25</p> <p>0C: Cast iron GG25 Bronze G-CuSn10 impeller</p> <p>0E: Cast iron GG25 stainless steel 1.4408 impeller</p> <p>4B: Stainless steel 1.4408</p>	<p>2: Confined flat gasket of EWP 210 material</p> <p>4: Confined flat gasket of PTFE.</p>
ZLND	32125	AB, AC or A2	Alternatively	Alternatively	Alternatively
	32160	AB, AC, A2, BB,BC or B2			
	32200	AB, AC, A2, BB,BC or B2			
	32250				
	40125				
	40160				
	40200				
	40250				
	40315				
	50125				
	50160				
	50200				
	50250				
	50315				
	65125				
	65160				
	65200				
	65250				
	65315				
	80160				
	80200				
	80250	AB, AC or A2			
	80315				
	80400				
	100160				
	100200				
	100250				
	100315				
	100400				
	125200				
	125250				
	125315				
	125400				
	150200				
	150250				
	150315				
	150400				
	150500	AS, AT or A2			
	200250	AB, AC or A2			
	200315	AS, AT or A2			
200400					
200500	DS, DT or D2				
250300					
250315	AS, AT or A2				
250400					
250500	DS, DT or D2				
300400					
300500					

Designs are subject to amendment without prior notice.

Sterling Fluid Systems (Spain), S.A.

Vereda de los Zapateros s/n, Pozuelo de Alarcón 28223 Madrid, Spain.

Telephone +34 91 709 1310 Telefax +34 91 715 9700. E-mail mibsa@stnet.es

Designs are subject to amendment without prior notice.