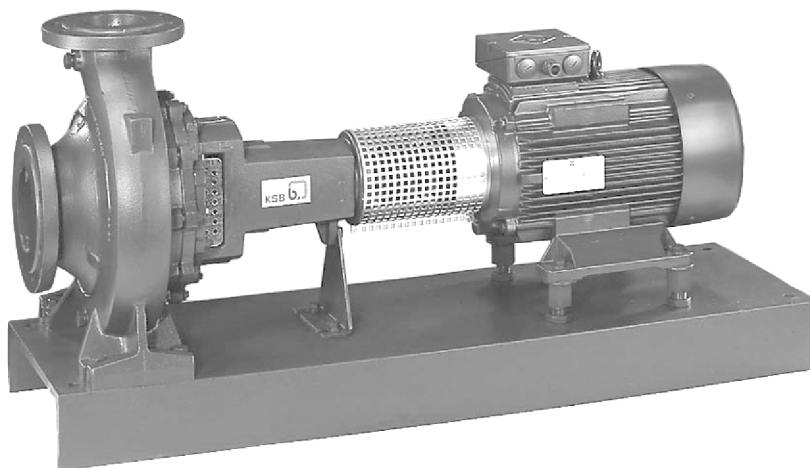


Standardized Pumps



Fields of Application

- Water supply
- Fire-fighting systems
- Sprinkling
- Irrigation
- Drainage
- Heating
- Air-conditioning systems
- Drinking water
- Service water
- Hot water
- Cooling water
- Swimming pool water
- Sea water
- Fire-fighting water
- Brackish water
- Condensate
- Brine
- Oils
- Cleaning agents

Fluid

Pure liquids not chemically or mechanically aggressive to the pump materials.

Operating Data

Q up to 1900 m³/h, (528 l/s)
H up to 102 m
t -30 °C to +140 °C
p₂ up to 16 bar ¹⁾

¹⁾ see pressure/temperature limits, page 5

Design

Horizontal volute casing pump, single-stage (pump size 125-200/2 two-stage), with power ratings and main dimensions to EN 733 up to DN 200 / extension Etanorm-R, with bearing bracket, in back pull-out design.

Shaft with replaceable shaft sleeve/shaft protecting sleeve in the shaft seal area.

Volute casing and impeller with replaceable wear rings.

Volute casing with integrally cast pump feet.

Bearings

Deep-groove ball bearings, grease-lubricated.

Shaft Seal

Mechanical seal to EN 12756 (Standard for Etanorm, for Etanorm-R as option) or gland packing.

Designation

EN(-R) 40 - 160 43 (6238) G 10 ^{*)}

Type series Etanorm _____
Pump size, e.g. _____
Actual impeller diameter - 100 mm, e.g. 143 mm
= (angular reduction of impeller vanes)
e.g. actual diameter 162/138 mm = _____
Casing material, e.g. JL 1040 ²⁾ _____
Shaft seal, e.g. mechanical seal Q₁ Q₁ X4GG _____
²⁾ to EN 1561 = GJL-250
^{*)} for Etanorm only

Accessories

Drive

Surface-cooled KSB-IEC three-phase squirrel cage motor

Winding: up to 2.2 kW: 220-240 V/380-420 V
3 kW and above: 380-420 V/660-725 V

Design: IMB 3

Enclosure: IP 55

Thermal class: F with temperature sensors: 3 PTC resistors

Operating mode: continuous operation S1
or

surface-cooled three-phase squirrel cage motor as described above, but West European brand to KSB's choice.

Coupling

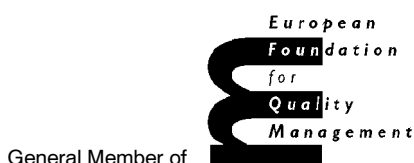
Flexible coupling with/without spacer sleeve

Contact Guard

Coupling guard as per EN 294.

Baseplate

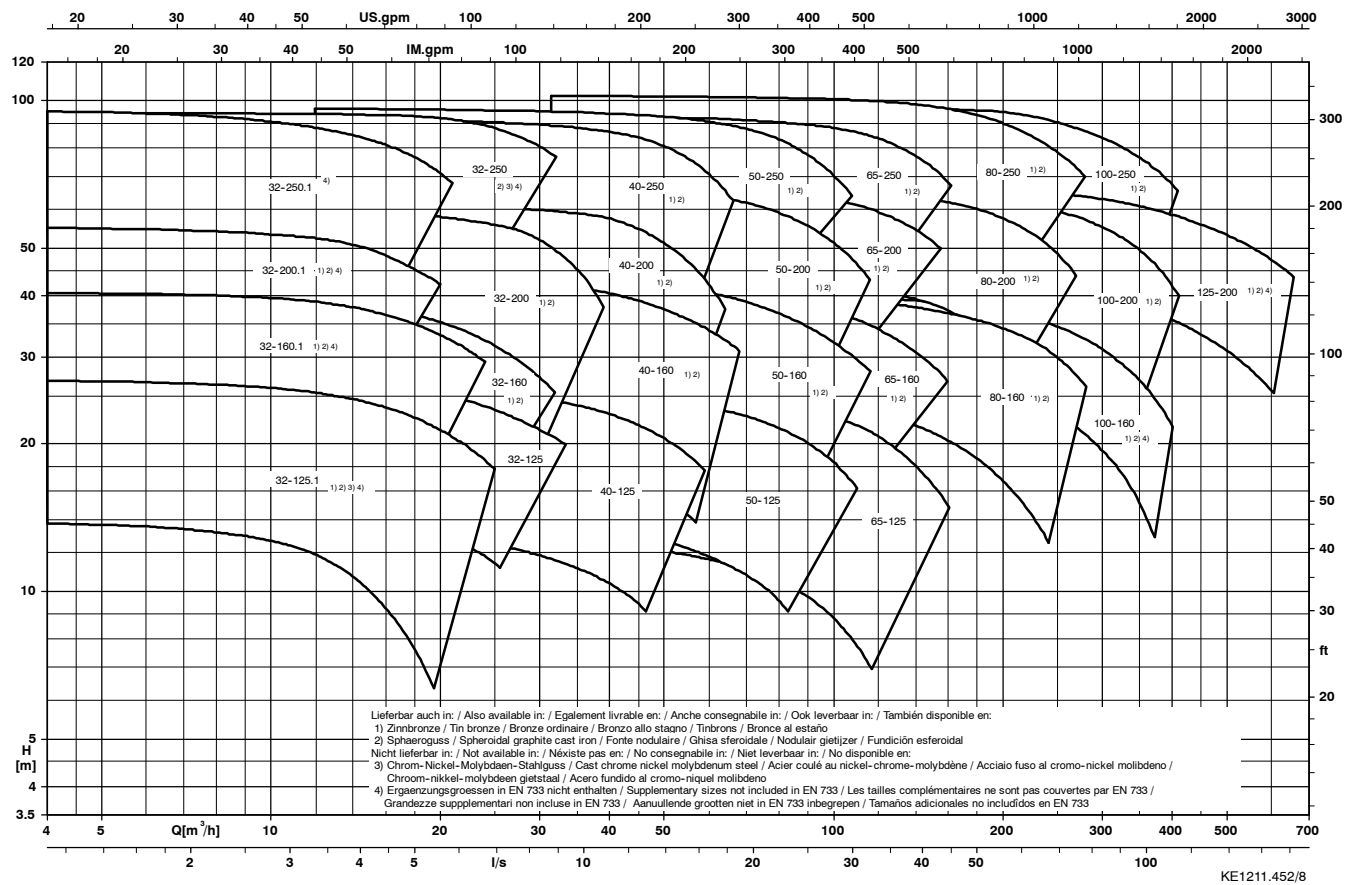
Sectional steel / folded steel plate, fabricated sectional steel for the complete unit (pump and motor)
in torsion-resistant design



Selection charts

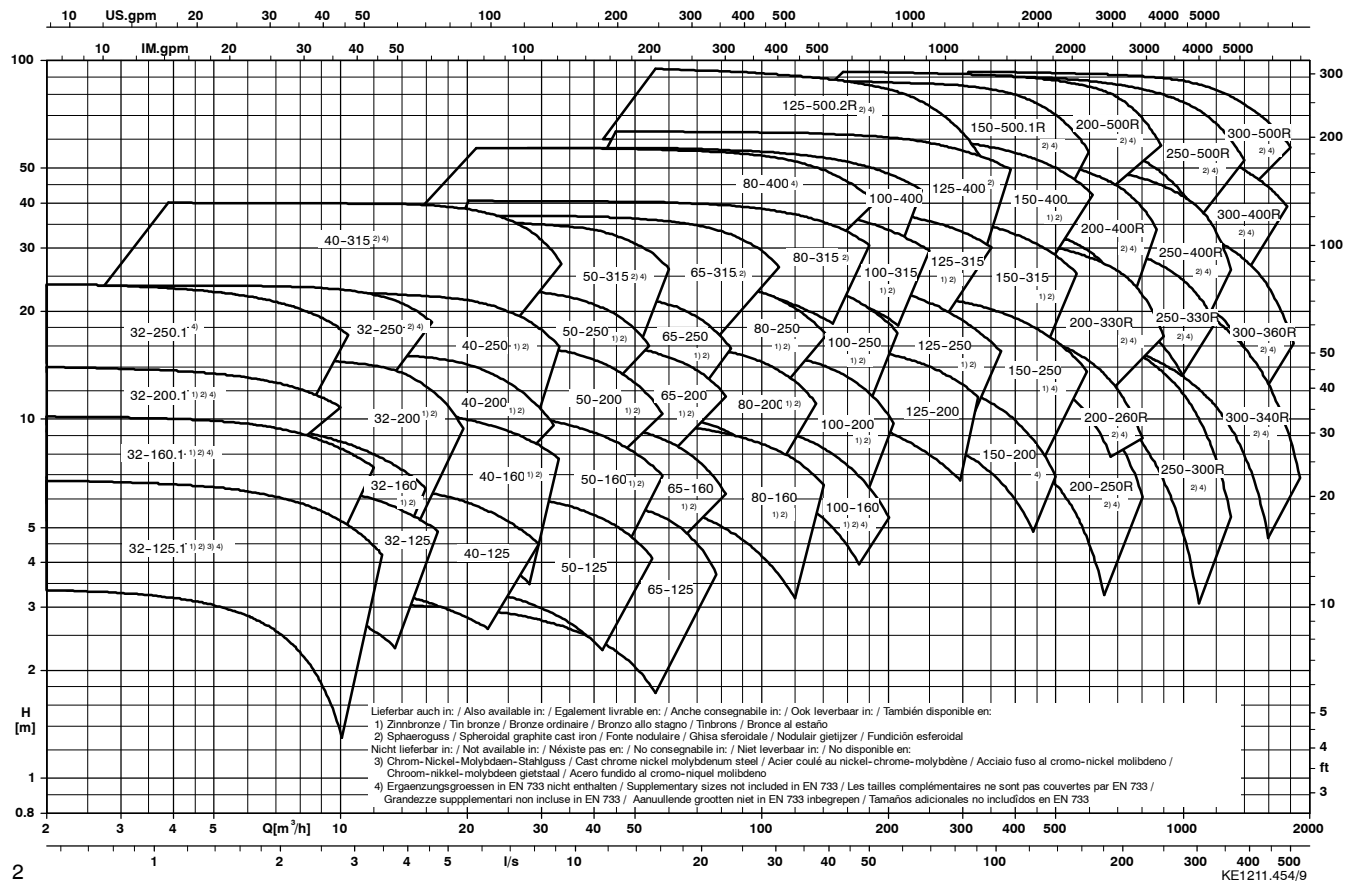
Etanorm

$n = 2900 \text{ 1/min}$



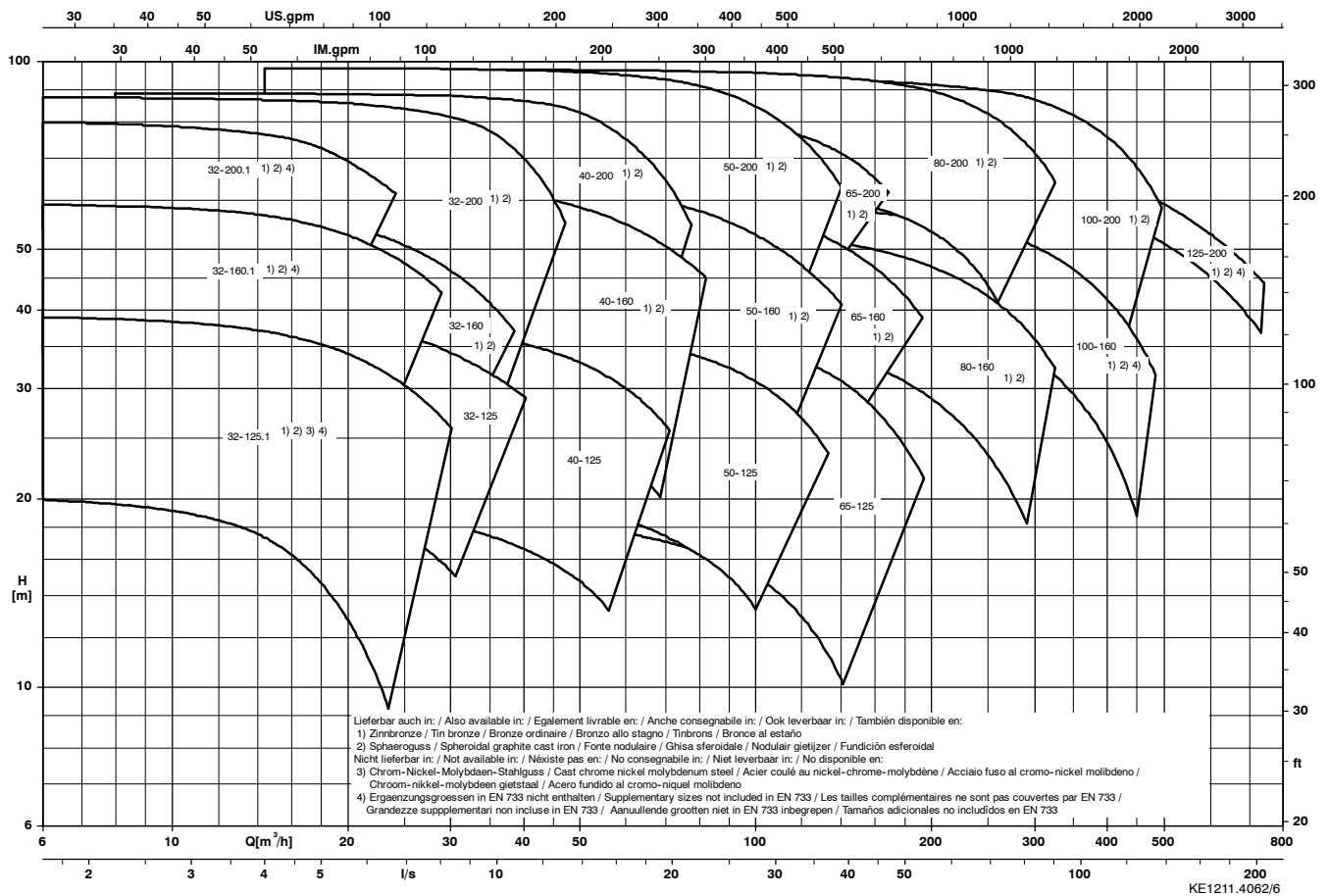
Etanorm / Etanorm-R

$n = 1450 \text{ 1/min}$



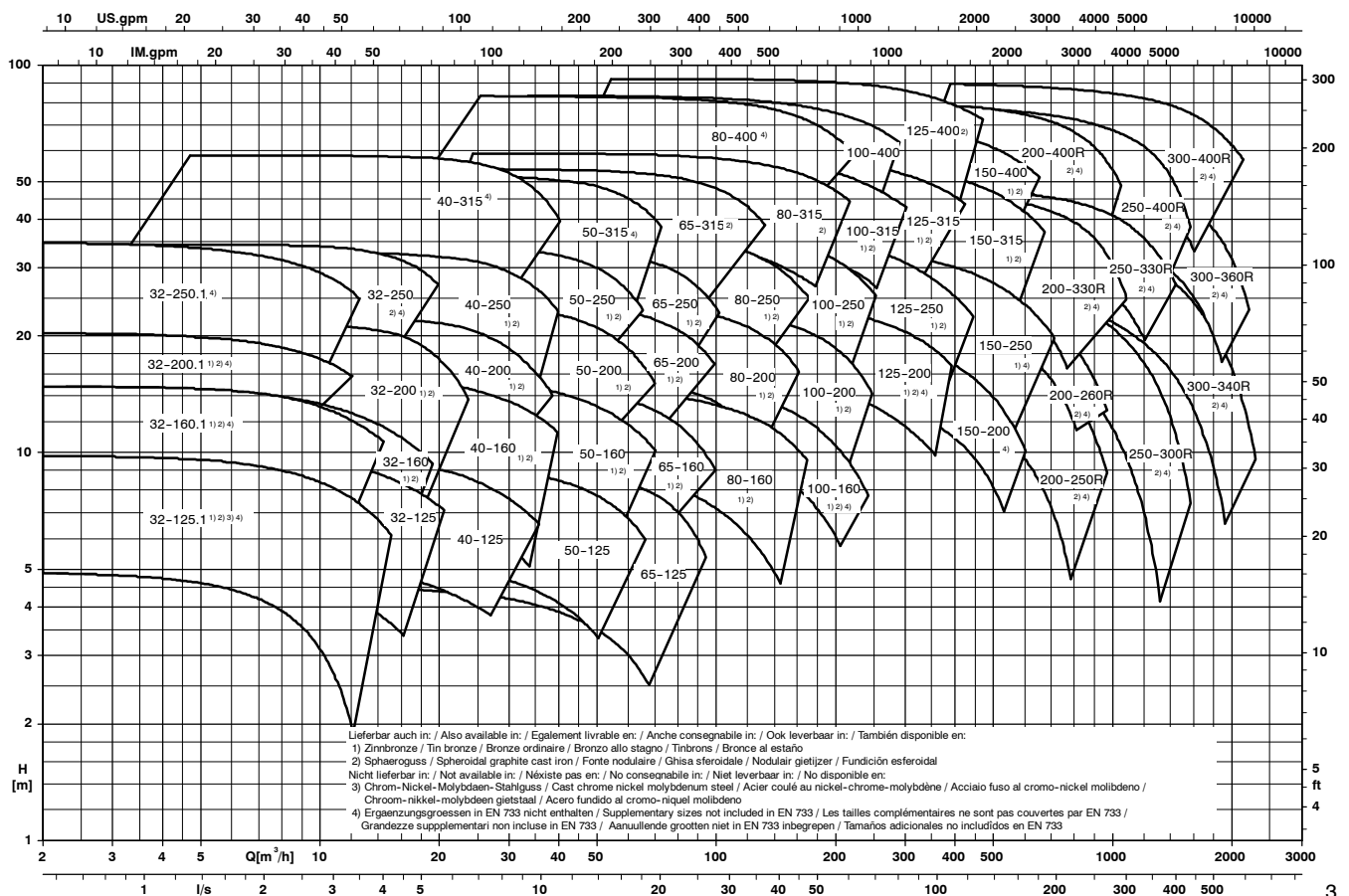
Etanorm

$n = 3500 \text{ 1/min}$



Etanorm / Etabloc / Etanorm-R

$n = 1750 \text{ 1/min}$



Materials

	Etanorm G / Etanorm-RG	Etanorm-R GC1	Etanorm M	Etanorm-RM	Etanorm B
Volute casing	Grey cast iron JL 1040 ¹⁾		Grey cast iron JL 1040 ¹⁾		Tin bronze CC 480 K-GS ³⁾
Discharge cover	Grey cast iron JL 1040 ¹⁾		Grey cast iron JL 1040 ¹⁾		Tin bronze CC 480 K-GS ³⁾
Impeller	Grey cast iron JL 1040 ¹⁾	1.4408	Tin bronze CC 480 K-GS ³⁾		Tin bronze CC 480 K-GS ³⁾
Spaltringe	Grey cast iron GG	1.4408	Grey cast iron/Bleibronze GG/G-CuPb10Sn		Leaded bronze CC 495 K-GS ³⁾
Shaft	Tempering steel C45		Tempering steel C45		Chrome nickel molybdenum steel 1.4462
Shaft sleeve	Chrome nickel molybdenum steel 1.4571	1.4122	Chrome nickel molybdenum steel 1.4571	1.4122	Chrome nickel molybdenum steel 1.4571
Shaft protection sleeve	Chrome nickel molybdenum steel 1.4122		Chrome nickel molybdenum steel 1.4122		Chrome nickel molybdenum steel 1.4571
Bearing bracket	Grey cast iron JL 1040 ¹⁾		Grey cast iron JL 1040 ¹⁾		Grey cast iron JL 1040 ¹⁾

	Etanorm S	Etanorm-RS	Etanorm C
Volute casing	Sphäroguss JS 1025 ²⁾		Cast chrome nickel molybdenum steel 1.4408
Discharge cover	Sphäroguss JS 1025 ²⁾		Cast chrome nickel molybdenum steel 1.4408
Impeller	Grey cast iron JL 1040 ¹⁾		Cast chrome nickel molybdenum steel 1.4408
Spaltringe	Grey cast iron GG		Cast chrome nickel molybdenum steel 1.4408
Shaft	Tepering steel C45		Chrome nickel molybdenum steel 1.4462
Shaft sleeve	Chrome nickel molybdenum steel 1.4571	1.4122	Chrome nickel molybdenum steel 1.4571
Shaft protection sleeve	Chrome nickel molybdenum steel 1.4122		Chrome nickel molybdenum steel 1.4571
Bearing bracket	Grey cast iron JL 1040 ¹⁾		Grey cast iron JL 1040 ¹⁾

- 1) to EN 1561 = GJL-250
2) to EN 1563 = GJS-400-18-LT
3) to EN 1982

Benefits at a Glance

Large material selection
Grey cast iron, tin bronze, nodular cast iron, cast chrome nickel molybdenum steel

Pressure jacket designed for 16 bar to guarantee high operating reliability

Connecting dimensions and power ratings to EN 733 (Etanorm)

Wear rings
service-friendly

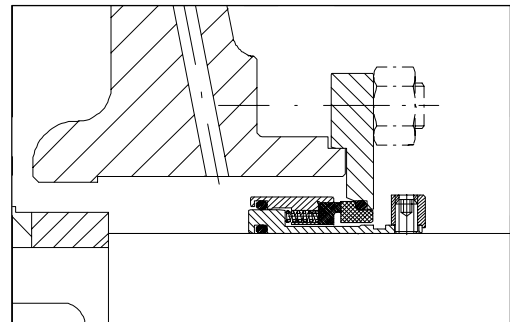
Suction geometry designed for max. suction capacity (NPSH) and optimal cavitation behaviour

Impeller with optimized hydraulics, excellent efficiencies and fine graduation of the QH-performance chart

Mechanical seal or gland packing, uncooled

Back pull-out design: easy dismantling, the casing may remain in the pipeline when the pump is dismantled

Type: Etanorm-R



001636

Robust deep-groove ball bearings, protected against contamination by v-rings

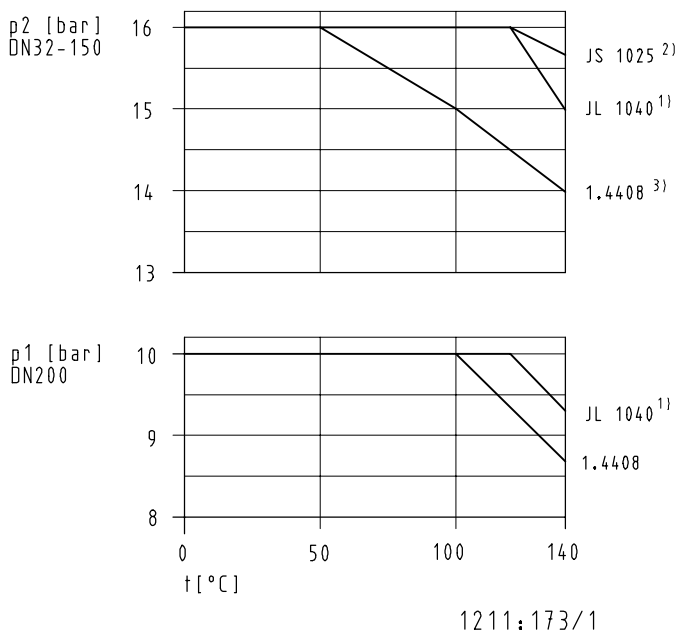
Shaft sleeve/shaft protecting sleeve prevents wear on the shaft

Pressure and Temperature Limits

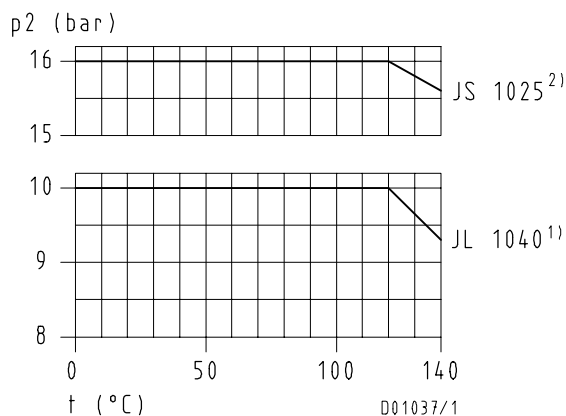
Etanorm/ Etanorm-R	Förderguttempera- tur 1)4)	Enddruck p ₂ 2)	Prüfdruck 3)	
			Etanorm	Etanorm-R
G	-30 °C bis + 140 °C	5)	bis 21 bar	bis 15 bar
M	-30 °C bis + 140 °C		bis 21 bar	bis 15 bar
S	-30 °C bis + 140 °C		bis 25 bar	bis 24 bar
B	-30 °C bis + 140 °C	10 bar	bis 13 bar	--
C	-30 °C bis + 140 °C	5)	bis 21 bar	--

- 1) For hot water heating systems to DIN 4752, section 4.5, application limits must be observed.
- 2) The sum of inlet pressure and shut-off head must not exceed the values shown in the diagram.
- 3) The casing components are checked for leakage by means of an internal pressure test to AN 1897/75-03 D00 with water.
- 4) For product temperatures > 140 °C, Etanorm SYN shall be used.
- 5) See diagram

Pressure/Temperature Diagram for Flanges to EN 1092-1 and EN 1092-2



Etanorm-R all size



Availability of pump sizes in the individual material variants

Pump size	Etanorm				
	G	M	S	B	C
32-125.1	X	X	X	X	-
32-160.1	X	X	X	X	X
32-200.1	X	X	X	X	X
32-250.1	X	X	-	-	X
32-125	X	X	X	X	X
32-160	X	X	X	X	X
32-200	X	X	X	X	X
32-250	X	X	X	X	X
40-125	X	X	-	-	X
40-160	X	X	X	X	X
40-200	X	X	X	X	X
40-250	X	X	X	X	X
40-315	X	X	X	-	X
50-125	X	X	-	-	X
50-160	X	X	X	X	X
50-200	X	X	X	X	X
50-250	X	X	X	X	X
50-315	X	X	X	-	X
65-125	X	X	-	-	X
65-160	X	X	X	X	X
65-200	X	X	X	X	X
65-250	X	X	X	X	X
65-315	X	X	X	-	X
80-160	X	X	X	X	X
80-200	X	X	X	X	X
80-250	X	X	X	X	X
80-315	X	X	X	X	X
80-400	X	X	-	-	X
100-160	X	X	X	X	X
100-200	X	X	X	X	X
100-250	X	X	X	X	X
100-315	X	X	X	X	X
100-400	X	X	-	-	X
125-200	X	X	X	X	X
125-250	X	X	X	X	X
125-315	X	X	X	X	X
125-400	X	X	X	-	X
150-200	X	X	-	-	X
150-250	X	X	-	X	X
150-315	X	X	X	X	X
150-400	X	X	X	X	X

Pump size	Etanorm-R			
	G	GC1	M	S
125-500/2	X	X	X	X
150-500.1	X	X	X	X
200-250	X	X	X	X
200-260	X	X	X	X
200-330	X	X	X	X
200-400	X	X	X	X
200-500	X	X	X	X
250-300	X	X	X	X
250-330	X	X	X	X
250-400	X	X	X	X
250-500	X	X	X	X
300-340	X	X	X	X
300-360	X	X	X	X
300-400	X	X	X	X
300-500	X	X	X	X

- 1) to EN 1561 = GJL-250
- 2) to EN 1563 = GJS-400-18-LT
- 3) only DN 65-150; DN 32-50 16 bar

Etanorm

Medium handled	Application limits	Materials ⁹⁾						Shaft seal						Reference code		Comments
		Casing/Impeller						Gland packing		Mechanical seal				Gland packing Na:p ₁ ≤ 0,5 bar Nb:p ₁ > 0,5 bar	Mechanical seal	
		Grey cast iron/ Grey cast iron	Grey cast iron/ Tin bronze	Nodular cast iron/ Grey cast iron	Zinnbronze/ Zinnbronze	Cast CrNiMo steel/ Cast CrNiMo steel	RT-P	Pure graphite	U3BEGG 4)	U3U3X4GG	Q1Q1X4GG	BQ1EGG	Q1Q1MMGG			
G	M	S	B	C	1	3	6	9	10	11	12					
Water																
Brackish water ³⁾	t ≤ 25 °C; p ≤ 10 bar				X		X			X			B1	B10	Cast CrNiMo steel possible	
Condensate ²⁾	t ≤ 120 °C; p ≤ 10 bar	X					X			X			G1	G11		
Condensate, unconditioned	t ≤ 120 °C; p ≤ 10 bar					X	X				X		C1	C11		
Cooling water ¹⁾ (no anti-freezes)	t ≤ 60 °C ⁷⁾ ; p ≤ 10 bar	X					X			X			G1	G10	open circuit: M1/M10 required	
Cooling water pH value ≥ 7.5 (with anti-freeze) ⁵⁾	t ≤ 120 °C; p ≤ 10 bar	X					X				X		G1	G11	open circuit: M1/M11 required	
Dam water ¹⁾	t ≤ 40 °C; p ≤ 10 bar				X		X			X			B1	B10	If solids-laden: contact KSB	
Drinking water ¹⁾	t ≤ 60 °C ⁷⁾ ; p ≤ 10 bar		X				X			X			M1	M10		
Fire-fighting water ¹⁾	t ≤ 60 °C ⁷⁾ ; p ≤ 10 bar		X				X			X			M1	M10	Contact KSB if VdS guideline has been specified	
Fully desalinated water	t ≤ 120 °C; p ≤ 10 bar					X	X				X		C1	C11	Purity requirements cannot be met.	
Fully desalinated water as boiler feed water ²⁾	t ≤ 120 °C; p ≤ 10 bar	X					X				X		G1	G11		
Heating water ²⁾	t ≤ 120 °C; p ≤ 10 bar	X					X				X		G1	G11		
Heating water ²⁾	t ≤ 140 °C; p ≤ 16 bar	X						X	X				G3	G6	If used as circulation pump to DIN 4752: p max. ≤ 10 bar	
Heating water ²⁾	t ≤ 110 °C; p ≤ 10 bar	X					X			X			G1	G10		
Partly desalinated water ²⁾	t ≤ 60 °C ⁸⁾ ; p ≤ 10 bar		X				X				X		M1	M11		
Pure water ⁶⁾	t ≤ 60 °C ⁸⁾ ; p ≤ 10 bar	X					X				X		G1	G11		
Raw water ¹⁾	t ≤ 25 °C; p ≤ 10 bar				X		X			X			B1	B10		
Sea water ³⁾	t ≤ 60 °C ⁷⁾ ; p ≤ 10 bar	X					X			X			G1	G10	Cast CrNiMo steel possible	
Slightly contaminated water ¹⁾	t ≤ -30 °C; p ≤ 10 bar t ≤ 110 °C	X					X				X		G1	G11		
Swimming-pool water (fresh water) ¹⁾	t ≤ 60 °C ⁷⁾ ; p ≤ 10 bar	X					X			X			G1	G10	Also if DIN 19 643 has been specified	
Swimming-pool water (sea water) ³⁾	t ≤ 60 °C; p ≤ 10 bar	X					X			X			G1	G10	Cast CrNiMo steel possible if t ≤ +25 °C	
Coolants, cooling brines																
Cooling brine, inorganic, pH value > 7.5; inhibited	t ≤ -30 °C; p ≤ 10 bar t ≤ 25 °C	X					X				X		G1	G11		
Water with anti-freeze, pH value ≥ 7.5; ^{1), 5)}	t ≤ -30 °C; p ≤ 10 bar t ≤ 110 °C	X					X				X		G1	G11		
Oils/Emulsions																
Diesel oil, fuel oil EL	t ≤ 60 °C; p ≤ 10 bar			X							X			S10	Grey cast iron possible, unless specific standards have to be observed	
Drilling/Grinding emulsion	t ≤ 60 °C; p ≤ 10 bar	X								X			G1	G9		
Lubricating oil, turbine oil, does not apply to SDF oils (hardly inflammable)	t ≤ 80 °C; p ≤ 10 bar			X							X			S10	If specified "without" internal primer, contact KSB. Grey cast iron possible, unless specific standards have to be observed	
Oil-water emulsion	t ≤ 60 °C; p ≤ 10 bar	X								X			G1	G9		
Cleaning agents																
Lees for bottle rinsing	t ≤ 90 °C; p ≤ 10 bar	X					X						G1	G7	Q ₁ Q ₁ EGG	
Brewery applications																
Beer mash	t ≤ 100 °C; p ≤ 10 bar	X										X		G12	If there is a risk of the pump running dry due to excessive emptying of the tank, an Etanorm with dual seal in tandem arrangement must be used.	
Beer wort	t ≤ 100 °C; p ≤ 10 bar	X										X		G12		

- General criteria for results of water analysis: pH value ≥ 7; chloride (Cl) content ≤ 250 mg/kg, chlorine (Cl₂) ≤ 0.6 mg/kg.
- Treatment to VdTUV 1466; additional requirement: O₂ ≤ 0.02 mg/l
- Criteria for all parts made of bronze: ammonia (NH₃) ≤ 5 mg/kg, free from hydrogen sulphide (H₂S); no limitation of Cl content required in this case. Please contact KSB if limits are exceeded.
- applies only to shaft units 25 and 35; shaft unit 55 = AQ1EGG
Pump size / shaft unit combinations see page 15
- antifreeze on ethylene glycol basis with inhibitors. Content: >20 % to 50 % (e.g. Antifrogen N)
- No ultra-pure water! Conductivity at 25 °C: ≤ 800 µS/cm, neutral with regard to chemical corrosion
- Mechanical seal suitable for t ≤ 110 °C
- Mechanical seal suitable for t ≤ 120 °C
- Table of materials/pump size combinations see page 3.

Example:

Given: pure water 15 °C; Q = 60 m³/h; H = 80 m

Found:

Etanorm G 50 - 250 G 1 (or G 11)

Material variant (as per above table) _____

Pump size (as per characteristic curve 2900 1/min) _____

Reference code (as per above table) _____

Required drive rating 22 kW

Etanorm-R

Medium handled	Application limits	Materials Casing/Impeller			Shaft seal		Reference code	
		G	M	S	Gland packing	Mechanical seal	Gland packing Na: $P_1 \leq 0,5 \text{ bar}$ Nb: $P_1 > 0,5 \text{ bar}$	Mechanical seal
					1	4		
Water								
Condensate ²⁾	$t \leq 120 \text{ }^\circ\text{C}; \quad p \leq 10 \text{ bar}$	X			X		G1	Contact KSB
Cooling water ¹⁾ (no anti-freezes)	$t \leq 60 \text{ }^\circ\text{C}; \quad p \leq 10 \text{ bar}$	X			X	X	G1	G4
Cooling water pH-Wert $\geq 7,5$ (with anti-freezes) ⁵⁾	$t \geq -30 \text{ }^\circ\text{C}; \quad p \leq 10 \text{ bar}$ $t \leq 110 \text{ }^\circ\text{C}$	X			X	X	G1	G4
Dam water ¹⁾	$t \leq 60 \text{ }^\circ\text{C}; \quad p \leq 10 \text{ bar}$		X			X	-	M4
Drink water ¹⁾	$t \leq 60 \text{ }^\circ\text{C}; \quad p \leq 10 \text{ bar}$		X		X	X	M1	M4
Fire-fighting water ¹⁾	$t \leq 60 \text{ }^\circ\text{C}; \quad p \leq 10 \text{ bar}$		X			X	-	M4
Fully desalinated water as boiler feed water ²⁾	$t \leq 120 \text{ }^\circ\text{C}; \quad p \leq 10 \text{ bar}$	X			X	X	G1	G4
Heating water ²⁾	$t \leq 120 \text{ }^\circ\text{C}; \quad p \leq 10 \text{ bar}$	X			X	X	G1	G4
Heating water ²⁾	$t \leq 140 \text{ }^\circ\text{C}; \quad p \leq 16 \text{ bar}$			X	X	X	S1	S4
Heating water ²⁾	$t \leq 110 \text{ }^\circ\text{C}; \quad p \leq 10 \text{ bar}$	X			X	X	G1	G4
Partly desalinated water ²⁾	$t \leq 120 \text{ }^\circ\text{C}; \quad p \leq 10 \text{ bar}$	X			X		G1	Contact KSB
Pure water ⁴⁾	$t \leq 25 \text{ }^\circ\text{C}; \quad p \leq 10 \text{ bar}$	X			X	X	G1	G4
Raw water (industrie applications) ¹⁾	$t \leq 60 \text{ }^\circ\text{C}; \quad p \leq 10 \text{ bar}$	X			X	X	G1	G4
Raw water irrigation) ¹⁾	$t \leq 60 \text{ }^\circ\text{C}; \quad p \leq 10 \text{ bar}$	X				X	-	G4
Service water	$t \leq 60 \text{ }^\circ\text{C}; \quad p \leq 10 \text{ bar}$	X				X	-	G4
Slightly contaminated water ¹⁾	$t \leq 60 \text{ }^\circ\text{C}; \quad p \leq 10 \text{ bar}$	X			X	X	G1	G4
Swimming-pool water (fresh water) ¹⁾	$t \leq 60 \text{ }^\circ\text{C}; \quad p \leq 10 \text{ bar}$	X			X	X	G1	G4
Coolants, cooling brines								
Cooling brine, inorganic, pH value $> 7,5$; inhibited	$t \geq -30 \text{ }^\circ\text{C}; \quad p \leq 10 \text{ bar}$ $t \leq 25 \text{ }^\circ\text{C}$	X			X	X	G1	G4
Water with anti-freeze, pH value $\geq 7,5$; ^{1) 3)}	$t \geq -30 \text{ }^\circ\text{C}; \quad p \leq 10 \text{ bar}$ $t \leq 110 \text{ }^\circ\text{C}$	X			X	X	G1	G4
Oils/Emulsions								
Diesel oil, fuel oil EL	$t \leq 60 \text{ }^\circ\text{C}; \quad p \leq 10 \text{ bar}$			X		X		S4
Drilling/Grinding emulsion	$t \leq 60 \text{ }^\circ\text{C}; \quad p \leq 10 \text{ bar}$	X				X		G4
Lubricating oil, turbine oil, does not apply to SDF oils (hardly inflammable)	$t \leq 80 \text{ }^\circ\text{C}; \quad p \leq 10 \text{ bar}$			X		X		S4
Oil-water emulsion	$t \leq 60 \text{ }^\circ\text{C}; \quad p \leq 10 \text{ bar}$	X			X	X	G1	G4
Cleaning agents								
Lees for bottle rinsing	$t \leq 90 \text{ }^\circ\text{C}; \quad p \leq 10 \text{ bar}$	X			X		G1	
Brewery applications								
Beer mash	$t \leq 100 \text{ }^\circ\text{C}; \quad p \leq 10 \text{ bar}$	X			X	X		G4
Beer wort	$t \leq 100 \text{ }^\circ\text{C}; \quad p \leq 10 \text{ bar}$	X				X		G4

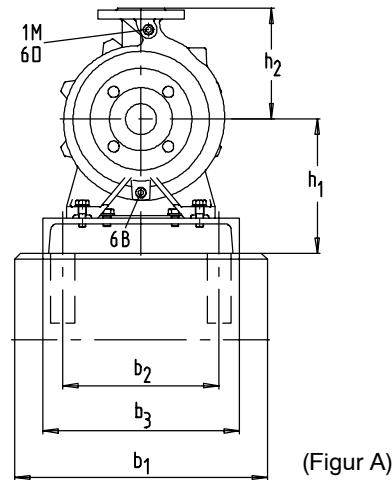
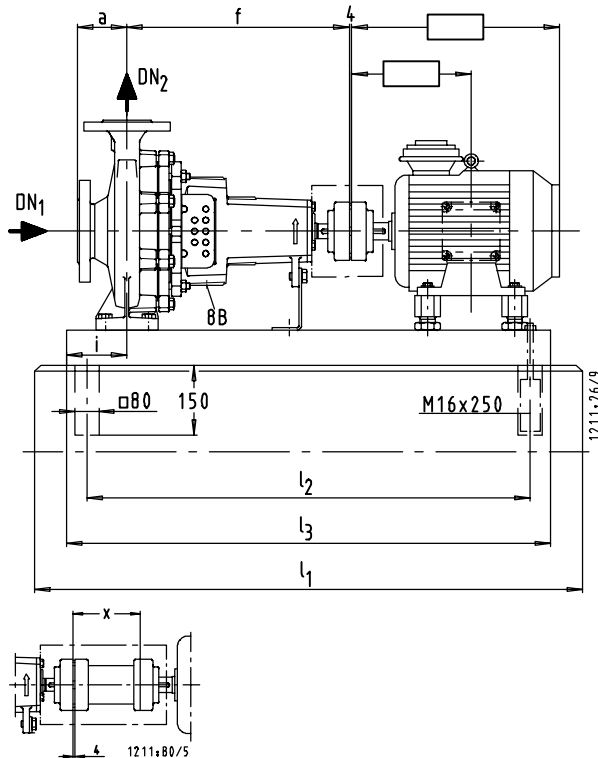
1) General criteria for results of water analysis: pH value ≥ 7 ; chloride (Cl) content $\leq 250 \text{ mg/kg}$, chlorine (Cl2) $\leq 0,6 \text{ mg/kg}$.

2) Treatment to VdTUV 1466; additional requirement: $O_2 \leq 0,02 \text{ mg/l}$

3) antifreeze on ethylene glycol basis with inhibitors. Content: $>20 \%$ to 50% (e.g. Antifrogen N)



4) No ultra-pure water! Conductivity at $25 \text{ }^\circ\text{C}$: $\leq 800 \text{ } \mu\text{S/cm}$, neutral with regard to chemical corrosion

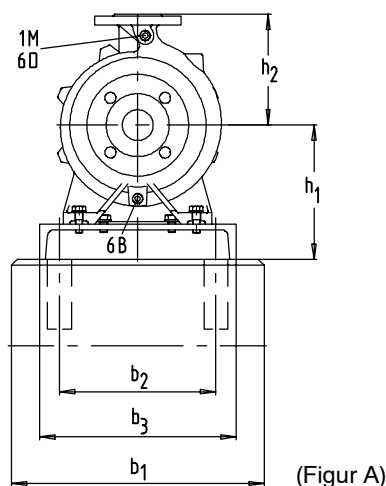
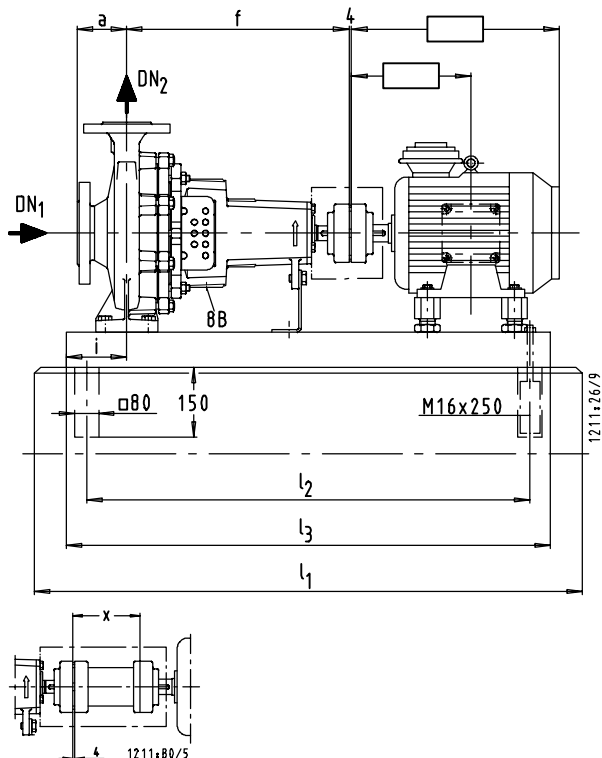
5) antifreeze on ethylene glycol basis with inhibitors. Content: $>20 \%$ to 50% (e.g. Antifrogen N)

Etanorm 32-125.1 - 32-250.1




(Figur A)

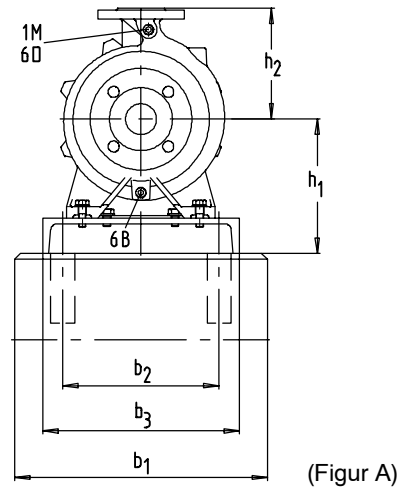
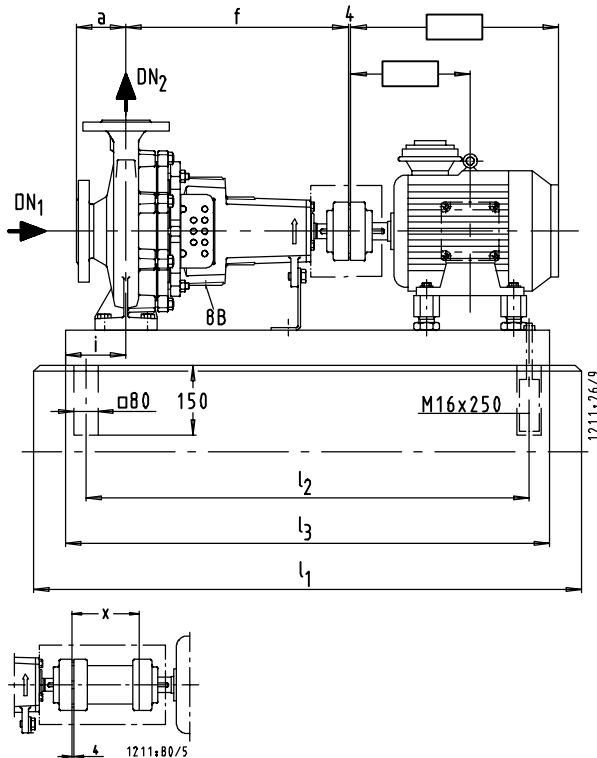
Dimensions in mm

Etanorm	Motor 1 / min 1450 1750 2900 3500 kW					pump size	Figur																		
	DN ₁	DN ₂	a	b ₁	b ₂			b ₃	f	h ₁	h ₂	i	l ₁	l ₂	l ₃	l ₁	l ₂	l ₃	x						
32-125.1	0,55	0,55	-	-	80	A	50	32	80	450	240	300	360	212	140	100	860	650	710	950	740	800	100		
	-	-	0,55	-	71	A	50	32	80	450	240	300	360	212	140	100	860	650	710	950	740	800	100		
	-	-	0,75	-	80	A	50	32	80	450	240	300	360	212	140	100	860	650	710	950	740	800	100		
	-	-	1,1	1,1	80	A	50	32	80	450	240	300	360	212	140	100	860	650	710	950	740	800	100		
	-	-	1,5	1,5	90S	A	50	32	80	450	240	300	360	212	140	100	860	650	710	950	740	800	100		
	-	-	2,2	2,2	90L	A	50	32	80	450	240	300	360	212	140	100	950	740	800	1050	840	900	100		
	-	-	3,0	3,0	100L	A	50	32	80	450	240	300	360	212	140	100	1050	840	900	1150	940	1000	100		
	-	-	-	4,0	112M	A	50	32	80	450	240	300	360	212	140	100	1050	840	900	1150	940	1000	100		
-	-	-	5,5	132S	A	50	32	80	450	240	300	360	232	140	100	1050	840	900	1150	940	1000	100			
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	-	0,75	-	-	80	A	50	32	80	450	240	300	360	232	160	100	860	650	710	950	740	800	100		
	-	1,1	-	-	90S	A	50	32	80	450	240	300	360	232	160	100	860	650	710	950	740	800	100		
	-	-	1,5	-	90S	A	50	32	80	450	240	300	360	232	160	100	860	650	710	950	740	800	100		
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	-	-	3,0	3,0	100L	A	50	32	80	450	240	300	360	232	160	100	1050	840	900	1150	940	1000	100		
	-	-	4,0	4,0	112M	A	50	32	80	450	240	300	360	232	160	100	1050	840	900	1150	940	1000	100		
	-	-	-	5,5	132S	A	50	32	80	450	240	300	360	232	160	100	1050	840	900	1150	940	1000	100		
-	-	-	7,5	132S	A	50	32	80	450	240	300	360	232	160	100	1050	840	900	1150	940	1000	100			
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	0,75	0,75	-	-	80	A	50	32	80	450	240	300	360	260	180	100	860	650	710	950	740	800	100		
	1,1	1,1	-	-	90S	A	50	32	80	450	240	300	360	260	180	100	860	650	710	950	740	800	100		
	-	1,5	-	-	90L	A	50	32	80	450	240	300	360	260	180	100	950	740	800	1050	840	900	100		
	-	2,2	-	-	100L	A	50	32	80	450	240	300	360	260	180	100	1050	840	900	1150	940	1000	100		
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	-	-	5,5	5,5	132S	A	50	32	80	450	240	300	360	260	180	100	1050	840	900	1150	940	1000	100		
-	-	7,5	7,5	132S	A	50	32	80	450	240	300	360	260	180	100	1050	840	900	1150	940	1000	100			
-	-	-	11,0	160M	A	50	32	80	500	280	350	360	260	180	100	1270	1060	1120	1270	1060	1120	100			
-	-	-	15,0	160M	A	50	32	80	500	280	350	360	260	180	100	1270	1060	1120	1270	1060	1120	100			
32-250.1	0,75	-	-	-	80	A	50	32	100	500	280	350	360	280	225	112	1050	840	900	1050	840	900	100		
	1,1	1,1	-	-	90S	A	50	32	100	500	280	350	360	280	225	112	1050	840	900	1050	840	900	100		
	1,5	1,5	-	-	90L	A	50	32	100	500	280	350	360	280	225	112	1050	840	900	1050	840	900	100		
	2,2	2,2	-	-	100L	A	50	32	100	500	280	350	360	280	225	112	1050	840	900	1050	840	900	100		
	-	3,0	-	-	100L	A	50	32	100	500	280	350	360	280	225	112	1050	840	900	1050	840	900	100		
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	-	-	7,5	-	132S	A	50	32	100	500	280	350	360	280	225	112	1050	840	900	1150	940	1000	100		
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-	-	15,0	-	160M	A	50	32	100	500	280	350	360	280	225	112	1270	1060	1120	1270	1060	1120	100			

Etanorm 32-125 - 32-250


Dimensions in mm

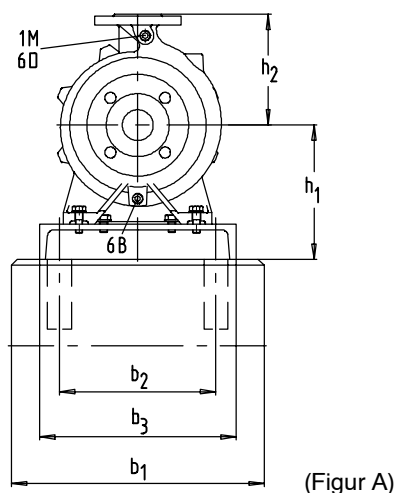
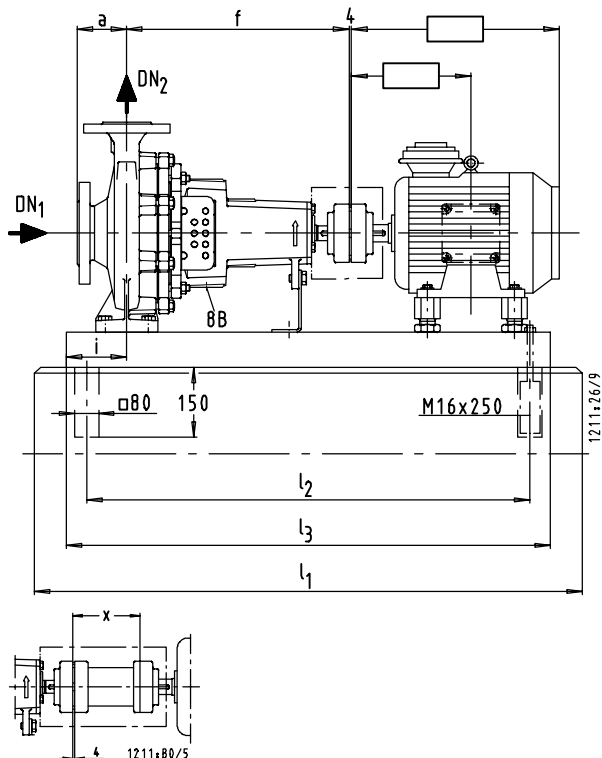
Etanorm	Motor 1 / min 1450 1750 2900 3500 kW					pump size	Figur												Dimensions in mm										
																													
	DN ₁	DN ₂	a	b ₁	b ₂			b ₃	f	h ₁	h ₂	i	l ₁	l ₂	l ₃	l ₁	l ₂	l ₃	x										
32-125	0,55	0,55	-	-	80	A	50	32	80	450	240	300	360	212	140	100	860	650	710	950	740	800	100						
	-	0,75	-	-	80	A	50	32	80	450	240	300	360	212	140	100	860	650	710	950	740	800	100						
	-	-	1,1	-	80	A	50	32	80	450	240	300	360	212	140	100	860	650	710	950	740	800	100						
	-	-	1,5	1,5	90S	A	50	32	80	450	240	300	360	212	140	100	860	650	710	950	740	800	100						
	-	-	2,2	2,2	90L	A	50	32	80	450	240	300	360	212	140	100	950	740	800	1050	840	900	100						
	-	-	3,0	3,0	100L	A	50	32	80	450	240	300	360	212	140	100	1050	840	900	1150	940	1000	100						
	-	-	-	4,0	112M	A	50	32	80	450	240	300	360	212	140	100	1050	840	900	1150	940	1000	100						
	-	-	-	5,5	132S	A	50	32	80	450	240	300	360	232	140	100	1050	840	900	1150	940	1000	100						
32-160	0,55	0,55	-	-	80	A	50	32	80	450	240	300	360	232	160	100	860	650	710	950	740	800	100						
	-	0,75	-	-	80	A	50	32	80	450	240	300	360	232	160	100	860	650	710	950	740	800	100						
	-	1,1	-	-	90S	A	50	32	80	450	240	300	360	232	160	100	860	650	710	950	740	800	100						
	-	-	2,2	-	90L	A	50	32	80	450	240	300	360	232	160	100	950	740	800	1050	840	900	100						
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	-	-	-	5,5	132S	A	50	32	80	450	240	300	360	232	160	100	1050	840	900	1150	940	1000	100						
	-	-	-	7,5	132S	A	50	32	80	450	240	300	360	232	160	100	1050	840	900	1150	940	1000	100						
32-200	0,55	-	-	-	80	A	50	32	80	450	240	300	360	260	180	100	860	650	710	950	740	800	100						
	0,75	-	-	-	80	A	50	32	80	450	240	300	360	260	180	100	860	650	710	950	740	800	100						
	1,1	1,1	-	-	90S	A	50	32	80	450	240	300	360	260	180	100	860	650	710	950	740	800	100						
	-	1,5	-	-	90L	A	50	32	80	450	240	300	360	260	180	100	950	740	800	1050	840	900	100						
	-	2,2	-	-	100L	A	50	32	80	450	240	300	360	260	180	100	1050	840	900	1150	940	1000	100						
	-	-	4,0	-	112M	A	50	32	80	450	240	300	360	260	180	100	1050	840	900	1150	940	1000	100						
	-	-	5,5	-	132S	A	50	32	80	450	240	300	360	260	180	100	1050	840	900	1150	940	1000	100						
	-	-	7,5	7,5	132S	A	50	32	80	450	240	300	360	260	180	100	1050	840	900	1150	940	1000	100						
32-250	-	-	11,0	11,0	160M	A	50	32	80	500	280	350	360	260	180	100	1270	1060	1120	1270	1060	1120	100						
	-	-	-	15,0	160M	A	50	32	80	500	280	350	360	260	180	100	1270	1060	1120	1270	1060	1120	100						
	1,1	-	-	-	90S	A	50	32	100	500	280	350	360	280	225	112	1050	840	900	1050	840	900	100						
	1,5	1,5	-	-	90L	A	50	32	100	500	280	350	360	280	225	112	1050	840	900	1050	840	900	100						
	2,2	2,2	-	-	100L	A	50	32	100	500	280	350	360	280	225	112	1050	840	900	1050	840	900	100						
	-	3,0	-	-	100L	A	50	32	100	500	280	350	360	280	225	112	1050	840	900	1050	840	900	100						
	-	4,0	-	-	112M	A	50	32	100	500	280	350	360	280	225	112	1050	840	900	1050	840	900	100						
	-	5,5	-	-	132S	A	50	32	100	500	280	350	360	280	225	112	1050	840	900	1150	940	1000	100						
32-250	-	-	7,5	-	132S	A	50	32	100	500	280	350	360	280	225	112	1050	840	900	1150	940	1000	100						
	-	-	11,0	-	160M	A	50	32	100	500	280	350	360	280	225	112	1270	1060	1120	1270	1060	1120	100						
	-	-	15,0	-	160M	A	50	32	100	500	280	350	360	280	225	112	1270	1060	1120	1270	1060	1120	100						
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-							

Etanorm 40-125 - 40-315


(Figur A)

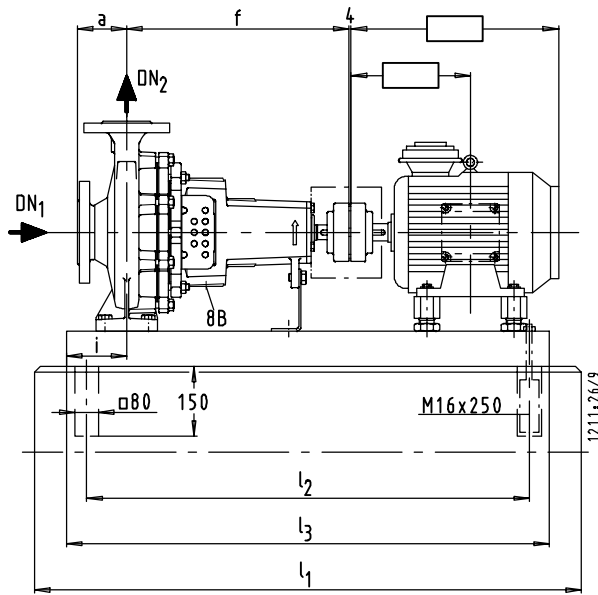
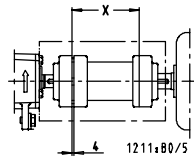
Dimensions in mm

Etanorm	Motor 1 / min 1450 1750 2900 3500 kW				pump size	Figur																			
							DN ₁	DN ₂	a	b ₁	b ₂	b ₃	f	h ₁	h ₂	i		l ₁	l ₂	l ₃		l ₁	l ₂	l ₃	x
40-125	0,55	0,55	-	-	80	A	65	40	80	450	240	300	360	212	140	100		860	650	710		950	740	800	100
	-	0,75	-	-	80	A	65	40	80	450	240	300	360	212	140	100		860	650	710		950	740	800	100
	-	1,1	-	-	90S	A	65	40	80	450	240	300	360	212	140	100		860	650	710		950	740	800	100
	-	-	1,5	-	90S	A	65	40	80	450	240	300	360	212	140	100		860	650	710		950	740	800	100
	-	-	2,2	-	90L	A	65	40	80	450	240	300	360	212	140	100		950	740	800		1050	840	900	100
	-	-	3,0	-	100L	A	65	40	80	450	240	300	360	212	140	100		1050	840	900		1150	940	1000	100
	-	-	4,0	-	112M	A	65	40	80	450	240	300	360	212	140	100		1050	840	900		1150	940	1000	100
	-	-	-	5,5	132S	A	65	40	80	450	240	300	360	232	140	100		1050	840	900		1150	940	1000	100
	-	-	-	7,5	132S	A	65	40	80	450	240	300	360	232	140	100		1050	840	900		1150	940	1000	100
	-	-	-	11,0	160M	A	65	40	80	500	280	350	360	260	160	100		1150	840	900		1150	940	1000	100
	-	-	-	-	160M	A	65	40	80	500	280	350	360	260	160	100		1150	840	900		1150	940	1000	100
40-160	0,55	-	-	-	80	A	65	40	80	450	240	300	360	232	160	100		860	650	710		950	740	800	100
	0,75	0,75	-	-	80	A	65	40	80	450	240	300	360	232	160	100		860	650	710		950	740	800	100
	1,1	1,1	-	-	90S	A	65	40	80	450	240	300	360	232	160	100		860	650	710		950	740	800	100
	-	1,5	-	-	90L	A	65	40	80	450	240	300	360	232	160	100		950	740	800		1050	840	900	100
	-	2,2	-	-	100L	A	65	40	80	450	240	300	360	232	160	100		1050	840	900		1150	940	1000	100
	-	-	3,0	-	100L	A	65	40	80	450	240	300	360	232	160	100		1050	840	900		1150	940	1000	100
	-	-	4,0	-	112M	A	65	40	80	450	240	300	360	232	160	100		1050	840	900		1150	940	1000	100
	-	-	5,5	-	132S	A	65	40	80	450	240	300	360	232	160	100		1050	840	900		1150	940	1000	100
	-	-	7,5	-	132S	A	65	40	80	450	240	300	360	232	160	100		1050	840	900		1150	940	1000	100
	-	-	-	11,0	160M	A	65	40	80	500	280	350	360	260	160	100		1270	1060	1120		1270	1060	1120	100
	-	-	-	15,0	160M	A	65	40	80	500	280	350	360	260	160	100		1270	1060	1120		1270	1060	1120	100
	-	-	-	-	160M	A	65	40	80	500	280	350	360	260	160	100		1270	1060	1120		1270	1060	1120	100
40-200	0,75	-	-	-	80	A	65	40	100	450	240	300	360	260	180	100		860	650	710		950	740	800	100
	1,1	-	-	-	90S	A	65	40	100	450	240	300	360	260	180	100		860	650	710		950	740	800	100
	1,5	1,5	-	-	90L	A	65	40	100	450	240	300	360	260	180	100		950	740	800		1050	840	900	100
	-	2,2	-	-	100L	A	65	40	100	450	240	300	360	260	180	100		1050	840	900		1150	940	1000	100
	-	3,0	-	-	100L	A	65	40	100	450	240	300	360	260	180	100		1050	840	900		1150	940	1000	100
	-	-	5,5	-	132S	A	65	40	100	450	240	300	360	260	180	100		1050	840	900		1150	940	1000	100
	-	-	7,5	-	132S	A	65	40	100	450	240	300	360	260	180	100		1050	840	900		1150	940	1000	100
	-	-	11,0	-	160M	A	65	40	100	500	280	350	360	260	180	100		1270	1060	1120		1270	1060	1120	100
	-	-	15,0	-	160M	A	65	40	100	500	280	350	360	260	180	100		1270	1060	1120		1270	1060	1120	100
	-	-	18,5	-	160L	A	65	40	100	500	280	350	360	260	180	100		1270	1060	1120		1400	1190	1250	100
	-	-	22,0	-	180M	A	65	40	100	550	320	400	360	290	180	100		1400	1190	1250		1400	1190	1250	100
	-	-	-	22,0	200L	A	65	40	100	550	320	400	360	310	225	112		1400	1190	1250		1400	1190	1250	100
40-250	1,1	-	-	-	90S	A	65	40	100	500	280	350	360	280	225	112		1050	840	900		1050	840	900	100
	1,5	-	-	-	90L	A	65	40	100	500	280	350	360	280	225	112		1050	840	900		1050	840	900	100
	2,2	2,2	-	-	100L	A	65	40	100	500	280	350	360	280	225	112		1050	840	900		1050	840	900	100
	3,0	3,0	-	-	100L	A	65	40	100	500	280	350	360	280	225	112		1050	840	900		1050	840	900	100
	-	4,0	-	-	112M	A	65	40	100	500	280	350	360	280	225	112		1050	840	900		1050	840	900	100
	-	5,5	-	-	132S	A	65	40	100	500	280	350	360	280	225	112		1050	840	900		1050	840	900	100
	-	-	11,0	-	160M	A	65	40	100	500	280	350	360	280	225	112		1270	1060	1120		1270	1060	1120	100
	-	-	15,0	-	160M	A	65	40	100	500	280	350	360	280	225	112		1270	1060	1120		1270	1060	1120	100
	-	-	18,5	-	160L	A	65	40	100	500	280	350	360	280	225	112		1270	1060	1120		1400	1190	1250	100
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40-315	2,2	-	-	-	100L	A	65	40	125	500	280	350	470	325	250	112		1050	840	900		1150	940	1000	100
	3,0	-	-	-	100L	A	65	40	125	500	280	350	470	325	250	112		1050	840	900		1150	940	1000	100
	4,0	-	-	-	112M	A	65	40	125	500	280	350	470	325	250	112		1150	940	1000		1270	1060	1120	100
	5,5	5,5	-	-	132S	A	65	40	125	500	280	350	470	325	250	112		1150	940	1000		1270	1060	1120	100
	-	7,5	-	-	132M	A	65	40	125	500	280	350	470	325	250	112		1270	1060	1120		1270	1060	1120	100
	-	11,0	-	-	160M	A	65	40	125	550	320	400	470	335	250	112		1400	1190	1250		1400	1190	1250	100



Etanorm 50-125 - 50-315


Dimensions in mm

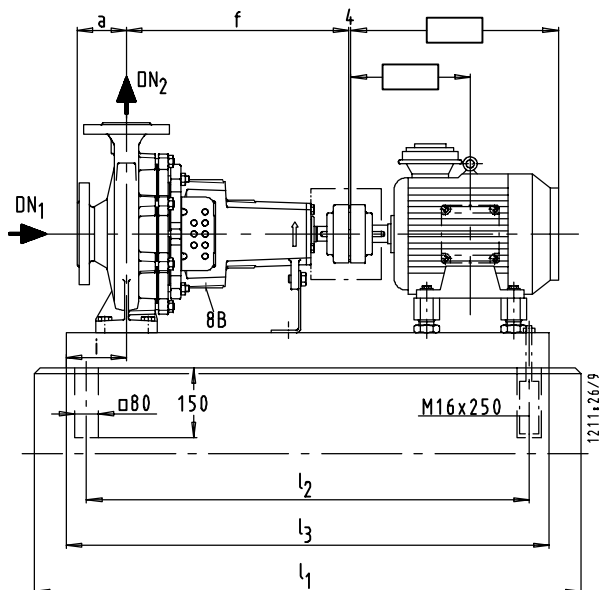
Etanorm	Motor				pump size	Figur																	
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50-125	0,55	-	-	-	80	A	65	50	100	450	240	300	360	232	160	100	860	650	710	950	740	800	100
	0,75	-	-	-	80	A	65	50	100	450	240	300	360	232	160	100	860	650	710	950	740	800	100
	1,1	-	-	-	90S	A	65	50	100	450	240	300	360	232	160	100	860	650	710	950	740	800	100
	-	1,5	-	-	90L	A	65	50	100	450	240	300	360	232	160	100	950	740	800	1050	840	900	100
	-	-	3,0	-	100L	A	65	50	100	450	240	300	360	232	160	100	1050	840	900	1150	940	1000	100
	-	-	4,0	-	112M	A	65	50	100	450	240	300	360	232	160	100	1050	840	900	1150	940	1000	100
	-	-	5,5	5,5	132S	A	65	50	100	450	240	300	360	232	160	100	1050	840	900	1150	940	1000	100
	-	-	7,5	7,5	132S	A	65	50	100	450	240	300	360	232	160	100	1050	840	900	1150	940	1000	100
	-	-	-	11,0	160M	A	65	50	100	500	280	350	360	260	160	100	1270	1060	1120	1270	1060	1120	100
	-	-	-	15,0	160M	A	65	50	100	500	280	350	360	260	160	100	1270	1060	1120	1270	1060	1120	100
	-	-	-	-	160M	A	65	50	100	500	280	350	360	260	160	100	1270	1060	1120	1270	1060	1120	100
	-	-	-	-	160M	A	65	50	100	500	280	350	360	260	160	100	1270	1060	1120	1270	1060	1120	100
50-160	0,75	-	-	-	80	A	65	50	100	450	240	300	360	260	180	100	860	650	710	950	740	800	100
	1,1	-	-	-	90S	A	65	50	100	450	240	300	360	260	180	100	860	650	710	950	740	800	100
	1,5	-	-	-	90L	A	65	50	100	450	240	300	360	260	180	100	950	740	800	1050	840	900	100
	-	2,2	-	-	100L	A	65	50	100	450	240	300	360	260	180	100	1050	840	900	1150	940	1000	100
	-	3,0	-	-	100L	A	65	50	100	450	240	300	360	260	180	100	1050	840	900	1150	940	1000	100
	-	-	5,5	-	132S	A	65	50	100	450	240	300	360	260	180	100	1050	840	900	1150	940	1000	100
	-	-	7,5	-	132S	A	65	50	100	450	240	300	360	260	180	100	1050	840	900	1150	940	1000	100
	-	-	11,0	11,0	160M	A	65	50	100	500	280	350	360	260	180	100	1270	1060	1120	1270	1060	1120	100
	-	-	-	15,0	160M	A	65	50	100	500	280	350	360	260	180	100	1270	1060	1120	1270	1060	1120	100
	-	-	-	18,5	160L	A	65	50	100	500	280	350	360	260	180	100	1270	1060	1120	1400	1190	1250	100
	-	-	-	22,0	180M	A	65	50	100	550	320	400	360	290	180	100	1400	1190	1250	1400	1190	1250	100
	-	-	-	-	180M	A	65	50	100	550	320	400	360	290	180	100	1400	1190	1250	1400	1190	1250	100
50-200	1,5	-	-	-	90L	A	65	50	100	450	240	300	360	260	200	100	950	740	800	1050	840	900	100
	2,2	-	-	-	100L	A	65	50	100	450	240	300	360	260	200	100	1050	840	900	1150	940	1000	100
	3,0	-	-	-	100L	A	65	50	100	450	240	300	360	260	200	100	1050	840	900	1150	940	1000	100
	-	4,0	-	-	112M	A	65	50	100	450	240	300	360	260	200	100	1050	840	900	1150	940	1000	100
	-	5,5	-	-	132S	A	65	50	100	450	240	300	360	260	200	100	1050	840	900	1150	940	1000	100
	-	-	11,0	-	160M	A	65	50	100	500	280	350	360	260	200	100	1270	1060	1120	1270	1060	1120	100
	-	-	15,0	-	160M	A	65	50	100	500	280	350	360	260	200	100	1270	1060	1120	1270	1060	1120	100
	-	-	18,5	-	160L	A	65	50	100	500	280	350	360	260	200	100	1270	1060	1120	1400	1190	1250	100
	-	-	22,0	22,0	180M	A	65	50	100	550	320	400	360	290	200	100	1400	1190	1250	1400	1190	1250	100
	-	-	-	30,0	200L	A	65	50	100	550	320	400	360	310	200	100	1400	1190	1250	1400	1190	1250	100
	-	-	-	37,0	200L	A	65	50	100	550	320	400	360	310	200	100	1400	1190	1250	1400	1190	1250	100
	-	-	-	-	200L	A	65	50	100	550	320	400	360	310	200	100	1400	1190	1250	1400	1190	1250	100
50-250	2,2	-	-	-	100L	A	65	50	100	500	280	350	360	280	225	112	1050	840	900	1050	840	900	100
	3,0	-	-	-	100L	A	65	50	100	500	280	350	360	280	225	112	1050	840	900	1050	840	900	100
	4,0	-	-	-	112M	A	65	50	100	500	280	350	360	280	225	112	1050	840	900	1050	840	900	100
	-	5,5	-	-	132S	A	65	50	100	500	280	350	360	280	225	112	1050	840	900	1150	940	1000	100
	-	7,5	-	-	132M	A	65	50	100	500	280	350	360	280	225	112	1150	940	1000	1270	1060	1120	100
	-	11,0	-	-	160M	A	65	50	100	500	280	350	360	280	225	112	1270	1060	1120	1270	1060	1120	100
	-	-	15,0	-	160M	A	65	50	100	500	280	350	360	280	225	112	1270	1060	1120	1270	1060	1120	100
	-	-	18,5	-	160L	A	65	50	100	500	280	350	360	280	225	112	1270	1060	1120	1400	1190	1250	100
	-	-	22,0	-	180M	A	65	50	100	550	320	400	360	290	225	112	1400	1190	1250	1400	1190	1250	100
	-	-	30,0	-	200L	A	65	50	100	550	320	400	360	310	225	112	1400	1190	1250	1400	1190	1250	100
	-	-	37,0	-	200L	A	65	50	100	550	320	400	360	310	225	112	1400	1190	1250	1400	1190	1250	100
	-	-	-	-	200L	A	65	50	100	550	320	400	360	310	225	112	1400	1190	1250	1400	1190	1250	100
50-315	3,0	-	-	-	100L	A	65	50	125	500	280	350	470	325	250	112	1050	840	900	1150	940	1000	100
	4,0	-	-	-	112M	A	65	50	125	500	280	350	470	325	250	112	1150	940	1000	1270	1060	1120	100
	5,5	-	-	-	132S	A	65	50	125	500	280	350	470	325	250	112	1150	940	1000	1270	1060	1120	100
	7,5	-	-	-	132M	A	65	50	125	500	280	350	470	325	250	112	1270	1060	1120	1270	1060	1120	100
	-	11,0	-	-	160M	A	65	50	125	550	320	400	470	335	250	112	1400	1190	1250	1400	1190	1250	100
	-	15,0	-	-	160L	A	65	50	125	550	320	400	470	335	250	112	1400	1190	1250	1400	1190	1250	100

Etanorm 65-125 - 65-200

Figur A


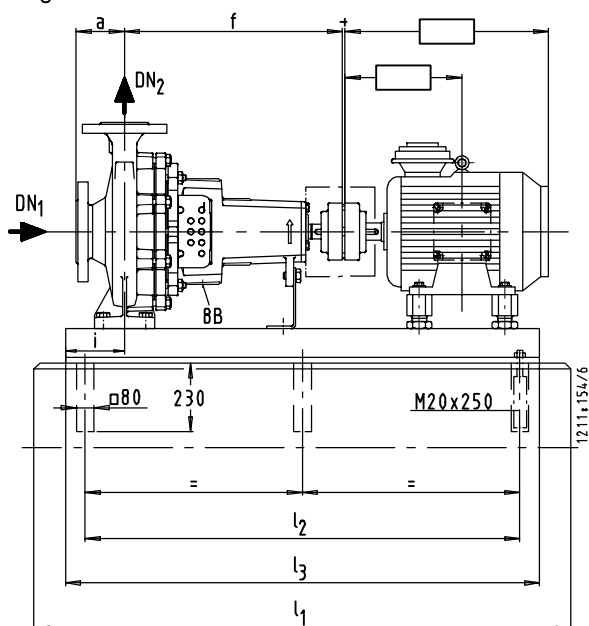
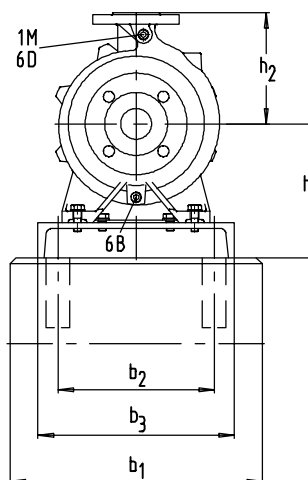
Dimensions in mm

Etanorm	Motor					Figur																		
	1 / min 1450 1750 2900 3500 kW				pump size																			
	DN ₁	DN ₂	a	b ₁			b ₂	b ₃	f	h ₁	h ₂	i	l ₁	l ₂	l ₃	l ₁	l ₂	l ₃	x					
65-125	0,55	-	-	-	80	A	80	65	100	450	240	300	360	260	180	112	860	650	710	950	740	800	100	
	0,75	-	-	-	80	A	80	65	100	450	240	300	360	260	180	112	860	650	710	950	740	800	100	
	1,1	1,1	-	-	90S	A	80	65	100	450	240	300	360	260	180	112	860	650	710	950	740	800	100	
	-	1,5	-	-	90L	A	80	65	100	450	240	300	360	260	180	112	950	740	800	1050	840	900	100	
	-	2,2	-	-	100L	A	80	65	100	450	240	300	360	260	180	112	1050	840	900	1150	940	1000	100	
	-	-	4,0	-	112M	A	80	65	100	450	240	300	360	260	180	112	1050	840	900	1150	940	1000	100	
	-	-	5,5	-	132S	A	80	65	100	450	240	300	360	260	180	112	1050	840	900	1150	940	1000	100	
	-	-	7,5	7,5	132S	A	80	65	100	450	240	300	360	260	180	112	1050	840	900	1150	940	1000	100	
	-	-	11,0	11,0	160M	A	80	65	100	500	280	350	360	260	180	112	1270	1060	1120	1270	1060	1120	100	
	-	-	-	15,0	160M	A	80	65	100	500	280	350	360	260	180	112	1270	1060	1120	1270	1060	1120	100	
	65-160	1,1	-	-	-	90S	A	80	65	100	450	240	300	360	260	200	112	860	650	710	950	740	800	100
		1,5	1,5	-	-	90L	A	80	65	100	450	240	300	360	260	200	112	950	740	800	1050	840	900	100
2,2		2,2	-	-	100L	A	80	65	100	450	240	300	360	260	200	112	1050	840	900	1150	940	1000	100	
-		3,0	-	-	100L	A	80	65	100	450	240	300	360	260	200	112	1050	840	900	1150	940	1000	100	
-		4,0	-	-	112M	A	80	65	100	450	240	300	360	260	200	112	1050	840	900	1150	940	1000	100	
-		-	7,5	-	132S	A	80	65	100	450	240	300	360	260	200	112	1050	840	900	1150	940	1000	100	
-		-	11,0	-	160M	A	80	65	100	500	280	350	360	260	200	112	1270	1060	1120	1270	1060	1120	100	
-		-	15,0	15,0	160M	A	80	65	100	500	280	350	360	260	200	112	1270	1060	1120	1270	1060	1120	100	
-		-	-	18,5	160L	A	80	65	100	500	280	350	360	260	200	112	1270	1060	1120	1400	1190	1250	100	
-		-	-	22,0	180M	A	80	65	100	550	320	400	360	290	200	112	1400	1190	1250	1400	1190	1250	100	
-		-	-	30,0	200L	A	80	65	100	550	320	400	360	310	200	112	1400	1190	1250	1400	1190	1250	100	
65-200		2,2	-	-	-	100L	A	80	65	100	500	280	350	360	280	225	112	1050	840	900	1150	940	1000	140
	3,0	3,0	-	-	100L	A	80	65	100	500	280	350	360	280	225	112	1050	840	900	1150	940	1000	140	
	4,0	4,0	-	-	112M	A	80	65	100	500	280	350	360	280	225	112	1050	840	900	1150	940	1000	140	
	-	5,5	-	-	132S	A	80	65	100	500	280	350	360	280	225	112	1050	840	900	1150	940	1000	140	
	-	7,5	-	-	132M	A	80	65	100	500	280	350	360	280	225	112	1150	940	1000	1270	1060	1120	140	
	-	-	15,0	-	160M	A	80	65	100	500	280	350	360	280	225	112	1270	1060	1120	1400	1190	1250	140	
	-	-	18,5	-	160L	A	80	65	100	500	280	350	360	280	225	112	1270	1060	1120	1400	1190	1250	140	
	-	-	22,0	22,0	180M	A	80	65	100	550	320	400	360	290	225	112	1400	1190	1250	1400	1190	1250	140	
	-	-	30,0	30,0	200L	A	80	65	100	550	320	400	360	310	225	112	1400	1190	1250	1400	1190	1250	140	
	-	-	-	37,0	200L	A	80	65	100	550	320	400	360	310	225	112	1400	1190	1250	1400	1190	1250	140	
	-	-	-	-	200L	A	80	65	100	550	320	400	360	310	225	112	1400	1190	1250	1400	1190	1250	140	
	-	-	-	-	200L	A	80	65	100	550	320	400	360	310	225	112	1400	1190	1250	1400	1190	1250	140	

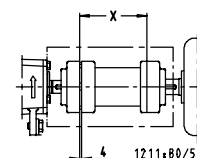
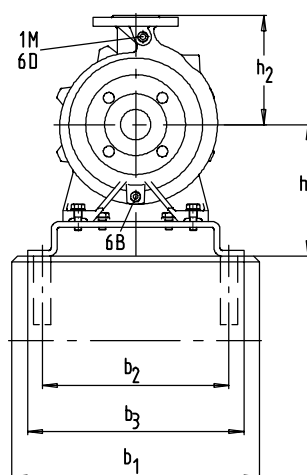
Etanorm 65-250 - 65-315



Figur A

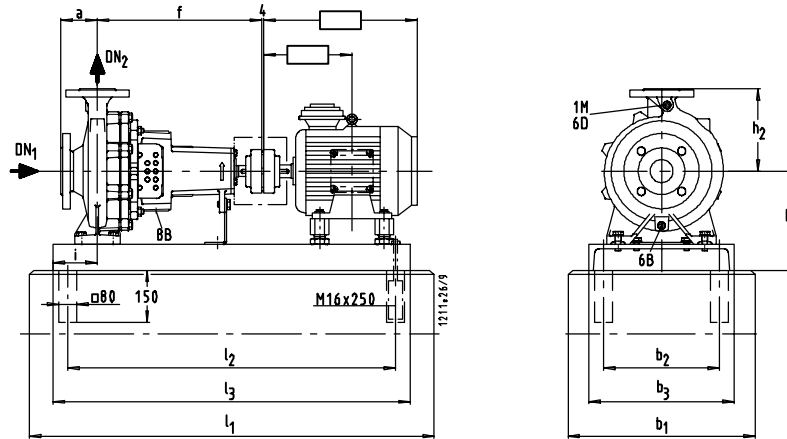
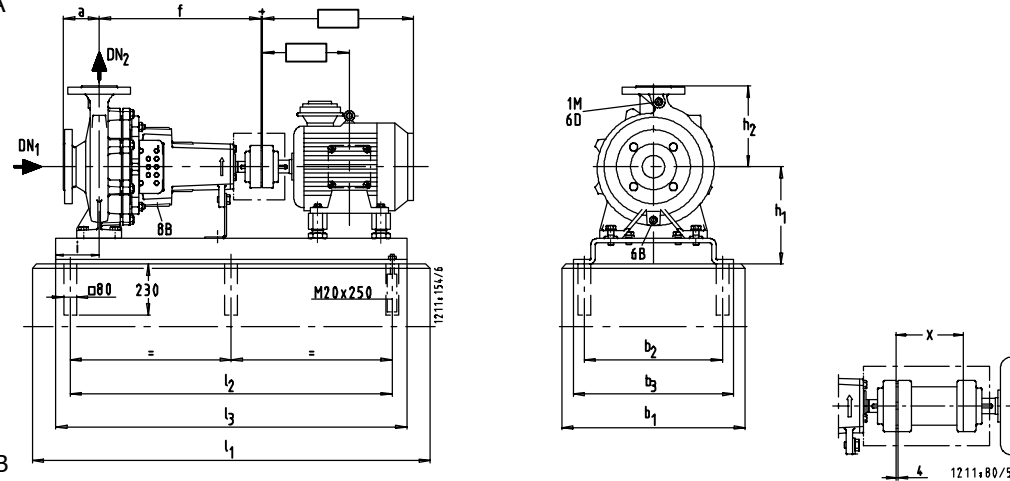


Figur B


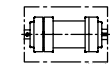


Dimensions in mm

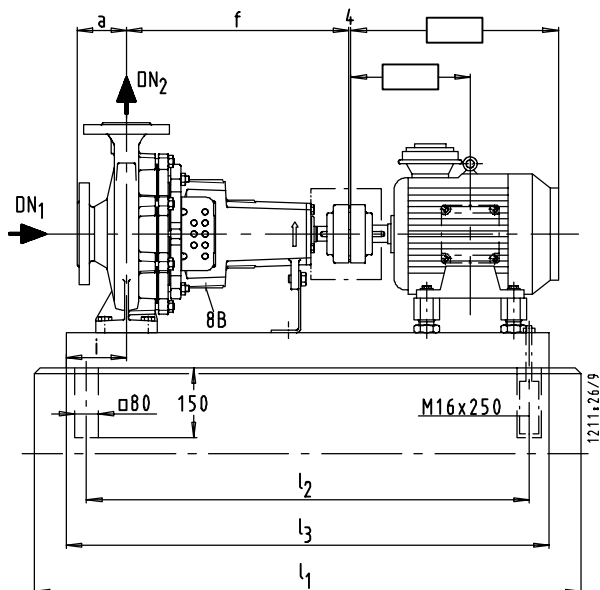
Etanorm	Motor 1 / min 1450 1750 2900 3500 kW				pump size	Figur																	
							DN ₁	DN ₂	a	b ₁	b ₂	b ₃	f	h ₁	h ₂	i	l ₁	l ₂	l ₃	l ₁	l ₂	l ₃	x
65-250	3,0	-	-	-	100L	A	80	65	100	550	320	400	470	310	250	130	1150	940	1000	1400	1190	1250	140
	4,0	-	-	-	112M	A	80	65	100	550	320	400	470	310	250	130	1150	940	1000	1400	1190	1250	140
	5,5	5,5	-	-	132S	A	80	65	100	550	320	400	470	310	250	130	1150	940	1000	1400	1190	1250	140
	-	7,5	-	-	132M	A	80	65	100	550	320	400	470	310	250	130	1150	940	1000	1400	1190	1250	140
	-	11,0	-	-	160M	A	80	65	100	550	320	400	470	310	250	130	1400	1190	1250	1570	1360	1420	140
	-	-	22,0	-	180M	A	80	65	100	550	320	400	470	310	250	130	1400	1190	1250	1570	1360	1420	140
	-	-	30,0	-	200L	A	80	65	100	550	320	400	470	310	250	130	1400	1190	1250	1570	1360	1420	140
	-	-	37,0	-	200L	A	80	65	100	550	320	400	470	310	250	130	1400	1190	1250	1570	1360	1420	140
	-	-	45,0	-	225M	B	80	65	100	750	550	590	470	365	250	130	1550	940	1400	1550	940	1400	140
	-	-	-	-	225M	B	80	65	100	750	550	590	470	365	250	130	1550	940	1400	1550	940	1400	140
65-315	5,5	-	-	-	132S	A	80	65	125	550	320	400	470	335	280	130	1150	940	1000	1400	1190	1250	140
	7,5	-	-	-	132M	A	80	65	125	550	320	400	470	335	280	130	1150	940	1000	1400	1190	1250	140
	11,0	11,0	-	-	160M	A	80	65	125	550	320	400	470	335	280	130	1400	1190	1250	1570	1360	1420	140
	-	15,0	-	-	160L	A	80	65	125	550	320	400	470	335	280	130	1400	1190	1250	1570	1360	1420	140
	-	18,5	-	-	180M	A	80	65	125	550	320	400	470	335	280	130	1400	1190	1250	1570	1360	1420	140
	-	22,0	-	-	180L	A	80	65	125	550	320	400	470	335	280	130	1400	1190	1250	1570	1360	1420	140
	-	-	-	-	180L	A	80	65	125	550	320	400	470	335	280	130	1400	1190	1250	1570	1360	1420	140
	-	-	-	-	180L	A	80	65	125	550	320	400	470	335	280	130	1400	1190	1250	1570	1360	1420	140

Etanorm 80-160 - 80-250

Figur A

Figur B

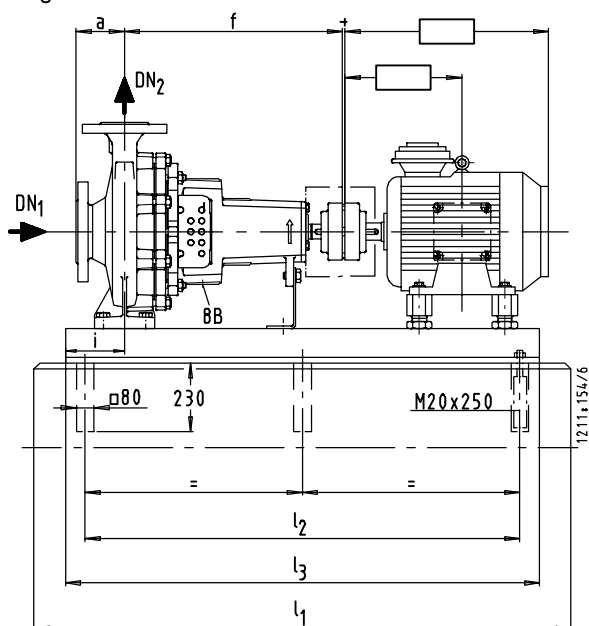
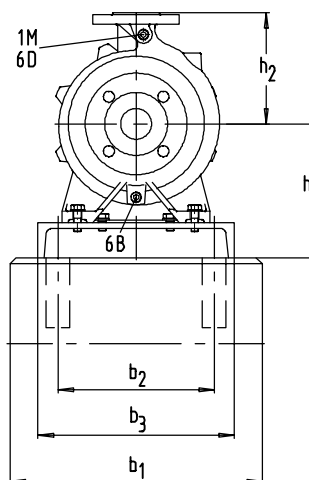
Dimensions in mm

Etanorm	Motor					pump size	Figur																	
	1 / min 1450 1750 2900 3500 kW																							
	DN ₁	DN ₂	a	b ₁	b ₂			b ₃	f	h ₁	h ₂	i	l ₁	l ₂	l ₃	l ₁	l ₂	l ₃	x					
80-160	1,5	-	-	-	90L	A	100	80	125	500	280	350	360	280	225	112	1050	840	900	1050	840	900	140	
	2,2	-	-	-	100L	A	100	80	125	500	280	350	360	280	225	112	1050	840	900	1150	940	1000	140	
	3,0	3,0	-	-	100L	A	100	80	125	500	280	350	360	280	225	112	1050	840	900	1150	940	1000	140	
	-	4,0	-	-	112M	A	100	80	125	500	280	350	360	280	225	112	1050	840	900	1150	940	1000	140	
	-	5,5	-	-	132S	A	100	80	125	500	280	350	360	280	225	112	1050	840	900	1150	940	1000	140	
	-	-	15,0	-	160M	A	100	80	125	500	280	350	360	280	225	112	1270	1060	1120	1400	1190	1250	140	
	-	-	18,5	-	160L	A	100	80	125	500	280	350	360	280	225	112	1270	1060	1120	1400	1190	1250	140	
	-	-	22,0	22,0	180M	A	100	80	125	550	320	400	360	290	225	112	1400	1190	1250	1400	1190	1250	140	
	-	-	30,0	30,0	200L	A	100	80	125	550	320	400	360	310	225	112	1400	1190	1250	1400	1190	1250	140	
	-	-	-	37,0	200L	A	100	80	125	550	320	400	360	310	225	112	1400	1190	1250	1400	1190	1250	140	
	-	-	-	-	200L	A	100	80	125	550	320	400	360	310	225	112	1400	1190	1250	1400	1190	1250	140	
	80-200	2,2	-	-	-	100L	A	100	80	125	500	280	350	470	280	250	112	1150	940	1000	1270	1060	1120	140
3,0		-	-	-	100L	A	100	80	125	500	280	350	470	280	250	112	1150	940	1000	1270	1060	1120	140	
4,0		-	-	-	112M	A	100	80	125	500	280	350	470	280	250	112	1150	940	1000	1270	1060	1120	140	
5,5		5,5	-	-	132S	A	100	80	125	500	280	350	470	280	250	112	1150	940	1000	1270	1060	1120	140	
-		7,5	-	-	132M	A	100	80	125	500	280	350	470	280	250	112	1270	1060	1120	1400	1190	1250	140	
-		11,0	-	-	160M	A	100	80	125	500	280	350	470	280	250	112	1270	1060	1120	1400	1190	1250	140	
-		-	18,5	-	160L	A	100	80	125	550	320	400	470	290	250	112	1400	1190	1250	1570	1360	1420	140	
-		-	22,0	-	180M	A	100	80	125	550	320	400	470	290	250	112	1400	1190	1250	1570	1360	1420	140	
-		-	30,0	-	200L	A	100	80	125	550	320	400	470	310	250	112	1400	1190	1250	1570	1360	1420	140	
-		-	37,0	-	200L	A	100	80	125	550	320	400	470	310	250	112	1400	1190	1250	1570	1360	1420	140	
-		-	45,0	45,0	225M	B	100	80	125	750	550	590	470	365	250	112	1550	940	1400	1550	940	1400	140	
-		-	-	55,0	250M	B	100	80	125	810	600	650	470	390	250	112	1750	1060	1600	1750	1060	1600	140	
-	-	-	75,0	280S	B	100	80	125	880	670	720	470	420	250	112	1750	1060	1600	1750	1060	1600	140		
80-250	4,0	-	-	-	112M	A	100	80	125	550	320	400	470	310	280	130	1150	940	1000	1400	1190	1250	140	
	5,5	-	-	-	132S	A	100	80	125	550	320	400	470	310	280	130	1150	940	1000	1400	1190	1250	140	
	7,5	7,5	-	-	132M	A	100	80	125	550	320	400	470	310	280	130	1150	940	1000	1400	1190	1250	140	
	11,0	11,0	-	-	160M	A	100	80	125	550	320	400	470	310	280	130	1400	1190	1250	1570	1360	1420	140	
	-	15,0	-	-	160L	A	100	80	125	550	320	400	470	310	280	130	1400	1190	1250	1570	1360	1420	140	
	-	18,5	-	-	180M	A	100	80	125	550	320	400	470	310	280	130	1400	1190	1250	1570	1360	1420	140	
	-	-	30,0	-	200L	A	100	80	125	550	320	400	470	310	280	130	1400	1190	1250	1570	1360	1420	140	
	-	-	37,0	-	200L	A	100	80	125	550	320	400	470	310	280	130	1400	1190	1250	1570	1360	1420	140	
	-	-	45,0	-	225M	B	100	80	125	750	550	590	470	365	280	130	1550	940	1400	1550	940	1400	140	
	-	-	55,0	-	250M	B	100	80	125	810	600	650	470	390	280	130	1750	1060	1600	1750	1060	1600	140	
	-	-	75,0	-	280S	B	100	80	125	880	670	720	470	420	280	130	1750	1060	1600	1750	1060	1600	140	
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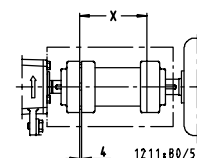
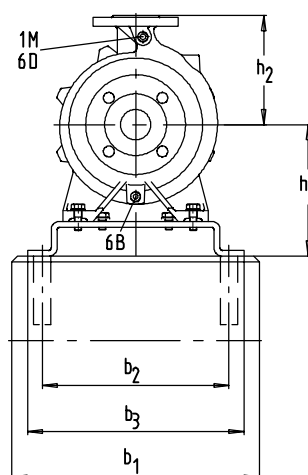
Etanorm 80-315 - 80-400





Figur A

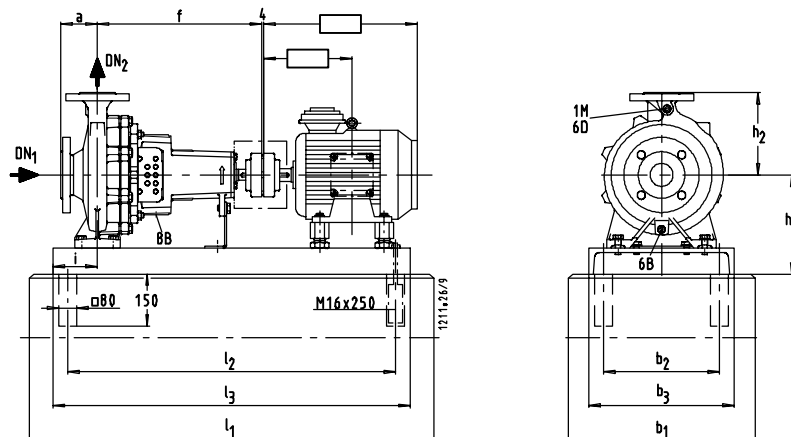
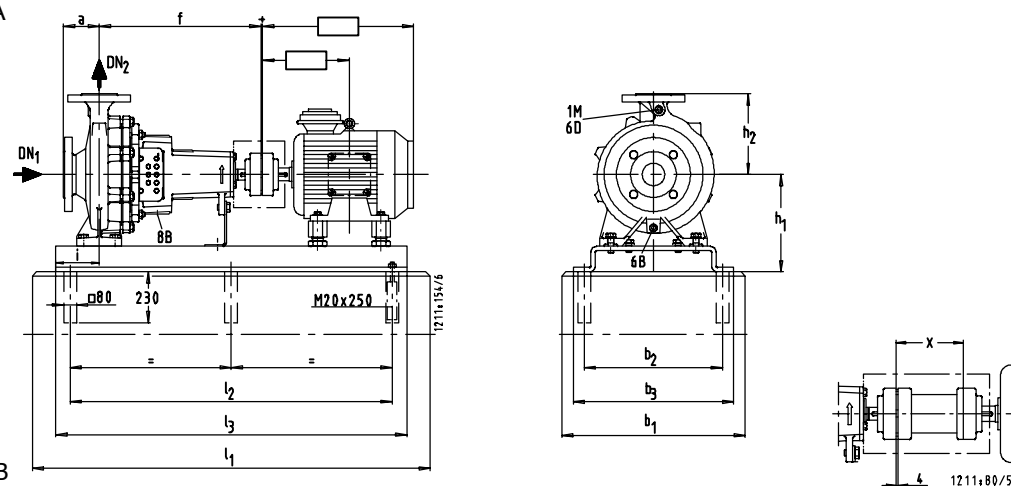


Figur B





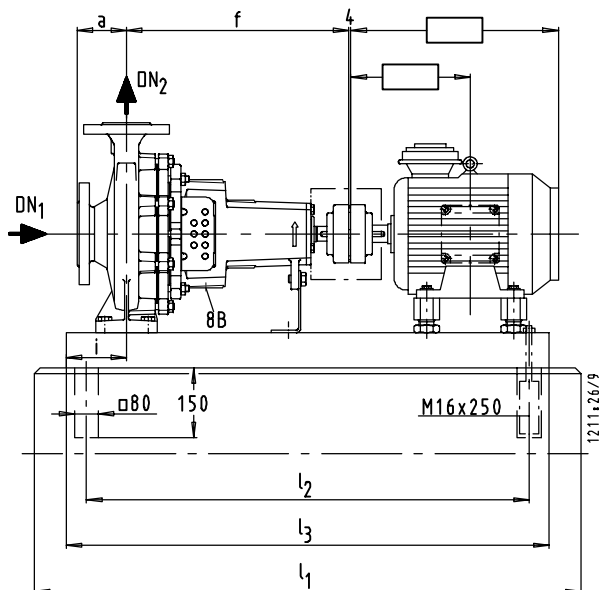
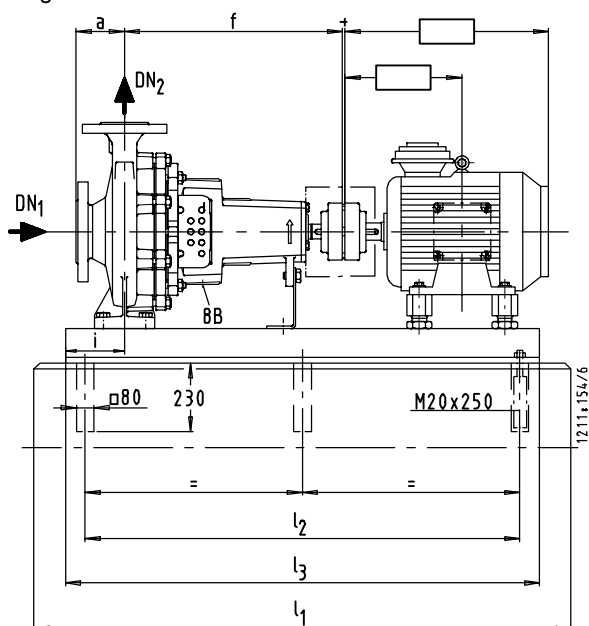
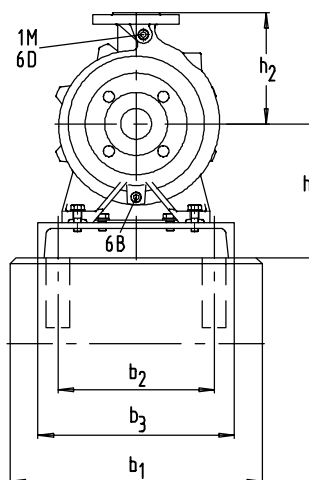
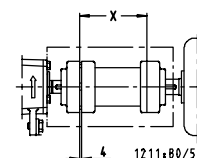
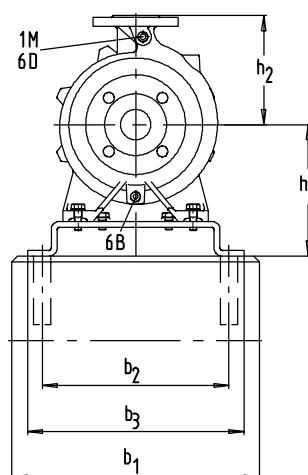
Dimensions in mm

Etanorm	Motor 1 / min 1450 1750 2900 3500 kW					pimp size	Figur																					
								DN ₁	DN ₂	a	b ₁	b ₂	b ₃	f	h ₁	h ₂	i	l ₁	l ₂	l ₃	l ₁	l ₂	l ₃	x				
80-315	7,5	-	-	-	132M	A	100	80	125	550	320	400	470	360	315	130	1150	940	1000	1400	1190	1250	1400	140				
	11,0	-	-	-	160M	A	100	80	125	550	320	400	470	360	315	130	1400	1190	1250	1570	1360	1420	140					
	15,0	-	-	-	160L	A	100	80	125	550	320	400	470	360	315	130	1400	1190	1250	1570	1360	1420	140					
	18,5	18,5	-	-	180M	A	100	80	125	550	320	400	470	360	315	130	1400	1190	1250	1570	1360	1420	140					
	-	22,0	-	-	180L	A	100	80	125	550	320	400	470	360	315	130	1400	1190	1250	1570	1360	1420	140					
	-	30,0	-	-	200L	B	100	80	125	750	550	590	470	390	315	130	1550	940	1400	1550	940	1400	140					
	-	37,0	-	-	225S	B	100	80	125	750	550	590	470	390	315	130	1550	940	1400	1550	940	1400	140					
	-	-	-	-	225M	B	100	80	125	750	550	590	470	390	315	130	1550	940	1400	1550	940	1400	140					
80-400	11,0	-	-	-	160M	B	100	80	125	750	550	590	530	420	355	112	1550	940	1400	1550	940	1400	140					
	15,0	-	-	-	160L	B	100	80	125	750	550	590	530	420	355	112	1550	940	1400	1550	940	1400	140					
	18,5	-	-	-	180M	B	100	80	125	750	550	590	530	420	355	112	1550	940	1400	1550	940	1400	140					
	22,0	-	-	-	180L	B	100	80	125	750	550	590	530	420	355	112	1550	940	1400	1550	940	1400	140					
	30,0	30,0	-	-	200L	B	100	80	125	750	550	590	530	420	355	112	1550	940	1400	1550	940	1400	140					
	-	37,0	-	-	225S	B	100	80	125	750	550	590	530	420	355	112	1550	940	1400	1550	940	1400	140					
	-	45,0	-	-	225M	B	100	80	125	750	550	590	530	420	355	112	1550	940	1400	1550	940	1400	140					
	-	55,0	-	-	250M	B	100	80	125	810	600	650	530	420	355	112	1750	1060	1600	1750	1060	1600	140					
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					

Etanorm 100-160 - 100-250

Figur A

Figur B

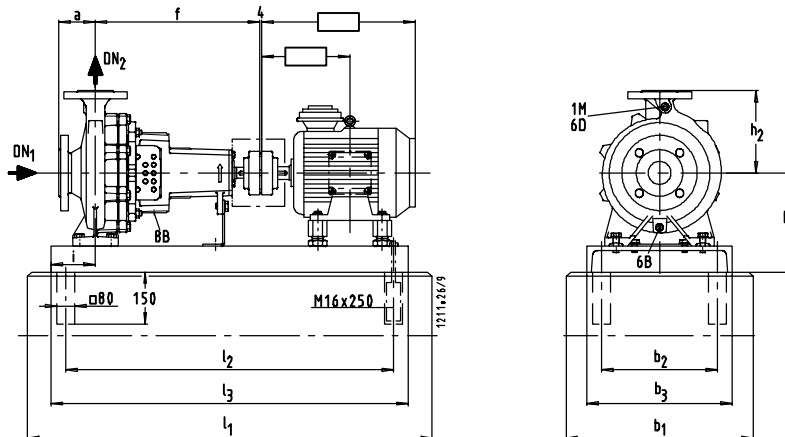
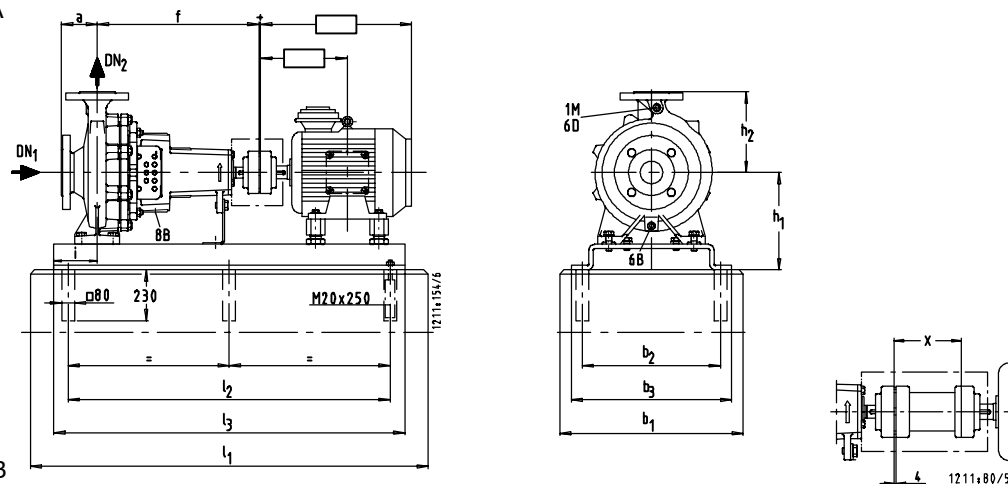
Dimensions in mm

Etanorm	Motor 1 / min 1450 1750 2900 3500 kW					pump size	Figur																								
	DN ₁	DN ₂	a	b ₁	b ₂			b ₃	f	h ₁	h ₂	i	l ₁	l ₂	l ₃	l ₁	l ₂	l ₃	x												
100-160	3,0	-	-	-	100L	A	125	100	125	550	320	400	470	310	280	130	1150	940	1000	1400	1190	1250	140								
	4,0	-	-	-	112M	A	125	100	125	550	320	400	470	310	280	130	1150	940	1000	1400	1190	1250	140								
	-	5,5	-	-	132S	A	125	100	125	550	320	400	470	310	280	130	1150	940	1000	1400	1190	1250	140								
	-	7,5	-	-	132M	A	125	100	125	550	320	400	470	310	280	130	1150	940	1000	1400	1190	1250	140								
	-	-	22,0	-	180M	A	125	100	125	550	320	400	470	310	280	130	1400	1190	1250	1570	1360	1420	140								
	-	-	30,0	-	200L	A	125	100	125	550	320	400	470	310	280	130	1400	1190	1250	1570	1360	1420	140								
	-	-	37,0	-	200L	A	125	100	125	550	320	400	470	310	280	130	1400	1190	1250	1570	1360	1420	140								
	-	-	-	45,0	225M	B	125	100	125	750	550	590	470	365	280	130	1550	940	1400	1550	940	1400	140								
	-	-	-	55,0	250M	B	125	100	125	810	600	650	470	390	280	130	1750	1060	1600	1750	1060	1600	140								
	-	-	-	75,0	280S	B	125	100	125	880	670	720	470	420	280	130	1750	1060	1600	1750	1060	1600	140								
100-200	4,0	-	-	-	112M	A	125	100	125	550	320	400	470	310	280	130	1150	940	1000	1400	1190	1250	140								
	5,5	-	-	-	132S	A	125	100	125	550	320	400	470	310	280	130	1150	940	1000	1400	1190	1250	140								
	7,5	-	-	-	132M	A	125	100	125	550	320	400	470	310	280	130	1150	940	1000	1400	1190	1250	140								
	-	11,0	-	-	160M	A	125	100	125	550	320	400	470	310	280	130	1400	1190	1250	1570	1360	1420	140								
	-	15,0	-	-	160L	A	125	100	125	550	320	400	470	310	280	130	1400	1190	1250	1570	1360	1420	140								
	-	-	30	-	200L	A	125	100	125	550	320	400	470	310	280	130	1400	1190	1250	1570	1360	1420	140								
	-	-	37	-	200L	A	125	100	125	550	320	400	470	310	280	130	1400	1190	1250	1570	1360	1420	140								
	-	-	45	-	225M	B	125	100	125	750	550	590	470	365	280	130	1550	940	1400	1550	940	1400	140								
	-	-	55	-	250M	B	125	100	125	810	600	650	470	390	280	130	1750	1060	1600	1750	1060	1600	140								
	-	-	75	75	280S	B	125	100	125	880	670	720	470	420	280	130	1750	1060	1600	1750	1060	1600	140								
	-	-	-	90	280M	B	125	100	125	880	670	720	470	420	280	130	1750	1060	1600	1750	1060	1600	140								
	-	-	-	110	315S	B	125	100	125	940	730	780	470	455	280	130	1800	1100	1650	1800	1100	1650	140								
	100-250	7,5	-	-	-	132M	A	125	100	140	550	320	400	470	335	280	130	1150	940	1000	1400	1190	1250	140							
		11,0	11,0	-	-	160M	A	125	100	140	550	320	400	470	335	280	130	1400	1190	1250	1570	1360	1420	140							
15,0		15,0	-	-	160L	A	125	100	140	550	320	400	470	335	280	130	1400	1190	1250	1570	1360	1420	140								
-		18,5	-	-	180M	A	125	100	140	550	320	400	470	335	280	130	1400	1190	1250	1570	1360	1420	140								
-		22,0	-	-	180L	A	125	100	140	550	320	400	470	335	280	130	1400	1190	1250	1570	1360	1420	140								
-		-	55	-	250M	B	125	100	140	810	600	650	470	390	280	130	1750	1060	1600	1750	1060	1600	140								
-		-	75	-	280S	B	125	100	140	880	670	720	470	420	280	130	1750	1060	1600	1750	1060	1600	140								
-		-	90	-	280M	B	125	100	140	880	670	720	470	420	280	130	1750	1060	1600	1750	1060	1600	140								
-		-	110	-	315S	B	125	100	140	940	730	780	470	455	280	130	1800	1100	1650	1800	1100	1650	140								
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

Etanorm 100-315 - 100-400

Figur A

Figur B


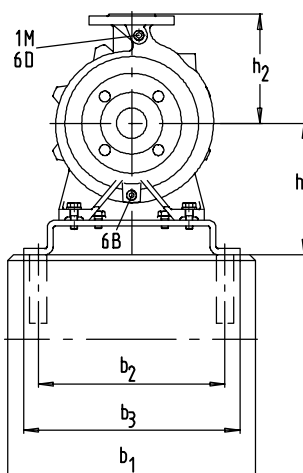
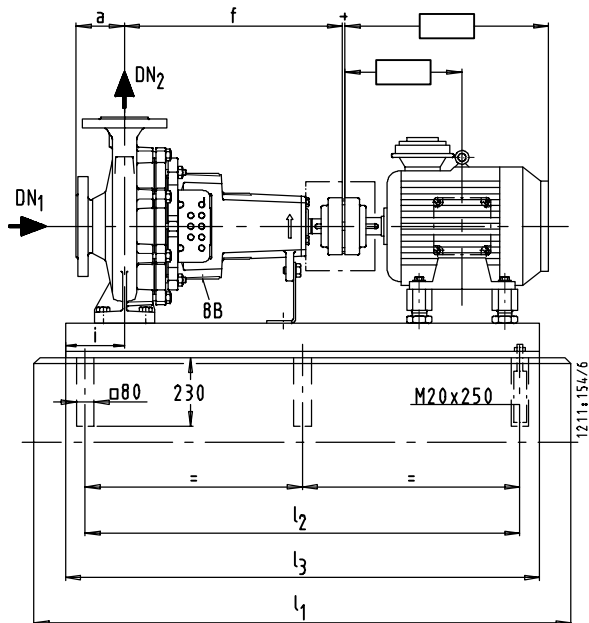
Dimensions in mm

Etanorm	Motor 1 / min 1450 1750 2900 3500 kW				pump size	Figur																	
							DN ₁	DN ₂	a	b ₁	b ₂	b ₃	f	h ₁	h ₂	i	l ₁	l ₂	l ₃	l ₁	l ₂	l ₃	x
100-315	15,0	-	-	-	160L	A	125	100	140	550	320	400	470	360	315	130	1400	1190	1250	1570	1360	1420	140
	18,5	-	-	-	180M	A	125	100	140	550	320	400	470	360	315	130	1400	1190	1250	1570	1360	1420	140
	22,0	-	-	-	180L	A	125	100	140	550	320	400	470	360	315	130	1400	1190	1250	1570	1360	1420	140
	30,0	30,0	-	-	200L	B	125	100	140	750	550	590	470	390	315	130	1550	940	1400	1550	940	1400	140
	-	37,0	-	-	225S	B	125	100	140	750	550	590	470	390	315	130	1550	940	1400	1550	940	1400	140
	-	45,0	-	-	225M	B	125	100	140	750	550	590	470	390	315	130	1550	940	1400	1550	940	1400	140
100-400	22,0	-	-	-	180L	B	125	100	140	810	600	650	530	420	355	112	1750	1060	1600	1750	1060	1600	140
	30,0	-	-	-	200L	B	125	100	140	810	600	650	530	420	355	112	1750	1060	1600	1750	1060	1600	140
	37,0	37,0	-	-	225S	B	125	100	140	810	600	650	530	420	355	112	1750	1060	1600	1750	1060	1600	140
	-	45,0	-	-	225M	B	125	100	140	810	600	650	530	420	355	112	1750	1060	1600	1750	1060	1600	140
	-	55,0	-	-	250M	B	125	100	140	810	600	650	530	420	355	112	1750	1060	1600	1750	1060	1600	140
	-	75,0	-	-	280S	B	125	100	140	880	670	720	530	420	355	112	1750	1060	1600	1750	1060	1600	140

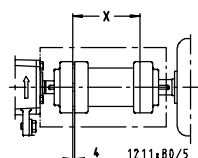
Etanorm 125-200 - 125-400

Figur A

Figur B

Dimensions in mm


Etanorm	Motor					pump size	Figur																	
	1450	1 / min 1750	2900	3500	kW			DN ₁	DN ₂	a	b ₁	b ₂	b ₃	f	h ₁	h ₂	i	l ₁	l ₂	l ₃	l ₁	l ₂	l ₃	x
125-200	7,5	-	-	-	132M	A	150	125	140	550	320	400	470	360	315	130	1150	940	1000	1400	1190	1250	140	
	11,0	-	-	-	160M	A	150	125	140	550	320	400	470	360	315	130	1400	1190	1250	1570	1360	1420	140	
	15,0	15,0	-	-	160L	A	150	125	140	550	320	400	470	360	315	130	1400	1190	1250	1570	1360	1420	140	
	-	18,5	-	-	180M	A	150	125	140	550	320	400	470	360	315	130	1400	1190	1250	1570	1360	1420	140	
	-	22,0	-	-	180L	A	150	125	140	550	320	400	470	360	315	130	1400	1190	1250	1570	1360	1420	140	
	-	-	55	-	250M	B	150	125	140	810	600	650	470	390	315	130	1750	1060	1600	1750	1060	1600	140	
	-	-	75	-	280S	B	150	125	140	880	670	720	470	420	315	130	1750	1060	1600	1750	1060	1600	140	
	-	-	90	90	280M	B	150	125	140	880	670	720	470	420	315	130	1750	1060	1600	1750	1060	1600	140	
	-	-	110	110	315S	B	150	125	140	940	730	780	470	455	315	130	1800	1100	1650	1800	1100	1650	140	
	125-250	11,0	-	-	-	160M	A	150	125	140	550	320	400	470	360	355	130	1400	1190	1250	1570	1360	1420	140
15,0		-	-	-	160L	A	150	125	140	550	320	400	470	360	355	130	1400	1190	1250	1570	1360	1420	140	
18,5		18,5	-	-	180M	A	150	125	140	550	320	400	470	360	355	130	1400	1190	1250	1570	1360	1420	140	
-		22	-	-	180L	A	150	125	140	550	320	400	470	360	355	130	1400	1190	1250	1570	1360	1420	140	
-		30	-	-	200L	B	150	125	140	750	550	590	470	390	355	130	1550	940	1400	1550	940	1400	140	
-		37	-	-	225S	B	150	125	140	750	550	590	470	390	355	130	1550	940	1400	1550	940	1400	140	
125-315	18,5	-	-	-	180M	B	150	125	140	810	600	650	530	420	355	112	1750	1060	1600	1750	1060	1600	140	
	22	-	-	-	180L	B	150	125	140	810	600	650	530	420	355	112	1750	1060	1600	1750	1060	1600	140	
	30	-	-	-	200L	B	150	125	140	810	600	650	530	420	355	112	1750	1060	1600	1750	1060	1600	140	
	37	37	-	-	225S	B	150	125	140	810	600	650	530	420	355	112	1750	1060	1600	1750	1060	1600	140	
	-	45	-	-	225M	B	150	125	140	810	600	650	530	420	355	112	1750	1060	1600	1750	1060	1600	140	
	-	55	-	-	250M	B	150	125	140	810	600	650	530	420	355	112	1750	1060	1600	1750	1060	1600	140	
	-	75	-	-	280S	B	150	125	140	880	670	720	530	420	355	112	1750	1060	1600	1750	1060	1600	140	
	125-400	30	-	-	-	200L	B	150	125	140	810	600	650	530	455	400	112	1750	1060	1600	1750	1060	1600	140
37		-	-	-	225S	B	150	125	140	810	600	650	530	455	400	112	1750	1060	1600	1750	1060	1600	140	
45		-	-	-	225M	B	150	125	140	810	600	650	530	455	400	112	1750	1060	1600	1750	1060	1600	140	
55		55	-	-	250M	B	150	125	140	810	600	650	530	455	400	112	1750	1060	1600	1750	1060	1600	140	
75		75	-	-	280S	B	150	125	140	880	670	720	530	455	400	112	1750	1060	1600	1750	1060	1600	140	
-		90	-	-	280M	B	150	125	140	880	670	720	530	455	400	112	1750	1060	1600	1750	1060	1600	140	
-		110	-	-	315S	B	150	125	140	940	730	780	530	455	400	112	1800	1100	1650	1800	1100	1650	140	
-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Etanorm 150-200 - 150-400


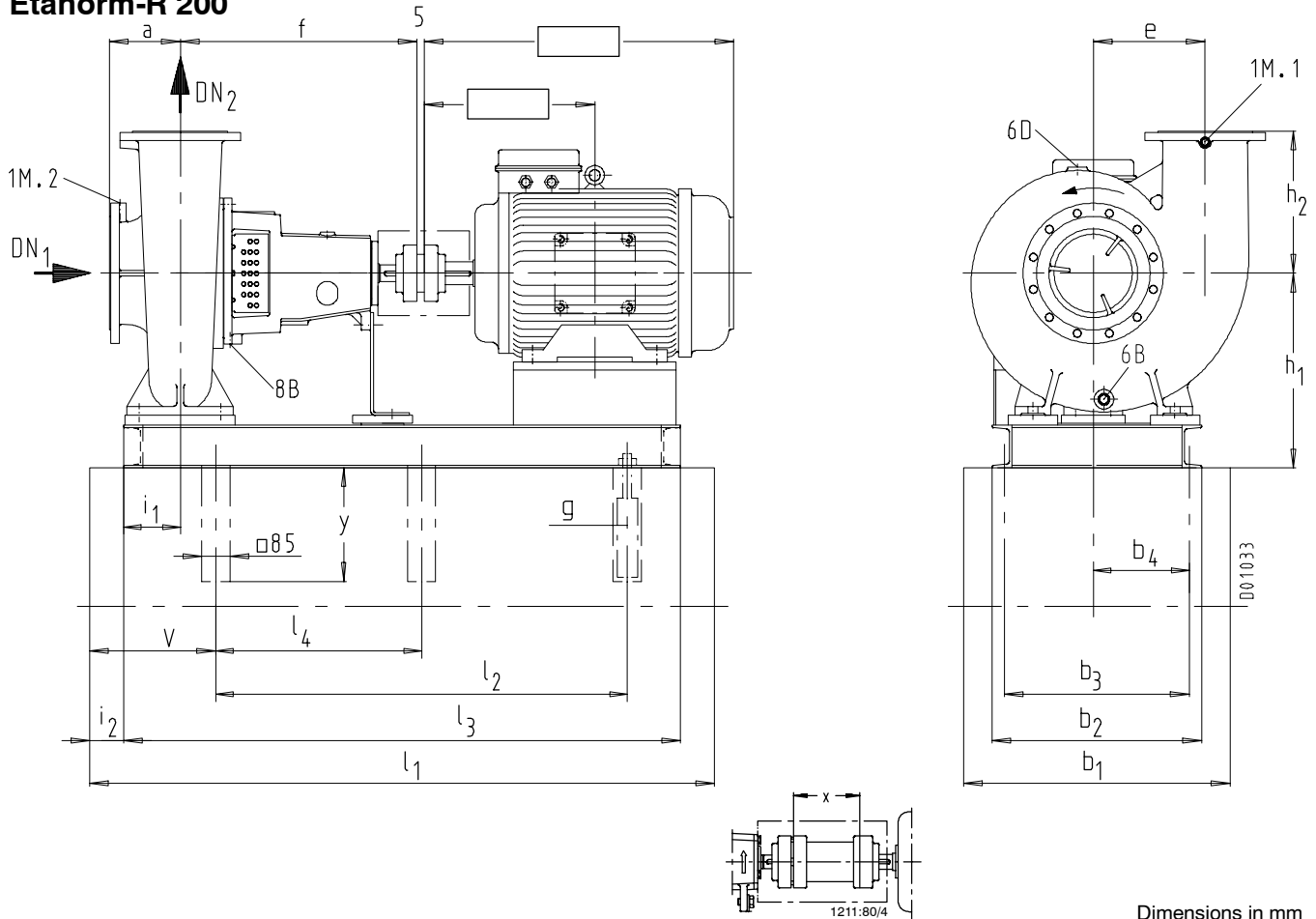
(Figur B)





Dimensions in mm

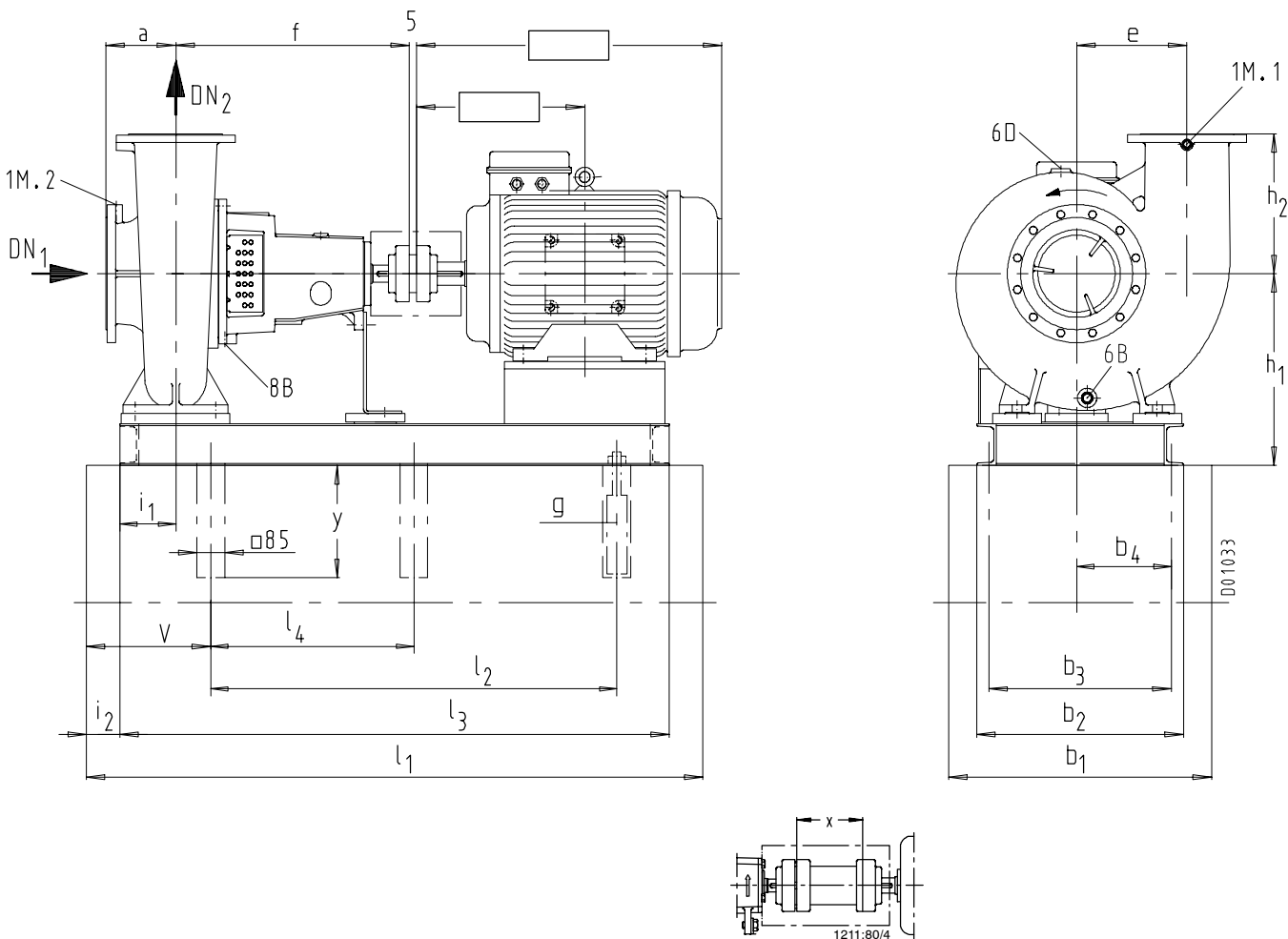
Etanorm	Motor 1 / min 1450 1750 2900 3500 kW					pump size	Figur																						
	DN ₁	DN ₂	a	b ₁	b ₂			b ₃	f	h ₁	h ₂	i	l ₁	l ₂	l ₃	l ₁	l ₂	l ₃	x										
150-200	11,0	-	-	-	160M	B	200	150	160	880	670	720	470	420	400	112	1750	1060	1600	1750	1060	1600	140						
	15,0	15,0	-	-	160L	B	200	150	160	880	670	720	470	420	400	112	1750	1060	1600	1750	1060	1600	140						
	-	18,5	-	-	180M	B	200	150	160	880	670	720	470	420	400	112	1750	1060	1600	1750	1060	1600	140						
	-	22,0	-	-	180L	B	200	150	160	880	670	720	470	420	400	112	1750	1060	1600	1750	1060	1600	140						
150-250	15,0	-	-	-	160L	B	200	150	160	810	600	650	470	420	400	112	1750	1060	1600	1750	1060	1600	140						
	18,5	-	-	-	180M	B	200	150	160	810	600	650	470	420	400	112	1750	1060	1600	1750	1060	1600	140						
	22,0	-	-	-	180L	B	200	150	160	810	600	650	470	420	400	112	1750	1060	1600	1750	1060	1600	140						
	30,0	30,0	-	-	200L	B	200	150	160	810	600	650	470	420	400	112	1750	1060	1600	1750	1060	1600	140						
	-	37,0	-	-	225S	B	200	150	160	810	600	650	470	420	400	112	1750	1060	1600	1750	1060	1600	140						
	-	45,0	-	-	225M	B	200	150	160	810	600	650	470	420	400	112	1750	1060	1600	1750	1060	1600	140						
	-	55,0	-	-	250M	B	200	150	160	810	600	650	470	420	400	112	1750	1060	1600	1750	1060	1600	140						
	-	-	-	-	250M	B	200	150	160	810	600	650	470	420	400	112	1750	1060	1600	1750	1060	1600	140						
150-315	22	-	-	-	180L	B	200	150	160	880	670	720	530	420	400	112	1750	1060	1600	1750	1060	1600	140						
	30	-	-	-	200L	B	200	150	160	880	670	720	530	420	400	112	1750	1060	1600	1750	1060	1600	140						
	37	37	-	-	225S	B	200	150	160	880	670	720	530	420	400	112	1750	1060	1600	1750	1060	1600	140						
	45	45	-	-	225M	B	200	150	160	880	670	720	530	420	400	112	1750	1060	1600	1750	1060	1600	140						
	-	55	-	-	250M	B	200	150	160	880	670	720	530	420	400	112	1750	1060	1600	1750	1060	1600	140						
	-	75	-	-	280S	B	200	150	160	880	670	720	530	420	400	112	1750	1060	1600	1750	1060	1600	140						
	-	90	-	-	280M	B	200	150	160	880	670	720	530	420	400	112	1750	1060	1600	1750	1060	1600	140						
	-	-	-	-	280M	B	200	150	160	880	670	720	530	420	400	112	1750	1060	1600	1750	1060	1600	140						
150-400	37	-	-	-	225S	B	200	150	160	880	670	720	530	455	450	112	1750	1060	1600	1750	1060	1600	140						
	45	-	-	-	225M	B	200	150	160	880	670	720	530	455	450	112	1750	1060	1600	1750	1060	1600	140						
	55	-	-	-	250M	B	200	150	160	880	670	720	530	455	450	112	1750	1060	1600	1750	1060	1600	140						
	75	75	-	-	280S	B	200	150	160	880	670	720	530	455	450	112	1750	1060	1600	1750	1060	1600	140						
	90	90	-	-	280M	B	200	150	160	880	670	720	530	455	450	112	1750	1060	1600	1750	1060	1600	140						
	-	110	-	-	315S	B	200	150	160	940	730	780	530	455	450	112	1800	1100	1650	1800	1100	1650	140						

Etanorm-R 200




Etanorm-R	(M) IP 55		pump size																																																						
	960	1450																																																							
	1160	1750																																																							
1/min kW				1) DN ₁	1) DN ₂	a	e	f	g	h ₂	i ₁	y	b ₁	b ₂	b ₃	b ₄	h ₁	i ₂	l ₁	l ₂	l ₃	v	b ₁	b ₂	b ₃	b ₄	h ₁	i ₂	l ₁	l ₂	l ₃	l ₄	v	x																							
200-250	4,0	--	132M	200	200	220	250	815	M20x400	345	170	450	820	570	525	293	505	115	1920	1150	1695	285	900	650	605	333	505	110	2000	1250	1780		280	200																							
200-250	5,5	--	132M	200	200	220	250	815	M20x400	345	170	450	820	570	525	293	505	115	1920	1150	1695	285	900	650	605	333	505	110	2000	1250	1780		280	200																							
200-250	7,5	--	160M	200	200	220	250	815	M20x400	345	170	450	820	570	525	293	505	115	1920	1150	1695	285	1010	760	710	385	525	110	2100	1300	1880		330	200																							
200-250	11,0	15,0	160L	200	200	220	250	815	M20x400	345	170	450	820	570	525	293	505	115	1920	1150	1695	285	1010	760	710	385	525	110	2100	1300	1880		330	200																							
200-250	--	18,5	180M	200	200	220	250	815	M20x400	345	170	450	820	570	525	293	505	115	1920	1150	1695	285	1010	760	710	385	525	110	2100	1300	1880		330	200																							
200-250	15,0	22,0	180L	200	200	220	250	815	M20x400	345	170	450	820	570	525	293	505	115	1920	1150	1695	285	1010	760	710	385	525	110	2100	1300	1880		330	200																							
200-250	--	30,0	200L	200	200	220	250	815	M20x400	345	170	450	900	650	605	333	505	110	2000	1250	1780	280	1110	860	810	435	545	110	2260	1450	2040		330	200																							
200-250	--	37,0	225S	200	200	220	250	815	M20x400	345	170	450	900	650	605	333	505	110	2000	1250	1780	280	1110	860	810	435	545	110	2260	1450	2040		330	200																							
200-250	--	45,0	225M	200	200	220	250	815	M20x400	345	170	450	900	650	605	333	505	110	2000	1250	1780	280	1110	860	810	435	545	110	2260	1450	2040		330	200																							
200-260	7,5	--	160M	200	200	300	715	M20x400	350	170	450	820	570	525	293	550	115	1920	1150	1695	285	900	650	605	333	550	110	2000	1250	1780		280	200																								
200-260	11,0	18,5	160L	200	200	300	715	M20x400	350	170	450	820	570	525	293	550	115	1920	1150	1695	285	900	650	605	333	550	110	2000	1250	1780		280	200																								
200-260	15,0	22,0	180L	200	200	300	715	M20x400	350	170	450	820	570	525	293	550	115	1920	1150	1695	285	900	650	605	333	550	110	2000	1250	1780		280	200																								
200-260	15,0	22,0	180L	200	200	300	715	M20x400	350	170	450	820	570	525	293	550	115	1920	1150	1695	285	900	650	605	333	550	110	2000	1250	1780		280	200																								
200-260	18,5	30,0	200L	200	200	300	715	M20x400	350	170	450	820	570	525	293	550	115	1920	1150	1695	285	1010	760	710	385	570	110	2100	1300	1880		330	200																								
200-260	--	37,0	225S	200	200	300	715	M20x400	350	170	450	820	570	525	293	550	115	1920	1150	1695	285	1010	760	710	385	570	110	2100	1300	1880		330	200																								
200-260	--	45,0	225M	200	200	300	715	M20x400	350	170	450	820	570	525	293	550	115	1920	1150	1695	285	1010	760	710	385	570	110	2100	1300	1880		330	200																								
200-260	--	55,0	250M	200	200	300	715	M20x400	350	170	450	900	650	605	333	550	110	2000	1250	1780	280	1110	860	810	435	590	110	2260	1450	2040		330	200																								
200-330	11,0	--	160L	250	200	315	715	M20x400	400	170	450	820	570	525	293	550	115	1920	1150	1695	285	900	650	605	333	550	110	2000	1250	1780		280	200																								
200-330	15,0	18,5	180M	250	200	315	715	M20x400	400	170	450	820	570	525	293	550	115	1920	1150	1695	285	900	650	605	333	550	110	2000	1250	1780		280	200																								
200-330	15,0	22,0	180L	250	200	315	715	M20x400	400	170	450	820	570	525	293	550	115	1920	1150	1695	285	900	650	605	333	550	110	2000	1250	1780		280	200																								
200-330	18,5	--	200L	250	200	315	715	M20x400	400	170	450	820	570	525	293	550	115	1920	1150	1695	285	1010	760	710	385	570	110	2100	1300	1880		330	200																								
200-330	22,0	30,0	200L	250	200	315	715	M20x400	400	170	450	820	570	525	293	550	115	1920	1150	1695	285	1010	760	710	385	570	110	2100	1300	1880		330	200																								
200-330	--	37,0	225S	250	200	315	715	M20x400	400	170	450	820	570	525	293	550	115	1920	1150	1695	285	1010	760	710	385	570	110	2100	1300	1880		330	200																								
200-330	30,0	45,0	225M	250	200	315	715	M20x400	400	170	450	820	570	525	293	550	115	1920	1150	1695	285	1010	760	710	385	570	110	2100	1300	1880		330	200																								
200-330	--	55,0	250M	250	200	315	715	M20x400	400	170	450	900	650	605	333	550	110	2000	1250	1780	280	1110	860	810	435	590	110	2260	1450	2040		330	200																								
200-330	--	75,0	280S	250	200	315	715	M20x400	400	170	450	900	650	605	333	550	110	2000	1250	1780	280	1110	860	810	435	590	110	2260	1450	2040		330	200																								
200-330	--	90,0	280M	250	200	315	715	M20x400	400	170	450	1010	760	710	385	570	110	2100	1300	1880	330	1110	860	810	435	590	110	2260	1450	2040		330	200																								
200-330	--	110,0	315S	250	200	315	715	M20x400	400	170	450	1010	760	710	385	570	110	2100	1300	1880	330	1110	860	800	430	610	110	2450	1650	2230	825	330	200																								
200-400	18,5	--	200L	250	200	180	290	715	M20x400	400	170	450	820	570	525	293	550	115	1920	1150	1695	285	1010	760	710	385	570	110	2100	1300	1880		330	200																							
200-400	22,0	--	200L	250	200	180	290	715	M20x400	400	170	450	820	570	525	293	550	115	1920	1150	1695	285	1010	760	710	385	570	110	2100	1300	1880		330	200																							
200-400	30,0	--	225M	250	200	180	290	715	M20x400	400	170	450	820	570	525	293	550	115	1920	1150	1695	285	1010	760	710	385	570	110	2100	1300	1880		330	200																							
200-400	37,0	--	250M	250	200	180	290	715	M20x400	400	170	450	900	650	605	333	550	110	2000	1250	1780	280	1110	860	810	435	590	110	2260	1450	2040		330	200																							
200-400	45,0	75,0	280S	250	200	180	290	715	M20x400	400	170	450	900	650	605	333	550	110	2000	1250	1780	280	1110	860	810	435	590	110	2260	1450	2040		330	200																							
200-400	55,0	90,0	280M	250	200	180	290	715	M20x400	400	170	450	1010	760	710	385	570	110	2100	1300	1880	330	1110	860	810	435	590	110	2260	1450	2040		330	200																							
200-400	75,0	110,0	315S	250	200	180	290	715	M20x400	400	170	450	1010	760	710	385	570	110	2100	1300	1880	330	1110	860	800	430	610	110	2450	1650	2230	825	330	200																							
200-400	--	132,0	315M	250	200	180	290	715	M20x400	400	170	450	1110	860	810	435	590	110	2260	1450	2040	330	1110	860	800	430	610	110	2450	1650	2230	825	330	200																							
200-500	30,0	--	225M	250	200	387	715	M20x400	450	195	450	1010	760	710	385	670	110	2000	1200	1780	330</																																				

Etanorm-R 250

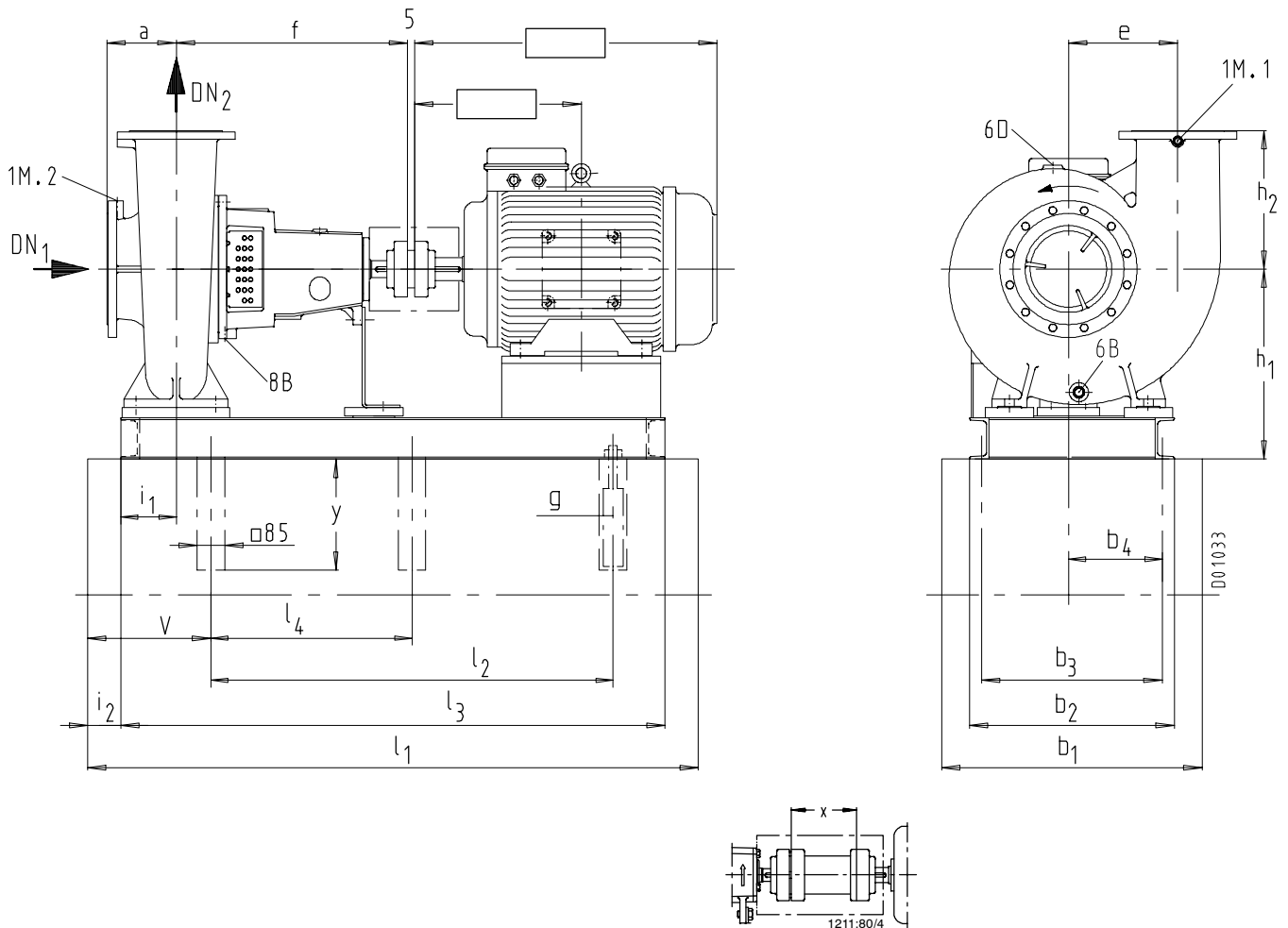


Dimensions in mm

Etanorm-R	(M IP 55 960 1450 1160 1750 size 1/min kW		pump size																																
	DN1	DN2		a	e	f	g	h2	i1	y	b1	b2	b3	b4	h1	i2	l1	l2	l3	v	b1	b2	b3	b4	h1	i2	l1	l2	l3	l4	v	x			
250-300	11,0	--	160L	250	250	225	300	830	M20x400	400	170	450	1010	760	710	385	570	115	1920	1150	1695	310	1010	760	710	385	570	110	2100	1300	1880	330	250		
250-300	--	18,5	180M	250	250	225	300	830	M20x400	400	170	450	1010	760	710	385	570	115	1920	1150	1695	310	1010	760	710	385	570	110	2100	1300	1880	330	250		
250-300	15,0	--	180L	250	250	225	300	830	M20x400	400	170	450	1010	760	710	385	570	115	1920	1150	1695	310	1110	860	810	445	590	110	2260	1450	2040	330	250		
250-300	18,5	30,0	200L	250	250	225	300	830	M20x400	400	170	450	1010	760	710	385	570	110	2000	1200	1780	330	1110	860	810	445	590	110	2260	1450	2040	330	250		
250-300	22,0	--	200L	250	250	225	300	830	M20x400	400	170	450	1010	760	710	385	570	110	2000	1200	1780	330	1110	860	810	445	590	110	2260	1450	2040	330	250		
250-300	--	37,0	225S	250	250	225	300	830	M20x400	400	170	450	1010	760	710	385	570	110	2000	1200	1780	330	1110	860	810	445	590	110	2260	1450	2040	330	250		
250-300	30,0	45,0	225M	250	250	225	300	830	M20x400	400	170	450	1010	760	710	385	570	110	2000	1200	1780	330	1110	860	810	445	590	110	2260	1450	2040	330	250		
250-300	--	55,0	250M	250	250	225	300	830	M20x400	400	170	450	1010	760	710	385	570	110	2100	1300	1880	330	1110	860	800	430	610	110	2450	1650	2230	825	330	250	
250-300	--	75,0	280S	250	250	225	300	830	M20x400	400	170	450	1010	760	710	385	570	110	2100	1300	1880	330	1110	860	800	430	610	110	2450	1650	2230	825	330	250	
250-300	--	90,0	280M	250	250	225	300	830	M20x400	400	170	450	1110	860	810	435	590	110	2260	1450	2040	330	1110	860	800	430	610	110	2450	1650	2230	825	330	250	
250-330	15,0	--	180L	250	250	250	345	715	M20x400	400	195	450	1010	760	710	395	620	115	1920	1150	1695	310	1010	760	710	395	620	110	2100	1300	1880	330	200		
250-330	18,5	--	200L	250	250	250	345	715	M20x400	400	195	450	1010	760	710	395	620	115	1920	1150	1695	310	1010	760	710	395	620	110	2100	1300	1880	330	200		
250-330	22,0	--	200L	250	250	250	345	715	M20x400	400	195	450	1010	760	710	395	620	115	1920	1150	1695	310	1010	760	710	395	620	110	2100	1300	1880	330	200		
250-330	37,0	--	225S	250	250	250	345	715	M20x400	400	195	450	1010	760	710	395	620	110	2000	1200	1780	330	1010	760	710	395	620	110	2100	1300	1880	330	200		
250-330	30,0	--	225M	250	250	250	345	715	M20x400	400	195	450	1010	760	710	395	620	110	2000	1200	1780	330	1010	760	710	395	620	110	2100	1300	1880	330	200		
250-330	37,0	55,0	250M	250	250	250	345	715	M20x400	400	195	450	1010	760	710	395	620	110	2000	1200	1780	330	1110	860	810	445	640	110	2240	1450	2040		330	200	
250-330	45,0	75,0	280S	250	250	250	345	715	M20x400	400	195	450	1010	760	710	395	620	110	2100	1300	1880	330	1110	860	810	445	640	110	2240	1450	2040		330	200	
250-330	--	90,0	280M	250	250	250	345	715	M20x400	400	195	450	1010	760	710	395	620	110	2100	1300	1880	330	1110	860	810	445	640	110	2240	1450	2040		330	200	
250-330	--	110,0	315S	250	250	250	345	715	M20x400	400	195	450	1110	860	810	445	640	110	2260	1450	2040	330	1110	860	800	440	660	110	2450	1650	2230	825	330	200	
250-330	--	132,0	315M	250	250	250	345	715	M20x400	400	195	450	1110	860	810	445	640	110	2260	1450	2040	330	1110	860	800	440	660	110	2450	1650	2230	825	330	200	
250-400	18,5	--	200L	300	250	180	335	715	M20x400	480	195	450	1010	760	710	385	620	115	1920	1150	1695	310	1010	760	710	385	620	110	2100	1300	1880		330	200	
250-400	22,0	--	200L	300	250	180	335	715	M20x400	480	195	450	1010	760	710	385	620	115	1920	1150	1695	310	1010	760	710	385	620	110	2100	1300	1880		330	200	
250-400	37,0	--	225S	300	250	180	335	715	M20x400	480	195	450	1010	760	710	385	620	110	2000	1200	1780	330	1010	760	710	385	620	110	2100	1300	1880		330	200	
250-400	30,0	--	225M	300	250	180	335	715	M20x400	480	195	450	1010	760	710	385	620	110	2000	1200	1780	330	1010	760	710	385	620	110	2100	1300	1880		330	200	
250-400	37,0	--	250M	300	250	180	335	715	M20x400	480	195	450	1010	760	710	385	620	110	2000	1200	1780	330	1110	860	810	435	640	110	2260	1450	2040		330	200	
250-400	45,0	--	280S	300	250	180	335	715	M20x400	480	195	450	1010	760	710	385	620	110	2100	1300	1880	330	1110	860	810	435	640	110	2260	1450	2040		330	200	
250-400	--	75,0	280S	300	250	180	335	715	M20x400	480	195	450	1010	760	710	385	620	110	2100	1300	1880	330	1110	860	810	435	640	110	2260	1450	2040		330	200	
250-400	55,0	90,0	280M	300	250	180	335	715	M20x400	480	195	450	1010	760	710	385	620	110	2100	1300	1880	330	1110	860	810	435	640	110	2260	1450	2040		330	200	
250-400	75,0	110,0	315S	300	250	180	335	715	M20x400	480	195	450	1110	860	810	435	640	110	2260	1450	2040	330	1110	860	800	430	660	110	2450	1650	2230	825	330	200	
250-400	--	132,0	315M	300	250	180	335	715	M20x400	480	195	450	1110	860	810	435	640	110	2260	1450	2040	330	1110	860	800	430	660	110	2450	1650	2230	825	330	200	
250-500	45,0	--	280S	300	250	225	425	715	M20x400	500	220	450	1110	860	810	445	690	110	2260	1450	2040	330	1110	860	810	445	690	110	2260	1450	2040		330	200	
250-500	55,0	--	280M	300	250	225	425	715	M20x400	500	220	450	1110	860	810	445	690	110	2260	1450	2040	330	1110	860	800	440	710	110	2450	1650	2230	825	330	200	
250-500	75,0	--	315S	300	250	225	425	715	M20x400	500	220	450	1110	860	810	445	690	110	2260	1450	2040	330	1110	860	800	440	710	110	2450	1650	2230	825	330	200	
250-500	90,0	--	315M	300	250	225	425	715	M20x400	500	220	450	1110	860	810	445	690	110	2260	1450	2040	330	1110	860	800	440	710	110	2450	1650	2230	825	330	200	

1) DN = EN 1092-2/DN.../PN 10/21/GJL-250/B710
DN = EN 1092-2/DN.../PN 16/21/GJS-400-18-LT/B

Etanorm-R 300

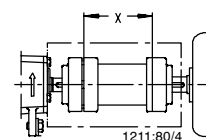
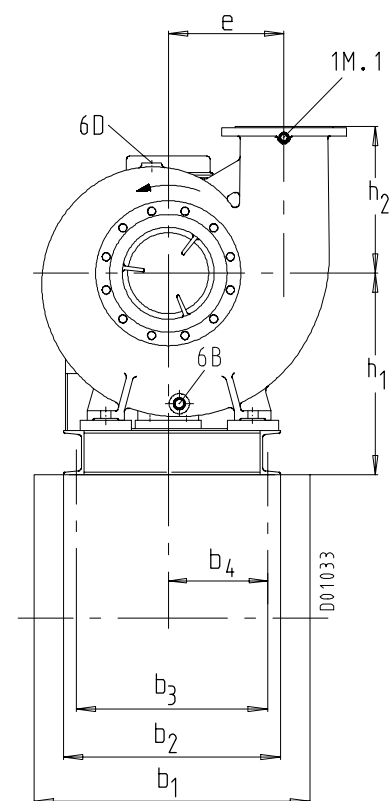
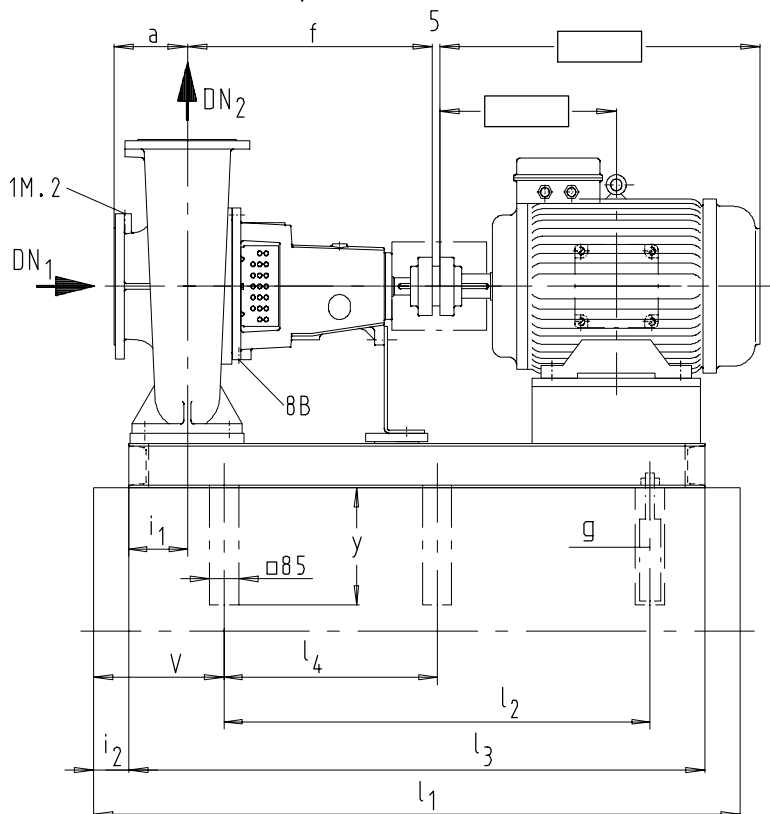


Dimensions in mm



Etanorm-R	(M) 960 1160	IP 55 1450 1750	pump size																																				
-----------	--------------------	-----------------------	--------------	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

1) DN = EN 1092-2/DN.../PN 10/21/GJL-250/B710
DN = EN 1092-2/DN.../PN 16/21/GJS-400-18-LT/B

Etanorm-R 125-500/2 - 150-500.1

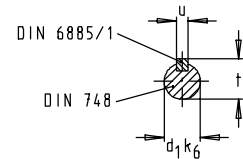
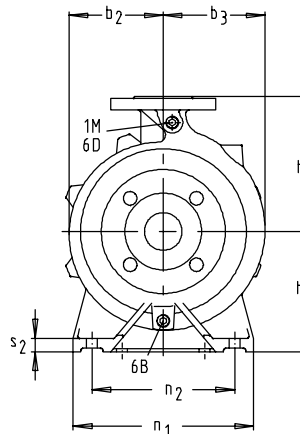
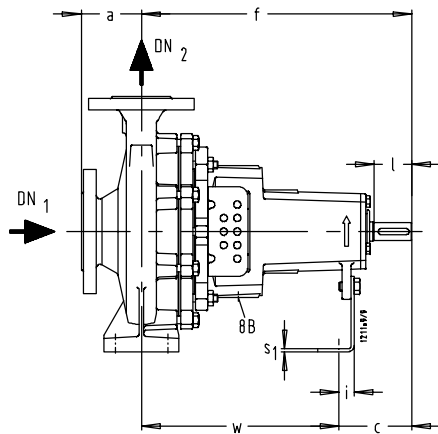


Dimensions in mm

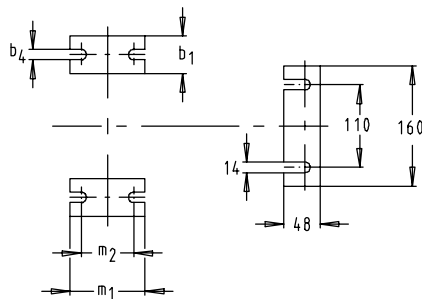
Etanorm-R	(M) 960 1160	IP 55 1450 1750	pump size																																				
				1) DN1	1) DN2	a	e	f	g	h2	i	y	b1	b2	b3	b4	h1	i2	l1	l2	l3	v	b1	b2	b3	b4	h1	i2	l1	l2	l3	l4	v	x					
125-500/2	11,0	-	160L	150	125	245	270	703	M20x400	300	145	450		1010	760	710	370	525	115	1920	1150	1695	310	1010	760	710	370	525	115	1920	1150	1695		310	200				
125-500/2	18,5	-	180M	150	125	245	270	703	M20x400	300	145	450		1010	760	710	370	525	115	1920	1150	1695	310	1010	760	710	370	525	115	1920	1150	1695		310	200				
125-500/2	15,0	-	180L	150	125	245	270	703	M20x400	300	145	450		1010	760	710	370	525	115	1920	1150	1695	310	900	650	805	318	505	110	2000	1250	1780		280	200				
125-500/2	18,5	-	200L	150	125	245	270	703	M20x400	300	145	450		1010	760	710	370	525	115	1920	1150	1695	310	1010	760	710	370	525	110	2100	1300	1880		330	200				
125-500/2	22,0	-	200L	150	125	245	270	703	M20x400	300	145	450		1010	760	710	370	525	115	1920	1150	1695	310	1010	760	710	370	525	110	2100	1300	1880		330	200				
125-500/2	-	30,0	200L	150	125	245	270	703	M20x400	300	145	450		1010	760	710	370	525	115	1920	1150	1695	310	1010	760	710	370	525	110	2100	1300	1880		330	200				
125-500/2	-	37,0	225S	150	125	245	270	703	M20x400	300	145	450		1010	760	710	370	525	115	1920	1150	1695	310	1010	760	710	370	525	110	2100	1300	1880		330	200				
125-500/2	30,0	45,0	225M	150	125	245	270	703	M20x400	300	145	450		1010	760	710	370	525	115	1920	1150	1695	310	1010	760	710	370	525	110	2100	1300	1880		330	200				
125-500/2	37,0	55,0	250M	150	125	245	270	703	M20x400	300	145	450		1010	760	710	370	525	115	1920	1150	1695	310	1010	760	710	370	525	110	2100	1300	1880		330	200				
125-500/2	45,0	75,0	280S	150	125	245	270	703	M20x400	300	145	450		900	650	605	318	505	110	2000	1250	1780	280	1110	860	810	420	545	110	2260	1450	2040		330	200				
125-500/2	55,0	90,0	280M	150	125	245	270	703	M20x400	300	145	450		900	650	605	318	505	110	2000	1250	1780	280	1110	860	810	420	545	110	2260	1450	2040		330	200				
150-500.1	18,5	-	200L	200	150	150	315	715	M20x400	450	170	450		820	570	710	365	550	115	1920	1150	1695	285	1010	760	710	365	570	110	2100	1300	1880		330	200				
150-500.1	22,0	-	200L	200	150	150	315	715	M20x400	450	170	450		820	570	710	365	550	115	1920	1150	1695	285	1010	760	710	365	570	110	2100	1300	1880		330	200				
150-500.1	37,0	-	225S	200	150	150	315	715	M20x400	450	170	450		820	570	710	365	550	115	1920	1150	1695	285	1010	760	710	365	570	110	2100	1300	1880		330	200				
150-500.1	30,0	-	225M	200	150	150	315	715	M20x400	450	170	450		820	570	710	365	550	115	1920	1150	1695	285	1010	760	710	365	570	110	2100	1300	1880		330	200				
150-500.1	37,0	-	250M	200	150	150	315	715	M20x400	450	170	450		900	650	605	313	550	110	2000	1250	1780	280	1110	860	810	415	590	110	2260	1450	2040		330	200				
150-500.1	45,0	-	280S	200	150	150	315	715	M20x400	450	170	450		900	650	605	313	550	110	2000	1250	1780	280	1110	860	810	415	590	110	2260	1450	2040		330	200				
150-500.1	-	75,0	280S	200	150	150	315	715	M20x400	450	170	450		900	650	605	313	550	110	2000	1250	1780	280	1110	860	810	415	590	110	2260	1450	2040		330	200				
150-500.1	55,0	90,0	280M	200	150	150	315	715	M20x400	450	170	450		1010	760	710	365	570	110	2100	1300	1880	330	1110	860	810	415	590	110	2260	1450	2040		330	200				
150-500.1	75,0	110,0	315S	200	150	150	315	715	M20x400	450	170	450		1010	760	710	365	570	110	2100	1300	1880	330	1110	860	800	410	610	110	2450	1650	2230	825	330	200				
150-500.1	-	132,0	315M	200	150	150	315	715	M20x400	450	170	450		1110	860	810	415	590	110	2260	1450	2040	330	1110	860	800	410	610	110	2450	1650	2230	825	330	200				

1) DN = EN 1092-2/DN.../PN 10/21/GJL-250/B710
DN = EN 1092-2/DN.../PN 16/21/GJS-400-18-LT/B

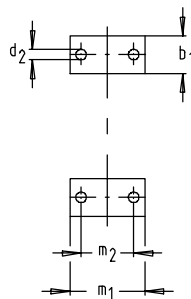
Etanorm



Etanorm G, M, S, B



Etanorm C



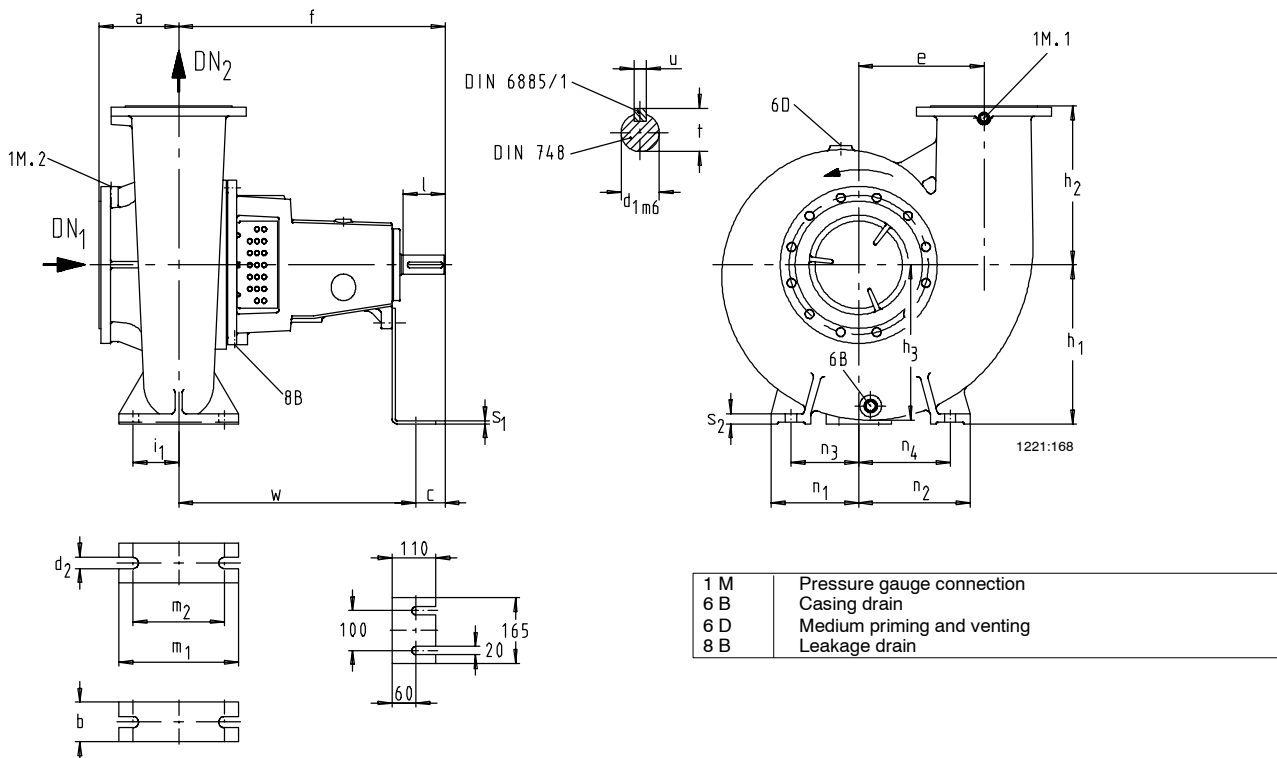
	DN 32-150	DN 200
Etanorm G, M	EN 1092-2/ PN 16/21/JL 1040/B	
Etanorm S	EN 1092-2/PN 16/21/JS 1025/B	
Etanorm B	ISO 7005-3/ PN 10/ 21	
Etanorm C	EN 1092-1 PN 16/21	
	PN 16/21	PN 10/21

1 M	Pressure gauge connection
6 B	Casing drain
6 D	Medium priming and venting
8 B	Leakage drain

Dimensions in mm

Etanorm	DN ₁	DN ₂	a	b ₁	b ₂	b ₃	b ₄	c	d ₁ k ₆	d ₂	f	h ₁	h ₂	i	l	m ₁	m ₂	n ₁	n ₂	s ₁	s ₂	t	u	w	Etanorm			
																									G, M, B		S, C	
																									1) 1 M 6 B 6 D	2) 8 B	2) 1 M 6 B 6 D	2) 8 B
32-125.1	50	32	80	50	113	113	14	100	24	-	360	112	140	23	50	100	70	190	140	4	15	27	8	260	Rc 3/8	G 1/2	G 3/8	G 1/2
32-160.1	50	32	80	50	116	125	14	100	24	14	360	132	160	23	50	100	70	240	190	4	15	27	8	260	Rc 3/8	G 1/2	G 3/8	G 1/2
32-200.1	50	32	80	50	128	137	14	100	24	14	360	160	180	25	50	100	70	240	190	6	18	27	8	260	Rc 3/8	G 1/2	G 3/8	G 1/2
32-250.1	50	32	100	65	164	171	14	100	24	14	360	180	225	25	50	125	95	320	250	6	18	27	8	260	Rc 3/8	G 1/2	G 3/8	G 1/2
32-125	50	32	80	50	113	113	14	100	24	14	360	112	140	23	50	100	70	190	140	4	15	27	8	260	Rc 3/8	G 1/2	G 3/8	G 1/2
32-160	50	32	80	50	113	125	14	100	24	14	360	132	160	23	50	100	70	240	190	4	15	27	8	260	Rc 3/8	G 1/2	G 3/8	G 1/2
32-200	50	32	80	50	132	141	14	100	24	14	360	160	180	25	50	100	70	240	190	6	18	27	8	260	Rc 3/8	G 1/2	G 3/8	G 1/2
32-250	50	32	100	65	170	176	14	100	24	14	360	180	225	25	50	125	95	320	250	6	18	27	8	260	Rc 3/8	G 1/2	G 3/8	G 1/2
40-125	65	40	80	50	113	113	14	100	24	14	360	112	140	23	50	100	70	210	160	4	15	27	8	260	Rc 3/8	G 1/2	G 3/8	G 1/2
40-160	65	40	80	50	115	131	14	100	24	14	360	132	160	23	50	100	70	240	190	4	15	27	8	260	Rc 3/8	G 1/2	G 3/8	G 1/2
40-200	65	40	100	50	115	131	14	100	24	14	360	160	180	25	50	100	70	265	212	6	18	27	8	260	Rc 3/8	G 1/2	G 3/8	G 1/2
40-250	65	40	100	65	165	178	14	100	24	14	360	180	225	25	50	125	95	320	250	6	18	27	8	260	Rc 3/8	G 1/2	G 3/8	G 1/2
40-315	65	40	125	65	194	203	14	130	32	14	470	225	250	24	80	125	95	345	280	6	18	35	10	340	Rc 3/8	G 1/2	G 3/8	G 1/2
50-125	65	50	100	50	113	128	14	100	24	14	360	132	160	23	50	100	70	240	190	4	18	27	8	260	Rc 3/8	G 1/2	G 3/8	G 1/2
50-160	65	50	100	50	126	147	14	100	24	14	360	160	180	25	50	100	70	265	212	6	18	27	8	260	Rc 3/8	G 1/2	G 3/8	G 1/2
50-200	65	50	100	50	145	165	14	100	24	14	360	160	200	25	50	100	70	265	212	6	18	27	8	260	Rc 3/8	G 1/2	G 3/8	G 1/2
50-250	65	50	100	65	168	184	14	100	24	14	360	180	225	25	50	125	95	320	250	6	18	27	8	260	Rc 3/8	G 1/2	G 3/8	G 1/2
50-315	65	50	125	65	200	216	14	130	32	14	470	225	280	24	80	125	95	345	280	6	18	35	10	340	Rc 3/8	G 1/2	G 3/8	G 1/2
65-125	80	65	100	65	120	148	14	100	24	14	360	160	180	25	50	125	95	280	212	6	18	27	8	260	Rc 3/8	G 1/2	G 3/8	G 1/2
65-160	80	65	100	65	130	158	14	100	24	14	360	160	200	25	50	125	95	280	212	6	18	27	8	260	Rc 3/8	G 1/2	G 3/8	G 1/2
65-200	80	65	100	65	154	177	14	100	24	14	360	180	225	25	50	125	95	320	250	6	18	27	8	260	Rc 3/8	G 1/2	G 3/8	G 1/2
65-250	80	65	100	80	180	200	19	130	32	18	470	200	250	24	80	160	120	360	280	6	20	35	10	340	Rc 3/8	G 1/2	G 3/8	G 1/2
65-315	80	65	125	80	208	229	19	130	32	18	470	225	280	24	80	160	120	400	315	6	20	35	10	340	Rc 3/8	G 1/2	G 3/8	G 1/2
80-160	100	80	125	65	153	192	14	100	24	14	360	180	225	25	50	125	95	320	250	6	18	27	8	260	Rc 3/8	G 1/2	G 3/8	G 1/2
80-200	100	80	125	65	161	199	14	130	32	14	470	180	250	24	80	125	95	345	280	6	18	35	10	340	Rc 3/8	G 1/2	G 3/8	G 1/2
80-250	100	80	125	80	184	210	19	130	32	18	470	200	280	24	80	160	120	400	315	6	18	35	10	340	Rc 3/8	G 1/2	G 3/8	G 1/2
80-315	100	80	125	80	220	244	19	130	32	18	470	250	315	24	80	160	120	400	315	6	20	35	10	340	Rc 3/8	G 1/2	G 3/8	G 1/2
80-400	100	80	125	80	253	276	19	160	42	18	530	280	355	25	110	160	120	435	355	6	20	45	12	370	Rc 3/8	G 1/2	G 3/8	G 1/2
100-160	125	100	125	80	178	225	19	130	32	18	470	200	280	24	80	160	120	360	280	6	18	35	10	340	Rc 1/2	G 1/2	G 1/2	G 1/2
100-200	125	100	125	80	173	213	19	130	32	18	470	200	280	24	80	160	120	360	280	6	18	35	10	340	Rc 1/2	G 1/2	G 1/2	G 1/2
100-250	125	100	140	80	190	220	19	130	32	18	470	225	280	24	80	160	120	400	315	6	18	35	10	340	Rc 1/2	G 1/2	G 1/2	G 1/2
100-315	125	100	140	80	225	255	19	130	32	18	470	250	315	24	80	160	120	400	315	6	18	35	10	340	Rc 1/2	G 1/2	G 1/2	G 1/2
100-400	125	100	140	100	253	280	24	160	42	26	530	280	355	25	110	200	150	500	400	6	20	45	12	370	Rc 1/2	G 1/2	G 1/2	G 1/2
125-200	150	125	140	80	195	244	19	130	32	18	470	250	315	24	80	160	120	400	315	6	20	35	10	340	Rc 1/2	G 1/2	G 1/2	G 1/2
125-250	150	125	140	80	226	275	19	130	32	18	470	250	355	24	80	160	120	400	315	6	20	35	10	340	Rc 1/2	G 1/2	G 1/2	G 1/2
125-315	150	125	140	100	238	278	24	160	42	23	530	280	355	25	110	200	150	500	400	6	20	35	12	370	Rc 1/2	G 1/2	G 1/2	G 1/2
125-400	150	125	140	100	275	306	24	160	42	23	530	315	400	25	110	200	150	500	400	6	20	45	12	370	Rc 1/2	G 1/2	G 1/2	G 1/2
150-200	200	150	160	100	238	315	24	130	32	23	470	280	400	24	80	200	150	550	450	6	20	35	10	340	Rc 1/2	G 1/2	G 1/2	G 1/2
150-250	200	150	160	100	228	298	24	130	32	23	470	280	400	24	80	200	150	500	400	6	20	35	10	340	Rc 1/2	G 1/2	G 1/2	G 1/2
150-315	200	150	160	100	255	303	24	160	42	23	530	280	400	25	110	200	150	550	450	6	20	45	12	370	Rc 1/2	G 1/2	G 1/2	G 1/2
150-400	200	150	160	100	285	325	24	160	42	23	530	315	450	25	110	200	150	550	450	6	20	45	12	370	Rc 1/2	G 1/2	G 1/2	G 1/2

1) Rc = ISO 7/1
2) G = ISO 228/1

Etanorm-R


Dimensions in mm

Etanorm-R	DN ₁ ¹⁾	DN ₂ ¹⁾	a	b	c	d _{1m6}	d ₂	e	f	h ₁	h ₂	h ₃	i ₁	l	m ₁	m ₂	n ₁	n ₂	n ₃	n ₄	s ₁	s ₂	t	u	w
125-500/2	150	125	245	120	121	60	24	270	703	355	300	297	95	140	250	190	270	300	220	250	6	22	64	18	582
150-500.1	200	150	150	100	115	60	28	315	715	400	450	359	115	140	300	230	240	260	190	210	6	25	64	18	600
200-250	200	200	220	100	119	60	28	250	815	355	345	329	109	140	300	230	220	280	170	230	6	25	64	18	690
200-260	200	200	200	100	120	60	28	300	715	400	350	369	115	140	300	230	220	280	170	230	8	25	64	18	595
200-330	250	200	200	100	120	60	28	315	715	400	400	390	115	140	300	230	220	280	170	230	8	25	64	18	595
200-400	250	200	180	130	120	60	28	290	715	400	400	358	115	140	300	230	220	280	155	215	8	25	64	18	595
200-500	250	200	200	130	115	60	28	387	715	500	450	497	140	140	350	280	320	380	255	315	20	25	64	18	600
250-300	250	250	225	130	115	60	28	300	830	400	400	384	95	140	300	230	270	330	205	265	8	25	64	18	695
250-330	250	250	250	130	120	60	34	345	715	450	400	445	140	140	350	280	310	390	245	325	10	25	64	18	595
250-400	300	250	180	130	120	60	34	335	715	450	480	400	140	140	350	280	320	380	255	315	10	25	64	18	595
250-500	300	250	225	130	115	60	34	425	715	500	500	514	162,5	140	400	325	360	440	295	375	20	32	64	18	600
300-340	300	300	255	160	115	60	34	315	850	450	450	427	120	140	350	280	310	390	230	310	10	25	64	18	715
300-360	300	300	300	160	122	60	34	387	717	560	450	505	162,5	140	400	325	310	390	230	310	20	32	64	18	595
300-400	350	300	300	160	120	60	34	425	715	560	500	540	162,5	140	400	325	350	450	270	370	20	32	64	18	595
300-500	350	300	300	160	115	60	34	450	715	560	500	581	162,5	140	400	325	350	450	270	370	20	32	64	18	600

- 1) DN 125, 150 = EN 1092-2/DN.../PN 16/21/GJL-250/B
 DN 200, 250, 300, 350 = EN 1092-2/DN.../PN 10/21/GJL-250/B
 DN = EN 1092-2/DN.../PN 16/21/GJS-400-18-LT/B

Etanorm

Interchangeability of Etanorm and Etabloc Components and Interchangeability of Component Parts

Etanorm	Shaft unit	Description											
		Volute casing	Discharge cover gland packing	Discharge cover mechanical seal	Shaft	Impeller	Deep-groove ball bearing	Mechanical seal	Gland packing	Casing wear ring suction side	Casing wear ring discharge side	Shaft sleeve	Shaft protecting sleeve
		Part No.											
		102	163.1	163.2	210	230	321	433	461	502.1	502.2	523	524
32-125.1	25	○	1	12	1	○	1	1	1	1	X	1	1
32-160.1	25	○	1	12	1	1	1	1	1	1	3	1	1
32-200.1	25	○	4	15	1	2	1	1	1	1	3	1	1
32-250.1	25	○	6	17	1	3	1	1	1	1	4	1	1
32-125	25	○	1	12	1	○	1	1	1	1	X	1	1
32-160	25	○	1	12	1	1	1	1	1	1	3	1	1
32-200	25	○	4	15	1	2	1	1	1	1	3	1	1
32-250	25	○	6	17	1	3	1	1	1	1	4	1	1
40-125	25	○	1	12	1	○	1	1	1	2	X	1	1
40-160	25	○	1	12	1	○	1	1	1	2	3	1	1
40-200	25	○	4	15	1	○	1	1	1	○	3	1	1
40-250	25	○	6	17	1	○	1	1	1	2	4	1	1
40-315	35	○	○	○	2	○	2	2	2	2	13	2	2
50-125	25	○	1	12	1	○	1	1	1	3	3	1	1
50-160	25	○	1	12	1	○	1	1	1	3	3	1	1
50-200	25	○	4	15	1	○	1	1	1	3	3	1	1
50-250	25	○	6	17	1	○	1	1	1	3	4	1	1
50-315	35	○	9	20	2	○	2	2	2	5	10	2	2
65-125	25	○	1	12	1	○	1	1	1	5	3	1	1
65-160	25	○	2	13	1	○	1	1	1	5	9	1	1
65-200	25	○	○	○	1	○	1	1	1	5	9	1	1
65-250	35	○	○	○	2	○	2	2	2	9	13	2	2
65-315	35	○	9	20	2	○	2	2	2	9	10	2	2
80-160	25	○	2	13	1	○	1	1	1	6	9	1	1
80-200	35	○	3	14	2	○	2	2	2	6	10	2	2
80-250	35	○	7	18	2	○	2	2	2	6	10	2	2
80-315	35	○	9	20	2	○	2	2	2	6	10	2	2
80-400	55	○	11	22	3	○	3	3	3	10	8	3	3
100-160	35	○	3	14	2	○	2	2	2	7	10	2	2
100-200	35	○	3	14	2	○	2	2	2	7	10	2	2
100-250	35	○	7	18	2	○	2	2	2	7	10	2	2
100-315	35	○	9	20	2	○	2	2	2	7	10	2	2
100-400	55	○	11	22	3	○	3	3	3	7	8	3	3
125-200	35	○	5	16	2	○	2	2	2	8	11	2	2
125-250	35	○	8	19	2	○	2	2	2	8	14	2	2
125-315	55	○	10	21	3	○	3	3	3	8	8	3	3
125-400	55	○	11	22	3	○	3	3	3	8	8	3	3
150-200	35	○	5	16	2	○	2	2	2	○	11	2	2
150-250	35	○	8	19	2	○	2	2	2	12	14	2	2
150-315	55	○	10	21	3	○	3	3	3	12	8	3	3
150-400	55	○	11	22	3	○	3	3	3	12	8	3	3

1	Same number means	○	Components differ	X	Components not fitted
1	same component				
	Components interchangeable with Etabloc				

Etanorm-R

Interchangeability of Pump Components

Etanorm-R	Shaft unit	Part description														
		Volute casing	Shaft	Impeller	Deep-groove ball bearing	Radial shaft seal ring for oil lubrication only	Mechanical seal	Stuffing box housing (for gland packing or mechanical seal)	Gland packing	Ring	Ring	Casing wear ring - suction side	Casing wear ring - discharge side	Thrower	Shaft sleeve	Shaft protecting sleeve
		Part no.	Part no.	Part no.	Part no.	Part no.	Part no.	Part no.	Part no.	Part no.	Part no.	Part no.	Part no.	Part no.	Part no.	Part no.
		102	210	230	321	411.4	433	451	461	500.1	500.3	502.1	502.2	507	523	524
125-500/2	65	○	○	○	1	1	1	○	1	1	1	○	○	1	○	○
150-500.1	65	○	1	○	1	1	1	1	1	1	1	1	1	1	1	x
200-250	65	○	2	○	1	1	1	○	1	1	1	○	3	1	2	2
200-260	65	○	1	○	1	1	1	○	1	1	1	1	3	1	1	1
200-330	65	○	1	○	1	1	1	4	1	1	1	○	4	1	1	1
200-400	65	○	1	○	1	1	1	○	1	1	1	2	2	1	1	1
200-500	65	○	1	○	1	1	1	1	1	1	1	○	1	1	1	1
250-300	65	○	2	○	1	1	1	4	1	1	1	○	4	1	2	2
250-330	65	○	1	○	1	1	1	○	1	1	1	2	4	1	1	1
250-400	65	○	1	○	1	1	1	○	1	1	1	○	1	1	1	1
250-500	65	○	1	○	1	1	1	2	1	1	1	○	1	1	1	1
300-340	65	○	2	○	1	1	1	○	1	1	1	○	2	1	2	2
300-360	65	○	1	○	1	1	1	3	1	1	1	○	1	1	1	1
300-400	65	○	1	○	1	1	1	3	1	1	1	3	1	1	1	1
300-500	65	○	1	○	1	1	1	2	1	1	1	3	1	1	1	1



Components differ

1
1

Same number means same component



Not applicable

Etanorm

Recommended Spare Parts Stock for 2 Years' Continuous Operation as per DIN 24 296

Part No.	Description	Number of pumps (including stand-by pumps)							
		2	3	4	5	6 and 7	8 and 9	10 and more	
Pumps with mechanical seals:		Quantity of spare parts							
210	Shaft	1	1	1	2	2	2	20 %	
230	Impeller (including Casing wear ring 502.2)	1	1	1	2	2	2	20 %	
321	Deep-groove ball bearing	2	2	4	4	6	8	100 %	
330	Bearing bracket	-	-	-	-	-	1	2 off	
412	O-ring	4	6	8	8	9	10	100 %	
433	Mechanical seal	1	1	2	2	2	3	25 %	
502.1/.2	Casing wear ring	2	2	2	3	3	4	50%	
523	Shaft sleeve	1	1	2	2	2	3	25 %	
---	Gaskets (set)	4	6	8	8	9	12	150 %	
---	Torque-transmitting coupling elements (set)	1	1	2	2	3	4	30 %	
Pump with gland packing									
461	Gland packing (set)	} instead of parts 412, 433, 523	4	4	6	6	6	8	100 %
524	Shaft protecting sleeve		2	2	2	3	3	4	50 %

Etanorm-R

Recommended Spare Parts Stock for 2 Years' Continuous Operation as per DIN 24 296

Part No.	Description	Number of pumps (including stand-by pumps)							
		2	3	4	5	6 and 7	8 and 9	10 and more	
		Quantity of spare parts							
Pumps with mechanical seals:		Quantity of spare parts							
171	Diffuser ¹⁾	1	1	1	2	2	2	20 %	
210	Shaft	1	1	1	2	2	2	20 %	
230	Impeller ²⁾	1	1	1	2	2	2	20 %	
321	Deep-groove ball bearing	2	2	4	4	4	6	50 %	
330	Bearing bracket	-	-	-	-	-	1	2 off	
400./...	Gaskets (set)	4	6	8	8	9	12	150 %	
412	O-ring ¹⁾	4	6	8	8	9	12	150 %	
433	Mechanical seal	1	1	2	2	2	3	25 %	
456	Neck bush	1	1	2	2	2	3	30 %	
500.1	Ring	4	4	8	8	8	12	100 %	
500.3	Ring	1	1	2	2	2	3	25 %	
502.1/.2	Casing wear ring	2	2	2	3	3	4	50 %	
523	Shaft sleeve	2	2	2	3	3	4	50 %	
525	Spacer sleeve ¹⁾	1	1	1	2	2	2	20 %	
---	Torque-transmitting coupling elements (set)	1	1	2	2	3	4	30 %	
Pump with gland packing									
461	Gland packing (set)	} instead of parts 400.3, 433, 500.3, 523	4	4	6	6	6	8	180 %
524	Shaft protecting sleeve		2	2	2	3	3	4	50 %

1) for Etanorm-R 125-500/2 only

2) double quantity for Etanorm-R 125-500/2

Subject to technical modification without prior notice.

01.06.2003

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1211.5/9-10

