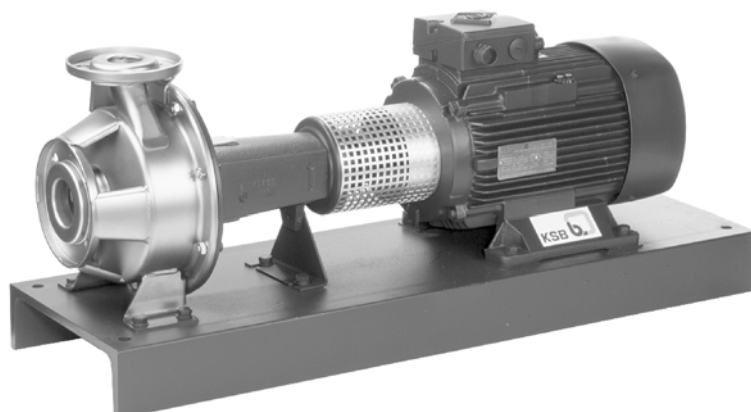


Standardised Pumps



Automation products available:

- PumpDrive (MM)
- Hyamaster
- hyatronic

Fields of Application

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

Operating Data

Q up to 260 m³/h, 72 l/s
H up to 106 m
t - 30 °C to + 110 °C
p₂ up to 12 bar ¹⁾

1) The sum of inlet pressure and head at zero flow point must not exceed the value indicated.

Design

Horizontal circular casing pump, single-stage, with power ratings and main dimensions to EN 733, with bearing bracket in back pull-out design. Pump casing and discharge cover with replaceable casing wear rings.

Materials

Circular casing	Chrome nickel molybdenum steel 1.4571
Discharge cover	Chrome nickel molybdenum steel 1.4571
Impeller ²⁾	Chrome nickel molybdenum steel 1.4571
Casing wear rings	Chrome nickel molybdenum steel 1.4571
Shaft ⁴⁾	Chrome nickel molybdenum steel 1.4571
Bearing bracket	Grey cast iron JL 1040 ³⁾

2) Impeller of pump sizes 50-200, 65-200, 80-200 and all impellers with nominal diameter 250: cast chrome nickel molybdenum steel 1.4408

3) GJL-250 to EN 1561

4) Shaft on pump sizes 65-200, 80-200 and 80-250: 1.4462

Bearings

Deep-groove ball bearings, grease-lubricated

Shaft Seal

Mechanical seal to DIN 24 960

Designation

Type series	Etachrom	NC	40 - 200
Standardised version			
Casing material: CrNiMo steel 1.4571			
Discharge nozzle DN			
Nominal impeller diameter in mm			

Accessories

Drive

surface-cooled KSB IEC three-phase squirrel cage motor
up to 2.2 kW 220-240 V/380-420 V
Winding: 3 kW and above: 380-420 V/660-725 V

Design: IM B 3

Enclosure: IP 55

Thermal class: F with temperature sensors: 3 PTC thermistors

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 to EN 249

Baseplate Sectional steel for complete unit (pump and motor), torsion-resistant design

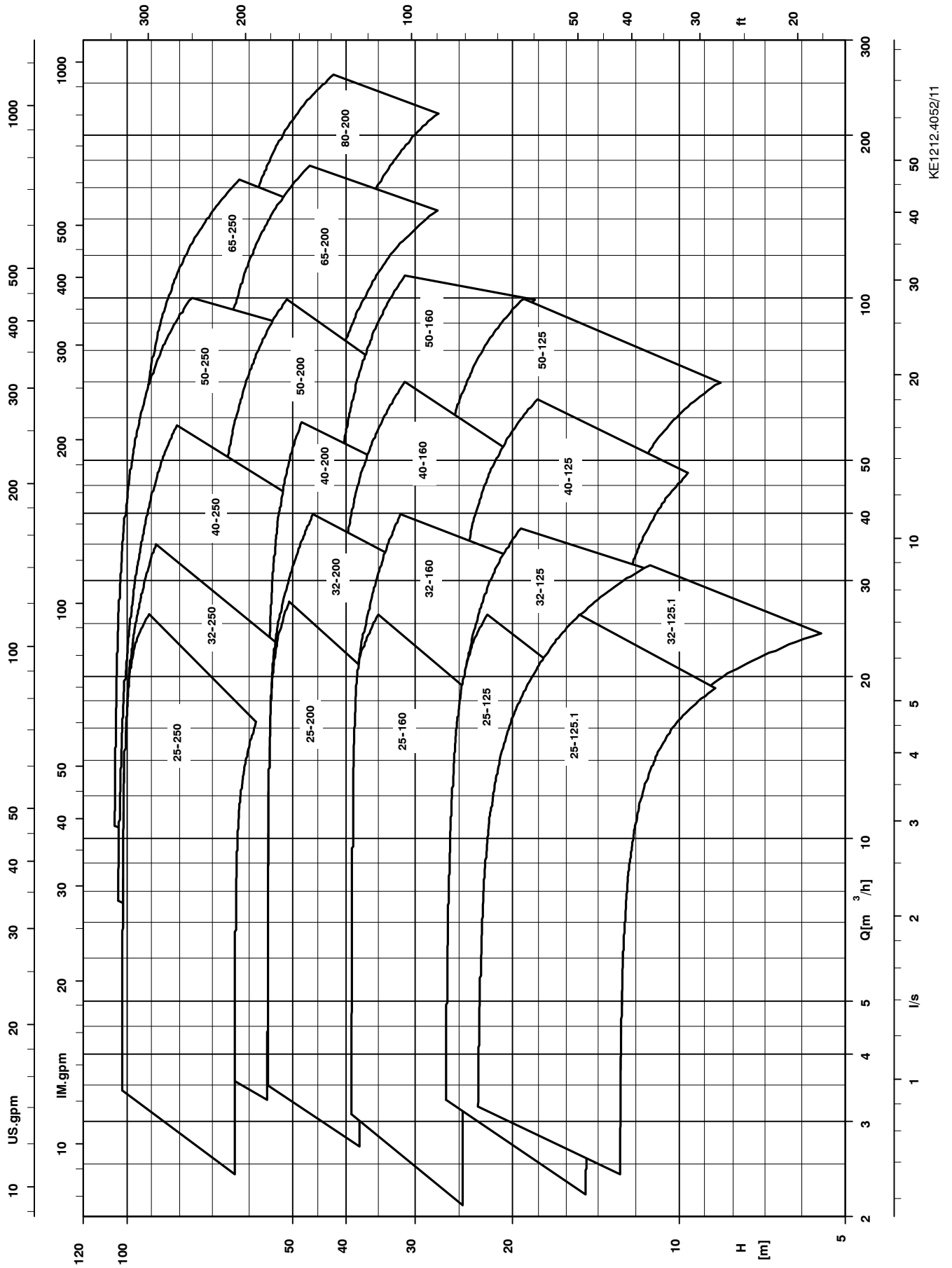
Certification

Certified quality management ISO 9001.

Product Information as per Regulation No. 547/2012 (for Water Pumps with a Maximum Shaft Power of 150 kW) Implementing "Ecodesign" Directive 2009/125/EC

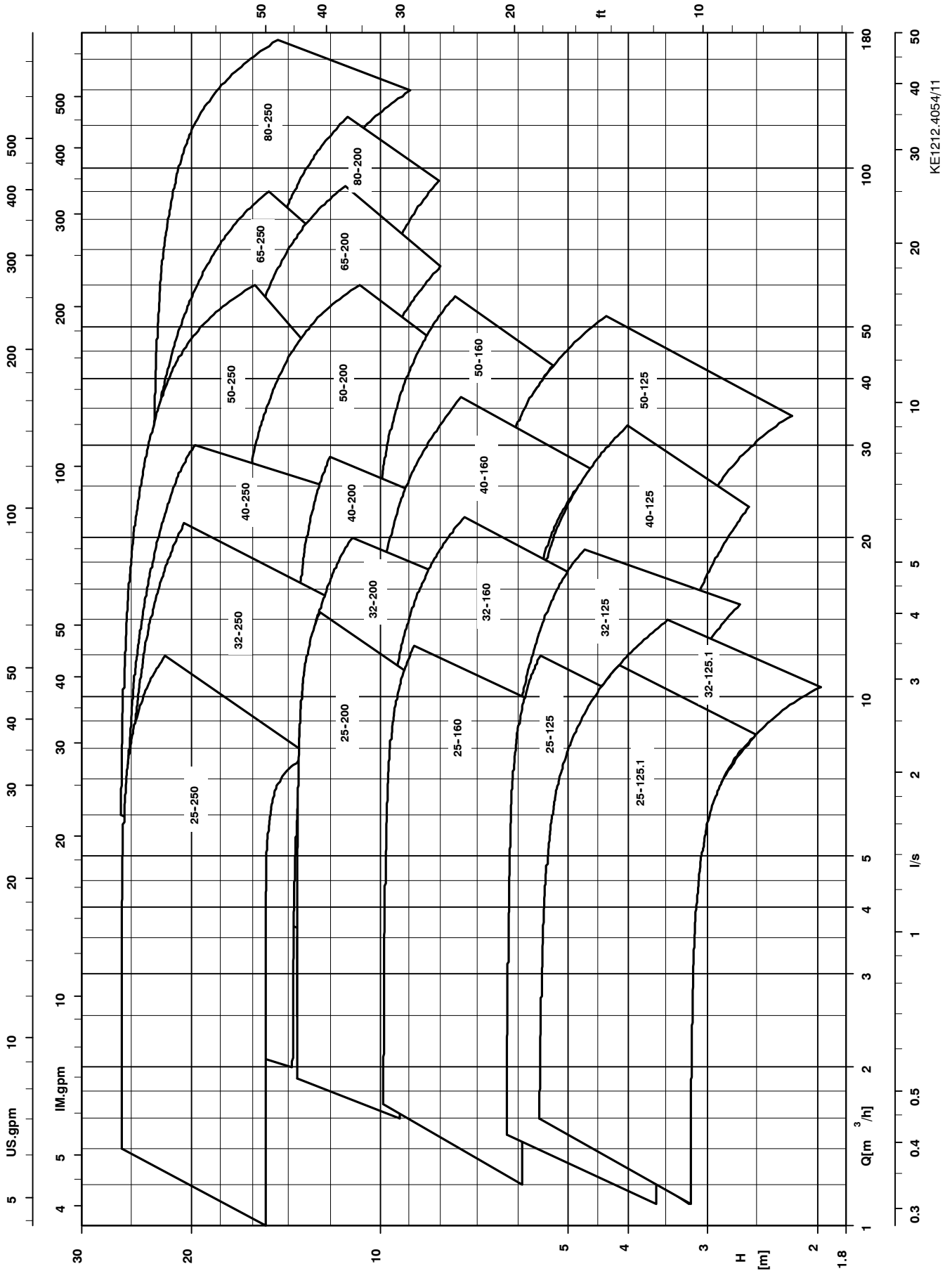
- Minimum efficiency index: see data sheet
- The benchmark for most efficient water pumps is $MEI \geq 0.70$.
- Year of construction: see data sheet
- Manufacturer's name or trade mark, commercial registration number and place of manufacture: see data sheet or order documentation
- Product's type and size identifier: see data sheet
- Hydraulic pump efficiency (%) with trimmed impeller: see data sheet
- Pump performance curves, including efficiency characteristics: see documented characteristic curve
- The efficiency of a pump with a trimmed impeller is usually lower than that of a pump with the full impeller diameter. The trimming of the impeller will adapt the pump to a fixed duty point, leading to reduced energy consumption. The minimum efficiency index (MEI) is based on the full impeller diameter.
- The operation of this water pump with variable duty points may be more efficient and economic when controlled, for example, by the use of a variable speed drive that matches the pump duty to the system.
- Information relevant for disassembly, recycling or disposal at end of life: see installation/ operating manual
- Information on benchmark efficiency or benchmark efficiency graph for $MEI = 0.7$ (0.4) for the pump based on the model shown in the Figure are available at:
<http://www.europump.org/efficiencycharts>

n = 2900 rpm



KE1212.4052/11

n = 1450 rpm



KE1212-4054/11

Advantages at a glance

Etachrom NC

25-125.1	32-125.1	40-125	50-125
25-125	32-125	40-160	50-160
25-160	32-160	40-200	
25-200	32-200		

Connecting dimensions and power ratings to EN 733

Shaft, key and hex. nut made of CrNiMo steel

Circular casing, discharge cover: deep-drawn CrNiMo steel 1.4571

Reliable **standardised mechanical seal**, maintenance-free

Large bearing distance, reduces shaft deflection

Casing wear rings service-friendly, no wear on the casing/ discharge cover

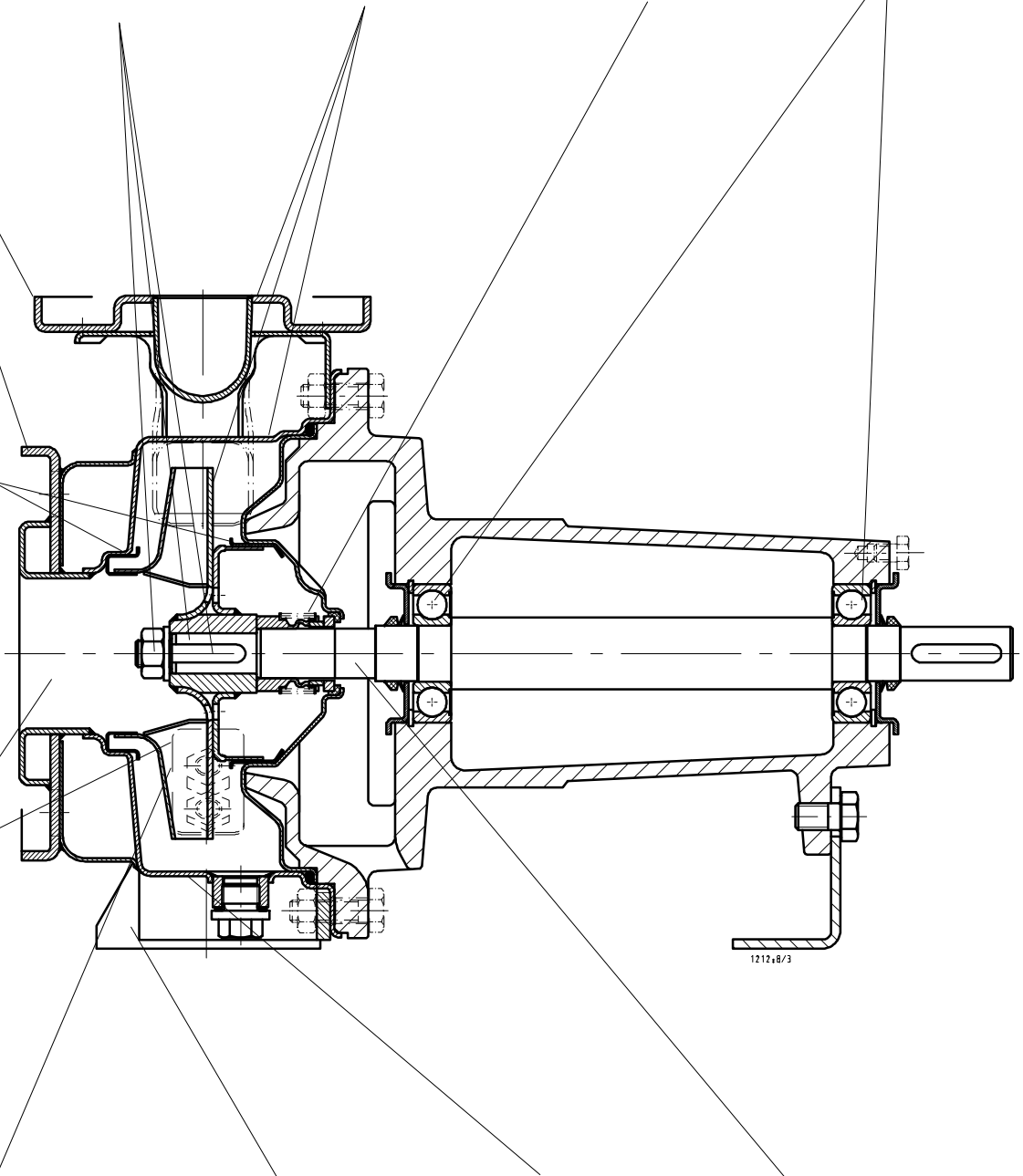
Suction geometry designed for max. suction capacity (NPSH) and optimal cavitation behaviour

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

Back pull-out design, easy dismantling, pump casing remains in the pipeline

Pressure jacket designed for 12 bar to guarantee high operating reliability

Short shaft overhang, therefore low bearing loads



Medium handled	Application limits		Shaft seal Mechanical seal			
			Q1Q1M1GG	U3U3X4GG	Q1Q1X4GG	BQ1EGG 1)
			Reference code			
Content	t	C5 ¹¹⁾	C9	C10	C11	
Acid of vinegar	≤90%	≤110°C				X
Alcohol (ethanol)						X
Alkaline cleaning agents					X	
Ammonia bicarbonate	≤10%	≤40°C				X
Ammonia water (salmiac)	≤10%	≤60°C				X
Antifreeze (ethylene glycol) ⁶⁾ (no high-grade cooling brines)						X
Antifrogen (alcohol basis)						X
Beer mash		≤100°C	X			
Butanol						X
Butyric acid	100%	≤30°C				X
Calcium acetate	10%					X
Calcium nitrate	≤10%	≤30°C			X	
Caustic soda (sodium hydroxide)	≤20%	≤60°C			X	
Caustic soda (sodium hydroxide)	≤10%	≤80°C			X	
Cider						X
Citric acid	≤ 50%	RT ⁹⁾				X
Corn oil					X	
Cupric sulphate	≤ 5%	RT ⁹⁾				X
Cutting oil				X		
Deminerlized water (fully desalinated water) ⁵⁾						X
Diesel oil				X		
Edible oil				X		
Ethanol						X
Ethanol (alcohol)						X
Ethylene glycol / diethylene glycol ⁶⁾						X
Ethylene glycol ⁶⁾						X
Fuel oil, light				X		
Glycol (ethylene glycol) ⁶⁾						X
Glycol - water - mixture ⁶⁾						X
Hexane		≤40 °C			X	
Hydraulic oil					X	
Isopropanol						X
Kerosine					X	
Lees for bottle rinsing		≤90°C				X
Lees for metal cleaning, pH ≤ 12		≤80°C		X		
Linseed oil					X	
Lubricating oil					X	
Magnesium sulphate	≤10%	≤20°C				X
Methyl alcohol (Methanol)						X
Mineral oil					X	
Miscella		≤80°C			X	
Oil - water emulsion		≤60°C		X		
Peanut oil					X	
Petrol			X			
Petroleum					X	
Phosphoric acid	≤10%	≤85°C			X	
Polyglycols		≤90°C				X
Potassium bicarbonate	≤10%	≤80°C				X
Potassium carbonate	≤10%	≤80°C				X
Potassium hydroxide	≤10%	≤80°C			X	
Potassium sulphate	≤ 3%	≤20°C				X
Propanol (propyl alcohol)						X

Medium handled	Application limits		Shaft seal Mechanical seal			
			Q1Q1M1GG	U3U3X4GG	Q1Q1X4GG	BQ1EGG 1)
			Reference code			
Content	t	C5 ¹¹⁾	C9	C10	C11	
Rape oil						X
Salmiac (ammonia water)	≤10%	≤60°C				X
Silicone oil						X
Sodium bicarbonate	≤ 6%	≤20°C			X	
Sodium carbonate	≤ 6%	≤60°C				X
Sodium hydroxide (caustic soda)	≤20%	≤60°C			X	
Sodium hydroxide (caustic soda)	≤10%	≤80°C			X	
Sodium nitrate	≤10%	≤90°C				X
Sodium phosphate	≤10%	≤100°C			X	
Sodium sulphate	≤ 5%	≤60°C				X
Soy-bean oil					X	
Spirits						X
Sulphuric acid	≤ 5%	RT ⁹⁾				X
Sulphuric acid	≤2.5%	≤60°C				X
Sulphurous acid	≤10%	RT ⁹⁾				X
Tannic acid	≤50%	BP ¹⁰⁾				X
Trisodium phosphate	≤ 4%	≤85°C			X	
Turbine oil (not SFD oils, non-combustible)		≤80°C			X	
Vegetable oil, pure					X	
Vinegar (= 5 % acid of vinegar)	≤ 5%					X
Viscous media, sugar juice (thin juice)	≤20Brix	≤100°C	X			
Washing agents (containing tensides)						X
Water						
Bath water ³⁾		≤60°C				X
Boiler water		≤110°C				X
Condensate ⁵⁾		≤110°C				X
Cooling water (without antifreeze)		≤60°C ⁸⁾			X	
Cooling water, pH value ≥ 7.5 (with antifreeze) ⁶⁾		≤110°C				X
Dam water ³⁾		≤60°C ⁸⁾			X	
Decarbonized water ³⁾		≤60°C				X
Distilled water		≤60°C				X
Drinking water ³⁾		≤60°C ⁸⁾				X
Fire-fighting water ³⁾		≤25°C ⁸⁾			X	
Fully demineralized water ⁵⁾		≤110°C				X
Heating water ⁴⁾		≤110°C			X	
Partly demineralized water		≤110°C				X
Pure water ⁷⁾		≤60°C ⁸⁾				X
Pure water with 6 % soda	≤6%	≤60°C				X
Raw water ³⁾		≤60°C ⁸⁾			X	
Rinsing water ³⁾		≤60°C			X	
Slightly contaminated water ³⁾		≤60°C ⁸⁾			X	
Soaking water		≤60°C				X
Swimming-pool water (fresh water)		≤60°C			X	

- N.B.: soft/hard seal face combinations (BQ1) must only be used up to a total solids content of 50 mg/l! Higher solids contents will cause leakage and reduce seal life.
- content up to saturated solution
- chloride content ≤300 mg/l. If this limit is exceeded, a water analysis is required.
- conductivity at 25 °C: 100 to 800 µS/cm
- conductivity at 25 °C: <250 µS/cm. SiO₂ (silicate) content ≤10 mg/l
- 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
- mechanical seal suitable for t ≤ 110 °C
- RT = room temperature
- BP = boiling point
- shaft seal C5 uni-rotational

Example:

 Given: pure water 15 °C; Q = 40 m³/h; H = 51 m

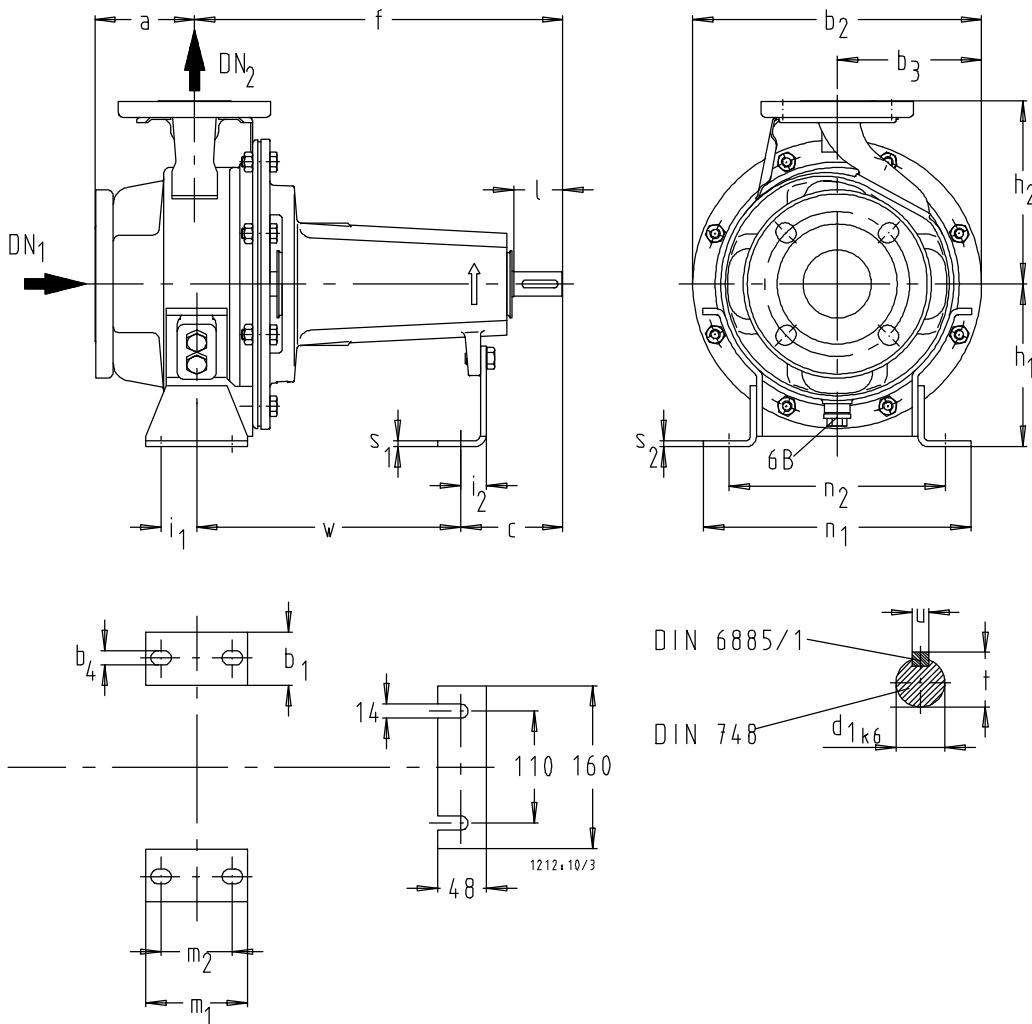
Found:

Etachrom NC 40 - 200 C11

Pump size (as per characteristic curve 2900 rpm)

Reference code (as per above table)

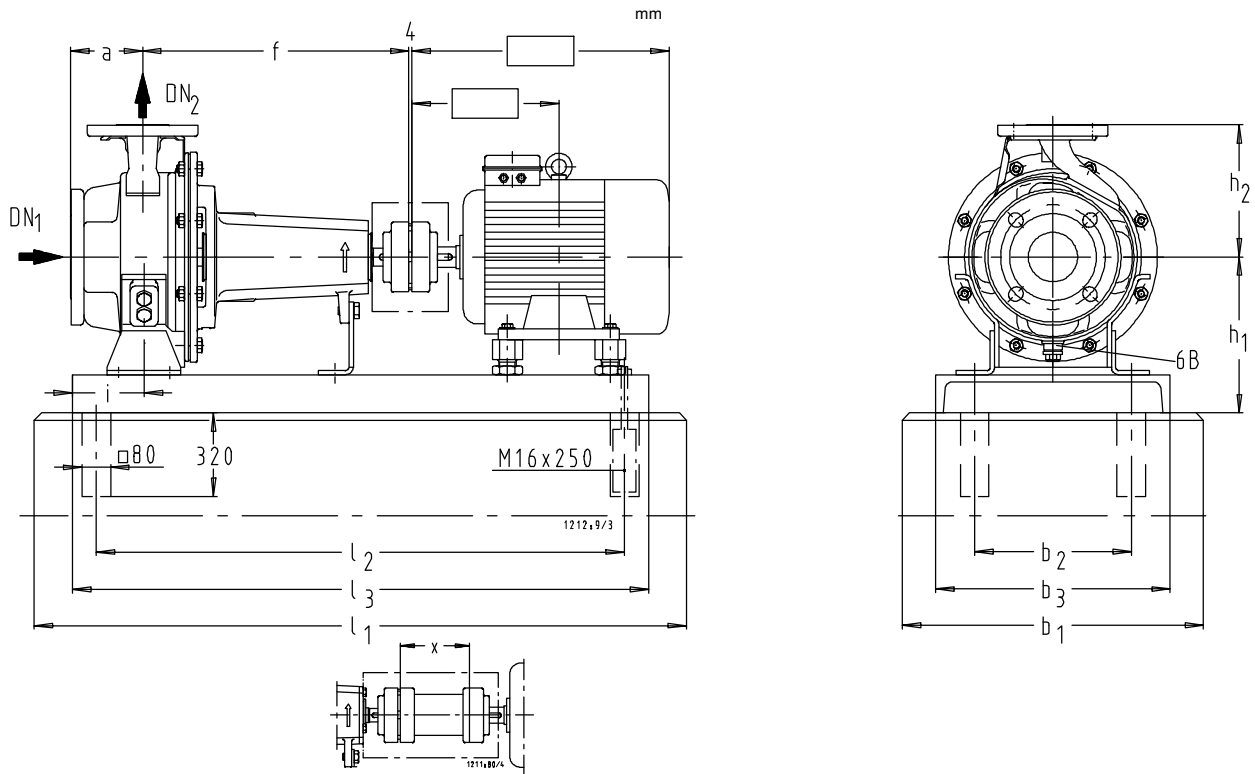
Required drive rating 11 kW

Etachrom NC


6 B Förderflüssigkeit-Entleerung / Casing drain/ Vidange de liquide véhiculé / Scarico del liquido convogliato / verpompte vloeistof-afvoer $G^3/8 = ISO 228/1$

Etachrom NC	DN ₁ ¹⁾	DN ₂ ¹⁾	mm																					
			a	b ₁	b ₂	b ₃	b ₄	c	d _{1k6}	f	h ₁	h ₂	i ₁	i ₂	l	m ₁	m ₂	n ₁	n ₂	s ₁	s ₂	t	u	w
25-125.1	50	25	80	50	220	110	14	100	24	360	112	140	35	23	50	100	70	190	140	4	5	26.9	8	260
25-125	50	25	80	50	220	110	14	100	24	360	112	140	35	23	50	100	70	190	140	4	5	26.9	8	260
25-160	50	25	80	50	256	128	14	100	24	360	132	160	35	23	50	100	70	240	190	4	6	26.9	8	260
25-200	50	25	80	50	286	143	14	100	24	360	160	180	35	25	50	100	70	240	190	6	6	26.9	8	260
25-250	50	25	100	65	346	173	14	100	24	360	180	225	47.5	25	50	125	95	320	250	6	5	26.9	8	260
32-125.1	50	32	80	50	220	110	14	100	24	360	112	140	35	23	50	100	70	190	140	4	5	26.9	8	260
32-125	50	32	80	50	220	110	14	100	24	360	112	140	35	23	50	100	70	190	140	4	5	26.9	8	260
32-160	50	32	80	50	256	128	14	100	24	360	132	160	35	23	50	100	70	240	190	4	6	26.9	8	260
32-200	50	32	80	50	286	143	14	100	24	360	160	180	35	25	50	100	70	240	190	6	6	26.9	8	260
32-250	50	32	100	65	346	173	14	100	24	360	180	225	47.5	25	50	125	95	320	250	6	5	26.9	8	260
40-125	65	40	80	50	220	110	14	100	24	360	112	140	35	23	50	100	70	210	160	4	5	26.9	8	260
40-160	65	40	80	50	256	128	14	100	24	360	132	160	35	23	50	100	70	240	190	4	6	26.9	8	260
40-200	65	40	100	50	286	143	14	100	24	360	160	180	35	25	50	100	70	265	212	6	6	26.9	8	260
40-250	65	40	100	65	346	173	14	100	24	360	180	225	47.5	25	50	125	95	320	250	6	5	26.9	8	260
50-125	65	50	100	50	256	128	14	100	24	360	132	160	35	23	50	100	70	240	190	4	6	26.9	8	260
50-160	65	50	100	50	256	128	14	100	24	360	160	180	35	25	50	100	70	265	212	6	6	26.9	8	260
50-200	65	50	100	50	310	155	14	100	24	360	160	200	35	25	50	100	70	265	212	4	4	26.9	8	260
50-250	65	50	100	65	346	173	14	100	24	360	180	225	47.5	25	50	125	95	320	250	6	5	26.9	8	260
65-200	80	65	100	65	348	174	14	100	24	360	180	225	47.5	25	50	125	95	320	250	6	5	26.9	8	260
65-250	80	65	100	80	348	174	14	130	32	470	200	250	60	24	80	160	120	360	280	6	5	35	10	340
80-200	100	80	125	65	348	174	14	130	32	470	180	250	47.5	24	80	125	95	345	280	6	5	35	10	340
80-250	100	80	125	80	348	174	18	130	32	470	200	280	60	24	80	160	120	400	315	6	5	35	10	340

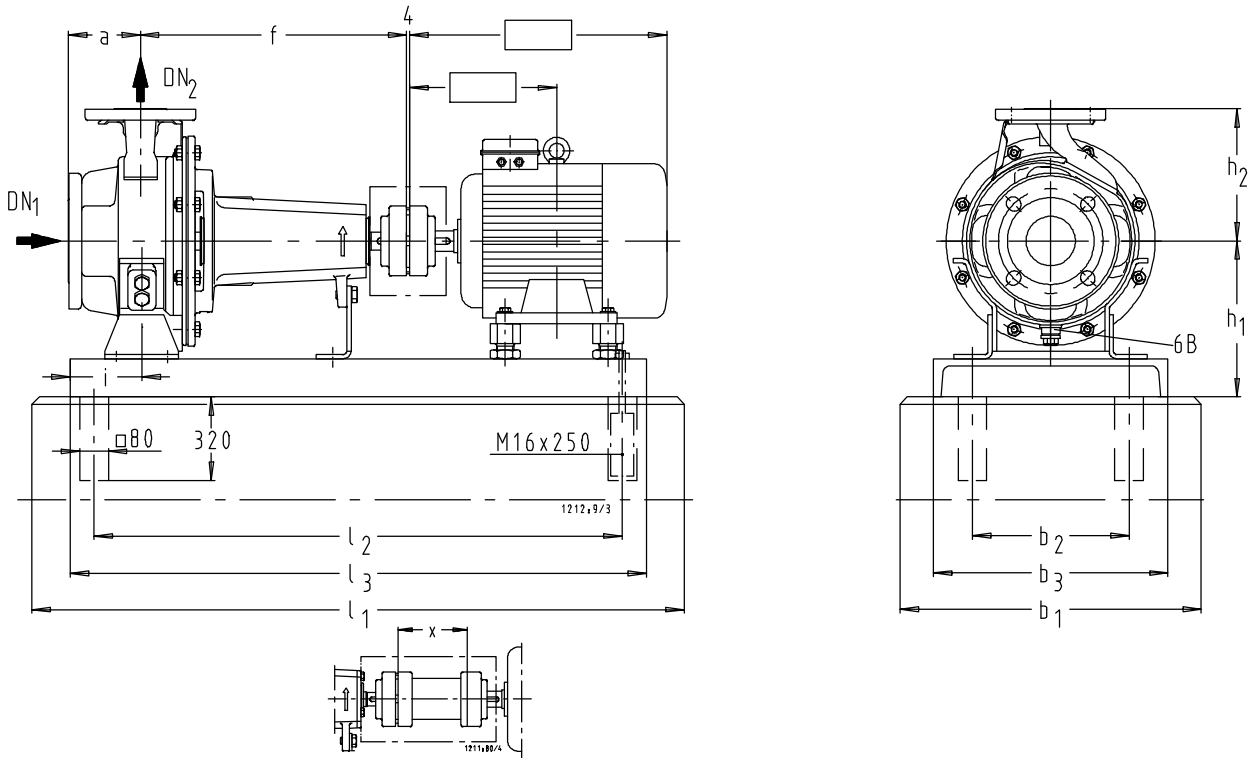
1) DN = connecting dimensions as per EN 1092-2/DN.../PN 16/B

Etachrom NC 25-125.1 - 25-250


6 B Förderflüssigkeit-Entleerung / Casing drain/ Vidange de liquide véhiculé / Scarico del liquido convogliato / verpompte vloeistof-afvoer G³/₈ = ISO 228/1

Etachrom NC	IP 55																		mm			
	n=2900 rpm kW	n=1450 rpm kW	DN ₁ ¹⁾	DN ₂ ¹⁾	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			
25-125.1	0.75	0.55	80	50	25	80	450	240	300	360	212	140	100	860	650	710	950	740	800	100		
	1.1	-	80	50	25	80	450	240	300	360	212	140	100	860	650	710	950	740	800	100		
	1.5	-	90S	50	25	80	450	240	300	360	212	140	100	860	650	710	950	740	800	100		
	2.2	-	90L	50	25	80	450	240	300	360	212	140	100	950	740	800	1050	840	900	100		
25-125	-	0.55	80	50	25	80	450	240	300	360	212	140	100	860	650	710	950	740	800	100		
	1.1	-	80	50	25	80	450	240	300	360	212	140	100	860	650	710	950	740	800	100		
	1.5	-	90S	50	25	80	450	240	300	360	212	140	100	860	650	710	950	740	800	100		
	2.2	-	90L	50	25	80	450	240	300	360	212	140	100	950	740	800	1050	840	900	100		
	3.0	-	100L	50	25	80	450	240	300	360	212	140	100	1050	840	900	1150	940	1000	100		
25-160	-	0.55	80	50	25	80	450	240	300	360	232	160	100	860	650	710	950	740	800	100		
	1.5	-	90S	50	25	80	450	240	300	360	232	160	100	860	650	710	950	740	800	100		
	2.2	-	90L	50	25	80	450	240	300	360	232	160	100	950	740	800	1050	840	900	100		
	3.0	-	100L	50	25	80	450	240	300	360	232	160	100	1050	840	900	1150	940	1000	100		
	4.0	-	112M	50	25	80	450	240	300	360	232	160	100	1050	840	900	1150	940	1000	100		
5.5	-	132S	50	25	80	450	240	300	360	232	160	100	1050	840	900	1150	940	1000	100			
25-200	-	0.55	80	50	25	80	450	240	300	360	260	180	100	860	650	710	950	740	800	100		
	-	0.75	80	50	25	80	450	240	300	360	260	180	100	860	650	710	950	740	800	100		
	-	1.1	90S	50	25	80	450	240	300	360	260	180	100	860	650	710	950	740	800	100		
	3.0	-	100L	50	25	80	450	240	300	360	260	180	100	1050	840	900	1150	940	1000	100		
	4.0	-	112M	50	25	80	450	240	300	360	260	180	100	1050	840	900	1150	940	1000	100		
	5.5	-	132S	50	25	80	450	240	300	360	260	180	100	1050	840	900	1150	940	1000	100		
	7.5	-	132S	50	25	80	450	240	300	360	260	180	100	1050	840	900	1150	940	1000	100		
25-250	-	0.75	80	50	25	100	500	280	350	360	280	225	112	1050	840	900	1050	840	900	100		
	-	1.1	90S	50	25	100	500	280	350	360	280	225	112	1050	840	900	1050	840	900	100		
	-	1.5	90L	50	25	100	500	280	350	360	280	225	112	1050	840	900	1050	840	900	100		
	-	2.2	100L	50	25	100	500	280	350	360	280	225	112	1050	840	900	1050	840	900	100		
	5.5	-	132S	50	25	100	500	280	350	360	280	225	112	1050	840	900	1150	940	1000	100		
	7.5	-	132S	50	25	100	500	280	350	360	280	225	112	1050	840	900	1150	940	1000	100		
	11.0	-	160M	50	25	100	500	280	350	360	280	225	112	1270	1060	1120	1270	1060	1120	100		
	15.0	-	160M	50	25	100	500	280	350	360	280	225	112	1270	1060	1120	1270	1060	1120	100		

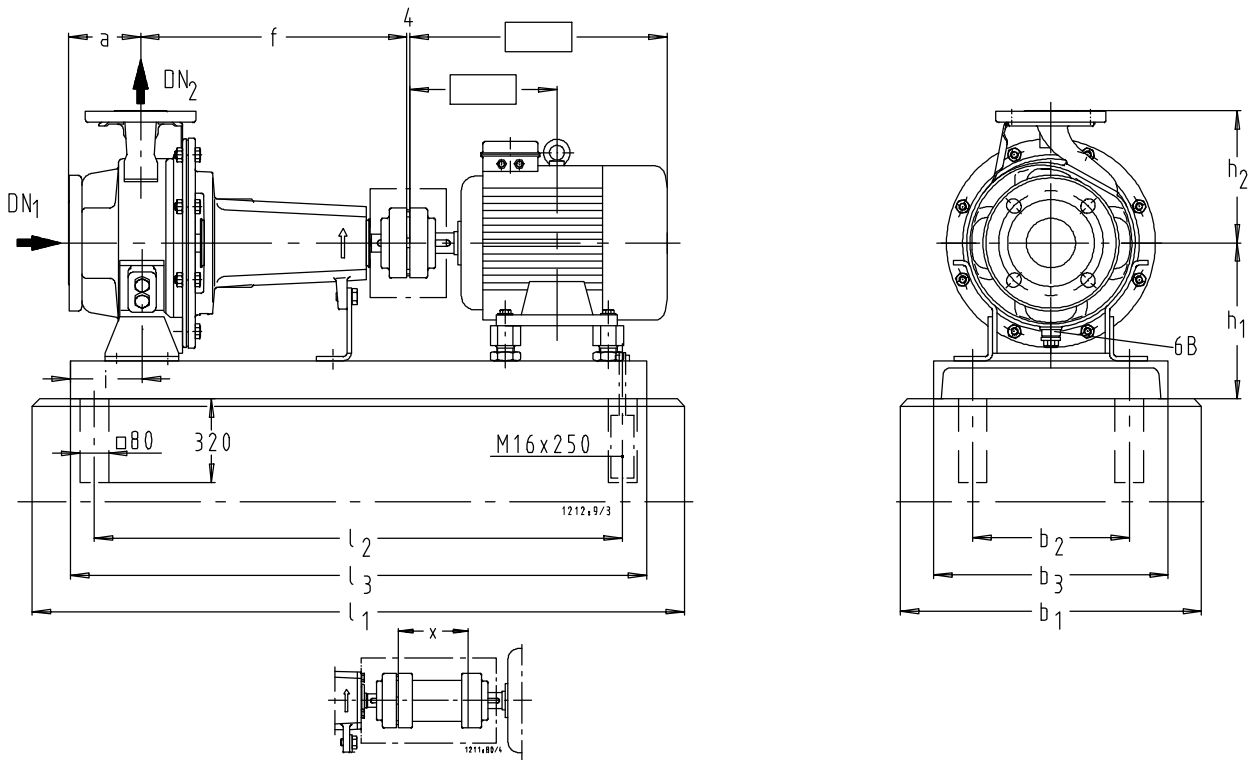
1) DN = connecting dimensions as per EN 1092-2/DN.../PN 16/B

Etachrom NC 32-125.1 - 32-250




6 B Förderflüssigkeit-Entleerung / Casing drain / Vidange de liquide véhiculé / Scarico del liquido convogliato / verpompte vloeistof-afvoer G³/₈ = ISO 228/1

Etachrom NC	(M) IP 55																				
	n=2900 rpm kW	n=1450 rpm kW	DN ₁ ¹⁾	DN ₂ ¹⁾	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	0.75	0.55	80	50	32	80	450	240	300	360	212	140	100	860	650	710	950	740	800	100	
	1.1	-	80	50	32	80	450	240	300	360	212	140	100	860	650	710	950	740	800	100	
	1.5	-	90S	50	32	80	450	240	300	360	212	140	100	860	650	710	950	740	800	100	
	2.2	-	90L	50	32	80	450	240	300	360	212	140	100	950	740	800	1050	840	900	100	
32-125	-	0.55	80	50	32	80	450	240	300	360	212	140	100	860	650	710	950	740	800	100	
	1.1	-	80	50	32	80	450	240	300	360	212	140	100	860	650	710	950	740	800	100	
	1.5	-	90S	50	32	80	450	240	300	360	212	140	100	860	650	710	950	740	800	100	
	2.2	-	90L	50	32	80	450	240	300	360	212	140	100	950	740	800	1050	840	900	100	
	3.0	-	100L	50	32	80	450	240	300	360	212	140	100	1050	840	900	1150	940	1000	100	
32-160	-	0.55	80	50	32	80	450	240	300	360	232	160	100	860	650	710	950	740	800	100	
	-	0.75	80	50	32	80	450	240	300	360	232	160	100	860	650	710	950	740	800	100	
	2.2	-	90L	50	32	80	450	240	300	360	232	160	100	950	740	800	1050	840	900	100	
	3.0	-	100L	50	32	80	450	240	300	360	232	160	100	1050	840	900	1150	940	1000	100	
	4.0	-	112M	50	32	80	450	240	300	360	232	160	100	1050	840	900	1150	940	1000	100	
	5.5	-	132S	50	32	80	450	240	300	360	232	160	100	1050	840	900	1150	940	1000	100	
32-200	-	0.55	80	50	32	80	450	240	300	360	260	180	100	860	650	710	950	740	800	100	
	-	0.75	80	50	32	80	450	240	300	360	260	180	100	860	650	710	950	740	800	100	
	-	1.1	90S	50	32	80	450	240	300	360	260	180	100	860	650	710	950	740	800	100	
	3.0	-	100L	50	32	80	450	240	300	360	260	180	100	1050	840	900	1150	940	1000	100	
	4.0	-	112M	50	32	80	450	240	300	360	260	180	100	1050	840	900	1150	940	1000	100	
	5.5	-	132S	50	32	80	450	240	300	360	260	180	100	1050	840	900	1150	940	1000	100	
	7.5	-	132S	50	32	80	450	240	300	360	260	180	100	1050	840	900	1150	940	1000	100	
	11.0	-	160M	50	32	80	500	280	350	360	260	180	100	1270	1060	1120	1270	1060	1120	100	
	18.5	-	160L	50	32	100	500	280	350	360	280	225	112	1270	1060	1120	1400	1190	1250	100	
32-250	-	0.75	80	50	32	100	500	280	350	360	280	225	112	1050	840	900	1050	840	900	100	
	-	1.1	90S	50	32	100	500	280	350	360	280	225	112	1050	840	900	1050	840	900	100	
	-	1.5	90L	50	32	100	500	280	350	360	280	225	112	1050	840	900	1050	840	900	100	
	-	2.2	100L	50	32	100	500	280	350	360	280	225	112	1050	840	900	1050	840	900	100	
	-	3.0	100L	50	32	100	500	280	350	360	280	225	112	1050	840	900	1050	840	900	100	
	5.5	-	132S	50	32	100	500	280	350	360	280	225	112	1050	840	900	1150	940	1000	100	
	7.5	-	132S	50	32	100	500	280	350	360	280	225	112	1050	840	900	1150	940	1000	100	
	11.0	-	160M	50	32	100	500	280	350	360	280	225	112	1270	1060	1120	1270	1060	1120	100	
	15.0	-	160M	50	32	100	500	280	350	360	280	225	112	1270	1060	1120	1270	1060	1120	100	
	18.5	-	160L	50	32	100	500	280	350	360	280	225	112	1270	1060	1120	1400	1190	1250	100	

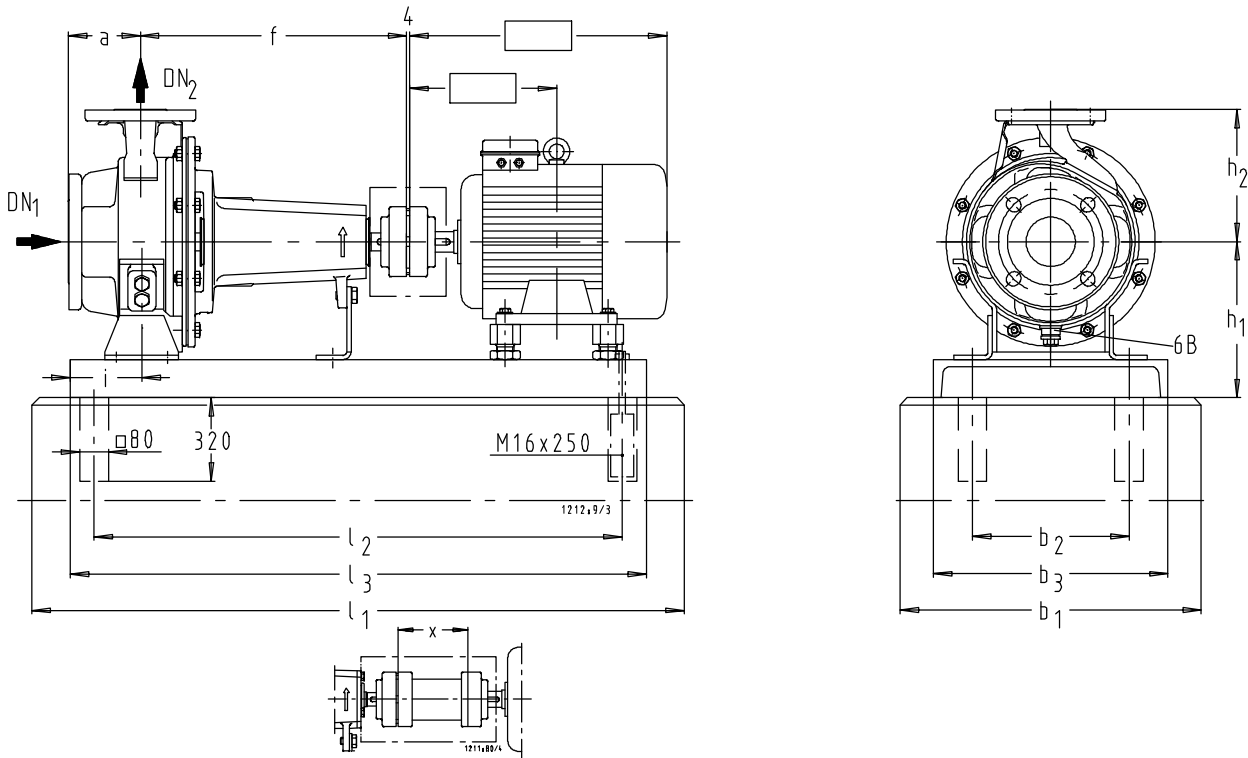
1) DN = connecting dimensions as per EN 1092-2/DN.../PN 16/B

Etachrom NC 40-125 - 40-250


6 B Förderflüssigkeit-Entleerung / Casing drain/ Vidange de liquide véhiculé / Scarico del liquido convogliato / verpompte vloeistof-afvoer G³/₈ = ISO 228/1

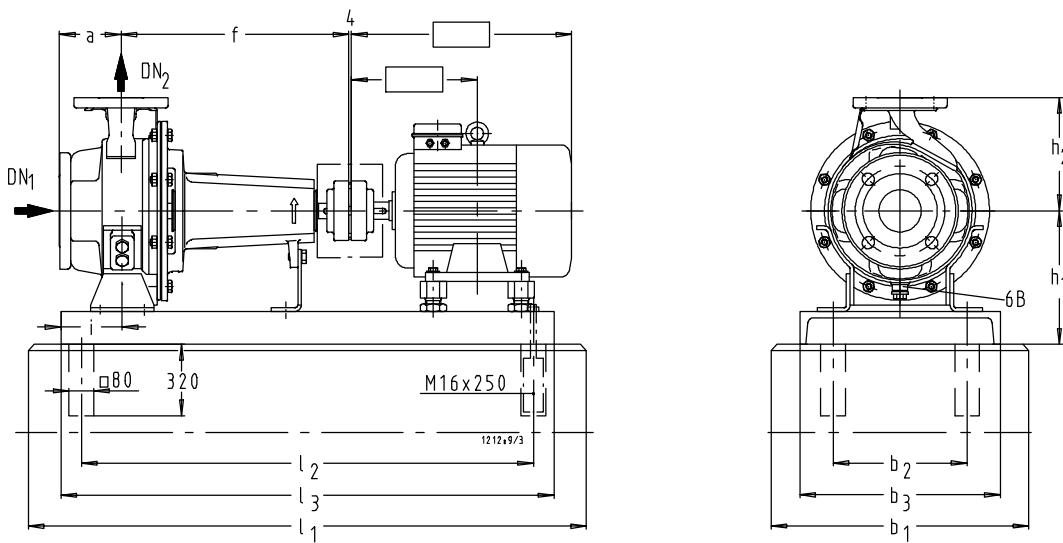
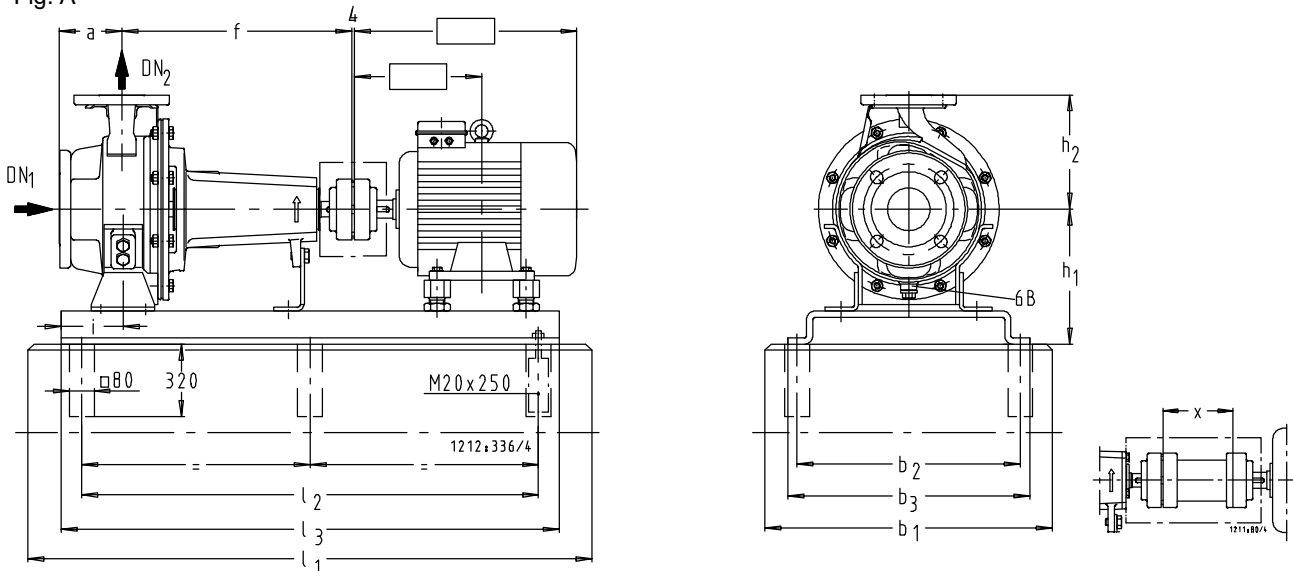
Etachrom NC	IP 55																						mm	
	n=2900 rpm kW	n=1450 rpm kW		DN ₁ ¹⁾	DN ₂ ¹⁾	a	b ₁	b ₂	b ₃	f	h ₁	h ₂	i							x				
														l ₁	l ₂	l ₃	l ₁	l ₂	l ₃					
40-125	-	0.55	80	65	40	80	450	240	300	360	212	140	100	860	650	710	950	740	800	100	100			
	1.5	-	90S	65	40	80	450	240	300	360	212	140	100	860	650	710	950	740	800	100	100			
	2.2	-	90L	65	40	80	450	240	300	360	212	140	100	950	740	800	1050	840	900	100	100			
	3.0	-	100L	65	40	80	450	240	300	360	212	140	100	1050	840	900	1150	940	1000	100	100			
	4.0	-	112M	65	40	80	450	240	300	360	212	140	100	1050	840	900	1150	940	1000	100	100			
	5.5	-	132S	65	40	80	450	240	300	360	212	140	100	1050	840	900	1150	940	1000	100	100			
40-160	-	0.55	80	65	40	80	450	240	300	360	232	160	100	860	650	710	950	740	800	100	100			
	-	0.75	80	65	40	80	450	240	300	360	232	160	100	860	650	710	950	740	800	100	100			
	-	1.1	90S	65	40	80	450	240	300	360	232	160	100	860	650	710	950	740	800	100	100			
	-	1.5	90L	65	40	80	450	240	300	360	232	160	100	950	740	800	1050	840	900	100	100			
	3.0	-	100L	65	40	80	450	240	300	360	232	160	100	1050	840	900	1150	940	1000	100	100			
	4.0	-	112M	65	40	80	450	240	300	360	232	160	100	1050	840	900	1150	940	1000	100	100			
	5.5	-	132S	65	40	80	450	240	300	360	232	160	100	1050	840	900	1150	940	1000	100	100			
	7.5	-	132S	65	40	80	450	240	300	360	232	160	100	1050	840	900	1150	940	1000	100	100			
	11.0	-	160M	65	40	80	500	280	350	360	232	160	100	1270	1060	1120	1270	1060	1120	100	100			
40-200	-	0.75	80	65	40	100	450	240	300	360	260	180	100	860	650	710	950	740	800	100	100			
	-	1.1	90S	65	40	100	450	240	300	360	260	180	100	860	650	710	950	740	800	100	100			
	-	1.5	90L	65	40	100	450	240	300	360	260	180	100	950	740	800	1050	840	900	100	100			
	5.5	-	132S	65	40	100	450	240	300	360	260	180	100	1050	840	900	1150	940	1000	100	100			
	7.5	-	132S	65	40	100	450	240	300	360	260	180	100	1050	840	900	1150	940	1000	100	100			
	11.0	-	160M	65	40	100	500	280	350	360	260	180	100	1270	1060	1120	1270	1060	1120	100	100			
40-250	-	1.1	90S	65	40	100	500	280	350	360	280	225	112	1050	840	900	1050	840	900	100	100			
	-	1.5	90L	65	40	100	500	280	350	360	280	225	112	1050	840	900	1050	840	900	100	100			
	-	2.2	100L	65	40	100	500	280	350	360	280	225	112	1050	840	900	1050	840	900	100	100			
	-	3.0	100L1	65	40	100	500	280	350	360	280	225	112	1050	840	900	1050	840	900	100	100			
	7.5	-	32S	65	40	100	500	280	350	360	280	225	112	1050	840	900	1150	940	1000	100	100			
	11.0	-	160M	65	40	100	500	280	350	360	280	225	112	1270	1060	1120	1270	1060	1120	100	100			
	15.0	-	160M	65	40	100	500	280	350	360	280	225	112	1270	1060	1120	1270	1060	1120	100	100			
	18.5	-	160L	65	40	100	500	280	350	360	280	225	112	1270	1060	1120	1400	1190	1250	100	100			
	22.0	-	180M	65	40	100	550	320	400	360	280	225	112	1400	1190	1250	1400	1190	1250	100	100			

1) DN = connecting dimensions as per EN 1092-2/DN.../PN 16/B

Etachrom NC 50-125 - 50-250

6 B Förderflüssigkeit-Entleerung / Casing drain / Vidange de liquide véhiculé / Scarico del liquido convogliato / verpompte vloeistof-afvoer **G³/₈ = ISO 228/1**

Etachrom NC	(M) IP 55																			
	n=2900 rpm kW	n=1450 rpm kW	DN ₁ ¹⁾	DN ₂ ¹⁾	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	
50-125	-	0.55	80	65	50	100	450	240	300	360	232	160	100	860	650	710	950	740	800	100
	-	0.75	80	65	50	100	450	240	300	360	232	160	100	860	650	710	950	740	800	100
	-	1.1	90S	65	50	100	450	240	300	360	232	160	100	860	650	710	950	740	800	100
	3.0	-	100L	65	50	100	450	240	300	360	232	160	100	1050	840	900	1150	940	1000	100
	4.0	-	112M	65	50	100	450	240	300	360	232	160	100	1050	840	900	1150	940	1000	100
	5.5	-	132S	65	50	100	450	240	300	360	232	160	100	1050	840	900	1150	940	1000	100
	7.5	-	132S	65	50	100	450	240	300	360	232	160	100	1050	840	900	1150	940	1000	100
50-160	-	0.75	80	65	50	100	450	240	300	360	260	180	100	860	650	710	950	740	800	100
	-	1.1	90S	65	50	100	450	240	300	360	260	180	100	860	650	710	950	740	800	100
	-	1.5	90L	65	50	100	450	240	300	360	260	180	100	950	740	800	1050	840	900	100
	-	2.2	100L	65	50	100	450	240	300	360	260	180	100	1050	840	900	1150	940	1000	100
	5.5	-	132S	65	50	100	450	240	300	360	260	180	100	1050	840	900	1150	940	1000	100
	7.5	-	132S	65	50	100	450	240	300	360	260	180	100	1050	840	900	1150	940	1000	100
	11.0	-	160M	65	50	100	500	280	350	360	260	180	100	1270	1060	1120	1270	1060	1120	100
15.0	-	160M	65	50	100	500	280	350	360	260	180	100	1270	1060	1120	1270	1060	1120	100	
50-200	-	0.75	80	65	50	100	450	240	300	360	260	200	100	860	650	710	950	740	800	100
	-	1.1	90S	65	50	100	450	240	300	360	260	200	100	860	650	710	950	740	800	100
	-	1.5	90L	65	50	100	450	240	300	360	260	200	100	950	740	800	1050	840	900	100
	-	2.2	100L	65	50	100	450	240	300	360	260	200	100	1050	840	900	1150	940	1000	100
	-	3.0	100L	65	50	100	450	240	300	360	260	200	100	1050	840	900	1150	940	1000	100
	7.5	-	132S	65	50	100	450	240	300	360	260	200	100	1050	840	900	1150	940	1000	100
	11.0	-	160M	65	50	100	500	280	350	360	260	200	100	1270	1060	1120	1270	1060	1120	100
15.0	-	160M	65	50	100	500	280	350	360	260	200	100	1270	1060	1120	1270	1060	1120	100	
18.5	-	160L	65	50	100	500	280	350	360	260	200	100	1270	1060	1120	1400	1190	1250	100	
22.0	-	180M	65	50	100	550	320	400	360	290	200	100	1400	1060	1120	1400	1190	1250	100	
50-250	-	1.5	90L	65	50	100	500	280	350	360	280	225	112	1050	840	900	1050	840	900	100
	-	2.2	100L	65	50	100	500	280	350	360	280	225	112	1050	840	900	1050	840	900	100
	-	3.0	100L	65	50	100	500	280	350	360	280	225	112	1050	840	900	1050	840	900	100
	-	4.0	112M	65	50	100	500	280	350	360	280	225	112	1050	840	900	1050	840	900	100
	-	5.5	132S	65	50	100	500	280	350	360	280	225	112	1050	840	900	1050	840	900	100
	11.0	-	160M	65	50	100	500	280	350	360	280	225	112	1270	1060	1120	1270	1060	1120	100
	15.0	-	160M	65	50	100	500	280	350	360	280	225	112	1270	1060	1120	1270	1060	1120	100
	18.5	-	160L	65	50	100	500	280	350	360	280	225	112	1270	1060	1120	1400	1190	1250	100
	22.0	-	180M	65	50	100	550	320	400	360	290	225	112	1400	1190	1250	1400	1190	1250	100
	30.0	-	200L	65	50	100	550	320	400	360	310	225	112	1400	1190	1250	1400	1190	1250	100
37.0	-	200L	65	50	100	550	320	400	360	310	225	112	1400	1190	1250	1400	1190	1250	100	

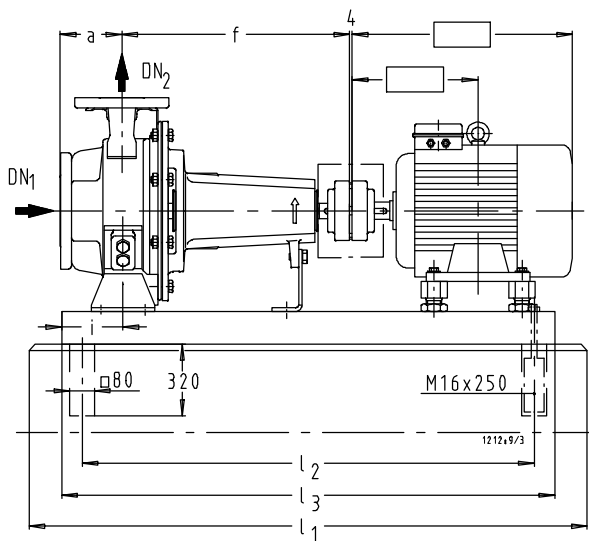
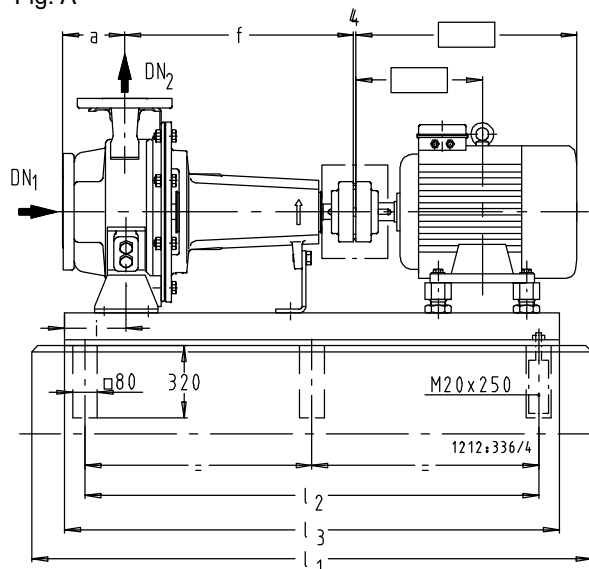
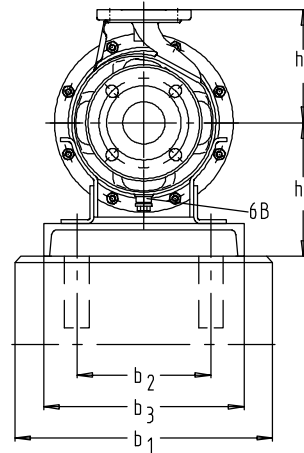
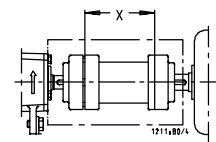
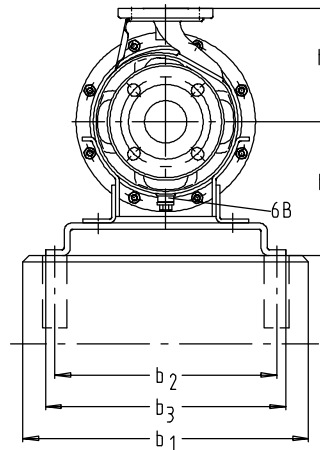
1) DN = connecting dimensions as per EN 1092-2/DN.../PN 16/B

Etachrom NC 65-200. 65-250

Fig. A

Fig. B

6 B Förderflüssigkeit-Entleerung / Casing drain/ Vidange de liquide véhiculé / Scarico del liquido convogliato / verpompte vloeistof-afvoer $G^3/B = ISO 228/1$

Etachrom NC	IP 55		Fig.	DN ₁ ¹⁾	DN ₂ ¹⁾	a	b ₁	b ₂	b ₃	f	h ₁	h ₂	i	mm			mm					
	n=2900 1/min kW	n=1450 1/min kW												l ₁	l ₂	l ₃	l ₁	l ₂	l ₃	x		
65-200	-	1,5	90L	A	80	65	100	500	280	350	360	280	225	112	950	740	800	1050	840	900	1000	140
	-	2,2	100L	A	80	65	100	500	280	350	360	280	225	112	1050	840	900	1150	940	1000	1000	140
	-	3,0	100L	A	80	65	100	500	280	350	360	280	225	112	1050	840	900	1150	940	1000	1000	140
	-	4,0	112M	A	80	65	100	500	280	350	360	280	225	112	1050	840	900	1150	940	1000	1000	140
	11,0	-	160M	A	80	65	100	500	280	350	360	280	225	112	1270	1060	1120	1400	1190	1250	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	-	180M	A	80	65	100	550	320	400	360	290	225	112	1400	1190	1250	1400	1190	1250	140	
	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	
65-250	-	2,2	100L	A	80	65	100	550	320	400	470	310	250	130	1150	940	1000	1400	1190	1250	140	
	-	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	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	
	15,0	-	160M	A	80	65	100	550	320	400	470	310	250	130	1400	1190	1250	1570	1360	1420	140	
	18,5	-	160L	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		

1) DN = connecting dimensions as per EN 1092-2/DN.../PN 16/B

Etachrom NC 80-200. 80-250

Fig. A

Fig. B


6 B Förderflüssigkeit-Entleerung / Casing drain / Vidange de liquide véhiculé / Scarico del liquido convogliato / verpompte vloeistof-afvoer $G^3/8 = ISO 228/1$

Etachrom NC	IP 55		Fig.	DN ₁ ¹⁾	DN ₂ ¹⁾	a	b ₁	b ₂	b ₃	f	h ₁	h ₂	i	mm			mm				
	n=2900 rpm kW	n=1450 rpm kW												l ₁	l ₂	l ₃	l ₁	l ₂	l ₃	x	
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	132S	A	100	80	125	500	280	350	470	280	250	112	1150	940	1000	1270	1060	1120	140
	15,0	-	160M	A	100	80	125	550	320	400	470	290	250	112	1400	1190	1250	1570	1360	1420	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	-	225M	B	100	80	125	750	550	590	470	365	250	112	1550	940	1400	1550	940	1400	140
80-250	-	3,0	100L	A	100	80	125	550	320	400	470	310	280	130	1150	940	1000	1400	1190	1250	140
	-	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	132M	A	100	80	125	550	320	400	470	310	280	130	1150	940	1000	1400	1190	1250	140
	-	11,0	160M	A	100	80	125	550	320	400	470	310	280	130	1400	1190	1250	1570	1360	1420	140

1) DN = connecting dimensions as per EN 1092-2/DN.../PN 16/B

Interchangeability of Etachrom NC and Etachrom BC Components and Interchangeability of Component Parts

Etachrom NC	Description																		
	Pump casing	Intermediate part	Discharge cover	Foot	Support foot	Shaft	Impeller	Deep-groove ball bearing motor end	Deep-groove ball bearing pump end	Bearing bracket	Bearing cover motor end	Bearing cover pump end	Shaft seal ring	Shaft seal ring	O-ring	Mechanical seal	Casing wear ring suction side	Casing wear ring discharge side	Shaft sleeve
	101	132	163	182	183	210	230	321.1	321.2	330	360.1	360.2	411.1	411.2	412	433	502.1	502.2	523
25-125.1	1	X	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
25-125	1	X	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	X	X
25-160	O	X	5	2	2	1	3	1	1	2	1	1	1	1	2	1	1	X	X
25-200	O	X	2	3	3	1	4	1	1	3	1	1	1	1	3	1	1	1	X
25-250	O	1	3	X	4	2	5	1	2	4	1	2	1	2	4	2	3	3	X
32-125.1	2	X	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	X	X
32-125	2	X	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	X	X
32-160	O	X	5	2	2	1	3	1	1	2	1	1	1	1	2	1	1	X	X
32-200	O	X	2	3	3	1	4	1	1	3	1	1	1	1	3	1	1	1	X
32-250	O	1	3	X	4	2	5	1	2	4	1	2	1	2	4	2	3	3	X
40-125	O	X	1	O	1	1	O	1	1	1	1	1	1	1	1	1	2	X	X
40-160	O	X	O	2	2	1	O	1	1	2	1	1	1	1	2	1	2	2	X
40-200	O	X	2	O	3	1	O	1	1	3	1	1	1	1	3	1	2	2	X
40-250	O	1	3	X	4	2	O	1	2	4	1	2	1	2	4	2	4	3	X
50-125	O	X	O	2	2	1	O	1	1	2	1	1	1	1	2	1	2	X	X
50-160	O	X	O	O	3	1	O	1	1	2	1	1	1	1	2	1	2	2	X
50-200	O	O	O	X	3	2	O	1	2	4	1	2	1	2	O	2	4	3	X
50-250	O	1	3	X	4	2	O	1	2	4	1	2	1	2	4	2	4	3	X
65-200	O	1	O	X	4	2	O	1	2	4	1	2	1	2	4	2	5	O	X
65-250	O	3	4	X	5	3	O	3	3	5	3	3	3	3	4	3	5	4	1
80-200	O	3	4	X	O	3	O	3	3	5	3	3	3	3	4	3	6	4	1
80-250	O	3	4	X	5	3	O	3	3	5	3	3	3	3	4	3	6	4	1

1	Same number means same component	X	Component not fitted
1			
O	Components differ		Component interchangeable with Etachrom BC

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

Part No.	Description	Number of Pumps (incl. stand-by pumps)						
		2	3	4	5	6 and 7	8 and 9	10 and more
		Quantity of spare parts						
210	Shaft	1	1	1	2	2	2	20 %
230	Impeller	1	1	1	2	2	2	20 %
321	Deep-groove ball bearing	2	2	4	4	4	6	25 %
330	Bearing bracket	-	-	-	-	-	1	2 off
412.1	O-ring	1	1	2	2	2	3	25 %
433	Mechanical seal	1	1	2	2	2	3	25 %
502.1	Casing wear ring, suction side	2	2	2	3	3	4	50 %
502.2 ¹⁾	Casing wear ring, discharge side	2	2	2	3	3	4	50 %
523 ²⁾	Shaft sleeve	2	2	2	3	3	4	50 %

1) not fitted on Etachrom NC 25-125.1, 25-125, 25-160, 32-125.1, 32-125, 32-160, 40-125, 50-125
2) only on Etachrom NC 65-250, 80-200, 80-250

