

Self-priming Pump

Etaprime L

Type Series Booklet



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Type Series Booklet Etaprime L

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Contents

Self-priming Pump	4
Volute Casing Pumps	4
Etaprime L.....	4
Main applications.....	4
Fluids handled	4
Operating data.....	4
Designation	4
Design details	4
Materials.....	5
Product benefits.....	5
Certifications	5
Fluid handled.....	5
Overview of type series.....	6
Priming time	7
Pressure limits.....	8
Selection charts	8
Flange connections / pump connections.....	10
Dimensions and connections	11
Scope of supply	19

Self-priming Pump

Volute Casing Pumps

Etaprime L



Main applications

- Spray irrigation systems
- Service water supply systems
- Drainage applications
- Drainage systems
- Fire-fighting systems
- Lowering groundwater levels
- Domestic water supply
- Air-conditioning systems
- Cooling circuits
- Swimming pools
- Water supply systems

Fluids handled

- Drinking water
- Swimming pool water with 0.4 to 1.4 mg/l free chlorine and max. 0.6 mg/l combined chlorine; pH value 6.9 to 7.7; water hardness TH 10° to 30° Salt content up to 7 g/l
- Fire-fighting water
- Seawater
- River, lake and groundwater
- Brackish water
- Condensate
- Brine
- Oil
- Service water
- Cleaning agents
- Cooling water

Operating data

Operating properties

Characteristic		Value	
		50 Hz	60 Hz
Flow rate	Q	Up to 180 m³/h (50 l/s)	Up to 150 m³/h (41 l/s)
Head	H	Up to 85 m	Up to 105 m
Operating temperature	t	-30 to +90 °C	
Operating pressure	p	Up to 10 bar	
Static suction lift	H _{geo}	Up to 9 m	

Designation

Example: Etaprime GL 80-200 GL10

Designation key

Code	Description
Etaprime	Type series
G	Casing material
G	= cast iron
C	= stainless steel
L	Long-coupled design
80	Nominal discharge nozzle diameter [mm] (code)
200	Nominal impeller diameter [mm] (code)
GL10	Seal code, e.g. GL10 = mechanical seal Q ₁ Q ₁ X ₄ GG

Design details

Design

- Volute casing pump
- Back pull-out design (from size 40-140)
- Horizontal installation
- Self-priming
- Single-stage
- Single-entry

Pump casing

- Radially split volute casing
- Volute casing with integrally cast pump feet (from pump size 40-140)

Drive

- KSB surface-cooled IEC frame three-phase current squirrel-cage motor
- Winding
Up to 2.2 kW: 220-240 V/380-420 V
From 3 kW: 380-420 V/660-725 V
- 60 Hz winding
440-480 V
- Type of construction B3
- IP55 enclosure
- Thermal class F with temperature sensor; 3 PTC thermistors
- Mode of operation: continuous operation S1

Or a surface-cooled three-phase current squirrel-cage motor as described above to our choice (West European make)

Shaft seal

- The shaft is fitted with a replaceable shaft sleeve in the shaft seal area (from pump size 40-140).
- Standardised mechanical seal to EN 12756

Bearings

- Radial ball bearing
- Grease lubrication
- Oil lubrication

Impeller type

- Open multi-channel impeller

Materials

Overview of available materials

Component	Material variant GL	Material variant CL
Volute casing	Grey cast iron JL 1040	Chrome nickel molybdenum cast steel 1.4408
Casing cover	Grey cast iron JL 1040	Chrome nickel molybdenum cast steel 1.4408
Shaft	Tempered steel C45+N ¹⁾	Chrome nickel molybdenum steel 1.4462 ¹⁾
Impeller	Grey cast iron JL 1040	Chrome nickel molybdenum cast steel 1.4408
Bearing bracket ²⁾	Grey cast iron JL 1040	Grey cast iron JL 1040
Bearing housing ³⁾	Grey cast iron JL 1040	Chrome nickel molybdenum cast steel 1.4408
Shaft sleeve ⁴⁾	Chrome nickel molybdenum steel 1.4571	Chrome nickel molybdenum steel 1.4571

Product benefits

- Maintenance-free mechanical seal ensures operating reliability
- Easy to dismantle due to back pull-out design; no need to remove the pump casing from the piping
- Good suction performance, self-priming up to 9 m suction lift, also suitable for applications with relatively poor inlet conditions (i.e. low or negative inlet pressure) and for handling fluids with entrained gas.

- Optimised hydraulic components for high efficiency help reduce energy consumption

Certifications

Certified quality management to ISO 9001

Fluid handled

Fluid selection table

Fluid handled	Application limits	Materials		Shaft seal				Variant code	Comments
		Casing / impeller		Mechanical seal				Mechanical seal	
		Grey cast iron/ grey cast iron	CrNiMo cast steel/ CrNiMo cast steel	AQ1VGG ³⁾	U3U3VGG	Q1Q1X4GG	BQ1EGG ³⁾		
G	C	8	9	10	11				
Water									
Industrial waste water									Analysis of the fluid handled required
Ammonia water (ammonia solution)	T ≤ 40 °C; conc. ≤ 10 %	X					X	GL 11	
Brackish water	T ≤ 25 °C		X			X		CL 10	
Fire-fighting water ⁶⁾	T ≤ 60 °C	X				X		GL 10	
Condensate ⁵⁾	T ≤ 90 °C	X					X	GL 11	
Condensate, not conditioned	T ≤ 90 °C		X				X	CL 11	
Cooling water (without antifreeze) ⁶⁾	T ≤ 60 °C	X				X		GL 10	Open circuit: CL 10 required

1) Shaft unit 17 = chrome nickel molybdenum steel 1.4571

2) For shaft units 25 and 35

3) For shaft unit 17

4) Not for shaft unit 17

5) Treatment to VdTÜV 1466; additional requirement: O₂ ≤ 0.02 mg/l

6) General criteria for results of water analysis: pH value ≥ 7; chloride content (Cl) ≤ 150 mg/kg. Chlorine (Cl₂) ≤ 0.6 mg/kg Ammonia (NH₃) ≤ 5 mg/kg, free from hydrogen sulphide (H₂S); no limitation of Cl-content required in this case.

Fluid handled	Application limits	Materials		Shaft seal				Variant code	Comments
		Casing / impeller		Mechanical seal					
		Grey cast iron/ grey cast iron	CrNiMo cast steel/ CrNiMo cast steel	AQ1VGG ⁹⁾	U3U3VGG	Q1Q1X4GG	BQ1EGG ⁹⁾		
Variant code									
G	C	8	9	10	11				
Cooling water pH ≥ 7.5 (with antifreeze) ^{9/7)}	T ≥ -30 °C p ≤ 10 bar T ≤ 90 °C	✗					✗	GL 11	Open circuit: CL 11 required
Slightly contaminated water ⁶⁾	T ≤ 60 °C	✗				✗		GL 10	
Seawater	T ≤ 25 °C		✗			✗		CL 10	
Surface water ⁶⁾	T ≤ 40 °C	✗		✗				GL 8	Analysis of the fluids handled required
Pure water ⁸⁾	T ≤ 60 °C	✗					✗	GL 11	
Raw water ⁶⁾	T ≤ 60 °C	✗				✗		GL 10	
Swimming pool water (fresh water) ⁶⁾	T ≤ 60 °C	✗				✗		GL 10	Also applies to requirements as per DIN 19643
Dam water ⁶⁾	T ≤ 60 °C	✗				✗		GL 10	If solids are contained, contact KSB.
Drinking water ⁶⁾	T ≤ 60 °C	✗					✗	GL 11	
Partly desalinated water ⁹⁾	T ≤ 90 °C	✗					✗	GL 11	
Fully desalinated water	T ≤ 90 °C		✗				✗	CL 11	Requirements for ultra-pure water cannot be met.
Fully desalinated water as boiler feed water ⁹⁾	T ≤ 90 °C	✗					✗	GL 11	
Refrigerants, cooling brines									
Cooling brine; inorganic, pH value > 7.5, inhibited	T ≥ -30 °C T ≤ 25 °C	✗					✗	GL 11	
Water with antifreeze, pH value > 7.5 ^{9/7)}	T ≥ -30 °C T ≤ 90 °C	✗					✗	GL 11	
Oils/emulsions									
Drilling/grinding emulsion	T ≤ 60 °C	✗			✗			GL 9	
Oil and water emulsion	T ≤ 60 °C	✗			✗			GL 9	
Cleaning agents									
Lyes for bottle rinsers	T ≤ 90 °C	✗				✗		GL 10	
Acids									
Acetic acid	T ≤ 60 °C; conc. ≤ 5 % T ≤ 60 °C; conc. ≤ 10 %		✗				✗	CL 11	

Overview of type series

Available sizes and designs

Size	Shaft unit	Etaprime L		Etaprime BN		Etaprime B
		GL	CL	GBN	CBN	GB
		JL 1040	1.4408	JL 1040	1.4408	JL 1040
32-100	17	S / T	-	S / T	-	-
32-120	17	S / T	S / T	S / T	S / T	-
40-110	17	S / T	S / T	S / T	S / T	-
40-140	25	S / T / B	S / T / B	S / T / B	S / T / B	-
50-130	25	S / T / B	S / T / B	S / T / B	S / T / B	-
50-160	25	S / T / B	S / T / B	S / T / B	S / T / B	-
65-150	25	S / T / B	S / T / B	S / T / B	S / T / B	-
65-180	35	S / T / B	S / T / B	S / T / B	S / T / B	-
80-170	35	S / T / B	S / T / B	S / T / B	S / T / B	-
80-190	35	S / T / B	-	S / T / B	-	-
80-200	35	S / T / B	S / T / B	S / T / B	S / T / B	-
100-240.1	35	S / T / B	-	S / T / B	-	-
100-240	35	S / T / B	-	-	-	-
125-260	35	S / T / B	-	-	-	-

- 7) Antifreeze on ethylene glycol basis with inhibitors. Content: >20 % to 50 % (e.g. Antifrogen N)
8) No ultra-pure water! Conductivity at 25 °C: ≤ 800 µS/cm

- S = single mechanical seal (standard design)
 T = double mechanical seal in tandem arrangement available
 B = double mechanical seal in back-to-back arrangement available
 - = size not available

Priming time

For a 1-metre horizontal length of the suction line and DN suction line = DN pump, the priming times are as follows:

When handling gaseous fluids, fluids which tend to froth or water with a temperature $T > 60^\circ\text{C}$, the pump will not be self-priming. In such cases, a check valve must be installed in the suction line.

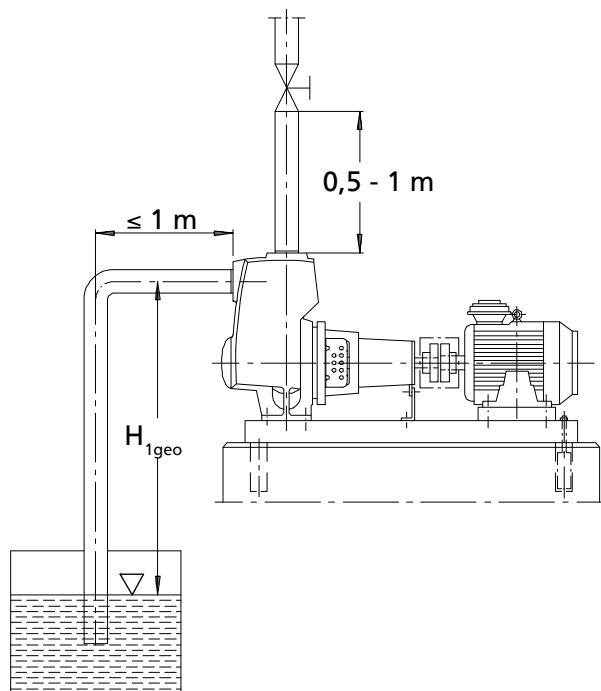


Fig. 1: Distances of suction and discharge lines

Size ⁹⁾	Shaft unit	Priming time [sec]					
		at a speed $n = 2900$ rpm					
		at a static suction lift $H_{1\text{geo}}$ of ... m					
		2 m	4 m	5 m	6 m	7 m	8 m
25-100	17	40	145	415	-	-	-
32-120		30	90	135	190	255	360
40-110		60	100	215	420	-	-
40-140	25	30	70	125	220	355	600
50-130		50	120	195	260	345	440
50-160		30	70	105	170	265	430
65-150	35	60	120	165	260	375	570
65-180		30	50	75	100	145	200
80-170		50	100	135	180	225	310
80-190	35	40	70	105	160	185	240
80-200		30	50	75	105	155	200
100-240.1		30	70	95	120	150	190
100-240	35	70	85	110	160	-	-

Size ⁹⁾	Shaft unit	Priming time [sec]					
		at a speed $n = 2900$ rpm					
		at a static suction lift $H_{1\text{geo}}$ of ... m					
		2 m	4 m	5 m	6 m	7 m	8 m
125-260	35	35	80	105	130	160	190

Size ⁹⁾	Shaft unit	Priming time [sec]					
		at a speed $n = 3500$ rpm					
		at a static suction lift $H_{1\text{geo}}$ of ... m					
		2 m	4 m	5 m	6 m	7 m	8 m
25-100	17	30	85	135	-	-	-
32-120		20	60	105	140	175	250
40-110		30	85	125	200	265	470
40-140	25	25	50	85	120	145	230
50-130		30	90	140	190	245	300
50-160		25	55	75	150	215	280
65-150	35	40	80	125	170	225	370
65-180		20	40	65	90	105	150
80-170		30	80	105	130	165	220
80-190	35	30	55	75	100	125	160
80-200		25	40	55	80	125	160
100-240.1		25	60	85	115	145	180
100-240	25	70	85	100	155	360	

Size ⁹⁾	Shaft unit	Priming time [sec]							
		at a speed $n = 1450$ rpm							
		at a static suction lift $H_{1\text{geo}}$ of ... m							
		1 m	2 m	3 m	4 m	5 m	6 m	7 m	8 m
25-100	17	130	-	-	-	-	-	-	-
32-120		100	210	-	-	-	-	-	-
40-110		120	-	-	-	-	-	-	-
40-140	25	130	-	-	-	-	-	-	-
50-130		210	410	-	-	-	-	-	-
50-160		210	430	-	-	-	-	-	-
65-150	35	190	350	540	-	-	-	-	-
65-180		90	140	220	370	-	-	-	-
80-170		110	180	280	480	-	-	-	-
80-190	35	100	110	200	310	-	-	-	-
80-200		70	110	190	270	320	420	-	-
100-240.1		130	150	220	300	440	-	-	-
100-240	35	110	160	270	480	-	-	-	-
125-260		60	70	110	160	200	330	430	610

Size ⁹⁾	Shaft unit	Priming time [sec]							
		at a speed $n = 1750$ rpm							
		at a static suction lift $H_{1\text{geo}}$ of ... m							
		1 m	2 m	3 m	4 m	5 m	6 m	7 m	8 m
25-100	17	70	170	-	-	-	-	-	-
32-120		80	150	260	-	-	-	-	-
40-110		90	180	-	-	-	-	-	-
40-140	25	80	150	200	-	-	-	-	-
50-130		130	240	380	-	-	-	-	-
50-160		130	260	480	-	-	-	-	-

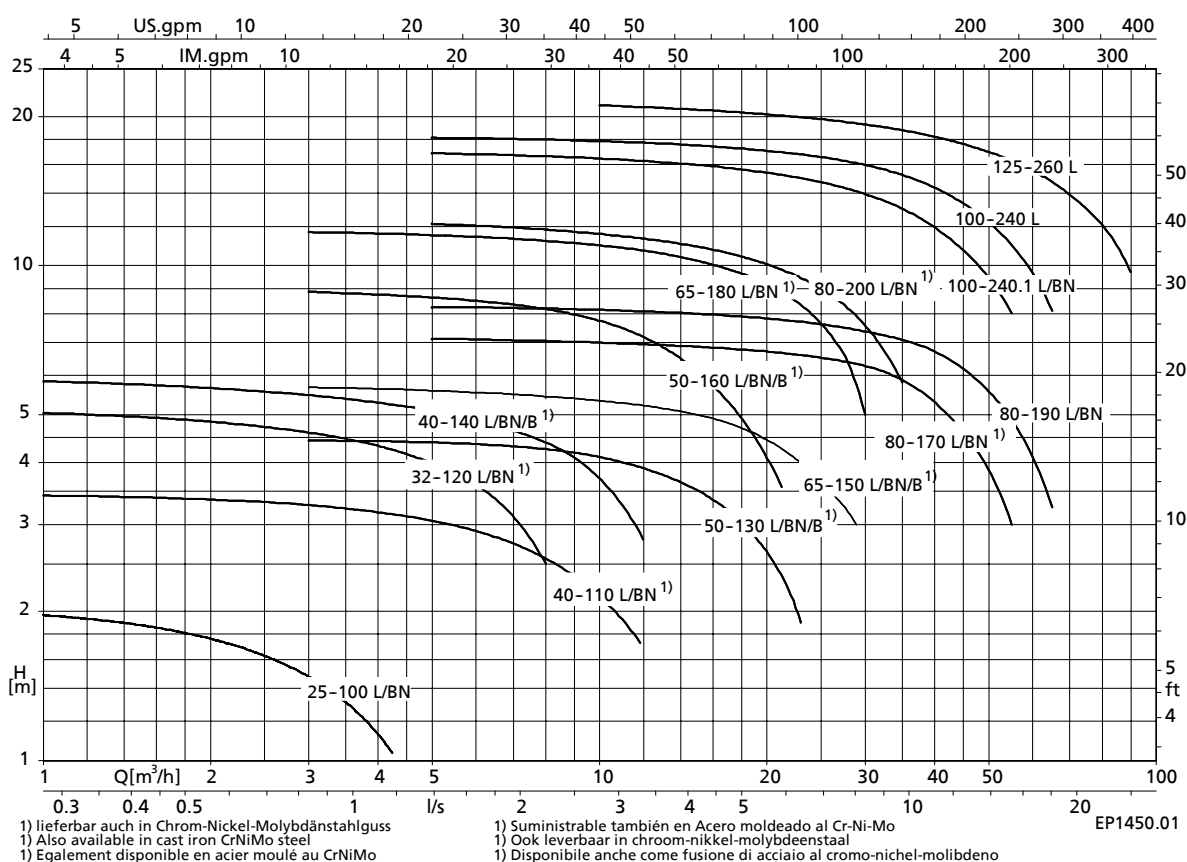
9) Stainless steel variant not available for all pump sizes.

Size ⁹⁾	Shaft unit	Priming time [sec]							
		at a speed n = 1750 rpm							
		at a static suction lift H _{1geo} of ... m							
		1 m	2 m	3 m	4 m	5 m	6 m	7 m	8 m
65-150	25	140	260	350	430	-	-	-	-
65-180	35	80	110	170	220	330	-	-	-
80-170		90	130	200	320	480	-	-	-
80-190		80	100	130	160	210	390	-	-
80-200		60	100	160	230	280	350	-	-
100-240.1		90	110	140	210	260	400	-	-
100-240		80	100	140	200	300	-	-	-

Size ⁹⁾	Shaft unit	Priming time [sec]							
		at a speed n = 1750 rpm							
		at a static suction lift H _{1geo} of ... m							
		1 m	2 m	3 m	4 m	5 m	6 m	7 m	8 m
125-260	35	50	60	80	115	170	220	300	400

Pressure limits

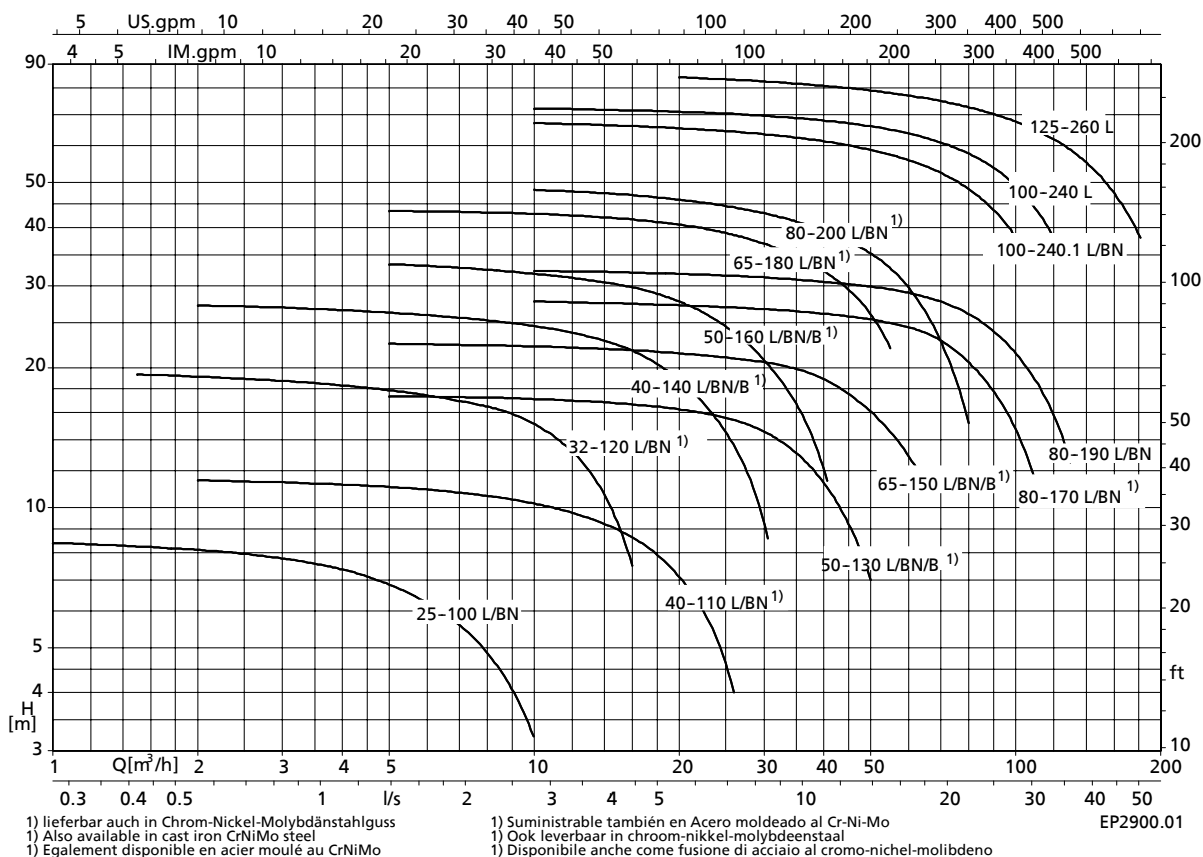
Size	Discharge pressure p ₂ ¹⁰⁾ [bar]	Test pressure ¹¹⁾ [bar]
All sizes	10,0	15,0

Selection charts
Etaprime L/BN, n = 1450 rpm


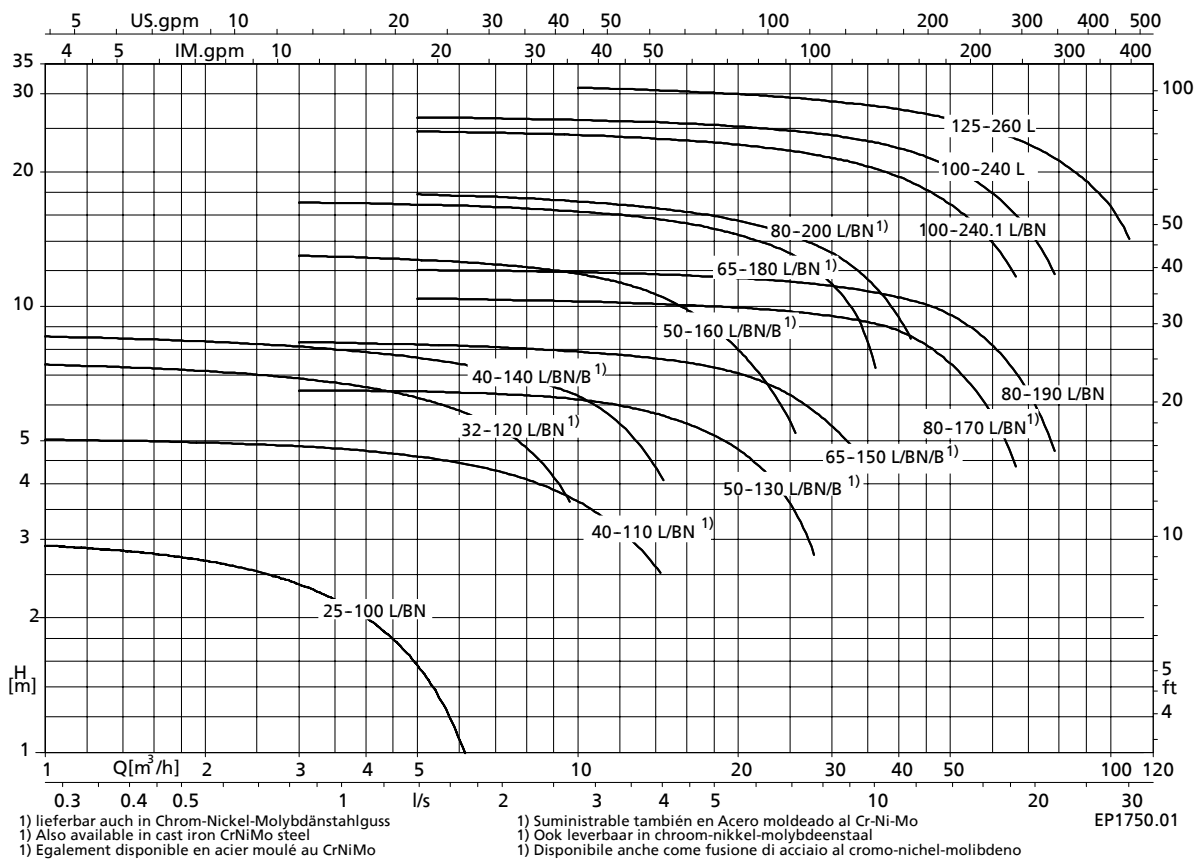
10) The sum of inlet pressure and shut-off head must not exceed the values indicated.

11) The casing components are checked for leakage by means of internal pressure tests to ZN 1650 with water.

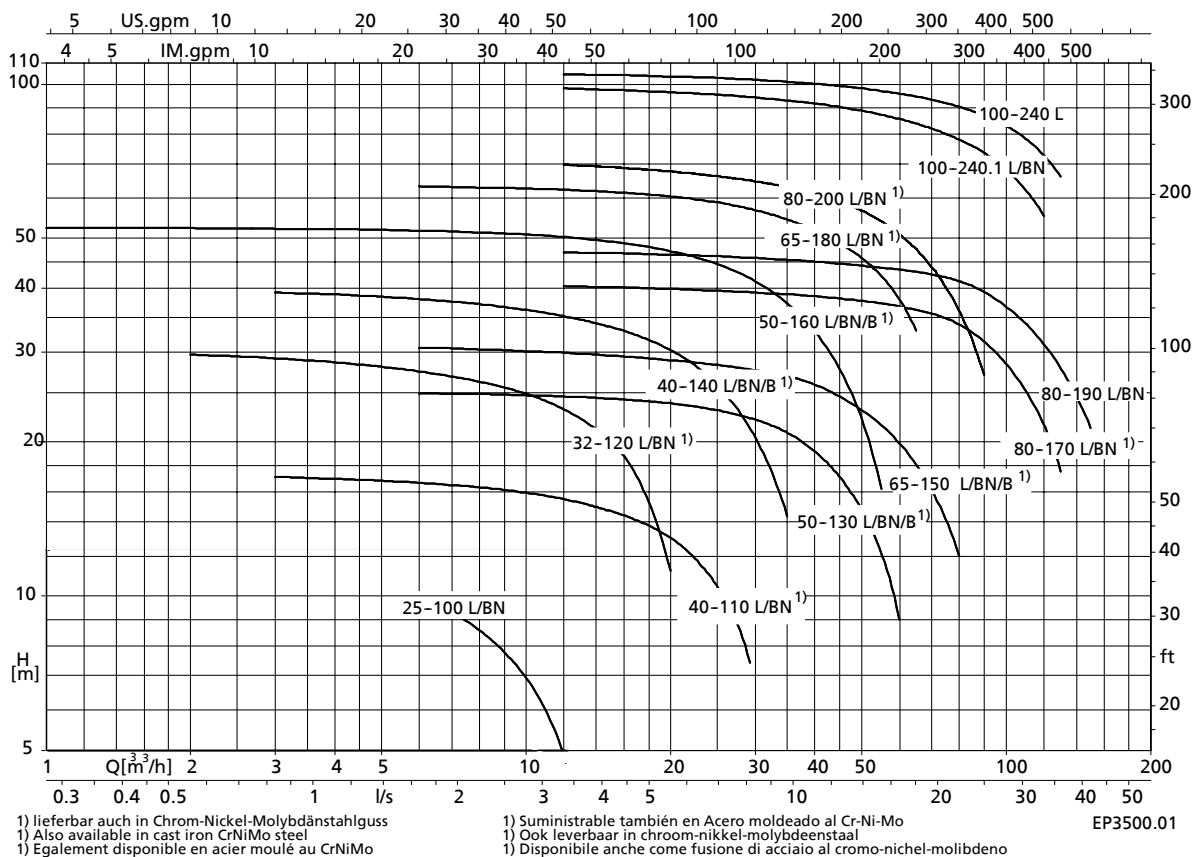
Etaprime L/B/BN, n = 2900 rpm



Etaprime L/B/BN, n = 1750 rpm



Etaprime L/B/BN, n = 3500 rpm



Flange connections / pump connections

Connections

Size	Shaft unit	Standard connection	Special connection
25-100 32-120 40-110	17	Pipe thread Rp to ISO 7/1	Pipe thread NPT to ASME B1.20.1
40-140 50-130 50-160 65-150	25	Flange to EN 1092-2, PN 16, (JL 1040) to EN 1092-1, PN 16, (1.4408)	Flange to ASME BE 16.1 Class 125 (to ZN 2606)
65-180 80-170 80-190 80-200 100-240.1 100-240 125-260	35		

Dimensions and connections

Sizes 25-100 to 40-110, shaft unit 17 - pump

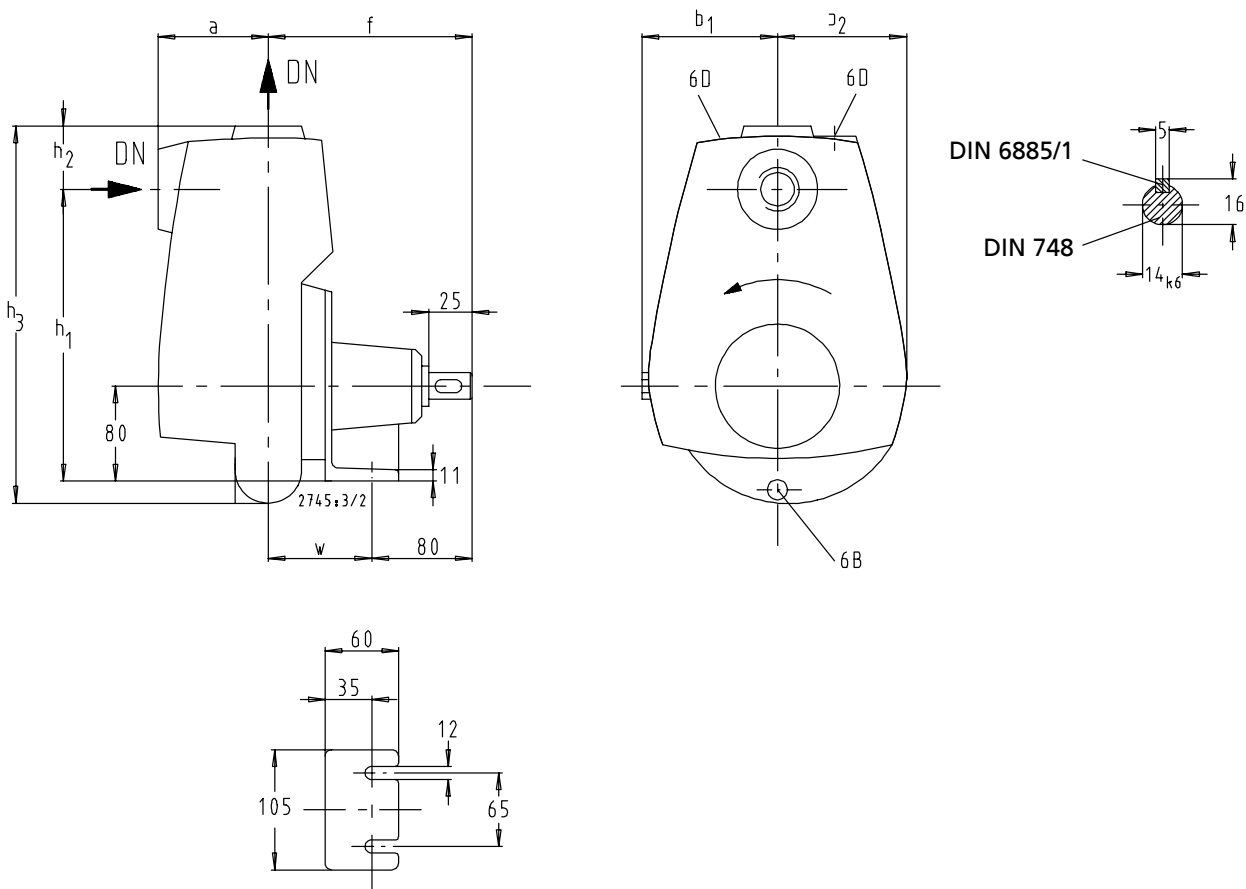


Fig. 2: Dimensions of sizes 25-100 to 40-110 (shaft unit 17)

6B	Fluid drain
6D	Fluid priming and venting

Connections

Size	6 B ¹²⁾	6D ¹²⁾
25-100	G 1/8	G 3/8
32-120	G 1/8	G 3/8
40-110	G 1/8	G 3/8

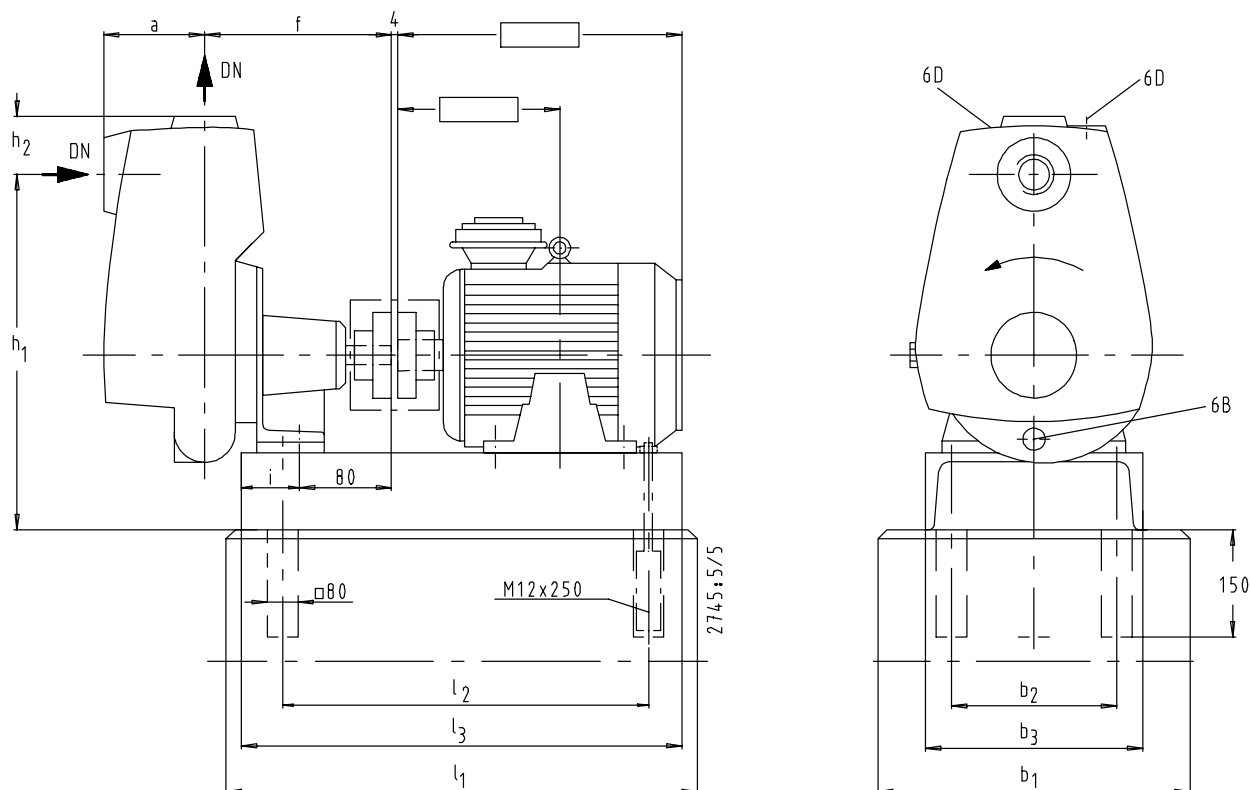
Pump dimensions [mm]

Size	Connection		a	b1	b2	f	h1	h2	h3	w
	Standard DN ¹³⁾	Special DN ¹⁴⁾								
25-100	Rp 1	NPT 1	70	104	95	169	220	38	265	89
32-120	Rp 1 1/4	NPT 1 1/4	95	118	95	165	229	46	286	85
40-110	Rp 1 1/2	NPT 1 1/2	105	118	110	171	235	55	312	91

12) G = ISO 228/1

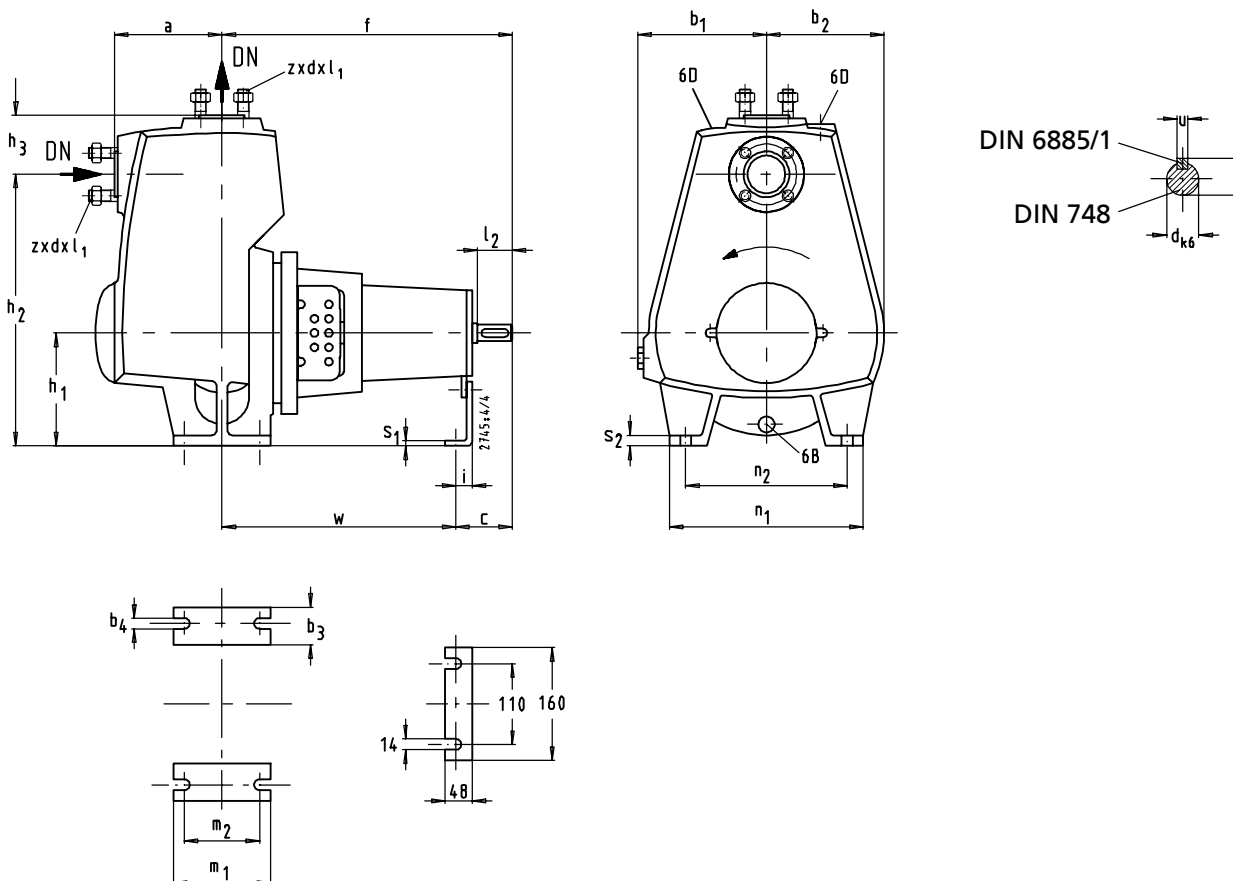
13) Standard connection to ISO 7/1

14) Special connection to ASME B1.20.1

Sizes 25-100 to 40-110, shaft unit 17 - pump set

Fig. 3: Dimensions of sizes 25-100 to 40-110 (shaft unit 17)

Dimensions of the pump set [mm]

Pump					Motor		Connection		Pump dimensions										
Size	n = 1450 rpm	n = 1750 rpm	n = 2900 rpm	n = 3500 rpm	Rating [kW]	IEC	Standard DN	Special DN	a	f	h1	h2	b1	b2	b3	i	l1	l2	l3
25-100	✗	✗	-	-	0,37	71	Rp 1	NPT 1	70	169	295	38	350	160	200	41,5	570	360	420
25-100	✗	✗	-	-	0,55	80	Rp 1	NPT 1	70	169	295	38	350	160	200	41,5	570	360	420
25-100	-	-	✗	-	0,55	71	Rp 1	NPT 1	70	169	295	38	350	160	200	41,5	570	360	420
25-100	-	-	-	✗	0,75	80	Rp 1	NPT 1	70	169	295	38	350	160	200	41,5	570	360	420
25-100	-	-	-	✗	1,1	80	Rp 1	NPT 1	70	169	295	38	350	160	200	41,5	570	360	420
32-120	✗	✗	-	-	0,37	71	R 1 1/4	NPT 1 1/4	95	165	304	46	350	160	200	41,5	570	360	420
32-120	✗	✗	-	-	0,55	80	R 1 1/4	NPT 1 1/4	95	165	304	46	350	160	200	41,5	570	360	420
32-120	-	-	✗	-	1,1	80	R 1 1/4	NPT 1 1/4	95	165	304	46	350	160	200	41,5	570	360	420
32-120	-	-	-	✗	2,2	90 L	R 1 1/4	NPT 1 1/4	95	165	314	46	350	160	200	41,5	570	360	420
40-110	✗	✗	-	-	0,37	71	Rp 1 1/2	NPT 1 1/2	105	171	310	55	350	160	200	41,5	570	360	420
40-110	✗	✗	-	-	0,55	80	Rp 1 1/2	NPT 1 1/2	105	171	310	55	350	160	200	41,5	570	360	420
40-110	-	-	✗	-	1,1	80	Rp 1 1/2	NPT 1 1/2	105	171	310	55	350	160	200	41,5	570	360	420
40-110	-	-	-	✗	1,5	90 S	Rp 1 1/2	NPT 1 1/2	105	171	320	55	350	160	200	41,5	570	360	420

Sizes 40-140 to 125-260, shaft units 25 and 35 - pump

Fig. 4: Dimensions of sizes 40-140 to 125-260 (shaft units 25 and 35)

6B	Fluid drain
6D	Fluid priming and venting

Connections

Size	6 B ¹⁵⁾	6D ¹⁵⁾
40-140	G 3/8	G 3/8
50-130	G 3/8	G 3/8
50-160	G 3/8	G 3/8
65-150	G 3/8	G 3/8
65-180	G 3/8	G 3/8

Size	6 B ¹⁵⁾	6D ¹⁵⁾
80-170	G 1/2	G 1/2
80-190	G 1/2	G 1/2
80-200	G 1/2	G 1/2
100-240.1	G 1/2	G 1/2
100-240	G 1/2	G 1/2
125-260	G 1/2	G 1/2

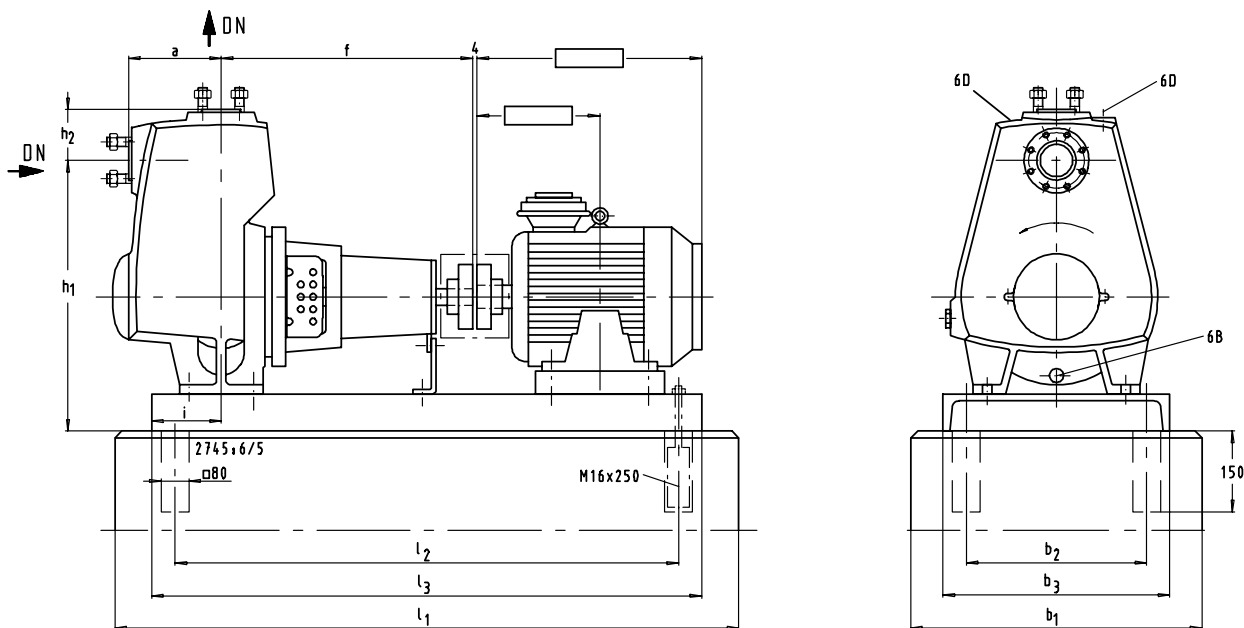
Flange dimensions [mm]

Flange connection	DN	Bolt circle diameter	z	d	l ₁
Standard connection EN 1092-1 EN 1092-2	40	110	4	M16	40
	50	125	4	M16	40
	65	145	4	M16	40
	80	160	8	M16	45
	100	180	8	M16	45
	125	210	8	M16	45
Special connection ASME BE 16.1 Class 125 (ZN 2606)	40	98,6	4	UNC 1/2-13	40
	50	120,7	4	UNC 5/8-11	40
	65	139,7	4	UNC 5/8-11	40
	80	152,4	4	UNC 5/8-11	40
	100	190,5	8	UNC 5/8-11	45
	125	215,9	8	UNC 3/4-10	45

15) G = ISO 228/1

Pump dimensions [mm]

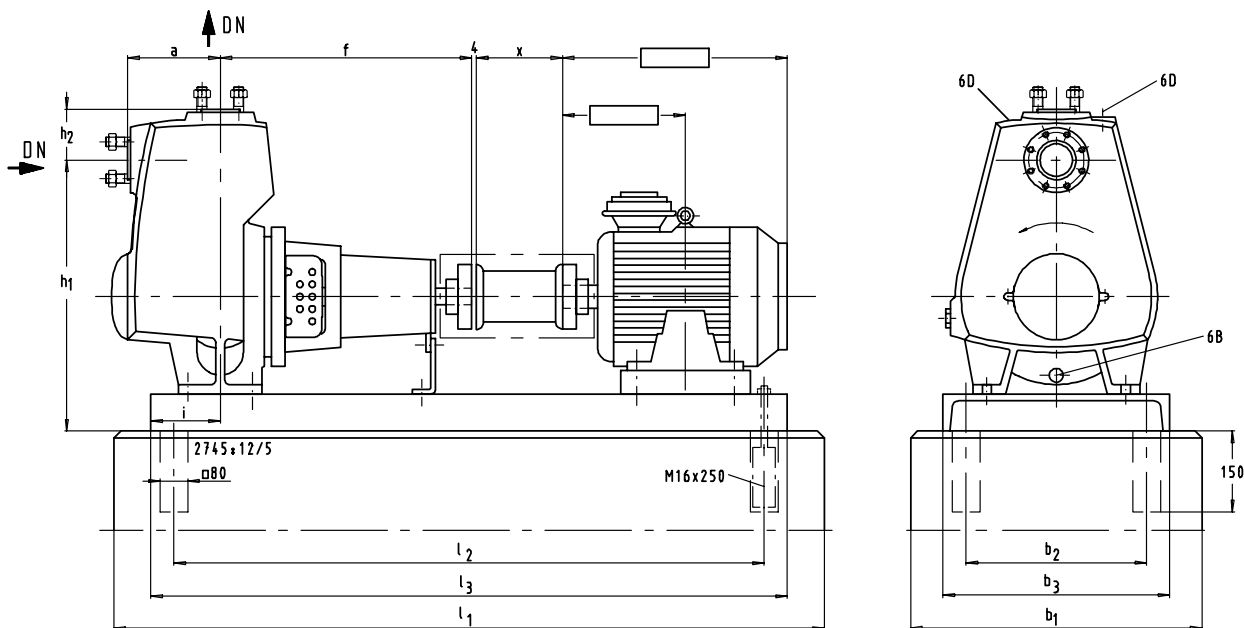
Size	DN	a	b ₁	b ₂	b ₃	b ₄	c	d _{K6}	f	h ₁	h ₂	h ₃	i	l ₂	m ₁	m ₂	n ₁	n ₂	s ₁	s ₂	t	u	w
40-140	40	115	115	128	57	16	100	24	370	112	284	73	23	50	100	70	220	160	4	13	27	8	270
50-130	50	130	138	128	55	16	100	24	370	132	317	78	23	50	100	70	250	190	4	17	27	8	270
50-160	50	130	145	126	55	16	100	24	370	132	327	75	23	50	100	70	250	190	4	17	27	8	270
65-150	65	140	155	149	55	16	100	24	370	160	370	85	25	50	125	95	270	212	6	20	27	8	270
65-180	65	140	158	138	55	16	130	32	490	160	376	89	23	80	125	95	270	212	4	18	35	10	360
80-170	80	156	173	168	65	18	130	32	490	160	380	104	23	80	140	106	310	240	4	18	35	10	360
80-190	80	170	188	181	65	20	130	32	490	180	420	107	24	80	160	120	345	280	6	22	35	10	360
80-200	80	154	172	152	65	20	130	32	490	160	378	107	24	80	140	100	285	220	4	22	35	10	360
100-240.1	100	182	203	178	68	20	130	32	478	200	457	127	24	80	140	100	330	260	6	18	35	10	348
100-240	100	182	203	178	68	20	130	32	478	200	457	127	24	80	140	100	330	260	6	18	35	10	348
125-260	125	204	227	197	70	20	130	32	478	200	486	142	24	80	140	100	340	270	6	18	35	10	348

Sizes 40-140 to 125-260, shaft units 25 and 35 - pump set with coupling

Fig. 5: Dimensions of sizes 40-140 to 125-260 (shaft units 25 and 35) with coupling

Dimensions of the pump set [mm]

Pump						Motor		Pump dimensions										
Size	n = 1450 rpm	n = 1750 rpm	n = 2900 rpm	n = 3500 rpm	Rating [kW]	Size	DN	a	f	h1	h2	b1	b2	b3	i	l1	l2	l3
40-140	X	X	-	-	1,5	90L	40	115	370	384	73	450	240	300	100	950	740	800
40-140	-	-	X	-	2,2	90L	40	115	370	384	73	450	240	300	100	950	740	800
40-140	-	-	X	-	3	100L	40	115	370	384	73	450	240	300	100	950	740	800
40-140	-	-	-	X	4	112M	40	115	370	384	73	450	240	300	100	1050	840	900
40-140	-	-	-	X	5,5	132S	40	115	370	404	73	450	240	300	100	1050	840	900
50-130	X	X	-	-	1,5	90L	50	130	370	417	78	450	240	300	100	950	740	800
50-130	-	-	X	-	2,2	90L	50	130	370	417	78	450	240	300	100	950	740	800
50-130	-	-	X	-	3	100L	50	130	370	417	78	450	240	300	100	950	740	800
50-130	-	-	-	X	4	112M	50	130	370	417	78	450	240	300	100	1050	840	900
50-160	X	X	-	-	1,5	90L	50	130	370	427	75	450	240	300	112	950	740	800
50-160	-	-	X	-	4	112M	50	130	370	427	75	450	240	300	112	1050	840	900
50-160	-	-	X	X	5,5	132S	50	130	370	427	75	450	240	300	112	1150	940	1000
50-160	-	-	-	X	7,5	132S	50	130	370	427	75	450	240	300	112	1150	940	1000
65-150	X	X	-	-	1,5	90L	65	140	370	470	85	450	240	300	112	950	740	800
65-150	-	-	X	-	4	112M	65	140	370	470	85	450	240	300	112	1050	840	900
65-150	-	-	X	X	5,5	132S	65	140	370	470	85	450	240	300	112	1150	940	1000
65-150	-	-	-	X	7,5	132S	65	140	370	470	85	450	240	300	112	1150	940	1000
65-180	X	X	-	-	2,2	100L	65	140	490	476	89	500	280	350	112	1270	1060	1120
65-180	-	-	X	-	5,5	132S	65	140	490	476	89	500	280	350	112	1270	1060	1120
65-180	-	-	X	-	7,5	132S	65	140	490	476	89	500	280	350	112	1270	1060	1120
65-180	-	-	-	X	11	160M	65	140	490	476	89	500	280	350	112	1270	1060	1120
80-170	X	X	-	-	2,2	100L	80	156	490	480	104	500	280	350	120	1270	1060	1120
80-170	-	-	X	-	7,5	132S	80	156	490	480	104	500	280	350	120	1270	1060	1120
80-170	-	-	-	X	11	160M	80	156	490	480	104	500	280	350	120	1270	1060	1120
80-170	-	-	-	X	15	160M	80	156	490	480	104	500	280	350	120	1270	1060	1120
80-190	X	X	-	-	2,2	100L	80	170	490	520	107	500	280	350	130	1270	1060	1120
80-190	X	X	-	-	3	100L	80	170	490	520	107	500	280	350	130	1270	1060	1120
80-190	-	-	X	-	11	160M	80	170	490	520	107	500	280	350	130	1400	1190	1250
80-190	-	-	-	X	15	160M	80	170	490	520	107	500	280	350	130	1400	1190	1250
80-190	-	-	-	X	18,5	160L	80	170	490	520	107	500	280	350	130	1400	1190	1250

Pump					Motor		Pump dimensions											
Size	n = 1450 rpm	n = 1750 rpm	n = 2900 rpm	n = 3500 rpm	Rating [kW]	Size	DN	a	f	h1	h2	b1	b2	b3	i	l1	l2	l3
80-200	X	X	-	-	2,2	100L	80	154	490	478	107	500	280	350	120	1270	1060	1120
80-200	-	-	X	-	11	160M	80	154	490	478	107	500	280	350	120	1400	1190	1250
80-200	-	-	-	X	15	160M	80	154	490	478	107	500	280	350	120	1400	1190	1250
80-200	-	-	-	X	18,5	160L	80	154	490	478	107	500	280	350	120	1400	1190	1250
100-240.1	X	X	-	-	2,2	100L	100	182	478	557	127	500	280	350	120	1270	1060	1120
100-240.1	X	X	-	-	3	100L	100	182	478	557	127	500	280	350	120	1270	1060	1120
100-240.1	X	X	-	-	4	112M	100	182	478	557	127	500	280	350	120	1270	1060	1120
100-240.1	-	-	X	-	15	160M	100	182	478	557	127	500	280	350	120	1270	1060	1120
100-240.1	-	-	X	-	18,5	160L	100	182	478	557	127	500	280	350	120	1400	1190	1250
100-240.1	-	-	-	X	22	180M	100	182	478	567	127	550	320	400	120	1400	1190	1250
100-240.1	-	-	-	X	30	200L	100	182	478	567	127	550	320	400	120	1400	1190	1250
100-240	X	X	-	-	3	100L	100	182	478	557	127	500	280	350	120	1270	1060	1120
100-240	X	X	-	-	4	112M	100	182	478	557	127	500	280	350	120	1270	1060	1120
100-240	X	X	-	-	5,5	132S	100	182	478	557	127	500	280	350	120	1270	1060	1120
100-240	-	-	X	-	22	180M	100	182	478	567	127	550	320	400	120	1400	1190	1250
100-240	-	-	X	-	30	200L	100	182	478	567	127	550	320	400	120	1400	1190	1250
100-240	-	-	-	X	37	200L	100	182	478	567	127	550	320	400	120	1400	1190	1250
125-260	X	X	-	-	5,5	132S	125	204	478	586	142	500	280	350	120	1270	1060	1120
125-260	X	X	-	-	7,5	132M	125	204	478	586	142	500	280	350	120	1270	1060	1120
125-260	X	X	-	-	11	160M	125	204	478	596	142	550	320	400	120	1400	1190	1250
125-260	-	-	X	-	30	200L	125	204	478	596	142	550	320	400	120	1400	1190	1250
125-260	-	-	X	-	37	200L	125	204	478	596	142	550	320	400	120	1400	1190	1250

Sizes 40-140 to 125-260, shaft units 25 and 35 - pump set with spacer-type coupling

Fig. 6: Dimensions of sizes 40-140 to 125-260 (shaft units 25 and 35) with spacer-type coupling

Dimensions of the pump set [mm]

Pump						Motor		Pump dimensions											
Size	n = 1450 rpm	n = 1750 rpm	n = 2900 rpm	n = 3500 rpm	Rating [kW]	Size	DN	a	f	h1	h2	b1	b2	b3	i	l1	l2	l3	x
40-140	✕	✕	-	-	1,5	90L	40	115	370	384	73	450	240	300	100	1050	840	900	100
40-140	-	-	✕	-	2,2	90L	40	115	370	384	73	450	240	300	100	1050	840	900	100
40-140	-	-	✕	-	3	100L	40	115	370	384	73	450	240	300	100	1050	840	900	100
40-140	-	-	-	✕	4	112M	40	115	370	384	73	450	240	300	100	1150	940	1000	100
40-140	-	-	-	✕	5,5	132S	40	115	370	404	73	450	240	300	100	1150	940	1000	100
50-130	✕	✕	-	-	1,5	90L	50	130	370	417	78	450	240	300	100	1050	840	900	100
50-130	-	-	✕	-	2,2	90L	50	130	370	417	78	450	240	300	100	1050	840	900	100
50-130	-	-	✕	-	3	100L	50	130	370	417	78	450	240	300	100	1050	840	900	100
50-130	-	-	-	✕	4	112M	50	130	370	417	78	450	240	300	100	1150	940	1000	100
50-160	✕	✕	-	-	1,5	90L	50	130	370	427	75	450	240	300	112	1050	840	900	100
50-160	-	-	✕	-	4	112M	50	130	370	427	75	450	240	300	112	1150	940	1000	100
50-160	-	-	✕	✕	5,5	132S	50	130	370	427	75	500	280	350	112	1270	1060	1120	100
50-160	-	-	-	✕	7,5	132S	50	130	370	427	75	500	280	350	112	1270	1060	1120	100
65-150	✕	✕	-	-	1,5	90L	65	140	370	470	85	450	240	300	112	1050	840	900	100
65-150	-	-	✕	-	4	112M	65	140	370	470	85	450	240	300	112	1150	940	1000	100
65-150	-	-	✕	✕	5,5	132S	65	140	370	470	85	500	280	350	112	1270	1060	1120	100
65-150	-	-	-	✕	7,5	132S	65	140	370	470	85	500	280	350	112	1270	1060	1120	100
65-180	✕	✕	-	-	2,2	100L	65	140	490	476	89	500	280	350	112	1400	1190	1250	140
65-180	-	-	✕	-	5,5	132S	65	140	490	476	89	500	280	350	112	1400	1190	1250	140
65-180	-	-	✕	-	7,5	132S	65	140	490	476	89	500	280	350	112	1400	1190	1250	140
65-180	-	-	-	✕	11	160M	65	140	490	476	89	500	280	350	112	1400	1190	1250	140
80-170	✕	✕	-	-	2,2	100L	80	156	490	480	104	500	280	350	120	1400	1190	1250	140
80-170	-	-	✕	-	7,5	132S	80	156	490	480	104	500	280	350	120	1400	1190	1250	140
80-170	-	-	-	✕	11	160M	80	156	490	480	104	500	280	350	120	1400	1190	1250	140
80-170	-	-	-	✕	15	160M	80	156	490	480	104	500	280	350	120	1400	1190	1250	140
80-190	✕	✕	-	-	2,2	100L	80	170	490	520	107	550	280	350	120	1400	1190	1250	140
80-190	✕	✕	-	-	3	100L	80	170	490	520	107	550	280	350	120	1400	1190	1250	140
80-190	-	-	✕	-	11	160M	80	170	490	530	107	550	320	400	130	1570	1360	1420	140
80-190	-	-	-	✕	15	160M	80	170	490	530	107	550	320	400	130	1570	1360	1420	140
80-190	-	-	-	✕	18,5	160L	80	170	490	530	107	550	320	400	130	1570	1360	1420	140

Pump					Motor		Pump dimensions												
Size	n = 1450 rpm	n = 1750 rpm	n = 2900 rpm	n = 3500 rpm	Rating [kW]	Size	DN	a	f	h1	h2	b1	b2	b3	i	l1	l2	l3	x
80-200	✗	✗	-	-	2,2	100L	80	154	490	478	107	500	280	350	120	1400	1190	1250	140
80-200	-	-	✗	-	11	160M	80	154	490	488	107	550	320	400	120	1570	1360	1420	140
80-200	-	-	-	✗	15	160M	80	154	490	488	107	550	320	400	120	1570	1360	1420	140
80-200	-	-	-	✗	18,5	160L	80	154	490	488	107	550	320	400	120	1570	1360	1420	140
100-240.1	✗	✗	-	-	2,2	100L	100	182	478	557	127	500	280	350	120	1400	1190	1250	140
100-240.1	✗	✗	-	-	3	100L	100	182	478	557	127	500	280	350	120	1400	1190	1250	140
100-240.1	✗	✗	-	-	4	112M	100	182	478	557	127	500	280	350	120	1400	1190	1250	140
100-240.1	-	-	✗	-	15	160M	100	182	478	557	127	500	280	350	120	1400	1190	1250	140
100-240.1	-	-	✗	-	18,5	160L	100	182	478	567	127	550	320	400	120	1570	1360	1420	140
100-240.1	-	-	-	✗	22	180M	100	182	478	567	127	550	320	400	120	1570	1360	1420	140
100-240.1	-	-	-	✗	30	200L	100	182	478	567	127	550	320	400	120	1570	1360	1420	140
100-240	✗	✗	-	-	3	100L	100	182	478	557	127	500	280	350	120	1400	1190	1250	140
100-240	✗	✗	-	-	4	112M	100	182	478	557	127	500	280	350	120	1400	1190	1250	140
100-240	✗	✗	-	-	5,5	132S	100	182	478	557	127	500	280	350	120	1400	1190	1250	140
100-240	-	-	✗	-	22	180M	100	182	478	567	127	550	320	400	120	1570	1360	1420	140
100-240	-	-	✗	-	30	200L	100	182	478	567	127	550	320	400	120	1570	1360	1420	140
100-240	-	-	-	✗	37	200L	100	182	478	567	127	550	320	400	120	1570	1360	1420	140
125-260	✗	✗	-	-	5,5	132S	125	204	478	596	142	550	320	400	120	1570	1360	1420	140
125-260	✗	✗	-	-	7,5	132M	125	204	478	596	142	550	320	400	120	1570	1360	1420	140
125-260	✗	✗	-	-	11	160M	125	204	478	596	142	550	320	400	120	1570	1360	1420	140
125-260	-	-	✗	-	30	200L	125	204	478	596	142	550	320	400	120	1570	1360	1420	140
125-260	-	-	✗	-	37	200L	125	204	478	596	142	550	320	400	120	1570	1360	1420	140

Scope of supply

Depending on the model, the following items are included in the scope of supply:

- Pump

Drive

- Electric motor

Shaft coupling

- Flexible coupling with or without spacer

Contact guard

- Coupling guard

Baseplate

- Channel section steel or folded steel plate

Optional

- Cast baseplate (to ISO 3661)

Special accessories

- As required



KSB SE & Co. KGaA
Johann-Klein-Straße 9 • 67227 Frankenthal (Germany)
Tel. +49 6233 86-0
www.ksb.com