

Description

Standard chemical pumps of the SIHI^{ISOchem} range are horizontal single-stage volute casing pumps with dimensions to ISO 2858 / EN 22858. They meet the technical requirements of ISO 5199 / EN 25199.

It is a modular configuration of either bare shaft end or close-coupled design. Shaft sealing options are single or double acting mechanical seals, magnetic drives or canned motor designs.

The benefits are the interchangeability of the back pull-out assemblies and a reduction of spare parts costs.



Application

Pumps of the SIHI^{ISOchem} range meet the requirements on custom-built solutions in the process industry, in the following areas:

- chemical and pharmaceutical
- petrochemical
- paper
- plastics
- food processing
- plant engineering and construction.

Technical data

Flowrate:	max. 650 m ³ /h
Head:	max. 150 m
Speed:	max. 3600 rpm
Temperature:	max. 350 °C
Casing pressure:	max. 25 bar
Shaft seal:	- mechanical seal - magnetic drive - canned motor

Direction of rotation: clockwise, when viewed from drive end

Design

The SIHI^{ISOchem} hydraulics can be designed either with a closed impeller or a semi-open impeller.

The shaft seal chamber of the back pull-out assemblies can accommodate all usual mechanical seal types (single or double acting mechanical seal to ISO 3069/DIN 24960, cartridge mechanical seals, gas seals).

Close coupled pumps are furnished with standard motors.

Leak-free back pull-out assemblies with magnetic drive or canned motor meet the requirements with regard to job safety, operational reliability and environmental protection.

Magnetic drive isolation shroud materials are Hastel-loy, plastics or ceramics.

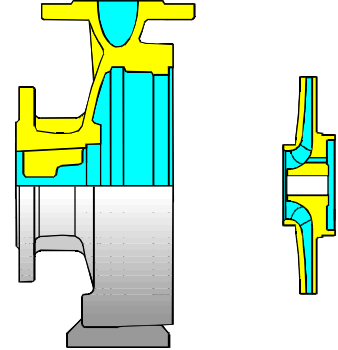
Options

- Temperatures up to 400 °C without external cooling
- Special materials
- Heating of all casing components that come into contact with the fluid handled
- Monitoring systems

Single-stage volute casing pumps
to ISO 5199/EN 25199 and ISO 2858/EN 22858
of either bare shaft end or close coupled
design with:

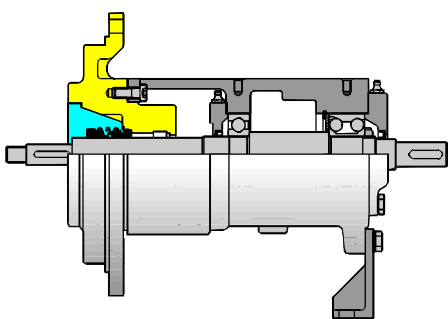
- mechanical seal
- magnetic coupling
- canned motor

Hydraulic



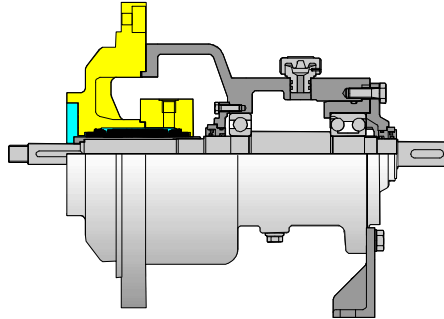
Volute casing with closed impeller

Backpull-out assemblies with bare shaft end



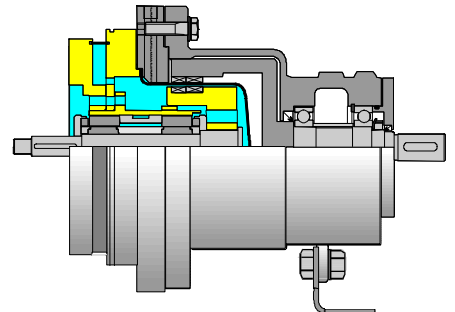
CBS

Pumps with single acting mechanical seal and grease lubricated ball bearings



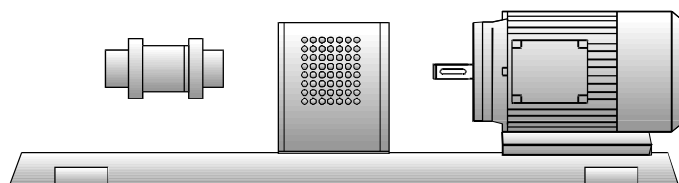
CBS

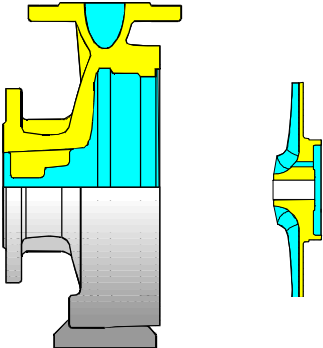
Pumps with single or double acting mechanical seal and oil lubricated ball bearings



CBM

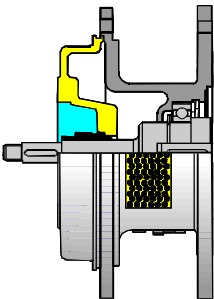
Pumps with magnetic coupling according to VDMA 24279





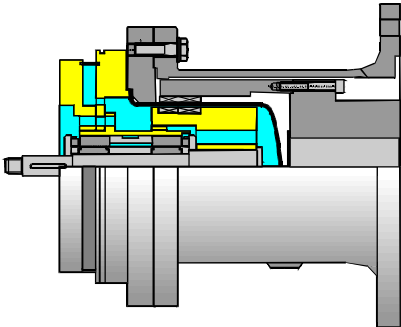
Volute casing with semi-open impeller

Close-coupled back pull-out assemblies



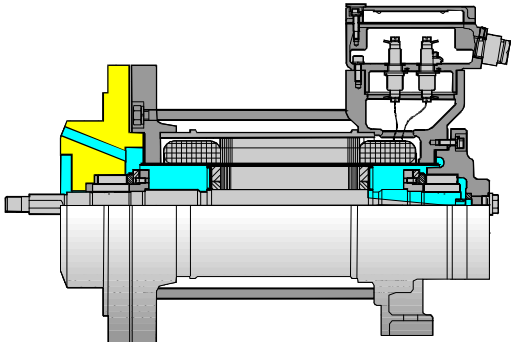
CBB

Pumps with single acting mechanical seal and lifetime-greased ball bearing



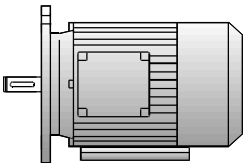
CBE

Pumps with magnetic coupling according to VDMA 24279



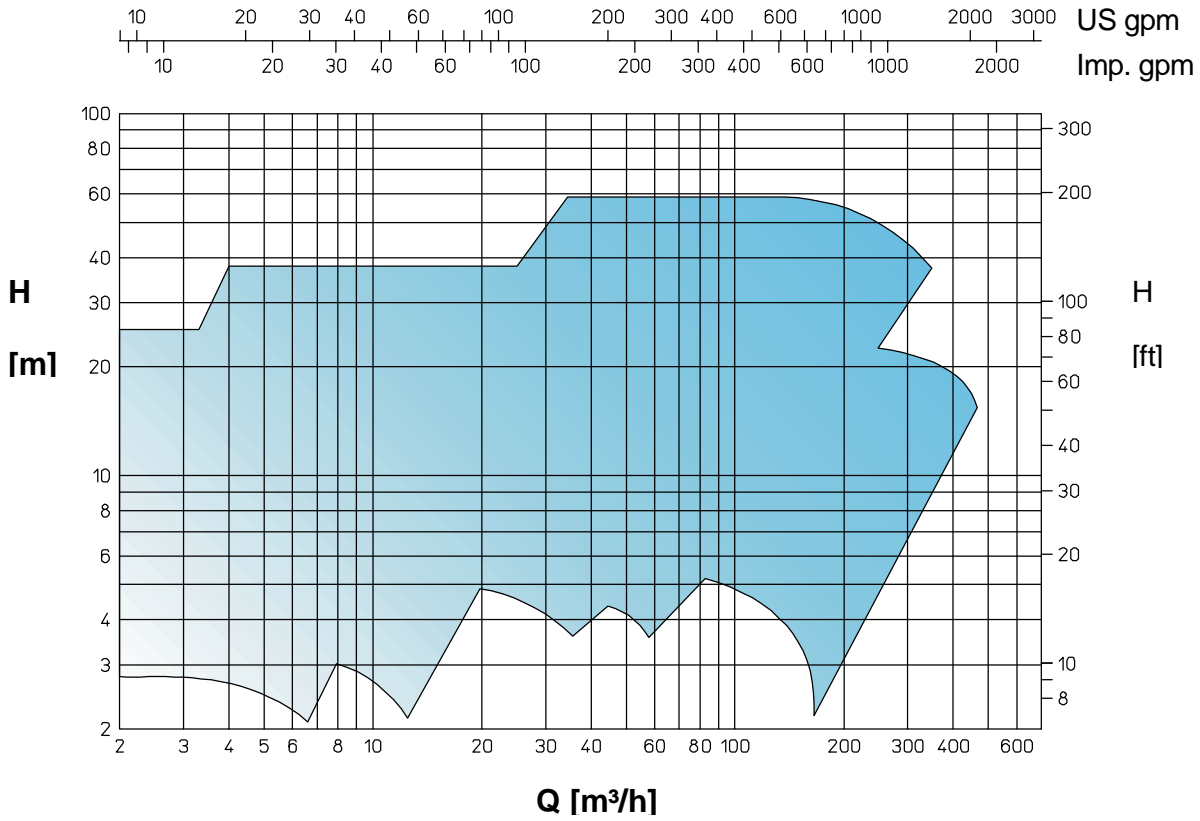
CBC

Pumps with standard or explosionproof canned motors

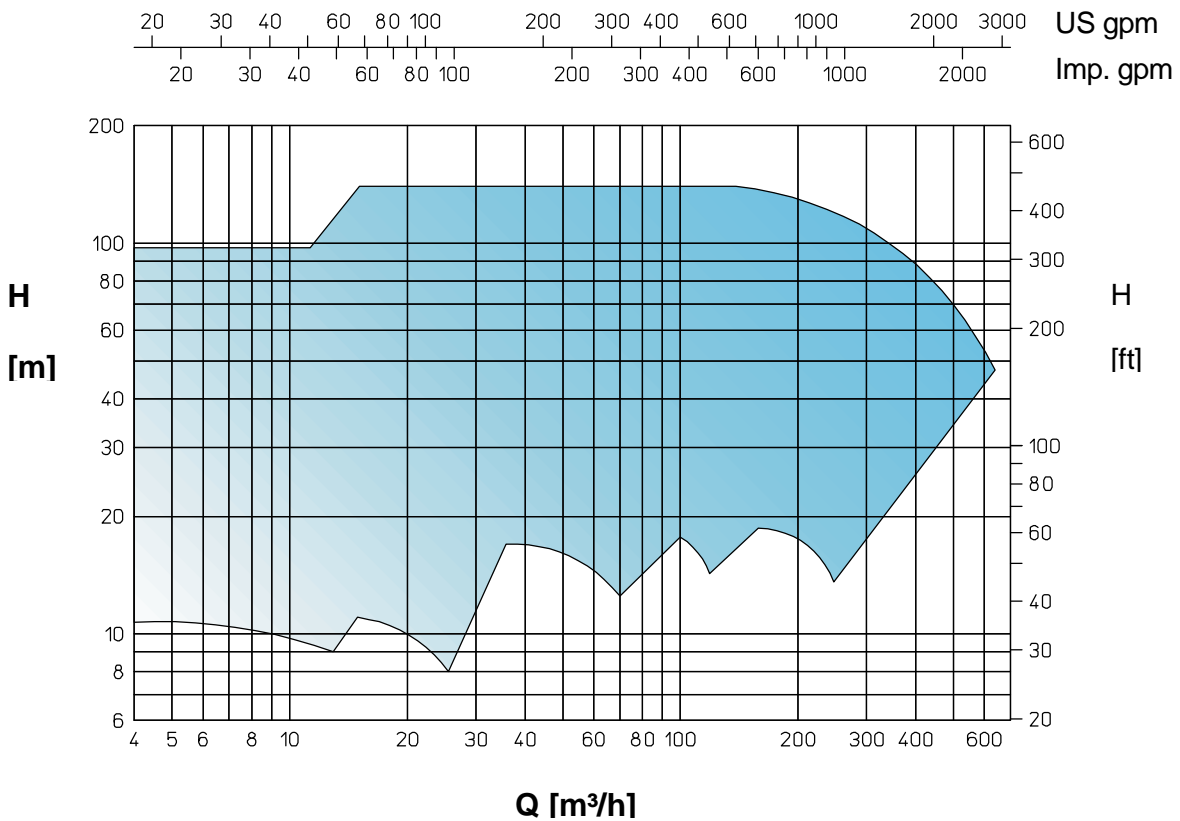


CBS, CBM, CBB, CBE, CBC Performance chart 50 Hz

n = 1450 rpm

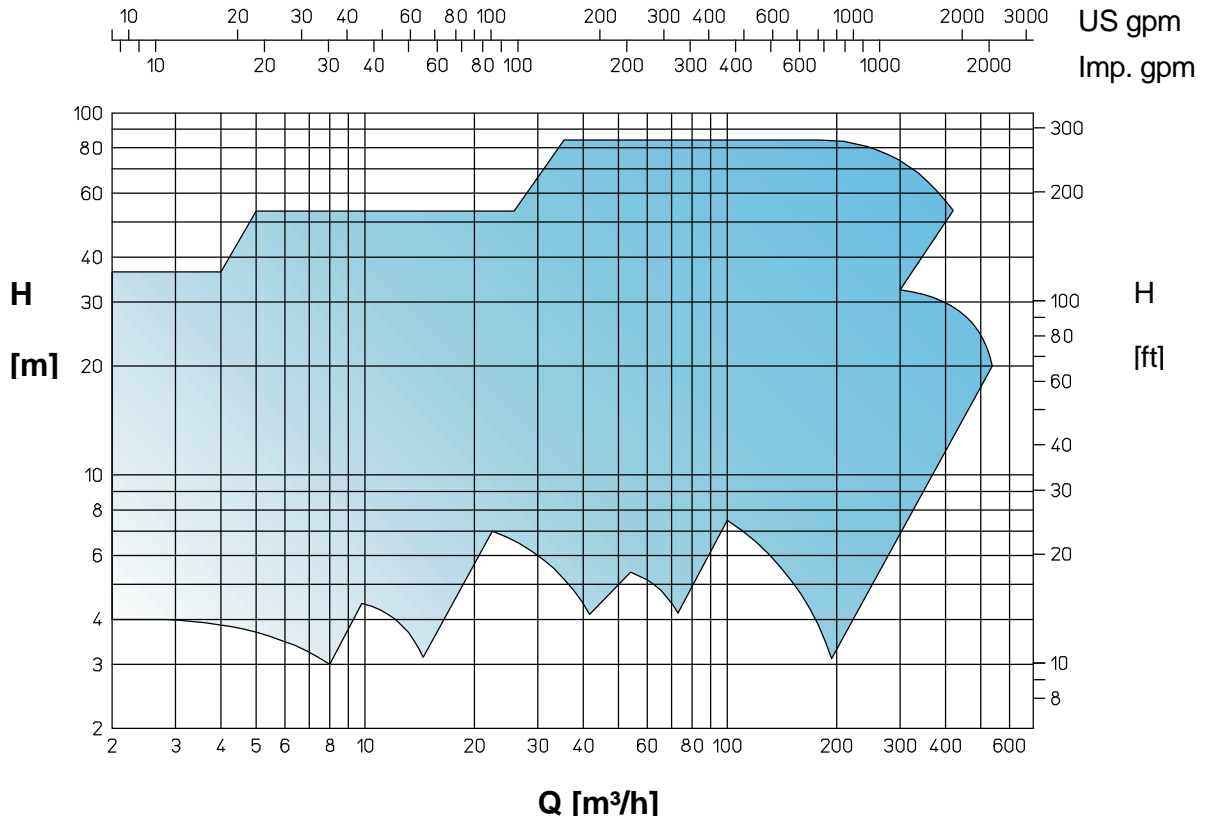


n = 2900 rpm

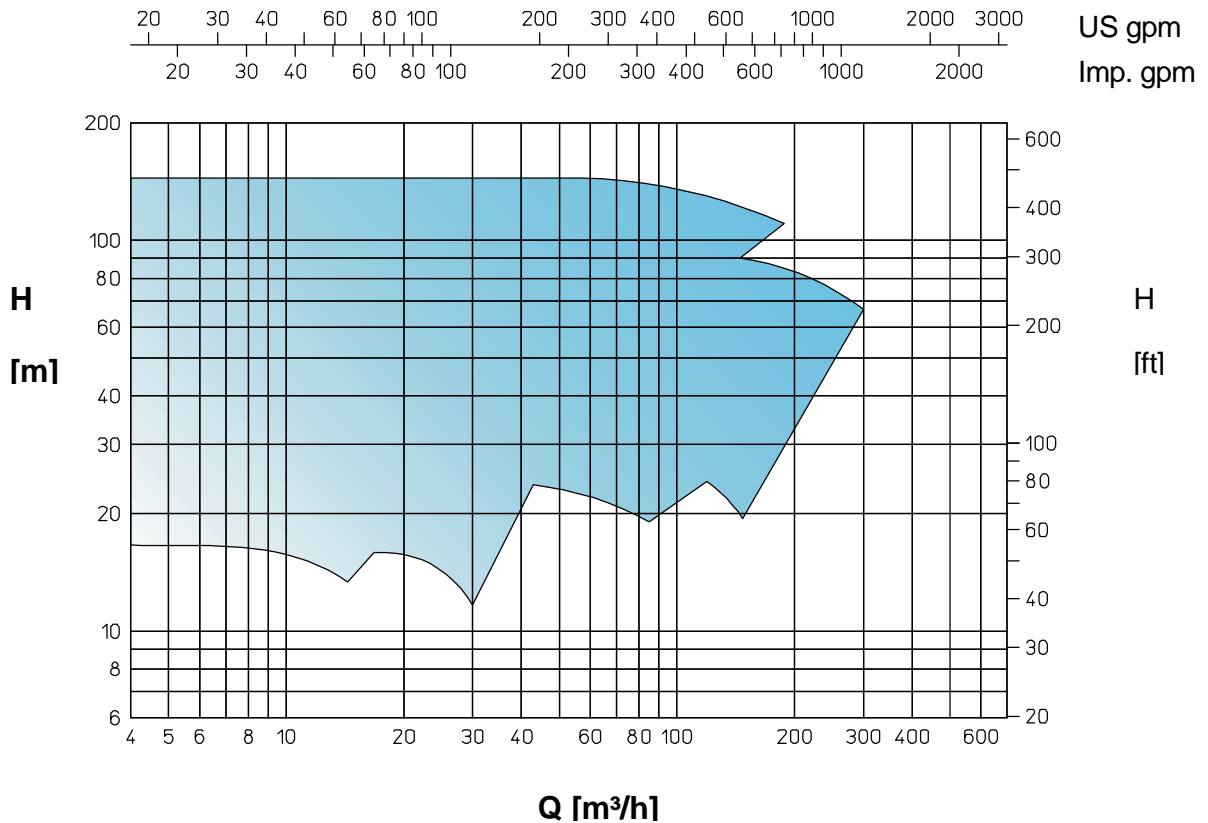


CBS, CBM, CBB, CBE, CBC Performance chart 60 Hz

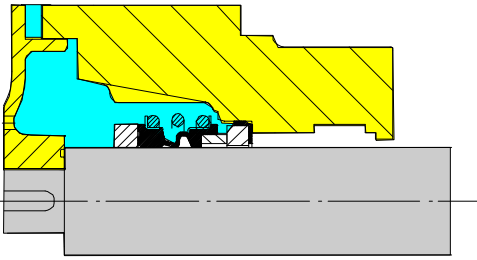
n = 1750 rpm



n = 3500 rpm

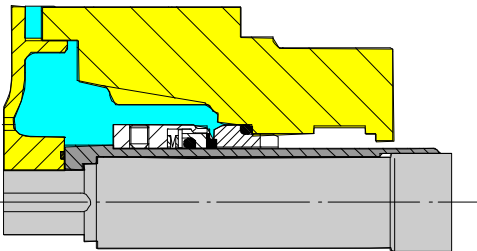


Mechanical seal designs to ISO 3069 / DIN 24960



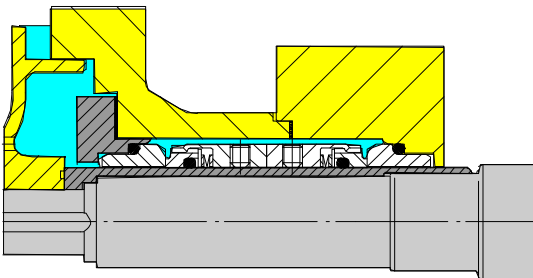
Mechanical seal with elastomeric bellows in conical shaft seal chamber

- shaft seal chamber with vortex breaker
- with or without quench connection, circulation connection
- without shaft sleeve



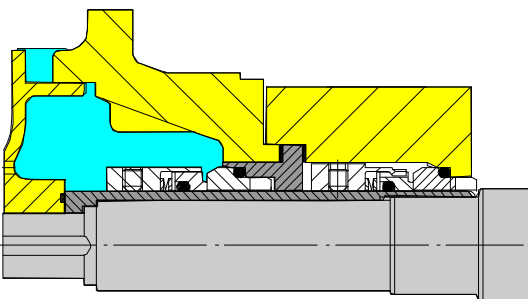
Single-acting mechanical seal in conical shaft seal chamber

- shaft seal chamber with vortex breaker
- with quench connection, circulation connection
- with or without shaft sleeve



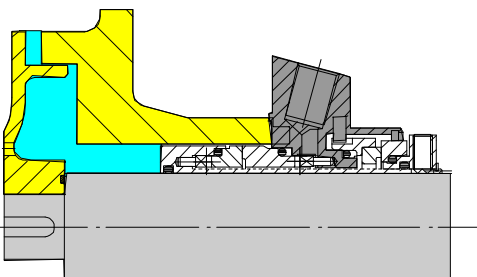
Double acting mechanical seal, back-to-back arrangement, in cylindrical shaft seal chamber

- with barrier liquid connection
- with shaft sleeve



Double-acting mechanical seal, tandem design, in conical shaft seal chamber

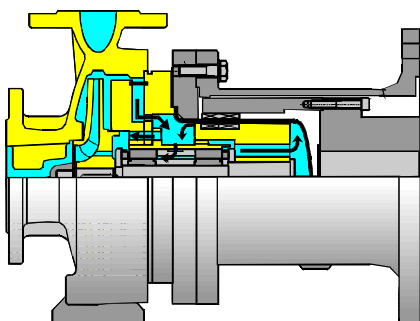
- with buffer liquid connection
- with shaft sleeve



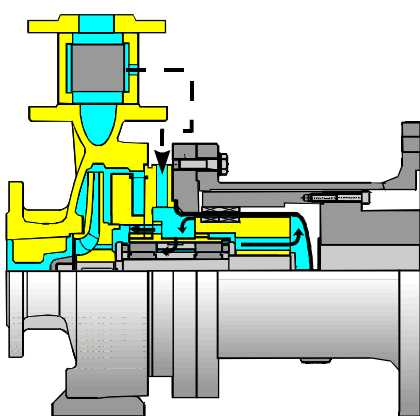
Cartridge type mechanical seal in cylindrical shaft seal chamber

- cartridge mechanical seal, single or double acting
- quench connection and buffer or barrier liquid connection
- with integrated shaft sleeve

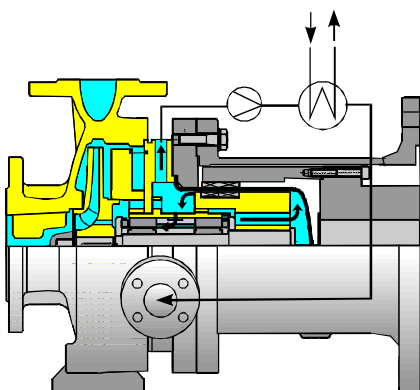
Magnetic coupling designs



Pump with internal strainer
Standard design

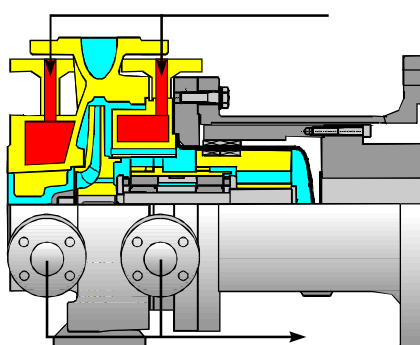


Pump with free flow filter for heavily contaminated liquids handled



Pump with external partial flow for

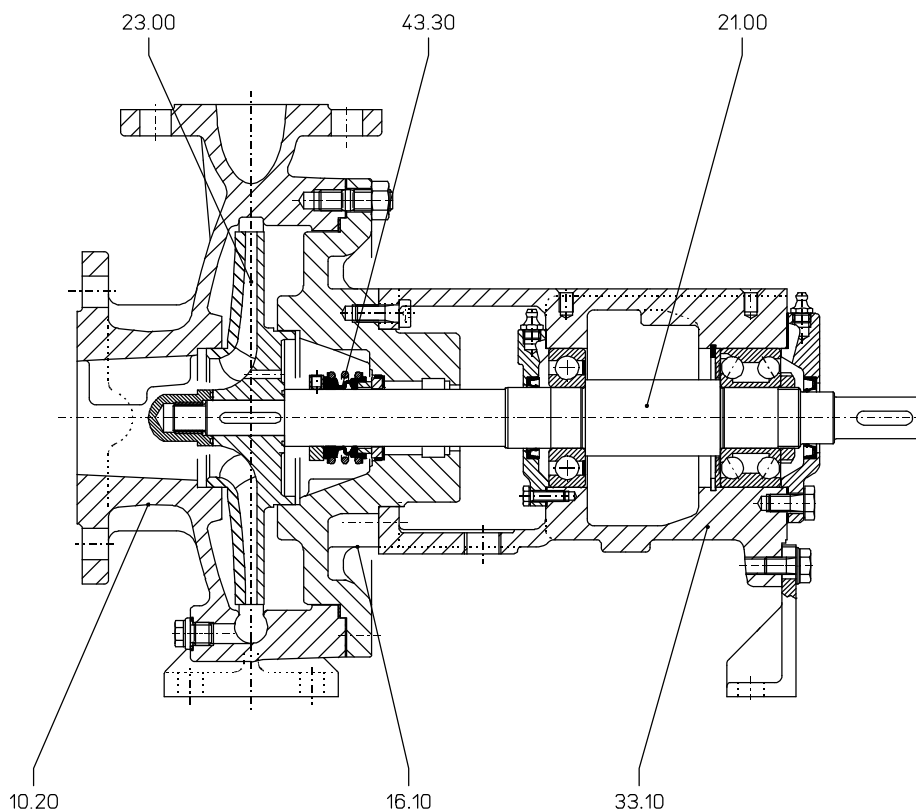
- extremely dirty fluids
- extremely hot liquids
- liquids containing magnetic substances
- liquids that must not be heated



Heatable pumps for handling melts

Back pull-out assemblies with bare shaft end Design with mechanical seal

Type CBS (bearing configuration **B** or **C**)



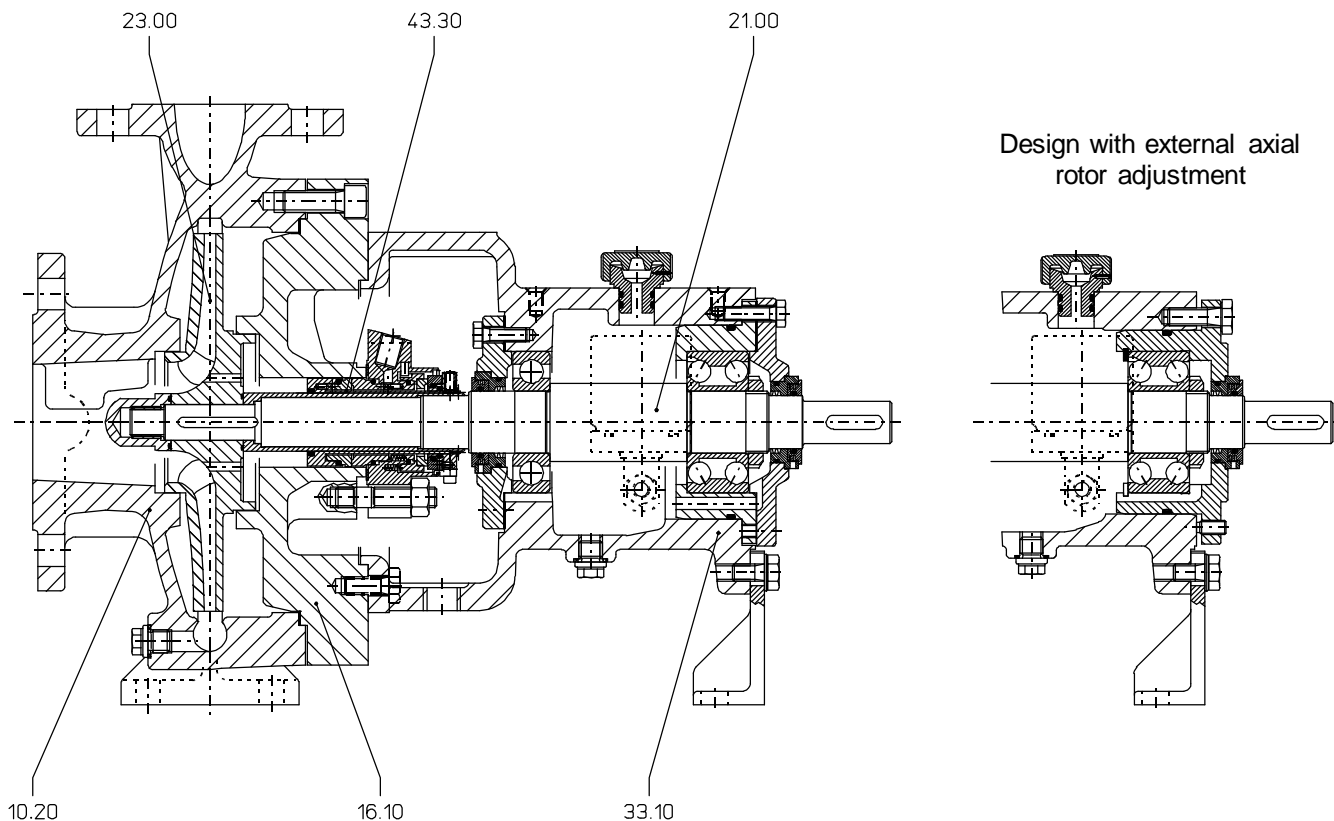
Materials of construction

Item	Designation	Material									
		1B	1E	1R	1U	4B	4R	5K	5L	5G	5H
10.20	Volute casing	GGG-40.3				1.4408		Alloy R48 1.4517*		Alloy R53 2.4607*	
16.10	Casing cover	GGG-40.3/GS-C25				1.4408		Alloy R48 1.4517*		Alloy R.53 2.4607*	
21.00	Shaft	CK 45 N		1.4571		CK 45 N	1.4571	CK 45 N	1.4462	CK 45 N	2.4610
54.30	Shaft sleeve	1.4571		-		1.4571	-	1.4462	-	2.4610	-
23.00	Impeller	GG-25	1.4408	GG-25	1.4408	1.4408		Alloy R48 1.4517*		Alloy R53 2.4607*	
33.00	Bearing housing	GG-25									
43.30	Mechanical seal	various material combinations									

* similar material to DIN 17007

Back pull-out assemblies with bare shaft end Design with mechanical seal

Type CBS (bearing configuration S or T)

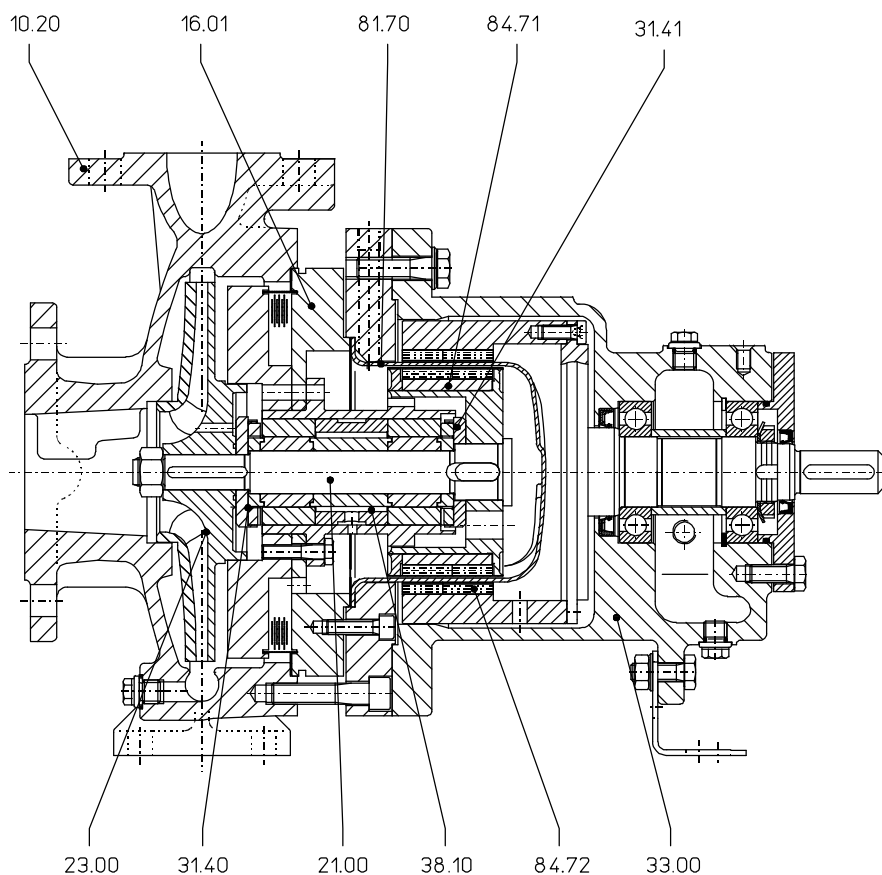


Materials of construction

Item	Designation	Material									
		1B	1E	1R	1U	4B	4R	5K	5L	5G	5H
10.20	Volute casing	GGG-40.3				1.4408		Alloy R48 1.4517*		Alloy R53 2.4607*	
16.10	Casing cover	GGG-40.3/GS-C25				1.4408		Alloy R48 1.4517*		Alloy R.53 2.4607*	
21.00	Shaft	CK 45 N		1.4571		CK 45 N	1.4571	CK 45 N	1.4462	CK 45 N	2.4610
54.30	Shaft sleeve	1.4571		-		1.4571	-	1.4462	-	2.4610	-
23.00	Impeller	GG-25	1.4408	GG-25	1.4408	1.4408		Alloy R48 1.4517*		Alloy R53 2.4607*	
33.00	Bearing housing	GG-25									
43.30	Mechanical seal	various material combinations									

* similar material to DIN 17007

Back pull-out assemblies with bare shaft end Design with magnetic coupling

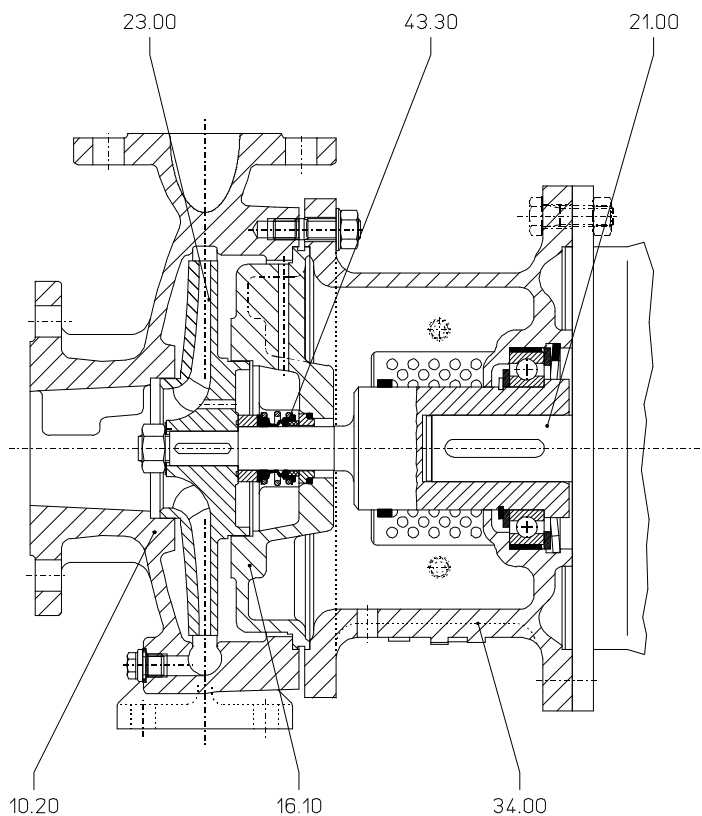
Type CBM

Materials of construction

Item	Designation	Materials			
		1B	4B	5L	5H
10.20	Volute casing	GGG-40.3	1.4408	Alloy R48 1.4517*	Alloy R53 2.4607*
16.01	Casing cover	GGG-40.3	1.4408	Alloy R48 1.4517*	Alloy R53 2.4607*
21.00	Shaft	1.4462			2.4610
23.00	Impeller	GG-25	1.4408	Alloy R48 1.4517*	Alloy R53 2.4607*
31.40, 31.41	Sleeve bearing	1.4571/SSiC			2.4610/SSiC
33.00	Bearing housing	GGG-40			
38.10	Bearing insert	1.4462/SSiC			2.4610/SSiC
81.70	Isolation shroud	2.4610 / ceramic / CFK			
84.71	Inner magnet	1.4571/SmCo			2.4610/SmCo
84.72	Outer magnet	1.0570/SmCo			

* similar material to DIN 17007

Close-coupled back pull-out assemblies Design with mechanical seal

Type CBB

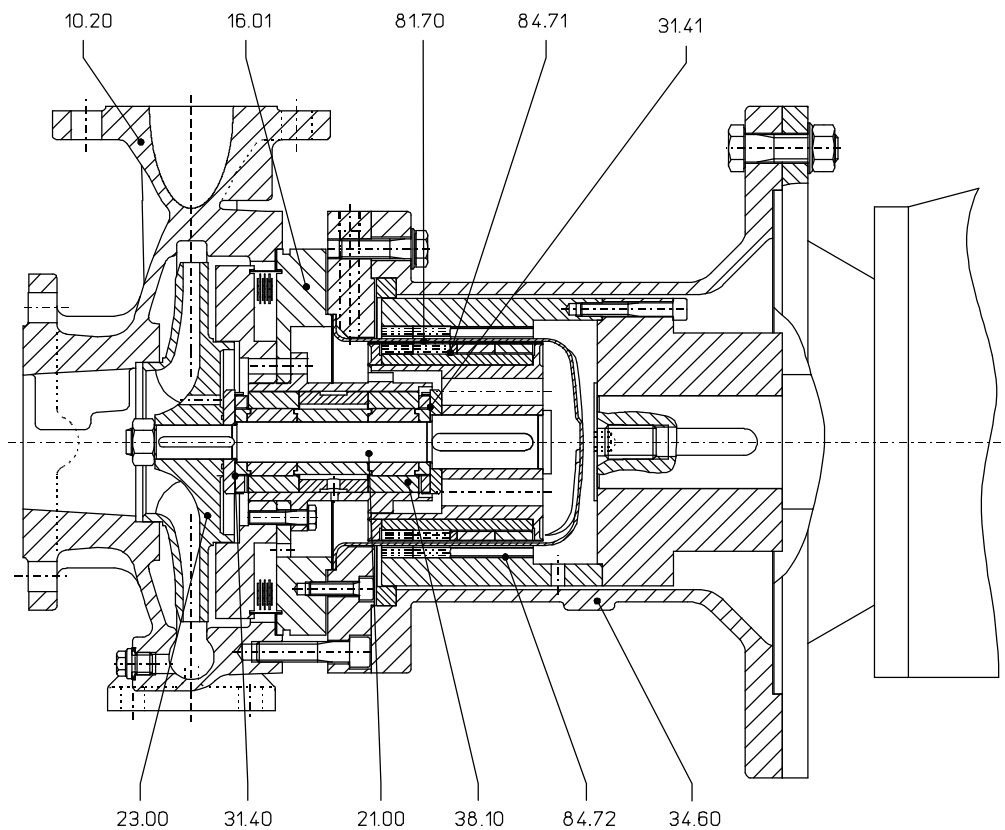


Materials of construction

Item	Designation	Material	
		1B	4B
10.20	Volute casing	GGG-40.3	1.4408
16.01	Casing cover	GGG-40.3	1.4408
21.00	Shaft	1.4021	1.4571
23.00	Impeller	GG-25	1.4408
34.00	Lantern	GGG-40	
43.30	Mechanical seal	various material combinations	

Close-coupled back pull-out assemblies Design with magnetic coupling

Type CBE



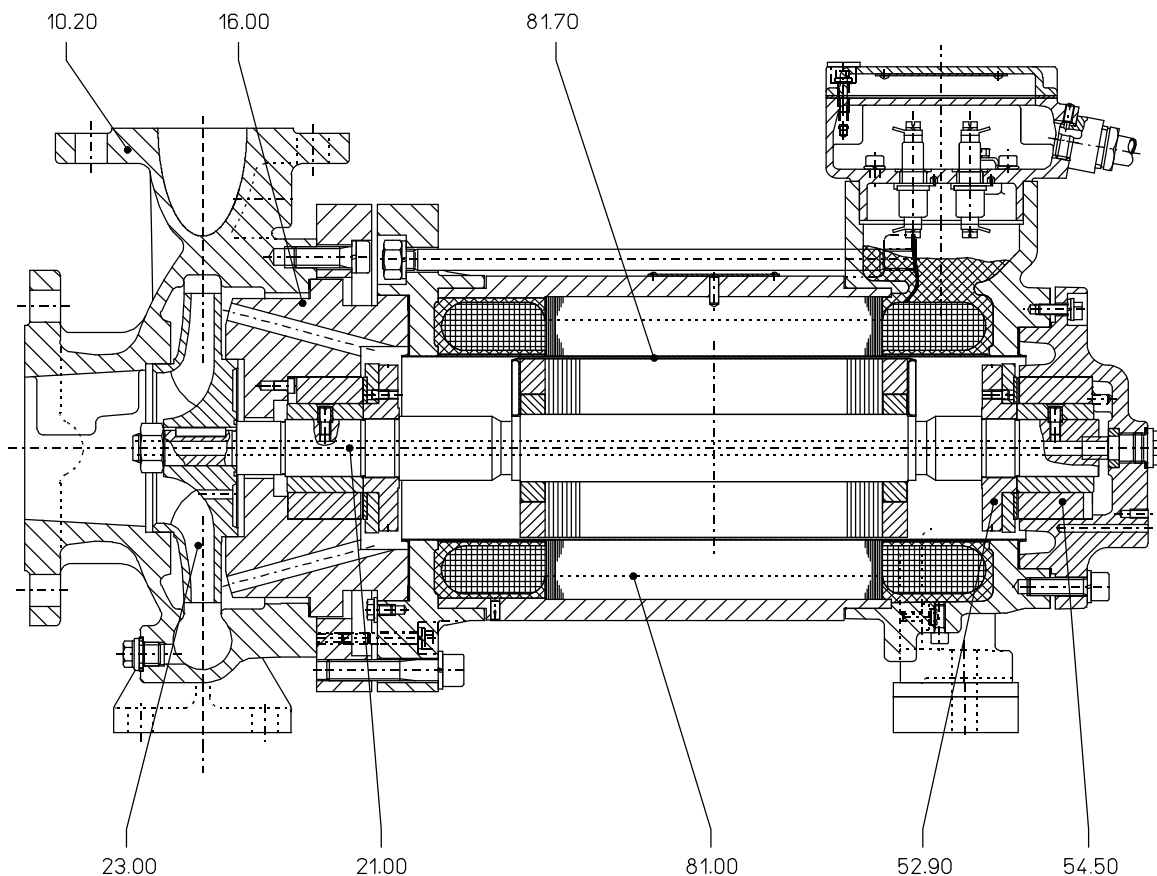
Materials of construction

Item	Designation	Materials			
		1B	4B	5L	5H
10.20	Volute casing	GGG-40.3	1.4408	Alloy R48 1.4517*	Alloy R53 2.4607*
16.01	Casing cover	GGG-40.3	1.4408	Alloy R48 1.4517*	Alloy R53 2.4607*
21.00	Shaft	1.4462			2.4610
23.00	Impeller	GG-25	1.4408	Alloy R48 1.4517*	Alloy R53 2.4607*
31.40, 31.41	Sleeve bearing	1.4571/SSiC			2.4610/SSiC
34.60	Lantern	GGG-40			
38.10	Bearing insert	1.4462/SSiC			2.4610/SSiC
81.70	Isolation shroud	2.4610 / ceramic / CFK			
84.71	Inner magnet	1.4571/SmCo			2.4610/SmCo
84.72	Outer magnet	1.0570/SmCo			

* similar material to DIN 17007

Close-coupled back pull-out assemblies Design with canned motor

Type CBC



Materials of construction

Item	Designation	Materials			
		1B	4B	5L	5H
10.20	Volute casing	GGG-40.3	1.4408	Alloy R48 1.4517*	Alloy R53 2.4607*
16.01	Casing cover	GGG-40.3	1.4408	Alloy R48 1.4517*	Alloy R53 2.4607*
21.00	Shaft	1.4571			2.4610
52.90	Bearing ring carrier	1.4462			2.4610
54.50	Sleeve bearing	PTFE/SSiC			
81.00	Stator casing	GG-25			
8170	Can	2.4610			

* similar material to DIN 17007

Operating limits

Temperature / Power

Type	Lubrication	Min. Temperature	Max. Temperature	Max. Power at 2900 rpm
CBS	Grease	-40°C	+140°C	160 kW
	Oil	-40°C	+350°C	
CBM	Grease	-40°C	+180°C	65 kW
	Oil	-40°C	+300°C	
CBB	Grease	-40°C	+140°C	37 kW
CBE	Liquid handled	-40°C	+300°C*	90 kW
CBC	Liquid handled	-40°C	+300°C	105 kW

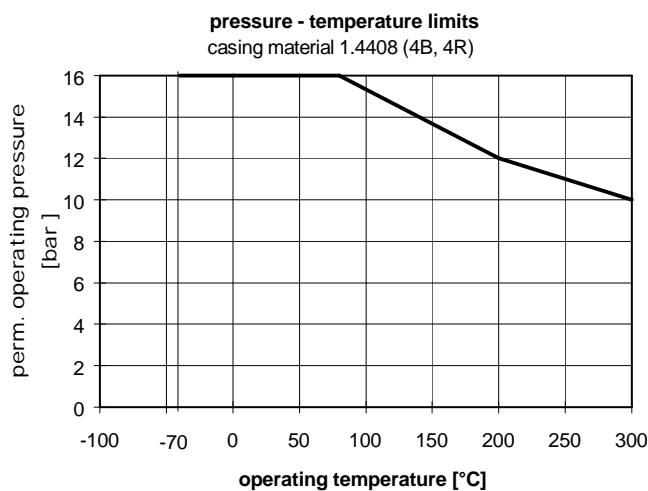
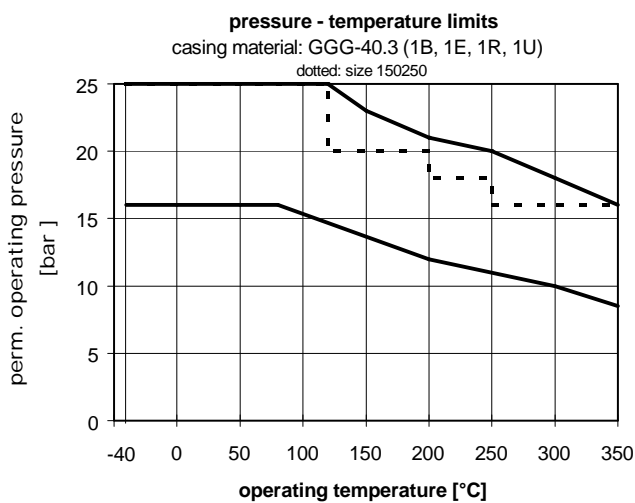
* uncooled up to 400 °C possible with thermal barrier

Speed

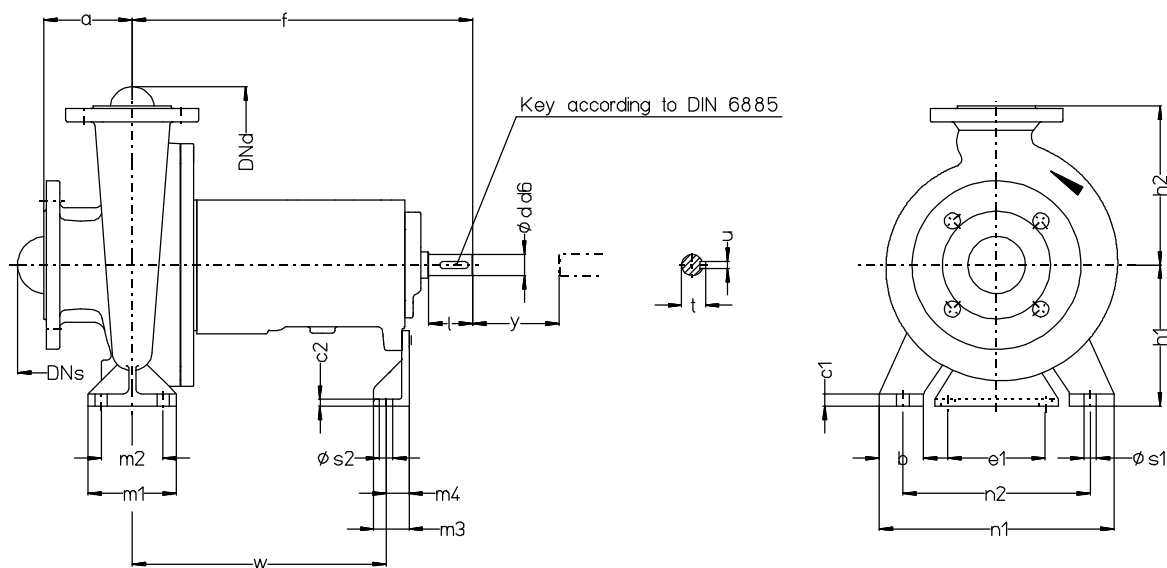
Size				Max. Speed rpm
32125	32160	32200	32250 ¹⁾	3600
40125	40160	40200	40250 ¹⁾	
	50160	50200	50250 ¹⁾	
	65160	65200	65250 ¹⁾	
	80160	80200		
100200	100250	40315 ²⁾		3000
		50315 ²⁾		
		65315 ²⁾		
		80315 ²⁾		
		80400		1800
125250	125315	100400		
150250		125400		

- 1) Impeller material 1.4408
Impeller material GG-25: n_{max} = 3000 rpm
- 2) Impeller material 1.4408
Impeller material GG-25: n_{max} = 1800 rpm

Casing pressure



**Table of dimensions - Pumps with bare shaft end to ISO 2858 / EN 22858
Types CBS, CBM**

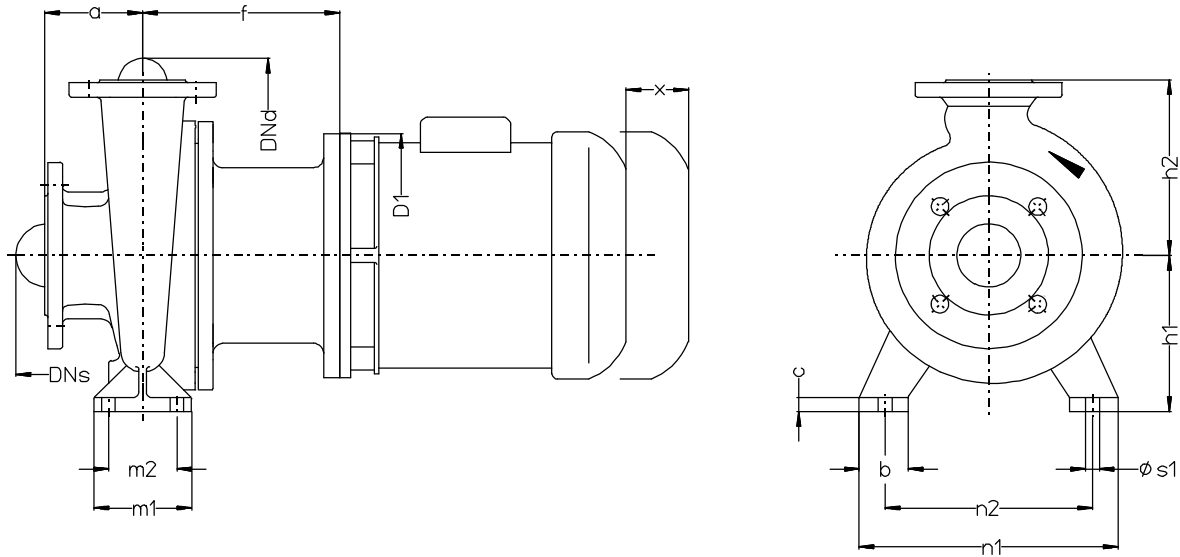


y: distance between pump shaft and motor shaft

Size	Pump dimension				Foot dimension												Shaft end dimension for removal						Pump weight kg				
	DN _d	DN _s	a	f	h ₁	h ₂	b	c ₁	c ₂	m ₁	m ₂	m ₃	m ₄	n ₁	n ₂	s ₁	s ₂	e ₁	e ₂	w	d	l	t	u	y	CBS	CBM
32125			80	385	112	140	50	14	8	100	70	40	28	190	140	14	15	110	140	285	24	50	27	8	140	38	-
32160	32	50	80	385	160	160	50	14	8	100	70	40	28	240	190	14	15	110	140	285	24	50	27	8	140	44	57
32200			80	385	160	180	50	14	8	100	70	40	28	240	190	14	15	110	140	285	24	50	27	8	140	53	76
32250			100	500	180	225	65	14	8	125	95	40	28	320	250	14	15	110	140	370	32	80	35	10	140	91	127
40125			80	385	112	140	50	14	8	100	70	40	28	210	160	14	15	110	140	285	24	50	27	8	140	38	-
40160			80	385	132	160	50	14	8	100	70	40	28	240	190	14	15	110	140	285	24	50	27	8	140	45	59
40200	40	65	100	385	160	180	50	14	8	100	70	40	28	265	212	14	15	110	140	285	24	50	27	8	140	55	79
40250			100	500	180	225	65	14	8	125	95	40	28	320	250	14	15	110	140	370	32	80	35	10	140	93	138
40315			125	500	200	250	65	14	88	125	95	40	28	345	280	14	15	110	140	370	32	80	35	10	140	117	260
50160			100	385	160	180	50	14	8	100	70	40	28	265	212	14	15	110	140	285	24	50	27	8	140	54	69
50200	50	80	100	385	160	200	50	14	8	100	70	40	28	265	212	14	15	110	140	285	24	50	27	8	140	58	84
50250			125	500	180	225	65	14	8	125	95	40	28	320	250	14	15	110	140	370	32	80	35	10	140	96	167
50315			125	500	225	280	65	14	8	125	95	40	28	345	280	14	15	110	140	370	32	80	35	10	140	122	280
65160			100	500	160	200	65	14	8	125	95	40	28	280	212	14	15	110	140	370	32	80	35	10	140	72	75
65200	65	100	100	500	180	225	65	14	8	125	95	40	28	320	250	14	15	110	140	370	32	80	35	10	140	83	147
65250			125	500	200	250	80	16	8	160	120	40	28	360	280	18	15	110	140	370	32	80	35	10	140	106	256
65315			125	530	225	280	80	16	88	160	120	40	28	400	315	18	15	110	140	370	42	110	45	12	140	136	-
80160			125	500	180	225	65	14	8	125	95	40	28	320	250	14	15	110	140	370	32	80	35	10	140	82	107
80200			125	500	180	250	65	14	8	125	95	40	28	345	280	14	15	110	140	370	32	80	35	10	140	92	195
80250	80	125	125	500	225	280	80	16	8	160	120	40	28	400	315	18	15	110	140	370	32	80	35	10	140	113	261
80315			125	530	250	315	80	16	8	160	120	40	28	400	315	18	15	110	140	370	42	110	45	12	140	147	-
80400			125	530	280	355	80	16	8	160	120	40	28	435	355	18	15	110	140	370	42	110	45	12	140	204	-
100200			125	500	200	280	80	16	8	160	120	40	28	360	280	18	15	110	140	370	32	80	35	10	140	106	207
100250	100	125	140	530	225	280	80	16	8	160	120	40	28	400	315	18	15	110	140	370	42	110	45	12	140	135	-
100315			140	530	250	315	80	16	8	160	120	40	28	400	315	18	15	110	140	370	42	110	45	12	140	157	-
100400			140	530	280	355	100	18	8	200	150	40	28	500	400	23	15	110	140	370	42	110	45	12	140	199	-
125250	125	150	140	530	250	355	80	16	8	160	120	40	28	400	315	18	15	110	140	370	42	110	45	12	140	142	-
125315			140	530	280	355	100	18	8	200	150	40	28	500	400	23	15	110	140	370	42	110	45	12	140	176	-
125400			140	530	315	400	100	18	8	200	150	40	28	500	400	23	15	110	140	370	42	110	45	12	140	209	-
150250	150	200	160	530	280	375	100	20	8	200	150	40	28	500	400	23	15	110	140	370	42	110	45	12	140	202	-

All dimensions in mm, tolerances to EN 735

**Table of dimensions - Close-coupled pumps with mechanical seal
Type CBB**

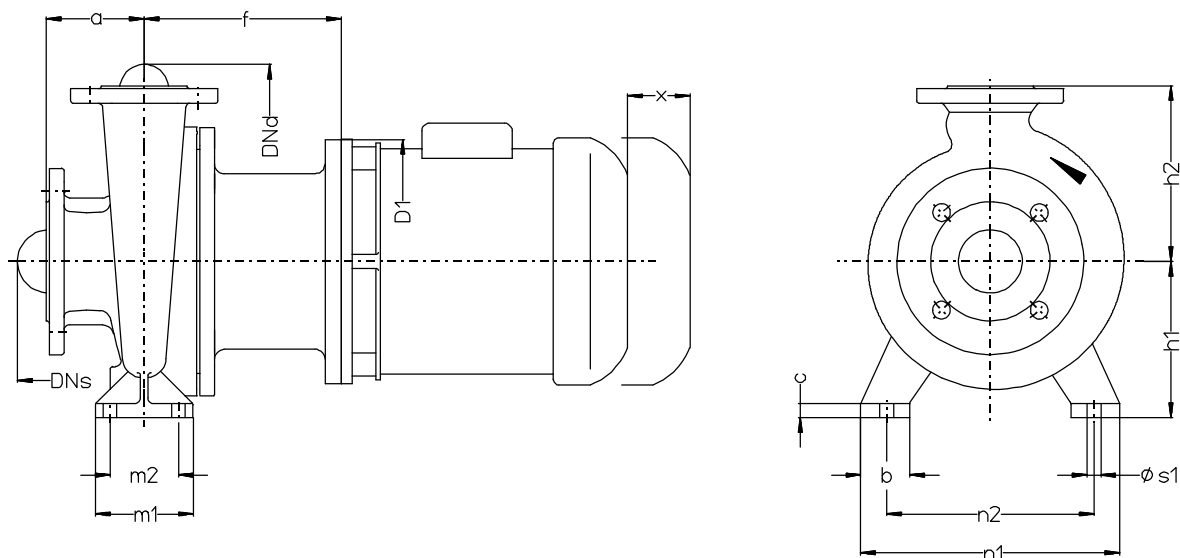


x: dimension for removal

Size	Motor size	Pump dimensions														Pump weight kg	
		DN _d	DN _s	a	b	c	f	h1	h2	m1	m2	n1	n2	s1	x		D1
32125	80b,90S,90L			80	50	14	167	112	140	100	70	190	140	14	90	200	30
32160	80a,90S,90L			80	50	14	167	132	160	100	70	240	190	14	90	200	34
	100L,112M			80	50	14	162	132	160	100	70	240	190	14	90	250	34
32200	80b,90S			80	50	14	167	160	180	100	70	240	190	14	90	200	41
	112M	32	50	80	50	14	167	160	180	100	70	240	190	14	90	250	41
32250	132S			80	50	14	210	160	180	100	70	240	190	14	90	300	41
	90S,90L			100	65	14	177	180	225	125	70	320	250	14	90	200	52
	100L			100	65	14	177	180	225	125	95	320	250	14	90	250	52
	132S			100	65	14	210	180	225	125	95	320	250	14	90	300	52
	160M			100	65	14	210	180	225	125	95	320	250	14	90	350	52
	40125	90S,90L			80	50	14	162	112	140	100	70	210	160	14	90	200
	100L,112M			80	50	14	162	112	140	100	70	210	160	14	90	250	33
	40160	80a,80b			80	50	14	167	132	160	100	70	240	190	14	90	200
	90L			80	50	14	162	132	160	100	70	240	190	14	90	200	36
	100L,112M			80	50	14	162	132	160	100	70	240	190	14	90	250	36
	132S			80	50	14	210	132	160	100	70	240	190	14	90	300	36
40200	80b,90S,90L	40	65	100	50	14	167	160	180	100	70	265	212	14	90	200	42
	112M			100	50	14	210	160	180	100	70	265	212	14	90	250	42
	132S			100	50	14	210	160	180	100	70	265	212	14	90	300	42
	160M			100	50	14	210	160	180	100	70	265	212	14	90	350	42
40250	90S,90L			100	65	14	177	180	225	125	95	320	250	14	100	200	52
	100L			100	65	14	177	180	225	125	95	320	250	14	100	250	52
	160M,160L,180M			100	65	14	210	180	225	125	95	320	250	14	100	350	52
50160	80b,90S,90L			100	50	14	167	160	180	100	70	265	212	14	90	200	39
	112M			100	50	14	162	160	180	100	70	265	212	14	90	250	39
	132S			100	50	14	210	160	180	100	70	265	212	14	90	300	39
	160M			100	50	14	210	160	180	100	70	265	212	14	90	350	39
50200	90S,90L			100	50	14	167	160	200	100	70	265	212	14	90	200	44
	100L	50	80	100	50	14	167	160	200	100	70	265	212	14	90	250	44
	132S			100	50	14	210	160	200	100	70	265	212	14	90	300	44
	160M,160L			100	50	14	210	160	200	100	70	265	212	14	90	350	44
50250	100L,112M			125	65	14	177	180	225	125	95	320	250	14	100	250	54
	160L,180M			125	65	14	210	180	225	125	95	320	250	14	100	350	54
	200L			125	65	14	210	180	225	125	95	320	250	14	100	400	54

All dimensions in mm, tolerances to EN 735

**Table of dimensions - Close-coupled pumps with mechanical seal (cont'd)
Type CBB**



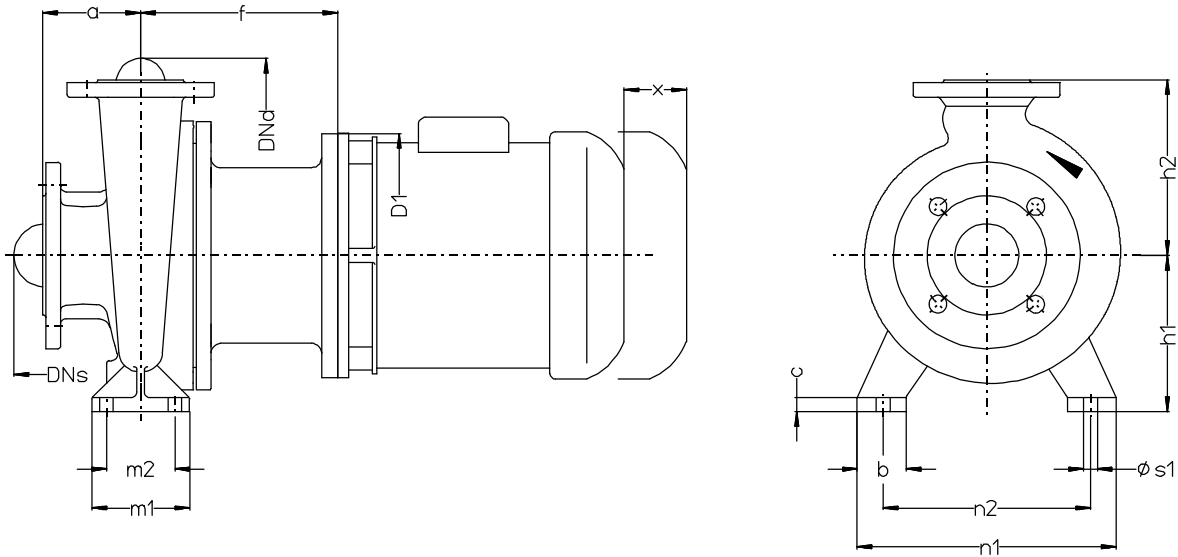
x: dimension for removal

Size	Motor size	Pump dimensions														Pump weight kg	
		DN _d	DN _s	a	b	c	f	h1	h2	m1	m2	n1	n2	s1	x		D1
65160	80b,90S,90L			100	65	14	167	160	200	125	95	280	212	14	90	200	47
	100L			100	65	14	162	160	200	125	95	280	212	14	90	250	47
	132S			100	65	14	210	160	200	125	95	280	212	14	90	300	47
	160M			100	65	14	210	160	200	125	95	280	212	14	90	350	47
65200	90L			100	65	14	167	180	225	125	95	320	250	14	90	200	49
	100L,112M	65	100	100	65	14	167	180	225	125	95	320	250	14	90	250	49
	160M,160L,180M			100	65	14	210	180	225	125	95	320	250	14	90	350	49
	200L			100	65	14	210	180	225	125	95	320	250	14	90	400	49
65250	100L,112M			125	80	16	187	200	250	160	120	360	280	16	130	250	70
	132S,132N			125	80	16	220	200	250	16	120	360	280	16	130	300	70
	160L,180M			125	80	16	220	200	250	160	120	360	280	16	130	350	70
	200L			125	80	16	220	200	250	160	120	360	280	16	130	400	70
80160	90S,90L			125	65	14	167	180	225	125	95	320	250	14	90	200	55
	100L			125	65	14	162	180	225	125	95	320	250	14	90	250	55
	132S			125	65	14	210	180	225	125	95	320	250	14	90	300	55
	160M,160L,180M			125	65	14	210	180	225	125	95	320	250	14	90	350	55
80200	100L,112M	80	125	125	65	14	183	180	250	125	95	345	280	14	120	250	66
	132S			125	65	14	226	180	250	125	95	345	280	14	120	300	66
	160L,180M			125	65	14	226	180	250	125	95	345	280	14	120	350	66
	200L			125	65	14	226	180	250	125	95	345	280	14	120	400	66
80250	100L,112M			125	80	16	187	225	280	160	120	400	315	18	130	250	76
	132S,132N			125	80	16	220	225	280	160	120	400	315	18	130	300	76
100200	100L,112M	100	125	125	80	16	183	200	280	160	120	360	280	18	115	250	89

All dimensions in mm, tolerances to EN 735

Table of dimensions - Close-coupled magnetic drive pumps

Type CBE

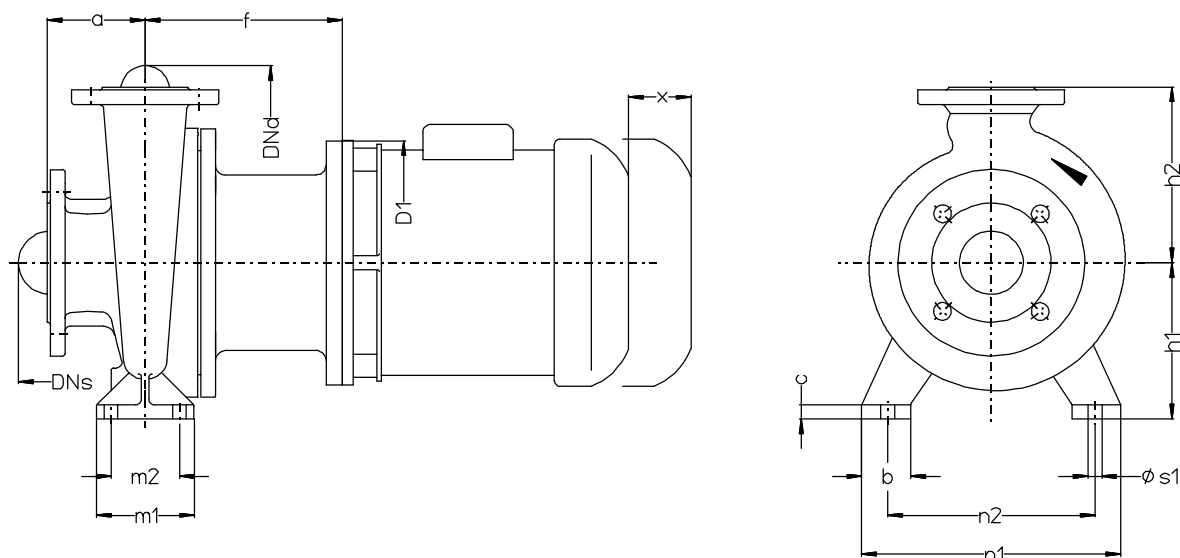


x: dimension for removal

Size	Motor size	Pump dimensions															Pump weight kg
		DN _d	DN _s	a	b	c	f	h ₁	h ₂	m ₁	m ₂	n ₁	n ₂	s	x	D1	
32160	100L, 112M			80	50	14	302	132	160	100	70	240	190	14	90	250	57
	132S			80	50	14	322	132	160	100	70	240	190	14	90	300	57
	160M			80	50	14	352	132	160	100	70	240	190	14	90	350	57
32200	132S	32	50	80	50	14	322	160	180	100	70	240	190	14	90	300	76
	160M, 160L			80	50	14	352	160	180	100	70	240	190	14	90	350	76
32250	160M, 160L, 180M			100	65	14	351,5	180	225	125	95	320	250	14	90	350	127
	200L			100	65	14	351,5	180	225	125	95	320	250	14	90	400	127
40160	112M			80	50	14	302	132	160	100	70	240	190	14	90	250	59
	132S			80	50	14	322	132	160	100	70	240	190	14	90	300	59
	160M			80	50	14	352	132	160	100	70	240	190	14	90	350	59
40200	132S			100	50	14	322	160	180	100	70	265	212	14	90	300	79
	160M, 160L, 180M			100	50	14	352	160	180	100	70	265	212	14	90	350	79
40250	160M, 160L, 180M			100	65	14	351,5	180	225	125	95	320	250	14	100	350	138
	200L			100	65	14	351,5	180	225	125	95	320	250	14	100	400	138
	225M			100	65	14	351,5	180	225	125	95	320	250	14	100	450	138
	250M	40	65	100	65	14	381,5	180	225	125	95	320	250	14	100	550	138
40315	180M			125	65	14	431,5	200	250	125	95	345	280	14	130	350	260
	200L			125	65	14	431,5	200	250	125	95	345	280	14	130	400	260
	225M			125	65	14	461,5	200	250	125	95	345	280	14	130	450	260
	250M, 280S, 280M			125	65	14	461,5	200	250	125	95	345	280	14	130	550	260
50160	132S			100	50	14	322	160	180	100	70	265	212	14	90	300	69
	160M, 160L, 180M			100	50	14	352	160	180	100	70	265	212	14	90	350	69
	200L			100	50	14	352	160	180	100	70	265	212	14	90	400	69
50200	160M, 160L, 180M			100	50	14	352	160	200	100	70	265	212	14	90	350	84
	200L			100	50	14	352	160	200	100	70	265	212	14	90	400	84
50250	180M			125	65	14	351,5	180	225	125	95	320	250	14	100	350	167
	200L			125	65	14	351,5	180	225	125	95	320	250	14	10	400	167
	225M	50	80	125	65	14	351,5	180	225	125	95	320	250	14	100	450	167
	250M, 280S			125	65	14	381,5	180	225	125	95	320	250	14	100	550	167
50315	200L			125	65	14	431,5	225	280	125	95	345	280	14	130	400	280
	225M			125	65	14	431,5	225	280	125	95	345	280	14	130	450	280
	250M, 280S, 280M			125	65	14	461,5	225	280	125	95	345	280	14	130	550	280
	315S			125	65	14	461,5	225	280	125	95	345	280	14	130	660	280

All dimensions in mm, tolerances to EN 735

Table of dimensions - Close-coupled magnetic drive pumps (cont'd)
Type CBE

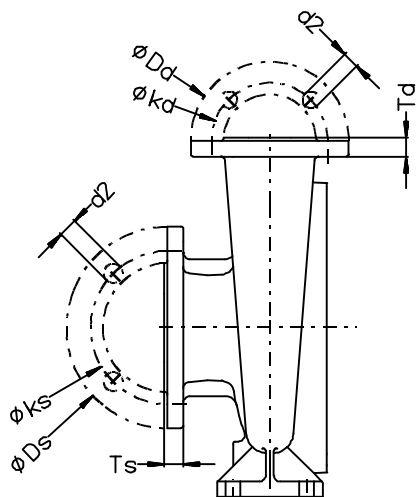


x: dimension for removal

Size	Motor size	Pump dimensions														Pump weight	
		DN _d	DN _s	a	b	c	f	h ₁	h ₂	m ₁	m ₂	n ₁	n ₂	s	x	D ₁	kg
65160	132S			100	65	14	321,5	160	200	125	95	280	212	14	90	300	75
	160M, 160L, 180M			100	65	14	351,5	160	200	125	95	280	212	14	90	350	75
	200L			100	65	14	351,5	160	200	125	95	280	212	14	90	400	75
65200	160L, 180M			100	65	14	351,5	180	225	125	95	320	250	14	90	350	147
	200L			100	65	14	351,5	180	225	125	95	32	250	14	90	400	147
	225M	65	100	100	65	14	351,5	180	225	125	95	320	250	14	90	450	147
	250M, 280S			100	65	14	381,5	180	225	125	95	320	250	14	90	550	147
65250	200L			125	80	16	431,5	200	250	160	120	360	280	18	130	400	256
	225M			125	8	16	431,5	200	250	160	120	360	280	18	130	450	256
	250M, 280S, 280M			125	80	16	461,5	200	250	160	120	360	280	18	130	550	256
	315S			125	80	16	461,5	200	250	160	120	360	280	18	130	660	256
80160	160M, 160L, 180M			125	65	14	351,5	180	225	125	95	320	250	14	90	350	107
	200L			125	65	14	351,5	180	225	125	95	320	250	14	90	400	107
	225M			125	65	14	351,5	180	225	125	95	320	250	14	90	450	107
	250M			125	65	14	381,5	180	225	125	95	320	250	14	90	550	107
80200	160L, 180M			125	65	14	432,5	180	250	125	95	345	280	14	120	350	195
	200L	80	125	125	65	14	432,5	180	250	125	95	345	280	14	120	400	195
	225M			125	65	14	432,5	180	250	125	95	345	280	14	120	450	195
80250	250M, 280S, 280M			125	65	14	462,5	180	250	125	95	345	280	14	120	550	195
	200L			125	80	16	431,5	225	280	160	120	400	315	18	130	400	261
	225M			125	80	16	431,5	225	280	160	120	400	315	18	130	450	261
100200	250M, 280S, 280M			125	80	16	461,5	225	280	160	120	400	315	18	130	550	261
	315S			125	80	16	461,5	225	280	160	120	400	315	18	130	660	261
	180M			125	80	16	432,5	200	280	160	120	360	280	18	115	350	207
	200L			125	80	16	432,5	200	280	160	120	360	280	18	115	400	207
100250	225M			125	80	16	432,5	200	280	160	120	360	280	18	115	450	207
	250M, 280S, 280M	100	125	125	80	16	462,5	200	280	160	120	360	280	18	115	550	207
	315S, 315M			125	80	16	462,5	200	280	160	120	360	280	18	115	660	207
	225M			140	80	16	431,5	225	280	160	120	400	315	18	130	450	274
	250M, 280S, 280M			140	80	16	461,5	225	280	160	120	400	315	18	130	550	274
315S, 315M			140	80	16	461,5	225	280	160	120	400	315	18	130	660	274	

All dimensions in mm, tolerances to EN 735

Flange dimensions

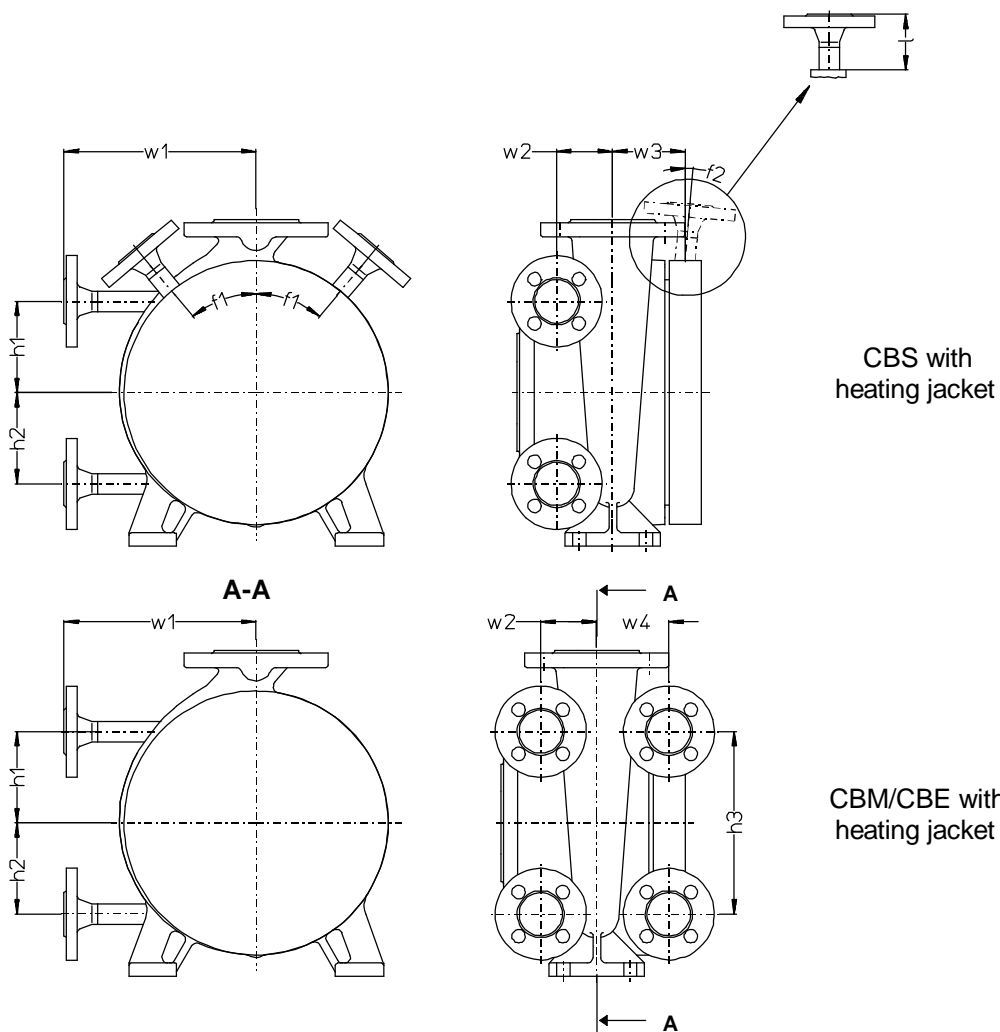


Dimension to DIN PN 16									
DN _s DN _d	32	40	50	65	80	100	125	150	200
k	100	110	125	145	160	180	210	240	295
d ₂ x n	18 x 4	18 x 4	18 x 4	18 x 4	18 x 8	18 x 8	18 x 8	22 x 8	22 x 12
Dimension to DIN PN 25									
DN _s DN _d	32	40	50	65	80	100	125	150	200
k	100	110	125	145	160	190	220	250	310
d ₂ x n	18 x 4	18 x 4	18 x 4	18 x 8	18 x 8	22 x 8	26 x 8	26 x 8	26 x 12
Dimension to ANSI 150 RF									
DN _s DN _d	32	40	50	65	80	100	125	150	200
k	1,5"	1,5"	2"	2,5"	3"	4"	5"	6"	8"
d ₂ x n	16 x 4	16 x 4	20 x 4	20 x 4	20 x 4	20 x 8	23 x 8	23 x 8	23 x 8

Size			SG iron DIN PN16				Stainless steel DIN PN16				SG iron DIN PN25				SG iron ANSI 150 RF				Stainless steel ANSI 150 RF							
	DN _s DN _d		Discharge nozzle		Suction nozzle		Discharge nozzle		Suction nozzle		Discharge nozzle		Suction nozzle		Discharge nozzle		Suction nozzle		Discharge nozzle		Suction nozzle					
	D _d	T _d	D _s	T _s	D _d	T _d	D _s	T _s	D _d	T _d	D _s	T _s	D _d	T _d	D _s	T _s	D _d	T _d	D _s	T _s	D _d	T _d	D _s	T _s		
32125			140	20	165	22	140	18	165	20	140	20	165	22	140	18	165	20	140	18	165	20	140	18	165	20
31160	32	50	140	20	165	22	140	18	165	20	140	20	165	22	140	18	165	20	140	18	165	20	140	18	165	20
32200			140	20	165	22	140	18	165	20	140	20	165	22	140	18	165	20	140	18	165	20	140	18	165	20
32250			140	20	165	22	140	18	165	20	140	20	165	22	140	18	165	20	140	18	165	20	140	18	165	20
40125			150	20	191	24	-	-	-	-	150	20	191	24	150	17	191	21	-	-	-	-	-	-	-	-
40160			150	20	191	24	150	18	191	18	150	20	191	24	150	17	191	21	150	18	191	18	150	18	191	18
40200	40	65	150	20	191	24	150	18	191	18	150	20	191	24	150	17	191	21	150	18	191	18	150	18	191	18
40250			150	20	191	24	150	18	191	18	150	20	191	24	150	17	191	21	150	18	191	18	150	18	191	18
40315			150	20	191	24	150	18	191	18	150	20	191	24	150	17	191	21	150	18	191	18	150	18	191	18
50160			165	22	200	26	165	20	200	20	165	22	200	26	165	19	200	23	165	20	200	20	165	20	200	20
50200	50	80	165	22	200	26	165	20	200	24	165	22	200	26	165	19	200	23	165	20	200	20	165	20	200	20
50250			165	22	200	26	165	20	200	24	165	22	200	26	165	19	200	23	165	20	200	20	165	20	200	20
50315			165	22	200	26	165	20	200	20	165	22	200	26	165	19	200	23	165	20	200	20	165	20	200	20
65160			191	24	235	28	191	18	229	24	191	24	235	28	191	21	235	25	191	18	229	24	191	18	229	24
65200	65	100	191	24	235	28	191	18	229	24	191	24	235	28	191	21	235	25	191	18	229	24	191	18	229	24
65250			191	24	235	28	191	18	229	24	191	24	235	28	191	21	235	25	191	18	229	24	191	18	229	24
65315			191	24	235	28	191	18	229	24	191	24	235	28	191	21	235	25	191	18	229	24	191	18	229	24
80160			200	26	270	30	200	20	254	24	200	26	270	30	200	23	270	27	200	20	254	24	200	20	254	24
80200			200	26	270	30	200	20	254	24	200	26	270	30	200	23	270	27	200	20	254	24	200	20	254	24
80250	80	125	200	26	270	30	200	20	254	24	200	26	270	30	200	23	270	27	200	20	254	24	200	20	254	24
80315			200	26	270	30	200	20	254	24	200	26	270	30	200	23	270	27	200	20	254	24	200	20	254	24
80400			200	26	270	30	200	20	254	24	200	26	270	30	200	23	270	27	200	20	254	24	200	20	254	24
100200			235	28	270	30	229	24	254	24	235	28	270	30	235	25	270	27	229	24	254	24	235	24	254	24
100250	100	125	235	28	270	30	229	24	254	24	235	28	270	30	235	25	270	27	229	24	254	24	235	24	254	24
100315			235	28	270	30	229	24	254	24	235	28	270	30	235	25	270	27	229	24	254	24	235	24	254	24
100400			235	28	270	30	229	24	254	24	235	28	270	30	235	25	270	27	229	24	254	24	235	24	254	24
125250			270	30	300	34	254	24	285	25	270	30	300	34	270	27	300	31	254	24	285	25	270	27	300	31
125315	125	150	270	30	300	34	254	24	285	25	270	30	300	34	270	27	300	31	254	24	285	25	270	27	300	31
125400			270	30	300	34	254	24	285	25	270	30	300	34	270	27	300	31	254	24	285	25	270	27	300	31
150250	150	200	300	34	360	34	285	29	343	32	300	34	360	34	300	31	360	31	285	26	343	29	300	34	360	34

All dimensions in mm, tolerances to EN 735

Heating agent supply - Connection dimensions



Size	CBS with heating jacket									CBM/CBE with heating jacket	Flanges DIN2633 PN16 Form C
	h1	h2	w1	w2	w3	f1 [°]	f2 [°]	l	h3		
32125	70	70	160	45	71	55	0	75	-	-	DN 15
31160	69,5	69,5	175	40	77	55	10	75	152	70	DN 15
32200	103	97	190	50	66	55	0	75	162	67	DN 15
32250	114,5	110,5	200	65	76	35	0	75	196	70	DN 15
40160	82	82	175	43	77	55	10	75	152	70	DN 15
40200	95	95	200	60	66	55	0	75	162	67	DN 15
40250	110	115	200	65	76	35	0	75	196	70	DN 15
40315	125	125	200	75	93	35	10	75	x		DN 15
50160	87	87	175	50	77	55	10	75	152	70	DN 15
50200	100	100	205	55	66	55	0	75	162	67	DN 15
50250	120	120	200	75	76	35	0	75	x		DN 15
50315	120	120	230	85	93	35	10	75	x		DN 15
65160	92	63	188	55	73	55	0	75	152	70	DN 15
65200	110	110	210	60	76	55	0	75	x		DN 15
65250	115	115	235	75	77	55	10	75	174	83	DN 15
80160	130	130	215	80	73	55	0	75	x		DN 15
80200	115	115	220	75	81	55	10	75	x		DN 15
100200	135	135	215	80	80	55	10	75	x		DN 15

All dimensions are reference values in mm or °
 x = adaptation to customer requirements



**Sterling SIHI GmbH
Works Itzehoe**

Lindenstraße 170, D-25524 Itzehoe, Germany
Telefon +49 (0) 4821 7 71 - 01 Telefax +49 (0) 4821 7 71 - 274



**Sterling SIHI GmbH
Works Ludwigshafen**

Halbergstr. 1, D-67061 Ludwigshafen, Germany
Telefon +49 (0) 621 56 12 - 0 Telefax +49 (0) 621 56 12 - 209