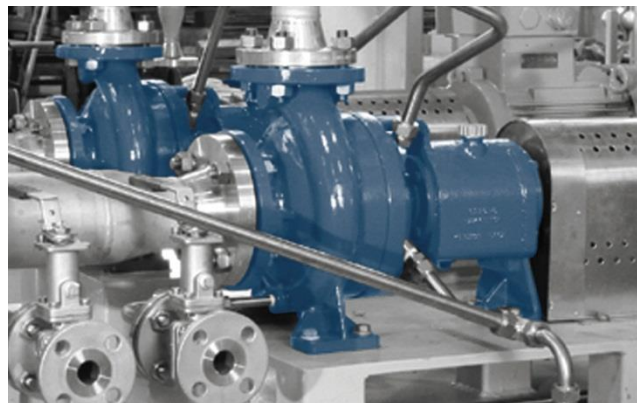


Technical Data

Flow rate:	max. 650 m ³ /h
Head:	max. 150 m
Speed:	max. 3600 min ⁻¹
Materials:	Cast iron, cast steel, stainless steel, hastelloy, duplex
Temperature:	max. 350 °C
Casing pressure:	max. 25 bar
Shaft seal:	Mechanical seal or magnetic coupling
Dimensions of flanges:	according to DIN or ANSI (see flanges)
Direction of rotation:	clockwise, when viewed from drive end



Applications

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

- Chemical
- Pharmaceutical
- Petro-chemical
- Paper
- Plastic
- Food processing
- Plant engineering and construction

Design

Chemical process pumps of the **SIHI^{ISOchem}** are horizontal, single-stage volute casing pumps with dimensions to DIN EN ISO 2858 and meet the technical requirements of DIN EN ISO 5199.

It is a modular configuration of either bare shaft end or close-coupled design. Shaft sealing options are single or double-acting mechanical seals or magnetic couplings. The benefits are the interchangeability of the back pull-out assemblies and the reduction of spare parts cost.

Construction

Hydraulic

The hydraulic of the **SIHI^{ISOchem}** is designed with closed impeller.

Casing pressure

PN16 and PN25.

Maximal casing pressure = 25 bar.

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

Please note

The relevant technical regulations and safety rules must be observed.

Flange location

Axial suction flange, discharge flange radially upwards.

Flanges

According DIN EN 1092 or ANSI.

Materials

Standard materials: Cast iron, cast steel, stainless steel, hastelloy, duplex.

Special materials on request.

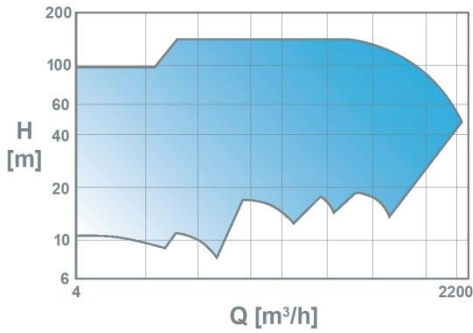
Shaft sealing

Mechanical seals:

- Single-acting seals
- Double-acting seals
- Cartridge seals

Magnetic coupling:

- with or without heat barrier
- Internal strainer
- External partial flow
- Heating jackets



Chemical process pumps in the range **SIHI^{ISOchem}** are horizontal, single-stage volute casing pumps with designs that fully meets technical requirements of DIN EN ISO 5199 and dimensions according to DIN EN ISO 2858.

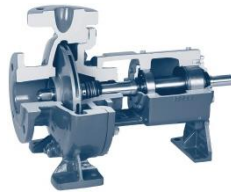
This modular process pumps consists of **hydraulics** with **closed** impellers. Due to the modular configuration, the pumps can be used in a **bare shaft** or **close-coupled** configuration.

Hydraulics

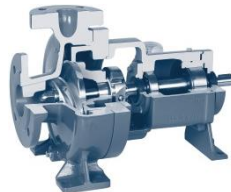


Volute casing with closed impeller
+ Clean liquids
+ Low NPSH values

Bare shaft design



CBS with single-acting mechanical seal and lifetime lubricated ball bearings



CBS with single or double-acting mechanical seal, shaft sleeve and oil lubricated ball bearings

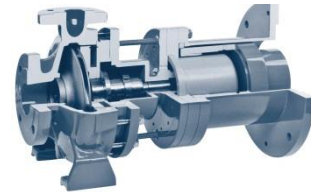


CBM with magnetic coupling according VDMA 24279

Close-coupled design



CBE with magnetic coupling according to VDMA 24279 for temperatures up to 300 °C



CBE with magnetic coupling and heat barrier according VDMA 24279 for temperatures up to 400 °C

Benefits

- + Low power consumption
- + Increased lifetime and longer maintenance intervals
- + Low installation cost
- + High level of availability and short supply times
- + Simple assembly and dismantling
- + Quick on-site servicing
- + Can be used where is a risk of explosion

Execution with mechanical seal

High efficiency

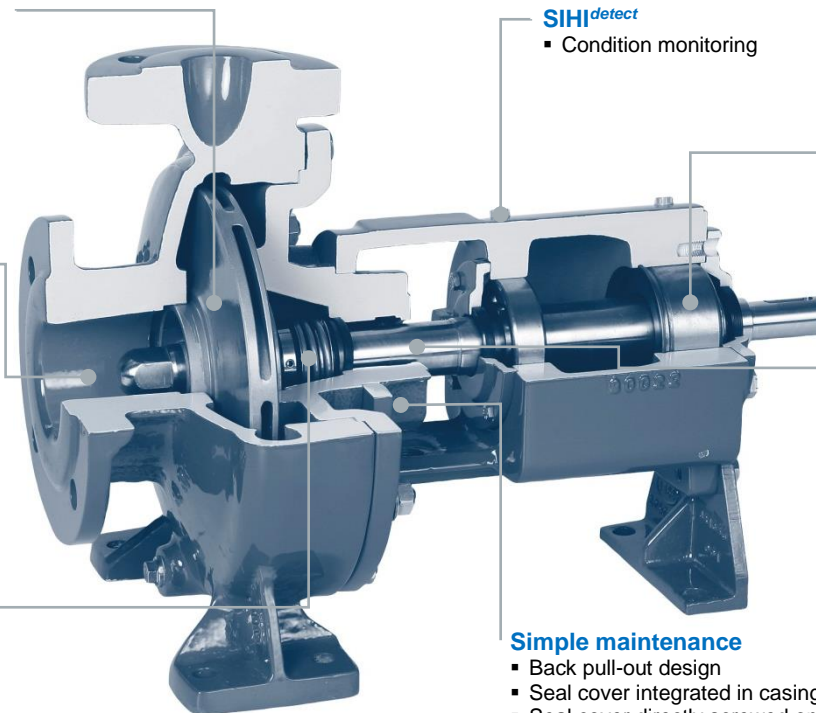
- Modern hydraulics
- High efficiencies
- Optimal velocities

Low installation cost

- Low NPSH value

Shaft seal options

- Single or double-acting mechanical seal
- Cartridge seal



SIHI^{detect}

- Condition monitoring

High reliability

- Heavy duty thrust ball bearings / angular contact ball bearings
- Grease or oil lubrication

Optimised maintenance cost

- Lower shaft deflection than required by ISO 5199
- Longer seal lifetime
- Longer lifetime of bearings
- High quality standard
- Labyrinth seal re-usable

Simple maintenance

- Back pull-out design
- Seal cover integrated in casing cover
- Seal cover directly screwed onto volute casing
- Bearing bracket not subjected to pressure

Execution with magnetic coupling

High efficiency

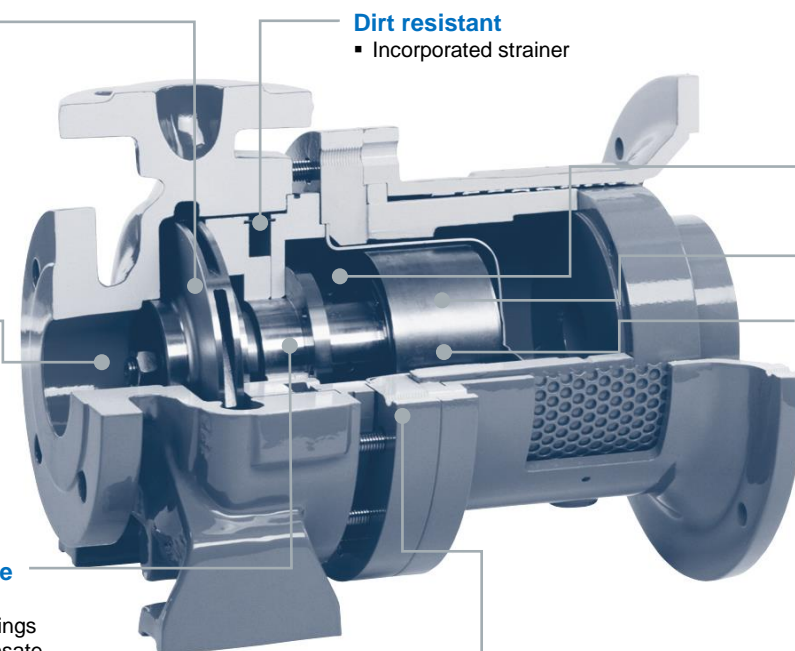
- Modern hydraulics
- High efficiencies
- Optimal velocities

Low installation cost

- Low NPSH value

Optimised maintenance cost due to robust sleeve bearings

- Silicon carbide sleeve bearings
- Patented design to compensate different thermal expansion



Dirt resistant

- Incorporated strainer

High reliability

- Constant partial flow via internal magnet (cooling flow)
- Constant partial flow via axial bearing (lubrication flow)
- Protection against damage for inner and outer magnets
- Samarium cobalt magnets
- Hastelloy C4 or ceramic isolation shroud

Broad range of applications

- Heat barrier for temperatures up to 400 °C with uncooled ceramic isolation shrouds

Operating limits

Temperature / Power

Type	Lubrication	min. Temperature	max. Temperature	max. Power at 2900 min ⁻¹
CBS	grease	-40°C	+140°C	according to characteristic curve
	oil	-40°C	+350°C	
CBM	grease	-40°C	+180°C	65 kW
	oil	-40°C	+350°C	
CBE	Liquid handled	-40°C	+350°C*	90 kW

* with thermal barrier up to 400 °C possible

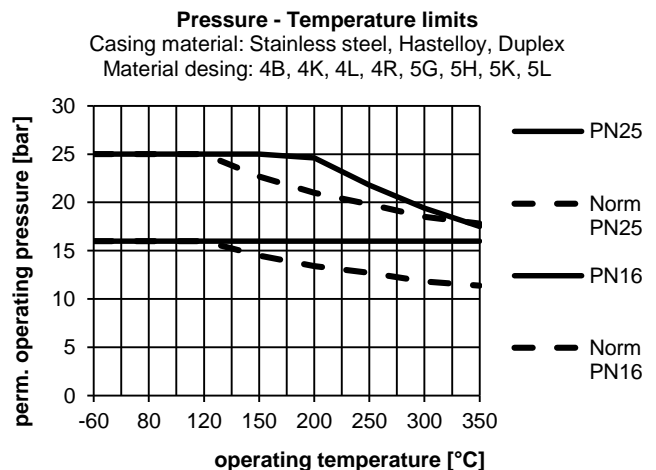
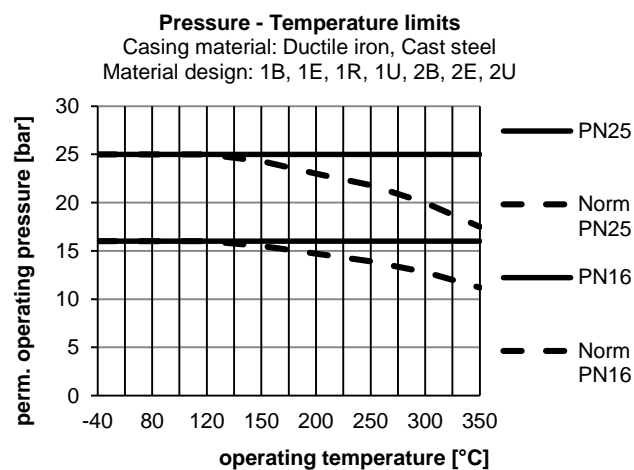
Speed

Size	max. Speed min ⁻¹	Size	max. Speed min ⁻¹	Size	max. Speed min ⁻¹
25125 40250 ¹⁾	3600	40315 ²⁾	3000	80400	1800
25160 50160		50315 ²⁾		100400	
25200 50200		65315 ²⁾		125250	
32125 50250 ¹⁾		80250		125315	
32160 65160		80315 ²⁾		125400	
32200 65200		100200		150250	
32250 ¹⁾ 65250 ¹⁾		100250			
40125 80160		100315			
40160 80200					
40200					

¹⁾ Except impeller material GG-25: n_{max} = 2900 min⁻¹

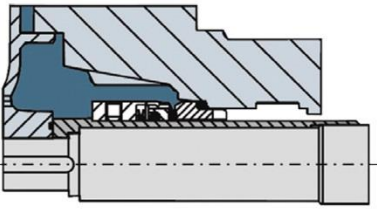
²⁾ Except impeller material GG-25: n_{max} = 1800 min⁻¹

Casing pressure

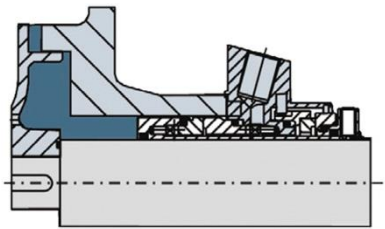


Shaft sealing

Mechanical seal designs

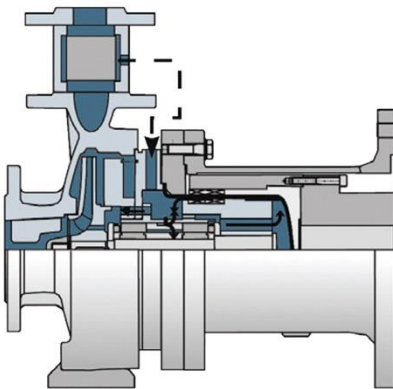


Single-acting mechanical seal

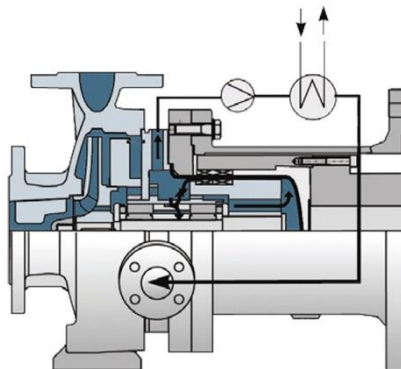


Mechanical seal, type Cartridge

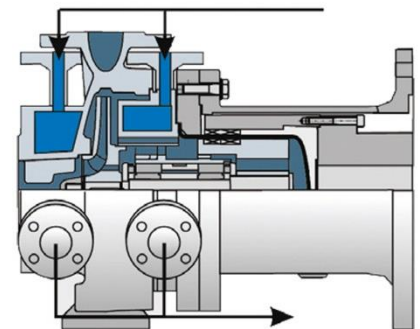
Magnetic coupling designs



Internal strainer



External partial flow

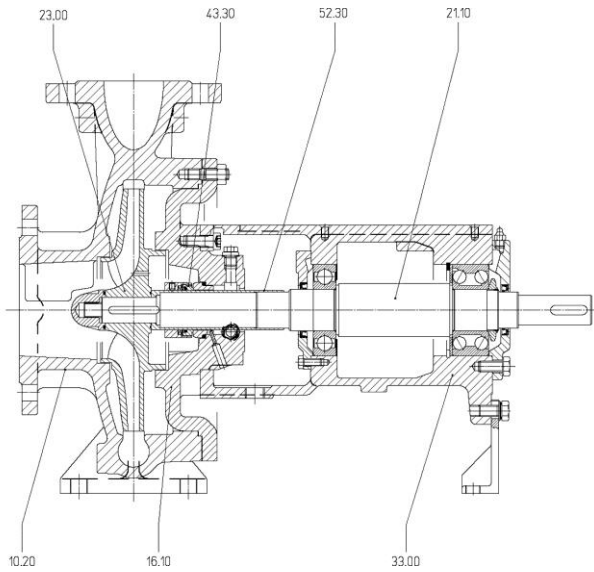


Heating jackets

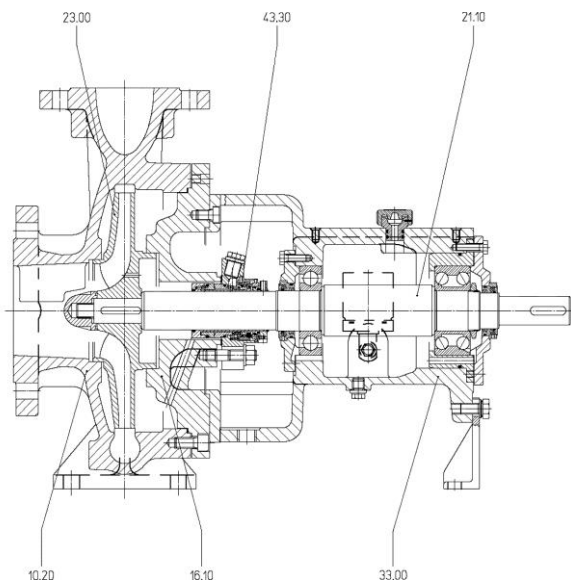
Sectional drawing and materials of construction

Bare shaft end design with mechanical seal

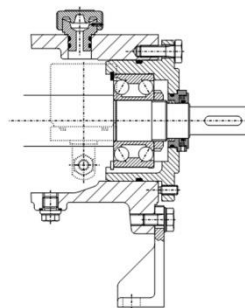
CBS with grease lubrication



CBS with oil lubrication



Design with external axial rotor adjustment



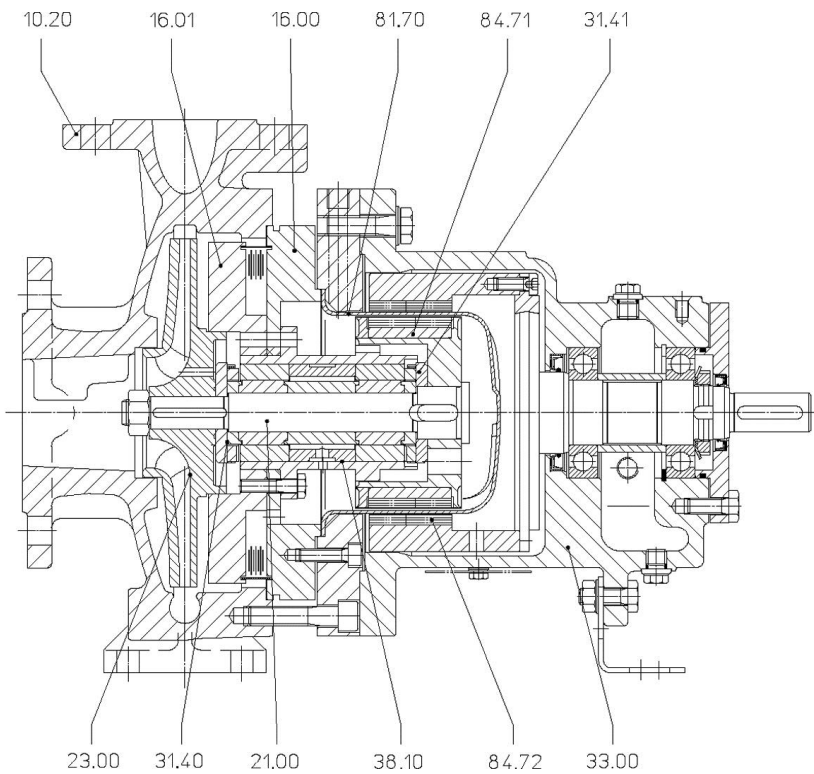
Materials of construction CBS

Pos.	Design.	Materials											
		1B	1E	1R	1U	2B	2R	4B	4R	4K	4L	5K	5L
10.20	Volute casing	EN-JS 1025				1.4408		1.4408				1.4517	
16.10	Casing cover	EN-JS 1025 / GS-C25				1.4408 (BB55 1.0619)		1.4408				1.4517	
21.10	Shaft	CK 45 N		1.4571		CK 45 N 1.4571		CK 45 N 1.4571		CK 45 N 1.4571		CK 45 N 1.4462	
52.30	Shaft sleeve	1.4571		-		1.4571 -		1.4571 -		1.4571		1.4462 -	
23.00	Impeller	EN-JL 1040	1.4408	EN-JL 1040	1.4408	EN-JL 1040		1.4408		1.4517		1.4517	
33.00	Bearing bracket	EN-JL 1040											
43.30	Mechanical seal	various material combinations											

Sectional drawing and materials of construction

Bare shaft end design with magnetic drive

CBM up to 350 °C



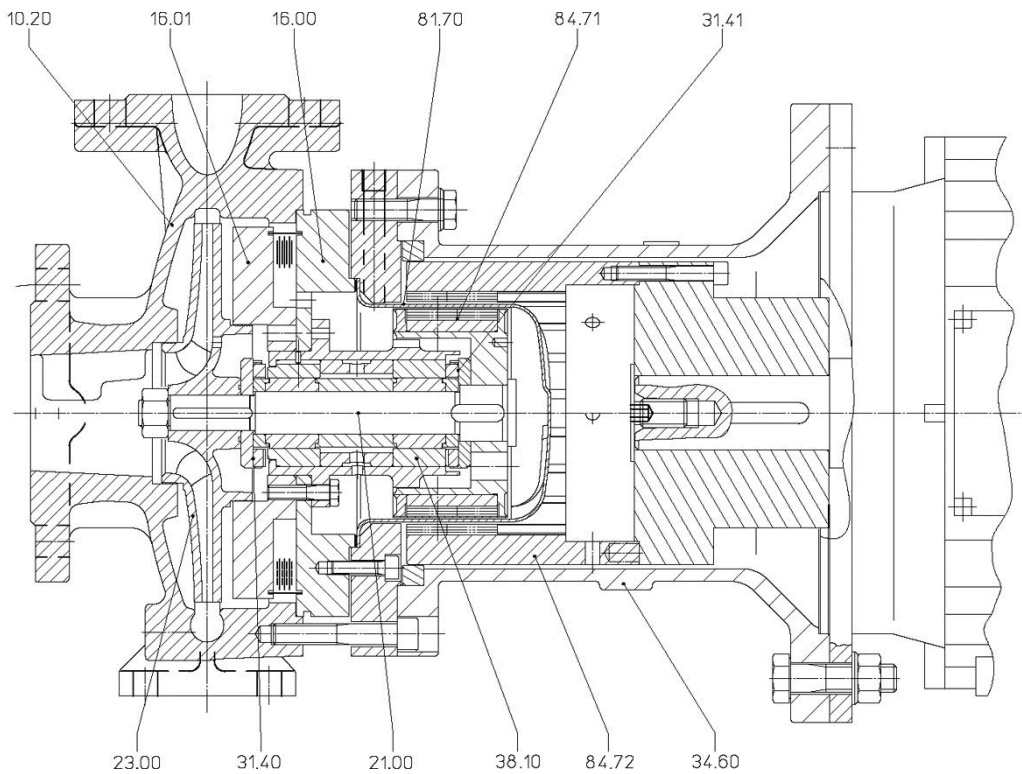
Materials of construction CBM

Pos.	Designation	Material			
		1B	4B	5K	5G
10.20	Volute casing	EN-JS 1025	1.4408	1.4517	2.4686
16.00 16.01	Casing cover	EN-JS 1025	1.4408	1.4517	2.4686
21.00	Shaft	1.4462			2.4610
23.00	Impeller	EN-JL 1040	1.4408	1.4517	2.4686
31.40 31.41	Sleeve bearing	1.4571 / SSiC			2.4610 / SSiC
33.00	Bearing bracket	EN-JS 1025			
38.10	Bearing insert	1.4462 / SSiC			2.4610 / SSiC
81.70	Isolation shroud	2.4610			
84.71	Inner magnet	1.4571 / SmCo			2.4610 / SmCo
84.72	Outer magnet	1.0570 / SmCo			

Sectional drawing and materials of construction

Close-coupled design with magnetic drive

CBE up to 350 °C (for 400 °C on request)



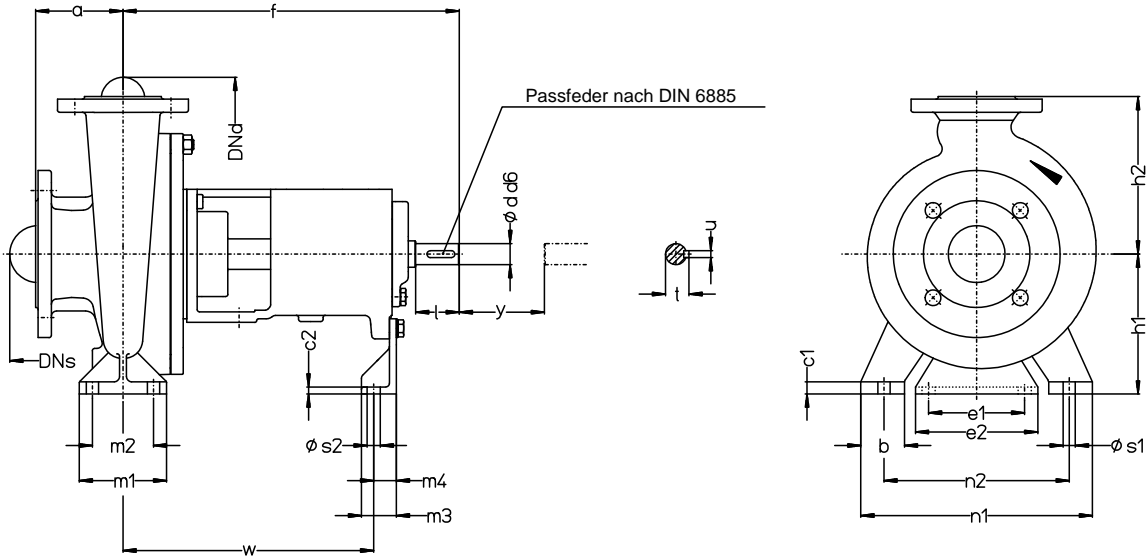
Materials of construction CBE

Pos.	Designation	Material				
		1B	1E	2B	4B	5L
10.20	Volute casing	EN-JS 1025		1.4408	1.4408	1.4517
16.00 16.01	Casing cover	1.0053		1.0053	1.4571	1.4539
21.00	Shaft	1.4462				
23.00	Impeller	EN-JL 1040	1.4408	EN-JL 1040	1.4408	1.4517
31.40 31.41	Sleeve bearing	1.4571 / SSiC				
34.60	Stool	EN-JS 1025				
38.10	Bearing insert	1.4462 / SSiC				
81.70	Isolation shroud	2.4610				
84.71	Inner magnet	1.4571 / SmCo				
84.72	Outer magnet	1.0553 / SmCo				

Table of dimensions

Bare shaft end design with mechanical seal

CBS bare shaft design to DIN EN ISO 2858



y = dimension for removal

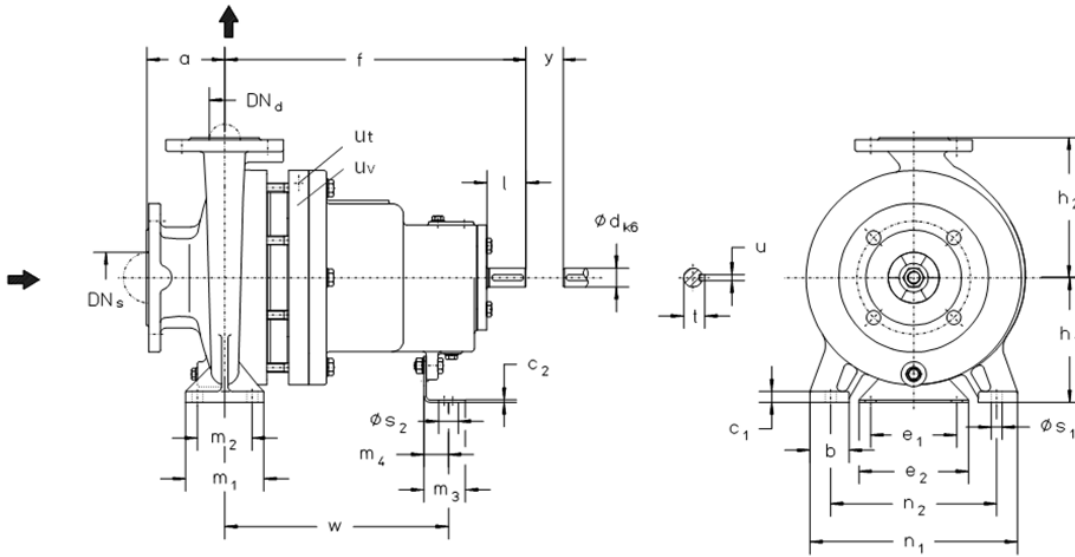
All dimensions in mm, tolerances to DIN EN 735

Size	Bearing bracket	Pump dimensions						Foot dimensions										Shaft end					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														
025125	35	25	40	80	385	112	140	50	14	100	70	40	28	190	140	15	110	140	370	32	80	35	10	140	37																
025160						132	160							55	240										190	55															
025200						160	180							60	240										190	60															
032125		32	50	80	385	112	140	50	14	100	70	40	28	190	140	15	110	140	370	32	80	35	10	140	38																
032160						132	160							44	240										190	44															
032200						160	180							53	240										190	53															
032250	45	40	65	100	500	180	225	65	14	125	95	40	28	320	250	15	110	140	370	32	80	35	10	140	91																
040125	80			385	112	140	38																																		
040160	35			80	385	132	160	50						100	70										240	190	45														
040200	40			65	100	160	180	65						125	95										265	212	55														
040250	45			125	500	180	225	65						125	95										320	250	93														
040315	125			500	200	250	65	125						95	345										280	117															
050160	35	50	80	100	385	160	180	50	14	100	70	40	28	265	212	15	110	140	370	32	80	35	10	140	54																
050200				180	225	58																																			
050250				125	500	180	225	65						125	95										320	250	96														
050315				125	500	225	280	65						125	95										345	280	122														
065160				45	65	100	500	160						200	65										8	125	95	40	28	280	212	15	110	140	370	32	80	35	10	140	72
065200								180						225																83											
065250	200	250	106																																						
065315	55	80	125	500	530	225	280	80	16	160	120	40	28	360	280	18	110	140	370	42	110	45	12	140	106																
080160	180				225	82																																			
080200	45				500	180	250	65	14					125	95										320	250	92														
080250	80				125	225	280	65	14					125	95										345	280	92														
080315	80				125	250	315	65	14					125	95										400	315	113														
080400	55				125	530	280	355	80					16	160										120	435	355	147													
100200	45	100	140	530	500	200	280	80	16	160	120	40	28	360	280	18	110	140	370	42	110	45	12	140	106																
100250					225	280	135																																		
100315					250	315	157																																		
100400					280	315	180							150	200										150	500	400	23	199												
125250					55	125	150							530	250										355	80	16	160	120	400	315	18	142								
125315															280										315	176															
125400	315	400	100	18				200	150	500	400	23	209																												

Table of dimensions

Bare shaft end design with magnetic drive

CBM



Ut : Connection for temperature sensor G1/4

Uv : Connection for condition monitoring sensor SIHIdetect M8

x = dimension for removal

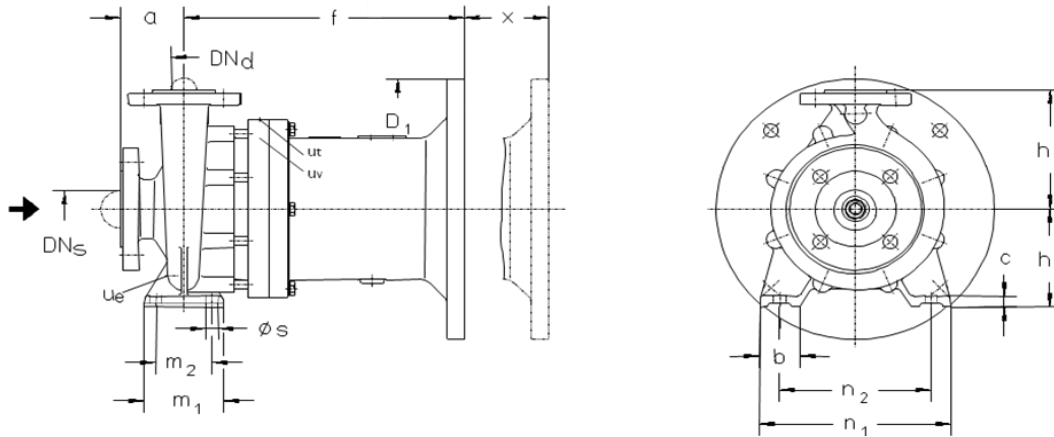
All dimensions in mm, tolerances to DIN EN 735

Size	Bearing bracket	Pump dimensions										Foot dimensions										Shaft end					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	
025125	35	25	40	80	385	112	140	50	14	3	100	70	53	35	190	140	14	14	110	140	370	24	50	27	8	140	47
025160						132	160								57												
025200						160	180								76												
032125						112	140								41												
032160						132	160								57												
032200						160	180								76												
032250	45	40	65	100	500	180	225	65	125	95	320	250	370	32	80	35	10	127									
040125	80			385	112	140	59																				
040160	132			160	69																						
040200	160			180	79																						
040250	180			225	138																						
040315	125			200	250	260																					
050160	35	50	80	100	385	160	180	50	100	70	53	265	212	285	24	50	27	8	69								
050200	160			200	84																						
050250	180			225	167																						
050315	225			280	280																						
065160	45			65	100	100	500	160	200	65	125	95	345	280	370	32	80	35	10	280							
065200	180					225	147																				
065250	200	250	256																								
065315	55	530	225			280	80	16	8	160	120	40	28	400	315	18	15	295									
080160	45	80	125			125	500	180	225	65	14	125	95	53	35	320	250	14	32	80	35	10	107				
080200						180	250	195																			
080250				225	280	261																					
080315				55	530	250	315	16	3	43	25	400	315	14	42	11	45	12	280								
100160				45	100	140	140	515	200	280	80	20	160	120	53	35	360	280	18	385	32	80	35	10	217		
100200							125	500	200	280	16	43	25	400	315	18	370	42	11	45	12	207					
100250	225	280	262																								
125250	55	125	150				140	530	250	355	80	16	43	25	400	315	370	42	11	45	12	230					

Table of dimensions

Close-coupled design with magnetic drive

CBE up to 350°C (for 400 °C on request)



Ut : Connection for temperature sensor G1/4

Uv : Connection for condition monitoring sensor SIHIdetect M8

x = dimension for removal

All dimensions in mm, tolerances to DIN EN 735

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	D ₁										
025125	80M, 90S, 90L	25	40				262	112	140	100	70	190	140	14	90	200	42									
	100L, 112M						272									250										
	132S, 132M						300																			
025160	80M, 90S, 90L												292			132	160								200	54
	100L, 112M						302	250																		
	132S, 132M						322	300																		
025200	160M, 160L												352												350	72
	90S, 90L						292	200	240			190														
	100L, 112M						302	250																		
	132S, 132M						322	300																		
	160M, 160L						352	350																		
032125	80M, 90S, 90L						32	50	80			50	262			112	140	100	70	190	140	14	90	200	44	
	100L, 112M	272	250																							
	132S, 132M	292	300																							
	160M, 160L	322	350																							
032160	80M, 90S, 90L					292				132	160													200	57	
	100L, 112M	302	250																							
	132S, 132M	322	300																							
	160M, 160L	352	350																							
	180M, 180L																									
032200	100L, 112M					302				160	180				240	190								250	76	
	132S, 132M	322	300																							
	160M, 160L					352							350													
	180M, 180L																									
032250	200L															400	127									
	100L, 112M	302	250																							
	132S, 132M	322	300																							
	160M, 160L					352	180	225	125	95	320	250	350													
	180M, 180L													400												
225S, 225M					382										450											

All dimensions in mm, tolerances to DIN EN 735

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	D ₁			
040125	80M, 90S, 90L	40	65			15	262	112	140			210	160	15		200	47		
	272						250												
	292						300												
	322						350												
040160	90S, 90L			80	50			15	292	132	160	100	70	240	190		90	200	59
	302								250										
	322								300										
	352								350										
040200	100L, 112M				50			15	302	160	180			265	212		90	250	79
	322								300										
	352								350										
	382								400										
	450																		
040250	100L, 112M			100		14		14	302	180	225			320	250	14	100	250	138
	322								300										
	352								350										
	382								400										
	450								550										
	550																		
040315	132S, 132M	125	65			14	402	200	250	125	95	345	280	130	130	300	260		
	432						350												
	462						400												
							450												
							550												
050125	90S, 90L	50	80			14	262	132	160			240	190		90	200	47		
	272						250												
	292						300												
	322						350												
050160	90S, 90L			100	50			14	292	180		100	70			90	90	200	69
	302								250										
	322								300										
	352								350										
									400										
050200	100L, 112M				50			14	302	160	200			265	212	14	100	250	84
	322								300										
	352								350										
	382								400										
	450								550										
	550																		
050250	100L, 112M			125	65			14	302	180	225			320	250	100	100	250	167
	322								300										
	352								350										
	382	400																	
	450	550																	
	550																		
050315	132S, 132M		65			14	402	225	280	125	95	345	280	130	130	300	280		
	432						350												
	462						400												
							450												
							550												
							660												

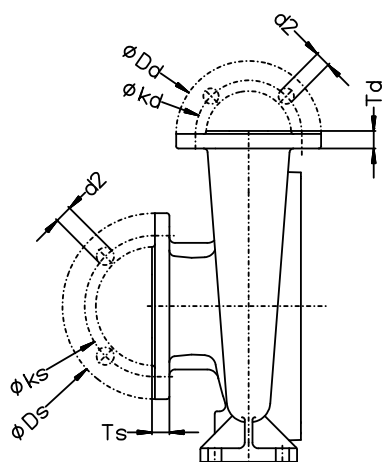
All dimensions in mm, tolerances to DIN EN 735

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	D ₁	
065160	90S, 90L	65	100	100	65	14	292	160	200	125	95	280	212	14	90	200	75
	100L, 112M						302									250	
	132S, 132M						322									300	
	160M, 160L						352									350	
	180M, 180L															400	
	200L															450	
	550																
065200	100L, 112M	65	100	100	65	14	302	180	225	125	95	320	250	14	90	250	147
	132S, 132M						322									300	
	160M, 160L						352									350	
	180M, 180L															400	
	200L															450	
	225S, 225M															550	
	250M, 280S						382									550	
065250	132S, 132M	65	100	125	80	16	402	200	250	160	120	360	280	18	130	300	256
	160M, 160L						462									350	
	180M, 180L															400	
	200L															450	
	225S, 225M															550	
	250M, 280S, 280M						477									660	
	315S															660	
	660																
065315	132S, 132M	65	100	125	80	16	417	225	280	160	120	400	315	18	130	300	295
	160M, 160L						477									350	
	180M, 180L															400	
	200L															450	
	225S, 225M															550	
	250M, 280S, 280M						477									660	
	315S															660	
	660																
080160	100L, 112M	80	125	125	65	14	302	180	225	125	95	320	250	14	90	250	107
	132S, 132M						322									300	
	160M, 160L						352									350	
	180M, 180L															400	
	200L															450	
	225S, 225M															550	
	250M						382									550	
080200	132S, 132M	80	125	125	65	14	402	250	250	125	95	345	280	120	120	300	195
	160M, 160L						462									350	
	180M, 180L															400	
	200L															450	
	225S, 225M															550	
	250M, 280S, 280M						462									550	
																550	
	550																
080250	132S, 132M	80	125	125	80	16	402	225	280	160	120	400	315	18	130	300	261
	160M, 160L						462									350	
	180M, 180L															400	
	200L															450	
	225S, 225M															550	
	250M, 280S, 280M						462									660	
	315S															660	
	660																
100200	132S, 132M	125	100	125	80	16	402	200	200	160	1200	360	280	18	115	300	207
	160M, 160L						462									350	
	180M, 180L															400	
	200L															450	
	225S, 225M															550	
	250M, 280S, 280M						462									660	
	315S, 315M															660	
	660																
100250	132S, 132M	125	100	140	80	16	417	280	160	1200	400	315	18	130	300	274	
	160M, 160L						477								350		
	180M, 180L														400		
	200L														450		
	225S, 225M														550		
	250M, 280S, 280M						477								660		
	315S, 315M														660		
	660																

All dimensions in mm, tolerances to DIN EN 735

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	D ₁	
100315	160M, 160L	100	125	140	80	16	447	250	315	160	120	400	315	18	130	350	277
	180M, 180L															400	
	200L						450										
	225S, 225M						550										
	250M, 280S, 280M						660										
315S, 315M	477																
125250	160M, 160L	125	150	140	80	16	447	250	355	160	120	400	315	18	130	350	300
	180M, 180L															400	
	200L						450										
	225S, 225M						550										
	250M, 280S, 280M						660										
315S, 315M	477																
125315	160M, 160L	125	150	140	100	18	447	280	355	200	150	500	400	23	130	350	364
	180M, 180L															400	
	200L						450										
	225S, 225M						550										
	250M, 280S, 280M						660										
315S, 315M	477																
150250	160M, 160L	150	200	160	100	20	447	280	375	200	150	500	400	22	130	350	300
	180M, 180L															400	
	200L						450										
	225S, 225M						550										
	250M, 280S, 280M						660										
315S, 315M	477																

Flange dimensions



Dimensions to DIN PN 16										
DN _d DN _s	25	32	40	50	65	80	100	125	150	200
k	85	100	110	125	145	160	180	210	240	295
d ₂ x n	14 x 4	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
Dimensions to DIN PN 25										
DN _d DN _s	25	32	40	50	65	80	100	125	150	200
k	85	100	110	125	145	160	190	220	250	310
d ₂ x n	14 x 4	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
Dimensions to ANSI 150 RF										
DN _d DN _s	25	32	40	50	65	80	100	125	150	200
	1" ²⁾	1,5" ¹⁾	1,5"	2"	2,5"	3"	4"	5"	6"	8"
k	79,4	98,4	98,4	120,6	139,7	152,4	190,5	215,9	241,3	298,4
d ₂ x n	16 x 4	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

¹⁾ Execution 1 1/4" for DN32 not possible

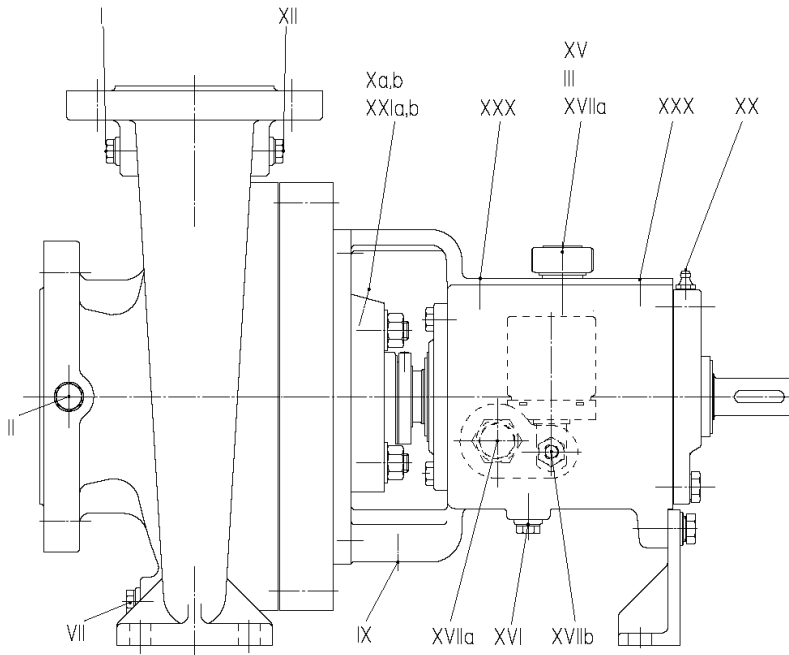
²⁾ Execution 1" on suction side (DN40) with 4 x threads 1/2" – 13 UNC

All dimensions in mm, tolerances to EN 735

Size	DN _d	DN _s	SG iron PN16 / PN25				Stainless steel PN16 / PN25				SG iron ANSI 150 RF				Stainless steel ANSI 150 RF				
			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	
025125	25	40	-	-	-	-	115	18	150	19	-	-	-	-	115	18	150	19	
025160			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
025200			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
032125	32	50	140	20	165	22	140	18	165	20	140	18	165	20	140	18	165	20	
032160			140	20	165	22	140	18	165	20	140	18	165	20	140	18	165	20	
032200			140	20	165	22	140	18	165	20	140	18	165	20	140	18	165	20	
032250			140	20	165	22	140	18	165	20	140	18	165	20	140	18	165	20	
040125	40	65						22	185						-	-	-	-	
040160																			
040200																			
040250																			
040315																			
050160			50	80	165	22	200	26	165	20	200	24	165	20	200	24	165	20	200
050200	165	22			200	26	165	20	200	24	165	20	200	24	165	20	200	24	
050250	165	22			200	26	165	20	200	24	165	20	200	24	165	20	200	24	
050315	165	22			200	26	165	20	200	24	165	20	200	24	165	20	200	24	
065160	65	100			191	24	235	28	191	22	235	24	191	22	235	24	191	22	235
065200			191	24	235	28	191	22	235	24	191	22	235	24	191	22	235	24	
065250			191	24	235	28	191	22	235	24	191	22	235	24	191	22	235	24	
065315			191	24	235	28	191	22	235	24	191	22	235	24	191	22	235	24	
080160	80	125																	
080200																			
080250			200	26	270	30	200	24	270	26	200	24	270	27	200	24	270	26	
080315			200	26	270	30	200	24	270	26	200	24	270	27	200	24	270	26	
080400			200	26	270	30	200	24	270	26	200	24	270	27	200	24	270	26	
100200	100	125																	
100250																			
100315			235	28	270	30	229	24	270	26	235	25	270	27	229	24	270	26	
100400			235	28	270	30	229	24	270	26	235	25	270	27	229	24	270	26	
125250	125	150	270	30	300	34	270	26	300	28	270	27	300	31	270	26	300	28	
125315			270	30	300	34	270	26	300	28	270	27	300	31	270	26	300	28	
125400			270	30	300	34	270	26	300	28	270	27	300	31	270	26	300	28	
150250	150	200	300	34	360	34	300	29	360	32	300	31	360	31	300	29	360	32	

Connections

CBS

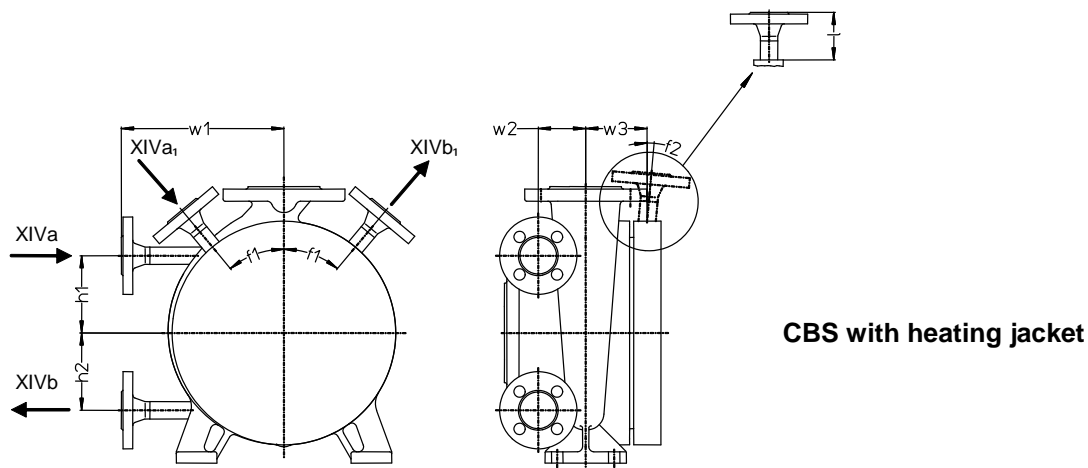


Pos.	Description	Execution	Connection
I	Pressure gauge	By request	G ¼ / G ½ ¹⁾
II	Vacuum and pressure gauge	By request	G ¼ / G ½ ¹⁾
III, XV	Vent, Oil filling	For oil lubrication	Ø 20
VII	Drain	By request	G ¼ / G ⅜ ¹⁾
IX	Drainage of leakage	By request	G ½
Xa, b	Sealing liquid, inlet/outlet	Execution mechanical seal	G ¼
XII	Circulation	Execution mechanical seal	G ¼
XVI	Oil drain	For oil lubrication	G ¼
XVIIa	Oil dip stick	Execution with oil dip stick or oil sight glass	Ø 20 G ½
XVIIb	Oil level controller	Execution with oil level controller	G ¼
XX	Grease lubrication	For grease lubrication	⅛"
XXIa,b ²⁾	Quench, inlet/outlet	Execution mechanical seal	Dependent of mechanical seal
XXX	Shock pulse measurement	All executions	M8

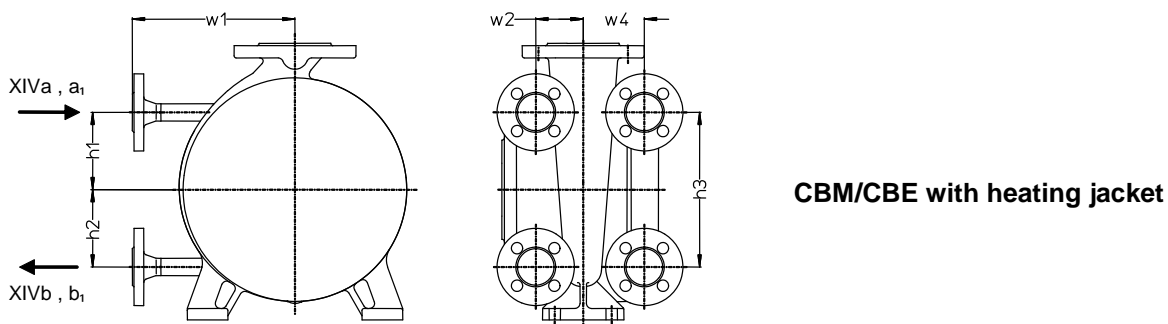
¹⁾ Depending on size

²⁾ For elastomer bellow seals not executed by default

Connections Heating agent supply



CBS with heating jacket



CBM/CBE with heating jacket

XIVa,a₁ = heating jacket connection - inlet
 XIVb,b₁ = heating jacket connection - outlet

All dimension in mm or °, tolerances to EN 735

Size	Bearing bracket	Values of connections										l	Flange
		h ₁	h ₂	h ₃	w ₁	w ₂	w ₃	w ₄	f ₁	f ₂			
032125	35	70	70	-	160	45	71	-	55	0	75	DN15	
032160		69.5	69.5	152	175	40	77	70		10			
032200		103	97	162	190	50	66	67		0			
032250	45	114.5	110.5	196	200	65	76	70	35	0			
040160	35	82	82	152	175	43	77	70	55	10			
040200		95	95	162	200	60	66	67		0			
040250	45	110	115	196		200	65	76	70	35			0
040315		125	125	-	75		93	-	10				
050160	35	87	87	152	175	50	77	70	55	10			
050200		100	100	162	205	55	66	67		0			
050250		120	120	-	200	75	76	-		35	10		
050315	45	92	63	152	188	55	73	70	55	0			
065160											110	110	-
065200		115	115	174	235	75	77	83		10			
065250		130	130	-	215	80	73	80		0			
080160		115	115	-	220	75	81	75		0			
080200		135	135	-	215	80	80	-		10			
100200		135	135	-	215	80	80	-		10			

Additional innovative solutions from SIHI

SIHI^{detect}



Condition based monitoring

Detect wear before damage occurs

- + Cavitation and process turbulence
- + Simple to connect
- + LED display
- + Available Ex
- + All rotating machinery
- + DCS integration and continual monitoring

Noise and Vibration analysis allows this compact device to diagnose the (often hidden) symptoms of longer term damage even before vibration occurs.

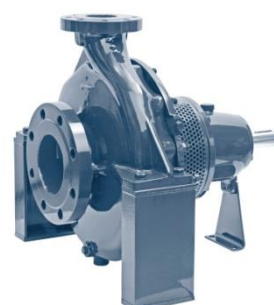
SIHI^{ISOchem}



CBT for larger flow rates

Flow rate:	max. 2200 m ³ /h
Head:	max. 160 m
Casing pressure:	max. 25 bar
Temperature:	max. 350 °C

SIHI^{ISOchem}



RBS for higher casing pressures

Flow rate:	max. 1200 m ³ /h
Head:	max. 150 m
Casing pressure:	max. 40 bar
Temperature:	max. 400 °C

Sterling SIHI GmbH

Lindenstr. 1, 25524 Itzehoe, Germany

Tel. +49 (0) 4821 771-01 Telefax +49 (0) 4821 4821 771-274

www.sihi.com