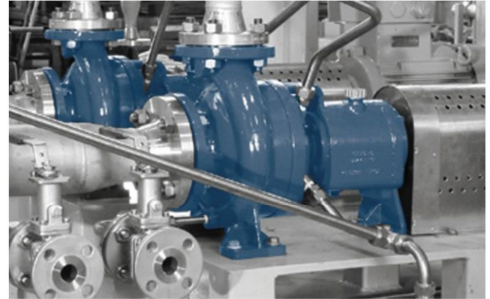


Technical Data

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.

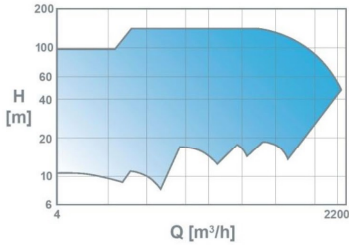
Shaft sealing

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 DIN EN ISO 2858.

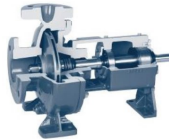
This modular process pumps consists of **hydraulics** with **closed** impellers. Due to the modular configuration, the pumps can be used in a **bare shaft** or **close-coupled** configuration.

Hydraulics

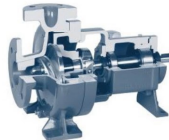


Volute casing with closed impeller
 + Clean liquids
 + Low NPSH values

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

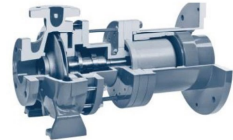


CBM with magnetic coupling according VDMA 24279

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

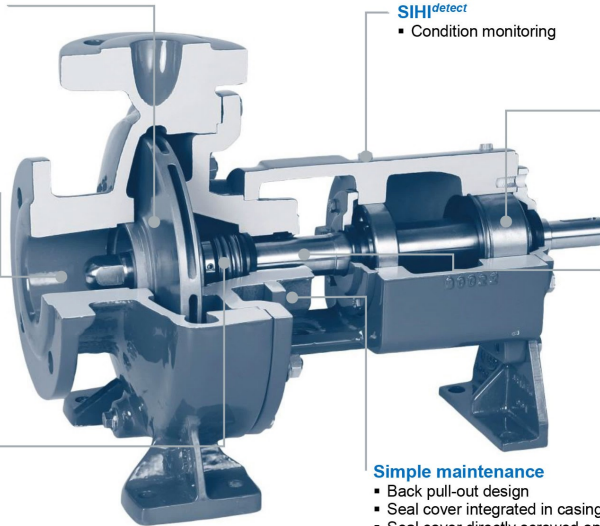
- Modern hydraulics
- High efficiencies
- Optimal velocities

Low installation cost

- Low NPSH value

Shaft seal options

- Single or double-acting mechanical seal
- Cartridge seal



SIH^{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

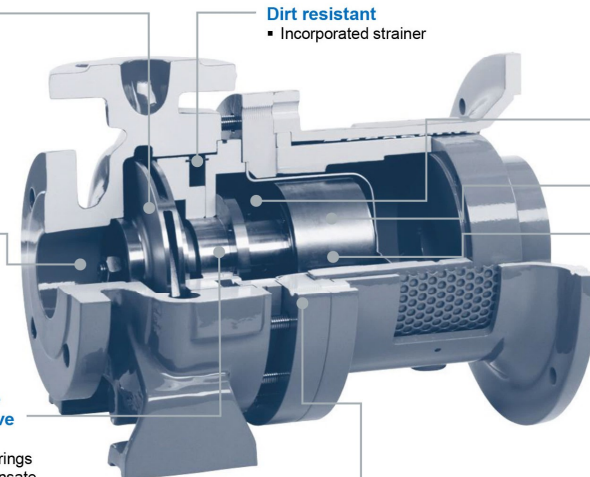
- Modern hydraulics
- High efficiencies
- Optimal velocities

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

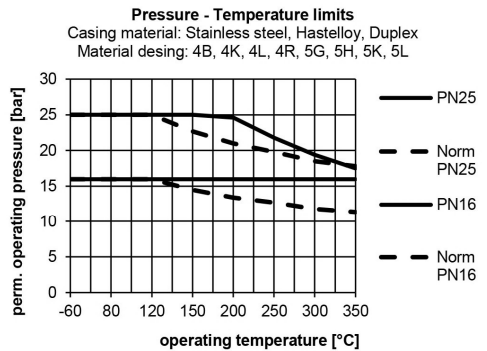
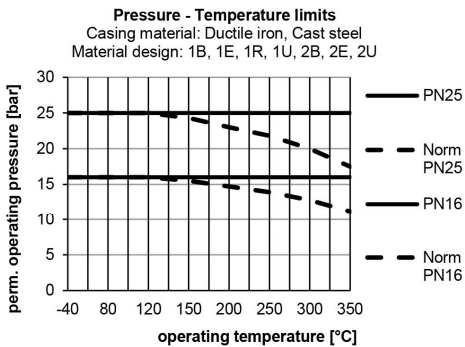
Speed

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⁾			
25200 50200		65315 ²⁾			
32125 50250 ¹⁾		80250			
32160 65160		80315 ²⁾			
32200 65200		100200			
32250 ¹⁾ 65250 ¹⁾		100250			
40125 80160		100315			
40160 80200					
40200					

¹⁾ Except impeller material GG-25: $n_{max} = 2900 \text{ min}^{-1}$

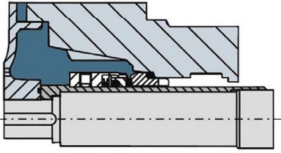
²⁾ Except impeller material GG-25: $n_{max} = 1800 \text{ min}^{-1}$

Casing pressure

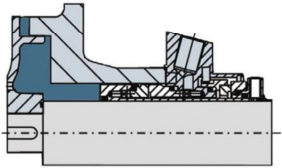


Shaft sealing

Mechanical seal designs

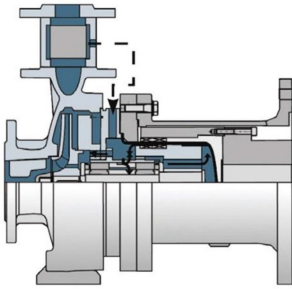


Single-acting mechanical seal

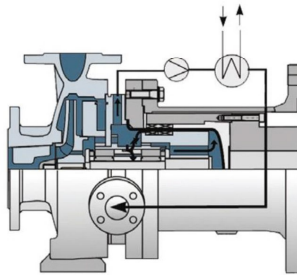


Mechanical seal, type Cartridge

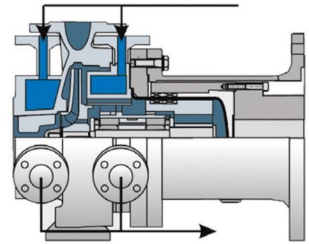
Magnetic coupling designs



Internal strainer



External partial flow

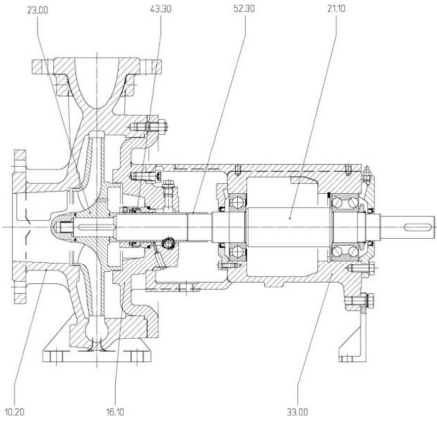


Heating jackets

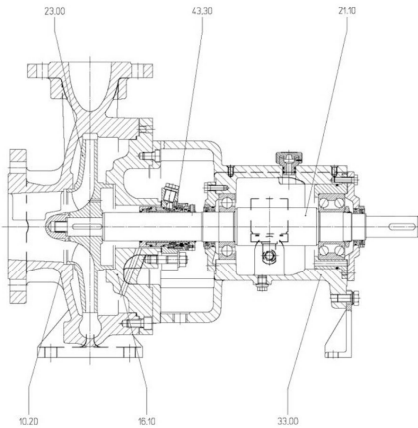
Sectional drawing and materials of construction

Bare shaft end design with mechanical seal

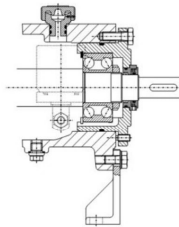
CBS with grease lubrication



CBS with oil lubrication



Design with external axial rotor adjustment



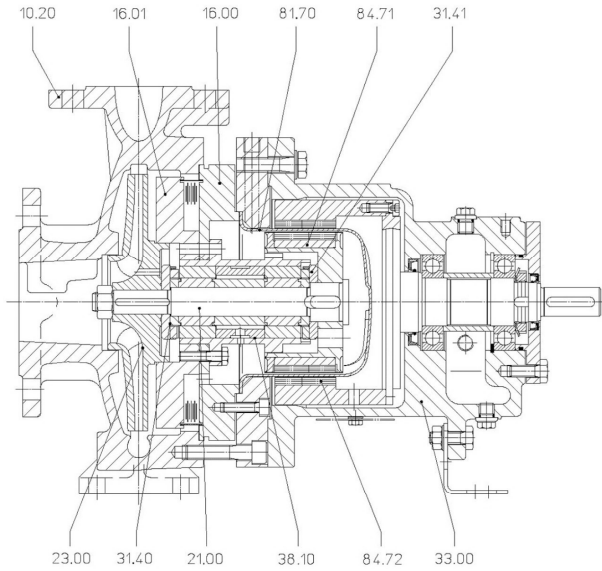
Materials of construction CBS

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		1.4462	
52.30	Shaft sleeve	1.4571		-		1.4571		-		1.4571		-	
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



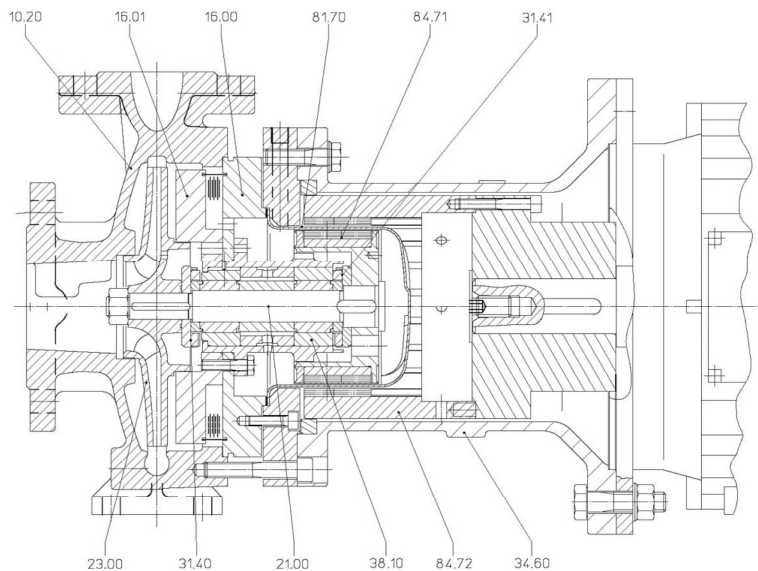
Materials of construction CBM

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)



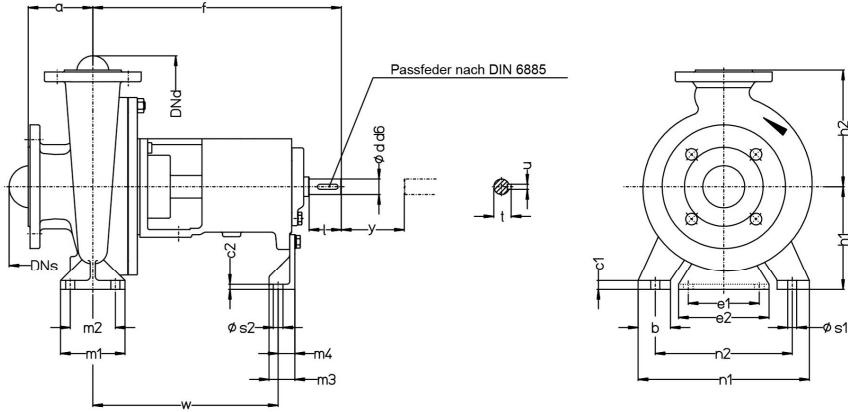
Materials of construction CBE

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

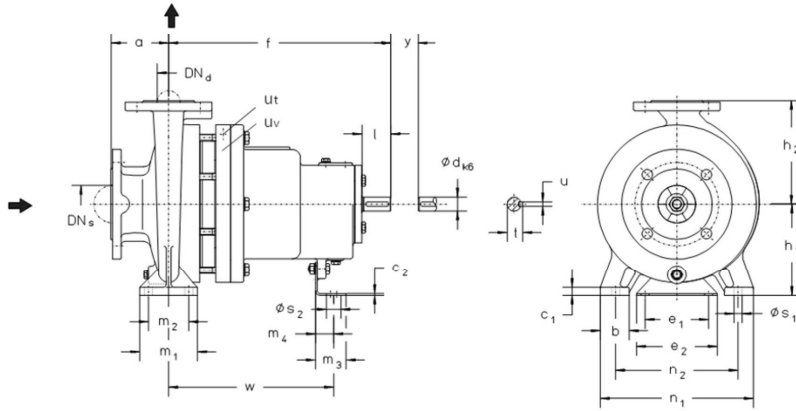
All dimensions in mm, tolerances to DIN EN 735

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	100	70	190	140	285	24	50	27	8	117	37																	
025160						132	160					240								190	55															
025200						160	180					240								190	60															
032125						112	140					190								140	38															
032160	32	50	80	385	132	160	50	125	95	210	160	14	285	24	50	27	8	117	38																	
032200					160	180					240									190	44															
032250					100	500					180									225	65	320	250	370	32	80	35	10	91							
040125					80	112					140									210	160	38														
040160	35	40	65	500	132	160	50	125	95	240	190	14	285	24	50	27	8	117	45																	
040200					160	180					265									212	55															
040250					100	180					225									320	250	93														
040315					125	200					250									345	280	117														
050160	35	50	80	500	180	200	50	160	120	265	212	15	110	140	285	24	50	27	8	117																
050200					100	385					160										200	100	70	265	212	285	24	50	27	8						
050250					125	180					225										280	65	8	125	95	40	28	320	250	370	32	80	35	10	140	117
050315					100	225					280										65	8	125	95	40	28	320	250	370	32	80	35	10	140	117	
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065200					180	225					400										315	32	80	35	10	140										
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065315					530	225					280										400	315	32	80	35	10	140									
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125400					200	280					360										280	42	110	45	12	136										
125400					250	315					360										280	42	110	45	12	136										

Table of dimensions

Bare shaft end design with magnetic drive

CBM



Ut : Connection for temperature sensor G1/4

Uv : Connection for condition monitoring sensor SIHdetect M8

x = dimension for removal

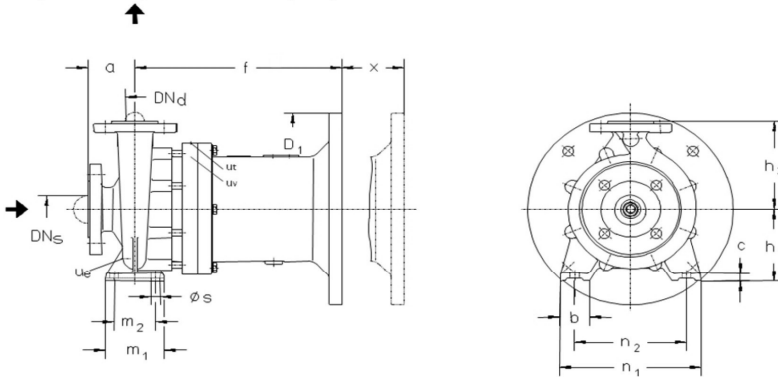
All dimensions in mm, tolerances to DIN EN 735

Size	Bearing bracket	Pump dimensions						Foot dimensions										Shaft end					Pump weight kg																														
		DN _s	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	14	14	110	140	370	24	50	27	8	140	47																												
025160						132	160																		190	140	57																										
025200						160	180																		240	190	76																										
032125		32	50	100	500	112	140				65	8	8												125	95	190	140	285	32	80	35	10	370	32	80	35	10	140	41													
032160						132	160																																	240	190	57											
032200						160	180																																	240	190	76											
032250	45	50	100	500	180	225	65	8	8	125				95	320	250	285	32	80	35	10	370	32	80	35	10	140	127																									
040125					210	160																						210												160	59												
040160	35	40	65	100	385	132				65				8	8	100												70												240	190	285	24	50	27	8	370	32	80	35	10	140	69
040200					160	180					265	212	79																																								
040250	45	50	100	500	180	225					65	8	8			125												95	320	250	285	32	80	35	10	370	32	80	35	10	140												138
040315					200	250																																															345
050160	35	50	80	100	385	160	65	8	8							100	70	265	212	285	24	50	27	8	370	32	80	35	10	140																							69
050200					160	200																																															320
050250	45	50	80	100	125	180				65				8	8	125	95	345	280																							285	32	80	35	10	370	32	80	35	10	140	167
050315					225	280																																															345
065160	45	65	100	100	500	160					65	8	8			125	95	280	212												285	32	80	35	10	370	32	80	35	10	140												75
065200					180	225																																															320
065250	55	65	100	100	200	250	65	8	8							160	120	360	280	285	32	80	35	10	370	32	80	35	10	140																							256
065315					530	225																																															280
080160	45	80	125	125	180	225				65				14	3	125	95	320	250																							285	32	80	35	10	370	32	80	35	10	140	107
080200					500	180																																															250
080250	55	125	125	125	225	280					65	14	3			160	120	400	315												285	32	80	35	10	370	32	80	35	10	140												261
080315					530	250																																															315
100160	45	100	140	515	200	280	80	20	3							160	120	53	35	285	32	80	35	10	370	32	80	35	10	140																							217
100200					125	500																																															200
100250	55	125	150	140	530	225				80				16	3	43	25	400	315																							285	32	80	35	10	370	32	80	35	10	140	262
125250					250	355																																															43

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 SIHldetect 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	80	50	14	262	112	140	100	70	190	140	14	90	200	42																				
	100L, 112M						272									250																					
	132S, 132M						292									300																					
025160	80M, 90S, 90L						302	132	160			32	50			14	160	180	240	190	200	250	72	300	350												
	100L, 112M						322																			250											
	132S, 132M						352																			300											
025200	160M, 160L						292	160	180								100	70			160	180		240	190	200	250	300	76	350	400						
	90S, 90L						302																									250					
	100L, 112M						322																									300					
	132S, 132M						352																									350					
032125	160M, 160L						32	50	100												65	14				180	225	125		95	320	250	14	90	250	300	350
	80M, 90S, 90L																																				
	100L, 112M	272																																			
	132S, 132M	292																																			
032160	160M, 160L	322	132	160	32	50				14	160			180	240											190	200				250	57			300	350	
	80M, 90S, 90L	292										190	140			250			300																		
	100L, 112M	302																																			
	132S, 132M	322																																			
032200	160M, 160L	352	160	180							100	65	14	160			180	125		95			320	250	127		350		400								
	180M, 180L	302														225			250												250				300		
	100L, 112M	322																																			
	132S, 132M	352																																			
032250	160M, 160L	32	50	100			65	14	180					225		125	95		320		250	14	90	250			300	350									
	180M, 180L																												302	225	250		250	300			
	200L																												322								
	100L, 112M																												352								
	132S, 132M				382																																
225S, 225M	400				225	250			250	300																											
250L	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	80	50	15	262	112	140	100	70	210	160	15	90	200	47
	100L, 112M						272									250	
	132S, 132M						292									300	
	160M, 160L						322									350	
040160	90S, 90L	40	65	80	50	15	292	132	160	100	70	240	190	15	90	200	59
	100L, 112M						302									250	
	132S, 132M						322									300	
	160M, 160L						352									350	
040200	100L, 112M	40	65	50	50	15	302	160	180	100	70	265	212	15	90	250	79
	132S, 132M						322									300	
	160M, 160L						352									350	
	180M, 180L						382									450	
040250	100L, 112M	40	65	100	14	14	302	180	225	125	95	320	250	14	100	250	138
	132S, 132M						322									300	
	160M, 160L						352									350	
	180M, 180L						382									450	
040315	132S, 132M	40	65	125	14	14	402	200	250	125	95	345	280	14	130	300	260
	160M, 160L						432									350	
	180M, 180L						462									400	
	200L						492									450	
050125	90S, 90L	50	80	100	50	14	262	132	160	100	70	240	190	14	90	200	47
	100L, 112M						272									250	
	132S, 132M						292									300	
	160M, 160L						322									350	
050160	90S, 90L	50	80	100	50	14	292	180	200	100	70	265	212	14	90	200	69
	100L, 112M						302									250	
	132S, 132M						322									300	
	160M, 160L						352									350	
050200	100L, 112M	50	80	125	65	14	302	160	200	125	95	320	250	14	100	250	84
	132S, 132M						322									300	
	160M, 160L						352									350	
	180M, 180L						382									400	
050250	100L, 112M	50	80	125	65	14	302	180	225	125	95	320	250	14	100	250	167
	132S, 132M						322									300	
	160M, 160L						352									350	
	180M, 180L						382									400	
050315	100L, 112M	50	80	125	65	14	402	225	280	125	95	345	280	14	130	300	280
	132S, 132M						432									350	
	160M, 160L						462									400	
	180M, 180L						492									450	
050315	200L	50	80	125	65	14	462	225	280	125	95	345	280	14	130	550	280
	225S, 225M						492									450	
	250M, 280S, 280M						522									500	
	315S						552									600	

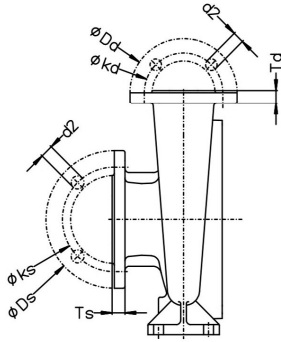
All dimensions in mm, tolerances to DIN EN 735

Size	Motor size	Pump dimensions															Pump weight kg														
		DN _a	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									200													
	100L, 112M						302											250													
	132S, 132M						322											300													
	160M, 160L						352											350													
	180M, 180L																	400													
200L							125	95	14									90	250												
100L, 112M	302						300																								
132S, 132M	322						350																								
160M, 160L	352						400																								
180M, 180L							450																								
200L							550																								
065200	225S, 225M						65	100	125									80	16	382	180	225									250
	250M, 280S																			402											300
	132S, 132M																			432											350
	160M, 160L																														400
	180M, 180L	462	450																												
200L	550																														
225S, 225M		660																													
065250	250M, 280S, 280M	65	100	125	80	16				402	200	250																			360
	315S									417																					300
	132S, 132M									447																					350
	160M, 160L																														400
	180M, 180L									477																					450
200L	550																														
225S, 225M										660																					
065315	250M, 280S, 280M									65	100	125																			80
	315S						402	300																							
	132S, 132M						432	350																							
	160M, 160L							400																							
	180M, 180L						462	450																							
200L	550																														
225S, 225M							660																								
080160	250M, 280S, 280M						80	125	125									65	14				302	180	225						
	100L, 112M	322	300																												
	132S, 132M	352	350																												
	160M, 160L		400																												
	180M, 180L	382	450																												
200L	550																														
225S, 225M		660																													
080200	250M, 280S, 280M	80	125	125	65	14							402	250	345																
	100L, 112M									302	300																				
	132S, 132M									432	350																				
	160M, 160L										400																				
	180M, 180L									462	450																				
200L	550																														
225S, 225M										660																					
080250	250M, 280S, 280M									80	125	125	65	14	462																225
	100L, 112M						302	300																							
	132S, 132M						432	350																							
	160M, 160L							400																							
	180M, 180L						462	450																							
200L	550																														
225S, 225M							660																								
100200	250M, 280S, 280M						125	100	80						16				402							200	160				
	132S, 132M	322	300																												
	160M, 160L	432	350																												
	180M, 180L		400																												
	200L	462	450																												
225S, 225M	550																														
250M, 280S, 280M		660																													
100250	315S, 315M	125	100	80	16											477	225		1200												
	132S, 132M									402	300																				
	160M, 160L									432	350																				
	180M, 180L										400																				
	200L									462	450																				
225S, 225M	550																														
250M, 280S, 280M										660																					

All dimensions in mm, tolerances to DIN EN 735

Size	Motor size	Pump dimensions															Pump weight kg
		DN _a	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	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
k	1" ²⁾	1,5" ¹⁾	1,5"	2"	2,5"	3"	4"	5"	6"	8"
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

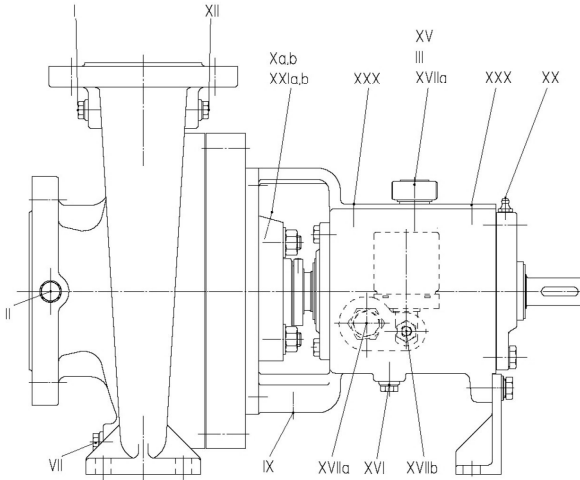
²⁾ Execution 1" on suction side (DN40) with 4 x threads 1/2" – 13 UNC

All dimensions in mm, tolerances to EN 735

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

Connections

CBS

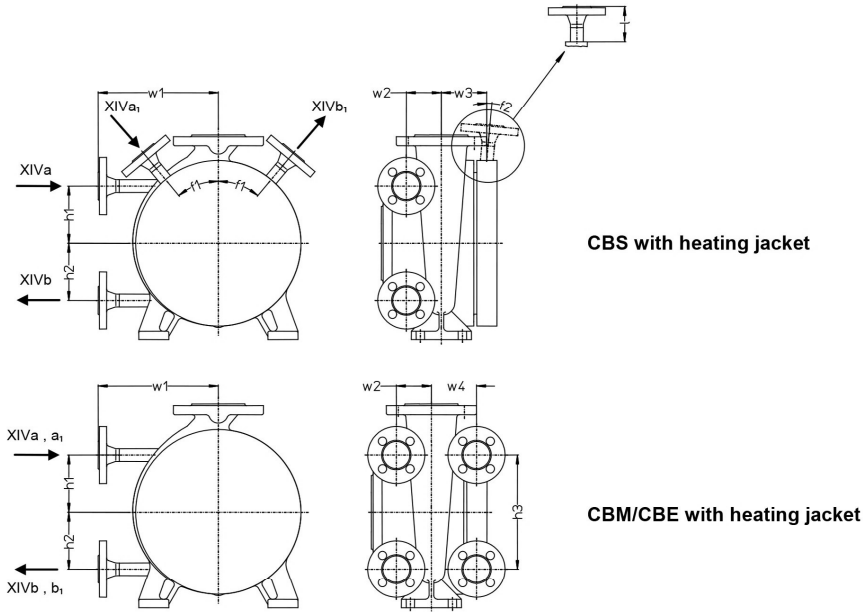


Pos.	Description	Execution	Connection
I	Pressure gauge	By request	G ¼ / G ½ ¹⁾
II	Vacuum and pressure gauge	By request	G ¼ / G ½ ¹⁾
III, XV	Vent, Oil filling	For oil lubrication	∅ 20
VII	Drain	By request	G ¼ / G ¾ ¹⁾
IX	Drainage of leakage	By request	G ½
Xa, b	Sealing liquid, inlet/outlet	Execution mechanical 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	∅ 20 G ½
XVIIb	Oil level controller	Execution with oil level controller	G ¼
XX	Grease lubrication	For grease lubrication	⅜"
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

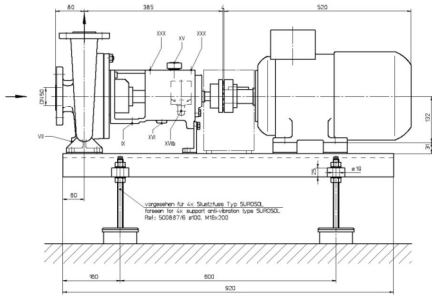


XIVa, a₁ = heating jacket connection - inlet
 XIVb, b₁ = heating jacket connection - outlet

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		60	66	67		0			
040250		110	115	196	200	65	76	70		35			0
040315	45	125	125	-		75	93	-	55	10			
050160	35	87	87	152	175	50	77	70		55			0
050200		100	100	162	205	55	66	67					10
050250					200	75	76	-	0				
050315	45	120	120	-	230	85	93	-	55	10			
065160		92	63	152	188	55	73	70		0			
065200		110	110	-	210	60	76	-		10			
065250		115	115	174	235	75	77	83		0			
080160		130	130	-	215	80	73	80		10			
080200		115	115	-	220	75	81	75		0			
100200		135	135	-	215	80	80	-		10			

Foundation plans



Detailed foundation plans are available on request. These plans can also be supplied in different electronic formats, for example as 3D models (STEP, ...) with the main dimensions of all components.

For the configuration of a pump set the following accessories can be supplied:

- Base plates
- Couplings and coupling guards
- Motors
- Additional accessories

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.

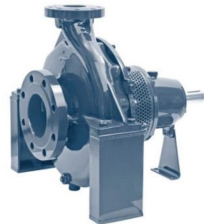
SIHI^{ISOchem}



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

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