














brainpower your pumps!



**IMPLEMENTATION ECODESIGN DIRECTIVE 2009/125/EC,
REGULATION (EU) 2019/1781**

**Minimum efficiency classes 0.12 – 0.749 kW
for deliveries from 1 July 2021**

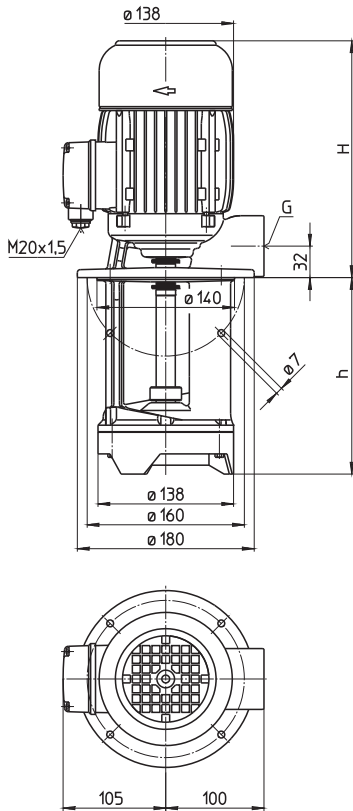
Immersion Pumps Stainless Steel Immersion Pumps TA TE STE STA	Semi-open / closed impellers Standard coolant pumps 25 ... 5000 l/min 4 ... 120 m	4 – 9	
Quick Suctioning Immersion Pumps with BRINKMANN's Suction De-aeration System TL TAL STL SAL	Axial/semi-open impellers Inflated fluids / slurping 25 ... 2600 l/min 5 ... 115 m	10 – 15	
Suction Immersion Pumps Lifting Pumps TAS TAA	Axial/semi-open impellers Vacuum filter / lifting 25 ... 1200 l/min 4 ... 60 m	16 – 19	
Horizontal End-Suction Pumps Vertical End-Suction Pumps SBA SBA-V SBM	Axial - radial impellers Coolant Lubricants / cutting oils 25 ... 2250 l/min 5 ... 62 m	20 – 25	
Horizontal End-Suction Pumps Vertical End-Suction Pumps SBF SBF-V	Axial/semi-open impellers heavy chip loads 25 ... 2500 l/min 5 ... 46 m	26 – 29	 Chip
Free-flow Immersion Pumps/Vortex Pumps FT FTA	Semi-open impellers Large chips 25 ... 2500 l/min 4 ... 20 m	30 – 31	 Chip
Immersion Pumps TS	Peripheral impellers High pressure in compact units 10 ... 70 l/min 25 ... 95 m	32 – 33	
Immersion Pumps Pressure Boosting Pumps (S)TC (S)TH FH	Closed impellers High pressure / no long chips 10 ... 640 l/min 30 ... 520 m	34 – 59	
Immersion Pumps in Plastics KTF KTB	Semi-open impellers Industrial water circuits 15 ... 400 l/min 4 ... 42 m	60 – 63	
Miniature Centrifugal Pumps Suction Pumps KC SB	Open/peripheral impellers Suctioning / circulating 2 ... 60 l/min 10 ... 45 m	64 – 67	
Immersion Pumps / Miniature Centrifugal Pumps TB-M B BMK	Open/semi-open/peripheral impellers Maintaining temperatures 10 ... 100 l/min 5 ... 65 m	68 – 73	

Immersion Pumps

TA160...600

Semi-open impellers

TA160, 250, 400 TA600



Type	Vol. del. at manom. del. head l/min / m	Height H mm	Depth of im- mersion h mm	Pipe con- nection	Weight kg	Power kW	Voltage 3~ V	Fre- quen- cy Hz	Current A	Speed 1/min
TA160/200	220/2	264	200	G 1 ¼	14.0	0.63	220-240	50	2.70	2850
	270		270		15.0					
	350	350	16.0	0.725	460	60	1.46	3425		
	440	440	17.5							
	550	550	19.0							
TA250/200	280/2	264	200	G 1 ¼	14.0	0.63	220-240	50	2.70	2850
	270		270		15.0					
	350	350	16.0	0.725	460	60	1.46	3425		
	440	440	17.5							
	550	550	19.0							
TA400/200	380/2	264	200	G 1 ½	14.5	0.85	220-240	50	3.64	2850
	270		270		16.0					
	350	350	17.5	0.98	460	60	2	3450		
	440	440	19.0							
	550	550	20.5							
TA600/210	460/2	291	210	G 1 ½	17.0	1.1	220-240	50	4.33	2850
	280		280		18.5					
	360	360	19.5	1.27	460	60	2.4	3440		
	450	450	21.0							
	560	560	22.5							

Immersion Pumps

are plain centrifugal pumps with the impeller fitted on the driving shaft extension. They are mounted on top of the container, the pump extension being immersed in the coolant.

The dimensions are based on standard specification EN 12157.

The maximum coolant level must stay a few mm/inches below the mounting flange.

Applications

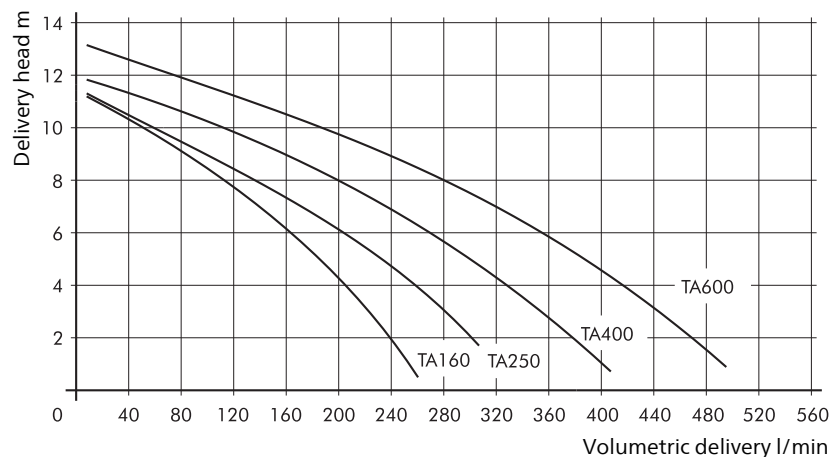
- Types of fluid
 - coolants
 - cooling/cutting oils
- Kinematic viscosity
 - ...45 mm²/s (45 cSt)
- Pumping temperature
 - 0...60° C
 - higher temperatures upon request

Construction

Pump body	cast iron
Cover	POM
	cast iron (TA600)
Impeller	POM
	brass (TA600)
Shaft	steel
Optional:	
Cover	cast iron (TA160...TA400)
Suction cover	with threaded inlet
Impeller	brass (TA160...TA400) cast steel (TA160...TA600)

Noise level

- TA160...TA250 60 dBA
- TA400...TA600 62 dBA

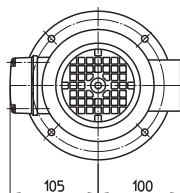
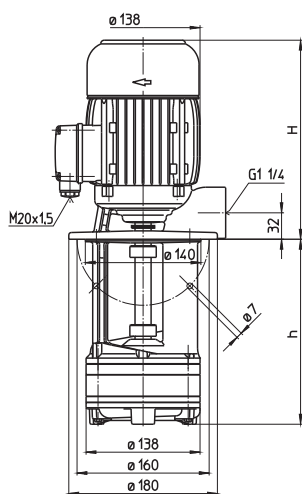


Immersion Pumps

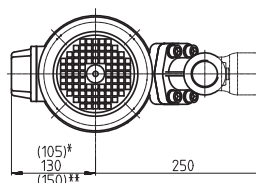
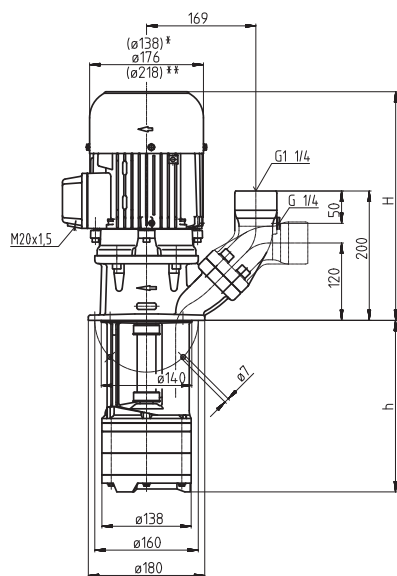
TE/STE141...146

Semi-open impellers

TE141, 142



STE141...146



*) Dimensions for STE141, 142
 **) Dimensions for STE146

Type	Vol. del. at manom. del. head l/min / m	Height H mm	Depth of immersion h mm	Weight kg	Power kW	Voltage 3~ V	Fre- quen- cy Hz	Current A	Speed 1/min
TE141/200	80/9	264	200	15.0	0.63	220-240	50	2.70	2850
	270		270	16.0					
	350		350	17.0	0.725	460	60	1.46	3425
	440		440	18.5					
	550		550	20.0					
TE142/150	80/20	291	150	16.5	1.1	220-240	50	4.33	2850
	230		230	18.0					
	300		300	18.5	1.27	460	60	2.4	3440
	380		380	19.5					
	470		470	21.0					
	580		580	23.0					
STE141/120	80/9	334	120	19.0	0.63	220-240	50	2.70	2850
	200		200	20.0					
	270		270	21.0	0.725	460	60	1.46	3425
	350		350	22.0					
	440		440	23.5					
	550		550	25.0					
STE142/150	80/20	361	150	21.5	1.1	220-240	50	4.33	2850
	230		230	23.0					
	300		300	23.5	1.27	460	60	2.4	3440
	380		380	24.5					
	470		470	26.0					
	580		580	28.0					
STE143/190	80/33	406	185	32	1.7	220-240	50	6.24	2890
	270		265	33					
	340		335	34	1.95	460	60	3.5	3480
	420		415	35					
	510		505	36					
	620		615	38					
STE144/220	80/45	439	220	36	2.2	220-240	50	7.8	2890
	300		300	37					
	370		370	38	2.55	460	60	4.4	3480
	450		450	39					
	540		540	41					
	650		650	42					
STE145/270	80/56	439	270	40	2.6	220-240	50	9.30	2880
	350		350	41					
	420		420	42	2.94	460	60	5.1	3480
	500		500	43					
	590		590	44					
	700		700	46					
STE146/300	80/70	478	305	52	4.0	220-240	50	14.50	2920
	380		385	53					
	450		455	54	4.55	460	60	7.9	3520
	530		535	55					

Immersion Pumps

are plain centrifugal pumps with the impeller fitted on the driving shaft extension. They are mounted on top of the container, the pump extension being immersed in the coolant.

The dimensions are based on standard specification **EN 12157**.

The maximum coolant level must stay a few mm/inches below the mounting flange.

The STE serie offers a **(SAE) flange** with pressure gauge connection port.

The flange can be rotated for either horizontal or vertical pipe connections.



All types are also available as quick-suctioning immersion pumps equipped with "BRINKMANN's Suction De-aeration System". See series TL/STL.

Applications

Types of fluid
coolants
cooling/cutting oils

Kinematic viscosity
...45 mm²/s (45 cSt)

Pumping temperature
0...60° C

Construction

Pump body cast iron
Cover cast iron

PPS (TE141, STE141)

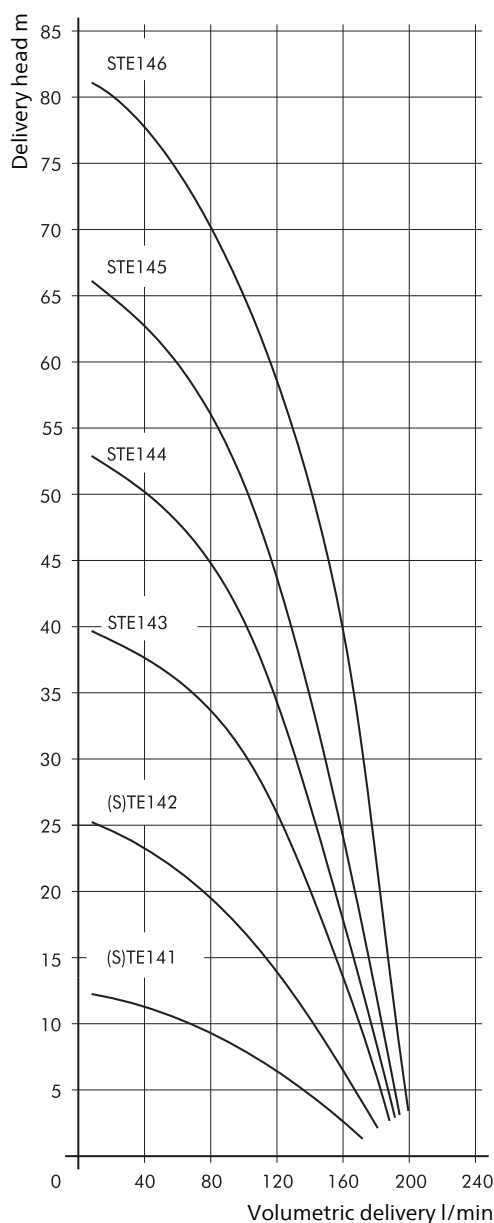
Impellers PPS
Shaft steel

Optional:
Cover cast iron (TE141, STE141)

Suction cover with threaded inlet
Impellers brass

Other materials cast steel
on request

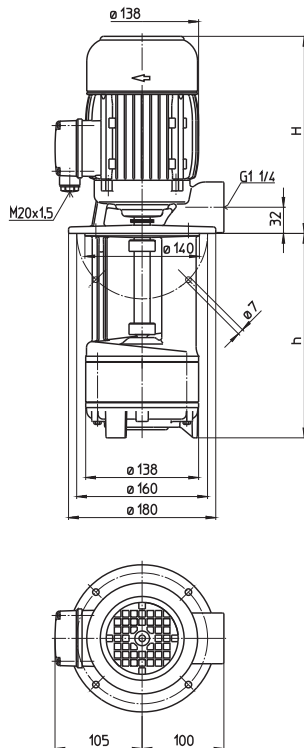
Noise level
TE141...STE142 60 dBA
STE143...STE145 68 dBA
STE146 73 dBA



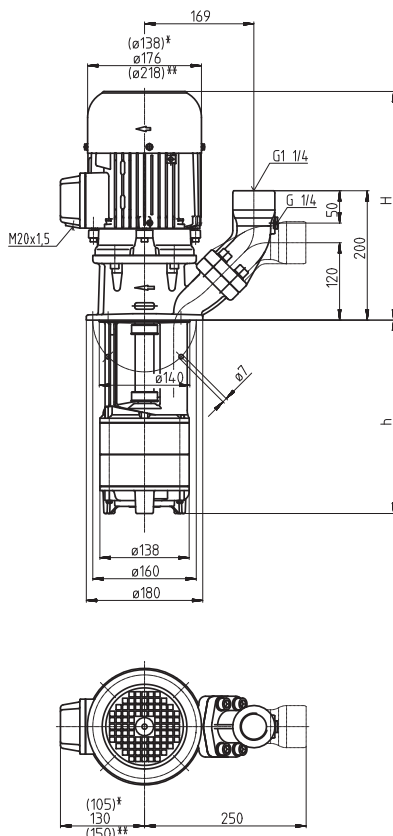
Immersion Pumps TA/STA301...306

Semi-open impellers

TA302



STA301...306



*) Dimensions for STA301, 302
**) Dimensions for STA306

Type	Vol. del. at manom. del. head l/min / m	Height H mm	Depth of im- mersion h mm	Weight kg	Power kW	Voltage 3~ V	Fre- quen- cy Hz	Current A	Speed 1/min
TA302/170	160/12	291	170	18	1.1	220-240 380-415	50	4.33	2850
250			250	19					
320			320	20					
400			400	21	1.27	460	60	2.4	3440
490			490	22					
600			600	24					
STA301/120	160/8	334	120	20.5	0.63	220-240 380-415	50	2.70	2850
200			200	21.5					
270			270	22.5					
350			350	23.5	0.725	460	60	1.46	3425
440			440	25.0					
550			550	26.5					
STA302/170	160/12	361	170	26	1.1	220-240 380-415	50	4.33	2850
250			250	27					
320			320	28					
400			400	29	1.27	460	60	2.4	3440
490			490	31					
600			600	33					
STA303/220	160/18	380	220	36	1.5	220-240 380-415	50	5.5	2880
300			300	37					
370			370	38					
450			450	39	1.75	460	60	3.1	3470
540			540	40					
650			650	42					
850			850	48					
1000			1000	50					
STA304/270	160/24	439	270	45					
350			350	46					
420			420	47					
500			500	49	2.18	460	60	3.9	3500
590			590	50					
700			700	52					
900			900	58					
1050			1050	60					
STA305/320	160/29	439	320	50					
400			400	51					
470			470	52					
550			550	53	2.94	460	60	5.1	3480
640			640	54					
750			750	56					
950			950	63					
1100			1100	65					
STA306/370	160/37	478	370	63					
450			450	64					
520			520	65					
600			600	66	3.8	460	60	6.4	3520
690			690	67					
800			800	69					
1000			1000	76					


Immersion Pumps


are plain centrifugal pumps with the impeller fitted on the driving shaft extension. They are mounted on top of the container, the pump extension being immersed in the coolant.

The maximum coolant level must stay a few mm/inches below the mounting flange.

The STA serie offers a **(SAE) flange** with pressure gauge connection port.

The flange can be rotated for either horizontal or vertical pipe connections.

 All types are also available as quick-suctioning immersion pumps equipped with "BRINKMANN's Suction De-aeration System". See series TAL/SAL.

 All types are also available as suction immersion pump with a connection to the vacuum filters on the suction side. See series STS.

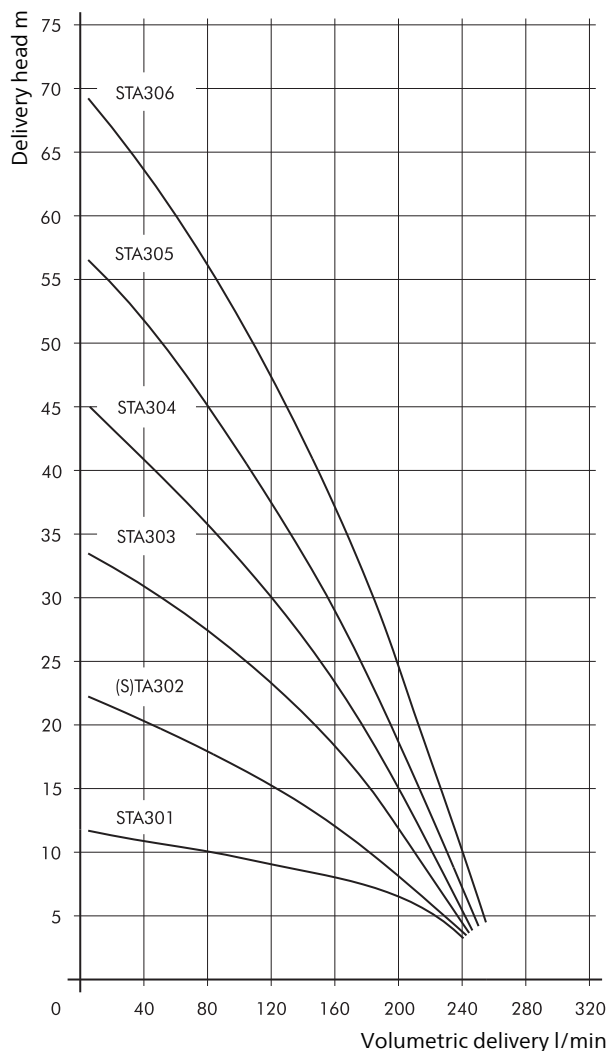
Applications

Types of fluid
coolants
cooling/cutting oils
Kinematic viscosity
...45 mm²/s (45 cSt)
Pumping temperature
0...80° C
0...60° C (TA302)
higher temperatures upon request

Construction

Pump body	cast iron
Cover	cast iron POM (TA302)
Impellers	brass POM (TA302)
Shaft	steel
Optional:	
Suction cover	with threaded inlet
Impeller	cast steel
Other materials	on request

Noise level	
TA302...STA302	60 dBA
STA303...STA305	66 dBA
STA306	71 dBA

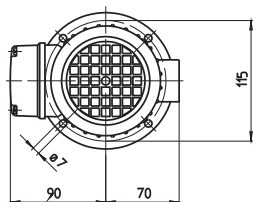
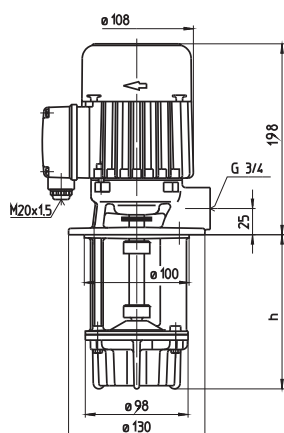


Quick Suctioning Immersion Pumps

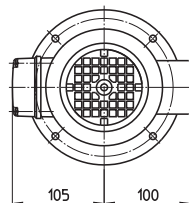
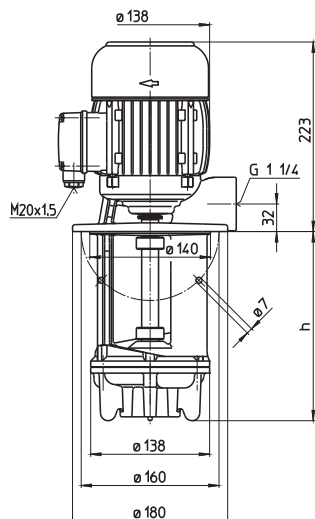
TL50...TAL200

Axial/semi-open impellers

TL50



TAL200



Type	Vol. del. at manom. del. head l/min / m	Height H mm	Depth of immersion h mm	Weight kg	Power kW	Voltage 3~ V	Fre- quen- cy Hz	Current A	Speed 1/min
TL50/110	40/2.4	198	120	6.5	0.17	220-240	50	0.92	2775
140			145	6.9					
190			195	7.1					
240			245	7.5					
290			295	7.8	0.195	460	60	0.49	3345
370			375	8.5					
TAL200/140	200/4.6	223	140	14.0	0.48	220-240	50	2.06	2820
220			220	14.5					
290			290	15.5					
370			370	16.5	0.55	460	60	1.14	3405
460			460	17.5					
570			570	19.5					

Quick Suctioning Immersion Pumps

equipped with the patented "BRINKMANN's Suction De-aeration System" are excellently suited to pumping **extremely air entrained fluids** (emulsions resp. cooling/cutting oils) as they occur in heavy cutting when turning, milling or grinding.

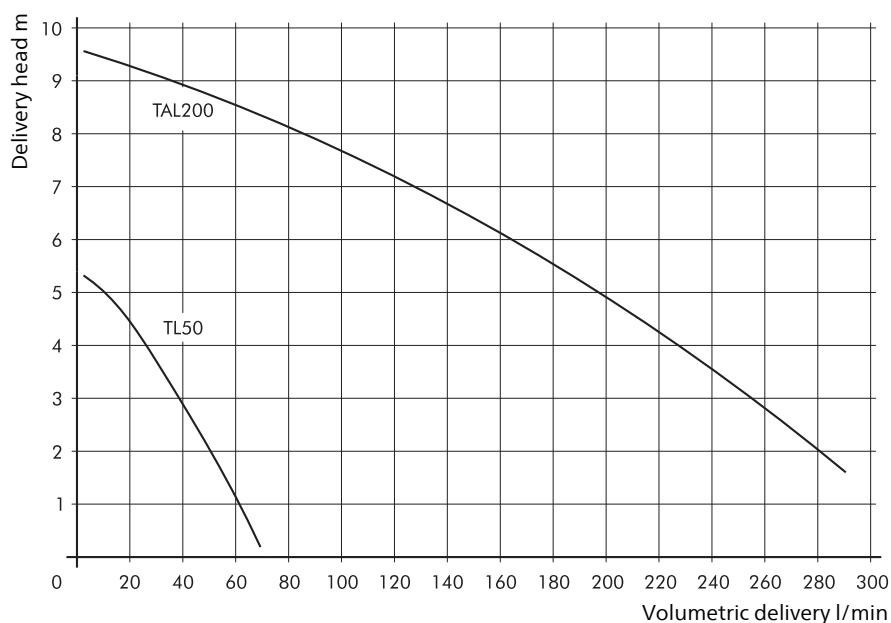
The quick suctioning immersion pumps reach stable working conditions as soon as the liquid level reaches the suction inlet.

Applications

Types of fluid
 coolants
 cooling/cutting oils
 Kinematic viscosity
 ...45 mm²/s (45 cSt)
 Pumping temperature
 0...80° C

Construction

Pump body	cast iron
Cover	cast iron
Impeller axial	cast steel
Impeller radial	brass
Shaft	steel
Optional: Impeller radial	cast steel

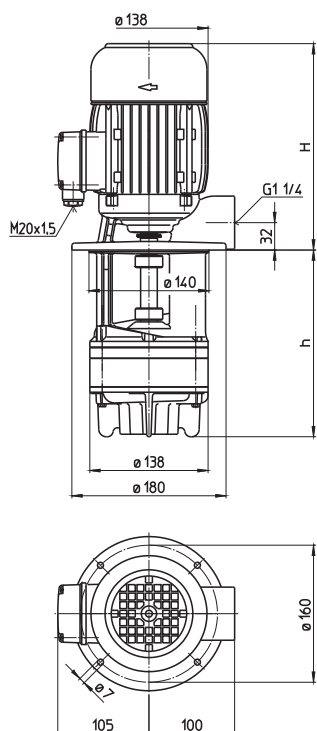


Quick Suctioning Immersion Pumps

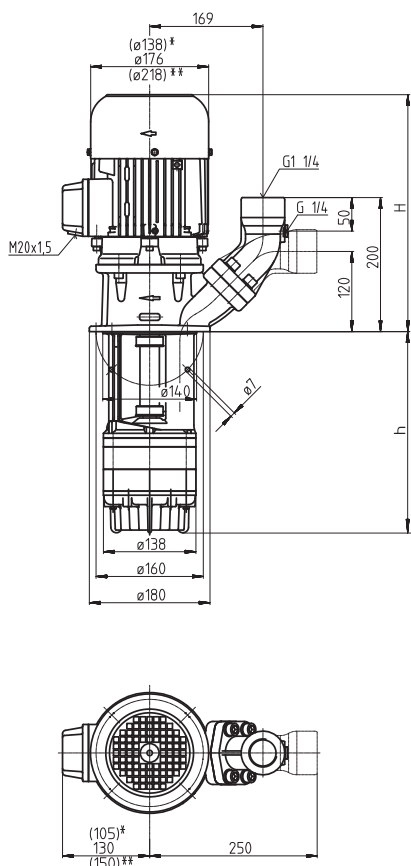
TL/STL141...146

Axial/semi-open impellers

TL141, 142



STL141...146



*) Dimensions for STL141, 142

**) Dimensions for STL146

Type	Vol. del. at manom. del. head l/min / m	Height H mm	Depth of immersion h mm	Weight kg	Power kW	Voltage 3~ V	Fre- quen- cy Hz	Current A	Speed 1/min
TL141/150	100/10	264	150	15.5	0.63	220-240	50	2.70	2850
230			230	16.0					
300			300	17.5					
380			380	18.0	0.725	460	60	1.46	3425
470			470	19.5					
580			580	20.5					
TL142/180	100/20	291	180	19.0					
260			260	19.5	1.1	220-240	50	4.33	2850
330			330	21.0					
410			410	22.0	1.27	460	60	2.4	3440
500			500	24.0					
610			610	25.0					
STL141/150	100/10	334	150	22.5					
230			230	23.0	0.63	220-240	50	2.70	2850
300			300	24.0					
380			380	24.5					
470			470	26.0	0.725	460	60	1.46	3425
580			580	27.5					
STL142/180	100/20	361	180	25					
260			260	26					
330			330	27					
410			410	29	1.27	460	60	2.4	3440
500			500	30					
610			610	32					
STL143/220	100/30	406	215	36					
300			295	37	1.7	220-240	50	6.24	2890
370			365	38					
450			445	39					
540			535	40	1.95	460	60	3.5	3480
650			645	41					
STL144/250	100/40	439	250	41					
330			330	42					
400			400	43					
480			480	44	2.55	460	60	4.4	3480
570			570	46					
680			680	47					
STL145/300	100/50	439	300	46					
380			380	47	2.6	220-240	50	9.30	2880
450			450	48					
530			530	49	2.94	460	60	5.1	3480
620			620	50					
730			730	52					
STL146/330	100/62	478	335	57					
410			415	58	3.3	220-240	50	11.6	2930
480			485	60					
560			565	61	3.8	460	60	6.4	3520

Quick Suctioning Immersion Pumps

equipped with the patented "BRINKMANN's Suction De-aeration System" are excellently suited to pumping **extremely air entrained fluids** (emulsions resp. cooling/cutting oils) as they occur in heavy cutting when turning, milling or grinding.

The quick suctioning immersion pumps reach stable working conditions as soon as the liquid level reaches the suction inlet.

The STL serie offers a (SAE) flange with pressure gauge connection port.

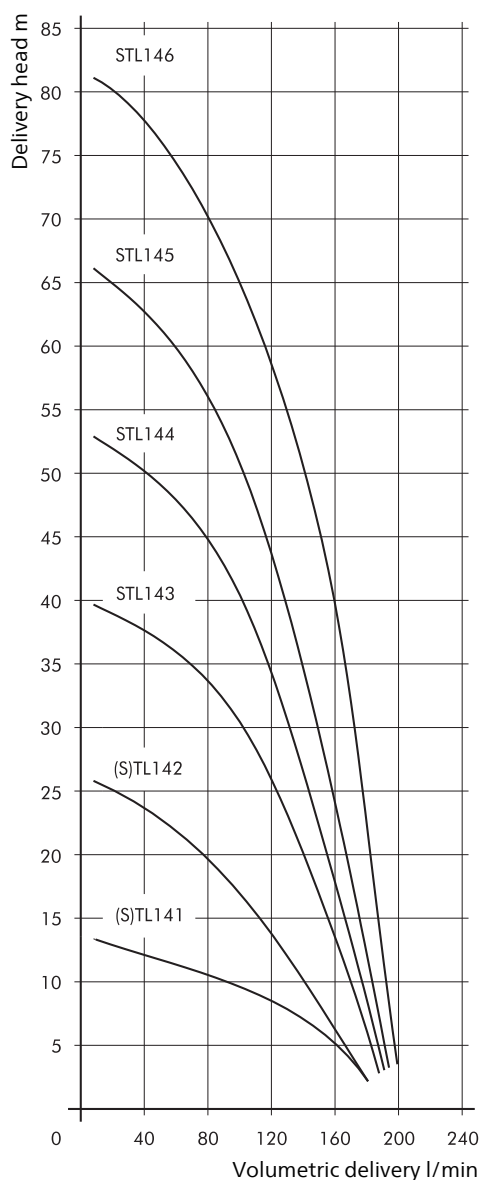
The flange can be rotated for either horizontal or vertical pipe connections.

Applications

Types of fluid
coolants
cooling/cutting oils
Kinematic viscosity
...45 mm²/s (45 cSt)
Pumping temperature
0...80° C

Construction

Pump body	cast iron
Cover	cast iron
Impeller axial	cast steel
Impeller radial	brass
Shaft	steel
Optional: Impeller radial	cast steel

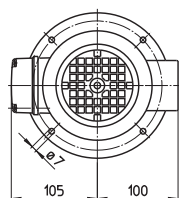
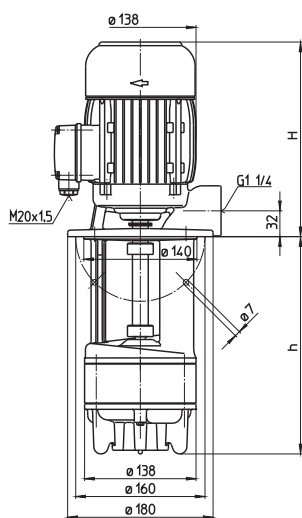


Quick Suctioning Immersion Pumps

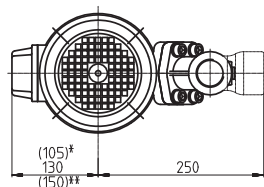
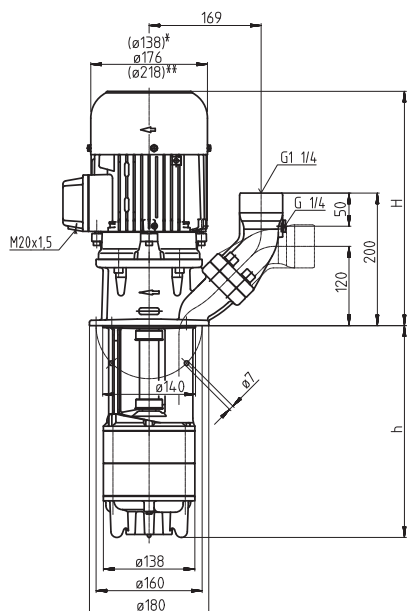
TAL/SAL301...306

Axial/semi-open impellers

TAL302



SAL301...306



*) Dimensions for SAL301, 302

**) Dimensions for SAL306

Type	Vol. del. at manom. del. head l/min / m	Height H mm	Depth of immersion h mm	Weight kg	Power kW	Voltage 3~ V	Fre- quen- cy Hz	Current A	Speed 1/min					
TAL302/190	160/12	291	190	20.5	1.1	220-240	50	4.33	2850					
270			270	21.0										
340			340	21.5	1.27	460	60	2.4	3440					
420			420	22.5										
510			510	24.0										
620			620	25.5										
SAL301/140	160/7	334	140	22						0.75	220-240	50	3.24	2850
220			220	23										
290			290	24	0.86	460	60	1.85	3440					
370			370	25										
460			460	27										
570			570	31										
SAL302/190	160/12	361	190	26.5						1.1	220-240	50	4.33	2850
270			270	27.5										
340			340	28.5	1.27	460	60	2.4	3440					
420			420	30.0										
510			510	31.5										
620			620	33.5										
SAL303/240	160/18	380	240	37						1.5	220-240	50	5.5	2880
320			320	38										
390			390	39	1.75	460	60	3.1	3470					
470			470	40										
560			560	41										
670			670	43										
870			870	49										
1020			1020	51										
SAL304/290	160/24	439	290	46	1.9	220-240	50	6.84	2900					
370			370	47										
440			440	48	2.18	460	60	3.9	3500					
520			520	50										
610			610	51										
720			720	53										
920			920	59										
1070			1070	61										
SAL305/340	160/29	439	340	51						2.6	220-240	50	9.30	2880
420			420	52										
490			490	53	2.94	460	60	5.1	3480					
570			570	54										
660			660	55										
770			770	57										
970			970	64										
1120			1120	66										
SAL306/390	160/37	478	390	64	3.3	220-240	50	11.6	2930					
470			470	65										
540			540	66	3.8	460	60	6.4	3520					
620			620	67										
710			710	68										
820			820	70										
1020			1020	77										

Quick Suctioning Immersion Pumps

equipped with the patented "BRINKMANN's Suction De-aeration System" are excellently suited to pumping **extremely air entrained fluids** (emulsions resp. cooling/cutting oils) as they occur in heavy cutting when turning, milling or grinding.

The quick suctioning immersion pumps reach stable working conditions as soon as the liquid level reaches the suction inlet.

The SAL serie offers a (SAE) flange with pressure gauge connection port.

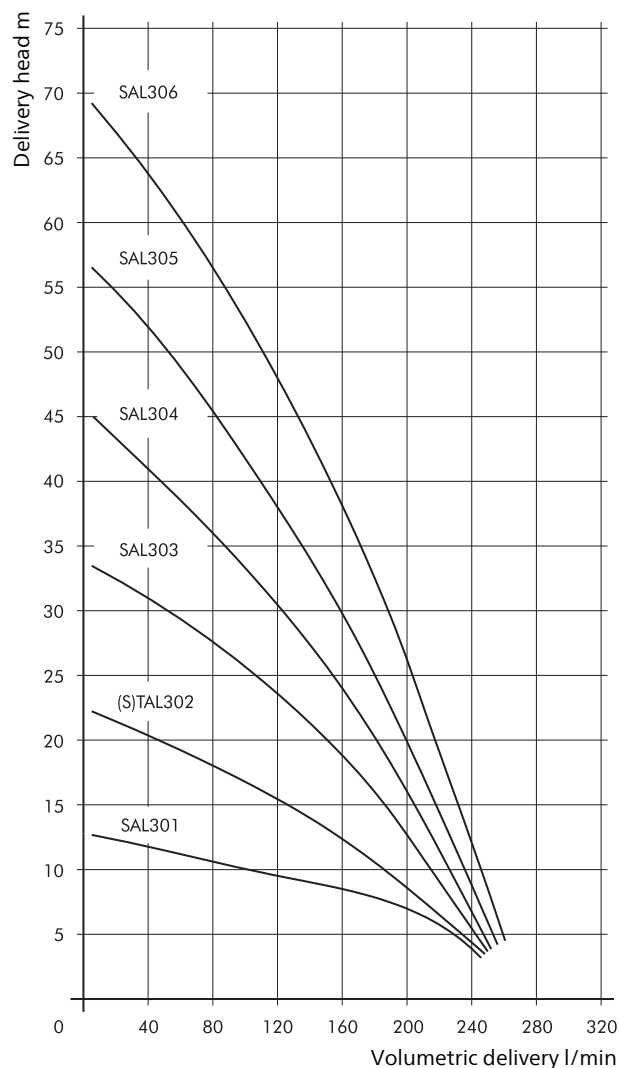
The flange can be rotated for either horizontal or vertical pipe connections.

Applications

Types of fluid
coolants
cooling/cutting oils
Kinematic viscosity
...45 mm²/s (45 cSt)
Pumping temperature
0...80° C

Construction

Pump body	cast iron
Cover	cast iron
Impeller axial	cast steel
Impeller radial	brass
Shaft	steel
Optional: Impeller radial	cast steel

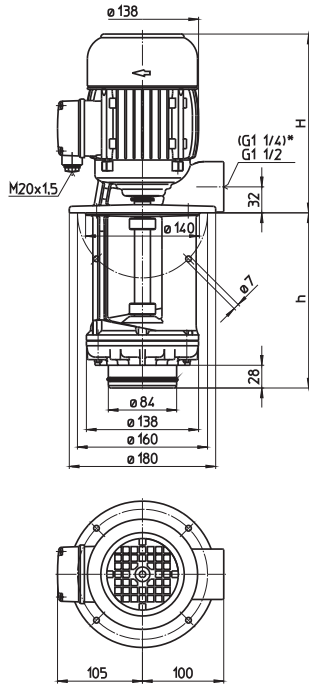


Suction Immersion Pumps

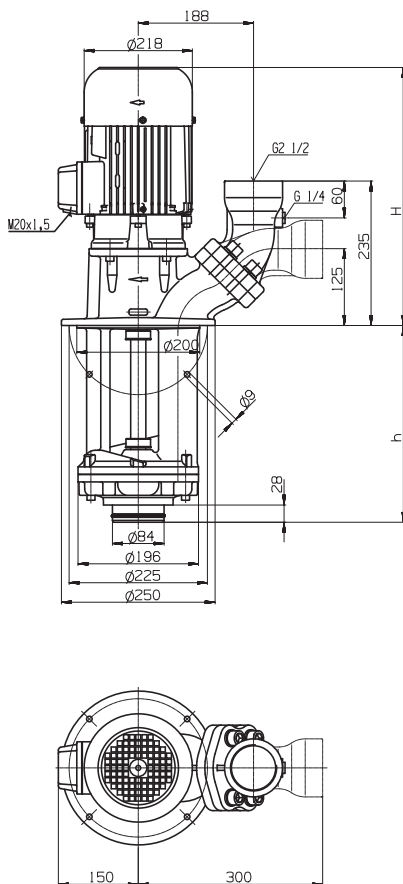
TAS/STS301...1001

Axial/semi-open impellers

TAS301, TAS601



STS1001



*) Dimensions for TAS301

Type	Vol. del. at manom. del. head l/min / m	Height H mm	Depth of immersion h mm	Weight kg	Power kW	Voltage 3~ V	Fre- quen- cy Hz	Current A	Speed 1/min
TAS301/140	200/5.5	264	136	14.0	0.63	220-240	50	2.70	2850
220			216	14.5		380-415	50	1.56	2850
290			286	15.0					
370			366	15.5	0.725	460	60	1.46	3425
460			456	17.5					
570			566	19.0					
TAS601/150	400/4	291	144	17.5	1.1	220-240	50	4.33	2850
230			224	18.0		380-415	50	2.50	2850
300			294	19.0					
380			374	20.0	1.27	460	60	2.4	3440
470			464	21.5					
580			574	22.5					
STS1001/230	600/14	503	216	65	3.3	220-240	50	11.6	2930
330			316	67		380-415	50	6.7	2930
460			446	70					
580			566	74	3.8	460	60	6.4	3520
780			766	86					
1010			996	92					

Suction Immersion Pumps

series TAS/STS make it possible to connect to vacuum filters through their simple connection on the suction side (for instance, with a slot screen).

Suction immersion pumps without seals are positioned in the area of unfiltered coolant in the tank.

With their robust design, they allow operating pressures of - 0.3 bar to - 0.5 bar on the suction side.

The STS serie offers a flange with pressure gauge connection port.

The flange can be rotated for either horizontal or vertical pipe connections.



All types specified are also available as multistage pumps e.g. STS304/610.

See series TA/STA.

Applications

Types of fluid
coolants
cooling/cutting oils

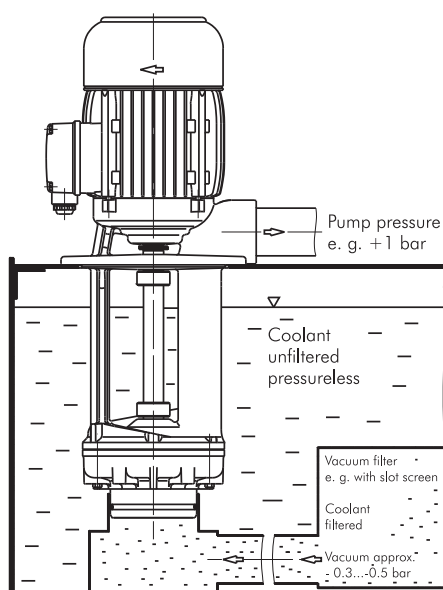
Kinematic viscosity
...45 mm²/s (45 cSt)

Pumping temperature
0...60° C

Construction

Pump body	cast iron
Cover	cast iron
Impeller axial	cast steel
Impeller radial	brass
	cast steel (STS1001)
Shaft	steel
Optional:	
Impeller radial	cast steel (TAS301...TAS601)

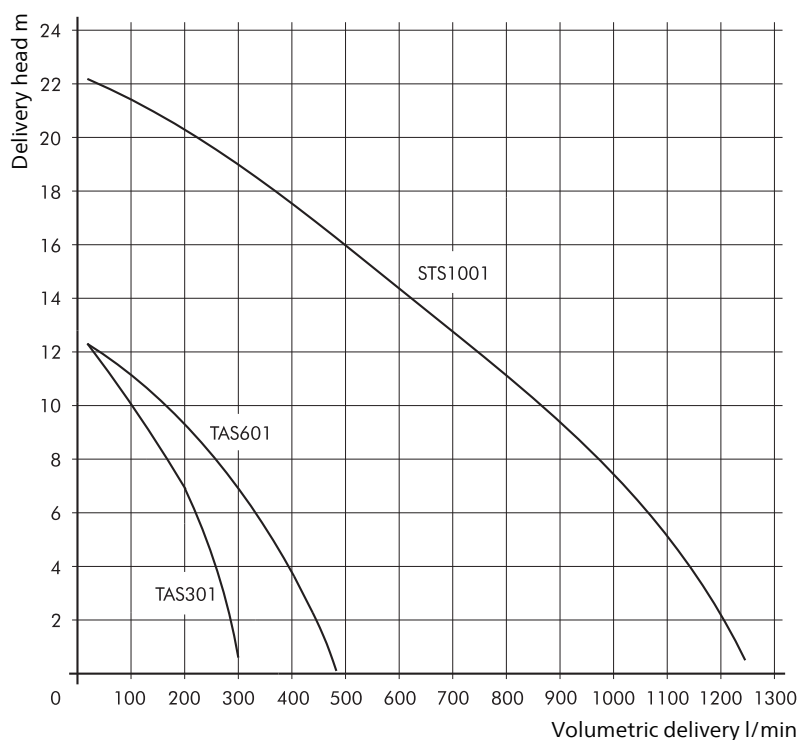
Noise level	
TAS301	60 dBA
TAS601	62 dBA
STS1001	71 dBA



Suction connection

Intake cover cast iron
with O-Ring 78 x 4 mm Viton

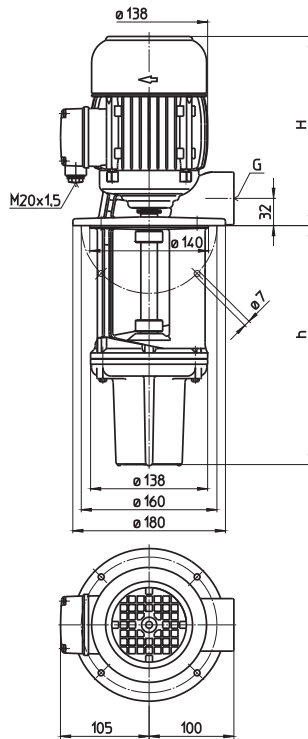
for
Connecting pipe
86.0...86.8 mm inner-Ø



Lifting Pumps TAA140...280

Axial impellers

TAA140, 280



Type	Vol. del. at manom. del. head l/min / m	Height H mm	Depth of im- mersion h mm	Pipe con- nection	Weight kg	Power kW	Voltage 3~ V	Fre- quen- cy Hz	Current A	Speed 1/min
TAA140/200	180/2	223	200	G 1 ¼	15.5	0.48	220-240	50	2.06	2820
	280		280		16.5					
	350	350	17.5							
TAA280/200	360/2	264	200	G 1 ½	17	0.92	220-240	50	3.8	2840
	280		280		18					
	350		350		19					
						0.55	460	60	1.14	3405
						1.06	460	60	2.1	3440

Lifting Pumps

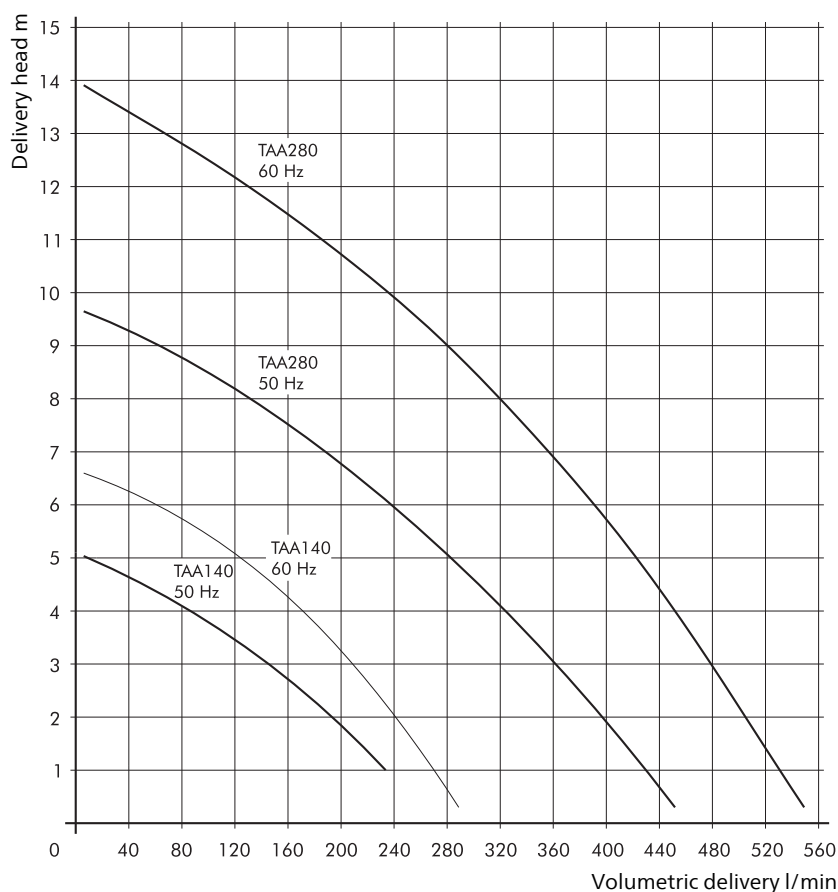
series TAA gently pump foam-sensitive cooling lubricants (emulsions or cooling and cutting oils) or highly inflated cooling lubricants such as occur with a high degree of machining in lathing, milling or grinding.

Applications

Types of fluid
 coolants
 cooling/cutting oils
 Kinematic viscosity
 ...45 mm²/s (45 cSt)
 Pumping temperature
 0...60° C

Construction

Pump body	cast iron
Cover	cast iron
Impellers	cast iron
Shaft	steel
Noise level	
TAA140...TAA280	62 dBA

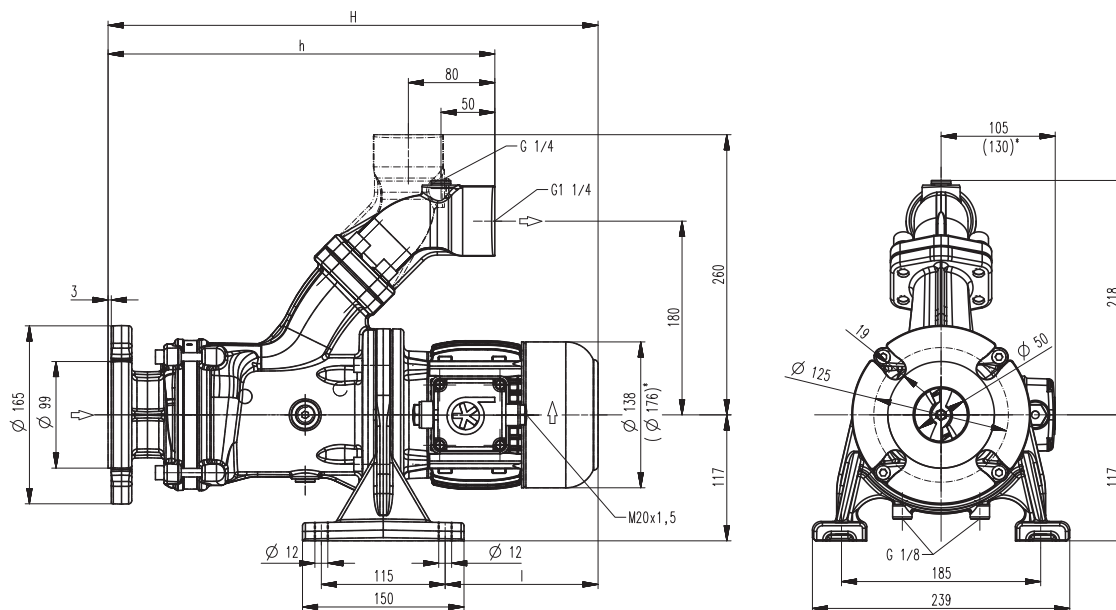


Horizontal End-Suction Pumps

SBA141...143

Axial/semi-open impellers

SBA141...143



*) Dimensions for SBA143

Type	Vol. del. at manom. del. head l/min / m	Dimensions		Length l mm	Weight kg	Power kW	Voltage 3 ~ V	Fre- quen- cy Hz	Current A	Speed 1/min
		H mm	h mm							
SBA141	100/9	497	359	184	28	0.63	220-240	50	2.70	2850
							380-415	50	1.56	2850
SBA142	100/13	575	410	211	32	0.725	460	60	1.46	3425
						1.1	220-240	50	4.33	2850
							380-415	50	2.50	2850
SBA143	100/20	653	444	256	42	1.27	460	60	2.4	3440
						1.7	220-240	50	6.24	2890
							380-415	50	3.60	2890
						1.95	460	60	3.5	3480

Horizontal End-Suction Pumps

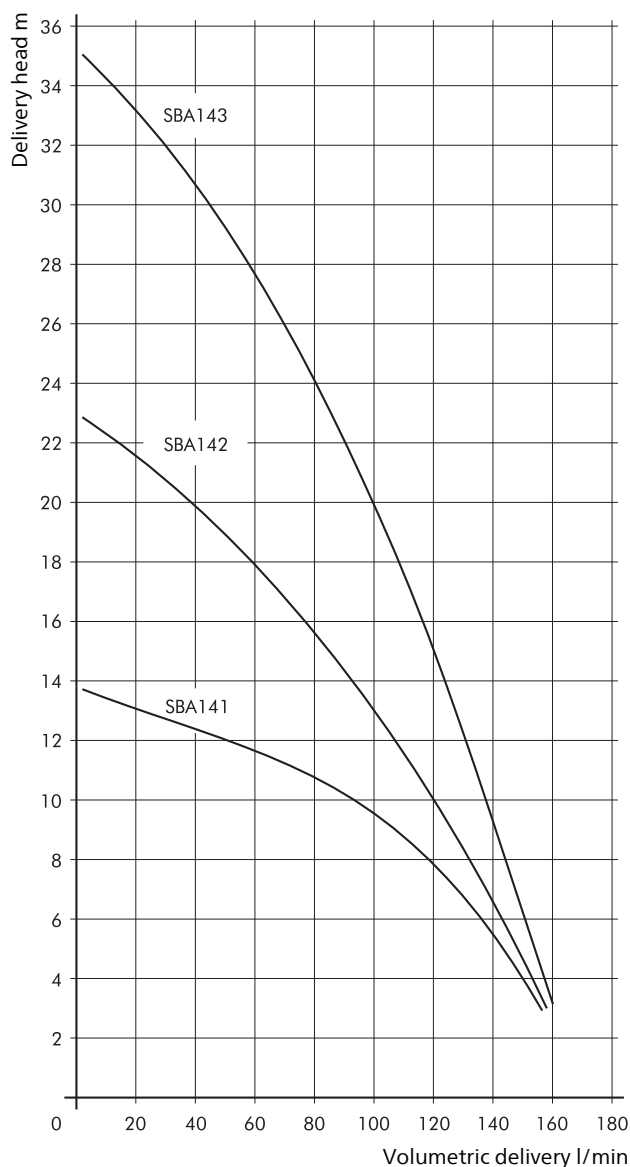
are centrifugal inline pumps with a compact design where the impeller is mounted onto the extended motor shaft. These pumps are not self-priming and must be gravity fed. All pumps are equipped with a single mechanical seal. Upon request a second mechanical seal is available to allow for dry-running (-GD). This pump series is designed for horizontal installations next to a tank and for pumping **air entrained coolant** fluids, such as **water-soluble coolants or cutting oils**, as they occur in **high speed turning, milling or grinding applications**. The SBA pumps are equipped with the user-friendly **(SAE) flange** connection which allows for either vertical or horizontal pipe connection and the connection of a pressure gauge with G 1/4. For more information see mechanical features within the technical information section.

Applications

Types of fluid
coolants
cooling/cutting oils
Kinematic viscosity
...45 mm²/s (45 cSt)
Pumping temperature
0...80° C

Construction

Pump body	cast iron
Cover	cast iron
Impeller axial	cast steel
Impeller radial	cast steel
Shaft	steel
Mechanical seal	SiC
Noise level	
SBA141...SBA142	64 dBA
SBA143	68 dBA

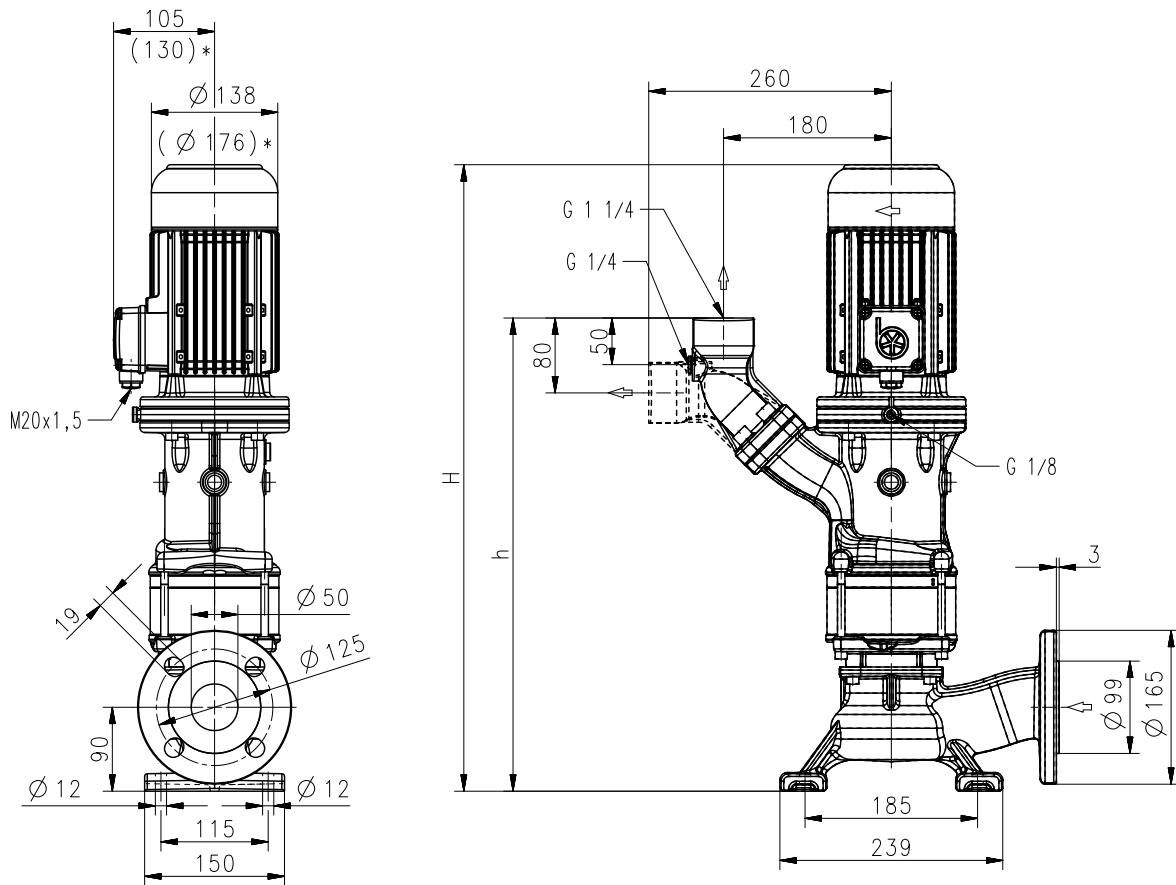


Vertical End Suction Pumps

SBA141...143-V

Axial/semi-open impellers

SBA141...143-V



*) Dimensions for SBA143-V

Type	Vol. del. at manom. del. head l/min /m	Dimensions		Weight kg	Power kW	Voltage 3 ~ V	Fre- quen- cy Hz	Current A	Speed 1/min
		H mm	h mm						
SBA141-V	100/7	594	457	32.5	0.63	220-240	50	2.70	2850
						380-415	50	1.56	2850
					0.725	460	60	1.46	3425
SBA142-V	100/17.5	672	508	38	1.1	220-240	50	4.33	2850
						380-415	50	2.50	2850
					1.27	460	60	2.4	3440
SBA143-V	100/28	751	542	47	1.7	220-240	50	6.24	2890
						380-415	50	3.60	2890
					1.95	460	60	3.5	3480

Vertical End Suction Pumps

are centrifugal inline pumps with a compact design where the impeller is mounted onto the extended motor shaft. These pumps are not self-priming and must be gravity fed. All pumps are equipped with double mechanical seal. This pump series is designed for vertical installations next to a tank and for pumping **air entrained coolant** fluids, such as **water-soluble coolants or cutting oils**, as they occur in **high speed turning, milling or grinding applications**.

The SBA pumps are equipped with the user-friendly 45 degree **flange** connection which allows for either vertical or horizontal pipe connection and the connection of a pressure gauge with G 1/4.

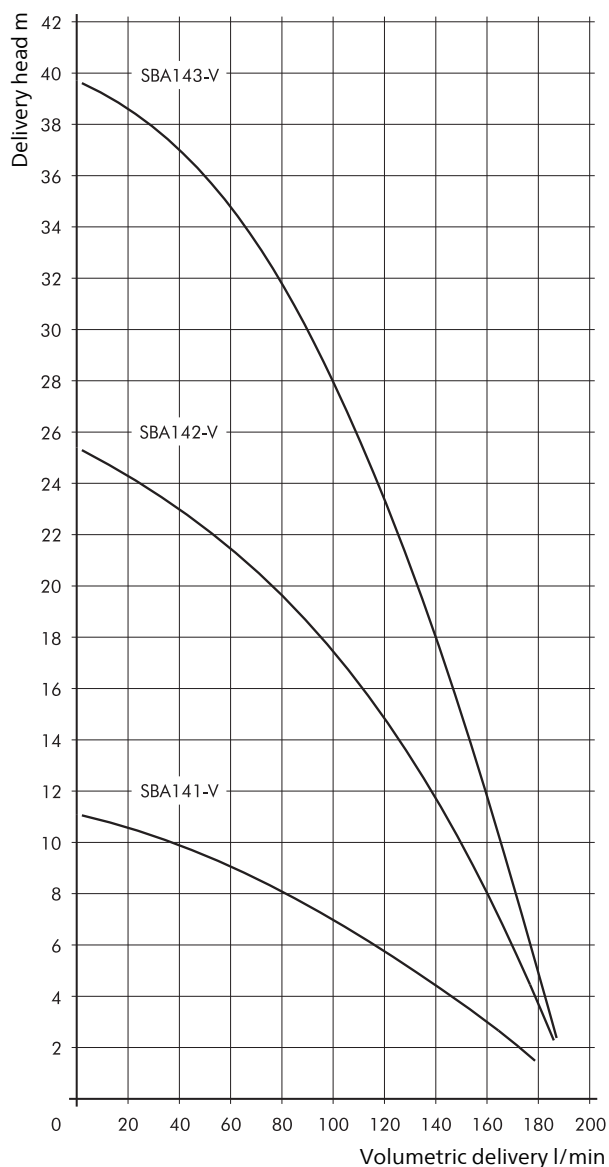
For more information see mechanical features within the technical information section.

Applications

Types of fluid
coolants
cooling/cutting oils
Kinematic viscosity
...45 mm²/s (45 cSt)
Pumping temperature
0...80° C

Construction

Pump body	cast iron
Cover	cast iron
Impeller axial	cast steel
Impeller radial	cast steel
Shaft	steel
Mechanical seal	SiC
Noise level	
SBA141-V...SBA142-V	64 dBA
SBA143-V	68 dBA

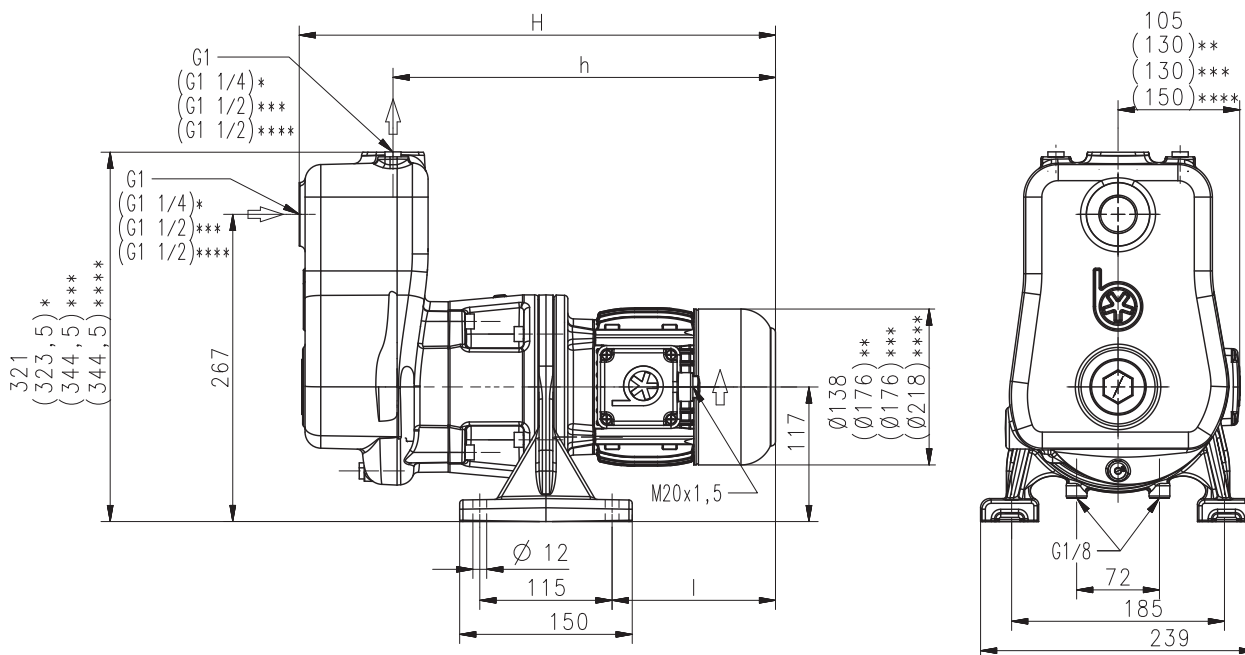


Horizontal End-Suction Pumps

SBM140...450

Semi-open impellers

SBM140...450



- *) Dimensions for SBM315, SBM315/60 Hz
- **) Dimensions for SBM315/60Hz
- ***) Dimensions for SBM450
- ****) Dimensions for SBM450/60Hz

Type	Vol. del. at manom. del. head l/min / m	Dimensions		Length l mm	Weight kg	Power kW	Voltage 3 ~ V	Fre- quen- cy Hz	Current A	Speed 1/min
		H mm	h mm							
SBM140	100/8	460	373	183	28.5	0.63	220-240 380-415	50 50	2.70 1.56	2850 2850
SBM140/60Hz	120/12	461	375	184	29	1.06	460	60	2.1	3440
SBM315	200/9	497	399	211	32	1.1	220-240 380-415	50 50	4.33 2.50	2850 2850
SBM315/60Hz	240/14	542	444	256	46	1.95	460	60	3.5	3480
SBM450	240/15	586	476	289	48	1.9	220-240 380-415	50 50	6.84 3.95	2900 2900
SBM450/60Hz	270/24	625	515	328	55	3.8	460	60	6.4	3520

Horizontal End-Suction Pumps

are centrifugal inline pumps with a compact design where the impeller is mounted onto the extended motor shaft.

These pumps are **self-priming after initial filling.**

All pumps are equipped with a single mechanical seal.

SBM Pumps are mounted **next to or on top** of the tank and they are suitable for pumping **air entrained coolant fluids**, such as **water-soluble coolants or cutting oils**, as they occur in **high speed turning, milling or grinding applications.**

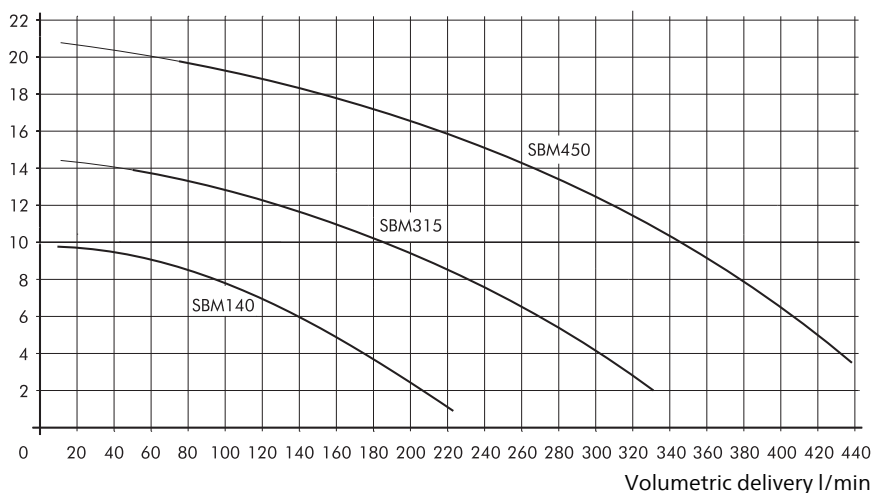
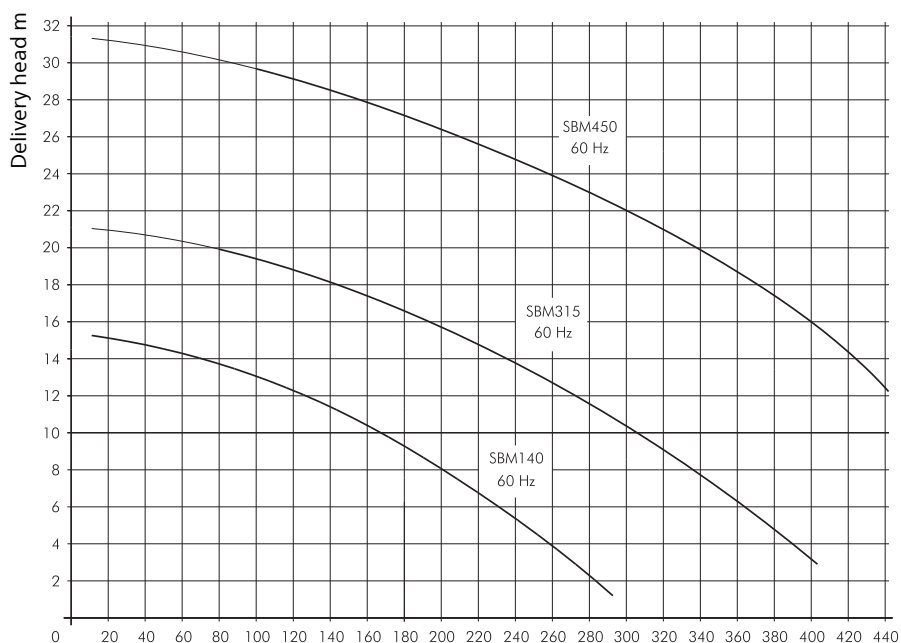
For more information see mechanical features within the technical information section.

Applications

- Types of fluid
 - coolants
 - cooling/cutting oils
- Kinematic viscosity
 - ...45 mm²/s (45 cSt)
- Pumping temperature
 - 0...60° C
- Suction height
 - 5 m

Construction

- | | |
|-----------------|------------|
| Cover | cast iron |
| Impeller radial | cast steel |
| Shaft | steel |
| Mechanical seal | SiC |

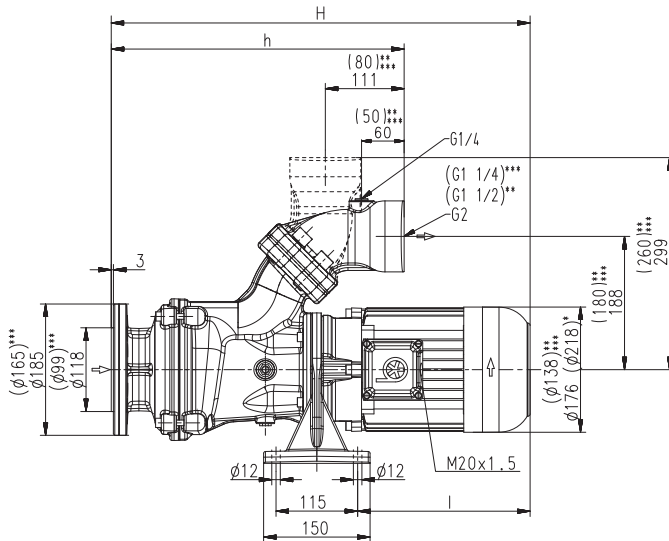


Horizontal End-Suction Pumps

SBF125...1150

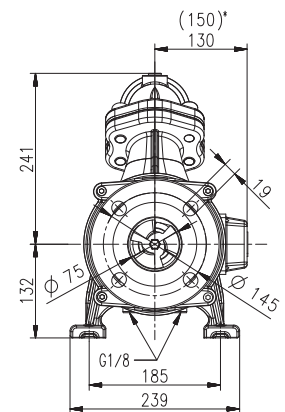
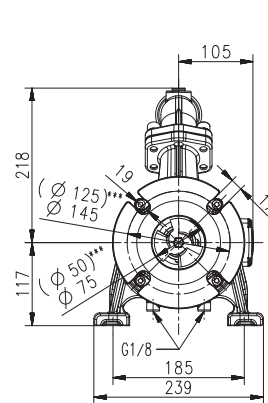
Axial/semi-open impellers

SBF125...1150



SBF125, 550

SBF650, 850, 1150



- *) Dimensions for SBF850,1150
- **) Dimensions for SBF550
- ***) Dimensions for SBF125

Type	Vol. del. at manom. del. head	Dimensions		Length	Weight	Power kW	Voltage 3~ V	Frequency Hz	Current A	Speed 1/min
	l/min /m	H mm	h mm	l mm	kg					
SBF125	80/6	497	359	184	28.5	0.63	220-240	50	2.70	2850
							380-415	50	1.56	2850
						0.725	460	60	1.46	3425
SBF550	250/4	524	360	211	30	1.1	220-240	50	4.33	2850
							380-415	50	2.50	2850
						1.27	460	60	2.4	3440
SBF650	400/7	632	409	289	55	2.2	220-240	50	7.8	2890
							380-415	50	4.5	2890
						2.55	460	60	4.4	3480
SBF850	500/10	675	413	328	67	3.3	220-240	50	11.6	2930
							380-415	50	6.7	2930
						3.8	460	60	6.4	3520
SBF1150	600/13	675	413	328	72	4.0	220-240	50	14.50	2920
							380-415	50	8.35	2920
						4.55	460	60	7.9	3520



Horizontal End-Suction Pumps

are centrifugal inline pumps with a compact design where the impeller is mounted onto the extended motor shaft. These pumps are not self-priming and must be gravity fed. The SBF125 pumps are equipped with double mechanical seal. The SBF550...1150 Pumps are equipped with a single mechanical seal. Upon request a second mechanical seal is available to allow for dry-running (-GD). This pump series is designed for horizontal installations next to a tank and for pumping **air entrained coolant fluids, such as water-soluble coolants (emulsions), as they occur in high speed machining applications, such as turning and milling.**

The SBF* pumps are equipped with the user-friendly 45 degree **flange** connection which allows for either vertical or horizontal pipe connection and the connection of a pressure gauge with G 1/4.

*) SBF125...550 with SAE flange.

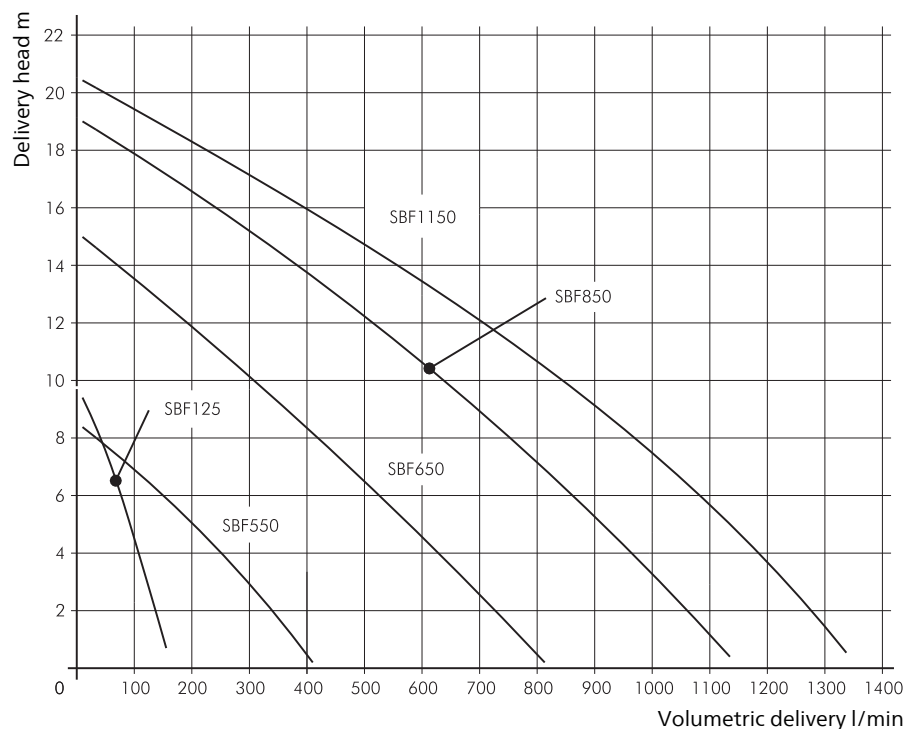
For more information see lifting pumps features SFL/SBF within the technical information section.

Applications

Types of fluid
coolants
cooling/cutting oils
Max. chip to coolant ratio by weight:
1.0 % depending on the specific chip type
Chip material:
Aluminium, steel, coloured steels, cast iron
Kinematic viscosity
...45 mm²/s (45 cSt)
Pumping temperature
0...80° C

Construction

Pump body	cast iron
Cover	cast iron
Impeller axial	cast steel
Impeller radial	cast steel
Shaft	steel
Mechanical seal	SiC
Noise level	
SBF550	62 dBA
SBF125	64 dBA
SBF650	66 dBA
SBF850...SBF1150	71 dBA

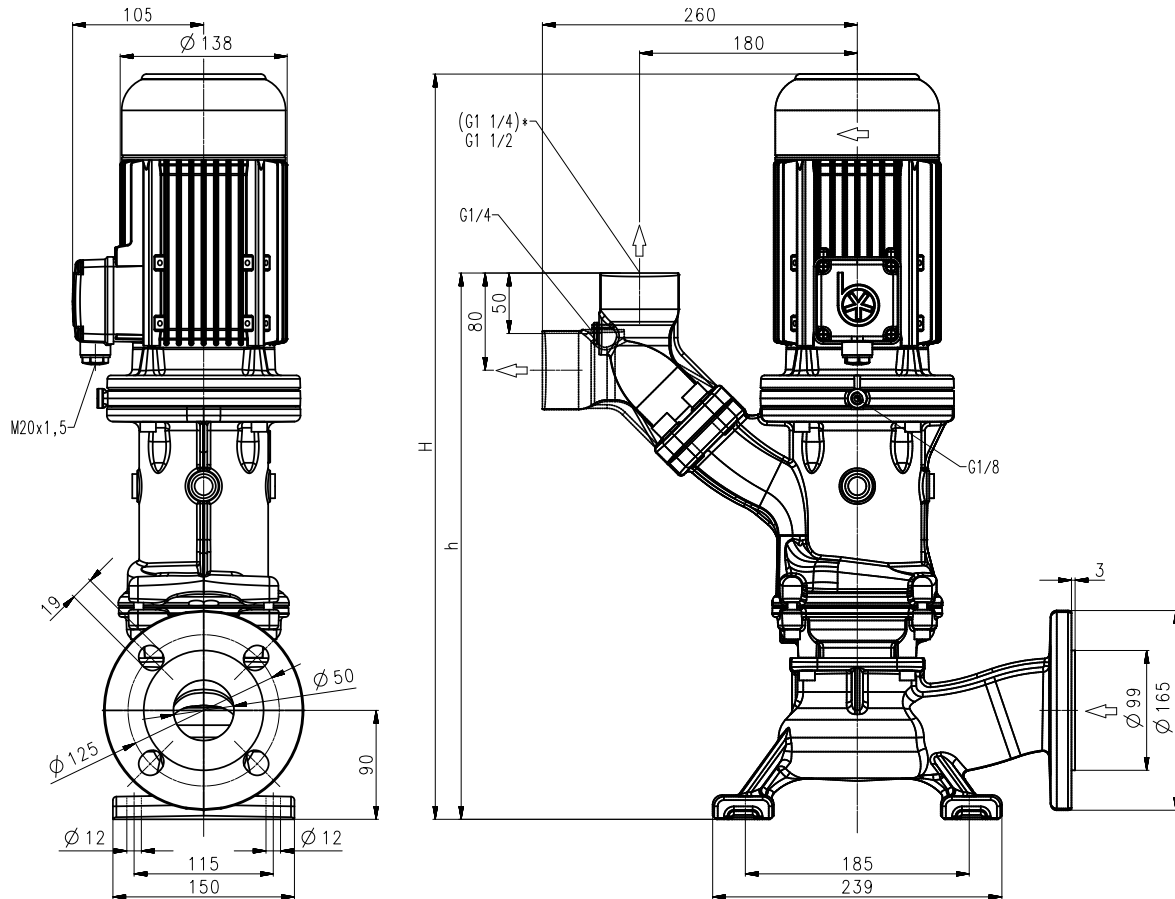


Vertical End Suction Pumps

SBF125...550-V

Axial/semi-open impellers

SBF125...550-V



*) Dimensions for SBF125-V

Type	Vol. del. at manom. del. head l/min / m	Dimensions		Weight kg	Power kW	Voltage 3 ~ V	Fre- quen- cy Hz	Current A	Speed 1/min
		H mm	h mm						
SBF125-V	80/5.5	591	454	32.5	0.63	220-240	50	2.70	2850
						380-415	50	1.56	2850
					0.725	460	60	1.46	3425
SBF550-V	200/4	616	452	34.5	1.1	220-240	50	4.33	2850
						380-415	50	2.50	2850
					1.27	460	60	2.4	3440

Vertical End Suction Pumps

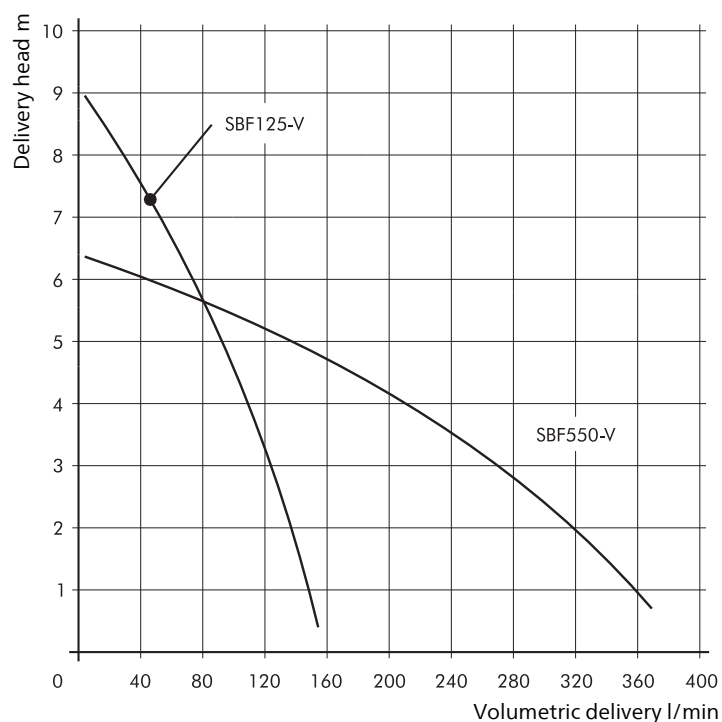
are centrifugal inline pumps with a compact design where the impeller is mounted onto the extended motor shaft. These pumps are not self-priming and must be gravity fed. All pumps are equipped with double mechanical seal. This pump series is designed for vertical installations next to a tank and for pumping air entrained coolant fluids, such as water-soluble coolants or cutting oils, as they occur in high speed turning, milling or grinding applications. The SBF pumps are equipped with the user-friendly 45 degree flange connection which allows for either vertical or horizontal pipe connection and the connection of a pressure gauge with G 1/4. For more information see mechanical features within the technical information section.

Applications

Types of fluid
coolants
cooling/cutting oils
Max. chip to coolant ratio by weight:
1.0 %
Chip material:
Aluminium, steel, coloured steels
Kinematic viscosity
...45 mm²/s (45 cSt)
Pumping temperature
0...80° C

Construction

Pump body	cast iron
Cover	cast iron
Impeller axial	cast steel
Impeller radial	cast steel
Shaft	steel
Mechanical seal	SiC
Noise level	
SBF550-V	62 dBA
SBF125-V	64 dBA

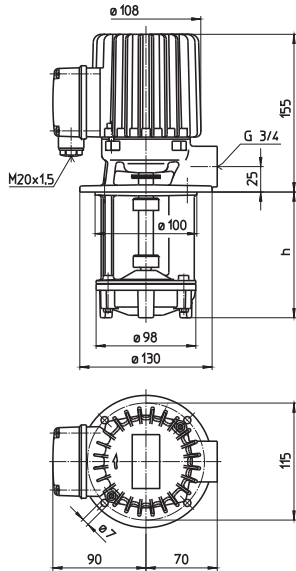


Free Flow-Immersion Pumps

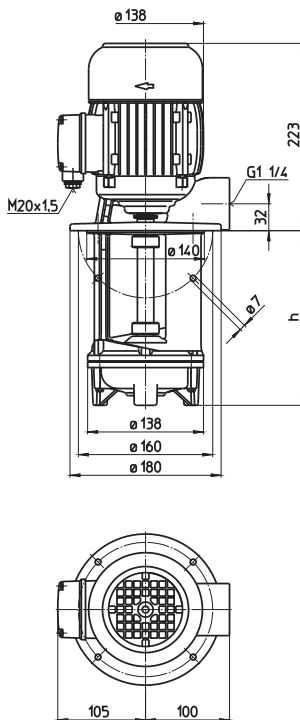
FT35...FTA140

Semi-open impellers

FT35



FTA140



Type	Vol. del. at manom. del. head l/min /m	Height H mm	Depth of immersion h mm	Weight kg	Power kW	Voltage 3~ V	Fre- quen- cy Hz	Current A	Speed 1/min
FT35/100	40/2	155	100	5.5	0.21	220-240	50	0.71	2800
130			130	5.8		380-420	50	0.41	2800
180			180	6.0	460	60	0.41	3300	
230			230	6.5					
280			280	7.0					
360			360	7.5					
FTA140/130	150/2	223	130	14.0	0.48	220-240	50	2.06	2820
210			210	14.5		380-415	50	1.19	2820
280			280	15.5	0.55	460	60	1.14	3405
360			360	16.5					
450			450	18.0					
560			560	19.5					



Free Flow-Immersion Pumps

series FT/FTA are provided to lift coolant for filtering.

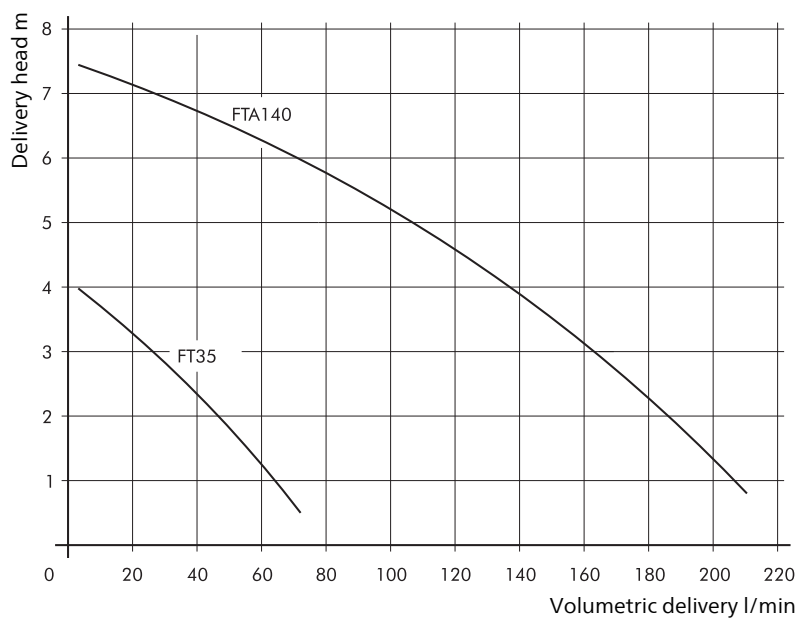
Middle shreds can be transported together with liquids.

Applications

Types of fluid
coolants
cooling/cutting oils
Kinematic viscosity
...45 mm²/s (45 cSt)
Pumping temperature
0...60° C

Construction

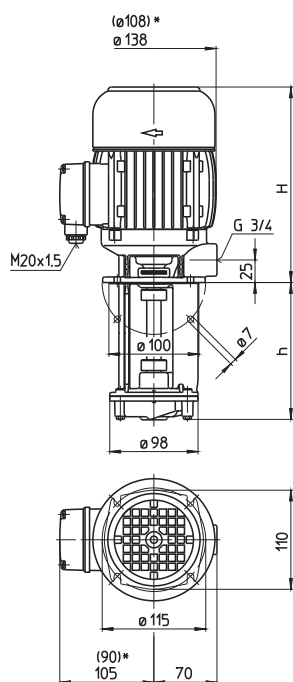
Pump body	cast iron
Cover	cast iron
Impeller	brass
Shaft	steel
Optional:	
Cover	POM (FT35)
Impeller	POM
	cast iron
Noise level	
FT35	45 dBA
FTA140	60 dBA



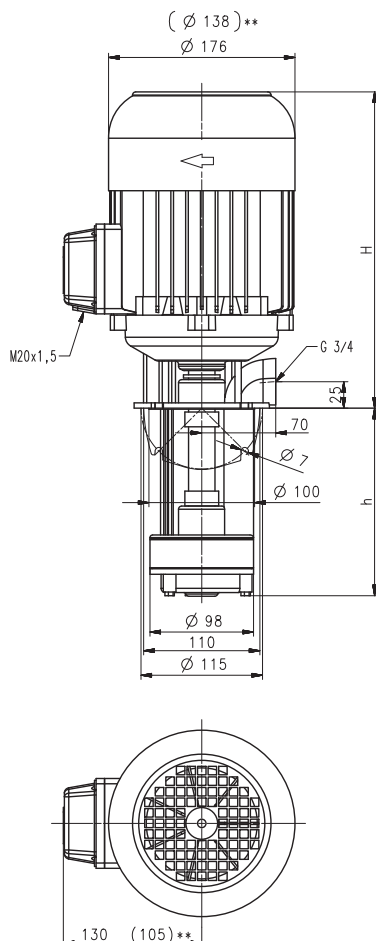
TS12...TS24

Peripheral impellers

TS12, 13, 14, 21, 22



TS15, TS24



*) Dimensions for TS12, 13
 **) Dimensions for TS15

Type	Vol. del. at manom. del. head l/min / m	Height H mm	Depth of immersion h mm	Weight kg	Power kW	Voltage 3~ V	Fre- quen- cy Hz	Current A	Speed 1/min
TS12/110	20/10	236	110	5.7	0.32	220-240	50	1.58	2825
	150		150	5.9					
	190		190	6.3	0.365	460	60	0.84	3400
	250		250	6.8					
	300		300	7.3					
TS13/110	20/16	236	110	6.2	0.32	220-240	50	1.58	2825
	150		150	6.4					
	190		190	6.8	0.365	460	60	0.84	3400
	250		250	7.3					
	300		300	7.8					
TS14/110	20/16	243	110	7.2	0.48	220-240	50	2.06	2820
	150		150	7.5					
	190		190	7.9	0.55	460	60	1.14	3405
	250		250	8.2					
	300		300	8.5					
TS15/190	20/35	285	190	12.5	1.1	220-240	50	4.33	2850
	220		220	13.0					
					1.27	460	60	2.4	3440
TS21/110	40/14	258	110	9.7	0.75	220-240	50	3.24	2850
	150		150	10.0					
	190		190	10.5	0.86	460	60	1.85	3440
	250		250	11.0					
	300		300	11.5					
350		350	12.0						
TS22/110	40/25	285	110	11.8	1.1	220-240	50	4.33	2850
	150		150	12.2					
	190		190	12.5	1.27	460	60	2.4	3440
	250		250	13.0					
	300		300	13.4					
350		350	13.7						
TS24/140	40/35	360	140	26	1.9	220-240	50	6.84	2900
	180		180	27					
	220		220	28	2.18	460	60	3.9	3500


Immersion Pumps

Models TS12 to TS24 are suitable for **CNC machine tools** featuring coolant supply through the tool holder or driving spindle or equipped with internally cooled tool.

These pumps are equipped with a peripheral impeller to achieve a compact high pressure unit.

Series TS are suitable for filtered coolant only.

To reduce pump pressure, models TS22 to TS24 are also available with an optional Y/YY (Dahlander) motor configuration for 4 pole operation at half speed.

 Special versions of the TS pumps can be supplied for use with temperature controlling systems carrying thermal oils of up to 150° C resp. 200° C.

Applications

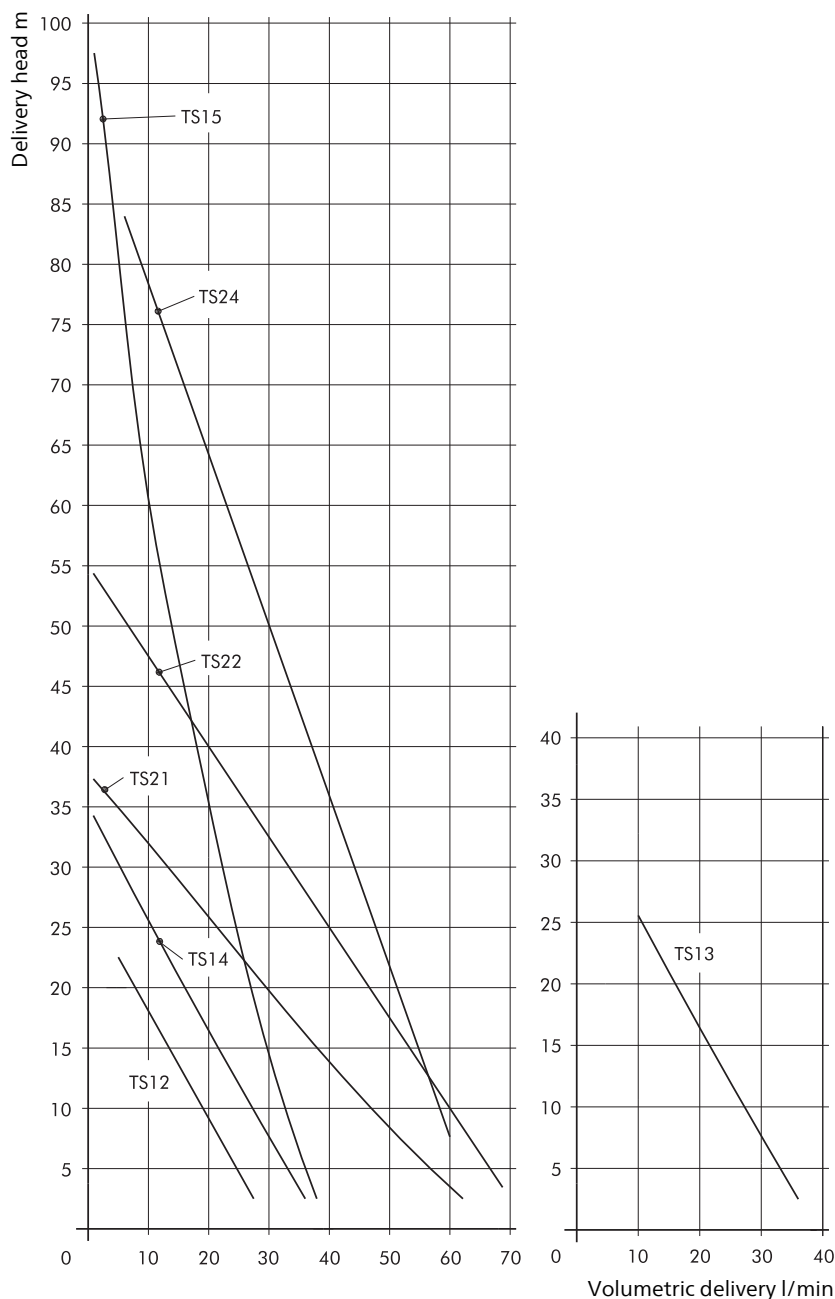
- Types of fluid
 - coolants
 - cooling/cutting oils
- Kinematic viscosity
 - ...45 mm²/s (45 cSt)
- Pumping temperature
 - 0...80° C
 - ...150° C (200° C) as special make (TS)

Construction

Pump body	cast iron
Cover	cast iron
Impellers	brass
Shaft	steel
Optional:	
Pump body	bronze (TS12...TS14, TS21...TS22)
Cover	bronze (TS12...TS14, TS21...TS22)
Impellers	CrNi-steel (TS12...TS22)

Noise level

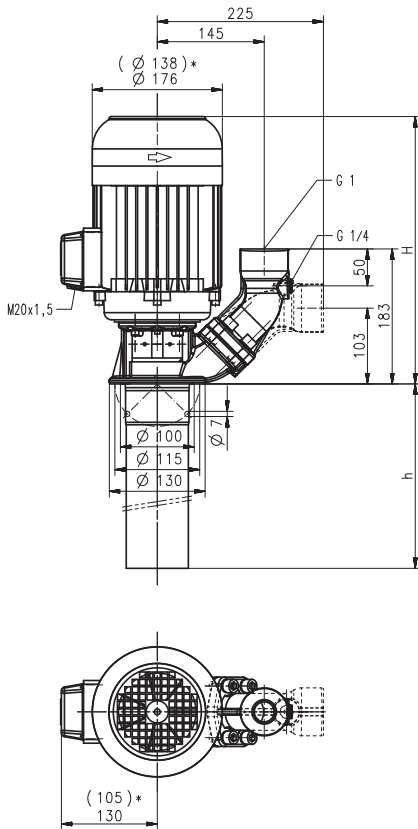
TS12...TS14	54 dBA
TS21...TS22	64 dBA
TS15	66 dBA
TS24	67 dBA



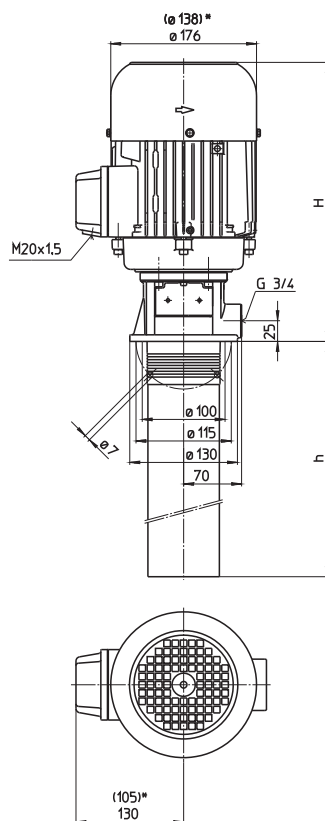
Immersion Pumps (S)TC25

Closed impellers

STC25/260...810



TC25/260...810



*) Dimensions for (S)TC25/260...805

Type	Vol. del. at manom. del. head l/min / m	Height H mm	Depth of im- mersion h mm	Weight kg	Power kW	Voltage 3~ V	Fre- quen- cy Hz	Current A	Speed 1/min
(S)TC25/260	10/28	276	260	11	0.48	220-240 380-415	50 50	2.06 1.19	2820 2820
					0.55	460	60	1.14	3405
(S)TC25/340	10/40	276	335	12	0.48	220-240 380-415	50 50	2.06 1.19	2820 2820
					0.55	460	60	1.14	3405
(S)TC25/430	10/60	317	430	14	0.63	220-240 380-415	50 50	2.70 1.56	2850 2850
					0.725	460	60	1.46	3425
(S)TC25/550	10/85	345	565	16.5	1.1	220-240 380-415	50 50	4.33 2.50	2850 2850
					1.27	460	60	2.4	3440
(S)TC25/805	10/110	345	810	18.5	1.1	220-240 380-415	50 50	4.33 2.50	2850 2850
					1.27	460	60	2.4	3440
(S)TC25/810	10/140	367	810	25	1.5	220-240 380-415	50 50	5.5 3.2	2880 2880
					1.75	460	60	3.1	3470

Immersion Pumps

Our multistage pump models (S)TC25... (S)TC460 have been especially developed to supply **internally cooled tools** with coolant fluid.

Closed impellers provide optimal hydraulic efficiencies while minimizing power consumption.

A **frequency converter** can be supplied for **special applications** or for matching the pump characteristic to a specific duty point.

See page "Control/Regulation" in the Technical Information section of this catalog for further information.

Extended length is possible. See medium pressure pumps features within the technical information section.

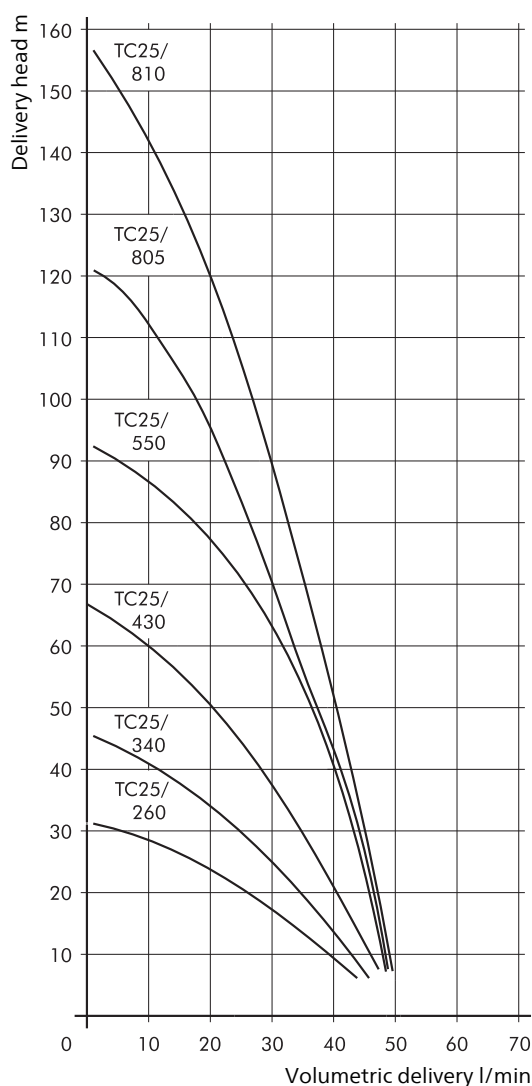
Applications

- Types of fluid
 - Industry water
 - coolants
 - cooling/cutting oils
- Kinematic viscosity
 - ...25 mm²/s (25 cSt)
- Pumping temperature
 - 0...60° C

Construction

Pump body	cast iron
Pump shell	steel
Cover	PBTP
Intake strainer	steel
Impellers	PBTP
Shaft	steel
Mechanical seal	SiC
O-rings	Viton
Optional:	
Pump body	CrNi-steel
Threaded inlet	G 1 ¼

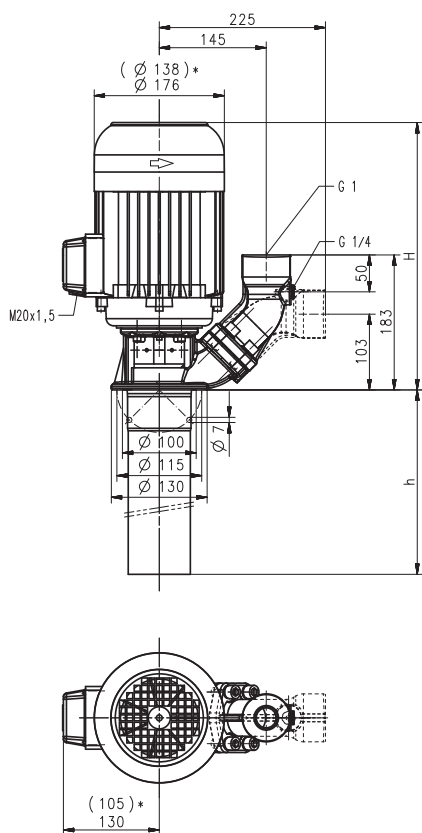
Noise level	
(S)TC25/260...(S)TC25/805	58 dBA
(S)TC25/810	63 dBA



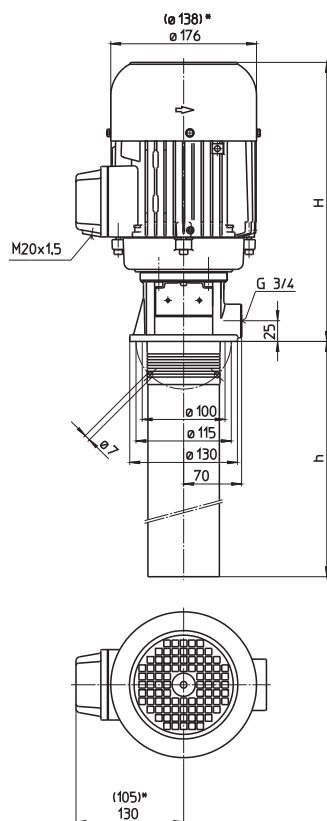
Immersion Pumps (S)TC40

Closed impellers

STC40/260...720



TC40/260...720



*) Dimensions for (S)TC40/260...550

Type	Vol. del. at manom. del. head l/min / m	Height H mm	Depth of im- mersion h mm	Weight kg	Power kW	Voltage 3~ V	Fre- quen- cy Hz	Current A	Speed 1/min
(S)TC40/260	25/28	276	260	11.5	0.48	220-240 380-415	50 50	2.06 1.19	2820 2820
					0.55	460	60	1.14	3405
(S)TC40/340	25/42	317	335	13.5	0.63	220-240 380-415	50 50	2.70 1.56	2850 2850
					0.725	460	60	1.46	3425
(S)TC40/430	25/60	318	430	15	0.85	220-240 380-415	50 50	3.64 2.10	2850 2850
					0.98	460	60	2	3450
(S)TC40/550	25/80	345	550	16.5	1.1	220-240 380-415	50 50	4.33 2.50	2850 2850
					1.27	460	60	2.4	3440
(S)TC40/715	25/95	367	720	24	1.5	220-240 380-415	50 50	5.5 3.2	2880 2880
					1.75	460	60	3.1	3470
(S)TC40/720	25/120	393	720	26.5	1.7	220-240 380-415	50 50	6.24 3.60	2890 2890
					1.95	460	60	3.5	3480

Immersion Pumps

Our multistage pump models (S)TC25... (S)TC460 have been especially developed to supply **internally cooled tools** with coolant fluid.

Closed impellers provide optimal hydraulic efficiencies while minimizing power consumption.

A **frequency converter** can be supplied for **special applications** or for matching the pump characteristic to a specific duty point.

See page "Control/Regulation" in the Technical Information section of this catalog for further information.

Extended length is possible. See medium pressure pumps features within the technical information section.

Applications

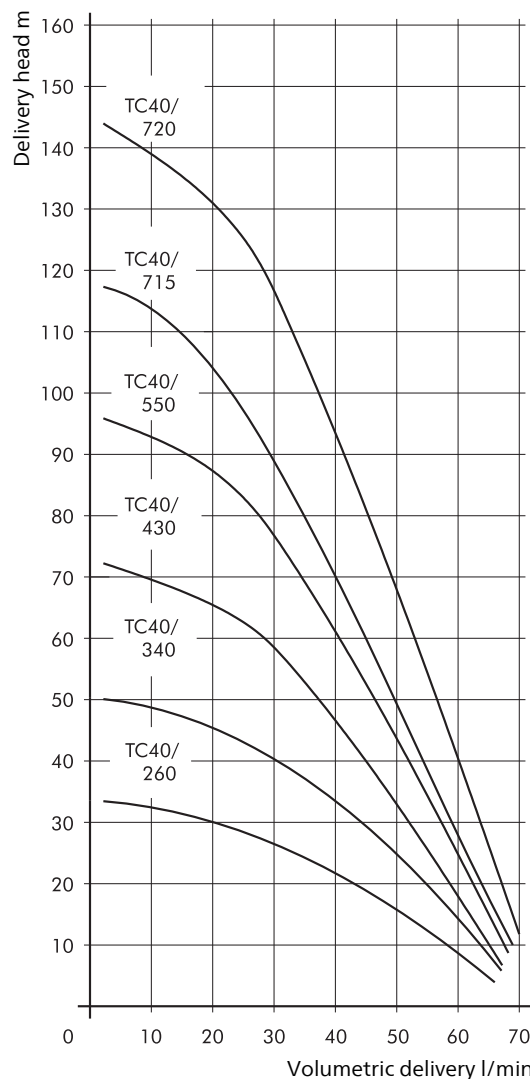
- Types of fluid
 - Industry water
 - coolants
 - cooling/cutting oils
- Kinematic viscosity
 - ...25 mm²/s (25 cSt)
- Pumping temperature
 - 0...60° C

Construction

Pump body	cast iron
Pump shell	steel
Cover	PBTP
Intake strainer	steel
Impellers	PBTP
Shaft	steel
Mechanical seal	SiC
O-rings	Viton

Optional:	
Pump body	CrNi-steel
Threaded inlet	G 1 ¼

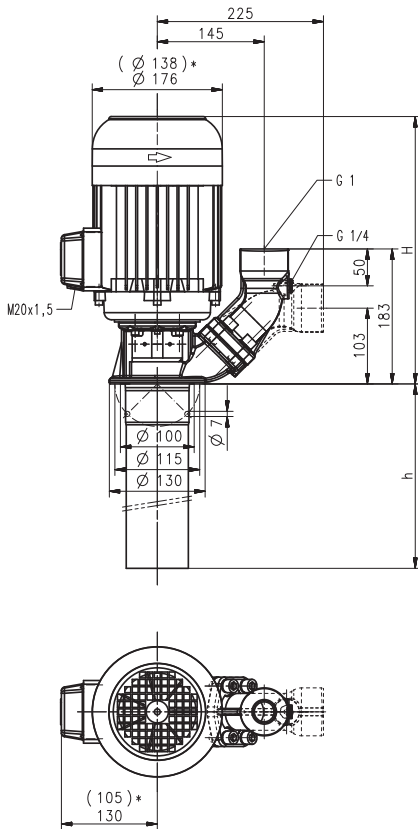
Noise level	
(S)TC40/260...(S)TC40/550	58 dBA
(S)TC40/715...(S)TC40/720	63 dBA



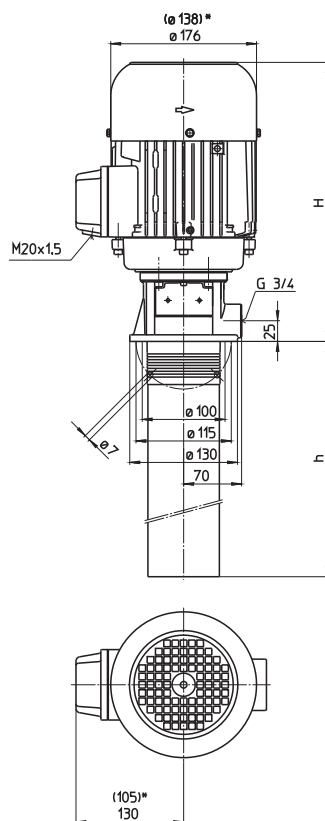
Immersion Pumps (S)TC63

Closed impellers

STC63/270...750



TC63/270...750



*) Dimensions for (S)TC63/270...350

Type	Vol. del. at manom. del. head l/min / m	Height H mm	Depth of im- mersion h mm	Weight kg	Power kW	Voltage 3~ V	Fre- quen- cy Hz	Current A	Speed 1/min
(S)TC63/270	60/22	318	275	13.5	0.75	220-240 380-415	50 50	3.24 1.87	2850 2850
(S)TC63/350	60/30	318	340	15	0.86	460	60	1.85	3440
(S)TC63/440	60/40	367	440	22	0.92	220-240 380-415	50 50	3.8 2.2	2840 2840
(S)TC63/560	60/55	425	565	28	1.06	460	60	2.1	3440
(S)TC63/745	60/77	425	755	30	1.3	220-240 380-415	50 50	4.85 2.80	2900 2900
(S)TC63/750	60/90	425	755	31	1.49	460	60	2.7	3500
(S)TC63/750	60/90	425	755	31	1.9	220-240 380-415	50 50	6.84 3.95	2900 2900
(S)TC63/750	60/90	425	755	31	2.18	460	60	3.9	3500
(S)TC63/750	60/90	425	755	31	2.2	220-240 380-415	50 50	7.8 4.5	2890 2890
(S)TC63/750	60/90	425	755	31	2.55	460	60	4.4	3480
(S)TC63/750	60/90	425	755	31	2.6	220-240 380-415	50 50	9.30 5.35	2880 2880
(S)TC63/750	60/90	425	755	31	2.94	460	60	5.1	3480

Immersion Pumps

Our multistage pump models (S)TC25... (S)TC460 have been especially developed to supply **internally cooled tools** with coolant fluid.

Closed impellers provide optimal hydraulic efficiencies while minimizing power consumption.

A **frequency converter** can be supplied for **special applications** or for matching the pump characteristic to a specific duty point.

See page "Control/Regulation" in the Technical Information section of this catalog for further information.

Extended length is possible. See medium pressure pumps features within the technical information section.

Applications

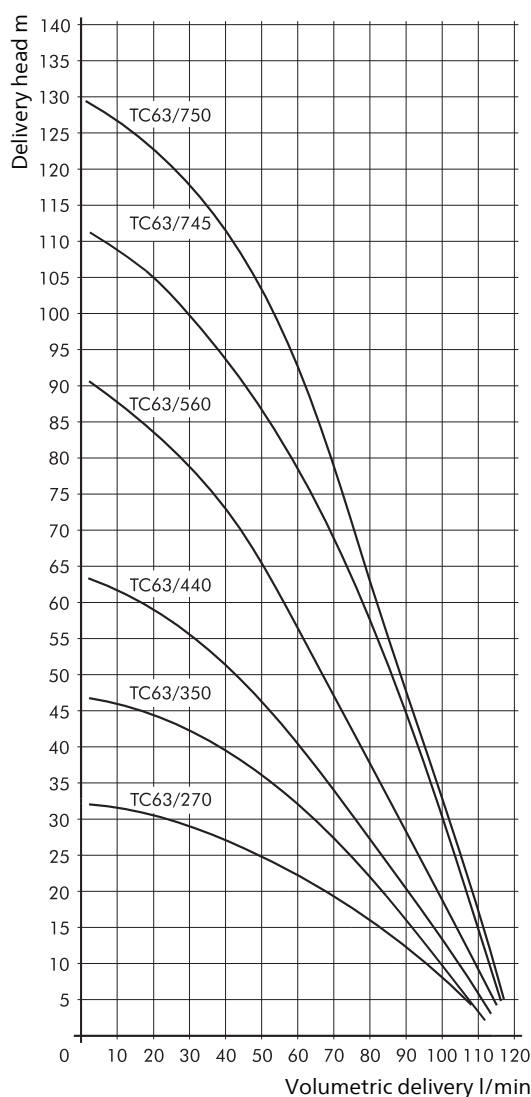
- Types of fluid
 - Industry water
 - coolants
 - cooling/cutting oils
- Kinematic viscosity
 - ...45 mm²/s (45 cSt)
- Pumping temperature
 - 0...60° C

Construction

Pump body	cast iron
Pump shell	steel
Cover	PBTP
Intake strainer	steel
Impellers	PBTP
Shaft	steel
Mechanical seal	SiC
O-rings	Viton
Optional:	
Pump body	CrNi-steel
Threaded inlet	G 1 ¼

Noise level

(S)TC63/270...(S)TC63/350	58 dBA
(S)TC63/440...(S)TC63/750	63 dBA

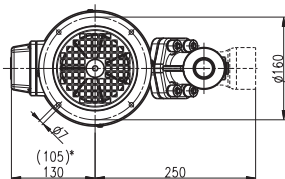
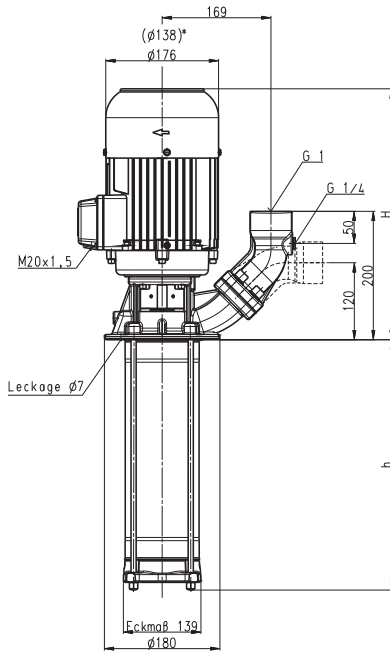


(S)TH2

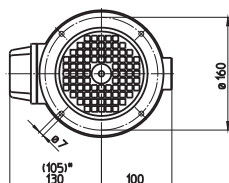
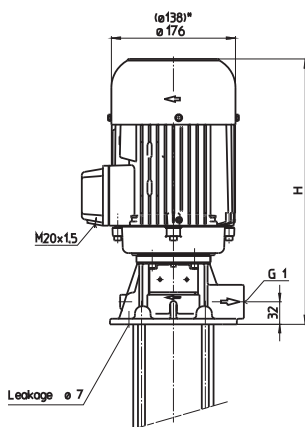
Closed impellers

50 Hz

STH203...241



TH203...241



*) Dimensions for (S)TH203...(S)TH222

Type	Vol. del. at manom. del. head l/min / m	Height H mm	Depth of im- mersion h mm	Weight kg	Power kW	Voltage 3~ V	Fre- quen- cy Hz	Current A	Speed 1/min
(S)TH203A190	20/15	291	190	14.9	0.48	220-240 380-415	50 50	2.06 1.19	2820 2820
(S)TH204A190	20/20			15.0					
(S)TH205A190	20/25			15.1					
(S)TH206A190	20/30			15.2					
(S)TH207A290	20/35		290	15.7	0.63	220-240 380-415	50 50	2.70 1.56	2850 2850
(S)TH208A290	20/40			15.8					
(S)TH209A290	20/45			15.9					
(S)TH210A290	20/50			16.0					
(S)TH211A290	20/56	332	290	17.4	0.75	220-240 380-415	50 50	3.24 1.87	2850 2850
(S)TH212A390	20/60		390	17.9					
(S)TH213A390	20/68	332	390	20.0					
(S)TH214A390	20/75			20.1					
(S)TH215A390	20/82	332	390	21.4	0.92	220-240 380-415	50 50	3.8 2.2	2840 2840
(S)TH216A390	20/88			21.5					
(S)TH217A490	20/93		490	22.1					
(S)TH218A490	20/98			22.2					
(S)TH219A490	20/102	359	490	24.1	1.1	220-240 380-415	50 50	4.33 2.50	2850 2850
(S)TH220A490	20/108			24.2					
(S)TH221A490	20/112			24.3					
(S)TH222A590	20/118		590	24.9					
(S)TH223A590	20/125	381	590	31.0	1.3	220-240 380-415	50 50	4.85 2.80	2900 2900
(S)TH224A590	20/130			31.2					
(S)TH225A590	20/135			31.3					
(S)TH226A590	20/142	381	590	31.5					
(S)TH227A690	20/150		690	32.4	1.5	220-240 380-415	50 50	5.5 3.2	2880 2880
(S)TH228A690	20/155			32.5					
(S)TH229A690	20/160	407	690	34.3					
(S)TH230A690	20/166			34.4					
(S)TH231A690	20/172			34.5	1.7	220-240 380-415	50 50	6.24 3.60	2890 2890
(S)TH232A790	20/178		790	36.4					
(S)TH233A790	20/182			36.5					
(S)TH234A790	20/190	439	790	41.0					
(S)TH235A790	20/195			41.1	1.9	220-240 380-415	50 50	6.84 3.95	2900 2900
(S)TH236A790	20/200			41.2					
(S)TH237A890	20/205	439	890	43.0					
(S)TH238A890	20/210			43.1					
(S)TH239A890	20/215			43.2	2.2	220-240 380-415	50 50	7.8 4.5	2890 2890
(S)TH240A890	20/220			43.3					
(S)TH241A890	20/225			43.4					

Immersion Pumps

series TH and FH use **closed impellers** in order to minimize power consumption and to optimize hydraulic pump efficiencies.

In addition, the TH series offers high pressures at short immersion depths. Inline pumps of the series FH can be used as **boosting pumps** if provided with positive inlet pressure. This inlet pressure can be provided by the central coolant supply or a feed pump. In such a setup, pumps of the series FH can raise the incoming pressure by up to 26 bar.

Extended length is possible. See medium pressure pumps features within the technical information section.

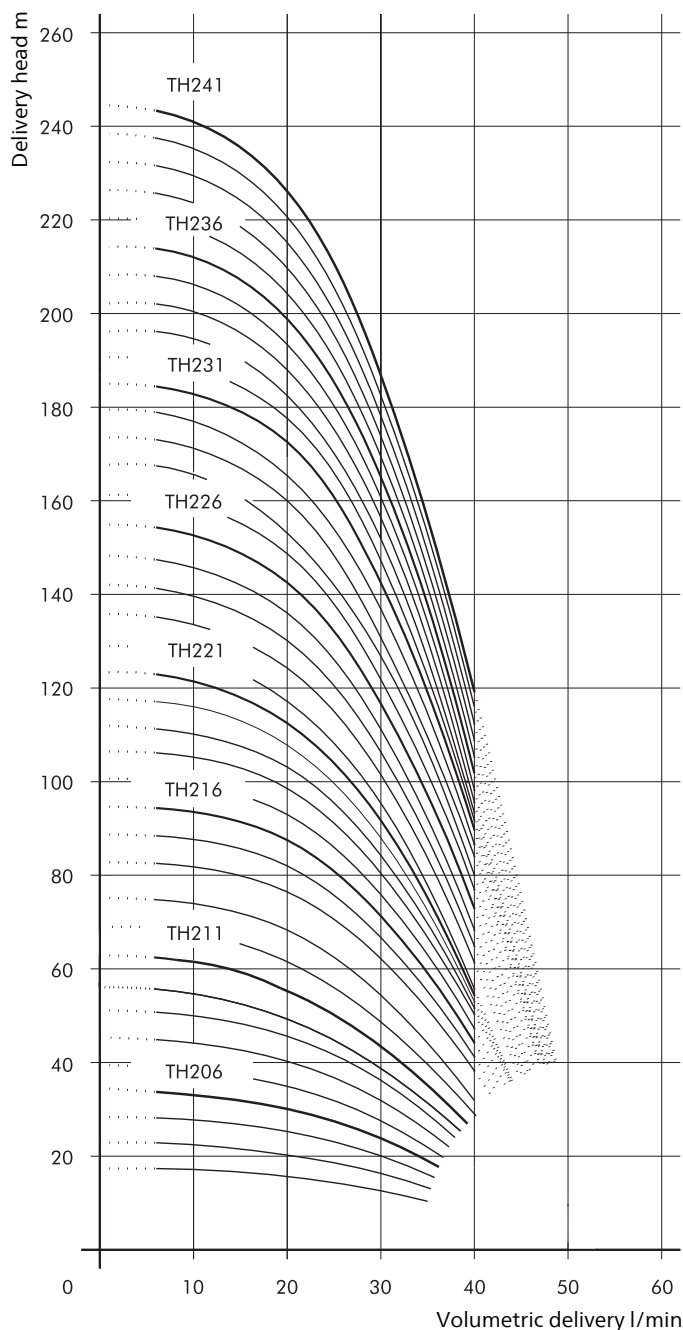
Applications

Types of fluid
 Industry water
 coolants
 cooling/cutting oils
 Kinematic viscosity
 1 mm²/s (1 cSt)
 higher viscosity upon request
 Pumping temperature
 0...80° C

Construction

Pump body	cast iron
Cover	cast iron
Impellers	CrNi-steel
Shaft	CrNi-steel
Diffusers	CrNi-steel
Mechanical seal	SiC
O-rings	Viton
Optional:	
Pump body	bronze
Cover	bronze
	CrNi-steel

Noise level	
(S)TH203...(S)TH222	58 dBA
(S)TH223...(S)TH241	63 dBA

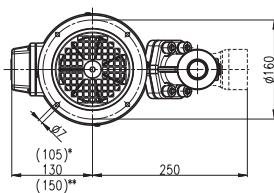
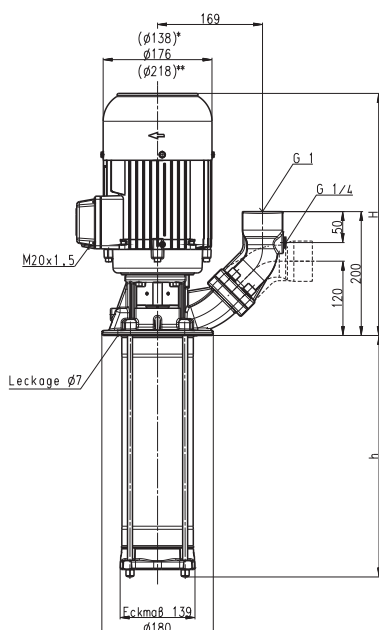


(S)TH4

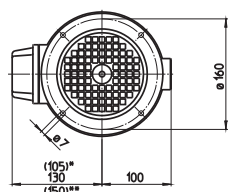
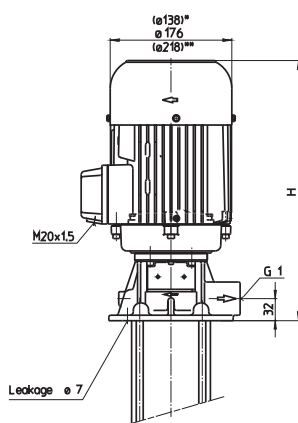
Closed impellers

50 Hz

STH403...436



TH403...436



*) Dimensions for (S)TH403...(S)TH412
 **) Dimensions for (S)TH428...(S)TH436

Type	Vol. del. at manom. del. head l/min / m	Height H mm	Depth of immersion h mm	Weight kg	Power kW	Voltage 3~ V	Frequency Hz	Current A	Speed 1/min
(S)TH403A190	40/18	291	190	14.9	0.48	220-240	50	2.06	2820
(S)TH404A190	40/25			15.0		380-415	50	1.19	2820
(S)TH405A190	40/30			15.1					
(S)TH406A190	40/36	332	190	16.5	0.63	220-240	50	2.70	2850
						380-415	50	1.56	2850
(S)TH407A290	40/42	332	290	17.9	0.75	220-240	50	3.24	2850
(S)TH408A290	40/50			18.0		380-415	50	1.87	2850
(S)TH409A290	40/56	332	290	18.5	0.85	220-240	50	3.64	2850
						380-415	50	2.10	2850
(S)TH410A290	40/62	332	290	19	0.92	220-240	50	3.8	2840
						380-415	50	2.2	2840
(S)TH411A290	40/68	359	290	20.1	1.1	220-240	50	4.33	2850
						380-415	50	2.50	2850
(S)TH412A390	40/74		390	20.6					
(S)TH413A390	40/80	381	390	27.6	1.3	220-240	50	4.85	2900
						380-415	50	2.80	2900
(S)TH414A390	40/86	381	390	28.1	1.5	220-240	50	5.5	2880
(S)TH415A390	40/95			28.2		380-415	50	3.2	2880
(S)TH416A390	40/104	407	390	30.9	1.7	220-240	50	6.24	2890
						380-415	50	3.60	2890
(S)TH417A490	40/112		490	31.4					
(S)TH418A490	40/118	439	490	35.6	1.9	220-240	50	6.84	2900
(S)TH419A490	40/125			35.9		380-415	50	3.95	2900
(S)TH420A490	40/130	439	490	36.0	2.2	220-240	50	7.8	2890
(S)TH421A490	40/136			36.1		380-415	50	4.5	2890
(S)TH422A590	40/142		590	36.6					
(S)TH423A590	40/150	439	590	37.2	2.6	220-240	50	9.30	2880
(S)TH424A590	40/156			37.3		380-415	50	5.35	2880
(S)TH425A590	40/162			37.4					
(S)TH426A590	40/168			37.5					
(S)TH427A690	40/175		690	38.0					
(S)TH428A690	40/182	432	690	50.0	3.0	220-240	50	10.7	2930
(S)TH429A690	40/190			50.2		380-415	50	6.2	2930
(S)TH430A690	40/198	432	690	50.4	3.3	220-240	50	11.6	2930
(S)TH431A690	40/208			50.6		380-415	50	6.7	2930
(S)TH432A790	40/216		790	51.4					
(S)TH433A790	40/220	432	790	52.6	4.0	220-240	50	14.50	2920
(S)TH434A790	40/230			52.7		380-415	50	8.35	2920
(S)TH435A790	40/240			52.8					
(S)TH436A790	40/248			53.0					

Immersion Pumps

series TH and FH use **closed impellers** in order to minimize power consumption and to optimize hydraulic pump efficiencies.

In addition, the TH series offers high pressures at short immersion depths. Inline pumps of the series FH can be used as **boosting pumps** if provided with positive inlet pressure. This inlet pressure can be provided by the central coolant supply or a feed pump. In such a setup, pumps of the series FH can raise the incoming pressure by up to 26 bar.

Extended length is possible. See medium pressure pumps features within the technical information section.

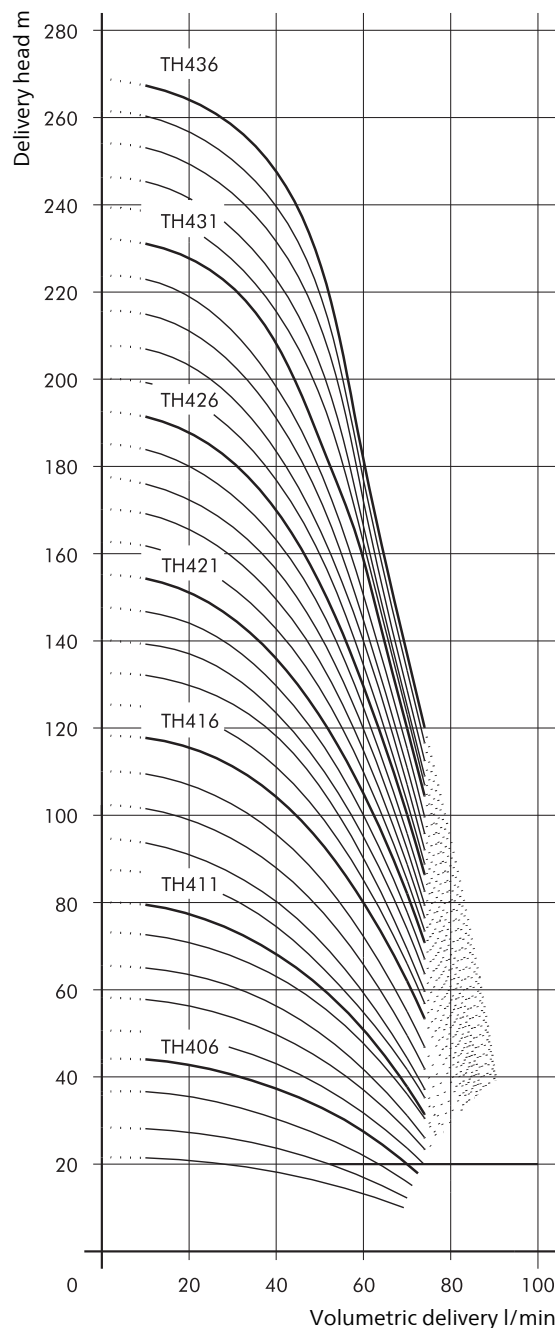
Applications

- Types of fluid
 - Industry water
 - coolants
 - cooling/cutting oils
- Kinematic viscosity
 - 1 mm²/s (1 cSt)
 - higher viscosity upon request
- Pumping temperature
 - 0...80° C

Construction

Pump body	cast iron
Cover	cast iron
Impellers	CrNi-steel
Shaft	CrNi-steel
Diffusers	CrNi-steel
Mechanical seal	SiC
O-rings	Viton
Optional:	
Pump body	bronze
Cover	bronze
	CrNi-steel

Noise level	
(S)TH403...(S)TH412	58 dBA
(S)TH413...(S)TH427	63 dBA
(S)TH428...(S)TH436	71 dBA

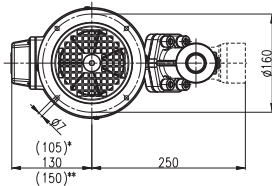
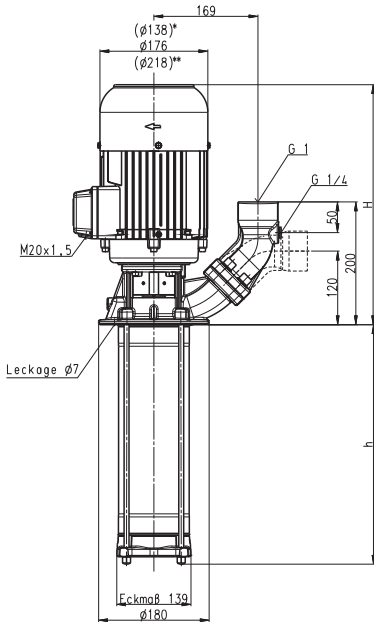


Immersion Pumps (S)TH6

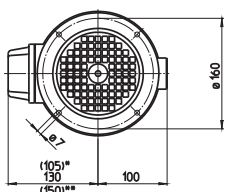
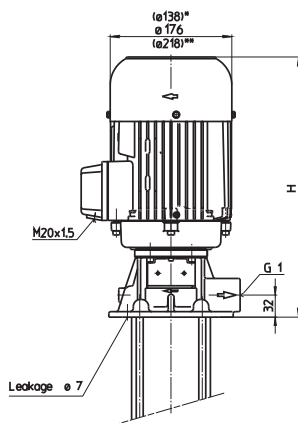
50 Hz

Closed impellers

STH603...632



TH603...632



*) Dimensions for (S)TH603...(S)TH607
 **) Dimensions for (S)TH619...(S)TH632

Type	Vol. del. at manom. del. head l/min / m	Height H mm	Depth of im- mersion h mm	Weight kg	Power kW	Voltage 3~ V	Fre- quen- cy Hz	Current A	Speed 1/min
(S)TH603A190	80/18	291	190	15.3	0.48	220-240 380-415	50 50	2.06 1.19	2820 2820
(S)TH604A190	80/24	332	190	16.8	0.63	220-240 380-415	50 50	2.70 1.56	2850 2850
(S)TH605A240	80/30	332	240	17.8	0.75	220-240 380-415	50 50	3.24 1.87	2850 2850
(S)TH606A240	80/36	332	240	18	0.92	220-240 380-415	50 50	3.8 2.2	2840 2840
(S)TH607A290	80/41	359	290	19.5	1.1	220-240 380-415	50 50	4.33 2.50	2850 2850
(S)TH608A290	80/48	381	290	26.2	1.3	220-240 380-415	50 50	4.85 2.80	2900 2900
(S)TH609A340	80/56	381	340	26.8	1.5	220-240 380-415	50 50	5.5 3.2	2880 2880
(S)TH610A340	80/61			27.0					
(S)TH611A390	80/71	407	390	29.5	1.7	220-240 380-415	50 50	6.24 3.60	2890 2890
(S)TH612A390	80/76	439	390	34	1.9	220-240 380-415	50 50	6.84 3.95	2900 2900
(S)TH613A490	80/82	439	490	35.0	2.2	220-240 380-415	50 50	7.8 4.5	2890 2890
(S)TH614A490	80/90			35.2					
(S)TH615A490	80/96			35.5					
(S)TH616A490	80/101	439	490	36.3	2.6	220-240 380-415	50 50	9.30 5.35	2880 2880
(S)TH617A590	80/108		590	36.8					
(S)TH618A590	80/114			37.0					
(S)TH619A590	80/120	432	590	48.3	3.3	220-240 380-415	50 50	11.6 6.7	2930 2930
(S)TH620A590	80/128			48.5					
(S)TH621A690	80/136		690	49.5					
(S)TH622A690	80/142	432	690	50.1	4.0	220-240 380-415	50 50	14.50 8.35	2920 2920
(S)TH623A690	80/150			50.3					
(S)TH624A690	80/155			50.5					
(S)TH625A790	80/160		790	51.2					
(S)TH626A790	80/166			51.4					
(S)TH627A790	80/172	462	790	58.8	5.0	220-240 380-415	50 50	17.3 10.0	2920 2920
(S)TH628A790	80/180			59.0					
(S)TH629A890	80/186		890	60.0					
(S)TH630A890	80/192			60.2					
(S)TH631A890	80/200			60.4					
(S)TH632A890	80/206			60.6					

Immersion Pumps

series TH and FH use **closed impellers** in order to minimize power consumption and to optimize hydraulic pump efficiencies.

In addition, the TH series offers high pressures at short immersion depths. Inline pumps of the series FH can be used as **boosting pumps** if provided with positive inlet pressure. This inlet pressure can be provided by the central coolant supply or a feed pump. In such a setup, pumps of the series FH can raise the incoming pressure by up to 26 bar.

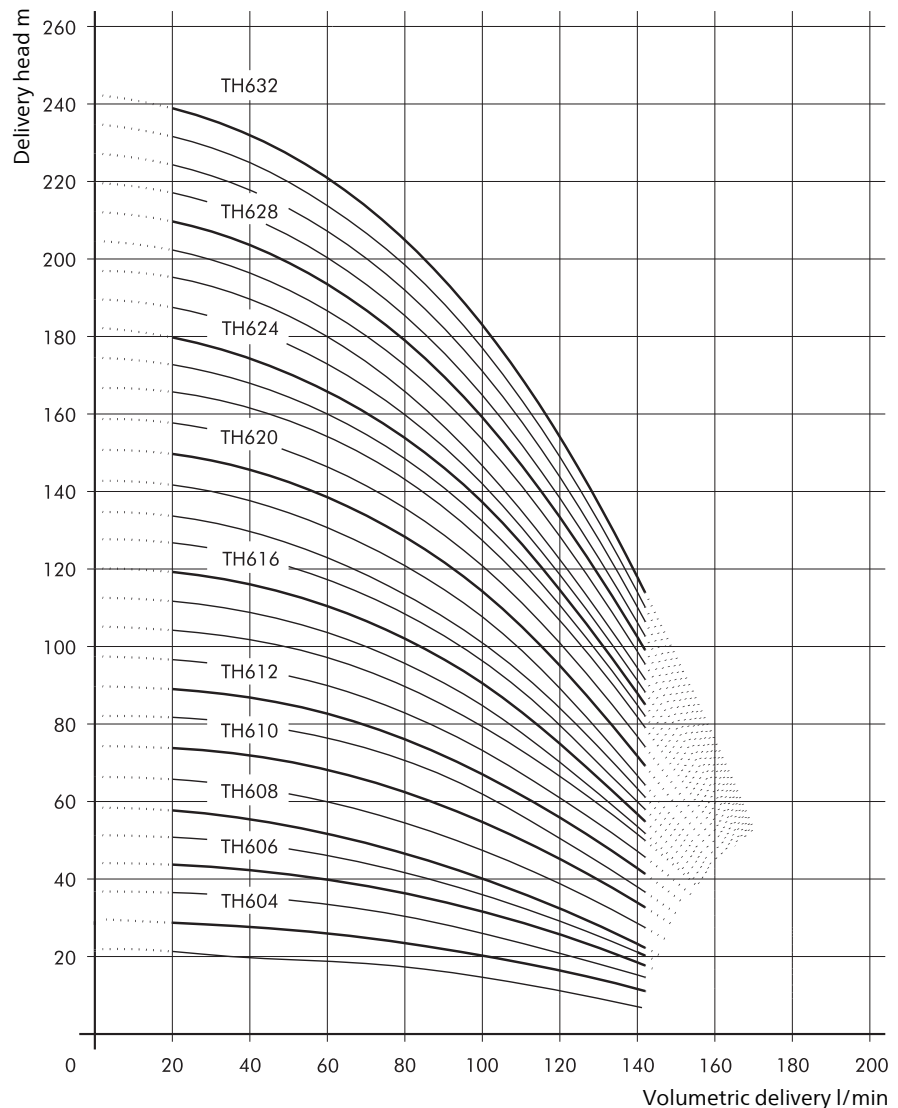
Extended length is possible. See medium pressure pumps features within the technical information section.

Applications

Types of fluid
 Industry water
 coolants
 cooling/cutting oils
 Kinematic viscosity
 1 mm²/s (1 cSt)
 higher viscosity upon request
 Pumping temperature
 0...80° C

Construction

Pump body	cast iron
Cover	cast iron
Impellers	CrNi-steel
Shaft	CrNi-steel
Diffusers	CrNi-steel
Mechanical seal	SiC
O-rings	Viton
Optional:	
Pump body	bronze
Cover	bronze
	CrNi-steel
Noise level	
(S)TH603...(S)TH607	58 dBA
(S)TH608...(S)TH618	63 dBA
(S)TH619...(S)TH632	71 dBA



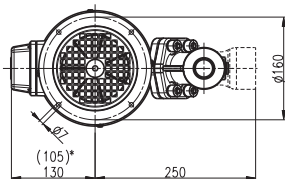
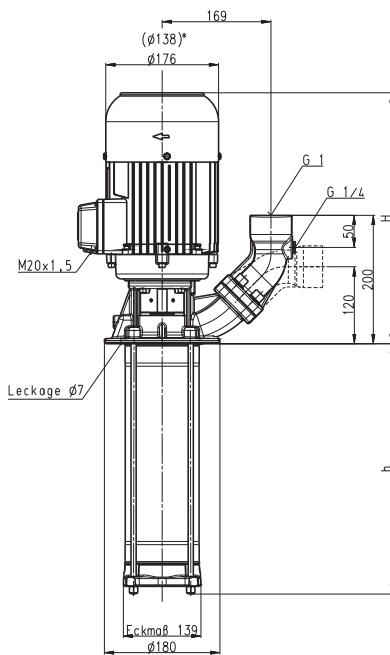
Immersion Pumps

(S)TH2

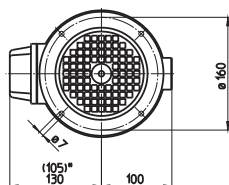
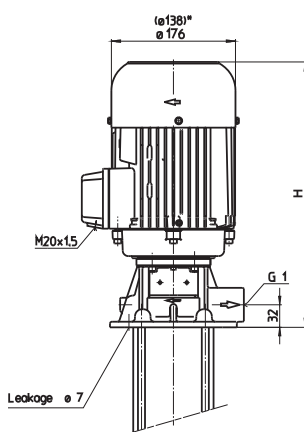
Closed impellers



STH203...231



TH203...231



*) Dimensions for (S)TH203...(S)TH215

Type	Vol. del. at manom. del. head l/min / m	Height H mm	Depth of immersion h mm	Weight kg	Power kW	Voltage 3~ V	Fre- quen- cy Hz	Current A	Speed 1/min
(S)TH203B190	20/25	291	190	14.9	0.55	460	60	1.14	3405
(S)TH204B190	20/30			15.0					
(S)TH205B190	20/40			15.1					
(S)TH206B190	20/50			15.2					
(S)TH207B290	20/57	332	290	18.6	0.725	460	60	1.46	3425
(S)TH208B290	20/64			18.7					
(S)TH209B290	20/74	332	290	19.2	0.86	460	60	1.85	3440
(S)TH210B290	20/81	332	290	20.1	0.98	460	60	2	3450
(S)TH211B290	20/90	332	290	20.3	1.06	460	60	2.1	3440
(S)TH212B390	20/98		390	20.4					
(S)TH213B390	20/106			20.5					
(S)TH214B390	20/113	359	390	21.7	1.27	460	60	2.4	3440
(S)TH215B390	20/119			21.8					
(S)TH216B390	20/127	381	390	28	1.49	460	60	2.7	3500
(S)TH217B490	20/136	381	490	30.2	1.75	460	60	3.1	3470
(S)TH218B490	20/146			30.3					
(S)TH219B490	20/156			30.4					
(S)TH220B490	20/164	407	490	32.5	1.95	460	60	3.5	3480
(S)TH221B490	20/172			32.6					
(S)TH222B590	20/182	439	590	37.4	2.18	460	60	3.9	3500
(S)TH223B590	20/191			37.5					
(S)TH224B590	20/200	439	590	38.2	2.55	460	60	4.4	3480
(S)TH225B590	20/208			38.4					
(S)TH226B590	20/216			38.5					
(S)TH227B690	20/224		690	39.1					
(S)TH228B690	20/231	439	690	40.2	2.94	460	60	5.1	3480
(S)TH229B690	20/238			40.3					
(S)TH230B690	20/245			40.4					
(S)TH231B690	20/252			40.5					

Immersion Pumps

series TH and FH use **closed impellers** in order to minimize power consumption and to optimize hydraulic pump efficiencies.

In addition, the TH series offers high pressures at short immersion depths. Inline pumps of the series FH can be used as **boosting pumps** if provided with positive inlet pressure. This inlet pressure can be provided by the central coolant supply or a feed pump. In such a setup, pumps of the series FH can raise the incoming pressure by up to 26 bar.

Extended length is possible. See medium pressure pumps features within the technical information section.

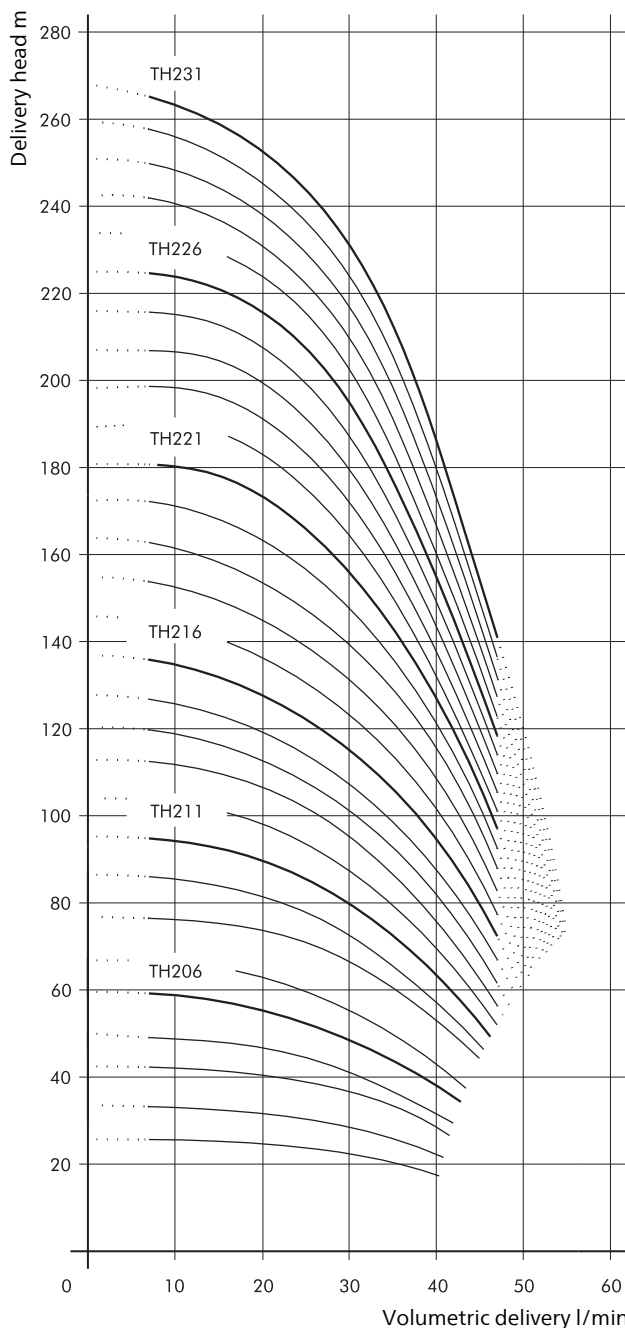
Applications

- Types of fluid
 - Industry water
 - coolants
 - cooling/cutting oils
- Kinematic viscosity
 - 1 mm²/s (1 cSt)
 - higher viscosity upon request
- Pumping temperature
 - 0...80° C

Construction

- | | |
|-----------------|------------|
| Pump body | cast iron |
| Cover | cast iron |
| Impellers | CrNi-steel |
| Shaft | CrNi-steel |
| Diffusers | CrNi-steel |
| Mechanical seal | SiC |
| O-rings | Viton |
| Optional: | |
| Pump body | bronze |
| Cover | bronze |
| | CrNi-steel |

- | | |
|---------------------|--------|
| Noise level | |
| (S)TH203...(S)TH215 | 61 dBA |
| (S)TH216...(S)TH231 | 66 dBA |

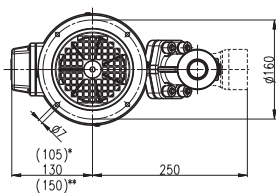
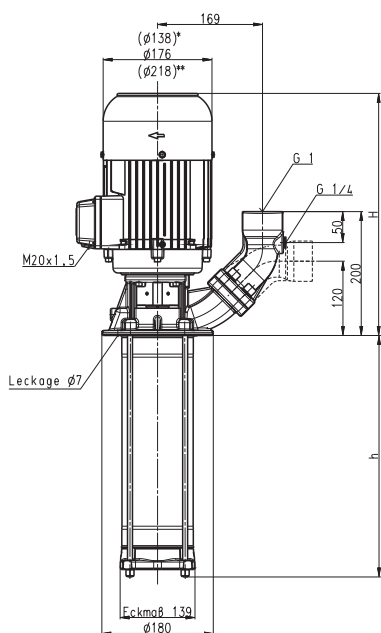


(S)TH4

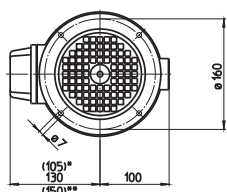
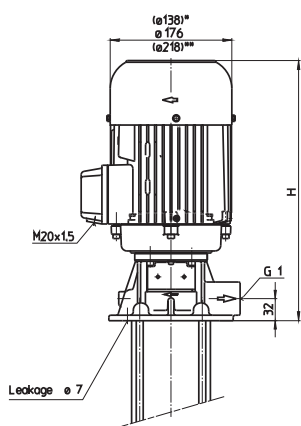
Closed impellers



STH403...424



TH403...424



*) Dimensions for (S)TH403...(S)TH408
 **) Dimensions for (S)TH419...(S)TH424

Type	Vol. del. at manom. del. head l/min / m	Height H mm	Depth of immersion h mm	Weight kg	Power kW	Voltage 3~ V	Fre- quen- cy Hz	Current A	Speed 1/min
(S)TH403B190	40/29	291	190	15.4	0.55	460	60	1.14	3405
(S)TH404B190	40/39	332	190	16.7	0.725	460	60	1.46	3425
(S)TH405B190	40/49	332	190	17.2	0.86	460	60	1.85	3440
(S)TH406B190	40/58	332	190	18.2	1.06	460	60	2.1	3440
(S)TH407B290	40/68	359	290	19.4	1.27	460	60	2.4	3440
(S)TH408B290	40/78			19.5					
(S)TH409B290	40/88	381	290	27	1.49	460	60	2.7	3500
(S)TH410B290	40/100	381	290	27.2	1.75	460	60	3.1	3470
(S)TH411B290	40/110	407	290	29.4	1.95	460	60	3.5	3480
(S)TH412B390	40/119		390	30.0					
(S)TH413B390	40/129	439	390	35	2.18	460	60	3.9	3500
(S)TH414B390	40/139	439	390	35.5	2.55	460	60	4.4	3480
(S)TH415B390	40/150			35.6					
(S)TH416B390	40/159	439	390	36.0	2.94	460	60	5.1	3480
(S)TH417B490	40/170		490	36.1					
(S)TH418B490	40/179			36.2					
(S)TH419B490	40/192	432	490	47.9	3.8	460	60	6.4	3520
(S)TH420B490	40/202			48.0					
(S)TH421B490	40/214			48.1					
(S)TH422B590	40/224		590	48.3					
(S)TH423B590	40/233	432	590	49.5	4.55	460	60	7.9	3520
(S)TH424B590	40/242			49.7					

Immersion Pumps

series TH and FH use **closed impellers** in order to minimize power consumption and to optimize hydraulic pump efficiencies.

In addition, the TH series offers high pressures at short immersion depths. Inline pumps of the series FH can be used as **boosting pumps** if provided with positive inlet pressure. This inlet pressure can be provided by the central coolant supply or a feed pump. In such a setup, pumps of the series FH can raise the incoming pressure by up to 26 bar.

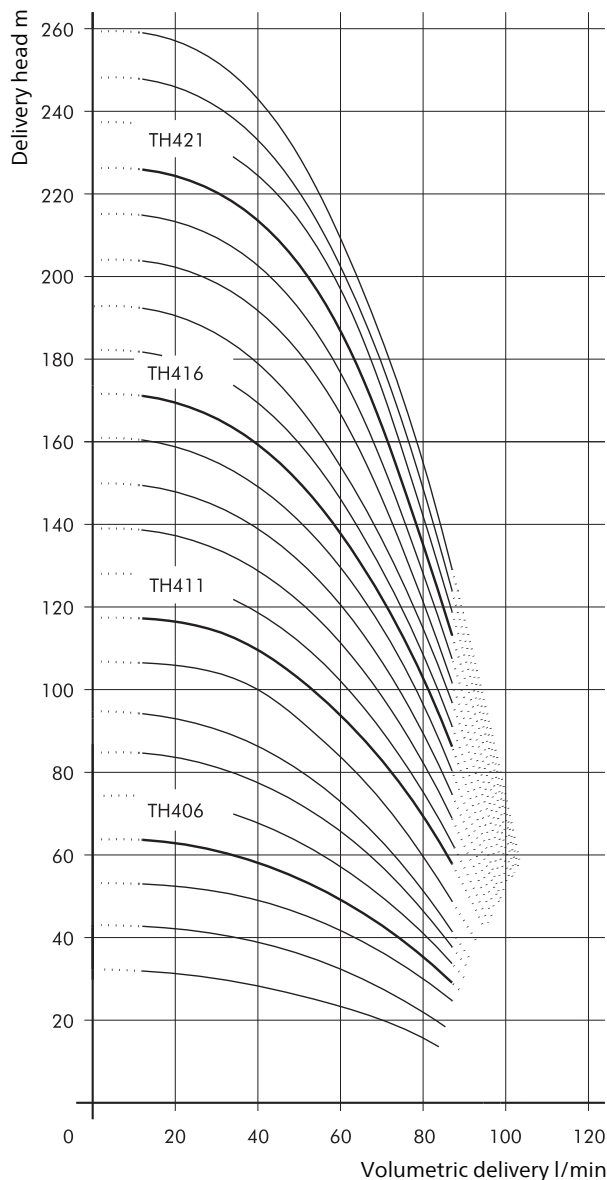
Extended length is possible. See medium pressure pumps features within the technical information section.

Applications

- Types of fluid
 - Industry water
 - coolants
 - cooling/cutting oils
- Kinematic viscosity
 - 1 mm²/s (1 cSt)
 - higher viscosity upon request
- Pumping temperature
 - 0...80° C

Construction

Pump body	cast iron
Cover	cast iron
Impellers	CrNi-steel
Shaft	CrNi-steel
Diffusers	CrNi-steel
Mechanical seal	SiC
O-rings	Viton
Optional:	
Pump body	bronze
Cover	bronze
	CrNi-steel
Noise level	
(S)TH403...(S)TH408	61 dBA
(S)TH409...(S)TH418	66 dBA
(S)TH419...(S)TH424	75 dBA

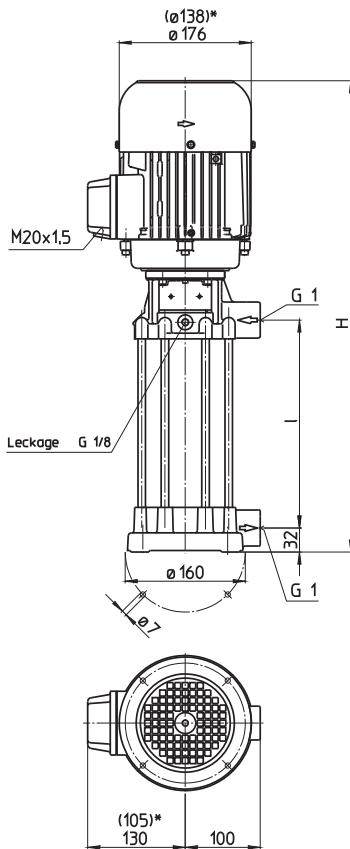


FH2

50 Hz

Closed impellers

FH203...240



*) Dimensions for FH203...FH222

Type	Vol. del. at manom. del. head l/min /m	Height H mm	Length l mm	Weight kg	Power kW	Voltage 3~ V	Fre- quen- cy Hz	Current A	Speed 1/min
FH203A19	20/15	488	197	17.4	0.48	220-240	50	2.06	2820
FH204A19	20/20			17.5					
FH205A19	20/25			17.6					
FH206A29	20/30	588	297	18.1	0.63	220-240	50	2.70	2850
FH207A29	20/35			18.2					
FH208A29	20/40			18.3					
FH209A29	20/45			18.4	0.75	220-240	50	3.24	2850
FH210A29	20/50			18.5					
FH211A39	20/56	729	397	21.7					
FH212A39	20/60			21.9	0.92	220-240	50	3.8	2840
FH213A39	20/68	729	397	23.0					
FH214A39	20/75			23.1					
FH215A39	20/82	729	397	23.5	0.75	220-240	50	1.87	2850
FH216A49	20/88	829	497	24.1					
FH217A49	20/93			24.2					
FH218A49	20/98			24.3	0.92	220-240	50	2.2	2840
FH219A49	20/102	856	497	28.1					
FH220A49	20/108			28.2					
FH221A59	20/112	956	597	28.8	1.1	220-240	50	4.33	2850
FH222A59	20/118			28.9					
FH223A59	20/125	978	597	34.8					
FH224A59	20/130			34.9	1.3	220-240	50	4.85	2900
FH225A59	20/135			35.0					
FH226A69	20/142	1078	697	35.9					
FH227A69	20/150			36.0	1.5	220-240	50	5.5	2880
FH228A69	20/155			36.1					
FH229A69	20/160	1104	697	38.9					
FH230A69	20/166			39.0	1.7	220-240	50	6.24	2890
FH231A79	20/172	1204	797	39.5					
FH232A79	20/178			39.6					
FH233A79	20/182			39.8	1.9	220-240	50	6.84	2900
FH234A79	20/190	1236	797	44.1					
FH235A79	20/195			44.2					
FH236A89	20/200	1336	897	44.8	2.2	220-240	50	7.8	2890
FH237A89	20/205	1336	897	46.7					
FH238A89	20/210			46.8					
FH239A89	20/215			46.9	0.63	220-240	50	2.50	2850
FH240A89	20/220			47.0					

Pressure Boosting Pumps

series TH and FH use **closed impellers** in order to minimize power consumption and to optimize hydraulic pump efficiencies.

In addition, the TH series offers high pressures at short immersion depths. Inline pumps of the series FH can be used as **boosting pumps** if provided with positive inlet pressure. This inlet pressure can be provided by the central coolant supply or a feed pump. In such a setup, pumps of the series FH can raise the incoming pressure by up to 26 bar.

A **frequency converter** can be supplied for **special applications** or for matching the pump characteristic to a specific duty point.

See page "Control/Regulation" in the Technical Information section of this catalog for further information.



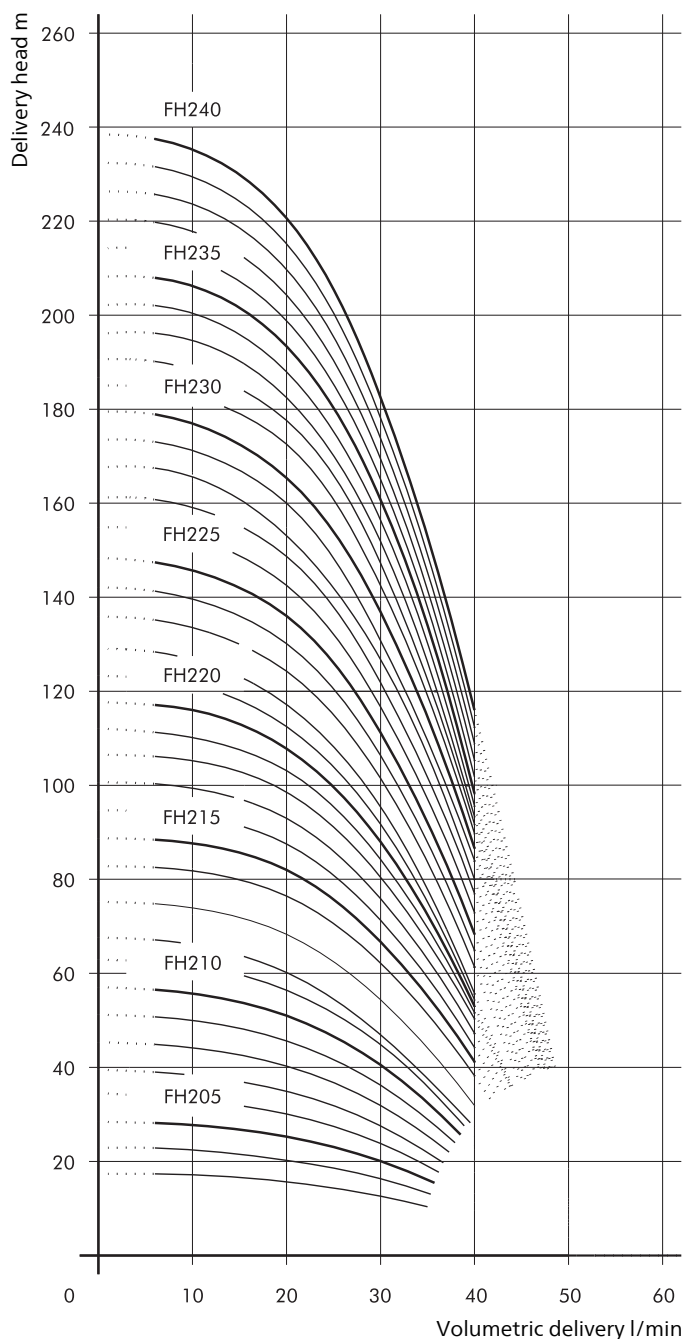
Applications

Types of fluid
 Industry water
 coolants
 cooling/cutting oils
 Kinematic viscosity
 1 mm²/s (1 cSt)
 higher viscosity upon request
 Pumping temperature
 0...80° C

Construction

Pump body	cast iron
Cover	cast iron
Impellers	CrNi-steel
Shaft	CrNi-steel
Diffusers	CrNi-steel
Mechanical seal	SiC
O-rings	Viton
Optional:	
Pump body	bronze
Cover	bronze

Noise level	
FH203...FH222	58 dBA
FH223...FH240	63 dBA

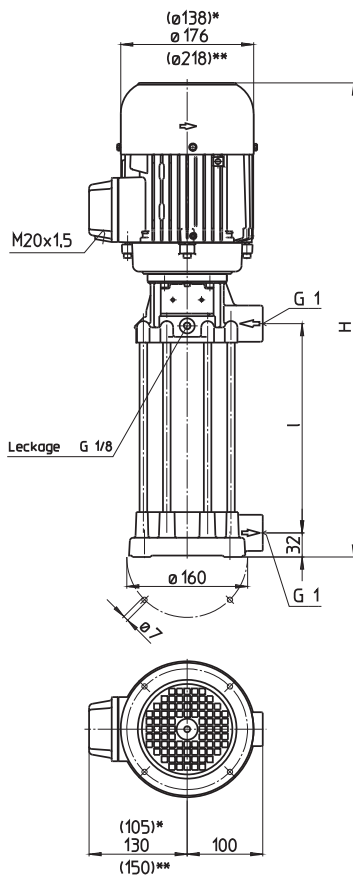


FH4

50 Hz

Closed impellers

FH403...435



*) Dimensions for FH403...FH412
 **) Dimensions for FH428...FH435

Type	Vol. del. at manom. del. head l/min / m	Height H mm	Length l mm	Weight kg	Power kW	Voltage 3 ~ V	Fre- quen- cy Hz	Current A	Speed 1/min
FH403A19	40/18	488	197	17.9	0.48	220-240	50	2.06	2820
FH404A19	40/25			18.0		380-415	50	1.19	2820
FH405A19	40/30			18.1					
FH406A29	40/36	629	297	19.5	0.63	220-240	50	2.70	2850
						380-415	50	1.56	2850
FH407A29	40/42	629	297	20.9	0.75	220-240	50	3.24	2850
FH408A29	40/50			21.0		380-415	50	1.87	2850
FH409A29	40/56	629	297	22.5	0.85	220-240	50	3.64	2850
						380-415	50	2.10	2850
FH410A29	40/62	629	297	23	0.92	220-240	50	3.8	2840
						380-415	50	2.2	2840
FH411A39	40/68	756	397	24.6	1.1	220-240	50	4.33	2850
FH412A39	40/74			24.8		380-415	50	2.50	2850
FH413A39	40/80	778	397	31	1.3	220-240	50	4.85	2900
						380-415	50	2.80	2900
FH414A39	40/86	778	397	31.5	1.5	220-240	50	5.5	2880
FH415A39	40/95			32.1		380-415	50	3.2	2880
FH416A49	40/104	904	497	34.5	1.7	220-240	50	6.24	2890
FH417A49	40/112			34.9		380-415	50	3.60	2890
FH418A49	40/118	936	497	38.5	1.9	220-240	50	6.84	2900
FH419A49	40/125			38.9		380-415	50	3.95	2900
FH420A49	40/130	936	497	39.5	2.2	220-240	50	7.8	2890
						380-415	50	4.5	2890
FH421A59	40/136	1036	597	41.0	2.6	220-240	50	9.30	2880
FH422A59	40/142			41.3		380-415	50	5.35	2880
FH423A59	40/150	1036	597	41.7	3.0	220-240	50	10.7	2930
FH424A59	40/156			42.0		380-415	50	6.2	2930
FH425A59	40/162			42.8					
FH426A69	40/168	1136	697	43.0	3.3	220-240	50	11.6	2930
FH427A69	40/175			43.3		380-415	50	6.7	2930
FH428A69	40/182	1129	697	54.2	4.0	220-240	50	14.50	2920
FH429A69	40/190			54.3		380-415	50	8.35	2920
FH430A69	40/198	1129	697	55.8					
FH431A79	40/208	1229	797	56.6	4.0	220-240	50	14.50	2920
FH432A79	40/216			57.0		380-415	50	8.35	2920
FH433A79	40/220	1229	797	58.1					
FH434A79	40/230			58.3					
FH435A79	40/240			58.5					

Pressure Boosting Pumps

series TH and FH use **closed impellers** in order to minimize power consumption and to optimize hydraulic pump efficiencies.

In addition, the TH series offers high pressures at short immersion depths. Inline pumps of the series FH can be used as **boosting pumps** if provided with positive inlet pressure. This inlet pressure can be provided by the central coolant supply or a feed pump. In such a setup, pumps of the series FH can raise the incoming pressure by up to 26 bar.

A **frequency converter** can be supplied for **special applications** or for matching the pump characteristic to a specific duty point.

See page "Control/Regulation" in the Technical Information section of this catalog for further information.

Applications

Types of fluid

Industry water
coolants
cooling/cutting oils

Kinematic viscosity

1 mm²/s (1 cSt)
higher viscosity upon request

Pumping temperature

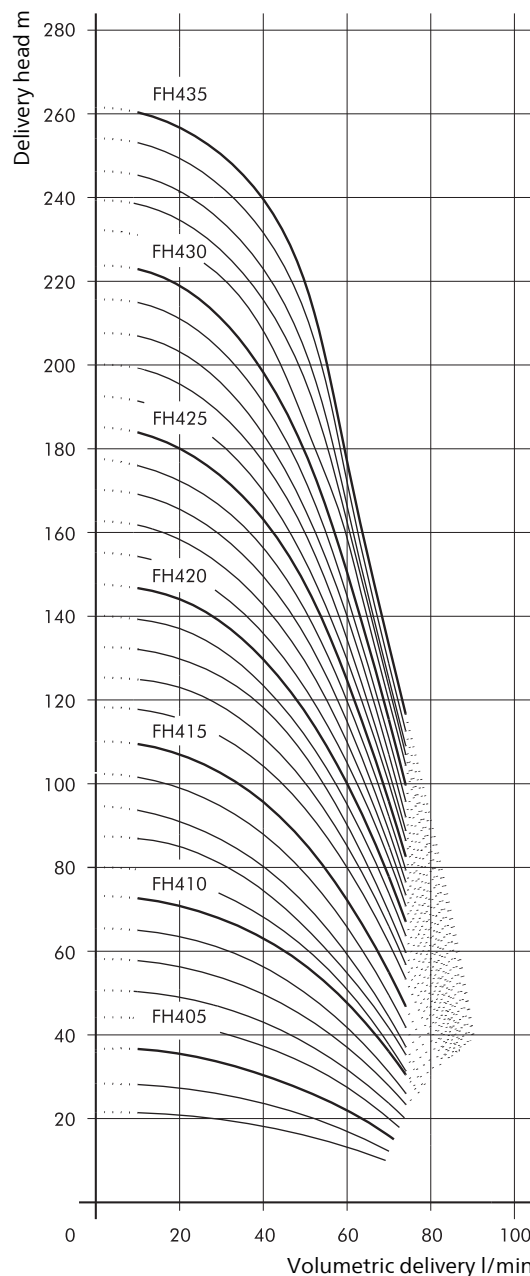
0...80° C

Construction

Pump body	cast iron
Cover	cast iron
Impellers	CrNi-steel
Shaft	CrNi-steel
Diffusers	CrNi-steel
Mechanical seal	SiC
O-rings	Viton

Optional:	
Pump body	bronze
Cover	bronze

Noise level	
FH403...FH412	58 dBA
FH413...FH427	63 dBA
FH428...FH435	71 dBA

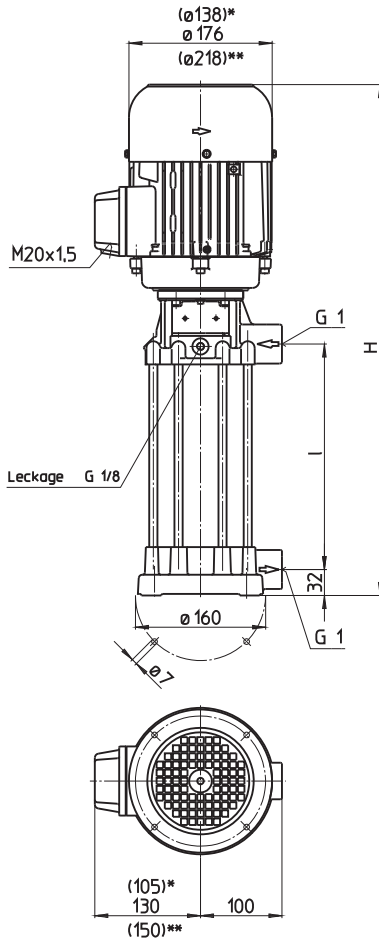


FH6

50 Hz

Closed impellers

FH603...632



*) Dimensions for FH603...FH607

**) Dimensions for FH619...FH632

Type	Vol. del. at manom. del. head l/min /m	Height H mm	Length l mm	Weight kg	Power kW	Voltage 3~ V	Fre- quen- cy Hz	Current A	Speed 1/min
FH603A19	80/18	488	197	18	0.48	220-240 380-415	50 50	2.06 1.19	2820 2820
FH604A19	80/24	529	197	19.6	0.63	220-240 380-415	50 50	2.70 1.56	2850 2850
FH605A24	80/30	579	247	20.8	0.75	220-240 380-415	50 50	3.24 1.87	2850 2850
FH606A24	80/36	579	247	21.4	0.92	220-240 380-415	50 50	3.8 2.2	2840 2840
FH607A29	80/41	656	297	22.5	1.1	220-240 380-415	50 50	4.33 2.50	2850 2850
FH608A29	80/48	678	297	29	1.3	220-240 380-415	50 50	4.85 2.80	2900 2900
FH609A34	80/56	728	347	30.0	1.5	220-240 380-415	50 50	5.5 3.2	2880 2880
FH610A34	80/61			30.2					
FH611A39	80/71	804	397	33	1.7	220-240 380-415	50 50	6.24 3.60	2890 2890
FH612A39	80/76	836	397	37	1.9	220-240 380-415	50 50	6.84 3.95	2900 2900
FH613A49	80/82	936	497	39.0	2.2	220-240 380-415	50 50	7.8 4.5	2890 2890
FH614A49	80/90			39.1					
FH615A49	80/96			39.2					
FH616A49	80/101	936	497	39.8	2.6	220-240 380-415	50 50	9.30 5.35	2880 2880
FH617A59	80/108	1036	597	40.4					
FH618A59	80/114			40.6					
FH619A59	80/120	1029	597	52.0	3.3	220-240 380-415	50 50	11.6 6.7	2930 2930
FH620A59	80/128			52.1					
FH621A69	80/136	1129	697	53.5					
FH622A69	80/142	1129	697	54.6	4.0	220-240 380-415	50 50	14.50 8.35	2920 2920
FH623A69	80/150			54.8					
FH624A69	80/155			55.0					
FH625A79	80/160	1229	797	56.2					
FH626A79	80/166			56.4					
FH627A79	80/172	1259	797	63.0	5.0	220-240 380-415	50 50	17.3 10.0	2920 2920
FH628A79	80/180			63.2					
FH629A89	80/186	1359	897	64.9					
FH630A89	80/192			65.1					
FH631A89	80/200			65.3					
FH632A89	80/206			65.5					

Pressure Boosting Pumps

Series TH and FH use **closed impellers** in order to minimize power consumption and to optimize hydraulic pump efficiencies.

In addition, the TH series offers high pressures at short immersion depths. Inline pumps of the series FH can be used as **boosting pumps** if provided with positive inlet pressure. This inlet pressure can be provided by the central coolant supply or a feed pump. In such a setup, pumps of the series FH can raise the incoming pressure by up to 26 bar.

A **frequency converter** can be supplied for **special applications** or for matching the pump characteristic to a specific duty point.

See page "Control/Regulation" in the Technical Information section of this catalog for further information.

Applications

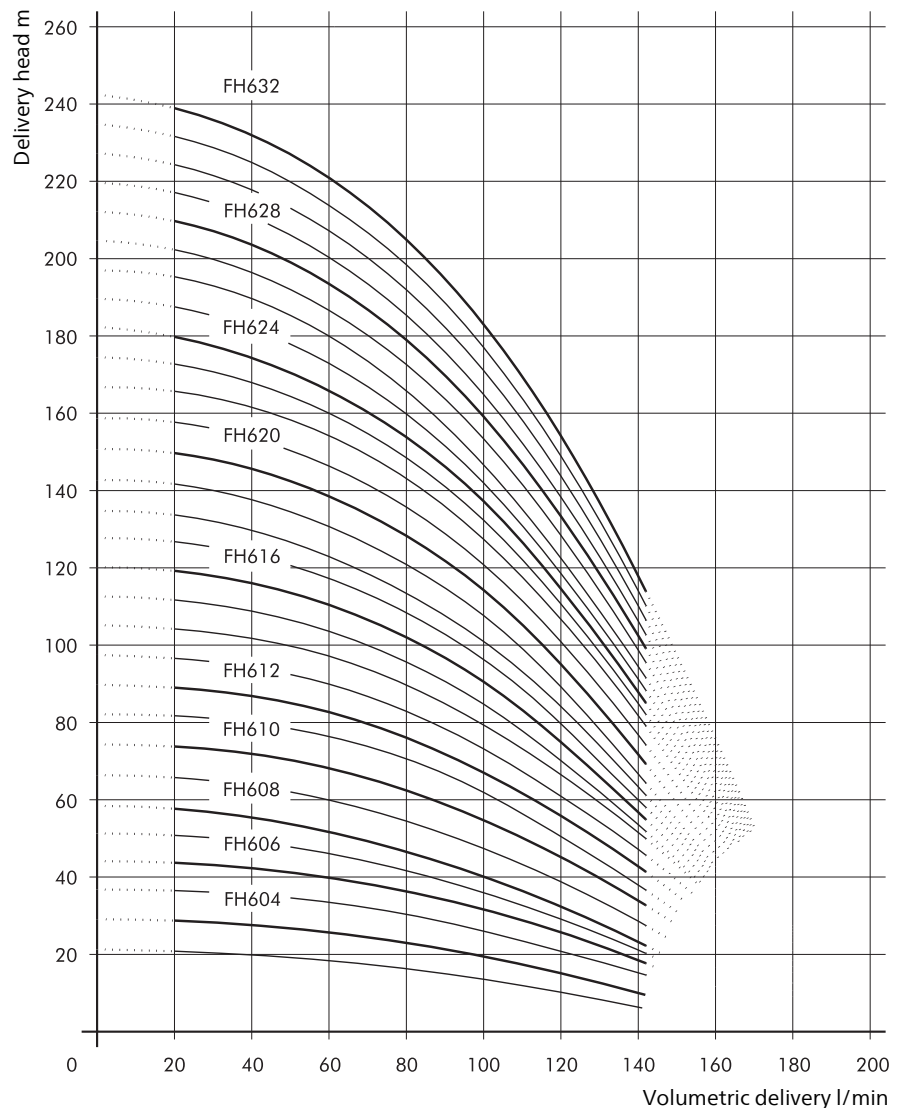
Types of fluid
 Industry water
 coolants
 cooling/cutting oils
 Kinematic viscosity
 1 mm²/s (1 cSt)
 higher viscosity upon request
 Pumping temperature
 0...80° C

Construction

Pump body	cast iron
Cover	cast iron
Impellers	CrNi-steel
Shaft	CrNi-steel
Diffusers	CrNi-steel
Mechanical seal	SiC
O-rings	Viton

Optional:	
Pump body	bronze
Cover	bronze

Noise level	
FH603...FH607	58 dBA
FH608...FH618	63 dBA
FH619...FH632	71 dBA



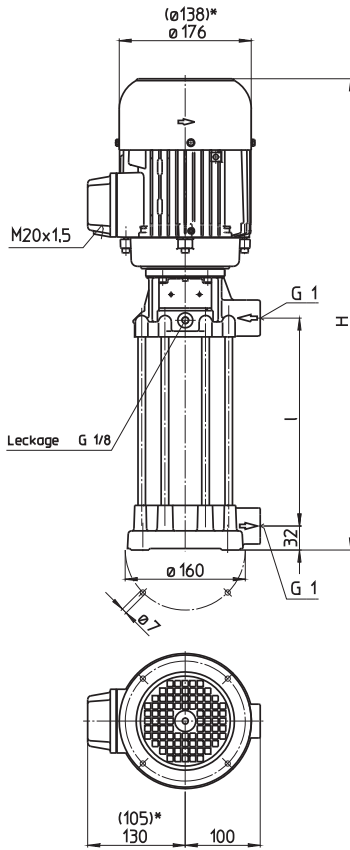
Pressure Boosting Pumps

FH2

Closed impellers



FH203...230



*) Dimensions for FH203...FH215

Type	Vol. del. at manom. del. head l/min /m	Height H mm	Length l mm	Weight kg	Power kW	Voltage 3~ V	Fre- quen- cy Hz	Current A	Speed 1/min
FH203B19	20/25	488	197	17.4	0.55	460	60	1.14	3405
FH204B19	20/30			17.5					
FH205B19	20/40			17.9					
FH206B29	20/50	588	297	18.4	0.725	460	60	1.46	3425
FH207B29	20/57	629	297	21.2					
FH208B29	20/64			21.3					
FH209B29	20/74	629	297	22.2	0.86	460	60	1.85	3440
FH210B29	20/81	629	297	23.3					
FH211B39	20/90	729	397	24.0					
FH212B39	20/98			24.1	1.06	460	60	2.1	3440
FH213B39	20/106			24.2					
FH214B39	20/113	756	397	25.4					
FH215B39	20/119			25.5	1.27	460	60	2.4	3440
FH216B49	20/127	878	497	31					
FH217B49	20/136	878	497	33.2					
FH218B49	20/146			33.3	1.75	460	60	3.1	3470
FH219B49	20/156			33.4					
FH220B49	20/164	904	497	35.5					
FH221B59	20/172	1004	597	36.5	1.95	460	60	3.5	3480
FH222B59	20/182	1036	597	40.4					
FH223B59	20/191			40.5					
FH224B59	20/200	1036	597	41.2	2.18	460	60	3.9	3500
FH225B59	20/208			41.4					
FH226B69	20/216	1136	697	42.0					
FH227B69	20/224			42.1	2.55	460	60	4.4	3480
FH228B69	20/231	1136	697	43.1					
FH229B69	20/238			43.3					
FH230B69	20/245			43.5	2.94	460	60	5.1	3480

Pressure Boosting Pumps

Series TH and FH use **closed impellers** in order to minimize power consumption and to optimize hydraulic pump efficiencies.

In addition, the TH series offers high pressures at short immersion depths. Inline pumps of the series FH can be used as **boosting pumps** if provided with positive inlet pressure. This inlet pressure can be provided by the central coolant supply or a feed pump. In such a setup, pumps of the series FH can raise the incoming pressure by up to 26 bar.

A **frequency converter** can be supplied for **special applications** or for matching the pump characteristic to a specific duty point.

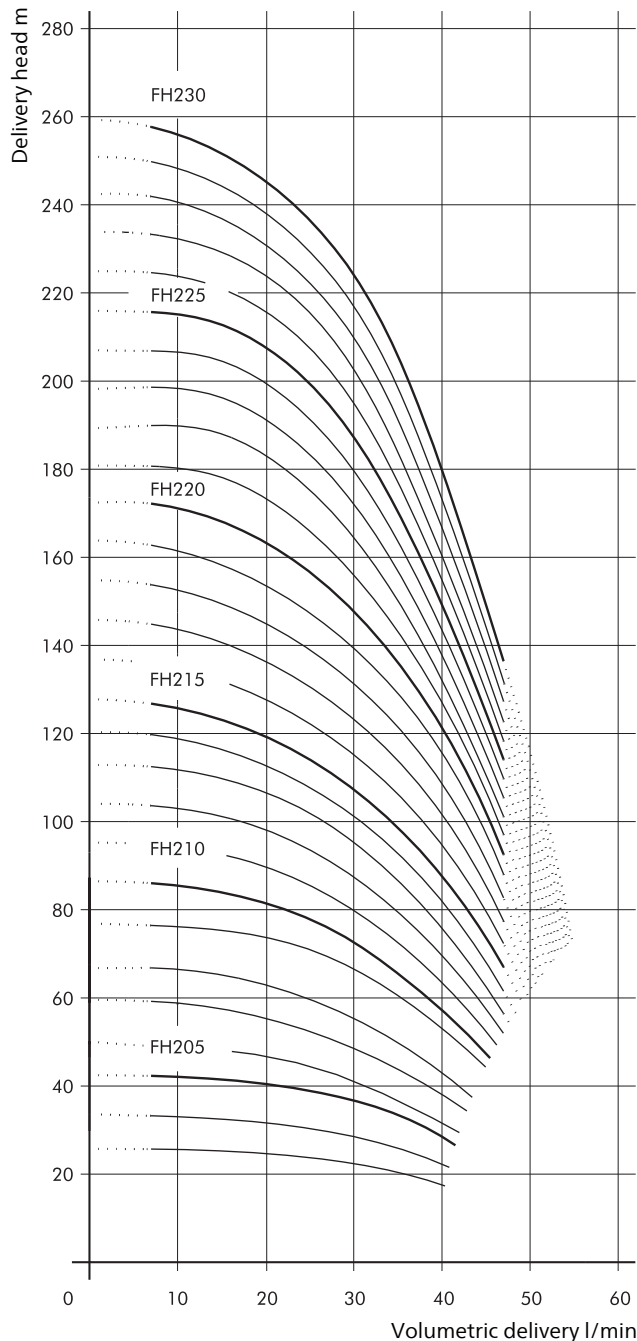
See page "Control/Regulation" in the Technical Information section of this catalog for further information.

Applications

- Types of fluid
 - Industry water
 - coolants
 - cooling/cutting oils
- Kinematic viscosity
 - 1 mm²/s (1 cSt)
 - higher viscosity upon request
- Pumping temperature
 - 0...80° C

Construction

Pump body	cast iron
Cover	cast iron
Impellers	CrNi-steel
Shaft	CrNi-steel
Diffusers	CrNi-steel
Mechanical seal	SiC
O-rings	Viton
Optional:	
Pump body	bronze
Cover	bronze
Noise level	
FH203...FH215	61 dBA
FH216...FH230	66 dBA

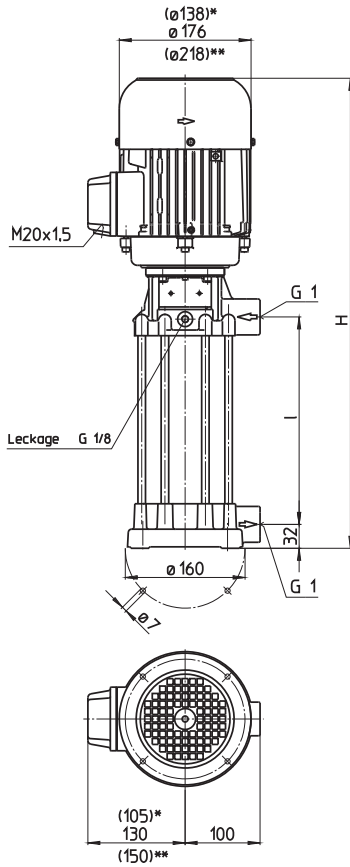


FH4

Closed impellers

60 Hz

FH403...423



*) Dimensions for FH403...FH408

**) Dimensions for FH419...FH423

Type	Vol. del. at manom. del. head l/min /m	Height H mm	Length l mm	Weight kg	Power kW	Voltage 3~ V	Fre- quen- cy Hz	Current A	Speed 1/min
FH403B19	40/29	488	197	18.4	0.55	460	60	1.14	3405
FH404B19	40/39	529	197	19.5	0.725	460	60	1.46	3425
FH405B19	40/49	529	197	20.3	0.86	460	60	1.85	3440
FH406B29	40/58	629	297	21.2	1.06	460	60	2.1	3440
FH407B29	40/68	656	297	22.4	1.27	460	60	2.4	3440
FH408B29	40/78			22.5					
FH409B29	40/88	678	297	30	1.49	460	60	2.7	3500
FH410B29	40/100	678	297	30.2	1.75	460	60	3.1	3470
FH411B39	40/110	804	397	32.4	1.95	460	60	3.5	3480
FH412B39	40/119			33.0					
FH413B39	40/129	836	397	38	2.18	460	60	3.9	3500
FH414B39	40/139	836	397	38.5	2.55	460	60	4.4	3480
FH415B39	40/150			38.6					
FH416B49	40/159	936	497	39.0	2.94	460	60	5.1	3480
FH417B49	40/170			39.1					
FH418B49	40/179			39.2					
FH419B49	40/192	929	497	50.9	3.8	460	60	6.4	3520
FH420B49	40/202			51.0					
FH421B59	40/214	1029	597	51.1					
FH422B59	40/224			51.3					
FH423B59	40/233	1029	597	55.5	4.55	460	60	7.9	3520

Pressure Boosting Pumps

series TH and FH use **closed impellers** in order to minimize power consumption and to optimize hydraulic pump efficiencies.

In addition, the TH series offers high pressures at short immersion depths. Inline pumps of the series FH can be used as **boosting pumps** if provided with positive inlet pressure. This inlet pressure can be provided by the central coolant supply or a feed pump. In such a setup, pumps of the series FH can raise the incoming pressure by up to 26 bar.

A **frequency converter** can be supplied for **special applications** or for matching the pump characteristic to a specific duty point.

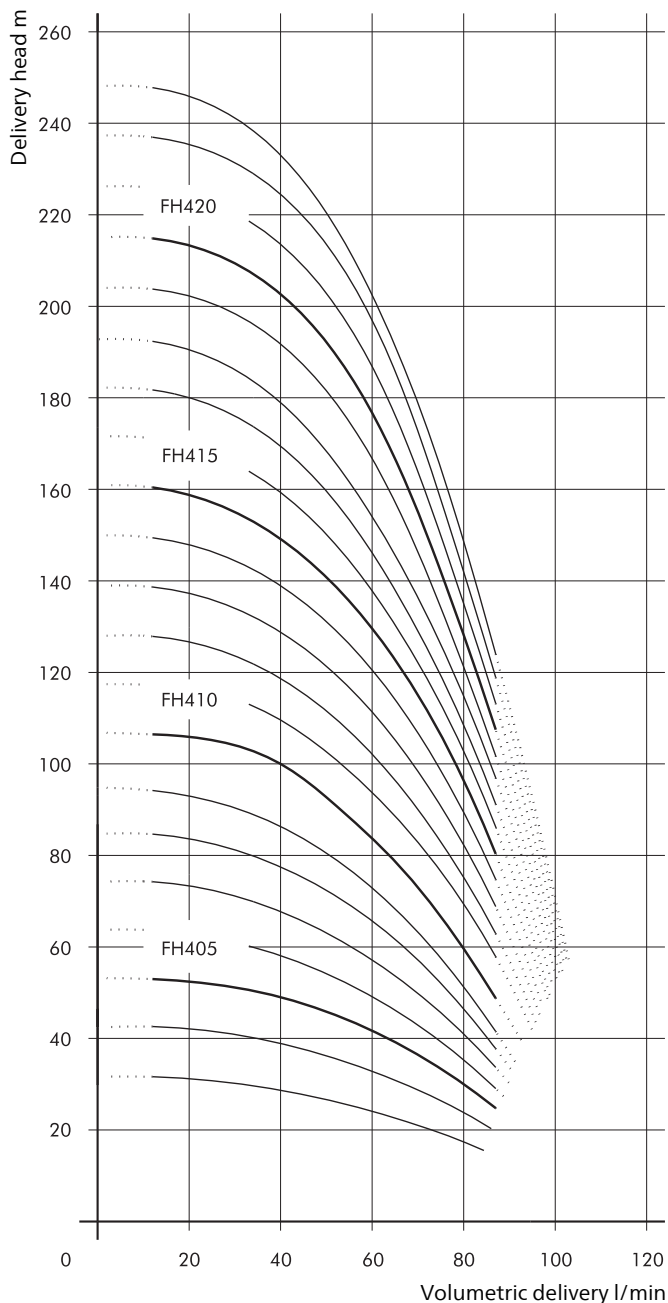
See page "Control/Regulation" in the Technical Information section of this catalog for further information.

Applications

- Types of fluid
 - Industry water
 - coolants
 - cooling/cutting oils
- Kinematic viscosity
 - 1 mm²/s (1 cSt)
 - higher viscosity upon request
- Pumping temperature
 - 0...80° C

Construction

Pump body	cast iron
Cover	cast iron
Impellers	CrNi-steel
Shaft	CrNi-steel
Diffusers	CrNi-steel
Mechanical seal	SiC
O-rings	Viton
Optional:	
Pump body	bronze
Cover	bronze
Noise level	
FH403...FH408	61 dBA
FH409...FH418	66 dBA
FH419...FH423	75 dBA

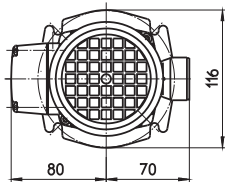
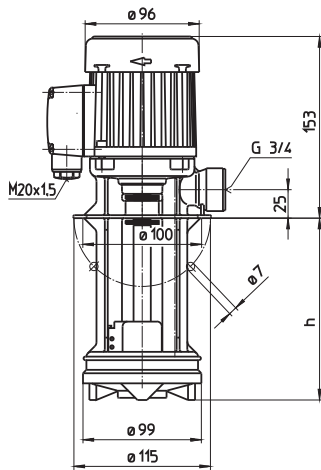


Immersion Pumps in Plastics

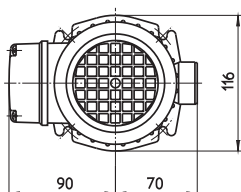
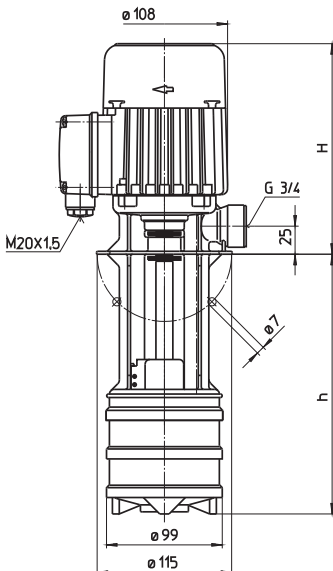
KTF25...54, KTF81...83

Semi-open impellers

KTF25, 40, 51



KTF52, 53, 54 KTF81, 82, 83



Type	Vol. del. at manom. del. head l/min / m	Height H mm	Depth of im- mersion h mm	Weight kg	Power kW	Voltage 3~ V	Fre- quen- cy Hz	Current A	Speed 1/min
KTF25/120	25/2	153	118	2.6	0.045	220-240	50	0.33	2800
	170		168	2.7					
	220		218	2.9					
	270		268	3.0					
KTF40/120	25/3	153	118	2.6	0.055	220-240	50	0.35	2800
	170		168	2.7					
	220		218	2.9					
	270		268	3.0					
KTF51/120	25/5	153	118	2.7	0.075	220-240	50	0.38	2700
	170		168	2.8					
	220		218	2.9					
	270		268	3.0					
KTF52/150	25/9	197	151	3.3	0.17	220-240	50	0.92	2775
	200		201	3.5					
	250		251	3.6					
	300		301	3.8					
KTF53/190	25/15	214	184	4.3	0.22	220-240	50	1.14	2800
	240		234	4.5					
	290		284	4.7					
	340		334	4.9					
KTF54/220	25/20	239	217	5.2	0.32	220-240	50	1.58	2825
	270		267	5.5					
	320		317	5.7					
								0.365	460
KTF81/120	30/5	197	118	3.2	0.17	220-240	50	0.92	2775
	170		168	3.4					
	220		218	3.6					
	270		268	3.8					
KTF82/150	30/10	214	151	3.9	0.22	220-240	50	1.14	2800
	200		201	4.1					
	250		251	4.3					
	300		301	4.5					
KTF83/190	30/15	239	184	5.0	0.32	220-240	50	1.58	2825
	240		234	5.2					
	290		284	5.4					
	340		334	5.6					
					0.365	460	60	0.84	3400

Immersion Pumps in Plastics

series KTF are suitable for various **water supply problems**.

These pumps are also suitable for a wide range of **chemical liquids**.

No shaft seal is required, due to the construction.

Applications

Types of fluid

Industry water; warm, cold, with and without chemical admixtures, distilled, de-ionnized

Kinematic viscosity

...12 mm²/s (12 cSt)

Pumping temperature

-10...+60° C

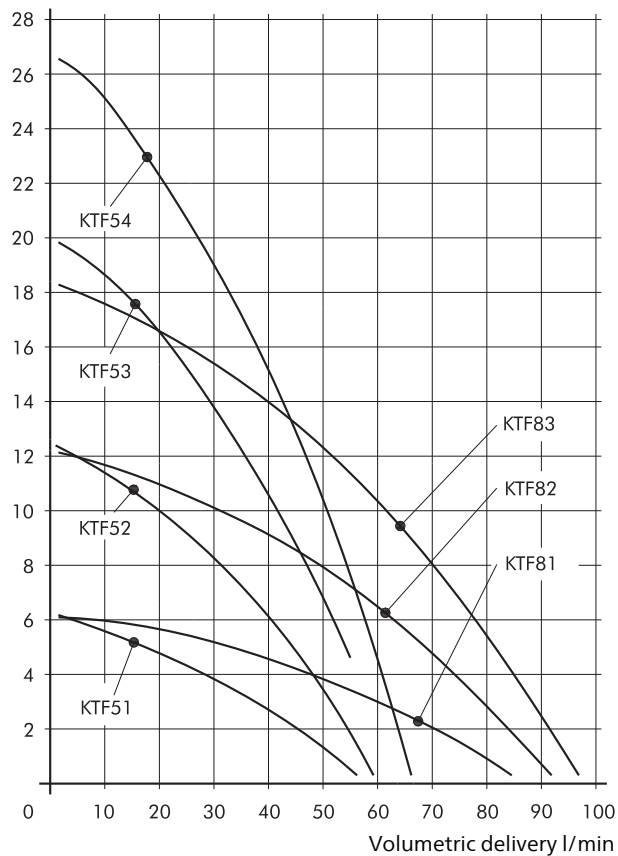
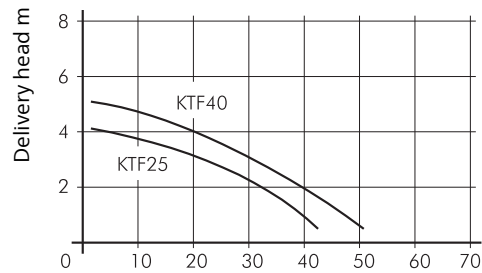
Construction

Pump body	PPS
Cover	PP
Impellers	PPS
Shaft	1.4104

Optional: Shaft	CrMo
--------------------	------

Optional:
These models are also available with **single phase motor**.

Noise level	
KTF25...KTF51	47 dBA
KTF52...KTF83	48 dBA

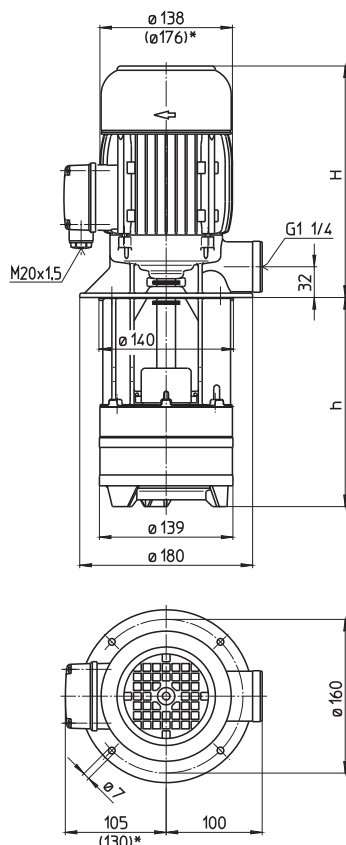


Immersion Pumps in Plastics

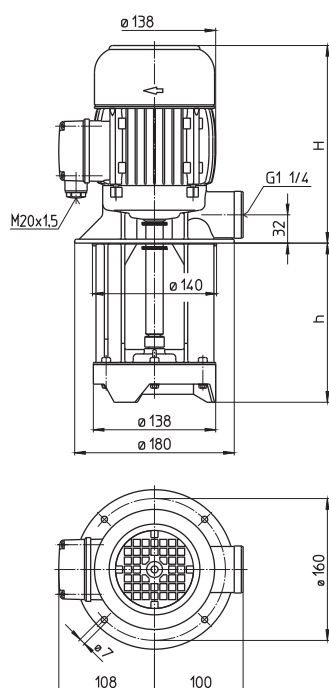
KTF151...303, KTB200

Semi-open impellers

KTF151...153 KTF301...303



KTB200



*) Dimensions for KTF153, KTF302, 303

Type	Vol. del. at manom. del. head l/min / m	Height H mm	Depth of immersion h mm	Weight kg	Power kW	Voltage 3~ V	Fre- quen- cy Hz	Current A	Speed 1/min
KTF151/140	100/11	264	140	8.7	0.63	220-240	50	2.70	2850
	220		220	9.0					
	290		290	9.5	0.725	460	60	1.46	3425
	370		370	9.7					
KTF152/180	100/20	291	180	10.5	1.1	220-240	50	4.33	2850
	260		260	11.0					
	330		330	11.5	1.27	460	60	2.4	3440
	410		410	12.0					
KTF153/220	100/32	346	220	20.5	1.7	220-240	50	6.24	2890
	300		300	21.0					
	370		370	21.5	1.95	460	60	3.5	3480
	450		450	22.0					
KTF301/140	180/10	291	140	10.0	1.1	220-240	50	4.33	2850
	220		220	10.5					
	290		290	11.0	1.27	460	60	2.4	3440
	370		370	11.5					
KTF302/180	180/20	346	180	20.0	1.7	220-240	50	6.24	2890
	260		260	20.5					
	330		330	21.0	1.95	460	60	3.5	3480
	410		410	21.5					
KTF303/220	180/33	378	220	25.0	2.6	220-240	50	9.30	2880
	300		300	25.5					
	370		370	26.0	2.94	460	60	5.1	3480
	450		450	26.5					
KTB200/120	210/2	264	120	8.0	0.63	220-240	50	2.70	2850
	200		200	8.5					
	270		270	9.0	0.725	460	60	1.46	3425
	350		350	10.0					

Immersion Pumps in Plastics

series KTF and KTB are suitable for various **water supply problems**. These pumps are also suitable for a wide range of **chemical liquids**. No shaft seal is required, due to the construction.

Applications

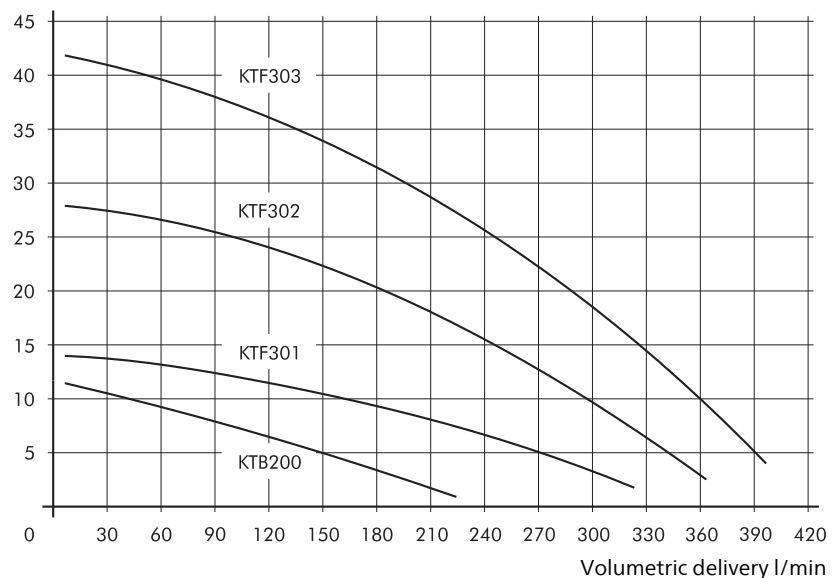
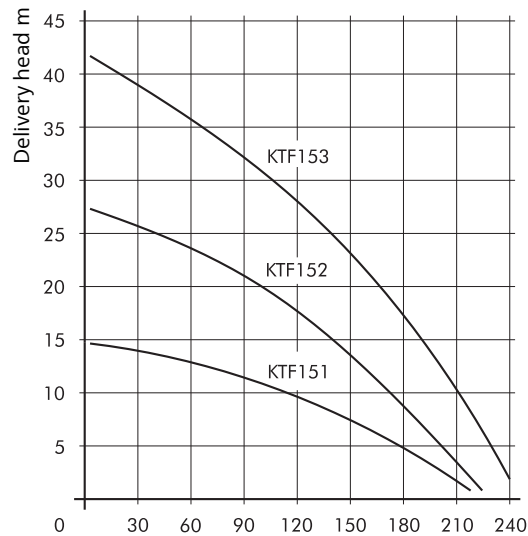
Types of fluid
Industry water; warm, cold, with and without chemical admixtures, distilled, de-ionnized

Kinematic viscosity
...12 mm²/s (12 cSt)

Pumping temperature
-10...+60° C

Construction

Pump body	POM
Cover	PP
Impellers	POM (KTB200) PPS
Shaft	POM (KTB200) 1.4104
Optional: Shaft	CrMo
Noise level	
KTF151...KTF152	60 dBA
KTF301	
KTB200	
KTF153	65 dBA
KTF302...KTF303	

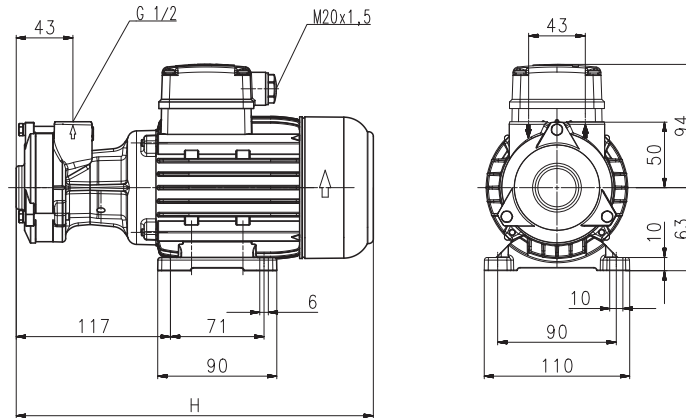


Miniature Centrifugal Pumps

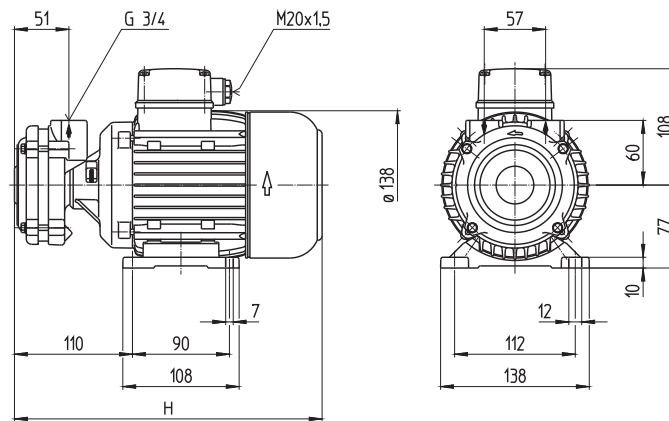
KC21...45 / KC60

Open/peripheral impellers

KC21, 31, 35, 45 self-priming



KC60 self-priming



Type	Vol. del. at	Dimensions	Weight	Power	Voltage	Fre-	Current	Speed
	manom. del. head	H mm		kg	3 ~			
	l/min / m			kW	V	Hz	A	1/min
KC21	2/20	269	6	0.22	220-240	50	1.14	2800
					380-415	50	0.66	2800
KC31	2/28	295	6.5	0.32	220-240	50	1.58	2825
					380-415	50	0.91	2825
KC35	2/33	269	6	0.22	220-240	50	1.14	2800
					380-415	50	0.66	2800
KC45	2/43	295	7	0.32	220-240	50	1.58	2825
					380-415	50	0.91	2825
KC60	2/45	309	11	0.92	220-240	50	3.8	2840
					380-415	50	2.2	2840
				1.06	460	60	2.1	3440



Miniature Centrifugal Pumps

series KC are suitable for pumping thin-bodied fluids.

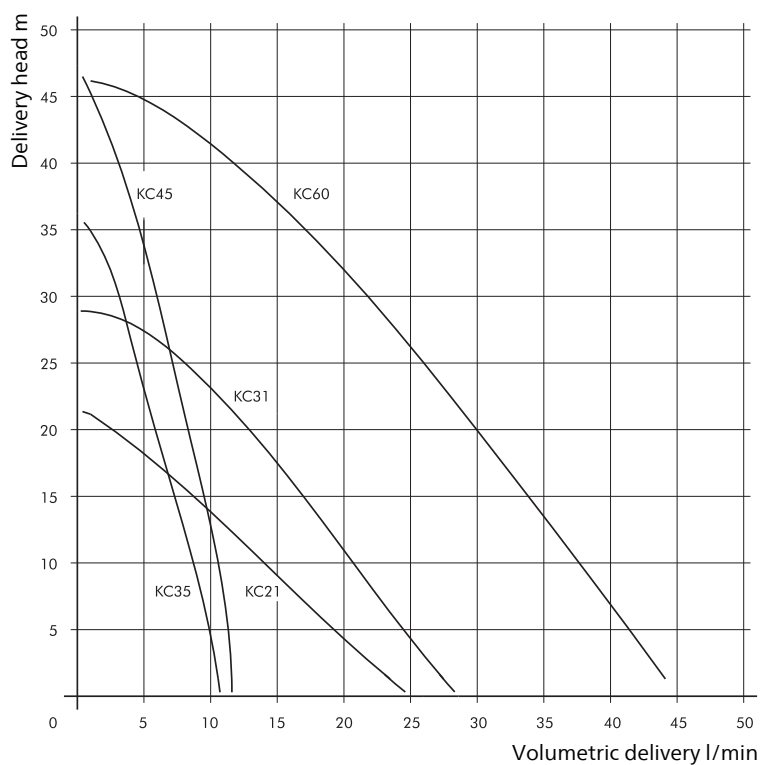
They operate according to the bypass duct principle, with self-priming function following initial priming.

Applications

Types of fluid
 Industry water
 coolants
 fuel oil
 Kinematic viscosity
 ...12 mm²/s (12 cSt)
 Pumping temperature
 0...80° C
 Suction height
 2 m without foot-located valve
 6 m with foot-located valve

Construction

Pump body	bronze (KC21...KC45)
Cover	bronze (KC21...KC31) brass (KC35...KC60)
Impeller	brass
Shaft	Cr-steel
Gasket	Viton
Noise level	
KC35	57 dBA
KC45	60 dBA
KC21...KC31	63 dBA
KC60	65 dBA

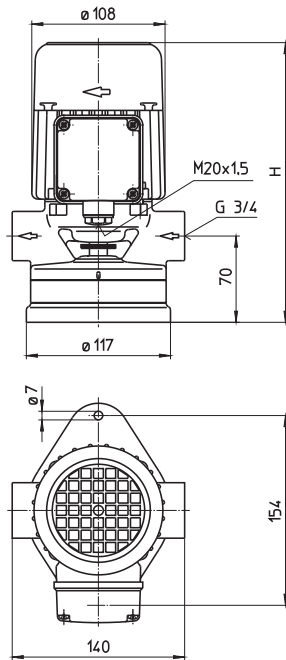


Suction Pumps

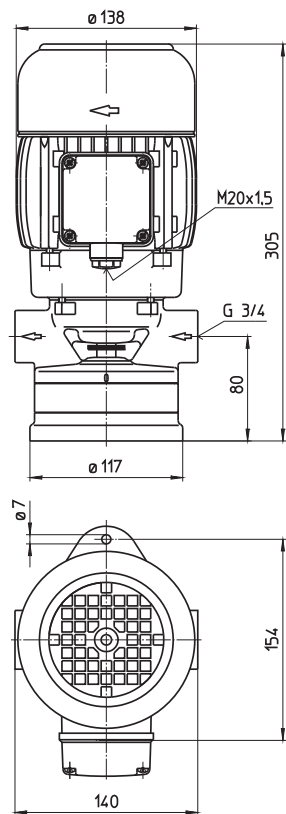
SB20...60

Open impellers

SB20, 40



SB60



Type	Vol. del. at manom. del. head l/min / m	Height H mm	Weight kg	Power kW	Voltage 3~ V	Fre- quen- cy Hz	Current A	Speed 1/min
SB20	23/2	230	6	0.22	220-240	50	1.14	2800
					380-415	50	0.66	2800
				0.255	460	60	0.62	3370
SB40	43/2	288	7	0.32	220-240	50	1.58	2825
					380-415	50	0.91	2825
				0.365	460	60	0.84	3400
SB60	47/2	305	10.5	0.48	220-240	50	2.06	2820
					380-415	50	1.19	2820
				0.55	460	60	1.14	3405

Suction Pumps

are self-priming following the initial priming, and operate according to the bypass duct principle. We recommend pump models featuring bronze body elements for pumping water without anti-corrosion additives.

The dimensions are based on standard specification EN 12157.

Applications

Types of fluid
 coolants
 cooling/cutting oils
 fuel oil
 water (with anticorrosive additive)

Kinematic viscosity
 ...60 mm²/s (60 cSt)

Pumping temperature
 0...80° C

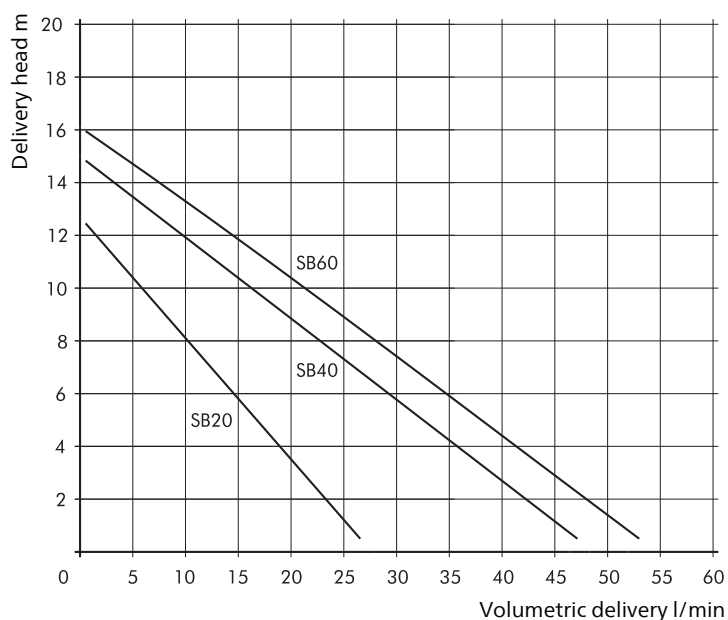
Suction height
 1 - 2 m without foot-located valve
 4 - 6 m with foot-located valve

Construction

Pump body	cast iron
Cover	cast iron
Impeller	brass
Shaft	steel
Mechanical seal	graphite based
O-rings	Viton

Optional:	
Pump body	bronze (SB20...SB40)
Cover	bronze (SB20...SB40)
Impeller	CrNi-steel

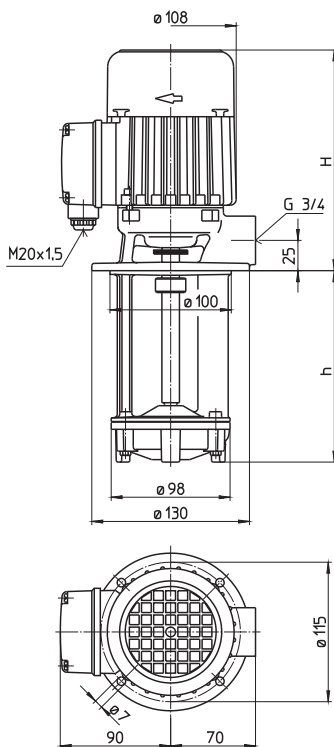
Noise level	
SB20...SB40	54 dBA
SB60	64 dBA



TB...-M

Semi-open impellers

TB40-M, TB63-M TB100-M



Type	Vol. del. at manom. del. head l/min /m	Height H mm	Depth of immersion h mm	Weight kg	Power kW	Voltage 3~ V	Fre- quen- cy Hz	Current A	Speed 1/min
TB40/120-M	50/2	198	120	5.3	0.17	220-240	50	0.92	2775
170-M			170	5.7		380-415	50	0.53	2775
220-M			220	6.1					
270-M			270	6.5	0.195	460	60	0.49	3345
350-M			350	7.3					
TB63/120-M	79/2	216	130	5.3	0.22	220-240	50	1.14	2800
170-M			180	5.8		380-415	50	0.66	2800
220-M			230	6.3					
270-M			280	6.8	0.255	460	60	0.62	3370
350-M			360	7.3					
TB100/120-M	88/2	241	130	7.2	0.32	220-240	50	1.58	2825
170-M			180	7.5		380-415	50	0.91	2825
220-M			230	7.8					
270-M			280	8.1	0.365	460	60	0.84	3400
350-M			360	8.7					

Immersion Pumps

are plain centrifugal pumps with the impeller fitted on the driving shaft extension. They are mounted on top of the container, the pump extension being immersed in the coolant.

The dimensions are based on standard specification **EN 12157**.

The maximum coolant level must stay a few mm/inches below the mounting flange.

Applications

Types of fluid
freezing medium, cooling oils
other fluids on request

Kinematic viscosity
...45 mm²/s (45 cSt)

Pumping temperature
...+ 130° C

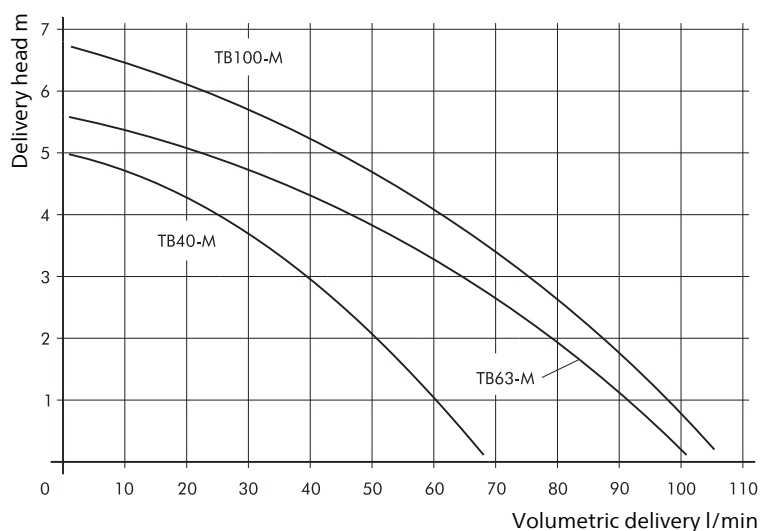
Construction

Pump body	cast iron
Cover	cast iron
Impeller	brass
Shaft	steel
Optional:	
Cover	cast iron with thread
Impeller	cast iron

On request:
All parts having contact with the fluid are made of bronze.

Optional:
The models of TB...-M are also available with **single phase motor**.

Noise level	
TB40-M...TB100-M	54 dBA

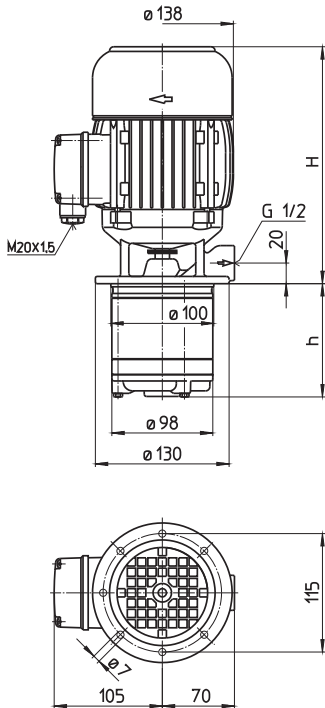


Miniature Centrifugal Pumps

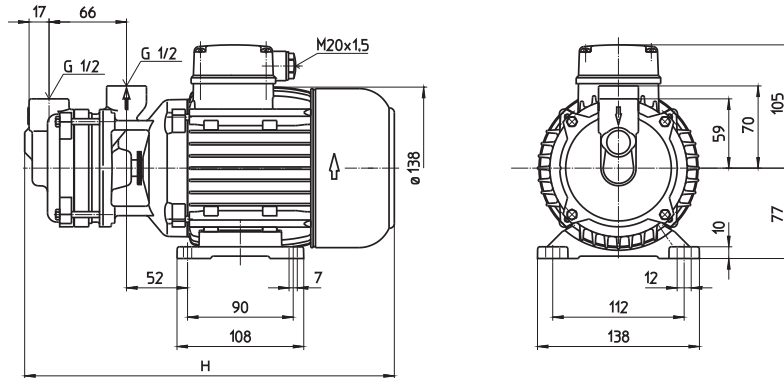
B401...501

Peripheral impellers

B401...501
Immersion Version



B401...501
Base-mounted Version



Type	Vol. del. at manom. del. head l/min /m	Dimensions		Weight kg	Power kW	Voltage 3 ~ V	Fre- quen- cy Hz	Current A	Speed 1/min
		H mm	h mm						
B401/110	10/32	271	110	10.2	0.63	220-240	50	2.70	2850
B401-F		338	67	10.5		380-415	50	1.56	2850
B501/110	10/45	271	110	11.5	0.92	220-240	50	3.8	2840
B501-F		341	67	11.8		380-415	50	2.2	2840
					1.06	460	60	2.1	3440



Miniature Centrifugal Pumps

Series B401 ...501 are suitable for pumping **clean fluids** up to 140° C temperature and 5 bar system-pressure.

For open circuits see immersion pumps TS12...24.

The minimum liquid level for immersion pumps of the B-series installed vertically must reach the lower impeller.

Applications

Types of fluid

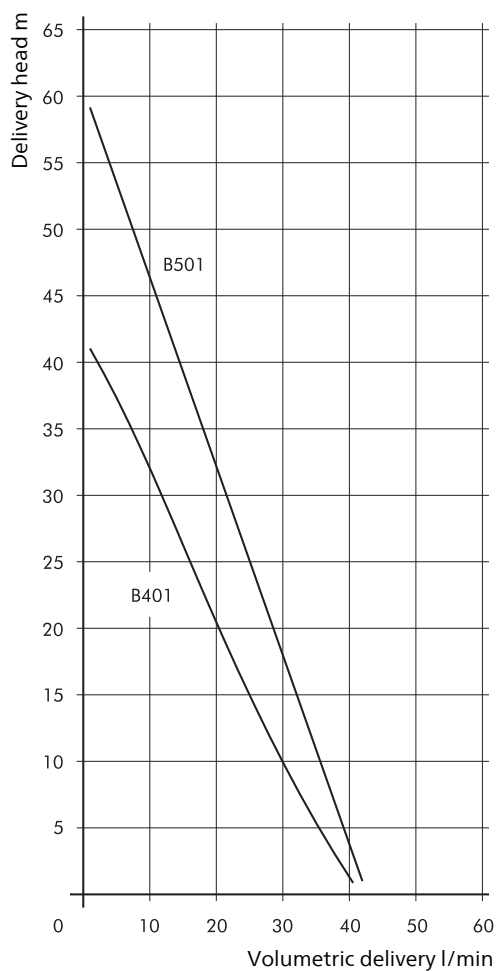
Industry water up to 140° C at 5 bar system-pressure

Pumping temperature

...+ 140° C

Construction

Pump body	bronze
Cover	bronze
Impeller	brass
Shaft	Cr-steel
Optional:	
Cover	CrNi-steel
Impeller	CrNi-steel
Noise level	
B401...B501	65 dBA



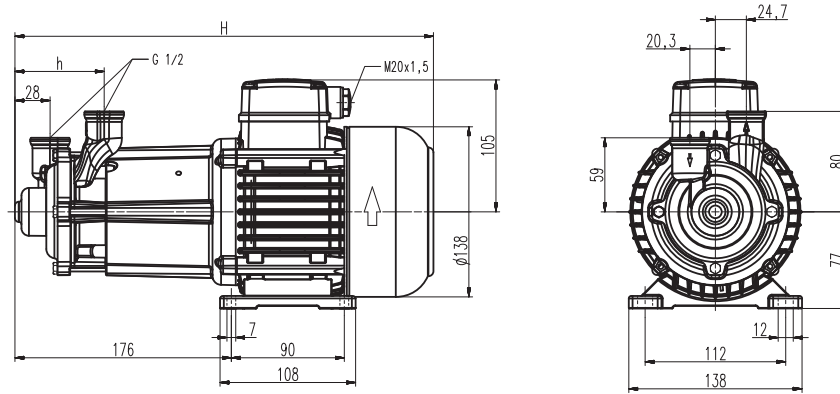
Miniature Centrifugal Pumps



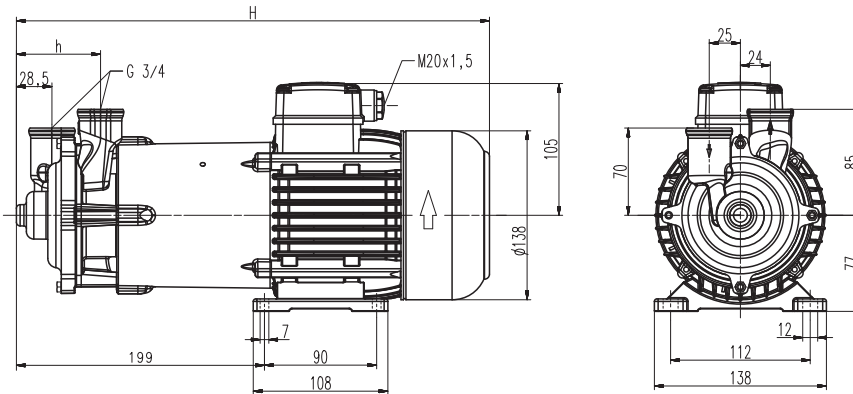
BMK3...BMK4

Peripheral impellers

BMK3



BMK4



Type	Vol. del. at manom. del. head l/min / m	Dimensions		Weight kg	Power kW	Voltage 3 ~ V	Fre- quen- cy Hz	Current A	Speed 1/min
		H mm	h mm						
BMK3	10/35	374	71	10.8	0.63	220-240	50	2.70	2850
						380-415	50	1.56	2850
					0.725	460	60	1.46	3425
BMK4	10/48	430	67.5	14	1.1	220-240	50	4.33	2850
						380-415	50	2.50	2850
					1.27	460	60	2.4	3440



Miniature Centrifugal Pumps

of the **BMK series** have been desined for **clean water circuits** of up to 160 degree C fluid temperature and up to **7 bar** of system pressure.

The pumps are equipped with a magnetic coupling. The pumps can be mounted vertically or horizontally. The specific design allows the pumps to operate wear poor.

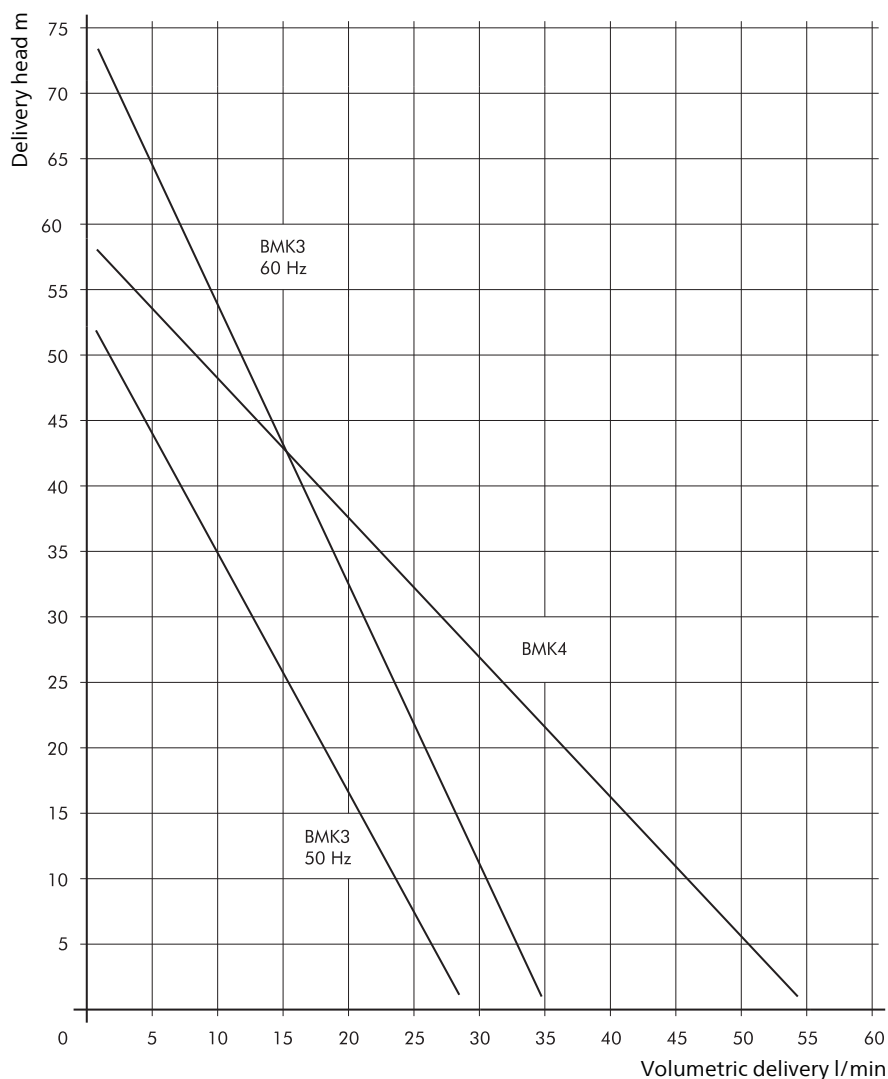
Applications

Types of fluid
Industry water up to 160° C at 7 bar system-pressure

Construction

Pump body	CrNi-steel
Cover	CrNi-steel
Impeller	CrNi-steel
Shaft	Ceramic
Gasket	Split-case

Noise level	
BMK3	65 dBA
BMK4	67 dBA



The Brinkmann Pumps network – This is the way to find us.



BRINKMANN PUMPS has a global presence and direct representation throughout Europe, Asia and North America. This ensures quick response times, competent consulting personnel and the highest level of service, which Brinkmann Pumps is known for, anytime and anywhere. Visit our website – where you will find all the contact details for our representative offices. Visit us and convince yourself of our capabilities.

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