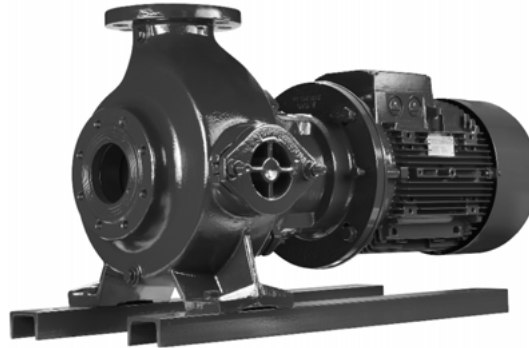


## Volute casing pump for dry-well installation DN 50-700

50 Hz / 60 Hz (DIN, IEC Motor)



Sewatec



Sewabloc

Automation products available:

- PumpExpert

### Application

For handling untreated sewage and all types of waste water in sewage treatment and industry.

### Operating Data

		Impeller Types				
		K	D	F	E	
Capacity	Q up to	10 000	1260	680	2520	m <sup>3</sup> /h l/s
		2775	350	189	700	
Head	H up to	95	40	40	50	m
Operating pressure	p up to	10	10	10	10	bar
Product temperature	t up to	70	70	70	70	°C

### Design

Horizontally or vertically mounted volute casing pump, also available in close-coupled design with flange-mounted standardized motor type B5/V1 (Sewabloc), with free-flow (F), single-vane (E), multi-vane (K) or open, diagonal single-vane (D) impeller.

### Bearings

Pump and motor sides are fitted with grease-packed rolling element bearings sealed for life.

From bearing bracket S05 onwards supplied with re-greasable bearing.

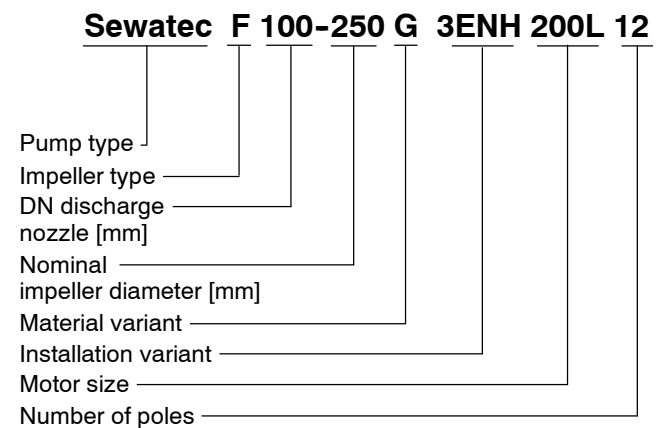
### Shaft Seal

All pump sizes are fitted with two mechanical seals in series, independent of the direction of rotation. A liquid containing chamber between the seals provides seal cooling and lubrication. Packed gland can be supplied as an alternative from bearing bracket S05 onwards.

### Materials

Pump casing:	Cast iron (JL 1040)
Wear plate:	Cast iron (JL 1040) / Duplex Steel / Wear resistant White Iron
Impeller:	Cast iron (JL 1040) / Duplex Steel / Wear resistant White Iron
Shaft:	Stainless steel 420 / F51
Casing wear ring:	Cast iron / VG 434
Mechanical seal:	SiC / SiC

### Designation



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**Product Features**

based on Sewatec E 100-250

Angular casing wear ring for radial flow

**Your benefit:**

Protection against abrasion of pump casing and simple resetting after maintenance.  
No seizure in impeller gap.

Two mechanical seals, independent of direction of rotation with SiC / SiC mating surfaces

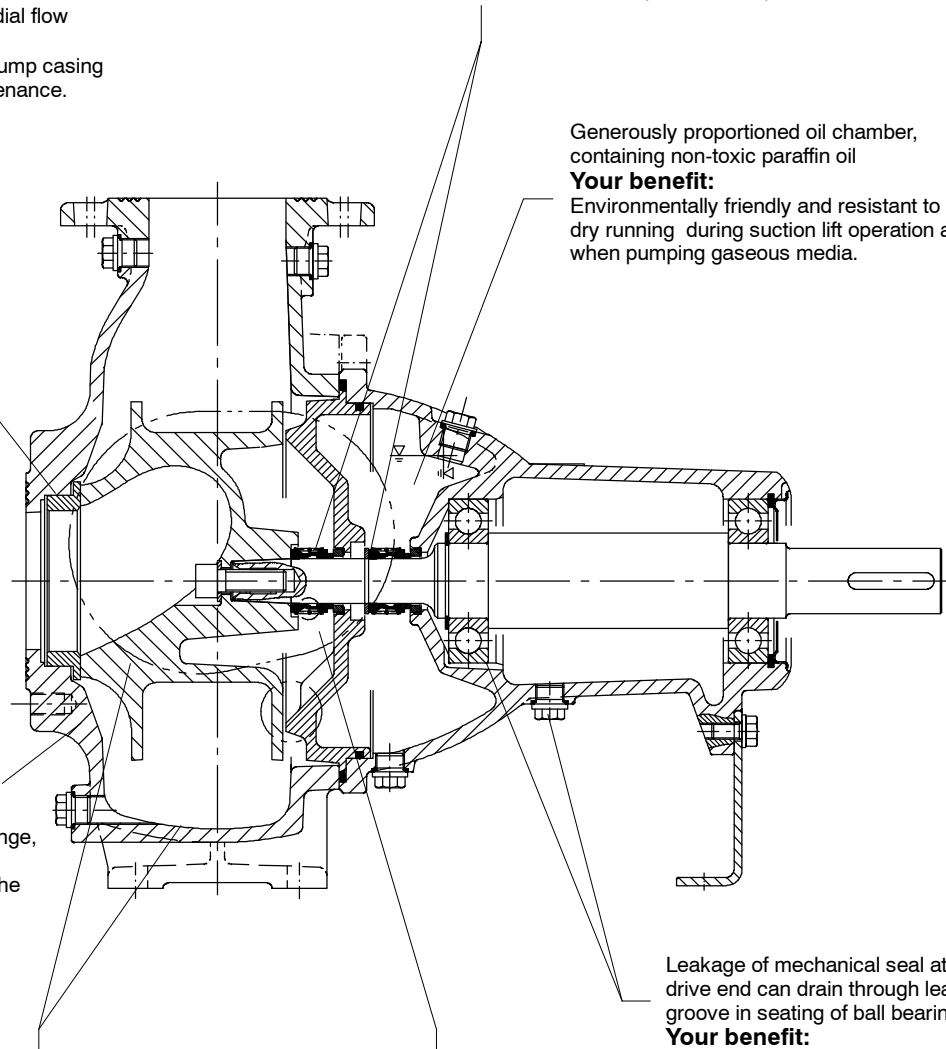
**Your benefit:**

Long periods of use through double protection. Failure of one mechanical seal retains full operational capabilities of the unit.

Generously proportioned oil chamber, containing non-toxic paraffin oil

**Your benefit:**

Environmentally friendly and resistant to dry running during suction lift operation and when pumping gaseous media.



Identical volute casings for all impeller types (E, F, K)

**Your benefit:**

Should operating conditions change, a different impeller type can be installed without any rework on the casing.

Identical F-, E-, K- and D-hydraulics in Sewatec and Amarex KRT kits

**Your benefit:**

Simplified, reduced and less expensive stockholding of spare parts used for all KSB sewage treatment equipment.

Large flooded chamber around mechanical seal at pump end

**Your benefit:**

No seal failure by deposits of solids or fibrous admixtures.

Leakage of mechanical seal at the drive end can drain through leakage groove in seating of ball bearing

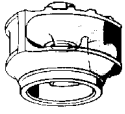

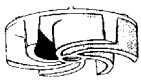
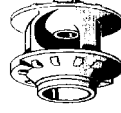
**Your benefit:**

Simple checking of mechanical seal.

Impeller Types

Sewatec F 100 - 250 / 1 G V

K, D, F, E

 <p>(K)</p>	<p>Closed multi-vane impeller</p> <hr/> <p><b>K-Impeller</b> for contaminated liquids containing sludges and solids which are non-gaseous and not containing fibres liable to twist or bunch.</p> <ul style="list-style-type: none"> <li>● screened sewage</li> <li>● mechanically treated sewage</li> <li>● industrial waste water</li> <li>● effluent from waste disposal sites</li> <li>● storm water</li> <li>● activated sludge</li> <li>● industrial effluent</li> </ul>	 <p>(D)</p>	<p>Open, diagonal single vane impeller</p> <hr/> <p><b>D-Impeller</b> for sewage containing solid substances, long fibres and coarse dirt.</p> <ul style="list-style-type: none"> <li>● raw sewage</li> <li>● mixed water</li> <li>● raw and digested sludge</li> <li>● activated sludge</li> <li>● circulated and heated sludge</li> </ul>
 <p>(F)</p>	<p>Free-flow impeller</p> <hr/> <p><b>F-Impeller</b> or liquids containing long fibres, solid substances, coarse dirt as well as gas or air.</p> <ul style="list-style-type: none"> <li>● raw sewage</li> <li>● activated sludge</li> <li>● circulated and heated sludge</li> <li>● raw and digested sludge</li> <li>● mixed water</li> </ul>	 <p>(E)</p>	<p>Single vane impeller</p> <hr/> <p><b>E-Impeller</b> for sewage containing long fibres and solid substances.</p> <ul style="list-style-type: none"> <li>● raw sewage</li> <li>● mixed water</li> <li>● raw and digested sludge</li> <li>● activated sludge</li> <li>● circulated and heated sludge</li> </ul>



Hydraulic systems with D-, F- and E-impellers are available only as shown in the documented QH parameters.  
K-impellers can be adjusted to the required duty point.



## Guide to Selection of Materials and Hydraulic Systems, Depending on Pumped Medium

The table below is a guide, based on KSB's experience over many years, but the details given cannot be taken as a general recommendation. More detailed advice is available from KSB direct.

Make use of the KSB materials laboratories when selecting the most suitable material.

Pumped media <sup>1)</sup>	Recom- mended material	Recom- mended type of impeller <sup>2)</sup>	Notes and other recommendations
<b>Waste water</b>	<b>Cast Iron</b>	K, D, E, F	Free impeller passage >solid substances. If necessary, pre-clean by screening
<b>River water</b>		K, D, E, F	
<b>Storm water</b>		K, D, E, F	
<b>Sewage</b>		F, D, E, (K)	ATV recommend 100 mm free impeller passage, but at least 75 mm Two-channel impeller can be used in certain circumstances
- municipal, not treated		F	For highly gaseous media, contact KSB.
- containing air and gas			
<b>Sludges</b>		F, E, D, K	Slurry to contain not more than 6 % dry solids
- Raw sludge		F, E, D	
- Digested sludge		K	
- Activated sludge			
<b>Industrial effluent, containing:</b>	<b>Cast Iron</b>	K	Free from solvents. Observe operator's instructions!
- paint suspension		F, E	Free from solvents. Contact KSB for silicone-free variant
- lacquer suspension		F, D	
- fibres		K, F	G2 or GH variant, special mechanical seal
- swarf		K, F	G2 or GH variant, special mechanical seal
- abrasive materials <sup>3)</sup>			
<b>Industrial effluents, slightly acidic</b>		K, F	pH-value ≥ 6.5 G1 variant and FPM (Viton) O-rings
<b>Effluents, non-corrosive</b>			
- Ammonia water		K	
- Ammonium hydroxide 5 % NH <sub>4</sub> OH		K	
- Urea 25 % (NH <sub>2</sub> ) <sub>2</sub> -CO	K		
- Potassium hydroxide 10 % KOH	K		
- Calcium hydroxide 5 % Ca(OH) <sub>2</sub>	K		
- Sodium hydroxide 5 % NaOH	K		
- Sodium carbonate 30 % Na <sub>2</sub> CO <sub>3</sub>	K		
<b>Effluents, non corrosive, containing:</b>	<b>Cast Iron</b>	K	FPM (Viton) O-rings } FPM (Viton) O-rings } 4)
- aliphatic hydrocarbons e. g. oils, petrol, butane, methane		K	
- aromatic hydrocarbons e. g. benzene, styrene		K	
- chlorinated hydrocarbons e. g. trichlorethene, ethylene chloride, chloroform, methylene chloride	K		
<b>Highly abrasive industrial effluent (chemically neutral), causing wear, e. g.</b>	<b>Wear resistant White Iron</b>		The required materials largely depend on duration of operation, rotational speed and flow velocity
- Sinter water		K	For sinter content <4g/l GH variant & special mech. seals
- Milk of lime with quartz admixtures and pigment suspensions		K	Up to 15 % milk of lime GH variant & special mech. seals
- Washing water with solids		K, F	Material selection based on medium analysis, GH variant, special mech. seals
- Effluents containing ashes and dust		K	Material selection requires medium analysis, GH variant, special mech. seals
<b>Water and sand mixtures</b>		K, F	Up to 5 g/l solids, GH version, special mechanical seals.
<b>Waste water and land fill seepage water</b>	<b>Duplex Steel</b>	K, F	GC variant (not for seawater and brackish water)

1) Contact KSB for pumped media not listed here.

2) The type mentioned first is to be preferred.

3) High hydro-abrasive wear occurs from ~ 0.5 g/l solid admixtures at a circumferential velocity of >20 m/s or when under partial load.

4) Different specific weights and low solubility of the hydrocarbons mentioned may cause high concentrations. In such cases contact KSB.

### Impeller / Material Variant Combinations

Pump Sizes	Bearing bracket		Material Variants																			
	Sewatec	Sewabloc	G				G1				G2				GH				GC			
			Impeller				Impeller				Impeller				Impeller				Impeller			
			K	D	F	E	K	D	F	E	K	D	F	E	K	D	F	E	K	D	F	E
050-250	S01	--	K		F		K		F		K		F		K		F		K		F	
050-250	--	B01	K		F		K		F		K		F		K		F		K		F	
050-251	S02	--	K		F		K		F		K		F		K		F		K		F	
050-251	--	B02	K		F		K		F		K		F		K		F		K		F	
065-250	S01	--	K		F				F				F				F				F	
065-250	--	B01	K		F				F				F				F				F	
080-250	S01	--	K		F		K		F		K		F		K		F		K		F	
080-250	--	B01	K		F		K		F		K		F		K		F		K		F	
080-315	S03	--	K	D	F		K	D	F		K	D	F		K	D	F		K	D	F	
080-315	S05	--		D				D				D				D				D		
080-315	--	B03	K	D	F		K	D	F		K	D	F		K	D	F		K	D	F	
080-316	S03	--		D				D				D				D				D		
080-316	--	B03		D				D				D				D				D		
100-250	S01	--	K		F	E	K		F		K		F		K		F		K		F	
100-250	--	B01	K		F		K		F		K		F		K		F		K		F	
100-251	S02	--	K	D	F	E	K	D	F		K	D	F		K	D	F		K	D	F	
100-251	--	B02	K	D	F		K	D	F		K	D	F		K	D	F		K	D	F	
100-315	S05	--		D				D				D				D				D		
100-316	S03	--		D				D				D				D				D		
100-316	--	B03		D				D				D				D				D		
100-401	S04	--	K		F	E	K		F		K		F		K		F		K		F	
100-401	S05	--	K		F	E	K		F		K		F		K		F		K		F	
125-315	S03	--	K		F																	
125-315	--	B03	K		F																	
125-317	S03	--				E																
125-317	--	B03				E																
150-251	S02	--		D				D				D				D				D		
150-251	--	B02		D				D				D				D				D		
150-315	S03	--	K	D	F	E	K	D	F		K	D	F		K	D	F		K	D	F	
150-315	--	B03	K	D	F		K	D	F		K	D	F		K	D	F		K	D	F	
150-400	S05	--		D				D				D				D				D		
150-401	S04	--	K		F	E	K		F		K		F		K		F		K		F	
150-401	S05	--	K	D	F	E	K	D	F		K	D	F		K	D	F		K	D	F	
150-401	S06	--		D		E		D				D				D				D		
151-401	S05	--	K				K				K				K				K			
150-500	S05	--	K				K				K				K				K			
150-500	S06	--	K				K				K				K				K			
200-315	S03	--	K	D			K	D			K	D			K	D			K	D		
200-315	--	B03	K	D			K	D			K	D			K	D			K	D		
200-316	S03	--	K				K				K				K				K			
200-316	--	B03	K				K				K				K				K			
200-330	S04	--	K				K				K				K				K			
200-330	S05	--	K				K				K				K				K			
200-400	S04	--	K				K				K				K				K			
200-400	S05	--	K	D		E	K	D			K	D			K	D			K	D		
200-400	S06	--		D		E		D				D				D				D		
200-500	S05	--				E																
200-500	S06	--	K				K				K				K				K			
200-500	S07	--	K				K				K				K				K			
200-500Ex	S05	--				E																
200-501	S06	--	K				K				K				K				K			
200-631	S07	--	K				K				K				K				K			
200-631	S08	--	K				K				K				K				K			
250-400	S04	--	K				K				K				K				K			
250-400	S05	--	K	D			K	D			K	D			K	D			K	D		
250-400	S06	--		D				D				D				D				D		
250-401	S04	--	K				K				K				K				K			
250-401	S05	--	K				K				K				K				K			
250-500	S06	--				E																
250-500	S07	--				E																
250-630	S07	--	K			E	K				K				K				K			
250-630	S08	--	K			E	K				K				K				K			
300-400	S04	--	K				K				K				K				K			
300-400	S05	--	K	D			K	D			K	D			K	D			K	D		
300-400	S06	--		D				D				D				D				D		
300-401	S04	--	K				K				K				K				K			
300-401	S05	--	K				K				K				K				K			
300-500	S06	--	K				K				K				K				K			
300-500	S07	--	K				K				K				K				K			
300-630	S07	--				E																
300-630	S08	--				E																
350-500	S06	--	K				K				K				K				K			
350-500	S07	--	K				K				K				K				K			
350-501	S06	--	K				K				K				K				K			
350-501	S07	--	K				K				K				K				K			
350-630	S07	--	K				K				K				K				K			
350-630	S08	--	K				K				K				K				K			
350-710	S07	--				E																
350-710	S08	--	K			E	K				K				K				K			
400-500	S06	--	K				K				K				K				K			
400-500	S07	--	K				K				K				K				K			
400-630	S08	--	K				K				K				K				K			
500-630	S07	--	K				K				K				K				K			
500-630	S08	--	K				K				K				K				K			
500-632	S08	--	K				K				K				K				K			
600-520	S07	--	K				K				K				K				K			
600-710	S08	--	K				K				K				K				K			
700-900	S08	--	K				K				K				K				K			

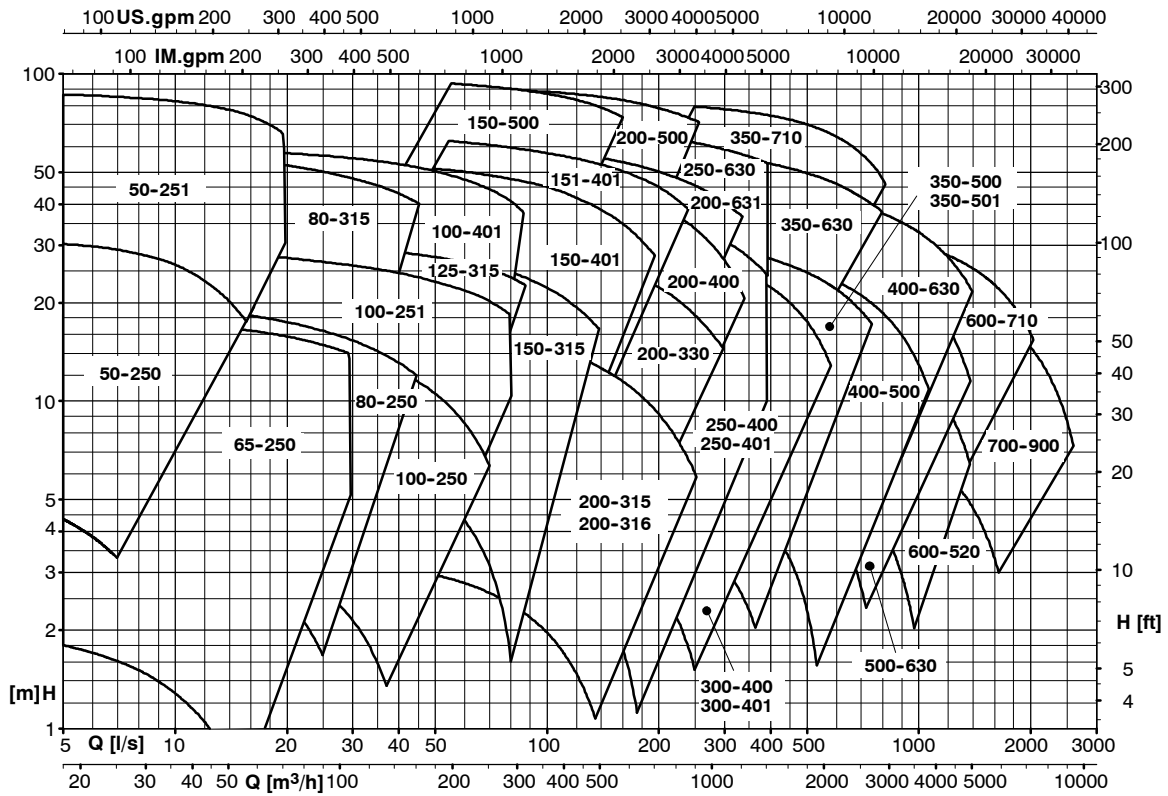
<b>Cast iron</b>	
<b>G</b> = standard version - parts in contact with the medi in cast iron	<b>GH</b> = like G, but impeller and intermediate casing in chilled iron
<b>G1</b> = like G, but duplex steel impeller	<b>GC</b> = like G, but impeller and discharge cover in duplex steel, shaft in 1.4462
<b>G2</b> = like G, but chilled iron impeller	

### Impeller / Material Variant Combinations (USA 60 Hz)

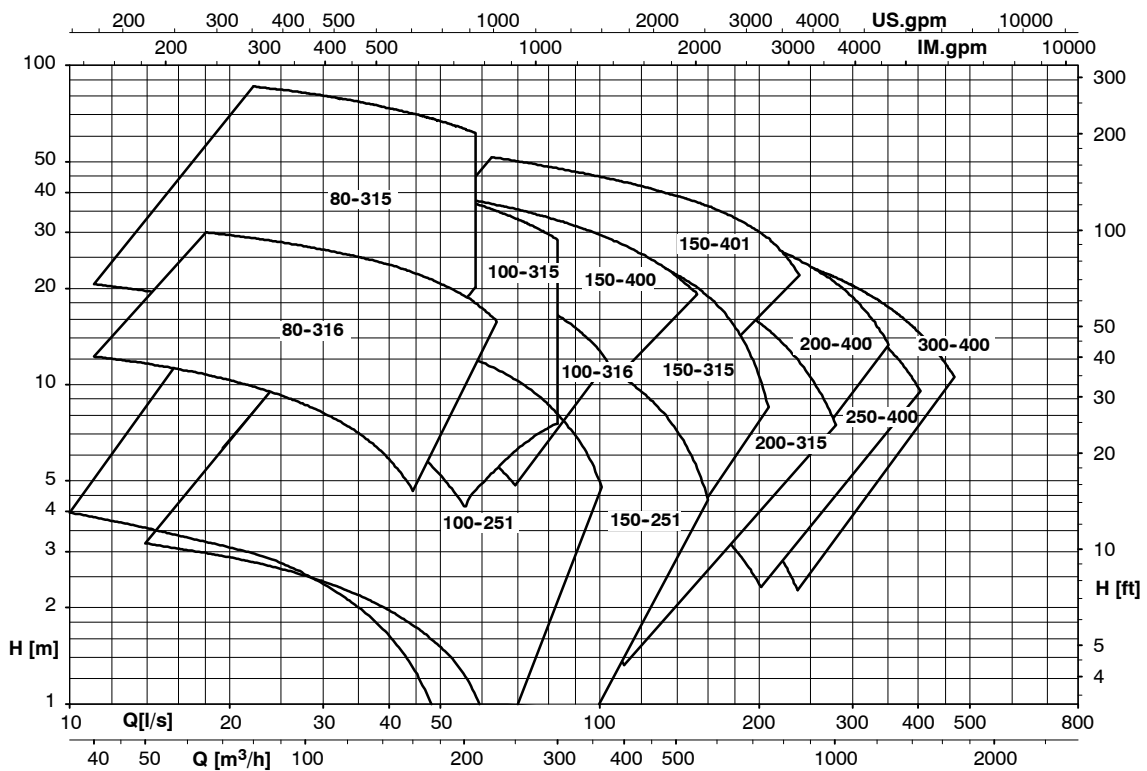
Pump Sizes	Bearing bracket		G				G1				Material Variants G2				GH				GC			
	Sewatec	Sewabloc	Impeller				Impeller				Impeller				Impeller				Impeller			
			K	D	F	E	K	D	F	E	K	D	F	E	K	D	F	E	K	D	F	E
050-250	S01	--	K		F		K		F		K		F		K		F		K		F	
050-250	--	B01	K		F		K		F		K		F		K		F		K		F	
050-251	S02	--	K				K				K				K				K			
050-251	--	B02	K				K				K				K				K			
065-250	S01	--	K		F				F				F				F				F	
065-250	--	B01	K		F				F				F				F				F	
080-250	S01	--	K		F		K		F		K		F		K		F		K		F	
080-250	--	B01	K		F		K		F		K		F		K		F		K		F	
080-315	S03	--	K	D	F		K	D	F		K	D	F		K	D	F		K	D	F	
080-315	S05	--		D				D				D				D				D		
080-315	--	B03	K	D	F		K	D	F		K	D	F		K	D	F		K	D	F	
080-316	S03	--		D				D				D				D				D		
080-316	--	B03		D				D				D				D				D		
100-250	S01	--			F	E			F				F				F				F	
100-250	--	B01			F	E			F				F				F				F	
100-251	S02	--	K	D	F	E	K	D	F	E	K	D	F	E	K	D	F	E	K	D	F	E
100-251	--	B02	K	D	F	E	K	D	F	E	K	D	F	E	K	D	F	E	K	D	F	E
100-315	S05	--		D				D				D				D				D		
100-316	S03	--		D				D				D				D				D		
100-316	--	B03		D				D				D				D				D		
100-401	S04	--	K		F		K		F		K		F		K		F		K		F	
100-401	S05	--	K		F		K		F		K		F		K		F		K		F	
125-315	S03	--	K		F																	
125-315	--	B03	K		F																	
125-317	S03	--				E																
125-317	--	B03				E																
150-251	S02	--		D				D				D				D				D		
150-251	--	B02		D				D				D				D				D		
150-315	S03	--	K	D	F	E	K	D	F	E	K	D	F	E	K	D	F	E	K	D	F	E
150-315	--	B03	K	D	F	E	K	D	F	E	K	D	F	E	K	D	F	E	K	D	F	E
150-400	S05	--		D				D				D				D				D		
150-401	S04	--	K		F		K		F		K		F		K		F		K		F	
150-401	S05	--	K	D	F		K	D	F		K	D	F		K	D	F		K	D	F	
150-401	S06	--		D				D				D				D				D		
151-401	S05	--	K				K				K				K				K			
150-500	S05	--	K				K				K				K				K			
150-500	S06	--	K				K				K				K				K			
200-315	S03	--	K	D			K	D			K	D			K	D			K	D		
200-315	--	B03	K	D			K	D			K	D			K	D			K	D		
200-316	S03	--	K				K				K				K				K			
200-316	--	B03	K				K				K				K				K			
200-330	S04	--	K				K				K				K				K			
200-330	S05	--	K				K				K				K				K			
200-400	S04	--	K				K				K				K				K			
200-400	S05	--	K	D			K	D			K	D			K	D			K	D		
200-400	S06	--		D				D				D				D				D		
200-500	S05	--																				
200-500	S06	--	K				K				K				K				K			
200-500	S07	--	K				K				K				K				K			
200-500Ex	S05	--																				
200-501	S06	--	K				K				K				K				K			
200-631	S07	--	K				K				K				K				K			
200-631	S08	--	K				K				K				K				K			
250-400	S04	--	K				K				K				K				K			
250-400	S05	--	K	D			K	D			K	D			K	D			K	D		
250-400	S06	--		D				D				D				D				D		
250-401	S04	--	K				K				K				K				K			
250-401	S05	--	K				K				K				K				K			
250-500	S06	--																				
250-500	S07	--																				
250-630	S07	--	K				K				K				K				K			
250-630	S08	--	K				K				K				K				K			
300-400	S04	--	K				K				K				K				K			
300-400	S05	--	K	D			K	D			K	D			K	D			K	D		
300-400	S06	--		D				D				D				D				D		
300-401	S04	--	K				K				K				K				K			
300-401	S05	--	K				K				K				K				K			
300-500	S06	--	K				K				K				K				K			
300-500	S07	--	K				K				K				K				K			
300-630	S07	--	K				K				K				K				K			
300-630	S08	--	K				K				K				K				K			
350-500	S06	--	K				K				K				K				K			
350-500	S07	--	K				K				K				K				K			
350-501	S06	--	K				K				K				K				K			
350-501	S07	--	K				K				K				K				K			
350-630	S07	--	K				K				K				K				K			
350-630	S08	--	K				K				K				K				K			
350-710	S07	--	K				K				K				K				K			
350-710	S08	--	K				K				K				K				K			
400-500	S06	--	K				K				K				K				K			
400-500	S07	--	K				K				K				K				K			
400-630	S08	--	K				K				K				K				K			
500-630	S07	--	K				K				K				K				K			
500-630	S08	--	K				K				K				K				K			
500-632	S08	--	K				K				K				K				K			
600-520	S07	--	K				K				K				K				K			
600-710	S08	--	K				K				K				K				K			
700-900	S08	--	K				K				K				K				K			

<b>Cast iron</b>	
<b>G</b> = standard version - parts in contact with the medi in cast iron	<b>GH</b> = like G, but impeller and intermediate casing in chilled iron
<b>G1</b> = like G, but duplex steel impeller	<b>GC</b> = like G, but impeller and discharge cover in duplex steel, shaft in 1.4462
<b>G2</b> = like G, but chilled iron impeller	

### Selection Diagrams 50 Hz Speed range for K-Impeller

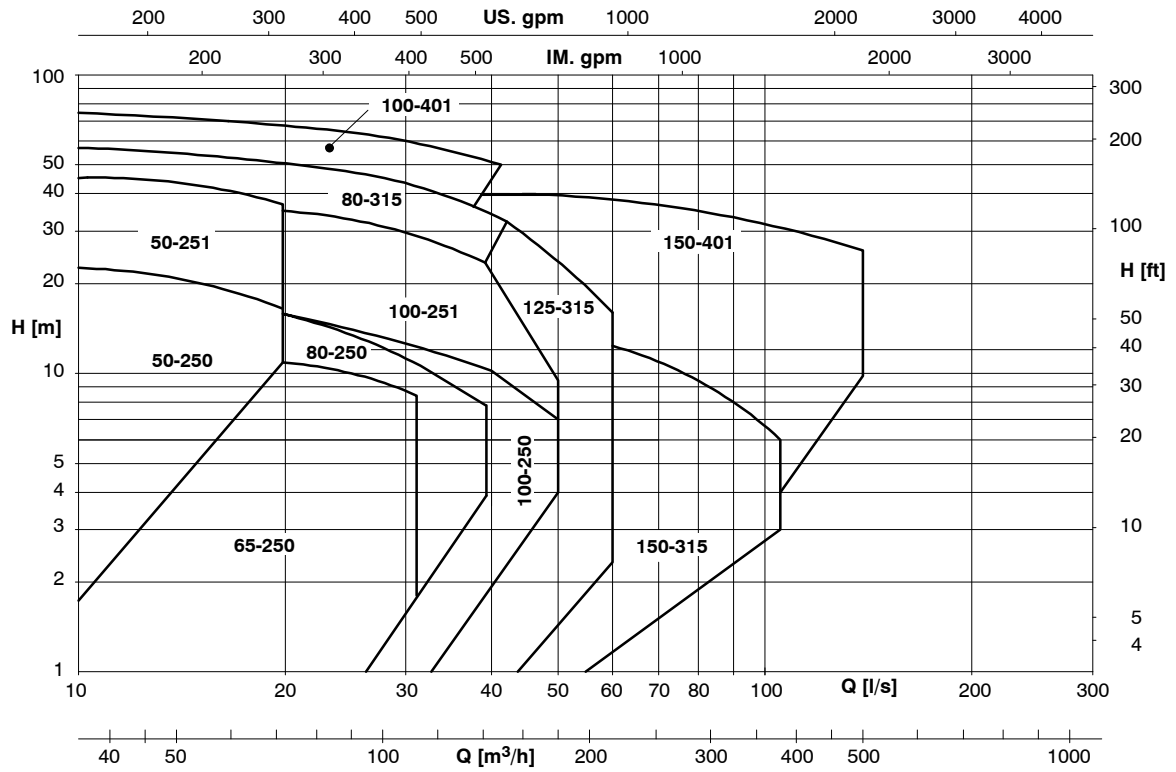


### Speed range for D-Impeller

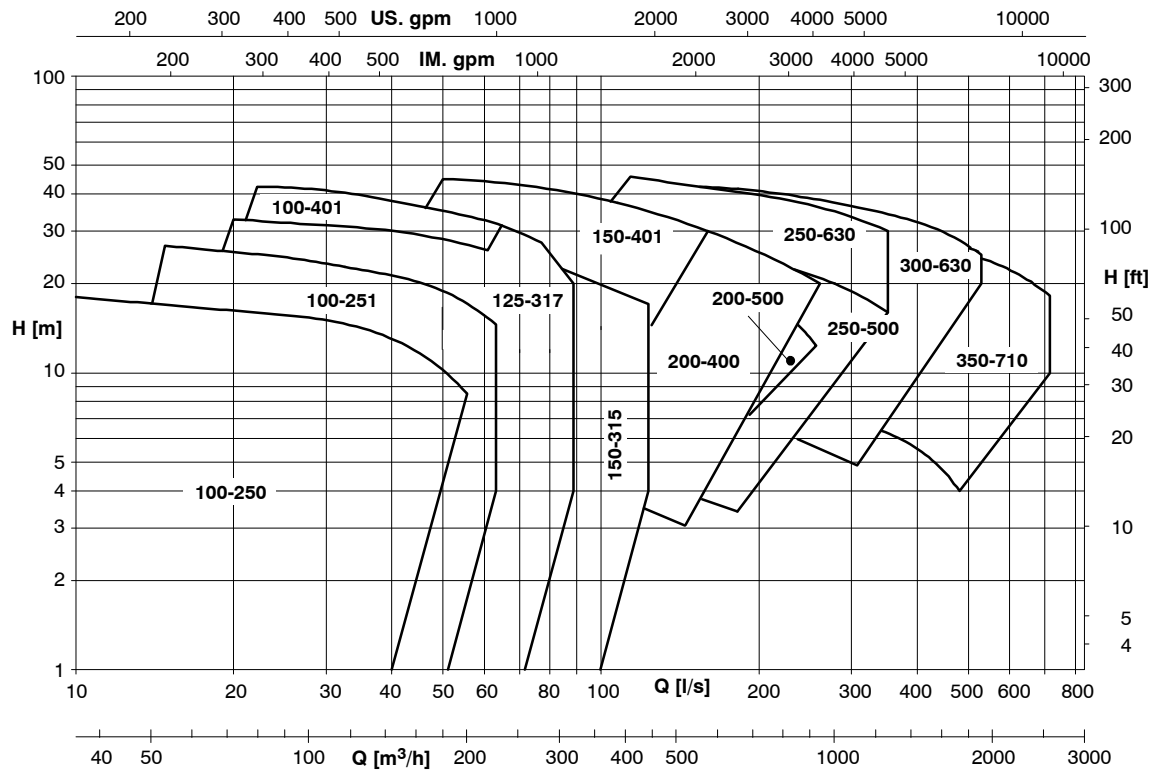




**Speed range for F-Impeller**



**Speed range for E-Impeller (not for Sewabloc)**



**Materials Standard Versions**

Part No.	Identification	Material Variants (EN / ASTM)				
		G	G1	G2	GH	GC
101	Pump casing	JL 1040 / A 48 Class 40 B				
135	Wear Plate <sup>4)</sup>	JL 1040 <sup>5)</sup> / A 48 Class 40 B <sup>5)</sup>		--		
163	Discharge cover	JL 1040 / A 48 Class 40 B			JN3 029 / A 532 II C 15 % CrMo-Hc	1.4517 / A 890 CD4MCu
183	Support foot	Steel <sup>2)</sup> / Steel <sup>2)</sup>				
210	Shaft	1.4021 / A 276 Type 420				1.4462 / A182 F51
230	Impeller	JL 1040 / A 48 Class 40 B	1.4517 / A 890 CD4MCu	JN3 029 / A 532 II C15 % CrMo-Hc		1.4517 / A 890 CD4MCu
330	Bearing bracket	JL 1040 / A 48 Class 40 B				
433	Mechanical seal	SiC/SiC (Q1Q1 PGG) / Si-Carbide/Si-Carbide				
502.01	Casing wear ring	VG 434 <sup>3)</sup> / AISI 329 <sup>3)</sup>	VG 434 (JL 1040 for F-impeller) / AISI 329 (A 48 Class 40 B for F-impeller)			
452.01	Gland	} only for packed gland	JS 1030 / A 536 Class 60-40-18			
454.01	Stuffing box ring		JL 1040 / A 48 Class 40 B			
456.01	Neck bush		PTFE / PTFE			
458.01	Lantern ring		1.4021 / A 276 Type 420			
524.01	Shaft protection sleeve		Stainless steel <sup>1)</sup> / Stainless steel <sup>1)</sup>			
914	Impeller screw	Stainless steel / Stainless steel				
902/920	Nuts and bolts	Steel / Steel				
var.	Screwed plug	NBR / NBR				
var.	Seals and gaskets	NBR / NBR				

1) beginning with bearing bracket S05: CK 35N / A 29 Gr.1035

2) beginning with bearing bracket S05: JL 1040 / A 48 Class 40 B

3) for F-impeller and beginning with 100-401: JL 1040 / A 48 Class 40 B

for E100-250, E100-251, E100-401, E150-315, E150-401, E200-315, E200-400: JN3 029 / A 532 IIC15 % CrMo-Hc

4) only E200-500, E250-500, E250-630, E300-630, E350-710

5) for D-impeller optional: JN3 029 / A 532 II C15 % CrMo-Hc

**Material comparison**

EN (DIN)	ASTM equivalent
JL 1040 (GG-25)	A 48 Class 40 B
JS 1030 (GGG-40)	A 536 Class 60-40-18
JN3 029 (0.9635)	A 532 II C 15 % CrMo-Hc
1.4517	A 890 CD4MCu
1.4021	A 276 Type 420
1.4401	A 276 Type 316
1.4462	A 182 F51

EN (DIN)	ASTM equivalent
1.4571	A 276 Type 316 Ti
C 45+N	A 576 Gr. 1045
C 35E	A 29 Gr. 1035
ST TZN	galv. steel
NBR	NBR
FPM	FKM

**Materials - Information**
**Cast Iron  
JL 1040 (GG-25)  
Lamellar Graphite Cast Iron**

This graphited cast iron to DIN 1691 is mostly used in the pumping of municipal sewage, sludges and rain- or surface water. Suitable for neutral, slightly aggressive media and media unlikely to cause excessive wear. The pH value of the pumped medium should be  $\geq 6.5$ , sand content  $\leq 0.5$  g/l.

**Duplex Steel  
Cast Stainless Steel  
(1.4517 or a technically  
equivalent material)**

The resistance to pitting of this ferritic-austenitic stainless cast steel makes it particularly suitable to pump sewage containing substantial amounts of chlorides and acids or sea- and brackish water. Its good chemical resistance, even against sewage containing phosphorus and sulphuric acid, has ensured its wide application in the chemical and process industries. Pumps made from duplex steel have been used very successfully to pump brine, chemical effluents (pH 1 - 12), foul water and seepage from waste disposal sites.

**Wear resistant White Iron  
(JN3 029 or a technically  
equivalent material)**

A wear resistant white iron for highly abrasive media, such as liquids containing sand, ashes or scale. Its hardness is approximately 61.5 to 68 Rockwell and therefore higher than hardened chromium steel. The alloyed cast iron of chromium- molybdenum has a significantly higher resistance to wear than cast iron JL 1040 (GG-25) or other cast materials.

**Speed / Impeller diameter / Bearing bracket combinations (density 1.0 kg/dm<sup>3</sup>)**

Baugröße Pump Size	Lagerträger Bearing bracket		F-Rad / F-impeller							E-Rad / E-impeller								
			Drehzahl [1/min] / speed [1/min]							Drehzahl [1/min] / speed [1/min]								
	Sewatec	Sewabloc	2900	1750	1450	1160	960	875	725	1450	1160	960	875	725	700	580	585	480
050-250	S01	--	--	200	200	200	200	200	200	--	--	--	--	--	--	--	--	--
050-250	--	B01	--	200	200	200	200	200	200	--	--	--	--	--	--	--	--	--
050-251	S02	--	190	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
050-251	--	B02	190	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
065-250	S01	--	--	210	210	210	210	210	--	--	--	--	--	--	--	--	--	--
065-250	--	B01	--	210	210	210	210	210	--	--	--	--	--	--	--	--	--	--
080-250	S01	--	--	210	210	--	--	--	--	--	--	--	--	--	--	--	--	--
080-250	--	B01	--	250	250	--	--	--	--	--	--	--	--	--	--	--	--	--
080-315	S03	--	250	250	250	250	--	--	--	--	--	--	--	--	--	--	--	--
080-315	S05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
080-315	--	B03	250	250	250	250	--	--	--	--	--	--	--	--	--	--	--	--
080-316	S03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
080-316	--	B03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
100-250	S01	--	--	210	210	210	--	--	245	245	245	245	245	245	245	--	--	--
100-250	--	B01	--	265	265	265	--	--	245	245	245	245	245	245	245	--	--	--
100-251	S02	--	--	265	265	--	--	--	265	265	265	265	265	265	265	--	--	--
100-251	--	B02	--	265	265	--	--	--	265	265	265	265	265	265	265	--	--	--
100-315	S05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
100-316	S03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
100-316	--	B03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
100-401	S04	--	--	390	390	390	390	--	412	412	412	412	412	412	--	--	--	--
100-401	S05	--	--	390	390	390	390	--	412	412	412	412	412	412	--	--	--	--
125-315	S03	--	--	300	300	300	300	--	--	--	--	--	--	--	--	--	--	--
125-315	--	B03	--	300	300	300	300	--	--	--	--	--	--	--	--	--	--	--
125-317	S03	--	--	--	--	--	--	--	--	330	330	330	330	330	330	--	--	--
125-317	--	B03	--	--	--	--	--	--	--	330	330	330	330	330	330	--	--	--
150-251	S02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
150-251	--	B02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
150-315	S03	--	--	--	290	290	290	--	320	320	320	320	320	320	320	--	--	--
150-315	--	B03	--	--	290	290	290	--	320	320	320	320	320	320	320	--	--	--
150-400	S05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
150-401	S04	--	--	390	390	390	390	390	--	--	--	--	--	--	--	--	--	--
150-401	S05	--	--	390	390	390	390	390	384	--	407	407	407	407	--	--	--	--
150-401	S06	--	--	--	--	--	--	--	407	407	407	--	--	--	--	--	--	--
151-401	S05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
150-500	S05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
150-500	S06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
200-315	S03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
200-315	--	B03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
200-316	S03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
200-316	--	B03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
200-330	S04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
200-330	S05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
200-400	S04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
200-400	S05	--	--	--	--	--	--	--	351	351	400	400	400	--	--	--	--	--
200-400	S06	--	--	--	--	--	--	--	400	400	--	--	--	--	--	--	--	--
200-500	S05	--	--	--	--	--	--	--	--	--	508	508	508	--	508	--	--	--
200-500	S06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
200-500	S07	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
200-500Ex	S05	--	--	--	--	--	--	--	--	--	500	--	500	--	500	--	--	--
200-501	S06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
200-631	S07	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
200-631	S08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
250-400	S04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
250-400	S05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
250-400	S06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
250-401	S04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
250-401	S05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
250-500	S06	--	--	--	--	--	--	--	--	--	--	--	475	475	516	516	516	516
250-500	S07	--	--	--	--	--	--	--	--	--	516	516	516	516	516	516	516	516
250-630	S07	--	--	--	--	--	--	--	--	--	540	--	640	--	640	--	640	--
250-630	S08	--	--	--	--	--	--	--	--	--	640	640	640	640	640	640	640	640
300-400	S04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
300-400	S05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
300-400	S06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
300-401	S04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
300-401	S05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
300-500	S06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
300-500	S07	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
300-630	S07	--	--	--	--	--	--	--	--	--	530	--	640	--	640	--	640	--
300-630	S08	--	--	--	--	--	--	--	--	--	640	640	640	640	640	640	640	640
350-500	S06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
350-500	S07	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
350-501	S06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
350-501	S07	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
350-630	S07	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
350-630	S08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
350-710	S07	--	--	--	--	--	--	--	--	--	--	--	740	--	740	--	740	--
350-710	S08	--	--	--	--	--	--	--	--	--	--	--	740	740	740	740	740	740
400-500	S06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
400-500	S07	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
400-630	S08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
500-630	S07	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
500-630	S08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
500-632	S08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
600-520	S07	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
600-710	S08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
700-900	S08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Selection for a product density of 1.0 kg/dm<sup>3</sup> - higher density upon request.

For higher densities up to 1.2 kg/dm<sup>3</sup> (max.): Take into account the density of the fluid pumped when selecting the impeller diameter / bearing bracket combination.

**Speed / Impeller diameter / Bearing bracket combinations (density 1.0 kg/dm<sup>3</sup>)**

Baugröße Pump Size	Lagerträger Bearing bracket		K-Rad / K-impeller											D-Rad / D-impeller							
			Drehzahl [1/min] / speed [1/min]											Drehzahl [1/min] / speed [1/min]							
	Sewatec	Sewabloc	2900	1750	1450	1160	960	875	725	700	580	585	480	2900	1750	1450	1160	960	875	725	700
050-250	S01	--	--	--	260	260	260	260	260	--	--	--	--	--	--	--	--	--	--	--	--
050-250	--	B01	--	--	260	260	260	260	260	--	--	--	--	--	--	--	--	--	--	--	--
050-251	S02	--	265	265	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
050-251	--	B02	265	265	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
065-250	S01	--	--	--	230	230	230	230	230	--	--	--	--	--	--	--	--	--	--	--	--
065-250	--	B01	--	--	230	230	230	230	230	--	--	--	--	--	--	--	--	--	--	--	--
080-250	S01	--	--	--	235	235	235	--	--	--	--	--	--	--	--	--	--	--	--	--	--
080-250	--	B01	--	--	235	235	235	--	--	--	--	--	--	--	--	--	--	--	--	--	--
080-315	S03	--	220	220	--	--	--	--	--	--	--	--	--	260	260	260	260	--	--	--	--
080-315	S05	--	--	--	--	--	--	--	--	--	--	--	--	260	260	--	--	--	--	--	--
080-315	--	B03	220	220	--	--	--	--	--	--	--	--	--	--	260	260	260	--	--	--	--
080-316	S03	--	--	--	--	--	--	--	--	--	--	--	--	--	306	306	--	--	--	--	--
080-316	--	B03	--	--	--	--	--	--	--	--	--	--	--	--	306	306	--	--	--	--	--
100-250	S01	--	--	--	256	--	256	--	256	--	--	--	--	--	--	--	--	--	--	--	--
100-250	--	B01	--	--	256	--	256	--	256	--	--	--	--	--	--	--	--	--	--	--	--
100-251	S02	--	--	256	256	256	--	--	--	--	--	--	--	--	265	265	--	--	--	--	--
100-251	--	B02	--	256	256	256	--	--	--	--	--	--	--	--	265	265	--	--	--	--	--
100-315	S05	--	--	--	--	--	--	--	--	--	--	--	222	222	--	--	--	--	--	--	--
100-316	S03	--	--	--	--	--	--	--	--	--	--	--	--	--	306	306	--	--	--	--	--
100-316	--	B03	--	--	--	--	--	--	--	--	--	--	--	--	306	306	--	--	--	--	--
100-401	S04	--	--	--	404	404	404	404	404	--	--	--	--	--	--	--	--	--	--	--	--
100-401	S05	--	--	--	404	404	404	404	404	--	--	--	--	--	--	--	--	--	--	--	--
125-315	S03	--	--	312	312	312	312	312	312	--	--	--	--	--	--	--	--	--	--	--	--
125-315	--	B03	--	312	312	312	312	312	312	--	--	--	--	--	--	--	--	--	--	--	--
125-317	S03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
125-317	--	B03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
150-251	S02	--	--	--	--	--	--	--	--	--	--	--	--	--	254	254	254	254	254	--	--
150-251	--	B02	--	--	--	--	--	--	--	--	--	--	--	--	254	254	254	254	254	--	--
150-315	S03	--	--	312	312	312	312	312	312	--	--	--	--	--	317	317	317	317	317	--	--
150-315	--	B03	--	312	312	312	312	312	312	--	--	--	--	--	317	317	317	317	317	--	--
150-400	S05	--	--	--	--	--	--	--	--	--	--	--	--	--	363	363	363	--	--	--	--
150-401	S04	--	--	--	404	404	404	404	404	--	--	--	--	--	--	--	--	--	--	--	--
150-401	S05	--	--	--	404	404	404	404	404	--	--	--	--	--	--	412	--	--	--	--	--
150-401	S06	--	--	--	--	--	--	--	--	--	--	--	--	--	412	412	--	--	--	--	--
151-401	S05	--	--	380	408	408	408	--	--	--	--	--	--	--	--	--	--	--	--	--	--
150-500	S05	--	--	--	504	504	504	504	504	--	--	--	--	--	--	--	--	--	--	--	--
150-500	S06	--	--	--	504	504	504	504	504	--	--	--	--	--	--	--	--	--	--	--	--
200-315	S03	--	--	--	295	295	295	295	--	--	--	--	--	--	315	315	315	315	315	315	--
200-315	--	B03	--	--	295	295	295	295	--	--	--	--	--	--	315	315	315	315	315	315	--
200-316	S03	--	--	--	305	305	305	305	--	--	--	--	--	--	--	--	--	--	--	--	--
200-316	--	B03	--	--	305	305	305	305	--	--	--	--	--	--	--	--	--	--	--	--	--
200-330	S04	--	--	--	326	326	326	326	--	326	--	326	--	--	--	--	--	--	--	--	--
200-330	S05	--	--	--	326	326	326	326	--	326	--	326	--	--	--	--	--	--	--	--	--
200-400	S04	--	--	--	404	404	404	404	404	--	404	--	404	--	--	--	--	--	--	--	--
200-400	S05	--	--	--	404	404	404	404	404	--	404	--	404	--	--	--	402	--	--	--	--
200-400	S06	--	--	--	--	--	--	--	--	--	--	--	--	--	402	402	--	--	--	--	--
200-500	S05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
200-500	S06	--	--	--	--	500	500	504	--	--	--	--	--	--	--	--	--	--	--	--	--
200-500	S07	--	--	--	504	504	504	504	504	--	--	--	--	--	--	--	--	--	--	--	--
200-500Ex	S05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
200-501	S06	--	--	--	450	502	502	--	--	--	--	--	--	--	--	--	--	--	--	--	--
200-631	S07	--	--	--	--	622	622	--	--	--	--	--	--	--	--	--	--	--	--	--	--
200-631	S08	--	--	--	622	622	622	--	--	--	--	--	--	--	--	--	--	--	--	--	--
250-400	S04	--	--	--	x	x	x	x	x	--	x	--	x	--	--	--	--	--	--	--	--
250-400	S05	--	--	--	x	x	x	x	x	--	x	--	x	--	--	--	375	375	375	--	--
250-400	S06	--	--	--	--	--	--	--	--	--	--	--	--	--	375	375	--	--	--	--	--
250-401	S04	--	--	--	x	x	x	x	x	--	x	--	x	--	--	--	--	--	--	--	--
250-401	S05	--	--	--	x	x	x	x	x	--	x	--	x	--	--	--	--	--	--	--	--
250-500	S06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
250-500	S07	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
250-630	S07	--	--	--	--	630	630	630	--	--	--	--	--	--	--	--	--	--	--	--	--
250-630	S08	--	--	--	630	630	630	630	--	--	--	--	--	--	--	--	--	--	--	--	--
300-400	S04	--	--	--	--	x	x	x	x	x	--	x	--	--	--	--	--	--	--	--	--
300-400	S05	--	--	--	--	x	x	x	x	x	--	x	--	--	--	408	408	408	408	408	--
300-400	S06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
300-401	S04	--	--	--	--	x	x	x	x	x	--	x	--	--	--	--	--	--	--	--	--
300-401	S05	--	--	--	--	x	x	x	x	x	--	x	--	--	--	--	--	--	--	--	--
300-500	S06	--	--	--	--	460	--	504	504	504	--	504	--	--	--	--	--	--	--	--	--
300-500	S07	--	--	--	--	504	504	504	504	504	--	504	--	--	--	--	--	--	--	--	--
300-630	S07	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
300-630	S08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
350-500	S06	--	--	--	--	430	--	508	508	508	--	508	--	--	--	--	--	--	--	--	--
350-500	S07	--	--	--	--	508	508	508	508	508	--	508	--	--	--	--	--	--	--	--	--
350-501	S06	--	--	--	--	500	500	509	509	509	--	509	--	--	--	--	--	--	--	--	--
350-501	S07	--	--	--	--	509	509	509	509	509	--	509	--	--	--	--	--	--	--	--	--
350-630	S07	--	--	--	--	610	--	630	630	630	--	630	--	--	--	--	--	--	--	--	--
350-630	S08	--	--	--	--	630	630	630	630	630	--	630	--	--	--	--	--	--	--	--	--
350-710	S07	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
350-710	S08	--	--	--	--	730	730	--	--	--	--	--	--	--	--	--	--	--	--	--	--
400-500	S06	--	--	--	--	464	501	508	508	--	--	--	--	--	--	--	--	--	--	--	--
400-500	S07	--	--	--	--	508	508	508	508	--	--	--	--	--	--	--	--	--	--	--	--
400-630	S08	--	--	--	--	620	620	--	--	--	--	--	--	--	--	--	--	--	--	--	--
500-630	S07	--	--	--	--	565	--	565	565	565	--	565	--	--	--	--	--	--	--	--	--
500-630	S08	--	--	--	--	565	565	565	565	565	--	565	--	--	--	--	--	--	--	--	--
500-632	S08	--	--	--	--	639	639	639	639	639	--	639	--	--	--	--	--	--	--	--	--
600-520	S07	--	--	--	--	--	--	532	532	532	--	--	--	--	--	--	--	--	--	--	--
600-710	S08	--	--	--	--	--	--	715	715	715	--	--	--	--	--	--	--	--	--	--	--
700-900	S08	--	--	--	--	--	--	--	--	805	805	--	--	--	--	--					



**Technical pump information**
**K-Impeller**

Pump size	Bearing bracket		Suction	Discharge	Pump data										K-Impeller				
					Spring rate	Bearings		Shaft sealing		Pressure limits		Inspection hole Ø		Number of channels	max. free passage	max. impeller Ø	min. impeller Ø	Moment of inertia J with water	
	pump side	motor side				max. operating pressure	max. test pressure			Pump casing	Spacer pipe								
	[Nm/Rad]	320.01						322.01	320.02			Packed gland	Mechanical seal						[bar]
050-250	S01	--	65	50	13.000	1x6307	--	1x6307	--	Std	10	15	--	80	3	15	260	150	0.05
050-250	--	B01			13.000	1x6307	--	--	--	Std									
050-251	S02	--	65	50	50.000	1x6311	--	1x6311	--	Std	10	15	--	80	3	15	256	150	0.05
050-251	--	B02			50.000	1x6311	--	--	--	Std									
065-250	S01	--	80	65	13.000	1x6307	--	1x6307	--	Std	6	9	--	80	2	50	230	170	0.08
065-250	--	B01			13.000	1x6307	--	--	--	Std									
080-250	S01	--	100	80	13.000	1x6307	--	1x6307	--	Std	6	9	--	120	2	71	235	205	0.08
080-250	--	B01			13.000	1x6307	--	--	--	Std									
080-315	S03	--	100	80	80.000	1x6314	--	1x6314	--	Std	10	15	--	120	2	33	220	140	0.07
080-315	S05	--			220.000	--	1xNU313	2x7314B-MUA	--	Std									
080-315	--	B03			80.000	1x6314	--	--	--	Std									
100-250	S01	--	100	100	50.000	1x6311	--	1x6311	--	Std	6	9	118	120	2	71	256	210	0.07
100-250	--	B01			50.000	1x6311	--	--	--	Std			D=100						
100-251	S02	--	100	100	50.000	1x6311	--	1x6311	--	Std	6	9	118	120	2	71	256	235	0.07
100-251	--	B02	D=150		50.000	1x6311	--	--	--	Std									
100-401	S04	--	125	100	190.000	1x6314	--	1x6314	--	Std	10	15	120	120	2	50	404	310	0.31
100-401	S05	--			220.000	--	1xNU313	2x7315BG8	option	Std									
125-315	S03	--	125	125	80.000	1x6314	--	1x6314	--	Std	6	9	118	120	2	76	312	235	0.09
125-315	--	B03			80.000	1x6314	--	--	--	Std									
150-315	S03	--	150	150	80.000	1x6314	--	1x6314	--	Std	6	9	118	150	2	76	310	235	0.09
150-315	--	B03			80.000	1x6314	--	--	--	Std									
150-401	S04	--	150	150	190.000	1x6314	--	1x6314	--	Std	10	15	120	200	2	76	404	330	0.42
150-401	S05	--	D=250		220.000	--	1xNU313	2x7315BG8	option	Std									
150-401	S06	--			370.000	--	1xNU416	2x7319BUA	option	Std									
151-401	S05	--	150	150	220.000	--	1xNU313	2x7315BG8	option	Std	10	15	120	200	3	80	408	380	0.52
150-500	S05	--	150	150	220.000	--	1xNU313	2x7315BG8	option	Std	10	15	118	150	3	60	504	350	0.71
150-500	S06	--			370.000	--	1xNU416	2x7319BUA	option	Std									

**Technical pump information K-Impeller**

Pump size	Bearing bracket		Pump data											K-Impeller					
			Suction	Discharge	Spring rate	Bearings			Shaft sealing		Pressure limits		Inspection hole Ø		Number of channels	max. free passage	max. impeller Ø	min. impeller Ø	Moment of inertia J with water
	pump side	motor side				Packed gland	Mechanical seal	max. operating pressure	max. test pressure	Pump casing	Spacer pipe								
	Sewatec	Sewabloc	[mm]	[mm]	[Nm/Rad]							320.01	322.01	320.02	[bar]	[bar]	[mm]	[mm]	[mm]
200-315	S03	--	200	200	80.000	1x6314	--	1x6314	--	Std	6	9	118	200	3	70	295	210	0.22
200-315	--	B03			80.000	1x6314	--	--	--	Std									
200-316	S03	--	200	200	80.000	1x6314	--	1x6314	--	Std	6	9	118	200	2	100	305	230	0.22
200-316	--	B03			80.000	1x6314	--	--	--	Std									
200-330	S04	--	250	200	190.000	1x6314	--	1x6314	--	Std	10	15	118	200	3	70	326	270	0.22
200-330	S05	--			220.000	--	1xNU313	2x7315BG8	option	Std									
200-400	S04	--	200	200	190.000	1x6314	--	1x6314	--	Std	10	15	200	200	3	80	404	330	0.46
200-400	S05	--	D=250		220.000	--	1xNU313	2x7315BG8	option	Std			D=125						
200-400	S06	--			370.000	--	1xNU416	2x7319BUA	option	Std									
200-500	S05	--	200	200	220.000	--	1xNU313	2x7315BG8	option	Std	10	15	118	200	3	75	504	400	0.83
200-500	S06	--			370.000	--	1xNU416	2x7319BUA	option	Std									
200-500	S07	--			1.020.000	--	1xNU324	2x7324BUA	option	Std									
200-501	S06	--	250	200	370.000	--	1xNU416	2x7319BUA	option	Std	10	15	200	200	2	100	502	400	1.68
200-631	S07	--	250	200	1.020.000	--	1xNU324	2x7324BUA	option	Std	10	15	140	200	2	105	622	480	4.41
200-631	S08	--			1.400.000	--	1xNU324	2x7324BUA	option	Std									
250-400	S04	--	250	250	190.000	1x6314	--	1x6314	--	Std	10	15	143	200	3	85	370	330	0.5
250-400	S05	--			220.000	--	1xNU313	2x7315BG8	option	Std									
250-400	S06	--			370.000	--	1xNU416	2x7319BUA	option	Std									
250-401	S04	--	250	250	190.000	1x6314	--	1x6314	--	Std	10	15	143	200	2	105	404	310	0.56
250-401	S05	--			220.000	--	1xNU313	2x7315BG8	option	Std									
250-630	S07	--	250	250	1.020.000	--	1xNU324	2x7324BUA	option	Std	10	15	200	143	4	90	630	500	4.49
250-630	S08	--			1.400.000	--	1xNU324	2x7324BUA	option	Std			K=143						
300-400	S04	--	300	300	190.000	1x6314	--	1x6314	--	Std	10	15	143	200	3	100	388	332	0.75
300-400	S05	--			220.000	--	1xNU313	2x7315BG8	option	Std									
300-400	S06	--			370.000	--	1xNU416	2x7319BUA	option	Std									
300-401	S04	--	300	300	190.000	1x6314	--	1x6314	--	Std	10	15	143	200	2	135	408	367	0.75
300-401	S05	--			220.000	--	1xNU313	2x7315BG8	option	Std									
300-500	S06	--	300	300	370.000	--	1xNU416	2x7319BUA	option	Std	6	9	143	200	3	100	504	430	1.48
300-500	S07	--			1.020.000	--	1xNU324	2x7324BUA	option	Std									
350-500	S06	--	350	350	370.000	--	1xNU416	2x7319BUA	option	Std	6	9	143	200	3	110	508	393	3.12
350-500	S07	--			1.020.000	--	1xNU324	2x7324BUA	option	Std									
350-501	S06	--	350	350	370.000	--	1xNU416	2x7319BUA	option	Std	6	9	143	200	2	170	509	490	2.23
350-501	S07	--			1.020.000	--	1xNU324	2x7324BUA	option	Std									
350-630	S07	--	350	350	1.020.000	--	1xNU324	2x7324BUA	option	Std	10	15	143	200	3	135	630	500	6
350-630	S08	--			1.400.000	--	1xNU324	2x7324BUA	option	Std									
350-710	S07	--	350	350	1.020.000	--	1xNU324	2x7324BUA	option	Std	10	15	200	200	3	110	730	580	9.27
350-710	S08	--			1.400.000	--	1xNU324	2x7324BUA	option	Std									
400-500	S06	--	400	400	370.000	--	1xNU416	2x7319BUA	option	Std	6	9	200	200	3	130	508	355	3.37
400-500	S07	--			1.020.000	--	1xNU324	2x7324BUA	option	Std									
400-630	S08	--	500	400	1.400.000	--	1xNU324	2x7324BUA	option	Std	6	9	200	200	3	132	620	400	8.21
500-630	S07	--	500	500	1.020.000	--	1xNU324	2x7324BUA	option	Std	4	6	200	200	3	133	582	490	3.46
500-630	S08	--			1.400.000	--	1xNU324	2x7324BUA	option	Std									
500-632	S08	--	500	500	1.400.000	--	1xNU324	2x7324BUA	option	Std	4	6	200	200	3	135	639	560	6
600-520	S07	--	500	600	1.020.000	--	1xNU324	2x7324BUA	option	Std	4	6	200	200	3	145	532	457	7.02
600-710	S08	--	600	600	1.400.000	--	1xNU324	2x7324BUA	option	Std	4	6	200	200	3	165	736	664	16.96
700-900	S08	--	700	700	1.400.000	--	1xNU324	2x7324BUA	option	Std	3	4.5	200	200	3	190	850	638	31.22

**Technical pump information D-Impeller**

Pump size	Bearing bracket		Suction	Discharge	Pump data								D-Impeller						
					Spring rate	Bearings		Shaft sealing		Pressure limits		Inspection hole Ø		Number of channels	max. free passage	max. impeller Ø	min. impeller Ø	Moment of inertia J with water	
	pump side	motor side				Packed gland	Mechanical seal	max. operating pressure	max. test pressure	Pump casing	Spacer pipe								
	320.01	322.01										320.02	[bar]						[bar]
080-315	S03	--	100	80	80.000	1x6314	--	1x6314	--	Std	10	15	--	120	1	70	260	242	0.124
080-315	S05	--			220.000	--	1xNU313	2x7314B-MUA	--	Std									
080-315	--	B03			80.000	1x6314	--	--	--	Std									
080-316	S03	--	125	80	80.000	1x6314	--	1x6314	--	Std	10	15	--	120	1	70	306	280	0.222
080-316	--	B03			80.000	1x6314	--	--	--	Std									
100-251	S02	--	150	100	50.000	1x6311	--	1x6311	--	Std	6	9	118	120	1	76	265	234	0.115
100-251	--	B02			50.000	1x6311	--	--	--	Std									
100-315	S05	--	125	100	220.000	--	1xNU313	2x7314B-MUA	--	Std	10	15	100	120	1	75	222	196	0.065
100-316	S03	--	150	100	80.000	1x6314	--	1x6314	--	Std	10	15	100	150	1	85	306	270	0.223
100-316	--	B03			80.000	1x6314	--	--	--	Std									
150-251	S02	--	150	150	50.000	1x6311	--	1x6311	--	Std	6	9	120	150	1	100	254	225	0.150
150-251	--	B02			50.000	1x6311	--	--	--	Std									
150-315	S03	--	150	150	80.000	1x6314	--	1x6314	--	Std	6	9	118	150	1	100	317	280	0.289
150-315	--	B03			80.000	1x6314	--	--	--	Std									
150-400	S05	--	200	150	220.000	--	1xNU313	2x7315BG8	option	Std	10	15	100	200	1	100	363	326	0.573
150-401	S05	--	250	150	220.000	--	1xNU313	2x7315BG8	option	Std	10	15	120	200	1	110	412	370	0.999
150-401	S06	--			370.000	--	1xNU416	2x7319BUA	option	Std									
200-315	S03	--	200	200	80.000	1x6314	--	1x6314	--	Std	6	9	118	200	1	100	315	280	0.261
200-315	--	B03			80.000	1x6314	--	--	--	Std									
200-400	S05	--	250	200	220.000	--	1xNU313	2x7315BG8	option	Std	10	15	125	200	1	100	402	355	0.825
200-400	S06	--			370.000	--	1xNU416	2x7319BUA	option	Std									
250-400	S05	--	250	250	220.000	--	1xNU313	2x7315BG8	option	Std	10	15	143	200	1	120	375	320	0.653
250-400	S06	--			370.000	--	1xNU416	2x7319BUA	option	Std									
300-400	S05	--	300	300	220.000	--	1xNU313	2x7315BG8	option	Std	10	15	143	200	1	150	408	375	0.925
300-400	S06	--			370.000	--	1xNU416	2x7319BUA	option	Std									



**Technical pump information F-Impeller**

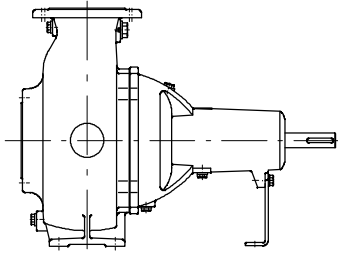
Pump size	Bearing bracket		Suction	Discharge	Pump data						F-Impeller							
					Spring rate	Bearings		Shaft sealing		Pressure limits		Inspection hole ∅		max. free passage	max. impeller ∅	min. impeller ∅	Moment of inertia J with water	
	pump side	motor side				Packed gland	Mechanical seal	max. operating pressure	max. test pressure	Pump casing	Spacer pipe							
	320.01	322.01										320.02	[mm]					[mm]
050-250	S01	--	65	50	13.000	1x6307	--	1x6307	--	Std	10	15	--	80	25	200	150	0.273
050-250	--	B01			13.000	1x6307	--	--	--	Std								
050-251	S02	--	65	50	50.000	1x6311	--	1x6311	--	Std	10	15	--	80	25	190	150	0.273
050-251	--	B02			50.000	1x6311	--	--	--	Std								
065-250	S01	--	80	65	13.000	1x6307	--	1x6307	--	Std	6	9	--	80	65	210	170	0.273
065-250	--	B01			13.000	1x6307	--	--	--	Std								
080-250	S01	--	100	80	13.000	1x6307	--	1x6307	--	Std	6	9	--	120	76	210/250	150	0.949
080-250	--	B01			13.000	1x6307	--	--	--	Std								
080-315	S03	--	100	80	80.000	1x6314	--	1x6314	--	Std	10	15	--	120	76	250	150	1.187
080-315	S05	--			220.000	--	1xNU313	2x7314B-MUA	--	Std								
080-315	--	B03			80.000	1x6314	--	--	--	Std								
100-250	S01	--	100	100	50.000	1x6311	--	1x6311	--	Std	6	9	118 D=100	120	100	210/265	170	1.187
100-250	--	B01			50.000	1x6311	--	--	--	Std								
100-251	S02	--	100	100	50.000	1x6311	--	1x6311	--	Std	6	9	118	120	100	265	249	1.187
100-251	--	B02	D=150		50.000	1x6311	--	--	--	Std								
100-401	S04	--	125	100	190.000	1x6314	--	1x6314	--	Std	10	15	120	120	100	390	325	4.746
100-401	S05	--			220.000	--	1xNU313	2x7315BG8	option	Std								
125-315	S03	--	125	125	80.000	1x6314	--	1x6314	--	Std	6	9	118	120	120	300	240	2.136
125-315	--	B03			80.000	1x6314	--	--	--	Std								
150-315	S03	--	150	150	80.000	1x6314	--	1x6314	--	Std	6	9	118	150	120	290	250	2.136
150-315	--	B03			80.000	1x6314	--	--	--	Std								
150-401	S04	--	150	150	190.000	1x6314	--	1x6314	--	Std	10	15	120	200	135	390	325	0.475
150-401	S05	--	D=250		220.000	--	1xNU313	2x7315BG8	option	Std								
150-401	S06	--			370.000	--	1xNU416	2x7319BUA	option	Std								

**Technical pump information E-Impeller**

Pump size	Bearing bracket		Suction	Discharge	Pump data						E-Impeller							
					Spring rate	Bearings		Shaft sealing		Pressure limits		Inspection hole ∅		max. free passage	max. impeller ∅	min. impeller ∅	Moment of inertia J with water	
	pump side	motor side				Packed gland	Mechanical seal	max. operating pressure	max. test pressure	Pump casing	Spacer pipe							
	320.01	322.01										320.02	[mm]					[mm]
100-250	S01	--	100	100	50.000	1x6311	--	1x6311	--	Std	6	9	118 D=100	120	100	245	--	0.16
100-250	--	B01			50.000	1x6311	--	--	--	Std								
100-251	S02	--	100	100	50.000	1x6311	--	1x6311	--	Std	6	9	118	120	100	265	--	0.16
100-251	--	B02	D=150		50.000	1x6311	--	--	--	Std								
100-401	S04	--	125	100	190.000	1x6314	--	1x6314	--	Std	10	15	120	120	80	412	389	0.65
100-401	S05	--			220.000	--	1xNU313	2x7315BG8	option	Std								
125-317	S03	--	125	125	80.000	1x6314	--	1x6314	--	Std	6	9	118	120	100	330	--	0.25
125-317	--	B03			80.000	1x6314	--	--	--	Std								
150-315	S03	--	150	150	80.000	1x6314	--	1x6314	--	Std	6	9	118	150	120	320	--	0.25
150-315	--	B03			80.000	1x6314	--	--	--	Std								
150-401	S04	--	150	150	190.000	1x6314	--	1x6314	--	Std	10	15	120	200	135	407	348	0.68
150-401	S05	--	D=250		220.000	--	1xNU313	2x7315BG8	option	Std								
150-401	S06	--			370.000	--	1xNU416	2x7319BUA	option	Std							388	
200-400	S04	--	200	200	190.000	1x6314	--	1x6314	--	Std	10	15	200 D=125	200	125	400	319	0.86
200-400	S05	--	D=250		220.000	--	1xNU313	2x7315BG8	option	Std								
200-400	S06	--			370.000	--	1xNU416	2x7319BUA	option	Std					145		373	
200-500	S05	--	200	200	220.000	--	1xNU313	2x7315BG8	option	Std	10	15	118	200	150	508	420	2.07
200-500Ex	S05	--	200	200	220.000	--	1xNU313	2x7315BG8	option	Std	10	15	200	200	200	500	500	3.47
250-500	S06	--	250	250	370.000	--	1xNU416	2x7319BUA	option	Std	10	15	200	200	180	516	454	3.22
250-500	S07	--			1.020.000	--	1xNU324	2x7324BUA	option	Std								
250-630	S07	--	250	250	1.020.000	--	1xNU324	2x7324BUA	option	Std	10	15	200 K=143	143	196	640	540	6.56
250-630	S08	--			1.400.000	--	1xNU324	2x7324BUA	option	Std								
300-630	S07	--	300	300	1.020.000	--	1xNU324	2x7324BUA	option	Std	10	15	200	200	220	640	530	7.25
300-630	S08	--			1.400.000	--	1xNU324	2x7324BUA	option	Std								
350-710	S07	--	400	350	1.020.000	--	1xNU324	2x7324BUA	option	Std	6	9	200	200	280	740	670	15.21
350-710	S08	--			1.400.000	--	1xNU324	2x7324BUA	option	Std								

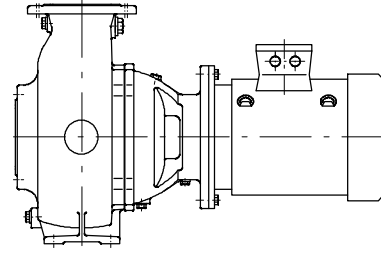
Installation Types (Selection)

Sewatec - Fig. 0



Pump with free drive shaft end

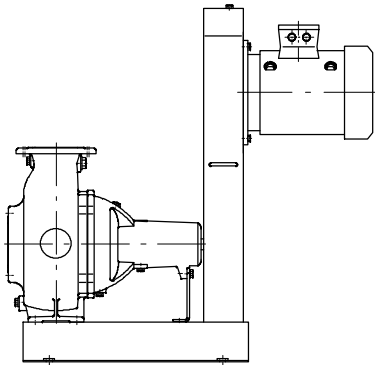
Sewabloc



Pump unit with flange-mounted motor, design B5/V1

Sewatec - 3H

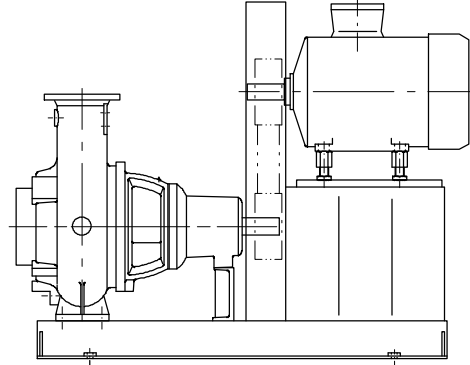
3HZ



Pump unit with baseplate, belt drive, belt guard and motor, design B5/V1, (up to motor size 200 L)

Sewatec - 3H

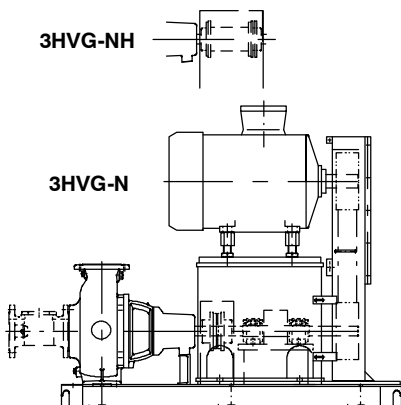
3HM



Pump unit with baseplate, belt drive, belt guard, motor support (from motor size 225 S) and motor, design B3 and motor height adjustment

Sewatec - 3H with indirect drive

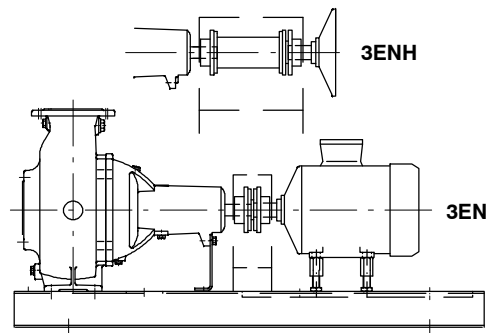
3HVG



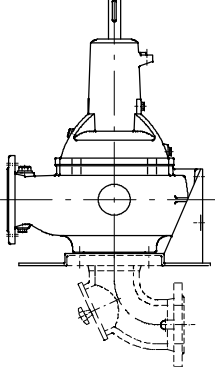
Pump unit with baseplate, coupling (also available with spacer), coupling guard, indirect drive pedestal, indirect drive, motor support, motor, design B3 and motor height adjustment facility, belt drive and belt guard.

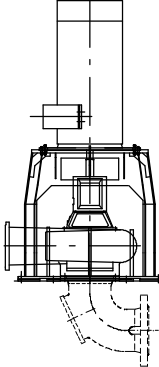
Sewatec - 3E

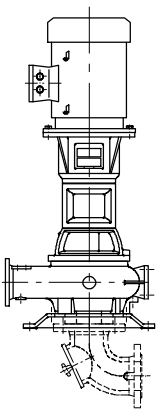
3EN - 3ENH

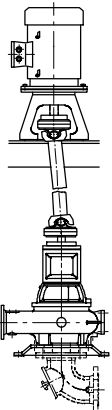


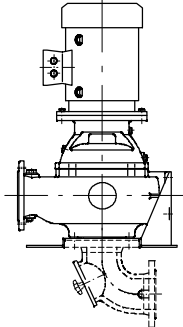
Pump unit with direct coupled motor of B3 design, baseplate, coupling (also available with spacer) coupling guard and motor height adjustment

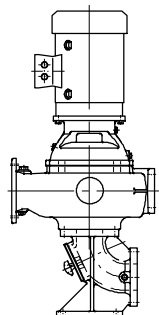
Sewatec - vertical	V
	
<p>Vertical mounting of pump with free drive shaft end, with soleplate and suction elbow, for drive through cardan shaft, <b>(for bearing bracket S01, S02, S03)</b></p>	

Sewatec - vertical	VUP
	
<p>Pump unit with direct coupled motor, design B5/V1, vertical installation, motor stool for motor, coupling and coupling guard, suction elbow <b>(for drive ratings &gt; 300 kW)</b></p>	

Sewatec - vertical	VU
	
<p>Pump unit with direct coupled motor, design B5/V1, vertical installation, soleplate for pump, drive lantern, coupling, coupling guard and suction elbow, for underfloor installation, <b>(from bearing bracket S05 onwards)</b></p>	

Sewatec - vertical	VGW
	
<p>Vertical mounting of pump with free drive shaft end, with soleplate for motor and pump, support frame, motor lantern and suction elbow, for drive through cardan shaft, <b>(from bearing bracket S05 onwards)</b></p>	

Sewabloc - vertical	V
	
<p>Pump unit with flange-mounted motor of B5/V1 design, placed vertically onto soleplate, with suction elbow for underfloor installation</p>	

Sewabloc - vertical	VF
	
<p>Pump unit with flange-mounted motor of B5/V1 design, vertical installation, with druckfoot bend</p>	

**Installation Types (Overview)**

Installation Types		Sewabloc	Sewabloc - vertical			Sewatec						Sewatec - vertical		
SIZES	BEARING BRACKET IMPELLER													
		BLOC	BLOC-V	BLOC-VF	Fig.0	3E-N	3E-NH	3HZ	3HM	3HVG-N	3HVG-NH	V	VU	VGW
050-250	B01	F	x	x	x									
		K	x	x	x									
	S01	F				x	x	x	x			x		
		K				x	x	x	x			x		
050-251	B02	F	x	x	x									
		K	x	x	x									
	S02	F				x	x	x	x			x		
		K				x	x	x	x			x		
065-250	B01	F	x	x	x									
		K	x	x	x									
	S01	F				x	x	x	x			x		
		K				x	x	x	x			x		
080-250	B01	F	x	x	x									
		K	x	x	x									
	S01	F				x	x	x	x			x		
		K				x	x	x	x			x		
080-315	B03	D	x	x	x									
		F	x	x	x									
		K	x	x	x									
	S03	D				x	x	x	x			x		
		F				x	x	x	x			x		
		K				x	x	x	x			x		
S05	D				x	x	x	x	x					
080-316	B03	D	x	x	x									
	S03	D				x	x	x	x			x		
100-250	B01	E												
		F	x	x	x									
		K	x	x	x									
	S01	E				x	x	x	x			x		
		F				x	x	x	x			x		
		K				x	x	x	x			x		
100-251	B02	D	x	x	x									
		E												
		F	x	x	x									
	S02	D				x	x	x	x			x		
		E				x	x	x	x			x		
		F				x	x	x	x			x		
K	D				x	x	x	x			x			
100-315	B03	D	x	x	x									
	S03	D										x		
	S05	D				x	x	x	x					
100-316	B03	D	x	x	x									
	S03	D				x	x	x	x			x		
100-401	S04	E				x	x	x	x					
		F				x	x	x	x					
		K				x	x	x	x					
	S05	E				x	x	x	x	x		x	x	x
		F				x	x	x	x	x		x	x	x
		K				x	x	x	x	x		x	x	x
125-315	B03	F	x	x	x									
		K	x	x	x									
	S03	F				x	x	x	x			x		
		K				x	x	x	x			x		
125-317	B03	E												
	S03	E				x	x	x	x			x		
150-251	B02	D	x	x	x									
	S02	D				x	x	x	x			x		
150-315	B03	D	x	x	x									
		E												
		F	x	x	x									
	S03	K	x	x	x									
		D				x	x	x	x			x		
		E				x	x	x	x			x		
F				x	x	x	x				x			
	K				x	x	x	x			x			

Installation Types		Sewabloc	Sewabloc - vertical		Sewatec						Sewatec - vertical				
SIZES	BEARING BRACKET IMPELLER														
		BLOC	BLOC-V	BLOC-VF	Fig.0	3E-N	3E-NH	3HZ	3HM	3HVG-N	3HVG-NH	V	VU	VGW	
150-400	S05	D			x	x	x	x	x			x	x	x	
150-401	S04	E			x	x	x	x							
		F			x	x	x	x							
		K			x	x	x	x							
	S05	D			x	x	x	x	x			x	x	x	
		E			x	x	x	x	x			x	x	x	
		F			x	x	x	x	x			x	x	x	
	S06	D			x	x	x					x	x	x	
		E			x	x	x		x			x	x	x	
		K			x	x	x					x	x	x	
150-500	S05	K			x	x	x	x	x	x	x	x	x		
S06	K			x							x	x			
151-401	S05	K			x						x	x			
200-315	B03	D	x	x	x										
		K	x	x	x										
	S03	D			x	x	x	x				x			
K				x	x	x	x				x				
200-316	B03	K	x	x	x										
S03	K				x	x	x	x			x				
200-330	S04	K			x	x	x	x							
S05	K				x	x	x	x	x		x	x	x		
200-400	S04	E			x	x	x	x							
		K			x	x	x	x							
	S05	D			x	x	x	x	x			x	x	x	
		E			x	x	x	x	x			x	x	x	
	S06	D			x	x	x	x	x			x	x	x	
		E			x	x	x	x	x			x	x	x	
200-500	S05	E			x	x	x	x				x	x	x	
	S06	K			x	x	x					x	x	x	
	S07	K			x	x	x		x		x	x	x	x	
200-501	S06	K			x						x	x			
200-631	S07	K			x							x	x		
	S08	K			x							x	x		
250-400	S04	K			x	x	x	x				x	x	x	
	S05	D			x	x	x	x	x			x	x	x	
		K			x	x	x	x	x			x	x	x	
S06	D			x	x	x	x	x			x	x	x		
250-401	S04	K			x	x	x	x							
	S05	K			x	x	x	x	x			x	x	x	
250-500	S06	E			x	x	x	x				x	x	x	
	S07	E			x	x	x	x				x	x	x	
250-630	S07	E			x	x	x	x				x	x	x	
		K			x	x	x	x	x		x	x	x	x	
	S08	E			x	x	x				x	x	x	x	
K			x								x	x	x		
300-400	S04	K			x	x	x	x				x	x	x	
	S05	D			x	x	x	x	x			x	x	x	
		K			x	x	x	x	x			x	x	x	
		D			x	x	x	x	x			x	x	x	
300-401	S04	K			x	x	x	x				x	x	x	
	S05	K			x	x	x	x	x			x	x	x	
300-500	S06	K			x	x	x		x			x	x	x	
	S07	K			x	x	x				x	x	x	x	
300-630	S07	E			x	x	x		x			x	x	x	
	S08	E			x	x	x				x	x	x	x	
350-500	S06	K			x	x	x	x				x	x	x	
	S07	K			x	x	x	x			x	x	x	x	
350-501	S06	K			x	x	x	x				x	x	x	
	S07	K			x	x	x				x	x	x	x	
350-630	S07	K			x	x	x	x			x	x	x	x	
	S08	K			x	x	x				x	x	x	x	
350-710	S07	E			x							x	x	x	
	S08	E			x	x	x				x	x	x	x	
	S08	K			x							x	x	x	
400-500	S06	K			x							x	x		
	S07	K			x							x	x		
400-630	S08	K			x							x			
500-630	S07	K			x	x	x		x		x	x	x	x	
	S08	K			x							x	x	x	
500-632	S08	K			x	x	x				x	x	x	x	
600-520	S07	K			x							x	x		
600-710	S08	K			x							x			
700-900	S08	K			x							x			

## Rotational Speeds for Sewatec 3H

Standard electric motors - design B5/V1 up to 200 L, and design B3 from 225 S on - are used.

Motor speed $n_M$ [1/min]	Transmission ratio [i]														
		1.0	1.06	1.12	1.2	1.25	1.34	1.4	1.5	1.6	1.7	1.8	1.9	2.0	
960	Pump speed [1/min]	--	--	--	--	--	--	685	640	600	565	535	505	480	
1450		1450	1540	1620	1740	1810	1940	2030	2180	2320	2470	2610	2760	2900	
		1450	1370	1295	1210	1160	1080	1035	965	905	850	805	765	725	
2900	2900	2735	2590	2415	2320	2165	2070	1935	1815	1705	1610	1525	1450		

### Notes:

- The permissible maximum speed is shown in the speed range curves.
- E- and F-impellers cannot be trimmed. Several sizes of F-impellers are available for each nominal diameter.
- Whilst K-impeller may be trimmed, reasons of efficiency recommend that the duty point is reached with the maximum impeller diameter, using the transmission ratios shown above.
- The maximum transmission ratio is 2 : 1.
- 4-pole motors are given preference to 2-pole motors because of their low noise level.
- 4-pole motors are frequently less expensive than motors with a higher number of poles and should therefore be given preference.
- Flywheels, incorporating the pulley, can be fitted within the limits of certain shaft distances and flywheel diameters

## Motor Rating

Electric motors of B3 or B5/V1 design are fitted as standard.

Motor sizes		100 L	112 M	132 S	132 M	160 M	160 L	180 M	180 L	200 L	225 S	225 M	250 M	280 S	280 M
Motor rating <sup>1)</sup> to IEC IP 55 [kW]	2 pol. 2900 min <sup>-1</sup>	3	4	5.5 7.5	--	11 15	18.5	22	--	30 37	--	45	55	75	90
	4 pol. 1450 min <sup>-1</sup>	2.2 3	4	5.5	7.5	11	15	18.5	22	30	37	45	55	75	90
	6 pol. 960 min <sup>-1</sup>	1.5	2.2	3	4 5.5	7.5	11	--	15	18.5 22	--	30	37	45	55
	8 pol. 750 min <sup>-1</sup>	0.75 1.1	1.5	2.2	3	4 5.5	7.5	--	11	15	18.5	22	30	37	45

Motor sizes		315 S	315 M	315 L	315	355	400
Motor rating <sup>1)</sup> to IEC IP 55 [kW]	2 pole 2900 min <sup>-1</sup>	110	132	160 200	250 315	355 400 500	560 630 710
	4 pole 1450 min <sup>-1</sup>	110	132	160 200	250 315	355 400 500	560 630 710
	6 pole 960 min <sup>-1</sup>	75	90	110 132 160	200 250	315 400	450 500 560
	8 pole 750 min <sup>-1</sup>	55	75	90 110 132	160 200	250 315	355 400 450

<sup>1)</sup> Deviations in power ratings are possible for the individual motor sizes depending on manufacturer.

## Power Reserve

Power input of pump [kW]	Recommended power reserve of drive motor
up to 7.5	30 % approx., 1 kW minimum
above 7.5 to 22	20 % approx.
above 22 to 55	15 % approx.
above 55	10 % approx.

## Guarantee, Tests / Inspections and Quality Assurance

Each pump is subjected to a functional test to KSB standard ZN 56 535. Pump performance is guaranteed to ISO 9906/A. Acceptance inspections conforming to ISO / DIN or another comparable standard are possible at a surcharge. The quality is assured under a tested and certified quality assurance system to DIN EN ISO 9001.

## Scope of Supply

Sewatec: Pump with bare shaft end

Sewabloc: Pump without flange mounted motor

## Programme Classification and Accessories

		Sewatec					Sewabloc			
		Fig.0	V	3E	3H	3H Indirect drive		V		
Motor	without motor	●	●	●	●	●	●	●		
	standard KSB motor	-	○ <sup>11)</sup>	●	●	●	●	●		
	branded product to customer's requirement	-	○ <sup>11)</sup>	○	○	○	○	○		
Accessories Mounting kit	baseplate	-	● <sup>10)</sup>	● <sup>3)</sup>	● <sup>4)</sup>	● <sup>1)</sup>	● <sup>2)</sup>	● <sup>10)</sup>		
	Optional	support frame, motor lantern, soleplate motor	-	△	-	-	-	-	-	
		coupling and coupling guard	-	● <sup>9)</sup>	●	-	●	-	-	
		inlet flange spacer piece with inspection hole	●	● <sup>5)</sup>	●	●	●	●	● <sup>5)</sup>	
		fixing elements: either anchor bolts or foundation bolts	St	-	-	●	●	●	● <sup>6)</sup>	●
			A 4	-	-	○	○	○	○ <sup>6)</sup>	○
Shaft seal	MS	KSB standard with elastomer bellows						●		
		KSB standard with covered spring (up to bearing bracket S05)						○		
	Packed gland (only available from bearing bracket S05 onwards)							-		
Coating	KSB standard							●		
	standard primer									
	to customer's requirements							△		
Flange	to DIN							●		
	to ANSI							△		
Screws and Seals	NBR / A4 <sup>7)</sup>							●		
	Viton / A4							○		
Acceptance	KSB standard ZN 56 535							●		
	to customer's requirements <sup>8)</sup>							○		

- 1) inclusive of drive belt and guard, countershaft, coupling and coupling guard
- 2) foundation rail for Sewabloc
- 3) includes motor height adjustment
- 4) inclusive of belt drive and guard and with motor height adjustment from motor size 225 S
- 5) intake elbow
- 6) only in connection with foundation rails
- 7) screwed plug St
- 8) HI Level A: K-type impeller  
HI Level B (only for K-type impeller, not for white iron)  
ISO 9906 / (Grad) 2 (not for F-type impeller, not for white iron)  
BS 5 316/ I A (not for F-type impeller, not for white iron)  
BS 5 316/ I B (only for K-type impeller, not for white iron)
- 9) for underfloor mounting
- 10) vertical installation: soleplate or feet
- 11) for cardan shaft - special design

● standard design

○ standard variant

△ special design

**Standard variants and special design are subject to surcharge and require longer delivery times**

**Recommended Spare Parts Stock for 2 Years' Operation as per VDMA 24 296**

Repère	Description	Nombre de pompes (y compris les pompes auxiliaires)								Type
		1	2	3	4	5	6	8	10 et plus	
		Nombre de pièces de rechange								
163	Discharge cover	1	2	2	2	3	3	4	50 %	E
210	Shaft	1	1	1	2	2	2	3	30 %	E
230	Impeller	1	1	1	2	2	2	3	30 %	R
321.01/02	Rolling element bearing (set)	1	1	1	2	2	3	4	50 %	V
330	Bearing bracket complete	--	--	--	--	--	--	1	2 units	E
433.01/02	Mechanical seal, cpl. (set)	1	2	3	4	4	4	6	90 %	V
	Installation kit for packed gland (neck bush, shaft protection sleeve, lantern ring)	1	1	1	2	2	2	3	40 %	R
	Packing (4 rings)	4	4	6	8	8	9	12	100 %	V
502.01	Casing wear ring	1	2	2	2	3	3	4	50 %	V
135	Wear plate	1	2	2	2	3	3	4	50 %	V
	Gaskets (set)	2	4	6	8	8	9	12	150 %	V

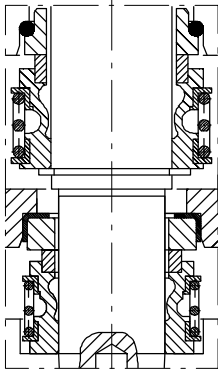
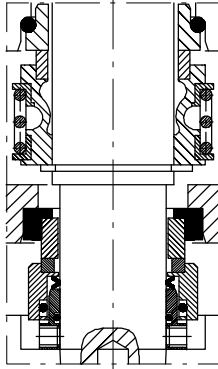
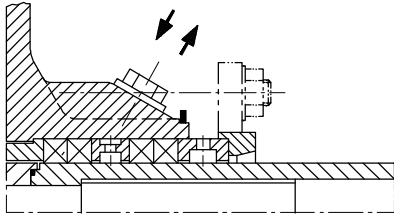
E = Replacement part

R = Spare part

V = Wear part

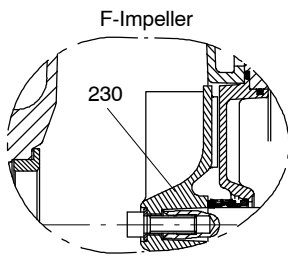
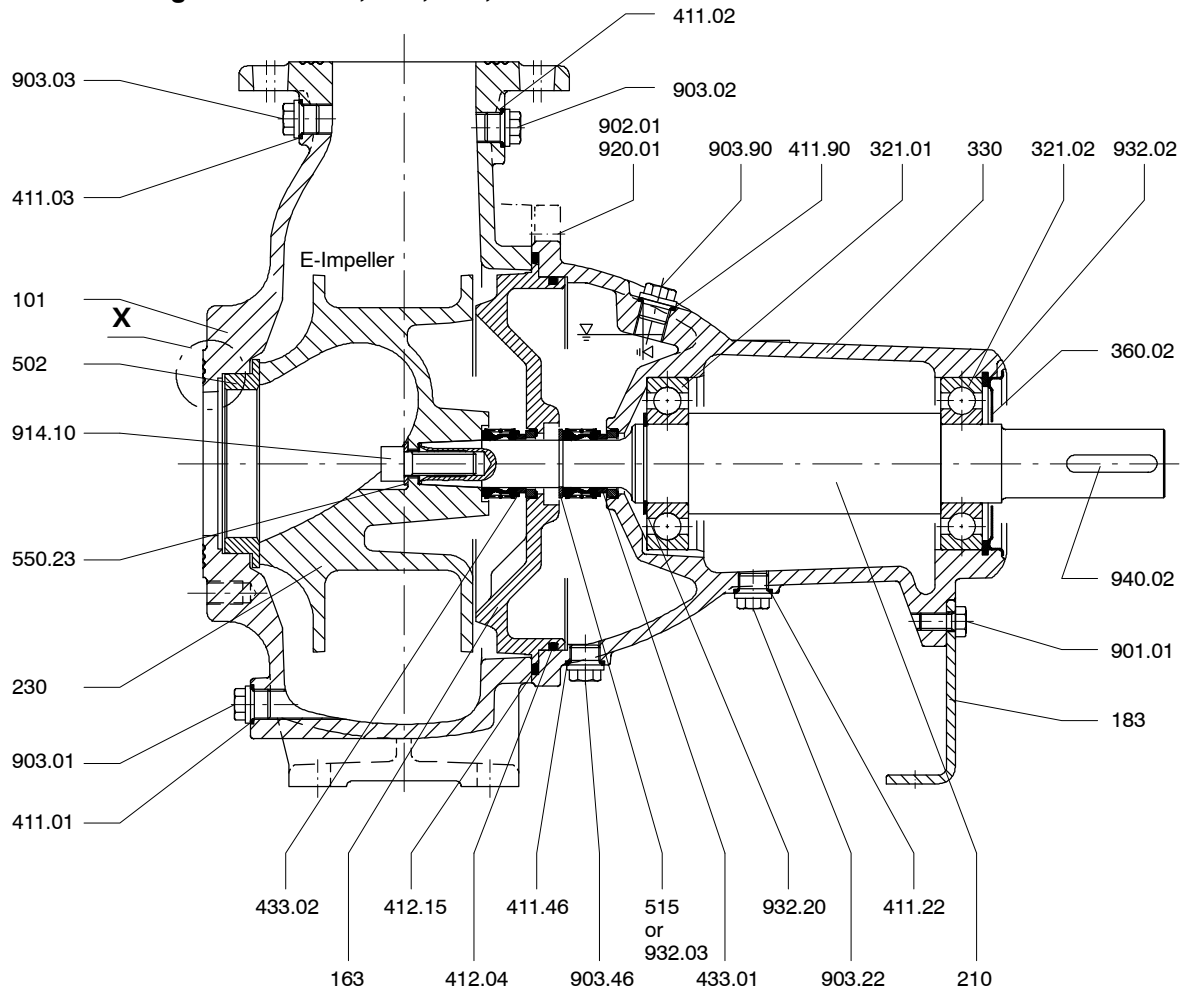
It is recommended that wear parts and spare parts are kept as stock items even whilst the unit is under warranty.

**Shaft Seal**

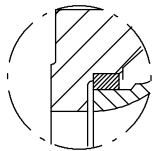
Standard version	Standard variant	
Mechanical seal, using elastomer bellows (NBR, Viton optional) for sewage and effluents of all kinds.	Mechanical seal (at the product side) with covered spring for media containing highly abrasive or metallic solids, (such as swarf turnings).	From bearing bracket S05! Packed gland
		



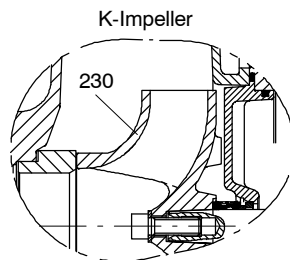
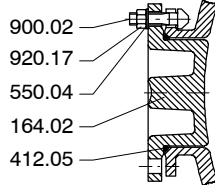
**General Assembly Drawing with List of Components**  
**Sewatec - Bearing brackets S01, S02, S03, S04**



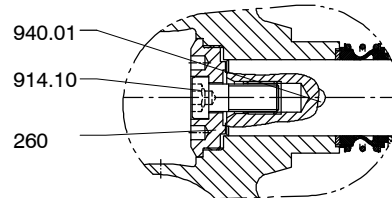
**X**  
for S04



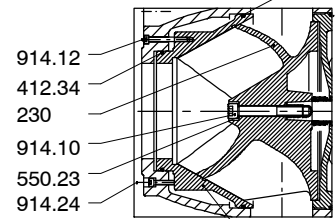
Inspection hole  
(Pump casing)



Fastening of impeller for S04



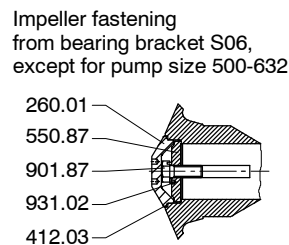
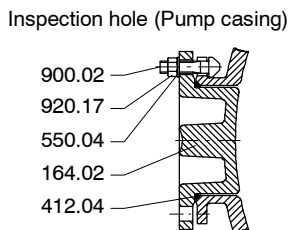
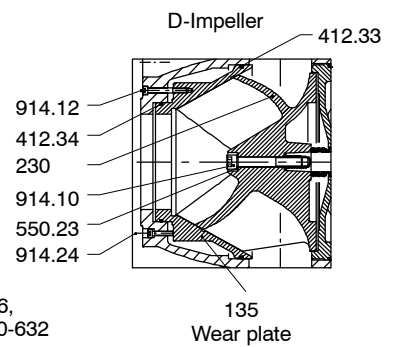
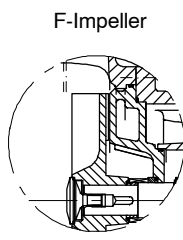
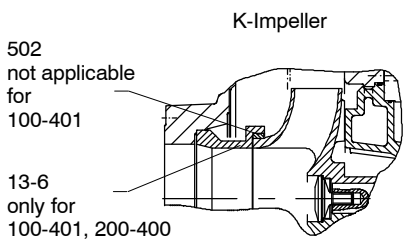
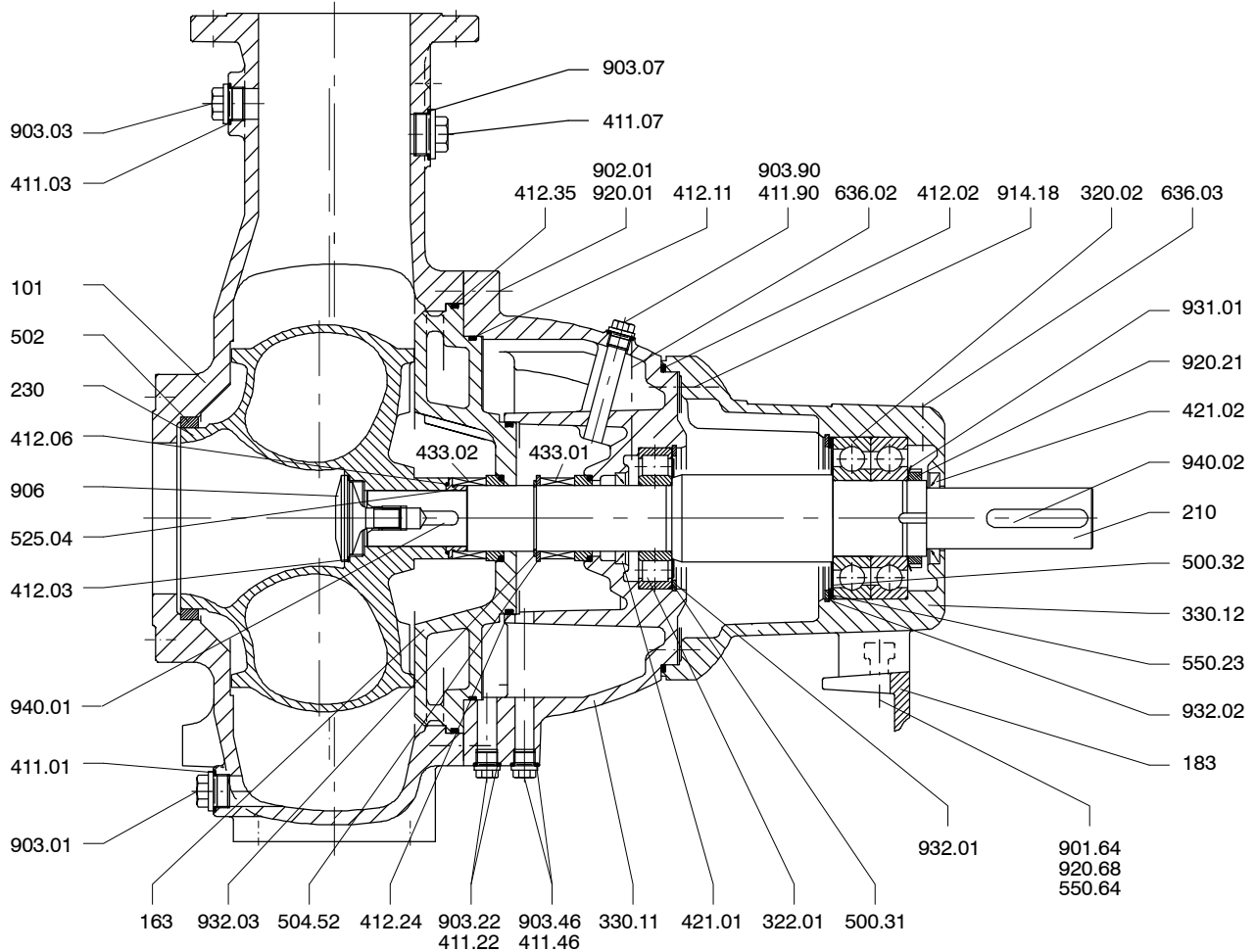
D-Impeller 412.33



135  
Wear plate

Part No.	Description	Part No.	Description	Part No.	Description
101	Pump casing	360	Bearing cover	901	Hex. head bolt
163	Discharge cover	411	Joint ring	902	Stud
183	Support foot	412	O-ring	903	Screwed plug
210	Shaft	433	Mechanical seal	914	Hex. socket head cap screw
230	Impeller	502	Casing wear ring	920	Nut
321	Radial ball bearing	515	Taper lock ring	932	Circlip
330	Bearing bracket	550	Disc	940	Key

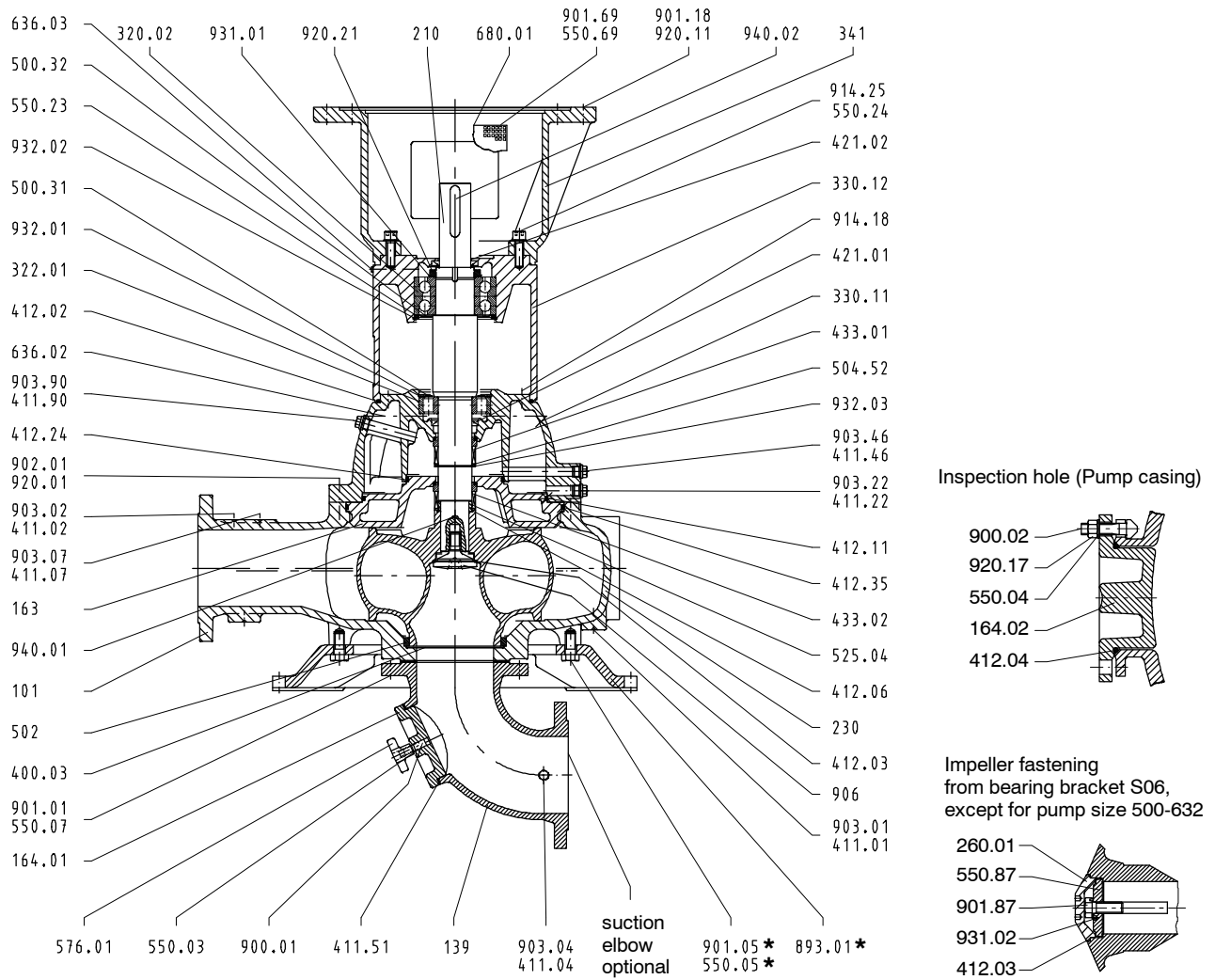
### General Assembly Drawing with List of Components Sewatec - Bearing brackets S05, S06, S07, S08



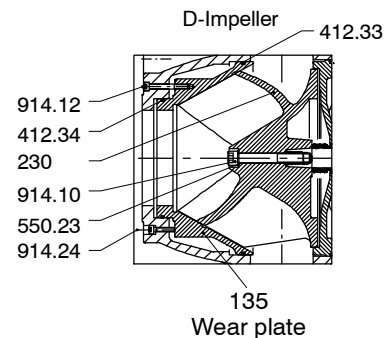
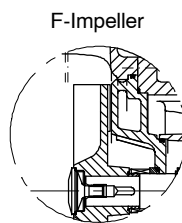
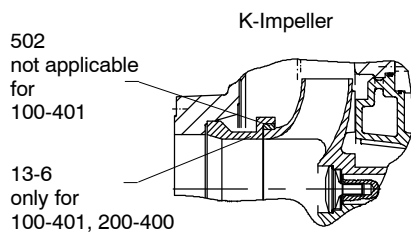
Part No.	Description	Part No.	Description	Part No.	Description
101	Pump casing	330	Bearing bracket	902	Stud
163	Discharge cover	411	Joint ring	903	Screwed plug
183	Support foot	412	O-ring	906	Impeller screw
210	Shaft	433	Mechanical seal	914	Hex. socket head cap screw
230	Impeller	502	Casing wear ring	920	Nut
320	Angular contact ball bearing	550	Disc	932	Circlip
322	Cyl. roller bearing	901	Hex. head bolt	940	Key

### General Assembly Drawing with List of Components

#### Sewatec - vertical - Underfloor Installation - Bearing brackets S05, S06, S07, S08

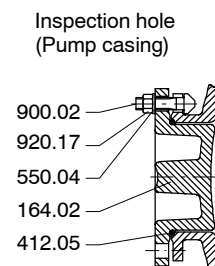
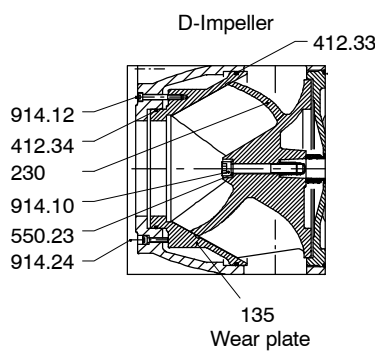
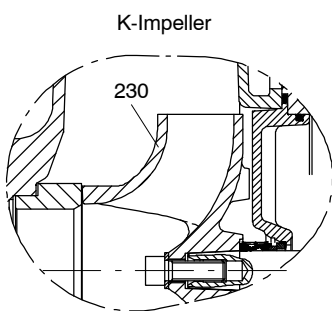
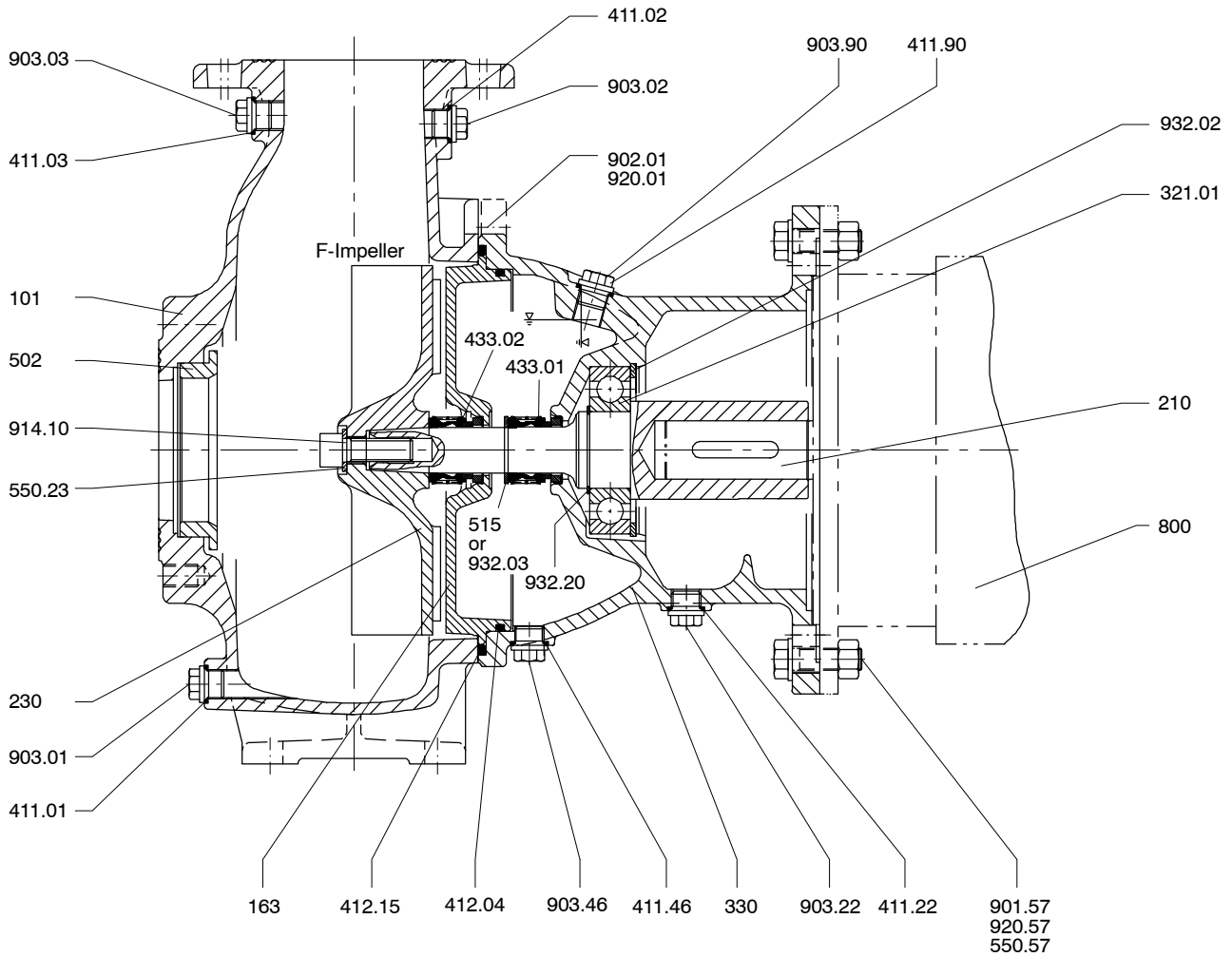


\* Applicable only to Sewatec 100-401, 150-401, K 150-500, 200-330, K 200-500



Part No.	Description	Part No.	Description	Part No.	Description
101	Pump casing	330	Bearing bracket	902	Stud
163	Discharge cover	411	Joint ring	903	Screwed plug
183	Support foot	412	O-ring	906	Impeller screw
210	Shaft	433	Mechanical seal	914	Hex. socket head cap screw
230	Impeller	502	Casing wear ring	920	Nut
320	Angular contact ball bearing	550	Disc	932	Circlip
322	Cyl. roller bearing	901	Hex. head bolt	940	Key

### General Assembly Drawing with List of Components Sewabloc



Part No.	Description	Part No.	Description	Part No.	Description
101	Pump casing	411	Joint ring	901	Hex. head bolt
163	Discharge cover	412	O-ring	902	Stud
210	Shaft	433	Mechanical seal	903	Screwed plug
230	Impeller	502	Casing wear ring	920	Nut
321	Radial ball bearing	550	Disc	932	Circlip
330	Bearing bracket	800	Motor		







