

# Product data

Vertical Multistage Centrifugal In-line Pumps



STAIRS

Range	SB, SBI, SBN					
	1	3	5	10	15	20
<b>50Hz</b>						
Nominal flow [ m <sup>3</sup> /h ]	1.8	3	5.7	10	17	21
Flow range [ m <sup>3</sup> /h ]	0.7-2.4	1.2-4.5	2.5-8.5	5-13	8.5-23.5	10.5-29
Max. pressure [ bar ]	21.5	23	24	21.5	23	24.3
Fluid temperature [ °C ]	-15 to +120					
Motor power [ kW ]	0.37-2.2	0.37-3	0.37-5.5	0.37-7.5	1.1-15	1.1-18.5
<b>Version</b>						
SB: Cast iron and stainless steel EN 1.4301/AISI 304	•	•	•	•	•	•
SBI: Stainless steel EN 1.4301/AISI 304	•	•	•	•	•	•
SBN: Stainless steel EN 1.4401/AISI 316	•	•	•	•	•	•
<b>Motor</b>						
Mains connection 1- [ V/Hz ] (Permissible voltage tolerance ± 10%)	0.37-2.2 kW 220-240 V					
Mains connection 3- [ V/Hz ] (Permissible voltage tolerance ± 10%)	0.37-2.2 kW 220-240 V / 380-415 V 3 - 22 kW 220-240 V / 380-415 V 3 - 22 kW 380-415 V / 660-720 V					
Insulation class	F					
Enclosure class	IP 55					
Ambient temperature	50° C					
<b>SB, SBI, SBN Pipe Connection</b>						
Flange	DN 25 / DN 32	DN 25 / DN 32	DN 25 / DN 32	DN 40	DN 50	DN 50
Oval Flange	RP 1"	RP 1"	RP 1 ¼"	RP 1 ½"	RP 2"	RP 2"
<b>SBI, SBN Pipe Connection</b>						
Victaulic-connections	R 1 ¼	R 1 ¼	R 1 ¼	R 2	R 2	R 2
<b>Mechanical Seals</b>						
SiC/SiC	Standard					
<b>Seals</b>						
EPDM	Standard					
Viton						

\* Flange standards : Refer to dimensional drawings

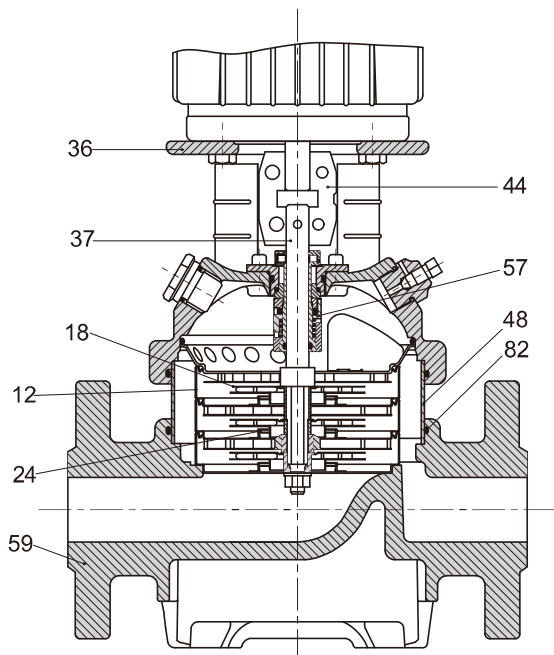
# Construction

Vertical Multistage Centrifugal In-line Pumps

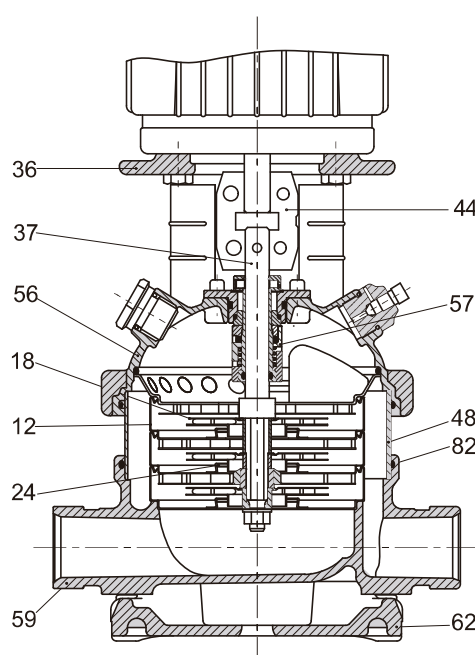


STAIRS

**SB-1,3,5,10,15,20**



**SBI(N)-1,3,5,10,15,20**



## CONSTRUCTION

Pos.	Name	Material	SB 1,3,5,10,15,20		SBI 1,3,5,10,15,20		SBN 1,3,5,10,15,20	
			Standard		Standard		Standard	
			Europe	USA	Europe	USA	Europe	USA
36	Pump head	Cast Iron	EN-GJL-200	ASTM 25B	EN-GJS-450-10	ASTM 65-45-12	EN-GJS-450-10	ASTM 65-45-12
56	Pump head cover	Stainless steel	N/A		1.4301	AISI 304	1.4401	AISI 316
18	Impeller	Stainless steel	1.4301	AISI 304	1.4301	AISI 304	1.4401	AISI 316
37	Shaft	Stainless steel	1.4057	AISI 431	1.4057	AISI 431	1.4401	AISI 316
48	Outer Sleeve	Stainless steel	1.4301	AISI 304	1.4301	AISI 304	1.4401	AISI 316
82	O-ring for outer sleeve	EPDM						
12	Chamber	Stainless steel	1.4301	AISI 304	1.4301	AISI 304	1.4401	AISI 316
24	Neck ring	PTFE						
59	Base	Cast Iron	EN-GJL-200	ASTM 25B	N/A			
	Base	Stainless steel	N/A		1.4301	AISI 304	1.4401	AISI 316
62	Base plate	Cast Iron	N/A		EN-GJL-200	ASTM 25B	EN-GJL-200	ASTM 25B
44	Coupling	Fe-Cu-C	SINT C11	MPIF FC0525	SINT C11	MPIF FC0525	SINT C11	MPIF FC0525
57	Mechanical seal	Cartridge type						

# Performance Curves

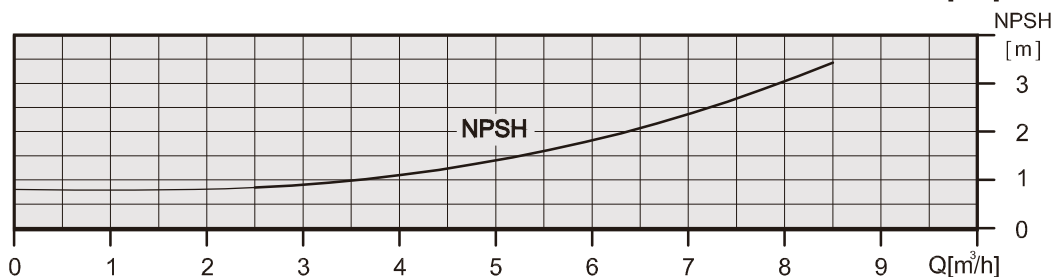
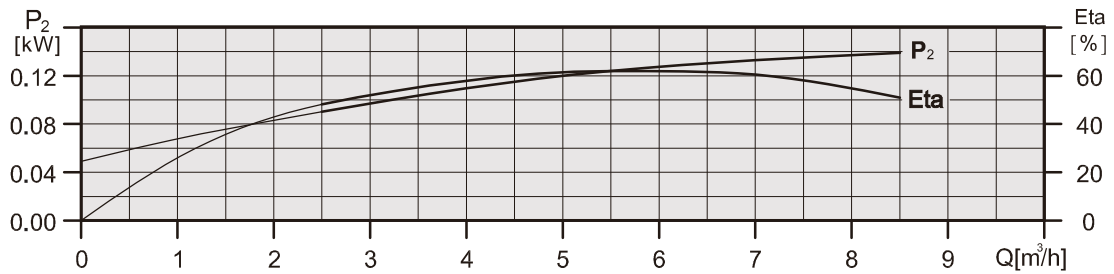
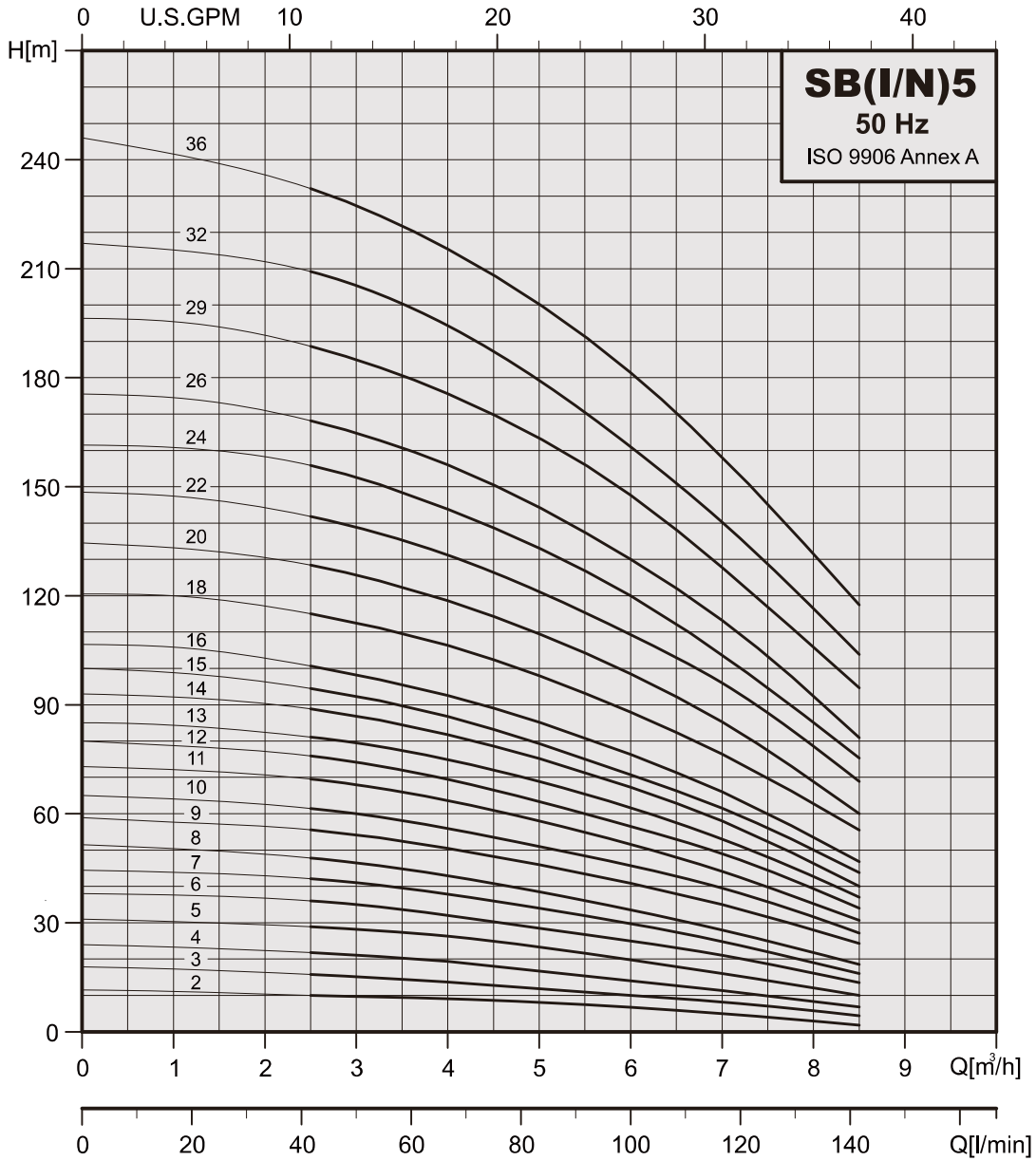
Vertical Multistage Centrifugal In-line Pumps

# SB 5



STAIRS

## SB, SBI, SBN 5



# Technical data

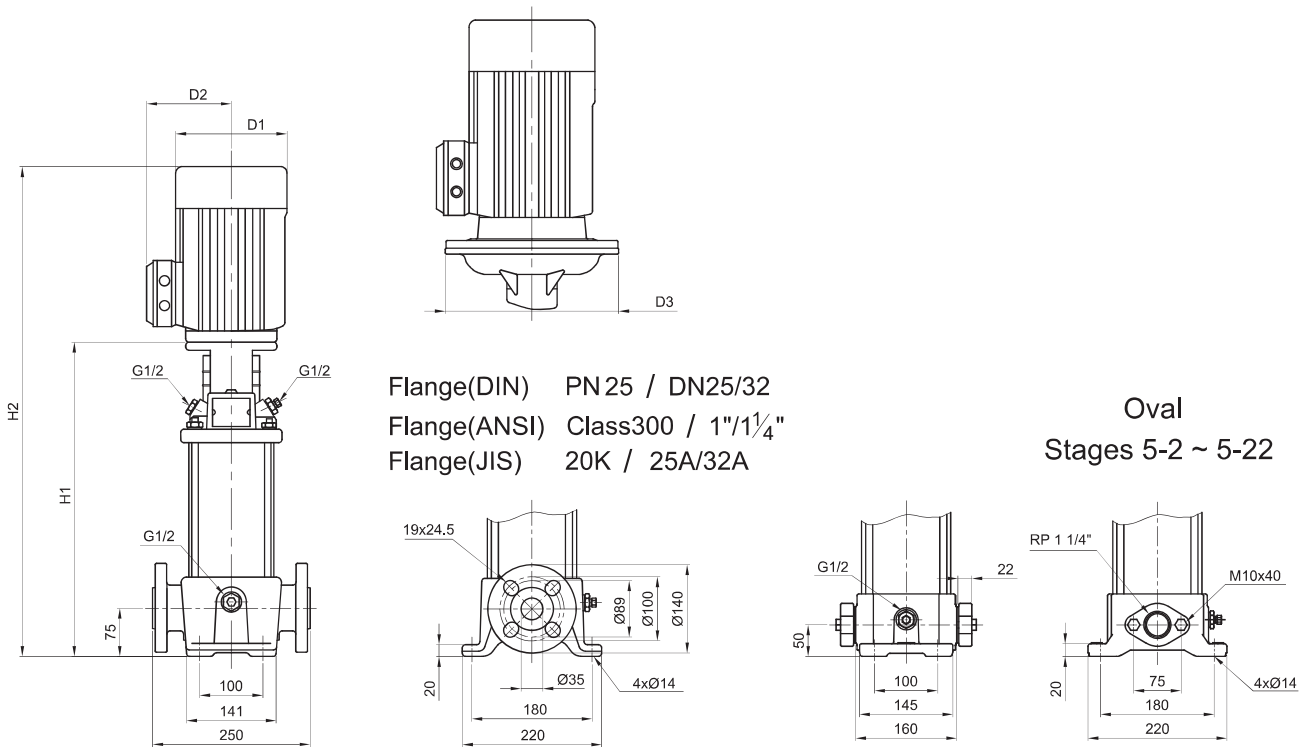
Vertical Multistage Centrifugal In-line Pumps

# SB 5



STAIRS

## SB 5



Flange(DIN) PN25 / DN25/32  
 Flange(ANSI) Class300 / 1"1/4"  
 Flange(JIS) 20K / 25A/32A

Oval  
 Stages 5-2 ~ 5-22

## SB 5

50Hz	Motor		Nominal current [A]					Dimension[mm]						Net weight [kg]		
	P <sub>2</sub>		1ø	3ø		3ø		DIN flange		OVAL		D1	D2	D3	DIN flange	OVAL
Pump type	[kW]	[HP]	220-240V	△220-240V	Y380-415V	△380-415V	Y660-720V	H1	H2	H1	H2	D1	D2	D3		
SB5-2	0.37	0.5	2.5 - 2.5	1.7 - 1.9	1.0 - 1.1	—	—	279	474	254	449	141	115	—	23.3	19.0
SB5-3	0.55	0.75	4.0 - 3.5	2.6 - 2.9	1.5 - 1.7	—	—	306	501	281	476	141	115	—	24.2	19.9
SB5-4	0.55	0.75	4.0 - 3.5	2.6 - 2.9	1.5 - 1.7	—	—	333	528	308	503	141	115	—	24.8	20.5
SB5-5	0.75	1.0	5.1 - 4.1	3.4 - 3.4	2.0 - 2.0	—	—	366	601	341	576	141	115	—	27.4	23.1
SB5-6	1.1	1.5	8.0 - 6.9	4.8 - 5.0	2.8 - 2.9	—	—	393	682	368	657	177	141	—	34.7	30.4
SB5-7	1.1	1.5	8.0 - 6.9	4.8 - 5.0	2.8 - 2.9	—	—	420	709	395	684	177	141	—	35.2	30.9
SB5-8	1.1	1.5	8.0 - 6.9	4.8 - 5.0	2.8 - 2.9	—	—	447	736	422	711	177	141	—	35.7	31.4
SB5-9	1.5	2.0	9.5 - 8.9	6.2 - 6.6	3.6 - 3.8	—	—	490	785	465	760	177	141	—	40.3	36.0
SB5-10	1.5	2.0	9.5 - 8.9	6.2 - 6.6	3.6 - 3.8	—	—	517	812	492	787	177	141	—	40.9	36.6
SB5-11	2.2	3.0	13.4 - 12.7	8.8 - 9.4	5.1 - 5.4	—	—	544	839	519	814	177	141	—	43.2	38.9
SB5-12	2.2	3.0	13.4 - 12.7	8.8 - 9.4	5.1 - 5.4	—	—	571	866	546	841	177	141	—	43.7	39.4
SB5-13	2.2	3.0	13.4 - 12.7	8.8 - 9.4	5.1 - 5.4	—	—	598	893	573	868	177	141	—	44.2	39.9
SB5-14	2.2	3.0	13.4 - 12.7	8.8 - 9.4	5.1 - 5.4	—	—	625	920	600	895	177	141	—	44.8	40.5
SB5-15	2.2	3.0	13.4 - 12.7	8.8 - 9.4	5.1 - 5.4	—	—	652	947	627	922	177	141	—	45.2	40.9
SB5-16	2.2	3.0	13.4 - 12.7	8.8 - 9.4	5.1 - 5.4	—	—	679	974	654	949	177	141	—	45.8	41.5
SB5-18	3.0	4.0	—	11.8 - 12.3	6.8 - 7.1	6.8 - 6.9	3.9 - 4.0	737	1053	712	1028	197	147	—	55.7	51.4
SB5-20	3.0	4.0	—	11.8 - 12.3	6.8 - 7.1	6.8 - 6.9	3.9 - 4.0	791	1107	766	1082	197	147	—	56.9	52.6
SB5-22	4.0	5.5	—	15.1 - 15.2	8.7 - 8.8	8.7 - 8.3	5.0 - 4.8	845	1171	820	1146	220	161	—	61.8	57.5
SB5-24	4.0	5.5	—	15.1 - 15.2	8.7 - 8.8	8.7 - 8.3	5.0 - 4.8	899	1225	—	—	220	161	—	62.8	—
SB5-26	4.0	5.5	—	15.1 - 15.2	8.7 - 8.8	8.7 - 8.3	5.0 - 4.8	953	1279	—	—	220	161	—	64.7	—
SB5-29	4.0	5.5	—	15.1 - 15.2	8.7 - 8.8	8.7 - 8.3	5.0 - 4.8	1034	1360	—	—	220	161	—	66.6	—
SB5-32	5.5	7.5	—	18.7 - 18.0	10.8 - 10.4	10.9 - 10.8	6.3 - 6.2	1145	1507	—	—	235	197	300	89.4	—
SB5-36	5.5	7.5	—	18.7 - 18.0	10.8 - 10.4	10.9 - 10.8	6.3 - 6.2	1253	1615	—	—	235	197	300	91.9	—