

## **VS SERIES**

### **8" SUBMERSIBLE PUMPS AND ACCESSORIES**



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## VS Stainless Steel Submersible Turbine Pumps for 8" deep wells and larger

*This heavy-duty 8" submersible pump range is specially engineered to satisfy the high volume water needs.*

### APPLICATIONS

- Municipal water works
- Water distribution and pressure boosting
- Irrigation and sprinkler systems, water treatment plants, filtration and reverse osmosis
- Industrial cooling and processing
- Mining industry, drainage and dewatering
- Fountains
- Fire-fighting equipment

### FEATURES

- Stainless steel components for durability and robustness, to increase run time and trouble-free operation. Many technical features of the design make this pump range very compact and extremely reliable
- Three-dimensional twisted blades of the impeller and diffuser design to enhance efficiency and to reduce energy consumption
- External stainless steel sleeve to improve stiffness and assure permanent alignment of all the components
- Motor adapter and discharge head may be removed without disturbing the impeller / diffuser stack
- Built-in check valve and over size pump shaft
- Very compact and extremely reliable to resist to the most complex and severe conditions
- Easily serviceable without the need of special tools

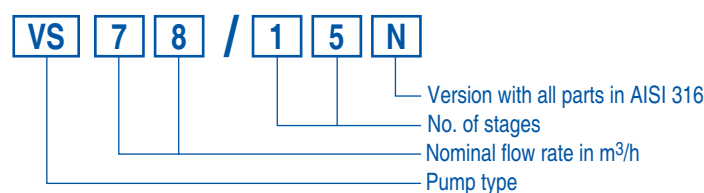
### SPECIFICATIONS

- Capacities up to 120 m<sup>3</sup>/h at 50Hz / 650 GPM at 60Hz
- Heads to 500 m at 50Hz / 1650 feet at 60Hz
- Maximum allowable amount of sand 50 gr/m<sup>3</sup> (of the same hardness and granulometry of silt)
- Water temperature range: from -5° C to 60°C
- Rotation: counter clockwise when looking into the discharge
- Motor adapter in compliance with NEMA standard
- Pump can work continuously in a vertical or horizontal position

### AVAILABLE OPTIONS

- Double cable guard
- Discharge outlet adapters

### PUMP IDENTIFICATION CODE





## Mixed flow stage

DESCRIPTION	Standard N version		
	MATERIAL	AISI	DIN / EN
Outer case	Stainless steel	316	1.4401
Motor Adapter and Flange	Stainless steel	316	1.4401
Suction strainer	Stainless steel	316	1.4401
Discharge head	Stainless steel	316	1.4401
Check valve assembly	Stainless steel	316	1.4401
Sealing O-Ring	Nitrile rubber (NBR)		
Stop ring	Stainless steel	316	1.4401
Spring	Stainless steel	316	1.4401
Pump shaft	Stainless steel	329	1.44060
Upper journal sleeve <sup>1)</sup>	Silicon carbide (SiC)		
Coupling to motor	Stainless steel	316/329	1.4401/1.44060
Diffuser	Stainless steel	316	1.4401
Floating neck ring	Teflon (PTFE)		
Secondary bearing bush	Nitrile rubber (NBR)		
Flange clamping neck ring	Stainless steel	316	1.4401
Impeller	Stainless steel	316	1.4401
Split cone	Stainless steel	316	1.4401
Split cone nut	Stainless steel	316	1.4401
Cable guard	Stainless steel	316	1.4401
Insert locking outer case	Stainless steel	316	1.4401
Up-thrust washer	Stainless steel	329	1.44060
Up-thrust disc	Teflon (PTFE)		
Screws and washers	Stainless steel	316	1.4401

1) only for types with more than 16 stages

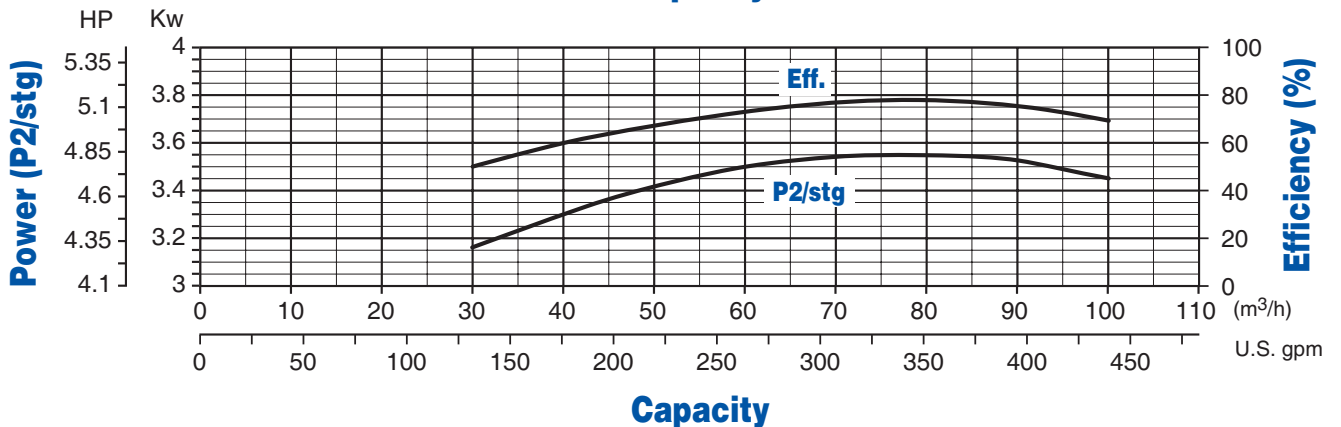
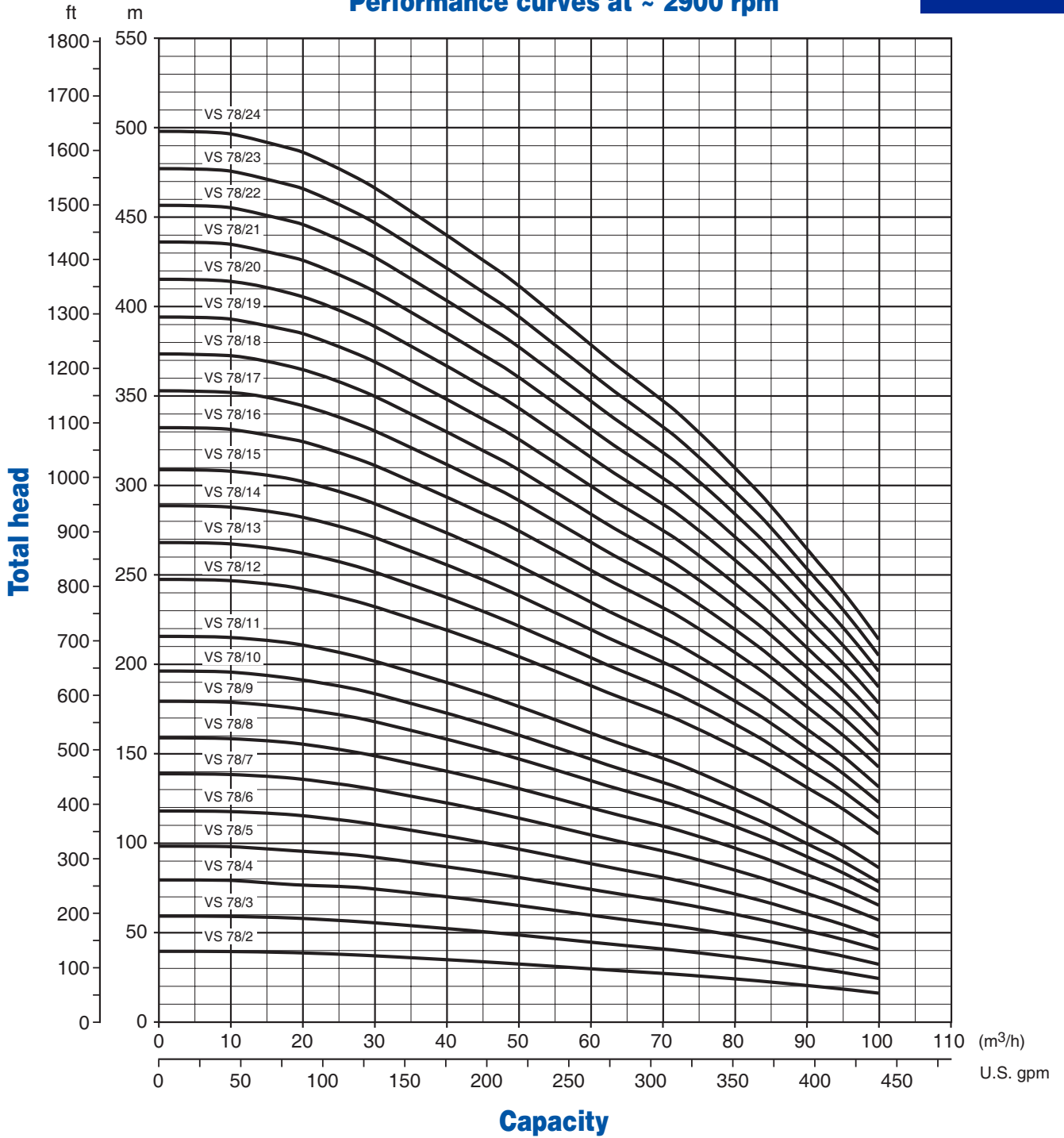
# **VS Series Performance Curves and Tables**

**VS 78** 50Hz

**VS 97** 50Hz



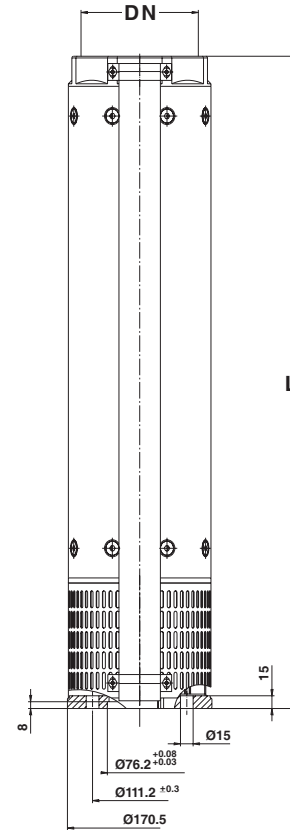
**Performance curves at ~ 2900 rpm**



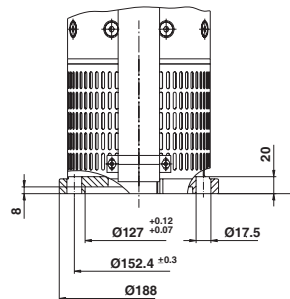
## Performance table at ~ 2900 rpm

Pump model	kW	HP	Motor size	Dimensions		Weight [Kg]
				L [mm]	DN	
VS 78/2	7.5	10	6"	644	Rp 5"	31.5
VS 78/3	11	15	6"	770	Rp 5"	36.5
VS 78/4	15	20	6"	896	Rp 5"	41.5
VS 78/5	18.5	25	6"	1022	Rp 5"	46.5
VS 78/6	22	30	6"	1148	Rp 5"	51
VS 78/7	30	40	6"	1274	Rp 5"	56
VS 78/8	30	40	6"	1400	Rp 5"	61
VS 78/9	30	40	6"	1526	Rp 5"	66
VS 78/10	37	50	6"	1652	Rp 5"	71
VS 78/11	37	50	6"	1778	Rp 5"	76
VS 78/12	45	60	8"	1909	Rp 5"	82
VS 78/13	55	75	8"	2035	Rp 5"	87
VS 78/14	55	75	8"	2161	Rp 5"	92
VS 78/15	55	75	8"	2287	Rp 5"	97
VS 78/16	75	100	8"	2413	Rp 5"	101.5
VS 78/17	75	100	8"	2539	Rp 5"	106.5
VS 78/18	75	100	8"	2665	Rp 5"	111.5
VS 78/19	75	100	8"	2791	Rp 5"	116.5
VS 78/20	75	100	8"	2917	Rp 5"	121
VS 78/21	75	100	8"	3043	Rp 5"	126
VS 78/22	93	125	8"	3169	Rp 5"	131
VS 78/23	93	125	8"	3295	Rp 5"	136
VS 78/24	93	125	8"	3421	Rp 5"	141

### Dimensions



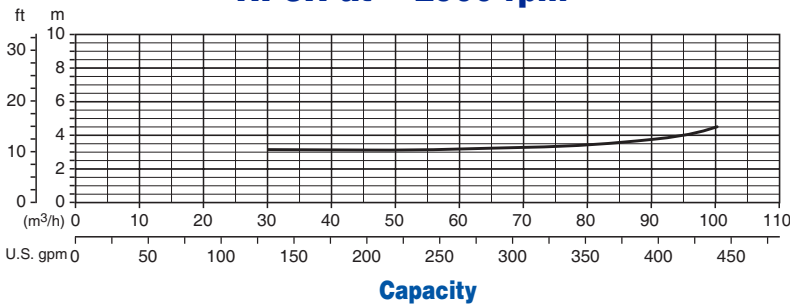
### 6" Motor Adapter



### 8" Motor Adapter

	Diameter with 1 cable cover	Diameter with 2 cable covers	External Motor Diameter
Pump 8"	186.5	192	/
Pump 8" with motor 6"	186.5	192	136.5
Pump 8" with motor 8"	195	197.5	187.5

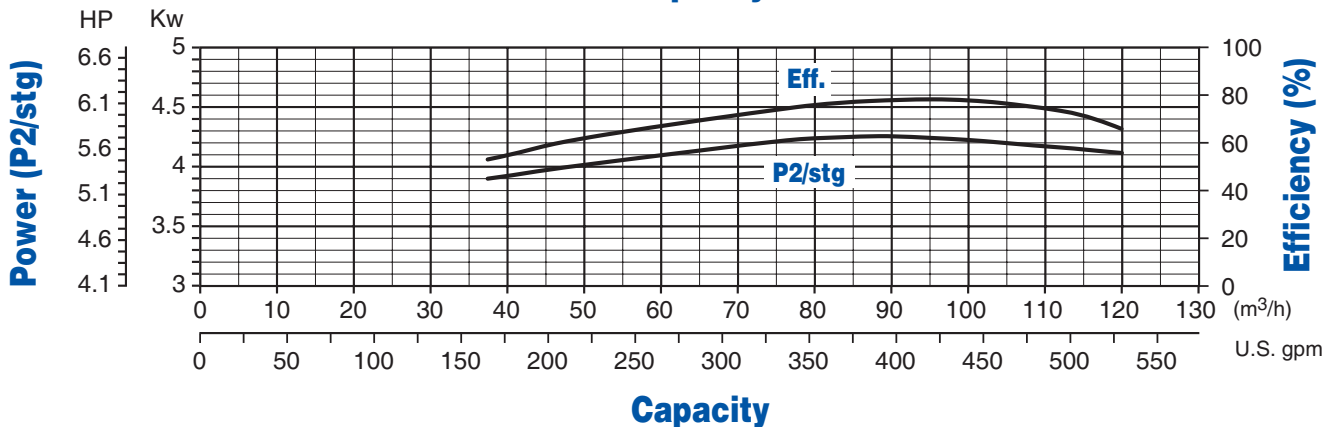
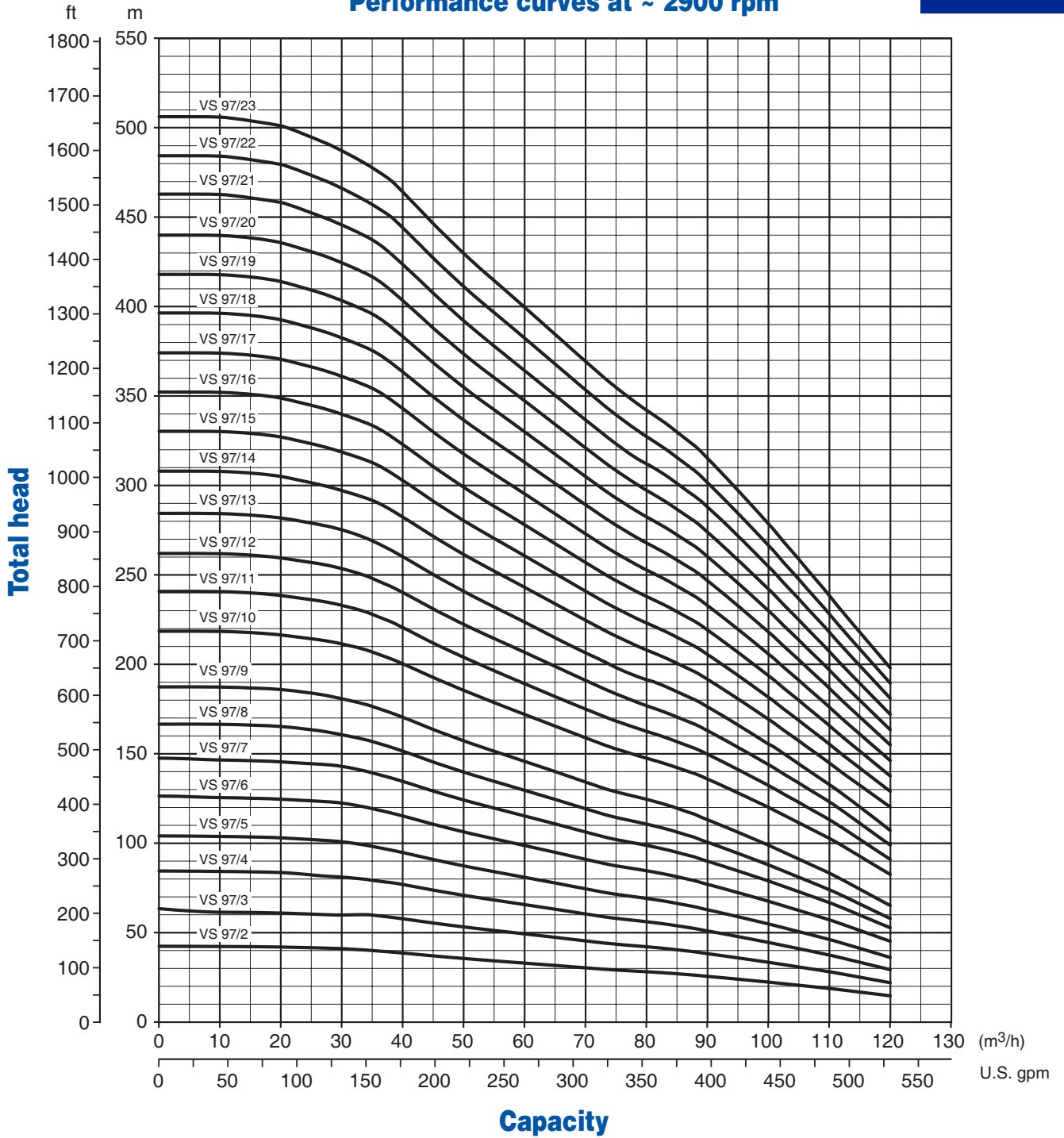
### NPSH at ~ 2900 rpm



The coupling to motor and all the mounting dimensions are in accordance with NEMA standard.



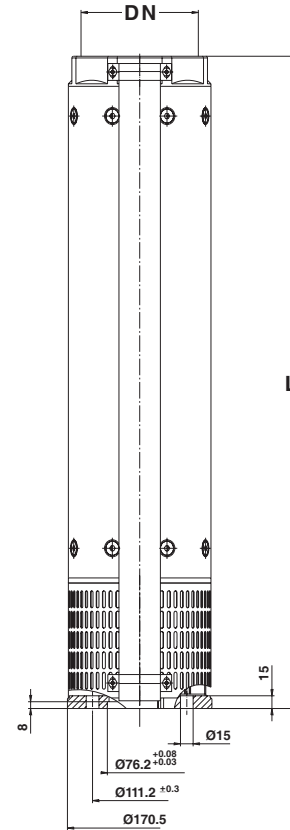
**Performance curves at ~ 2900 rpm**



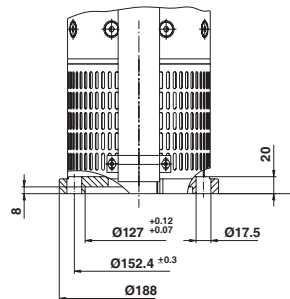
## Performance table at ~ 2900 rpm

Pump model	kW	HP	Motor size	Dimensions		Weight [Kg]
				L [mm]	DN	
VS 97/2	9.3	12.5	6"	644	Rp 5"	31.5
VS 97/3	15	20	6"	770	Rp 5"	36.5
VS 97/4	18.5	25	6"	896	Rp 5"	41.5
VS 97/5	22	30	6"	1022	Rp 5"	46
VS 97/6	30	40	6"	1148	Rp 5"	51
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VS 97/10	45	60	8"	1657	Rp 5"	72
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### Dimensions



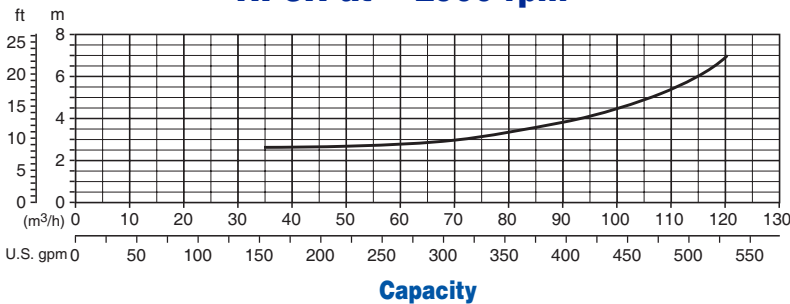
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### 8" Motor Adapter

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Pump 8"	186.5	192	/
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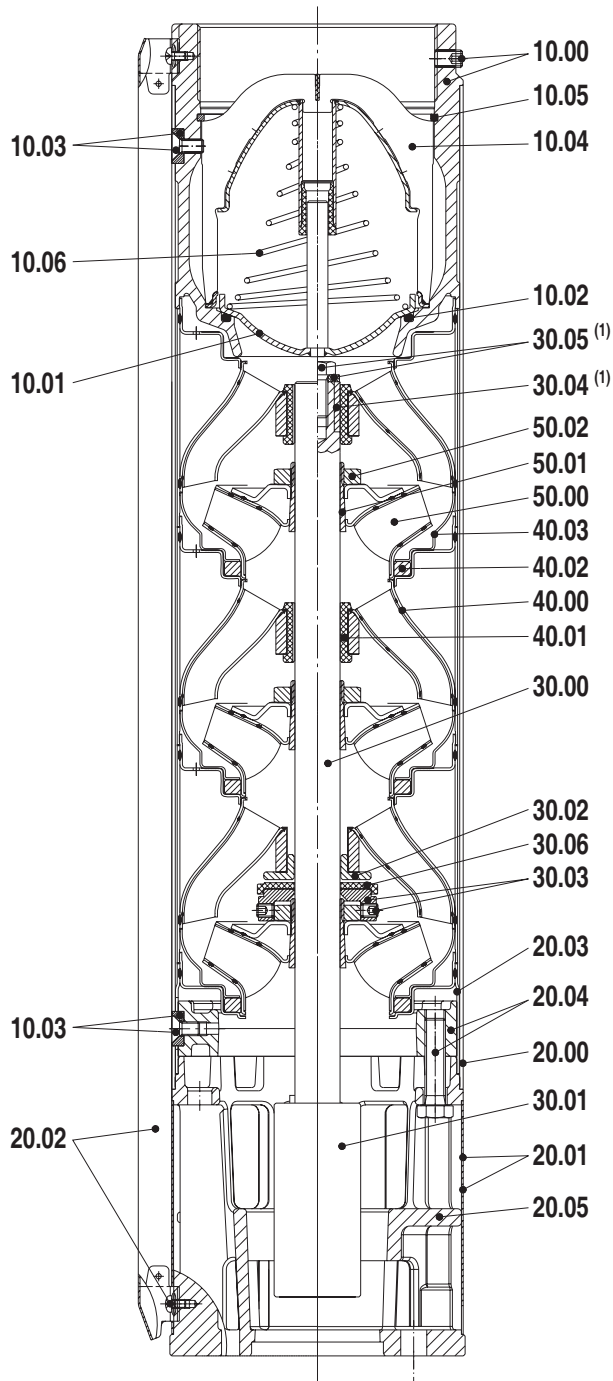
# **VS Series Pump Sections and List of Main Components**

**VS 78**

**VS 97**

# VS 78

# VS 97



Ref. N.	Description
10 00	Discharge head and screw
10 01	Valve
10 02	O-Ring
10 03	Screw and outer case locking nut
10 04	Check valve assembly
10 05	Seeger ring
10 06	Spring
20 00	Outer case
20 01	Suction strainer and clamp
20 02	Cable guard and screws
20 03	Initial spacer
20 04	Flange and bolt
20 05	Motor adapter

Ref. N.	Description
30 00	Pump shaft
30 01	Coupling
30 02	Upper up-thrust washer
30 03	Lower up-thrust washer and screw
30 04	Upper journal sleeve 1)
30 05	Bolt and washer 1)
30 06	Up-thrust disc
40 00	Diffuser
40 01	Secondary bearing bush
40 02	Floating neck ring
40 03	Flange clamping neck ring
50 00	Impeller
50 01	Split cone
50 02	Split cone nut

1) only for types with more than 16 stages