

VERTICAL SLURRY PUMP

SVSL Vertical Slurry Pump

Heavy-duty vertical sump and pit pumping technology for abrasive slurries containing suspended solids.

FLOW ENVELOPE

9.9-364 m³/h

HEAD ENVELOPE

Up to 45.5 m

DRIVE POWER

1.1-45 kW

PROCESS TEMP.

60 °C


OPERATING ENVELOPE & CONSTRUCTION

Pump Configuration	Single-stage, single-suction vertical centrifugal sump pump
Series Designation	SVSL heavy-duty vertical slurry pump
Flow Envelope	9.9-364 m ³ /h
Total Dynamic Head	1.8-45.5 m
Recommended Motor Power	1.1-45 kW
Rotational Speed	590-1,480 r/min
Discharge Diameter Range	50-150 mm
Maximum Medium Temperature	60 °C
Fly-ash Slurry Concentration	Up to 45% nominal
Mineral-slurry Concentration	Up to 60% nominal
Casing Architecture	Robust double-casing metallic wet end
Installation	Vertical sump and pit service

CONSTRUCTION & SERVICE FEATURES

Wet End	Abrasion-resistant metallic hydraulic components
Shaft Arrangement	Vertical cantilever arrangement for sump duty
Hydraulics	Optimized passages for abrasive suspended solids
Maintenance	Service-oriented component layout for streamlined access
Series Operation	Selected duties may use multiple pumps where additional system head is required

ENGINEERED FOR SUMP DUTY

01 / IMPACT

Metallic wetted construction resists particle strike at high-energy surfaces.

02 / SLIDING ABRASION

Controlled passages support particle transport with reduced local recirculation.

03 / CORROSION

Stainless, duplex and super-duplex options match process chemistry.

04 / HYDRAULIC STABILITY

Duty-point selection limits vibration, uneven wear and solids accumulation.

TYPICAL SERVICE

Mineral-processing sumps and floor pits

Metallurgical process drainage

Coal-preparation sumps

Power-generation ash handling

Aggregate and sand-processing pits

Building-material slurry transfer

Abrasive wastewater collection

Continuous pit dewatering with suspended solids

SELECTION IS APPLICATION-SPECIFIC

Published ranges define the product envelope, not a guaranteed duty point. Confirm slurry density, viscosity, solids concentration, particle characteristics, NPSHa and system resistance.

DATA REQUIRED FOR SELECTION

HYDRAULIC DUTY

SLURRY PROFILE

CHEMISTRY

INSTALLATION

SITE CONDITIONS

OPERATING PROFILE

Hydraulic performance & motor selection

Complete SVSL configuration data with three operating points for each speed and motor arrangement. Final dimensional drawings are supplied against the selected installation configuration.

50SVSL-18		SPEED 1470 r/min	MOTOR 3 kW	FRAME Y100L ₂ 4B5	MASS 250 kg	SUCTION / INLET Open sump (no flange)	DISCHARGE 50 mm	NPSH _R Submerged duty
Point	Flow Q (m³/h)	Head H (m)	Efficiency η (%)	Shaft Power P (kW)	Overall Dimensions L × W × H (mm)			
1	15.3	8.7	34.9	1.0	Model-specific drawing			
2	22.5	7.5	38.6	1.2	Model-specific drawing			
3	34.2	1.8	31.2	1.5	Model-specific drawing			

50SVSL-18		SPEED 910 r/min	MOTOR 1.1 kW	FRAME Y90L6B5	MASS 250 kg	SUCTION / INLET Open sump (no flange)	DISCHARGE 50 mm	NPSH _R Submerged duty
Point	Flow Q (m³/h)	Head H (m)	Efficiency η (%)	Shaft Power P (kW)	Overall Dimensions L × W × H (mm)			
1	9.9	3.5	34.9	0.3	Model-specific drawing			
2	14.4	3.0	38.6	0.3	Model-specific drawing			
3	21.6	1.9	31.2	0.3	Model-specific drawing			

65SVSL-30		SPEED 1470 r/min	MOTOR 18.5 kW	FRAME Y180M-4V1	MASS 530 kg	SUCTION / INLET Open sump (no flange)	DISCHARGE 65 mm	NPSH _R Submerged duty
Point	Flow Q (m³/h)	Head H (m)	Efficiency η (%)	Shaft Power P (kW)	Overall Dimensions L × W × H (mm)			
1	38	34.7	43.7	8.2	Model-specific drawing			
2	58	31.9	51.9	9.7	Model-specific drawing			
3	98	26.0	51.7	13.4	Model-specific drawing			

65SVSL-30		SPEED 960 r/min	MOTOR 5.5 kW	FRAME Y132M ₂ 6B5	MASS 530 kg	SUCTION / INLET Open sump (no flange)	DISCHARGE 65 mm	NPSH _R Submerged duty
Point	Flow Q (m³/h)	Head H (m)	Efficiency η (%)	Shaft Power P (kW)	Overall Dimensions L × W × H (mm)			
1	25	14.8	43.7	2.3	Model-specific drawing			
2	40	13.6	51.9	2.7	Model-specific drawing			
3	64	11.1	51.7	3.7	Model-specific drawing			

Hydraulic performance & motor selection

Complete SVSL configuration data with three operating points for each speed and motor arrangement. Final dimensional drawings are supplied against the selected installation configuration.

65SVSL-27		SPEED 1470 r/min	MOTOR 15 kW	FRAME Y160-4V1	MASS 530 kg	SUCTION / INLET Open sump (no flange)	DISCHARGE 65 mm	NPSH _R Submerged duty
Point	Flow Q (m³/h)	Head H (m)	Efficiency η (%)	Shaft Power P (kW)	Overall Dimensions L × W × H (mm)			
1	34	28.1	43.7	6.0	Model-specific drawing			
2	52	25.8	51.9	7.1	Model-specific drawing			
3	88	21.0	51.7	9.8	Model-specific drawing			

65SVSL-27		SPEED 960 r/min	MOTOR 4.0 kW	FRAME Y132M, 6B5	MASS 530 kg	SUCTION / INLET Open sump (no flange)	DISCHARGE 65 mm	NPSH _R Submerged duty
Point	Flow Q (m³/h)	Head H (m)	Efficiency η (%)	Shaft Power P (kW)	Overall Dimensions L × W × H (mm)			
1	23	12.0	43.7	1.7	Model-specific drawing			
2	34	11.0	51.9	2.0	Model-specific drawing			
3	58	9.0	51.7	2.7	Model-specific drawing			

80SVSL-36		SPEED 1480 r/min	MOTOR 45 kW	FRAME Y225M4V1	MASS 660 kg	SUCTION / INLET Open sump (no flange)	DISCHARGE 80 mm	NPSH _R Submerged duty
Point	Flow Q (m³/h)	Head H (m)	Efficiency η (%)	Shaft Power P (kW)	Overall Dimensions L × W × H (mm)			
1	105	45.5	52.1	25.0	Model-specific drawing			
2	144	41.4	58.2	27.9	Model-specific drawing			
3	201	32.5	54.2	32.8	Model-specific drawing			

80SVSL-36		SPEED 970 r/min	MOTOR 15 kW	FRAME Y180L6V1	MASS 660 kg	SUCTION / INLET Open sump (no flange)	DISCHARGE 80 mm	NPSH _R Submerged duty
Point	Flow Q (m³/h)	Head H (m)	Efficiency η (%)	Shaft Power P (kW)	Overall Dimensions L × W × H (mm)			
1	69	19.5	52.1	7.0	Model-specific drawing			
2	94	17.8	58.2	7.8	Model-specific drawing			
3	132	14.0	54.2	9.3	Model-specific drawing			

Hydraulic performance & motor selection

Complete SVSL configuration data with three operating points for each speed and motor arrangement. Final dimensional drawings are supplied against the selected installation configuration.

80SVSL-33		SPEED 1480 r/min	MOTOR 37 kW	FRAME Y225S4V1	MASS 660 kg	SUCTION / INLET Open sump (no flange)	DISCHARGE 80 mm	NPSH _R Submerged duty
Point	Flow Q (m ³ /h)	Head H (m)	Efficiency η (%)	Shaft Power P (kW)	Overall Dimensions L × W × H (mm)			
1	96	38.2	52.1	19.3	Model-specific drawing			
2	132	34.8	58.2	21.5	Model-specific drawing			
3	184	27.3	54.2	25.3	Model-specific drawing			

80SVSL-33		SPEED 970 r/min	MOTOR 11 kW	FRAME Y160L6V1	MASS 660 kg	SUCTION / INLET Open sump (no flange)	DISCHARGE 80 mm	NPSH _R Submerged duty
Point	Flow Q (m ³ /h)	Head H (m)	Efficiency η (%)	Shaft Power P (kW)	Overall Dimensions L × W × H (mm)			
1	63	16.4	52.1	5.4	Model-specific drawing			
2	86	15.0	58.2	6.0	Model-specific drawing			
3	121	11.8	54.2	7.2	Model-specific drawing			

100SVSL-34		SPEED 1480 r/min	MOTOR 45 kW	FRAME Y225M-4V1	MASS 850 kg	SUCTION / INLET Open sump (no flange)	DISCHARGE 100 mm	NPSH _R Submerged duty
Point	Flow Q (m³/h)	Head H (m)	Efficiency η (%)	Shaft Power P (kW)	Overall Dimensions L × W × H (mm)			
1	157	36.8	60.2	26.1	Model-specific drawing			
2	214	32.6	65.1	29.2	Model-specific drawing			
3	293	24.4	58.2	33.5	Model-specific drawing			

100SVSL-34		SPEED 970 r/min	MOTOR 15 kW	FRAME Y180L6V1	MASS 850 kg	SUCTION / INLET Open sump (no flange)	DISCHARGE 100 mm	NPSH _R Submerged duty
Point	Flow Q (m³/h)	Head H (m)	Efficiency η (%)	Shaft Power P (kW)	Overall Dimensions L × W × H (mm)			
1	103	15.8	60.2	7.4	Model-specific drawing			
2	140	14.0	65.1	8.2	Model-specific drawing			
3	192	10.5	58.2	9.4	Model-specific drawing			

Hydraulic performance & motor selection

Complete SVSL configuration data with three operating points for each speed and motor arrangement. Final dimensional drawings are supplied against the selected installation configuration.

100SVSL-31		SPEED 1480 r/min	MOTOR 37 kW	FRAME Y225S4V1	MASS 850 kg	SUCTION / INLET Open sump (no flange)	DISCHARGE 100 mm	NPSH _R Submerged duty
Point	Flow Q (m ³ /h)	Head H (m)	Efficiency η (%)	Shaft Power P (kW)	Overall Dimensions L × W × H (mm)			
1	143	30.6	60.2	19.8	Model-specific drawing			
2	195	27.1	65.1	22.1	Model-specific drawing			
3	267	20.3	58.2	25.4	Model-specific drawing			

100SVSL-31		SPEED 970 r/min	MOTOR 11 kW	FRAME Y160L6V1	MASS 850 kg	SUCTION / INLET Open sump (no flange)	DISCHARGE 100 mm	NPSH _R Submerged duty
Point	Flow Q (m ³ /h)	Head H (m)	Efficiency η (%)	Shaft Power P (kW)	Overall Dimensions L × W × H (mm)			
1	94	13.1	60.2	5.6	Model-specific drawing			
2	128	11.6	65.1	6.2	Model-specific drawing			
3	175	8.7	58.2	7.1	Model-specific drawing			

150SVSL-35		SPEED 980 r/min	MOTOR 37 kW	FRAME Y250M-6V1	MASS 900 kg	SUCTION / INLET Open sump (no flange)	DISCHARGE 150 mm	NPSH _R Submerged duty
Point	Flow Q (m ³ /h)	Head H (m)	Efficiency η (%)	Shaft Power P (kW)	Overall Dimensions L × W × H (mm)			
1	198	17.9	63.1	15.3	Model-specific drawing			
2	332	13.2	68.1	17.5	Model-specific drawing			
3	364	12.1	66.8	18.0	Model-specific drawing			

150SVSL-35		SPEED 730 r/min	MOTOR 15 kW	FRAME Y200L8V1	MASS 900 kg	SUCTION / INLET Open sump (no flange)	DISCHARGE 150 mm	NPSH _R Submerged duty
Point	Flow Q (m ³ /h)	Head H (m)	Efficiency η (%)	Shaft Power P (kW)	Overall Dimensions L × W × H (mm)			
1	147	10.0	63.1	6.3	Model-specific drawing			
2	247	7.3	68.1	7.2	Model-specific drawing			
3	271	6.7	66.8	7.4	Model-specific drawing			

Hydraulic performance & motor selection

Complete SVSL configuration data with three operating points for each speed and motor arrangement. Final dimensional drawings are supplied against the selected installation configuration.

150SVSL-35		SPEED 590 r/min	MOTOR 11 kW	FRAME Y160L6B3	MASS 900 kg	SUCTION / INLET Open sump (no flange)	DISCHARGE 150 mm	NPSH _R Submerged duty
Point	Flow Q (m ³ /h)	Head H (m)		Efficiency η (%)		Shaft Power P (kW)		Overall Dimensions L × W × H (mm)
1	119	6.5		63.1		3.3		Model-specific drawing
2	200	4.8		68.1		3.8		Model-specific drawing
3	219	4.4		66.8		3.9		Model-specific drawing

150SVSL-32		SPEED 980 r/min	MOTOR 22 kW	FRAME Y200L6V1	MASS 900 kg	SUCTION / INLET Open sump (no flange)	DISCHARGE 150 mm	NPSH _R Submerged duty
Point	Flow Q (m ³ /h)	Head H (m)		Efficiency η (%)		Shaft Power P (kW)		Overall Dimensions L × W × H (mm)
1	181	15.0		63.1		11.7		Model-specific drawing
2	304	11.0		68.1		13.4		Model-specific drawing
3	332	10.1		66.8		13.8		Model-specific drawing

150SVSL-32		SPEED 730 r/min	MOTOR 11 kW	FRAME Y180L8V1	MASS 900 kg	SUCTION / INLET Open sump (no flange)	DISCHARGE 150 mm	NPSH _R Submerged duty
Point	Flow Q (m ³ /h)	Head H (m)		Efficiency η (%)		Shaft Power P (kW)		Overall Dimensions L × W × H (mm)
1	134	8.4		63.1		4.8		Model-specific drawing
2	226	6.1		68.1		5.5		Model-specific drawing
3	248	5.6		66.8		5.7		Model-specific drawing

150SVSL-32		SPEED 590 r/min	MOTOR 7.5 kW	FRAME Y160L-10V1	MASS 900 kg	SUCTION / INLET Open sump (no flange)	DISCHARGE 150 mm	NPSH _R Submerged duty
Point	Flow Q (m ³ /h)	Head H (m)		Efficiency η (%)		Shaft Power P (kW)		Overall Dimensions L × W × H (mm)
1	109	5.4		63.1		2.5		Model-specific drawing
2	183	4.0		68.1		2.9		Model-specific drawing
3	200	3.7		66.8		3.0		Model-specific drawing