



Diverse Product Range / Technical Support
High-Quality Materials / Global Reach



SHIJIAZHUANG HONGSTONE PUMP TECHNOLOGY CO., LTD.

Hongstone SP/SPR range vertical sump pumps are designed specifically for a variety of sump condition applications.

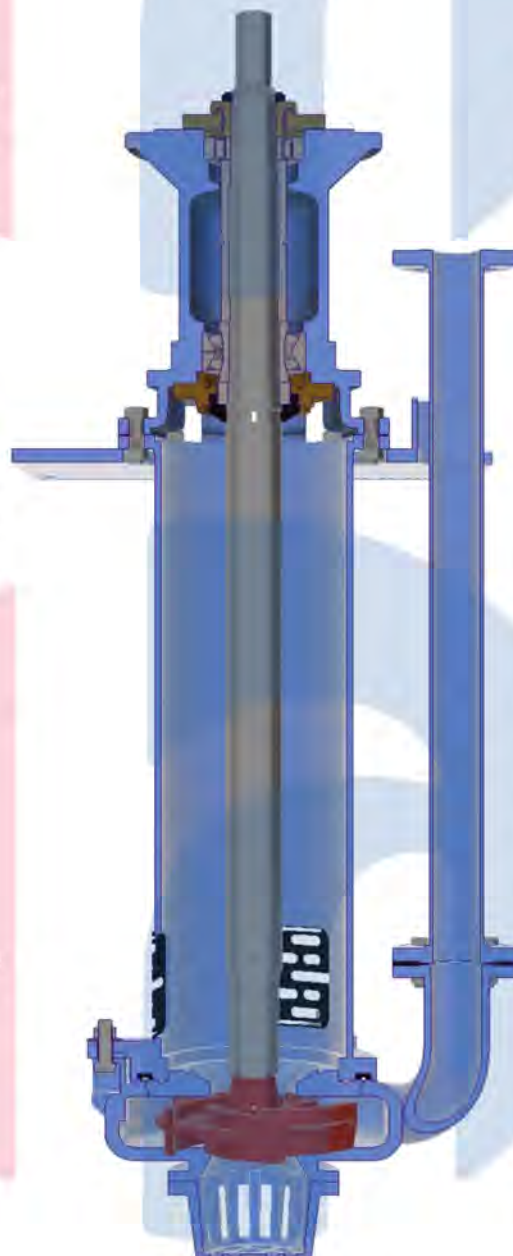
The SP/SPR range is of a vertical cantilevered design that features hard alloy wear parts or full elastomer protection on all submerged components. They are especially suitable for abrasive slurries and feature a robust design with ease of maintenance.

Product Features

Cantilever design without submerged bearings ---- The heavy duty pump shaft is of cantilever design, hanging below the bearing housing. There are no submerged bearings.

Cantilever design without shaft seals ---- The wet end is suspended from a tubular column below the bearing housing and submerged in water, there are no shaft seals. This design ensures minimum maintenance and eliminates the need for water flushing.

Open impeller design ---- The open or semi-open impeller provides better solids handling than the closed impeller design and is less sensitive to air blocking on intermittent operation.



Heavy duty bearings ---- Heavy duty grease lubricated roller bearings in a sealed cartridge designed for maximum bearing life. Bearings are located in a housing above the base plate for accessibility and protection.

Type of drive ---- Pumps can be coupling drive or V-belt drive.
Coupling drive
The motor shaft and the pump shaft are connected by a coupling.
V-belt drive
The motor is mounted vertically, on an adjustable motor plate fitted beside the bearing housing. The rotate speed of the pump can be changed by changing the pulley ratio.

Shaft length is optional ---- Pump shaft length can be changed according to customer needs at the time of ordering.

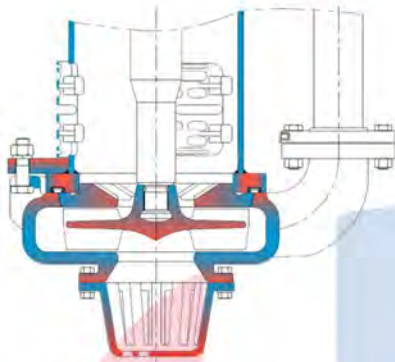
Wet end material options ----Hard alloy wear parts (SP range) or full elastomer protection on all submerged components (SPR range) . This allows this pump to be used in erosive/corrosive applications.

Other wet end parts materials available include corrosion-resisting alloy such as austenitic stainless steel and duplex stainless steel and so on.

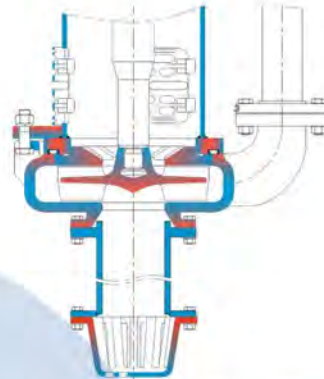
Contact us for other material options.

Dry running ----All pumps can run dry intermittently. Pumps with metal pump parts can run dry for an unlimited length of time.

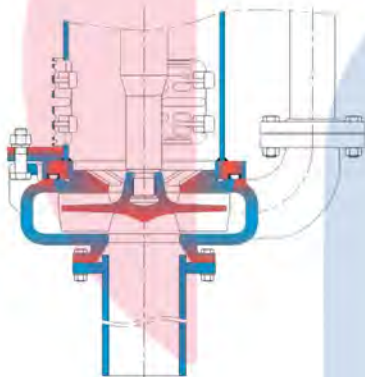
Four different suction options ----There are four different suction options are available for specific requirement. Suction with Strainer, Suction Pipe with Strainer, Suction Pipe without Strainer, Suction with Agitator.



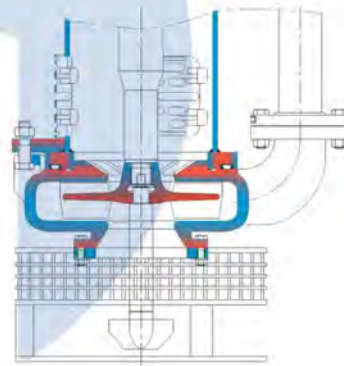
Type 1 -- Suction with Strainer



Type 2 -- Suction Pipe with Strainer

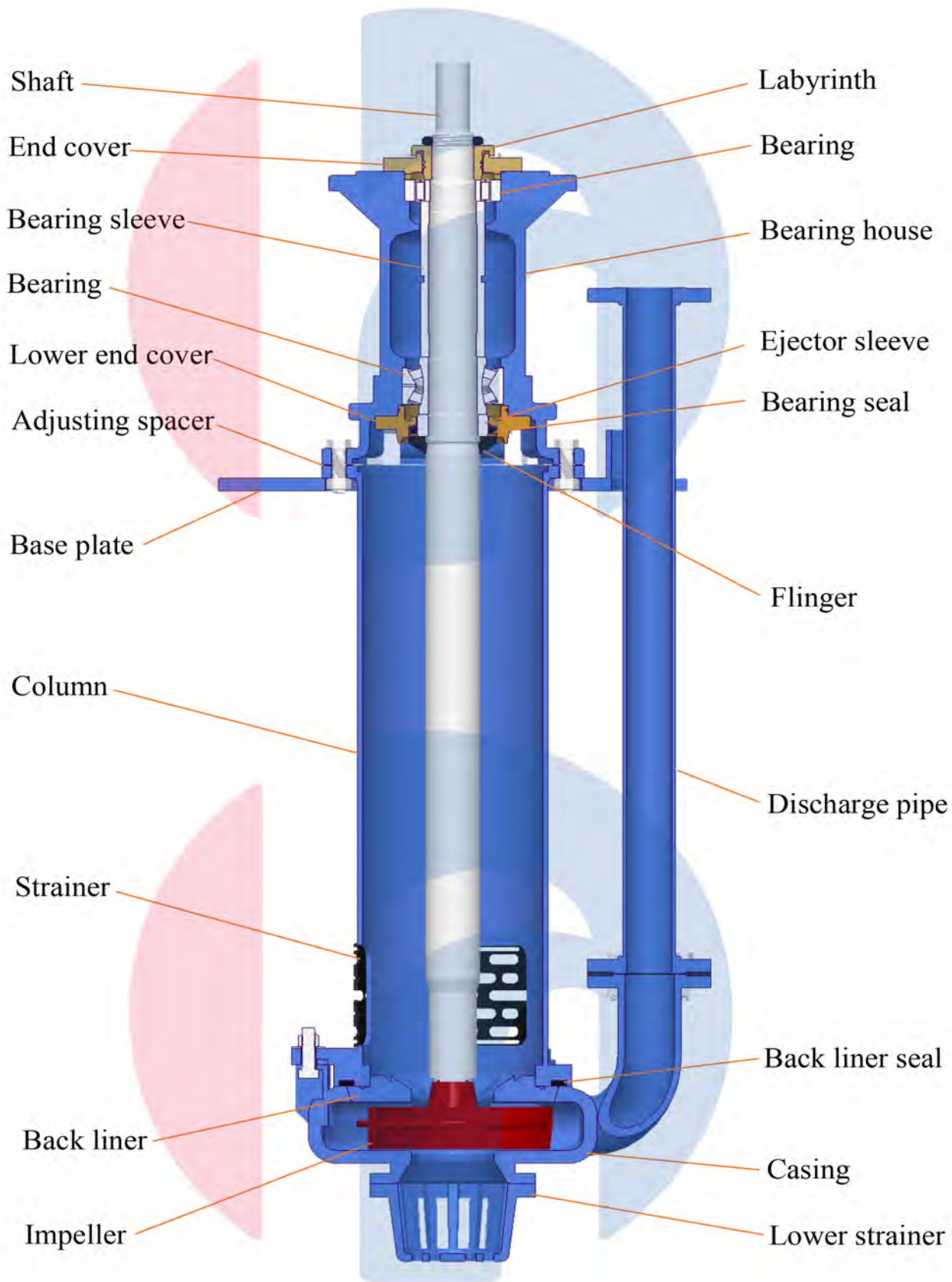


Type 3 -- Suction Pipe without Strainer



Type 4 -- Suction with Agitator

Product Structure



Materials

Metal materials for wet end parts

Name	Material description	Hardness	Applications
BTMcr27	27% Cr Erosion Resistant White Iron	≥56HRC	It is a wear resistant white iron that offers excellent performance under erosive conditions.
BTMcr28	28% Cr, Low C, High Cr, White Iron	≥45HRC	It is particularly suitable for FGD and other corrosive applications, where the pH is less than 4.
BTMcr33	33% Cr, Erosion & Corrosion Alloy, High Cr, Low C	≥35HRC	It can transport oxygenated slurry with PH not be less than 1 such as phosphoric acid duties and other corrosive applications.

Elastomer materials for wet end parts

Material code	Description	Applications
Natural Rubber PNR08	Standard impeller Rubber	Black medium hardness natural rubber is used for impellers where superior erosive resistance is required in fine particle slurries.
Natural Rubber PNR26	Standard Liner Rubber	Black soft natural rubber is used for impellers where superior erosive resistance is required in fine particle slurries.
Natural Rubber PNR55	Black medium hardness rubber	Black medium hardness rubber with excellent resistance against the environment. general purpose grade for fine to medium slurry applications. good erosion resistance and physical properties.
Polyurethane Elastomer PPE01	Wear Resistant Polyurethane	An erosion resistant material that performs well in elastomer applications, This is attributed to the high tear and tensile strength of Polyurethane.

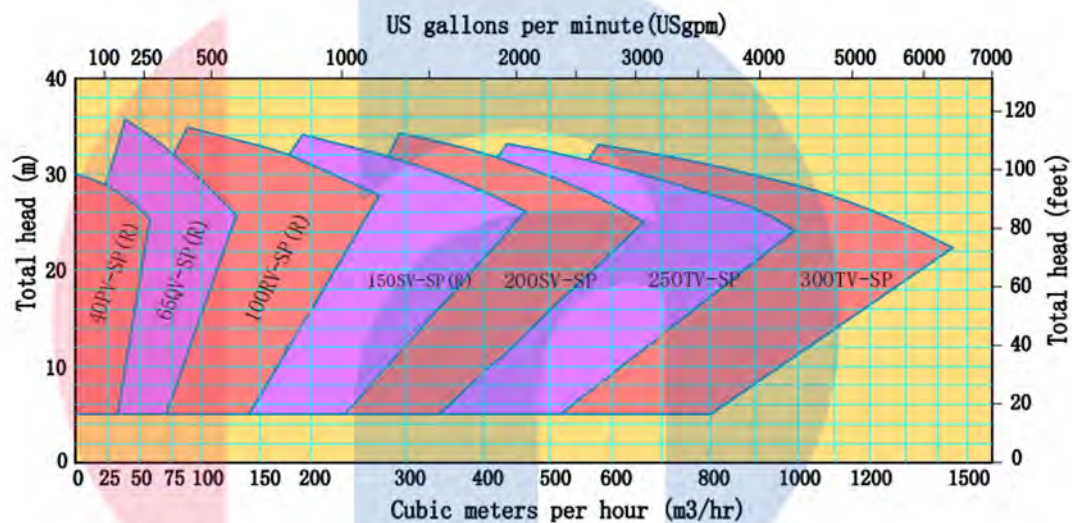
The above is a list of commonly used materials. Contact us for other material options.

Clear water performance parameters

TYPE	OUTLET DIA. (mm)	SPEED(r/min)	CLEAR WATER PERFORMANCE			MAX. POWER (kW)	IMPELLER DIA. (mm)
			CAPACITY Q(m ³ /h)	HEAD H(m)	MAX. EFF. η(%)		
40PV-SP	40	1000-2200	17-45	4-28.5	41	15	188
40PV-SPR	40	1000-2200	17-40	4-26.0	41	15	188
65QV-SP	65	700-1500	18-120	5-31.5	51	30	280
65QV-SPR	65	700-1500	18-115	5-31.5	51	30	280
100RV-SP	100	500-1200	54-289	5-36	57	75	370
100RV-SPR	100	500-1200	54-289	5-36	57	75	370
150SV-SP	150	500-1000	108-479	8.5-40	52	110	450
150SV-SPR	150	500-1000	108-479	8.5-40	52	110	450
200SV-SP	200	400-850	189-891	6.5-37	64	110	520
250TV-SP	250	400-750	261-1089	7-33.5	60	200	575
300TV-SP	300	350-700	288-1267	6-33	50	200	610

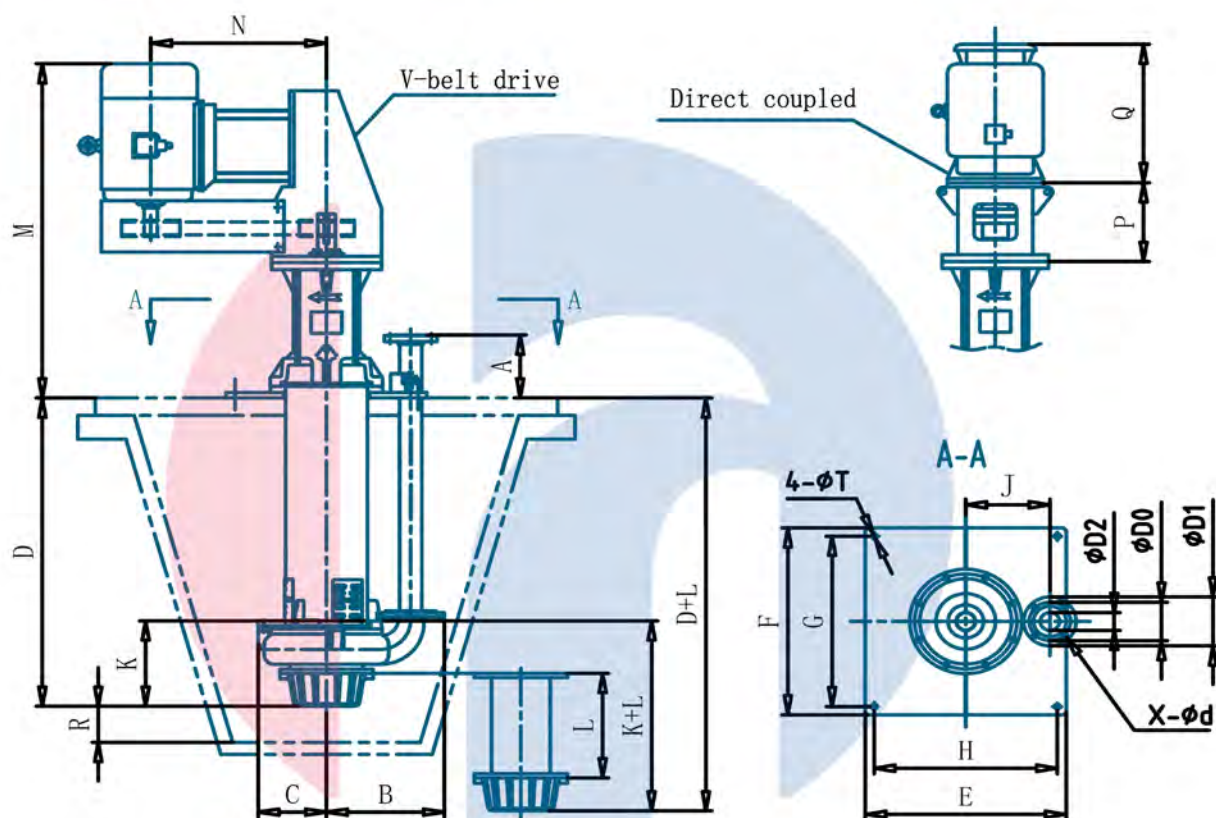
Note: Approximate clear water performance and to be used for preliminary selection only.

Quick selection chart for SP/SPR pumps



Note: Approximate clear water performance and to be used for preliminary selection only.

Outline and installation dimensions



TYPE	Dimensions of base plate and submerged portion									
	B	C	D	E	F	G	H	J	ΦT	K
40PV-SP	285	153	900*/1200	500	500	450	450	205	φ18	174
40PV-SPR	265	175								
65QV-SP	399	231	900/1200*/1500	680	680	620	620	285	φ18	265
65QV-SPR	380	260								
100RV-SP	538	317	1200/1500*/1800	1000	870	800	930	400	φ22	393
100RV-SPR	535	332								
150SV-SP	670	365	1500/1800*/2100	1100	1100	1030	1030	500	φ28	475
150SV-SPR	670	400								
200SV-SP	805	440	1500/1800*/2100	1300	1200	1100	1200	600	φ28	550
250TV-SP	930	470	1800/2100*/2400	1750	1450	1350	1650	700	φ48	685
300TV-SP	1170	559	1800/2100*/2400	1750	1450	1350	1650	700	φ48	700

TYPE	Max. dimentions with motor				Dimensions of discharge flanges					Dimensions of shaft ends	
	M	N	P	Q	A	D1	D2	D0	X - Φ d	Dim	Length
40PV-SP	1113	675	248	629	137	127	40	98	4-Φ16	40	85
40PV-SPR	1113				140					40	85
65QV-SP	1390	794	290	681	227	178	65	140	4-Φ19	50	110
65QV-SPR	1396				230					50	110
100RV-SP	1803	1020	416	960	265	229	100	191	8-Φ19	80	170
100RV-SPR	1809				266					80	170
150SV-SP	2186	1200	476	1011	390	280	150	241	8-Φ22	100	210
150PVSJ	2194				395					100	210
150SV-SPR	2191	1300	476	1011	450	343	200	298	8-2Φ2	100	210
250TV-SP	2572	1750	561	1246	500	406	250	362	12-Φ25	100	210
300TV-SP	2476	1750	561	1246	500	483	300	432	12-Φ25	100	210

- Note: 1、 All sizes are in millimeters;
- 2、 There are some options for dimension 'L': 0,300,600,900,1200,1500,1800;
- 3、 The recommended range for distance 'R' is 300mm—500mm;
- 4、 Sizes 'D' and 'L' can be customized according to requirements.

Application cases

Typical applications

- Floor sumps in process plants
- Mining and mineral processing
- Sludge pits
- Wastewater reclamation
- FGD accident sump
- Chemical industry
- Other sump or pit applications



SP pump are used in Wastewater sump, China



SP pumps are used in iron mine, China