



Slurry pumping solutions

Mining & Mineral Process Coal Washing POWER CHEMICAL METALLURGY

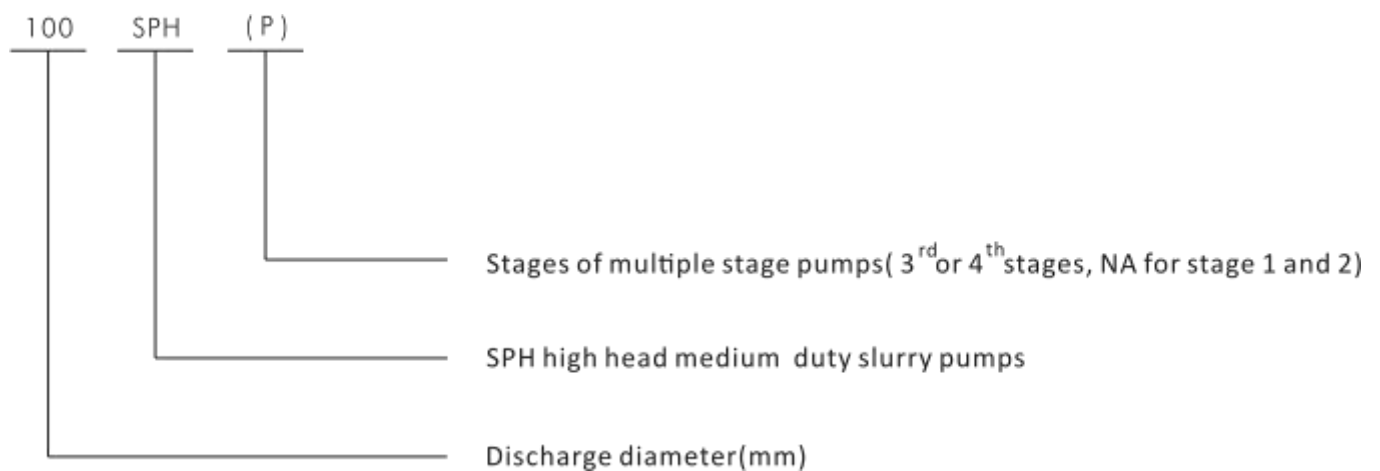


Sph medium DUTY SLURRY PUMPS

SPH pumps are single stage, single suction, over hang, double casing horizontal slurry pumps, widely used in power plant, metallurgy, mining, coal, building material and chemical industries to deliver abrasive or corrosives fluids. Due to its large flow rate and high head, SPH pumps are particularly suit for pumping long distance slug in power plants.

SPH pumps could be used as multi-stage pumps in series.

Model descriptions



- Pump Range: 65~300mm
- Capacity to: 1920m³/hr
- Head to: 94m

clear water performance

Mode	Max. Motor Power Kw	Clear water performance					Impeller			Weight (Kg)
		Capacity Q(m ³ /h)	Head (m)	Max. pump speed n (rpm)	Best efficiency η (%)	NPSHr (m)	Max. particle size (mm)	Impeller diameter (mm)	Qty. of vanes	
65SP	55	52~132	25~63.3	1480	63	2.6~5.8	15	398	5	760
80SP (P)	132	82~205	33~92	1480	66	2.4~5.2	20	485	5	1400

NPSH value refer to the pressure needed when pumps running at the Max. speed and best efficiency

100SP (P)	200	170~420	33~94	1480	66	2.5~6.0	30	500	5	1420
150SP (P)	355	300~740	31~91	980	78	2.4~3.8	50	740	5	3450
200SP (P)	560	430~1080	34~94.7	980	76	2.1~6.5	60	740	5	4000
250SP (P)	630	560~1420	32~90	980	79	2.4~7.3	70	740	5	4500
300SP	710	790~1920	32~94	980	81.5	3.9~7.5	90	760	5	5500

H

typical applications

Usage of versatile wear-resistant metal allows SPL slurry pumps could be used in different industries such as mill discharge and tailings in mining process, ash removal and FGD in power plants, coal washing in coal preparations, to reduce operation cost, minimize maintenance and down time.

Ash Removal

Featured with high efficiency and high head, hard metal wet parts, plus the usage of oil lubrication bearing assembly, ensures the pump could running continuously without stop in ash removal in power plants.



Coal Washing

High head performance could meet the needs of feeding process to filter press, allows the SPL pumps are widely used in coal washing applications.



Mineral Processing

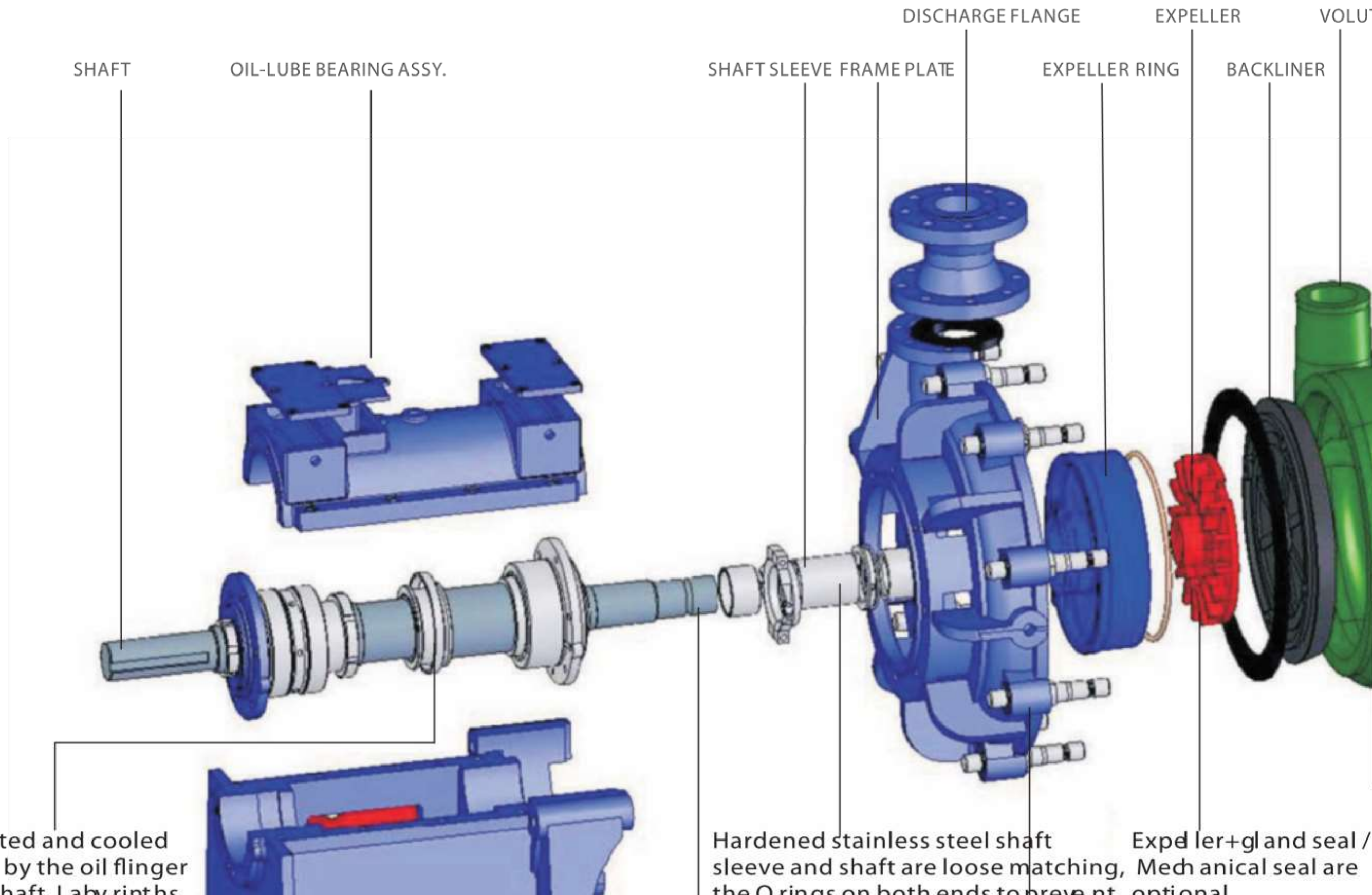
The rigid structure design and usage of wear-resistance hard metals, combined with low running speed, allows SPL slurry pumps could be used in long distance tailing transportation.

FGD

Special materials are adopted to resist the abrasion and corrosion from the gas of power generation.

Building Material

The usage of versatile wear/corrosion resistance materials allow the pump could be used in this field to pump corrosive and sticky fluids.

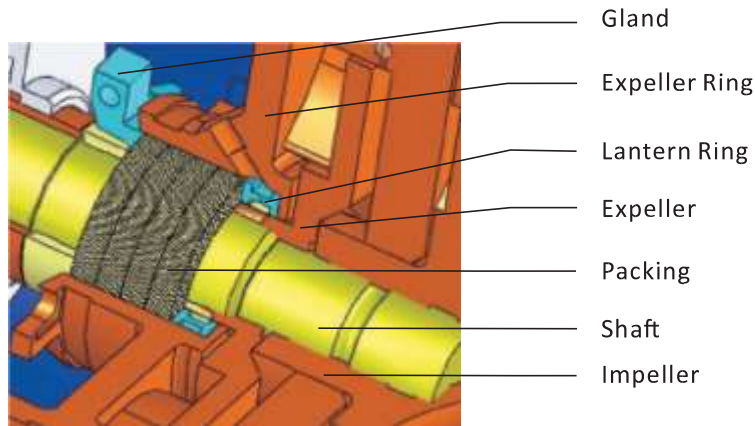


Bearings are lubricated and cooled with oil being taken by the oil flinger which hang on the shaft. Labyrinth

Hardened stainless steel shaft sleeve and shaft are loose matching,

Expeller+gland seal / Mechanical seal are the O rings on both ends to prevent optional

seal options



Expeller +Gland Seal- The expeller generates a reverse centrifugal force to prevent the leakage, two rings of packing are fixed beside the expeller to strength the seal. suit the applications which the suction pressure is too high that expellers are not capable of preventing leakage completely. for single stage pump, seal water pressure should be 0.2~0.3MPa; for multi-stage pump, the seal water pressure should be discharge pressure+0.1MPa.

Mechanical Seal- Suitable for applications where no extra substance is allowed to mix with the fluid being pumped, such as chemical or food industry.

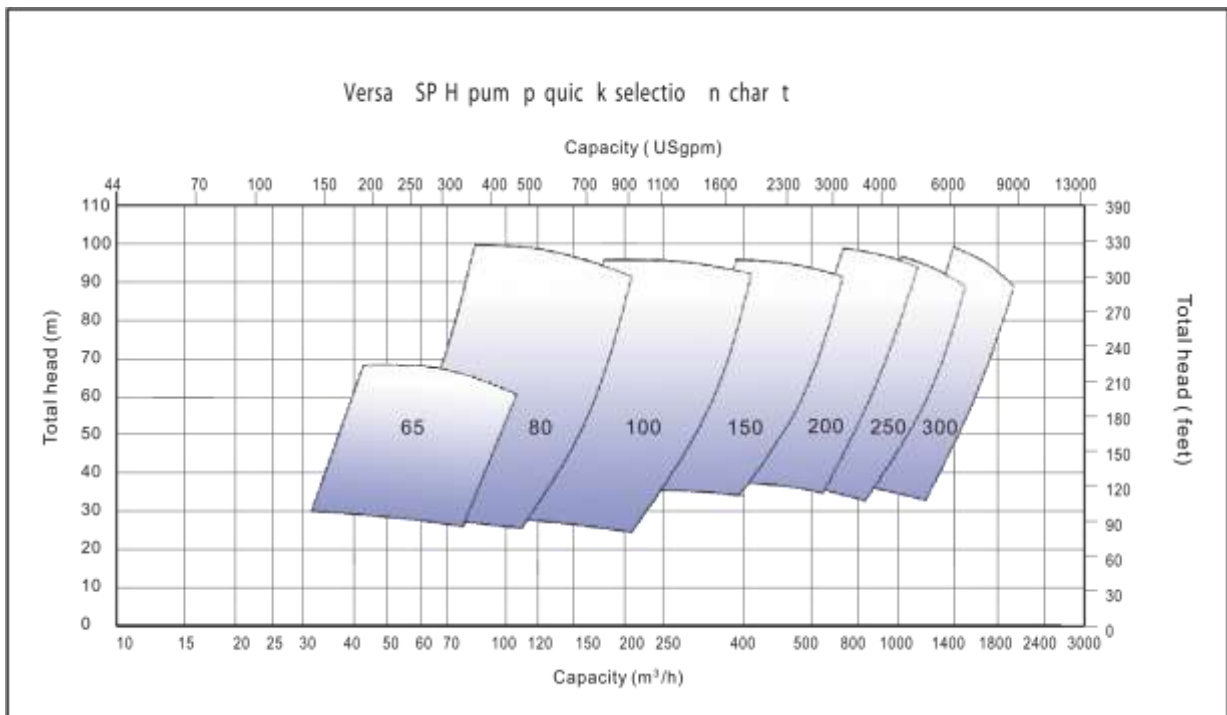
Material options

AAS Index code	Material #	Hardness RC	Performance	Applications
A 01	Km BCr8	>55	Abrasion resstant performance is about 10% less than A 05	Mud & slag applications
A 03	Km BN'4Cr2	>56	Abrasion resstant performance is about 20% less than A 05	Neutral water sand slurry and applications with lower impact load
A 05	Km BCr26	>56	Ranks second only to A 07 in abrasion resstant performance, fair corrosion resstant performance	High impact load abrasion condition, duty rate ranging from 5 to 12
A 07	Km BCr15Mo3	> 57	Best abrasion resstant performance, corrosion resstant performance superior to A 05	High impact load abrasion condition
A 11	Km BCrMnMo	38-42	Mod corrosion resstant, lower hardness, drilling and tapping operations are applicable	Use parts with light abrasion



A 33		>35	Abrasion resistant performance comparable to A 03, fair corrosion resistant performance	Oxide slurry with PH rate no less than 1, like phosphogypsum in phosphate fertilizer plant, nitric acid, sulphoic acid and phosphoric acid, etc.
A 49		>43	fair abrasion resistant performance, comparable to A 03, fair corrosion resistant performance in media with lower PH rate	Corrosion conditions with low PH rate, especially for flue gas and FGD devices for media of PH ≥ 4 ; general suitable for lower acid condition.
A 12		>62	Higher abrasion-resistant performance than AT05, fair corrosion-resistant performance; suitable for media with PH rate is 6 - 14, where AT05 is not suitable.	High abrasion slurry with fine particles
A 61		63~68	Optimized abrasion resistant performance than A 12	High abrasion slurry with fine particles

quick selection chart



drive arrangements



CVIz



zVIz

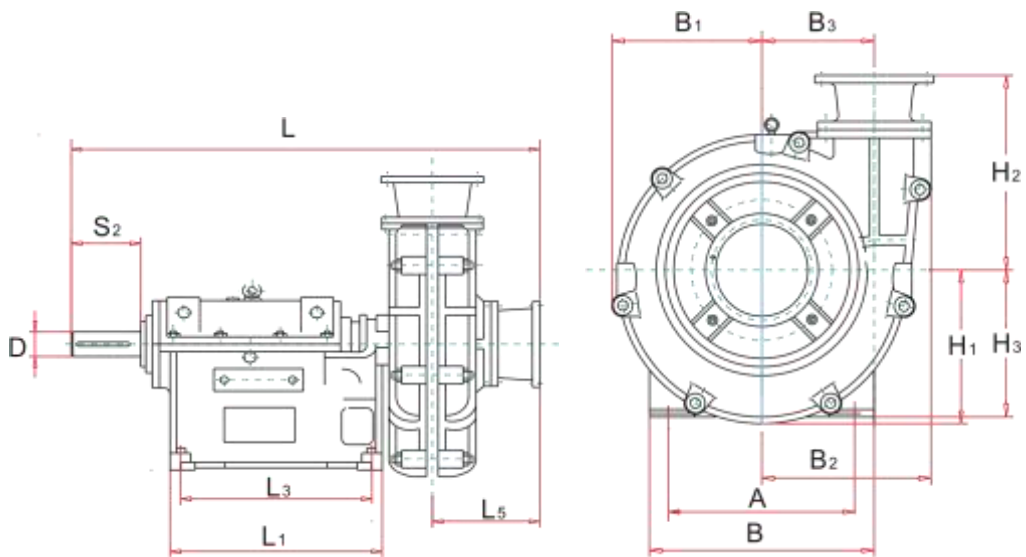


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dcIz

OUTLINE DIMENSIONS



PUMP MOD	A	B	B1	B2	B3	D	1	2	3	1	3	5	S2	
65SP	432	492	352	377	220	65	360	475	415	1379	580	340	330	167
80SP (³)	560	636	360	459	279	80	414	560	520	1598	725	440	296	222
100SP (³)	560	636	395	467	290	80	394	597	520	1718	725	440	402	222

150SP (°)	760	840	619	684	453	120	655	820	650	2006	1013	560	388	210
200SP (°)	760	840	675	713	460	120	695	880	650	2213	1013	560	579	210
250SP (°)	780	950	645	710	460	120	680	974	650	2160	978	550	500	215
300SP	780	950	649	766	475	120	676	883	650	2282	978	550	610	215

All Dimensions are In Millimeter(mm)