



CE ISO9001

ZR PUMP
FOR YOUR SUCCESS



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► Introduction of Slurry Pump ◀

SHIJIAZHUANG
ZHENGRONG PUMP
CO., LTD.



[COMPANY HONOURS]

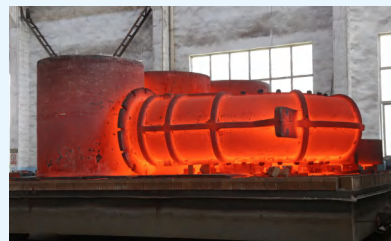
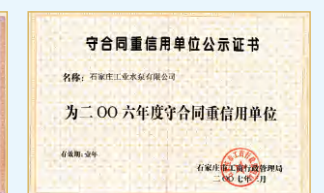
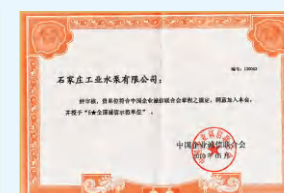
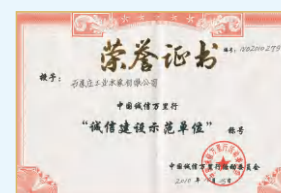


COMPANY INTRODUCTION

Shijiazhuang Zhengrong Pump Co., Ltd, which is affiliated with ZhengRong Group, is a large enterprise specializing in the production of slurry pump. The company has three production bases, one of which 46000m² for dredging pump and desulphurization pump and slurry pump that introduced advanced foreign technology is located in shijiazhuang development zone. The test precision of pump testing station has reached the international standard, complete the research and development of new product and materials independently and ensure provide the best products and materials to suit various working condition.

The professional production equipment and international manufacture level created a good development platform for the enterprise. Not only establish stable cooperative relationship with several Hydrographic Bureau, Mining and Desulfurization well-known listed companies in domestic, but also cooperated with a large number of multinational companies. Our product range involving pumps and accessories, OEM and processing with supplied drawings etc. Products are exported to North America, South America, Africa, Russia, Europe and Southeast Asia and other regions.

The company will revitalize national industry as own duty, with morality and personality create chinese famous brand “ZR PUMP”, do the best supplier with slurry pump and high alloy anti-abrasive materials parts. Shijiazhuang Industrial Pump Co.,Ltd is willing to become a sincerely and permanent partner with each user.





ZA(R) Heavy Duty Slurry Pump

Type ZA(R) pumps are single-stage, single-suction, cantilevered, double casing, horizontal, centrifugal slurry pump. They are designed for handing abrasive, high concentration slurries in the mining, coal, metallurgical, power, building material and other industrial departments. This series of pump is suitable for various liquids performance, which is the first select product for convey mine mill slurry and tailings slurry.

40-80% for higher density, strong abrasive slurries
40-100% for medium density, medium abrasive slurries
40-120% for lower density, lower abrasive slurries

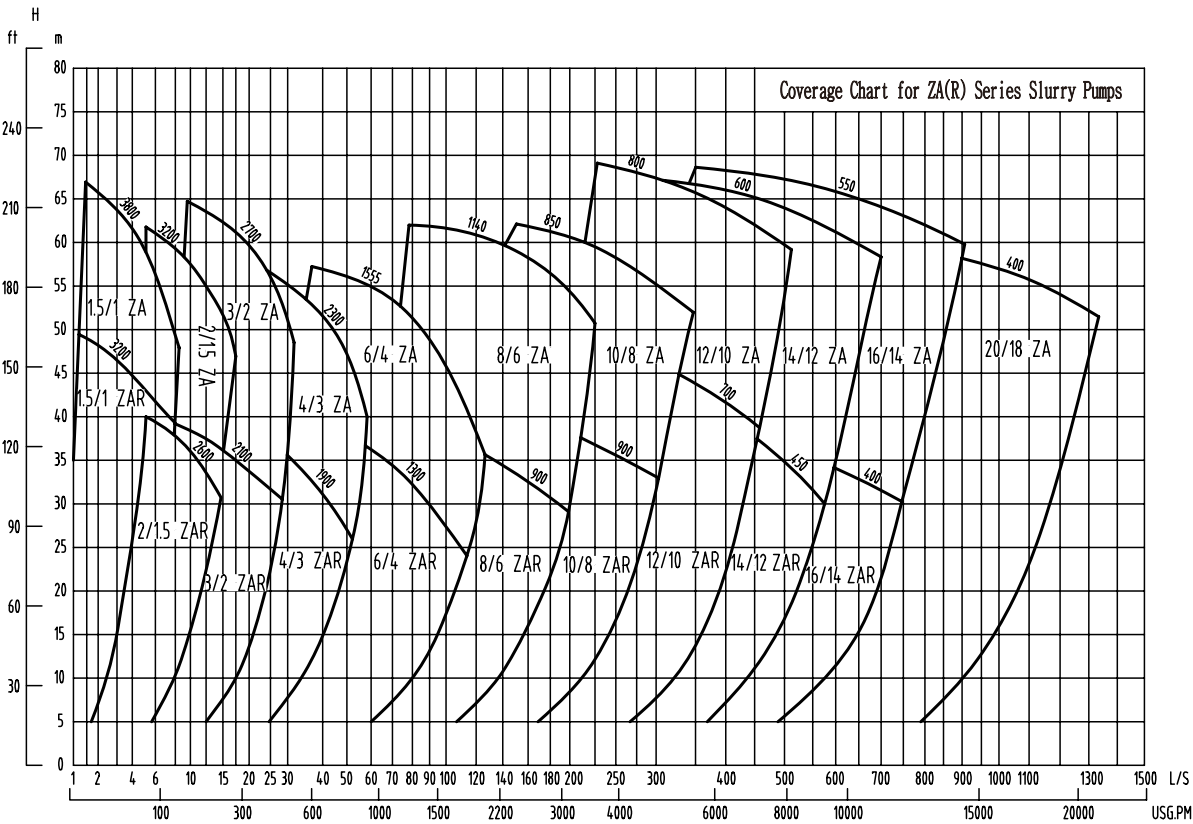
Pump Diameter: 1"~18"
Capacity to: 5400m³/h
Head to: 68m

Clear Water Performance

ZA(R) Clear Water Performance									
Type	Max.Motor Power Kw	Material		Clear Water Performance					
		Liner	Impeller	Capacity		Head H(m)	Speed n(r/min)	Eff. η%	NPSH (m)
				(m ³ /h)	(l/s)				
1.5/1B-ZA	15	M	M	12.6~28.8	3.5~8	6~68	1200~3800	40	2~4
		RU	RU	10.8~25.2	3~7	7~52	1400~3400	35	2~4
2/1.5B-ZA	15	M	M	32.4~72	9~20	6~58	1200~3200	45	3.5~8
		RU	RU	25.2~54	7~15	5.5~41	1000~2600	50	2.5~5
3/2C-ZA	30	M	M	39.6~86.4	11~24	12~64	1300~2700	55	4~6
		RU	RU	36~75.6	10~21	13~39	1300~2100	55	2~4
4/3C-ZA	30	RU	RU	79.2~180	22~50	5~34.5	800~1800	59	3~5
4/3D-ZA	60								
6/4D-ZA	60	M	M	162~360	45~100	12~56	800~1550	65	5~8
6/4E-ZA	120								
6/4D-ZA	60	RU	RU	144~324	40~90	12~45	800~1350	65	3~5
6/4E-ZA	120								
8/6E-ZA	120	M	M	360~828	100~230	10~61	500~1140	72	2~9
8/6R-ZA	300								
8/6E-ZA	120	RU	RU	32~720	90~200	7~49	400~1000	65	5~10
8/6R-ZA	300								
10/8ST-ZA	560	M	M	612~1368	170~380	11~61	400~850	71	4~10
		RU	RU	540~1188	150~330	12~50	400~750	75	4~12
12/10ST-ZA	560	M	M	936~1980	260~550	7~68	300~800	82	6
		RU	RU	720~1620	200~450	7~45	300~650	80	2.5~7.5
14/12ST-ZA	560	M	M	1260~2772	350~770	13~63	300~600	77	3~10
		RU	RU	1152~2520	320~700	13~44	300~500	79	3~8
16/14TU-ZA	1200	M	M	1368~3060	380~850	11~63	250~550	79	4~10
		RU	RU	1260~2880	350~800	12~42.5	250~450	80	4~8
20/18TU-ZA	1200	M	M	2520~5400	700~1500	13~57	200~400	85	5~10
		RU	RU	1800~4680	500~1300	13~44	200~350	80	2~7

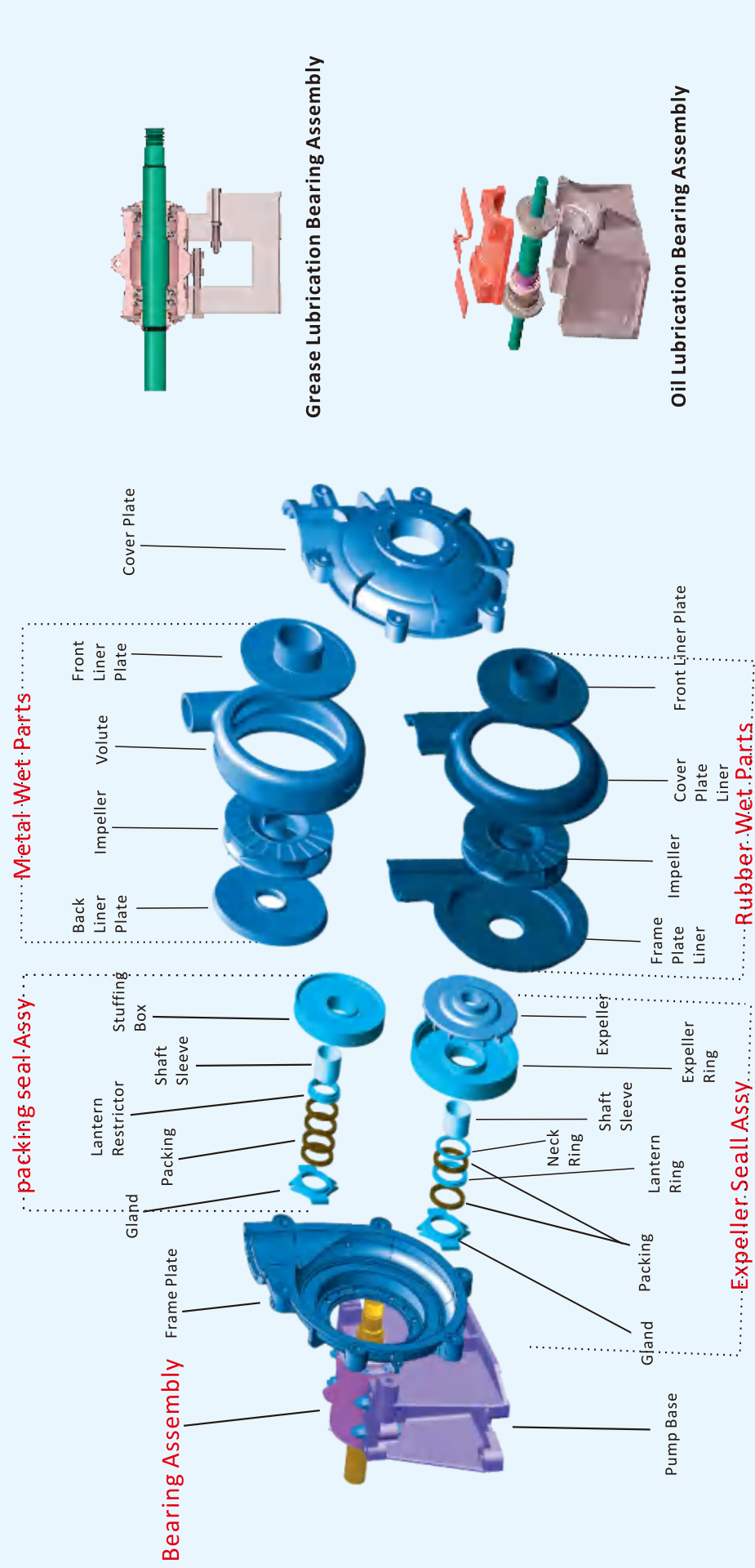
1.Capacity range recommended 50%Q'≤Q≤110%Q', (Q'≈Capacity at Max. eff. point) 2. M means alloy wear-resistant material , R means rubber

Selection Chart



Structural features

- ▲ A large diameter with a short overhang ensure the rigidity of shaft, suitable for high power condition.
- ▲ Hardened stainless steel shaft sleeve with 'O' ring seals at both ends. A slip fit allows the sleeve protects the shaft from the wear and corrosion.
- ▲ The deputy vanes in both former and rear cover of Impeller relieve seal pressure and minimize recirculation.
- ▲ Casing is made of ductile iron, ribs help casing to stand high pressure.
- ▲ The wet parts are made of high-chrom alloy or rubber, having the abrasion-resist, corrosion-resist and impact erosion-resist properties, improved the service life of pump.
- ▲ The metal wet parts and rubber wet parts are interchangeable or mixed use, suited different working conditions.
- ▲ Impeller adopt the method of wide flow and vane concave to improve flow and corrosion resistance, prolong service life.
- ▲ The shaft seal may be adoptable of packing seal, expeller seal and mechanical seal to fit different working conditions.
- ▲ The discharge branch can be positioned at intervals of 45 degrees by request and oriented to any eight positions to suit installations and applications.
- ▲ The bearing assembly have the grease lubrication and oil lubrication are optional depend on the usage.
- ▲ Adopted the oil lubrication bearing assembly can effectively lower the high operating temperature and reduce bearing fault.
- ▲ The grease lubrication bearing assembly easy installation and adjustment, simple structure and easy to maintain and perform reliably.



Seal Options

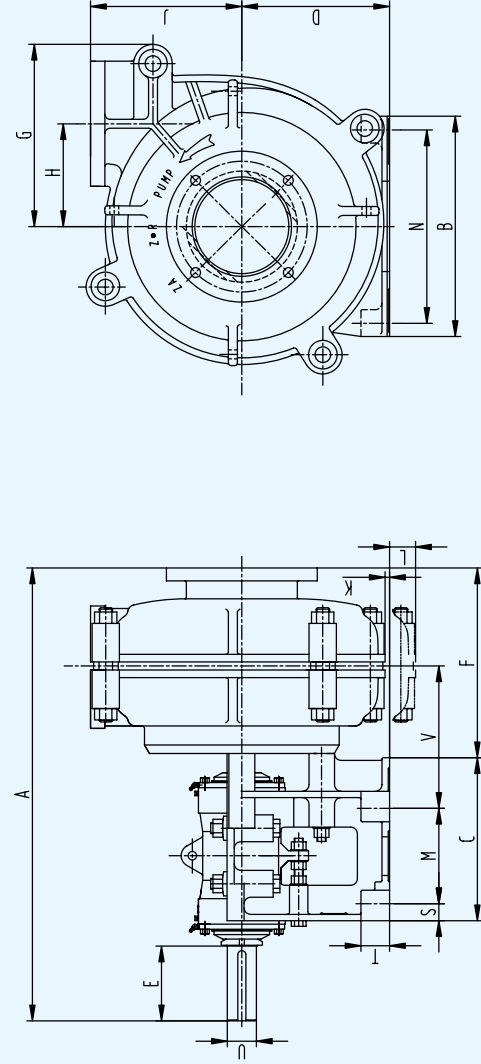
Gland seal – Most popular type of seal. Clean water at a certain pressure being injected into the packing through the lantern restrictor, preventing leakage from casing. Simple structure, easy maintenance and low cost, suitable for where expeller seal unsuitable.

Expeller seal – The expeller generate a reverse centrifugal force to prevents the leakage. It can be used for single-stage pump or the first pump of multiple pumps in series when the positive pressure at suction side is larger than that at discharge side by no more than 10%. No gland water is needed, the slurry will not be diluted and the sealing effect is reliable, used in where dilution of slurry is not allowed.

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



OUTLINE DIMENSION



Type	A	B	C	D	U	E	F	G	H	J	K	L	M	N	S	T	V	Suction flange				Discharge flange				The anchor hole	Weight(kg)	
																		O.D	I.D	P.C.D	HOLES	O.D	I.D	P.C.D	HOLES		Metal	Rubber
1.5/1B-ZA	583	295	248	197	28	79	206	181	98	171	46	—	143	254	24	38	181	152	38	114	4-Φ16	165	25	127	4-Φ16	4-Φ14	91	77
2/1.5B-ZA	592	295	248	197	28	79	217	205	114	184	33	—	143	254	24	38	184	184	51	146	4-Φ19	165	38	127	4-Φ19	4-Φ14	104	118
3/2C-ZA	768	406	311	254	42	121	281	238	138	210	71	—	175	356	32	48	233	216	76	178	4-Φ19	184	51	146	4-Φ19	4-Φ19	191	154
4/3C-ZA	843	406	311	254	42	121	354	292	149	262	24	—	175	356	32	48	270	279	102	235	4-Φ22	229	76	191	4-Φ22	4-Φ19	263	236
4/3D-ZA	943	492	364	330	65	164	353	292	149	262	100	—	213	432	38	64	279	279	102	235	4-Φ22	229	76	191	4-Φ22	4-Φ22	363	290
6/4D-ZA	1021	492	364	330	65	164	421	406	229	338	11	—	213	432	38	64	318	337	152	292	4-Φ22	279	102	235	4-Φ22	4-Φ22	626	454
6/4E-ZA	1178	622	448	457	80	222	433	406	229	338	138	—	257	546	54	76	351	337	152	292	4-Φ22	279	102	235	4-Φ22	4-Φ29	728	635
8/6E-ZA	1302	622	448	457	80	222	557	551	318	460	—	62	257	546	54	76	402	406	203	356	8-Φ21	368	152	324	8-Φ21	4-Φ29	1473	982
8/6R-ZA	1360	680	590	350	85	215	554	551	318	460	—	170	490	560	50	70	312	406	203	356	8-Φ22	368	152	324	8-Φ22	4-Φ28	1655	1164
10/8ST-ZA	1748	1150	780	650	120	280	692	673	419	635	27	—	620	900	80	125	439	502	254	445	8-Φ29	432	203	375	8-Φ29	4-Φ48	3750	3130
12/10ST-ZA	1816	1150	780	650	120	280	762	755	464	674	—	65	620	900	80	125	461	527	305	470	12-Φ25	527	254	470	12-Φ25	4-Φ48	4318	3357
14/12ST-ZA	1873	1150	780	650	120	280	812	937	629	832	—	224	620	900	80	125	486	584	365	521	12-Φ25	552	305	495	12-Φ25	4-Φ48	6409	4672
16/14TU-ZA	2320	1460	1050	900	150	350	953	1048	660	889	—	84	860	1200	95	150	597	705	406	641	12-Φ35	673	356	610	12-Φ29	4-Φ79	10000	7867
20/18TU-ZA	2467	1460	1050	900	150	350	1100	1414	940	1230	—	417	860	1200	95	150	615	900	508	800	12-Φ42	900	460	800	12-Φ42	4-Φ79	17840	12750

All dimensions are in millimeter (mm)



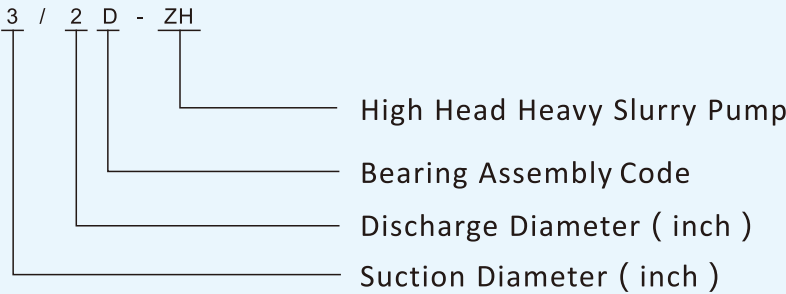
ZH High Head Heavy Slurry Pump

Type ZH pumps are single-stage, single-suction, cantilevered, double casing, horizontal, centrifugal slurry pump. They are designed for conveying strong abrasive slurries in the mining, metallurgical, power, chemical, papermaking building material industry etc. This series of pump is suitable for low flow, high concentration and high head working condition, especially suitable for the high head working condition that single-stage pump can't delievery.

40-80% for higher density, strong abrasive slurries
40-100% for medium density, medium abrasive slurries
40-120% for lower density, lower abrasive slurries

Pump Diameter: 1"~6"
Capacity to: 1152m ³ /h
Head to: 98m

Model Meaning



Clear Water Performance

ZH Clear Water Performance									
Type	Max.Motor Power Kw	Material		Clear Water Performance					
		Liner	Impeller	Capacity Q		Head H(m)	Speed n(r/min)	Eff. η%	NPSH(m)
				(m ³ /h)	(l/s)				
1.5/1C-ZH	30	M	M	16.2~34.2	4.5~9.5	25~92	1400~2200	20	2~5.5
3/2D-ZH	60	M	M	68.4~136.8	19~38	25~87	850~1400	47	3~7.5
4/3E-ZH	120	M	M	126~252	35~70	12~97	600~1400	50	2~5
6/4F-ZH	560	M	M	324~720	90~200	30~98	600~1000	64	3~8
8/6T-ZH	1200	M	M	576~1152	160~320	32~95	450~725	65	6~10

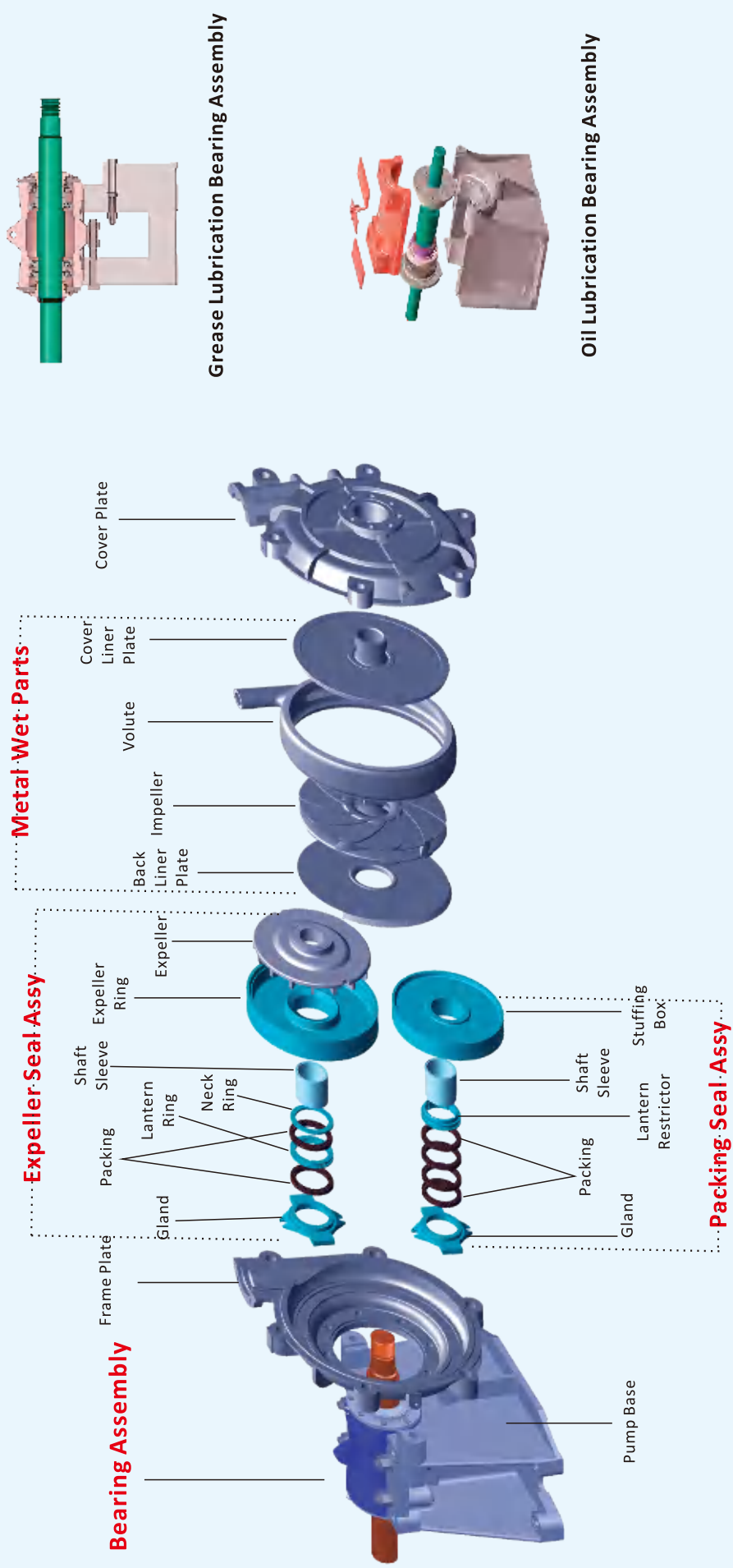
M means alloy wear-resistant material

Selection Chart



Structural features

- ▲ A large diameter with a short overhang ensure the rigidity of shaft, suitable for high power condition.
- ▲ Hardened stainless steel shaft sleeve with 'O' ring seals at both ends. A slip fit allows the sleeve protects the shaft from the wear and corrosion.
- ▲ The deputy vanes in both former and rear cover of Impeller relieve seal pressure and minimize recirculation.
- ▲ Casing is made of ductile iron, ribs help casing to stand high pressure.
- ▲ The wet parts are made of high-chrom alloy or rubber, to resist wear, corrosion, erosion or impact, parts made of metal or rubber are interchangeable.
- ▲ The shaft seal may be adoptable of packing seal, expeller seal and mechanical seal to fit different working conditions.
- ▲ The discharge branch can be positioned at intervals of 45 degrees by request and oriented to any eight positions to suit installations and applications.
- ▲ The bearing assembly have the grease lubrication and oil lubrication are optional depend on the usage.
- ▲ Adopted the oil lubrication bearing assembly can effectively lower the high operating temperature and reduce bearing fault.
- ▲ The grease lubrication bearing assembly easy installation and adjustment, simple structure and easy to maintain and perform reliably.



Grease Lubrication Bearing Assembly

Oil Lubrication Bearing Assembly

Seal Options

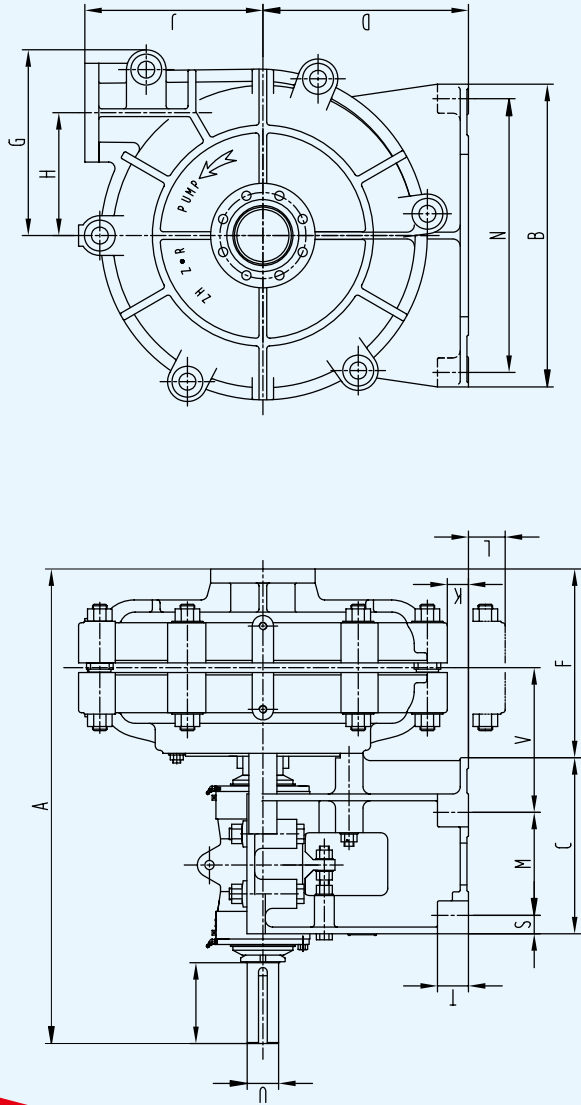
Gland seal – Most popular type of seal. Clean water at a certain pressure being injected into the packing through the lantern restrictor, preventing leakage from casing. Simple structure, easy maintenance and low cost, suitable for where expeller seal is unsuitable.

Expeller seal – The expeller generate a reverse centrifugal force to prevents the leakage. It can be used for single-stage pump or the first pump of multiple pumps in series when the positive pressure at suction side is larger than that at discharge side by no more than 10%. No gland water is needed, the slurry will not be diluted and the sealing effect is reliable, used in where dilution of slurry is not allowed.

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



OUTLINE DIMENSION



Type	A	B	C	D	U	E	F	G	H	J	K	L	M	N	S	T	V	Suction flange			Discharge flange			The anchor hole	Weight(kg)		
																		O.D	I.D	H.OLES	P.C.D	O.D	I.D			H.OLES	P.C.D
1.5/1C-ZH	759	406	311	254	42	121	306	270	194	254	/	11	175	356	32	48	252	152	38	4-ø17	114	152	25	4-ø17	114	4-ø19	318
3/2D-ZH	986	492	364	330	65	164	389	384	254	368	/	51	213	432	38	64	298	216	76	8-ø19	178	203	51	4-ø19	165	4-ø22	750
4/3E-ZH	1240	622	448	457	80	222	492	492	330	432	2	/	257	546	54	76	381	254	102	8-ø19	210	254	76	8-ø19	210	4-ø29	1250
6/4F-ZH	1556	857	635	610	100	279	584	616	413	546	26	/	349	762	95	98	470	337	152	8-ø22	292	305	102	8-ø22	260	4-ø35	2531
8/6T-ZH	2275	1150	1040	650	150	350	852	835	584	813	/	160	880	900	80	125	538	432	203	8-ø29	375	432	152	8-ø29	375	4-ø48	6586
6S-ZH	1700	920	780	450	120	280	622	625	415	615	/	155	640	760	70	90	382	380	152	8-ø27	320	420	150	8-ø27	360	4-ø35	3450

All dimensions are in millimeter (mm)

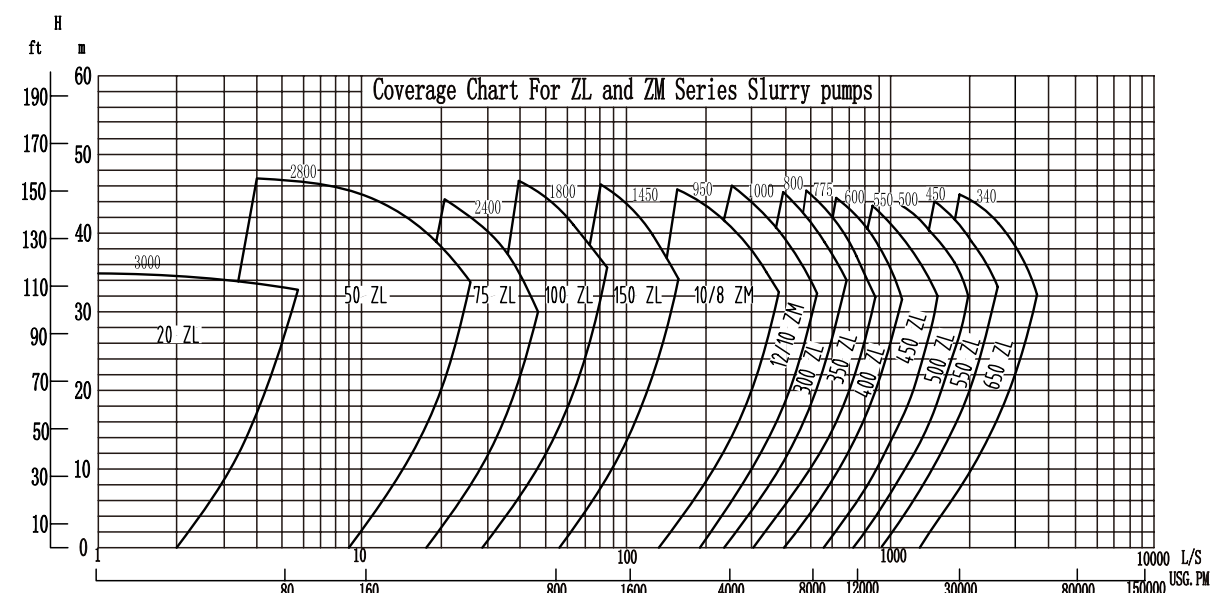


ZL(R) Light Slurry pump

Type ZL(R) pumps are single-stage, single-suction, cantilevered, double casing, horizontal, centrifugal slurry pump. They are designed for conveying medium abrasive slurries in the metallurgical, power, chemical, mining, papermaking building material industry ect. This series of pump is suitable for high flow, low concentration and low head working condition, when low speed can deliver strong abrasion high concentration slurry. Compared with the same caliber of ZA type slurry pump, small size, light weight and high cost performance.

Pump Diameter : 20mm~650mm
Capacity to : 10260m³/hr
Head to : 63m

Selection Chart



Clear Water Performance

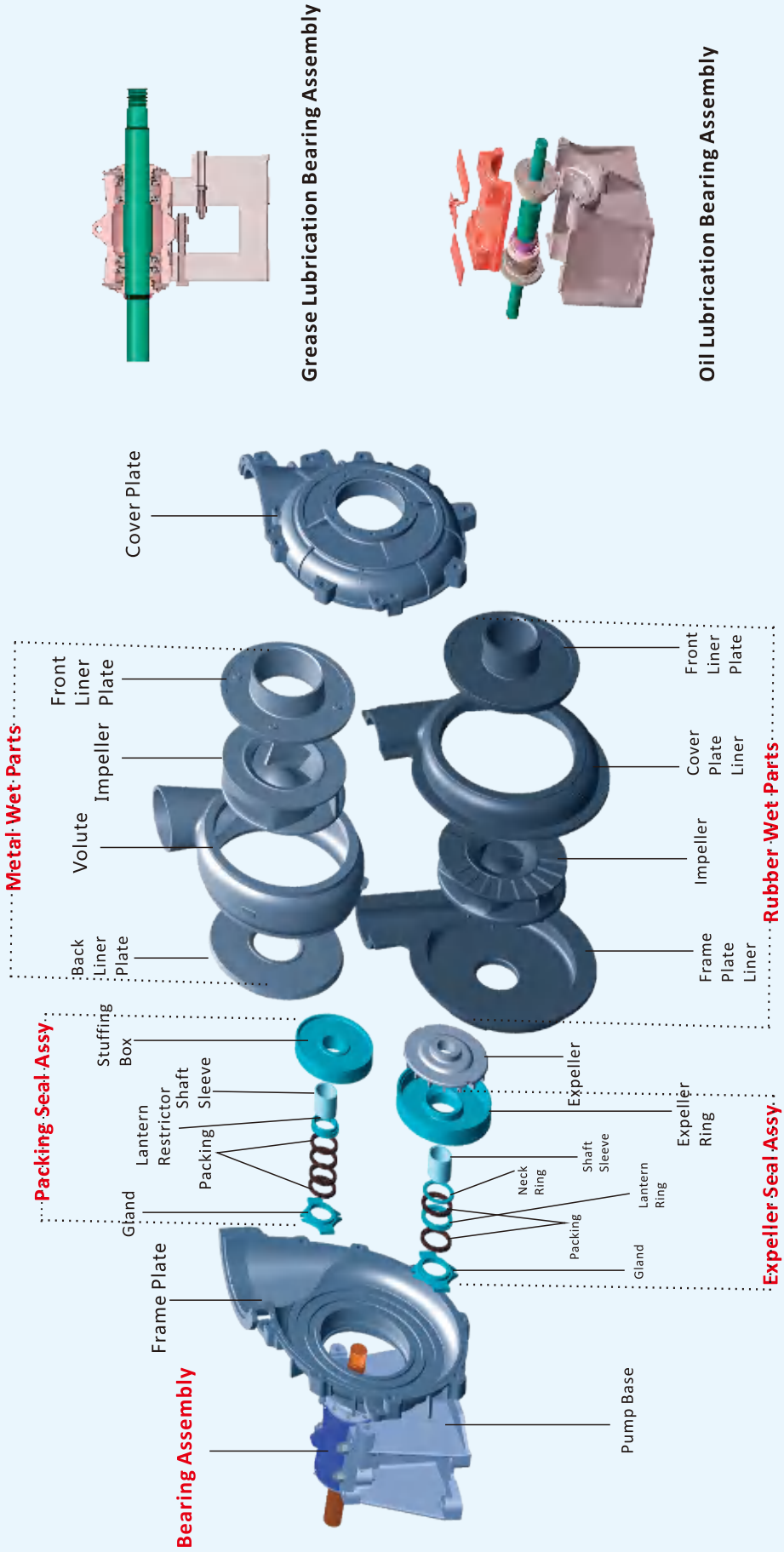
ZL(R) Clear Water Performance

Type	Max.Motor Power Kw	Material		Clear Water Performance					
		Liner	Impeller	Capacity Q		Head H(m)	Speed n(r/min)	Eff. η%	NPSH (m)
20A-ZL	7.5	M	M	2.34~10.8	0.65~3	6~37	1400~3000	39	3~5
20A-ZLR		RU	RU	2.69~9	0.6~2.5	7~32	1600~3000	33	
50B-ZL	15	M	M	16.2~76	4.5~20	9~44	1400~2800	62	3~5
50B-ZLR		RU	RU	12.6~60	3.5~17.6	6~38	1200~2600	48	
75C-ZL	30	M	M	18~151	5~42	4~45	900~2400	57	3~6
75C-ZLR		RU	RU	25~144	7~40	9~43	1000~2200	60	3~5
100D-ZL	60	M	M	50~252	14~70	7~46	800~1800	60	2~3.5
100D-ZLR		RU	RU	61~252	17~70	8~38	800~1600	65	2~5
150E-ZL	120	M	M	115~486	32~135	12~51.5	800~1500	65	2~6
150E-ZLR		RU	RU	137~486	38~135	10~36.5	800~1300		2.5~5.5
200E-ZL	120	M	M	446~1325	124~368	14~63	600~1100	73	3~14
10/8E-ZM		RU	RU	277~1088	27~322	11~43	500~900	79	3~10
200E-ZLR	260	M	M	468~1386	130~385	9~47	500~1000	73	3~10
12/10F-ZM		RU	RU	522~1278	140~355	10~39	500~900	73	5~10
250F-ZL	560	M	M	468~2538	130~705	8~60	400~950	79	2~10
250F-ZLR		RU	RU	432~1900	120~528	7~41	400~800	81	3~8
300S-ZL	560	M	M	650~2800	180~780	10~59	400~840	81	3~10
300S-ZLR		RU	RU	720~2844	200~790	10~41	400~700	86	3~7
400ST-ZLR	560	RU	RU	756~3312	210~920	7~37.5	300~600	85	2~8
400ST-ZL		M	M	720~3312	200~920	7~51	300~700	80	2~10
450ST-ZLR	560	RU	RU	1080~4356	300~1210	9~40	300~550	87	3~10
450ST-ZR		M	M	1008~4356	280~1210	9~48	300~600	80	2~9
500T-ZL	1200	M	M	1440~5580	400~1550	8~51	250~550	86	3~10
500T-ZLR		RU	RU	1152~5112	320~1420	8~42	250~500	87	3~10
550TU-ZL	1200	M	M	1980~7920	560~2200	10~50	250~475	86	4~10
550TU-ZLR		RU	RU	2160~6660	600~1850	13~43	250~425	88	3~10
650TU-ZL	1200	M	M	3600~10260	1000~2850	10~57	200~425	86	4~10
650TU-ZLR		RU	RU	2520~9108	700~2530	10~39	200~350	86	2~8

1.Capacity range recommended 50%Q'≤Q≤110%Q', (Q'≈Capacity at Max. eff. point) 2. M means alloy wear-resistant material , R means rubber

Structural features

- ▲ A large diameter with a short overhang ensure the rigidity of shaft, suitable for high power condition.
- ▲ Hardened stainless steel shaft sleeve with 'O' ring seals at both ends. A slip fit allows the sleeve protects the shaft from the wear and corrosion.
- ▲ The deputy vanes in both former and rear cover of Impeller relieve seal pressure and minimize recirculation.
- ▲ Casing is made of ductile iron, ribs help casing to stand high pressure.
- ▲ The wet parts are made of high-chrom alloy or rubber, having the abrasion-resist, corrosion-resist and impact erosion-resist properties, improved the service life of pump.
- ▲ The metal wet parts and rubber wet parts are interchangeable or mixed use, suited different working condition.
- ▲ Impeller adopt the method of wide flow and vane concave to improve flow and corrosion resistance, prolong service life.
- ▲ The shaft seal may be adoptable of packing seal, expeller seal and mechanical seal to fit different working conditions.
- ▲ The discharge branch can be positioned at intervals of 45 degrees by request and oriented to any eight positions to suit installations and applications.
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Seal Options

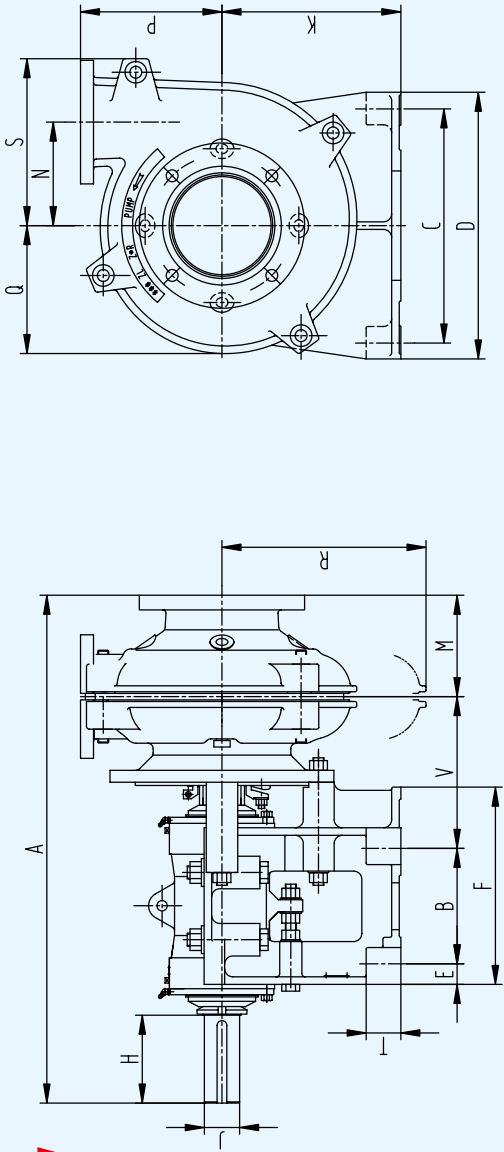
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Mechanical seal – Suitable for applications where no extra substance is allowed to mix with the fluid being pumped, such as chemical or food industry.

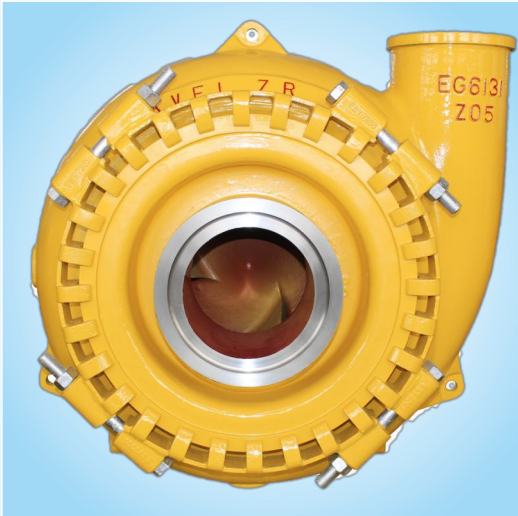


OUTLINE DIMENSION



Type	A	B	C	D	E	F	H	J	K	M	N	S	T	V	Q	R	P	Suction flange				Discharge Flange				The anchor hole		Weight(kg)	
																		O.D	I.D	P.C.D	H.OLES	O.D	I.D	P.C.D	H.OLES	Metal	Rubber		
20A-ZL(R)	461	159	241	286	25	210	57	20	145	90	86	144	28	89	128	124	128	128	114	25	83	4-Φ14	102	20	73	4-Φ14	4-Φ18	32	28
50B-ZL(R)	624	143	254	295	24	248	80	28	197	136	114	197	38	191	155	154	163	184	75	146	4-Φ19	165	50	127	4-Φ19	4-Φ14	58	46	
75C-ZL(R)	813	175	356	406	32	311	120	42	254	163	146	248	48	253	191	198	204	229	100	191	4-Φ19	203	75	165	4-Φ19	4-Φ19	163	144	
100D-ZL(R)	950	213	432	492	38	364	163	65	330	187	190	308	64	280	236	249	262	305	150	260	4-Φ22	229	100	191	4-Φ22	4-Φ22	343	309	
150E-ZL(R)	1218	257	546	622	54	448	220	80	457	237	248	403	76	376	303	324	324	368	200	324	8-Φ19	305	150	260	8-Φ19	4-Φ29	718	696	
10/8E-ZM(R)	1343	257	546	622	54	448	220	80	457	306	381	613	76	413	451	540	401	445	250	394	8-Φ22	382	200	337	8-Φ22	4-Φ29	1625	1164	
12/10F-ZM(R)	1549	349	762	857	95	636	280	100	610	324	438	696	98	451	476	603	470	552	305	495	8-Φ32	483	254	425	8-Φ32	4-Φ35	1998	1340	
300S-ZL(R)	1720	640	760	920	70	780	280	120	450	300	475	740	90	415	599	634	570	560	350	500	12-Φ26	530	300	470	12-Φ26	4-Φ35	2270	1802	
350S-ZL(R)	1776	640	760	920	70	780	280	120	450	340	530	825	90	425	643	691	620	640	400	580	12-Φ26	590	350	530	12-Φ26	4-Φ35	3630	2823	
400ST-ZL(R)	1840	620	900	1150	80	780	280	120	650	375	600	942	125	480	747	809	740	720	450	650	12-Φ33	685	400	615	12-Φ33	4-Φ48	4210	3212	
450ST-ZL(R)	1875	620	900	1150	80	780	280	120	650	400	660	1040	125	500	814	872	800	770	500	700	12-Φ33	740	450	670	12-Φ33	4-Φ48	5596	4211	
500T-ZL(R)	2291	880	900	1150	80	1040	350	150	650	437	780	1251	125	492	1013	1112	975	875	550	780	12-Φ39	850	500	750	12-Φ39	4-Φ48	8172	6356	
550TU-ZL(R)	2400	860	1200	1460	95	1050	350	150	900	625	860	1313	150	625	1055	1142	975	975	650	880	12-Φ39	900	550	800	12-Φ39	4-Φ79	10900	8263	
650TU-ZL(R)	2517	860	1200	1460	95	1050	350	150	900	641	1020	1553	150	641	1248	1360	1175	1175	800	1092	12-Φ55	1050	650	950	12-Φ45	4-Φ79	18780	13915	

All dimensions are in millimeter (mm)

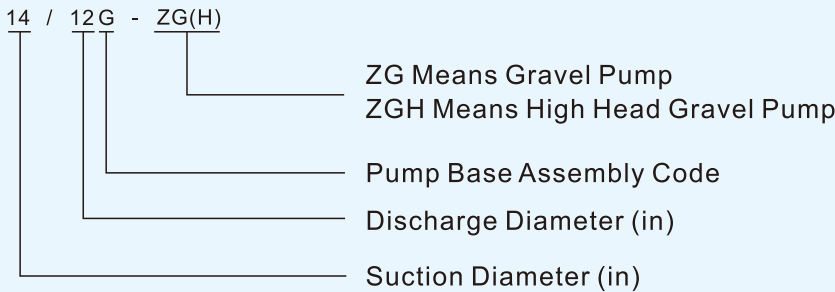


ZG(H) Gravel Slurry Pump

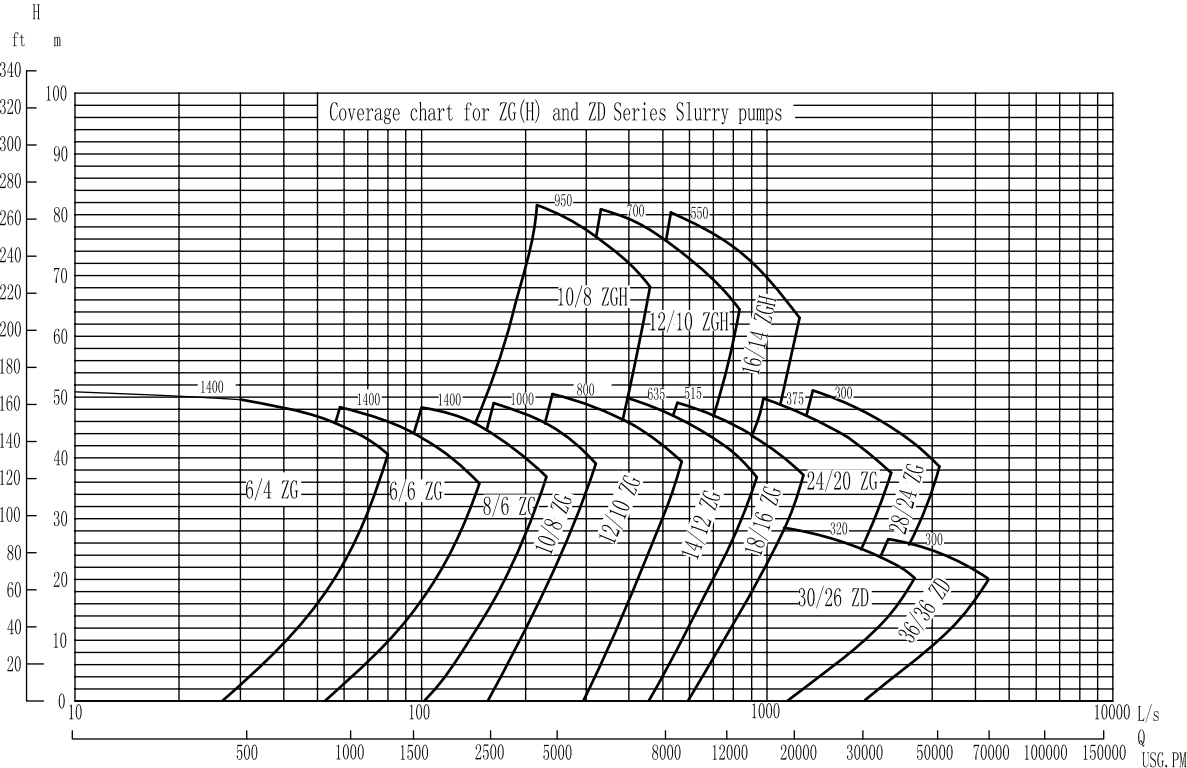
Type ZG(H) pumps are single-stage, single-suction, cantilevered, horizontal, centrifugal slurry pump. They are designed for continuously handling the most difficult higher abrasive slurries which contain too big solids to be pumped by common pumps. They are suitable for delivering slurries in mining, explosive sludge in metal melting, dredging in dredger and course of rivers, and other filed. This series of pump especially suitable for the high flow, high concentration and high head working condition, good performance of NPSH and high abrasion- resistant, can be widely used in high temperature and strong abrasive slurry transportation.

Pump Diameter: 4"~20"
Capacity to: 5600m ³ /hr
Head to: 78m

Model Meaning



Selection Chart



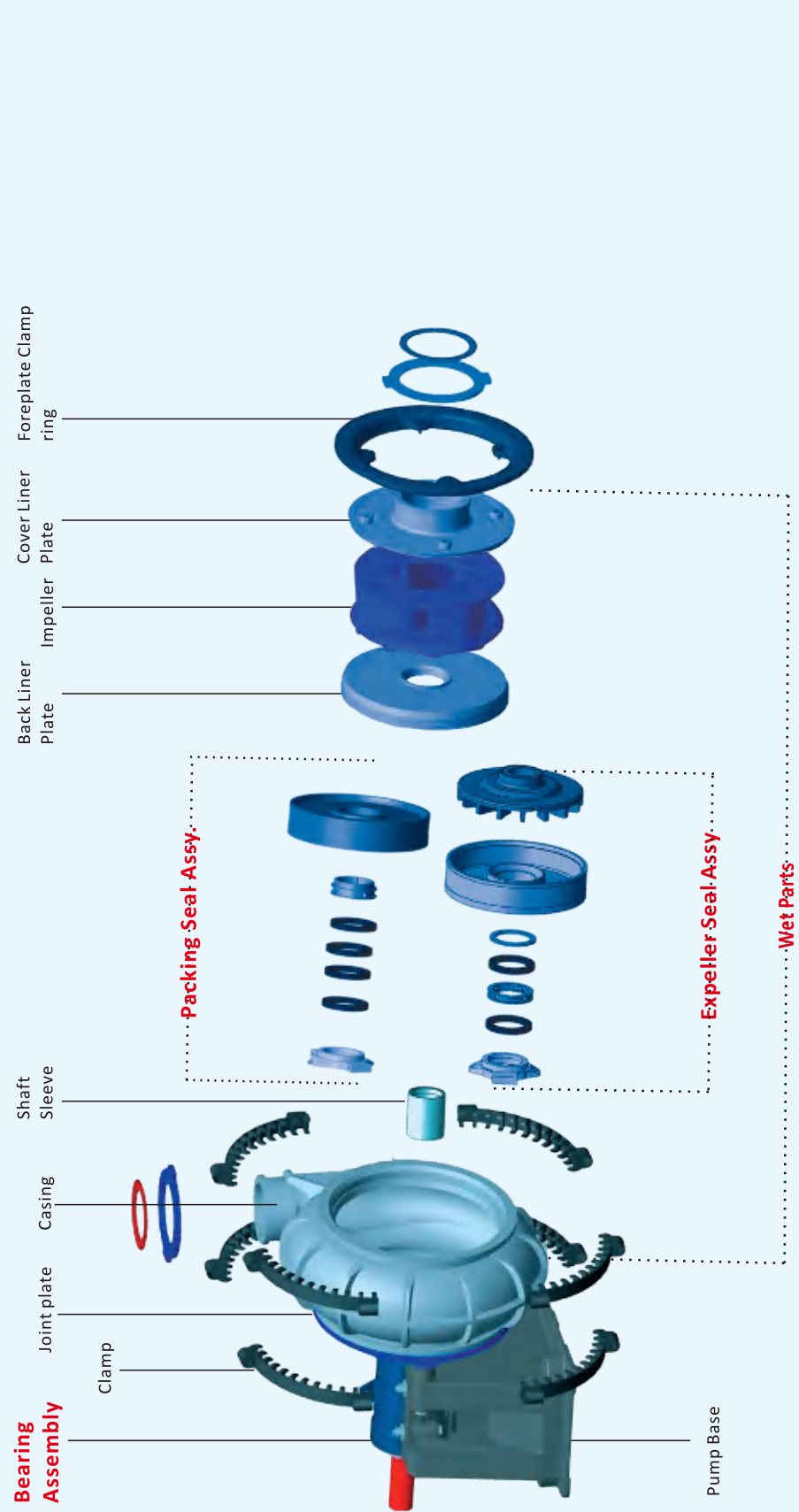
Clear Water Performance

ZG (H) Clear Water Performance							
Type	Max. Motor Power Kw	Capacity Q(m ³ /h)	Head H(m)	Speed n(r/min)	Eff. η%	NPSH (m)	Min. passage size (mm)
6/4D-ZG	60	300	45	1400	58	4	82
8/6E-ZG	120	500	37	1400	60	3.5	127
10/8F-ZG	260	950	43	1000	65	8	178
10/8S-ZG	560	950	43	1000	65	8	178
12/10G-ZG	600	1530	52	850	65	9	220
14/12G-ZG	600	1700	65	700	73	5	241
18/16T-ZG	1200	3300	40	500	72	6.3	254
20/18H-ZG	1400	4300	39	400	66	8	330
24/20H-ZG	1400	5600	57	400	70	7	380
8/6S-ZGH	560	880	78	1100	71	4.8	140
10/8S-ZGH	560	1300	70	950	72	5	180
12/10G-ZGH	600	2220	67	700	73	8.2	210
16/14TU-ZGH	1200	3050	59	500	72	6.5	230

1.Capacity range recommended 50%Q'≤Q≤110%Q', (Q'≈Capacity at Max. eff. point) 2. M means alloy wear-resistant material , R means rubber

structural features

- ▲ The bolt connect the high strength frame and cylinder bearing assembly are easy to installation and disassemble, and also easy to adjust the impeller clearance.
- ▲ The discharge direction of pump can be oriented in any direction, easy maintenance.
- ▲ Packing seal and expeller seal are optional according to the requirment.
- ▲ The wet-parts as casing, impeller, front/back liner are made of high chromium abrasive-resistant alloys that ensure the longlife.
- ▲ The design of this pump is single casing and wide wet-passage that ensure the pass of large particles, good performance of NPSH and high abrasion-resistant.



Seal Options

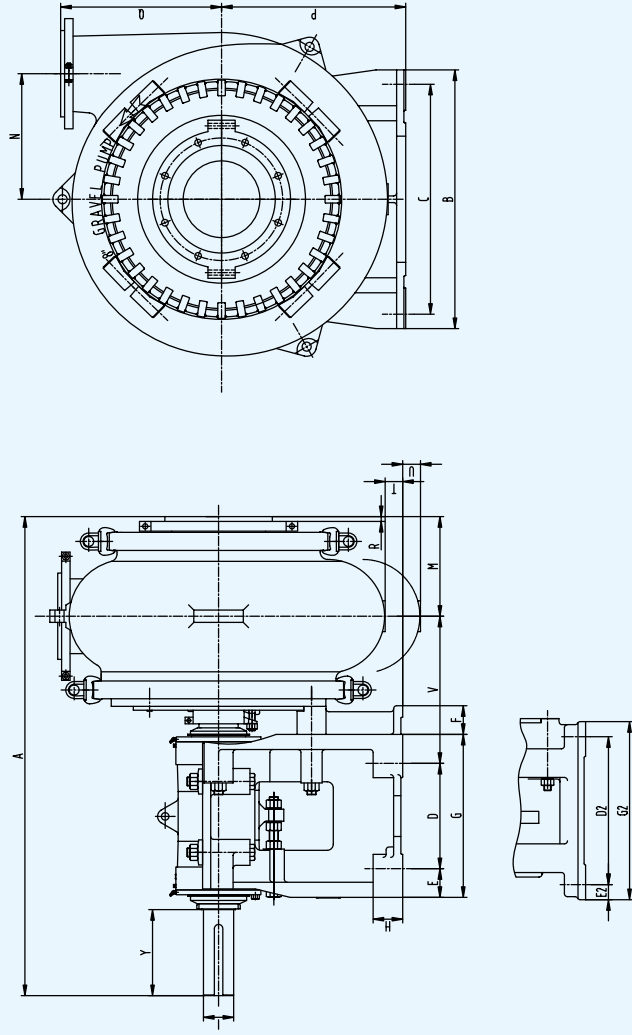
Gland seal – Most popular type of seal. Clean water at a certain pressure being injected into the packing through the lantern restrictor, preventing leakage from casing. simple structure, easy maintenance and low cost, suitable for where expeller seal is unsuitable.

Expeller seal – The expeller generates a reverse centrifugal force to prevents the leakage. It can be used for single-stage pump or the first pump of multiple pumps in series when the positive pressure at suction side is larger than that at discharge side by no more than 10%. No gland water is needed, the slurry will not be diluted and the sealing effect is reliable, used in where dilution of slurry is not allowed.

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



OUTLINE DIMENSION



Type	A	B	C	D	E	F	G	E2	D2	G2	H	V	Y	I	M	N	P	Q	R	T	U	Suction flange				Discharge flange				The anchor hole	Weight (kg)
																						O.D	I.D	HOLES	P.C.D	O.D	I.D	HOLES	P.C.D		
6/4D-ZG	1006	492	432	213	38	75	289	/	/	/	54	330	164	65	203	260	330	343	33	16	/	305	152	8-ø19	260	254	102	4-ø19	210	4-ø22	460
8/6E-ZG	1286	622	546	257	54	83	365	/	/	/	75	392	222	80	295	352	457	405	29	54	/	368	203	8-ø19	324	305	152	8-ø19	260	4-ø29	1120
10/8F-ZG	1591	857	762	349	45	45	540	/	/	/	98	487	281	100	330	416	610	533	48	60	/	457	254	8-ø22	406	368	203	8-ø19	324	4-ø35	2250
10/8S-ZG	1720	920	760	/	/	/	/	70	640	780	90	378	280	120	330	416	450	533	48	/	102	457	254	8-ø22	406	368	203	8-ø19	324	4-ø35	2285
12/10G-ZG	2010	1207	851	/	/	/	/	64	749	876	152	473	356	140	368	522	851	665	48	238	/	527	305	12-ø22	470	457	254	8-ø22	406	4-ø41	4450
14/12G-ZG	2096	1207	851	/	/	/	/	64	749	876	152	502	356	140	424	610	851	787	48	121	/	552	356	8-ø22	495	527	305	12-ø22	470	4-ø41	5400
18/16T-ZG	2320	1150	900	/	/	/	/	80	880	1041	125	607	350	150	431	692	650	914	58	/	274	705	457	16-ø25	641	640	406	12-ø25	584	4-ø48	11370
10/8S-ZGH	1774	920	760	/	/	/	/	70	640	780	90	455	280	120	330	475	450	620	48	/	206	457	254	8-ø22	406	368	203	8-ø19	324	4-ø35	3188
12/10G-ZGH	2062	1219	851	/	/	/	/	64	749	876	152	496	356	140	400	605	851	800	60	40	/	533	305	8-ø29	476	483	254	8-ø25	432	4-ø41	4638
16/14TU-ZGH	2367	1460	1200	/	/	/	/	95	860	1050	150	649	350	150	448	765	900	1008	72	/	120	650	405	12-ø28	600	600	356	12-ø28	540	4-ø79	12247

All dimensions are in millimeter (mm)

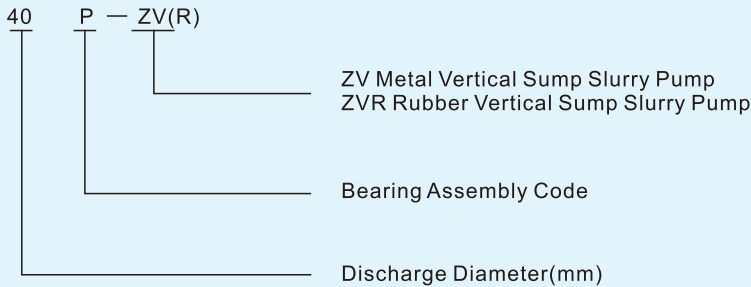


ZV(R) Sump Slurry Pump

Type ZV(R) pumps are single-stage, single-suction, cantilevered, vertical, centrifugal slurry pump. They are designed for delivering abrasive, large particle and high density slurries. These pumps have no need of any shaft seal and sealing water, they can also be operated normally for insufficient suction duties, especially suitable for used as all kinds of pit pump in mines and coal preparation system.

Pump Diameter:40mm~250mm
Capacity to:1089m ³ /h
Head to:38m

Model Meaning

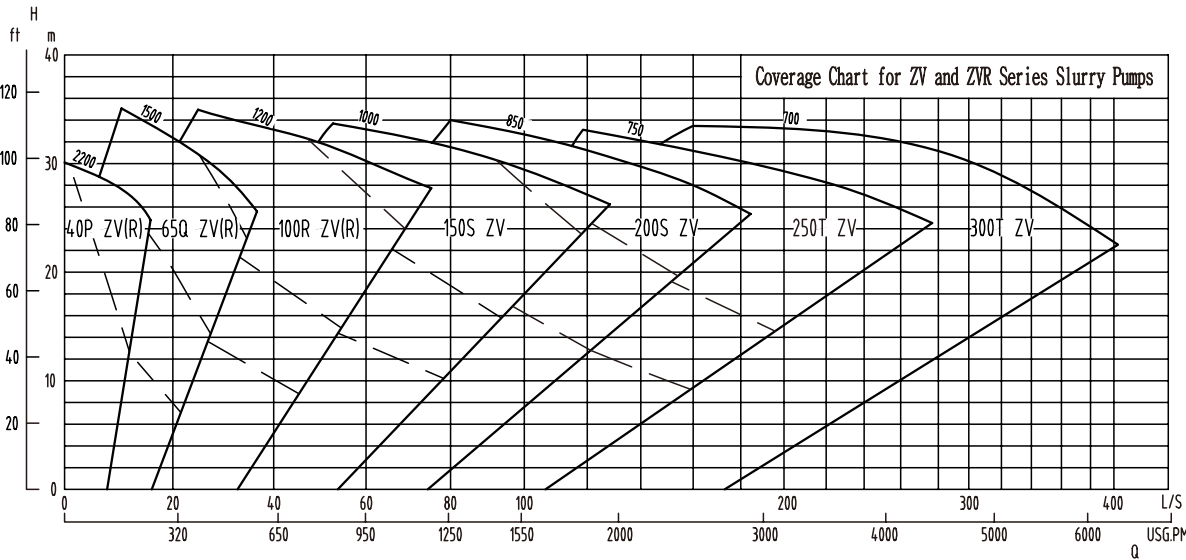


Clear Water Performance

ZV(R) Clear Water Performance								
Type	Max.Motor Power Kw	Material		Clear Water Performance				
		Liner	Impeller	Capacity Q		NPSH(m)	Speed n(r/min)	Eff. η%
				(m ³ /h)	(l/s)			
40P-ZV	15	M	M	19.44~43.2	5.4~12	3.5~28	1000~2200	38
40P-ZVR		RU	RU	17.28~39.6	4.8~11	3~24.5	1000~2200	40
65Q-ZV	30	M	M	23.4~87.12	6.75~24.2	5.5~31.5	700~1500	51
65Q-ZVR		RU	RU	22.5~105	6.25~29.15	5.5~27	700~1500	51
100R-ZV	75	M	M	54~289	15~80.3	5~37	500~1200	56
100R-ZVR		RU	RU	64.8~285	18~79.2	7.5~38	600~1200	62
150S-ZV	110	M	M	108~479.16	30~133.1	8.5~37	500~1000	55
150S-ZVR		RU	RU	108~479.16	30~133.1	8.5~35.5	500~1000	56
200S-ZV	200	M	M	189~891	52.5~247.5	6.5~37	400~850	64
250T-ZV		M	M	261~1089	72.5~302.5	7.5~33.5	400~750	60

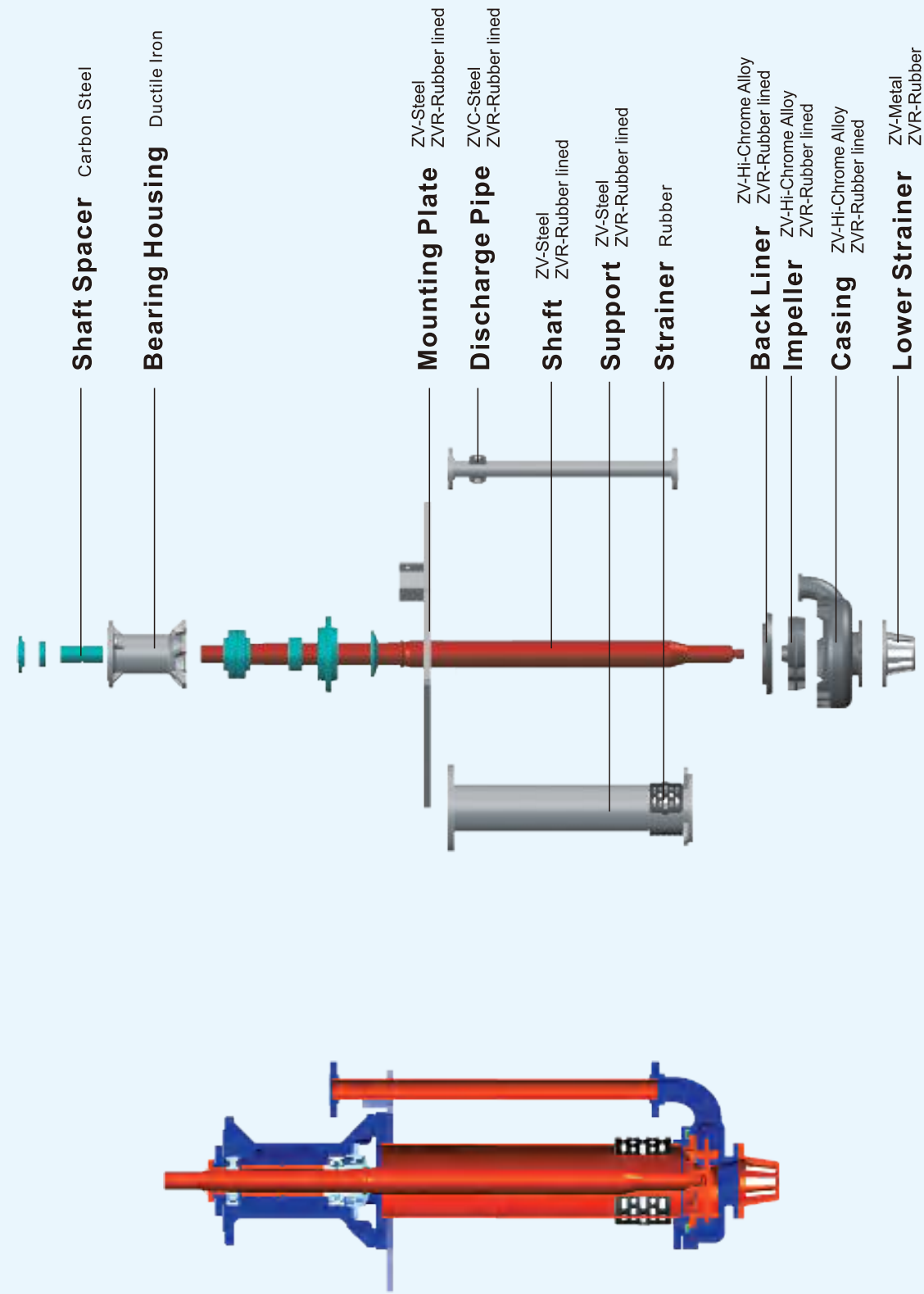
M means alloy wear-resistant material , R means rubber

Selection Chart

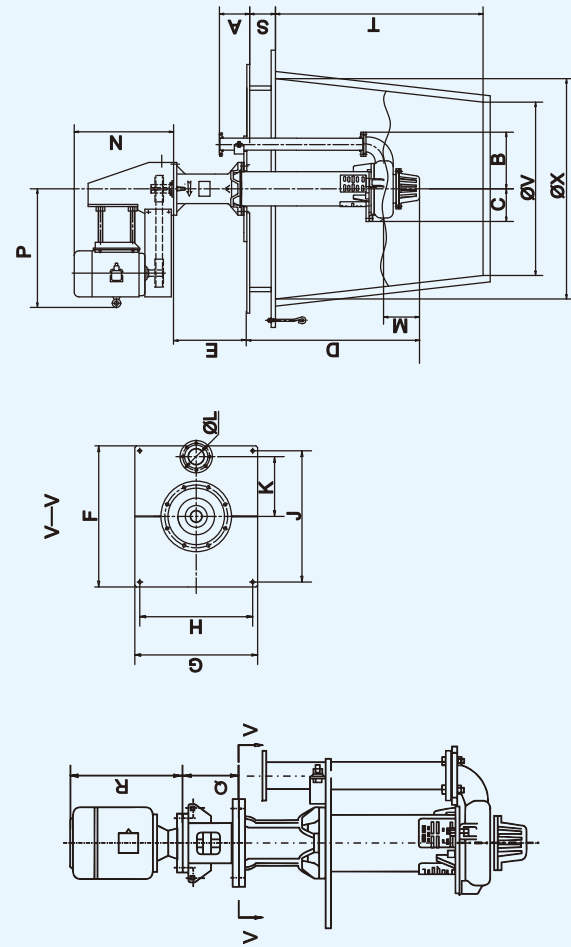


Structural features

- ▲ The wet-parts as casing and impeller are made of white high chromium abrasive-resistant casing, with the abrasion - resistant, corrosion- resistant and erosion-resistant characteristics.
- ▲ All parts of type ZVR and type ZV pump immersed in liquid are lined with rubber outer liner, suited to transport abrasive slurry.
- ▲ No shaft seal structure, either can fixed in the beam of gallery or be used suspension when pump head immersed in liquid working.
- ▲ The bearing assembly adopt grease lubrication that easy to maintenance.
- ▲ Install suction pipe below the pump suction, so as to suction the high concentration slurries under the tunnels.
- ▲ Suited for the indirect working condition and wider application range.
- ▲ Through adjusting the thickness of gasket that between bearing house and the support to realize the position adjustment of impeller, convenient operation.
- ▲ A double suction impeller, effectively reduce the axial load.



OUTLINE
DIMENSION



Type	A	B	C	D	E	F	G	H	J	K	ØL	M	Max.dimension				Weight (kg)	Min.size of the pit				Volume (m³)
													N	P	Q	R		S	T	ØV	ØX	
40P-ZV	137	286	154	900* 1200	380	500	500	450	450	205	127	174	733	675	248	629	285	280	695	550	1000	0.34
40P-ZVR	140	265	175		380													250				
65Q-ZV	227	399	231	900 1200* 1500	492	680	680	620	620	285	178	265	898	794	290	681	432	350	925	800	1400	0.90
65Q-ZVR	230	380	260		498													386				
100R-ZV	260	515	317	1200 1500* 1800	662	1000	870	800	930	400	229	393	1141	1020	416	960	867	350	1225	1000	1750	1.86
100R-ZVR	266	535	332		668													772				
150S-ZV	390	640	375	1500 1800* 2100	875	1100	1100	1030	1030	500	280	475	1311	1200	476	1011	1737	350	1525	1250	2150	3.54
150S-ZVR	395	674	400		883													1520				
200S-ZV	450	772	440	1500 1800* 2100	878	1300	1200	1100	1200	600	343	550	1313	1300	476	1011	3087	350	1525	1500	2400	4.76
250T-ZV	500	903	470	1800 2100* 2400	1000	1750	1450	1350	1650	700	406	685	1572	1750	561	1246	4086	400	1775	1700	2700	6.68

All dimensionsts are in millimeter (mm)

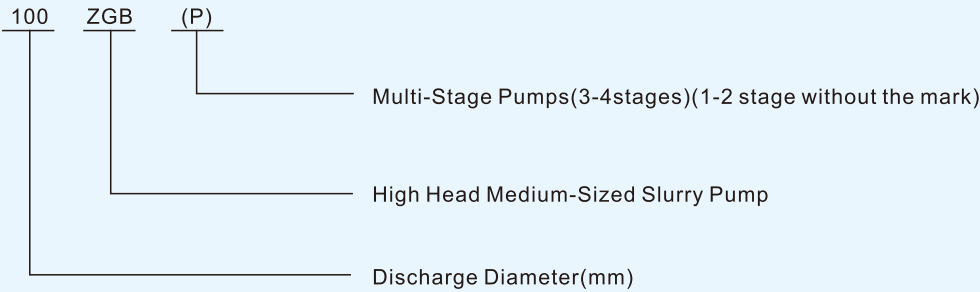


ZGB Medium Slurry Pump

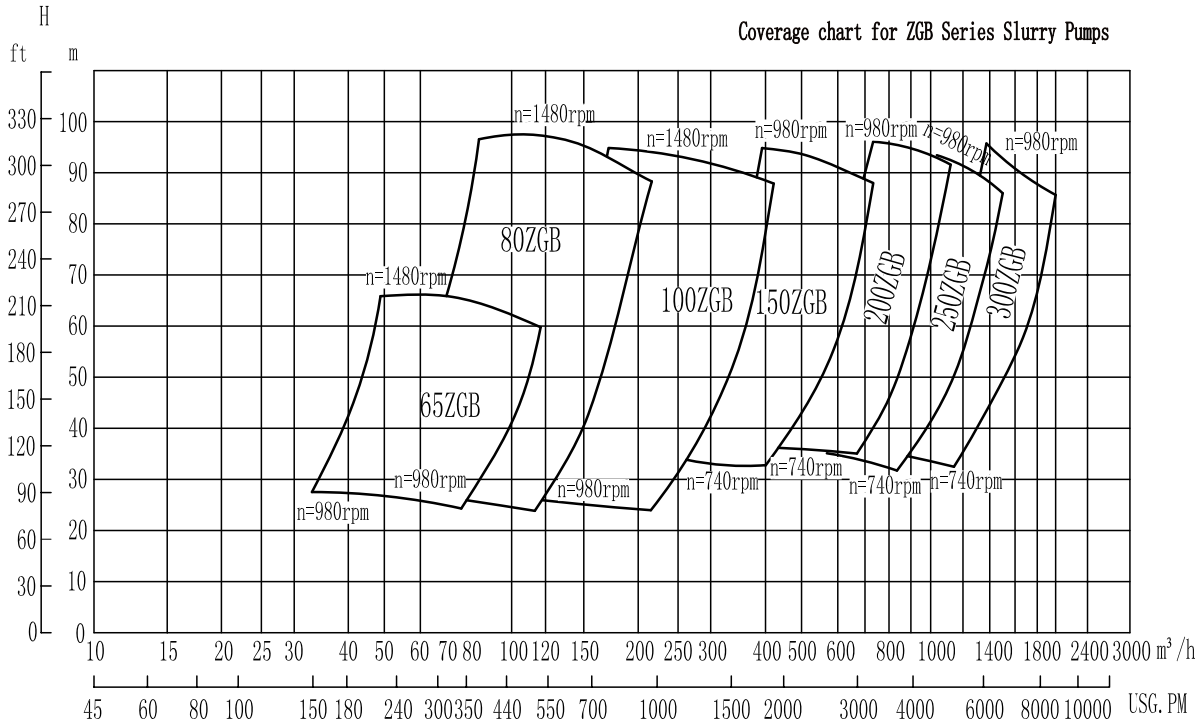
Type ZGB pumps are single-stage, single-suction, cantilevered, double casing, horizontal, centrifugal slurry pump. They are designed for conveying abrasive or corrosive slurries in the power, metallurgical, mining, coal, building material and chemical industry ect, especially in the power plant ash remote transfer condition. This series of pump with high flow and high head can be used multistage.

Pump Diameter:65mm~300mm
Capacity to:1920m³/h
Head to:94m

Model Meaning



Selection Chart



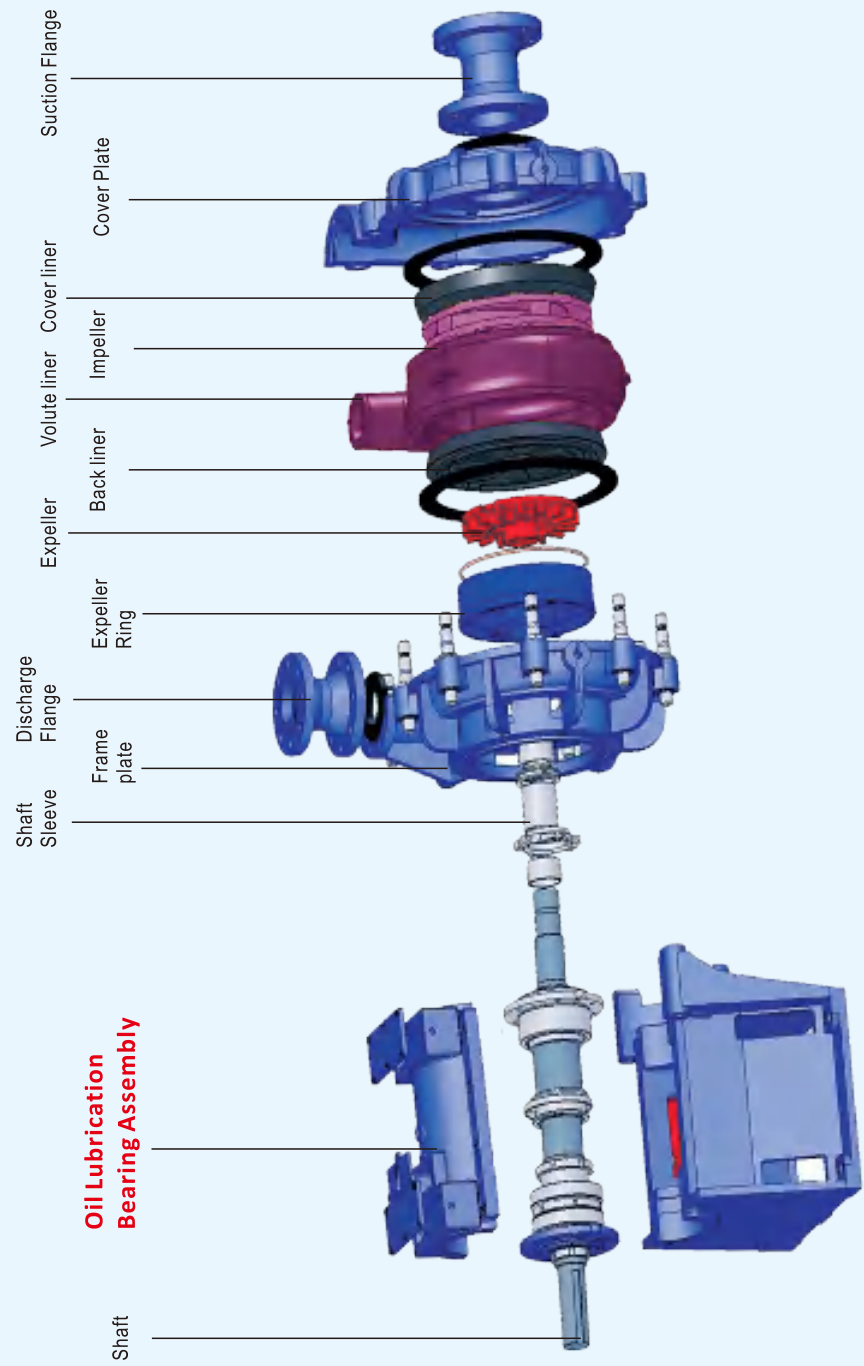
Clear Water Performance

ZGB Clear Water Performance										
Type	Max.Motor Power Kw	Performance range				Impeller				
		Capacity Q(m³/h)	Head H(m)	Speed n (r/min)	Eff. η%	NPSH (m)	Max. particle Size (mm)	Impeller Dia. (mm)	No.of vanes	Weight (Kg)
65ZGB	55	52~132	25~63.3	1480	63	2.6~5.8	15	398	5	760
80ZGB(P)	132	82~205	33~92	1480	66	2.4~5.2	20	485	5	1400
100ZGB(P)	200	170~420	33~94	1480	66	2.5~6.0	30	500	5	1420
150ZGB(P)	355	300~740	31~91	980	78	2.4~3.8	50	740	5	3450
200ZGB(P)	560	430~1080	34~94.7	980	76	2.1~6.5	60	740	5	4000
250ZGB(P)	630	560~1420	32~90	980	79	2.4~7.3	70	740	5	4500
300ZGB	710	790~1920	32~94	980	81.5	3.9~7.5	90	760	5	5500

NPSH means max. speed of revolution.

Structural features

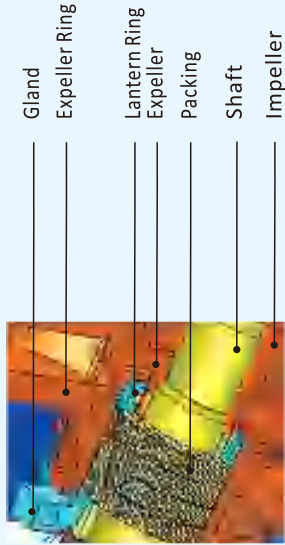
- ▲ Adopted oil lubrication and the shaft with lubricating plate, with the rotation of the shaft drives the circulation of the lubricating oil. The lubrication cooling bearing shaft, the seal adopts the labyrinth shaft seal, reliable operation, long life and without leakage.
- ▲ High strength and rigidity horizontal split-case frame assembly with the rotor by means of the adjustment bolt to adjust rotor.
- ▲ A large diameter with a short overhang ensure the rigidity of shaft, suitable for high power condition.
- ▲ Hardened stainless steel shaft sleeve with 'O' ring seals at both ends, a slip fit allows the sleeve protects the shaft from the wear and corrosion.
- ▲ The expeller seal combined with packing and mechanical seal are optional.
- ▲ A variety of wear-resistant high hardness materials are optional to suit different working conditions.The deputy vanes in both former and rear cover of Impeller relieve seal pressure and minimize recirculation. The impeller adopts screw connection.
- ▲ Casing is made of ductile iron,ribs help casing to stand high pressure.



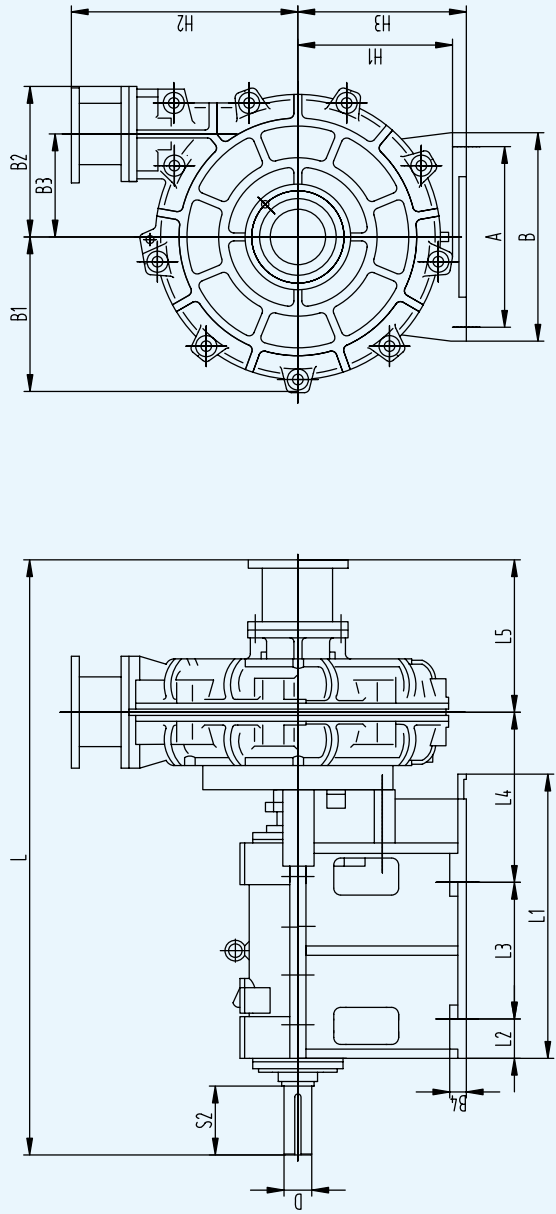
Seal Options

Expeller seal combined with packing- The expeller generates a reverse centrifugal force to prevent the leakage. With multiple-disc packing to combined seal, applied to can't used the expeller alone due to the high pressure suction, expanded the seal using range. The water pressure of the shaft seal is 0.2-0.3Mpa. As to multi-stage pump, the sealing water perssure of each stage of pump is higher 0.1Mpa than pump discharge pressure.

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



OUTLINE DIMENSION



Type	A	B	B1	B2	B3	B4	D	H1	H2	H3	L	L1	L2	L3	L4	L5	S2	Suction flange				Discharge flange				The anchor hole
																		O.D	I.D	HOLES	P.C.D	O.D	I.D	HOLES	P.C.D	
65ZGB	432	492	352	377	220	45	65	360	475	415	1379	580	45	340	401	330	167	210	80	8-ø22	168.5	190	65	8-ø22	149	4-ø22
80ZGB(P)	560	636	360	459	279	50	80	414	560	520	1598	725	72	440	451	296	222	255	100	8-ø22	200	210	80	8-ø22	168.5	4-ø29
100ZGB(P)	560	636	395	467	290	50	80	394	597	520	1718	725	72	440	467	402	222	320	152	12-ø22	270	275	100	8-ø26	216	4-ø29
150ZGB(P)	760	840	619	684	453	60	120	655	820	650	2006	1013	118	560	615	388	210	380	200	12-ø26	330	320	150	12-ø22	270	4-ø35
200ZGB(P)	760	840	675	713	460	60	120	695	880	650	2213	1013	118	560	628	579	210	425	250	12-ø26	370	380	200	12-ø26	330	4-ø35
250ZGB(P)	780	950	645	710	460	60	120	680	974	650	2160	978	128	550	628	500	215	515	300	16-ø33	450	445	250	16-ø30	387.5	4-ø40
300ZGB(P)	780	950	649	766	475	60	120	676	883	650	2282	978	128	550	668	610	215	585	350	20-ø33	514.5	520	300	16-ø33	451	4-ø40

All dimensions are in millimeter (mm)

Drive Arrangement



DC(Z) Drive



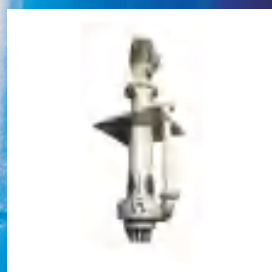
CV Drive



ZV(Z) Drive



CR(Z)/CL(Z) Drive



DC Drive



BD Drive

Material Options

Code	Material #	Hardness HRC	Performance	Applications
Z01	KmTBCr8	≥55	Abrasion-resistant performance is about 10% less than Z05.	Mud & slag applications
Z03	KmTBNi4Cr2	≥56	Abrasion-resistant performance is about 20% less than Z05.	Neutral water-sand slurry and applications with lower impact load.
Z05	KmTBCr26	≥56	Ranks second only to Z07 in abrasion-resistant performance; fair corrosion-resistant performance.	High impact load abrasion condition; PH rate ranging from 5 to 12.
Z07	KmTBCr15Mo3	≥59	Best abrasion-resistant performance; corrosion-resistant performance is inferior to Z05.	High impact load abrasion condition.
Z11	KmTBCrMnMo	38-42	Mild corrosion-resistant; lower hardness; drilling and tapping operations are applicable.	Fine particles with light abrasion.
Z33		≥35	Abrasion-resistant performance is close to Z03; fair corrosion-resistant performance.	Oxide slurry with PH rate no less than 1, like phospho-gypsum in phosphate fertilizer plant, nitric acid, sulph-oacid and phosphoric acid, etc.
Z49		≥43	Fair abrasion-resistant performance, close to Z03; 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.
Z12		≥62	Higher abrasion-resistant performance than Z05; fair corrosion-resistant performance; suitable for media with PH rate is 6 ~ 14, where Z05 is not suitable.	High abrasive slurry with fine particles.
Z61		63~68	Optimized abrasion-resistant performance than Z12.	High abrasive slurry with fine particles.
Z25		280-320HB	Hardness is lower than the anti-wear ductile iron, tolerance of mild shock and mild abrasive wear.	Suitable for conveying small gravel, generally not used for impeller and guard plate. suitable for the corrosive environment.

Material	Material #	Applications
Hypalon	SZ31	SZ 31 can be used for impellers, frame plate liners, cover plate liners and throat bushes. It is recommended to use for strong Acid slurry with mild or moderate corrosion. Maximal particle diameter can be 10 mm; impeller peripheral speed should be Less than 30m/s; suitable for temperature not exceeding 110℃.
Natural Rubber	RZ55	RZ 55 is widely used for impellers, frame plate liners, cover plate liners and throat bushes. Maximal particle diameter can be 20 mm; impeller peripheral speed should be less than 27.5m/s; suitable for temperature not exceeding 75℃.
EPDM Rubber	SZ01	SZ 01 is widely used for impellers, frame plate liners, cover plate liners and throat bushes. Maximal particle diameter can be 8 mm; impeller peripheral speed should be less than 25m/s; suitable for temperature not exceeding 120℃ (continuous duty) Or 140℃ (discontinuous duty)
Butyl Rubber	SZ21	SZ 21 is widely used for impellers, frame plate liners, cover plate liners, expellers, volute seals and throatbushes. Maximal Particle diameter can be 7 mm; impeller peripheral speed should be less than 30m/s; suitable for temperature not exceeding 100℃.
Nitrile Rubber (NBR)	SZ12	SZ 12 is widely used for frame plate liners, cover plate liners, throatbushes, lip seals, impellers and Expellers. Maximal particle diameter is 7mm; impeller peripheral speed should be less than 27m/s; Suitable for temperature not exceeding 95℃.
Natural Rubber (soft)	RZ33	RZ 33 is widely used for frame plate liners, cover plate liners and impellers. Maximal particle diameter is 10 mm; impeller Peripheral speed should be less than 25m/s; suitable for temperature not exceeding 75℃.

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