ZA(R) Series Heavy Duty Slurry Pump

Pump type ZA(R) is the standard heavy duty slurry pump which designed for the continuous pumping of highly abrasive, high density slurries with minimal maintenance requirements. It maintains high efficiencies over the wear life of its components. This type of pump typically used in heavy minerals processing, mineral recovery process plant transfers, wet waste processes, recycling-washing plant, sand plant duties and chemical process plant.

Standard Heavy Duty Slurry Pump Range:

Caliber(inch)	1"--18"
Maximum flow	5400m³/h
Maximum head	68m
Rotation	200-3800r/min
Power	15-1200kw

For details see clear water performance table on the bottom.

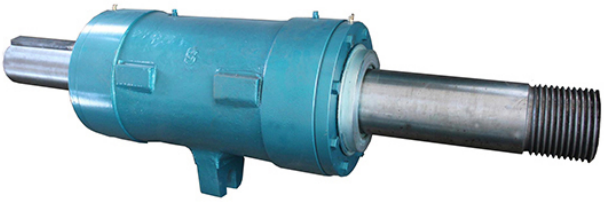
Product Description

1.High Chromium Pump Parts

Wear-resistant,Corrosion-resistant,
more suitable for sea water.

2. Bearing Assembly

Warranty **1 Year**



3.Slurry Pump is Powerful

It can transfer the water with solids,particles such as **sand, quartz, cinder, iron slag, stone, limestone, etc.,** and the diameter of the particles can reach up to **135mm.**

Standard Heavy Duty Slurry Pump Feature：

(1)Elastomer or high chrome alloy liners provide corrosion & abrasion resistance, plus the interchangeability to reduce the maintenance cost and maximize wear life

(2) Large diameter, high efficiency impellers designed to offer maximum wear life and low operating cost, wide options of impeller for specific applications

(3)Gland, expeller or mechanical seals are available to suite different working conditions

(4)The bearing can be grease or oil lubricated which offer ease of maintenance and reduced downtime

(5)The pump can be installed in multi-stage high pressure operation

(6)Large internal passage designed to reduce internal velocities to maximize wear life and lower operating cost

Seal Options:

(1)Centrifugal Seal or Expeller Seal or Dynamic Seal-The centrifugal seal consists of expelling vanes on the back of the impeller and an expeller which rotates in unison with the impeller. The expeller is located in a separate chamber behind the impeller. The expeller acts as a turbine to reduce the pressure of the slurry attempting to escape around the back of the impeller. The expeller forms a pressure ring within the expeller chamber and prevents the slurry from passing into the secondary seal area.

(2) Gland Seal-The gland seal comprises a number of soft packing rings, compressed in a chamber (stuffing box) against a protective wear sleeve which fitted to the pump shaft. This type of seal requires continuous clean flushing water lubrication and cooling between the rotating shaft sleeve and the compressed packing, to prevent over heating due to the friction.

(3)Mechanical Seal-When it is essential for the leakage to be prevented entirely, then mechanical seals should provide a solution. The mechanical seal consists of a stationary and rotating face pressed together under mechanical and hydraulic pressure to prevent leakage.

Standard Heavy Duty Slurry Pump Advantages:

The optimized structure is suitable for heavy duty application, ensuring longevity and longevity.

The double casing design of our heavy duty slurry pumps allows for axial splitting. Made of ductile iron, the pump casing is able to withstand the main pressure generated in the pump chamber. The lining is made of wear-resistant material and does not stick to the outer casing for easy maintenance and replacement.

The pump body of the coarse sand slurry pump is fixed to the pump base or the mount by a plurality of bolts. Under the housing or housing, the user can easily adjust the gap between the impeller and the suction pad.

Hydraulic Modeling

The wet end parts are cast from hard metal, rubber or polyurethane. They maintain good hydraulic performance even when the pump is heavily worn. This helps the pump achieve optimum pumping efficiency levels for extended periods of time. Various impeller designs are available for coarse sand slurry pump for a variety of pumping applications.

Standard Heavy Duty Slurry Pump Installation Types :

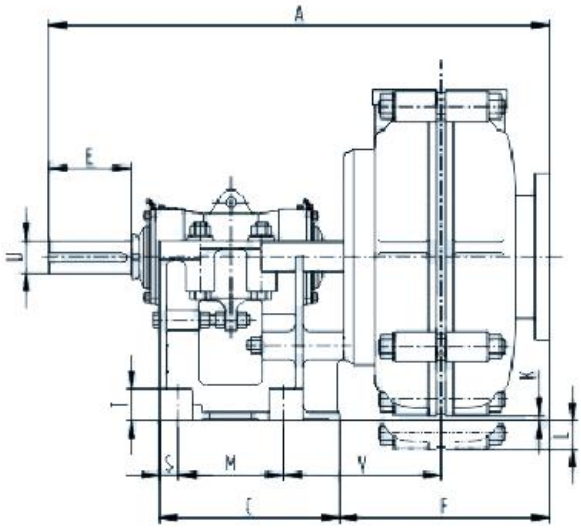
DC Type: The output shaft of a motor is directly connected to the input shaft of a pump via a pump coupler. This type of connection is suitable for applications where the speed of the slurry pump is the same as that of the motor.

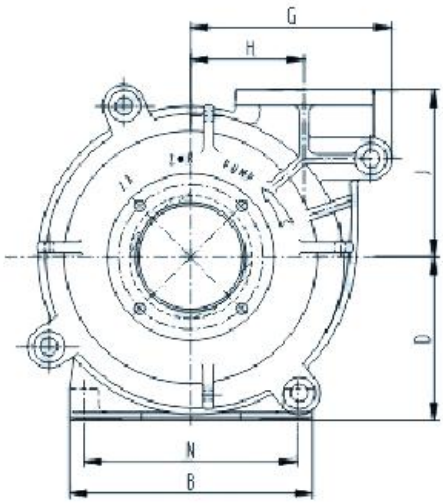
CV Type: The tailing handling slurry pump is driven by a belt connected to the crankshaft of the engine. This way of connection allows for saving space, easy installation, and fast adjustment of pumping speed. The motor is fixed to the motor support frame which is located on the bearing support above the slurry pump.

ZV Type: Another type of belt drive that allows easy adjustment of pumping speed. The motor is directly fixed to the bearing support. This way of installation is suitable for motors with larger horsepower than is possible with CV type of installation. Due to the installation of motor onto the bearing support, this method helps save installation space.

CR Type: This type of belt drive makes it easier to adjust pumping speed. The installation allows both the motor and slurry pump to be fixed to the ground. The motor is installed to the side of the pump. This installation method is suitable for large-power motors.

Model	Maximum motor power (KW)	Material		Clear water performance					
		Liner	Impeller	Capacity Q		Head	Speed	Efficiency	NPSH
				(m^3/h)	(l/s)	(m)	(r/min)	η%	(m)
1.5/1B-ZA(R)	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(R)	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(R)	30	M	M	39.6~89.4	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(R)	30	M	M	86.4~198	24~55	9~52	1000~2200	71	4~6
4/3D-ZA(R)	60								
4/3C-ZA(R)	30	RU	RU	79.2~180	22~50	5~34.5	800~1800	59	3~5
4/3D-ZA(R)	60								
6/4D-ZA(R)	60	M	M	162~360	45~100	12~56	800~1800	65	3~5
6/4E-ZA(R)	120								
6/4D-ZA(R)	60	RU	RU	144~324	40~90	12~45	800~1350	65	5~8
6/4E-ZA(R)	120								
8/6E-ZA(R)	120	M	M	360~828	100~230	10~61	500~1140	72	2~9
8/6R-ZA(R)	300								
8/6E-ZA(R)	120	RU	RU	32~720	90~200	7~49	400~1000	65	5~10
8/6R-ZA(R)	300								
10/8ST-ZA(R)	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(R)	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(R)	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(R)	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(R)	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





Model	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(R)	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(R)	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(R)	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(R)	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(R)	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(R)	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(R)	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(R)	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(R)	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(R)	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(R)	1816	1150	650	120	280	762	755	464	674	-	65	620	900	80	125	461	527	305	470	12-Φ25	12-Φ25	527	254	470	12-Φ25	4-φ48	4318	3357
14/12ST-ZA(R)	1873	1150	650	120	280	812	937	629	832	-	224	620	900	80	125	486	584	365	521	12-Φ25	12-Φ25	552	305	495	12-Φ25	4-φ48	6409	4672
16/14TU-ZA(R)	2320	1460	900	150	350	953	1048	660	889	-	84	860	1200	95	150	597	705	406	641	12-Φ35	12-Φ35	673	356	610	12-Φ29	4-φ79	10000	7867
20/18TU-ZA(R)	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