

VC(R)
VCH VCS
Sump Pump

Mining | Power Plant | Coal | Metallurgy | Chemical



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VC SERIES HEAVY DUTY SUMP PUMP

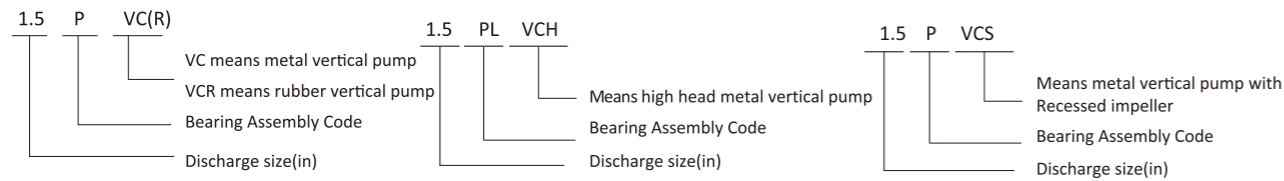
VC(R) slurry pumps are designed for handling abrasive and corrosive slurries whilst submerged in sumps or pit. Available in hard metal and rubber parts as options in the VC range. The parts are interchangeable. Suitable for most applications, where sump pumps are needed for slurry.

VCH slurry pumps are designed for long distance transport applications. Elastomer lined or hard metal fittings are optional. No submerged bearing or packing. High volume, double suction design with relatively high head.

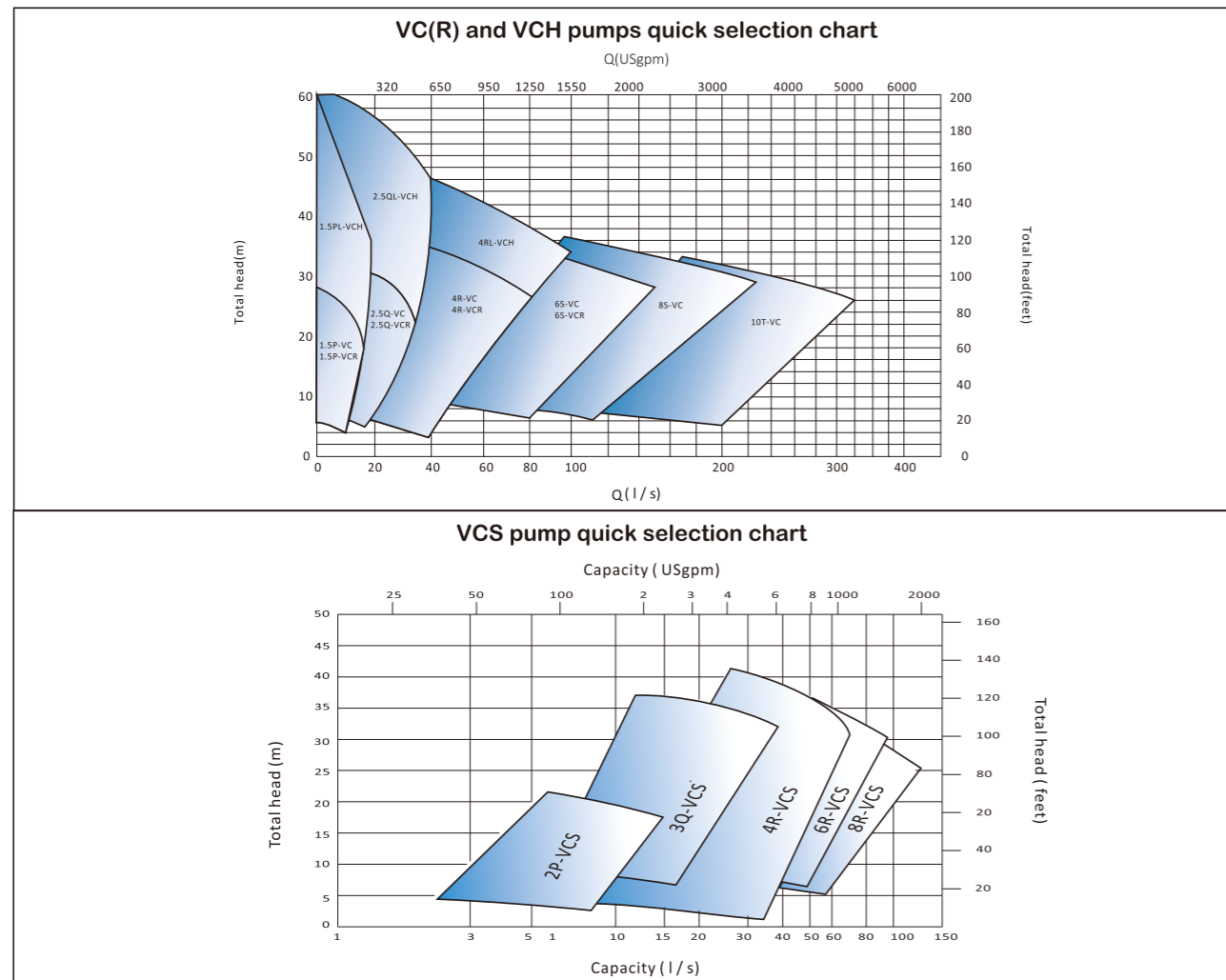
VCS slurry pumps are designed specifically for continuous use for slurry applications with larger or where particles are sensitive to breakage. This range vortex pumps have "dry run" capabilities, with large volume internal profiles, combined with the recessed open impeller design, reduce particle interaction and limits potential blockages.

Model Description

- Pump Range: 40mm~250mm
- Capacity to: 1089m³/h
- Head to: 60m



QUICK SELECTION CHART



TYPICAL APPLICATIONS

Usage of versatile wear-resistant and corrosion-resistant materials allows VC series slurry pumps to service in various industries.

Typically be used in areas such as clean-up, ash removal, FGD, coal washing and pit clearing in mining and heavy industry.



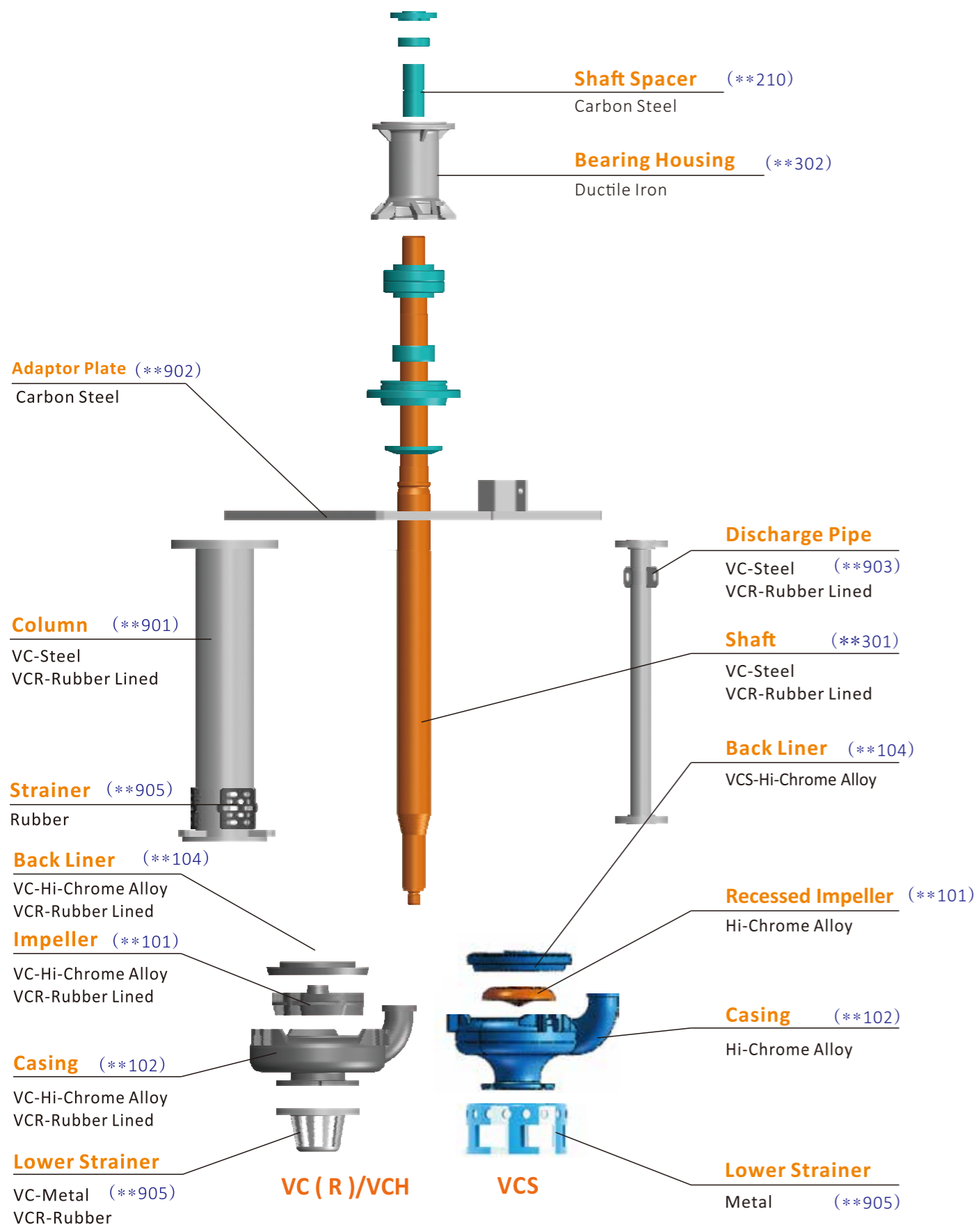
- VC(R)**
- Mineral processing
 - Coal washing
 - Flue Gas Desulphurization (FGD)

- VCH**
- Sump pumping installation
 - Open pits
 - Dewatering collection pits



- VCS**
- Carbon Transfers
 - "Soft" Particles Sewage
 - Effluent Sugar Beet
 - Diamond Concentrate

STRUCTURE & FEATURES



Pump Features

Single stage, single suction, overhang shaft, centrifugal, single casing structure vertical pump

- Material:**
 Wet Ends- Casings, Impellers, liners are made of high-chrome alloy or rubber, to resist wear, corrosion, impact or erosion, parts made of metal or rubber are interchangeable.
 For VCS series pumps, are only available in metal.
- Bearing Assembly-** Bearing grease lubrication, easy and cheap to maintenance.
 Running heavy duty bearing assemblies, this will ensure the stable operation of the pump while pumping larger solids in the slurry.
- Benefits –**
 - No Impeller clearance adjustment is needed
 - Dry running capabilities
 - Easy to repair and maintenance
 - Has an agitator option
 - no seal required
 - Parts are interchangeable
 - very reliable and cost-efficient pump



VC(R) and VCH - Standard impellers

Inlet - The bottom and top inlet design, requires no priming.
Screens- restricts large objects and reduces blockage rate.

Impeller - Double suction vanes reduce the axial load.
Suction pipe - could be fixed to draw away the high concentrated slurry deposited on the bottom of pit.

VCS- Non-clogging Sump Pumps with recessed impellers

The recessed impeller and the casing with specially designed flow passage permit passage of big particles unbroken.

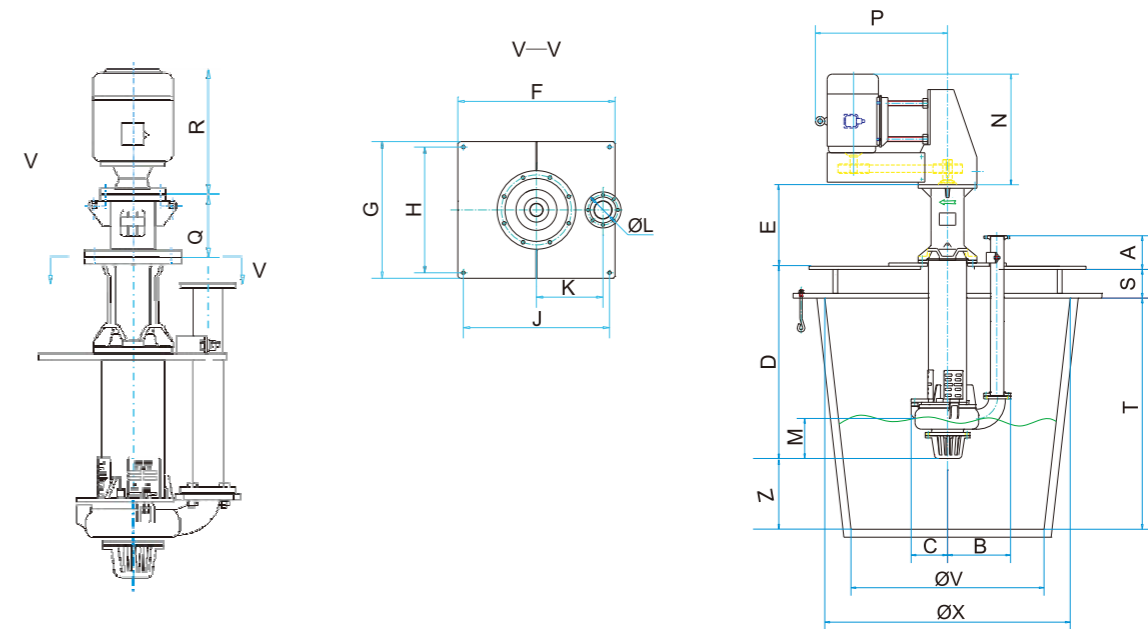
This series is specially designed for the applications where heavy abrasive slurries exist and the particles are required to keep constant sizing during pumping, e.g. pellets in mineral processing.

CLEAR WATER PERFORMANCE

Model	Max.Motor Power Kw	Material		Clear Water Performance				
		Liner	Impeller	Capacity Q		Head H(m)	Pump speed n(r/min)	Eff. Á(%)
				(m³/h)	(l/s)			
1.5P-VC	15	M	M	19.44~43.2	5.4~12	3.5~28	1000~2200	38
1.5P-VCR		R	R	17.28~39.6	4.8~11	3~24.5	1000~2200	40
2.5Q-VC	30	M	M	23.4~87.12	6.75~24.2	5.5~31.5	700~1500	51
2.5Q-VCR		R	R	22.5~105	6.25~29.15	5.5~27	700~1500	51
4R-VC	75	M	M	54~289	15~80.3	5~37	500~1200	56
4R-VCR		R	R	64.8~285	18~79.2	7.5~38	600~1200	62
6S-VC	110	M	M	108~479.16	30~133.1	8.5~37	500~1000	55
6S-VCR		R	R	108~479.16	30~133.1	8.5~35.5	500~1000	56
8S-VC		M	M	189~891	52.5~247.5	6.5~37	400~850	64
10T-VC	200	M	M	261~1089	72.5~302.5	7.5~33.5	400~750	60
2P-VCS	15	M	M	8~54	2.22~15	4~22	700~1500	41
3Q-VCS	30	M	M	20~130	5.56~36.1	7~37	700~1500	41
4R-VCS	75	M	M	30~250	8.3~669.44	2~41	400~1500	46
6R-VCS	75	M	M	36~330	10~91.67	8~39	700~1500	45
8R-VCS	75	M	M	60~420	16.7~116.7	6~33	700~1500	42

M means metal , R means rubber

OUTLINE DIMENSION



All dimensions are in millimeter

* means standard length

Z-Minimum 300~500mm

DRIVE ARRANGEMENTS



DC



BD



C

Pump model	A	B	C	D	E	F	G	H	J	K	ØL	M	N	P	Q	R	Weight (kg)	Min.size of the pit					
																		S	T	ØV	ØX	Volume (m³)	
1.5P-VC	137	286	154	900*1200	380	500	500	450	450	205	127	174	733	675	248	629	285	280	695	550	1000	0.34	
1.5P-VCR	140	265	175			500											250						
1.5PL-VCH	137	345	207			600											324						
2.5Q-VC	227	399	231	900 1200*1500	492	680	680	620	620	285	178	265	898	794	290	681	432	350	925	800	1400	0.9	
2.5Q-VCR	230	380	260			498											386						
2.5QL-VCH	227	425	255			701											480						
4R-VC	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	
4R-VCR	266	535	332														668						772
4RL-VCH	260	575	380														905						938
6S-VC	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	
6S-VCR	395	674	400														883						1520
8S-VC	450	772	440														878						3087
10T-VC	500	903	470	1800 2100*2400	1000	1750	1450	1350	1650	700	406	685	1572	1572	561	1246	4086	280	1775	1700	2700	6.68	
2P-VCS	137	286	154	900*1200	380	500	500	450	450	205	152		733	733	248	629	280	350	695	550	1000	0.34	
3Q-VCS	227	399	231	900 1200*1500	492	680	680	620	620	285	190		898	898	290	681	412	350	925	800	1400	0.9	
4R-VCS	260	515	317	1200 1500*1800	662	1000	870	800	930	400	229		1141	1020	416	960	815	350	1225	1000	1750	1.86	
6R-VCS	390	640	375	1500 1800*2100	662	1100	1100	1030	1030	500	279		1311	1200	476	1011	860	350	1525	1250	2150	3.54	
8R-VCS	450	772	440	1500 1800*2100	662	1300	1200	1100	1200	600	343		1313	1300	476	1011	920	350	1525	1500	2400	4.76	