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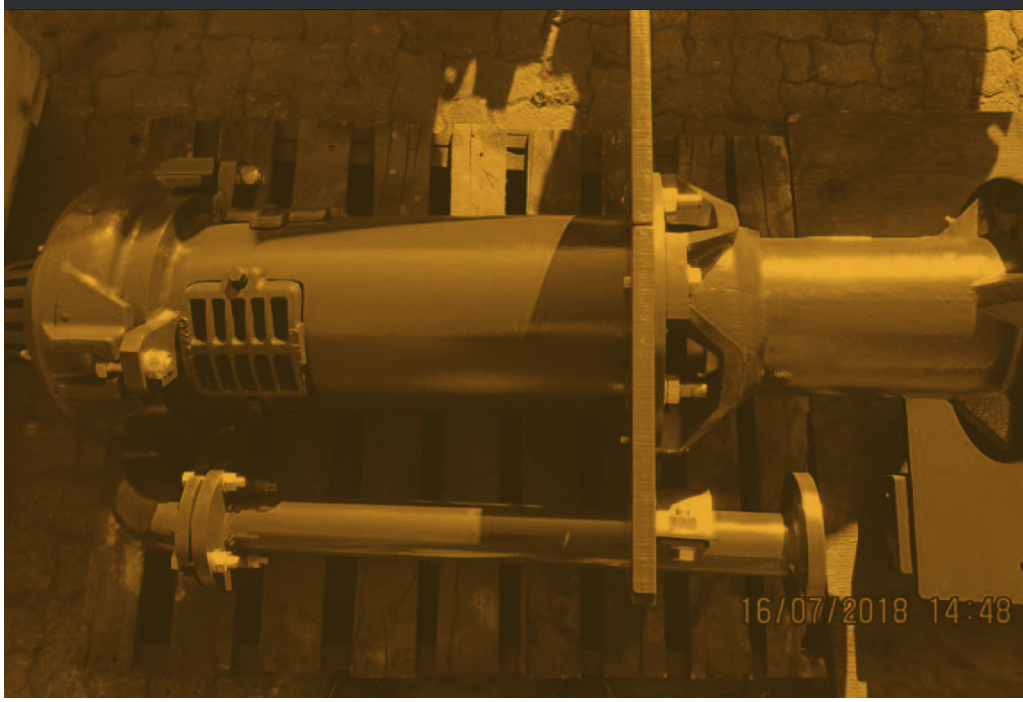
MV

Vertical Slurry Pump

SMI PUMPS



MV
Vertical Slurry Pump

The MV/MVR heavy duty pump is designed for applications requiring greater reliability and durability. The bearing assembly allows the jump to operate in the “snore” condition without damage to the bearings. It is designed for handeling abrasive slurries and corrosive fluids by using either elsatomer or alloy lined wet ends components. The pump is suitable for mining, chemical treatment, waste water treatment, gravel and general process application.

Typical Application:

- Mill Discharge
- Coarse Sand
- Tailings
- Mineral Concentration
- Heavy Media
- Coal Washing
- Chemical Processing
- Effluent Handling
- FGD

Pump Designation:

100 ___ Discharge Diameter (mm)

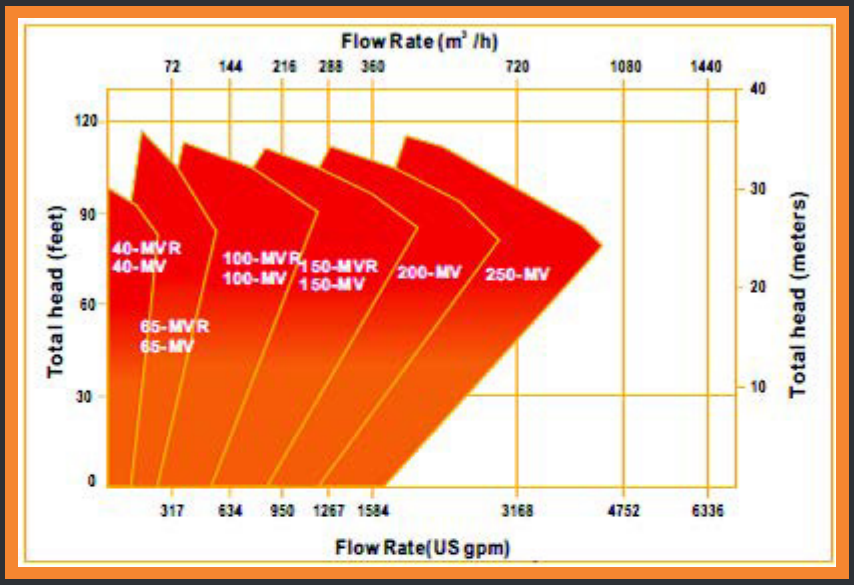
RV ___ Bearing Assembly Model

MV(R) _ MV-Metal lined vertical slurry pump
MVR-Rubber lined vertical slurry pump

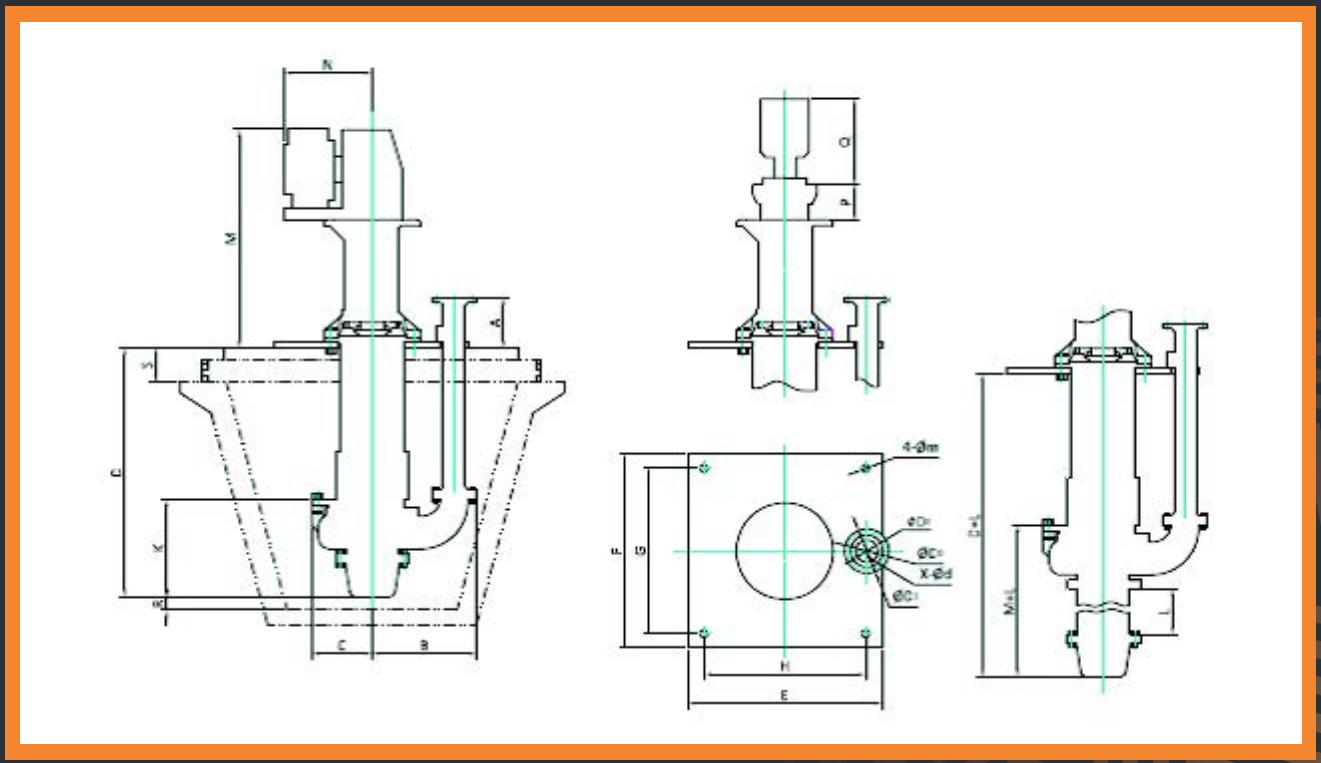
MV Pump Quick Selection Chart

Pump Range

- Discharge Size: 40 to 250mm
- Capacity: 17 to 1000m3/h
- Head: 4 to 40 m



Outline Dimensions



Pump Features

Wide range of hard metal or rubber wet parts to ensure longer service life Double suction semi-open impeller, effectively reduces the axial load No subermeged bearing avoids the need for gland or bearing flushing water Suction pipe or agitator available, which can be used for pumping the high density slurries under the pit MVR models feature full rubber covering for corrosion resistance Can be run in insufficient suction duties The screened inlets and large impeller passages reduce the risk of blockages

Material Options

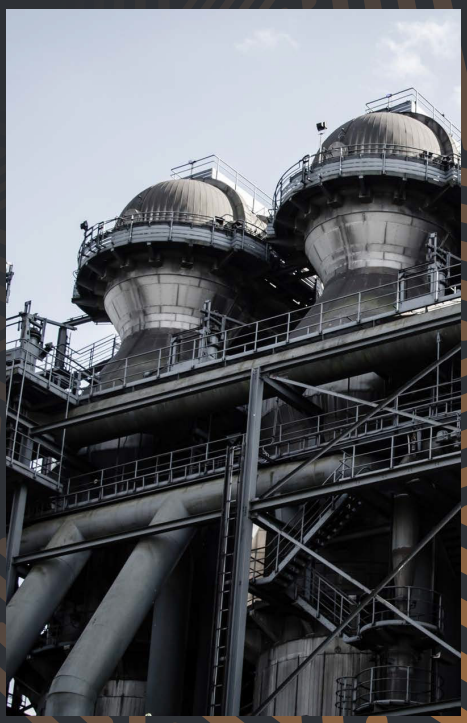
Pump Size	A	B	C	D	E	F	G	H	J	Φn	K	Key Size	M Note:dimension change with motor size	N	P	Q	Weight (KG)	S	Discharge Flange Size ΦD1	ΦD2	ΦD0	X-Φd
40PV-MV	137	285	154	900*	500	500	450	450	205	18	174	12×8	1113	675	248	629	285	280	127	40	98	4-Φ16
40PV-MVR	140	265	175	1200									1113				250					
65QV-MV	224	374	234	900	680	680	620	620	285	19	265	14×9	1390	794	290	681	432	350	178	65	140	4-Φ19
65QV-MVR	230	380	260	1200*									1396				381					
				1500																		
100RV-MV	261	435	311	1200	1000	870	800	929	400	22	393	22×14	1803	1020	416	960	867	350	229	104	191	8-Φ19
				1500*																		
				1800																		
				2000																		
				2400																		
100RV-MVR	266	535	332	1200									1809				743					
				1500*																		
				1800																		
150SV-MV	395	670	400	1500	1100	1100	1030	1030	500	28	475	28×16	2186	1200	476	1011	1737	350	280	150	241	8-Φ22
150SV-MVR	395	670	400	1800*									2194				1523					
				2100																		
200SV-MV	461	805	441	1500	1300	1200	1100	1200	600	28	550	28×16	2191	1300	476	1011	3090	350	343	200	298	8-Φ22
				1800*																		
				2100																		
250TV-MV	494	903	490	1800	1750	1450	1350	1650	700	48	685	28×16	2572	1750	561	1246	4090	400	406	250	362	12-Φ25
				2100*																		
				2400																		

Note: All the dimensions are in millimeter (mm).
* means the standard pump length.
L size includes: 0, 300, 600, 900, 1200, 1800 mm, when L=0mm, the pump is standard length.
R dimension range: 300 - 500 mm.

Material Code	Hardness (HRC)	Impact Toughness (J/cm2)	Application	Standards
M05	≥58	5~7	Alloy M05 is particularly suited for greater impact load and fair corrosion resistance, and it is used when pH range is 5-12.	ASTM A532 Cl.III-A
M07	≥58	5~7	Alloy M07 has lower wear resistance but higher impact resistance than Alloy M05. It is used when pH range is 5-12.	ASTM A532 Cl.III-A
M49	35~45	5~7	Alloy M49 has certain erosion resistance and better corrosion and abrasion resistance, which is used in mild acid application with pH =4, particularly suitable for Flu Gas Desulphurization (FGD) applications.	
M33	30~40	5~7	Alloy M33 excels in erosion resistance and corrosion resistance, which can be used in oxidizing medium with pH =1, such as delivery of phosphogypsum and nitric acid, sulfuric acid and phosphoric acid, etc.	
M12	60~67	2~5	Alloy M12 has better wear resistance than Alloy M05, but it is not best suited for corrosion applicaton. It can be selected when pH ranges of 6-14, where Alloy M05 provides fair wear life.	
M61	60~67	5~6	Alloy M61 has better toughness compared to Alloy M12. Aloy M61 can be further hardened by adjusting heat treatment, thereby improve its wear resistance. It is suitable for high abrasive slurry with fine particles with pH ranges of 6-14.	

Material Code	Material Name	Description and Application
M08R	Natural Rubber	M08R is a back natural rubber, low to medium harness generally used for impellers, and is required in fine particle slurries.
M26R	Natural Rubber	M26R is soft natural rubber, normally used for liners, and is required in fine particle slurries applications.
M33R	Natural Rubber	M33R is a premium grade material for use where M26R does not provide sufficient wear life.
M38R	Natural Rubber	M38R is a black natural rubber, of medium hardness, M38R is used for impellers where superior erosive is required in find particle slurries.
M55R	Natural Rubber	M55R is a premium grade material for use in a high wear application. Superior physical properties give increased cut resistance to hard, sharp particle slurries.
M02S	EPDM Elastomer	M02S is an acid resistant rubber which is of medium abrasion resistance.
M12S	Nitrile Elastomer	M12S is synthetic elastomer which is generally used in low abrasion/erosion application. It provides excellent resistance to oils, fats and waxes.
M21S	Butyl Rubber	M21S exhibits excellent chemical stability and good resistance to heat and oxidation. It is generally used in acidic applications.
M31S	Hypalon	M31S exhibits an excellent balance of chemical resistance to both hydrocarbons and acids.
M42S	Neoprene	M42S provides improved resistance to temperature, weather and ozone attack. It has excellent oil resistance.
M51S	Fluoroelastomer	M51S has exceptional resistance to oils and chemicals at elevated temperature. Limited erosion resistance.

A major advantage of the slurry pump is the number of optional materials available. This enables a pump to be constructed with the most appropriate materials specifically to meet duty requirements



Pump Structures

THANK
YOU

Please feel free to contact us if you require any additional information.

Contact Us

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