

**WARMAN®**  
Centrifugal Slurry Pumps

Excellent  
Minerals  
Solutions



**SHW-R**

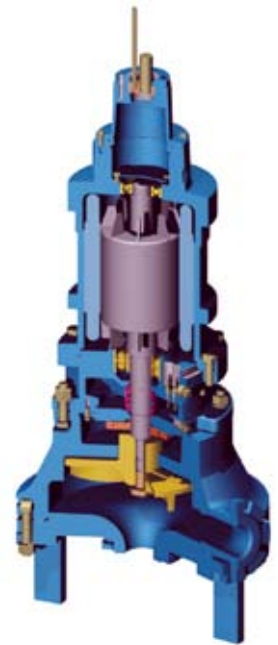
The design process of the Warman SHW-R made extensive use of state of the art solids modeling to ensure rugged, dependable solids handling capability at lowest possible cost.

A heavy duty all chrome wet end coupled with a motor designed and built by Weir Minerals for the most demanding applications makes the Warman SHW-R the most dependable, long lasting, submersible pump you can buy.



**Warman® SHW-R features**

- Vortex design allows the SHW-R to pump any solids that pass through the pump suction, even stringy, fibrous or tramp material
- Recessed impeller provides long wear life on heavy slurry applications
- The SHW-R handles much higher concentrations of air than centrifugal pumps
- Particle degradation is greatly reduced since pumped solids do not pass through the impeller
- **Temperature Sensor** – Over-temperature sensors protect the motor by sounding an alarm or shutting down the unit if internal temperatures exceed safe operating limits
- **Moisture detector** – A twin electrode system provides double protection by detecting moisture intrusion in either the motor housing or the mechanical seal chamber
- **Mechanical seals** – The SHW-R incorporates Warman’s proven balanced double-seal arrangement in which both sets of seal springs are enclosed in the oil reservoir. Silicon carbide seal faces are subject to submergence pressure only for greatly extended wear life
- **Heavy-duty water end** – Standard high chrome iron construction coupled with heavy section thickness provides the ultimate in protection against abrasive wear in heavy slurries
- **Easy maintenance access** – T-bolt construction allows rapid disassembly of the pump end for maintenance access. The heavy-duty impeller is not screwed on, but keyed to the shaft for easy removal and protection against movement



**Size range (discharge)**  
2" to 6"

50 mm to 150 mm

**Capacities to**  
2000 gpm  
455 m<sup>3</sup>/hr

**Heads to**  
175 ft  
53 m

**Optional features**

- Cooling jacket, quick disconnect, discharge elbow, sparger ring and slide bracket

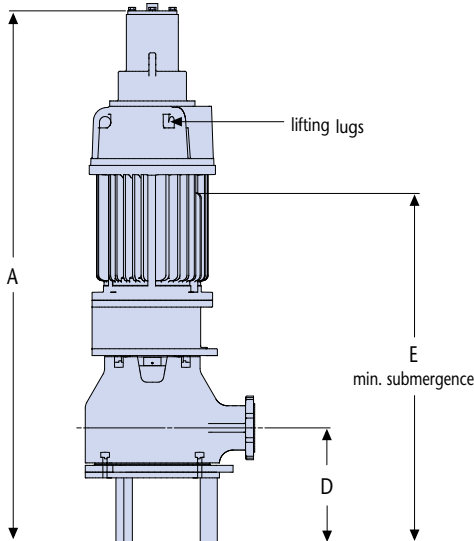
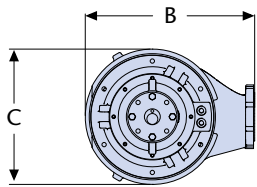
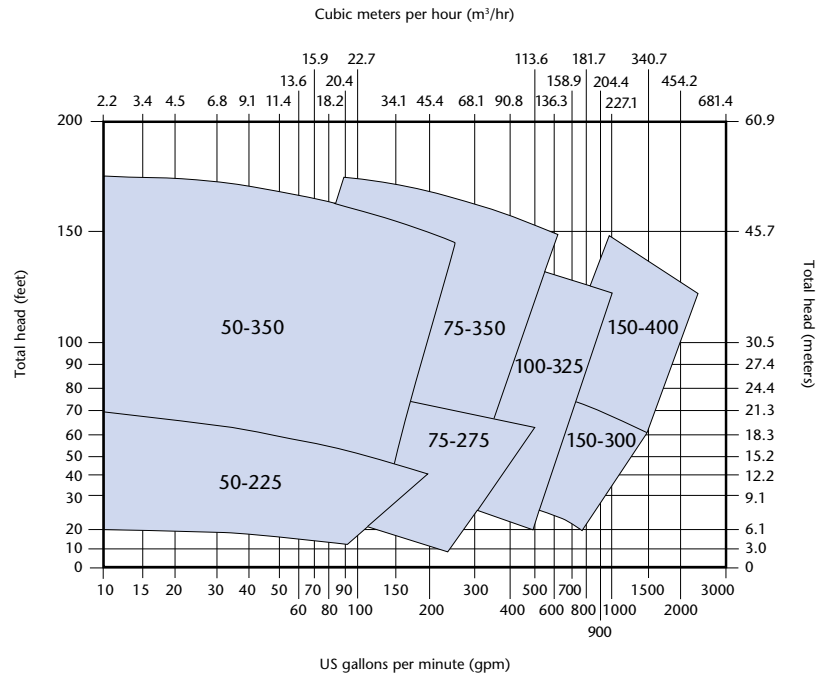
**Materials of Construction**

Part	Material	Specification
Casing	A05 Chrome	ASTM A532, Class III, Type A
Impeller	A05 Chrome	ASTM A532, Class III, Type A
Impeller nut	450 HT	ASTM A564, Hardened
Shaft	416 SS	ASTM A582, Type 416
Fasteners	316 SS	ASTM A193, Grade 8BM
Motor housing	Cast iron	ASTM A48, Class 30

## Applications

Mine dewatering	Boiler blowdown
Thickener drain	Lime slurry
Red mud recovery	Magnetite recovery
Fly ash sump	Skimming pit
Clarifier sludge	Coal fines recovery
Bottom ash overflow	Coal pile runoff
Coke quench	Precipitator slurry
Mill scale	Kaolin clay
Black liquor	Chlorinated thickener
Seawater/sand slurry	Wastewater sludge and grit
Red mud decanting	
Clean-up sumps	

## Warman SHW-R Pump Quick Selection Chart



### Warman SHW-R 250 Motor Frame Dimensions

Pump	A inches/mm	B inches/mm	C inches/mm	D inches/mm	E inches/mm	weight pounds/kg
50-225	50.8/1289	19.0/483	16.8/426	10.4/264	36.4/924	1135/515
75-275	52.1/1320	22.2/564	20.1/510	11.4/290	37.6/955	1289/586
75-350	52.5/1334	25.1/637	22.9/581	11.4/290	38.1/969	1356/615

### Warman SHW-R 280 Motor Frame Dimensions

Pump	A inches/mm	B inches/mm	C inches/mm	D inches/mm	E inches/mm	weight pounds/kg
75-350	154.1/60.7	25.1/637	22.9/581	11.4/290	44.4/1128	1800/817
100-325	65.6/1666	24.8/631	22.1/561	14.2/362	49.3/1253	2000/900
150-300	72.2/1834	25.4/645	22.1/561	19.3/491	55.9/1421	2100/910

### Warman SHW-R 360 Motor Frame Dimensions

Pump	A inches/mm	B inches/mm	C inches/mm	D inches/mm	E inches/mm	weight pounds/kg
100-325	84.4/2143	24.8/631	23.4/595	14.2/362	52.5/1333	3700/1680
150-400	91.9/2334	29.3/745	23.4/595	19.7/500	60/1524	4300/1950

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