

**CH**  
**Warman**  
**PUMP GROUP**

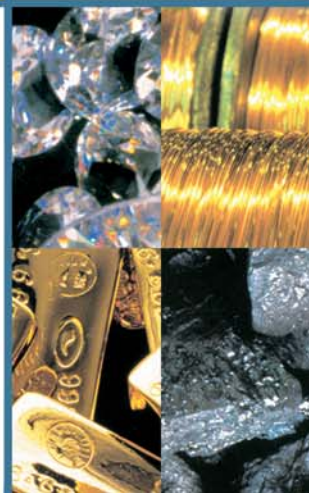


SPR & SP Sump Pumps

# SPR & SP Sump Pumps

**Team**  
**Warman**

THE TOTAL SLURRY SOLUTION



# Ultra Heavy Duty for Continuous Operation

## Ultra Heavy Duty

### Applications

The SPR and SP designs, manufactured in popular metric sizes, provide a simple, yet rugged range of sump pumps specially developed for:

- ▶ Abrasive and/or corrosive slurries
- ▶ Large particle size
- ▶ High slurry densities
- ▶ Continuous or “snore” operations
- ▶ Heavy duties demanding cantilevered shafts

### Design Features

**Bearing Assembly** - The bearings, shaft and housing are generously proportioned to avoid problems associated with the operation of cantilevered shafts in the first critical speed zones.

The assembly is grease lubricated and sealed by labyrinths; the upper is grease purged and the lower protected by a special flinger. The upper or drive end bearing is a parallel roller type whilst the lower bearing is a double taper roller with preset end float. This high performance bearing arrangement and robust shaft eliminates the need for a lower submerged bearing.

**Column Assembly** - Completely fabricated from mild steel. The SPR model is elastomer covered.

**Casing** - Has a simple bolt-on attachment to the base of the column. It is manufactured from a wear resistant alloy for the SP and from moulded elastomer for the SPR.

**Impeller** - Double suction impellers (top and bottom entry) induce low axial bearing loads and have heavy deep vanes for maximum wear resistance and for handling large solids. Wear resistant alloys, polyurethane and moulded elastomer impellers are interchangeable. The impeller is adjusted axially within the casting during assembly by external shims under the bearing housing feet. No further adjustment is necessary.

**Upper Strainer** - Drop-in metal mesh; snap-on elastomer or polyurethane for SP and SPR pumps. Strainers fit in column openings.

**Lower Strainer** - Bolted metal or polyurethane for SP; moulded snap-on elastomer for SPR.

**Discharge Pipe** - Metal for SP; elastomer covered for SPR. All wetted metal parts are completely rust protected.

**Submerged Bearings** - None

**Agitation** - An external agitator spray connection arrangement can be fitted to the pump as an option. Alternatively, a mechanical agitator is fitted to an extended shaft protruding from the impeller eye.

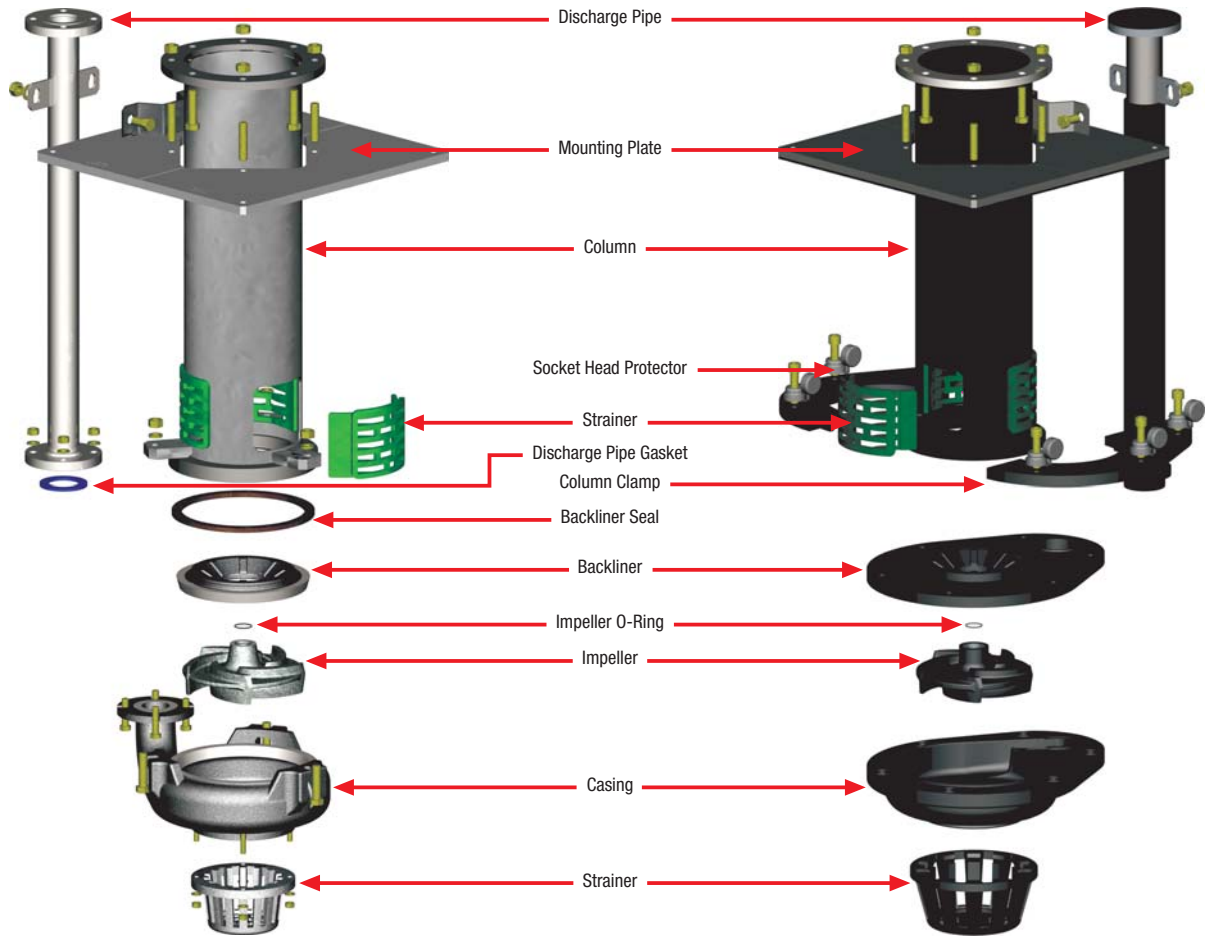
**Materials** - Pumps can be manufactured in abrasive and corrosive resistant materials.



# Options - Rubber or Metal

# Options - Rubber or Metal





## Sectional Arrangement

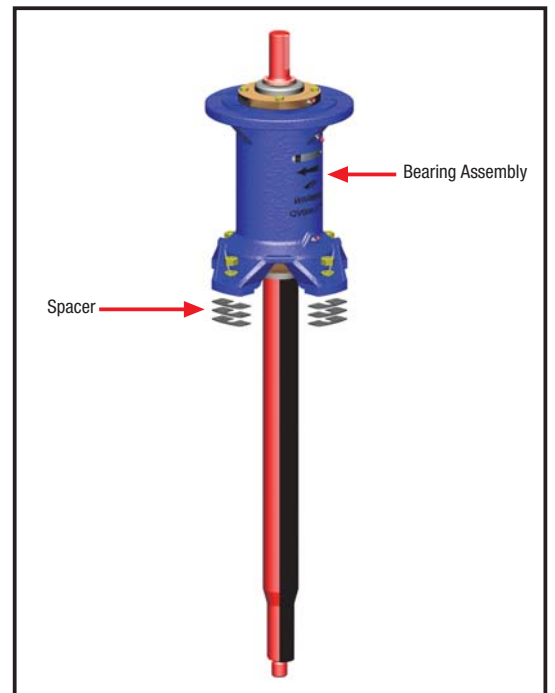


**Warman Metal Sump Pump - SP**  
(65QV SP Shown)

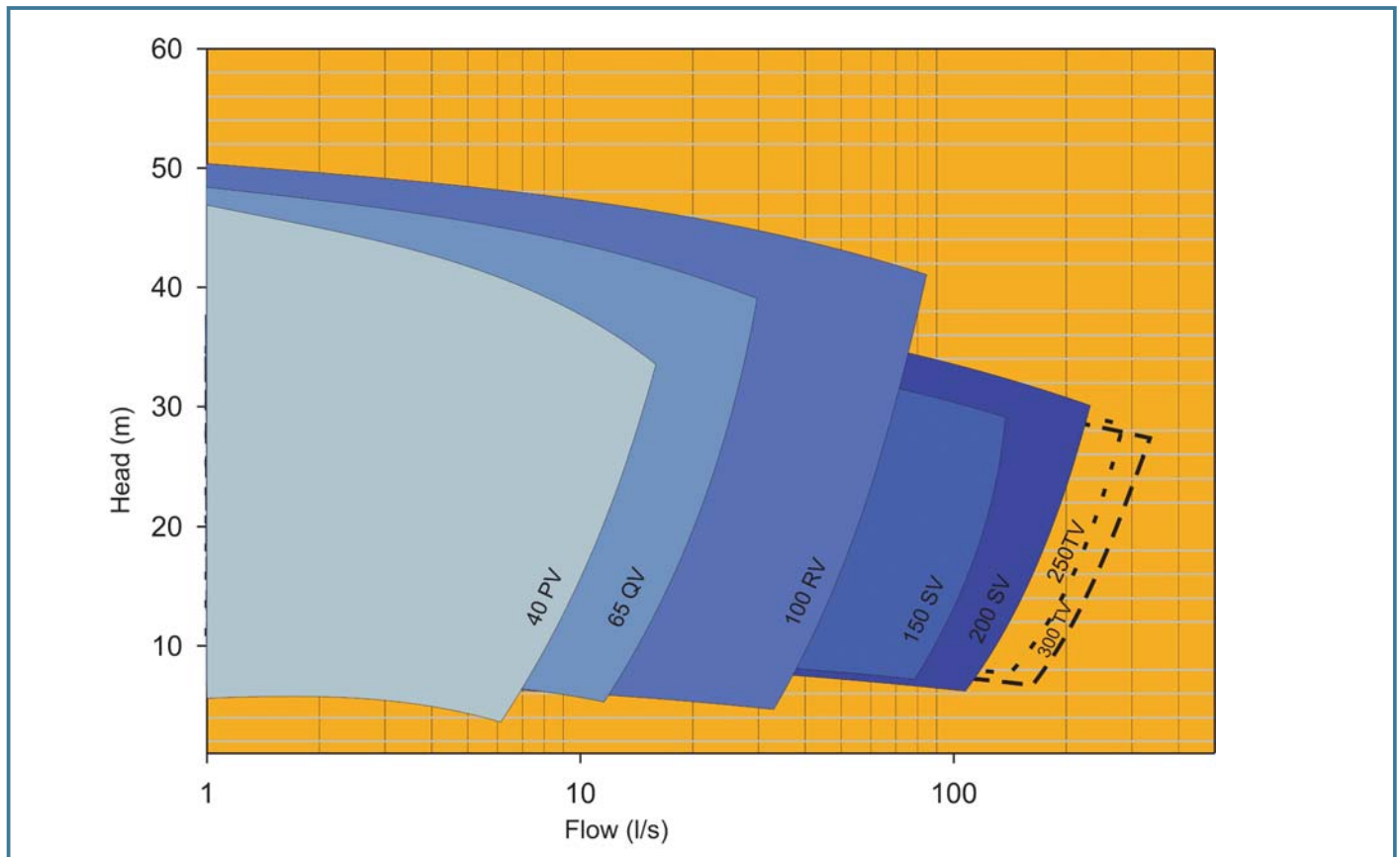
**Warman Elastomer Sump Pump - SPR**  
(65QV SPR Shown)

## Typical Applications

-  Sump drainage/washdown
-  Floor drainage
-  Mill sumps
-  Carbon transfer
-  Monitoring
-  Magnetite mixing



## Selection Chart



The selection chart should be used as a basic guide only.

It indicates the range and quantity of flow available from Warman pumps with standard impellers. It can also, however, be used to obtain a preliminary pump selection providing the user is able to estimate the quantity of slurry to be pumped and the developed head required.

## Materials of Construction

	CASING	IMPELLERS	SEALS	COLUMN	DISCHARGE
SP	High Chrome Alloy	High Chrome Alloy	Natural Rubber	Mild Steel	Mild Steel
SPR	Rubber	Rubber	Rubber	Mild Steel Rubber Lined	Mild Steel Rubber Lined
Options	Neoprene Butyl EPDM Hypalon Nitrile 316 SS W 151	Butyl EPDM Hypalon Polyurethane 316 SS W 151	Nordel Neoprene Viton Hypalon Butyl EPDM	Neoprene Butyl Nitrile 316 SS	Neoprene Butyl Nitrile 316 SS



### Warman Africa (Proprietary) Limited

3-5 Clarke Street South, Alrode, Alberton  
 P O Box 17872, Randhart, 1457 Republic of South Africa  
 Tel: +27 (011) 617-0700  
 Fax: +27 (011) 617-0791  
 e-mail: pumpsales@warman.co.za  
 website: www.warman.co.za

A DIVISION OF



CH WARMAN GROUP



For Alrode  
Manufacturing

We reserve the right to institute changes in material, designs and specifications within this leaflet to enable a policy of continuing product improvement.