

Sizing a Submersible Sleeve

A submersible pump's motor must be cooled by a flow of water past it. The flow sleeve is open at the very bottom in order to ensure that all the water being pumped passes the motor. A sufficient flow rate is needed to dissipate the heat that is developed in the motor shell.

Here is a chart to help size the sleeve necessary to cool the pump's motor. Flow rates have nothing to do with horsepower. You must know the GPM (gallons per minute) that you are pumping to use this chart.

Minimum Flow Rates per Sleeve Size

4" Motors			6" Motors		
<u>Sleeve Size</u>	<u>Minimum Flow Rate</u>		<u>Sleeve Size</u>	<u>Minimum Flow Rate</u>	
4"	1.2	GPM			
5"	7	GPM			
6"	13	GPM	6"	9	GPM
7"	20	GPM	7"	25	GPM
8"	30	GPM	8"	40	GPM
10"	50	GPM	10"	85	GPM
12"	80	GPM	12"	140	GPM
14"	110	GPM	14"	200	GPM
16"	150	GPM	16"	280	GPM

This chart is for 4" and 6" pumps and motor only.

NOTE: When using a flow sleeve, the electric cable should be continuous jacketed cable. Electrical work should meet all State and Local codes. The proper size and type of GFCI (ground fault circuit interrupter) should be used.