

# Water Feature Pump Data Worksheet

Complete worksheet then fax to 970.263.2277 or email to msi@munrocompanies.com.

Name:		Company:		Phone:		
Address:				City/State/Zip:		
GPH	<b>Pumping Requirements</b> To size a pump, first figure how big the water feature will be. Use table attached, then divide the figure by 60 to get GPM					_____ GPM
	Total Dynamic Head (TDH)	<b>Elevation</b> a. Suction Lift When using a submersible pump, suction lift should be "0". When using a non-submersible pump, measure vertical distance from water level to pump inlet. (Total measurement in feet) b. Elevation Change To figure elevation, measure the vertical distance from the surface of water to the highest point of discharge. (Total measurement in feet)				(a) _____ FEET (b) _____ FEET
		<b>Friction Loss</b> To estimate friction loss, keep velocity feet per second at 5' +/- 1' to first determine ideal pipe size. Then using friction loss chart, calculate loss per 100' of pipe based on flow + pipe size determined above. Multiply loss per 100' by number of 100' sections of pipe. (Total measurement in feet)				_____ FEET
		<b>PSI - Pounds Per Square Inch</b> Determine the pressure required to run both the fountain head and/or pressure filters (refer to the manufacturer's specifications). PSI x 2.31 = HEAD IN FEET				_____ FEET
		<b>Total Dynamic Head (TDH)</b> Total the sum of elevation, friction loss and PSI. This total equals TDH in feet.				_____ TDH
Misc.	<b>Electrical</b> Voltage: <input type="checkbox"/> 110 Volt <input type="checkbox"/> 220 Volt <input type="checkbox"/> 440 Volt Phase: <input type="checkbox"/> Single Phase <input type="checkbox"/> Three Phase		<b>Filtration</b> Gravity: <input type="checkbox"/> Waterfall <input type="checkbox"/> Skimmer Pressure: <input type="checkbox"/> Pressure <input type="checkbox"/> Sand		Check manufacturer's specifications to determine PSI for filters.	
	<b>Feature</b> <input type="checkbox"/> Pond <input type="checkbox"/> Fountain <input type="checkbox"/> Pond-less					
Weir Chart	<b>Calculating GPH Required for Water Features</b>					
	Depth in Inches	Length (L) of Weir in Feet			Additional gpm for each ft over 5 ft	
		1	3	5		
	1	2420	6420	10790	2615	
	1 1/4	2970	9025	15025	3025	
	1 1/2	3895	11820	19770	3970	
	1 3/4	4860	14400	24900	5015	
	2	5910	18120	30360	6120	
	2 1/4	7020	21660	36300	7320	
	2 1/2	8170	25320	42360	8580	
2 3/4	9420	29100	48900	9900		
3	10670	33120	55560	10020		

