



D Systems Residential Fire Pump

Determine Your Size Pump and Tank

1. Determine the demand of the sprinkler system in gallons and psi at the discharge of the pump by the use of hydraulic calculations (example: 30 gpm @ 40 psi required).
2. Tank size- multiply the gallons required by the duration in minutes required. (for 13D 10 minutes, NFPA 13R 30 minutes). If limited to standard doorways, or have limited accessibility, tanks may be manifolded together to obtain the longer duration (example: 30 gpm x 10 minutes = 300 gallon tank).
3. Pump size -select pump from the flow chart below(example: 30gpm @ 45psi required = 1.5 hp pump).

HP/IMP	Size	GPM	0	20	30	40	60	80	100	150
1HP/C	5-3/16	49	43	37	31					
<u>1.5HP/B</u>	<u>5-3/4</u>	<u>59</u>	<u>51</u>	<u>45</u>	<u>39</u>					
2HP/A	6-1/8	68	60	55	49					
<u>2HP/C</u>	<u>4-7/8</u>	<u>39</u>	-	-	35	32	29	23		
3HP/A	5-1/4	48	47	46	45	42	38	33		
<u>3HP/A1</u>	<u>6-1/8</u>	<u>59</u>	<u>58</u>	<u>55</u>	<u>53</u>	<u>47</u>				
5HP/G	5-5/16	58	58	57	56	55	50	44		
<u>S-5HP/A</u>	<u>6-5/8</u>	<u>71</u>	<u>69</u>	<u>68</u>	<u>67</u>	<u>63</u>	<u>55</u>	<u>52</u>		
S-7.5HP/C	7-11/16	94	91	90	88	82	73	67	39	
<u>S-10HP/A</u>	<u>8-27/64</u>	<u>113</u>	<u>111</u>	<u>108</u>	<u>107</u>	<u>103</u>	<u>95</u>	<u>86</u>	<u>59</u>	

~~Above numbers are in PSI @ discharge of pump

4. Determine what electrical power is available, 115 or 230 volt.
5. Select your pump controls. Pressure switch, D Panel, or a UL listed residential controller. Visit www.thedsystem.com to learn more on your control options.