

# The Red Jacket STP Flow Quick Reference Guide

High Flow Performance. High Reliability.

## MEETING YOUR FLOW DEMAND WITH FIXED SPEED RELIABILITY

The Red Jacket series of Submersible Turbine Pumps (STPs) and accessories covers all of your site throughput needs and guarantees hassle-free installation, minimal downtime, and dependable operation.

The flow throughput performance varies from site to site due to multiple, unique variables inherent to site layout and hydraulic configurations. Below are the flow estimations of the most common site configurations.



### ► AUTO-RETAIL DISPENSERS FOR 10 GPM

The information provided in the following chart is the estimated flow in Gallons Per Minute (GPM) per nozzle in Auto Retail dispensers. It helps you select the proper The Red Jacket Pump motor size based on the average active fueling positions on your site and the piping settings.

		4" PUMP FLOW RATE (GPM)								
		1.5 HP X3 STP		2 HP STP		2 + 2 HP STP		4 HP STP		4 + 4 HP STP
Active Fueling Positions	Pipe Length (Ft)	Pipe Size (In)								
		1.5"	2"	1.5"	2"	1.5"	2"	1.5"	2"	3"
4	<150	≥ 10	≥ 10	≥ 10	≥ 10	≥ 10	≥ 10	≥ 10	≥ 10	≥ 10
8	<250	7.1	7.5	9.1	9.8	≥ 10	≥ 10	9.6	≥ 10	≥ 10
12	<360	4.8	5.1	6.1	6.8	9.5	≥ 10	7.4	8.6	≥ 10
14	<400	4.1	4.3	5.3	5.9	8.2	≥ 10	6.4	7.4	≥ 10
16	<425	3.6	3.8	4.6	5.1	7.2	9.2	5.6	6.5	≥ 10
18	<475	3.2	3.4	4.1	4.5	6.4	8.2	5	5.8	≥ 10
20	<500	2.9	3	3.7	4.1	5.7	7.4	4.4	5.3	≥ 10

#### Parameters

- **Tank Diameter:** 10'
- **Tank Bury Depth:** 3'
- **Pipe Type:** Flex Piping
- **Fittings:** 1 Tee and 2 Elbows per Dispenser
- **Fuel Type:** Diesel Fuel Specific Gravity (SG) = 0.84

**Note:** Actual flow rates may vary based on site design and as-built condition

## ► HIGH FLOW DISPENSER FOR UP TO 25 GPM

The information provided in the following chart is the estimated flow in GPM per nozzle in High Flow dispensers. It helps you select the proper The Red Jacket Pump motor size based on the average active fueling positions on your site and the piping settings.



		FLOW RATE (GPM)					
		4 + 4 HP STP 4" PUMP		3 HP STP 6" PUMP		5 HP STP 6" PUMP	
Active Fueling Positions	Pipe Length (Ft)	Pipe Size (In)					
		2"	3"	2"	3"	2"	3"
4	<175	≥25	≥25	21.4	24.1	≥25	≥25
6	<250	20.7	24.9	16.8	20.1	20.5	≥25
8	<300	17.1	21.2	13.8	16.9	17.2	22.4
10	<350	14.2	18.2	11.5	14.4	14.4	19.6
12	<400	12.2	15.8	9.9	12.5	12.5	17.3

<b>Parameters</b>	<ul style="list-style-type: none"> <li>• <b>Tank Diameter:</b> 10'</li> <li>• <b>Tank Bury Depth:</b> 3'</li> <li>• <b>Pipe Type:</b> Flex Piping</li> <li>• <b>Fittings:</b> 1 Tee and 2 Elbows per Dispenser</li> <li>• <b>Fuel Type:</b> Diesel Fuel SG = 0.84</li> </ul>
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**Note:** Actual flow rates may vary based on site design and as-built condition

## ► ULTRA-HIGH FLOW DISPENSER FOR UP TO 32 GPM

The information provided in the following chart is the estimated flow in GPM per nozzle in Ultra-High Flow dispensers. It helps you select the proper The Red Jacket Pump motor size based on the average active fueling positions on your site and the piping settings.



		FLOW RATE (GPM)			
		4 + 4 HP STP 4" PUMP		5 HP STP 6" PUMP	
Active Fueling Positions	Pipe Length (Ft)	Pipe Size (In)			
		2"	3"	2"	3"
4	<175	26.4	29	25.6	28.8
6	<250	21	24.9	20.9	25.5
8	<300	17.4	21.2	17.6	22.4
10	<350	14.5	18.2	14.8	19.6
12	<400	12.5	15.8	12.8	17.3

<b>Parameters</b>	<ul style="list-style-type: none"> <li>• <b>Tank Diameter:</b> 10'</li> <li>• <b>Tank Bury Depth:</b> 3'</li> <li>• <b>Pipe Type:</b> Flex Piping</li> <li>• <b>Fittings:</b> 1 Tee and 2 Elbows per Dispenser</li> <li>• <b>Fuel Type:</b> Diesel Fuel SG = 0.84</li> </ul>
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**Note:** Actual flow rates may vary based on site design and as-built condition