

Pressure Chart for 10-34-0

For use with Rate Controllers and Ground Drive Pumps

GPA Water = GPA 10-34-0 x 1.19	GPA	Product	30 in. Spacing													Water GPA
			Operating Pressure (psi) of 10-34-0													
			3.0 mph	3.5 mph	4.0 mph	4.5 mph	5.0 mph	5.5 mph	6.0 mph	6.5 mph	7.0 mph	7.5 mph	8.0 mph	9.0 mph	10.0 mph	
CP4916-63	10.5	10-34-0	--	--	--	10	13	15	18	21	25	28	32	41	51	12.5
CP4916-63	11.0	10-34-0	--	--	--	12	15	18	22	26	30	34	39	49	--	13.1
CP4916-63	11.5	10-34-0	--	--	12	15	18	22	26	31	36	41	47	59	--	13.7
CP4916-63	12.0	10-34-0	--	11	14	17	22	26	31	36	42	48	55	--	--	14.3
CP4916-63	12.5	10-34-0	--	12	16	21	25	31	37	43	50	57	--	--	--	14.9
CP4916-63	13.0	10-34-0	11	15	19	24	30	36	43	50	58	--	--	--	--	15.5
CP4916-63	13.5	10-34-0	12	17	22	28	35	42	50	58	--	--	--	--	--	16.0

Orifice Options for 10-34-0

Below is flow data at 30 psi for 3 orifices above and below your orifice.

For use with Speed and Pressure

GPA Water = GPA 10-34-0 x 1.19	Operating Pressure PSI	Thru 1 orifice 10-34-0 GPM	30 in. Spacing													Thru 1 orifice Water GPM
			Gallons per Acre (GPA) of 10-34-0													
			3.0 mph	3.5 mph	4.0 mph	4.5 mph	5.0 mph	5.5 mph	6.0 mph	6.5 mph	7.0 mph	7.5 mph	8.0 mph	9.0 mph	10.0 mph	
CP4916-57	30	0.2911	19.2	16.5	14.4	12.8	11.5	10.5	9.6	8.9	8.2	7.7	7.2	6.4	5.8	0.3460
CP4916-59	30	0.3155	20.8	17.8	15.6	13.9	12.5	11.4	10.4	9.6	8.9	8.3	7.8	6.9	6.2	0.3750
CP4916-61	30	0.3399	22.4	19.2	16.8	15.0	13.5	12.2	11.2	10.4	9.6	9.0	8.4	7.5	6.7	0.4040
CP4916-63	30	0.3576	23.6	20.2	17.7	15.7	14.2	12.9	11.8	10.9	10.1	9.4	8.9	7.9	7.1	0.4250
CP4916-65	30	0.3803	25.1	21.5	18.8	16.7	15.1	13.7	12.5	11.6	10.8	10.0	9.4	8.4	7.5	0.4520
CP4916-67	30	0.4047	26.7	22.9	20.0	17.8	16.0	14.6	13.4	12.3	11.4	10.7	10.0	8.9	8.0	0.4810
CP4916-68	30	0.4173	27.5	23.6	20.7	18.4	16.5	15.0	13.8	12.7	11.8	11.0	10.3	9.2	8.3	0.4960

System Specifications

Full Rate Orifice: CP4916-63

Implement:	Planter	Target Speed:	6.0 mph	Req'd Prod. GPM:	0.3636 gpm/orif.
Width:	60 ft	Target Pressure:	30 psi	#63 Prod. GPM:	0.3576 gpm/orif.
Effect. Row Spacing:	30 inches	Target Prod. GPA:	12.0 gpa	#63 Prod. GPA:	11.8 gpa
No. of Rows:	24 rows	Req'd Total Prod. GPM:	8.7 gpm		
		Req'd Total Water GPM:	10.4 gpm		@ 6 mph & 30 psi

Op. Press. of #63 Orifice: 31 psi
@ 6 mph & 12 gpa



"Our mission is to help you realize the potential of your investment."

765-563-3426 o www.kelleyeng.com o info@kelleyeng.com



Note: Always insert Orifice Plate with side marked with number facing the outlet.
MATERIAL: Stainless Steel

* - Graphic from TeeJet Catalog 51 2011.



CP4916-63 The -63 represents the diameter of the orifice opening per 1000ths of an inch. In this case, 63/1000 inch or 0.0630 inch.



Note: Always insert Orifice Plate with side marked with number facing the outlet.
MATERIAL: Stainless Steel

* - Graphic from TeeJet Catalog 51 2011.

Troubleshooting

PRESSURE - It is higher or lower than the Pressure Chart above shows.

HIGH Look for restrictions down stream from the pressure gauge.

Examples: A pinched hose(s), plugged orifices, a shut-off did fully open, a faulty pressure gauge, or gauge protector.

A faulty flow meter sensor or rotor, or material in the flow meter causing it to drag.

LOW Look for break(s) in the line down stream from the pressure gauge.

Examples: A split hose, a hose off, an orifice left out, the wrong orifice size, a faulty pressure gauge, or gauge protector.

LOW Check for restrictions before the pressure gauge. If using a Controller, it would also not be able to maintain rate at the desired speed.

Examples: Air in the pump, plugged filters, pinched hose, or plugged tank outlet.

RATE - It is jumping up and down on my controller and won't stay steady.

1. Check the filters in the system.
2. Check the speed on your monitor. Is it steady? (*Jumping more than ± 0.2 mph is usually not normal*)
3. Try running in Manual. Can you manually adjust the pressure and rate? (*Manual mode is not available in all systems*)
4. Check the Flow Meter. Is the turbine spinning freely?
5. Give us a call at 765-563-3426.

We are available to help you troubleshoot your system. Usually we can solve any problems over the phone and get you going.

We are also available for an in field service call if needed.

GPA - My Total Gallons or my Gallons per Acre Rate are off. Which way do I move my Flow Meter calibration number?

First Is the monitor displaying the correct rate? If it is displaying and maintaining the correct rate, then keep on reading below. If the monitor is NOT maintaining the correct rate, then refer to the list above.

Too Little If you are not getting enough on per acre OR covering too many acres per load, then you need to raise your number. Usually a couple of tenths at a time (0.2) or twenty (20) at a time on a Raven monitor.

Too Much If you are getting too MUCH on per acre OR not covering enough acres per load, then you need to lower your number. Usually a couple of tenths at a time (0.2) or twenty (20) at a time on a Raven monitor.

Way Off Give us a call at 765-563-3426.



Kelley Engineering LLC

3367 West 1150 South
Brookston, IN 47923

*"Our mission is to help you realize
the potential of your investment."*

765-563-3426 o www.kelleyeng.com o info@kelleyeng.com

