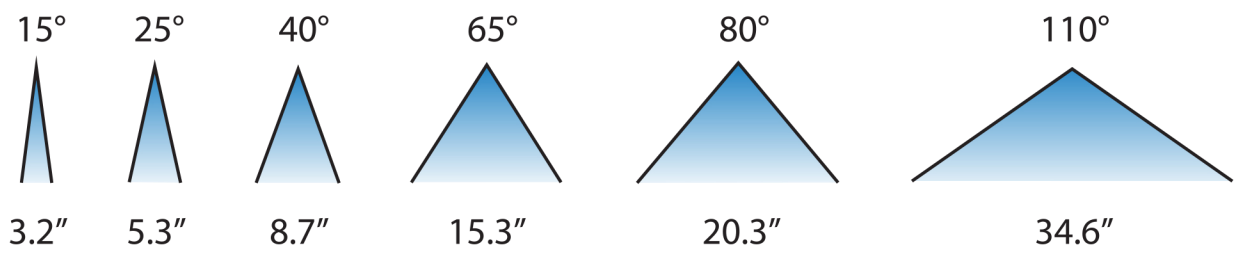
Helpful Information

TOMMY CAR WASH SYSTEMS

METERING PLUG ASSEMBLIES
Draw Volume in ml in a given time

Length	ml in 30s	ml in 25s	ml in 15s
3.00″	1.9	1.6	0.9
2.00″	2.6	2.2	1.3
1.00″	4.6	3.8	2.3
0.75″	5.7	4.8	2.9
0.50″	8.0	6.6	4.0
0.25″	13.9	11.6	7.0

NOZZLE COVERAGE (at 12 inches)



Conveyor Speed Chart
based on conveyor movement in 15 seconds

60 inches (5′)	=	**60 cars per hour**
90 inches (7.5′)	=	**90 cars per hour**
120 inches (10′)	=	**120 cars per hour**
150 inches (12.5′)	=	**150 cars per hour**
180 inches (15′)	=	**180 cars per hour**

NOZZLE CHART - Volume (GPM at various PSI)

H-VV
Small Capacity
1/8″–1/4″

H-VVL
Integral Strainer
1/8″–1/4″

H-U
Med Capacity
1/8″–3/4″

U
Lg Capacity
1″–2″

NOZZLE SIZE	ORIFICE DIM. IN.	40 PSI	100 PSI	250 PSI	500 PSI	700 PSI	800 PSI	1,000 PSI
0.05	0.02	0.05	0.08	0.12	0.18	0.20	0.23	0.25
0.067	0.02	0.07	0.11	0.16	0.24	0.28	0.30	0.33
1.00	0.03	0.10	0.16	0.25	0.35	0.40	0.43	0.50
2.00	0.03	0.20	0.32	0.50	0.71	0.80	0.89	1.00
3.00	0.04	0.30	0.47	0.75	1.10	1.25	1.35	1.50
4.00	0.05	0.40	0.63	1.00	1.40	1.70	1.80	2.00
5.00	0.06	0.50	0.79	1.30	1.80	2.10	2.20	2.50
6.00	0.06	.60	.95	1.50	2.10	2.50	2.70	3.00
8.00	0.07	0.80	1.30	2.00	2.80	3.40	3.60	4.00
10.00	0.08	1.00	1.60	2.50	3.50	4.20	4.50	5.00
15.00	0.09	1.50	2.40	3.80	5.30	6.40	6.80	7.50
20.00	.11	2.00	3.20	5.00	7.10	8.40	9.00	10.00
40.00	0.16	4.00	6.30	10.00	14.20	16.80	18.00	20.00

Conversions
and other helpful math

1 gal.	= 128 oz.	55 gal.	= 7,040 oz.
5 gal.	= 640 oz.	1 qt.	= 32 oz.
30 gal.	= 3,840 oz.	4 qt.	= 1 gal.

0.5 oz. per car = 14,080 cars per 55 gal. drum
1.0 oz. per car = 7,040 cars per 55 gal. drum
1.5 oz. per car = 4,693 cars per 55 gal. drum

Hydrominder Tip Chart

All ratios calculated using 40 psi at water viscosity

	Tip Color	511	515	546	Dia.
ULTRA-LEAN	Lt Orange	1:1030			
	Red/Purple	1:880			
	Olive	1:530			
	Lt Purple	1:465			
	Pink	1:355			
	Pink	1:240	1:152	1:1024	.010
	Purple	1:120	1:104	1:596	.014
	Aqua	1:100			
	Yellow	1:90	1:48	1:416	.020
	Brown	1:75	1:40	1:296	.023
	Orange	1:64	1:33	1:234	.025
	Green	1:48	1:24	1:176	.029
	Tan	1:36	1:16	1:144	.035
	Blue	1:25	1:12	1:96	.040
	White	1:23	1:10	1:67	.043
	Red	1:17	1:7	1:48	.052
	Beige	1:8	1:4	1:32	.070
	Black	1:6	1:2	1:20	.098
	Gray	1:5	1:5.1	1:10	.128
	No Tip	1:4	1:1	1:6	OPEN

Volumes at Various Pressures

Size	40 psi	800 psi	1,000 psi
03	0.3 GPM	1.25 GPM	1.5 GPM
04	.4 GPM	1.70 GPM	2.0 GPM
05	.5 GPM	2.10 GPM	2.5 GPM
10	1.0 GPM	4.20 GPM	5.0 GPM

Hydra-Flex® PLUGS/TIPS - Chemical to Water Dilution Ratios

	PLUG LENGTH	.029″ 0.25 GPM	.040″ 0.50 GPM	.051″ 0.75 GPM	.057″ 0.97 GPM	.070″ 1.41 GPM	.083″ 2.10 GPM	.086″ 2.30 GPM	.098″ 3.20 GPM	.125″ 5.40 GPM
	3.00″	1:251	1:503	1:754	1:1006	1:1509	1:2012	1:2263	1:3269	1:5532
	2.00″	1:181	1:363	1:544	1:726	1:1089	1:1451	1:1633	1:2359	1:3991
	1.00″	1:104	1:208	1:311	1:415	1:623	1:831	1:934	1:1350	1:2284
	0.75″	1:82	1:165	1:247	1:329	1:494	1:659	1:741	1:1071	1:1812
	0.50″	1:59	1:119	1:178	1:238	1:357	1:475	1:535	1:772	1:1307
	0.25″	1:34	1:68	1:102	1:136	1:204	1:272	1:306	1:442	1:748
	METERING TIP COLOR									
ULTRA-LEAN	Copper	1:57	1:104	1:155	1:146	1:281	1:406	1:458	1:629	1:1074
	Pumpkin	1:43	1:82	1:119	1:126	1:238	1:348	1:396	1:554	1:946
	Burgundy	1:34	1:67	1:97	1:111	1:207	1:304	1:367	1:495	1:845
	Lime	1:28	1:57	1:81	1:100	1:183	1:270	1:347	1:447	1:784
	Tan	1:28	1:37	1:81	1:100	1:183	1:270	1:307	1:447	1:764
	Orange	1:23	1:29	1:64	1:78	1:137	1:196	1:215	1:314	1:535
	Turquoise	1:17	1:21	1:45	1:55	1:91	1:126	1:134	1:197	1:336
	Pink	1:14	1:16	1:35	1:42	1:68	1:93	1:98	1:143	1:244
	Lt Blue	1:11	1:12	1:24	1:31	1:47	1:64	1:66	1:93	1:166
	Brown	1:10	1:12	1:22	1:28	1:43	1:58	1:59	1:88	1:150
	Red		1:10	1:17	1:23	1:34	1:45	1:46	1:69	1:116
	White			1:16	1:22	1:31	1:42	1:43	1:64	1:108
	Green			1:14	1:20	1:28	1:37	1:38	1:55	1:94
	Blue			1:12	1:17	1:23	1:30	1:31	1:46	1:77
	Yellow			1:9	1:12	1:16	1:20	1:22	1:31	1:52
	Black				1:10	1:13	1:16	1:17	1:24	1:40
	Purple				1:6.6	1:8.3	1:9	1:10	1:13	1:21
	Gray				1:5.3	1:6.7	1:6.9	1:7.6	1:10	1:16
	Open				1:4.9	1:5.3	1:5.2	1:6	1:6.1	1:10

Chemical draw rates are based on a viscosity equal to water. Actual draw rates may vary. Field tests are recommended.