

HILBORN NOZZLE FLOW CHART, at 30psi and .792sg (methanol)

-According to Vern Tomlinson of Fuel Injection Engineering (Hilborn), the Hilborn nozzle number is a designation of its' flow in gallons per minutes.

-Example #1 is #4 nozzles flows .04GPM each at 30PSI and using .792specific gravity fluid, so eight #4's equals .32GPM.

-Example #2 is #20 nozzles flow .20GPM each so eight flow 1.60GPM.

-These charts have been made to show the flow in PPH (Pounds Per Hour) based from square root calculations of the 30psi column using the formula: **new pressure divided by old pressure, square root, times old flow = new flow.**

| -----at 30 PSI----- | | -----psi----- | | | | | | |
|--|----------|---|-----|-----|------|------|------|------|
| | | 30 | 40 | 50 | 60 | 70 | 80 | 90 |
| | | sq. rt. (1.155) (1.118) (1.095) (1.080) (1.069) (1.061) | | | | | | |
| Nozzle/diam-/---SIA---GPM---pph---8xGPM | SIA x 8 | -----eight nozzles-PPH----- | | | | | | |
| #4A---.016" / .0002011--- .04---15.84--- .32 | .0016088 | 127 | 146 | 164 | 179 | 194 | 207 | 219 |
| #5A---.017" / .0002270--- .05---19.80--- .40 | .0018160 | 158 | 183 | 204 | 224 | 241 | 258 | 274 |
| #6A---.020" / .0003142--- .06---23.76--- .48 | .0025136 | 190 | 219 | 245 | 269 | 290 | 310 | 329 |
| #7A---.0215" / .0003631--- .07---27.72--- .56 | .0029048 | 222 | 256 | 287 | 314 | 339 | 363 | 384 |
| #8A---.0225" / .0003976--- .08---31.68--- .64 | .0031808 | 253 | 293 | 327 | 358 | 386 | 413 | 438 |
| #9A---.024" / .0004524--- .09---35.64--- .72 | .0036192 | 285 | 329 | 368 | 403 | 435 | 465 | 494 |
| #10A---.025" / .0004909--- .10---39.60--- .80 | .0039272 | 317 | 366 | 409 | 448 | 484 | 518 | 549 |
| #12A---.028" / .0006158--- .12---47.52--- .96 | .0049264 | 380 | 439 | 491 | 538 | 580 | 621 | 658 |
| #14A---.028" / .0006605--- .14---55.44--- 1.12 | .0052840 | 444 | 512 | 573 | 627 | 678 | 724 | 768 |
| #16A---.032" / .0008042--- .16---63.36--- 1.28 | .0064336 | 507 | 585 | 655 | 717 | 774 | 828 | 878 |
| #18A---.033" / .0008553--- .17---71.28--- 1.44 | .0068424 | 570 | 658 | 736 | 806 | 871 | 931 | 988 |
| #20A---.035" / .0009621--- .20---79.20--- 1.60 | .0076968 | 634 | 732 | 818 | 896 | 968 | 1035 | 1097 |
| ---.037" / .0010750--- .22---88.51--- 1.788 | .0086000 | 708 | 817 | 914 | 1001 | 1081 | 1156 | 1226 |

-----main jet diameters and square inch areas-----

| | | | |
|------------------|------------------|-----------------|------------------|
| .070" / .0038485 | .095" / .0070882 | .120" / .011310 | .145" / .016513 |
| .075" / .0044170 | .100" / .0078540 | .125" / .012272 | .150" / .017672 |
| .080" / .0050265 | .105" / .0086590 | .130" / .013273 | .155" / .018869 |
| .085" / .0056745 | .110" / .0095033 | .135" / .014314 | .160" / .020106 |
| .090" / .0063617 | .115" / .0103870 | .140" / .015394 | .165" / .0213825 |

-----4 nozzles for 122ci Pinto @ Bonneville-----

psi @ 30-----40-----50-----60-----70-----80-----90-----100

| |
|---|
| #4A |
| #5A |
| #6A |
| #7A |
| #8A---126.5---146.5---163.5---179---193---206.5---219---231 |
| #9A---142.5---164.5---184---201.5---217.5---232.5---247---260 |
| #10A |
| #12A |
| #14A---222---256---286.5---313.5---339---362---384---405.3 |
| #16A |
| #18A |
| #20A---317---366---409---448---484---517.5---548.5---578.8 |