



Port Flow Analyzer v3.0 Performance World
 Test: PW SBC 70180 www.performance-world.com
 Folder: Chevrolet Page: 1

Head #: Bore Adapter Diameter: 4.00"
 Customer: Int Port Adapter: Radiused Inlet
 Operator: Exh Port Adapter: Short "stub stack"

Test Comments:
 PW 70180 SB Chevrolet aluminum head as cast. Note:

Report of:	Tested at	Corr to	# Vlvs	Vlv Dia	Stem Dia	Port Area
Comparing	28"	28.0"	1	2.02"	.341"	0.00 sq in
1 Cylinders	Exh: 28"	28.0"	1	1.60"	.341"	0.00 sq in

Port	Lift	L/D	Avg CFM	Cyl 1 CFM
Intake	0.100	0.050	61.7	61.7
Intake	0.200	0.099	123.7	123.7
Intake	0.300	0.149	177.7	177.7
Intake	0.400	0.198	223.4	223.4
Intake	0.500	0.248	251.1	251.1
Intake	0.600	0.297	254.0	254.0
Intake	0.700	0.347	255.6	255.6
Exhaust	0.100	0.063	44.8	44.8
Exhaust	0.200	0.125	92.8	92.8
Exhaust	0.300	0.188	135.3	135.3
Exhaust	0.400	0.250	151.6	151.6
Exhaust	0.500	0.313	158.9	158.9
Exhaust	0.600	0.375	161.9	161.9
Exhaust	0.700	0.438	165.3	165.3

NOTE: ALL FLOWBENCHES ARE NOT CREATED EQUAL!
Data from one bench to the next can be vastly different.
If you are modifying this head, it is important to "baseline" first to ensure accuracy.
The data on this sheet is for reference only.

Head File: 70180
 Head Comments:
 PW 70180 SB Chevrolet aluminum head as cast.

Head Number	Customer
Intake	Exhaust
Layout: 1 valve & 1 port	Layout: 1 valve & 1 port
Valve Diameter, in 2.02"	Valve Diameter, in 1.60"
Stem Diameter, in .341"	Stem Diameter, in .341"
Throat Diameter, in	Throat Diameter, in
Avg Seat Angle, deg 45	Avg Seat Angle, deg 45
Port Shape: Rectangular	Port Shape: D
Port Volume, ccs 185cc	Port Volume, ccs 71cc
Avg Port Diameter, in	Avg Port Diameter, in
Avg Port Height, in	Avg Port Height, in
Port Length, in	Port Length, in

Specifications 70180

Material	A356 Aluminum
Combustion Chamber CC	73cc
Intake Port Volume CC	185cc
Intake Port Dimension	2.00" x 1.20"
Exhaust Port Volume CC	71cc
Exhaust Port Design	D Shape
Spark Plug Location	Straight
Intake Valve Diameter	2.02"
Exhaust Valve Diameter	1.60"
Valve Stem Diameter	11/32" (.343")
Valve Spring Pocket I.D.	1.49"
Valve Guide Material	Manganese Bronze
Valve Guide O.D.	0.530" (.570" at base)
Rocker Stud Thread Size	7/16"x14
Valve Cover Mounting	Perimeter & Centerbolt
Valve Angle	23 Degree
Valve Seat Machining	Intake=4-Angle Exhaust=3-Angle
Oiling	Through Pushrod

Hyd Flat Tappet (up to .525" lift) (Check Cam Manufacturer Recommendation)

Suggested Components	Size	Brand
Intake Valves	2.02" x 4.91" x 11/32"	PW 360020
Exhaust Valves	1.60" x 4.91" x 11/32"	PW 360016
Valve Spring Spec	1.26" Single w/damper	PEP 053-574-700 (16pcs)
Valve Retainers	7-Degree 11/32"	Manley 23651-1 (16pcs)
Valve Locks	7-Degree 11/32"	PW 360410
Valve Seals	11/32" x .530"	PW 360480
Valve Spring Cups		PW 360112
Rocker Arm Studs	7/16"-14 x 3/8"-24	Comp Cams 4500-16
Pushrod Guide Plates	5/16" Flat	PW 360200
Spark Plugs	Autolite 3924 or Equivalent	