



Port Flow Analyzer v3.0 Performance World
 Test: PW SBF 58185R www.performance-world.com
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Head #: Bore Adapter Diameter: 4.00"
 Customer: Int Port Adapter: Radiused Inlet
 Operator: Exh Port Adapter: Short "stub stack"

Test Comments:
 PW 58185R SB Ford 185 Full CNC. Note:

Report of:	Tested at	Corr to	# Vlvs	Vlv Dia	Stem Dia	Port Area
Comparing	28"	28.0"	1	2.02"	8mm	0.00 sq in
1 Cylinders	Exh: 28"	28.0"	1	1.60"	8mm	0.00 sq in

Port	Lift	L/D	Avg CFM	Cyl 1 CFM
Intake	0.100	0.050	68.2	68.2
Intake	0.200	0.099	121.7	121.7
Intake	0.300	0.149	179.8	179.8
Intake	0.400	0.198	229.3	229.3
Intake	0.500	0.248	261.7	261.7
Intake	0.600	0.297	279.3	279.3
Intake	0.700	0.347	284.8	284.8
Exhaust	0.100	0.063	58.4	58.4
Exhaust	0.200	0.125	112.6	112.6
Exhaust	0.300	0.188	163.4	163.4
Exhaust	0.400	0.250	201.6	201.6
Exhaust	0.500	0.313	219.7	219.7
Exhaust	0.600	0.375	226.0	226.0
Exhaust	0.700	0.438	229.0	229.0

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: 58185R
 Head Comments:
 PW 58185R SB Ford 185 Full CNC

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 8mm	Stem Diameter, in 8mm
Throat Diameter, in	Throat Diameter, in
Avg Seat Angle, deg 45	Avg Seat Angle, deg 45
Port Shape: Rectangular	Port Shape: Square
Port Volume, ccs 184cc	Port Volume, ccs 62cc
Avg Port Diameter, in	Avg Port Diameter, in
Avg Port Height, in	Avg Port Height, in
Port Length, in	Port Length, in

Specifications 58185R

Material	A356 Aluminum
Combustion Chamber CC	60cc
Intake Port Volume CC	184cc
Intake Port Dimension	2.10" x 1.25"
Exhaust Port Volume CC	62cc
Exhaust Port Dimension	1.35" x 1.35"
Spark Plug Location	OEM
Intake Valve Diameter	2.02"
Exhaust Valve Diameter	1.60"
Valve Stem Diameter	8mm
Valve Spring Pocket I.D.	1.55"
Valve Guide Material	Manganese Bronze
Valve Guide O.D.	0.500" (.560" at base)
Rocker Stud Thread Size	7/16"x14
Valve Cover Mounting	OEM
Valve Angle	20 Degree
Valve Seat Machining	Multi-Angle
Oiling	Through Pushrod

Suggested Components

	Size	Brand
Intake Valves	2.02" x 4.90" x 8mm	PW #360040
Exhaust Valves	1.60" x 4.95" x 8mm	PW #360046
Valve Seals	8mm x .502" Viton	PW #360488
Head Gaskets		Fel-Pro #1011-1
Intake Gasket		Fel-Pro #1262
Exhaust Gasket		Fel-Pro #1415
Head Bolts	(7/16")	ARP #154-3605
Head Bolts	(1/2")	ARP #154-3603
Head Studs	(1/2")	ARP #154-4003
Pushrod Guide Plates	5/16" Flat	Comp #4835-8 (Adjustable)
Spark Plugs	14mm x .750" Gasketed	Autolite 3924



Cylinder Head Checklist

All PWHEADS “bare” cylinder heads are sold ready for assembly.

What this means is the heads are ready for the assembly process, but still **MUST** be checked per the following list below. This includes a visual inspection. Check all cylinders and measurements as you normally would for any engine assembly.

It is the responsibility of the assembly technician/installer to:

- 1) Check valves for proper seating. Lap them and check surfaces.
- 2) Check guide to valve stem clearance. Clearance as required.
- 3) Check valve guide O.D. and ensure you have the correct seals.
- 4) Check valve springs for coil bind height and ensure they are correct for your camshaft.
- 5) Check for correct installed height on valve springs. Do this with inserts installed. Shim as necessary.
- 6) Check for retainer to top of guide clearance. Do this with inserts installed.
- 7) Use a non-hardening sealer on the rocker arm studs for applications where the threads run into a port such as the Small Block Chevrolet intake.
- 8) After setting the guideplates in place, torque the rocker studs down to 45 lb-ft in three stages.
- 9) Install sensors or pipe plugs in any open external water jacket holes if applicable.
- 10) Don't forget to check for proper pushrod length after heads are installed.

Any questions, please contact your engine builder or e-mail tech@performance-world.com