

Note 22

Design Parameters for other engines



All non-CoY Grand Prix engines

Figure numbers as in Design Parameter section

<u>G4</u>	<u>G5</u>	<u>G6</u>	<u>G8</u>	<u>G9</u>	<u>G10</u>	<u>G12</u>	<u>G14</u>
<u>100/Smm</u>	<u>B/S</u>	<u>R</u>	<u>VIA⁰</u>	<u>IVA/PA</u>	<u>IVL/IVD</u>	<u>CRL/S</u>	<u>B/PH</u>

Plotted as O

1992 Honda RA122E/B [SO20 in Appendix 1] DASO (69, 711)

75V12; B = 88 mm; S = 47.9 mm; V = 3,496 cc

2.088 1.837 12.9 29 0.344 0.315 2.32 1.96

1996 Yamaha OX11A (Judd JV) DASO (674)

72V10; B = 90 mm; S = 47.13 mm; V = 2,998 cc.

2.122 1.91 25 0.348 2.14

1996 Mugen Honda MF301 DASO (672)

72V10; B = 93 mm; S = 44.1 mm; V = 2,996 cc.

2.267 2.11 23 0.336 2.72* 2.3

*The CRL/S ratio was unusually high for the time because the engine had been designed as 3.5 Litres and when the regulation swept volume was reduced to 3 Litres for 1995 at short notice (following the death of Ayrton Senna) the unit had been reduced with a short-stroke crank in the original cylinder block, necessitating a lengthened rod.

2005 BMW P85 Prototype DASO (1095; *Ten Years of BMW F1 Engines*.

Paper by Prof. Dr-Ing. Mario Theissen et al. 2010)

90V10; B = 98 mm; S = 39.75 mm; V = 2,998.5 cc.

2.516 2.465 0.359

Not plotted

2006 Cosworth CA/6 DASO (1069; *Race Engine Technology* No.20, Feb 2007).

DASO (1107; *Race Engine Technology* No.73, Sept./Oct. 2013).

90V8; B = 98 mm; S = 39.77 mm; V = 2,399.9 cc.

2.514 2.464 13.3 18 0.355 0.387 2.573

+ 6⁰ in the plane of the valve pairs (longitudinally)

2009 Toyota RVX-09H DASO (1091; *Race Engine Technology* No.49, Sept/Oct 2010)

90V8; B = 96.8 mm; S = 40.75 mm; V = 2,399 cc

2.454 2.375 13.6 21.2 0.359 0.376 2.724

+ 3.2⁰ in the plane of the valve pairs (longitudinally)

