



NOTE 75 Rivals to the Ford-Cosworth DFV

The 10 major engine makes against which the Ford-Cosworth DFV competed from Mid 1967 to the end of 1983 and their main specifications are listed below.

DWC = Drivers' World Championship; CWC = Constructors' World Championship.

TC = TurboCharged; all others were 3L Normally Aspirated.

<u>Configuration</u>	<u>B/S</u> _mm	<u>Valve No. per Cylinder</u>	<u>VIA⁰</u>	<u>Dates : from</u>	<u>to</u>
<u>FERRARI</u>	<u>7 Specifications</u>	<u>47 Wins (1968 on)</u>	<u>DWC 1975, 1977, 1979</u>	<u>CWC 1975, 1976,1977,1979 1982, 1983</u>	
•60V12 Outside Exh.	77 / 53.5 = 1.439	3	Wide (Axial Inlets)	Monza 1966	April 1967
•60V12 Central Exh.	As Above	3	Wide (Axial Inlets)	April 1967	Monza 1967
•60V12 Central Exh.	As Above	4	Narrow	Monza 1967	Through 1968
•60V12 Outside Exh.	As Above	4	Narrow	1969	Through 1969
•F12	78.5 / 51.5 = 1.524	4	20	1970	1971
•F12	80 / 49.6 = 1.613	4	Narrow, prob. 20	1972	Early 1981
•120V6 1.5L TC	81 / 48.4 = 1.674	4	38	Early 1981	Past 1983
<u>REPCO</u>	<u>2 Specifications</u>	<u>3 Wins (In 1967 after DFV debut)</u>	<u>DWC 1967</u>	<u>CWC 1967</u>	WCs incl. 1 Win for 1966 Spec. prior to DFV debut
•90V8 Central Exh.	88.9 / (1982 on) 60.325 = 1.474	2	0	Through 1967	
•90V8	As Above	4	30	Through 1968	
<u>Eagle-Weslake</u>		<u>1 Win (1967 after DFV debut)</u>			
•60V12	72.8 / 60 = 1.213	4	30	Monza 1966	Part 1968
<u>Honda</u>	<u>3 Specifications</u>	<u>1 Win (1967 after DFV debut)</u>			
•90V12 Central Exh.	78 / 52.1 = 1.497	4	Wide (Axial Inlets)	Monza 1966	1967
•?V12 Outside Exh.	?	4	Not Wide	Through 1968	
•120V8 Air-Cooled	88 / 61.4 = 1.433	4	Not known	1968 (1 race)	
<u>Maserati</u>	<u>2 Specifications</u>	<u>0 Wins after DFV debut</u>			
•60V12	70.4 / 64 = 1.10	2	78 (Axial Inlets)		1967 Pre-Monza
•60V12	75.2 / 56 = 1.343	3	0	Monaco 1967	End 1967
<u>BRM</u>	<u>6 Specifications</u>	<u>4 Wins (1971-1972)</u>			
•I 16	69.85 / 48.895 = 1.429	2	52 (Axial Inlets)	Mid 1966	Start 1968
•I 16 Mk2	As Above	4	13	Not raced	
•60V12	74.6125 / 57.15 = 1.306	2	60 (Axial Inlets)	Through 1968	
•60V12 Central Exh.	As Above	4	13	Through 1969	
•60V12 Outside Exh.	As Above	4	13	Through 1970	
•60V12	78.5 / 51.5 = 1.524	4	13	1971	1977
<u>Matra</u>	<u>3 Specifications</u>	<u>3 Wins (1977,1978)</u>			
•60V12	79.7 / 50 = 1.594	4	56 (Axial Inlets)	Through 1968	
•60V12	As Above	4	33	Through 1970	
•60V12	As Above	4	15	1971	1972
				1976	1978
				1981	1982
<u>Alfa Romeo</u>	<u>4 Specifications</u>	<u>2 Wins (1978)</u>			
•90V8	86 / 64.4 = 1.335	4	39.5	1970	1971
•F12	77 / 53.6 = 1.437	4	35	1976	1978
•60V12	78.5 / 51.5 = 1.524	4	35	Start 1979	Mid 1979
•90V8 1.5L TC	74 / 43.5 = 1.701	4	Not Known	Late 1982	Past 1983
<u>Renault</u>		<u>15 Wins (1979 on)</u>			
•90V6 1.5L TC	86 / 42.8 = 2.009	4	21.5	Mid 1977	Past 1983
<u>BMW</u>		<u>5 Wins (1982 on)</u>	<u>DWC 1983</u>		
•IL4 1.5L TC	89.2 / 60 = 1.487	4	40	Mid 1981	Past 1983

NOTE 75 _Continued

While the above Table shows the serious competition which the Ford-Cosworth DFV met and defeated in 2 races out of every 3 over 1967–1983, there was one famous name in racing which did *not* enter the lists against it. It will never be known if Mercedes-Benz *could* have beaten the DFV consistently if they *had* built a new racing car in, say, 1978. As they described the many small successful chassis-builders with Ford-Cosworth engines as “boutiques”, it may be that they did not care to race against them for fear of any victories being ascribed simply to their vast resources and any defeats making them look foolish. What we *do* know is that in 1980, when they wanted a high-output rally engine for their 4-cylinder type 190 production saloon and an in-house redesign was not sufficiently powerful, they contracted with Cosworth to make for them a 16-valve head (Cosworth type WAA) which did meet their requirement and later engaged them to supply a modified road-going version in quantity (468).
