



# QED MotorSport Ltd

4 Soar Road, Quorn, Leicestershire, LE12 8BN  
Tel: +44 (0)1509 412317 Fax: +44 (0)1509 416555

## LOTUS TWINCAM Q420 CAMSHAFT DATA SHEET

### Description:

The cam for serious road performance. A superb profile giving the best of both worlds. By virtue of its relatively short duration, low down torque is enhanced without compromising top end power. Obviously such a cam must be fitted with caution and requires careful attention to valve spring loading and valve/piston clearance.

### Peak Power:

145-150 BHP @ 6500rpm

### Peak Torque:

120lbft @ 5500rpm

### Recommended supporting modifications:

10.5:1 Compression ratio  
1.565 inlet valves  
1.325 exhaust valves  
Colsibro bronze valve guides  
Q55 valve springs and retainers  
(Race springs required for engine speeds >7000rpm)  
Electronically managed ignition system

### Technical details:

Expressed Period: 285 degrees  
Maximum cam lift: 0.420"  
Inlet fully open: 100 degrees after top dead centre  
Inlet lift @ TDC: 0.155"  
Inlet valve clearance: 0.004" – 0.006"  
Exhaust fully open: 106 degrees before top dead centre  
Exhaust lift @ TDC: 0.122"  
Exhaust valve clearance: 0.007"-0.009"

### Recommended starting jets for carbs:

	Weber		Dellorto	
	40 DCOE	45 DCOE	40 DHLA	45 DHLA
Choke:	34	36	34	36
Main jet:	140	140	135	155
Air corrector:	155	180	150	170
Emulsion tube:	F16	F16	.5	.6
Idle jet:	45F8	50F8	50	55

Our range of products has been developed for professional use in motor sport applications. It is expected that anyone using our products will have experience of working on engines and will follow normal engine workshop practice.

These notes are intended as a guideline only. It is the responsibility of the fitter to ensure that all components are sized, assembled, and fastened correctly to perform without future failure. We accept no responsibility for damage caused either to, or by, our products as a result of incorrect or inappropriate assembly or fitment.

The power figures quoted above are an example taken from an engine built and tested by QED MotorSport Ltd. These figures are representative of a typical engine but exact power figures may vary between engines.

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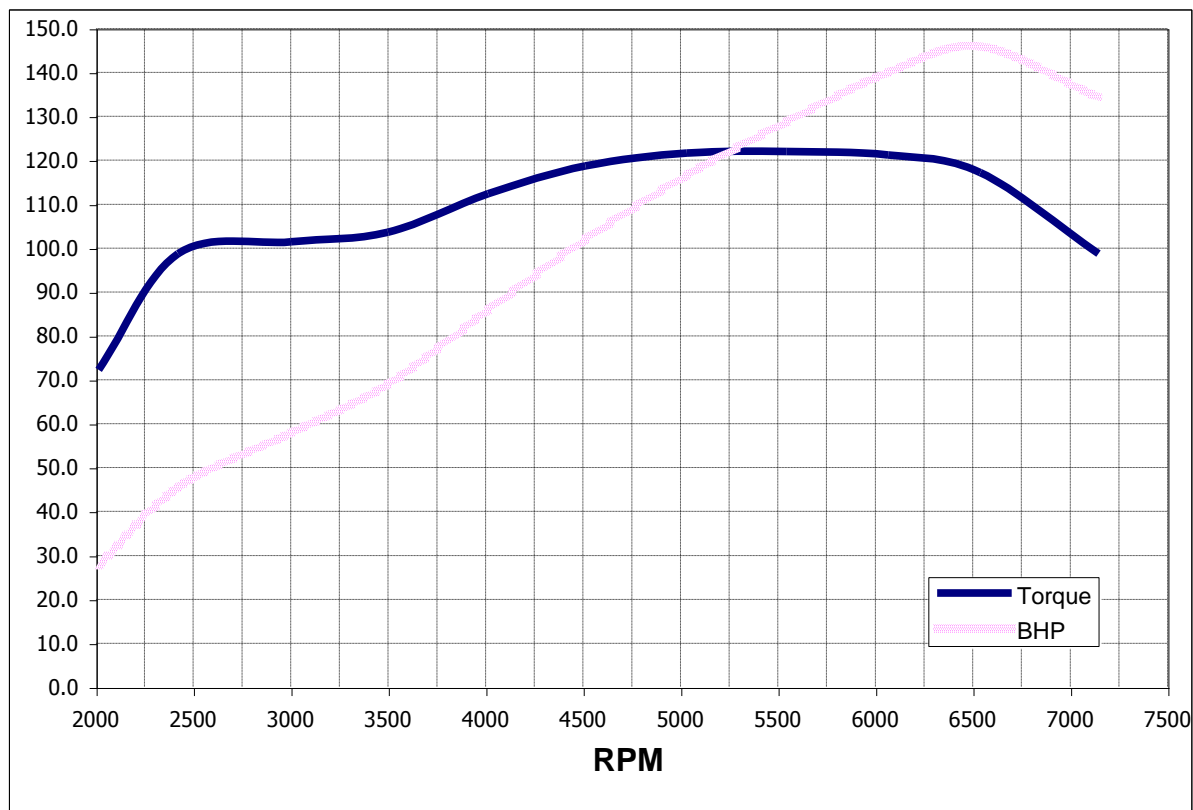
## Dyno Test Results

Engine Lotus TC  
Cam Q420  
CR 10.5:1

Induction 40 DCOE  
Ignition Twin Coil  
ECU DTAfast

Fuel Press. 2.4  
Air temp 27

Engine Speed (RPM)	Torque (lbft)	Power (BHP)
2014	72.3	27.7
2422	98.7	45.5
3001	101.4	57.9
3499	103.6	69.0
4014	112.4	85.9
4512	118.7	102.0
5034	121.6	116.6
5546	122.0	128.8
6067	121.2	140.0
6540	117.2	145.9
7145	98.7	134.3



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