

# 1303612

full race

Bmw S50 B32 320hp, vanos in+ex

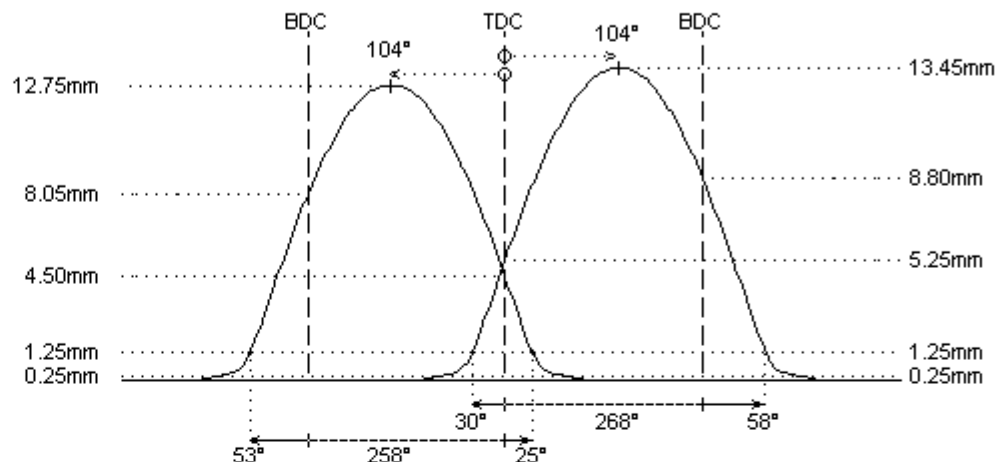
I-6cyl 3.2L 24v DOHC (DTs/DTs)



	intake	exhaust
<b>camshaft data:</b>		
lash ramp	: 0.25mm	0.25mm
duration @ 0.1mm	: 303°	293°
duration @ 1.0mm	: 268°	258°
valve lift	: 13.45mm	12.75mm
cam lift	:	
lobe angle	: 104°	104°
timing @ 1.0mm	: 30° / 58°	53° / 25°
valve lift @ TDC	: 5.25mm	4.50mm
<b>parts setup:</b>		
cam wheels :	:	:
follower	:  CC010	:  CC010
valve lash	:  TS101	:  TS101
valve	: O.E.M.	: O.E.M.
valve locks	: O.E.M.	: O.E.M.
upper retainer	:  99491/s	:  99491/s
lower retainer	:  99492	:  99492
exterior spring	:  PAC-E15009	:  PAC-E15009
interior spring	:  PAC-I15009	:  PAC-I15009
fitted load / length	: 35kg @ 35.0mm	: 35kg @ 35.0mm
max. load / lift	: 114kg @ 14.5mm	: 114kg @ 14.5mm

### REMARKS :

# check valve spring setup for seat load and coil bind length and adjust fitted length if required



### REMARKS :

- # camshafts for use with VVT on intake and exhaust (like original)
- # The VANOS (VVT) system on the intake camshaft changes the PD from 129° to 69°. The data are shown for full intake retard (disengaged VVT).  
The VANOS (VVT) system on the exhaust camshaft changes the PD from 114° to 76°. The data are shown for full exhaust advance (disengaged VVT).  
  
Check distance between valves and piston to be 1mm at least with VVT engaged. Wrong installation will cause severe engine damage!
- # VVT reprogramming, operating range adjustment or even eliminating the VVT system should be considered for camshafts with increased duration
- # These profiles require race cam followers with shim between cam follower and valve (shim under follower). It is not possible to use these profiles on std cam followers with the shim between the follower and the cam (shim over follower).
- # FOR COMPETITION APPLICATIONS ONLY. Following details must be verified:
  - the camshafts must turn smooth in the cylinderhead, provide free travel by machining where needed
  - distance between valve seal and retainer at full lift must be 0.6mm at least
  - minimum valve spring travel of 1.0mm at full lift must be provided
  - distance between valve and piston 1.0mm (pref. 1.5mm). check 5-15° before TDC on exhaust, and after TDC on intake
- # - valve clearance is to be adjusted using mechanical lash caps

- # Valve clearance is to be adjusted using mechanical lash caps
  - please make sure that the lash cap does not touch the valve locks !
  
- # ONLY for use in competition engines with independent engine management (throttle position sensor) or carburetors