

4603023

full race

Opel X20XE big block ecotec (X18XE-2.0L-2.2L)

I-4cyl 2.0L 16v DOHC (DTH/DTH)



intake **exhaust**

camshaft data:

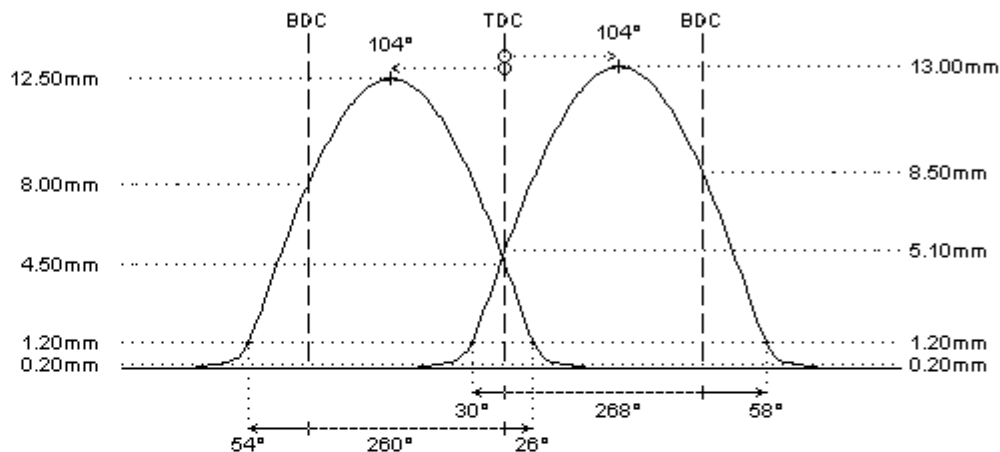
lash ramp	: 0.20mm	0.20mm
duration @ 0.1mm	: 307°	298°
duration @ 1.0mm	: 268°	260°
valve lift	: 13.00mm	12.50mm
cam lift	:	
lobe angle	: 104°	104°
timing @ 1.0mm	: 30° / 58°	54° / 26°
valve lift @ TDC	: 5.10mm	4.50mm

parts setup:

cam wheels :	: CTOPK01	: CTOPK01
follower	: CC004	: CC004
valve lash	: TS101	: TS101
valve	: O.E.M.	: O.E.M.
valve locks	: O.E.M.	: O.E.M.
upper retainer	: 99145/H	: 99145/H
lower retainer	: remove	: remove
exterior spring	: PAC-E92009	: PAC-E92009
interior spring	: PAC-I92009	: PAC-I92009
fitted load / length	: 39kg @ 33.0mm	: 39kg @ 33.0mm
max. load / lift	: 101kg @ 12.5mm	: 101kg @ 12.5mm

REMARKS :

replace OEM lower retainer to obtain a correct installation / fitted length (currently not available)



REMARKS :

- # - camshafts for use in X18XE-2.0L-2.2L long block 'ecotec' engines
- # - valve clearance is to be adjusted using mechanical lash caps
- please make sure that the lash cap does not touch the valve locks !
- # 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
- # ONLY for use in competition engines with independent engine management (throttle position sensor) or carburetors
- # In some cases machining of the cylinderhead can be required due to camshaft casting tolerances.