# 4602401

### sport

Opel X16XEL small block ecotec (1.4-1.6-1.8L) I-4cyl 1.6L 16v DOHC (DTH/DTH)



	intake	exhaust
camshaft data:		
lash ramp	: hydro	hydro
duration @ 0.1mm	: 252°	252°
duration @ 1.0mm	: 215°	215°
valve lift	: 9.50mm	9.50mm
cam lift	:	
lobe angle	: 110°	110°
timing @ 1.0mm	: -3° / 38°	37° / -2°
valve lift @ TDC	: 0.70mm	0.85mm

## parts setup:

cam wheels :	. 6	CTOP015	. 0	CTOP015
follower	:	O.E.M.	:	O.E.M.
valve lash	:	O.E.M.	:	O.E.M.
valve	:	O.E.M.	:	O.E.M.
valve locks	:	O.E.M.	:	O.E.M.
upper retainer	:	O.E.M.	:	O.E.M.
lower retainer	:	O.E.M.	:	O.E.M.
exterior spring	:	O.E.M.	:	O.E.M.
interior spring				

#### REMARKS:

fitted load / length

max. load / lift

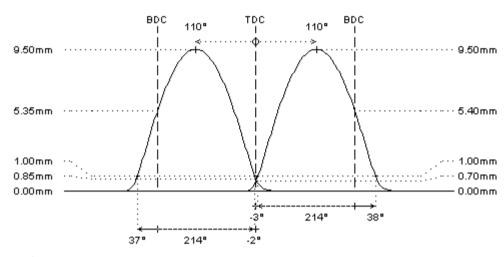
# for engines with 6mm valves (not for X18XE1, Z18XE: 5mm valves!)

: 27kg @ 0.0mm

: 60kg @ 10.0mm

: 27kg @ 0.0mm

: 60kg @ 10.0mm



### **REMARKS:**

- # camshafts for use in 1.4-1.6-1.8L short block 'ecotec' engines
  - CAUTION: Opel has fitted different types of sprockets and camshafts with different dowel pin positions and cam lobes. Therefore it is required to check the std camshafts before ordering for sports applications!
- # Sport version for X1.6XE with std cam lift of 8.5mm (in+ex)
- # Due to different dowel pen references on original cam wheels and camshafts, we advise to use adjustable cam wheels ref. CTOP015 for all applications. In any way, it is necessary to check the valve lift at TDC and adjust if required