

PERFORMANCE  
ENGINE COMPONENTS 2009

AVL



SCHRICK®



# Explanation of the catalog

Tuners and engine builders will find in this catalog a selection of the camshafts and other engine performance parts that we have in stock, or can deliver on short notice.

## What is the difference between a Sport- and Standard cam-shaft?

Standard camshafts offer a good compromise between the daily requirements from an automotive engine: sustained high speed on open roads, smooth engine idle at low rpm and low exhaust emissions.

If the importance of one or more of these parameters is reduced, the camshaft can be designed to function better in the remaining parameters.

Racing camshafts offer a substantial power increase at high rpm. Engine idle at low rpm is not possible anymore.

Sport camshafts increase the valve lift, valve opening duration and the inlet/outlet valve overlap. This improves the cylinder filling at high rpm.

Engine idle at low rpm becomes erratic, due to the mixing of intake air and exhaust gasses.

## Why are SCHRICK camshafts so special ?

- They are manufactured by highly qualified specialists, who also supply the automotive industry.
- They are machined to precise tolerances, using the latest CNC machines.
- They are usually made from expensive, extremely wearresistant "chilled" cast-iron.
- **Warranty:** 1 year without kilometer limitation.

## Which camshafts are good for Street-tuning ?

If the vehicle is intended for normal street use, i.e. with a stable engine idle and the ability to pass an emissions test (idle to lower rpm range), it is important to consider a small valve lift at TDC.

The table gives a guideline for valve lift at TDC.

2 Valve engines with solid lifters	2.3 mm
4 Valve engines with solid lifters	1.5 mm
2 Valve engines with hydraulic lifters	1.9 mm
4 Valve engines with hydraulic lifters	1.1 mm

When these values are exceeded, the engine idle will become increasingly unstable and the torque delivery in the lower rpm range will be noticeably weaker.

Camshafts with larger valve durations, and a resulting higher valve lift at TDC, should only be considered for racing applications, or when each cylinder has it's own butterfly valve i.e. 2 twin-choke carburetors on a 4 cylinder engine.

We have to point out that technical changes to an engine voids the vehicle's type approval.

## What precaution must be taken with valve springs ?

When we recommend the use of special valve springs, it is advisable to do so. SCHRICK camshafts usually have an increased valve lift. If the standard valve springs are used, it is important to increase the spring's installed

height, so that the increased lift will not overly compress the valve springs (possibly causing spring breakage or unacceptable cam/follower loads).

## When we do not list your required camshaft ?

We have several possibilities to help you:

1. We grind your required profile on a camshaft blank. The machine set-up cost will be added to the price of a comparable camshaft.
2. We can machine a camshaft from billet steel (single piece or small-batch production). We would be glad to help and advise you on your specific application.

## Explaining the listed technical data

Valve timing and valve opening durations are shown minus the ramps.

Valve timing is shown as IO (Inlet opens in °Crankshaft before TDC), IC (Inlet closes in °Crankshafts after BDC), EO (Exhaust opens in °Crankshafts before BDC) and EC (Exhaust closes in °Crankshafts after TDC).

Peak timing is shown as °Crankshaft and defines the angle between the gas exchange TDC and the lobe center line of the inlet- or exhaust valves.

All valve lift figures are shown without deduction of valve lash, i.e. the actual valve lift is the stated valve lift minus the valve lash.

Since engines with hydraulic lifters have no valve lash, the stated valve lift is also the actual valve lift.

Valve lift at TDC is also shown without deduction of valve lash, i.e. the actual valve lift at TDC is the stated lift minus the valve lash.

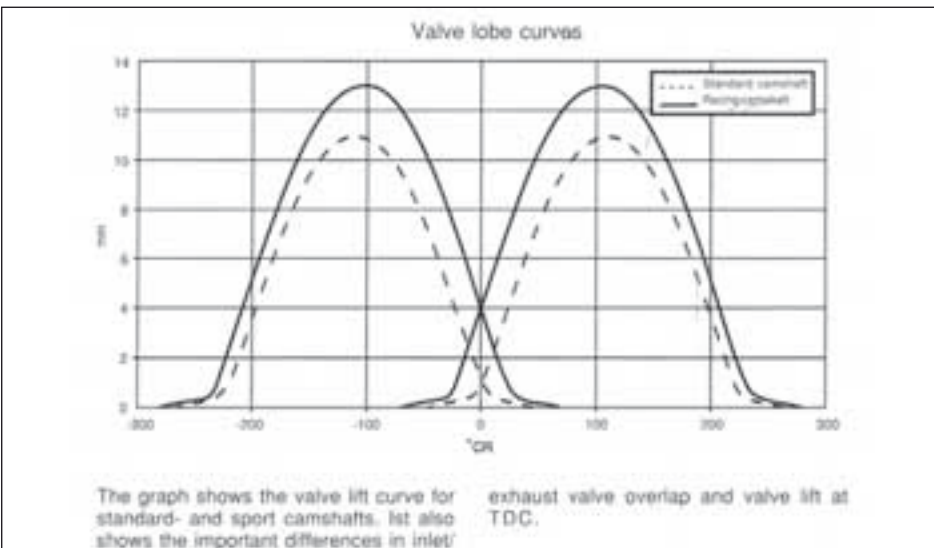
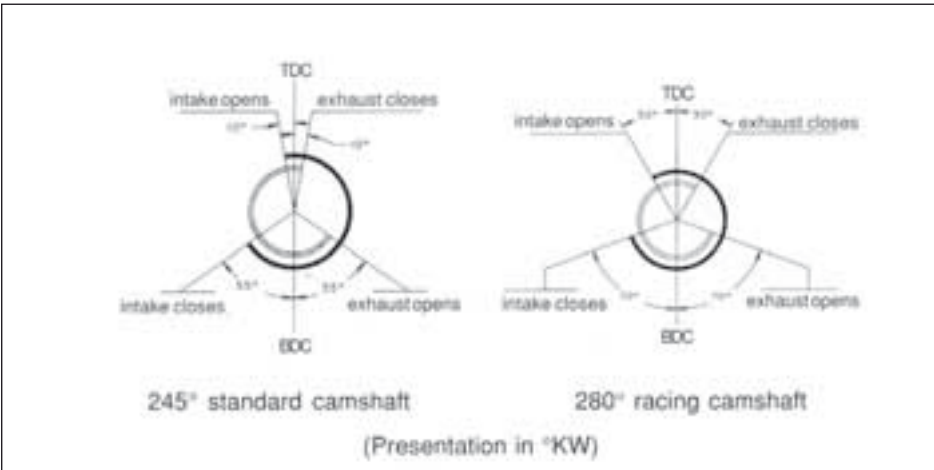
The graph shows the valve opening duration and valve lift curve for Standard- and Sport camshafts. It also shows the important differences in inlet/exhaust valve overlap and valve lift at TDC.

## General note

All products in this catalog (except advertising material) are only available through the automotors trade.

This catalog supersedes all previous catalogs. Part specifications and prices subject to change.

We may change technical specifications of our products without notice. Shipments back to us will only be accepted if we agreed before and in suitable, protective packaging. We will credit the invoiced amount -15% referring to the valid catalog price. Products which reach us will not be accepted if they were modified or have damages. This catalog is valid from 01.01.2009





# Camshafts



Part no.	Cam lift (Valve lift) I / E [mm]	Duration °CRA Intake/Exhaust Peak Timing	Valve Timing °CRA IO-IC-EO-EC	Valve lift at TDC I / E [mm]	Valve clearance I / E [mm]	fat printed accessories are necessary, other ones are recommended		Price		Remarks
						Valve springs	Valve spring retainer, accessories			
<b>Audi 5 Cyl. 4 Valve</b>										
0246 E1 601-01	10,9	260/ /112	18-62	0,8	hydr.		tappet 0863 13 801	CALL TMS		For Turbo charged and normally aspirated engines.
0246 A1 601-01	10,9	/260/112	62-18	0,9	hydr.		tappet 0863 13 801			For Turbo charged and normally aspirated engines.
<b>BMW M10 4 Cyl. 2 Valve</b>										
0002 01 840-01	7,2 (9,5)	284/284/110	32-72 72-32	2,0	0,20/0,20	-1985 0002 02 090 1985- 0056 02 062/022				clockwise distributor (-9/1980)
0002 01 840-02	7,2 (9,5)	284/284/110	32-72 72-32	2,0	0,20/0,20	-1985 0002 02 090 1985- 0056 02 062/022				anti-clockwise distributor (9/80 - )
0002 01 920-01	7,6 (10,0)	292/292/110	36-76 76-36	2,6	0,20/0,20	-1985 0002 02 090 1985- 0056 02 062/022				clockwise distributor ( - 9/80)
0002 01 920-02	7,6 (10,0)	292/292/110	36-76 76-36	2,6	0,20/0,20	-1985 0002 02 090 1985- 0056 02 062/022				anti-clockwise distributor (9/80 - )
0002 01 040-01	8,2 (10,7)	304/304/108	44-80 80-44	2,9	0,25/0,25	-1985 0002 02 090 1985- 0056 02 062/022				clockwise distributor ( - 9/80)
0002 01 040-02	8,2 (10,7)	304/304/108	44-80 80-44	2,9	0,25/0,25	-1985 0002 02 090 1985- 0056 02 062/022				A small slot must be bored in the middle bearing! anti-clockwise distributor (9/80 - )
0002 01 160-03	9,1 (11,9)	316/316/100	58-78 78-58	5,6	0,25/0,25	<b>0002 02 080</b> <b>0002 02 043</b>	<b>upper 0002 13 059</b> <b>key 0894 13 8M8</b>			A small slot must be bored in the middle bearing. First and second bearing 2 mm larger in dia, clockwise distributor.
0002 01 160-04	9,1 (11,9)	316/316/100	58-78 78-58	5,6	0,25/0,25	<b>0002 02 080</b> <b>0002 02 043</b>	<b>upper 0002 13 059</b> <b>key 0894 13 8M8</b>			First and second bearing 2 mm larger in dia, anti-clockwise distributor (9/80 - ).
0002 01 280-01	9,2/8,5 (12/11,15)	328/316/100	64-84 78-58	5,5	0,25/0,25	<b>0002 02 080</b> <b>0002 02 043</b>	<b>upper 0002 13 059</b> <b>key 0894 13 8M8</b>			First and second bearing 2 mm larger in dia, clockwise distributor ( - 9/80 ).
0002 01 360-01	9,5/9,2 (12,4/12)	336/328/100	68-88 84-64	5,9	0,25/0,25	<b>0002 02 080</b> <b>0002 02 043</b>	<b>upper 0002 13 059</b> <b>key 0894 13 8M8</b>			First and second bearing 2 mm larger in dia, clockwise distributor ( - 9/80 ).
<b>BMW M20 6 Cyl. 2 Valve (2.0 - 2.5 l)</b>										
0056 01 720-00	7,0 (11,0)	272/272/111	25-67 67-25	1,6	0,25/0,25	-1985 0002 02 090 1985- 0056 02 062 & -022				
0056 01 840-00	7,3/7,0 (11,4/11,0)	284/272/110	32-72 66-26	2,2/1,7	0,25/0,25	-1985 0002 02 090 1985- 0056 02 062 & -022				
0056 01 880-00	7,3 (11,4)	288/288/110	34-74 74-34	2,8	0,25/0,25	-1985 0002 02 090 1985- 0056 02 062 & -022				
0056 01 040-00	7,7 (12,2)	304/304/105	47-77 77-47	4,0	0,25/0,25	0002 02 090				
<b>BMW M30 6 Cyl. 2 Valve (2.8 - 3.5 l)</b>										
0022 01 820-00	8,4 (10,6)	282/282/110	31-71 71-31	1,8	0,25/0,25	0002 02 090				Distributor drive, not for Motronic, without fuel pump drive!
0022 01 840-01	8,7/8,6 (10,9/10,8)	284/280/110	32-72 70-30	1,9/1,7	0,25/0,25	0002 02 090				Motronic 1 ( - 9/83), without fuel pump drive!
0022 01 840-04	8,7/8,6 (10,9/10,8)	284/280/110	32-72 70-30	1,9/1,7	0,25/0,25	-1985 0002 02 090				Motronic 2 (9/83 - ), without fuel pump drive!



# Camshafts



Part no.	Cam lift (Valve lift) I / E [mm]	Duration °CRA Intake/Exhaust Peak Timing	Valve Timing °CRA IO-IC-EO-EC	Valve lift at TDC I / E [mm]	Valve clearance I / E [mm]	fat printed accessories are necessary, other ones are recommended		Price EUR / ea. excl. VAT	Discount group	Remarks
						Valve springs	Valve spring retainer, accessories			
<b>BMW M40 4 Cyl. 2 Valve</b> (318i, 316i)										
0237 01 681-00	6,5/6,3 (11,3/11,0)	268/264/110	24-64 62-22	1,5/1,3	hydr.			CALL TMS	2	
<b>BMW M42 4 Cyl. 4 Valve</b> (318is)										
0256 E1 561-00	10,4	256/ /110	18-58	1,2	hydr.	0256 02 082	tappet 0863 13 801	CALL TMS	2	made from billet steel
0256 A1 561-00	10,4	/256/110	58-18	1,2	hydr.	0256 02 082	tappet 0863 13 801	CALL TMS	2	made from billet steel
<b>BMW M43 4 Cyl. 2 Valve Roller Cam Follower</b> (316i, 318i, Z3 1.8..)										
0353 01 561-00	6,34/6,34 (11,1/11,1)	256/108 /256/110	20-56 58-18	1,05/0,86	hydr.			CALL TMS	2	
0353 01 641-00	6,34/6,34 (11,1/11,1)	264/110 /264/110	22-62 62-22	1,22/1,22	hydr.			CALL TMS	2	
<b>BMW M52 6 Cyl. 4 Valve</b> (320i - 328i, 520i - 528i) single VANOS !										
0261 E1 521-V0	10,2	252/ /116-91	10-62 35-37	0,3-3,2	hydr.			CALL TMS	2	Intake camshaft M52 single Vanos engine! Recommended exhaust camshaft 0261 A1 441-00!
0261 A1 441-00	9,5	/244/106	48-16	0,8	hydr.			CALL TMS	2	
<b>BMW M52TU 6 Cyl. 4 Valve</b> (320i - 328i, 520i - 528i) dual VANOS !										
0261 E1 481-DV0	10,0	248/ /120-80	4-64 44-24	0,1-4,4	hydr.			CALL TMS	2	M52TU Dual Vanos
0261 A1 481-DV0	10,0	/248/112-87	56-12 31-37	0,6-3,6	hydr.			CALL TMS	2	M52TU Dual Vanos
<b>BMW M54 6 Cyl. 4 Valve</b> ( 330i, 530i, X5 3,0L, Z4 ) dual VANOS !										
0261 E1 641-DV0	10,5	264/ /126-86	6-78 46-38	0,15-4,05	hydr.			CALL TMS	2	
0261 A1 481-DV0	10,0	/248/112-87	56-12 31-37	0,6-3,6	hydr.			CALL TMS	2	
0261 E1 721-DV0	10,9	272/ /126-86	10-82 50-42	0,35-4,85	hydr.			CALL TMS	2	Check valve spring length and valve to piston clearance!
0261 A1 561-DV0	10,4	/256/114-89	62-14 39-37	0,65-4,4	hydr.			CALL TMS	2	Check valve spring length and valve to piston clearance!
<b>BMW M70 V 12 Cyl. 2 Valve</b>										
0239 L1 641-00	6,3 (11,0)	264/264/112	20-64 64-20	1,1	hydr.			CALL TMS	2	Valve/piston clearance has to be checked.
0239 R1 641-00	6,3 (11,0)	264/264/112	20-64 64-20	1,1	hydr.			CALL TMS	2	Valve/piston clearance has to be checked.
<b>BMW S14 4 Cyl. 4 Valve</b> (M3 E30)										
0227 D1 760-01	11,3	276/276/106	32-64 64-32	3,2	0,35/0,40	0013 02 064 0220 02 026	upper 0227 13 051 lower 0227 13 052 key 0894 13 8M7	CALL TMS	2	
0227 D1 840-00	11,5	284/284/106	36-68 68-36	3,5	0,25/0,30	0013 02 064 0220 02 026	upper 0227 13 051 lower 0227 13 052 key 0894 13 8M7	CALL TMS	2	



# Camshafts



Part no.	Cam lift (Valve lift) I / E [mm]	Duration °CRA Intake/Exhaust Peak Timing	Valve Timing °CRA IO-IC-EO-EC	Valve lift at TDC I / E [mm]	Valve clearance I / E [mm]	fat printed accessories are necessary, other ones are recommended		Price EUR / ea. excl. VAT	Discount group	Remarks
						Valve springs	Valve spring retainer, accessories			
<b>BMW S14 4 Cyl. 4 Valve (M3 E30)</b>										
0227 D1 920-05	12,0	292/292/102	44-68 68-44	4,55	0,25/0,30	0013 02 064 0220 02 026	upper 0227 13 051 lower 0227 13 052 key 0894 13 8M7			
0227 D1 080-01	12,2	308/308/102	52-76 76-52	5,5	0,20/0,25	<b>0227 02 113</b>	<b>upper 0227 13 055</b> <b>lower 0227 13 058</b> <b>key 0894 13 8L7</b> <b>tappet 0227 13 805</b> <b>int. valve 0227 13 053</b> <b>exh. valve 0227 13 054</b>			Tappets 0227 13 805 necessary!
0227 D1 200-02	13,0	320/320/102	58-82 82-58	6,4	0,20/0,25	<b>0227 02 113</b>	<b>upper 0227 13 055</b> <b>lower 0227 13 058</b> <b>key 0894 13 8L7</b> <b>tappet 0227 13 805</b> <b>int. valve 0227 13 053</b> <b>exh. valve 0227 13 054</b>			Tappets 0227 13 805 necessary!
<b>BMW S50, S52 6 Cyl. 4 Valve (M3 E36)</b>										
0284 E1 840-0V1	11,9	284/ /122-80	20-84 62-42	1,3-6,7	0,25		M3 single Vanos 3,0L intake			
0284 A1 840-001	11,9	/284/108	70-34	3,1	0,25		M3 single Vanos 3,0L exhaust			
0284 E1 960-0V1	12,4	296/ /122-80	26-90 68-48	2,15-7,5	0,25		M 3 single Vanos 3,0L intake			
0284 A1 960-001	12,4	/296/108	40-76	4,00	0,25		M 3 single Vanos 3,0L exhaust			
0284 E1 840-0V2	11,9	284/ /129-69	13-91 73-31	0,8-7,95	0,25					Vanos system for intake- and exhaust 3,2 L
0284 A1 840-0V2	11,9	/284/114-76	72-28 38-66	2,32-7,15	0,25				2	Vanos system for intake- and exhaust 3,2 L
0284 E1 960-0V2	12,4	296/ /69-129	79-37 19-97	1,35-8,86	0,25	0013 02 064 0220 02 026	upper ret. 0284 13 010 lower ret. 0284 13 011 tappet 0227 13 804			Vanos system for intake- and exhaust 3,2 L
0284 A1 960-0V2	12,4	/296/76-114	44-72 82-34	3,2-7,94	0,25	0013 02 064 0220 02 026	upper ret. 0284 13 010 lower ret. 0284 13 011 tappet 0227 13 804		2	Vanos system for intake- and exhaust 3,2 L
0284 E1 160-1V2	13,3	316 / / 104	54 - 82	5,5	0,25	<b>0227 02 113</b>	<b>tappet 0227 13 805</b> <b>upper ret. 0284 13 012</b> <b>lower ret. 0284 13 013</b> <b>key 0894 13 8L6</b> <b>valve 0284 13 014 intake</b>		2	Vanos system must be removed! Base circle diam. 32mm
0284 A1 080-1V2	13,0	/308/104	78-50	4,5	0,25	<b>0227 02 113</b>	<b>tappet 0227 13 805</b> <b>upper ret. 0284 13 012</b> <b>lower ret. 0284 13 013</b> <b>key 0894 13 8L6</b> <b>valve 0284 13 015 exhaust</b>		2	Vanos system must be removed! Base circle diam. 32mm
<b>BMW M88, S38 6 Cyl. 4 Valve (M1, M5, 635Csi)</b>										
0207 D1 720-00	11,0	272/272/110	26-66 66-26	2,5	0,35/0,35				2	Engine M 88 ( - 1988)
0207 D1 800-00	11,0	280/280/110	30-70 70-30	2,7	0,35/0,35				2	Engine S 38 (1989 - )



# Camshafts



Part no.	Cam lift (Valve lift) I / E [mm]	Duration °CRA Intake/Exhaust Peak Timing	Valve Timing °CRA IO-IC-EO-EC	Valve lift at TDC I / E [mm]	Valve clearance I / E [mm]	fat printed accessories are necessary, other ones are recommended		Price EUR / ea. excl. VAT	Discount group	Remarks
						Valve springs	Valve spring retainer, accessories			
<b>BMW S54 (B32) 6 Cyl. 4 Valve</b>										
0415 E1 800-00	11,6 (12,50)	280/ /132-72	8-92 68-22	0,55-8,0	0,25		<b>rocker arm 0415 13 800</b>	CALL TMS	2	Chilled cast iron camshaft, to be used with Schrick rocker arms!
0415 A1 720-00	11,6 (12,50)	/272/128-83	53-37 8-82	0,55-6,15	0,25		<b>rocker arm 0415 13 800</b>	CALL TMS	2	Chilled cast iron camshaft, to be used with new rocker arms!
0415 E1 880-00	11,6 (12,50)	288/ /132-72	12-96 76-32	0,77-8,26	0,25		<b>rocker arm 0415 13 800</b>	CALL TMS	2	Chilled cast iron camshaft, to be used with Schrick rocker arms! For use in M3 CSL!
0415 A1 800-00	11,6 (12,50)	/280/130-85	55-45 10-90	0,62-6,25	0,25		<b>rocker arm 0415 13 800</b>	CALL TMS	2	Chilled cast iron camshaft, to be used with Schrick rocker arms! For use in M3 CSL.
0415 E1 040-00	11,6 (12,50)	304/ /132-72	20-104 80-44	1,15-8,5	0,25		<b>rocker arm 0415 13 800</b>	CALL TMS	2	Chilled cast iron camshaft, to be used with Schrick rocker arms!
0415 A1 960-00	11,6 (12,50)	/296/130-85	63-53 18-98	1,35-6,6	0,25		<b>rocker arm 0415 13 800</b>	CALL TMS	2	Chilled cast iron camshaft To be used with Schrick rocker arms!
0415 E1 880-01	12,9 (14,0)	288/ /132-72	12-96 72-36	0,9-8,9	0,25	<b>0415 02 095</b>	<b>rocker arm 0415 13 800</b>	CALL TMS	2	Valve springs, retainers and Schrick rocker arms must be used!
0415 A1 800-01	12,58 (14,0)	/280/130-85	55-45 10-90	0,68-6,68	0,25	<b>0415 02 095</b>	<b>Retainer up 0415 13 011 &amp; lo -012</b> <b>rocker arm 0415 13 800</b>	CALL TMS	2	Valve springs, retainers and Schrick rocker arms must be used!
0415 E1 040-01	12,9 (14,00)	304/ /104	48-76	4,57	0,25	<b>0415 02 095</b>	<b>Retainer up 0415 13 011 &amp; lo -012</b> <b>rocker arm 0415 13 800</b>	CALL TMS	2	Valve springs, retainers and Schrick rocker arms must be used! No Vanos to be used!
0415 A1 960-01	12,58 (14,00)	/296/104	44-72	4,1	0,25	<b>0415 02 095</b>	<b>Retainer up 0415 13 011 &amp; lo -012</b>	CALL TMS	2	Valve springs, retainers and Schrick rocker arms must be used! No Vanos to be used!
<b>BMW S62 V8 4 Valve (M5 E39, Z8)</b>										
0409 E1 681-L0	11,3	268/ /134-74	0-88 60-148	0,05-6,40	hydr.			CALL TMS	2	Check clearance between cam lobes and cyl. head!
0409 E1 681-R0	11,3	268/ /134-74	0-88 60-148	0,05-6,40	hydr.			CALL TMS	2	Check clearance between cam lobes and cyl. head!
0409 A1 681-L0	11,3	/268/136-76	86-2 58-38	0,1-6,15	hydr.			CALL TMS	2	Check clearance between cam lobes and cyl. head!
0409 A1 681-R0	11,3	/268/136-76	86-2 58-38	0,1-6,15	hydr.			CALL TMS	2	Check clearance between cam lobes and cyl. head!
<b>BMW S85, 10 Zyl. 4V (M5, M6)</b>										
0473 E1 921-L0	12,2	292//145-79	1-111 67-45	0,04-6,55	hydr.			CALL TMS	2	
0473 E1 921-R0	12,2	292//145-79	1-111 67-45	0,04-6,55	hydr.			CALL TMS	2	
0473 A1 801-L0	12,2	/280/130-93	90-10 63-47	0,2-3,8	hydr.			CALL TMS	2	Check for clearance of cam lobes to cyl. head and between valves & pistons!
0473 A1 801-R0	12,2	/280/130-93	90-10 63-47	0,2-3,8	hydr.			CALL TMS	2	Check for clearance of cam lobes to cyl. head & between valves & pistons!
0473 E1 961-L0	12,2	296//145-79	3-113 69-47	0,05-6,75	hydr.			CALL TMS	2	
0473 E1 961-R0	12,2	296//145-79	3-113 69-47	0,05-6,75	hydr.			CALL TMS	2	
0473 A1 841-L0	12,2	/284/130-93	92-12 55-49	0,25-4,05	hydr.			CALL TMS	2	
0473 A1 841-R0	12,2	/284/130-93	92-12 55-49	0,25-4,05	hydr.			CALL TMS	2	
<b>BMW R 259 2 Cyl. 4 Valve Boxer (R850 GS, R, R1100S, R, GS, RS R1200C..)</b>										
0392 01 920-00	9,5 (11,3)	292/292/108	38-74 74-38	3,3	0,20/0,35			CALL TMS	2	Please secure, that the cams are free turning.
0392 01 120-00	9,5 (11,3)	312/312/104	52-80 80-52	4,6	0,20/0,35					Please secure, that the cams are free turning.



# Camshafts



Part no.	Cam lift (Valve lift) I / E [mm]	Duration °CRA Intake/Exhaust Peak Timing	Valve Timing °CRA IO-IC-EO-EC	Valve lift at TDC I / E [mm]	Valve clearance I / E [mm]	fat printed accessories are necessary, other ones are recommended		Price EUR / ea. excl. VAT	Discount group	Remarks
						Valve springs	Valve spring retainer, accessories			
<b>BMW F650 1 Cyl. 4 Valve</b>										
0455 E1 800-00	10,0	280/ /108	32-68	2,3	0,25				2	
0455 A1 800-00	10,0	/280/108	68-32	2,3	0,3				2	
<b>BMW S65 V8 4Valve M3 E92</b>										
0485 E1 841-L0	12,00	284°/ /132-74°	12-90 68-36	0,15-6,72	hydr.				2	
0485 E1 841-R0	12,00	284°/ /132-74°	12-90 68-36	0,15-6,72	hydr.				2	
0485 A1 841-L0	12,00	/284°/134-86°	96-8 48-56	0,17-5,05	hydr.				2	
0485 A1 841-R0	12,00	/284°/134-86°	96-8 48-56	0,17-5,05	hydr.				2	
0485 E1 921-L0	12,20	292°/ /132-74°	14-98 72-40	0,4-7,37	hydr.				2	Check clearance in head and valve to piston! Check spring clearance at max. lift = min. 1,00mm!
0485 E1 921-R0	12,20	292°/ /132-74°	14-98 72-40	0,4-7,37	hydr.				2	Check clearance in head and valve to piston! Check spring clearance at max. lift = min. 1,00mm!
0485 A1 921-L0	12,20	/292°/134-86°	100-12 52-60	0,35-5,75	hydr.			CALL TMS	2	Check clearance in head and valve to piston! Check spring clearance at max. lift = min. 1,00mm!
0485 A1 921-R0	12,20	/292°/134-86°	100-12 52-60	0,35-5,75	hydr.				2	Check clearance in head and valve to piston! Check spring clearance at max. lift = min. 1,00mm!
<b>Chrysler PT Cruiser 4 Cyl. 4 valve ( 2,0L )</b>										
0406 E1 641-00	5,15 (9,00)	264/ /111	21-63	0,86	hydr.			CALL TMS	2	
0406 A1 561-00	5,15 (9,00)	/256/109	57-19	0,64	hydr.				2	
<b>Ducati V 2 Cyl. 2 Valve</b>										
0453 H1 240-00	10,70 (12,0)	324/324/ 110-106	54-94 90-58	3,0/3,5	0,2/0,25			CALL TMS	2	
0453 V1 240-00	10,70 (12,0)	324/324/ 110-106	54-94 90-58	3,0/3,5	0,2/0,25				2	
<b>Ducati V 2 Cyl. 4 Valve (916, 748, 996)</b>										
0359 EV 280-00	9,93 (12,0)	328/ /104	60-88	3,9	0,2			CALL TMS	2	
0359 EH 280-00	9,93 (12,0)	328/ /104	60-88	3,9	0,2				2	
0359 AV 160-00	9,93 (12,0)	/316/104	82-54	3,2	0,25				2	
0359 AH 160-00	9,93 (12,0)	/316/104	82-54	3,2	0,25				2	
<b>Fiat 20V 5 Cyl. 4 Valve (Bravo, Coupé)</b>										
0310 E1 601-V0	10,0	260/ /120-101	10-70 29-51	0,2-1,9	hydr.	0306 02 054 & 019		CALL	2	Calibration by Schrick installation tool 0306 13 002!
0310 A1 521-00	9,0	/252/106	52-20	0,95	hydr.	0306 02 054 & 019		TMS	2	Calibration by Schrick installation tool 0306 13 002!
<b>Ford CVH 4 Cyl. 2 Valve Aluminium Cylinder Head (Fiesta, Escort, Orion..)</b>										
0086 01 881-02	6,5 (10,6)	288/280/116/109	28-80 69-31	1,4/1,8	hydr.				2	















