



Performance Engine Components 2005

SCHRICK®
MEMBER OF THE AVL GROUP

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 camshaft?

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. (see: "Which camshafts are good for Street-tuning?" and "What is the Swing-boost effect?")

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.
- The only manufacturer to design camshafts with the "Swing-boost" effect.

What is the "Swing-boost" effect?

After long experimental- and test procedures, we have developed a method of high acceleration to the inlet- and exhaust valves. This causes an intensive resonance amplification of the gas column in the inlet tract, resulting in a very good cylinder filling.

The difference to other manufacturer's camshafts: We reach similar or better max. power figures, but with much smaller opening durations.

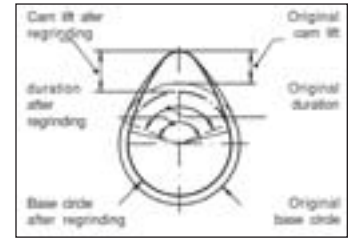
Smaller opening durations means substantially better torque delivery to the mid- to lower rpm range and a smoother, stable engine idle.

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



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).

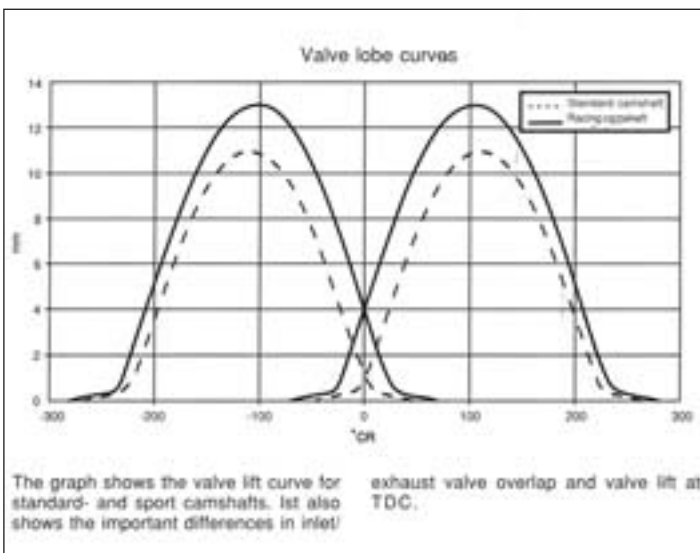
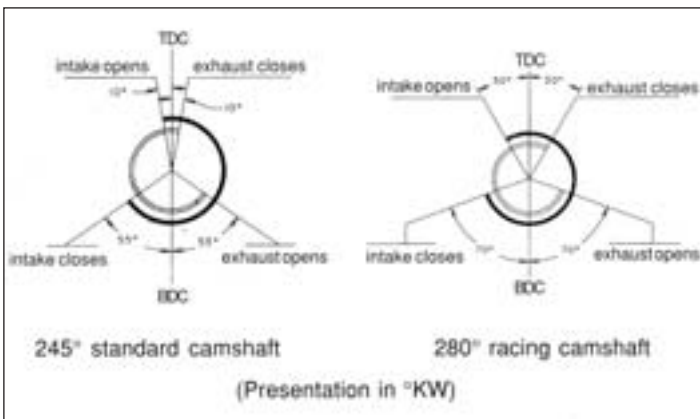
Peak timing is shown as °Crankshaft and defines the angle between the gas exchange TDC and the lobe center line of the inlet- or exhaust valves.

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.



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 its 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 re-grind your standard camshaft to your required profile (see: "What is re-grinding?").
3. 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.

What is re-grinding ?

Re-grinding is the process where the cam lobes of an existing camshaft, e.g. standard camshaft, are ground to a new cam lobe profile.

Sport camshaft lobes are usually thicker and higher than standard lobes, due to the requirement for increased valve lift and opening duration.

The following sketch shows that it is still possible to grind a sport cam lobe profile on a standard cam lobe. It also shows that the cam lobe base circle is smaller than before. This reduction has to be compensated by either using valve lash caps or valves with longer stems.



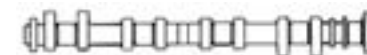
Camshafts



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			
Alfa Romeo Twin Spark 16V 4 Cyl. 4 Valve (GTV, Spider, 145, 146, 155, 156..)										
0306 E1 641-V1	10,25	264/ /118-93	14-70 - 39-45	0,4-3,2	hydr.	0306 02 053 0306 02 019		350,00	2	Calibration by Schrick Installation tool 0306 13 002
0306 A1 681-01	10,25	268/ /110	-64-24	1,4	hydr.	0306 02 053 0306 02 019		350,00	2	Valve-springs installed height must be checked Calibration by Schrick Installation tool 0306 13 002 Valve-springs installed height must be checked
Audi 5 Cyl. 2 Valve										
0064 01 720-00	11,0	272/272/110	26-66-66-26	2,1	0,35/0,45	0013 02 062 0013 02 026	upper 0014 13 194 lower 0014 13 094 Key 0894 13 8M8 tappet 0863 13 801	315,00	2	without fuel pump - drive, without vacuum pump drive, fits pulley inner diam. 22,0mm cyl.
0064 01 721-02	11,4	272/272/110	26-66-66-26	1,6/1,7	hydr.	0013 02 062 0013 02 026	upper 0014 13 194 lower 0014 13 094 Key 0894 13 8M8 tappet 0863 13 801	315,00	2	without fuel pump - drive, without vacuum pump drive, fits pulley inner diam. 22,0mm cyl.
0064 01 761-00	11,5	276/276/110	28-68-68-28	2,1	hydr.	0013 02 062 0013 02 026	upper 0014 13 194 lower 0014 13 094 Key 0894 13 8M8 tappet 0863 13 801	315,00	2	without fuel pump - drive, without vacuum pump drive, fits pulley inner diam. 22,0mm cyl.
Audi 4 Cyl. 5 Valve (A3, A4, VW Golf 4, Passat, Skoda Octavia..)										
0301 E1 681-00	9,1	268/ /112	22-66-	1,0	hydr.			395,00	2	Please check chain tensioner device for clearance to sprocket screws
0301 A1 601-00	10,4	/260/114	-64-16	0,7	hydr.			395,00	2	Please check chain tensioner device for clearance to sprocket screws
0301 E1 521-00	8,2	252/ /110	16-56-	0,8	hydr.			395,00	2	for turbo charged engines, with exhaust camshaft 301 A1 601-00
0301 E1 960-00	10,0	296/ /104	44-72-	3,7	0,25	0301 02 060	upper 0301 13 007/010 Key 0894 13 8M6/856	395,00	2	for application of springs, retainers and keys please look on page 20 camshaft kits 301 10 ...
0301 A1 920-00	11,5	/292/104	-70-42	3,8	0,35	0014 02 054/27 0299 02 050/31	upper 0301 13 008/0299 13 006 lower 0301 13 009/0299 13 007 Key 0894 13 8M6/856	395,00	2	for application of springs, retainers and keys please look on page 20 camshaft kits 301 10 ...
Audi 4 Cyl. 5 Valve (A4, 2,0L from Model B6)										
0301 E1 601-V0	9,2	260 / 126	4 - 76	0,4	hydr.			395,00	2	German TÜV approval for legal street use with A4 and A6
0301 A1 681-00	10,8	/ 268 / 114	68-20	0,84	hydr.			395,00	2	German TÜV approval for legal street use with A4 and A6
Audi 5 Cyl. 4 Valve										
0246 E1 601-01	10,9	260/ /112	18-62-	0,8	hydr.		tappet 0863 13 801	410,00	2	For Turbo charged and normally aspirated engines.
0246 A1 601-01	10,9	/260/112	-62-18	0,9	hydr.		tappet 0863 13 801	410,00	2	For Turbo charged and normally aspirated engines.



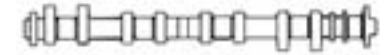
Camshafts



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			
Audi V8 Cyl. 5 Valve (Audi S4 2003-)										
0457 E1 641-L0	11,30 (13,5)	264 / 142-98	-10-74 / 34-50	0,5-2,5	hydr.			390,00	2	
0457 E1 641-R0	11,30 (13,5)	264 / 142-98	-10-74 / 34-50	0,5-2,5	hydr.			390,00	2	
0457 A1 721-L0	9,1 (10,8)	/ 272 / 115	- 71 - 21	0,75	hydr.			390,00	2	
0457 A1 721-R0	9,1 (10,8)	/ 272 / 115	- 71 - 21	0,75	hydr.			390,00	2	
Audi V 6 Cyl. 2 Valve										
0269 L1 601-00	11,1	260/260/112	18-62-62-18	0,9/11	hydr.		tappet 0863 13 801	325,00	2	
0269 R1 601-00	11,1	260/260/112	18-62-62-18	0,9/1,1	hydr.		tappet 0863 13 801	325,00	2	
BMW M10 4 Cyl. 2 Valve										
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		295,00	2	clockwise distributor (- 9/80)
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		295,00	2	anti-clockwise distributor (9/80 -)
0002 01 920-01	7,6 (10)	292/292/110	36-76-76-36	2,6	0,20/0,20	-1985 0002 02 090		295,00	2	clockwise distributor (- 9/80)
0002 01 920-02	7,6 (10)	292/292/110	36-76-76-36	2,6	0,20/0,20	-1985 0002 02 090		295,00	2	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		295,00	2	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		295,00	2	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	0002 02 080		400,00	2	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	0002 02 080		400,00	2	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	0002 02 080		415,00	2	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	0002 02 043		415,00	2	First and second bearing 2 mm larger in dia, clockwise distributor (- 9/80)
BMW M30 6 Cyl. 2 Valve (2.8 - 3.5 l)										
0022 01 820-00	8,4 (10,6)	282/282/110	31-71-71-31	1,8	0,25/0,25	0002 02 090		365,00	2	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		365,00	2	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		365,00	2	Motronic 2 (9/83 -), Without fuel pump drive
						1985 - 0056 02 062 & 0056 02 022				



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			
BMW M20 6 Cyl. 2 Valve (2.0 - 2.5 l)										
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 & 0056 02 022		345,00	2	
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 & 0056 02 022		345,00	2	
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 & 0056 02 022		345,00	2	
0056 01 040-00	7,7 (12,2)	304/304/105	47-77-77-47	4,0	0,25/0,25	0002 02 090		345,00	2	
BMW M88, S38 6 Cyl. 4 Valve (M1, M5, 635Csi)										
0207 D1 720-00	11,0	272/110	26-66-66-26	2,5	0,35/0,35			660,00	2	Engine M 88 (- 1988)
0207 D1 800-00	11,0	280/110	30-70-70-30	2,7	0,35/0,35			660,00	2	Engine S 38 (1989 -)
BMW S14 4 Cyl. 4 Valve (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	400,00	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	400,00	2	
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	425,00	2	
0227 D1 080-01	12,2	308/308/102	52-76-76-52	5,5	0,20/0,25	0227 02 113	upper 0227 13 055 lower 0227 13 058 Key 0894 13 8L7 tappet 0227 13 804 int. valve 0227 13 053 exh. valve 0227 13 054	425,00	2	Tappets 0227 13 804 necessary
0227 D1 200-02	13,0	320/320/102	58-82-82-58	6,4	0,20/0,25	0227 02 113	upper 0227 13 055 lower 0227 13 058 Key 0894 13 8L7 tappet 0227 13 804 int. valve 0227 13 053 exh. valve 0227 13 054	425,00	2	Tappets 0227 13 804 necessary
BMW M40 4 Cyl. 2 Valve (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.			345,00	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			
BMW M70 V 12 Cyl. 2 Valve										
0239 L1 641-00	6,3 (11,0)	264/264/112	20-64-64-20	1,1	hydr.			510,00	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.			510,00	2	valve / piston clearance has to be checked.
BMW M42 4 Cyl. 4 Valve (318is)										
0256 E1 561-00	10,4	256/ /110	18-58-	1,2	hydr.	0256 02 062	tappet 0863 13 801	310,00	2	
						0256 02 022				
0256 A1 561-00	10,4	/256/110	-58-18	1,2	hydr.	0256 02 062	tappet 0863 13 801	310,00	2	
						0256 02 022				
BMW M40 4 Cyl. 2 Valve Roller Cam Follower (316i, 318i, Z3 1.8..)										
0353 01 561-00	6,34/6,34 (11,1/11,1)	256/103 /256/106	25-51-54-22	1,05/0,86	hydr.			370,00	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.			370,00	2	
BMW M50 6 Cyl. 4 Valve (320i - 328i, 520i - 528i)										
0261 E1 561-00	10,4	256/ /106	22-54-	1,5	hydr.			425,00	2	Intake camshaft M50 engine no vanos built bef. 09/1992
0261 A1 441-00	9,5	/244/106	-48-16	0,8	hydr.			425,00	2	Recommended exhaust camshaft 0261 A1 441-00
BMW M52 6 Cyl. 4 Valve (320i - 328i, 520i - 528i) single VANOS !										
0261 E1 521-V0	10,2	252/ /116-91	10-62 - 35-37	0,3-3,2	hydr.			450,00	2	Intake camshaft M52 single Vanos engine
0261 A1 441-00	9,5	/244/106	-48-16	0,8	hydr.			450,00	2	Recommended exhaust camshaft 0261 A1 441-00
BMW M52 TU 6 Cyl. 4 Valve (320i - 328i, 520i - 528i) dual VANOS !										
0261 E1 481-DV0	10,0	248/ /120-80	4-64 - 44-24	0,1-4,4	hydr.			450,00	2	German TÜV approval for legal street use with
0261 A1 481-DV0	10,0	/248/112-87	56-12 - 31-37	0,6-3,6	hydr.			450,00	2	3-series / Z3 / 5-series M52TU Dual Vanos German TÜV approval for legal street use with
										3-series / Z3 / 5-series M52TU Dual Vanos
BMW M54 6 Cyl. 4 Valve (330i, 530i, X5 3,0L) dual VANOS !										
0261 E1 641-DV0	10,5	264/ /126 - 86	6 - 78 46 - 38	0,15 - 4,05	hydr.			450,00	2	
0261 A1 481-DV0	10,0	/248/112-87	56-12 - 31-37	0,6-3,6	hydr.			450,00	2	
0261 E1 721-DV0	10,9	272/ /126-86	10-82 50-42	0,24-4,8	hydr.			475,00	2	Check valve spring length and valve to piston clearance!
0261 A1 561-DV0	10,4	/256/114-89	62-14 - 39-37	0,77-3,8	hydr.			475,00	2	Check valve spring length and valve to piston clearance!



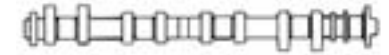
Camshafts



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			
BMW S54 (B32) 6 Cyl. 4 Valve (M 3 E46)										
0415 E1 800-00	11,6 (12,50)	280/ /132-72	8 - 92 / 68 - 22	0,55 - 8,0	0,25			575 ,00	2	chilled cast iron camshaft To be used with new rocker arms
0415 A1 720-00	11,6 (12,50)	/272/128-83	53 - 37 / 8 - 82	0,55-6,15	0,25			575,00	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			575,00	2	chilled cast iron camshaft To be used with new rocker arms. For use in M3 CSL
0415 A1 800-00	11,6 (12,50)	/280/130-85	55 - 45 / 10 - 90	0,30-6,0	0,25			575,00	2	chilled cast iron camshaft To be used with new 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			625,00	2	chilled cast iron camshaft To be used with new rocker arms.
0415 A1 960-00	11,6 (12,50)	/296/126-85	63 - 53 / 22 - 94	1,35-6,6	0,25			625,00	2	chilled cast iron camshaft To be used with new rocker arms.
BMW S62 V8 Cyl. 4 Valve (M 5 E39)										
0409 E1 681-L0	11,3	268/ /134-74	0 - 88	0,05-6,40	hydr.			490,00	2	
0409 E1 681-R0	11,3	268/ /134-74	0 - 88	0,05-6,40	hydr.			490,00	2	
0409 A1 681-L0	11,3	/268/136-76	58 - 38	0,1-6,15	hydr.			490,00	2	
0409 A1 681-R0	11,3	/268/136-76	58 - 38	0,1-6,15	hydr.			490,00	2	
BMW S50, S52 6 Cyl. 4 Valve (M3 E36)										
0284 E1 840-0V1	11,9	284/ /122-80	20-84-62-42	1,3-6,7	0,25			470,00	2	M 3 single Vanos 3,0L intake
0284 A1 840-001	11,9	/284/108	-70-34	3,1	0,25			470,00	2	M 3 single Vanos 3,0L exhaust
0284 E1 960-0V1	12,4	296/ / 122-80	26-90-68-48	2,15-7,5	0,25			495,00	2	M 3 single Vanos 3,0L intake
0284 A1 960-001	12,4	/ 296 / 108	40 - 76	4,00	0,25			495,00	2	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			470,00	2	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			470,00	2	Vanos system for intake- and exhaust 3,2 L
0284 E1 960-0V2	12,4	296/ /69-129	79 - 73 / 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	495,00	2	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	495,00	2	Vanos system for intake- and exhaust 3,2 L
0284 E1 160-1V2	13,3	316 / / 104	54 - 82	5,5	0,25	0227 02 113	tappet 0227 13 804 upper ret. 0284 13 012 lower ret. 0284 13 013 Key 0894 13 8L6	535,00	2	Vanos system must be removed ! Base circle diam. 32mm
0284 A1 080-1V2	13	/ 308 / 104	78 - 50	4,5	0,25	0227 02 113	valve 0284 13 014 intake valve 0284 13 015 exhaust tappet 0227 13 804 upper ret. 0284 13 012 lowerr ret. 0284 13 013 Key 0894 13 8L6 valve 0284 13 014 intake valve 0284 13 015 exhaust	535,00	2	Vanos system must be removed ! Base circle diam. 32mm



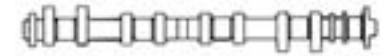
Camshafts



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			
BMW R 259 2 Cyl. 4 Valve Boxer (R850 GS, R, R1100S, R, GS, RS R1200C..)										
0392 01 920-00	9,5 (11,3)	292/292/108	38-74 - 74-38	3,3	0,20/0,35			180,00	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			180,00	2	Please secure, that the cams are free turning.
BMW F650 1 Cyl. 4 Valve										
0455 E1 800-00	10,0	280/108	32 - 68	2,3	0,25			190,00	2	
0455 A1 800-00	10,0	280/108	68 - 32	2,3	0,3			190,00	2	
Chrysler PT Cruiser 4 Cyl. 4 valve (2,0L)										
0406 E1 641-00	5,15 (9,00)	264/ /111	21 - 63	0,86	hydr.			395,00	2	
0406 A1 561-00	5,15 (9,00)	/256/109	57 - 19	0,64	hydr.			395,00	2	
Ducati V 2 Cyl. 4 Valve (916, 748, 996)										
0359 EV 280-00	9,93 (12,0)	328/104	60-88	3,9	0,2			310,00	2	
0359 EH 280-00	9,93 (12,0)	328/104	60-88	3,9	0,2			310,00	2	
0359 AV 160-00	9,93 (12,0)	316/104	82-54	3,2	0,25			310,00	2	
0359 AH 160-00	9,93 (12,0)	316/104	82-54	3,2	0,25			310,00	2	
Ducati V 2 Cyl. 2 Valve										
0453 H1 280-00	10,70 (12,0)	328/328/ 110-106	54-94 90-58	3,0/3,5	0,2 / 0,25			345,00	2	
0453 V1 280-00	10,70 (12,0)	328/328/ 110-106	54-94 90-58	3,0/3,5	0,2 / 0,25			345,00	2	
Fiat 20V 5 Cyl. 4 Valve (Bravo, Coupé)										
0310 E1 601-V0	10,0	260/ /120-101	10-70 - 29-51	0,2-1,9	hydr.	0306 02 054		375,00	2	Calibration by Schrick
0310 A1 521-00	9,0	252/106	-52-20	0,95	hydr.	0306 02 019 0306 02 054 0306 02 019		375,00	2	installation tool 306 13 002 Calibration by Schrick installation tool 306 13 002
Ford OHC 4 Cyl. 2 Valve Cast Iron Cyl. Head (Escort, Capri, Taunus..)										
0019 01 740-00	6,5 (10,6)	274/274/110	27-67-67-27	1,9	0,20/0,25	0092 02 086		290,00	2	
0019 01 ???						0019 13 800	Racing camshafts on demand within 4-6 weeks	350,00	2	Schrick rocker arms must be used



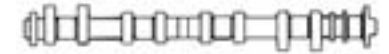
Camshafts



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			
Ford CVH 4 Cyl. 2 Valve Aluminium Cylinder Head (Fiesta, Escort, Orion..)										
0086 01 881-02	6,5 (10,6)	288/ /116 /280/109	28-80-69-31	1,4/1,8	hydr.	0086 02 080	lower 0086 13 024	245,00	2	
Ford Zetec 4 Cyl. 4 Valve (1.6 - 2.0 Escort, Mondeo, Fiesta, Focus..)										
0252 E1 601-00	9,9	260/ /114	16-64-	0,9	hydr.			315,00	2	
0252 A1 601-00	9,9	/260/114	-64-16	1,0	hydr.			315,00	2	
0252 E1 640-00	10,0	264/ /114	18-66-	1,5	0,3			315,00	2	for solid tappets (MY 1998-) Focus
0252 A1 560-00	9,7	/256/114	-62-14	1,13	0,35			315,00	2	for solid tappets (MY 1998-) Focus
Ford 4 Cyl. 4 Valve (2.0 - 2.3 Escort, Scorpio, Galaxy..)										
0270 E1 601-01	10,5	260/ /112	18-62-	1,1	hydr.			250,00	2	
0270 A1 601-01	10,1	/260/116	-66-14	1,0	hydr.			250,00	2	
Ford Zetec SE 4 Cyl. 4 Valve (1.7 Puma..)										
0330 E1 600-V0	9,0	260/ /126-86	4-76 - 44-36	0,5-4,1	0,3	0002 02 043	upper 0330 13 003 Key 0894 13 8L6 lash cap 0866 13 070	350,00	2	camshaft can not be assembled without fat printed accessories!
0330 A1 360-00	8,0	/236/106	-44-12	0,9	0,35	0002 02 043	upper 0330 13 003 Key 0894 13 8L6 lash cap 0866 13 070	300,00	2	camshaft can not be assembled without fat printed accessories!
Honda S2000 2,0L roller follower V-Tec 4 Cyl. 4 valve										
0438 E1 080-00	7,15 (12,50)	244/ / 116 308/ / 102	6-58 52-76	0,46 4,40	0,3			450,00	2	
0438 A1 000-00	6,93 (12,20)	/ 244 / 116 / 300 / 102	58 - 6 72 - 48	0,5 3,80	0,35			450,00	2	
Honda Civic Type R 2,0L & Accord 2,4L roller follower I V-Tec 4 Cyl. 4 valve										
0432 E1 960-00	7,33 (12,80)	232 296/ / 78-130	2-50 / 54- -2 18-98/70-46	0,43 0,95-7,4	0,3			450,00	2	Intake camshaft for Civic
0432 A1 900-00	6,81 (12,00)	/236 /290/112	50-6 77-33	0,52 2,20	0,35			450,00	2	Exhaust camshaft for Civic
0432 E1 920-01	7,33 (12,80)	248 292 / / 72-124	12-56 / 64-4 22-90 / 74-38	0,63 1,45-8,2	0,3			450,00	2	Intake camshaft for Accord
0432 A1 900-02	6,81 (12,00)	242 / 290 / 106	54,5 - 7,5 71 - 39	0,6	0,35			450,00	2	Exhaust camshaft for Accord
Honda Hornet 4 Cyl. 4 valve 0,6L										
0442 E1 840-00	8,8	284 / 104	38 - 66	2,5	0,16			360,00	2	
0442 A1 000-00	8,0	/ 300 / 106	76 - 44	2,0	0,25			360,00	2	



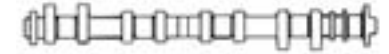
Camshafts



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			
Honda CRF450 1 Cyl. 4 valve										
0458 01 960-00	10,6 / 10,0	296/324/ 108-110	40-76 92-52	3,0/3,35	0,25			250,00	2	
KTM 450/520 LC4 1Cyl. 4v										
0460 01 040-00	9,63 / 9,26 (11,0 / 11,0)	304/304/110	42-82 82-42	2,7	0,2 / 0,25			195,00	2	
KTM 620 LC4 1Cyl. 4v										
0456 01 200-01	11,2	320 / 316 / 106-104	54-86 82-54	3,2	0,2			195,00	2	
Mazda Miata 4 Cyl. 4 valve 1,6L										
0441 E1 601-01	8,4	260 // / 110	20 - 60	0,8	hydr.			300,00	2	
0441 A1 601-00	9,0	/ 260 / 110	60 - 20	0,77	hydr.			300,00	2	
Mazda Miata 4 Cyl. 4 valve 1,9L										
0436 E1 560-00	9,5	256 / / 110	18 - 58	1,3	0,25			300,00	2	For engine code NB 1999- mechanical lash adjustment! For engine code NB 1999- mechanical lash adjustment! For engine code NA -1999 hydraulic tappets. For engine code NA -1999 hydraulic tappets.
0436 A1 560-00	9,5	256 / / 110	18 - 58	1,3	0,35			300,00	2	
0436 E1 641-00	9,5	264 // / 110	22 - 62	0,9	hydr.			300,00	2	
0436 A1 641-00	9,5	/ 264 / 110	62 - 22	0,9	hydr.			300,00	2	
Mercedes M102 4 Cyl. 2 Valve (190 E, 200-230E..)										
0201 01 681-01	7,6 (11,3)	268/268/112	22-66-66-22	1,0	hydr.	0208 02 102		325,00	2	only use DB rocker arms no. 102.050.0633
Mercedes M104 6 Cyl. 4 Valve (300E-24, C280..)										
0255 E1 401-00	9,7	240/ /126-92	0-60 - 28-32	0-2,3	hydr.			610,00	2	only use DB tappets no. 104 050 0925
0255 A1 521-00	9,6	/252/113	-59-13	0,8	hydr.			610,00	2	
Mercedes M111 4 Cyl. 4 Valve (C180-220, E230, CLK200..)										
0285 E1 641-00	10,3	264/ /120-100 (112)	12-72 - 32-52 (20-64)	0,3-2,3 (1,0)	hydr.		tappet 0863 13 801	425,00	2	
0285 A1 601-01	10,0	/260/110	-60-20	1,3	hydr.		tappet 0863 13 801	425,00	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			
Mercedes M112 V 6 Cyl. 3 Valve (C, CLK, E, SLK..)										
0351 01 561-L0	7,25 (10,8)	256/268/114	14-62-68-20	0,5 / 1,0	hydr.			690,00	2	
0351 01 561-R0	7,25 (10,8)	256/268/114	14-62-68-20	0,5 / 1,0	hydr.			690,00	2	
Mercedes M113 V 8 Cyl. 3 Valve (C, CLK, E, S, SL..)										
0352 01 561-L0	7,25 (10,8)	256/268/114	14-62-68-20	0,5 / 1,0	hydr.			795,00	2	
0352 01 561-R0	7,25 (10,8)	256/268/114	14-62-68-20	0,5 / 1,0	hydr.			795,00	2	
Moto Guzzi 2 Cyl. 2 Valve										
0459 01 200-0	9,03 (12,0)	320 / 320 / 108	52-88-88-52	3,77	0,25	000202043 000202080	upper titanium 045913003 lower steel 045913004 intake valve 045913005 exhaust valve 045913006	195,00	2	
Mini 4 Cyl. 4 Valve (also Cooper and Cooper S)										
0424 01 601-00	5,77 / 6,24 (9,5 / 9,0)	260 / 260 / 114	16-64 64-16	0,42	hydr.			360,00	2	
0424 01 641-03	5,77 / 6,24 (9,5 / 9,0)	264 / 272 / 114	18-66-70-22	0,5 / 0,65	hydr.		intake valve 0424 13 004 exhaust valve 0424 13 005	360,00	2	Camshaft for Cooper S
Opel OHC 4 Cyl. 2 Valve Aluminium Cyl. Head, "Small Block" (Corsa, Kadett, Vectra, Astra..)										
0073 01 801-00	6,5 (10,8)	280/280/112	28-72-72-28	1,4	hydr.		rocker arm 0092 13 800	215,00	2	Please use only new Schrick rocker arms ref. 0092 13 800
Opel OHC 4 Cyl. 2 Valve Aluminium Cyl. Head, "Big Block" (Kadett, Ascona, Manta..)										
0092 01 761-01	7,3/7,1 (11,8/11,5)	276/272/110	28-68-66-26	1,4/1,3	hydr.	0092 02 086	7mm: 0894 13 8K7 0092 13 046/035/036 8mm: 0894 13 8K8 0092 13 047/050 0092 13 800	215,00	2	Please use only new Schrick rocker arms ref. 0092 13 800
0092 01 961-00	7,3 (11,8)	296/296/105	43-73-73-43	3,6	hydr.	0092 02 086	7mm: 0894 13 8K7 0092 13 046/035/036 8mm: 0894 13 8K8 0092 13 047/050 0092 13 800	215,00	2	Please use only new Schrick rocker arms ref. 0092 13 800



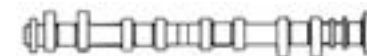
Camshafts



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			
Opel V 6 Cyl. 4 Valve (Calibra, Omega, Vectra, Sintra, Saab V6..)										
0219 D1 561-00	10,5	256/256/113/103	15-61 - 51-25	0,4/1,9	hydr.		tappet 0863 13 803	265,00	2	
0219 E1 761-00	10,7	276/ /116	22-74	1,1	hydr.		tappet 0863 13 803	265,00	2	For use in 3,2L engine
0219 A1 761-00	10,7	/276/106	64-32	1,65	hydr.		tappet 0863 13 803	265,00	2	For use in 3,2L engine
Opel 16 V C20XE 4 Cyl. 4 Valve (2.0 l Kadett, Astra, Calibra, Vectra.. 1988 - 1994)										
0242 E1 681-00	10,4	268/ /110	24-64-	1,5	hydr.	0242 02 065	upper 0242 13 030 Key 0894 13 8M7	280,00	2	
0242 A1 681-00	10,4	/268/110	-64-24	1,5	hydr.	0242 02 065	upper 0242 13 030 Key 0894 13 8M7	280,00	2	
0242 E1 761-00	10,7	276/ /110	28-68-	2,0	hydr.	0242 02 065	upper 0242 13 030 Key 0894 13 8M7	280,00	2	
0242 A1 761-00	10,7	/276/110	-68-28	2,1	hydr.	0242 02 065	upper 0242 13 030 Key 0894 13 8M7	280,00	2	
0242 E1 040-00	12,0	304/ /105	47-77-	5,1	0,25/0,30	0242 02 054/019	upper 0242 13 029 lower 0242 13 010 Key 0894 13 8M7	280,00	2	
0242 A1 040-00	12,0	/304/105	-77-47	5,1	0,25/0,30	0242 02 054/019	spacer 0863 14 700 upper 0242 13 029 lower 0242 13 010 Key 0894 13 8M7 spacer 0863 14 700	280,00	2	
Opel 16V "Small Block" 4 Cyl. 4 Valve (1.4 - 1.6 l Corsa, Tigra, Astra, Vectra..)										
0281 E1 561-00	9,5	256/ /110	18-58	0,7	hydr.	0242 02 065	upper 0299 13 004 tappet 0863 13 803	265,00	2	Please secure, that the cams are free trevelling.
0281 A1 561-00	9,5	/256/110	-58-18	0,8	hydr.	0242 02 065	upper 0299 13 004 tappet 0863 13 803	265,00	2	Please secure, that the cams are free trevelling.
0281 E1 641-00	9,8	264/ /110	22-62	1,0	hydr.	0242 02 065	upper 0299 13 004 tappet 0863 13 803	265,00	2	Please secure, that the cams are free trevelling.
0281 A1 641-00	9,8	/264/110	-62-22	1,2	hydr.	0242 02 065	upper 0299 13 004 tappet 0863 13 803	265,00	2	Please secure, that the cams are free trevelling.
0281 E1 800-00	10,25	280/ /110	30-70	2,5	0,25	0242 02 065	upper 0299 13 004 spacer 0863 14 600	280,00	2	base circle radius R=17,25 (1,25mm smaller then standard)
0281 A1 800-00	10,25	/280/110	-70-30	2,5	0,30	0242 02 065	upper 0299 13 004 spacer 0863 14 600	280,00	2	base circle radius R=17,25 (1,25mm smaller then standard)
0281 D1 920-00	11,50	292/104	42-70 - 70-42	4,0	0,25/0,30	0299 02 050 0299 02 031		280,00	2	base circle radius R=16 (2,5mm smaller then standard), camshaft for intake and exhaust



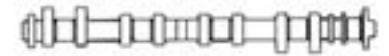
Camshafts



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			
Opel 16 V "Ecotec" 4 Cyl. 4 Valve (1.8 - 2.2 l Astra, Vectra, Sintra.. 1995 -)										
0291 D1 561-00	10,2	256/110	18-58 - 58-18	0,9/1,0	hydr.		tappet 0863 13 803	265,00	2	
0291 D1 641-00	10,5	264/110	22-62 - 62-22	1,3/1,4	hydr.		tappet 0863 13 803	265,00	2	
0291 D1 721-00	10,5	272/110	26-66 - 66-26	1,7/1,8	hydr.		tappet 0863 13 803	325,00	2	
Opel 4 Cyl. 4 Valve roller cam follower (2.2 l Zafira, Speedster ...)										
0412 E1 521-01	7,03 (12,0)	252/ /116	10 - 62	0,25	hydr.	0242 02 054 0242 02 019	upper 0412 13 004 lower 0895 00 820	390,00	2	valve spring seat must be machined to fit the springs.
0412 A1 481-01	7,03 (12,0)	/ 248 / 103	47 - 21	1,0	hydr.	0242 02 054 0242 02 019	upper 0412 13 004 lower 0895 00 820 Key 0894 13 8M6	390,00	2	valve spring seat must be machined to fit the springs.
Peugeot XU.. 4 Cyl. 2 Valve (1.9 l 205, 309, 405..)										
0234 01 680-03	12,0	268/268/112	22-66-66-22	1,7	0,20/0,35			265,00	2	Please ensure correct valve-springs installed height.
Peugeot XU.. MI16 4 Cyl. 4 Valve (1.9 - 2.0 l 309, 405, Citroen ZX..)										
0247 E1 681-02	10,4	268/ /114	20-68	1,3	hydr.			350,00	2	
0247 A1 641-02	10,2	/264/114	66-18	1,2	hydr.			350,00	2	
Peugeot TU.. 4 Cyl. 2 Valve (1.3 - 1.6 l 205, 106, 306, Citroen AX..) not for roller rocker arms!										
0257 01 720-00	7,0 (11,4)	272/272/112	24-68-68-24	1,6	0,20/0,35			290,00	2	Peugeot 205, Citroen AX (smaller bearing dia.) without fuel pump drive
0257 01 840-01	7,0 (11,4)	284/284/108	34-70-70-34	2,5	0,20/0,35			290,00	2	Peugeot 205, Citroen AX (smaller bearing dia.) without fuel pump drive
0257 01 040-00	7,4/7,2 (12,0/11,7)	304/296/105	47-77-73-43	4,1/3,6	0,20/0,35			290,00	2	Peugeot 205, Citroen AX (smaller bearing dia.) without fuel pump drive
0257 01 720-01	7,0 (11,4)	272/272/110	26-66-66-26	1,8	0,20/0,35			290,00	2	Peugeot 106, 306 (larger bearing dia.) without fuel pump drive
0257 01 840-02	7,0 (11,4)	284/284/108	34-70-70-34	2,5	0,20/0,35			290,00	2	Peugeot 106, 306 (larger bearing dia.) without fuel pump drive
0257 01 040-01	7,4/7,2 (12,0/11,7)	304/296/105	47-77-73-43	4,1/3,6	0,20/0,35			290,00	2	Peugeot 106, 306 (larger bearing dia.) without fuel pump drive
Peugeot TU5J4 4 Cyl. 4 V (1.6 l 106, Citroen Saxo..)										
0326 E1 601-00	9,3	260/ /110	20-60-	1,1	hydr.			250,00	2	
0326 A1 601-00	9,3	/260/110	-60-20	1,1	hydr.			250,00	2	



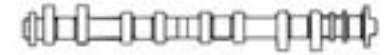
Camshafts



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			
Peugeot XU10J4 4 Cyl. 4 Valve (2.0 306, Citroen Xsara..)										
0336 E1 681-00	10,5	268/ /114	20-68-	1,1	hydr.			350,00	2	
0336 A1 681-00	10,5	/268/114	-68-20	1,2	hydr.			350,00	2	
0336 E1 601-00	9,3	260/ /110	20-60	1,1	hydr.			350,00	2	
0336 A1 601-00	9,3	/260/110	60-20	1,1	hydr.			350,00	2	
Porsche 911 6 Cyl. 2 Valve										
0005 L1 880-02	8,8 (13,2)	288/280/114	30-78-74-26	2,1/1,7	0,20/0,20	0013 02 064 0013 02 031	12 x 0005 13 042 Titanium 12 x 0005 13 035 Steel	395,00	2	Internal thread, bearings 49 mm dia. (Carrera 2 and Carrera 4)
0005 R1 880-02	8,8 (13,2)	288/280/114	30-78-74-26	2,1/1,7	0,20/0,20	0013 02 064 0013 02 031	12 x 0005 13 042 Titanium 12 x 0005 13 035 Steel	395,00	2	Internal thread, bearings 49 mm dia. (Carrera 2 and Carrera 4)
0005 L1 921-01	8,8 (13,2)	292/284/114	32-80-76-28	1,8/1,5	hydr.	0013 02 064 0013 02 031	12 x 0005 13 041 Titanium 12 x 0005 13 035 Steel 12 x 0005 13 043 Steel	395,00	2	Internal thread, bearings 49 mm dia. (993 - Carrera 1994 -)
0005 R1 921-01	8,8 (13,2)	292/284/114	32-80-76-28	1,8/1,5	hydr.	0013 02 064 0013 02 031	24 x 0894 13 8M8 Key 12 x 0005 13 041 Titanium 12 x 0005 13 035 Steel 12 x 0005 13 043 Steel	395,00	2	Internal thread, bearings 49 mm dia. (993 - Carrera 1994 -)
0005 L1 040-00	8,8 (13,2)	304/296/112	40-84-80-36	3,35/2,85	0,20/0,20	0013 02 064 0013 02 031	12 x 0005 13 042 Titanium 12 x 0005 13 035 Steel	415,00	2	Internal thread, bearings 49 mm dia.
0005 R1 040-00	8,8 (13,2)	304/296/112	40-84-80-36	3,35/2,85	0,20/0,20	0013 02 064 0013 02 031	12 x 0005 13 042 Titanium 12 x 0005 13 035 Steel	415,00	2	Internal thread, bearings 49 mm dia.
0005 L1 200-01	8,8 (13,2)	320/308/108	52-88-82-46	5,0/4,3	0,20/0,20	0013 02 064 0013 02 031	upper 0005 13 036 lower 0005 13 035 Valves 0005 13 003/004 Key 0894 13 8R8	440,00	2	Internal thread, bearings 49 mm dia. Porsche racing rocker arms Nr.96210530800 required
0005 R1 200-01	8,8 (13,2)	320/308/108	52-88-82-46	5,0/4,3	0,20/0,20	0013 02 064 0013 02 031	upper 0005 13 036 lower 0005 13 035 Valves 0005 13 003/004 Key 0894 13 8R8	440,00	2	Internal thread, bearings 49 mm dia. Porsche racing rocker arms Nr.96210530800 required
Porsche 996 6 Cyl. 4 Valve Water Cooling (Boxster, 911 Carrera 1998 - 3,4L)										
0319 E1 641-R0	10,7	264/ /120-95	12-72 - 37-47	0,4-3,3	hydr.			395,00	2	2,5L engine (Boxster) with adjustable sprocket
0319 A1 641-R0	10,7	/264/108	-60-24	1,7	hydr.			395,00	2	2,5L engine (Boxster)
0319 E1 641-L0	10,7	264/ /120-95	12-72 - 37-47	0,4-3,3	hydr.			395,00	2	2,5L engine (Boxster) with adjustable sprocket
0319 A1 641-L0	10,7	/264/108	-60-24	1,7	hydr.			395,00	2	2,5L engine (Boxster)
0319 E1 801-R0	10,7	280/ /127-102	13-87 - 38-62	0,4-3,2	hydr.	0299 02 050 0299 02 031	upper 0261 13 028 lower 0895 00 820 (2X) Key 0894 13 8M6	395,00	2	3,4L engine (911) with adjustable sprocket
0319 A1 721-R0	10,7	/272/113	-69-23	1,5	hydr.	0299 02 050 0299 02 031	upper 0261 13 028 lower 0895 00 820 (2X) Key 0894 13 8M6	395,00	2	3,4L engine (911)
0319 E1 801-L0	10,7	280/ /127-102	13-87 - 38-62	0,4-3,2	hydr.	0299 02 050 0299 02 031	upper 0261 13 028 lower 0895 00 820 (2X) Key 0894 13 8M6	395,00	2	3,4L engine (911) with adjustable sprocket



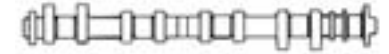
Camshafts



Part No.	Cam lift (Valve lift) l / E [mm]	Duration °CRA Intake/Exhaust Peak Timing	Valve timing °CRA IO-IC-EO-EC	Valve lift at TDC l / E [mm]	Valve clearance l / 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			
Porsche 996 6 Cyl. 4 Valve Water Cooling (Boxster, 911 Carrera 1998 - 3,4L)										
0319 A1 721-L0	10,7	/272/113	-69-23	1,5	hydr.	0299 02 050 0299 02 031	upper 0261 13 028 lower 0895 00 820 (2X) Key 0894 13 8M6	395,00	2	3,4L engine (911)
0319 E1 800-R0	12,2	280/ /127-102	13-87-38-62	0,95-4,0	0,30	0299 02 050 0299 02 031	upper 0261 13 039 lower 0895 00 820 (2X) Key 0894 13 8M6	415,00	2	3,4L engine (911) with adjustable sprocket
0319 A1 720-R0	12,0	/272/113	-69-23	2,06	0,35	0299 02 050 0299 02 031	upper 0261 13 039 lower 0895 00 820 (2X) Key 0894 13 8M6	415,00	2	3,4L engine (911)
0319 E1 800-L0	12,2	280/ /127-102	13-87 - 38-62	0,4-3,2	0,30	0299 02 050 0299 02 031	upper 0261 13 039 lower 0895 00 820 (2X) Key 0894 13 8M6	415,00	2	3,4L engine (911) with adjustable sprocket
0319 A1 720-L0	12,0	/272/113	-69-23	1,5	0,35	0299 02 050 0299 02 031	upper 0261 13 039 lower 0895 00 820 (2X) Key 0894 13 8M6	415,00	2	3,4L engine (911)
Porsche 996 GT3 CUP 6 Cyl. 4 Valve										
0450 E1 001-L0	12,0	300 /			hydr.			395,00	2	For application in non CUP engines the cam advancer must be removed!
0450 E1 001-R0	12,0	300 /			hydr.			395,00	2	
0450 A1 921-L0	11,0	/ 292 / 110		2,2	hydr.			395,00	2	
0450 A1 921-R0	11,0	/ 292 / 110		2,2	hydr.			395,00	2	
Porsche V6 24 valve roller cam follower (Cayenne V6)										
0452 E1 641-00	5,47 (11,0)	264/ /127	5 - 79	0,1	hydr.			475,00	2	
0452 A1 601-00	5,47 (11,0)	/260/108	58 - 22	1,3	hydr.			475,00	2	
0452 E1 681-00	5,47 (11,0)	268/127	7 - 81	0,1	hydr.			475,00	2	
0452 A1 641-00	5,47 (11,0)	/264/108	60 - 24	1,5	hydr.			475,00	2	
Porsche 996 3,6L 6 Cyl. 4 Valve										
0454 E1 841-R0	12,0	284			hydr.			510,00	2	
0454 E1 841-L0	12,0	284			hydr.			510,00	2	
0454 A1 921-R0	11,5	/ 292			hydr.			370,00	2	
0454 A1 921-L0	11,5	/ 292			hydr.			370,00	2	
Renault 16V F7P 4 Cyl. 4 Valve (Clio Williams, R19, Mégane..)										
0272 E1 641-01	10,3	264/ /112	20-64-	1,0	hydr.			350,00	2	
0272 A1 641-01	10,3	/264/112	-64-20	1,2	hydr.			350,00	2	



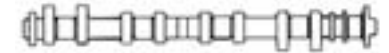
Camshafts



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			
Renault D7F 4 Cyl. 2 Valve Roller Cam Follower (1997- Twingo, Clio..)										
0332 01 520-01	5,85 (10,3)	252/113	13-59-59-13	0,7	0,2 / 0,3			350,00	2	
Renault K4M 4 Cyl. 4 Valve Roller Cam Follower (1999- Mégane, Laguna..)										
0374 E1 441-00	5,02 (10,0)	244/106	16-48 -	0,7	hydr.			375,00	2	
0374 A1 441-00	5,02 (10,0)	244/106	- 48-16	0,7	hydr.			375,00	2	
Renault 4 Cyl. 4 Valve Roller Cam Follower (2,0L Clio RS)										
0381 E1 881-00	5,66 (11,42)	288 / 125	19 - 89	0,57	hydr.			425,00	2	
0381 A1 801-01	5,66 (11,42)	/ 280 / 110	70 - 30	1,40	hydr.			425,00	2	
Renault/Citroen V6 Cyl. 4 Valve (Citroen C5, Clio V6)										
0429 E1 601-00L	10,0	260 / 128-98	2-78/32-48	0,1-2,45	hydr.			350,00	2	
0429 E1 601-00R	10,0	260 / 128-98	2-78/32-48	0,1-2,45	hydr.			350,00	2	
0429 A1 601-00L	9,9	/ 260 / 109	- 59 - 21	0,95	hydr.			350,00	2	
0429 A1 601-00R	9,9	/ 260 / 109	- 59 - 21	0,95	hydr.			350,00	2	
VW 827 4 Cyl. 2 Valve (1.5 - 2.0 l Golf, Scirocco, Jetta, Passat, Vento, Polo Classic, Audi 80/90, A4, A3, Seat Toledo, Cordoba, Ibiza, Skoda Octavia ..)										
0014 01 601-01	11,0	260/260/116	14-66-66-14	0,6/0,7	hydr.	0014 02 054 0014 02 027	upper 0014 13 198 for 7mm Valve stem Key 0894 13 8M7 lower 0014 13 199	265,00	2	Recommended for model year 2000 or later
0014 01 681-01	11,2	268/268/113	21-67-67-21	1,2	hydr.	0013 02 062 0013 02 026	upper 0014 13 194 for 8mm Valve stem Key 0894 13 8M8 lower 0014 13 094	265,00	2	Also recommended for G 60
0014 01 681-02	11,2 / 11,5	268/276/112	22-66 70-26	1,3 / 1,8	hydr.	0013 02 062 0013 02 026	upper 0014 13 194 for 8mm Valve stem Key 0894 13 8M8 lower 0014 13 094	265,00	2	recommended for G 60 only
0014 01 721-02	11,4	272/272/110	26-66-66-26	1,6/1,7	hydr.	0013 02 062 0013 02 026	upper 0014 13 194 for 8mm Valve stem Key 0894 13 8M8 lower 0014 13 094	265,00	2	
0014 01 761-00	11,5	276/276/110	28-68-68-28	2,1	hydr.	0013 02 062 0013 02 026	upper 0014 13 194 for 8mm Valve stem Key 0894 13 8M8 lower 0014 13 094	265,00	2	
0014 01 881-00	11,7	288/288/110	34-74-74-34	2,9	hydr.	0013 02 062 0013 02 026	upper 0014 13 194 for 8mm Valve stem Key 0894 13 8M8 lower 0014 13 094	265,00	2	



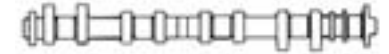
Camshafts



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			
VW 827 4 Cyl. 2 Valve (1.5 - 2.0 l Golf, Scirocco, Jetta, Passat, Vento, Polo Classic, Audi 80/90, A4, A3, Seat Toledo, Cordoba, Ibiza, Skoda Octavia ..)										
0014 01 760-00	11,3	276/276/110	28-68-68-28	2,7	0,35/0,45	0013 02 062 0013 02 026	upper 0014 13 195 (1.6 l) Key 0894 13 8R8 upper 0014 13 194 (1.8 l) Key 0894 13 8M8 lower 0014 13 094 (alle)	265,00	2	Please secure, that the cams are free travelling.
0014 01 880-02	11,7	288/288/108	36-72-72-36	3,4	0,35/0,45	0013 02 062 0013 02 026	upper 0014 13 195 (1.6 l) Key 0894 13 8R8 upper 0014 13 194 (1.8 l) Key 0894 13 8M8 lower 0014 13 094 (alle)	320,00	2	Please secure, that the cams are free travelling.
0014 01 040-06	12,3	304/304/106	46-78-78-46	4,6	0,35/0,45	0013 02 064 0013 02 031	upper 0050 13 133/RK8 0050 13 325/MK8 lower 0050 13 126 Key 0894 13 8R8/8M8 tappet 086313 005	320,00	2	Base circle 34 mm dia. Not for tappets with external lash adjustment plates, (cam contact surface Ø 35 required)
0014 01 200-01	12,9	320/320/102	58-82-82-58	6,1	0,35/0,45	0013 02 064 0013 02 031	upper 0050 13 133/RK8 0050 13 325/MK8 lower 0050 13 126 Key 0894 13 8R8/8M8 tappet 086313 005	320,00	2	Base circle 34 mm dia. Not for tappets with external lash adjustment plates, (cam contact surface Ø 35 required)
VW 16 V 4 Cyl. 4 Valve (1.8 - 2.0 l Golf, Passat, Scirocco, Corrado, Audi 80/90, Seat Toledo, Cordoba, Ibiza..)										
0220 E1 601-02	11,2	260/ /114	16-64-	0,9	hydr.	0013 02 062 0013 02 026	lower 0014 13 094 tappet 0863 13 801	320,00	2	
0220 A1 601-02	11,2	/260/114	-64-16	1,0	hydr.	0013 02 062 0013 02 026	lower 0014 13 094 tappet 0863 13 801	320,00	2	
0220 E1 681-01	11,5	268/ /112	22-66-	1,6	hydr.	0013 02 062 0013 02 026	lower 0014 13 094 tappet 0863 13 801	320,00	2	
0220 A1 681-01	11,5	/268/112	-66-22	1,7	hydr.	0013 02 062 0013 02 026	lower 0014 13 094 tappet 0863 13 801	320,00	2	
0220 E1 761-01	11,5	276/ /110	28-68-	2,4	hydr.	0013 02 062 0013 02 026	lower 0014 13 094 tappet 0863 13 801	320,00	2	
0220 A1 761-02	11,5	/276/110	-68-28	2,5	hydr.	0013 02 062 0013 02 026	lower 0014 13 094 tappet 0863 13 801	320,00	2	
0220 E1 840-03	11,6	284/108	34-70	3,1	0,25	0013 02 062 0013 02 026	lower 0014 13 094 tappet 0863 13 005	340,00	2	
0220 A1 840-03	11,6	284/108	70-34	3,1	0,30	0013 02 062 0013 02 026	lower 0014 13 094 tappet 0863 13 005	340,00	2	
0220 E1 000-03	12,0	300/105	45-75	4,2	0,25	0013 02 064/ 0220 02 026	upper 0220 13 133 lower 0220 13 135 Key 0894 13 8R7 tappet 0863 13 005	340,00	2	
0220 A1 000-03	12,0	300/105	75-45	4,2	0,30	0013 02 064/ 0220 02 026	upper 0220 13 133 lower 0220 13 135 Key 0894 13 8R7 tappet 0863 13 005	340,00	2	



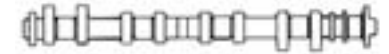
Camshafts



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			
VW 111 4 Cyl. 2 Valve Bucket Tappets, Cross Flow Cyl. Head (1.0 - 1.6 l Polo, Golf, Jetta, Vento, Seat Cordoba, Ibiza, Arosa, Skoda Felicia..)										
0244 01 521-00	9,6/10,0	252/276/111	17-55-71-25	0,7/1,3	hydr.		tappet 863 13 801	265,00	2	especially for G40
0244 01 641-03	9,8	264/260/112	20-64-62-18	0,9	hydr.		tappet 863 13 801	265,00	2	please secure, that spring travel is min. 1,5 mm more than full lift.
0244 01 681-01	9,3	268/268/113	21-67-67-21	1,2	hydr.		tappet 863 13 801	265,00	2	please secure, that spring travel is min. 1,5 mm more than full lift.
0244 01 681-02	10/9,8	268/264/112	22-66-64-20	1,2	hydr.		tappet 863 13 801	265,00	2	please secure, that spring travel is min. 1,5 mm more than full lift.
VW VR6 6 Cyl. 2 Valve (Golf, Passat, Corrado, Vento, Sharan, Ford Galaxy, Mercedes V..)										
0268 R1 681-00	11,4	268/268/115	18-70-68-20	0,8/1,1	hydr.	0013 02 062	lower 0895 00 811 / 814	340,00	2	use Schrick valve springs with washer 1,0mm 0895 00 811/814
0268 L1 681-00	11,4	268/268/115	18-70-68-20	0,8/1,1	hydr.	0013 02 026	tappet 0863 13 801	340,00	2	use Schrick valve springs with washer 1,0mm 0895 00 811/814
0268 R1 641-01	11,4/11,2	264/260/115	17-67-65-15	0,91/0,75	hydr.	0013 02 062	lower 0895 00 811 / 814	340,00	2	use Schrick valve springs with washer 1,0mm 0895 00 811/814
0268 L1 641-01	11,4/11,2	264/260/115	17-67-65-15	0,91/0,75	hydr.	0013 02 026	tappet 0863 13 801	340,00	2	use Schrick valve springs with washer 1,0mm 0895 00 811/814
0268 L1 761-00	11,5	276/276/112	26-70 70-26	2,08/2,20	hydr.	0013 02 062	lower 0895 00 811 / 814	340,00	2	use Schrick valve springs with washer 1,0mm 0895 00 811/814
0268 R1 761-00	11,5	276/276/112	26-70 70-26	2,08/2,20	hydr.	0013 02 026	tappet 0863 13 801	340,00	2	use Schrick valve springs with washer 1,0mm 0895 00 811/814
VW 16V "Small Block" 4 Cyl. 4 Valve Roller Cam Follower (Polo)										
0299 E1 561-00	9,5	256/ /112	16-60-	0,6	hydr.	242 02 065	upper 0299 13 004	300,00	2	
0299 A1 561-00	9,5	/256/112	-60-16	0,7	hydr.	242 02 065	lower 0299 13 005	300,00	2	
0299 E1 641-00	10,0	264/ /110	22-62-	1,1	hydr.	242 02 065	upper 0299 13 004	300,00	2	
0299 A1 641-00	10,0	/264/110	-62-22	1,2	hydr.	242 02 065	lower 0299 13 005	300,00	2	
0299 E1 800-00	10,4	280/ /110	33-67-	3,0	0,25	242 02 065	upper/lower 0299 13 004/5	300,00	2	base circle radius R=16,5
0299 A1 800-00	10,4	/280/110	-67-33	3,0	0,30	242 02 065	spacer 0863 11 600	300,00	2	(0,5mm smaller then standard)
0299 E1 920-01	11,6	292/ /104	42-70-	4,2	0,25	299 02 050	upper/lower 0299 13 004/5	300,00	2	base circle radius R=15,5
0299 A1 920-01	11,6	/292/104	-70-42	4,2	0,30	299 02 031	spacer 0863 11 600	300,00	2	(1,5mm smaller then standard)
						299 02 050	upper/lower 0299 13 004/5	300,00	2	base circle radius R=15,5
						299 02 031	spacer 0863 11 600	300,00	2	(1,5mm smaller then standard)



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			
VW 16V "Small Block" 4 Cyl. 4 Valve Roller Cam Follower (Polo, Lupo, Golf 4, Arosa, Felicia..)										
0350 E1 441-00	4,69 (9,0)	244/ /107	15-49-	0,7	hydr.			290,00	2	
0350 A1 441-00	4,69 (9,0)	/244/107	-49-15	0,7	hydr.			290,00	2	
0350 E1 521-00	4,69 (9,0)	252/ / 110	16-56	0,75	hydr.			290,00	2	
0350 A1 521-00	4,69 (9,0)	/252/110	- 56-16	0,75	hydr.			290,00	2	
0350 E1 681-00	4,80 (9,15)	268 / 112	22-66	0,8	hydr.			315,00	2	
0350 A1 681-00	4,80 (9,15)	/268 /112	-66-22	0,8	hydr.			315,00	2	
VW 16V "Small Block" 4 Cyl. 4 Valve Roller Cam Follower (Polo, Lupo, Golf 4..) variable intake camshaft										
0350 E1 561-V0	4,80 (9,15)	256/ /125	03-73	0,1 -	hydr.			315,00	2	For engines with variable intake camshaft
0350 A1 441-00	4,69 (9,0)	/244/107	-49-15	0,7	hydr.			290,00	2	
0350 A1 521-00	4,69 (9,0)	/252/ 110	-56-16	0,75	hydr.			290,00	2	
VW V6 24 Valve roller cam follower (Golf 4 V6)										
0389 E1 521-00	5,47 (11,0)	252/ /122- 91,5	4-68	0,09-2,9	hydr.			405,00	2	For engines with "vario cam" system, not for "hydraulic ring" system !
0389 A1 521-00	5,47 (11,0)	/252/110	58-18	0,7	hydr.			405,00	2	
VW V6 24 Valve roller cam follower (Golf 4 V6 from 05/2001, R32, Phaeton, Audi TT 3,2L, A3, Touareg)										
0452 E1 641-00	5,47 (11,0)	264/ /127	5-79	0,1	hydr.			475,00	2	
0452 A1 601-00	5,47 (11,0)	/ 260 / 108	58-22	1,3	hydr.			475,00	2	
0452 E1 681-00	5,47 (11,0)	268 / 127	7-81	0,1	hydr.			475,00	2	
0452 A1 641-00	5,47 (11,0)	/ 264 / 108	60-24	1,5	hydr.			475,00	2	
Yamaha YZF R6 4 Cyl. 4V										
433 E1 080-02	8,9	308 // 100	54-74	4,0	0,20			350,00	2	
433 A1 960-02	8,5	/ 296 / 112	80-36	2,35	0,30			350,00	2	



Camshaft Kits



Part No.	includes:				Price EUR per kit excl. VAT	Discount group	Remarks
	Camshaft	Valve Springs	Valve Spring Retainers	Cam followers, accessories			
Audi 5 Cyl. 2 Valve							
0064 10 721-02	1 x 0064 01 721-02	10 x 0013 02 062 10 x 0013 02 026	10 x 0014 13 194 Titanium 10 x 0014 13 094 Steel 20 x 0894 13 8M8 Key	10 x 0863 13 801 hydr. tappet	754,00	1	without fuel pump - drive, without vacuum pump drive, fits pulley inner diam. 22,0mm cyl.
0064 10 761-00	1 x 0064 01 761-00	10 x 0013 02 062 10 x 0013 02 026	10 x 0014 13 194 Titanium 10 x 0014 13 094 Steel 20 x 0894 13 8M8 Key	10 x 0863 13 801 hydr. tappet	754,00	1	without fuel pump - drive, without vacuum pump drive, fits pulley inner diam. 22,0mm cyl.
Audi 4 Cyl. 5 Valve (A3, A4, VW Golf 4, Passat, Skoda Octavia..)							
0301 10 960-00	1 x 0301 E1 960-00 1 x 0301 A1 920-00	12 x 0301 02 060 8 x 0014 02 054 8 x 0014 02 027	12 x 0301 13 007 Titanium 8 x 0301 13 008 Titanium 8 x 0301 13 009 Steel 40 x 0894 13 8M6 Key	20 x 0863 14 500 mech. spacer	1547,00	1	group A, using standard valves
0301 10 960-10	1 x 0301 E1 960-00 1 x 0301 A1 920-00	12 x 0301 02 060 8 x 0299 02 050 8 x 0299 02 031	12 x 0301 13 010 Titanium 8 x 0299 13 006 Titanium 8 x 0299 13 007 Steel 40 x 0894 13 8S6 Key 12 x 0301 13 011 int. valve 8 x 0301 13 012 exh. valve	20 x 0863 14 500 mech. spacer	2243,00	1	group H, with Schrick valves
BMW M30 6 Cyl. 2 Valve (2.8 - 3.5 l)							
0022 10 840-24	1 x 0022 01 840-04	12 x 0056 02 062 12 x 0056 02 022			521,00	1	Motronic 2 double valve springs (1985 -) without fuel pump drive
BMW M20 6 Cyl. 2 Valve (2.0 - 2.5 l)							
056 10 720-20	1 x 0056 01 720-00	12 x 0002 02 090			406,00	1	single valve springs (- 1985)
056 10 720-10	1 x 0056 01 720-00	12 x 0056 02 062 12 x 0056 02 022			502,00	1	double valve springs (1985 -)
BMW S14 4 Cyl. 4 Valve (M3 E30)							
0227 10 840-00	1 x 0227 D1 840-00 1 x 0227 D1 760-01	16 x 0013 02 064 16 x 0220 02 026	16 x 0227 13 051 Titanium 16 x 0227 13 052 Steel 32 x 0894 13 8M7 Key 8 x 0227 13 016 int. valve 8 x 0227 13 017 exh. valve		1966,00	1	
0227 10 920-05	1 x 0227 D1 920-05 1 x 0227 D1 840-00	16 x 0013 02 064 16 x 0220 02 026	16 x 0227 13 051 Titanium 16 x 0227 13 052 Steel 32 x 0894 13 8M7 Key 8 x 0227 13 016 int. valve 8 x 0227 13 017 exh. valve		1989,00	1	



Camshaft Kits



Part No.	Camshaft	includes: Valve Springs	Valve Spring Retainers	Cam followers, accessories	Price EUR per kit excl. VAT	Discount group	Remarks
BMW S14 4 Cyl. 4 Valve (M3 E30)							
0227 10 200-00	1 x 0227 D1 200-02 1 x 0227 D1 080-01	16 x 0227 02 113	16 x 0227 13 055 Titanium 16 x 0227 13 058 Steel 32 x 0894 13 8L7 Key 8 x 0227 13 053 int. valve 8 x 0227 13 054 exh. valve	16 x 0227 13 804 tappet	3326,00	2	
BMW S50, S52 6 Cyl. 4 Valve (M3 E36)							
0284 10 960-0V2	1 x 0284 E1 960-0V2 1 x 0284 A1 960-0V2	24 x 0013 02 064 24 x 0220 02 026	24 x 0284 13 010 Titanium 24 x 0284 13 011 Steel 48 x 0894 13 8M6 Key		1997,00	1	group A, using standard valves tappet 227 13 804 recommended
0284 10 160-1V2	1 x 0284 E1 160-1V2 1 x 0284 A1 080-1V2	24 x 0227 02 113	24 x 0284 13 012 Titanium 24 x 0284 13 013 Steel 48 x 0894 13 8L6 Key 12 x 0284 13 014 int. valve 12 x 0284 13 015 exh.valve	24 x 0227 13 804 tappet	5062,00	2	group H, with Schrick valves
Ford CVH 4 Cyl. 2 Valve Aluminium Cylinder Head (Fiesta, Escort, Orion..)							
0086 10 881-02	1 x 0086 01 881-02	8 x 0086 02 080	8 x 0086 13 024		326,00	1	
Ford Zetec SE 4 Cyl. 4 Valve (1.7 l Puma..)							
0330 10 600-V0	1 x 0330 E1 600-V0 1 x 0330 A1 360-00	16 x 0002 02 043	16 x 0330 13 003 Titanium 32 x 0894 13 8L6 Key	16 x 0866 13 070 lash cap	1093,00	1	
Opel OHC 4 Cyl. 2 Valve Aluminium Cyl. Head, "Small Block" (Corsa, Kadett, Vectra, Astra..)							
0073 10 801-00	1 x 0073 01 801-00			8 x 0092 13 800 rocker arms	273,00	1	
Opel OHC 4 Cyl. 2 Valve Aluminium Cyl. Head, "Big Block" (Kadett, Ascona, Manta..)							
0092 10 761-11	1 x 0092 01 761-01	8 x 0092 02 086	8 x 0092 13 046 Titanium 4 x 0092 13 035 Steel 4 x 0092 13 036 Steel 16 x 0894 13 8K7 Key	8 x 0092 13 800 rocker arms	524,00	1	For valves with 7 mm stem dia.



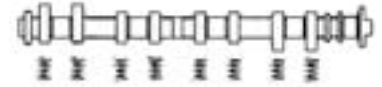
Camshaft Kits



Part No.	Camshaft	includes:			Price EUR per kit excl. VAT	Discount group	Remarks
		Valve Springs	Valve Spring Retainers	Cam followers, accessories			
Opel 16 V C20XE 4 Cyl. 4 Valve (2.0 Kadett, Astra, Calibra, Vectra.. 1988 - 1994)							
0242 10 681-00	1 x 0242 E1 681-00 1 x 0242 A1 681-00	16 x 0242 02 065	16 x 0242 13 030 Titanium 32 x 0894 13 8M7 Key	16 x 0863 13 803 hydr. tappet	1157,00	1	
0242 10 040-00	1 x 242 E1 040-00 1 x 242 A1 040-00	16 x 0242 02 054 16 x 0242 02 019	16 x 0242 13 029 Titanium 16 x 0242 13 010 Steel 32 x 0894 13 8M7 Key	16 x 0863 14 600 mech. spacer	1238,00	1	group A racing
Opel 16V "Small Block" 4 Cyl. 4 Valve (1.4 - 1.6 Corsa, Tigra, Astra, Vectra..)							
0281 10 800-00	1 x 0281 E1 800-00 1 x 0281 A1 800-00	16 x 0242 02 065	16 x 0299 13 004 Titanium 32 x 0894 13 8M6 Key	16 x 0863 14 600 mech. spacer	1009,00	1	group A rallye
Opel 4 Cyl. 4 Valve roller cam follower (2.2 Zafira, Speedster ...)							
0412 10 521-01	1 x 0412 E1 521-01 1 x 0412 A1 481-01	16 x 0242 02 054 16 x 0242 02 019	16 x 0412 13 004 Titanium 16 x 0895 00 820 Steel 32 x 0894 13 8M6 Key		1257,00	1	
Porsche 911 6 Cyl. 2 Valve							
0005 10 200-01	1 x 0005 L1 200-01 1 x 0005 R1 200-01	12 x 0013 02 064 12 x 0013 02 031	12 x 0005 13 036 Titanium 12 x 0005 13 035 Steel 24 x 0894 13 8R8 Key	6 x 0005 13 003 int. valve 6 x 0005 13 004 exh. valve	1807,00	1	Internal thread, bearings 49 mm dia. Porsche racing rocker arms Nr.96210530800 required
0005 10 880-02	1 x 0005 L1 880-02 1 x 0005 R1 880-02	12 x 0013 02 064 12 x 0013 02 031	12 x 0005 13 042 Titanium 12 x 0005 13 035 Steel		1252,00	1	Internal thread, bearings 49 mm dia. (Carrera 2 and Carrera 4)
0005 10 921-01	1 x 0005 L1 921-01 1 x 0005 R1 921-01	12 x 0013 02 064 12 x 0013 02 031	12 x 0005 13 041 Titanium 12 x 0005 13 035 Steel 12 x 0005 13 043 Steel 24 x 0894 13 8M8 Key	6 x 0005 13 001 int. valve 6 x 0005 13 002 exh. valve	1801,00	1	Internal thread, bearings 49 mm dia. (993 - Carrera 1994 -)
Porsche 996 6 Cyl. 4 Valve Water Cooling (Boxster, 911 Carrera 1998 - 3,4L)							
0319 10 800-00	1 X 0319 E1 800-R0 1 X 0319 E1 800-L0 1 X 0319 A1 720-R0 1 X 0319 A1 720-L0	24 X 0299 02 050 24 X 0299 02 031	24 X 0261 13 039 Titanium 48 X 0894 13 8M6 Key 48 X 0895 00 820 washer	24 X 0863 13 007 tappet	3616,00	1	order lash caps additional in needed thickness
VW 827 4 Cyl. 2 Valve (1.5 - 2.0 Golf, Scirocco, Jetta, Passat, Vento, Polo Classic, Audi 80/90, A4, A3, Seat Toledo, Cordoba, Ibiza, Skoda Octavia ..)							
0014 10 681-01	1 x 0014 01 681-01	8 x 0013 02 062 8 x 0013 02 026	8 x 0014 13 194 Titanium 8 x 0014 13 094 Steel 16 x 0894 13 8M8 Key	8 x 0863 13 801 hydr. tappet	615,00	1	Also recommended for G 60
0014 10 681-02	1 x 0014 01 681-02	8 x 0013 02 062 8 x 0013 02 026	8 x 0014 13 194 Titanium 8 x 0014 13 094 Steel 16 x 0894 13 8M8 Key	8 x 0863 13 801 hydr. tappet	615,00	1	recommended for G 60 only
0014 10 681-11	1 x 0014 01 681-01	8 x 0014 02 054 8 x 0014 02 027	8 x 0014 13 198 Titanium 8 x 0014 13 199 Steel 16 x 0894 13 8M7 Key	8 x 0863 13 801 hydr. tappet	630,00	1	Valve stem 7mm (MY 1995- and New Beetle)
0014 10 721-02	1 x 0014 01 721-02	8 x 0013 02 062 8 x 0013 02 026	8 x 0014 13 194 Titanium 8 x 0014 13 094 Steel 16 x 0894 13 8M8 Key	8 x 0863 13 801 hydr. tappet	615,00	1	Please secure, that the cams are free trevelling.



Camshaft Kits



Part No.	includes:				Price EUR per kit excl. VAT	Discount group	Remarks
	Camshaft	Valve Springs	Valve Spring Retainers	Cam followers, accessories			
VW 827 4 Cyl. 2 Valve (1.5 - 2.0 Golf, Scirocco, Jetta, Passat, Vento, Polo Classic, Audi 80/90, A4, A3, Seat Toledo, Cordoba, Ibiza, Skoda Octavia ..)							
0014 10 760-00 (1.8 l) Golf I	1 x 0014 01 760-00	8 x 0013 02 062 8 x 0013 02 026	8 x 0014 13 194 Titanium 8 x 0014 13 094 Steel 16 x 0894 13 8M8 Key		508,00	1	Please secure, that the cams are free travelling.
0014 10 760-10 (1.6 l) Golf I	1 x 0014 01 760-00	8 x 0013 02 062 8 x 0013 02 026	8 x 0014 13 195 Titanium 8 x 0014 13 094 Steel 16 x 0894 13 8R8 Key		508,00	1	Please secure, that the cams are free travelling.
VW 16 V 4 Cyl. 4 Valve (1.8 - 2.0 Golf, Passat, Scirocco, Corrado, Audi 80/90, Seat Toledo, Cordoba, Ibiza..)							
0220 10 601-00	1 x 0220 E1 601-02 1 x 0220 A1 601-02	16 x 0013 02 062 16 x 0013 02 026	16 x 0014 13 094	16 x 0863 13 801 hydr. tappet	1077,00	1	
0220 10 681-00	1 x 0220 E1 681-01 1 x 0220 A1 681-01	16 x 0013 02 062 16 x 0013 02 026	16 x 0014 13 094	16 x 0863 13 801 hydr. tappet	1077,00	1	
0220 10 840-03	1 x 0220 E1 840-03V 1 x 0220 A1 840-03	16 x 0013 02 062 16 x 0013 02 026	16 x 0014 13 094	16 x 0863 14 ... mech. spacer 1 x 0220 13 045 adjust. timing gear 1 x 0220 13 015 adj. sprocket on int. camshaft.	1248,00	1	group A rallye
0220 10 000-03	1 x 0220 E1 000-03V 1 x 0220 A1 000-03	16 x 0013 02 062 16 x 0013 02 026	16 x 0220 13 133 Titanium 16 x 0220 13 135 Steel 32 x 0894 13 8R7 Key 8 x 220 13 020 int. valve 8 x 220 13 021 exh. valve	16 x 0863 14 ... mech. spacer 1 x 0220 13 045 adjust. timing gear 1 x 0220 13 015 adj. sprocket on int. camshaft.	2064,00	1	group A racing
VW VR6 6 Cyl. 2 Valve (Golf, Passat, Corrado, Vento, Sharan, Ford Galaxy, Mercedes V..)							
0268 10 681-00	1 x 0268 L1 681-00 1 x 0268 R1 681-00	12 x 0013 02 062 12 x 0013 02 026	12 x 0895 00 811 12 x 0895 00 814	12 x 0863 13 801 hydr. tappet	984,00	1	use Schrick valve springs with washer 1,0mm 0895.00.811/814
0268 10 761-00	1 x 0268 L1 761-00 1 x 0268 R1 761-00	12 x 0013 02 062 12 x 0013 02 026	12 x 0895 00 811 12 x 0895 00 814	12 x 0863 13 801 hydr. tappet	984,00	1	use Schrick valve springs with washer 1,0mm 0895.00.811/814
VW 16V "Small Block" 4 Cyl. 4 Valve bucket Tappets (Polo)							
0299 10 561-00	1 x 0299 E1 561-00 1 x 0299 A1 561-00	16 x 0242 02 065	16 x 0299 13 004 Titanium 16 x 0299 13 005 Steel 32 x 0894 13 8M6 Key		1039,00	1	
0299 10 800-00	1 x 0299 E1 800-00 1 x 0299 A1 800-00	16 x 0242 02 065	16 x 0299 13 004 Titanium 16 x 0299 13 005 Steel 32 x 0894 13 8M6 Key	16 x 0863 11 600 mech. spacer	1142,00	1	group A rallye
0299 10 920-01	1 x 0299 E1 920-01 1 x 0299 A1 920-01	16 x 0299 02 050 16 x 0299 02 031	16 x 0299 13 006 Titanium 16 x 0299 13 007 Steel 32 x 0894 13 856 Key 8 x 0299 13 010 int. valve 8 x 0299 13 011 exh. valve	16 x 0863 11 700 mech. spacer	1744,00	1	group A racing
0299 10 920-11	1 x 0299 E1 920-01 1 x 0299 A1 920-01	16 x 0299 02 050 16 x 0299 02 031	16 x 0299 13 006 Titanium 16 x 0299 13 007 Steel 32 x 0894 13 856 Key 8 x 0299 13 008 int. valve 8 x 0299 13 009 exh. valve		1641,00	1	group H racing



Part No.	Specification	Price EUR / ea. excl. VAT	Discount group	Part No.	Specification	Price EUR / ea. excl. VAT	Discount group
0050 13 206	Adjustable timing gear for VW Golf (0014..) and Polo (0013..)	120,00	3	0220 13 807	Standard sprocket for VW Golf 16 valve (0220...)	30,00	3
0220 13 045	Adjustable timing gear for VW Golf 16 valve (0220...)	130,00	3	0899 00 001	Degree wheel, Aluminium for precise cam adjustment. (with printed instructions)	9,30	2
0220 13 015	Adjustable sprocket for VW Golf 16 valve (0220...)	135,00	3	0899 00 002	Locking bolt for precise determination of TDC	7,00	2



Part No.	Da [mm] outer diameter	Di [mm] inner diameter	d [mm] wire diameter	L1 [mm] max. installed height	L2 [mm] min. operating height	S [mm] max. valve lift	F1 [N] force at L1	F2 [N] force at L2	Price EUR / ea. excl. VAT	Discount group	Remarks
0002 02 090	32,3	23,3	4,5	38,5	26,5	12	270	880	6,90	1 - 8	single spring
0002 02 080	31,9	23,5	4,2	37	24	13	280	780	11,80	2 - 8	outer spring to 0002 02 043
0002 02 043	23,0	17	3	35	22	13	140	410	11,80	2 - 8	inner spring to 0002 02 080
0013 02 062	30,7	23	3,85	31,5	20	11,5	208	610	6,90	1 - 8	outer spring to 0013 02 026
0013 02 026	21,3	16,3	2,5	27,5	16	11,5	82	250	6,90	1 - 8	inner spring to 0013 02 062
0013 02 064	31,3	23,6	3,85	34	21	13	202	630	11,00	1 - 8	outer spring to 0013 02 031 and to 0220 02 026
0013 02 031	22,2	16,8	2,7	31,8	18,8	13	97	325	11,00	1 - 8	inner spring to 0013 02 064
0014 02 054	29,6	22,4	3,6	33,8	22,3	11,5	220	533	6,90	1 - 8	outer spring to 0014 02 027
0014 02 027	21,8	16,6	2,6	29,3	17,8	11,5	94	268	6,90	1 - 8	inner spring to 0014 02 054
0056 02 062	29,8	22,2	3,8	37,4	25,9	11,5	240	610	7,65	1 - 12	outer spring to 0056 02 022
0056 02 022	20,4	15,6	2,4	35,4	23,9	11,5	90	220	7,65	1 - 12	inner spring to 0056 02 022
0086 02 080	31,9	23,5	4,2	35	24,5	10,5	400	820	6,90	1 - 8	single spring
0092 02 086	32,1	23,5	4,3	36	24	12	285	834	10,20	1 - 8	single spring
0208 02 102	34,2	24,8	4,7	40,2	29,2	11	430	1000	11,00	1 - 8	single spring
0220 02 026	22,6	17,4	2,6	30	17	13	80	255	11,00	1 - 8	inner spring to 0013 02 064
0227 02 113	30,7	16,6	3,9/3,1	36	23	13	309	1130	41,00	2 - 16	contact spring set
0242 02 065	27,8	20,4	3,7	32,7	22,3	10,4	290	640	9,00	1 - 16	single spring
0242 02 019	20,2	15,9	2,15	28,7	16,3	12,4	90	190	9,00	1 - 16	inner spring to 0242 02 054
0242 02 054	28,0	21	3,5	32,7	20,3	12,4	200	530	9,00	1 - 16	outer spring to 0242 02 019
0256 02 062	29,8	22	3,9	37	26	11	265	620	9,00	1 - 16	outer spring to 0256 02 022
0256 02 022	21,0	16	2,5	30,3	19,3	11	100	220	9,00	1 - 16	inner spring to 0256 02 062
0256 02 082	30,6	22,2	4,2	37	25,1	11,9	300	835	11,50	2 - 16	single spring
0261 02 075	24,2/30,2	16/22	4,1	37	27,8	9,2	300	750	13,20	2 - 24	conical spring BMW M52 group N
0299 02 050	28,3	21,5	3,4	31,6	19,6	12	156	496	11,00	1 - 16	outer spring to 0299 02 031
0299 02 031	21,3	16	2,65	29,5	17,5	12	99	313	11,00	1 - 16	inner spring to 0299 02 050
0301 02 060	20,8	14,2	3,3	36,5	26,5	10	209	602	19,50	1 - 12	single spring
0306 02 053	29,3	22,1	3,6	32,2	21,7	10,5	252	545	8,45	1 - 16	outer spring to 0306 02 019
0306 02 019	20,7	16,2	2,25	27,5	17	10,5	91	200	8,45	1 - 16	inner spring to 0306 02 053



Part No.	d1 [mm]	d2 [mm]	h [mm]	s [mm]	Keys	Type, material	Spring reference	Price EUR / ea. excl. VAT	Discount group	Remarks
0005 13 035	22,6	31,4	-1,0	3,90		lower, steel	0013 02 064	7,00	2 - 12	
0005 13 036	23,6	17,0	3,0		10° RK8	upper, Titanium	0013 02 031	18,00	2 - 12	
0005 13 041	23,6	17,0	3,0		0894 13 8R8 14,25° MK8 0894 13 8M8	upper, Titanium	0013 02 064 0013 02 031 0013 02 031	18,00	2 - 12	Porsche Carrera (993) 0005 13 001/002 valves 0005 13 035+043 lower retainer
0005 13 042	23,6	17,0	3,0		14,25° MK9 0894 13 8M9	upper, Titanium	0013 02 064 0013 02 031	18,00	2 - 12	Porsche Carrera 2+4 0005 13 035 lower retainer
0005 13 043				3,30		lower, steel		7,00	2 - 12	Porsche Carrera (993) centering spacer for 0005 13 035 lower retainer
0014 13 094	22,5	16,0	2,0	1,00		lower, steel	0013 02 062	4,50	2 - 8	
0014 13 194	23,0	16,3	2,0		14,25° MK8 0894 13 8M8	upper, Titanium	0013 02 026 0013 02 062 0013 02 026	15,50	2 - 8	
0014 13 195	23,0	16,3	2,0		10° RK8 0894 13 8R8	upper, Titanium	0013 02 062 0013 02 026	15,50	2 - 8	
0014 13 198	22,4	16,6	2,2		14,25° MK7 0894 13 8M7	upper, Titanium	0014 02 054 0014 02 027	15,50	2 - 8	
0014 13 199	22,4	16,6	2,2	1,50		lower, steel	0014 02 054 0014 02 027	6,50	2 - 8	
0050 13 126	23,3	16,6	1,0	1,00		lower, steel	0013 02 064 0013 02 031	6,50	2 - 8	
0050 13 133	23,3	16,7	1,0		10° RK8 0894 13 8R8	upper, steel	0013 02 064 0013 02 031	9,20	2 - 8	
0050 13 325	23,6	17,0	1,0		14,25° MK8 0894 13 8M8	upper, steel	0013 02 064 0013 02 031	9,20	2 - 8	
0086 13 024	23,3	13,8	2,0	3,50		lower, steel	0086 02 080	6,50	2 - 8	
0086 13 040						lower, steel	0086 02 080	6,50	2 - 8	
0092 13 035	23,5			8,50		lower, steel	0092 02 086/092	6,50	2 - 4	exhaust, 7mm valve stem
0092 13 050	23,5			8,50		lower, steel	0092 02 086/092	6,50	2 - 4	exhaust, 8mm valve stem
0092 13 036	23,5			1,00		lower, steel	0092 02 086/092	6,50	2 - 4	intake, 7mm valve stem
0092 13 046	23,3				14,25° KK7 0894 13 8K7	upper, Titanium	092.02.086	15,50	2 - 8	
0092 13 047	23,3				14,25° KK8 0894 13 8K8	upper, Titanium	092.02.086	15,50	2 - 8	
0220 13 133	23,6	17,4	2,0		10° RK7 0894 13 8R7	upper, Titanium	0013 02 064/ 220 02 026	15,50	2 - 16	
0220 13 134	23,6	17,4	2,0		14,25° MK7 0894 13 8M7	upper, Titanium	0013 02 064/ 220 02 026	15,50	2 - 16	
0220 13 135	23,6	17,4	2,0	1,50		lower, steel	0013 02 064/ 220 02 026	6,50	2 - 16	
0227 13 051	23,6	17,4	2,0		14,25° MK7 0894 13 8M7	upper, Titanium	0013 02 064/ 220 02 026	18,00	2 - 16	
0227 13 052	23,6	17,4	2,0	2,00		lower, steel	0013 02 064/ 220 02 026	7,00	2 - 16	
0227 13 055	22,8	16,6	2,0		14,25° LK7 0894 13 8L7	upper, Titanium	0227 02 113	18,00	2 - 16	
0227 13 058		16,6	0,0	1,0		lower, steel	0227 02 113	7,00	2 - 16	
0227 13 057	23,6	17,4	2,0		14,25° LK 0894 13 8L6	upper, Titanium	0013 02 064/ 220 02 026	18,00	2 - 16	
0242 13 010	21,4	16,3	2,0	1,80		lower, steel	0242 02 054 0242 02 019	6,50	2 - 16	
0242 13 029	21,0	15,9	2,1		14,25° MK7 0894 13 8M7	upper, Titanium	0242 02 054 0242 02 019	15,50	2 - 16	
0242 13 030	20,4				14,25° MK7 0894 13 8M7	upper, Titanium	0242 02 065	15,50	2 - 16	
0261 13 039	21,5	16	2,1		14,25° MK6 0894 13 8M6	upper, Titanium	0299 02 050 0299 02 031	18,00	2 - 24	
0284 13 010	23,6	16,8	2,0		14,25° MK6 0894 13 8M6	upper, Titanium	0013 02 064/ 220 02 026	18,00	2 - 24	
0284 13 011	23,6	16,8	2,0	4,0		lower, steel	0013 02 064/ 220 02 026	7,00	2 - 24	
0284 13 012	22,8	16,6	2,2		14,25° LK6 0894 13 8L6	upper, Titanium	0227 02 113	18,00	2 - 24	
0284 13 013		16,6		3,0		lower, steel	0227 02 113	7,00	2 - 24	
0299 13 004	20,4				14,25° MK6 0894 13 8M6	upper, Titanium	0242 02 065	15,50	2 - 16	
0299 13 005	20,4			1,50		lower, steel	0242 02 065	6,50	2 - 16	
0299 13 006	21,5	16,0	2,1		10° SK6 0894 13 8S6	upper, Titanium	0299 02 050 0299 02 031	15,50	2 - 16	
0299 13 007	28,3		0,0	1,50		lower, steel	0299 02 050 0299 02 031	6,50	2 - 8	
0299 13 012	21,5	16,0	2,1		10° SK5 0894 13 8S5	upper, Titanium	0299 02 050 0299 02 031	15,50	2 - 16	



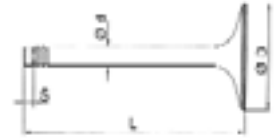
Valve Spring Retainers



Part No.	d1 [mm]	d2 [mm]	h [mm]	s [mm]	Keys	Type, material	Spring reference	Price EUR / ea. excl. VAT	Discount group	Remarks
0301 13 007	14,2				14,25° MK6	upper, Titanium	0301 02 060	15,50	2 - 12	
0301 13 008	22,4	16,6	2,7		0894 13 8M6 14,25° MK6	upper, Titanium	0014 02 054	15,50	2 - 8	intake
0301 13 009	22,2	16,6	2,0		0894 13 8M6	lower, steel	0014 02 027 0014 02 054	6,50	2 - 8	exhaust
0301 13 010	14,2				10° SK6	upper, Titanium	0301 02 060	15,50	2 - 12	exhaust
0330 13 003	17,0				0894 13 8S6 14,25° LK6	upper, Titanium	0002 02 043	15,50	2 - 16	
0412 13 004	21,0	15,9	2,0		0894 13 8L6 14,25° LK6	upper, Titanium	0242 02 054 0242 02 019	15,50	2 - 16	
0459 13 003	23,5	17,0	2,0		14,25 KK8	upper, Titanium	0002 02 043	18,00	2	
0459 13 004		17,0		1,50	0894 13 8K8	lower, steel	0002 02 080 0002 02 043 0002 02 080	7,00	2	



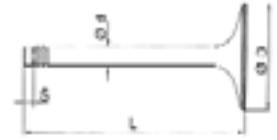
Valves



Part No.	D [mm] Head dia.	L [mm] Length	d [mm] Stem dia.	s [mm] Groov position	Number of grooves	Keys	Type	Price EUR / ea. excl. VAT	Discount group	Remarks
Audi 4 Cyl. 5 Valve (A3, A4, VW Golf 4, Passat, Skoda Octavia..)										
0301 13 011	27,5	105,2	6,0	3,8	1	SK6	intake	27,50	2 - 12	
0301 13 012	30,0	104,0	6,0	3,8	1	SK6	exhaust	45,00	2 - 8	Nimonic
BMW M10 4 Cyl. 2 Valve										
0002 13 005	39,0	103,5	8,0	3,8	3	MK8	exhaust	27,50	2 - 4	
0002 13 022	48,0	103,5	8,0	3,8	3	MK8	intake	27,50	2 - 4	
BMW M20 6 Cyl. 2 Valve (2.0 - 2.5 l)										
0056 13 001	42,0	103,0	7,0	4,6	3	MK7	intake	27,50	2 - 6	
0056 13 002	36,0	103,0	7,0	4,6	3	MK7	exhaust	27,50	2 - 6	
BMW S14 4 Cyl. 4 Valve (M3 E30)										
0227 13 016	38,0	123,0	7,0	12,2	3	MK7	intake	34,00	2 - 8	
0227 13 017	32,0	125,0	7,0	13,2	3	MK7	exhaust	47,50	2 - 8	Nimonic
0227 13 053	39,0	123,0	7,0	12,7	1	LK7	intake	34,00	2 - 8	
0227 13 054	32,5	125,0	7,0	13,7	1	LK7	exhaust	47,50	2 - 8	Nimonic
BMW S50, S52 6 Cyl. 4 Valve (M3 E36)										
0284 13 014	35,8	122,4	6,0	13,7	1	LK6	intake	34,00	2 - 12	
0284 13 015	31,5	123,9	6,0	13,7	1	LK6	exhaust	47,50	2 - 12	Nimonic
BMW R 259 2 Cyl. 4 Valve Boxer (R850 GS, R, R1100S, R, GS, RS R1200C..)										
0392 13 002	37,0	115,9	5,0	4,0	1	SK5	intake	34,00	2 - 4	
0392 13 001	33,0	117,5	5,0	5,5	1	SK5	exhaust	34,00	2 - 4	
Mini 4 Cyl. 4 valve (also Cooper and Cooper S)										
0424 13 004	31,3	109,5	6,0		3	MK6	intake	34,00	2 - 8	
0424 13 005	26,0	118,3	6,0		3	MK6	exhaust	47,50	2 - 8	Nimonic
Moto Guzzi 2 Cyl. 2 Valve										
0459 13 005	46,5	103,8	8,0	6,2	1	KK8	intake	27,50	2	
0459 13 006	39,7	101,5	8,0	6,2	1	KK8	exhaust	27,50	2	
Porsche 911 6 Cyl. 2 Valve										
0005 13 001	50,0	111,0	8,0	4,0	3	MK8	intake	34,00	2 - 6	
0005 13 002	43,0	110,0	8,0	4,0	3	MK8	exhaust	47,50	2 - 6	Nimonic
0005 13 003	52,0	109,0	8,0	6,0	1	RK8	intake	34,00	2 - 6	retainer reference 005 13 036
0005 13 004	44,0	108,0	8,0	6,0	1	RK8	exhaust	47,50	2 - 6	Nimonic, retainer reference 005 13 036



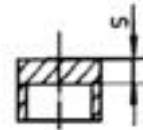
Valves



Part No.	D [mm] Head dia.	L [mm] Length	d [mm] Stem dia.	s [mm] Groove position	Number of grooves	Keys	Type	Price EUR / ea. excl. VAT	Discount group	Remarks
VW 827 4 Cyl. 2 Valve (1.5 - 2.0 Golf, Scirocco, Jetta, Passat, Vento, Audi 80/90..)										
0014 13 018	35,0	106,5	8,0	3,5	1	RK8	exhaust	27,50	2 - 4	Heron-combustion chamber
0014 13 017	40,0	106,5	8,0	3,5	1	RK8	intake	27,50	2 - 4	
0014 13 174	33,1	90,8	8,0	2,8	3	MK8	exhaust	27,50	2 - 4	
0014 13 173	40,0	90,8	8,0	3,0	3	MK8	intake	27,50	2 - 4	
VW 16 V 4 Cyl. 4 Valve (1.8 - 2.0 Golf, Passat, Scirocco, Corrado, Audi 80/90, Seat Toledo, Cordoba, Ibiza..)										
0220 13 020	32,0	95,4	7,0	4,5	1	RK7	intake	27,50	2 - 8	
0220 13 021	28,0	98,2	7,0	4,5	1	RK7	exhaust	27,50	2 - 8	
0220 13 022	27,0	98,2	7,0	4,5	1	RK7	exhaust	27,50	2 - 8	
VW VR6 6 Cyl. 2 Valve (Golf, Passat, Corrado, Vento, Sharan, Ford Galaxy, Mercedes V..)										
0268 13 001	41,0	106,0	7,0	3,0	3	MK7	intake	27,50	2 - 6	
0268 13 002	36,2	106,4	7,0	3,0	3	MK7	exhaust	27,50	2 - 6	
VW 16V "Small Block" 4 Cyl. 4 Valve bucket Tappets (Polo)										
0299 13 008	32,0	111,1	6,0	17,7	1	SK6	intake	27,50	2 - 8	
0299 13 009	28,0	110,4	6,0	17,7	1	SK6	exhaust	27,50	2 - 8	
0299 13 010	29,5	97,9	6,0	4,5	1	SK6	intake	27,50	2 - 8	
0299 13 011	26,0	97,2	6,0	4,5	1	SK6	exhaust	27,50	2 - 8	



Valve lash caps



Price EUR / ea. excl. VAT		Discount group		Price EUR / ea. excl. VAT		Discount group					
4,25		2-8		4,25		2-8					
inner dia. 5 mm Part No.	inner dia. 5,5 mm Part No.	inner dia. 6 mm Part No.	inner dia. 7 mm Part No.	inner dia. 8 mm Part No.	S thickness [mm]	inner dia. 5 mm Part No.	inner dia. 5,5 mm Part No.	inner dia. 6 mm Part No.	inner dia. 7 mm Part No.	inner dia. 8 mm Part No.	S thickness [mm]
		0866 13 070			0,70	0865 13 280	0855 13 280	0866 13 280	0867 13 280	0868 13 280	2,80
		0866 13 100	0867 13 100		1,00	0865 13 285	0855 13 285	0866 13 285	0867 13 285	0868 13 285	2,85
0865 13 200	0855 13 200	0866 13 200	0867 13 200	0868 13 200	2,00	0865 13 290	0855 13 290	0866 13 290	0867 13 290	0868 13 290	2,90
0865 13 205	0855 13 205	0866 13 205	0867 13 205	0868 13 205	2,05	0865 13 295	0855 13 295	0866 13 295	0867 13 295	0868 13 295	2,95
0865 13 210	0855 13 210	0866 13 210	0867 13 210	0868 13 210	2,10	0865 13 300	0855 13 300	0866 13 300	0867 13 300	0868 13 300	3,00
0865 13 215	0855 13 215	0866 13 215	0867 13 215	0868 13 215	2,15	0865 13 305	0855 13 305	0866 13 305	0867 13 305	0868 13 305	3,05
0865 13 220	0855 13 220	0866 13 220	0867 13 220	0868 13 220	2,20	0865 13 310	0855 13 310	0866 13 310	0867 13 310	0868 13 310	3,10
0865 13 225	0855 13 225	0866 13 225	0867 13 225	0868 13 225	2,25	0865 13 315	0855 13 315	0866 13 315	0867 13 315	0868 13 315	3,15
0865 13 230	0855 13 230	0866 13 230	0867 13 230	0868 13 230	2,30	0865 13 320	0855 13 320	0866 13 320	0867 13 320	0868 13 320	3,20
0865 13 235	0855 13 235	0866 13 235	0867 13 235	0868 13 235	2,35	0865 13 325	0855 13 325	0866 13 325	0867 13 325	0868 13 325	3,25
0865 13 240	0855 13 240	0866 13 240	0867 13 240	0868 13 240	2,40	0865 13 330	0855 13 330	0866 13 330	0867 13 330	0868 13 330	3,30
0865 13 245	0855 13 245	0866 13 245	0867 13 245	0868 13 245	2,45	0865 13 335	0855 13 335	0866 13 335	0867 13 335	0868 13 335	3,35
0865 13 250	0855 13 250	0866 13 250	0867 13 250	0868 13 250	2,50	0865 13 340	0855 13 340	0866 13 340	0867 13 340	0868 13 340	3,40
0865 13 255	0855 13 255	0866 13 255	0867 13 255	0868 13 255	2,55	0865 13 345	0855 13 345	0866 13 345	0867 13 345	0868 13 345	3,45
0865 13 260	0855 13 260	0866 13 260	0867 13 260	0868 13 260	2,60	0865 13 350	0855 13 350	0866 13 350	0867 13 350	0868 13 350	3,50
0865 13 265	0855 13 265	0866 13 265	0867 13 265	0868 13 265	2,65	0865 13 400	0855 13 400	0866 13 400	0867 13 400	0868 13 400	4,00
0865 13 270	0855 13 270	0866 13 270	0867 13 270	0868 13 270	2,70	0865 13 450	0855 13 450	0866 13 450	0867 13 450	0868 13 450	4,50
0865 13 275	0855 13 275	0866 13 275	0867 13 275	0868 13 275	2,75						

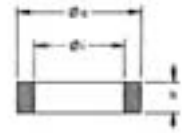


Valve keys

Discount group				2 - 16		Discount group				2 - 16	
Part No.	Specification			groove/s	Price EUR / ea. excl. VAT	Part No.	Specification			groove/s	Price EUR / ea. excl. VAT
0894 13 8K6	clamping, 14,25°, KK6, hardened			1	0,85	0894 13 8S6	clamping, 10°, SK6, hardened			1	0,93
0894 13 8K7	clamping, 14,25°, KK7, hardened			1	0,85	0894 13 8M5	non-clamping, 14,25°, MK5, hardened			3	0,93
0894 13 8K8	clamping, 14,25°, KK8, hardened			1	0,85						
0894 13 8L6	clamping, 14,25°, LK6, hardened			1	0,85	0894 13 8M6	non-clamping, 14,25°, MK6, hardened			3	0,85
0894 13 8L7	clamping, 14,25°, LK7, hardened			1	0,94						
0894 13 8R6	clamping, 10°, RK6, hardened			1	1,03	0894 13 8M7	non-clamping, 14,25°, MK7, hardened			3	0,85
0894 13 8R7	clamping, 10°, RK7, hardened			1	0,98						
0894 13 8R8	clamping, 10°, RK8, hardened			1	0,85	0894 13 8M8	non-clamping, 14,25°, MK8, hardened			3	0,85
0894 13 8S5	clamping, 10°, SK5, hardened			1	0,93						
0894 13 8S55	clamping, 10°, SK5.5, hardened			1	0,93						

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Seat ring blanks



Part No.	D [mm] outer dia.	d [mm] inner dia.	s [mm] height	Price EUR / ea. excl. VAT	Discount group	Remarks
0893 13 811	38	26	10	7,45	0	Otto, Diesel and turbocharged engines, intake and exhaust.
0893 13 814	44	32	10	9,50	0	Otto, Diesel and turbocharged engines, intake and exhaust.
0893 13 816	51	38	10	15,10	0	Otto, Diesel and turbocharged engines, intake and exhaust.

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Cam followers to be replaced together with camshaft



Part No.	Specification	Price EUR / ea. excl. VAT	Discount group	Remarks
Ford OHC (Schrack 019)				
0019 13 800	finger follower	20,00	2 - 8	
Opel OHC (Schrack 092, 073)				
0092 13 800	finger follower	10,00	1 - 8	
Audi, VW, BMW, Mercedes (Schrack: 064, 269, 246, 014, 220, 244, 268, 256, 261, 274, 285)				
0863 13 801	hydr. bucket tappet Ø35 x 26 x 17,5 x Ø14	14,50	1 - 8	
0863 13 004	bucket tappet Ø 35 x 26 x 3,3	45,00	3 - 8	
0863 13 005	bucket tappet Ø 35 x 26 x 14,5	50,00	3 - 8	
BMW - M (Schrack 227, 207, 284)				
0227 13 804	bucket tappet Ø 37,5 x 28 x 3,6	75,00	3 - 16	
Renault, BMW M52 (Schrack: 272, 261)				
0863 13 802	hydr. bucket tappet Ø33 x 24,5 x 17,5 x Ø12	14,50	1 - 8	
0863 13 023	bucket tappet Ø 33 x 24 x 14,5	50,00	3 - 8	
0863 13 021	bucket tappet Ø 33 x 26 x 3,3	45,00	3 - 8	
Opel, Peugeot (Schrack: 242, 250, 281, 219, 247)				
0863 13 803	hydr. bucket tappet Ø 32 x 26 x 17,5 x Ø12	14,50	1 - 8	
0863 13 024	bucket tappet Ø 32 x 24 x 14,5	50,00	3 - 8	
0863 13 008	bucket tappet Ø 32 x 26 x 3,3	45,00	3 - 8	
Mechanical spacers (to modify hydr. tappets for mechanical operation)				
0863 11 500	mechanical spacer Ø 11 x 15mm	6,95	2 - 8	
0863 11 600	mechanical spacer Ø 11 x 16mm	6,95	2 - 8	
0863 11 700	mechanical spacer Ø 11 x 17mm	6,95	2 - 8	
0863 11 800	mechanical spacer Ø 11 x 18mm	6,95	2 - 8	
0863 11 900	mechanical spacer Ø 11 x 19mm	6,95	2 - 8	
0863 12 500	mechanical spacer Ø 12 x 15mm	6,95	2 - 8	
0863 12 600	mechanical spacer Ø 12 x 16mm	6,95	2 - 8	
0863 12 700	mechanical spacer Ø 12 x 17mm	6,95	2 - 8	
0863 12 800	mechanical spacer Ø 12 x 18mm	6,95	2 - 8	
0863 12 900	mechanical spacer Ø 12 x 19mm	6,95	2 - 8	
0863 14 500	mechanical spacer Ø 14 x 15mm	6,95	2 - 8	
0863 14 600	mechanical spacer Ø 14 x 16mm	6,95	2 - 8	
0863 14 700	mechanical spacer Ø 14 x 17mm	6,95	2 - 8	
0863 14 800	mechanical spacer Ø 14 x 18mm	6,95	2 - 8	
0863 14 900	mechanical spacer Ø 14 x 19mm	6,95	2 - 8	



Washers for valve springs

Part No.	s [mm] thickness	d x D [mm]	Price EUR / ea. excl. VAT	Discount group	Part No.	s [mm] thickness	d x D [mm]	Price EUR / ea. excl. VAT	Discount group
0234 13 002	2,30	24 x 34	1,80	2 - 8	0895 00 811	1,00	16 x 22	1,00	2 - 8
0234 13 004	2,00	24 x 34	1,30	2 - 8	0895 00 812	0,25	23 x 30	1,00	2 - 8
0234 13 005	0,30	24 x 34	1,00	2 - 8	0895 00 814	1,00	23 x 30	1,00	2 - 8
0895 00 801	0,25	16,5 x 32	1,00	2 - 12	0895 00 815	0,25	14 x 26	1,00	2 - 8
0895 00 802	0,50	16,5 x 32	1,00	2 - 12	0895 00 816	0,50	14 x 26	1,00	2 - 8
0895 00 803	0,75	16,5 x 32	1,00	2 - 12	0895 00 817	1,00	14 x 26	1,00	2 - 8
0895 00 804	1,00	16,5 x 32	1,00	2 - 12	0895 00 818	0,25	16 x 28	1,00	2 - 8
0895 00 805	0,25	14,5 x 30	1,00	2 - 8	0895 00 819	0,50	16 x 28	1,00	2 - 8
0895 00 806	0,50	14,5 x 30	1,00	2 - 8	0895 00 820	1,00	16 x 28	1,00	2 - 8
0895 00 807	0,75	14,5 x 30	1,00	2 - 8	0895 00 821	0,25	12 x 20	1,00	2 - 8
0895 00 808	1,00	14,5 x 30	1,00	2 - 8	0895 00 822	0,50	12 x 20	1,00	2 - 8
0895 00 809	0,25	16 x 22	1,00	2 - 8	0895 00 823	1,00	12 x 20	1,00	2 - 8



Valve blanks

Stem ground, Head premachined, without key grooves

Part No.	d [mm] Stem dia.	D [mm] Head dia.	L [mm] Length	Price EUR / ea. excl. VAT	Discount group	Part No.	d [mm] Stem dia.	D [mm] Head dia.	L [mm] Length	Price EUR / ea. excl. VAT	Discount group
Bimettal - Steel, for intake and exhaust up to appr. 70 KW / l						Bimettal - Nimonic, for exhaust, when more then appr. 70 KW / l					
0894 50 30S	4,98	30	124	13,80	3	0894 50 30N	4,98	30	124	23,50	3
0894 55 30S	5,48	30	124	13,80	3	0894 55 30N	5,48	30	124	23,50	3
0894 60 30S	5,98	30	139	13,80	3	0894 60 30N	5,98	30	139	23,50	3
0894 70 30S	6,98	30	139	13,80	3	0894 70 30N	6,98	30	139	23,50	3
0894 80 30S	7,98	30	139	13,80	3	0894 13 09S	7,98	30	139	23,50	3
0894 50 34S	4,98	34	124	15,00	3	0894 50 34N	4,98	34	124	28,40	3
0894 55 34S	5,48	34	124	15,00	3	0894 55 34N	5,48	34	124	28,40	3
0894 60 34S	5,98	34	139	15,00	3	0894 60 34N	5,98	34	139	28,40	3
0894 70 34S	6,98	34	139	15,00	3	0894 70 34N	6,98	34	139	28,40	3
0894 80 34S	7,98	34	139	15,00	3	0894 13 086	7,98	34	139	28,40	3
0894 50 38S	4,98	38	124	16,25	3	0894 55 38N	5,48	38	124	31,50	3
0894 55 38S	5,48	38	124	16,25	3	0894 60 38N	5,98	38	139	31,50	3
0894 60 38S	5,98	38	139	16,25	3	0894 70 38N	6,98	38	139	31,50	3
0894 70 38S	6,98	38	139	16,25	3	0894 80 38N	7,98	38	139	31,50	3
0894 80 38S	7,98	38	139	16,25	3	0894 70 41N	6,98	41	139	36,00	3
0894 60 41S	5,98	41	139	17,00	3	0894 80 41N	7,98	41	139	36,00	3
0894 70 41S	6,98	41	139	17,00	3	0894 70 45N	6,98	45	139	38,80	3
0894 80 41S	7,98	41	139	17,00	3	0894 80 45N	7,98	45	139	38,80	3
0894 70 45S	6,98	45	139	18,25	3	0894 13 101	6,98	50	139	38,80	3
0894 80 45S	7,98	45	139	18,25	3	0894 80 50N	7,98	50	139	38,80	3
0894 70 50S	6,98	50	139	19,50	3						
0894 80 50S	7,98	50	139	19,50	3						
0894 80 53S	7,98	53	139	19,50	3						



Special Products



Part No.	Specification	Price EUR / ea. excl. VAT	Discount group
0261 16 017-00	Intake manifold for BMW M52 (B25..B32), aluminium casting, two part design. German TÜV approval for legal street use with 3-series / Z3 / 5-series	770,00	3
0268 16 020-00	Res. Int. Manif. for VW VR6, mechanical controlled throttle body (old version, external idle control valve). SCHRICK- logo	1415,00	3
0268 16 020-01	Res. Int. Manif. for VW VR6, electronic controlled throttle body (new version), SCHRICK- logo	1415,00	3
0268 16 042-00	Res. Int. Manif. for VW VR6, mechanical controlled throttle body (old version, external idle control valve). neutral- without logo	1415,00	3
0268 16 042-01	Res. Int. Manif. for VW VR6, electronic controlled throttle body (new version), neutral- without logo	1415,00	3
0014 11 071	Aluminium Oil Pan for VW 827 4 Cyl. 2 Valve 1.5 - 2.0 l (approx. 3/4 l more content)	145,50	3
0306 13 002	Installation tool for Schrick camshafts: 306 -Alfa Romeo and 310 -Fiat	150,00	3
0050 81 110	exhaust gasket for VW Golf 38mm x 42mm dist. between holes 62mm	7,77	3



Advertising articles

Order No.	Specification	Price EURO / ea. excl. VAT	Price EURO / ea. incl. VAT
0999 991	SCHRICK T-Shirt size M, L, XL, high-quality cotton	12,93	15,00

notes

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