

Needed data for calculating the valve lift curve by „KnockSoft“

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Engine type		
Customer name		
Date		
	Inlet	Exhaust
Weight of valve		Gramm
Weight of upper spring retainer		Gramm
Weight of bucket/roller tappet with shim		Gramm
Weight of cam follower, other weights		Gramm
Weight and distance from axis - other weights		Gramm
Weight of 2 valve keys		Gramm
Weight of outer valve spring		Gramm
Weight of inner valve spring		Gramm
Maximum valve lift free of mechanical collision		mm
Aimed valve timing - crank rotation while valve is open 1 mm or more, no valve clearance considered		Degrees crank
Maximum revs of crank per minute		Revs/Min
Maximum valve clearance		mm
Length of outer valve spring – not installed		mm
Length of inner valve spring – not installed		mm
Absolute minimum length of outer valve spring – block length/bind length		mm
Absolute minimum length of inner valve spring – block length/bind length		mm
Length of outer valve spring when when installed		mm
Length of inner valve spring when when installed		mm
Force of installed spring, outer		kp
Force of installed spring, inner		kp
* Force when valve open 6 mm, outer		kp
* Force when valve open 6 mm, inner		kp
# Spring konstant, outer		kp/mm
# Spring konstant, inner		kp/mm
Outer spring outer diameter		mm
Inner spring outer diameter		mm
(x) Diameter of spring wire outer		mm
(x) Diameter of spring wire inner		mm
(x) No. of spring threads - n, No. of contacting threads – nt, outer spring		n, nt
(x) No. of spring threads - n, No. of contacting threads – nt, inner spring		n, nt

Remarks:

Notice:

Either fields with # or fields with * MUST be filled in!

(x) fill in wanted but not necessary

Length: 1 inch = 25,4 mm

Weight: 1 pound = 453,6 Gramm

Force: 1 Newton = 0,102 kp or 1 kp = 9,81 x 1000 x 1000 [Gramm mm/Second²]