



## 1. Notch presence detection on a shock absorber

A notch on a metal shock absorber should be detected. It has to be taken into account, that the notch is very shiny. At this, a laser displacement sensor type **L-LAS-LT-38-CL** will be used at a distance of approximately 45mm. The signal difference caused from the depth of the notch is around 0.7 mm, thus, the notch can be proper detected as shown in the screen shots. The tolerance band is adjusted to  $45mm \pm 0.4mm$ , if the signal is out of range, a digital change at the output will be caused. Roughly 20% of the full power is necessary, if the laser spot falls into the shiny notch.





ensor Instruments OmbH et ++49 (0) 8544-9719-0 ttp://www.sensorinstruments.de			Sensor 👾						
			L-LAS-LT-Scope Version 3.18				Instrument		
RA1 PARA2	·		BUN	1024- 	1				
POWER 10 100- 1 500- 1	NERAL-PARA NT-TIME[ms] 20.00	V-THD[%] 100 - 50 - 1 - 25	SIOP VIDEO	800- 700- 600- 500- 800- 200- 100- 1-	500 100	0 1500 20	00 2500	3000 35	
44.76 RIGGER-THRI RAM EEPROM FILE	2994	TEACH TEACH 256 SEND GET	INPUT INO INO INO	Pixel: <b>1</b> E-BEG E-LEFT <b>3535</b> <b>31</b> CONNECT	_	ENT-VALUE <b>45.60</b> 2 [Data[64]	[mm]	toleranc 0.4 <b>[•</b> 0.4 <b>[</b> -	E-RIG

