

LASER INTERFEROMETER GRAVITATIONAL WAVE OBSERVATORY

- LIGO -

CALIFORNIA INSTITUTE OF TECHNOLOGY
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

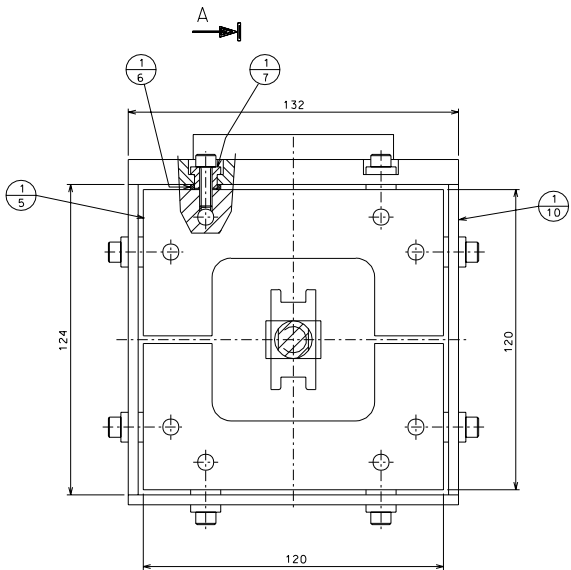
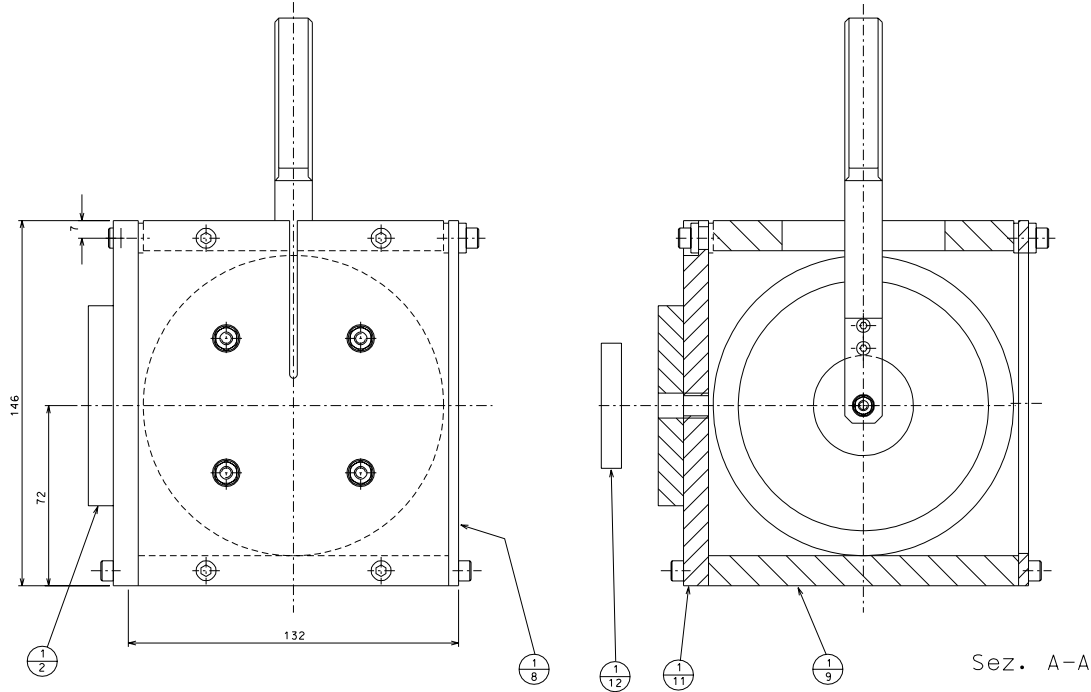
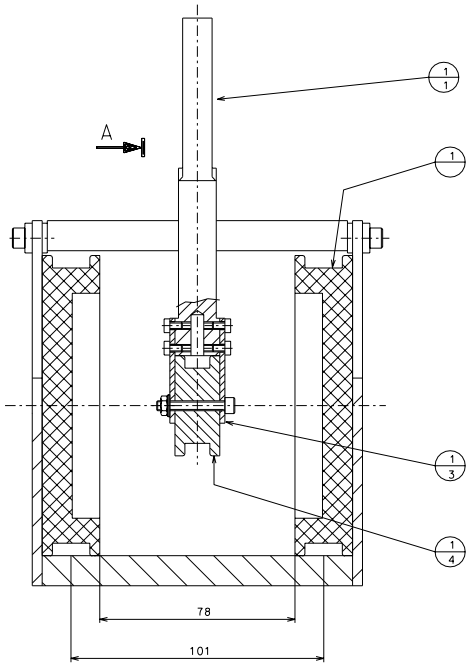
Document Type Technical Note	DCC Number LIGO-D-010243-00-R	Date 30 th October 2001
LIGO-II Seismic Attenuation System (SAS) test tower LVDT (Linear Variable Differential Transducer) Mechanical drawings		
Gianni Gennaro, Tatiana Zelenova (PROMEC), Riccardo DeSalvo (LIGO)		

Distribution of this draft: TBD
This is an internal working note
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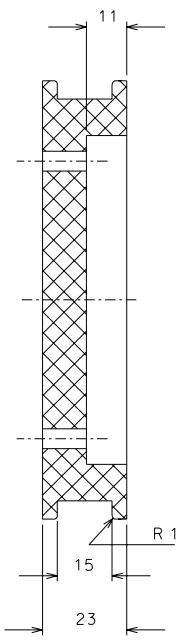
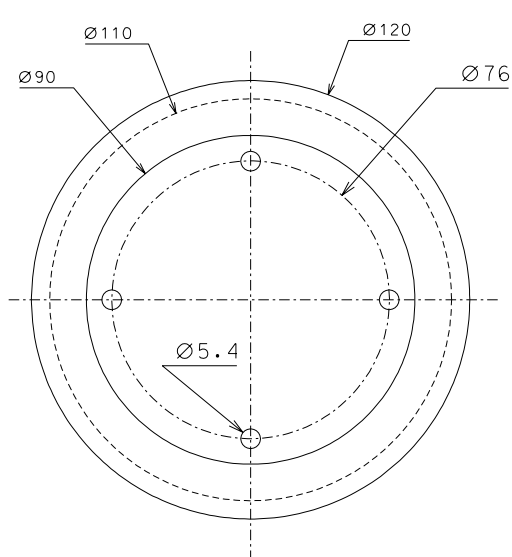
www: <http://www.ligo.caltech.edu/>



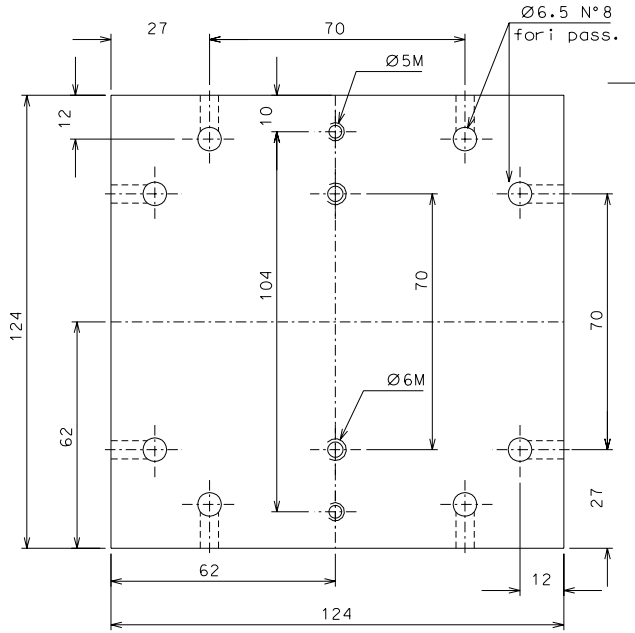
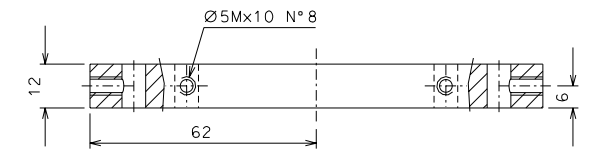
COURTESY OF VIRGO

1.9	001	bottom plate			
1.8	002	lateral plate			
1.7	002	insulator			
1.6	002	insulator ring			
1.5	002	box head			
1.4	001	first coil			
1.3	003	support plate			
1.2	003	rod threaded	1.12	003	spacer
1.1	002	nut	1.11	003	lateral plate
1	001	second coil	1.10	001	lateral plate
ref.	qnt.	desc. ragno	ref.	qnt.	desc. ragno

	LIGO PROJECT	designed for R. De Salvo
	1114	LVDT
LVDT		ass. num. PRIMEC 17.12.98
		date
		revision or. Num.

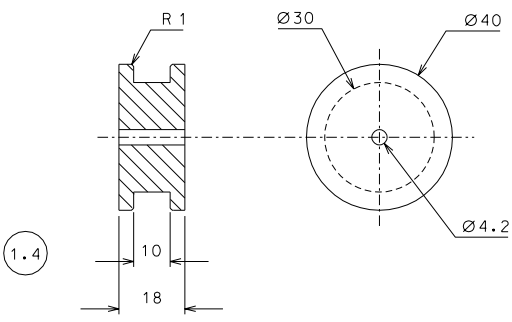


1

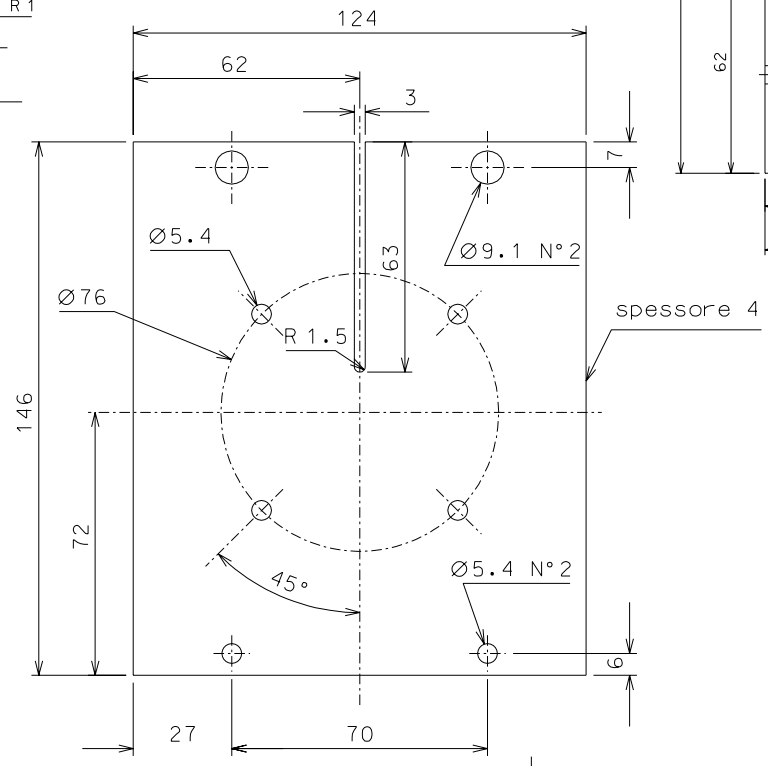


1.9

COURTESY OF VIRGO



1.4

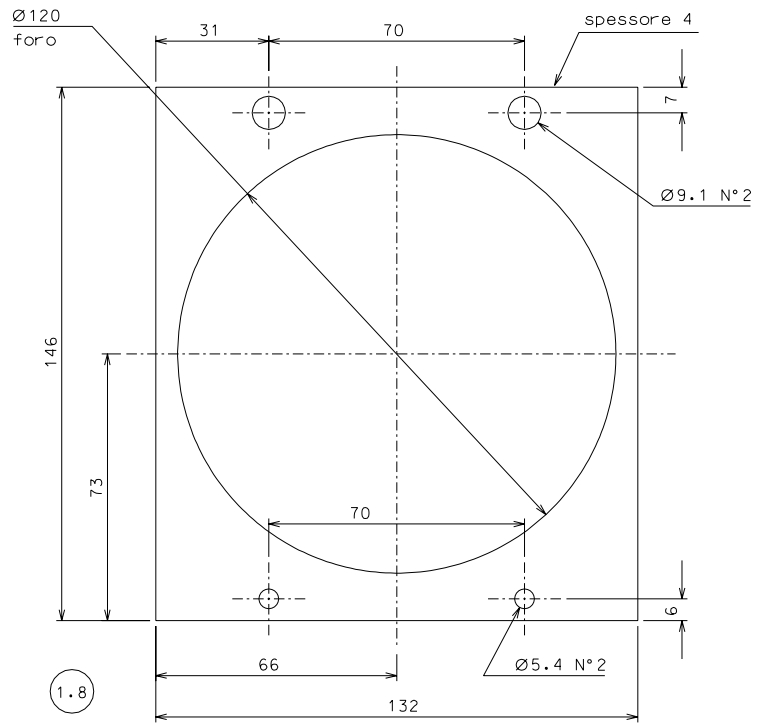


1.10

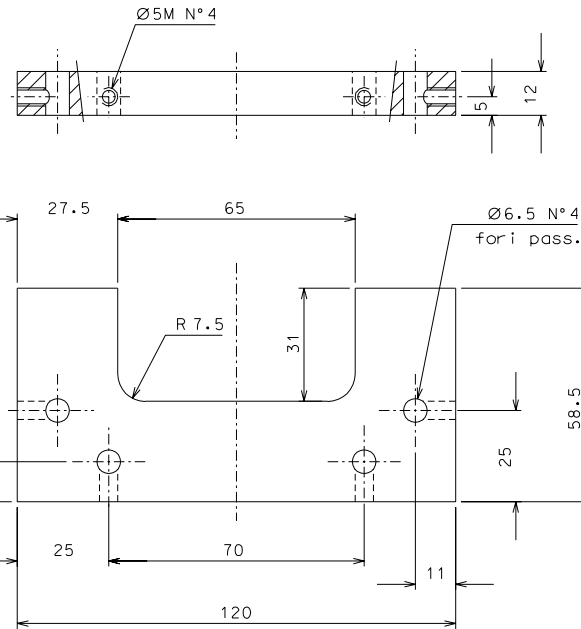
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1.9	1	"	1:1						
1.4	1	peek	1:1						
1	1	"	1:1						
ref.	pieces	mat. and treatments	scale	ref.	pieces	mat. and treatments	scale		

General machining tolerances UNI 5307-63								
Dimensions	< 6	> 6-30	> 30-120	> 120-315	> 315-1000	> 1000-2000	> 2000-4000	> 4000
Linear Toli.	± 0,1	± 0,2	± 0,3	± 0,5	± 0,8	± 1,2	± 2	± 3
angular Toli.	± 1'	± 30'	± 20'	± 10' referred to the shortest side				

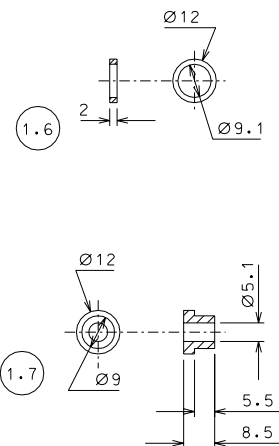
	LIGO PROJECT		designed for R. De Salvo
			N. LVDT 001
title		LVDT	draw. PROMEC 17.12.98
			details from 000
			replaces dr. Num.



1.8

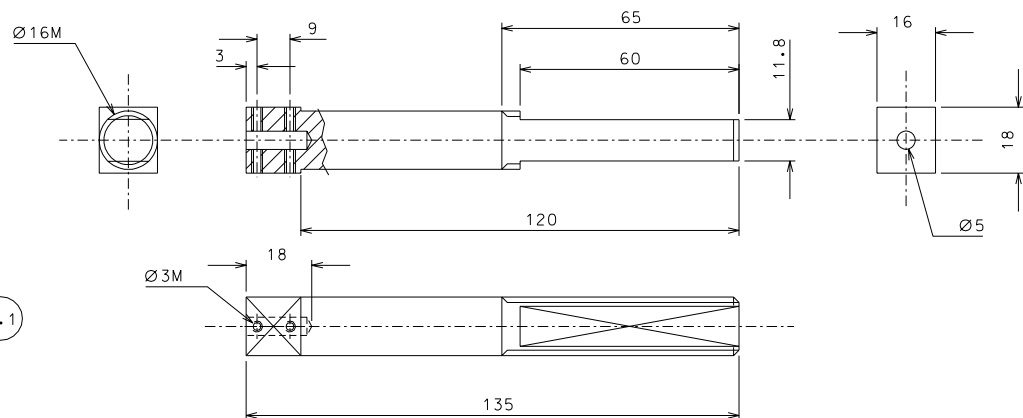


1.5



1.6

1.7



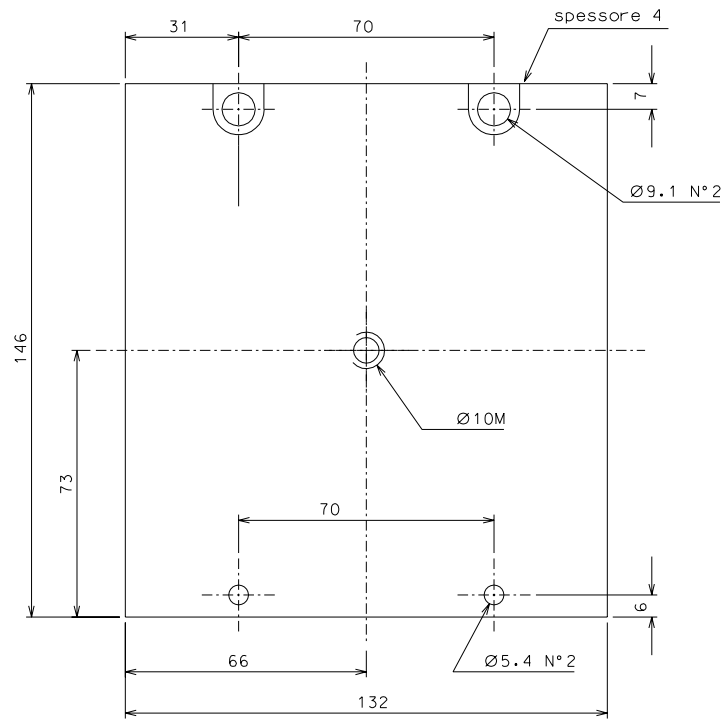
1.1

COURTESY OF VIRGO

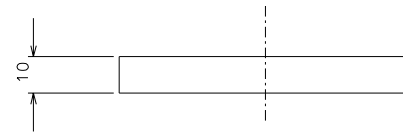
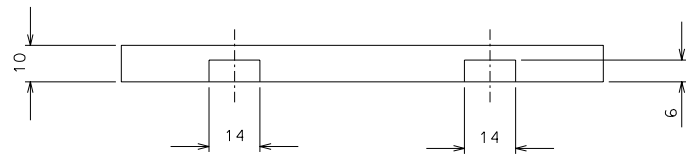
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1.7	8	peek	1:1				
1.6	8	peek	1:1				
1.5	2	UNI 9006/4	1:1				
1.1	1	UNI 9006/4	1:1				
ref.	pieces	mat. and treatments	scale	ref.	pieces	mat. and treatments	scale

General machining tolerances UNI 5307-63							
Dimensions	< 6	6-30	30-120	120-315	315-1000	1000-2000	> 2000-4000
Linear Toli.	± 0.1	± 0.2	± 0.3	± 0.5	± 0.8	± 1.2	± 2
angular Toli.	± 1'	± 30'	± 20'	± 10' referred to the shortest side			

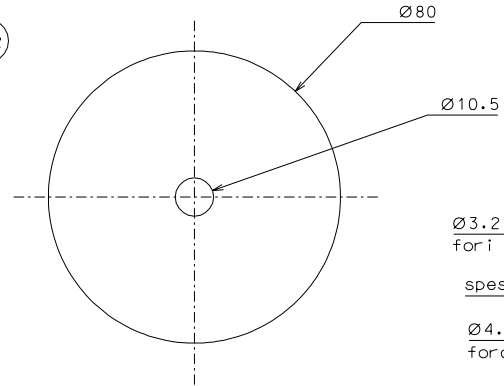
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			N. LVDT 002
title		LVDT	draw. PROMEC 17.12.98
			details from 000
			replaces dr. Num.



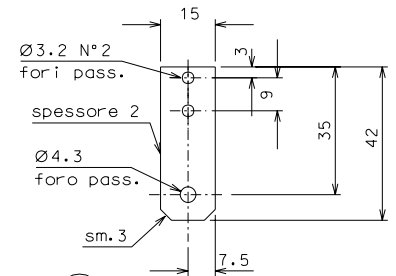
1.11



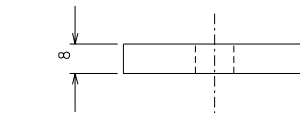
1.2



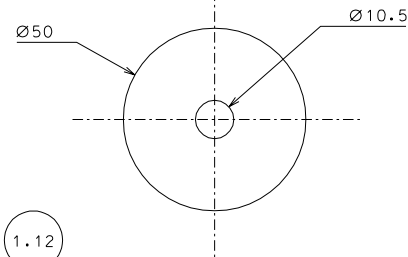
1.3



COURTESY OF VIRGO



1.12



1.12	1	UNI 9006/4	1:1				
1.11	1	"	1:1				
1.3	2	stainless steel	1:1				
1.2	1	"	1:1				
ref.	pieces	mat. and treatments	scale	ref.	pieces	mat. and treatments	scale

General machining tolerances UNI 5307-63							
Dimensions	< 6	> 6-30	> 30-120	> 120-315	> 315-1000	> 1000-2000	> 2000-4000
Linear Toli.	± 0,1	± 0,2	± 0,3	± 0,5	± 0,8	± 1,2	± 2
angular Toli.	± 1'	± 30'	± 20'	± 10' referred to the shortest side			

	LIGO PROJECT	designed for R. De Salvo
		N. LVDT 003
title LVDT	drawn by PROMEC 17.12.98	details from 000
		replaces dr. Num.