



Iberográfica

Capa Rota - Portugal

**Brand M
Model Comparison**

Elongation & Tensile

Doc. PROC- LAB - 009

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Item #	Brand/Model	Job #	Length				Yield		Mounting		Tensile		Young's Modulus MPa	Load@ LM kN	TT Time s
			L0 mm	L1 mm	L mm	LM mm	L-L1 mm	E1% ‰	L-L0 mm	E% ‰	LM-L0 mm	EM% ‰			
1	M / I	-	320,00	322,09	322,48	331,10	0,39	1,23	2,48	0,77	11,10	3,47	1.812	3,33	613,0
2	M / I	-	320,05	322,30	322,58	331,57	0,28	0,85	2,52	0,79	11,51	3,60	1.724	3,34	73,7
3	M / I	-	320,04	322,20	322,47	330,57	0,28	0,85	2,43	0,76	10,53	3,29	1.704	3,14	72,5
4	M / II	-	320,06	322,24	322,58	331,23	0,35	1,07	2,52	0,79	11,16	3,49	1.779	3,27	613,1
5	M / II	-	320,06	322,07	322,29	331,15	0,22	0,70	2,23	0,70	11,09	3,47	1.726	3,45	73,2
6	M / II	-	320,02	322,18	322,39	331,37	0,21	0,67	2,37	0,74	11,35	3,55	1.657	3,37	73,5
7	M / III	-	320,03	321,69	322,04	329,19	0,35	1,10	2,01	0,63	9,16	2,86	1.932	3,16	610,8
8	M / III	-	320,02	321,69	322,03	329,26	0,33	1,04	2,01	0,63	9,24	2,89	1.888	3,20	610,9
9	M / III	-	320,03	321,74	321,94	329,78	0,20	0,63	1,91	0,60	9,74	3,04	1.844	3,17	71,7
10	M / IV	1109326	320,01	324,85	325,50	334,80	0,65	2,02	5,50	1,72	14,79	4,62	1.284	2,44	616,5
11	M / IV	1109326	320,10	324,89	325,53	333,07	0,65	2,00	5,43	1,70	12,97	4,05	1.289	2,50	614,4
12	M / IV	1109326	320,23	324,94	325,37	334,30	0,43	1,33	5,14	1,61	14,08	4,40	1.218	2,37	76,1
13	M / V	-	320,58	326,90	327,73	335,92	0,83	2,53	7,15	2,23	15,34	4,78	1.180	2,68	616,7
14	M / V	-	320,53	327,01	327,77	336,52	0,76	2,32	7,23	2,26	15,99	4,99	1.046	2,84	617,5
15	M / V	-	320,48	326,92	327,64	335,96	0,72	2,21	7,16	2,23	15,48	4,83	1.136	2,73	616,9

Test standard: ISO 12636 4.2 (L0 to L) (*)
4.3 (L to break)

Tester: Lloyd LR 10K Plus

Grips Distance: 320 mm

Sample Dimensions: 50 x 390 mm

(*) - Bench marks not used.

An alternate 1' hold-time short test is also used.
Results may not be comparable with those strictly conducted according to ISO 12636.

Graphs: First Row each model

Legend

Extension (mm)

L0: @ 10 N

L1: @ 500 N

L : after 10' hold @ 500 N

LM: @ break

~"Mounting" elongation

L-L0: ΔL after tensioning-&-seating (mm)

E % = $[(L-L_0)/L_0] * 100$ %

~"Yield during Print"

L-L1: ΔL₁₀ after 10' @ 500N (mm), (or ΔL₁)

ΔL₁ = ~60 to 70 % ΔL₁₀

E1 % = $[(L-L_1)/L_1] * 10000$ %

Default Extension Graph Window: 1 mm

Modulus: stress/strain gradient @ greatest slope

Young's Modulus: (MPa)

Elongation @ LoadM

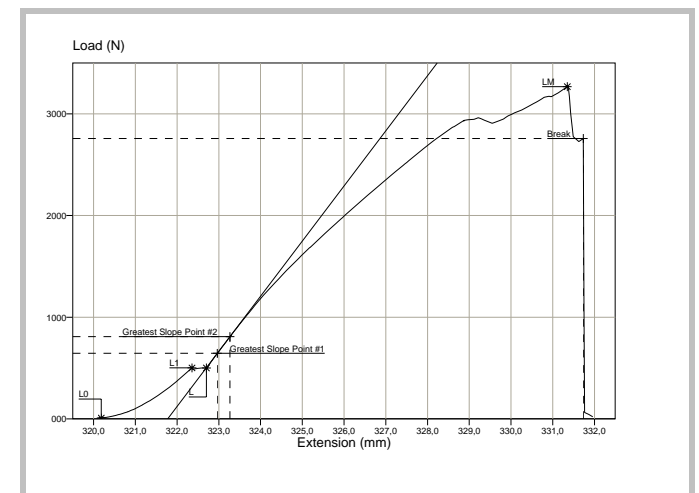
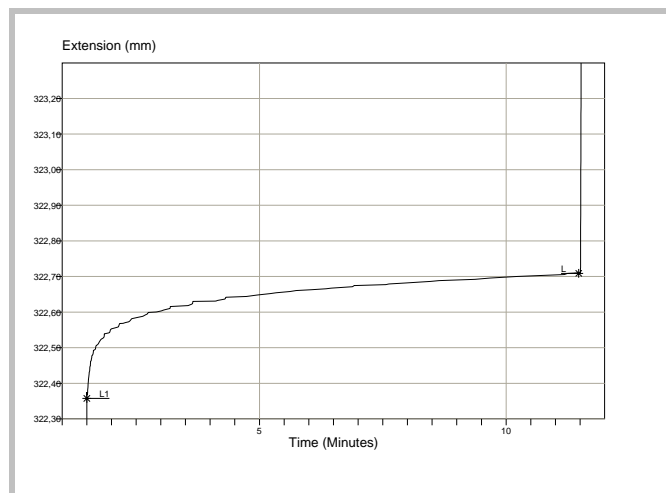
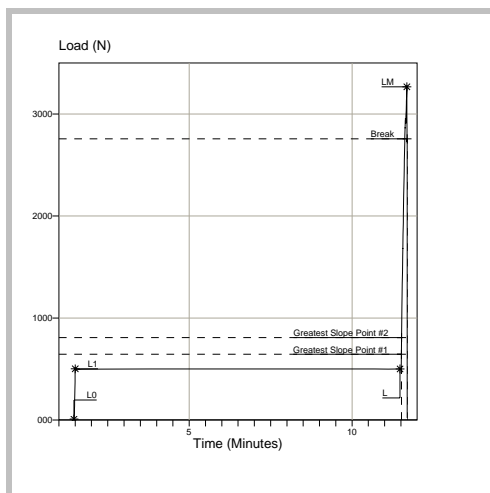
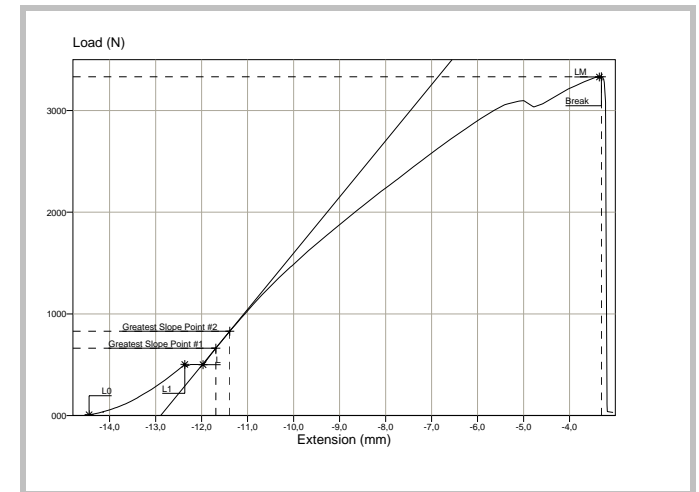
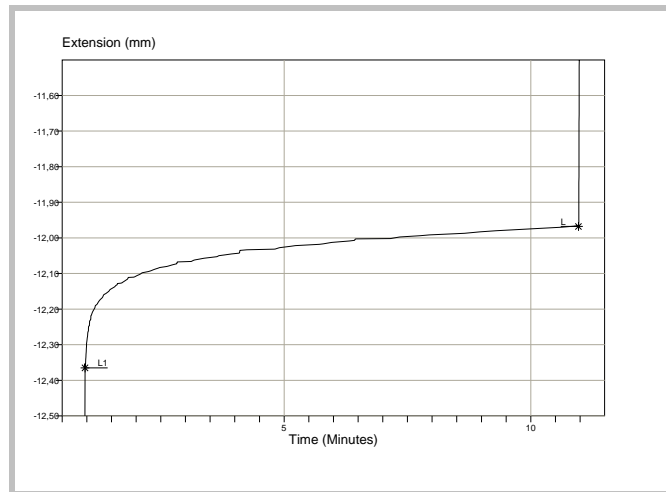
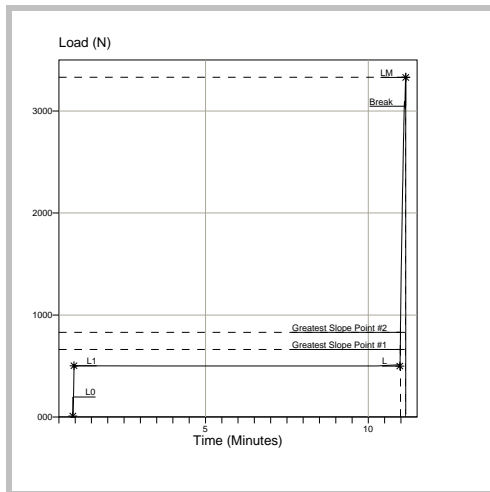
LM-L0: DL @ Maximum Load (break) (mm)

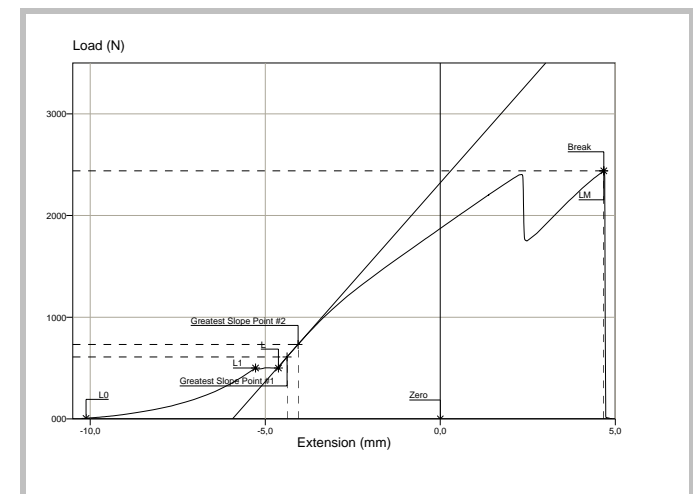
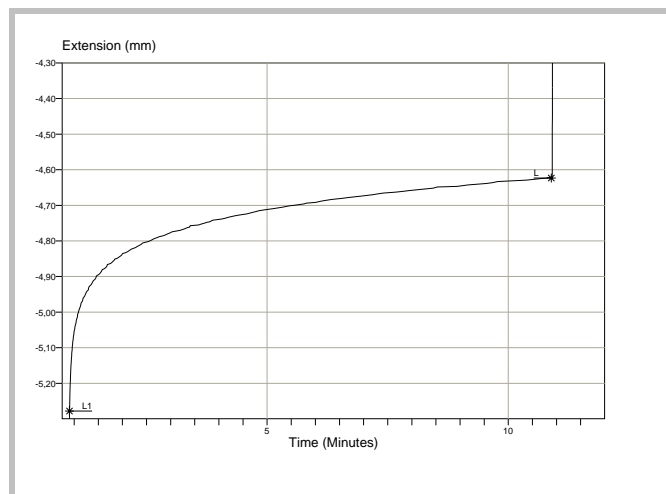
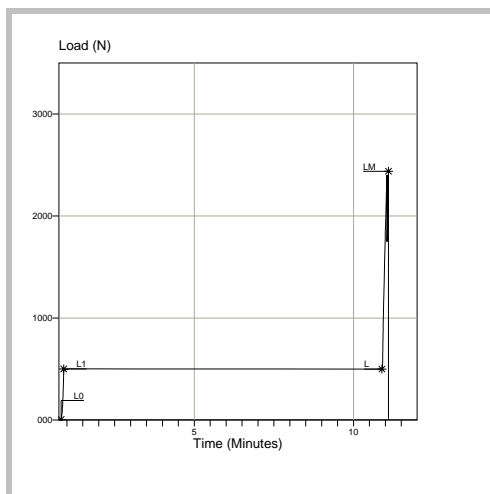
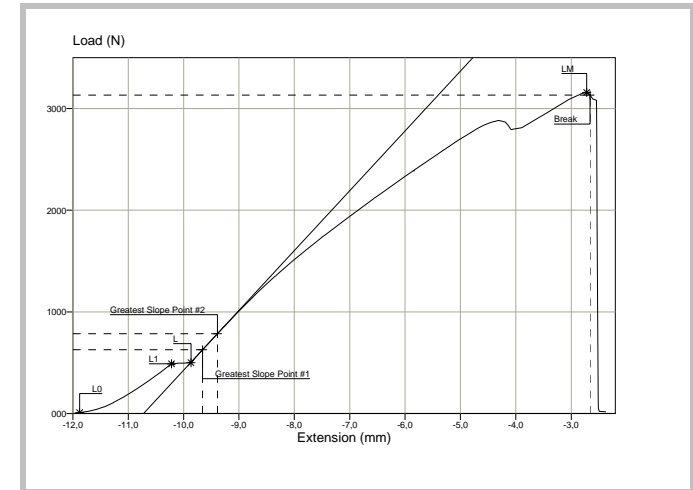
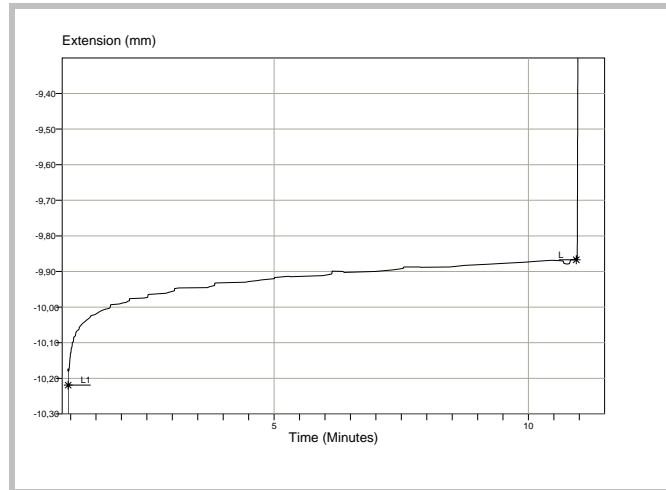
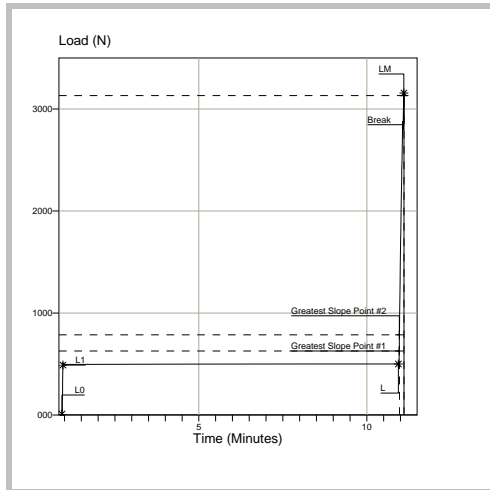
EM % = $[(L_M-L_0)/L_0] * 100$ %

Default Load Graph Window: 3.500 N

LoadM: Max. Load (kN)

TT: test Time (s)







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