



Iberográfica

Capa Rota - Portugal

Brand B
3 Ply Construction

Elongation & Tensile

Doc. PROC- LAB - 009

Date: 18 - 06 -2012

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Item #	Brand/Model	Job #	Length				L-L1 E1%		L-L0 E%		LM-L0 EM%		Young's Modulus MPa	Load@ LM kN	TT Time s
			L0 mm	L1 mm	L mm	LM mm	Yield mm	%	Mounting mm	%	Tensile mm	%			
1	B / I	2011_01	320,16	323,51	323,92	336,54	0,41	1,28	3,76	1,17	16,38	5,12	1.436	4,21	619,0
2	B / I	06/2012	320,30	323,04	323,40	335,31	0,37	1,14	3,10	0,97	15,02	4,69	1.622	4,12	617,6
3	B / I	06/2012	320,16	323,09	323,47	334,72	0,38	1,18	3,32	1,04	14,57	4,55	1.597	3,91	617,0
4	B / I	06/2012	320,21	323,14	323,54	334,44	0,40	1,22	3,33	1,04	14,23	4,44	1.604	3,83	616,6
5	B / II	2011_02	320,01	322,12	322,53	335,89	0,41	1,26	2,52	0,79	15,87	4,96	1.567	4,22	618,9
6	B / II	2011_02	320,05	322,14	322,55	336,11	0,41	1,28	2,50	0,78	16,06	5,02	1.547	4,30	618,9
7	B / II	06/2012	320,26	323,36	323,85	337,71	0,49	1,52	3,59	1,12	17,45	5,45	1.361	3,69	620,3
8	B / II	06/2012	320,25	323,19	323,71	337,52	0,52	1,60	3,45	1,08	17,27	5,39	1.380	3,61	620,2
9	B / II	06/2012	320,40	323,33	323,87	337,19	0,54	1,67	3,48	1,09	16,79	5,24	1.387	3,50	619,5

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: All, except Row 6

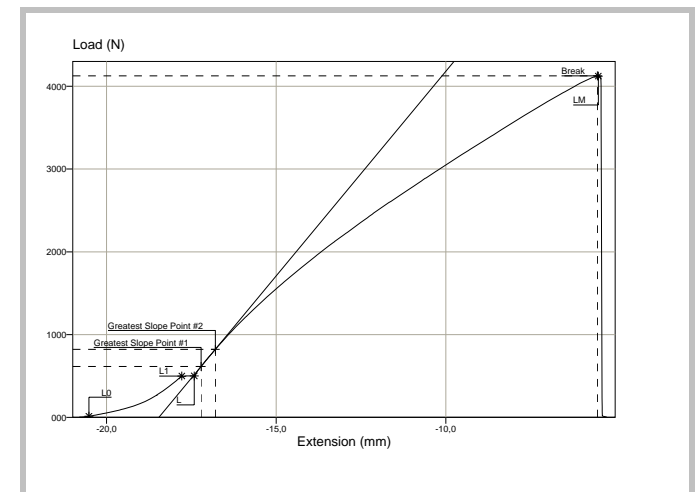
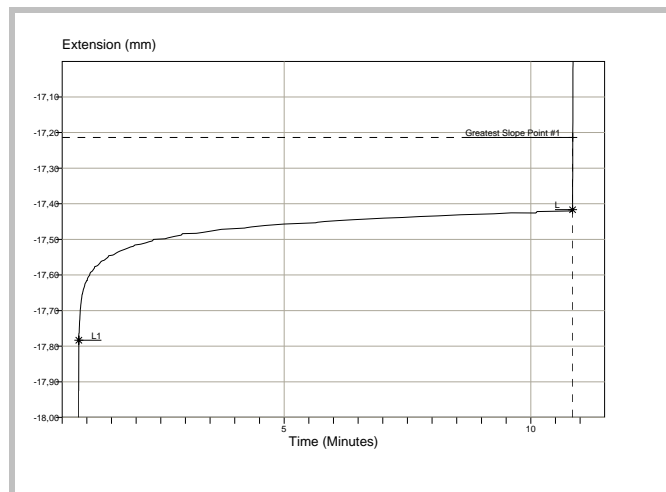
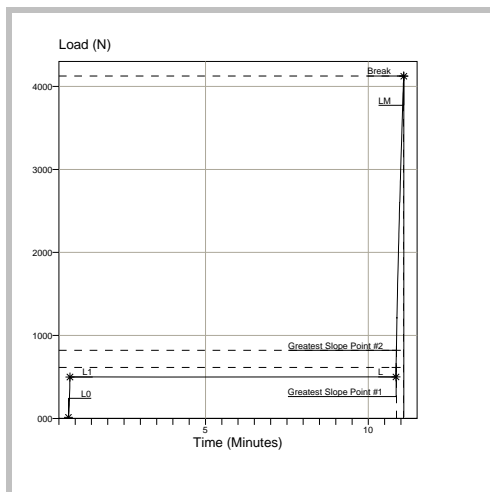
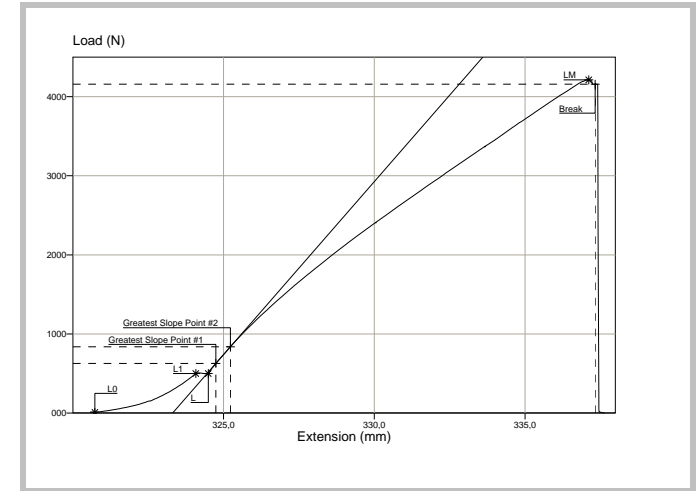
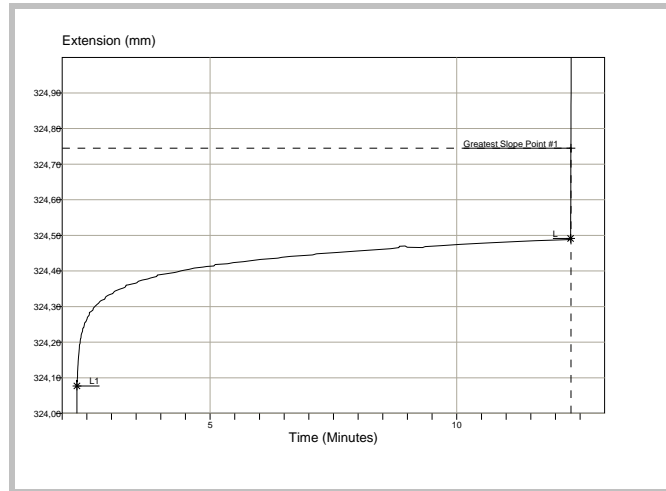
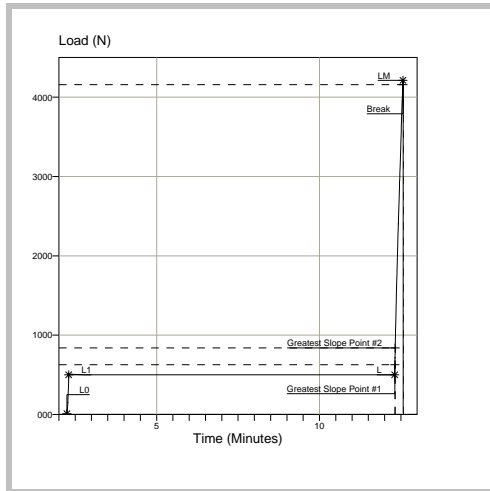
Legend
Extension (mm)
L0: @ 10 N L1: @ 500 N
L : after 10' hold @ 500 N LM: @ load max.

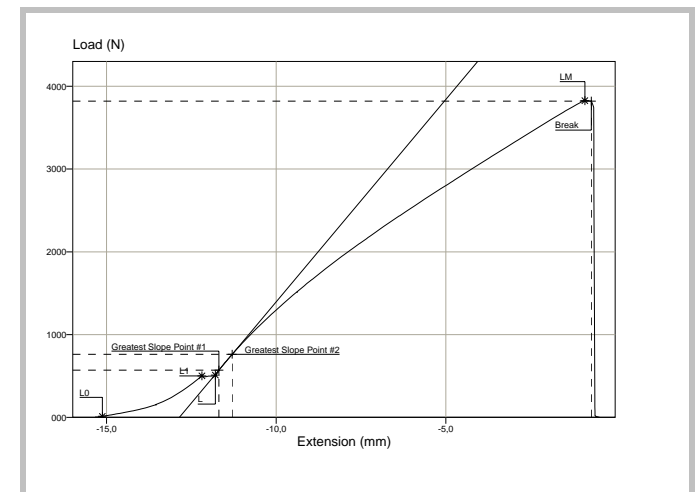
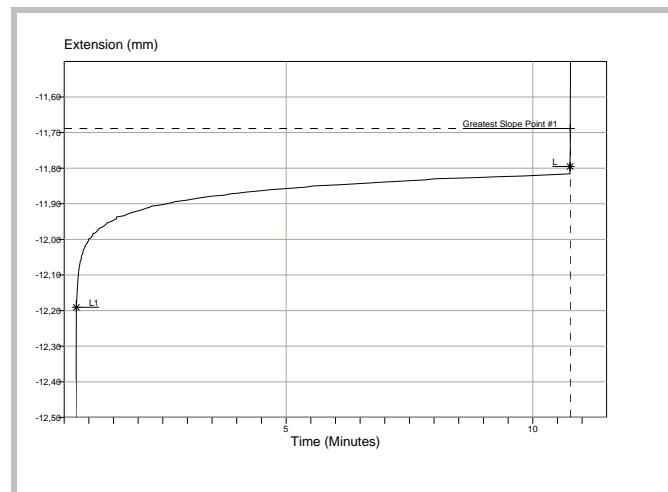
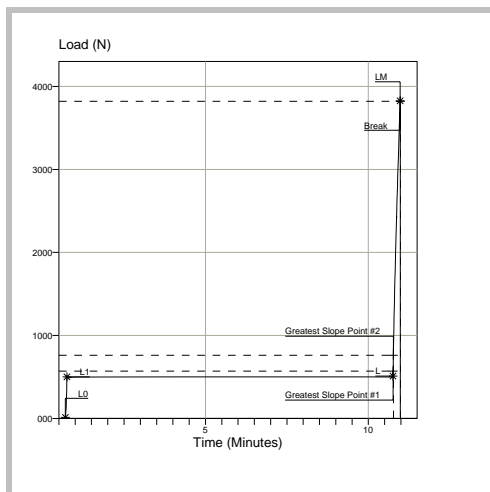
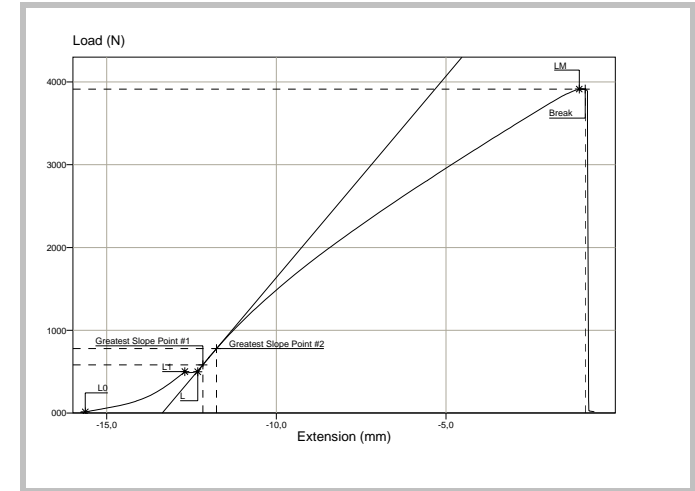
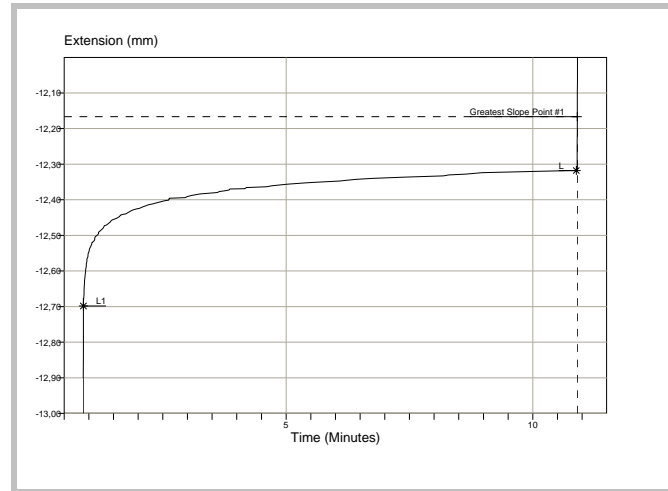
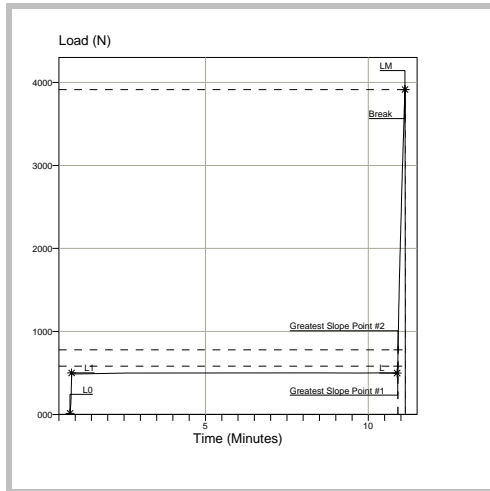
~"Yield during Print"
L-L1: ΔL after 10' @ 500N (mm)
E1 % = $[(L-L_1)/L_1] * 1000$ %
Default Graph Window Extension: 1 mm

~"Mounting" elongation
L-L0: ΔL after tensioning-&-seating (mm)
E % = $[(L-L_0)/L_0] * 100$ %
According to ISO 12636: E < 1,5 %

Elongation @ LoadM
LM-L0: ΔL @ Maximum Load (mm)
EM % = $[(L_M-L_0)/L_0] * 100$ %

Modulus: stress/strain gradient @ greatest slope
Young's Modulus: (MPa)
Load @ LM: Max. Load (kN)
TT: test Time (s)







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