



Iberográfica

Capa Rota - Portugal

Brand N
3Ply Construction

Elongation & Tensile

Doc. PROC- LAB - 009

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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	N / I	6001820	321,18	324,57	324,97	332,62	0,40	1,22	3,78	1,18	11,44	3,56	1.951	3,72	613,1
2	N / I	6001820	320,37	323,46	323,84	327,25	0,37	1,15	3,47	1,08	6,88	2,15	1.976	1,80	607,8
3	N / I	6001820	320,23	323,39	323,78	331,88	0,39	1,20	3,56	1,11	11,65	3,64	1.928	3,94	613,4
4	N / I	30378	320,24	323,52	323,89	331,16	0,37	1,15	3,65	1,14	10,92	3,41	1.882	3,62	612,6
5	N / I	30378	320,48	323,76	324,14	331,65	0,38	1,17	3,66	1,14	11,17	3,49	1.842	3,69	612,9
6	N / I	30378	320,21	323,40	323,77	331,17	0,37	1,15	3,56	1,11	10,96	3,42	1.884	3,68	612,8
7	N / II	6005266	320,12	322,28	322,61	328,22	0,33	1,01	2,49	0,78	8,10	2,53	1.871	3,06	609,5
8	N / II	6005266	320,16	322,37	322,71	328,12	0,33	1,03	2,54	0,79	7,96	2,48	1.886	2,94	609,3
9	N / II	6005266	320,15	322,34	322,67	327,37	0,33	1,03	2,52	0,79	7,22	2,26	1.954	2,76	608,4

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: Items 1; 3; 5; 7; 8 and 9

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

~"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: DL @ Maximum Load (break) (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)





