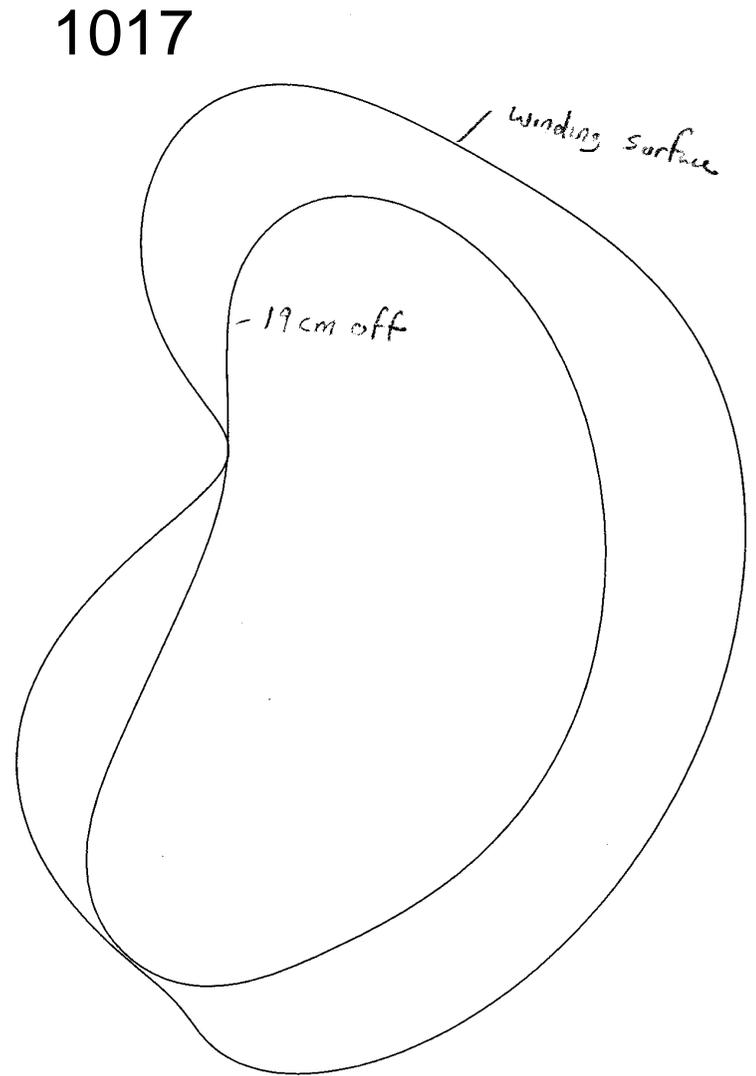
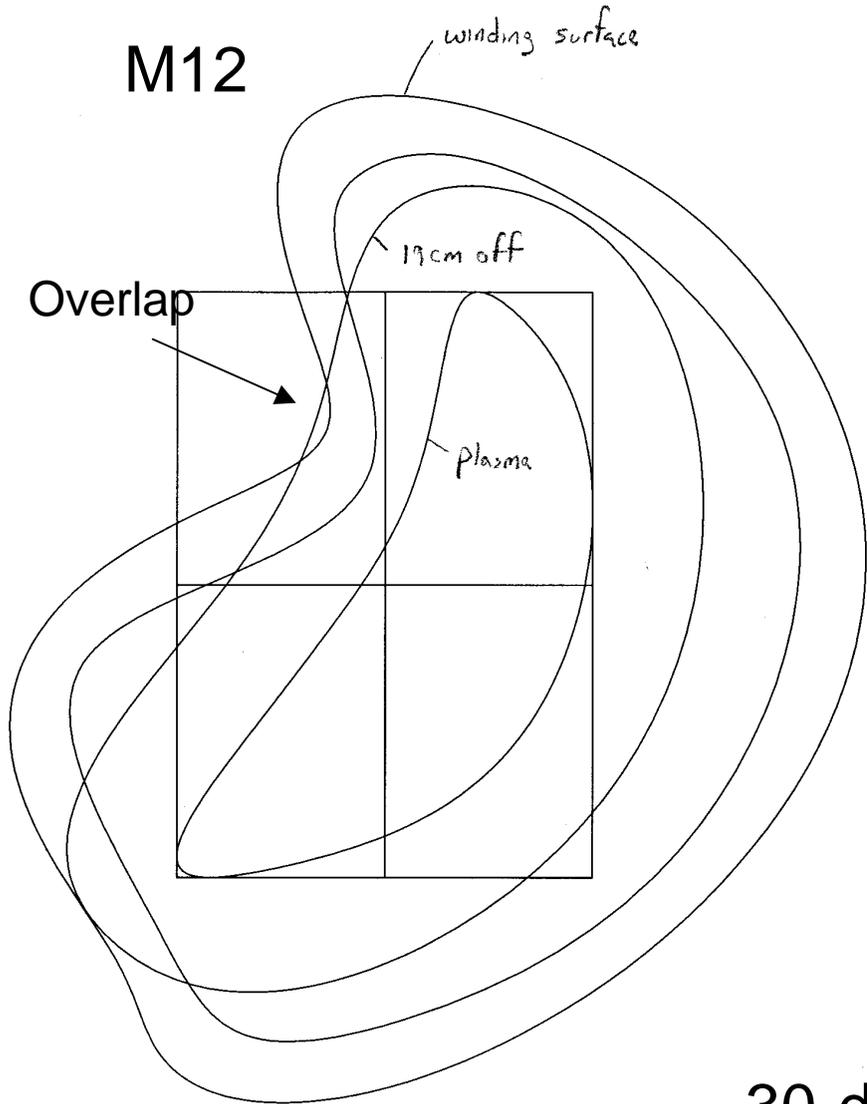


M12 winding surface interferes with min radial build at 30-deg



30-deg

Comparison of Coil Design Options (Normalized to 1.4m, 1.7T)

M12 M13 ← 18 Coil Designs →

	0907a1	1017a1	0227a1	0312a3	0628a1	0708a1	0711a1	0717a1
Modular Coils per FP	7	7	7	6	6	6	6	6
Symmetry coil, v=0	Y	Y	Y	Y	N	N	N	N
Symmetry coil, v=1/2	N	N	N	Y	N	N	N	N
NBI access	N	Y	Y	Y	Y	Y	Y	Y
Fourier modes-Modular coils	10	10	12	12	20	20	20	20
Fourier modes-Winding surf.	30	30	45	45	25	25	25	25
Avg. Field Error	0.57	0.61	0.48	0.59	0.61	0.6	0.59	0.6
Max. Field Error	2.55	2.61	1.95	3.06	2.57	2.25	2.17	2.33
Min. Coil-Coil Separation	11.04	12.19	12.85	13.51	11.7	11.9	11.5	11.3
Min. Plasma-Coil Separation	19.19	19.19	17.46	17.21	20.7	20.2	18.8	20.5
Min. Radius of Curvature	9.06	10.29	7.74	7.66	9.1	9.4	8.7	7.9
Min. NBI Access					26	25	24.6	26.2
I-mod,1	-569.45	-569.45	-482.18	-644.35	-520	-505.6	-556.3	-648.5
I-mod,2	-569.45	-569.45	-487.23	-549.85	-720.1	-700.1	-586.5	-719.1
I-mod,3	-569.45	-569.45	-512.17	-587.53	-743.3	-677.6	-640.5	-815.7
I-mod,4	-569.45	-569.45	-484.33	-600.48	0	0	0	0
I-TF			-1615.25	-1400.00	0	-600	-1200	1200
I-VF,1				95.20	-321.5	-190.7	-412	-436.2
I-VF,2				-43.87	-686.1	-273.5	-448.8	-876.5
I-VF,3				-48.88	30.8	78.2	211.6	95.2
I-VF,4					37.4	17.3	33.4	53.8
I-VF,5					10.5	3.3	4.2	8.9
I-mod,max/C-C,min	51.57	46.75	39.95	47.88	63.5	58.8	55.7	72.2

