Geometrical properties of each type of CSC as used in CMS Offline Software

Chamber	ME11	ME11a	ME11b	ME12	ME13	ME21	ME22	ME31	ME32	ME41	ME42
Al Frame *h*	162.0 cm	-	-	189.4 cm	179.3 cm	204.6 cm	338.0 cm	184.6 cm	338.0 cm	166.7 cm	338.0 cm
Al Frame *b*	30.13 cm	-	-	75.228 cm	86.42 cm	74.81 cm	91.038 cm	82.92 cm	91.038 cm	89.97 cm	91.038 cm
Al Frame *t*	60.90 cm	-	-	107.712 cm	117.85 cm	153.09 cm	152.68 cm	153.09 cm	152.68 cm	153.09 cm	152.68 cm
Al Frame *z*	14.7 cm	-	-	18.0467 cm	18.0467 cm	18.0467 cm	18.0467 cm	18.0467 cm	18.0467 cm	18.0467 cm	18.0467 cm
AGV *h*	148.74 cm	43.12 cm	105.62 cm	174.49 cm	164.16 cm	189.66 cm	323.06 cm	169.70 cm	323.06 cm	149.42 cm	323.06 cm
AGV *b*	18.70 cm	18.70 cm	26.73 cm	51.00 cm	63.40 cm	54.00 cm	66.46 cm	61.40 cm	66.46 cm	69.01 cm	66.46 cm
AGV *t*	46.62 cm	26.73 cm	46.62 cm	83.74 cm	92.10 cm	125.71 cm	127.15 cm	125.71 cm	127.15 cm	125.65 cm	127.15 cm
AGV *z*	0.7 cm	0.7 cm	0.7 cm	0.9525 cm	0.9525 cm	0.9525 cm	0.9525 cm	0.9525 cm	0.9525 cm	0.9525 cm	0.9525 cm
L(first w)	(20.13 cm)	-	-	51.00 cm	63.40 cm	54.00 cm	66.46 cm	61.40 cm	66.46 cm	69.01 cm	66.46 cm
L(last w)	(48.71 cm)	-	-	83.74 cm	92.10 cm	125.71 cm	127.15 cm	125.71 cm	127.15 cm	125.65 cm	127.15 cm
R(w-plane)	150.05 cm	-	-	174.81 cm	164.47 cm	189.97 cm	323.38 cm	170.01 cm	323.38 cm	149.73 cm	323.38 cm
L(central s)	-	44.50 cm	107.50 cm	174.49 cm	164.16 cm	189.66 cm	323.06 cm	169.70 cm	323.06 cm	149.42 cm	323.06 cm
N wiregroups	48	-	-	64	32	112	64	96	64	96	64
wirespacing	2.5 mm	-	-	3.16108 mm	3.16292 mm	3.11945 mm	3.16108 mm	3.11945 mm	3.16108 mm	3.11945 mm	3.16108 mm
APtoFW	10.646 mm	-	-	28.5 mm	28.5 mm	28.7 mm	28.7 mm	28.4 mm	28.7 mm	30.4 mm	28.7 mm
GlobalRofAP	(100.50 cm)	-	-	278.49 cm	508.99 cm	143.89 cm	360.99 cm	163.89 cm	360.99 cm	183.79 cm	360.99 cm
dFtoAP	(0.0 cm)	-	-	3.49 cm	3.49 cm	3.49 cm	3.49 cm	3.49 cm	3.49 cm	3.49 cm	3.49 cm
dStoAP	-	(5.0 cm)	(49.5 cm)	3.01 cm	3.00 cm	3.01 cm	3.03 cm	3.00 cm	3.03 cm	3.20 cm	3.03 cm
DeltaPhi-s	-	3.878509 mrad	2.958185 mrad	2.327105 mrad	2.152552 mrad	4.654210 mrad	2.327105 mrad	4.654210 mrad	2.327105 mrad	2.327105 mrad	2.327105 mrad
F thickness	0.0 mm	-	-	6.096 mm	6.096 mm	6.096 mm	6.096 mm	6.096 mm	6.096 mm	6.096 mm	6.096 mm
G thickness	7.0 mm	-	-	9.525 mm	9.525 mm	9.525 mm	9.525 mm	9.525 mm	9.525 mm	9.525 mm	9.525 mm
P thickness	15.0 mm	-	-	15.875 mm	15.875 mm	15.875 mm	15.875 mm	15.875 mm	15.875 mm	15.875 mm	15.875 mm
zAFtoAGV	1.70 mm	-	-	-1.71 mm	-1.71 mm	-1.71 mm	-1.71 mm	1.71 mm	1.71 mm	1.71 mm	1.71 mm
L-Frame	162.0 cm	-	-	189.4 cm	179.3 cm	204.6 cm	338.0 cm	184.6 cm	338.0 cm	164.7 cm	338.0 cm
wire tilt	29°	-	-	0°	0°	0°	0°	0°	0°	0°	0°
wires/group	37,11...,43	-	-	most 7–11	most 16, 17	most 5,6	most 16	most 5,6	most 16	most 5	most 16
wire group w	27.5 mm	-	-	22–35 mm	51, 54 mm	16, 18 mm	51 mm	16, 18 mm	51 mm	16 mm	51 mm
wires/layer	586	-	-								
strips/layer	-	48	64	80	64	80	80	80	80	80	80
strip channels	80	16	64	80	64	80	80	80	80	80	80
offset of strips		0	0	0.5 strip	0.5 strip	0.5 strip	0.5 strip	0.5 strip	0.5 strip	0.5 strip	0.5 strip
overlap of cscs		3 strips	5 strips	5 strips	0 strips	5 strips	5 strips	5 strips	5 strips	5 strips	5 strips
# of cscs/end	36	(36)	(36)	36	36	18	36	18	36	18	36
phi /csc	10°	(10°)	(10°)	10°	10°	20°	10°	20°	10°	20°	10°
eta coverage	~1.5–2.4	~2.1–2.4	~1.5–2.1	~1.2–1.6	~0.9–1.1	~1.6–2.4	~1.0–1.5	~1.75–2.4	~1.1–1.6	~1.85–2.4	~1.2–1.9
7P+6G+2F	147 mm	-	-	180.467 mm	180.467 mm	180.467 mm	180.467 mm	180.467 mm	180.467 mm	180.467 mm	180.467 mm