

Detector – Specifications

Detector Type: Cylindrical MWPC

Experiment: MUCAP

Responsible: P. Kammel, UIUC

➤ Diam. Anodes	640 mm
➤ Diam. Cathodes outer	648 mm
➤ Angle of cathode-Stripes inner	44.308° right screw
➤ Angle of cathode-Stripes outer	45.738° left screw
➤ Diam. Cathodes inner	632 mm
➤ Diam. Shielding outer	652 mm
➤ Diam. Shielding inner	628 mm
➤ Diam. Stesalitring outer	662 mm
➤ Diam. Stesalitring inner	615 mm
➤ Width cathode-Stripes	4.444 period.
➤ Number of cathode-Stripes inner	320
➤ Number of cathode-Stripes outer	320
➤ Angle of cathode-Stripes inner	44.308° right screw
➤ Angle of cathode-Stripes outer	45.738° left screw
➤ Readout of cathode-Stripes	Downstream only
➤ Number of Anode Wires	1024
➤ Wire spacing	1.963 mm
➤ Diam. of Wires	20μ
➤ Material of Wires	Tungsten (Gold plated)
➤ Mech. Wire-Tension	0.45 - 0.6 N
➤ Active Length	800
➤ Halfgap	4 mm
➤ Length of Cylinders	860
➤ Total Length (w/o prints)	910
➤ Material of Cathode-Foils	50μ Kapton /Al
➤ Material of Shielding-Foils	50μ Kapton /Al