FDC Specifications – v2.0

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Parameter	**Value**
Wire spacing s	10 mm (anode-anode), 5 mm (anode-field)
Anode-cathode distance, d	5.0 mm
Cathode readout pitch, w	5.0 mm
Gap between cathode strips, w_g	1.0 mm
Width of cathode strips	4.0 mm
Capacitance between strips	21 pF/m
Total strip capacitance	56 pF/m + 8 pF
Resistance between strips	$\sim$20 MΩ
Anode wire radius, r_a	0.010 mm
Wire capacitance per unit length, C_0	$\sim$9 pF/m
Gas gain	5×10^5
Operating voltage at nominal gain	1800 V
Electric field at cathode, E_c	$<$1 kV/cm
Electric field on anode wire surface	280 kV/cm
Field-shaping wire radius	0.040 mm
Electric field on field-shaping wire surface	15 kV/cm
Positive ion mobility, μ^+	1.3 cm^2/V/s
Total ion pairs	94/cm
Minimum wire tension	50 gm
Total charge collected	$\sim$15.5 pC
Charge collected in 30 ns (%)	$\sim$20%