

Installation of CMS Barrel Muon Chambers. Sectors as seen from inside. Sectors 4 and 10 have the chambers subdivided in two, as shown here in red, only at station MB4. The difference between R (or A; right) and L (or B; left) types is the location of gas, coolant, HV and LV external connection; the bodies are identical. The staggering between the SuperLayers is, however, different between the Zp and Zm types (have to extract the chambers in opposite directions in Z+ and Z- wheels, but the wheels have all the same orientation and are made left-right asymmetric to ensure an hermetic coverage in azimuth). The cable and piping trays along the periphery of the wheel are close to the face with the main connections; on the central wheel the Barrel Muon gas and cooling piping is on the Zm side. The "bottom" side of a chamber has one, the "top" side has two SuperLayers (SL) attached to the honeycomb structure (not applicable to MB4 chambers, which have only two SLs).