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# Proposal for names assignment of PXIE components

Names of the devices are assigned in ACNET as X:xxxxxx. (X: is used as an example and the actual letter needs to be negotiated with Controls).

Meaning of the characters in corresponding positions:

| | |
|---|---|
| 1 - | element type (solenoid, corrector etc.) |
| 2- | element characteristics (X/Y for correctors, F/D for quads etc.) |
| 3- | section of location ( L - LEBT, M- MEBT etc.) |
| 4 and 5- | number showing location inside the section |
| 6 - | type of reading/setting (voltage, current, temperature etc.) |

The name of a component in a mechanical drawing would be typically the same as the first 5 characters of the associated device.

Possible values in different positions:

1. Element types (letter)
    a. C- dipole corrector
    b. S- solenoid
    c. Q- quadrupole
    d. R- RF cavity
    e. K – kicker
    f. A- absorber
    g. I- ion sorce
    h. B- bending magnet
    i. V- valve
    j. Will add more types when needed
2. Possible characteristics (letter)
    a. X/Y- direction
    b. F/D – focusing/defocusing
    c. Etc.
3. Location (letter)
    a. L – ion source and LEBT
    b. R – RFQ
    c. M – MEBT
    d. H – HWR cryomodule
    e. S- SSR1 cryomodule
    f. D – diagnostics section and beam dump
4. 4 and 5 – a number between 00 and 99
    a. For MEBT,
        i. position #4 is a number from 0 to 9
            1. Each quadrupole doublet or triplet is numbered from 1 to 9

2. Other components has in the position #4 the number of the doublet/triplet immediately upstream
3. Possible elements upstream of the first doublet have 0 in the position #4

ii. position #5 is used for numbering elements between triplets

5. Type of reading/setting (letter)
    a. V/U - voltage
    b. I/C – current
    c. T – temperature
    d. Etc.

X:CYM20V – voltage readback of the horizontal dipole corrector in the second MEBT sub-section. Correspondingly, on mechanical drawings, in simulations, and in electrical schematics it can be marked as CYM20.