ATLAS	Barrel 3 DCS Services					
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Barrel 3 DCS Services

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Cable routing

Figure 1 shows a schematic drawing on the cable routing for one DCS cable. The sensors have individual twisted pair wires which are grouped into cables in units of 21 twisted pairs (harness 1) at the barrel ends. A connector is located at PP1 which allows harness 1 to be disconnected from harness 2. Harness 2 is routed to a patch panel at the service platforms. The layout of the harnesses can be found on $\frac{\text{http://www3.tal.uu.se/~brenner/atlas/dcs/DCS-}{\text{Cables.ps}}$. The shields of the harnesses are electrically connected to the heat spreader plates.

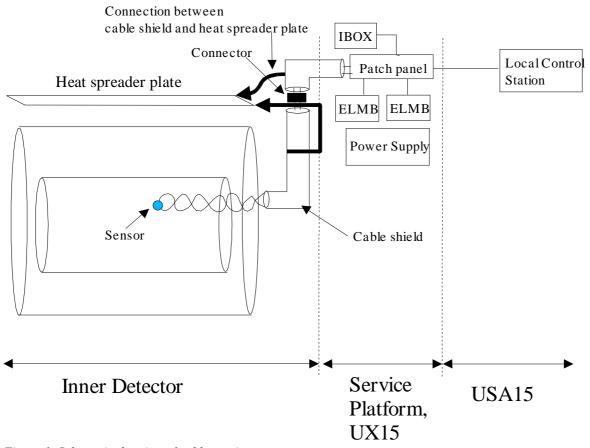


Figure 1. Schematic drawing of cable routing.

Figure 2 shows the mapping of sensors on Barrel 3. The symbols are explained in the figure. Figure 3 shows the grouping of sensors into cables. Four cables with 21 twisted pairs are routed through four paths to the service platforms. Sensors for operating the cooling system are <u>not</u> included in the figure.

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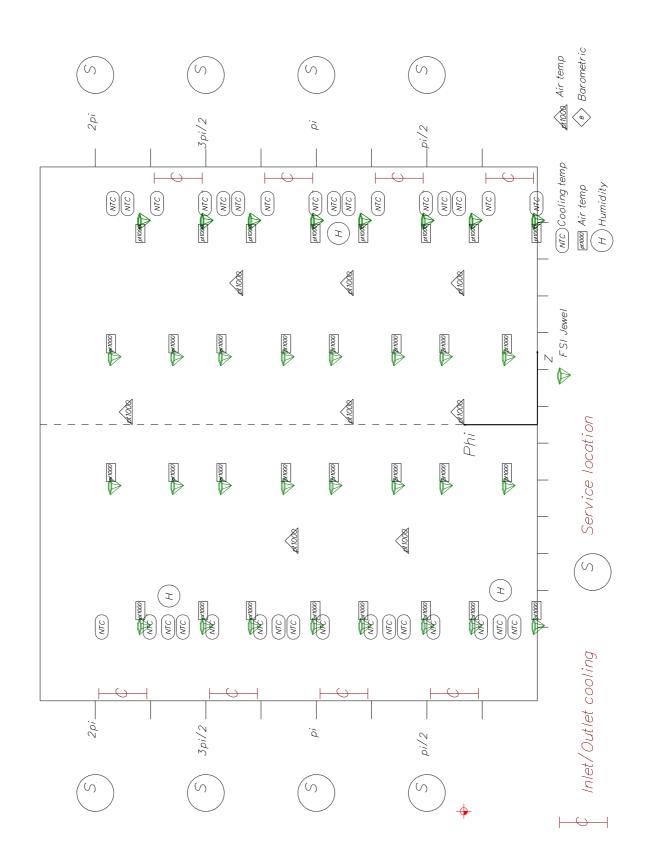


Figure 2. Sensors on Barrel 3.

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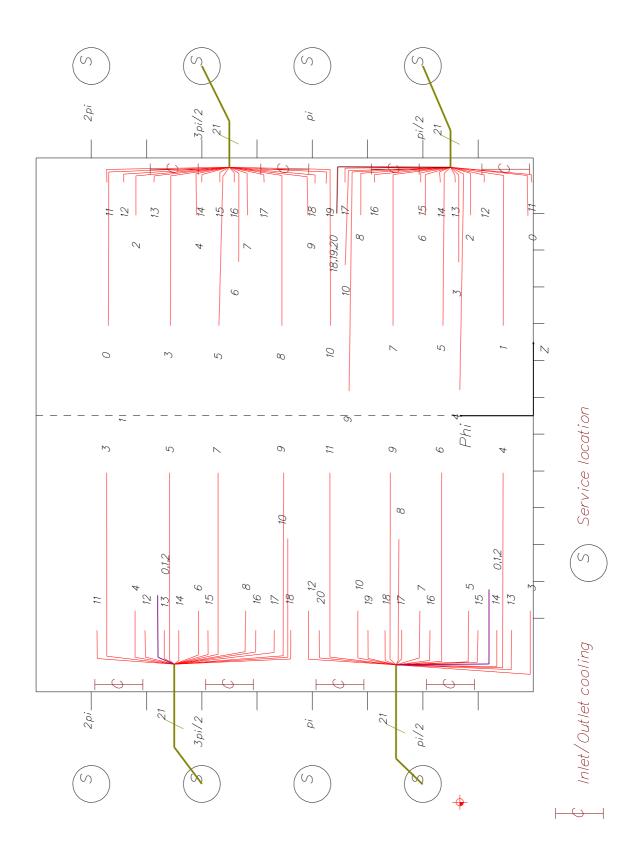


Figure 3. DCS sertvices on Barrel 3.