



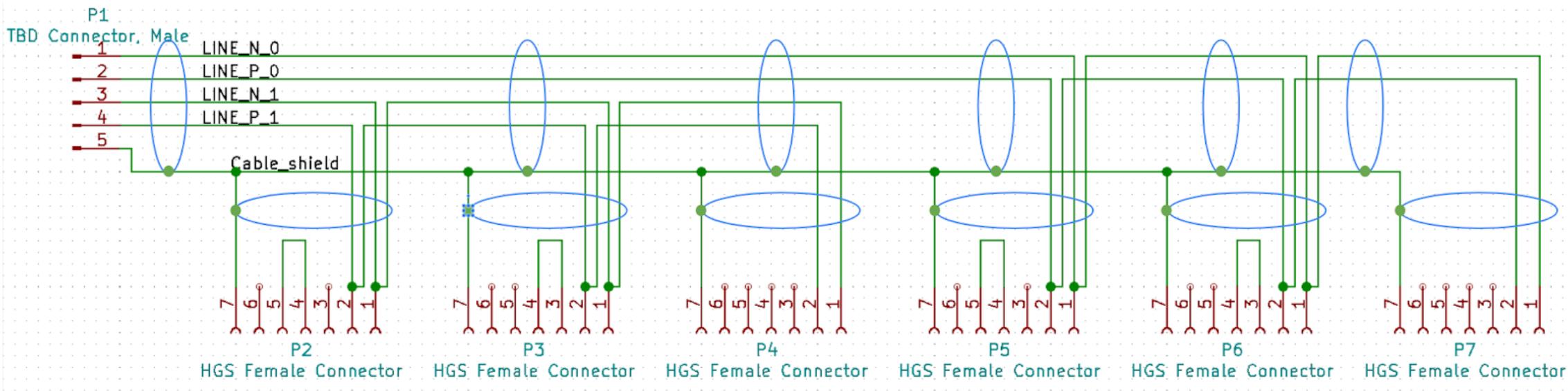
# List of Interfaces

Interface Requirement ID	Interface Name (e.g. interface function)	Interface Type (Electrical, Mechanical, Optical, Data)	Connection Name on THIS CI	Connection Name on OTHER CI	Name of Other CI
IR-1	BCA to PCA connection	Electrical	1 HGS connector per DOM		
IR-2	BCA to PCA connection	Electrical	CR10000	CR10000	
IR-3	BCA to MCA connection	Electrical	TBD	TBD	
IR-4	BCA to MCA connection	Mechanical			



# IR-1 Definition

Electrical interface with Penetrator Cable Assembly

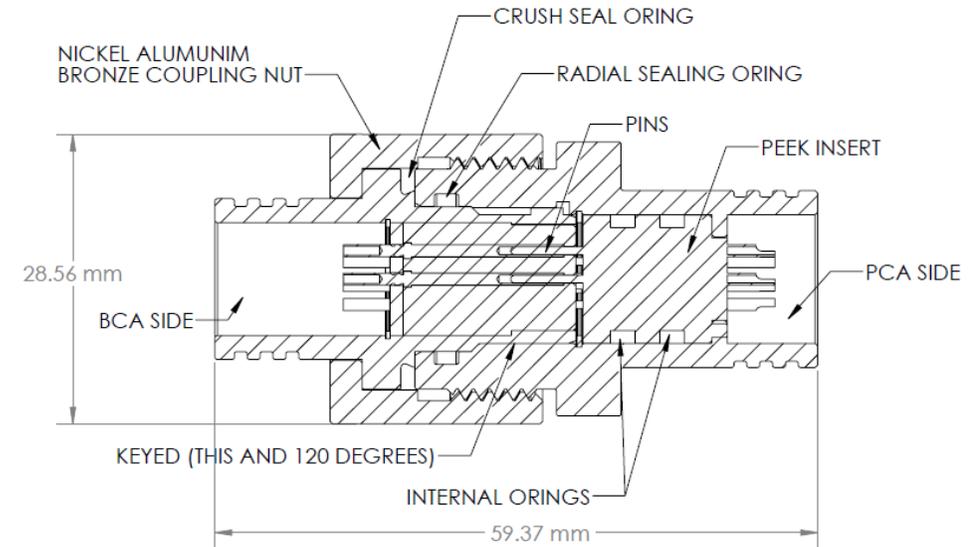




# IR-2 PCA TO BCA CONNECTION

Electrical interface with Penetrator Cable Assembly

- Electrical:
  - BCA side (CR10000) mates to the PCA mating connector (CP10000) both are steel 8 pin connectors from Hydro Group Systems.
  - Wiring diagram on the BCA side is shown on slide 2 and cross-section of the connectors are shown on the right





# IR-3 Definition

Electrical interface with Main Cable Assembly

- TBD connection from a single MCA quad to a BCA. The BCA makes a one-to-one connection to the conductors in a single quad, connector type to be selected by the MCA supplier.
- [Overview of main cable-to-PCA wiring](#) for reference.



# IR-4 Definition

## Mechanical interface with Main Cable Assembly

TBD for how the BCA will be mechanically connected to the MCA. MCA-side breakout termination design and connector type to be proposed by supplier in response to MCA RFP. The BCA-side connector will be an overmolded dry-mate connector rated to the pressure specified in the ERD.

A [proposed MCA breakout connection design](#) for reference.



# {Interface Name} Definition

{**Electrical, Mechanical, Optical, Data**} interface with {**Name of Other Item**}

- Electrical:
  - A schematic portion showing connector (all signal names listed) or:
  - A table listing connector type and pinout, like this ->
  - For circular connectors: add pin layout sketch showing “solder side”
- Mechanical:
  - A mounting hole pattern with dimensions, height constraints, etc
- Optical:
  - Sketch showing ray tracing FOV, NA, indexes of refraction,
- Data:
  - Command and variable definitions with parameters
  - Ok to Link from here to other documents such as command list, API, etc.
- Provide “interface location” block diagram if necessary
- Include all info required to design the interface’s other side
- Copy this slide as necessary for each of the item’s interfaces

<b>{J or P [X], Connector Type, Description}</b>		
Signal Name	Signal Type	Pin #