Connectors

Versatys® range of products

Versatile & fast locking

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Versatys® MMC product range

• Versatys® MMC originally developed in the frame of an EMITS TRP.
  – Evaluation finished and successful.
• Improved after evaluation, addition of new variants (8 cavities).
• Used on some programs
Versatys® MMC product range

• MMC / MMCA doc
• Technical brochure available

Connector gender by the contact type
- Male contact in female shell
- Female contact in male shell

A for “Amovible” ≈ Removable
Versatys® MMC product range

- MMC Versatys® connectors main characteristics
  - **Versatile**
    - Power and RF coaxial contacts
    - 4 and 8 cavities (2 in development)
  - **Fast locking “D-click” hardware** option
    - Up to 8 power/coaxial contacts mated in one click:
  - **Removable contacts option** or potted
    - Easy removability (w/o tooling)
  - **Double insulation** compliant
Versatys® MMC: Versatile

- Cavities for 4 or 8 contacts
- Removable or potted
- **S12 & S16 power**
  - Power up to 40A max (20A with de-rating).
- **S12 RF coaxial**
  - Coaxial up to 40 Ghz (RL<1.25 up to 40GHz)
Versatys® MMC: Versatile

VSWR <1.20 up to 40GHz

RL<1.25 up to 40Ghz
Versatys® MMC: Fast locking

D-click locking: AIT time saved

D-click variants available for male & female connector
Only latch pin required on PCB variants.

Std hardware
Versatys® MMC: Versatile

In line and PCB connectors

Socket D-Click
Socket guide-pins

Pin D-Click
Pin guide-pins

Potted versions also available

CBR & BS - Pin & Socket
Versatys® MMC: Contact Removability

Contact removal in three steps.
No tool.

Visual check of the locked position

3rd step: Remove the contact
Versatys® MMC: Contact Removability

Easy contact removal: Spring maintains a good mating

Removable concept: contact using a spring & a CLP “Contact Locking Part”.

[Diagram showing the contact mechanism with labels for Locking lug and CLP]
Versatys® MMC: Double insulation

- Front face interfacial seal
- Insert designed for double insulation:
  - Zig-zag between 2 potentials
  - Kynar sleeve over wires below insert at the back
Versatys® MMC: Micro Modular Connector

- Development achieved. *Extension of the range.*
- Extensive evaluation done and positive
  - Vibrations, Mating
  - Shielding effectiveness
  - Thermal cycling
  - Current overload, voltage overload...

- ESCC specifications available soon: ESA review in process
  - ESCC qual to come
- Qualified **according to ESCC3401** and implemented on a Mega-constellation program.
Thank you

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