

E01-SAA09FT06-011  
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SAA09FT06-011  
Rev. C

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S040244  
ATTACHMENT  
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SFP Item: Pressure Relief Valve

Find Number: A103657

Criticality Category: 2

SAA No: 09FT06-011

System/Area: Fluid & Gas Subsystem P/L  
Canister Transporter

NASA 79K80161-5

Part No:

PMN/ A70-0892  
Name:

Mfg Anderson Greenwood Co.

Part No: 81JS48-6

Drawing/ 79K08346/  
Sheet No: 2

Function: Provides GHe overpressure protection for the fluid and gas system.

Critical Failure Mode: Fail open (continuous vent) (FMN 09FT06-011.007)

Cause: Internal part failure

Failure Effect: Loss of GHe to the canister interface panels A thru E. Loss of GHe purge may result in damage to the payload. Failure is detectable by the IACS.

Acceptance Rationale

Design:

- |  | <u>Rated</u> | <u>Actual</u> |
|--|--------------|---------------|
| o Component Specification:   |              |               |
| Pressure (psig)  | 83/123       | 85            |
| Temperature (°F)   | -20 to 550°F | Ambient       |
| o Materials:   |              |               |
| Body - 316 SST   |              |               |
| Internal metal parts - 300 series SST  |              |               |
| Seat - Teflon  |              |               |
| Seals - Teflon   |              |               |
| o Set cracking pressure 89 psig, reseal pressure 82 psig.                          |              |               |
| o Flow capacity approx. 580 CFM at mid-range of rated set pressure as noted above. |              |               |

Test:

- o The valve was procured and accepted in accordance with the requirements of NASA component specification 79K80161.
- o Annual in-place calibration for cracking pressure, reseal pressure and leak check at component replacement per OMI E6401.

Inspection:

- o Verify current relief valve calibration prior to each operational use per OMI E2004.

Failure History:

- o No MDAC PRACA failure history in the critical failure mode.

Operational Use:

- o N/A