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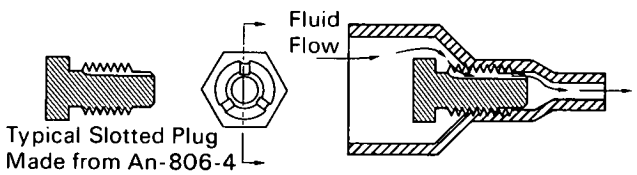
Brief 70-10037

NASA TECH BRIEF

Adjustable Flow Restrictor

A proposed flow-rate restrictor may be made from a standard tubing plug and a tapered pipe fitting, by cutting beveled slots perpendicular to the threads of the plug and by threading the inside of the small diameter end of the fitting to mate with the plug (see fig.). When the two are screwed together, the flow is



restricted to the area between the bottoms of the slots and the edges of the female threads. By generating turbulence in the fluid flowing past the sharp-edged threads, this device provides greater pressure reduction than is possible with a smooth-walled device such as a needle valve. The proposed device is therefore less susceptible to clogging and may be installed in any fluid flow system where a small, lightweight, inexpensive, adjustable flow restrictor is needed.

Note:

No additional documentation is available. Specific questions, however, may be directed to:

Technology Utilization Officer
Manned Spacecraft Center, Code BM7
Houston, Texas 77058
Reference: B70-10037

Patent status:

Inquiries about obtaining rights for the commercial use of this invention may be made to NASA, Code GP, Washington, D.C. 20546.

Source: R. J. Tufte of
LTV Aerospace Corporation
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Category 07