

Air Brake Valve Input-Output Characteristic Requirements

RATIONALE

J1861 has been reaffirmed to comply with the SAE 5-Year Review Policy.

1. SCOPE

This SAE Recommended Practice establishes minimum tolerance requirements for pilot operated and mechanically actuated modulating type valves, and through type valves used in the service brake control system when tested in accordance with the test procedure outlined in SAE J1859. This document applies to the nominal input-output characteristics as specified by vehicle original equipment manufacturer and labeled by the valve manufacturer as outlined in SAE J1860. The tolerance requirements will include:

- a. Crack (opening) pressure or force. Crack pressure may be measured at the initial output pressure or as the pressure differential before output pressure exceeds 14 kPa (2 psi). Crack force may be measured at initial output pressure or before output pressure exceeds 14 kPa (2 psi).
- b. Pressure differential (input-output)

1.1 Purpose

This document establishes uniform tolerance requirements for specified nominal input-output characteristics of pneumatic valves designed to operate at 931 kPa (135 psi) nominal pressure in commercial air braked vehicles. This serves as a supplement to SAE J1410.

2. REFERENCES

2.1 Applicable Publications

The following publications form a part of this specification to the extent specified herein. The latest issue of SAE publications shall apply.

SAE Technical Standards Board Rules provide that: "This report is published by SAE to advance the state of technical and engineering sciences. The use of this report is entirely voluntary, and its applicability and suitability for any particular use, including any patent infringement arising therefrom, is the sole responsibility of the user."

SAE reviews each technical report at least every five years at which time it may be reaffirmed, revised, or cancelled. SAE invites your written comments and suggestions.

Copyright © 2011 SAE International

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of SAE.

TO PLACE A DOCUMENT ORDER: Tel: 877-606-7323 (inside USA and Canada)
Tel: +1 724-776-4970 (outside USA)
Fax: 724-776-0790
Email: CustomerService@sae.org
http://www.sae.org

SAE WEB ADDRESS:

**SAE values your input. To provide feedback
on this Technical Report, please visit
http://www.sae.org/technical/standards/J1861_201109**