

GUARANTEED NON-STALLING AIR VALVE PERFORMANCE

If a Warren Rupp **ESADS®** (Externally Serviceable Air Distribution System) **EVER*** fails to operate or restart after shutdown due to “centering” of the main air valve or pilot valve, Warren Rupp will replace the air drive system free of charge.

Having supplied this UPGRADED, FIELD PROVEN, RETROFITABLE, air drive system since 1996, the absence of any field failures related to design, gives Warren Rupp the CONFIDENCE to offer the ONLY WRITTEN AIR VALVE PERFORMANCE GUARANTEE IN THE AODD INDUSTRY!

What makes the **ESADS®** air drive system of Warren Rupp so different from alternative technologies? The short answer is WARREN RUPP'S cross-drilled technology.

Here's how it works:

1. As a diaphragm assembly shifts to one side of the pump, its air-side diaphragm plate makes physical contact with the pilot valve.
2. The pilot valve movement opens a channel for air to be EXHAUSTED from one side of the main air valve spool, resulting in a lower pressure on that side of the valve spool.
3. The pilot valve movement also opens a channel that directs the primary air supply to the opposite side of the main air valve spool. The differential pressure across the main air valve spool causes it to shift.
4. As the main air valve spool “shifts”, it redirects the driver air from one diaphragm to the other (i.e. alternately exhausting from behind one diaphragm, while applying compressed air behind the other.) At this point is when the WARREN RUPP cross-drilled advantage is realized.
5. WARREN RUPP'S cross-drilled technology channels a supplementary source of air, from the pressurized inner chamber, to “lock” (“air detent”) that side of the main air valve spool under pressure. The main air-valve spool has no means of drifting or “centering” because of the ever-present difference of pressure across the main air valve spool.
6. Nothing happens to change the condition until the working diaphragm pulls the resting diaphragm assembly into contact with the opposite side of the pilot valve spool and the process repeats itself.

There are **no** springs, **no** sliding-shoes, **no** magnets, **no** unbalanced spools, and **no** deception about the number of parts needed to ensure performance. Unlike other technologies that require major pump disassembly just for inspection, there is no difficulty in inspection or removal from the pump. It bolts on and off. In short, it just keeps working and **YES**, it is in-line serviceable.

The design improvements of the **ESADS®** air drive system have made it the ONLY air drive system Warren Rupp offers on its new pumps, simply because it works. An additional benefit for customers is that this **UPGRADED** air drive system can be easily **RETROFITTED** into almost all Warren Rupp pumps produced in the last thirty + years owing to our modular pump design. Other pump manufacturers “say” their air valves do not stall...

Warren Rupp GUARANTEES AIR VALVE PERFORMANCE!

- Conditions of Guarantee:
- The model air drive system supplied must be operated within temperature parameters of design.
Note: One basic system operates to 130°F (65° C), a different model system is designed for higher temperature environments.
- The product has been maintained in accordance with basic inspection and maintenance instructions of Warren Rupp ...
(maintained clean, absence of nicks or cuts on O-rings ...)



Eligibility requirements:

- Product must be promptly returned, freight prepaid, to a Warren Rupp authorized distributor, or with prior authorization of Warren Rupp to its factory location.
- Claimant's exclusive remedy under this guarantee shall be limited (at Warren Rupp's option) to the replacement or repair of the defective product, parts, or components originally furnished by Warren Rupp.

Liability:

- Warren Rupp shall not be liable for any loss, damage, or expense directly or indirectly related to or arising out of the use of its products, including damage or injury caused to other products machinery, buildings or property, and Warren Rupp shall not be liable for consequential damages including, without limitation, lost profits, loss of time, inconvenience, loss of product being pumped, and loss of production. This guarantee does not obligate Warren Rupp to bear any costs of removal, installation, transportation, or other charges which may arise in connection with a claim.
- Claimant shall not be entitled to repair or replacement under this guarantee if in the judgment of Warren Rupp, the product or any of its components have been (a) tampered with, disassembled, repaired or altered in a manner inconsistent with Warren Rupp recommended practices (except as may be authorized by Warren Rupp in writing); (b) subjected to misapplication, misuse, neglect or accident; or (c) used with a driver fluid other than air, without the expressed written consent of Warren Rupp. The guarantee shall not apply to repairs or service necessitated by normal wear and tear or for lack of reasonable and proper maintenance.
- This **ESADS**® air drive system guarantee is independent of the pump warranty. No distributor or other person is authorized to assume any liability or obligation for Warren Rupp other than expressly provided herein.



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SPNOSTAL-REV0106