

Biffi Morin PSTD (Partial Stroke Test Device) Test ESD Valves without Shutdown (patent pending)

For use in critical applications where any flowrate upset can cause major process problems, a fully mechanical test system offers an additional measure of confidence.

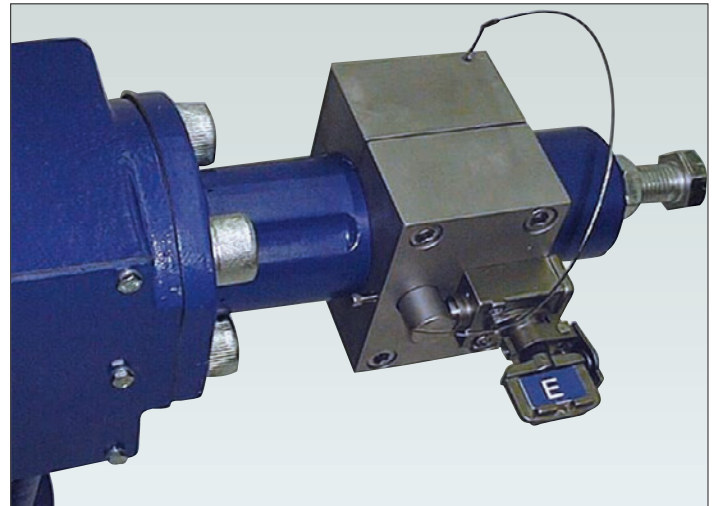
Features

- Allows the verification of safety shutdown valve operation without shutting down part or all of a system, to greatly improve plant productivity and safety.
- Allows for more frequent testing of ESD valve and actuator packages, reducing the potential for dangerous failures.
- Allows for full system loop check including the DCS system, solenoid, and other associated controls.
- Closes the valve by approximately 15 degrees – sufficient to demonstrate system operations, but with minimal effect on valve flow.
- Completely integrated package – no special mounting needed.
- The PSTD's proprietary interlocking unit ensures only authorized users of the device can access the system.
- Does not interfere with operation of standard travel stop when disengaged.

General Applications

Strict plant safety regulations require that critical ESD (Emergency Shutdown) valves be operationally checked on a regular basis. Before the PSTD option was developed, checking ESD valve operations often meant shutting down the complete system. Because of this loss of production, most plants kept frequency of testing to the bare minimum. In addition, infrequent testing also meant that ESD valves could become “stuck” in position due to continuous process effects. By utilizing Morin's PSTD option, more frequent testing can be performed with continuous, unimpaired operations.

The result – increased productivity and safety levels combined with increased system confidence should an actual ESD occur.



PSTD Lock

System uses trapped key interlock assembly. Unit and key made from stainless steel.

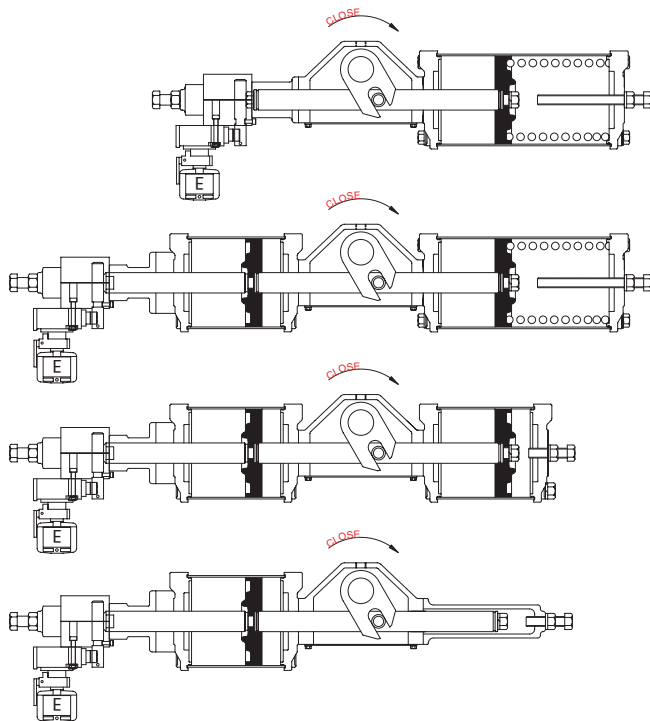
Unique coding prevents unauthorized tampering.

Materials of Construction

Mounting Block:	316 SS
Pin:	17-4PH SS
Fasteners:	18-8 SS

The PSTD is available for both the B-Series (ductile by stainless) and the S-Series (stainless) products.

Biffi Morin PSTD (Partial Stroke Test Device) Test ESD Valves without Shutdown (patent pending)



SR-PS-1
Clockwise
(Fail Closed)

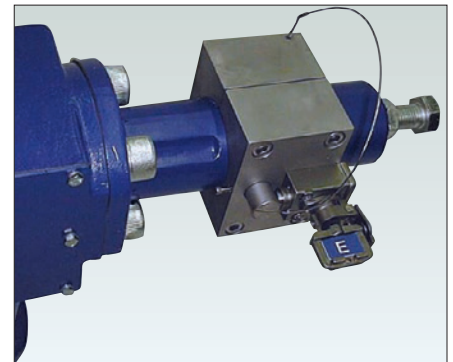
SR-PS-1
Clockwise
(Fail Closed)

D/A-PS-1
Clockwise

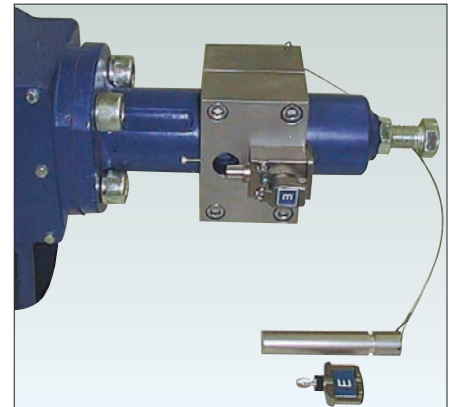
D/A-PS-1
Clockwise

PSTD mechanism engaged at 15 degrees of travel

PSTD may be ordered for clockwise or counterclockwise operation.
Use Suffix PS-1 for clockwise operation, PS-2 for counterclockwise operation.



PSTD Engaged
Ready to test
ESD valve operation



PSTD Dis-engaged
Normal ESD valve operation



Biffi Italia S.r.L.
Strada Biffi, 165 - 29017 Fiorenzuola d'Arda (PC) - ITALY
Ph: +39 (0)523 944 411
E-mail: biffi_italia@biffi.it

Emerson NA Sales:
19200 Northwest Freeway, Houston, Texas 77065 USA
Ph: +1 (281) 477-4100

Biffi reserves the right to change product designs and specifications without notice.
FLY-03-10-93-0100-EN-US



vn.linkedin.com/company/biffi-italia-srl



www.youtube.com/user/BiffiItaliaSrl



www.biffi.it



EMERSON