

Double-Acting Actuator Configurations

Introduction

A double-acting scotch yoke actuator requires air pressure for both the open and close stroke, as the spring is missing.

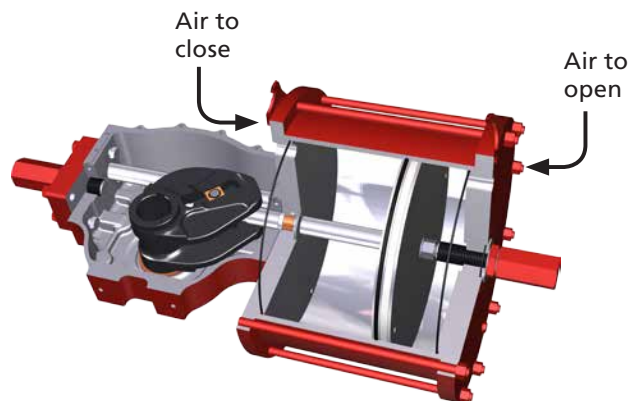
Double-acting actuators do not have an inherent fail-safe action. If pneumatic power is lost, then the actuator will remain in its last position.

Rotork Fluid Systems manufacture double-acting actuators in many configurations. This publication provides information on all the available configurations.

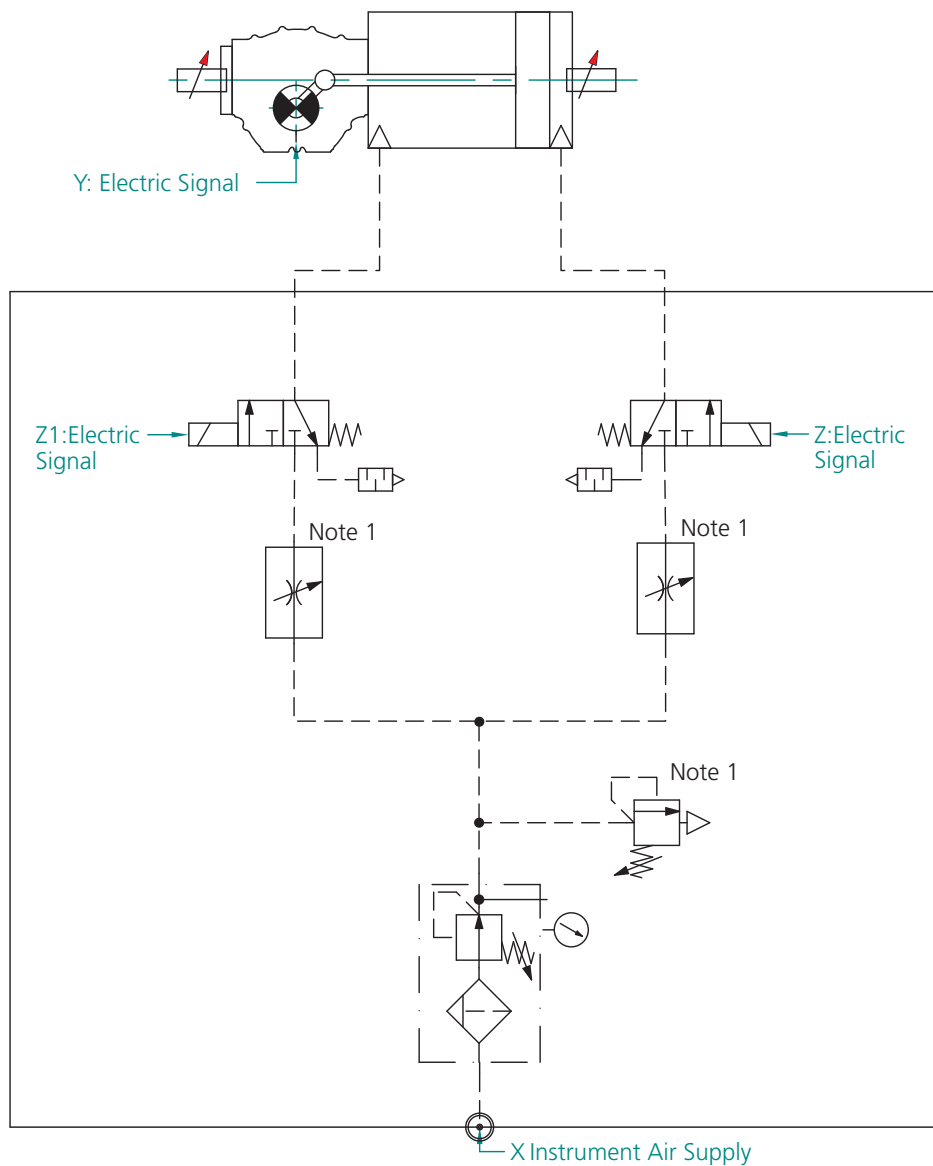
Actuator

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Fail Stay Electric & Pneumatic



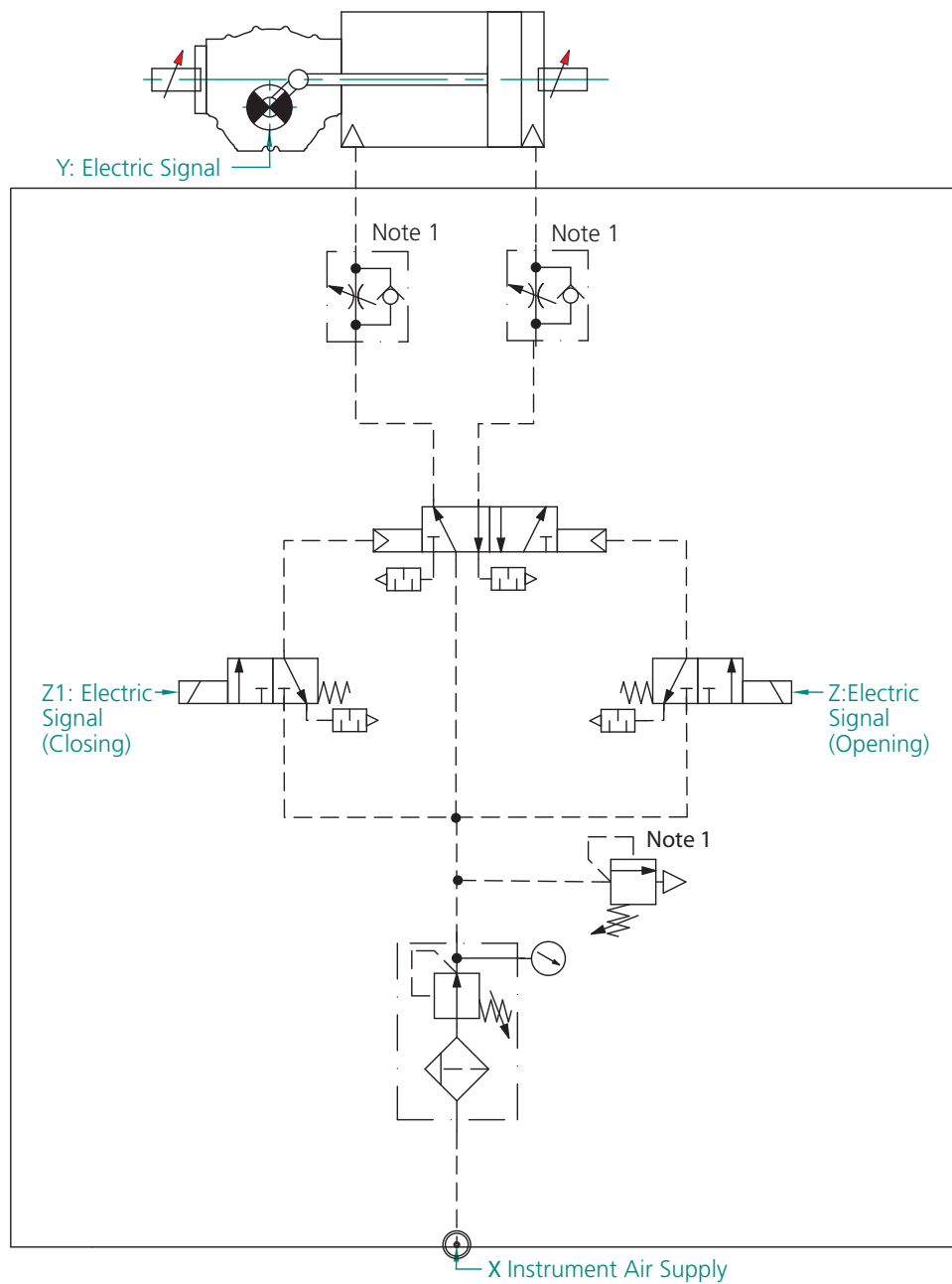
FAIL STAY ELECTRIC & PNEUMATIC:

Upon loss of electric and pneumatic supply the actuator maintains the last position (piston not locked).

Notes:

1. Only if necessary
2. The control schematic is shown without pneumatic and electric supply
3. The above schematic must be used as reference only.
4. Different configurations could be necessary to cover specific flow rates, material requirements or customized logics.

Fail Last Electric, Fail Stay Pneumatic



FAIL LAST ELECTRIC:

The actuator maintains the last received command; upon loss of electric supply during closing (open) signal, the actuator will end the closing (open) stroke.

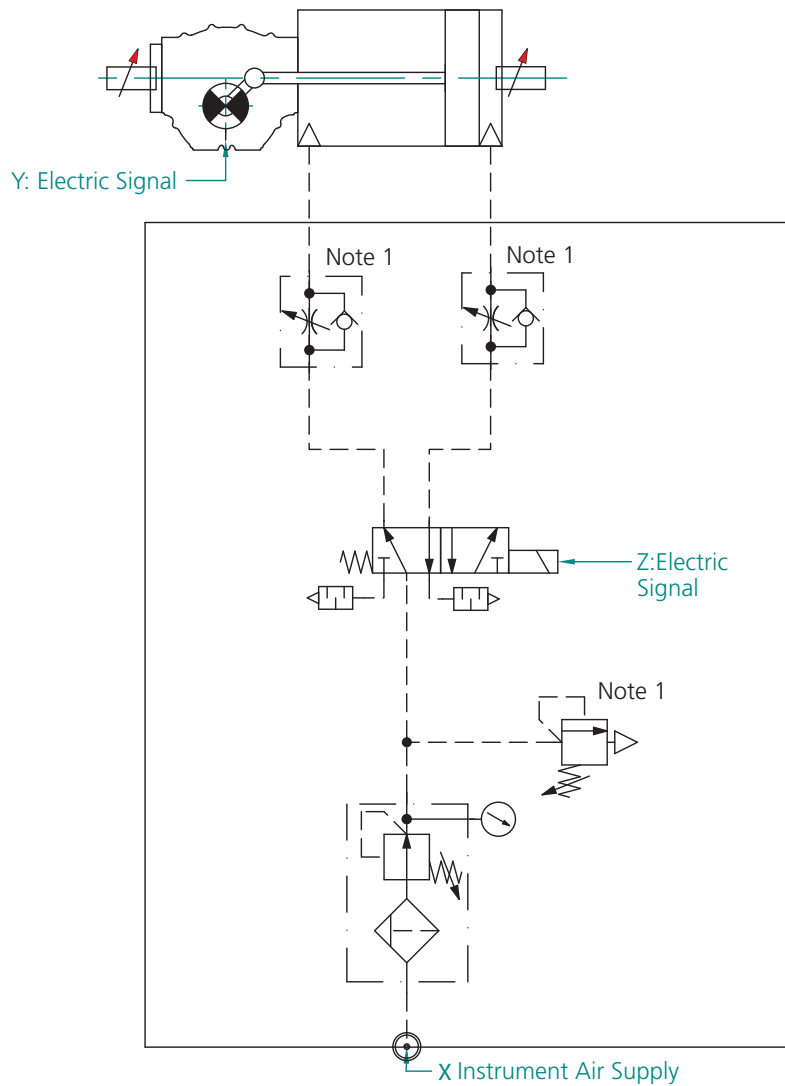
FAIL STAY PNEUMATIC:

Upon loss of pneumatic supply the actuator maintains the last position (piston not locked).

Notes:

1. Only if necessary
2. The control schematic is shown without pneumatic and electric supply
3. The above schematic must be used as reference only.
4. Different configurations could be necessary to cover specific flow rates, material requirements or customized logics.

Fail Close Electric & Fail Stay Pneumatic



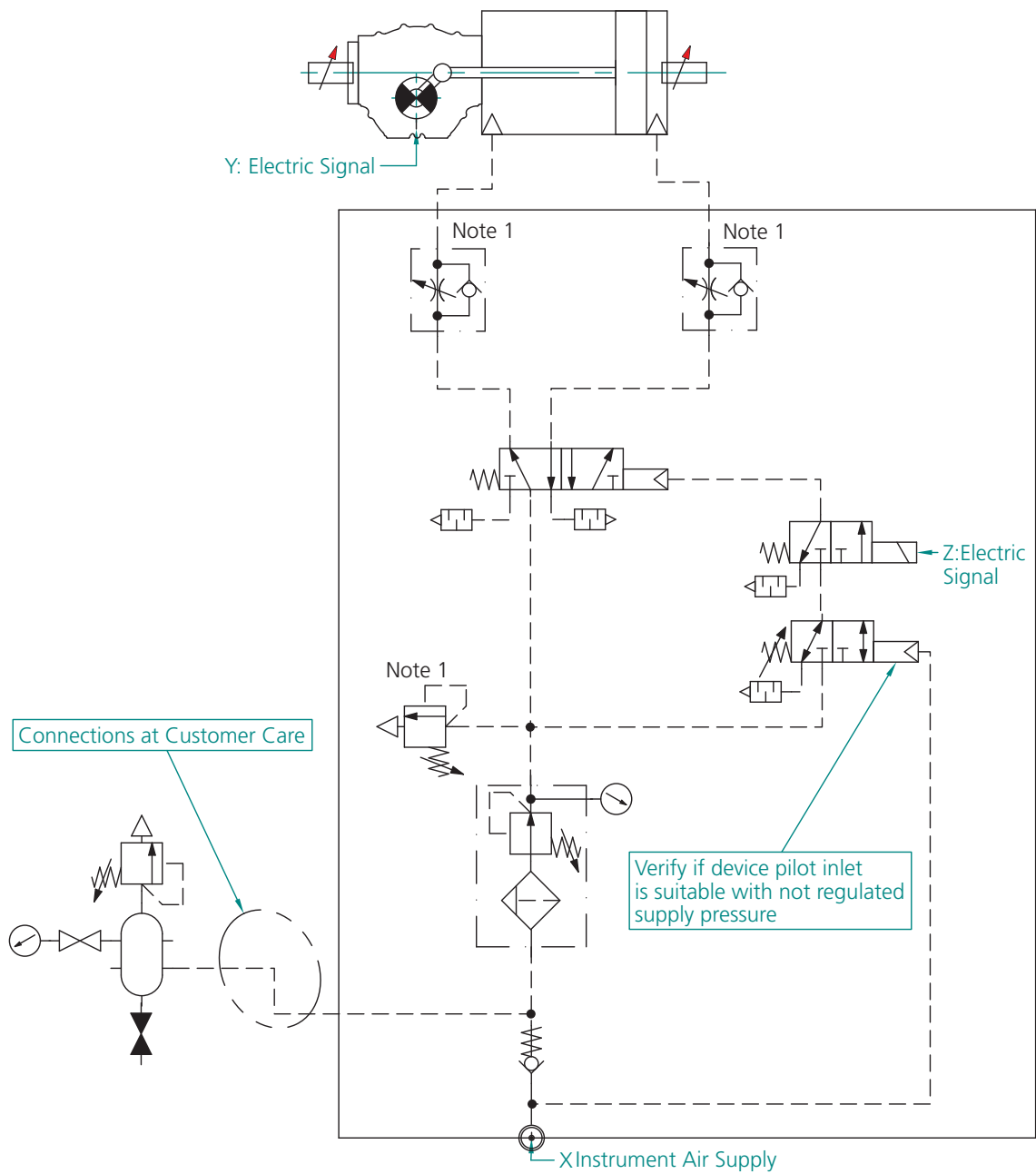
FAIL CLOSE ELECTRIC & FAIL STAY PNEUMATIC:

Upon loss of electric supply, the actuator will fail close. Upon loss of pneumatic supply, the actuator maintains the last position (piston not locked).

Notes:

1. Only if necessary
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Fail Close Electric & Pneumatic



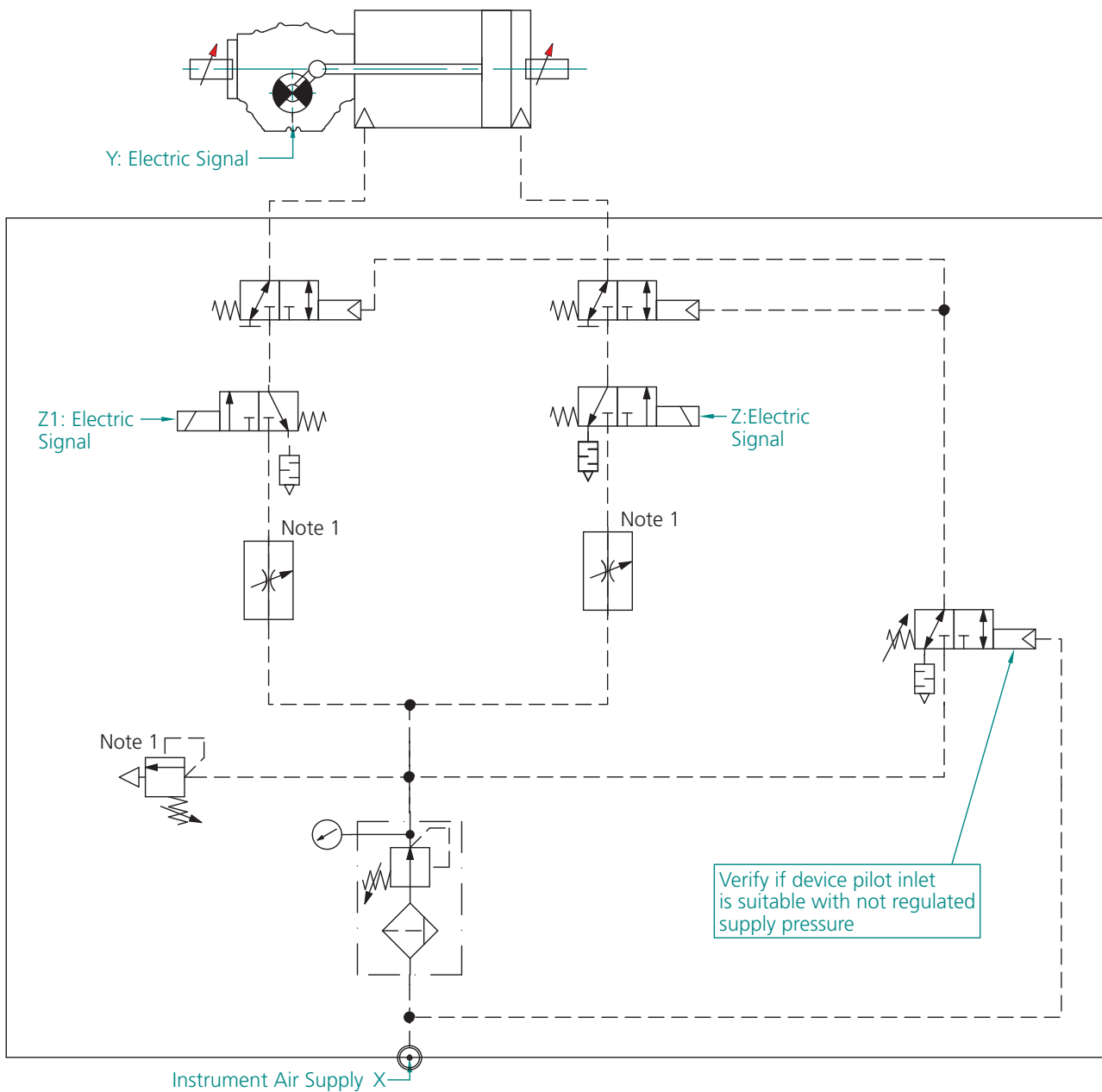
FAIL CLOSE ELECTRIC & PNEUMATIC:

Upon loss of electric and/or pneumatic supply, the actuator will fail close.

Notes:

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Fail Lock Pneumatic & Fail Stay Electric



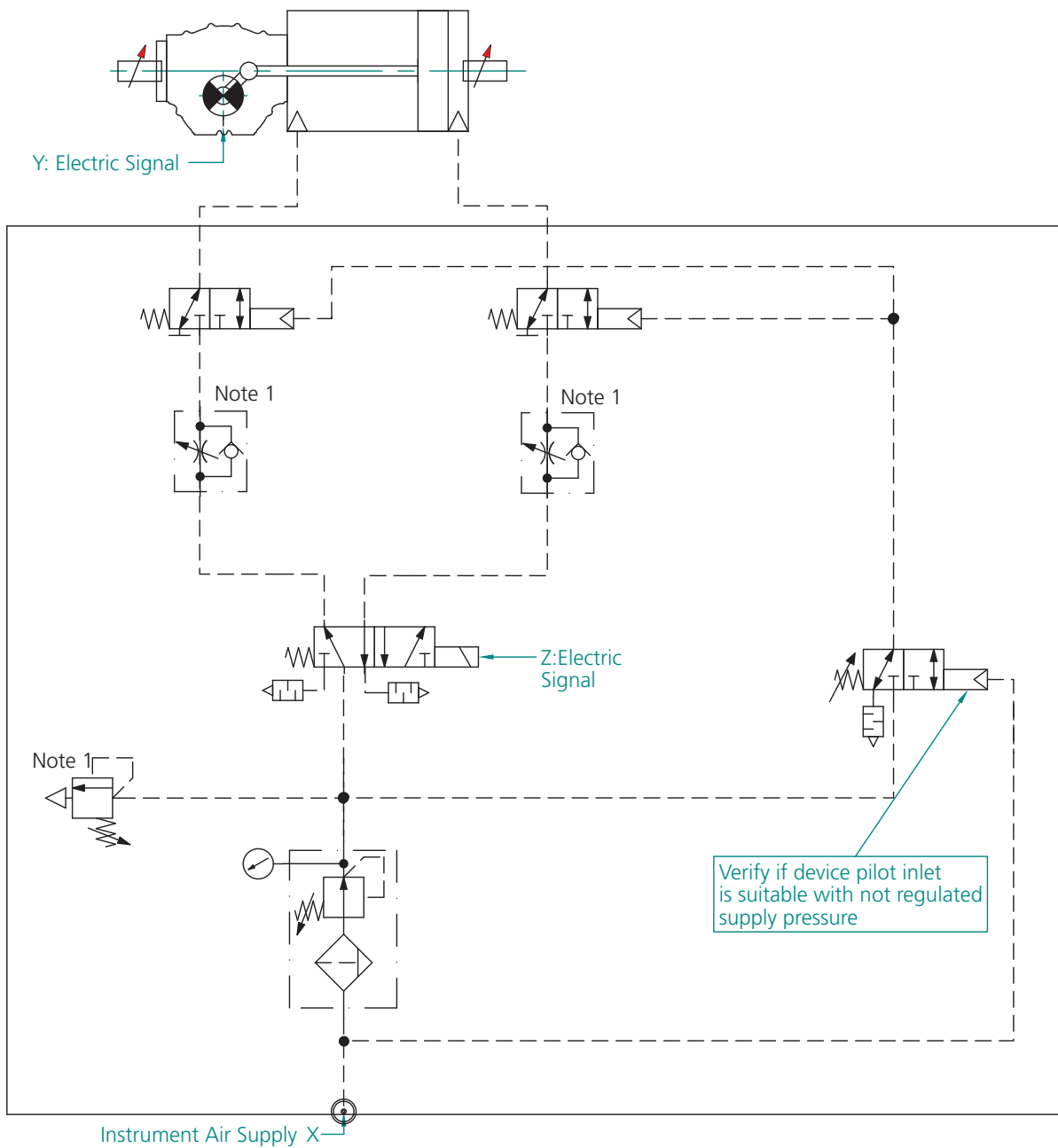
FAIL LOCK PNEUMATIC & FAIL STAY ELECTRIC:

Upon loss of pneumatic supply the actuator maintains the last position (piston locked); upon loss of electric supply the actuator maintains the last position (piston not locked).

Notes:

1. Only if necessary
2. The control schematic is shown without pneumatic and electric supply
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4. Different configurations could be necessary to cover specific flow rates, material requirements or customized logics.

Fail Lock Pneumatic & Fail Close Electric



FAIL LOCK PNEUMATIC & FAIL CLOSE ELECTRIC:

Upon loss of pneumatic supply the actuator maintains the last position (piston locked); upon loss of electric supply the actuator will fail close.

Notes:

1. Only if necessary
2. The control schematic is shown without pneumatic and electric supply
3. The above schematic must be used as reference only.
4. Different configurations could be necessary to cover specific flow rates, material requirements or customized logics.

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