

Series 8760P & 8760E Valve Positioner

A Universal Approach to Valve Control

Modular construction. Easy to calibrate.



The Norriseal Series 8760 Valve Controllers (Valve Positioners) provide an intelligent approach to your valve control applications. The series is modular in concept. All models are built on the base pneumatic unit, 8760P. The electro-pneumatic model, Model 8760E, is created by adapting an I/P transducer to the base unit.

The Series 8760P is designed to provide a universal approach to valve control. The design provides cam characterization, split ranging, direct or reverse action and single or double output without the need to add additional parts. Key features of the design are the non-interaction of the zero and span adjustments, and the positive cam locking mechanism. This turns calibration of the Models 8760P and 8760E into two easy steps.

All models of the Series 8760 valve controllers have provisions for mounting of internal limit switches as well as position feedback devices without the need for additional housings. Stacking of housings that impede access to adjustments in the main enclosure are eliminated.

Features

- **Modular Construction**
8760 P (Pneumatic) = Base Pneumatic Unit
8760 E (Electronic) = 8760P + I/P Transducer, Field Convertible
- **Easy to Calibrate**
Non Interacting Zero and Span
- **Universal Mounting**
NAMUR IEC 534-6 Rectilinear
VDI/VDE 3845 Rotary
- **Internal Limit Switches and Feedback Devices**

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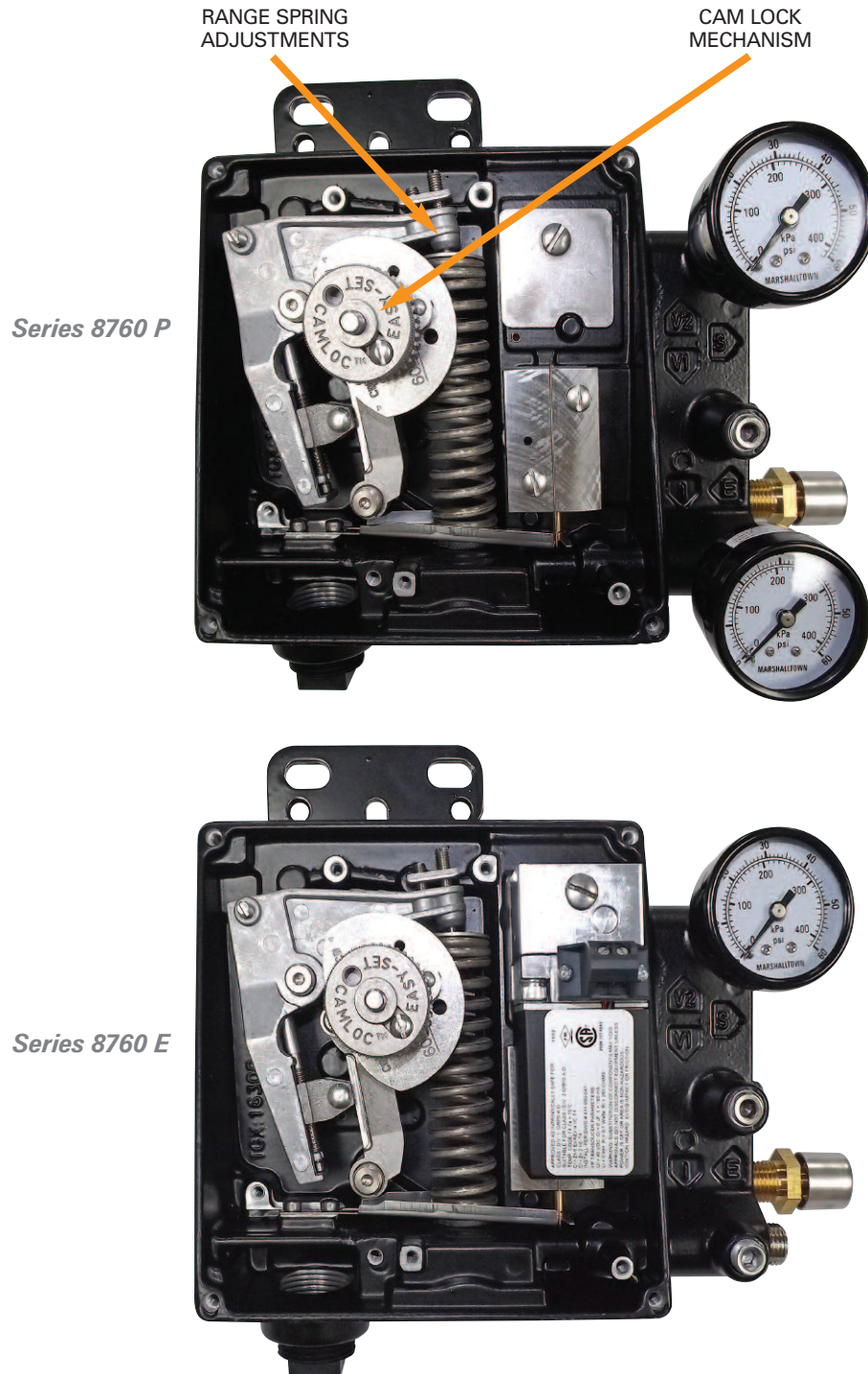
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**Engineered
Performance**

Easy Calibration Adjustments

The Series 8760 Valve Positioner has been designed to minimize calibration. All required adjustments can be made with a simple screwdriver. The non-interacting zero and span adjustments are simple and easy. Once the correct cam lobe has been selected, set the cam to the

rough zero position, establish a “zero” input signal (3 psig or 4 mA) and adjust the “zero.” Increase the input to full scale (15 psig or 20 mA) and adjust the “span.” Note that regardless of the input, pneumatic or electric, the zero and span are the only adjustments required.



Physical Specifications

- **Temperature Range** -40 to 185° F (-40 to 85° C)
- **Ingress** NEMA 4X std.
- **Connections** Pneumatic – 1/4" NPT
Gauge – 1/8" NPT
Electrical – 3/4" NPT, 25 mm
Exhaust – 1/4" NPT
- **Finish** Epoxy/polyester powder coat
- **Output Configuration** Single or double acting
- **Action** Direct or reverse
- **Supply Pressure** 150 psig max.
- **Air Consumption** 0.5 scfm typical
- **Flow Capacity** 9.0 scfm (C_V=0.3) Standard
18.0 scfm (C_V=0.6) optional high-flow
- **Input Signal** 8760P: 3-15 psig, 6-30 psig up to 50% split range
8760E: 4-20 mA, up to 50% split range
- **Feedback Signal** 90° rotary std. 1/2" to 6" rectilinear optional
- **Feedback Configuration** Cam characterization
- **Pressure Gain** 160% @ 60 psig supply standard
- **Span** Adjustable -60% to +25% of normal span
- **Zero** Adjustable -10% to +60% of normal span

Performance Specifications

- **Linearity (Independent)** 8760P: 0.5% of normal span (typical)
8760E: 0.75% of normal span (typical)
- **Hysteresis** 8760P: 0.75% of normal span (typical)
8760E: 1.0% of normal span (typical)
- **Deadband** Less than or equal to 0.25% of span
- **Repeatability** Within 0.5% of valve travel
- **Supply Pressure Effect** Less than 0.2% of span for a 5 psig change in supply pressure

Options

- **Limit Switches** – *Mechanical SPDT*
10A @ 125/250 VAC, 10A @ 24VDC, 0.1A @ 125 VDC
– *Proximity*
(see barrier instructions for power rating)
- **Position Transmitter** – *Current feedback*
4-20 mA DC
– *Resistive feedback*
1K ohm (90°) 666 ohm (60°)
- **Beacon Indicator**
- **Mounting Kits**

Electrical Classifications

- **FM Approval**
Intrinsically Safe, Entity:
Class I, Division 1, Groups A, B, C, D
Class II, Division 1, Groups E, F, G
Class III, Division 1; when installed in accordance with Siemens drawing 15032-7602 rev. 5.
Non-Incendive:
Class I, Division 2, Groups A, B, C, D
Suitable for:
Class II, Division 2, Groups F, G
Class III, Division 2
- **CSA Certification**
Intrinsically Safe:
Class I, Division 1, Groups A, B, C, D
Class II, Division 1, Groups E, F, G
Class III, Division 1; when installed in accordance with Siemens drawing 15032-7620
Suitable for:
Class I, Division 2, Groups A, B, C, D
Class II, Division 2, Groups E, F, G
Class III, Division 2
- **CE** EN50081-1 and EN50081-2 Emission
EN61000-6-1 and EN60000-6-2 Immunity
- **SIRA** Ex N IIC T5
- **Enclosure** NEMA Type 4X
IP65
- **ATEX Certified:**
II 2G EEx ia IIC T4/T5/T6
II 3G EEx nL IIC T5
See ATEX Certificates for Service Restrictions

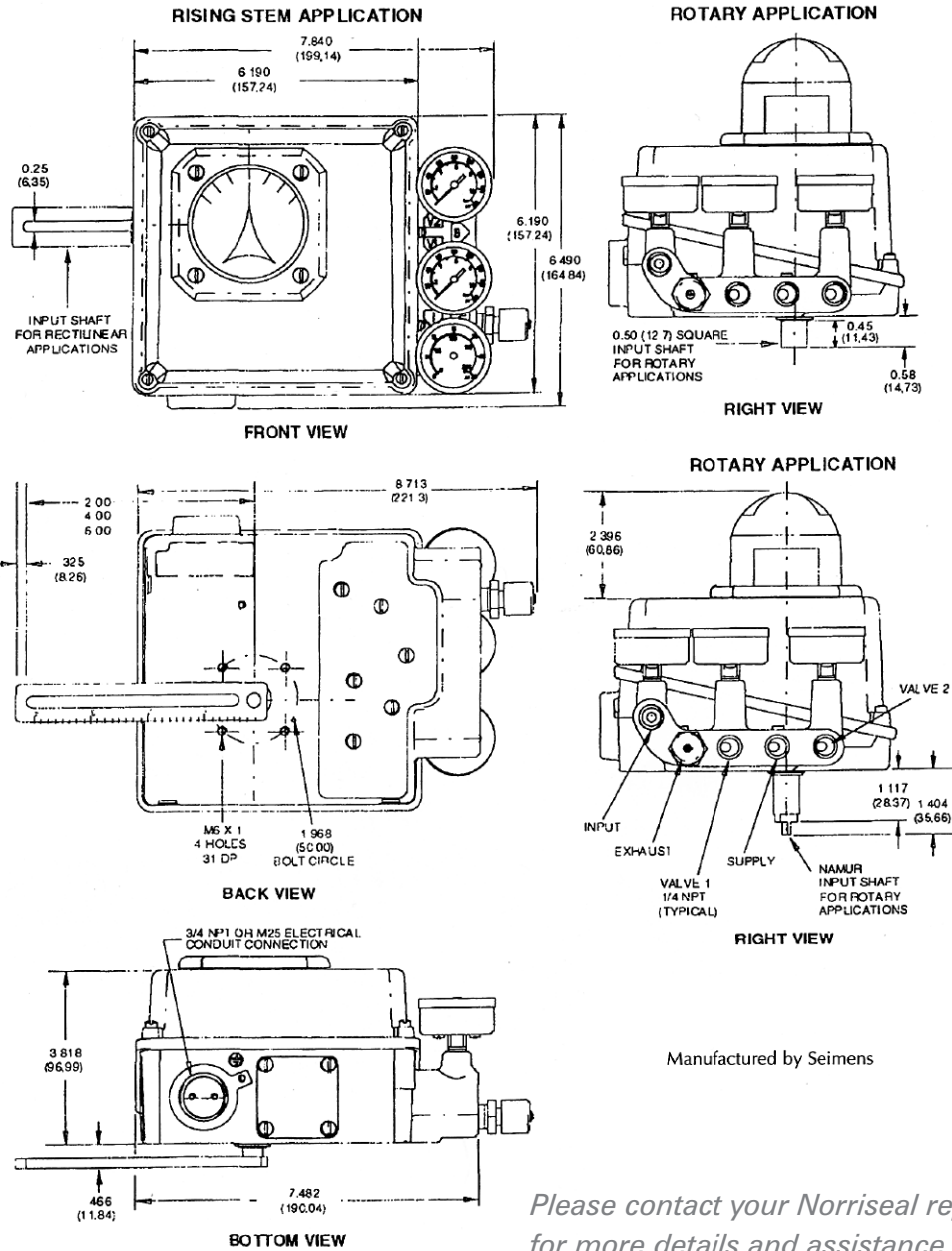
Ordering Information

Specify Series number selecting:

- Input
- Feedback
- Action
- Electrical Certification
- Enclosure
- Bypass
- Flow Capacity
- Filter/Regulator
- Gauges
- Indicator
- Limit Switches

Dimensions

inches (millimeters)



Manufactured by Seimens

Please contact your Norriseal representative for more details and assistance in specifying the optimal solution for your application.



Engineered Performance

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