

Westlock™ 793 Pneumatic Positioner

Rotary Valve Positioner, General Purpose

WESTLOCK

CONTROLS

Product Overview

A pneumatic positioner with the option of electric integral limit switches is suitable for direct mounting to Tyco Flow Control's range of pneumatic actuators and to all NAMUR actuators by means of adapter system and bracket kit (bracket kit sold separately).

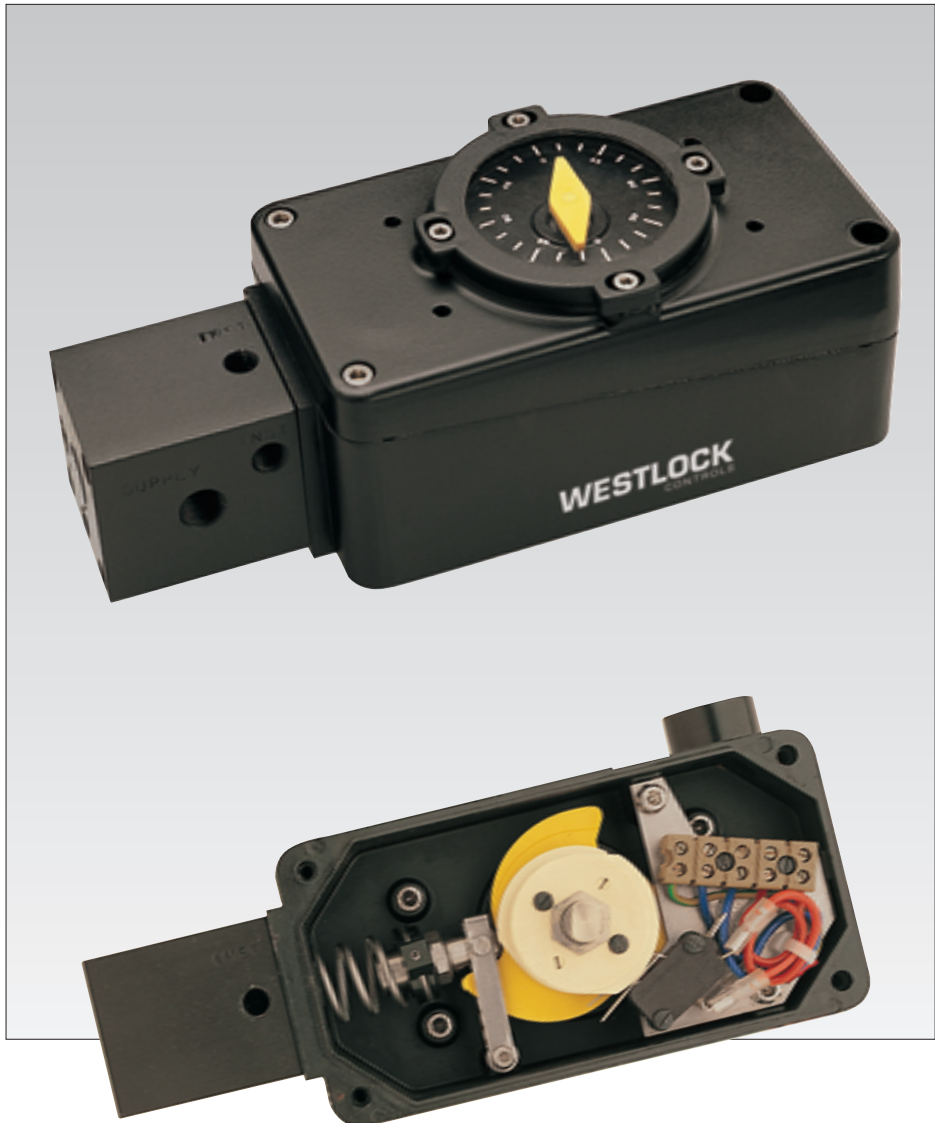
793 – Aluminum enclosure with anodize

Features and Benefits

- Compact design – mounted directly and axially to the actuator stem, by means of standard kit.
- Stable positioning characteristics are provided for both small and large actuators.
- Action (direct or reverse) is easily reversed in the field by turning cam and reversing air connection.
- Usable for double-acting or single-acting service.
- Unaffected by normal supply pressure fluctuations.

General Application

The Westlock™ 793 positioner is designed for the proportional operation of quarter-turn rotary actuators, and is generally coupled axially to the shaft of the actuator. The indicator gives visual position of the final control element. The action is based on a force balance principle.



tyco Flow Control

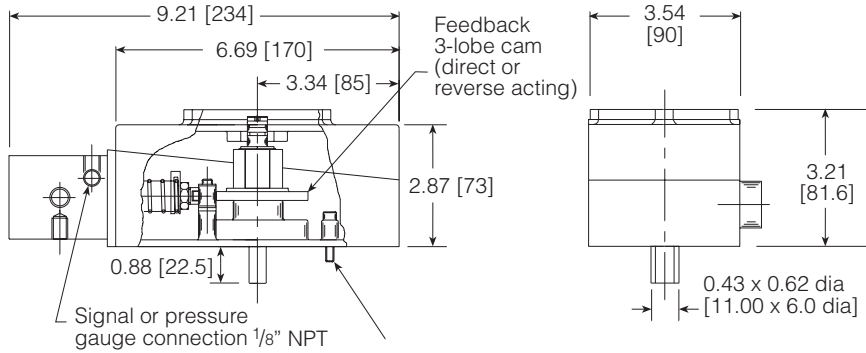
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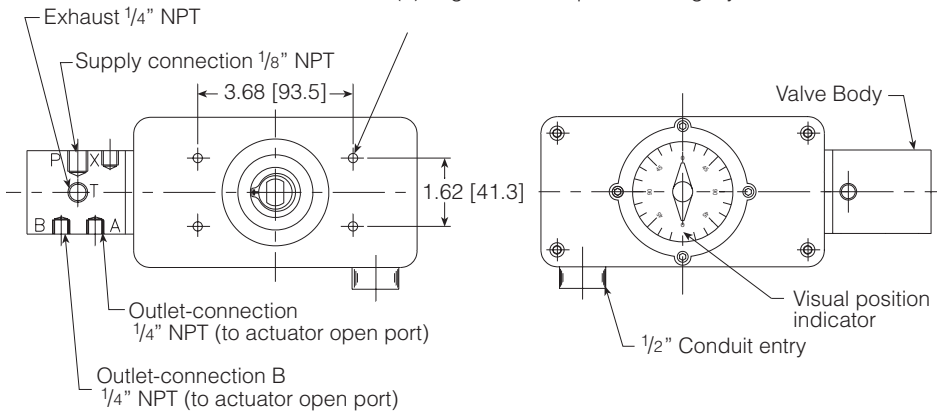
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Dimensions, inches [mm]

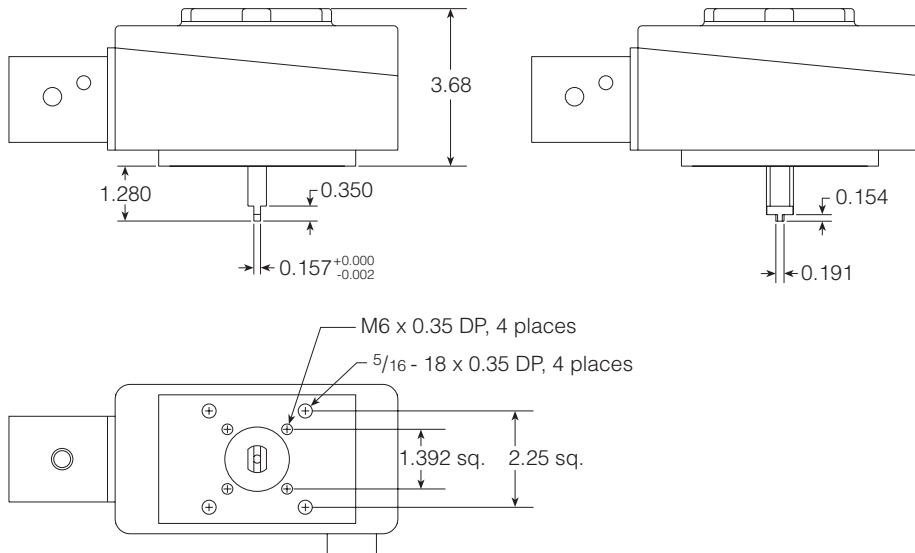


(4) mtg. screws as per mounting style ordered



mounting kit: universal mounting kit for Fig. 790/796 series actuators or appropriate NAMUR kit

NAMUR Mounting Option



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Technical Specifications

Designation of Connections

A & B – Working Lines
 P – Compressed Air Connection
 T – Exhaust Point
 X – Control Line

Conduit Entry 1/2 - 14 NPT

Port Connections NPT

Static Performance

Hysteresis < 1.5%
 Repeatability < 0.5%
 Linearity < 1.0%
 Supply Pressure Effect Minimal
 Sensitivity < 1.0%
 Power Amplification 2.5% deviation gives full differential

Air Consumption

0.6 cfm 916.99 lm at balance with 60 psig [4 bar] supply

1.2 seconds per 100 cubic in. [1.64 Litres] of Actuator Displacement

Flow Rate ~4 SCFM at 90 psig supply

Signal Ranges

3 to 15 psi [0.2 to 1.0 bar] over 90° movement - CAM 1

3 to 15 psi [0.2 to 1.0 bar] over 65° movement - CAM 2

3 to 9 psi [0.2 to 0.6 bar] OR
 9 to 15 psi [0.6 to 1.0 bar] over 65° movement - CAM 3

CAM Characteristics - Linear

Temperature Range

-5°F to +160°F [-20°C to +70°C]
 IP65 rated when switches enclosed

General Specifications

Input signal	single range cam characteristics 3 - lobe cam	3 - 15 psi [0.2 - 1.0 bar] standard linear curve 1, range: 3 - 15 psi = 90° movement curve 2, range: 3 - 9 psi or 9 - 15 psi = 65° curve 3, range: 3 - 15 psi = 65° movement
Supply	media supply pressure	compressed air or gas, dry, dust and oil free with 5 filter element to inlet 30 - 100 psi (150 psi max.) [2 - 8 bar (10 bar max.)]
Environmental Mounting and Connections	environmental temperature mounting position	-5° to +160°F [-20° to +70°C] as required, no limitations
Materials of Construction	housing diaphragm valve spool cover	anodized Aluminum alloy nitrile rubber stainless steel anodized Aluminum alloy
Weight		4 lb. (1.85 kg)
Options	gauges integral limit switches	instrument air 0 - 30 psi [0 - 2 bar] - 1 off supply air 0 - 150 psi [0 - 8 bar] - 2 off single pole double throw 10A 240V AC

Ordering Guide

Base Model

793- Pneumatic Positioner, 3-15 psi with Aluminum Enclosure

Position Indicator

F Flat Disk Indicator

Bracket Type (Mounting Style)

D Direct Mount to Keystone MRP or 79U Actuators
 N NAMUR

Conduit Entry

N (1) 1/2" NPT
 M (1) M20

Switch Options

0 None
 B Two SPDT Mechanical Switches

Filter Options

0 None
 F Filter/Regulator Assembly

Gauge Options

0 None
 G Gauges

Action Options

0 Regular Action
 R Reverse Action

793- F D N B 0 G R = Model **793-FDNB0GR**



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