# **AVID** PS793 PNEUMATIC ROTARY VALVE POSITIONER

A force balance pneumatic positioner for quarter turn rotary actuators. Designed for direct mounting to all NAMUR and Pentair Valves & Controls pneumatic actuators



## FEATURES

- Compact design – mounted directly and axially to the actuator stem by means of standard kit
- Updated design provides improved features while maintaining original dimensions cam profile and product calibration
- Captive fixings used throughout to prevent loss on site
- High visibility, graduated local visual indicator disc allows easy on-site monitoring
- Conduit boss is integral to enclosure wall providing greater strength and reduced footprint
- Indicator gives visual position of the final control element
- Stable positioning characteristics 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
- Integral electric limit switches option.
- Optional adapter and bracket kit for NAMUR actuators (bracket kit sold separately)

## GENERAL APPLICATION

The PS793 is a pneumatic positioner based on the force balanced principle, designed for the proportional operation of quarter turn rotary actuators. It is generally coupled to the shaft of the actuator with a local visual indicator allowing easy on-site monitoring.

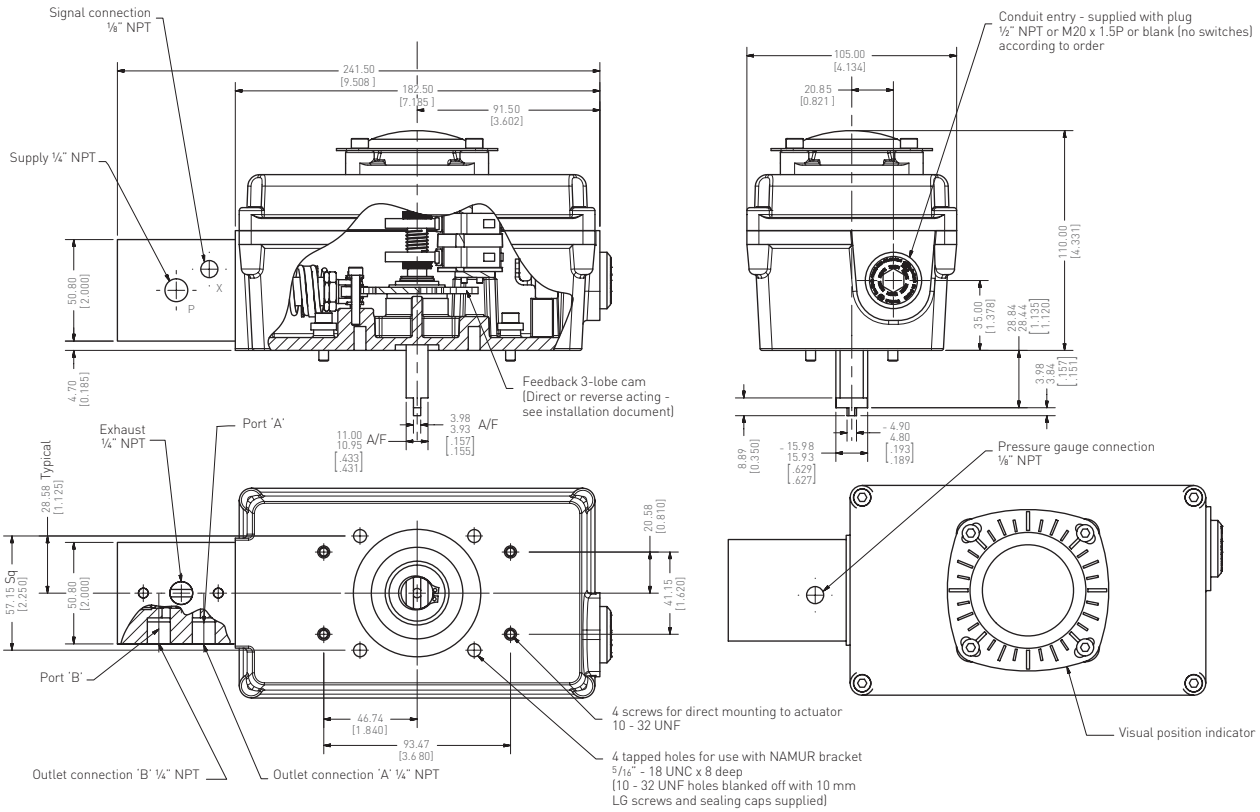
## TECHNICAL DATA

| | |
|---|---|
| **Agency approvals** | |
| Enclosure standards (IEC) | IP66 |
| **Switches (optional)** | SPDT mechanical switches<br>Proximity type sensor (inductive) |
| **Enclosure** | Anodized aluminum |




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DIMENSIONS




Dimensions in mm, imperial dimensions (inches) in parenthesis

**CONNECTIONS AND MOUNTING**

| | |
|---|---|
| Designation of connections | A and B – Working lines<br>P – Compressed air connection<br>T – Exhaust point<br>X – Control line |
| Conduit entry | ½" NPT or M20 (Blank with no switches) |
| Port connections | ¼ |
| Mounting | Any position/orientation, no limits<br>Direct mounting to Pentair actuators<br>Namur mounting bracket available |

## GENERAL SPECIFICATIONS

| | |
|---|---|
| **Input signal** | |
| Single range | 3 to 15 psi [0.2 - 1.0 bar] standard |
| Cam characteristics | Linear |
| 3-Lobe cam | Curve 1, range: 3 - 15 psi = 90° movement |
| | Curve 2, range: 3 - 9 psi or 9 - 15 psi = 65° movement |
| | Curve 3, range: 3 - 15 psi = 65° movement |
| **Supply** | |
| Media | Compressed air or gas, dry, dust and oil free with 5 micron filter element to inlet |
| Supply pressure | 30 - 100 psi [2 - 8 bar] |
| Air consumption | 0.6 cfm in balanced condition with 60 psi (4 bar) supply |
| **Environmental** | |
| Environmental temperature | -5° to +160°F [-20° to +70°C] |
| **Materials of construction** | |
| Housing | Anodized aluminum alloy |
| Diaphragm | Nitrile rubber |
| Valve spool | Stainless steel |
| Cover | Anodized aluminum alloy |
| Weight | 5 lb. (2.27 kg) |
| **Options** | |
| Gauges | Instrument air 0 - 30 psi [0 - 2 bar] - 1 off |
| | Supply air 0 - 150 psi [0 - 8 bar] - 2 off |
| Integral limit switches | Single pole double throw 10 A 240 V AC |

## SELECTION GUIDE

**Base Model**

PS- Pneumatic positioner

**Application**

0 Standard flow

**Conduit options**

0 No conduit entry
1 1 x 1/2" NPT
2 1 x M20
3 1 x PG 13.5

**Number of switches**

0 0 switches
2 2 switches

**Switch options**

00 No switches
01 V3 SPDT mechanical switches
03 P&F NJ2-V3-N

**Terminal Strip**

0 No terminal strip
B 8 pt standard

**Bracket type (mounting style)**

D Direct mount metric fixings
I Direct mount imperial fixings

**Pneumatic connections**

0B BSP
0N NPT

**Special features**

00 No special features

**Certification**

0 Non-hazardous

**Revision**

R* Revision number

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PS- | 0 | 2 | 2 | 01 | B | D | 0B | -00 | -0 | R1 | = Model Number **PS-02201BD0B-00-0R2** |

**NOTES**

1. Please contact your sales office for guidance on selecting the best possible combination for your control and monitoring requirements.

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