

## UP – Universal Pneumatic actuators for continuous duty or on/off operation

High performance pneumatic actuators for combustion air damper control application with precision positioning for optimum boiler performance



### Key features and benefits

#### Continuous modulating duty cycle

*Suitable for high dynamic process loops:* Actuators in continuous control applications require positioning of the final control element with no restriction to the number of actuator movements. The UP series Pneumatic Actuators provide this type of operating mode

#### Options for On/Off control

*Suitable for startup or shutdown dampers:* The UP actuators can provide On/Off control function for boiler startup or shutdown damper application

#### CE approval

*Meets international standards:* Certified for use in countries that require CE approval

#### Easy and flexible installation

*Space saving compact design:* Floor mount design with linkage mechanism allows easy installation for convenient access to the actuator

#### Control safety on loss of input signal

*Meet process control safety requirements:* The UP actuator provides options for fail safe or fail in place on loss of the control signal, this provides compliance to safe boiler damper control requirements

#### Control safety on loss of compressed air

*Meet process control safety requirements:* The UP actuator provides options for fail safe or fail in place on loss of the compressed air supply, this provides compliance to safe boiler damper control requirements

### Auto and Manual functions

*Manual override for process operation:* All UP actuators incorporates an A/M function to manually change damper position in case of emergency override or operation during plant outage

### Robust construction

*Suitable for any boiler process application:* The design of the UP actuators incorporates a heavy duty steel frame to ensure safe and reliable performance under continues full load conditions, all parts are enclosed in a NEMA 3 or NEMA 4 (IP65) construction for protection and tamper proof operation

### Time saving with easy setup

*Fast and easy process startup:* Commissioning and startup time can be reduced by up to 50% with digital positioner option, the local pushbuttons and display of the positioner provides easy setup of the UP actuator

### Control performance and accuracy

*Reduce process variability:* Control options with EDP300 or TZIDC digital positioners with HART or Fieldbus ensures best in class actuator performance for demanding applications

### High performance with low maintenance:

*Long life design:* The model UP1 & UP2 actuators incorporates a high efficiency rotary vane while the models UP3 up to the UP7 uses a high efficiency power cylinder, the design of these actuators ensures low maintenance and extended operating life.

### Wide range of torque options:

*An actuator for any application:* UP1 to UP7 provides solutions for any damper control application

| Model            | Torque @ 100psi [690kPa] |
|------------------|--------------------------|
| UP1              | 90 lbf.ft [122Nm]        |
| UP2              | 450 lbf.ft [610Nm]       |
| UP3              | 800 lbf.ft [1085Nm]      |
| UP4              | 1450 lbf.ft [1966Nm]     |
| UP5              | 2800 lbf.ft [3796Nm]     |
| UP6              | 4700 lbf.ft [6372Nm]     |
| UP7              | 5400 lbf.ft [7326Nm]     |
| UP6 Master/Slave | 9400 lbf.ft [12744Nm]    |

## Contact us

### ABB Inc.

Process Automation  
125 East County Line Road  
Warminster, PA 18974-4995 USA  
Phone: +1 215 674 6000  
Fax: +1 215 674 7183

[www.abb.com/actuators&positioners](http://www.abb.com/actuators&positioners)

### Note

We reserve the right to make technical changes or modify the contents of this document without prior notice. ABB does not accept any responsibility whatsoever for potential errors or possible errors or possible lack of information in this document

We reserve the rights in this document and in the subject matter and illustrations contained herein. Any reproduction, disclosure to third parties or utilization of its contents – in whole or in parts – is forbidden without prior written consent of ABB.

Copyright © 2016 ABB  
All rights reserved

Created US 05.24.16