



Ragon Industries (Pty) Ltd

INDUSTRIAL VALVE SPECIALISTS



ALP3800 SMART REMOTE  
POSITIONER



# ALP3800 SMART REMOTE POSITIONER

The ALP Series Smart Remote Positioner is an anti-vibration smart valve positioner, specially designed for valves and actuators in a vibrating working environment. The remote solution installs the valve position sensor unit in the positioner separately on the top of the valve, and then transmits the sensing valve position signal to the remote control unit through the twisted pair cable.

At working, the control unit of the Smart Remote Positioner receives the 2 wire 4-20mA.DC input signal from DCS system, obtains the valve position control set value through A/D conversion, and the actual valve position signal obtained through the remote valve position sensor, both through the CPU calculating, controls the input and output pressure of the pneumatic actuator through pilot valve, and then drives the valve to the set position.

## SPECIFICATIONS

Input Signal	4-20mA (2 wire), minimum 3.8mA
Output Signal	4-20mA @ 24VDC
Operating Voltage	9 ~ 36VDC
Supply Pressure	0.14Mpa-0.7MPa (1.4 Bar - 7 Bar)
Output Pressure	0.02Mpa-0.5MPa (0.2 Bar - 5 Bar)
Output Characteristic	Linear
Air Connection	1/4 (G, NPT)
Conduit	Input: 1/2 (G, NPT), Feedback: M20-1.5)
Explosion Proof	Ex db II CT6 Gb, Ex Ib IIIc T80° Db
Ambient Temperature	-20°C ~ 60°C
Linearity	±1% (Single Acting); ±1.5% (Double Acting)
Hysteresis	±1% (Single Acting); ±1.5% (Double Acting)
Repeatability	0.4% (Single Acting); 0.8% (Double Acting)
Material	Aluminum alloy with polyester powder coated
Weight / Weather Proof	3.15Kg+1.5Kg / IP65

## OPERATING CONDITIONS

The ALP Series Smart Remote Positioner has seven system parameters available for the user to reset to meet the requirements of different types of valves and control processes. Before the positioner leaves the factory, the default values of these system parameters are set as follows:

System Parameter	Function	Default Value
1. Acting Speed	The valve acting speed can be selected between 0-30 as required	(1, 10) acting speed 10
2. Split Control	Split control of 4-20 mA, 4-12 mA or 12-20 mA can be selected as required	(2, 4, 20) 4-20 mA full control
3. Tight Closing	Tight closed at 0% or 100% functions can be set as required	(3, Lo, Hi) tight closed at 0% and 100%
4. Travel Opening	Valve opening can be set at 20% - 100%	(4, 100) 100% opening
5. Valve Type	Air open and air close valve type can be set as required	(5, OPEN) Air open valve
6. Rub Factor	Valve rub factor can be set between 0-80 as required	(6, rub, 20) rub factor 20
7. Control Accuracy	The control accuracy can be set between 0.3% and 5% as needed	(7, Err, 3.0) accuracy = 3%

Type of the positioner	Linear: 0 ~ (10-100) mm
	Rotary: 0 ~ ( 50°-90°)
Type of Acting	Double Acting / Single Acting
Feedback (4-20mA)	Internal Position Transmitter
Hart protocol	Hart Module (only for input)
Location of position sensor	Integrated with control part
	At ≤ 5 m away from the control part
Explosion Proof	No explosion proof
	Flameproof



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