

The DP3 is a positioner that is capable of modulating with an external demand signal control (4-20mA or external potentiometer), but which can also function as an ON/OFF device if required to simply drive a valve fully open/closed. It can also be configured to move to a user definable intermediate position without the need for any external demand signal control.

- E Fast, smooth and precise control from a digital circuit
- Simple time saving field set up quick calibration via push buttons and LED status indication
- □ 3 position operation or 4-20mA modulation
- Resilient to poorer quality air (class 4.5.5)
- Internally enclosed solenoid valves (Models 05—15) External solenoid valves (Models 16 - 60)
- Integral, loop powered, angle retransmit is isolated from both demand signal and power supply
- Spring return, double acting fail free, fail hold and fail down options available
- □ Signal, power and air fail hold options
- Speed control via integrated snubbers Fast to end stop and fast positioning options available
- □ Weatherproof, compact and robust metal housing

#### Operation

The all-new encapsulated digital circuit has a 3-button digital set up with 12 LEDs providing indication of unit status. It comes with quick set up and precision set up so that the unit can be calibrated to the level of accuracy required for the application. The new circuit offers 24V dc as standard, an additional PCB will allow 100V to 264V ac supply.

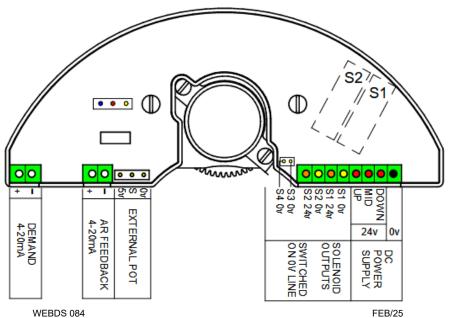
When the "UP" terminal is energised, the unit will drive to the 100% end of travel stop. When the "DOWN" terminal is energised the unit will drive to the 0% end of travel stop.

Energising the "MID" terminal activates the positioning function and the unit will drive to the required position demanded by one of the three methods below (selectable in "Installation Setup"):

- a) 4 20mA current demand loop.
- b) Potentiometer voltage.
- c) Internal set point (position defined during setup).

When using 4 - 20mA or potentiometer voltage, the "MID" terminal can be constantly energised, with the position being adjusted by altering the 4 - 20mA current or the potentiometer voltage.

Fast to end stop or fast positioning options are available which use additional solenoids to move faster whilst maintaining the positioning accuracy.

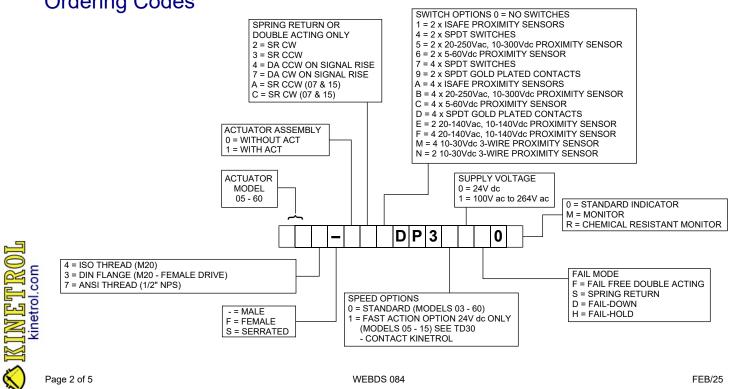




### **Specification**

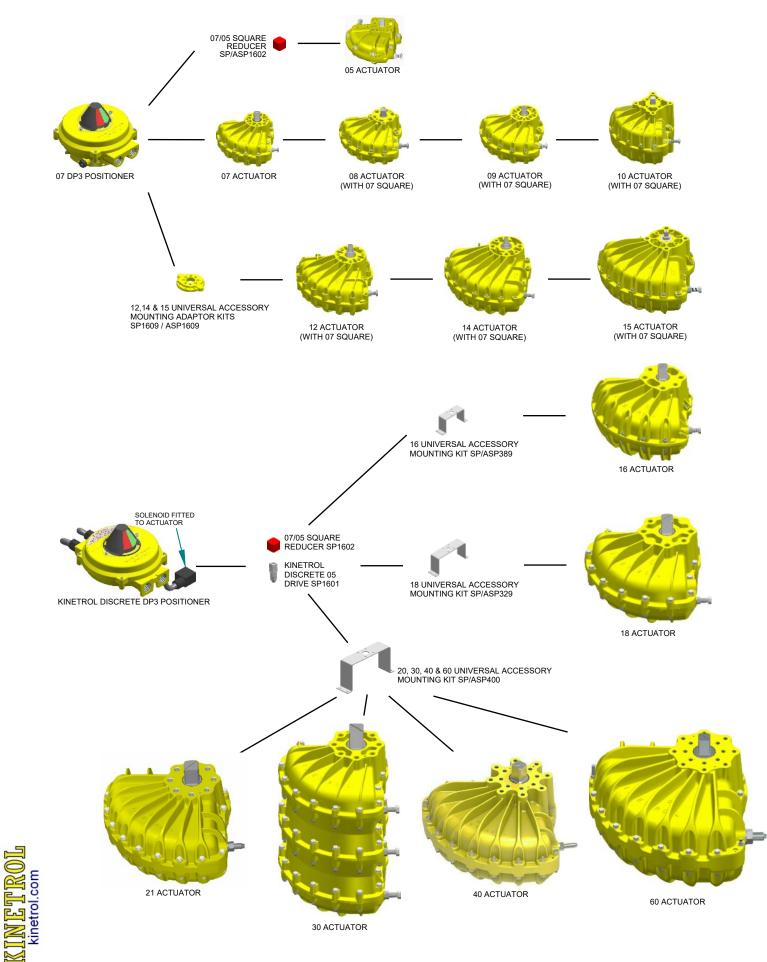
Actuator sizes Supply Voltage	Models 05 to 60 24V dc ± 10%		Current loop Input	4 - 20mA - impedance 250 ohm. Electrically isolated from all other inputs and outputs
Option: Power Consumption	100V ac to 264V ac, 50 / 60Hz Positioner 1.5W max Solenoids 3VA max per solenoid -20°C to 70°C (-4°F to 158°F) For alternative temperature options contact Kinetrol		Positioner Performance Slave Valve Block Cv	Linearity - better than 1% or range Deadband - 0.1 to 3 % of range
Operating Temperature Range				Repeatability - better than 1% of Range 1.6 (up to Model 15)
Operating Pressure Air Supply	<ul> <li>3.5 to 7.0 bar (50 to 100 psi)</li> <li>Must be reasonably clean and dry and to quality class 4.5.5 (ISO 8573.1).</li> <li>This implies 25 micron max particle size, 7°C dew point maximum (or lower than ambient temperature below 7°C) and 25mg/cubic metre maximum oil content.</li> </ul>		2 Wire Angle Retransmit	Supply voltage - 14.7 to 27V dc Output - 4 - 20 mA. Linearly proportionate to angular position, electrically isolated from all other inputs and outputs. Functions with or without positioner circuit energisation
Speed of Operation	Models 05 to 14: 5 seconds		Weight	1.7 kg / 3.75lb (Models 05 to 15)
(Unloaded - Factory Set)	Model 15: Model 16:	10 seconds 5 seconds	Materials Finish	Precision diecast aluminium alloy Epoxy thermoset powder
Speed is adjustable with snubbers depending on load	Model 18: Model 21: Model 30:	5 seconds 5 seconds 6 seconds	Enclosure Rating	IP67 / NEMA 6
Model 16 - 60 using ½" solenoid	Model 60:	12 seconds		

Faster operating options are available - contact Kinetrol

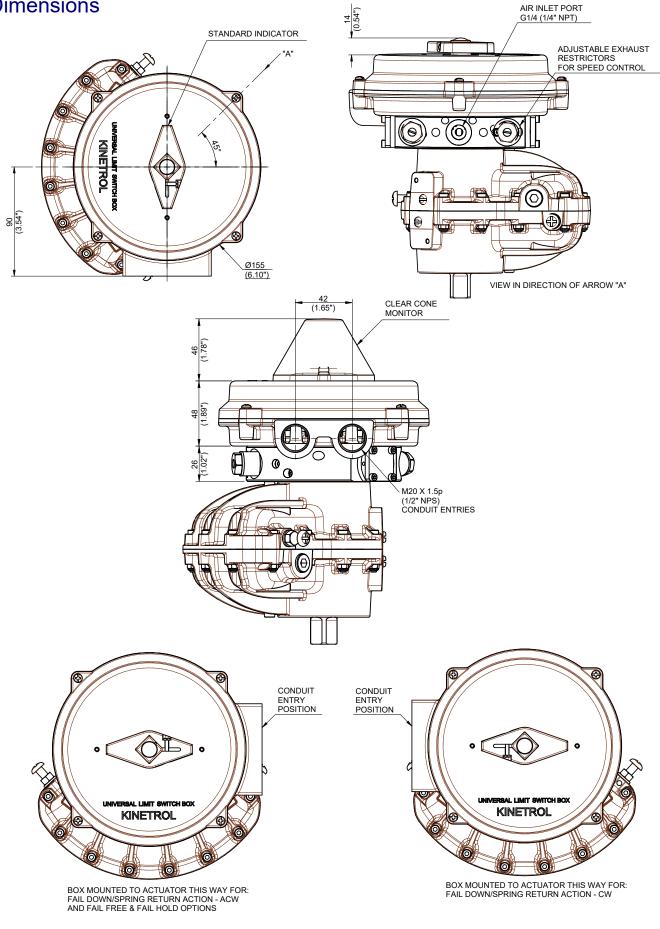


#### **Ordering Codes**

#### Modular Mounting Arrangement



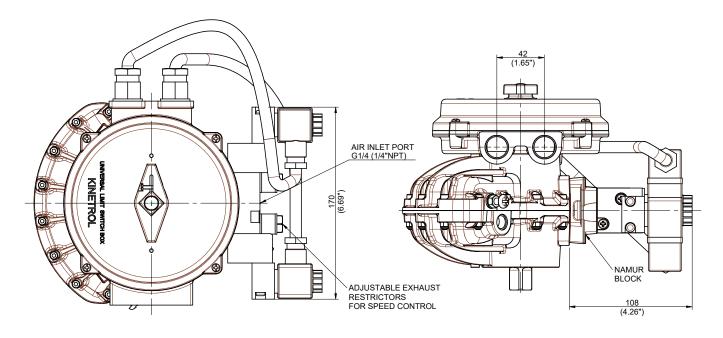
### **Dimensions**



#### Models 05 to 15. Please contact Kinetrol for Model 16 to 60.

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#### Dimensions



Models 05 to 15 Fail Hold. Please contact Kinetrol for Model 16 to 60.

