

# AVCO

*Alloy Valves and Control*

## ACTUATORS ELECTRIC - NEMA 7



### **Torque Rating**

800 - 13,250 in.lbs

### **Features**

Powder Coated Aluminum Body  
Position Indicator  
Proportional, On/Off/Jog Control  
Internal Heater  
Dual Auxilliary Switches  
Self Locking Drive  
ISO 5211 Direct Mount  
NEMA 7

### **Temperature Range**

-22 °F to 125 °F

### **Supply Voltage**

24V AC/DC  
120V AC  
230V AC

### **Operation Speed**

Between 15 & 55 seconds  
Depending Upon Model

### **Industries**

Chemical  
Food Processing  
Hydraulic  
Water/Oil/Gas  
Pharmaceutical  
Steam

### **Enclosures Certified to**

Class I, Division 1, Groups C, D.  
Class II, Division 1, Groups E, F, G.  
Class III; T6 (85°C)  
Ex d IIB Gb T6; Ex tb IIIC T85°C Db  
Class I, Zone 1, AEx d IIB Gb T6  
Zone 21, AEx tb IIIC T85°C Db

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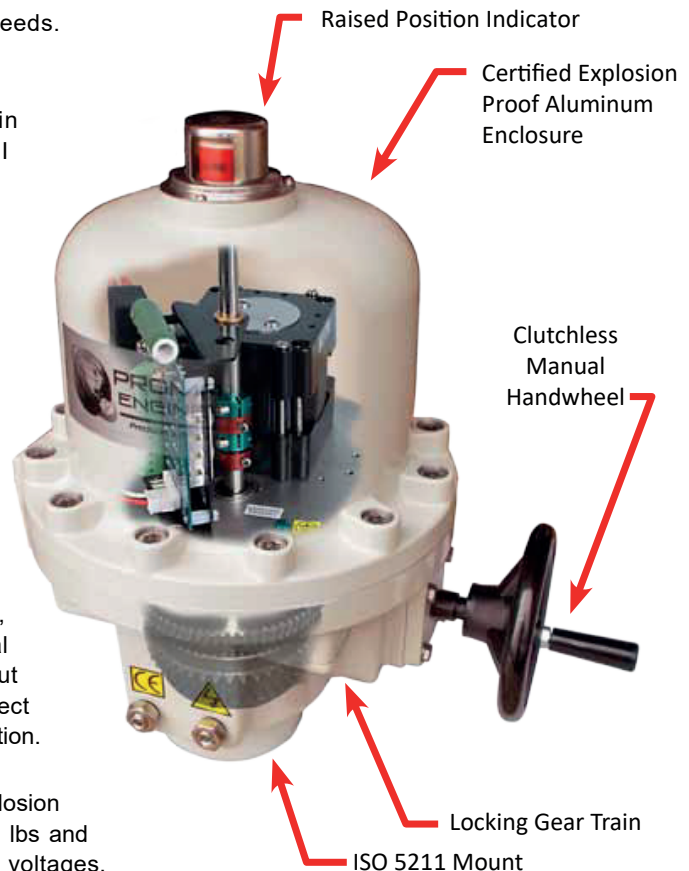
### Quarter Turn Explosion Proof Actuators

**Hazardous Applications** - Rugged and reliable, AVCO electric actuators are designed for use in Oil and Gas, Mining, Food Processing, Chemicals and Power applications controlling butterfly valves, ball valves, high performance valves, plug valves, gate valves and dampers. Call or email to have our actuator experts help you with your needs.


**Explosion Proof** - The AVCO electric explosion proof actuators are designed for use in hazardous locations. They meet the latest Class I and Class II Division 1 standards per UL 1203. The explosion proof actuators share the same electronic and mechanical components as the AVCO Standard Location products and give you the same reliability and performance that you've come to expect from our Standard Location quarter turn actuators.

**Features** - The AVCO electric actuators feature the only hazardous duty electric actuator that comes with a standard raised indicator allowing easy identification of actuator position. Other standard items include an anti-condensation heater, two auxiliary switches, ISO 5211 mounting, permanently lubricated locking gear train, and a clutchless manual handwheel. In addition to on/off control, the explosion proof actuators can have proportional control with 4–20 mA, 0–10, 2–10, and 1–5vdc input and feedback. Also available: torque switch to protect motors and valves, auxiliary switches, and 0–220 rotation.

**Torque Range and Voltages** - The explosion proof actuators range in torque from 800 to 13,250 in lbs and are available in 24vac, 24vdc, 120vac, and 230vac voltages. The output gearing and mounting patterns are the same as our standard product and therefore fully compatible with valve, damper couplers and linkages that are used for nearly any industrial application.



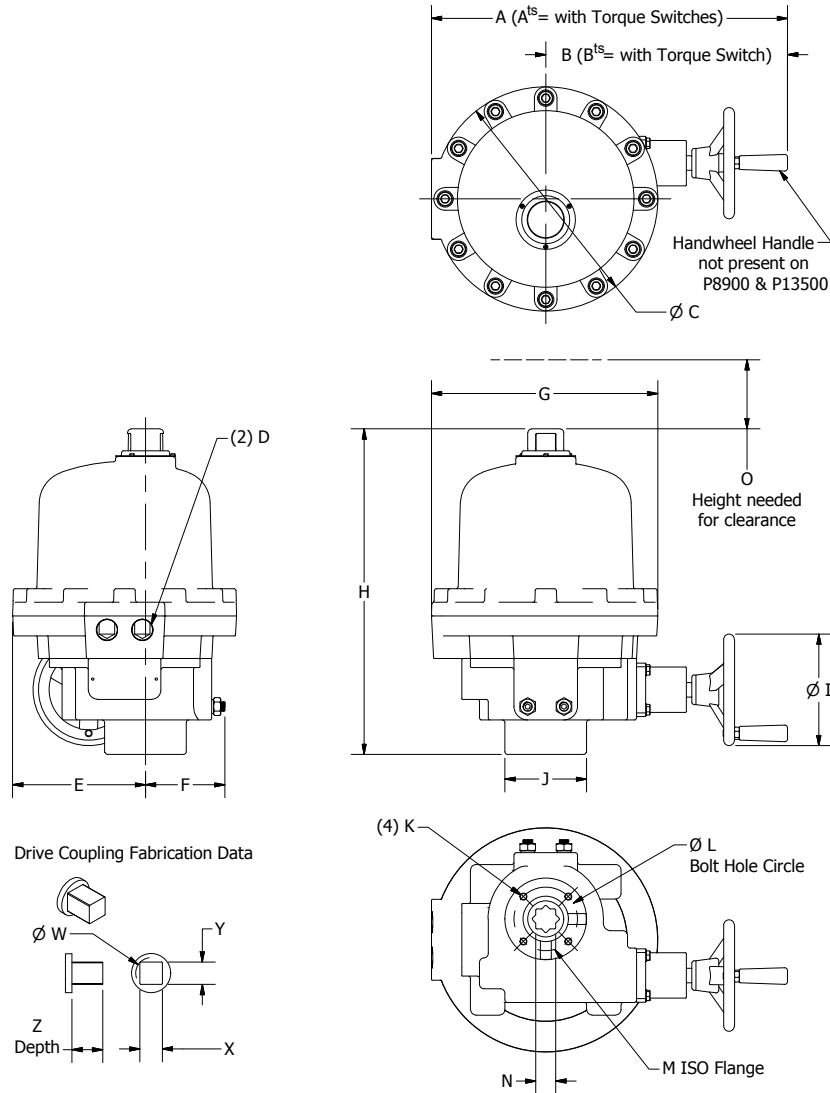
### Explosion Proof Actuator Specifications

Product Family	Torque Output		Draw (amps)	Actuator Run Time (seconds)		Mounting Information		Shipping Weight (lbs / kg)
	in lbs	Nm		50Hz	60Hz	ISO 5211	Output Drive (mm) 	
P0800	800	90	1.0	17	15	F07	22	40 / 18
P1300	1,335	150	1.2	26	22	F07	22	40 / 18
P3500	3,500	400	1.9	18	16	F10	35	58 / 26
P4400	4,400	500	2.0	25	22	F10	35	58 / 26
P5800	5,750	650	2.1	31	28	F10	35	58 / 26
P8900	8,900	1,000	3.1	55	46	F14	36	93 / 42
P13500	13,250	1,500	3.3	55	46	F14	36	93 / 42

Current Draw (amps) given for 120VAC actuators @ 60Hz.

Output Drives are 8 point female double-square. Drive Inserts are available for nearly any application.

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### DIMENSIONAL DATA (inches)

MODEL	A	A <sup>ts</sup>	B	B <sup>ts</sup>	C	D	E	F	G	H	I
P0800/1300	14.0	15.5	9.0	10.5	9.7	3/4 NPT	5.8	3.4	9.8	14.1	4.8
P3500/4400/5800	16.7	19.2	10.8	13.4	11.2	3/4 NPT	7.3	5.0	11.5	15.3	7.6
P8900/13500	14.9	18.4	9.0	12.6	11.2	3/4 NPT	9.3	5.0	11.5	18.8	11.6
	J	K	L	M	N	O	W	X	Y	Z	
P0800/1300	3.5	M8 x 0.8" DP	2.8	F07	0.866	8.0	1.18	0.866	0.866	1.18	
P3500/4400/5800	4.9	M10 x 0.8" DP	4.0	F10	1.378	8.0	1.89	1.378	1.378	1.58	
P8900/13500	7.1	M16 x 1.2" DP	5.5	F14	1.417	8.0	1.93	1.417	1.417	1.77	

#### Available Options (Factory Installed)

- Proportional Control - 4-20mA, 0-10VDC, 2-10VDC, 1-5VDC input
- Mechanical Torque Switch Assembly.
- Rotation modifications for up to 220 degree rotation.
- Auxiliary Switch Set. Provides two additional auxiliary switches, for a total of four.
- Local Control Stations and Power Backup Units are available if located outside hazardous area and wired to code.



**Torque Switch Option**

#### HOW TO ORDER

P0800	7X	120A	-	-
Series	Enclosure	Voltage	Control	Options
P0800 - 800 in.lbs model	7X - NEMA 7	24A - 24V AC	blank - On/Off	TS - Torque Switch
P1300 - 1335 in.lbs model		24D - 24V DC	P - Proportional	
P3500 - 3500 in.lbs model		120A - 120V AC	M - Modbus	
P4400 - 4400 in.lbs model		230A - 230V AC		
P5800 - 5750 in.lbs model				
P8900 - 8900 in.lbs model				
P13500 - 13250 in.lbs model				

#### Example ordering codes:

P0800-7X-120A = 800 in.lbs, 120V AC, On/Off control electric actuator

P1300-7X-230A-P = 1335 in.lbs, 230V AC, proportional control electric actuator