



PROMATION SERIES ELECTRIC ACTUATOR

Electric Actuators Built For Industrial and Commercial Applications That Require Optimal Performance



P1 Quarter Turn Actuator



P2 Quarter Turn Actuator



P4 Quarter Turn Actuator



PAO Spring Return Actuator



LCS-K Local Control Station

Innovative Quarter-Turn Actuators

Full Line of Actuators

Quarter Turn to 40,500 in lb
Spring Return to 2300 in lb

Multiple Configurations

On/off, jog or proportional control
24VDC through 575/3/60 applications
Local Control Stations

Complete Support

Full documentation
RapidQuote
ProMation Engineering Services

Many Actuators Look The Same Outside,
The Promation Difference Is On The Inside

DESIGN FEATURES AND STANDARDS

Flo-Tite's Promotion Series offers a full line of industrial actuators that are designed & constructed to meet the demands of industrial installations & applications.

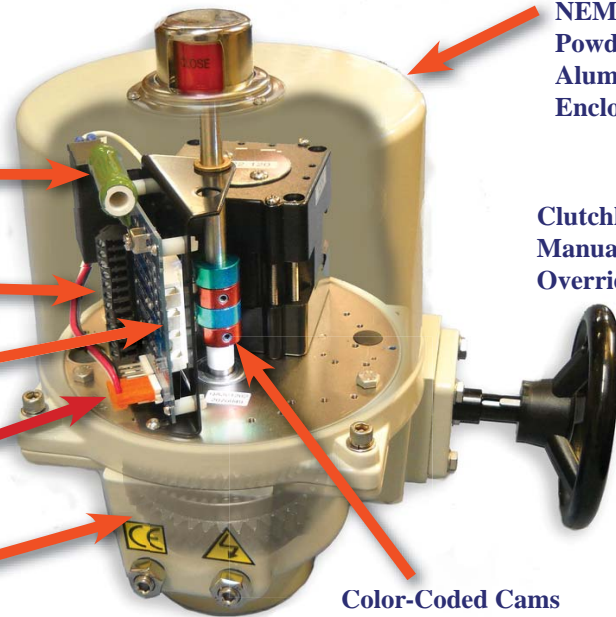
Rugged Board Design

Proprietary PC Boards with industrial grade components soldered into place eliminate 90% of the internal wiring found in most actuation products.

Rugged Board Mounted Components

- Anti-Condensation Heater (Standard Equipment)
- Incoming Connections
- Form C Auxiliary and Limit Switches
- Single connection for motor control

Epicyclic Gearing



NEMA 4X Rated Powder Coated Aluminum Enclosure

Clutchless Manual Override

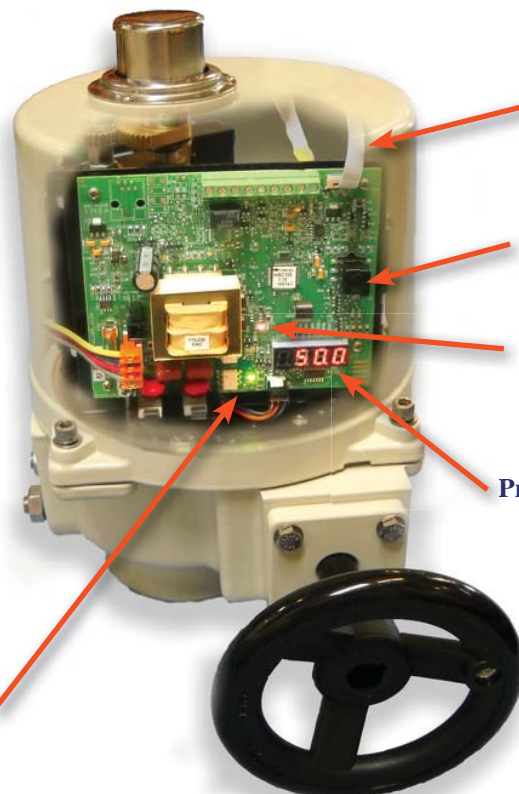
Color-Coded Cams

Flo-Tite ProMation Series offers full proportional control with several control options on all its models

Full Featured Proportional Control

- AutoCalibration
- Several Control Signal Inputs
 - 4-20mA
 - 2-10vdc
 - 1-5vdc
- Self-Powered Feedback Loop Generator
- Joystick Control for Programming
- Fault Indicator
- On-Board Diagnostics

Drive Direction Indicators



Temperature Feedback

Joystick Control

Status Indicator

Processor Display

Quarter Turn Non-Spring Return Actuators

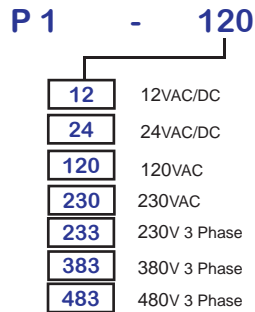
Product Family	Torque Output		Run Time	Draw (amp @ 120 vac)	Mounting Information		Height	Weight
	in lbs	Nm	Sec		ISO 5211	8pt Female Drive mm	in	lbs
PZ6	55	6	20	0.3	F03/F05	14	5	3
PZ15	135	15	20	0.3	F03/F05	14	5	3
P1	300	35	12	0.5	F03/F05	14	6	5
P1.A	445	50	20	0.5	F07	17	9	8
P1.B	135	15	8	0.5	F03/F05	14	6	5
P1.C	135	15	3	0.5	F03/F05	14	6	5
P2.0	600	67	17	1	F07	22	11.4	25
P2	800	90	15	1	F07	22	11.4	25
P3.0	1,150	130	22	1	F07	22	11.4	25
P3	1,335	150	22	1	F07	22	11.4	25
P4.0	2,200	248	16	1.3	F10	35	12.5	49
P4	3,500	400	16	1.3	F10	35	12.5	49
P5	4,400	500	22	1.5	F10	35	12.5	49
P6	5,800	650	28	1.8	F10	35	12.5	49
P7	8,900	1,000	46	3.2	F12	36	16.5	80
P8	13,500	1,500	46	4	F12	36	16.5	80
P9	17,500	2,000	58	3.2	F16	75*	23.2	125
P10	22,000	2,500	58	4	F16	75*	23.2	125
P11	26,500	3,000	58	3	F16	75*	23.2	125
P13	40,500	4,500	80	3.5	F25	72*	22.5	179

Product Ordering



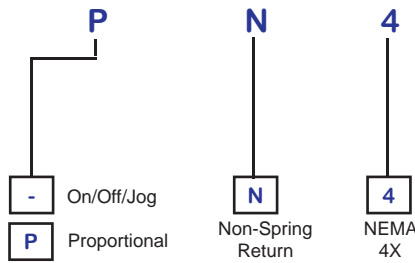
Note: Not all combinations are possible. Please consult factory.

Product Family

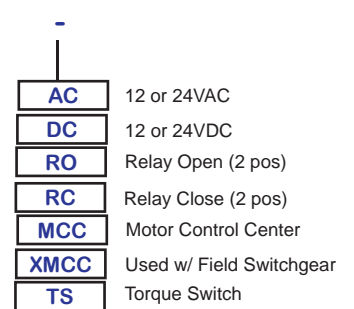


Voltage Level

Control



Special Designations



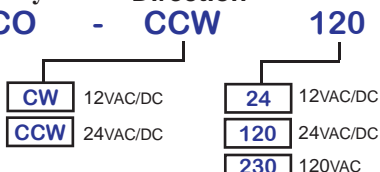
Quarter Turn Spring Return Failsafe Electric Actuators

Product Family	Torque Output		Run Time	Spring Return Time (Sec)		Draw (amp @ 120 vac)	Mounting Dimension		Height	Weight
	in lbs	Nm	Sec	24 v	120 /230 v		ISO 5211	8 pt Female Drive mm	in	lbs
PA	450	50	7	3	3	1.5	F07	17	15.75	59
PB	1,150	130	7	3	8	3.8	F10	22	18.82	124
PC	1,750	200	11	3	12	3.8	F12	27	21.57	209
PD	2,300	260	17	3	12	3.8	F12	27	21.57	209
With Manual Override										
PAO	450	50	7	3	3	1.5	F07	17	21.06	82
PBO	1,150	130	7	3	8	3.8	F10	22	25.3	163
PCO	1,750	200	11	3	12	3.8	F12	27	29.05	297
PDO	2,300	260	17	3	12	3.8	F12	27	29.05	297

Product Ordering



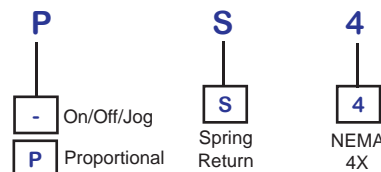
Product Family



Spring Direction

Voltage Level

Control



Note: 24v available in on/off only
Note: Not all combinations are possible. Please consult factory.

Extraordinary Electrical Engineering Applied to Industrial Actuators

Exclusive ProMation AutoCalibration Eases Installation

ProMation Engineering's proportional controls are the **only actuators that offer AutoCalibration** that allows set up at the push of a button; making installation, maintenance and re-installation easy and repeatable.

Fault Indicator and On-Board Diagnostics Can Reduce Wiring Issues

The ProMation proportional control board will indicate when input signals are miswired and will not operate. On-Board diagnostics show status of the actuator, incoming signal, feedback signal as well as a history of operating parameters for additional process analysis.

Multiple Input Signals Increase Flexibility

ProMation Engineering proportional controls are compatible with most industrial control signals (4-20mA, 1-5vdc or 2-10vdc). BUS network interfacing is also available.

Wide Voltage Range for All Industrial Applications

ProMation Engineering manufactures actuators to operate under 12VDC/VAC, 24VDC/VAC, 120VAC, 230VAC power, as well as 230V, 380V, 460V & 575V 3 phase power.

Local Control Stations (LCS)

ProMation LCS's can be remotely located or directly mounted on the actuator providing an array of controls and displays of functions being performed. LCS's are typically used when there is a need to take control of an actuator at or near the actuator's location.

The LCS's can be configured in a wide range of options from Mode Select and On/Off switches to units indicating proportional signals, valve position, power on, valve open and valve closed.



LCS A

LCS J/K

Power Backup Units (PBU)

ProMation PBU's are designed for Quarter Turn (P) and Linear (PL) series of actuators. The PBU's provide backup power in critical applications. Upon loss of power, the actuators are driven to a field selectable position, such as open or closed.

PBU options include visual indication of the actuator position as well as remote status of incoming power and battery system.



Full Documentation

We offer complete wiring diagrams, field installation manuals and set up documentation for all our products, both in printed and digital form. We regularly host customized educational webinars for our customers.

Industrial Applications

ProMation Engineering actuators have been installed to operate process controls such as butterfly valves, ball valves, high performance butterfly valves, plug valves and dampers, in a broad range of demanding industrial applications.



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