



**MAGNUS FORCE
ELECTRIC ACTUATOR**

MAGNUS FORCE ELECTRIC ACTUATOR

Quarter Turn

PDCQ ELECTRIC ACTUATORS ARE DESIGNED FOR QUARTER-TURN OPERATING APPLICATIONS ON VALVES AND DAMPERS

Features

MAGNUS FORCE QUARTER TURN ELECTRIC ACTUATOR:
PDCQ

Standard Design Features

- Output torques ranging from 6 N·m (53 in·lbs) to 3,500 N·m (31,000 in·lbs)
- High grade aluminum alloy enclosures
- Exteriors protected with a durable polyester powder coating
- Covers utilizing O-ring sealing and captured stainless-steel fasteners
- Enclosures meeting the sealing standards of CSA and NEMA Type 4X along with IP67 Ingress Protection
- Manual Override as standard
- Handwheel for manual operation, which has a non-clutch design and requires no manual/auto lever (except on
- PDCQ-A, B, C, D which use a lever)
- Visual Position Indicator as standard (except on PDCQ-A, B)
- Mounting base conforming to ISO 5211 standard
- Space heater and thermostat as standard (except on PDCQ-A, B)
- Standard Operating Temperature range of -30°C to +65°C (-22°F to +149°F)
- Standard voltages of 24V DC, 24V AC, 110V/220V AC, 1PH, 60Hz ±10%
- ON/OFF Control as standard
- Standard 30% Duty Cycle at 30% rated torque
- Ratings from 30 to 120 starts/movements per hour for inching control with a cyclic duration factor of not less than 25%
- Built-in Resettable Motor Thermal Protection
- Standard 4 limit switches: 2 for operation, 2 x SPDT for extra dry contacts (except on PDCQ-A, B)



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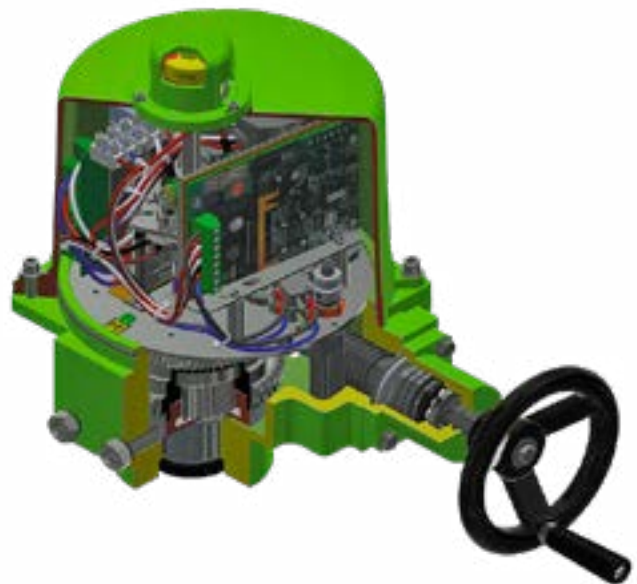
**PDCQ ELECTRIC ACTUATORS ARE DESIGNED
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ON VALVES AND DAMPERS**

Features *continued...*

MAGNUS FORCE QUARTER TURN ELECTRIC ACTUATOR: *PDCQ*

Optional Design Features

- Explosionproof Enclosures for Hazardous environments (CSA and NEMA Type 7 for Class I Div 1 Groups C & D areas and CSA and NEMA 9 for Class II Div 1 Groups E, F & G areas)
- Modulating Control with ratings from 300 to 1,200 starts/movements per hour
- 50% and 75% Duty Cycles at 30% rated torque for ON/OFF and Modulating Control
- Local Controls
- Torque Switches
- 4-20mA Current Position Transmitter or Potentiometer (1K or 5K)
- Interrupter Timer (slows down the cycle time)
- Chainwheel (c/w 5m of chain) (except on PDCQ-A, B, C, D)
- IP68 Ingress Protection as standard with Explosionproof Enclosures



MAGNUS FORCE ELECTRIC ACTUATOR

Quarter Turn & Spring Pack

PDCS ELECTRIC ACTUATORS ARE DESIGNED FOR QUARTER-TURN OPERATING APPLICATIONS REQUIRING A FAIL POSITION UPON LOSS OF POWER SUPPLY. THEY UTILIZE A COMPACT MECHANICAL SPRING SET TO FAIL THE VALVE OR DAMPER CLOCKWISE (CLOSE) OR COUNTER-CLOCKWISE (OPEN).

Features

MAGNUS FORCE QUARTER TURN ELECTRIC ACTUATOR:
PDCS

Standard Design Features

- Output torques ranging from 50 N·m (445 in·lbs) to 260 N·m (2,300 in·lbs)
- High grade aluminum alloy enclosures
- Exteriors protected with a durable polyester powder coating
- Covers utilizing O-ring sealing and captured stainless-steel fasteners
- Enclosures meeting the sealing standards of CSA and NEMA Type 4X along with IP67 Ingress Protection
- Visual Position Indicator as standard
- Adjustable mechanical buffer for the fail end position as standard
- Mounting base conforming to ISO 5211 standard



Optional Features

- Explosionproof Enclosures for Hazardous environments (CSA and NEMA Type 7 for Class I Div 1 Groups C & D areas and CSA and NEMA 9 for Class II Div 1 Groups E, F & G areas)
- ON/OFF Control (3-Position Control)
- Modulating Control (except with 24V AC/DC)
- 4-20mA Current Position Transmitter or Potentiometer (1K or 5K)
- Clutch-less geared Manual Override

MAGNUS FORCE ELECTRIC ACTUATOR

PDCQ ELECTRIC ACTUATORS

PDCQ Model	Output Torque		Weight		ISO 5211 Base	Manual Override	Running Time sec/90°*	
	N•m	in•lbs	Kg	lbs				
PDCQ-A	6	53	1.5	3.3	F03 / F05	Lever	8	
PDCQ-B	15	132	1.5	3.3	F03 / F05	Lever	19	
PDCQ-C	35	310	2	4.4	F03 / F05	Lever	12	
PDCQ-D	50	445	3	6.6	F05 / F07	Lever	27	
PDCQ-E	65	575	11	25	F07 / F10	Handwheel	6	
PDCQ-F	90	800	11	25	F07 / F10	Handwheel	17	
PDCQ-G	120	1,065	11	25	F07 / F10	Handwheel	8	
PDCQ-H	150	1,330	11	25	F07 / F10	Handwheel	26	
PDCQ-I	300	2,665	17	38	F07 / F10	Handwheel	24	
PDCQ-J	400	3,540	20	45	F10 / F12	Handwheel	19	
PDCQ-K	500	4,430	20	45	F10 / F12	Handwheel	26	
PDCQ-L	650	5,755	20	45	F10 / F12	Handwheel	34	
PDCQ-M	1,000	8,855	32	71	F12 or F14	Handwheel	50	
PDCQ-N	1,500	13,280	32	71	F12 or F14	Handwheel	51	
PDCQ-O	2,000	17,710	71	157	F14 or F16	Handwheel	62	
PDCQ-P	2,500	22,140	71	157	F14 or F16	Handwheel	62	
PDCQ-Q	3,000	26,565	72	159	F14 or F16	Handwheel	62	
PDCQ-R	3,500	31,000	72	159	F14 or F16	Handwheel	62	

* Running Time based on 110V AC / 60Hz @ 30% Duty

PDCS ELECTRIC ACTUATORS

PDCS Model	Output Torque		Weight		ISO 5211 Base	Manual Override	Running Time sec/90°*	
	N•m	in•lbs	Kg	lbs			Motor	Spring
PDCS-A	50	445	27	60	F07	Optional Handwheel	7	3
PDCS-B	130	1,150	57	126	F10	Optional Handwheel	7	8
PDCS-C	200	1,770	95	209	F12	Optional Handwheel	11	12
PDCS-D	260	2,300	95	209	F12	Optional Handwheel	14	12

* Running Time based on 110V AC / 60Hz @ 30% Duty



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Quality Certification

PDC Valve is
ISO 9001:2015
certified!

AIS
Compliance

